Hydraulic Tools

Hydraulic Tool Kit
Cylinders & Lifting Products
Hydraulic Pump
Hydraulic Accessories
Hydraulic Wrench
Hydraulic Bolt Tensioners
Hydraulic Nut
Hydraulic Puller
Hydraulic Press
Hydraulic Sync System
Hydraulic Wheeled Jack

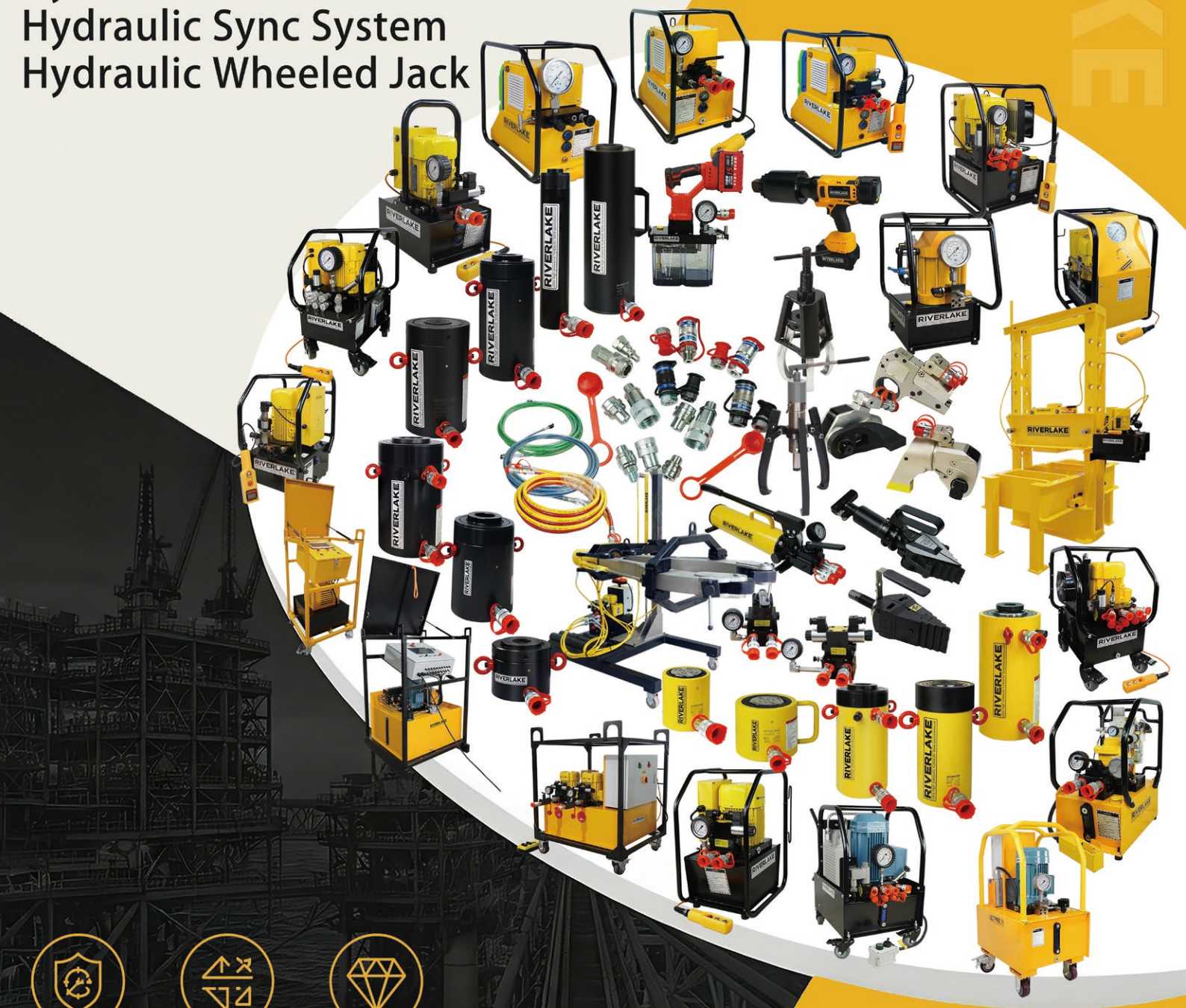


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1000T FULLY AUTOMATIC TEST SYSTEM, SPECIALLY FOR FINISHED PRODUCT PRE-DELIVERY INSPECTION



ABOUT US

RIVERLAKE IS A LEADING MANUFACTURER AND SUPPLIER OF HIGH-FORCE HYDRAULIC TOOLS IN CHINA. WE PROVIDE OUR CUSTOMERS WORLDWIDE WITH EXCEPTIONAL HYDRAULIC TOOL EXPERIENCE. HERE AT RIVERLAKE, WE MANUFACTURE AND SELL A WIDE RANGE OF HYDRAULIC CYLINDERS, PUMPS, BOLTING TOOLS, FLANGE MAINTENANCE TOOLS,PULLERS, AND OTHER HYDRAULIC TOOLS.

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▼SC-Series, Cylinder-Manual Pump Sets



- Optimal matching between components
- All pumps are dual-speed designed
- The kit is a ready-to-use configuration, ready to operate right out of the box.
- Includes a GA45GC pressure gauge and connector assembly for enhanced portability; the integrated pressure gauge allows for direct monitoring of working pressure.

▼SC Set List

Name	Qty./pcs
Hand Pump	1
Hydraulic Cylinder	1
Hydraulic Hose	1
Hard Plastic Case	1

▼SC Series Set Selection Table

Hydraulic Cylinder Series		Cylinder Model	Set Capacity (Ton)	Stroke (mm)	Collapsed Height (mm)
	RC Sereis,Single-Acting,General Purpose Hydraulic Cylinders	RC55	5	127	216
		RC102	10	54	121
		RC106	10	156	248
		RC1010	10	257	349
		RC154	15	101	200
		RC156	15	152	271
		RC252	25	50	165
		RC254	25	102	216
		RC256	25	158	273
		RC2514	25	362	476
		RC506	50	159	282
	RCS Series,Single-Acting,Low-Height Hydraulic Cylinder	RCS101	10	38	88
		RCS201	20	45	98
		RCS302	30	62	117
		RCS502	45	60	122
		RCS1002	90	57	141
	RCH Series,Single-Acting,Hollow Hydraulic Cylinder	RCH121	13	42	120
		RCH202	20	49	162
		RCH302	30	64	178
		RCH603	60	76	247
		RCH1003	95	76	254

Cylinder-Pump Sets

Ordering Examples

1. Select cylinder:
• RC106, single-acting cylinder, 156 mm stroke
2. Select pump:
• P392-GC light-duty manual pump
3. Confirm kit model:
• SCR106H

SC Series



Max. Operating Pressure:70MPa

Load Capacity : 5-95ton

Stroke : 38-362mm

Hydraulic Hose Model	Hand Pump P142GC	Hand Pump P392GC	Hand Pump P80GC
			
HSP700PC-2-MM	SCR55H	*	*
HSP700PC-2-MM	*	SCR102H	*
HSP700PC-2-MM	*	SCR106H	*
HSP700PC-2-MM	*	SCR1010H	*
HSP700PC-2-MM	*	SCR154H	*
HSP700PC-2-MM	*	SCR156H	*
HSP700PC-2-MM	*	SCR252H	*
HSP700PC-2-MM	*	SCR254H	*
HSP700PC-2-MM	*	SCR256H	*
HSP700PC-2-MM	*	*	SCR2514H
HSP700PC-2-MM	*	*	SCR506H
HSP700PC-2-MM	*	SCL101H	*
HSP700PC-2-MM	*	SCL201H	*
HSP700PC-2-MM	*	SCL302H	*
HSP700PC-2-MM	*	SCL502H	*
HSP700PC-2-MM	*	*	SCL1002H
HSP700PC-2-MM	SCH121H	*	*
HSP700PC-2-MM	*	SCH202H	*
HSP700PC-2-MM	*	SCH302H	*
HSP700PC-2-MM	*	*	SCH603H
HSP700PC-2-MM	*	*	SCH1003H

▼RC Universal Single-Acting Cylinders



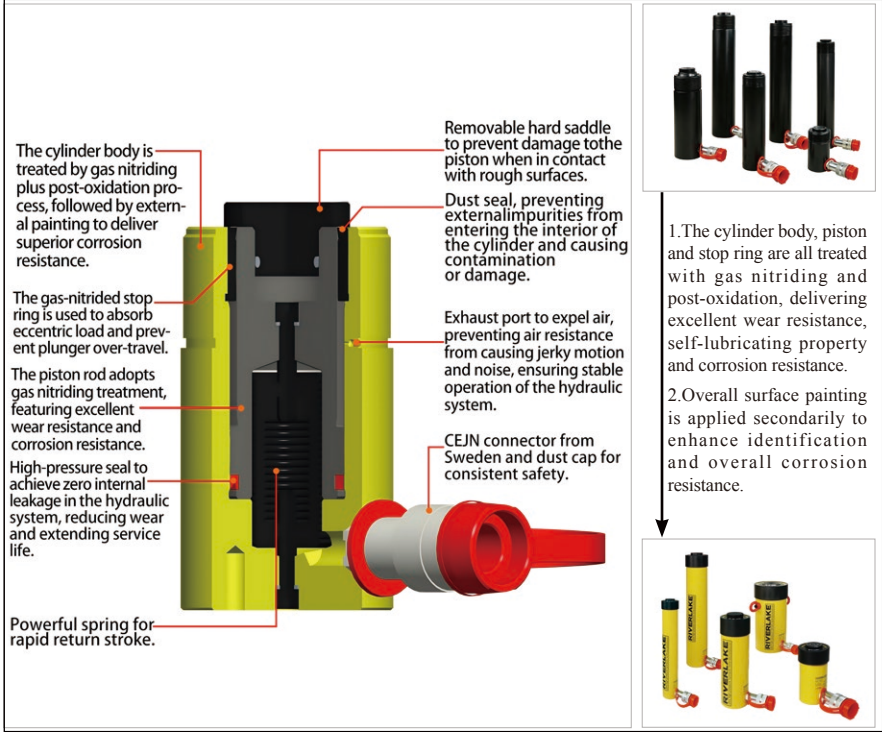
Rated Pressure: 70MPa

Rated Tonnage: 5-95ton

Stroke Range: 16-362mm

• The cylinder body, piston and stop ring are treated with gas nitriding and post-oxidation, offering outstanding wear resistance, self-lubricity and corrosion resistance.
• Secondary overall painting is adopted to improve overall recognizability and corrosion resistance.
• The outer thread protective sleeve made of reinforced nylon effectively protects the outer ring thread of the oil cylinder.
• High-tonnage cylinders are equipped with high-strength G80 lifting rings.
• Built-in hidden air vent enables faster and smoother retraction.
• Polyurethane seals feature superior sealing performance, high wear resistance and long service life.
• The plunger wiper seal reduces contamination and extends the service life of the hydraulic cylinder.
• Pre-machined outer ring threads, plunger threads and base mounting holes simplify connection and installation.
• Suitable for all mounting positions and orientations.

▼RC Performance Introduction:



1.The cylinder body, piston and stop ring are all treated with gas nitriding and post-oxidation, delivering excellent wear resistance, self-lubricating property and corrosion resistance.

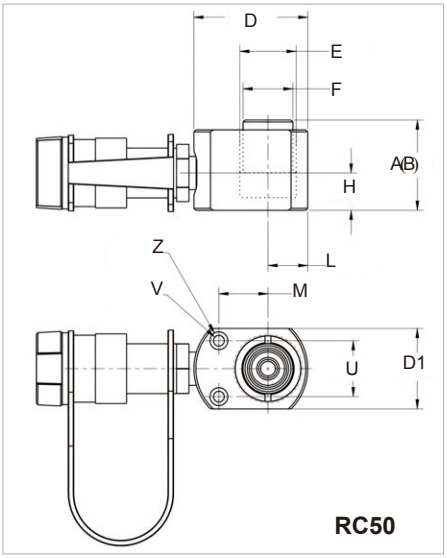
2.Overall surface painting is applied secondarily to enhance identification and overall corrosion resistance.

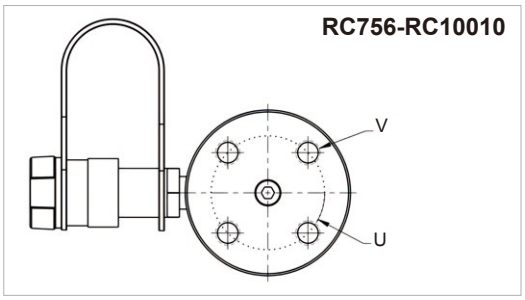
►Note:

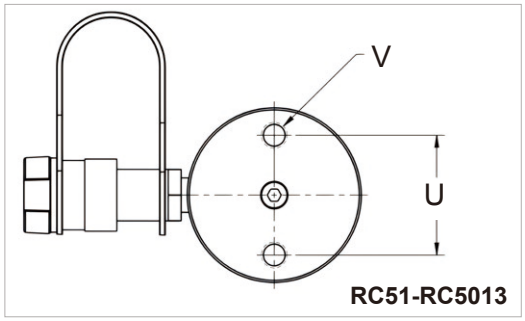
• RC50 cylinder has a non-removable grooved saddle and no collar thread.
• RC50: D1 = 41 mm, L = 20 mm, M = 25 mm.
• RC101 has plunger with two thread holes and non-removable saddle.

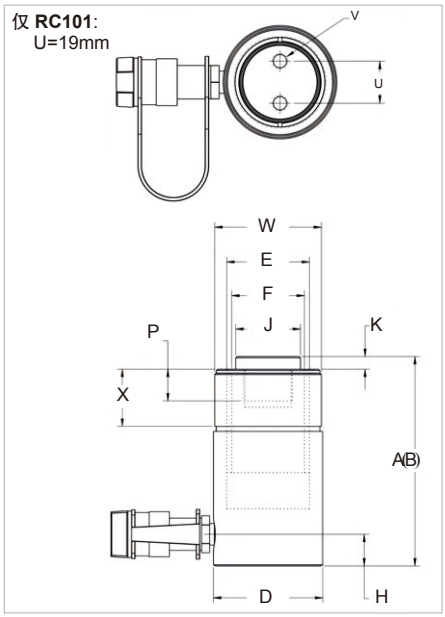
Capacity (ton (kN))	Stroke (mm)	Model Number	Cylinder Effective Area (cm²)	Oil Capacity (cm³)	Collapsed Height A (mm)	Extended Height B (mm)
5 (45)	16	RC50	6.4	10	41	57
	25	RC51	6.4	16	110	135
	79	RC53	6.4	50	165	244
	127	RC55	6.4	83	216	343
	177	RC57	6.4	115	273	450
	232	RC59	6.4	151	324	556
10 (101)	26	RC101	14.4	38	90	116
	54	RC102	14.4	78	121	175
	105	RC104	14.4	152	171	276
	156	RC106	14.4	226	248	404
	203	RC108	14.4	294	298	501
	257	RC1010	14.4	373	349	606
	304	RC1012	14.4	441	400	704
	356	RC1014	14.4	516	451	807
15 (142)	25	RC151	20.3	51	124	149
	51	RC152	20.3	104	149	200
	101	RC154	20.3	205	200	301
	152	RC156	20.3	308	271	423
	203	RC158	20.3	411	322	525
	254	RC1510	20.3	516	373	627
	305	RC1512	20.3	619	424	729
	356	RC1514	20.3	723	475	831
25 (232)	26	RC251	33.3	86	140	166
	50	RC252	33.3	166	165	215
	102	RC254	33.3	339	216	318
	158	RC256	33.3	525	273	431
	210	RC258	33.3	697	324	534
	261	RC2510	33.3	867	375	636
	311	RC2512	33.3	1033	425	736
	362	RC2514	33.3	1202	476	838
30 (295)	209	RC308	42.9	880	387	596
50 (498)	51	RC502	71.3	362	176	227
	101	RC504	71.3	719	227	328
	159	RC506	71.3	1131	283	442
	260	RC5010	71.3	1855	384	644
	337	RC5013	71.3	2399	460	797
75 (718)	156	RC756	102.6	1601	286	442
	333	RC7513	102.6	3417	492	825
95 (933)	51	RC1002	133.1	676	219	270
	168	RC1006	133.1	2239	357	525
	260	RC10010	133.1	3466	449	709

▼ RC Outline Dimensional









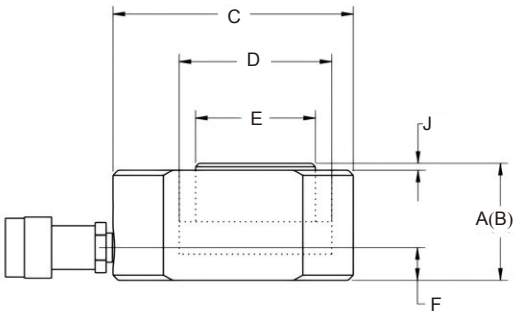
Outside Dia. D (mm)	Bore Dia. E (mm)	Plunger Dia. F (mm)	Base to Adv. Port H (mm)	Saddle Dia. J (mm)	Saddle Prot. from Plgr. K (mm)	Plunger Internal Thread O	Plunger Thread Length P (mm)	Steel Base Plate Mounting Holes			Base Mounting Holes - Thread W	Collar Thread Length X (mm)	Weight (KG)	Model Number
								Bolt Circle U(mm)	Thread V(mm)	Thread Depth Y(mm)				
58	28.6	25.4	19	—	—	—	—	29	5.6 mm	—	—	—	1	RC50
38	28.6	25.4	19	25	6	¾" - 16 UN	14	25	¼" - 20 UNC	14	1½" - 16 UN	28	1	RC51
38	28.6	25.4	19	25	6	¾" - 16 UN	14	25	¼" - 20 UNC	14	1½" - 16 UN	28	1.5	RC53
38	28.6	25.4	19	25	6	¾" - 16 UN	14	25	¼" - 20 UNC	14	1½" - 16 UN	28	1.9	RC55
38	28.6	25.4	19	25	6	¾" - 16 UN	16	25	¼" - 20 UNC	14	1½" - 16 UN	28	2.4	RC57
38	28.6	25.4	19	25	6	¾" - 16 UN	16	25	¼" - 20 UNC	14	1½" - 16 UN	28	2.8	RC59
57	42.8	38.1	19	—	—	#10 - 24 UN	6	40	5/16" - 18 UNC	12	2¼" - 14 UN	27	1.8	RC101
57	42.8	38.1	19	35	6	1" - 8 UN	19	40	5/16" - 18 UNC	12	2¼" - 14 UN	27	2.3	RC102
57	42.8	38.1	19	35	6	1" - 8 UN	19	40	5/16" - 18 UNC	12	2¼" - 14 UN	27	3.3	RC104
57	42.8	38.1	19	35	6	1" - 8 UN	19	40	5/16" - 18 UNC	12	2¼" - 14 UN	27	4.4	RC106
57	42.8	38.1	19	35	6	1" - 8 UN	19	40	5/16" - 18 UNC	12	2¼" - 14 UN	27	5.4	RC108
57	42.8	38.1	19	35	6	1" - 8 UN	19	40	5/16" - 18 UNC	12	2¼" - 14 UN	27	6.4	RC1010
57	42.8	38.1	19	35	6	1" - 8 UN	19	40	5/16" - 18 UNC	12	2¼" - 14 UN	27	6.8	RC1012
57	42.8	38.1	19	35	6	1" - 8 UN	19	40	5/16" - 18 UNC	12	2¼" - 14 UN	27	8.2	RC1014
70	50.8	41.3	19	38	9	1" - 8 UN	25	48	⅜" - 16 UNC	12	2¾" - 16 UN	30	3.3	RC151
70	50.8	41.3	19	38	9	1" - 8 UN	25	48	⅜" - 16 UNC	12	2¾" - 16 UN	30	4.1	RC152
70	50.8	41.3	19	38	9	1" - 8 UN	25	48	⅜" - 16 UNC	12	2¾" - 16 UN	30	5	RC154
70	50.8	41.3	25	38	9	1" - 8 UN	25	48	⅜" - 16 UNC	12	2¾" - 16 UN	30	6.8	RC156
70	50.8	41.3	25	38	9	1" - 8 UN	25	48	⅜" - 16 UNC	12	2¾" - 16 UN	30	8.2	RC158
70	50.8	41.3	25	38	9	1" - 8 UN	25	48	⅜" - 16 UNC	12	2¾" - 16 UN	30	9.5	RC1510
70	50.8	41.3	25	38	9	1" - 8 UN	25	48	⅜" - 16 UNC	12	2¾" - 16 UN	30	10.9	RC1512
70	50.8	41.3	25	38	9	1" - 8 UN	25	48	⅜" - 16 UNC	12	2¾" - 16 UN	30	11.8	RC1514
86	65.1	57.2	25	51	10	1½" - 16 UN	25	59	½" - 13 UNC	19	3 5/16" - 12 UN	49	5.9	RC251
86	65.1	57.2	25	51	10	1½" - 16 UN	25	59	½" - 13 UNC	19	3 5/16" - 12 UN	49	6.4	RC252
86	65.1	57.2	25	51	10	1½" - 16 UN	25	59	½" - 13 UNC	19	3 5/16" - 12 UN	49	8.2	RC254
86	65.1	57.2	25	51	10	1½" - 16 UN	25	59	½" - 13 UNC	19	3 5/16" - 12 UN	49	10	RC256
86	65.1	57.2	25	51	10	1½" - 16 UN	25	59	½" - 13 UNC	19	3 5/16" - 12 UN	49	12.2	RC258
86	65.1	57.2	25	51	10	1½" - 16 UN	25	59	½" - 13 UNC	19	3 5/16" - 12 UN	49	14.1	RC2510
86	65.1	57.2	25	51	10	1½" - 16 UN	25	59	½" - 13 UNC	19	3 5/16" - 12 UN	49	16.3	RC2512
86	65.1	57.2	25	51	10	1½" - 16 UN	25	59	½" - 13 UNC	19	3 5/16" - 12 UN	49	17.7	RC2514
102	73	57.2	29	51	10	1½" - 16 UN	25	59	½" - 13 UNC	16	3 5/16" - 12 UN	49	18.1	RC308
127	95.2	79.4	33	71	2	—	—	95	½" - 13 UNC	19	5" - 12 UN	55	15	RC502
127	95.2	79.4	33	71	2	—	—	95	½" - 13 UNC	19	5" - 12 UN	55	19.1	RC504
127	95.2	79.4	35	71	2	—	—	95	½" - 13 UNC	19	5" - 12 UN	55	23.1	RC506
127	95.2	79.4	35	71	2	—	—	95	½" - 13 UNC	19	5" - 12 UN	55	31.8	RC5010
127	95.2	79.4	35	71	2	—	—	95	½" - 13 UNC	19	5" - 12 UN	55	37.6	RC5013
146	114.3	95.3	30	71	2	—	—	114	⅝" - 13 UNC	16	5¾"- 12 UN	44	29.5	RC756
146	114.3	95.3	30	71	2	—	—	114	⅝" - 13 UNC	16	5¾"- 12 UN	44	59	RC7513
178	130.2	104.8	41	71	2	—	—	140	¾" - 10 UNC	25	6⅞" - 12 UN	44	36.7	RC1002
178	130.2	104.8	41	71	2	—	—	140	¾" - 10 UNC	25	6⅞" - 12 UN	44	59	RC1006
178	130.2	104.8	41	71	2	—	—	140	¾" - 10 UNC	25	6⅞" - 12 UN	44	72.6	RC10010

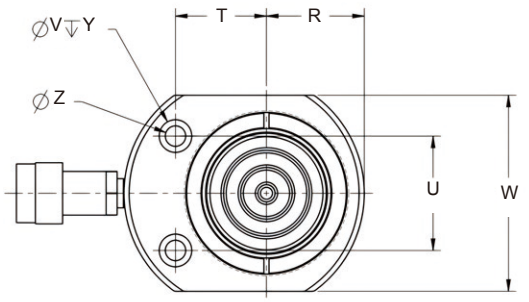
▼RSM/RCS Single-Acting Low-Height Cylinders



Rated Pressure:	70MPa
Rated Tonnage:	5-150ton
Stroke Range:	6-62mm

▼ RSM Outline Dimension:





RSM Series, Ultra-thin Hydraulic Cylinders:

• The cylinder body, piston and stop ring are treated with gas nitriding and post-oxidation, offering outstanding wear resistance, self-lubricity and corrosion resistance.
• Secondary overall painting is adopted to improve overall recognizability and corrosion resistance.
•Compact, low-profile design for applications where other hydraulic cylinders cannot be used.
•RSM750/1000/1500 models are fitted with handles for easy transportation.
•Mounting holes allow for convenient fixation.
•All models come standard with CEJN quick couplings and dust caps.
•RSM50 model is equipped with an 18 cm hydraulic hose with a CEJN female coupler at the end, suitable for operation in tight spaces.
•Single-acting, spring return.

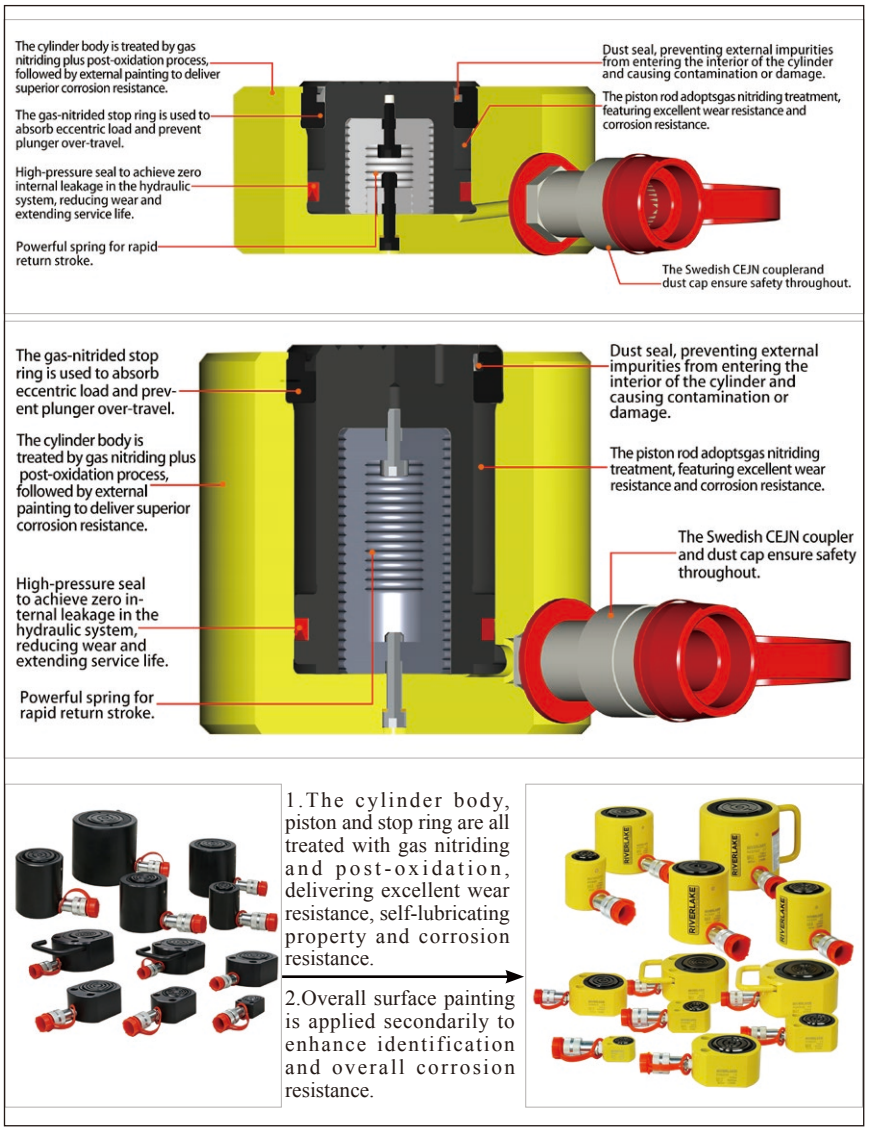
RCS Series, Low-profile Hydraulic Cylinders:

• The cylinder body, piston and stop ring are treated with gas nitriding and post-oxidation, offering outstanding wear resistance, self-lubricity and corrosion resistance.
• Secondary overall painting is adopted to improve overall recognizability and corrosion resistance.
•Lightweight and compact design for confined working spaces.
•Dust seals reduce contamination and extend the service life of the hydraulic cylinders.
•All models are supplied standard with CEJN quick couplings and dust caps.
•Threaded holes on the top of the grooved ram enable installation of tilting saddles.
•RCS-1002 is equipped with a handle for easy portability.
•Single-acting, spring return.

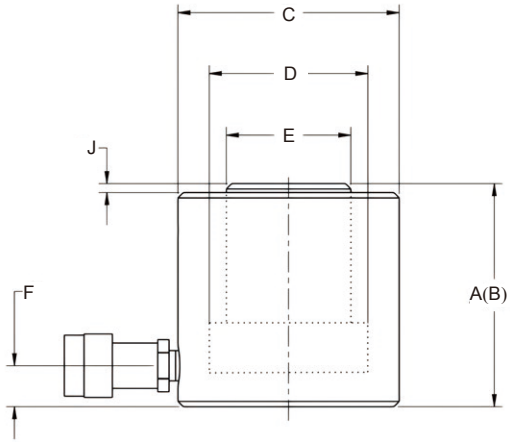
Load Capacity ton (kN)	Model	Stroke (mm)	Effective Area of Cylinder (cm^2)	Oil Capacity (cm^3)
5(45)	RSM50	6	6.5	4
10(101)	RSM100	11	14.5	18
20(201)	RSM200	11	28.7	32
30(295)	RSM300	13	42.1	55
45(435)	RSM500	16	62.1	99
75(718)	RSM750	16	102.6	164
90(887)	RSM1000	16	126.7	203
150(1386)	RSM1500	16	198.1	317
10(101)	RCS101	38	14.5	55
20(201)	RCS201	45	28.7	129
30(295)	RCS302	62	42.1	261
45(435)	RCS502	60	62.1	373
90(887)	RCS1002	57	126.7	722

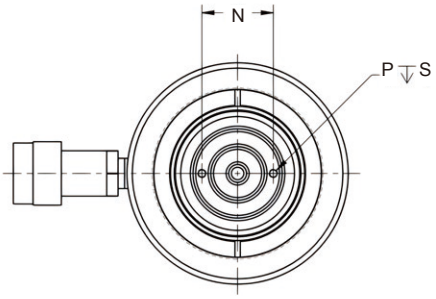
RSM Cylinders Mounting Hole Diameter Dimensions				
Model	Bolt Circle Diameter U(mm)	Hole Diameter Z (mm)	Counterbore Diameter V(mm)	Counterbore Length Y(mm)
RSM50	28.5	5.5	9.1	4.3
RSM100	36.6	7.1	10.7	7.9
RSM200	49.3	10	15.1	9.9
RSM300	52.3	10	15.9	11.2
RSM500	66.5	11	19	12.7
RSM750	76.2	13.5	20.6	14.2
RSM1000	76.2	13.5	20.6	14.2
RSM1500	117.3	13.5	20.6	14.2

▼ RSM/RCS Performance Introduction:



▼ RCS Outline Dimension:



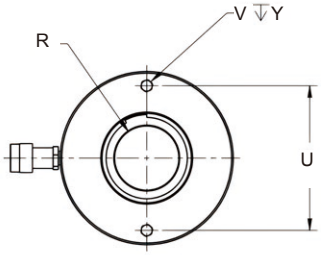


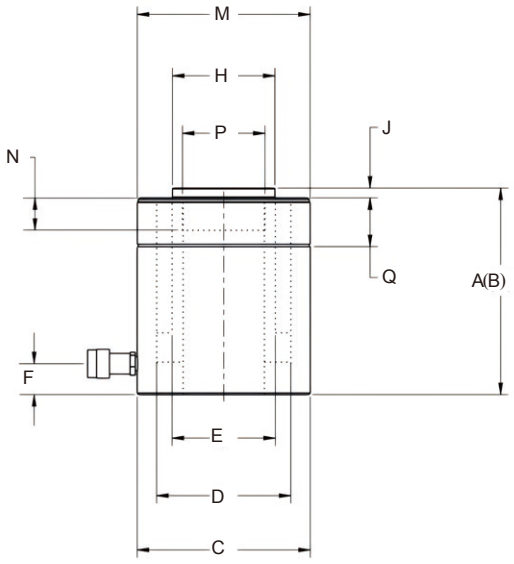
Collapsed Height A (mm)	Height B (mm)	Outer Diameter C (mm)	Inner Diameter D (mm)	Piston Rod Diameter E (mm)	Oil Inlet Height from Bottom F (mm)	Piston Protrusion Height J (mm)	Distance T (mm)	Distance R (mm)	Thread P (mm)	Thread Depth S (mm)	Thread Circle Diameter N (mm)	Weight (kg)	Model
32	38	58X41	28.7	25.4	16	1	22X28.5	20	-	-	-	1.0	RSM50
43	54	82X55	42.9	38.1	19	1	34X36.6	27	-	-	-	1.4	RSM100
51	62	101X76	60.5	50.8	19	1	39X49.3	39	-	-	-	3.1	RSM200
58	71	117X95	73.2	63.4	19	2	44X52.3	47	-	-	-	4.5	RSM300
66	82	140X114	88.9	69.8	19	2	53X66.5	57	-	-	-	6.8	RSM500
79	95	165X139	114.3	82.6	19	2	66X76.2	69	-	-	-	11.3	RSM750
85	101	177X153	127	92.2	19	2	74X76.2	76	-	-	-	14.5	RSM1000
100	116	215X190	158.8	114.3	23	2	82X117.3	95	-	-	-	26.3	RSM1500
88	126	69	42.9	38.1	17	5	-	-	M4	8	26	2.7	RCS101
98	143	92	60.5	50.8	17	3	-	-	M5	8	40	5.0	RCS201
117	179	101	73.2	66.5	17	3	-	-	M5	8	40	6.8	RCS302
122	182	124	88.9	69.8	23	2	-	-	M5	8	40	10.0	RCS502
141	198	165	127	92.2	31	1	-	-	M8	10	55	20.7	RCS1002

▼RCH Single-Acting Hollow Plunger Cylinders



Rated Pressure:	70MPa
Rated Tonnage:	12 -95ton
Stroke Range:	8-155mm
Center Hole Dia:	17.3-79.0mm



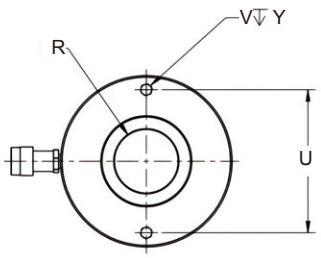


RCH202-RCH1003

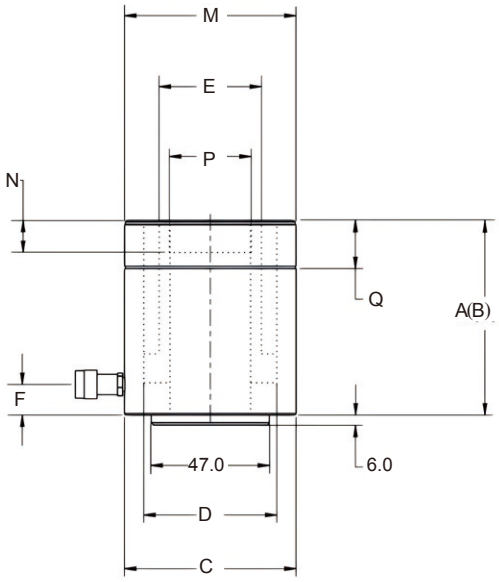
- The cylinder body, piston and stop ring are treated by gas nitriding plus post-oxidation, delivering excellent wear resistance, self-lubricating property and corrosion resistance.
- The overall surface is re-painted to enhance overall identifiability and corrosion resistance.
- The outer thread protective sleeve made of reinforced nylon effectively protects the outer ring thread of the hydraulic cylinder.
- The hollow plunger design is applicable for both tension and compression operations.
- Single-acting type with spring return.
- High-tonnage hydraulic cylinders are equipped with certified G80 high-strength lifting rings.
- All models are standardly fitted with CEJN quick couplings and dust caps.
- Base mounting holes are configured for all models.
- Polyurethane seals are adopted with superior sealing performance, high wear resistance and long service life.
- Threaded holes are arranged on the hollow piston for mounting non-standard saddles to adapt to diversified working conditions.
- Industrial-grade dust rings reduce contamination and extend the service life of hydraulic cylinders.
- All-weather protection from inside to outside.

▼ RCH Type Specification Sheet:

Capacity (ton)	Stroke (mm)	Model Number	Effective Area (cm^2)	Oil Capacity (cm^3)	Collapsed Height A (mm)	Extended Height B (mm)	Outside Diameter C (mm)	Bore Diameter D (mm)	Plunger Diameter E (mm)	Bottom to Advance Port F (mm)
12(125)	8	RCH120	17.9	14	55	63	70	54.1	35.1	9
	42	RCH121	17.9	75	120	162	70	54.1	35.1	25
	42	RCH1211	17.9	75	120	162	70	54.1	35.1	25
	76	RCH123	17.9	136	184	260	70	54.1	35.1	25
20(215)	49	RCH202	30.7	150	162	211	98.5	73.1	54.1	19
	155	RCH206	30.7	476	306	461	98.5	73.1	54.1	25
30(326)	64	RCH302	46.6	298	178	242	114	88.9	63.5	21
	155	RCH306	46.6	722	330	485	114	88.9	63.5	25
60(576)	76	RCH603	82.3	626	247	323	159	123.9	91.9	31
	153	RCH606	82.3	1259	323	476	159	123.9	91.9	31
95(931)	76	RCH1003	133	1011	254	330	213	165.1	127	38

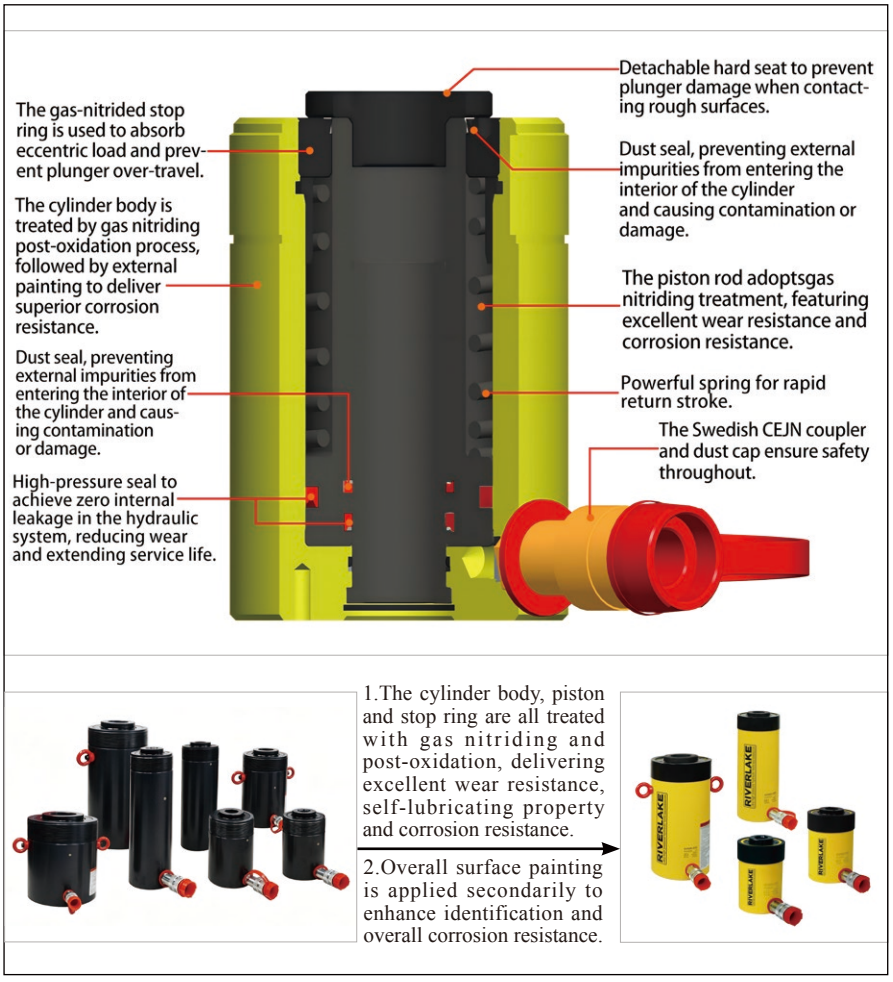


◀Both RCH121 and RCH1211 feature a 47 mm diameter projection, extending 6 mm above the base.



RCH120-RCH123

▼ RCH Performance Introduction:



1.The cylinder body, piston and stop ring are all treated with gas nitriding and post-oxidation, delivering excellent wear resistance, self-lubricating property and corrosion resistance.

2.Overall surface painting is applied secondarily to enhance identification and overall corrosion resistance.

RCH Steel Base Plate Mounting Holes(mm)			
Model	Bolt Circle U(mm)	Thread V(mm)	Thread Depth Y(mm)
RCH120	50.8	5/16" - 18 UNC	9
RCH121	-	-	-
RCH1211	-	-	-
RCH123	50.8	5/16" - 18 UNC	12.7
RCH202	82.6	3/8" - 16 UNC	9.4
RCH206	82.6	3/8" - 16 UNC	9.4
RCH302	92.2	3/8" - 16 UNC	14
RCH306	92.2	3/8" - 16 UNC	14
RCH603	130.3	1/2" - 13 UNC	14
RCH606	130.3	1/2" - 13 UNC	14
RCH1003	177.8	5/8" - 11 UNC	19

Saddle Diameter H (mm)	Saddle Protrusion Height J (mm)	Plunger Internal Thread P	Plunger Thread Length N (mm)	Collar Thread Specification M	Collar Thread Depth Q (mm)	Central Hole Diameter R (mm)	Weight (kg)	Model
-	-	3/4"-16 UN	16	2 3/4"-16	30	17.3	1.5	RCH120
-	-	-	-	2 3/4"-16	30	19.5	2.8	RCH121
-	-	3/4"-16 UN	16	2 3/4"-16	30	17.3	2.8	RCH1211
-	-	-	-	2 3/4"-16	30	19.5	4.4	RCH123
54	9.7	1 9/16"-16 UN	19	3 7/8"-12	38	26.9	7.7	RCH202
54	9.7	1 9/16"-16 UN	19	3 7/8"-12	38	26.9	14.1	RCH206
63	9	1 13/16"-16 UN	22	4 1/2"-12	42	33.3	10.9	RCH302
63	9	1 13/16"-16 UN	22	4 1/2"-12	42	33.3	21.8	RCH306
91	12	2 3/4"-16 UN	19	6 1/4"-12	48	53.8	28.1	RCH603
91	12	2 3/4"-16 UN	19	6 1/4"-12	48	53.8	35.4	RCH606
126	12	4"-16 UN	25	8 3/8"-12	60	79	63	RCH1003

▼RRH Double-Acting Hollow Plunger Cylinders



Rated Pressure:	70MPa
Rated Tonnage:	30 -145ton
Stroke Range:	38-258mm
Center Hole Dia:	33-79.2mm

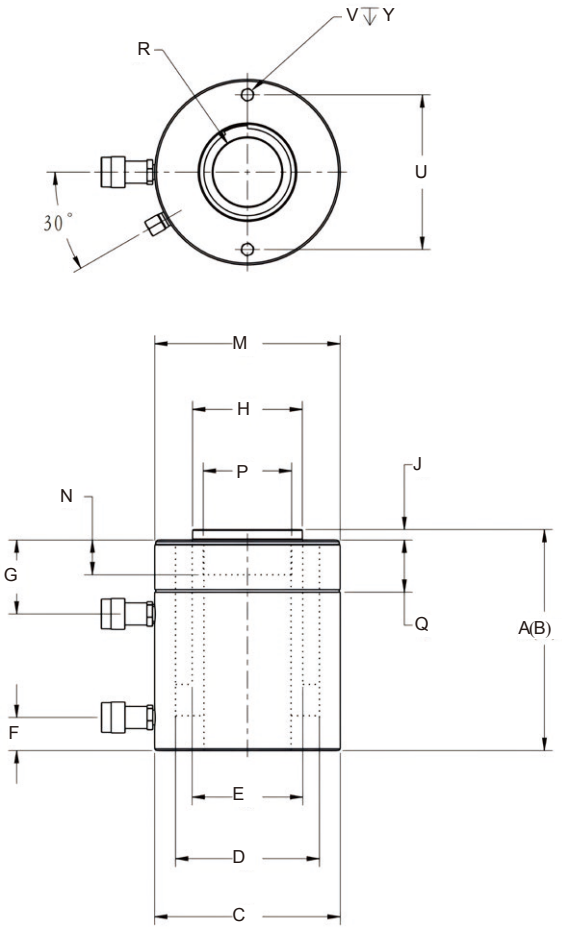
•The cylinder body, piston and stop ring are treated with gas nitriding + post-oxidation, providing excellent wear resistance, self-lubrication and corrosion resistance.
•The overall paint treatment enhances the overall recognizability and corrosion resistance.
•The relief valve protects the cylinder from damage during overload.
•The outer ring thread allows for easier installation.(except RRH1001, RRH1508, RRH2308, RRH4008, RRH6008)
•Double-acting design enables quick retraction.
•All models are equipped with CEJN quick couplings and dust caps.
•Industrial-grade dust seals reduce contamination and extend the service life of the hydraulic cylinder.
•All tonnage cylinders are equipped with certified G80 high-strength lifting rings.
•High-grade polyurethane seals are adopted, featuring good sealing performance, wear resistance and long service life.

RRH Steel Base Plate Mounting Holes(mm)			
Model	Bolt Circle U(mm)	Thread V(mm)	Thread Depth Y(mm)
RRH307	92.2	3/8" - 16 UNC	14
RRH3010	92.2	3/8" - 16 UNC	14
RRH603	130.3	1/2" - 13 UNC	14
RRH606	130.3	1/2" - 13 UNC	14
RRH6010	130.3	1/2" - 13 UNC	14
RRH1001	177.8	5/8" - 11 UNC	19
RRH1003	177.8	5/8" - 11 UNC	19
RRH1006	177.8	5/8" - 11 UNC	19
RRH10010	177.8	5/8" - 11 UNC	19
RRH1508	213.4	5/8" - 11 UNC	22.0
RRH2308	260.0	(4x) M16 × 2	25.0
RRH4008	340.0	(4x) M24 × 3	36.0
RRH6008	415.0	(4x) M24 × 3	36.0

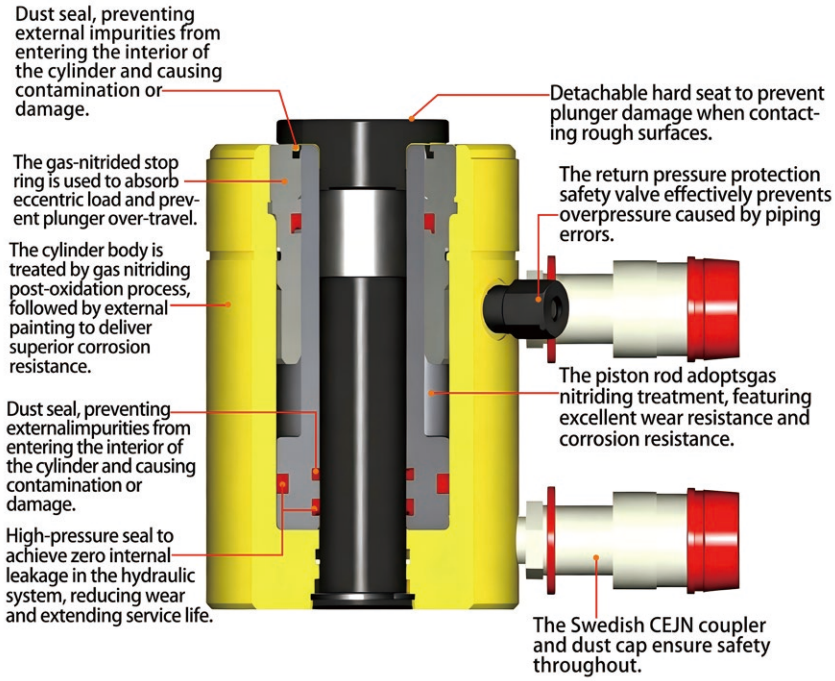
▼ RRH Specification Sheet:

Capacity (ton)	Stroke (mm)	Model	Maximum load capacity (kN)		The effective area of the cylinder (cm^2)		Hydraulic oil capacity (cm^3)		Collapsed Height A (mm)	Extended Height B (mm)	Outer Diameter C (mm)	Inner Diameter D (mm)
			push	pull	push	pull	push	pull				
30	178	RRH307	326	213	46.6	30.4	829	541	330	508	114	88.9
	258	RRH3010	326	213	46.6	30.4	1202	784	431	689	114	88.9
60	89	RRH603	576	380	82.3	54.2	733	482	247	336	159	123.9
	166	RRH606	576	380	82.3	54.2	1366	900	323	489	159	123.9
	257	RRH6010	576	380	82.3	54.2	2115	1393	438	695	159	123.9
95	38	RRH1001	931	612	133	87.4	505	333	165	203	213	165.1
95	76	RRH1003	931	612	133	87.4	1011	666	254	330	213	165.1
	153	RRH1006	931	612	133	87.4	2035	1337	342	495	213	165.1
	257	RRH10010	931	612	133	87.4	3420	2246	460	717	212	165.1
145	203	RRH1508	1429	718	204.1	102.6	4144	2083	349	552	247	190.5
220	200	RRH2308	2164	967	309.3	138.2	6185	2764	431	631	310	240.0
410	200	RRH4008	4036	1678	576.7	239.7	11534	4795	486	686	400	305.5
600	200	RRH6008	5937	1896	848.2	271	16964	5419	525	725	480	370.0

▼ RRH Outline Dimensional:



▼ RRH Performance Introduction:





1.The cylinder body, piston and stop ring are all treated with gas nitriding and post-oxidation, delivering excellent wear resistance, self-lubricating property and corrosion resistance.

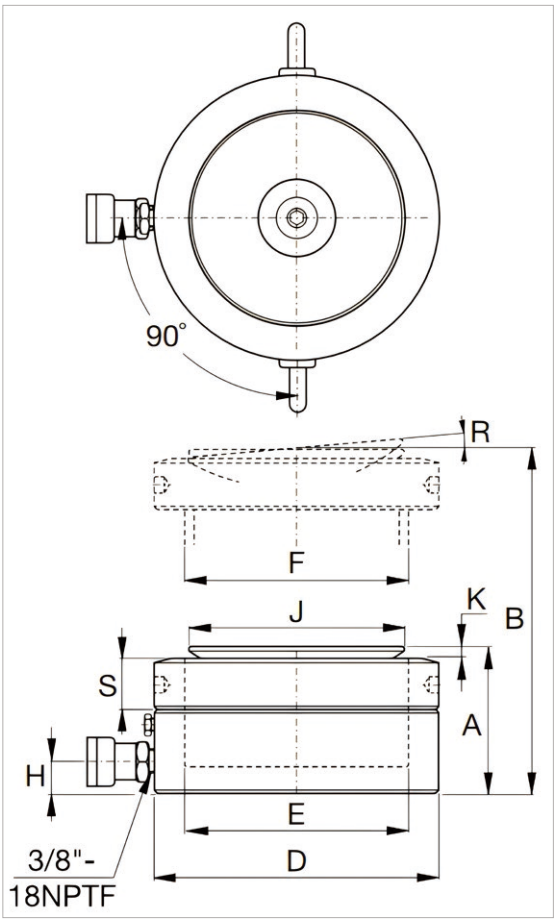
2.Overall surface painting is applied secondarily to enhance identification and overall corrosion resistance.



Plunger Diameter E (mm)	Distance from Top End to Oil Return Port G (mm)	Saddle Diameter H (mm)	Saddle Protrusion Height J (mm)	Thread P	Plunger Thread Length N (mm)	Collar Thread M	Collar Thread Length Q (mm)	Center Hole Diameter R (mm)	Weight (kg)	Model
63.5	60	63	9	1 13/16"-16	35	4 1/2"-12	42	33.3	21	RRH307
63.5	60	63	9	1 13/16"-16	35	4 1/2"-12	42	33.3	27	RRH3010
91.9	66	91	12	2 3/4"-16	35	6 1/4"-12	48	53.8	28	RRH603
91.9	66	91	12	2 3/4"-16	35	6 1/4"-12	48	53.8	35	RRH606
91.9	66	91	12	2 3/4"-16	35	6 1/4"-12	48	53.8	45	RRH6010
127	44	126	12	4"-16	40	-	-	79.2	33	RRH1001
127	85	126	12	4"-16	40	8 3/8"-12	60	79.2	61	RRH1003
127	85	126	12	4"-16	40	8 3/8"-12	60	79.2	79	RRH1006
127	85	126	12	4"-16	40	8 3/8"-12	60	79.2	106	RRH10010
152.4	60	127	4	4 1/4"-12	40	-	-	79.2	111	RRH1508
220	91	195	18	M150×2	50	-	-	105	190	RRH2308
250	111	245	18	M160×2	70	-	-	110	383	RRH4008
320	115	315	23	M190×2	90	-	-	135	611	RRH6008

▼LPL Low-Height High Tonnage Lock Nut Cylinders





- Locking nut provides mechanical support for the load, ensuring safety.
- Integrated tilting saddle with a maximum inclination angle of 5°.
- Extremely low collapsed height, suitable for narrow installation spaces.
- 5-10% eccentric load resistance capacity.
- Overflow port also serves as a stroke limiter.
- Single-acting, gravity return.
- Gas nitriding and post-oxidation surface treatment process provides superior corrosion resistance and anti-eccentric load performance
- All models come standard with CEJN quick couplings and dust caps.

Capacity (ton)	Stroke (mm)	Model	Max. Capacity ton (kN)	Side-load Resistance of Maximum Capacity	Effective Area(cm²)	Oil Capacity (cm³)	Body Height A(mm)	Extended Height B(mm)
60	50	LPL602	62 (606)	10%	86.6	433.0	126	176
100	50	LPL1002	102 (1002)	10%	143.1	715.7	137	187
150	45	LPL1602	162 (1589)	8%	227.0	1021.4	148	193
200	45	LPL2002	202 (1985)	8%	283.5	1275.9	155	200
250	45	LPL2502	259 (2541)	5%	363.1	1633.7	159	204
400	45	LPL4002	409 (4008)	5%	572.6	2576.5	178	223
500	45	LPL5002	522 (5114)	5%	730.6	3287.8	192	237

LPL Series Single-Acting





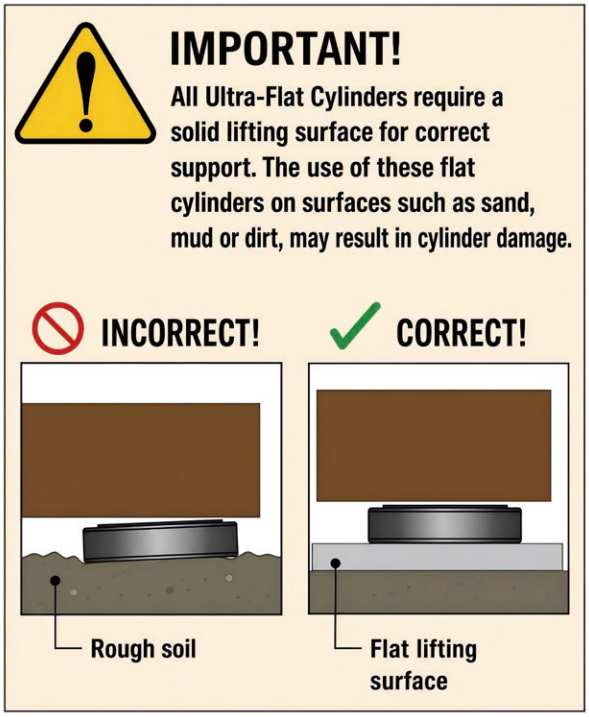
Extended Stroke Locknut Hydraulic Cylinders
HCL and HCRL lock nut cylinders are well-suited for all long-stroke operating requirements.

LPL Series

Rated Pressure: 70MPa

Rated Tonnage: 60 -500ton

Stroke Range: 45-50mm



	Outer Diameter D (mm)	Cylinders Bore E(mm)	Plunger Diameter Thread F(mm)	Oil Inlet Height from Bottom H(mm)	Saddle Diameter J(mm)	Saddle Protrusion Height K(mm)	Max. Saddle Tilt Angle R	Lock Nut Height S(mm)	Weight (kg)	Model
	140	105	Tr105 x 4	19	96	7	5°	28	15	LPL602
	173	135	Tr135 x 6	21	126	8	5°	31	25	LPL1002
	220	170	Tr170 x 6	27	160	9	5°	40	43	LPL1602
	245	190	Tr190 x 6	30	180	10	5°	43	55	LPL2002
	275	215	Tr215 x 6	32	200	12	5°	43	70	LPL2502
	350	270	Tr270 x 6	40	250	12	4°	55	129	LPL4002
	400	305	Tr305 x 6	49	290	10	3°	61,5	183	LPL5002

▼CLL High-Tonnage Lock Nut Cylinders

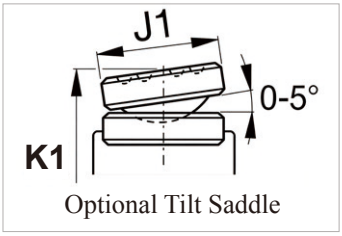


Rated Pressure: 70MPa

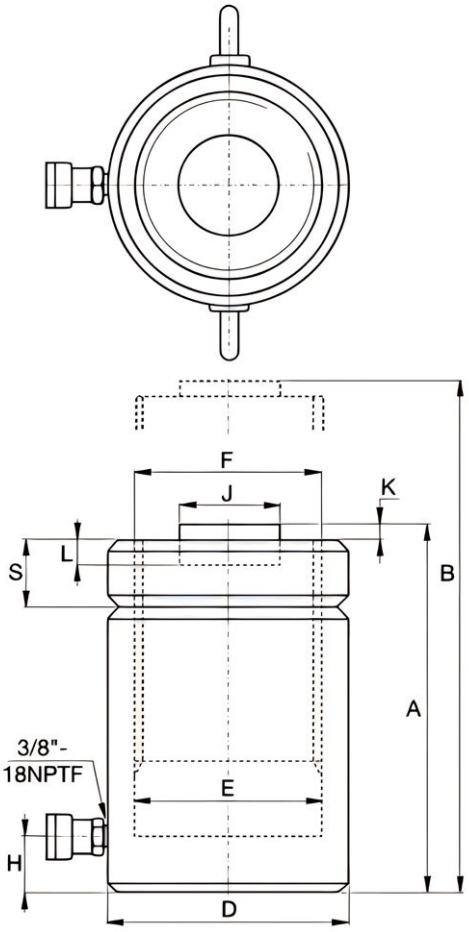
Rated Tonnage: 50 -1000ton

Stroke Range: 50-300mm

- Single-acting, load retraction
- Self-locking nut provides mechanical load holding for safe working environment
- High-strength composite bearing supports off-center loads to prevent cylinder barrel damage
- Gas nitriding and post-oxidation surface treatment delivers superior corrosion resistance and off-center load resistance
- All models are equipped with CEJN quick coupling and dust cap

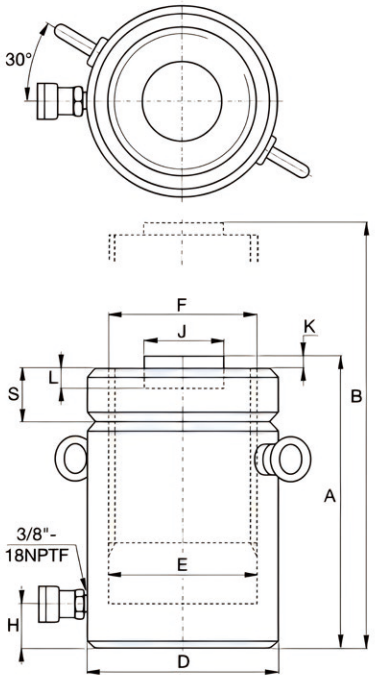


Optional Tilt Saddle



CLL502 - CLL25012

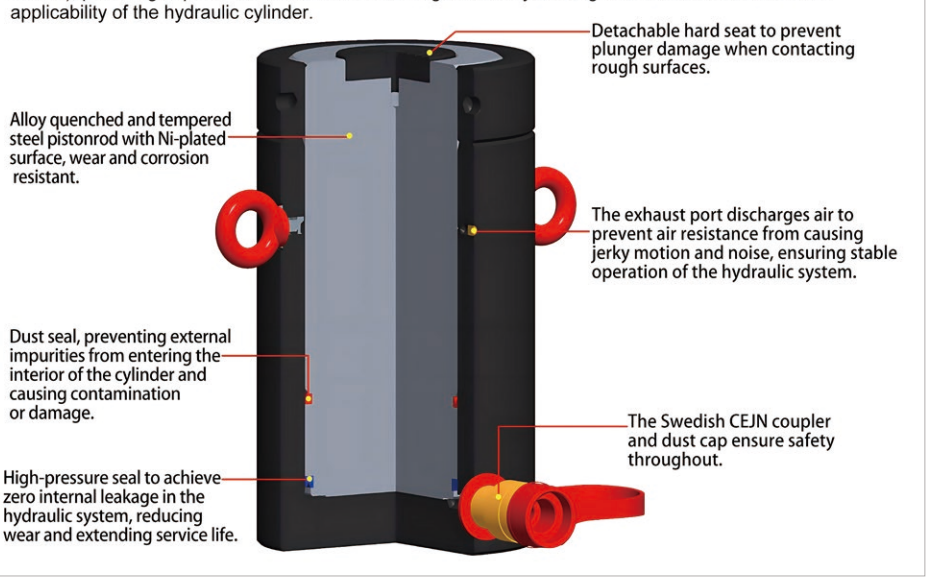
Load Capacity (ton (kN))	Stroke (mm)	Model	Effective Area (cm^2)	Oil Capacity (cm^3)	Collapsed Height A (mm)	Extended Height B (mm)	Outer Diameter D (mm)
50 (496)	50	CLL502	70.9	355	164	214	125
50 (496)	100	CLL504	70.9	709	214	314	125
50 (496)	150	CLL506	70.9	1064	264	414	125
50 (496)	200	CLL508	70.9	1418	314	514	125
50 (496)	250	CLL5010	70.9	1773	364	614	125
50 (496)	300	CLL5012	70.9	2127	414	714	125
100 (929)	50	CLL1002	132.7	664	187	237	165
100 (929)	100	CLL1004	132.7	1327	237	337	165
100 (929)	150	CLL1006	132.7	1991	287	437	165
100 (929)	200	CLL1008	132.7	2654	337	537	165
100 (929)	250	CLL10010	132.7	3318	387	637	165
100 (929)	300	CLL10012	132.7	3981	437	737	165
150 (1390)	50	CLL1502	198.6	993	209	259	205
150 (1390)	100	CLL1504	198.6	1986	259	359	205
150 (1390)	150	CLL1506	198.6	2979	309	459	205
150 (1390)	200	CLL1508	198.6	3972	359	559	205
150 (1390)	250	CLL15010	198.6	4965	409	659	205
150 (1390)	300	CLL15012	198.6	5958	459	759	205
200 (1859)	50	CLL2002	265.6	1330	243	293	235
200 (1859)	150	CLL2006	265.6	3989	343	493	235
200 (1859)	300	CLL20012	265.6	7995	493	793	235
250 (2562)	50	CLL2502	366.1	1832	249	299	275
250 (2562)	150	CLL2506	366.1	5496	349	499	275
250 (2562)	300	CLL25012	366.1	10995	499	799	275
300 (3193)	50	CLL3002	456.2	2281	295	345	310
300 (3193)	150	CLL3006	456.2	6843	395	545	310
300 (3193)	300	CLL30012	456.2	13740	545	845	310
400 (3919)	50	CLL4002	559.9	2800	335	385	350
400 (3919)	150	CLL4006	559.9	8399	435	585	350
400 (3919)	300	CLL40012	559.9	16800	585	885	350
500 (5118)	50	CLL5002	731.1	3653	375	425	400
500 (5118)	150	CLL5006	731.1	10959	475	625	400
500 (5118)	300	CLL50012	731.1	21930	625	925	400
600 (5983)	50	CLL6002	854.8	4277	395	445	430
600 (5983)	150	CLL6006	854.8	12830	495	645	430
600 (5983)	300	CLL60012	854.8	25650	645	945	430
800 (8238)	50	CLL8002	1176.9	5882	455	505	505
800 (8238)	150	CLL8006	1176.9	17645	555	705	505
800 (8238)	300	CLL80012	1176.9	35370	705	1005	505
1000 (10260)	50	CLL10002	1466.4	7329	495	545	560
1000 (10260)	150	CLL10006	1466.4	21986	595	745	560
1000 (10260)	300	CLL100012	1466.4	43980	745	1045	560



CLL3002 - CLL10012

▶CLL Performance Introduction

All components are surface-treated by gas nitriding and post-oxidation process (except for the hard saddle), providing superior corrosion resistance. High durability and high hardness ensure the wide applicability of the hydraulic cylinder.



	Cylinders Bore E (mm)	Plunger Dia. (Thread) F (mm)	Inlet Height from Base H (mm)	Std. Saddle Dia. J (mm)	Saddle Protrusion Ht. K (mm)	Plunger Bore Depth L (mm)	Lock Nut Height S (mm)	Weight (kg)	Model	*Optional Tilt Saddle		
										Saddle Dia. J1 (mm)	Saddle Height K1 (mm)	Saddle Model
	95	Tr95×4	30	71	2	13	36	15	CLL502	71	24	CAT100
	95	Tr95×4	30	71	2	13	36	20	CLL504	71	24	CAT100
	95	Tr95×4	30	71	2	13	36	25	CLL506	71	24	CAT100
	95	Tr95×4	30	71	2	13	36	30	CLL508	71	24	CAT100
	95	Tr95×4	30	71	2	13	36	35	CLL5010	71	24	CAT100
	95	Tr95×4	30	71	2	13	36	40	CLL5012	71	24	CAT100
	130	Tr130×6	30	71	2	13	44	30	CLL1002	71	24	CAT100
	130	Tr130×6	30	71	2	13	44	39	CLL1004	71	24	CAT100
	130	Tr130×6	30	71	2	13	44	48	CLL1006	71	24	CAT100
	130	Tr130×6	30	71	2	13	44	56	CLL1008	71	24	CAT100
	130	Tr130×6	30	71	2	13	44	64	CLL10010	71	24	CAT100
	130	Tr130×6	30	71	2	13	44	73	CLL10012	71	24	CAT100
	159	Tr159×6	39	130	2	25	44	53	CLL1502	130	20	CAT200
	159	Tr159×6	39	130	2	25	44	66	CLL1504	130	20	CAT200
	159	Tr159×6	39	130	2	25	44	78	CLL1506	130	20	CAT200
	159	Tr159×6	39	130	2	25	44	92	CLL1508	130	20	CAT200
	159	Tr159×6	39	130	2	25	44	104	CLL15010	130	20	CAT200
	159	Tr159×6	39	130	2	25	44	117	CLL15012	130	20	CAT200
	184	Tr184×6	50	130	2	25	50	83	CLL2002	130	20	CAT200
	184	Tr184×6	50	130	2	25	50	117	CLL2006	130	20	CAT200
	184	Tr184×6	50	130	2	25	50	170	CLL20012	130	20	CAT200
	216	Tr216×6	50	150	2	25	56	116	CLL2502	150	21	CAT250
	216	Tr216×6	50	150	2	25	56	162	CLL2506	150	21	CAT250
	216	Tr216×6	50	150	2	25	56	234	CLL25012	150	21	CAT250
	241	Tr241×6	59	139	5	25	60	173	CLL3002	195	75	CAT300
	241	Tr241×6	59	139	5	25	60	233	CLL3006	195	75	CAT300
	241	Tr241×6	59	139	5	25	60	323	CLL30012	195	75	CAT300
	267	Tr266×6	70	159	5	25	70	250	CLL4002	225	85	CAT400
	267	Tr266×6	70	159	5	25	70	327	CLL4006	225	85	CAT400
	267	Tr266×6	70	159	5	25	70	441	CLL40012	225	85	CAT400
	305	Tr305×6	80	179	5	25	80	367	CLL5002	250	91	CAT500
	305	Tr305×6	80	179	5	25	80	466	CLL5006	250	91	CAT500
	305	Tr305×6	80	179	5	25	80	617	CLL50012	250	91	CAT500
	330	Tr330×6	85	194	5	25	85	446	CLL6002	275	96	CAT600
	330	Tr330×6	85	194	5	25	85	562	CLL6006	275	96	CAT600
	330	Tr330×6	85	194	5	25	85	737	CLL60012	275	96	CAT600
	387	Tr387×6	100	224	5	25	100	709	CLL8002	320	123	CAT800
	387	Tr387×6	100	224	5	25	100	870	CLL8006	320	123	CAT800
	387	Tr387×6	100	224	5	25	100	1110	CLL80012	320	123	CAT800
	432	Tr432×6	110	249	5	25	110	949	CLL10002	360	136	CAT1000
	432	Tr432×6	110	249	5	25	110	1141	CLL10006	360	136	CAT1000
	432	Tr432×6	110	249	5	25	110	1430	CLL100012	360	136	CAT1000

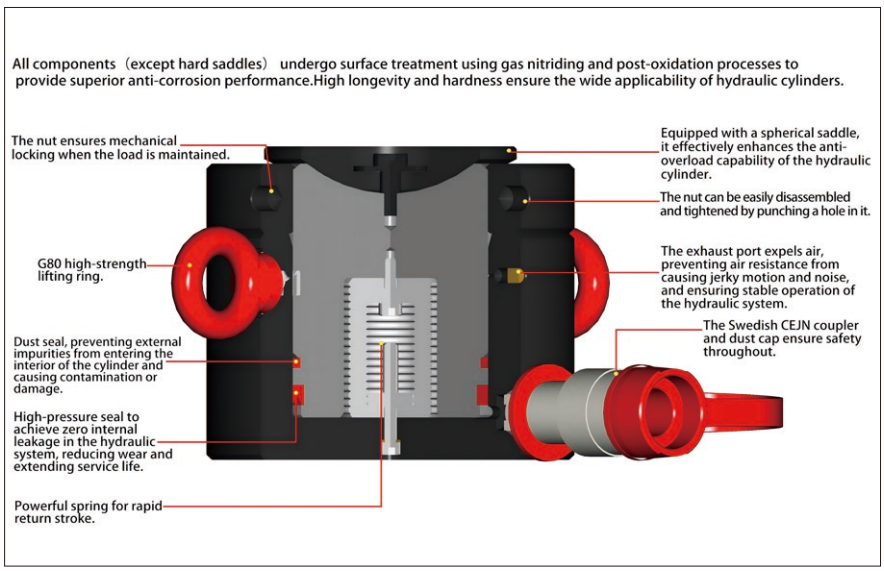
▼ HSL Single-Acting High Tonnage Lock Nut Cylinders



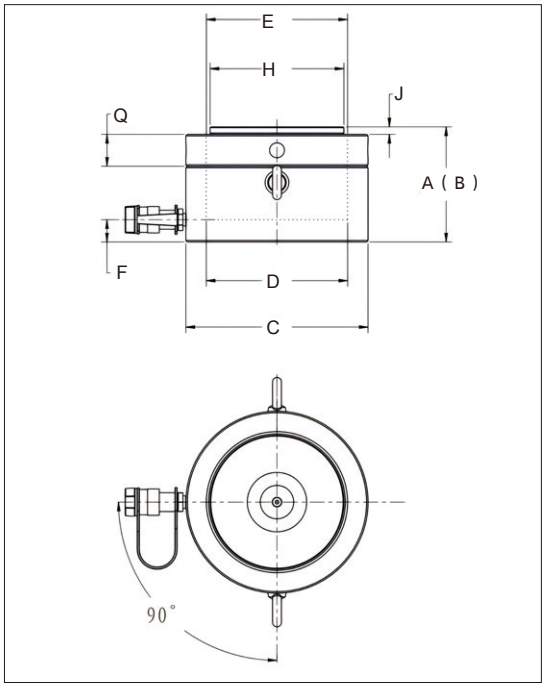
Rated Pressure:	70MPa
Rated Tonnage:	30 -500ton
Stroke Range:	50-300mm

- Single-acting, spring-return hydraulic cylinder
- Equipped with a spherical saddle, which effectively enhances the cylinder's anti-eccentric load capacity
- The locking nut enables mechanical locking for load retention
- The low-friction locking nut is easy to rotate, saving time and effort
- Can withstand up to 10% eccentric load when at 90% of the maximum stroke
- Gas nitriding and post-oxidation surface treatment process provides superior corrosion resistance and anti-eccentric load performance
- The overflow port acts as a stroke limiter to prevent plunger overstroke
- High-grade polyurethane seals are adopted, featuring excellent sealing performance, wear resistance, and a long service life
- Equipped with certified G80 high-strength lifting eyes and base mounting holes

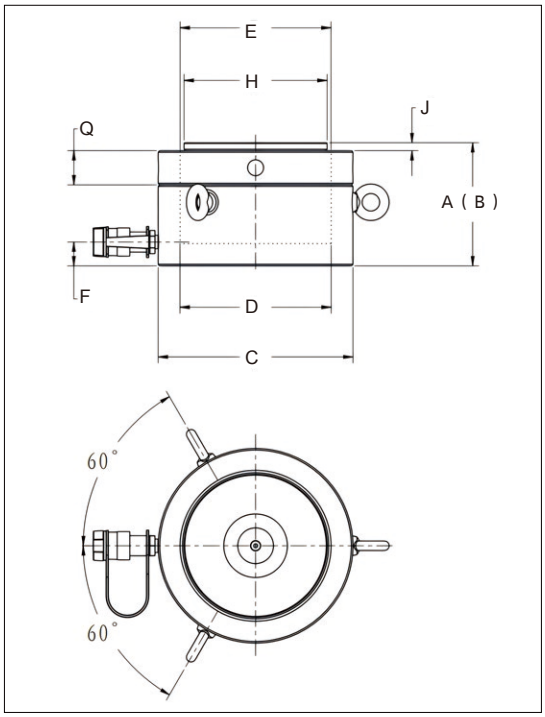
▼ HSL Performance Introduction:



▼ HSL Outline Dimensional Drawing



HSL30-HSL160



HSL200-HSL500

▼ HSL Type Specification Sheet:

Capacity (ton)	Model Number	Stroke (mm)	Effective Area of Cylinder (cm^2)	Oil Capacity (cm^3)	Collapsed Height A (mm)	Extended Height B (mm)	Outer Diameter C (mm)	Cylinders Bore D (mm)	Plunger Diameter E	Oil Inlet Height F	Saddle Diameter H (mm)	Saddle Protrusion J	Max Saddle Angle	Lock Nut Height Q (mm)	Weight (KG)
30	HSL30-50	50	44.2	221	120	170	110	75	Tr75x4	19	65	5	5°	25	10
	HSL30-100	100	44.2	442	170	270	110	75	Tr75x4	19	65	5	5°	25	14
	HSL30-150	150	44.2	663	225	375	110	75	Tr75x4	19	65	5	5°	25	17
	HSL30-200	200	44.2	884	280	480	110	75	Tr75x4	19	65	5	5°	25	21
	HSL30-250	250	44.2	1105	335	585	110	75	Tr75x4	19	65	5	5°	25	25
	HSL30-300	300	44.2	1326	390	690	110	75	Tr75x4	19	65	5	5°	25	29
60	HSL60-50	50	86.6	433	126	176	140	105	Tr105x4	19	96	7	5°	28	15
	HSL60-100	100	86.6	866	176	276	140	105	Tr105x4	19	96	7	5°	28	20
	HSL60-150	150	86.6	1299	231	381	140	105	Tr105x4	19	96	7	5°	28	27
	HSL60-200	200	86.6	1732	286	486	140	105	Tr105x4	19	96	7	5°	28	33
	HSL60-250	250	86.6	2165	341	591	140	105	Tr105x4	19	96	7	5°	28	39
	HSL60-300	300	86.6	2598	396	696	140	105	Tr105x4	19	96	7	5°	28	46
100	HSL100-50	50	146.8	734	137	187	173	135	Tr135X6	21	126	8	5°	31	25
	HSL100-100	100	146.8	1468	187	287	173	135	Tr135X6	21	126	8	5°	31	34
	HSL100-150	150	146.8	2202	242	392	173	135	Tr135X6	21	126	8	5°	31	43
	HSL100-200	200	146.8	2936	297	497	173	135	Tr135X6	21	126	8	5°	31	53
	HSL100-250	250	146.8	3670	352	602	173	135	Tr135X6	21	126	8	5°	31	63
	HSL100-300	300	146.8	4404	407	707	173	135	Tr135X6	21	126	8	5°	31	73
160	HSL160-45	45	231.3	1041	148	193	220	170	Tr170X6	27	160	9	5°	40	43
	HSL160-100	100	231.3	2313	203	303	220	170	Tr170X6	27	160	9	5°	40	58
	HSL160-150	150	231.3	3470	258	408	220	170	Tr170X6	27	160	9	5°	40	74
	HSL160-200	200	231.3	4626	313	513	220	170	Tr170X6	27	160	9	5°	40	90
	HSL160-250	250	231.3	5783	368	618	220	170	Tr170X6	27	160	9	5°	40	106
	HSL160-300	300	231.3	6939	423	723	220	170	Tr170X6	27	160	9	5°	40	122
200	HSL200-45	45	285.6	1285	155	200	245	190	Tr190X6	30	180	10	5°	43	53
	HSL200-100	100	285.6	2856	210	310	245	190	Tr190X6	30	180	10	5°	43	72
	HSL200-150	150	285.6	4284	265	415	245	190	Tr190X6	30	180	10	5°	43	90
	HSL200-200	200	285.6	5712	320	520	245	190	Tr190X6	30	180	10	5°	43	109
	HSL200-250	250	285.6	7140	375	625	245	190	Tr190X6	30	180	10	5°	43	128
	HSL200-300	300	285.6	8568	430	730	245	190	Tr190X6	30	180	10	5°	43	147
250	HSL250-45	45	366.8	1651	159	204	275	215	Tr215X6	32	200	12	5°	43	68
	HSL250-100	100	366.8	3668	214	314	275	215	Tr215X6	32	200	12	5°	43	92
	HSL250-150	150	366.8	5502	269	419	275	215	Tr215X6	32	200	12	5°	43	116
	HSL250-200	200	366.8	7336	324	524	275	215	Tr215X6	32	200	12	5°	43	141
	HSL250-250	250	366.8	9170	379	629	275	215	Tr215X6	32	200	12	5°	43	165
	HSL250-300	300	366.8	11004	434	734	275	215	Tr215X6	32	200	12	5°	43	189
300	HSL300-45	45	433.7	1952	166	211	305	235	Tr235X6	35	225	12	4°	48	90
	HSL300-100	100	433.7	4337	221	321	305	235	Tr235X6	35	225	12	4°	48	120
	HSL300-150	150	433.7	6506	276	426	305	235	Tr235X6	35	225	12	4°	48	151
	HSL300-200	200	433.7	8674	331	531	305	235	Tr235X6	35	225	12	4°	48	181
	HSL300-250	250	433.7	10843	386	636	305	235	Tr235X6	35	225	12	4°	48	211
	HSL300-300	300	433.7	13011	441	741	305	235	Tr235X6	35	225	12	4°	48	241
400	HSL400-45	45	559.5	2518	178	223	350	270	Tr270X6	40	250	12	4°	55	127
	HSL400-100	100	559.5	5595	233	333	350	270	Tr270X6	40	250	12	4°	55	167
	HSL400-150	150	559.5	8393	288	438	350	270	Tr270X6	40	250	12	4°	55	207
	HSL400-200	200	559.5	11190	343	543	350	270	Tr270X6	40	250	12	4°	55	247
	HSL400-250	250	559.5	13988	398	648	350	270	Tr270X6	40	250	12	4°	55	288
	HSL400-300	300	559.5	16785	453	753	350	270	Tr270X6	40	250	12	4°	55	328
500	HSL500-45	45	730.6	3288	192	237	400	305	Tr305X6	49	290	10	3°	61.5	181
	HSL500-100	100	730.6	7306	247	347	400	305	Tr305X6	49	290	10	3°	61.5	234
	HSL500-150	150	730.6	10959	302	452	400	305	Tr305X6	49	290	10	3°	61.5	287
	HSL500-200	200	730.6	14612	357	557	400	305	Tr305X6	49	290	10	3°	61.5	339
	HSL500-250	250	730.6	18265	412	662	400	305	Tr305X6	49	290	10	3°	61.5	392
	HSL500-300	300	730.6	21918	467	767	400	305	Tr305X6	49	290	10	3°	61.5	445

▼CULP Ultra-Flat Cylinders With Stop Ring



CULP Series

Rated Pressure: 70MPa

Rated Tonnage: 10-100ton

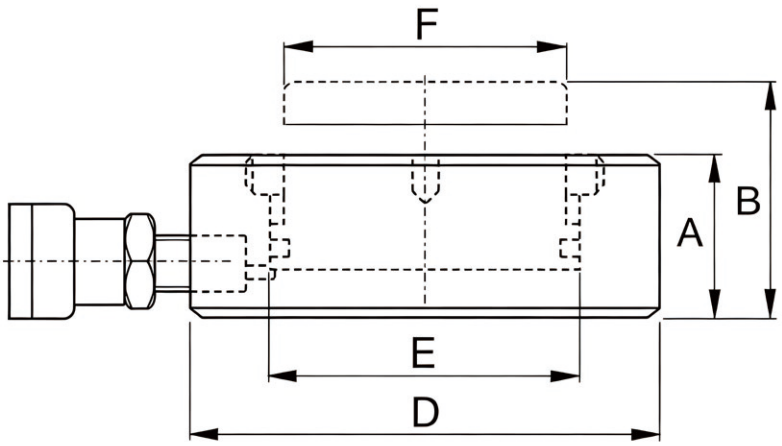
Stroke Range: 6mm

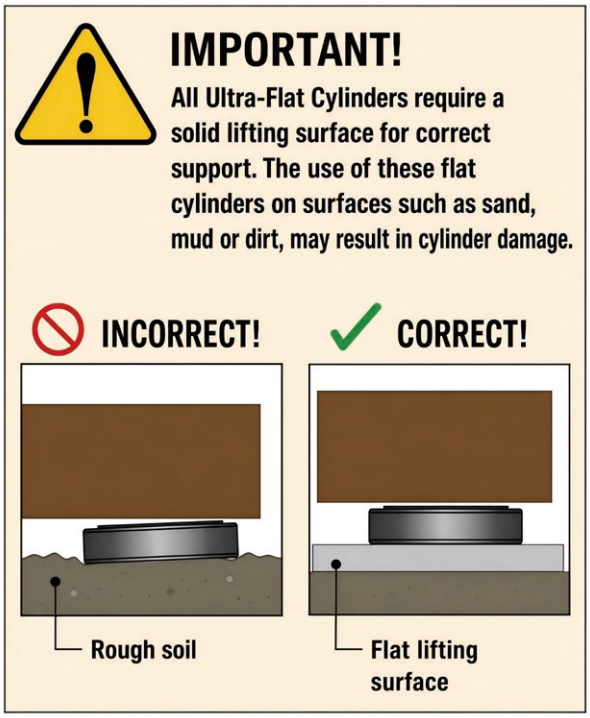


HSP Series Hoses

RIVERLAKE provides various types of high-grade hydraulic hoses. Choose original RIVERLAKE high-pressure hoses for complete system matching.

- Withstand side load up to 4% at maximum rated capacity
- Stop ring prevents excessive plunger stroke
- Low collapsed collapsed height
- Gas nitriding and post-oxidation surface treatment deliver excellent corrosion resistance and side load resistance
- All models in the CULP series are fitted with an 18 cm hydraulic hose with a female CEJN coupling assembled at the hose end, suited for operation under confined-space working conditions.





Cylinders Capacity @ 700 bar	Stroke (mm)	Model Number	Cylinders Effective Area (cm^2)	Oil Capacity (cm^3)	Collapsed Height A (mm)	Extended Height B (mm)	Outside Diameter D (mm)	Cylinders Bore Diameter E (mm)	Plunger Diameter F (mm)	Weight (kg)
10 (97)	6	CULP10	13.9	8.3	27.5	33.5	72	42	38	1.0
20 (198)	6	CULP20	28.3	17.0	32.0	38.0	90	60	55	1.7
30 (310)	6	CULP30	44.2	26.5	35.0	41.0	105	75	67	2.5
50 (550)	6	CULP50	78.5	47.1	44.5	50.5	140	100	90	5.4
100 (1078)	6	CULP100	153.9	92.5	65.0	71.0	195	140	125	11.5

▼CUSP Ultra-Flat High-Tonnage Cylinders



CUSP Series

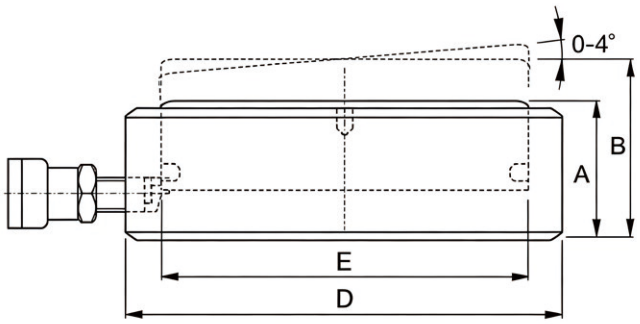
Rated Pressure: 70MPa

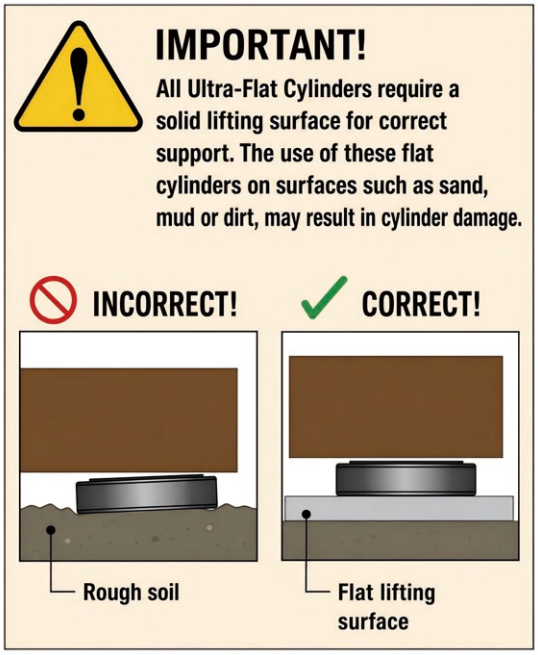
Rated Tonnage: 10-1000ton

Stroke Range: 6/10,7-17mm

Integrated: Tilting Saddle

- Able to withstand up to 4% side load under maximum load
- Low collapsed height, ultra-thin heavy-duty design, equipped with integrated tilting saddle cylinder
- Built-in tilting saddle with maximum 4° tilt for even load distribution
- Adopts gas nitriding and post-oxidation surface treatment for superior corrosion resistance and side load resistance
- Equipped with maximum stroke indicator line
- CUSP10-CUSP75 are fitted with an 18cm hydraulic hose terminated with a female CEJN coupling for confined-space operation.
- No stroke limiting stop ring





Cylinders Capacity @ 700 bar (ton (kN))	Tilted Stroke (mm)	Straight Stroke (mm)	Model Number	Tilting +/- (degree)	Cylinders Effective Area (cm²)	Oil Capacity (cm³)	Collapsed Height A (mm)	Extended Height B (mm)	Cylinders Outside Diameter D (mm)	Cylinders Bore Diameter E (mm)	Weight (kg)
10 (97)	6	6.7	CUSP10	2	13.9	9.3	35.5	41.5	72	42	1.2
20 (198)	6	7	CUSP20	2	28.3	19.8	40.5	46.5	90	60	1.9
30 (310)	6	7.3	CUSP30	2	44.2	32.1	42.5	48.5	105	75	2.7
50 (550)	10	13.3	CUSP50	4	78.5	104	57	67	130	100	5.6
75 (792)	10	14	CUSP75	4	113.1	158	60.5	70.5	150	120	8
100 (1078)	10	14.7	CUSP100	4	153.9	226	63.5	73.5	170	140	10.8
150 (1589)	10	14.3	CUSP150	3	227	324	65	75	200	170	15.3
200 (2090)	10	14.9	CUSP200	3	298.6	446	69	79	229	195	21.5
250 (2542)	10	14.5	CUSP250	3	363.1	569	72.5	82.5	252	215	27.3
300 (3167)	10	14.1	CUSP300	2	452.4	637	72.5	82.5	282	240	34.4
400 (4008)	10	14.6	CUSP400	2	572.6	837	77.5	87.5	316	270	46.2
500 (5115)	10	15.2	CUSP500	2	730.6	1111	82.5	92.5	356	305	62.7
600 (5987)	10	15.6	CUSP600	2	855.3	1334	87.5	97.5	386	330	78.4
750 (7527)	10	16.3	CUSP750	2	1075.2	1757	93.5	103.5	432	370	105.2
1000 (10.165)	10	17.4	CUSP1000	2	1452.2	2531	103	113	502	430	157

▼RT Series, Multi-Stage Telescopic Cylinders



Rated Pressure: 70MPa

Rated Tonnage: 14-31.5ton

Stroke Range: 270-600mm

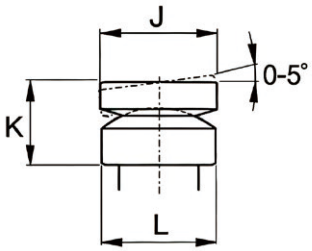
- Nitrided stop ring prevents plunger over-stroke
- Adopts gas nitriding and post-oxidation surface treatment for superior corrosion resistance and side load resistance
- Tolerates lateral load equal to 3% of rated capacity
- Dual/triple wear-resistant bearings reinforce lifting travel
- All units come with standard tilt saddle, max tilting angle: 5°
- All models equipped with CEJN quick couplers and dust caps

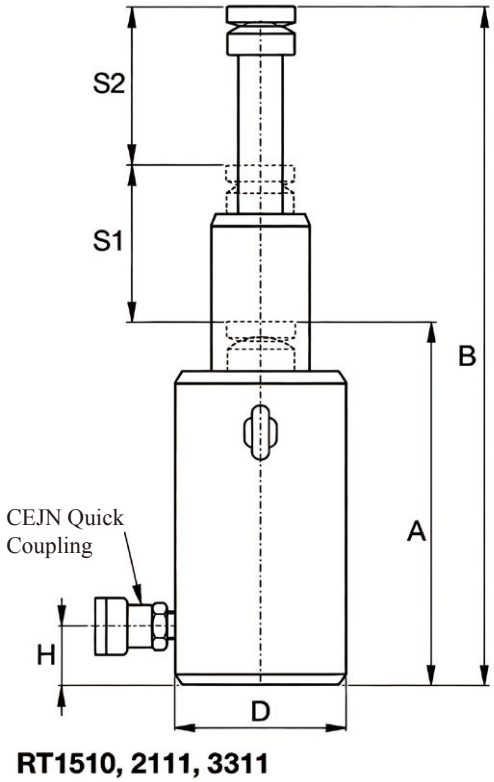
►Multi-Stage Cylinders

Plunger Stage	Load Capacity	Stroke Performance
1st Stage	Maximum	Minimum
2nd Stage	Lower than 1st stage	Longer than 1st stage
3nd Stage	Minimum	Maximum



All RT-series cylinders are equipped with an integral tilt saddle with a maximum tilt angle of up to 5 degrees.

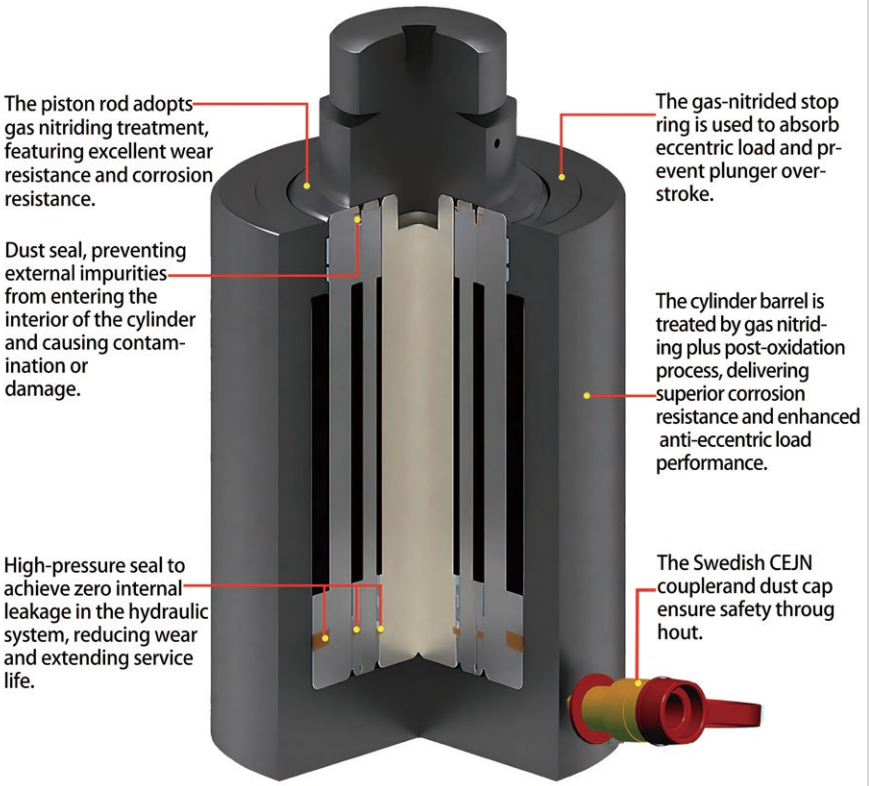


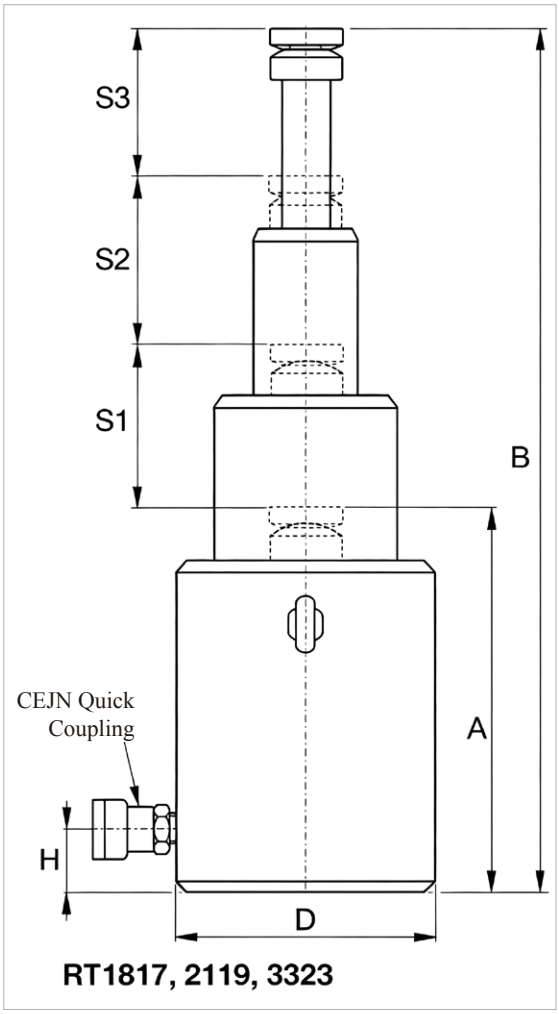


RT1510, 2111, 3311

Model Number	Cylinders Capacity at Maximum Stroke (ton)	Maximum Stroke (mm)	Collapsed Height A (mm)	Extended Height B (mm)	Oil Capacity (cm^3)
RT1510	14.0 (137)	270	283	553	944
RT1817	17.0 (166)	435	345	780	3092
RT2111	20.2 (198)	300	317	617	1487
RT2119	20.2 (198)	500	395	895	4661
RT3311	31.5 (309)	300	352	652	2359
RT3323	31.5 (309)	600	476	1076	8816

▼RT Cylinders Performance Introduction





RT1817, 2119, 3323

1st Stage		2nd Stage		3rd Stage		Outside Dia. D (mm)	Bottom to Advance Port H (mm)	Saddle Dia.J (mm)	Saddle Protrusion from Pl. K (mm)	Saddle Support L (mm)	Weight (kg)	Model Number
Capacity ton (kN)	Stroke S1 (mm)	Capacity ton (kN)	Stroke S2 (mm)	Capacity ton (kN)	Stroke S3 (mm)							
36 (352)	135	14 (137)	135	-	-	110	220	60	49	60	15.1	RT1510
95 (929)	145	41 (397)	145	17.0 (166)	145	170	277	80	73	85	40.3	RT1817
51 (496)	150	20 (198)	150	-	-	125	233	60	53	66	21.8	RT2111
126 (1237)	170	51 (496)	170	20.2 (198)	160	220	334	90	83	100	67.3	RT2119
81 (792)	150	32 (309)	150	-	-	160	255	80	66	89	39.9	RT3311
202 (1985)	200	81 (792)	200	31.5 (309)	220	250	444	110	111	123	124	RT3323

▼RLT-Series, Low-Height Telescopic Cylinders



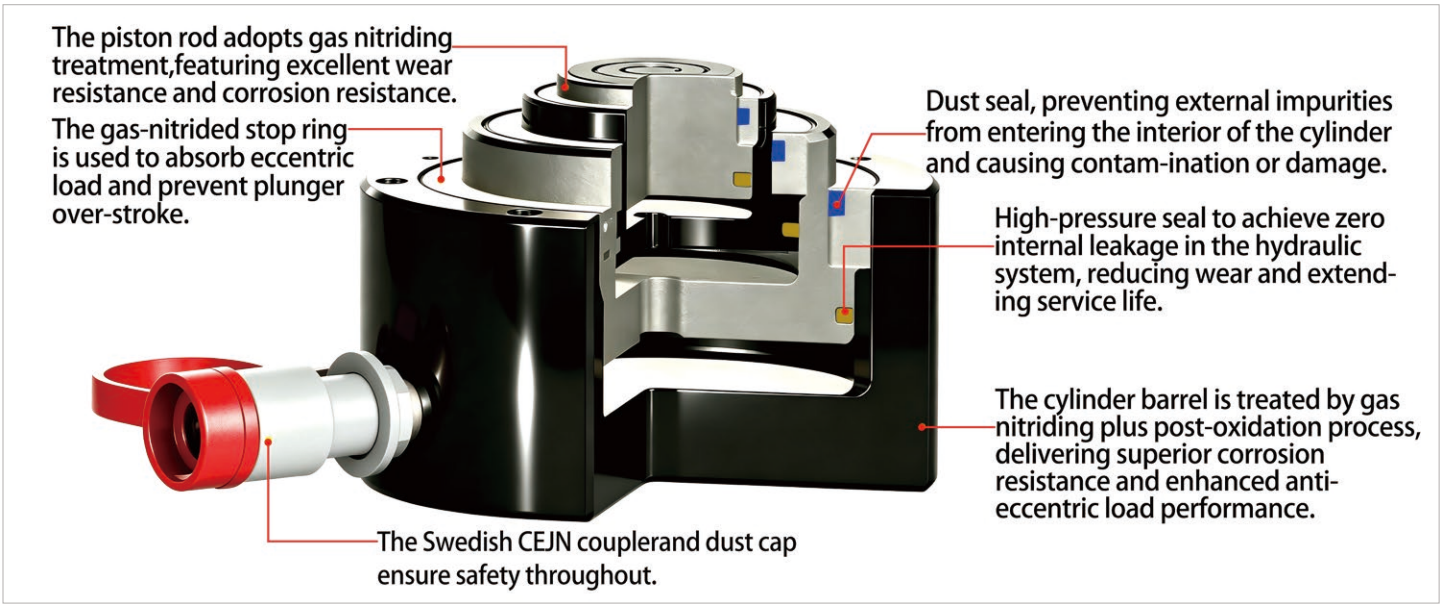
Rated Pressure: 70MPa

Rated Tonnage: 4.4-74.1ton

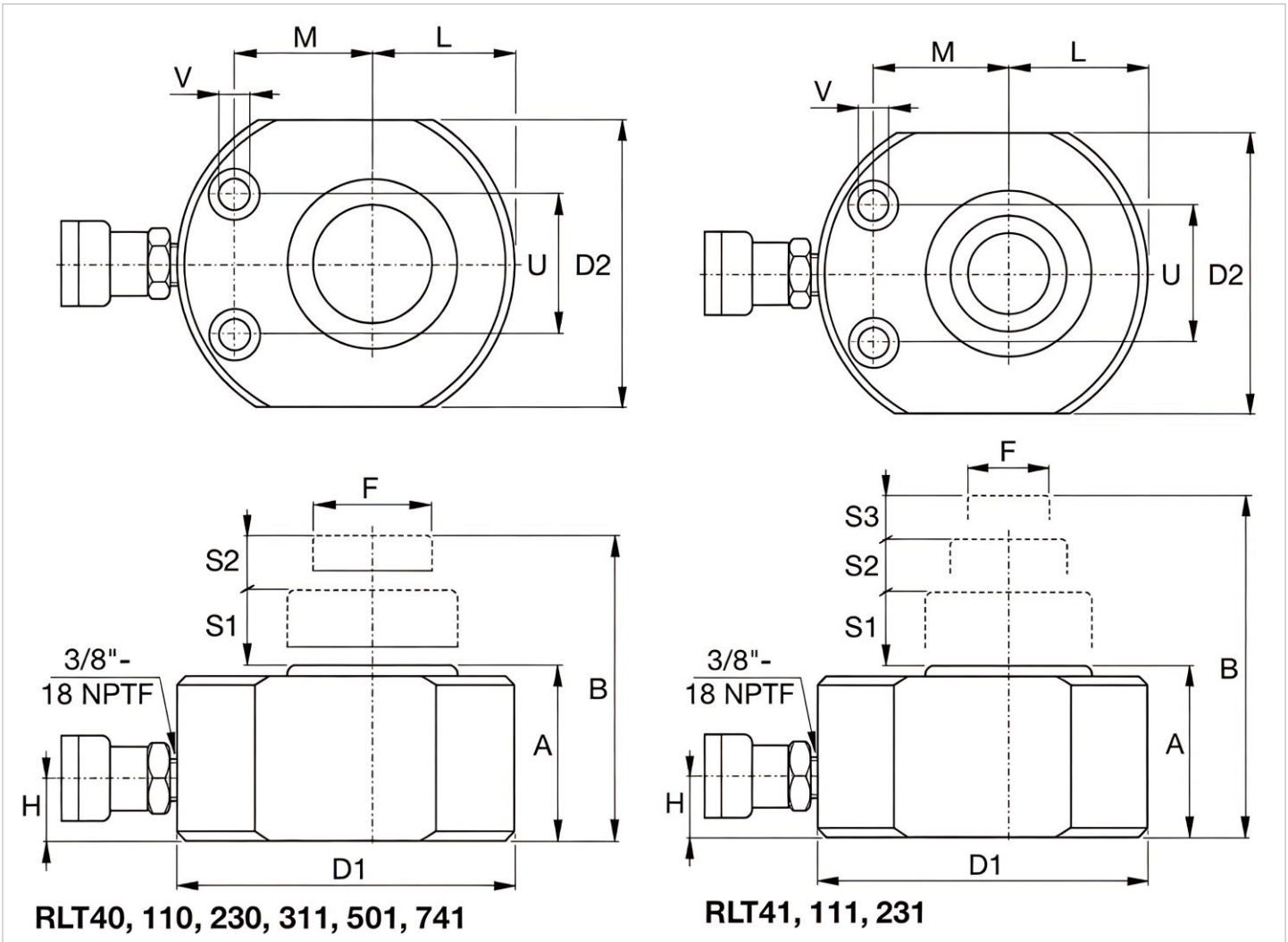
Stroke Range: 17-40mm

- Single-acting with load return
- Internal and external gas nitrocarburizing & post-oxidation surface treatment provides excellent corrosion resistance and side load resistance
- Suitable for confined space applications: machinery positioning, tool fastening
- Pre-drilled mounting bolt holes for easy installation and fixing
- Withstands side load up to 3% of full rated capacity
- Made of high-strength alloy steel for outstanding service life
- Long-stroke design allows moving loads over a longer distance without temporary support cribbing, saving working time and reducing project difficulty

▼RLT Performance Introduction



Model Number	Cylinders Capacity at Maximum Stroke (ton (kN))	Maximum Stroke (mm)	Collapsed Height A (mm)	Extended Height B (mm)	Oil Capacity (cm^3)	1st Stage	
						Capacity (ton (kN))	Stroke S1 (mm)
RLT40	4.4 (43)	17	45	62	21	**11.4 (111)**	**11**
RLT41	4.4 (43)	23	54	77	51	**23.7 (232)**	**11**
RLT110	11.4 (111)	18	54.5	72.5	48	**23.7 (232)**	**11**
RLT111	11.4 (111)	40	89	129	241	**74.1 (727)**	**16**
RLT230	23.7 (232)	27	75	102	150	**50.6 (496)**	**16**
RLT231	23.7 (232)	32	96	128	303	**94.7 (929)**	**16**
RLT311	31.5 (309)	29	89	118	224	**74.1 (727)**	**16**
RLT501	50.6 (496)	26	96	122	283	**94.7 (929)**	**16**
RLT741	74.1 (727)	26	114	140	426	**143.5 (1407)**	**16**



▼RLT Multi-stage Cylinders

Plunger Stage	Load Capacity	Stroke Performance
1st Stage	Maximum	Minimum
2nd Stage	Lower than the 1st Stage	Longer than the 1st Stage
Final Stage	Lowest	Maximum

RLT Cylinders Bottom Mounting Hole Dimensions (mm)				
Model Number	Bolt Distance U	Hole Diameter V	Counter Bore Diameter	Counter Bore Depth
RLT40	37	6.5	11	7
RLT41	50	9.0	14	9
RLT110	50	9.0	14	9
RLT111	76	13.0	20	13
RLT230	67	13.0	20	13
RLT231	76	6.5	11	7
RLT311	76	13.0	20	13
RLT501	76	6.5	11	7
RLT741	117	9.0	14	9

2st Stage		3st Stage		Outside Diameter D1 × D2 (mm)	Plunger Diameter F (mm)	Bottom to Advance Port H (mm)	Plunger to Base L (mm)	Plunger to Mounting Hole M (mm)	Weight (kg)	Model Number
Capacity (ton (kN))	Stroke S2 (mm)	Capacity (ton (kN))	Stroke S3 (mm)							
4.4 (43)	**6**	-	-	83×56	25	20	29	33	1.8	RLT40
11.4 (111)	**7**	**4.4 (43)**	**5**	102×80	25	20	41	39	3.1	RLT41
11.4 (111)	**7**	-	-	102×80	38	20	41	39	3	RLT110
31.5 (309)	**13**	**11.4 (111)**	**11**	165×140	38	25	70.5	66	13.1	RLT111
23.7 (232)	**11**	-	-	140×114	57	20	58	56	7.6	RLT230
50.6 (496)	**10**	**23.7 (232)**	**6**	178×162	57	29	89	70	17.3	RLT231
31.5 (309)	**13**	-	-	165×140	60	25	70.5	66	13	RLT311
50.6 (496)	**10**	-	-	178×162	78	29	89	70	17.3	RLT501
74.1 (727)	**10**	-	-	216×196	95	35	108	78	30.4	RLT741

▼RAC Single-acting Aluminum Cylinders



Rated Pressure: 70MPa

Rated Tonnage: 10-150ton

Stroke Range: 50-250mm



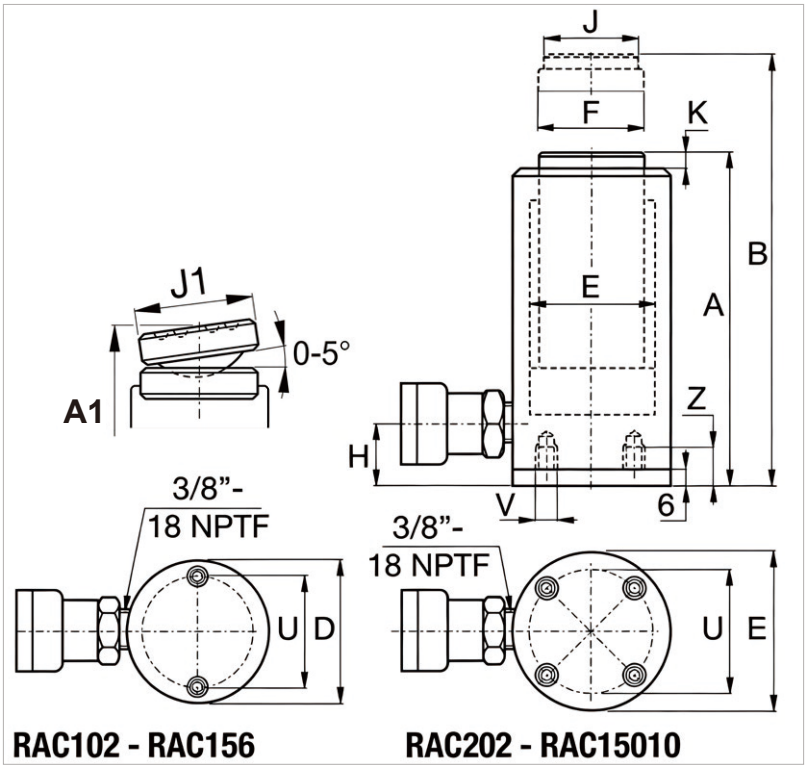
Removable Saddle
All RAC cylinders are fitted with bolt-on removable hardened steel saddles.

•Composite Wear Ring: Prevents direct metal-to-metal contact, extends cylinder service life, and withstands side loads up to 10%.
•Fully hardened surface treatment avoids damage from external forces, further extending cylinder service life.
•Cylinders from 30 to 150 ton capacity come standard with carrying handles for easy operation and handling.
•Standard saddle effectively prevents cylinder damage during load-bearing operations.
•RAC20 and larger tonnage cylinders are equipped with a standard steel base; RAC10 and RAC15 tonnage cylinders offer an optional steel base to suit different application requirements.
•Stop Ring Protection: The integrated stop ring prevents over-extension of the plunger and withstands the cylinder's maximum lifting force.
•High-strength return spring assists the cylinder in fast retraction, improving work efficiency.
All cylinder models are equipped with CEJN quick couplings and dust caps to ensure convenient connection and cleanliness.



Hand Pump
RIVERLAKE Lightweight Hand Pump P392, your ideal choice for matching light-duty accessories.

Cylinders Capacity at 700 bar ton (kN)	Stroke (mm)	Model Number		Oil Capacity (cm^3)
10 (88)	50	RAC102	12.6	60
10 (88)	100	RAC104	12.6	130
10 (88)	150	RAC106	12.6	190
15 (137)	50	RAC152	19.6	100
15 (137)	100	RAC154	19.6	200
15 (137)	150	RAC156	19.6	290
20 (218)	50	RAC202	31.2	156
20 (218)	100	RAC204	31.2	312
20 (218)	150	RAC206	31.2	468
20 (218)	200	RAC208	31.2	624
20 (218)	250	RAC2010	31.2	780
30 (309)	50	RAC302	44.2	221
30 (309)	100	RAC304	44.2	442
30 (309)	150	RAC306	44.2	663
30 (309)	200	RAC308	44.2	884
30 (309)	250	RAC3010	44.2	1105
50 (496)	50	RAC502	70.9	354
50 (496)	100	RAC504	70.9	709
50 (496)	150	RAC506	70.9	1063
50 (496)	200	RAC508	70.9	1417
50 (496)	250	RAC5010	70.9	1771
100 (1002)	50	RAC1002	143.1	715
100 (1002)	100	RAC1004	143.1	1431
100 (1002)	150	RAC1006	143.1	2147
100 (1002)	200	RAC1008	143.1	2863
100 (1002)	250	RAC10010	143.1	3578
150 (1589)	50	RAC1502	227	1135
150 (1589)	100	RAC1504	227	2270
150 (1589)	150	RAC1506	227	3405
150 (1589)	200	RAC1508	227	4540
150 (1589)	250	RAC15010	227	5675



▼Dimensions of optional bolt-on tilt saddle

For Cylinders Model / Capacity ton	Tilt Saddle Model Number	Tilt Saddle Diameter J1 (mm)	Addition to Collapsed Height A1 (mm)
RAC20, 30	CATS30	55	11
RAC50	CATS50	71	14
RAC100	CATS150	97	19
RAC150	CATS200	126	18

♦ Tilt saddle is not available for 10-ton and 15-ton models.

▼Optional steel base plate

For Cylinders Model / Capacity ton	Base Plate Model Number
RAC10	JBA10
RAC15	JBA15

♦Models from 10 to 150 ton are equipped with base plate of 6mm height; base plate is optional for 10 and 15 ton models.

Collapsed Height A (mm)	Extended Height B (mm)	Outside Diameter D (mm)	Inner Bore Diameter E (mm)	Plunger Diameter F (mm)	Bottom to Advance Port H (mm)	Saddle Diameter J (mm)	Saddle Protrusion from Plunger K (mm)	Bolt Circle U (mm)	Thread V	Thread Depth Z (mm)	Weight (kg)	Model Number
154	201	58	40	32	23	24	3	39	M6	12	1.3	RAC102
204	204	58	40	32	23	24	3	39	M6	12	1.7	RAC104
254	404	58	40	32	23	24	3	39	M6	12	2	RAC106
161	211	70	50	40	23	29	3	48	M6	12	1.9	RAC152
211	311	70	50	40	23	29	3	48	M6	12	2.4	RAC154
261	411	70	50	40	23	29	3	48	M6	12	2.9	RAC156
174	224	85	63	50	27	40	3	70	M6	12	3.6	RAC202
224	324	85	63	50	27	40	3	70	M6	12	4.1	RAC204
274	424	85	63	50	27	40	3	70	M6	12	4.6	RAC206
324	524	85	63	50	27	40	3	70	M6	12	5.1	RAC208
374	624	85	63	50	27	40	3	70	M6	12	5.6	RAC2010
181	231	100	75	60	32	40	3	80	M6	12	4.5	RAC302
231	331	100	75	60	32	40	3	80	M6	12	5.2	RAC304
281	431	100	75	60	32	40	3	80	M6	12	5.9	RAC306
331	531	100	75	60	32	40	3	80	M6	12	6.6	RAC308
381	631	100	75	60	32	40	3	80	M6	12	7.3	RAC3010
186	236	130	95	80	30	50	3	110	M8	12	8.5	RAC502
236	336	130	95	80	30	50	3	110	M8	12	9.8	RAC504
286	436	130	95	80	30	50	3	110	M8	12	11.1	RAC506
336	536	130	95	80	30	50	3	110	M8	12	12.4	RAC508
386	636	130	95	80	30	50	3	110	M8	12	13.7	RAC5010
221	271	180	135	110	46	94	3	150	M10	12	17.3	RAC1002
271	371	180	135	110	46	94	3	150	M10	12	19.6	RAC1004
321	471	180	135	110	46	94	3	150	M10	12	21.9	RAC1006
371	571	180	135	110	46	94	3	150	M10	12	24.2	RAC1008
421	671	180	135	110	46	94	3	150	M10	12	26.5	RAC10010
243	293	230	170	140	51	113	3	200	M10	12	25.3	RAC1502
293	393	230	170	140	51	113	3	200	M10	12	29.3	RAC1504
343	493	230	170	140	51	113	3	200	M10	12	33.3	RAC1506
393	593	230	170	140	51	113	3	200	M10	12	37.3	RAC1508
443	693	230	170	140	51	113	3	200	M10	12	41.3	RAC15010

▼RACL Aluminum Lock Nut Cylinders



Rated Pressure: 70MPa

Rated Tonnage: 20-150ton

Stroke Range: 50-250mm



Removable Saddle
All RACL hydraulic cylinders are equipped heavy-duty removable saddles.

•Aluminum lock nut: Enables long-term mechanical load holding to ensure stable load support.

•Hardened steel retaining ring: Extends cylinder service life and withstands lateral load up to 5% of rated load.

•Hard coat surface treatment: Applied to all surfaces for superior wear and damage resistance, greatly prolonging service life.

•Composite bearing: Improves durability and lateral load resistance.

•Standard lifting handle: Fitted across the full range for easy handling and on-site operation.

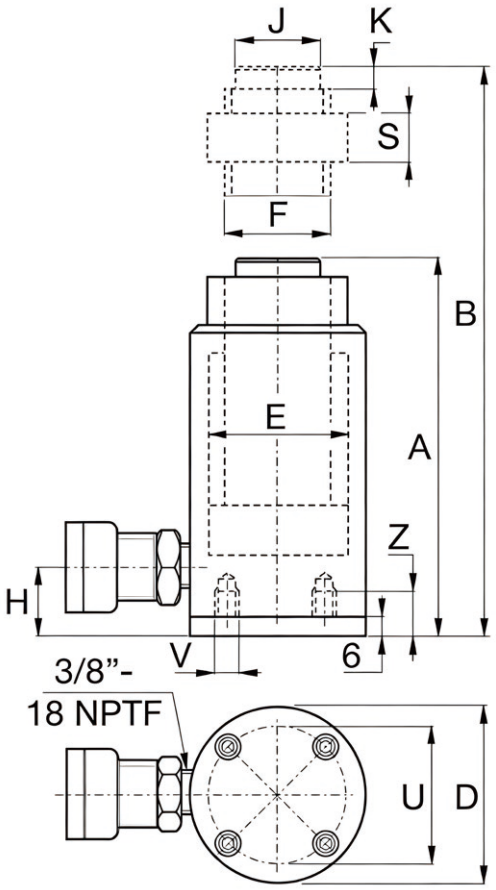
•Steel base plate and saddle: Resists structural damage under load and enhances operational reliability.

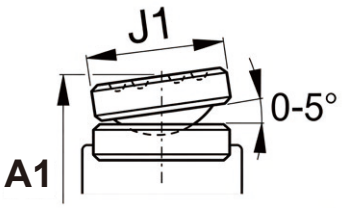
•Integrated stop ring: Prevents plunger overtravel and sustains full rated load for operational safety.

•High-strength return spring: Delivers rapid retraction and boosts working efficiency.

•Standard coupling and dust cap: All models come with CEJN quick couplings and dust caps.

Cylinders Capacity @ 700 bar (ton (kN))	Stroke (mm)	Model Number	Cylinders Effective Area (cm^2)	Oil Capacity (cm^3)
20 (218)	50	RACL202	31.2	156
20 (218)	100	RACL204	31.2	312
20 (218)	150	RACL206	31.2	468
20 (218)	200	RACL208	31.2	624
20 (218)	250	RACL2010	31.2	780
30 (309)	50	RACL302	44.2	221
30 (309)	100	RACL304	44.2	442
30 (309)	150	RACL306	44.2	663
30 (309)	200	RACL308	44.2	883
30 (309)	250	RACL3010	44.2	1105
50 (496)	50	RACL502	70.9	354
50 (496)	100	RACL504	70.9	709
50 (496)	150	RACL506	70.9	1063
50 (496)	200	RACL508	70.9	1417
50 (496)	250	RACL5010	70.9	1771
100 (1002)	50	RACL1002	143.1	716
100 (1002)	100	RACL1004	143.1	1431
100 (1002)	150	RACL1006	143.1	2147
100 (1002)	200	RACL1008	143.1	2863
100 (1002)	250	RACL10010	143.1	3578
150 (1589)	50	RACL1502	227	1135
150 (1589)	100	RACL1504	227	2270
150 (1589)	150	RACL1506	227	3405
150 (1589)	200	RACL1508	227	4540
150 (1589)	250	RACL15010	227	5675





▼Dimensions of Optional Bolt-on Tilt Saddle

For Cylinders Model / Capacity ton	Tilt Saddle Model Number	Tilt Saddle Diameter J1 (mm)	Addition to Collapsed Height A1 (mm)
RACL20, 30	CATS30	55	11
RACL50	CATS50	71	14
RACL100	CATS150	97	19
RACL150	CATS200	126	18

▼Steel Base Plate Mounting Holes

Cylinders Model / Capacity(ton)	Bolt Circle U (mm)	Thread V (mm)	Thread Depth Z (mm)
RACL20	70	M6	12
RACL30	80	M6	12
RACL50	110	M6	12
RACL100	150	M10	12
RACL150	200	M10	12

♦Includes base plate with a height of 6 mm

Collapsed Height A (mm)	Extended Height B (mm)	Outside Diameter D (mm)	Cylinders Bore Diameter E (mm)	Plunger Diameter (Threaded) F (mm)	Bottom to Advance Port H (mm)	Saddle Diameter J (mm)	Saddle Protrusion from Plunger K (mm)	Lock Nut Height S (mm)	Weight (kg)	Model Number
224	274	85	63	Tr 55 x 4	27	40	3	50	4	RACL202
274	374	85	63	Tr 55 x 4	27	40	3	50	4.6	RACL204
324	474	85	63	Tr 55 x 4	27	40	3	50	5.2	RACL206
374	574	85	63	Tr 55 x 4	27	40	3	50	5.8	RACL208
424	674	85	63	Tr 55 x 4	27	40	3	50	6.4	RACL2010
231	281	100	75	Tr 60 x 4	33	40	3	50	5.4	RACL302
281	381	100	75	Tr 60 x 4	33	40	3	50	6.1	RACL304
331	481	100	75	Tr 60 x 4	33	40	3	50	6.8	RACL306
381	581	100	75	Tr 60 x 4	33	40	3	50	7.5	RACL308
431	681	100	75	Tr 60 x 4	33	40	3	50	8.2	RACL3010
236	286	130	95	Tr 80 x 4	30	50	3	50	9.3	RACL502
286	386	130	95	Tr 80 x 4	30	50	3	50	10.6	RACL504
336	486	130	95	Tr 80 x 4	30	50	3	50	12.6	RACL506
386	586	130	95	Tr 80 x 4	30	50	3	50	13.2	RACL508
436	686	130	95	Tr 80 x 4	30	50	3	50	14.5	RACL5010
296	346	180	135	Tr 110 x 6	46	94	3	75	21.9	RACL1002
346	446	180	135	Tr 110 x 6	46	94	3	75	24.2	RACL1004
396	546	180	135	Tr 110 x 6	46	94	3	75	26.5	RACL1006
446	646	180	135	Tr 110 x 6	46	94	3	75	28.8	RACL1008
496	746	180	135	Tr 110 x 6	46	94	3	75	31.1	RACL10010
323	373	230	170	Tr 140 x 6	51	113	3	80	32.2	RACL1502
373	473	230	170	Tr 140 x 6	51	113	3	80	36.2	RACL1504
423	573	230	170	Tr 140 x 6	51	113	3	80	40.2	RACL1506
473	673	230	170	Tr 140 x 6	51	113	3	80	44.2	RACL1508
523	773	230	170	Tr 140 x 6	51	113	3	80	48.2	RACL15010

RACH Aluminum Hollow Plunger Cylinders



Rated Pressure: 70MPa

Rated Tonnage: 20-150ton

Stroke Range: 50-250mm

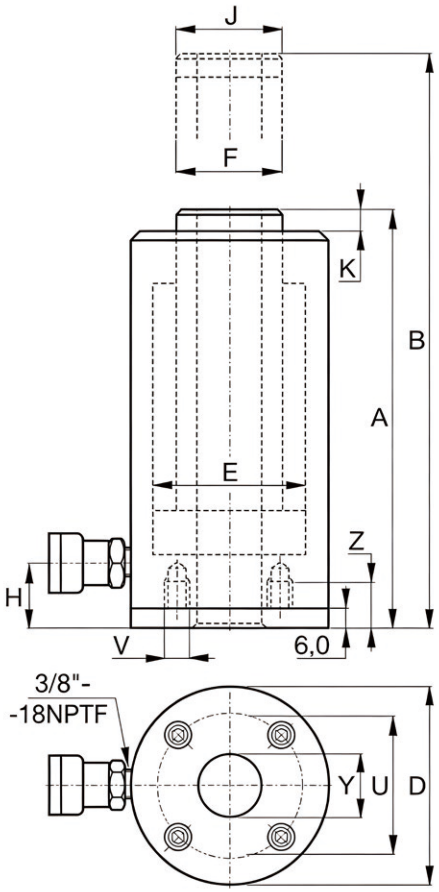
Center bore: 27.0-79.0mm



Manual Pump
RIVERLAKE Light-duty Manual Pump P392, an ideal choice for matching light-duty accessories.

- Hollow plunger design enables push and pull applications
- Internal thread on plunger for installation and connection
- Composite support rings prevent metal-to-metal contact and extend cylinder service life
- Floating center tube improves sealing and prolongs service life
- Steel base plate with hard saddle prevents damage under loading
- Integrated stop ring avoids plunger over-travel and bears full rated load of the cylinder
- High-strength return spring ensures fast return, enhancing working efficiency
- All cylinders come with CEJN quick couplings and dust caps
- Standard threaded hollow detachable hard saddle adapts to various working conditions with flexible installation

Max. Cylinders Capacity (ton (kN))	Stroke (mm)	Model	Effective Area (cm^2)	Oil Capacity (cm^3)
20 (229)	50	RACH202	32.7	164
20 (229)	100	RACH204	32.7	327
20 (229)	150	RACH206	32.7	491
20 (229)	200	RACH208	32.7	654
20 (229)	250	RACH2010	32.7	818
30 (358)	50	RACH302	51.1	256
30 (358)	100	RACH304	51.1	511
30 (358)	150	RACH306	51.1	766
30 (358)	200	RACH308	51.1	1022
30 (358)	250	RACH3010	51.1	1277
60 (596)	50	RACH602	84.7	423
60 (596)	100	RACH604	84.7	847
60 (596)	150	RACH606	84.7	1270
60 (596)	200	RACH608	84.7	1694
60 (596)	250	RACH6010	84.7	2117
100 (1157)	50	RACH1002	164.6	823
100 (1157)	100	RACH1004	164.6	1646
100 (1157)	150	RACH1006	164.6	2487
100 (1157)	200	RACH1008	164.6	3291
100 (1157)	250	RACH10010	164.6	4114
150 (1588)	50	RACH1502	225.8	1129
150 (1588)	100	RACH1504	225.8	2258
150 (1588)	150	RACH1506	225.8	3387
150 (1588)	200	RACH1508	225.8	4517
150 (1588)	250	RACH15010	225.8	5646



Model	Bolt Circle Diameter U (mm)	Thread V (mm)	Thread Depth Z (mm)
RACH20	80	M6	12
RACH30	110	M6	12
RACH60	160	M6	12
RACH100	220	M10	12
RACH150	245	M10	12

Collapsed Height A (mm)	Extended Height B (mm)	Outer Dia. D (mm)	Cylinders Bore E (mm)	Plunger Dia. F(mm)	Distance from Base to Oil Port H(mm)	Saddle Dia J(mm)	Saddle Body Distance K(mm)	Center Bore Dia Y(mm)	Weight (kg)	Model
188	238	100	75	55	29	55	10	27	5.2	RACH202
251	351	100	75	55	29	55	10	27	6.1	RACH204
315	465	100	75	55	29	55	10	27	7.1	RACH206
378	578	100	75	55	29	55	10	27	8	RACH208
442	692	100	75	55	29	55	10	27	9	RACH2010
208	258	130	95	70	29	70	10	34	8	RACH302
267	367	130	95	70	29	70	10	34	9.5	RACH304
333	483	130	95	70	29	70	10	34	11.2	RACH306
395	595	130	95	70	29	70	10	34	12.9	RACH308
458	708	130	95	70	29	70	10	34	14.5	RACH3010
251	301	180	130	100	61	100	12	54	16.2	RACH602
315	415	180	130	100	61	100	12	54	19.5	RACH604
380	530	180	130	100	61	100	12	54	25.6	RACH606
445	645	180	130	100	61	100	12	54	26	RACH608
510	760	180	130	100	61	100	12	54	29.6	RACH6010
258	308	250	185	145	61	145	14	79	33.8	RACH1002
325	425	250	185	145	61	145	14	79	39.8	RACH1004
391	541	250	185	145	61	145	14	79	46.2	RACH1006
459	659	250	185	145	61	145	14	79	52.2	RACH1008
527	777	250	185	145	61	145	14	79	58.8	RACH10010
280	330	275	205	150	61	145	14	79	48.9	RACH1502
360	460	275	205	150	61	145	14	79	55.7	RACH1504
430	580	275	205	150	61	145	14	79	63	RACH1506
500	700	275	205	150	61	145	14	79	70.1	RACH1508
570	820	275	205	150	61	145	14	79	77.2	RACH15010

▼RAR Double-Acting Aluminum Cylinders



Rated Pressure: 70MPa

Rated Tonnage: 20-150ton

Stroke Range: 50-250mm

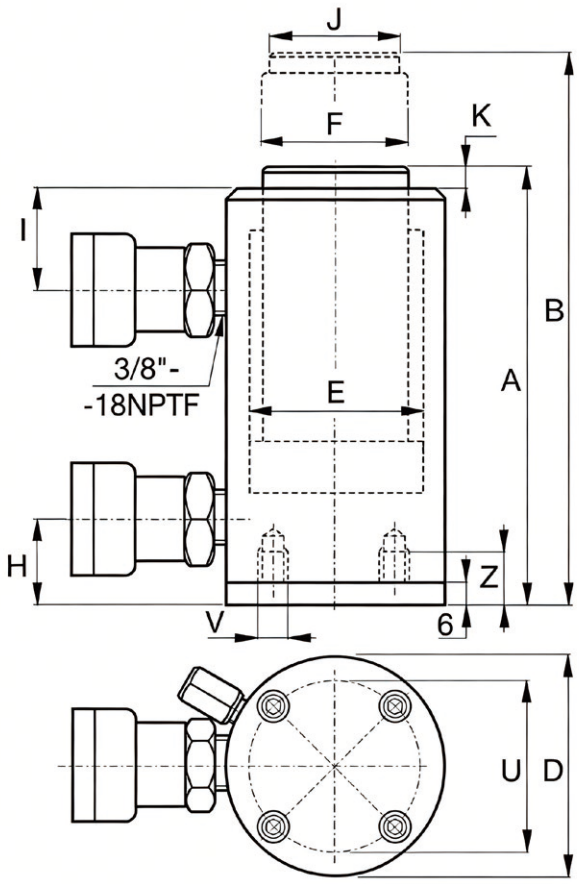


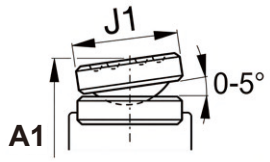
Removable Saddle
All RAR cylinders are fitted with bolt-on removable hardened steel saddles.

- Double-acting design enables fast retraction of the cylinder, independent of hose length and system pressure loss.
- Composite wear rings avoid metal-to-metal contact, extend service life and withstand 10% side load.
- All RAR cylinder models are equipped with carrying handles.
- Steel base and saddle prevent damage under load.
- Integrated stop ring limits over-extension of the plunger and withstands the maximum lifting force of the cylinder.
- Hardened surface resists damage and prolongs service life.

External safety valve prevents accidental overpressure.

Cylinders Capacity (ton)	Stroke (mm)	Model Number	Maximum Cylinders Capacity (kN)	Cylinders Effective Area (cm^2)	
			Push	Push	Pull
20	50	RAR202	218	31.2	18.6
	100	RAR204	218	31.2	18.6
	150	RAR206	218	31.2	18.6
	200	RAR208	218	31.2	18.6
	250	RAR2010	218	31.2	18.6
30	50	RAR302	309	44.2	24.5
	100	RAR304	309	44.2	24.5
	150	RAR306	309	44.2	24.5
	200	RAR308	309	44.2	24.5
	250	RAR3010	309	44.2	24.5
50	50	RAR502	496	70.9	26.7
	100	RAR504	496	70.9	26.7
	150	RAR506	496	70.9	26.7
	200	RAR508	496	70.9	26.7
	250	RAR5010	496	70.9	26.7
100	50	RAR1002	1002	143.1	79.5
	100	RAR1004	1002	143.1	79.5
	150	RAR1006	1002	143.1	79.5
	200	RAR1008	1002	143.1	79.5
	250	RAR10010	1002	143.1	79.5
150	50	RAR1502	1589	227	132
	100	RAR1504	1589	227	132
	150	RAR1506	1589	227	132
	200	RAR1508	1589	227	132
	250	RAR15010	1589	227	132





Optional Bolt-on Tilt Saddle Dimensions			
Cylinders Model / Capacity (ton)	Tilt Saddle Model Number	Tilt Saddle Diameter J1 (mm)	Addition to Collapsed Height A1 (mm)
RAR20	CATS20	42	10
RAR30	CATS30	55	11
RAR50	CATS50	71	14
RAR100	CATS101	71	10
RAR150	CATS150	97	19

Steel Base Mounting Holes			
Cylinders Model / Capacity (ton)	Bolt Circle U (mm)	Thread V (mm)	Thread Depth W (mm)
RAR20	93	M6	12
RAR30	105	M6	12
RAR50	110	M6	12
RAR100	155	M6	12
RAR150	200	M6	12

Oil Capacity (cm^3)		Collapsed Height A (mm)	Extended Height B (mm)	Outside Diameter D (mm)	Cylinders Bore Diameter E (mm)	Plunger Diameter F (mm)	Bottom to Advance Port H (mm)	Top to Retract Port I (mm)	Saddle Diameter J (mm)	Saddle Protrusion from Plunger K (mm)	Weight (kg)	Model Number
Push	Pull											
156	93	189	239	113	63	40	30	50	30	3	7.4	RAR202
312	186	239	339	113	63	40	30	50	30	3	8	RAR204
468	279	289	439	113	63	40	30	50	30	3	8.6	RAR206
624	372	339	539	113	63	40	30	50	30	3	9.2	RAR208
780	465	389	639	113	63	40	30	50	30	3	9.8	RAR2010
221	123	201	251	125	75	50	30	55	40	3	8.6	RAR302
442	245	251	351	125	75	50	30	55	40	3	9.5	RAR304
663	368	301	451	125	75	50	30	55	40	3	10.4	RAR306
884	490	351	551	125	75	50	30	55	40	3	11.3	RAR308
1105	613	401	651	125	75	50	30	55	40	3	12.2	RAR3010
354	134	201	251	145	95	75	30	56	50	3	11.1	RAR502
709	267	251	351	145	95	75	30	56	50	3	12.7	RAR504
1063	401	301	451	145	95	75	30	56	50	3	14.3	RAR506
1417	534	351	551	145	95	75	30	56	50	3	15.9	RAR508
1771	668	401	651	145	95	75	30	56	50	3	17.5	RAR5010
715	398	251	301	185	135	90	43	80	75	3	16.4	RAR1002
1431	795	301	401	185	135	90	43	80	75	3	19.3	RAR1004
2147	1193	351	501	185	135	90	43	80	75	3	22.2	RAR1006
2863	1590	401	601	185	135	90	43	80	75	3	25.1	RAR1008
3578	1988	451	701	185	135	90	43	80	75	3	28	RAR10010
1135	660	248	298	230	170	110	38	75	94	3	24.2	RAR1502
2270	1320	298	398	230	170	110	38	75	94	3	28.9	RAR1504
3405	1980	348	498	230	170	110	38	75	94	3	33.2	RAR1506
4540	2640	398	598	230	170	110	38	75	94	3	37.9	RAR1508
5675	3300	448	698	230	170	110	38	75	94	3	42.6	RAR15010

▼BRP/BRC Single-Acting Pull Cylinders

Shown from left to right: BRP606,BRC106,BRP106L, BRP106C



Rated Pressure:	70MPa
Rated Tonnage:	2.5-50ton
Stroke Range:	127-154mm

- •High-strength alloy steel construction
- •Built-in ram stop prevents over-stroke extension
- •The overall paint treatment enhances the overall recognizability and corrosion resistance.
- •All units equipped with CEJN quick couplers and dust caps
- •High-grade polyurethane seals are adopted, featuring good sealing performance, wear resistance and long service life.
- •Industrial-grade dust seals reduce contamination and extend the service life of the hydraulic cylinder.
- •Single-acting, spring return

▼Lifting mining conveyor belt using pull cylinders for bearing maintenance.



▼To lift a load bearing mast into place, BRP-Series cylinders were used to tension the supporting cables

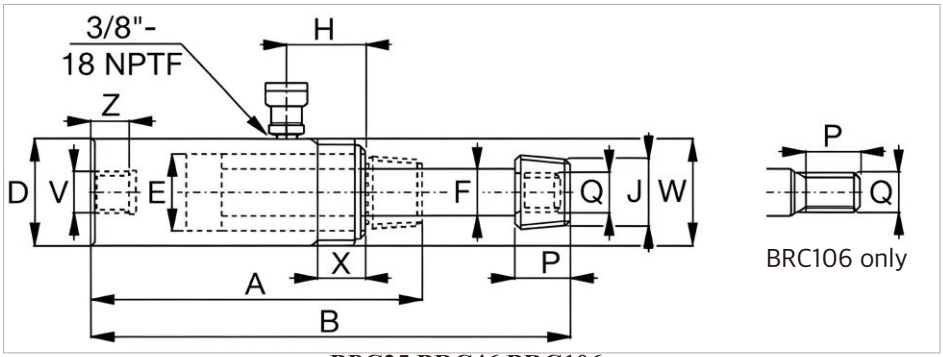


Model	Base Mounting Hole V	Locking Ring Thread W	Locking Ring Thread Length X (mm)	Mounting Thread Length Z (mm)
BRC25	¾"-14 NPT	1½"-16 UN	24	17
BRC46	1¼"-11½ NPT	2¼"-14 UN	26	24
BRC106	M30×2	M85×2	25	24



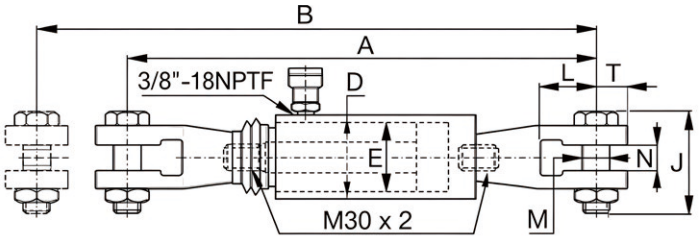
Attachments and Accessories

BRC25 and BRC46 units have base, collar and plunger threads to affix a range of optionalattachments and accessories, such as chains, saddles and extension tubes.

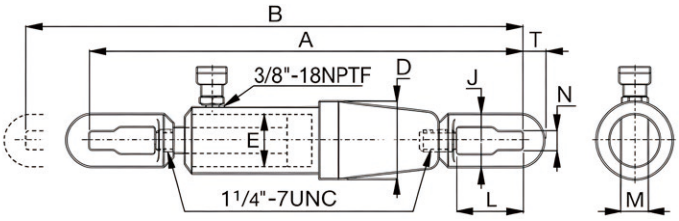


BPC25,BRC46,BRC106

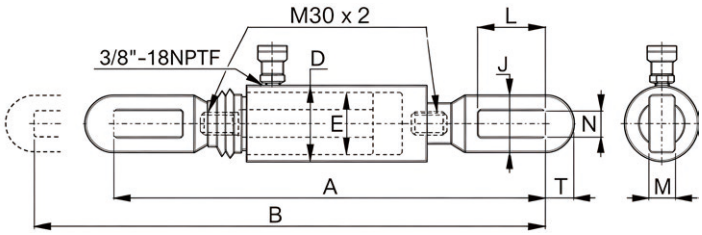
Cylinder Tonnage (kN)	Stroke (mm)	Model	Effective Area (cm²)	Oil Volume (cm³)	Collapsed Height A (mm)	Extended Height B (mm)	Outer Dia. D (mm)	Inner Bore E (mm)	Plunger Dia. F (mm)	Distance from Top to Oil Port H (mm)	Oil Port Thread J (NPT)	Plunger Thread Length P (mm)	External Plunger Thread Q	Weight (kg)
2.5(24)	127	BRC25	3.5	45	264	391	48	28	19	45	¾"-14	28	1 1/16"-24	1.8
5(51)	140	BRC46	7.3	101	301	441	57	42	30	42	1¼"-11½	32	1 3/16"-16	4.5
10(105)	151	BRC106	15	228	289	440	85	54	31	39	-	25	M30×2	9.5



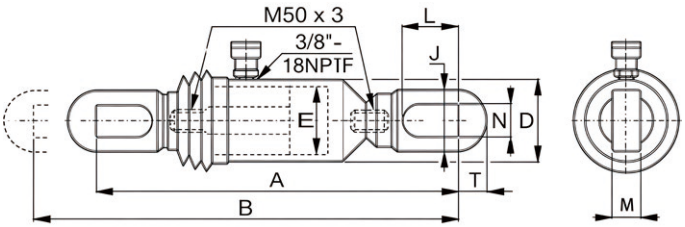
BRP106C



BRP306



BRP106L



BRP606

Cylinder Capacity (Ton/kN)	Stroke (mm)	Model	Effective Cylinder Area (cm²)	Oil Capacity (cm³)	Collapsed Height A (mm)	Extended Height B (mm)	Outer Dia. D (mm)	Inner Bore E (mm)	Link Height J (mm)	Link Opening L (mm)	Link Thickness M (mm)	Link Width N (mm)	Slot to Link End T(mm)	Weight (kg)
10(110)	150	BRP106C	15.8	238	601	751	85	54.1	105	87	30	35	32	15.3
10(110)	150	BRP106L	15.8	238	573	723	85	54.1	64	119	22	30	32	13.3
30(325)	154	BRP306	46.4	715	1110	1264	137	88.9	114	155	35	39	55	63.1
50(506)	153	BRP606	72.1	1096	718	871	140	110.1	130	151	40	48	65	58.3

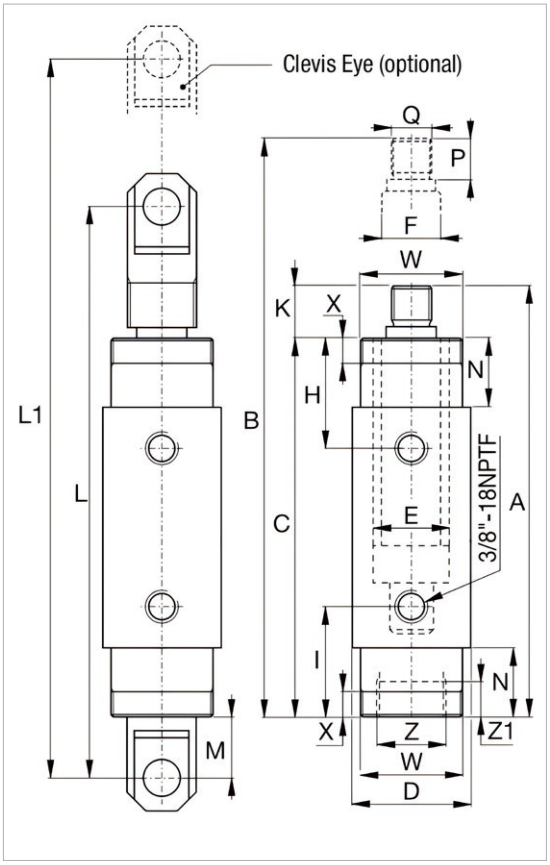
▼BRD Precision Production Cylinders



Rated Pressure: 70MPa

Rated Tonnage: 4-23ton

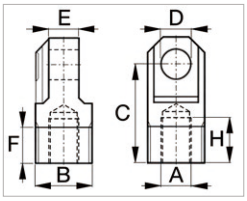
Stroke Range: 28-260mm



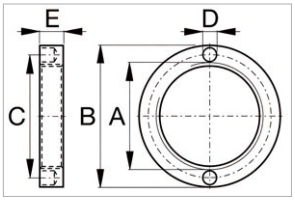
- Designed for long service life, ideal for production applications
- Unique mounting configurations simplify fixturing
- The cylinder body adopts gas nitriding and post-oxidation surface treatment processes, with the outer surface finished by painting, delivering superior corrosion resistance.
- Double-acting design provides bi-directional force for maximum versatility
- Standard plunger wiper reduces contamination ingress and extends cylinder service life
- Hardened and chrome-plated plunger minimizes wear and corrosion
- Hardened alloy steel guide ring prevents overtravel and reduces wear from side loads
- High-strength composite bearing supports side loads without damaging the cylinder bore
- Industrial-grade seals prevent costly leaks
- Optional imperial RD models available

Load Capacity (ton)	Stroke (mm)	Model	Max. Load Capacity (kN)		Cylinders Effective Area (cm²)		Oil Volume (cm³)		Collapsed Height A (mm)	Extended Height B (mm)	Cylinder Length C (mm)	Outer Dia. D (mm)	Cylinder Bore Dia. E (mm)	Plunger Dia. F (mm)
			push	pull	push	pull	push	pull						
4	28	BRD41	35	16	5.1	2.2	14	6	186	214	162	50	25.4	19
	79	BRD43	35	16	5.1	2.2	40	17	237	316	213	50	25.4	19
	155	BRD46	35	16	5.1	2.2	79	34	313	468	289	50	25.4	19
8	28	BRD91	80	44	11.4	6.3	32	18	223	251	198	63.5	38.1	25.4
	79	BRD93	80	44	11.4	6.3	90	50	274	353	249	63.5	38.1	25.4
	155	BRD96	80	44	11.4	6.3	177	98	350	505	325	63.5	38.1	25.4
	257	BRD910	80	44	11.4	6.3	293	162	452	709	427	63.5	38.1	25.4
15	159	BRD166	142	77	20.3	10.6	323	169	389	548	359	80	50.8	35
	260	BRD1610	142	77	20.3	10.6	528	276	491	751	461	80	50.8	35
23	159	BRD256	222	98	31.7	13.7	504	218	424	583	397	92	63.5	47.8
	260	BRD2510	222	98	31.7	13.7	824	356	526	786	499	92	63.5	47.8

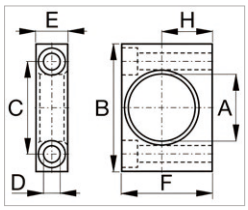




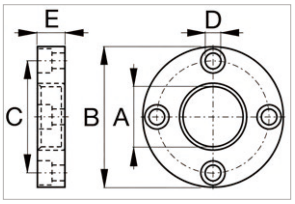
Clevis Eye
Threads onto plunger or into cylinder base.



Retainer Nut
For locking foot or flange mountings. Tightens onto cylinder collar threads (Included with foot and flange mounting kits).



Foot Mounting
Mounts onto cylinder collar.



Foot Mounting
Mounts onto cylinder collar.

Foot Mounting with Retainer Nut		Dimensions (mm)						
Model	BRD Cylinders (tons)	A	B	C	D	E	F	H
BAD141	**4**	42.1	80	58.0	10.5	20.0	57.0	31.8
BAD171	**9**	56.1	105	78.0	13.5	25.0	82.5	44.5
BAD181	**16**	70.1	127	95.2	20.0	35.0	100.0	52.4
BAD191	**25**	85.1	159	117.5	26.5	45.0	125.0	63.5
Flange Mounting with Retainer Nut		Dimensions (mm)						
Model	BRD Cylinders (tons)	A	B	C	D	E	F	H
BAD142	**4**	42.1	98.4	78.6	11.0	19.0	–	–
BAD172	**9**	56.1	121	98.4	11.0	25.4	–	–
BAD182	**16**	70.1	143	115.9	14.0	35.0	–	–
BAD192	**25**	85.1	165	135.7	17.0	44.5	–	–
Retainer Nut		Dimensions (mm)						
Model	BRD Cylinders (tons)	A	B	C	D	E	F	H
BAD143	**4**	M42×1.5	57	49.5	6.3	9.5	–	–
BAD173	**9**	M56×2	75	65.5	6.7	12.7	–	–
BAD183	**16**	M70×2	92	81.0	6.7	19.0	–	–
BAD193	**25**	M85×2	108	96.5	6.7	25.4	–	–
Clevis Eye （Refer to the table below for dimensions L, L1 and M.）		Dimensions (mm)						
Model	BRD Cylinders (tons)	A	B	C	D	E	F	H
BAD150	**4**	M16×1.5	M30×1.5	52.4	16.0	15.9	19.1	23.8
BAD151	**9**	M22×1.5	M42×1.5	57.1	20.0	25.4	25.4	23.8
BAD152	**16**	M30×1.5	M56×2	77.8	25.0	31.8	25.4	30.2
BAD153	**25**	M42×1.5	M70×2	77.8	32.0	38.2	25.4	27.0

Top to Oil Port H (mm)	Inlet Port to Base I (mm)	Plunger Protr. fr. Plgr. K (mm)	Lifting Lug Size			Outer Ring Thread Len. N (mm)	Plunger Thread Len. P (mm)	Plunger Male Thread Len. Q	Outer Ring Thread W	Cylinders Mount Dia.			Weight (kg)	Model
			L	L1	M					uter Ring Thread Len. X	Base Female Thread Len. Z	Base Thread Len. Z1		
47	47	24	258	286	41	29	22	M16x1.5	M42x1.5	11	M30x1.5	9	2.0	BRD41
47	47	24	308	387	41	29	22	M16x1.5	M42x1.5	11	M30x1.5	9	2.6	BRD43
47	47	24	385	540	41	29	22	M16x1.5	M42x1.5	11	M30x1.5	9	3.6	BRD46
57	57	25	295	323	38	38	22	M22x1.5	M56x2	14	M42x1.5	14	3.0	BRD91
57	57	25	346	425	38	38	22	M22x1.5	M56x2	14	M42x1.5	14	4.2	BRD93
57	57	25	422	577	38	38	22	M22x1.5	M56x2	14	M42x1.5	14	5.6	BRD96
57	57	25	524	781	38	38	22	M22x1.5	M56x2	14	M42x1.5	14	7.3	BRD910
73	73	30	492	651	52	54	28	M30x1.5	M70x2	22	M56x2	24	10.2	BRD166
73	73	30	593	853	52	54	28	M30x1.5	M70x2	22	M56x2	24	14.5	BRD1610
89	89	27	524	683	53	70	25	M42x1.5	M85x2	29	M70x2	26	16.0	BRD256
89	89	27	626	886	53	70	25	M42x1.5	M85x2	29	M70x2	26	20.3	BRD2510

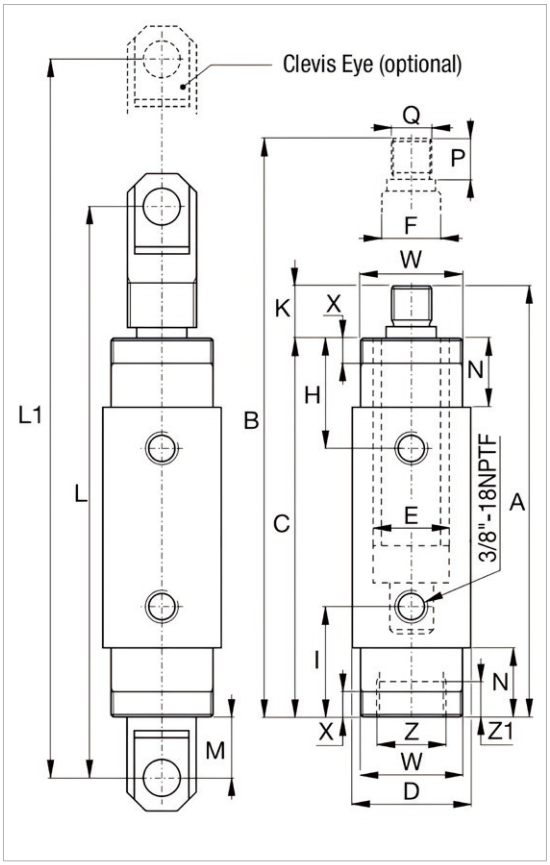
RD Precision Production Cylinders



Rated Pressure: 70MPa

Rated Tonnage: 4-23ton

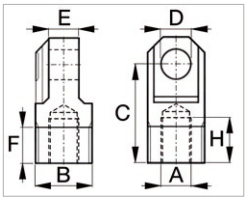
Stroke Range: 28-260mm



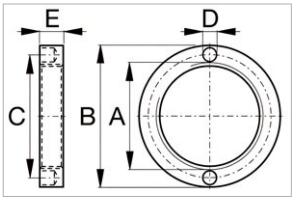
- Designed for long service life, ideal for production applications
- Unique mounting configurations simplify fixturing
- The cylinder body adopts gas nitriding and post-oxidation surface treatment processes, with the outer surface finished by painting, delivering superior corrosion resistance.
- Double-acting design provides bi-directional force for maximum versatility
- Standard plunger wiper reduces contamination ingress and extends cylinder service life
- Hardened and chrome-plated plunger minimizes wear and corrosion
- Hardened alloy steel guide ring prevents overtravel and reduces wear from side loads
- High-strength composite bearing supports side loads without damaging the cylinder bore
- Industrial-grade seals prevent costly leaks

Load Capacity (ton)	Stroke (in)	Model	Max. Load Capacity (ton)		Cylinders Effective Area (in²)		Oil Volume (in³)		Collapsed Height A (in)	Extended Height B (in)	Cylinder Length C(in)	Outer Dia. D (in)	Inner Bore Dia. E (in)	Plunger Dia. F (in)
			push	pull	push	pull	push	pull						
4	1.13	RD41	4	2	0.79	0.34	0.88	0.39	7.31	8.44	6.38	2	1	0.75
	3.13	RD43	4	2	0.79	0.34	2.45	1.07	9.31	12.44	8.38	2	1	0.75
	6.13	RD46	4	2	0.79	0.34	4.81	2.1	12.31	18.44	11.38	2	1	0.75
8	1.13	RD91	9	5	1.77	0.98	1.99	1.1	8.75	9.88	7.8	2.5	1.5	1
	3.13	RD93	9	5	1.77	0.98	5.52	3.07	10.78	13.91	9.8	2.5	1.5	1
	6.13	RD96	9	5	1.77	0.98	10.82	6.01	13.78	19.91	12.8	2.5	1.5	1
	10.13	RD910	9	5	1.77	0.98	17.89	9.94	17.78	27.91	16.81	2.5	1.5	1
15	6.25	RD166	16	8	3.14	1.66	19.63	10.35	15.31	21.56	14.31	3	2	1.38
	10.25	RD1610	16	8	3.14	1.66	32.2	16.98	19.31	29.56	18.11	3	2	1.38
23	6.25	RD256	25	11	4.91	2.15	30.68	13.42	16.69	22.94	15.63	3.63	2.5	1.88
	10.25	RD2510	25	11	4.91	2.15	50.31	22.01	20.69	30.94	19.61	3.63	2.5	1.88

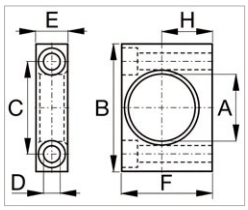




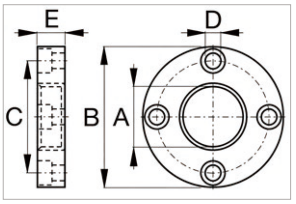
Clevis Eye
Threads onto plunger or into cylinder base.



Retainer Nut
For locking foot or flange mountings. Tightens onto cylinder collar threads (Included with foot and flange mounting kits).



Foot Mounting
Mounts onto cylinder collar.



Foot Mounting
Mounts onto cylinder collar.

Foot Mounting with Retainer Nut		Dimensions (in)						
Model	RD Cylinders (tons)	A	B	C	D	E	F	H
AD-141	**4**	1.38	3.00	2.00	0.41	0.76	2.25	1.25
AD-171	**9**	2.00	4.00	2.88	0.53	1.00	3.25	1.75
AD-181	**16**	2.63	5.00	3.76	0.78	1.38	4.00	2.06
AD-191	**25**	3.25	6.26	4.62	1.03	1.76	4.88	2.50
Flange Mounting with Retainer Nut		Dimensions (in)						
Model	RD Cylinders (tons)	A	B	C	D	E	F	H
AD-142	**4**	1.38	3.88	3.09	0.41	0.75	–	–
AD-172	**9**	2.00	4.75	3.88	0.41	1.00	–	–
AD-182	**16**	2.63	5.63	4.56	0.53	1.38	–	–
AD-192	**25**	3.25	6.50	5.34	0.66	1.75	–	–
Retainer Nut		Dimensions (in)						
Model	RD Cylinders (tons)	A	B	C	D	E	F	H
AD-143	**4**	1⅜"-12UNF	2.25	1.81	0.25	0.38	–	–
AD-173	**9**	2"-12	3.00	2.50	0.27	0.50	–	–
AD-183	**16**	2⅝"-16	3.63	3.12	0.27	0.75	–	–
AD-193	**25**	3¼"-16	4.25	3.75	0.27	1.00	–	–
Clevis Eye		Dimensions (in)						
Model	RD Cylinders (tons)	A	B	C	D	E	F	H
AD-150	**4**	½"-20	1⅛"-20	1.12	0.63	0.63	0.75	0.94
AD-151	**9**	¾"-16	$1^{11}/_{16}$"-18	1.31	0.75	1.00	1.00	0.94
AD-152	**16**	1⅛"-12	$2^{3}/_{16}$"-16	1.88	1.00	1.25	1.00	1.19
AD-153	**25**	1½"-12	2¾"-16	2.00	1.25	1.50	1.00	1.06

Top to Oil Port H(in)	Inlet Port to Base I (in)	Plunger Protr. fr. Plgr. K (in)	Outer Ring Thread Len. N (mm)	Plunger Thread Len. P (mm)	Plunger Male Thread Len. Q	Outer Ring Thread W	Cylinders Mount Dia.			Weight (kg)	Model
							Outer Ring Thread Len. X	Base Female Thread Len. Z	Base Thread Len. Z1		
1.84	1.84	0.94	1.13	0.75	1/2"-20	1⅜"-12	0.44	1⅛"-20	0.35	4.8	RD41
1.84	1.84	0.94	1.13	0.75	1/2"-20	1⅜"-12	0.44	1⅛"-20	0.35	6.4	RD43
1.84	1.84	0.94	1.13	0.75	1/2"-20	1⅜"-12	0.44	1⅛"-20	0.35	9	RD46
2.25	2.25	0.98	1.5	0.75	3/4"-16	2"-12	0.56	$1^{11}/_{16}$"-18	0.55	9	RD91
2.25	2.25	0.98	1.5	0.75	3/4"-16	2"-12	0.56	$1^{11}/_{16}$"-18	0.55	11	RD93
2.25	2.25	0.98	1.5	0.75	3/4"-16	2"-12	0.56	$1^{11}/_{16}$"-18	0.55	14	RD96
2.25	2.25	0.98	1.5	0.75	3/4"-16	2"-12	0.56	$1^{11}/_{16}$"-18	0.55	19	RD910
2.88	2.88	1.19	2.13	1	1⅛"-12	2⅝"-16	0.88	$2^{3}/_{16}$"-16	0.94	22	RD166
2.88	2.88	1.19	2.13	1	1⅛"-12	2⅝"-16	0.88	$2^{3}/_{16}$"-16	0.94	29	RD1610
3.5	3.5	1.06	2.75	1	1½"-12	3¼"-16	1.13	2¾"-16	1.02	36	RD256
3.5	3.5	1.06	2.75	1	1½"-12	3¼"-16	1.13	2¾"-16	1.02	46	RD2510

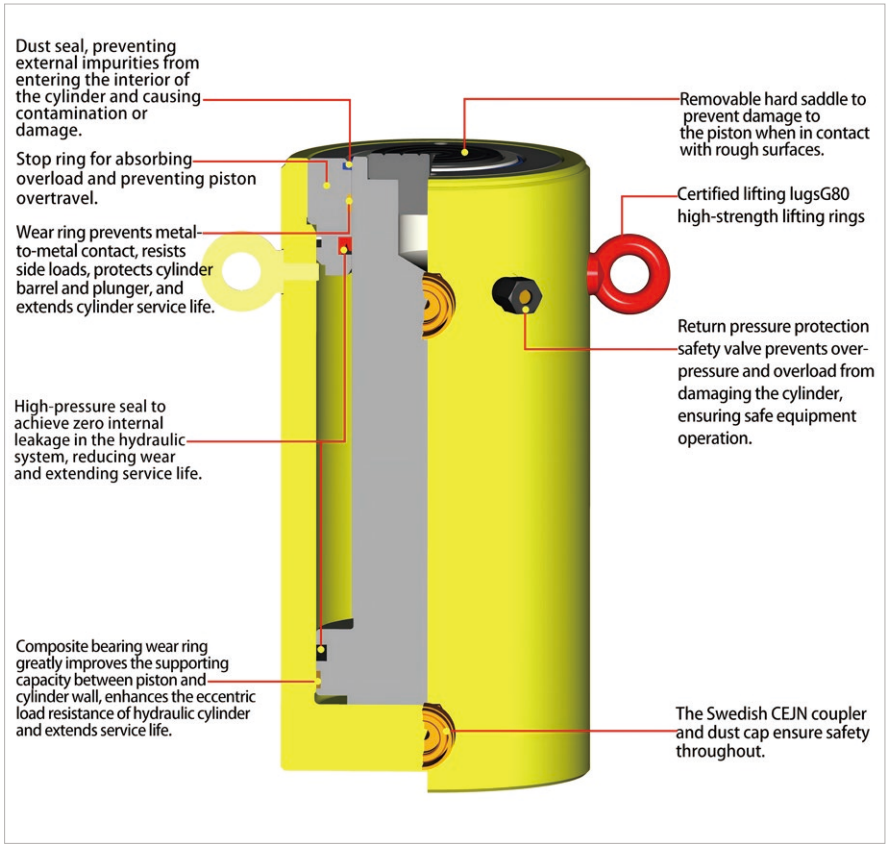
▼RR Double-Acting Hydraulic Cylinders



Rated Pressure:	70MPa
Rated Tonnage:	10-520ton
Stroke Range:	57-1219mm

- •Outer ring threads, plunger threads and bottom mounting holes for easy installation (for most models)
- •Paint-coated surface provides superior corrosion resistance
- •Removable saddle protects plunger during operation
- •Equipped the safety valve prevents accidental overload
- •All cylinders are equipped with CEJN quick couplings and dust caps
- •Wiper seals reduce contamination and extend service life of hydraulic cylinders
- •Versatile design, reliable performance in harsh environments, ideal for long-cycle industrial use.

►RR Performance Introduction





Optional Recessed Saddle
RR series cylinders below 75 tons are equipped with plunger mounting holes for installing recessed saddles.



Optimal Performance
Hydraulic pumps equipped with double-acting manual valves or solenoid valves deliver superior performance when used with RR series cylinders.

Optional plug-in saddles for RR Series

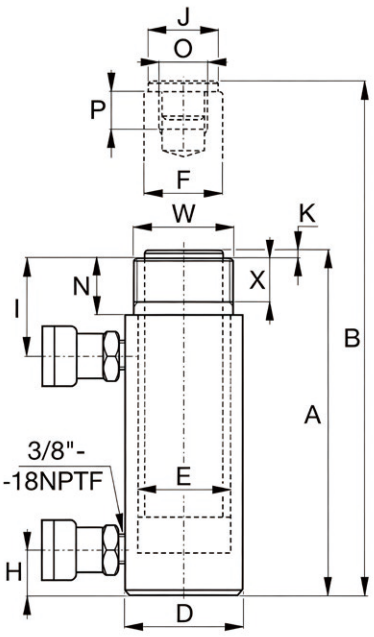
Type	Applicable Cylinders	Saddle Model
Flat Type	RR10	A102F
Tilt Type	RR10	CATS12
Tilt Type	RR30	CATS52
Tilt Type	RR50	CATS100
Tilt Type	RR75	CATS100

RR Series Standard Saddle

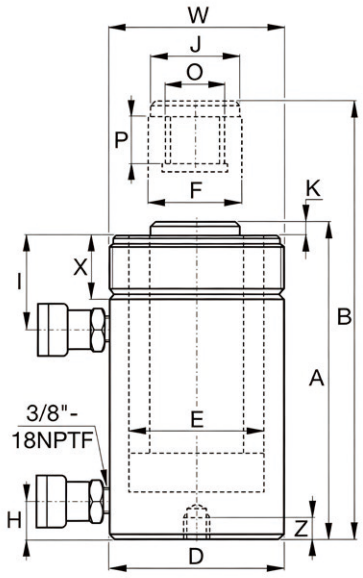
Saddle Type	Applicable Cylinders Model	Saddle Model
Groove Type	RR10	A102G
Groove Type	RR30	A252G

▼Quick Selection Chart

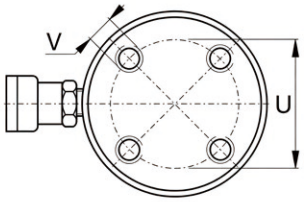
Load Capacity (ton)	Stroke (mm)	Model	Max. Load Capacity (kN)		Effective Area (cm^2)		Oil Volume (cm^3)		Collapsed Height (mm)	Extended Height (mm)
			Extending	Retracting	Extending	Retracting	Extending	Retracting		
10	254	RR1010*	101	33	14.5	4.8	368	122	409	663
10	305	RR1012*	101	33	14.5	4.8	442	147	457	762
30	209	RR308*	295	53	42.1	19.1	879	400	394	603
30	368	RR3014*	295	53	42.1	19.1	1549	703	549	917
50	156	RR506	498	103	71.2	21.5	1111	335	331	487
50	334	RR5013	498	103	71.2	21.5	2378	718	509	843
50	511	RR5020	498	103	71.2	21.5	3638	1099	733	1244
75	156	RR756	718	156	102.6	31.4	1601	490	347	503
75	333	RR7513	718	156	102.6	31.4	3417	1046	525	858
95	168	RR1006	933	435	133.3	62.2	2238	1045	357	525
95	333	RR10013	933	435	133.3	62.2	4439	2071	524	857
95	460	RR10018	933	435	133.3	62.2	6132	2861	687	1147
140	57	RR1502	1386	668	198.1	95.4	1129	544	183	240
140	156	RR1506	1386	668	198.1	95.4	3090	1488	385	541
140	333	RR15013	1386	668	198.1	95.4	6597	3177	582	915
140	815	RR15032	1386	668	198.1	95.4	16145	7775	1116	1931
200	152	RR2006	1995	1017	285	145.3	4332	2209	430	582
200	330	RR20013	1995	1017	285	145.3	9405	4795	608	938
200	457	RR20018	1995	1017	285	145.3	13025	6640	765	1222
200	610	RR20024	1995	1017	285	145.3	17385	8863	917	1527
200	914	RR20036	1995	1017	285	145.3	26049	13280	1222	2136
200	1219	RR20048	1995	1017	285	145.3	34741	17712	1527	2746
325	153	RR3006	3201	1703	457.3	243.2	6997	3721	485	638
325	305	RR30012	3201	1703	457.3	243.2	13947	7418	638	943
325	457	RR30018	3201	1703	457.3	243.2	20889	11114	790	1247
325	609	RR30024	3201	1703	457.3	243.2	27850	14811	943	1552
325	915	RR30036	3201	1703	457.3	243.2	41843	22253	1247	2162
325	1219	RR30048	3201	1703	457.3	243.2	55745	29646	1552	2771
440	152	RR4006	4292	2297	613.1	328.1	9319	4987	538	690
440	305	RR40012	4292	2297	613.1	328.1	18700	10007	690	995
440	457	RR40018	4292	2297	613.1	328.1	28018	14995	843	1300
440	610	RR40024	4292	2297	613.1	328.1	37400	20014	995	1605
440	914	RR40036	4292	2297	613.1	328.1	56037	29988	1300	2214
440	1219	RR40048	4292	2297	613.1	328.1	74737	39996	1605	2824
520	153	RR5006	5108	2838	729.7	405.4	11164	6203	577	730
520	305	RR50012	5108	2838	729.7	405.4	22256	12365	730	1035
520	457	RR50018	5108	2838	729.7	405.4	33347	18526	882	1339
520	609	RR50024	5108	2838	729.7	405.4	44440	24689	1035	1644
520	915	RR50036	5108	2838	729.7	405.4	66768	36973	1339	2254
520	1219	RR50048	5108	2838	729.7	405.4	88951	49418	1644	2863



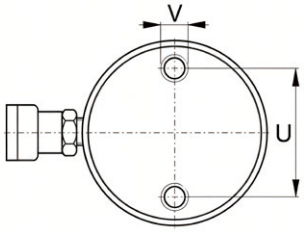
RR1010 - RR3014



RR506 - RR50048



RR1006 - RR30048



RR4006 - RR50048

RR506、RR5013、RR756、
RR7513、RR1502、RR15032
No mounting holes

•Outer ring threads, plunger threads and bottom mounting holes for easy installation (for most models)
•Paint-coated surface provides superior corrosion resistance
•Removable saddle protects plunger during operation
•Equipped the safety valve prevents accidental overload
•All cylinders are equipped with CEJN quick couplings and dust caps
•Wiper seals reduce contamination and extend service life of hydraulic cylinders
•Versatile design, reliable performance in harsh environments, ideal for long-cycle industrial use.

Load Capacity (ton)	Stroke (mm)	Model Number	Max. Load Capacity (kN)		Effective Area (cm²)		Oil Volume (cm³)		Collapsed Height A (mm)	Extended Height B (mm)	Outside Dia. D (mm)
			push	pull	push	pull	push	pull			
10	254	RR1010*	101	33	14.5	4.8	368	122	409	663	73
10	305	RR1012*	101	33	14.5	4.8	442	147	457	762	73
30	209	RR308*	295	53	42.1	19.1	879	400	394	603	101
30	368	RR3014*	295	53	42.1	19.1	1549	703	549	917	101
50	156	RR506	498	103	71.2	21.5	1111	335	331	487	127
50	334	RR5013	498	103	71.2	21.5	2378	718	509	843	127
50	511	RR5020	498	103	71.2	21.5	3638	1099	733	1244	127
75	156	RR756	718	156	102.6	31.4	1601	490	347	503	146
75	333	RR7513	718	156	102.6	31.4	3417	1046	525	858	146
95	168	RR1006	933	435	133.3	62.2	2238	1045	357	525	177
95	333	RR10013	933	435	133.3	62.2	4439	2071	524	857	177
95	460	RR10018	933	435	133.3	62.2	6132	2861	687	1147	177
140	57	RR1502	1386	668	198.1	95.4	1129	544	183	240	203
140	156	RR1506	1386	668	198.1	95.4	3090	1488	385	541	203
140	333	RR15013	1386	668	198.1	95.4	6597	3177	582	915	203
140	815	RR15032	1386	668	198.1	95.4	16145	7775	1116	1931	203
200	152	RR2006	1995	1017	285	145.3	4332	2209	430	582	247
200	330	RR20013	1995	1017	285	145.3	9405	4795	608	938	247
200	457	RR20018	1995	1017	285	145.3	13025	6640	765	1222	247
200	610	RR20024	1995	1017	285	145.3	17385	8863	917	1527	247
200	914	RR20036	1995	1017	285	145.3	26049	13280	1222	2136	247
200	1219	RR20048	1995	1017	285	145.3	34741	17712	1527	2746	247
325	153	RR3006	3201	1703	457.3	243.2	6997	3721	485	638	311
325	305	RR30012	3201	1703	457.3	243.2	13947	7418	638	943	311
325	457	RR30018	3201	1703	457.3	243.2	20889	11114	790	1247	311
325	609	RR30024	3201	1703	457.3	243.2	27850	14811	943	1552	311
325	915	RR30036	3201	1703	457.3	243.2	41843	22253	1247	2162	311
325	1219	RR30048	3201	1703	457.3	243.2	55745	29646	1552	2771	311
440	152	RR4006	4292	2297	613.1	328.1	9319	4987	538	690	358
440	305	RR40012	4292	2297	613.1	328.1	18700	10007	690	995	358
440	457	RR40018	4292	2297	613.1	328.1	28018	14995	843	1300	358
440	610	RR40024	4292	2297	613.1	328.1	37400	20014	995	1605	358
440	914	RR40036	4292	2297	613.1	328.1	56037	29988	1300	2214	358
440	1219	RR40048	4292	2297	613.1	328.1	74737	39996	1605	2824	358
520	153	RR5006	5108	2838	729.7	405.4	11164	6203	577	730	397
520	305	RR50012	5108	2838	729.7	405.4	22256	12365	730	1035	397
520	457	RR50018	5108	2838	729.7	405.4	33347	18526	882	1339	397
520	609	RR50024	5108	2838	729.7	405.4	44440	24689	1035	1644	397
520	915	RR50036	5108	2838	729.7	405.4	66768	36973	1339	2254	397
520	1219	RR50048	5108	2838	729.7	405.4	88951	49418	1644	2863	397

*RR1010 and RR1012: N=32 mm; RR308 and RR3014: N=55 mm.

Hydraulic Cylinders

Rated Pressure: 70MPa

Rated Tonnage: 10-520ton

Stroke Range: 57-1219mm

RR Series Double-Acting Hydraulic Cylinders



Inner Bore Dia. (mm)	Plgr. Dia. F (mm)	Base to Adv. Port H (mm)	Base to Ret. Port I (mm)	Top to Ret. Port J (mm)	Saddle Dia. K (mm)	Plunger Internal Thread O	Plunger Thread Length P (mm)	Base Mounting Holes Bolt Circle U (mm)	Base Mounting Holes Thread V	Base Mounting Holes Thread Depth Z (mm)	Collar Thread W	Collar Thread Length X (mm)	Weight (kg)	Model Number
42.9	34.9	36	57	35	6	1"- 8	25	-	-	-	2¼"- 14	26	12	RR1010*
42.9	34.9	36	57	35	6	1"- 8	25	-	-	-	2¼"- 14	26	14	RR1012*
73.2	54.1	39	81	50	10	1½"- 16	25	-	-	-	3 5/16"- 12	49	18	RR308*
73.2	54.1	39	81	50	10	1½"- 16	25	-	-	-	3 5/16"- 12	49	29	RR3014*
95.2	79.5	28	76	71	2	1"- 12	25	-	-	-	5"- 12	44	30	RR506
95.2	79.5	28	76	71	2	1"- 12	25	-	-	-	5"- 12	44	52	RR5013
95.2	79.5	57	76	71	2	1"- 12	25	76	½"- 13	25	5"- 12	44	68	RR5020
114.3	95.2	30	81	71	6	1"- 12	28	-	-	-	5 ¾"- 12	50	41	RR756
114.3	95.2	30	81	71	6	1"- 12	28	-	-	-	5 ¾"- 12	50	61	RR7513
130.3	95.2	38	71	76	3	1¾"- 12	35	139	¾"- 10	25	6⅞"- 12	50	61	RR1006
130.3	95.2	38	71	76	3	1¾"- 12	35	139	¾"- 10	25	6⅞"- 12	50	93	RR10013
130.3	95.2	41	92	76	3	1¾"- 12	35	139	¾"- 10	25	6⅞"- 12	50	117	RR10018
158.8	114.3	22	66	95	19	-	-	-	-	-	-	-	49	RR1502
158.8	114.3	49	84	114	19	3⅜"- 16	35	158	¾"- 16	28	8"- 12	55	93	RR1506
158.8	114.3	49	84	114	19	3⅜"- 16	35	158	¾"- 16	28	8"- 12	55	124	RR15013
158.8	114.3	76	88	114	19	3⅜"- 16	35	158	¾"- 16	28	8"- 12	55	238	RR15032
190.5	133.4	57	96	133	22			127	1"- 8	25	-	-	147	RR2006
190.5	133.4	57	96	133	22	2½"- 12	63	127	1"- 8	25	9¾"- 12	54	199	RR20013
190.5	133.4	85	101	133	22	2½"- 12	63	127	1"- 8	25	9¾"- 12	54	204	RR20018
190.5	133.4	85	101	133	22	2½"- 12	63	127	1"- 8	25	9¾"- 12	54	279	RR20024
190.5	133.4	85	101	133	22	2½"- 12	63	127	1"- 8	25	9¾"- 12	54	383	RR20036
190.5	133.4	85	101	133	22	2½"- 12	63	127	1"- 8	25	9¾"- 12	54	483	RR20048
241.3	165.1	88	114	165	28	2½"- 12	82	158	1¼"- 7	44	12¼"- 12	58	200	RR3006
241.3	165.1	88	114	165	28	2½"- 12	82	158	1¼"- 7	44	12¼"- 12	58	312	RR30012
241.3	165.1	88	114	165	28	2½"- 12	82	158	1¼"- 7	44	12¼"- 12	58	385	RR30018
241.3	165.1	88	114	165	28	2½"- 12	82	158	1¼"- 7	44	12¼"- 12	58	469	RR30024
241.3	165.1	88	114	165	28	2½"- 12	82	158	1¼"- 7	44	12¼"- 12	58	628	RR30036
241.3	165.1	88	114	165	28	2½"- 12	82	158	1¼"- 7	44	12¼"- 12	58	780	RR30048
279.4	190.5	108	133	190	28	3"- 12	95	203	1½"- 6	50	14⅛"- 8	65	303	RR4006
279.4	190.5	108	133	190	28	3"- 12	95	203	1½"- 6	50	14⅛"- 8	65	399	RR40012
279.4	190.5	108	133	190	28	3"- 12	95	203	1½"- 6	50	14⅛"- 8	65	453	RR40018
279.4	190.5	108	133	190	28	3"- 12	95	203	1½"- 6	50	14⅛"- 8	65	597	RR40024
279.4	190.5	108	133	190	28	3"- 12	95	203	1½"- 6	50	14⅛"- 8	65	792	RR40036
279.4	190.5	108	133	190	28	3"- 12	95	203	1½"- 6	50	14⅛"- 8	65	980	RR40048
304.8	203.2	120	152	203	28	3¼"- 12	108	203	1¾"- 5	57	15⅝"- 8	79	432	RR5006
304.8	203.2	120	152	203	28	3¼"- 12	108	203	1¾"- 5	57	15⅝"- 8	79	589	RR50012
304.8	203.2	120	152	203	28	3¼"- 12	108	203	1¾"- 5	57	15⅝"- 8	79	680	RR50018
304.8	203.2	120	152	203	28	3¼"- 12	108	203	1¾"- 5	57	15⅝"- 8	79	816	RR50024
304.8	203.2	120	152	203	28	3¼"- 12	108	203	1¾"- 5	57	15⅝"- 8	79	1002	RR50036
304.8	203.2	120	152	203	28	3¼"- 12	108	203	1¾"- 5	57	15⅝"- 8	79	1224	RR50048

▼CLRG Double-Acting High-Tonnage Cylinders

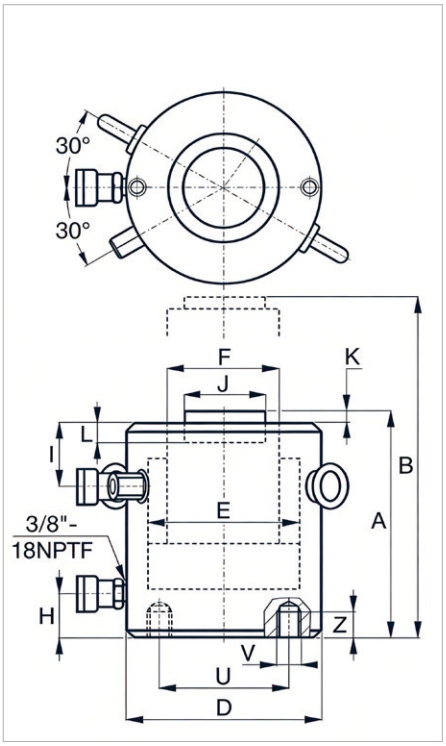


Rated Pressure: 70MPa

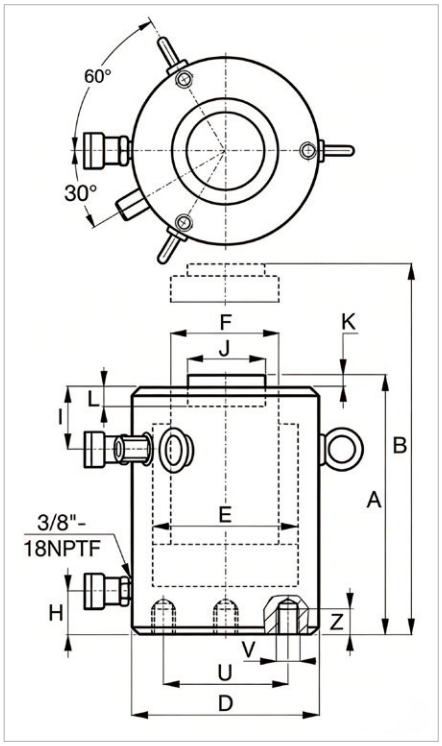
Rated Tonnage: 50 -1000ton

Stroke Range: 50-300mm

- Double-acting, suitable for both push and pull applications
- Top cavity safety valve prevents hazards from accidental overpressure
- Dust wiper reduces contamination and extends service life of hydraulic cylinders
- Baked enamel surface offers enhanced corrosion resistance
- Standard base mounting holes provided on all models



CLRG502-CLRG15012

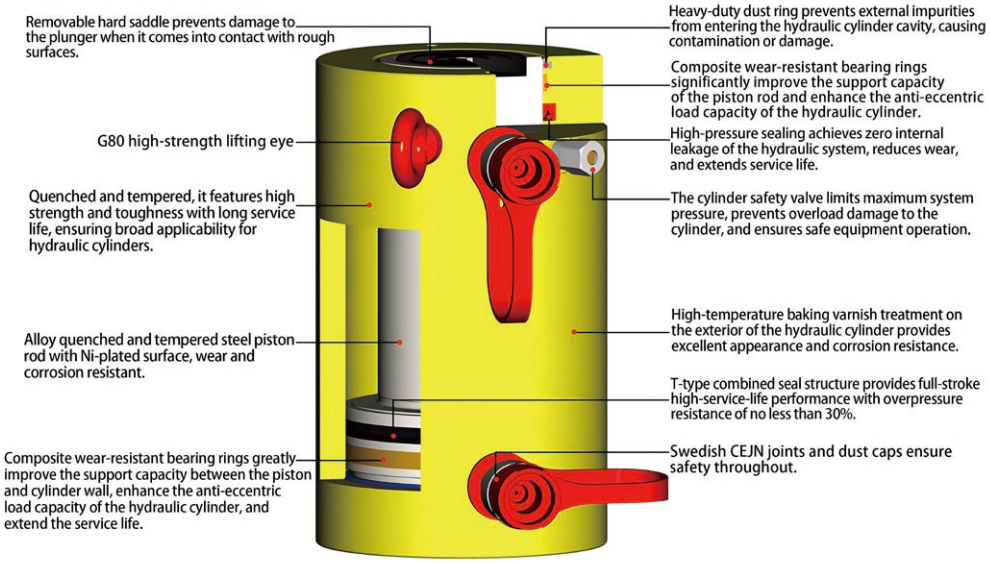


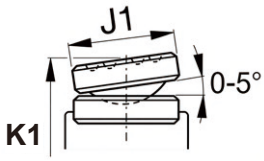
CLRG2002-CLRG10012

Base Mounting Hole Dimensions			
Model / Load Capacity (ton)	Bolt Circle Diameter U (mm)	Thread Size V	Minimum Thread Depth Z (mm)
CLRG50	80	2x M8	12
CLRG100	110	2x M8	12
CLRG150	130	2x M8	12
CLRG200	165	3x M10	15
CLRG250	190	3x M10	15
CLRG300	200	3x M10	15
CLRG400	230	3x M14	20
CLRG500	250	3x M14	20
CLRG600	275	3x M14	20
CLRG800	330	3x M20	25
CLRG1000	360	3x M20	25

Load Capacity (ton (kN))	Stroke (mm)	Model	Max. Cylinders Load Capacity (kN)	
			Push	Pull
50 (539)	50	CLRG502	550	280
50 (539)	100	CLRG504	550	280
50 (539)	150	CLRG506	550	280
50 (539)	200	CLRG508	550	280
50 (539)	250	CLRG5010	550	280
50 (539)	300	CLRG5012	550	280
100 (929)	50	CLRG1002	1002	506
100 (929)	100	CLRG1004	1002	506
100 (929)	150	CLRG1006	1002	506
100 (929)	200	CLRG1008	1002	506
100 (929)	250	CLRG10010	1002	506
100 (929)	300	CLRG10012	1002	506
150 (1390)	50	CLRG1502	1497	770
150 (1390)	100	CLRG1504	1497	770
150 (1390)	150	CLRG1506	1497	770
150 (1390)	200	CLRG1508	1497	770
150 (1390)	250	CLRG15010	1497	770
150 (1390)	300	CLRG15012	1497	770
200 (1861)	50	CLRG2002	1964	962
200 (1861)	150	CLRG2006	1964	962
200 (1861)	300	CLRG20012	1964	962
250 (2565)	50	CLRG2502	2565	1068
250 (2565)	150	CLRG2506	2565	1068
250 (2565)	300	CLRG25012	2565	1068
300 (3193)	50	CLRG3002	3167	1076
300 (3193)	150	CLRG3006	3167	1076
300 (3193)	300	CLRG30012	3167	1076
400 (3919)	50	CLRG4002	4008	1467
400 (3919)	150	CLRG4006	4008	1467
400 (3919)	300	CLRG40012	4008	1467
500 (5114)	50	CLRG5002	4948	1648
500 (5114)	150	CLRG5006	4948	1648
500 (5114)	300	CLRG50012	4948	1648
600 (5987)	50	CLRG6002	5987	2687
600 (5987)	150	CLRG6006	5987	2687
600 (5987)	300	CLRG60012	5987	2687
800 (8234)	50	CLRG8002	7939	2484
800 (8234)	150	CLRG8006	7939	2484
800 (8234)	300	CLRG80012	7939	2484
1000 (10260)	50	CLRG10002	9698	3343
1000 (10260)	150	CLRG10006	9698	3343
1000 (10260)	300	CLRG100012	9698	3343

► CLRG Performance Introduction





Effective Cylinders Area (cm²)		Oil Capacity (cm³)		Collapsed Height A (mm)	Extended Height B (mm)	Outer Diameter D (mm)	Inner Bore E (mm)	Plunger Diameter F (mm)	Inlet Ht. from Base H (mm)	Return Port from Top I (mm)	Std. Saddle Dia. J (mm)	Saddle Protru -sion K (mm)	Plunger Bore Depth L (mm)	Weight (kg)	Model	*Optional Tilt Saddle		
Push	Pull	Push	Pull													Saddle Diameter J1 (mm)	Saddle Height K1 (mm)	Saddle Model
78.6	40	393	200	162	212	130	100	70	40	42	50	1	10	17	CLRG502	50	19	CATG50
78.6	40	786	400	212	312	130	100	70	40	42	50	1	10	20	CLRG504	50	19	CATG50
78.6	40	1179	600	262	412	130	100	70	40	42	50	1	10	23	CLRG506	50	19	CATG50
78.6	40	1571	800	312	512	130	100	70	40	42	50	1	10	27	CLRG508	50	19	CATG50
78.6	40	1964	1000	362	612	130	100	70	40	42	50	1	10	31	CLRG5010	50	19	CATG50
78.6	40	2357	1200	412	712	130	100	70	40	42	50	1	10	34	CLRG5012	50	19	CATG50
143.1	72.3	716	361	179	229	165	135	95	43	44	75	1	10	29	CLRG1002	75	20	CATG100
143.1	72.3	1431	723	229	329	165	135	95	43	44	75	1	10	34	CLRG1004	75	20	CATG100
143.1	72.3	2147	1084	279	429	165	135	95	43	44	75	1	10	40	CLRG1006	75	20	CATG100
143.1	72.3	2863	1446	329	529	165	135	95	43	44	75	1	10	46	CLRG1008	75	20	CATG100
143.1	72.3	3579	1807	379	629	165	135	95	43	44	75	1	10	52	CLRG10010	75	20	CATG100
143.1	72.3	4294	2169	429	729	165	135	95	43	44	75	1	10	58	CLRG10012	75	20	CATG100
213.9	110	1069	550	196	246	205	165	115	47	48	94	1	10	39	CLRG1502	94	25	CATG150
213.9	110	2139	1100	246	346	205	165	115	47	48	94	1	10	52	CLRG1504	94	25	CATG150
213.9	110	3208	1650	296	446	205	165	115	47	48	94	1	10	65	CLRG1506	94	25	CATG150
213.9	110	4277	2200	346	546	205	165	115	47	48	94	1	10	78	CLRG1508	94	25	CATG150
213.9	110	5346	2750	396	646	205	165	115	47	48	94	1	10	92	CLRG15010	94	25	CATG150
213.9	110	6416	3300	446	746	205	165	115	47	48	94	1	10	105	CLRG15012	94	25	CATG150
280.6	137.4	1403	687	212	262	235	189	135	51	54	113	1	10	55	CLRG2002	113	32	CATG200
280.6	137.4	4209	2061	312	462	235	189	135	51	54	113	1	10	91	CLRG2006	113	32	CATG200
280.6	137.4	8417	4123	462	762	235	189	135	51	54	113	1	10	146	CLRG20012	113	32	CATG200
366.4	152.6	1832	763	235	285	275	216	165	58	64	145	1	10	89	CLRG2502	145	38	CATG250
366.4	152.6	5496	2289	335	485	275	216	165	58	64	145	1	10	136	CLRG2506	145	38	CATG250
366.4	152.6	10993	4577	485	785	275	216	165	58	64	145	1	10	207	CLRG25012	145	38	CATG250
452.4	153.7	2262	769	322	372	310	240	195	64	75	177	1	12	184	CLRG3002	177	41	CATG300
452.4	153.7	6786	2306	422	572	310	240	195	64	75	177	1	12	232	CLRG3006	177	41	CATG300
452.4	153.7	13573	4611	572	872	310	240	195	64	75	177	1	12	303	CLRG30012	177	41	CATG300
572.6	209.6	2863	1048	374	424	350	270	215	74	90	196	3	12	270	CLRG4002	196	55	CATG400
572.6	209.6	8589	3144	474	624	350	270	215	74	90	196	3	12	330	CLRG4006	196	55	CATG400
572.6	209.6	17177	6287	624	924	350	270	215	74	90	196	3	12	421	CLRG40012	196	55	CATG400
706.9	235.4	3534	1177	419	469	400	300	245	85	110	228	3	14	401	CLRG5002	228	60	CATG500
706.9	235.4	10603	3531	519	669	400	300	245	85	110	228	3	14	480	CLRG5006	228	60	CATG500
706.9	235.4	21206	7063	669	969	400	300	245	85	110	228	3	14	599	CLRG50012	228	60	CATG500
855.3	383.9	4276	1919	429	479	430	330	245	90	115	228	3	14	474	CLRG6002	228	60	CATG600
855.3	383.9	12829	5758	529	679	430	330	245	90	115	228	3	14	565	CLRG6006	228	60	CATG600
855.3	383.9	25659	11516	679	979	430	330	245	90	115	228	3	14	701	CLRG60012	228	60	CATG600
1134.1	354.9	5671	1774	484	534	505	380	315	98	130	297	3	18	741	CLRG8002	297	80	CATG800
1134.1	354.9	17012	5323	584	734	505	380	315	98	130	297	3	18	868	CLRG8006	297	80	CATG800
1134.1	354.9	34024	10646	734	1034	505	380	315	98	130	297	3	18	1058	CLRG80012	297	80	CATG800
1385.4	477.6	6927	2388	564	614	560	420	340	110	149	323	3	20	1062	CLRG10002	323	98	CATG1000
1385.4	477.6	20781	7164	664	814	560	420	340	110	149	323	3	20	1213	CLRG10006	323	98	CATG1000
1385.4	477.6	41563	14327	814	1114	560	420	340	110	149	323	3	20	1439	CLRG100012	323	98	CATG1000

▼CLSG Single-Acting High-Tonnage Cylinders

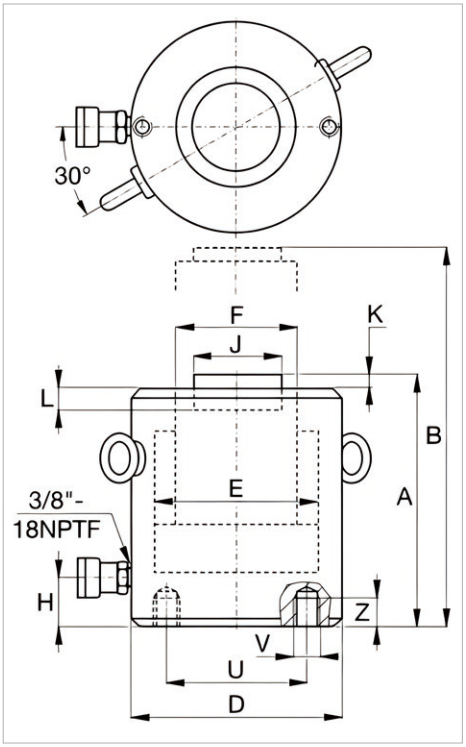


Rated Pressure: 70MPa

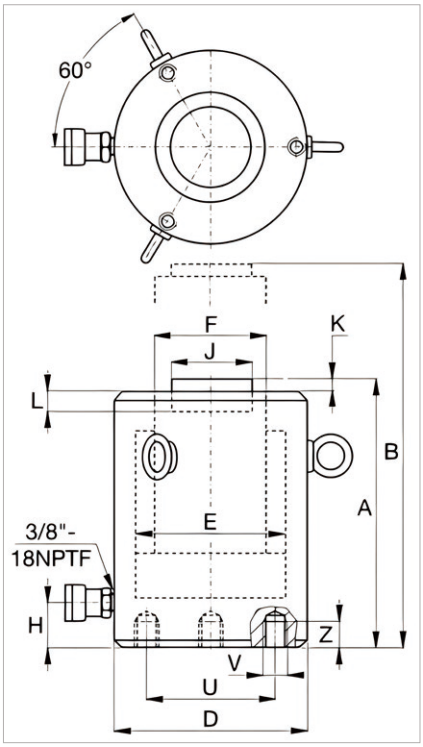
Rated Tonnage: 50 -1000ton

Stroke Range: 50-300mm

- Integral stop ring prevents plunger over-extension
- Baked enamel finish provides enhanced corrosion resistance
- Interchangeable hard grooved saddle is standard
- Standard base mounting holes on all models
- Dust wiper reduces contamination and extends hydraulic cylinder service life
- Single-acting, load return



CLSG502-CLSG15012

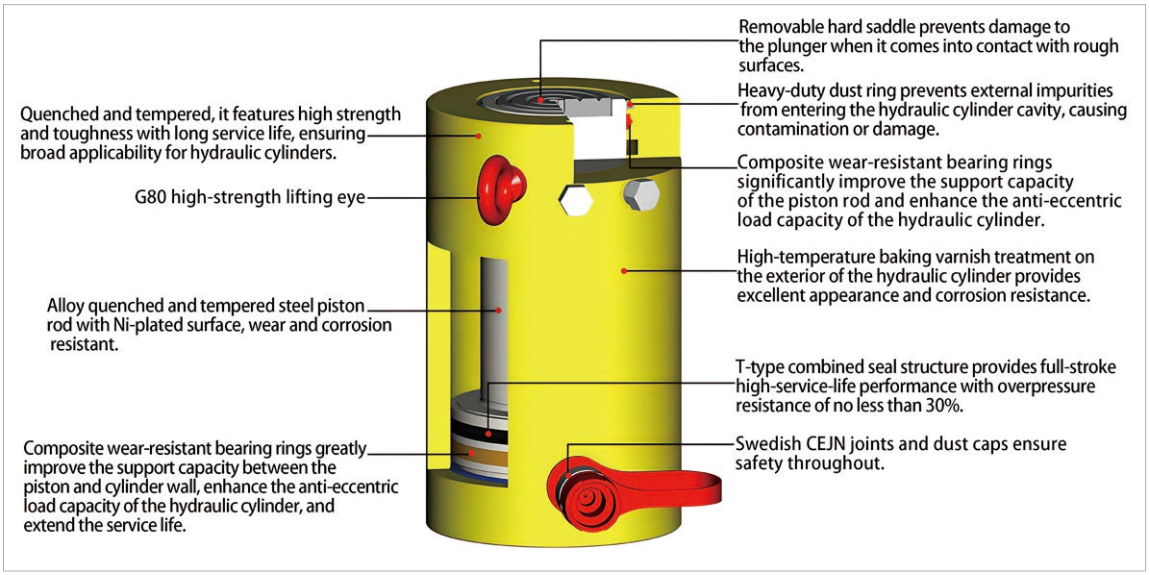


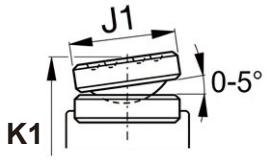
CLSG502-CLSG15012

Base Mounting Hole Dimensions			
Model / Load Capacity (ton)	Bolt Circle Diameter U (mm)	Thread Size V	Minimum Thread Depth Z (mm)
CLSG50	80	2x M8	12
CLSG100	110	2x M8	12
CLSG150	130	2x M8	12
CLSG200	165	3x M10	15
CLSG250	190	3x M10	15
CLSG300	200	3x M10	15
CLSG400	230	3x M14	20
CLSG500	250	3x M14	20
CLSG600	275	3x M14	20
CLSG800	330	3x M20	25
CLSG1000	360	3x M20	25

Load Capacity (ton (kN))	Stroke (mm)	Model	Effective Cylinders Area (cm²)
50 (550)	50	CLSG502	78.6
50 (550)	100	CLSG504	78.6
50 (550)	150	CLSG506	78.6
50 (550)	200	CLSG508	78.6
50 (550)	250	CLSG5010	78.6
50 (550)	300	CLSG5012	78.6
100 (1002)	50	CLSG1002	143.1
100 (1002)	100	CLSG1004	143.1
100 (1002)	150	CLSG1006	143.1
100 (1002)	200	CLSG1008	143.1
100 (1002)	250	CLSG10010	143.1
100 (1002)	300	CLSG10012	143.1
150 (1497)	50	CLSG1502	213.9
150 (1497)	100	CLSG1504	213.9
150 (1497)	150	CLSG1506	213.9
150 (1497)	200	CLSG1508	213.9
150 (1497)	250	CLSG15010	213.9
150 (1497)	300	CLSG15012	213.9
200 (1964)	50	CLSG2002	280.6
200 (1964)	150	CLSG2006	280.6
200 (1964)	300	CLSG20012	280.6
250 (2565)	50	CLSG2502	366.4
250 (2565)	150	CLSG2506	366.4
250 (2565)	300	CLSG25012	366.4
300 (3167)	50	CLSG3002	452.4
300 (3167)	150	CLSG3006	452.4
300 (3167)	300	CLSG30012	452.4
400 (4008)	50	CLSG4002	572.6
400 (4008)	150	CLSG4006	572.6
400 (4008)	300	CLSG40012	572.6
500 (4948)	50	CLSG5002	706.9
500 (4948)	150	CLSG5006	706.9
500 (4948)	300	CLSG50012	706.9
600 (5987)	50	CLSG6002	855.3
600 (5987)	150	CLSG6006	855.3
600 (5987)	300	CLSG60012	855.3
800 (7939)	50	CLSG8002	1134.1
800 (7939)	150	CLSG8006	1134.1
800 (7939)	300	CLSG80012	1134.1
1000 (9698)	50	CLSG10002	1385.4
1000 (9698)	150	CLSG10006	1385.4
1000 (9698)	300	CLSG100012	1385.4

► CLSG Performance Introduction





*Optional Tilt Saddle

Oil Capacity (cm^3)	Collapsed Height A (mm)	Extended Height B (mm)	Outer Diameter D (mm)	Cylinders Bore Diameter E (mm)	Plunger Diameter F (mm)	Oil Inlet Height from Base H (mm)	Standard Saddle Diameter J (mm)	Saddle Protrusion Height K (mm)	Plunger Bore Depth L (mm)	Weight (KG)	Model	Saddle Diameter J1 (mm)	Saddle Height K1 (mm)	Saddle Model
385	162	212	130	100	70	52	50	1	19	17	CLSG502	50	24	CATG50
770	212	312	130	100	70	52	50	1	19	20	CLSG504	50	24	CATG50
1155	262	412	130	100	70	52	50	1	19	23	CLSG506	50	24	CATG50
1540	312	512	130	100	70	52	50	1	19	27	CLSG508	50	24	CATG50
1924	362	612	130	100	70	52	50	1	19	31	CLSG5010	50	24	CATG50
2309	412	712	130	100	70	52	50	1	19	34	CLSG5012	50	24	CATG50
664	182	232	165	135	95	54	75	1	19	29	CLSG1002	75	29	CATG100
1327	232	332	165	135	95	54	75	1	19	34	CLSG1004	75	29	CATG100
1991	282	432	165	135	95	54	75	1	19	40	CLSG1006	75	29	CATG100
2655	332	532	165	135	95	54	75	1	19	46	CLSG1008	75	29	CATG100
3318	382	632	165	135	95	54	75	1	19	52	CLSG10010	75	29	CATG100
3982	432	732	165	135	95	54	75	1	19	58	CLSG10012	75	29	CATG100
993	196	246	205	165	115	61	94	1	19	39	CLSG1502	94	31	CATG150
1986	246	346	205	165	115	61	94	1	19	52	CLSG1504	94	31	CATG150
2978	296	446	205	165	115	61	94	1	19	65	CLSG1506	94	31	CATG150
3971	346	546	205	165	115	61	94	1	19	78	CLSG1508	94	31	CATG150
4964	396	646	205	165	115	61	94	1	19	92	CLSG15010	94	31	CATG150
5957	446	746	205	165	115	61	94	1	19	105	CLSG15012	94	31	CATG150
1330	216	266	235	189	135	67	113	1	24	55	CLSG2002	113	35	CATG200
3989	316	466	235	189	135	67	113	1	24	91	CLSG2006	113	35	CATG200
7977	466	766	235	189	135	67	113	1	24	146	CLSG20012	113	35	CATG200
1832	235	285	275	216	165	73	145	1	24	89	CLSG2502	145	46	CATG250
5497	335	485	275	216	165	73	145	1	24	136	CLSG2506	145	46	CATG250
10993	485	785	275	216	165	73	145	1	24	207	CLSG25012	145	46	CATG250
2281	312	362	310	240	195	101	177	1	19	184	CLSG3002	177	62	CATG300
6843	412	562	310	240	195	101	177	1	19	232	CLSG3006	177	62	CATG300
13685	562	862	310	240	195	101	177	1	19	303	CLSG30012	177	62	CATG300
2800	375	425	350	270	215	114	196	3	27	270	CLSG4002	196	51	CATG400
8399	475	625	350	270	215	114	196	3	27	330	CLSG4006	196	51	CATG400
16797	625	925	350	270	215	114	196	3	27	421	CLSG40012	196	51	CATG400
3653	419	469	400	300	245	114	228	3	27	401	CLSG5002	228	63	CATG500
10959	519	669	400	300	245	114	228	3	27	480	CLSG5006	228	63	CATG500
21918	669	969	400	300	245	114	228	3	27	599	CLSG50012	228	63	CATG500
4276	429	479	430	330	245	114	228	3	27	474	CLSG6002	228	76	CATG600
12829	529	679	430	330	245	114	228	3	27	565	CLSG6006	228	76	CATG600
25659	679	979	430	330	245	114	228	3	27	701	CLSG60012	228	76	CATG600
5881	474	524	505	380	315	149	297	3	27	741	CLSG8002	297	75	CATG800
17644	574	724	505	380	315	149	297	3	27	868	CLSG8006	297	75	CATG800
35288	724	1024	505	380	315	149	297	3	27	1058	CLSG80012	297	75	CATG800
7329	564	614	560	420	340	174	323	3	27	1062	CLSG10002	323	93	CATG1000
21986	664	814	560	420	340	174	323	3	27	1213	CLSG10006	323	93	CATG1000
43972	814	1114	560	420	340	174	323	3	27	1439	CLSG100012	323	93	CATG1000

▼HDC Double - Acting High-Tonnage Cylinders

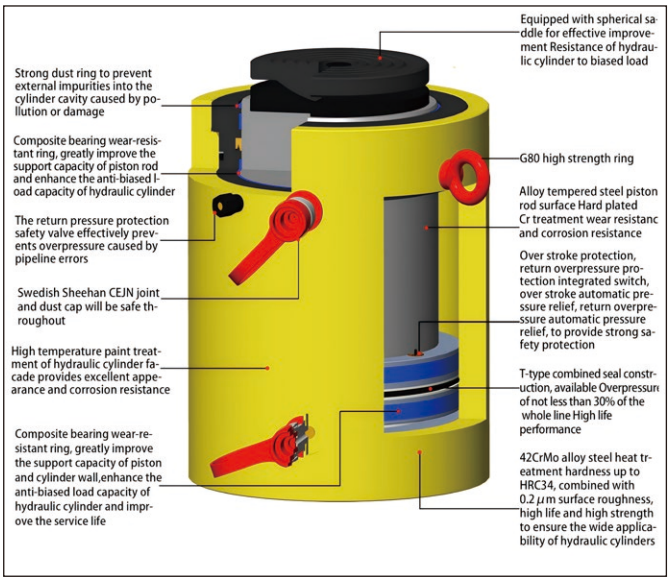


Rated Pressure: 70MPa(10000PSI)	
Capacity:	50-1000T
Stroke Range:	50-2000mm
Oil Drain Thread:	NPT3/8
Return Method:	Hydraulic Return
Medium:	Hydraulic Oil

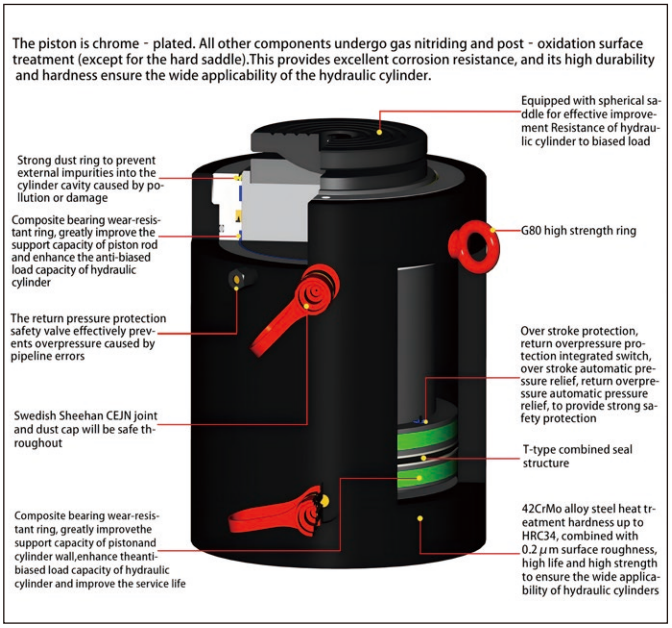
New dual-action hydraulic cylinders

- More compact dimensions, fully optimized outer diameter and collapsed Height, greatly reducing installation space requirements
- The full range of 50-1000T tonnages supports flexible customization of Fe_3O_4 with a stroke of 50mm-2000mm
- Innovative structural design, with all series using composite material reinforced bearings, 42CrMo alloy quenched and tempered steel, and T-shaped combination seals, significantly enhancing the service life and resistance to off-center loading of the cylinders
- Quality assurance, each hydraulic cylinder undergoes comprehensive inspection before leaving the factory, full stroke dynamic load holding tests, and traceable paper inspection reports are shipped with the cylinders
- Advanced features, including built-in over-travel protection switches, return pressure control safety valves, and return overpressure protection safety valves, to prevent failures or safety hazards due to over-travel use, overpressure use, or incorrect oil line connections
- High-temperature paint spraying process, with optional gas nitriding and post-oxidation processes, providing superior anti-corrosion performance and anti-eccentric load performance
- Equipped with CEJN quick-thread connectors and dust caps
- Faster production cycles: data-based standard parts and raw material safety stock management, hydraulic cylinders shipping within 7-14 days

▼Lacquered surface treatment



▼QPQ surface treatment



▼ Naming conventions:

HDC 100 - 150 - FS - HV42 - NAC

1	2	3	4	5	6
Product Type	Tonnage (T)	Stroke (mm)	Saddle Type	Optional valve	Surface treatment

1.Product Type

HDC Series

2.Tonnage (T)

Range: 50-1000

3.Stroke (mm)

Range: 50-2000

4.Saddle Type

Blank Spherical Saddle
FS Flat saddle

5.Optional valve

blank threaded quick coupling
HV42 hydraulically controlled check valve
HV66 one-way throttle valve

6. Surface treatment)

Blank Cylinders painting, piston plating Cr
NAC The piston is chromium-plated, and the remaining components undergo gas nitriding and post-oxidation.

Typical Models & Product Diagram of HDC Series

HDC200-150	HDC200-300-V42	HDC200-150-FS-V66	HDC100-250	HDC400-150-NAC	HDC400-150-V66-NAC
					

▼Four-bit servo synchronization system



▼ 1000T ton fully automatic test system



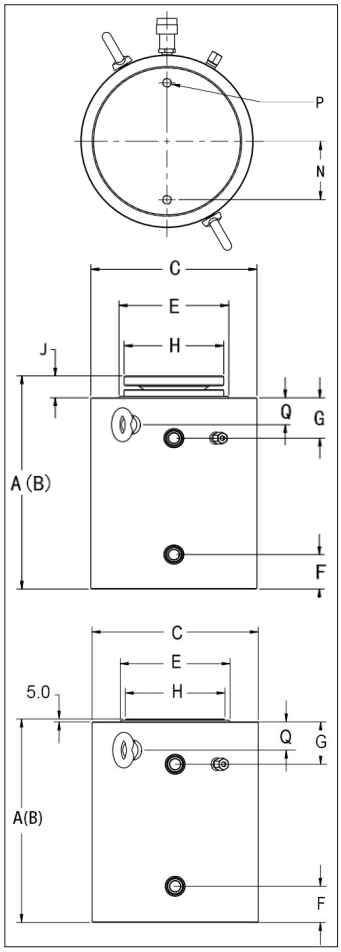
1000T ton fully automatic test system

•Fully automatic for hydraulic cylinders to perform no-load, medium pressure, and rated pressure full stroke dynamic load testing and full stroke holding pressure testing. After passing the tests, inspection reports can be printed.

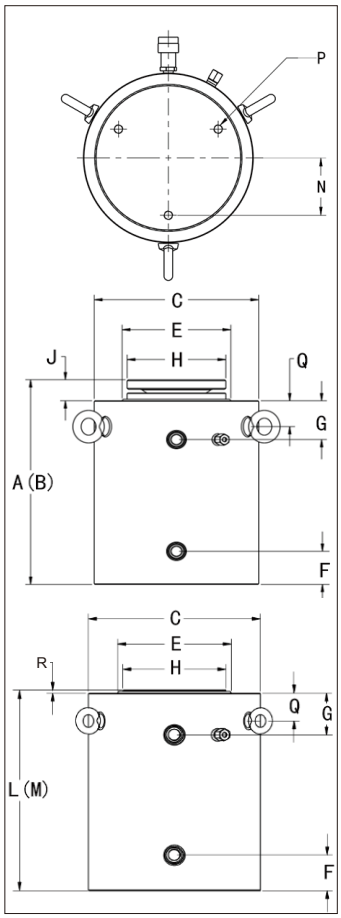
•Each hydraulic cylinder has a traceable factory code.

Hydraulic Cylinders

RIVERLAKE
ultra high pressure hydraulic tools www.riverlakeco.com



HDC50-HDC150

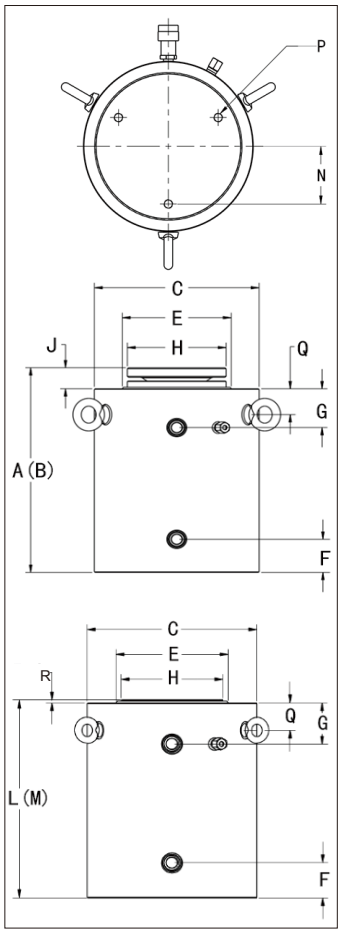


HDC200-HDC1000

Note: HDC200-HDC500,R=5.0;
HDC800 and HDC1000, R=7.0.

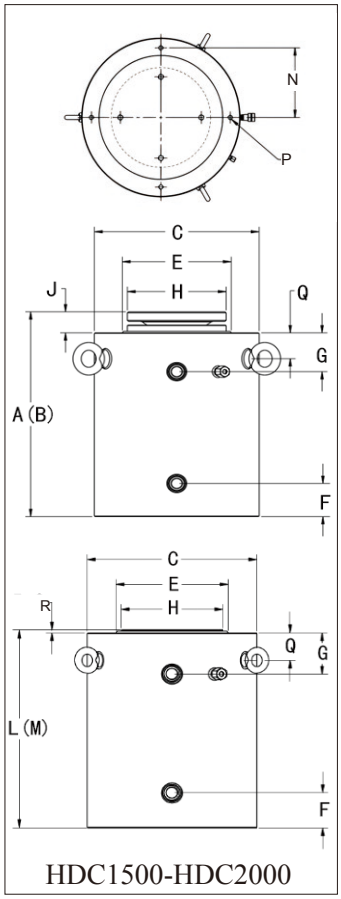
Cylinders Capacity ton (kN)	Model	Stroke (mm)	Maximum load capacity (kN)		The effective area of the cylinder (cm²)		Hydraulic oil capacity (cm³)		Collapsed Height A (with spherical saddle) (mm)	Reach height B(with spherical saddle) (mm)	Outside Dia C(mm)
			push	pull	push	pull	push	pull			
50 (550)	HDC50-50	50	550	280	78.6	40.0	393	200	176	226	130
	HDC50-100	100	550	280	78.6	40.0	786	400	226	326	130
	HDC50-150	150	550	280	78.6	40.0	1179	600	276	426	130
	HDC50-200	200	550	280	78.6	40.0	1571	800	326	526	130
	HDC50-250	250	550	280	78.6	40.0	1964	1000	376	626	130
	HDC50-300	300	550	280	78.6	40.0	2357	1200	426	726	130
	HDC50-350	350	550	280	78.6	40.0	2750	1400	476	826	130
	HDC50-500	500	550	280	78.6	40.0	3929	2000	626	1126	130
	HDC50-2000	2000	550	280	78.6	40.0	15714	8000	2126	4126	130
100 (1002)	HDC100-50	50	1002	506	143.1	72.3	716	361	191	241	165
	HDC100-100	100	1002	506	143.1	72.3	1431	723	241	341	165
	HDC100-150	150	1002	506	143.1	72.3	2147	1084	291	441	165
	HDC100-200	200	1002	506	143.1	72.3	2863	1446	341	541	165
	HDC100-250	250	1002	506	143.1	72.3	3579	1807	391	641	165
	HDC100-300	300	1002	506	143.1	72.3	4294	2169	441	741	165
	HDC100-350	350	1002	506	143.1	72.3	5010	2530	491	841	165
	HDC100-500	500	1002	506	143.1	72.3	7157	3614	641	1141	165
	HDC100-2000	2000	1002	506	143.1	72.3	28629	14457	2141	4141	165
150 (1497)	HDC150-50	50	1497	770	213.9	110.0	1069	550	207	257	215
	HDC150-100	100	1497	770	213.9	110.0	2139	1100	257	357	215
	HDC150-150	150	1497	770	213.9	110.0	3208	1650	307	457	215
	HDC150-200	200	1497	770	213.9	110.0	4277	2200	357	557	215
	HDC150-250	250	1497	770	213.9	110.0	5346	2750	407	657	215
	HDC150-300	300	1497	770	213.9	110.0	6416	3300	457	757	215
	HDC150-350	350	1497	770	213.9	110.0	7485	3850	507	857	215
	HDC150-500	500	1497	770	213.9	110.0	10693	5500	657	1157	215
	HDC150-2000	2000	1497	770	213.9	110.0	42771	22000	2157	4157	215
200 (1985)	HDC200-50	50	1985	983	283.6	140.4	1418	702	231	281	230
	HDC200-100	100	1985	983	283.6	140.4	2836	1404	281	381	230
	HDC200-150	150	1985	983	283.6	140.4	4254	2106	331	481	230
	HDC200-200	200	1985	983	283.6	140.4	5671	2809	381	581	230
	HDC200-250	250	1985	983	283.6	140.4	7089	3511	431	681	230
	HDC200-300	300	1985	983	283.6	140.4	8507	4213	481	781	230
	HDC200-350	350	1985	983	283.6	140.4	9925	4915	531	881	230
	HDC200-500	500	1985	983	283.6	140.4	14179	7021	681	1181	230
	HDC200-2000	2000	1985	983	283.6	140.4	56714	28086	2181	4181	230
300 (3167)	HDC300-50	50	3167	1076	452.4	153.7	2262	769	296	346	295
	HDC300-100	100	3167	1076	452.4	153.7	4524	1537	346	446	295
	HDC300-150	150	3167	1076	452.4	153.7	6786	2306	396	546	295
	HDC300-200	200	3167	1076	452.4	153.7	9049	3074	446	646	295
	HDC300-250	250	3167	1076	452.4	153.7	11311	3843	496	746	295
	HDC300-300	300	3167	1076	452.4	153.7	13573	4611	546	846	295
	HDC300-350	350	3167	1076	452.4	153.7	15835	5380	596	946	295
	HDC300-500	500	3167	1076	452.4	153.7	22621	7686	746	1246	295
	HDC300-2000	2000	3167	1076	452.4	153.7	90486	30743	2246	4246	295

Cylinders bore diameter D (mm)	Piston Rod dia. E (mm)	Height from oil inlet to bottomF (mm)	Return port height from top: G (mm)	Standard saddle diameter H (mm)	Protruding height of spherical saddle J (mm)	Piston rod top hole depth K (mm)	Collapsed Height (with flat saddle) L (mm)	Reach height M (with flat saddle)	Return port to top height: G (mm)	Height of the ring from the top Q (mm)	Eyebolt hole and bottom mounting hole thread P	Weight (kg)	Model
100	70	40	42	50	19	10	162	212	40	40	M8	15	HDC50-50
100	70	40	42	50	19	10	212	312	40	40	M8	19	HDC50-100
100	70	40	42	50	19	10	262	412	40	40	M8	22	HDC50-150
100	70	40	42	50	19	10	312	512	40	40	M8	26	HDC50-200
100	70	40	42	50	19	10	362	612	40	40	M8	30	HDC50-250
100	70	40	42	50	19	10	412	712	40	40	M8	33	HDC50-300
100	70	40	42	50	19	10	462	812	40	40	M8	37	HDC50-350
100	70	40	42	50	19	10	612	1112	40	40	M8	48	HDC50-500
100	70	40	42	50	19	10	2112	4112	40	40	M8	157	HDC50-2000
135	95	43	44	75	20	10	176	226	55	40	M8	26	HDC100-50
135	95	43	44	75	20	10	226	326	55	40	M8	32	HDC100-100
135	95	43	44	75	20	10	276	426	55	40	M8	37	HDC100-150
135	95	43	44	75	20	10	326	526	55	40	M8	43	HDC100-200
135	95	43	44	75	20	10	376	626	55	40	M8	48	HDC100-250
135	95	43	44	75	20	10	426	726	55	40	M8	54	HDC100-300
135	95	43	44	75	20	10	476	826	55	40	M8	59	HDC100-350
135	95	43	44	75	20	10	626	1126	55	40	M8	76	HDC100-500
135	95	43	44	75	20	10	2126	4126	55	40	M8	242	HDC100-2000
165	115	47	48	94	25	10	187	237	65	40	M8	48	HDC150-50
165	115	47	48	94	25	10	237	337	65	40	M8	58	HDC150-100
165	115	47	48	94	25	10	287	437	65	40	M8	68	HDC150-150
165	115	47	48	94	25	10	337	537	65	40	M8	78	HDC150-200
165	115	47	48	94	25	10	387	637	65	40	M8	88	HDC150-250
165	115	47	48	94	25	10	437	737	65	40	M8	98	HDC150-300
165	115	47	48	94	25	10	487	837	65	40	M8	107	HDC150-350
165	115	47	48	94	25	10	637	1137	65	40	M8	137	HDC150-500
165	115	47	48	94	25	10	2137	4137	65	40	M8	434	HDC150-2000
190	135	51	54	113	32	10	204	254	82.5	40	M10	60	HDC200-50
190	135	51	54	113	32	10	254	354	82.5	40	M10	71	HDC200-100
190	135	51	54	113	32	10	304	454	82.5	40	M10	82	HDC200-150
190	135	51	54	113	32	10	354	554	82.5	40	M10	92	HDC200-200
190	135	51	54	113	32	10	404	654	82.5	40	M10	103	HDC200-250
190	135	51	54	113	32	10	454	754	82.5	40	M10	114	HDC200-300
190	135	51	54	113	32	10	504	854	82.5	40	M10	125	HDC200-350
190	135	51	54	113	32	10	654	1154	82.5	40	M10	157	HDC200-500
190	135	51	54	113	32	10	2154	4154	82.5	40	M10	479	HDC200-2000
240	195	64	75	177	41	12	260	310	100	50	M10	135	HDC300-50
240	195	64	75	177	41	12	310	410	100	50	M10	156	HDC300-100
240	195	64	75	177	41	12	360	510	100	50	M10	177	HDC300-150
240	195	64	75	177	41	12	410	610	100	50	M10	197	HDC300-200
240	195	64	75	177	41	12	460	710	100	50	M10	218	HDC300-250
240	195	64	75	177	41	12	510	810	100	50	M10	239	HDC300-300
240	195	64	75	177	41	12	560	910	100	50	M10	260	HDC300-350
240	195	64	75	177	41	12	710	1210	100	50	M10	322	HDC300-500
240	195	64	75	177	41	12	2210	4210	100	50	M10	944	HDC300-2000



HDC200-HDC1000

Note: HDC200-HDC500,R=5.0;HDC800, HDC1000, R=7.0。



HDC1500-HDC2000

Cylinders Capacity ton (kN)	Model	Stroke (mm)	Maximum load capacity (kN)		The effective area of the cylinder (cm²)		Hydraulic oil capacity (cm³)		Collapsed Height A (with spherical saddle) (mm)	Reach height B(with spherical saddle) (mm)	Outside Dia C(mm)
			push	pull	push	pull	push	pull			
400 (4008)	HDC400-50	50	4008	1467	572.6	209.6	2863	1048	355	405	347
	HDC400-100	100	4008	1467	572.6	209.6	5726	2096	405	505	347
	HDC400-150	150	4008	1467	572.6	209.6	8589	3144	455	605	347
	HDC400-200	200	4008	1467	572.6	209.6	11451	4191	505	705	347
	HDC400-250	250	4008	1467	572.6	209.6	14314	5239	555	805	347
	HDC400-300	300	4008	1467	572.6	209.6	17177	6287	605	905	347
	HDC400-350	350	4008	1467	572.6	209.6	20040	7335	655	1005	347
	HDC400-500	500	4008	1467	572.6	209.6	28629	10479	805	1305	347
	HDC400-2000	2000	4008	1467	572.6	209.6	114514	41914	2305	4305	347
500 (4948)	HDC500-50	50	4948	1648	706.9	235.4	3534	1177	405	455	372
	HDC500-100	100	4948	1648	706.9	235.4	7069	2354	455	555	372
	HDC500-150	150	4948	1648	706.9	235.4	10603	3531	505	655	372
	HDC500-200	200	4948	1648	706.9	235.4	14137	4709	555	755	372
	HDC500-250	250	4948	1648	706.9	235.4	17671	5886	605	855	372
	HDC500-300	300	4948	1648	706.9	235.4	21206	7063	655	955	372
	HDC500-350	350	4948	1648	706.9	235.4	24740	8240	705	1055	372
	HDC500-500	500	4948	1648	706.9	235.4	35343	11771	855	1355	372
	HDC500-2000	2000	4948	1648	706.9	235.4	141371	47086	2355	4355	372
600 (5987)	HDC600-50	50	5987	2687	855.3	383.9	4277	1920	421	471	419
	HDC600-100	100	5987	2687	855.3	383.9	8553	3839	471	571	419
	HDC600-150	150	5987	2687	855.3	383.9	12830	5759	521	671	419
	HDC600-200	200	5987	2687	855.3	383.9	17106	7678	571	771	419
	HDC600-250	250	5987	2687	855.3	383.9	21383	9598	621	871	419
	HDC600-300	300	5987	2687	855.3	383.9	25659	11517	671	971	419
	HDC600-350	350	5987	2687	855.3	383.9	29936	13437	721	1071	419
	HDC600-500	500	5987	2687	855.3	383.9	42765	19195	871	1371	419
	HDC600-2000	2000	5987	2687	855.3	383.9	171060	76780	2371	4371	419
800 (7939)	HDC800-50	50	7939	2484	1134.1	354.9	5671	1774	480	530	475
	HDC800-100	100	7939	2484	1134.1	354.9	11341	3549	530	630	475
	HDC800-150	150	7939	2484	1134.1	354.9	17012	5323	580	730	475
	HDC800-200	200	7939	2484	1134.1	354.9	22683	7097	630	830	475
	HDC800-250	250	7939	2484	1134.1	354.9	28354	8871	680	930	475
	HDC800-300	300	7939	2484	1134.1	354.9	34024	10646	730	1030	475
	HDC800-350	350	7939	2484	1134.1	354.9	39695	12420	780	1130	475
	HDC800-500	500	7939	2484	1134.1	354.9	56707	17743	930	1430	475
	HDC800-2000	2000	7939	2484	1134.1	354.9	226829	70971	2430	4430	475
1000 (9698)	HDC1000-50	50	9698	3343	1385.4	477.6	6927	2388	553	603	525
	HDC1000-100	100	9698	3343	1385.4	477.6	13854	4776	603	703	525
	HDC1000-150	150	9698	3343	1385.4	477.6	20781	7164	653	803	525
	HDC1000-200	200	9698	3343	1385.4	477.6	27709	9551	703	903	525
	HDC1000-250	250	9698	3343	1385.4	477.6	34636	11939	753	1003	525
	HDC1000-300	300	9698	3343	1385.4	477.6	41563	14327	803	1103	525
	HDC1000-350	350	9698	3343	1385.4	477.6	48490	16715	853	1203	525
	HDC1000-500	500	9698	3343	1385.4	477.6	69271	23879	1003	1503	525
	HDC1000-2000	2000	9698	3343	1385.4	477.6	277086	95514	2503	4503	525
1500 (15038)	HDC1500-150	150	15038	5931	2148.3	847.3	32224	12709	830	980	685
	HDC1500-300	300	15038	5931	2148.3	847.3	64449	25419	980	1280	685
2000 (20057)	HDC2000-150	150	20057	6312	2865.3	901.7	42979	13526	937	1087	797
	HDC2000-300	300	20057	6312	2865.3	901.7	85959	27051	1087	1387	797

Cylinders bore diameter D (mm)	Piston Rod dia. E (mm)	Height from oil inlet to bottomF (mm)	Return port height from top: G (mm)	Standard saddle diameter H (mm)	Protruding height of spherical saddle J (mm)	Piston rod top hole depth K (mm)	Collapsed Height(with flat saddle) L(mm)	Reach height M (with flat saddle)	Return port to top height: G (mm)	Height of the ring from the top Q (mm)	Eyebolt hole & bottom mounting hole thread: P (mm)	Weight (kg)	Model
270	215	74	90	196	55	12	305	355	115	60	M14	223	HDC400-50
270	215	74	90	196	55	12	355	455	115	60	M14	252	HDC400-100
270	215	74	90	196	55	12	405	555	115	60	M14	281	HDC400-150
270	215	74	90	196	55	12	455	655	115	60	M14	309	HDC400-200
270	215	74	90	196	55	12	505	755	115	60	M14	338	HDC400-250
270	215	74	90	196	55	12	555	855	115	60	M14	367	HDC400-300
270	215	74	90	196	55	12	605	955	115	60	M14	396	HDC400-350
270	215	74	90	196	55	12	755	1255	115	60	M14	482	HDC400-500
270	215	74	90	196	55	12	2255	4255	115	60	M14	1346	HDC400-2000
300	245	85	110	228	60	14	350	400	125	80	M14	298	HDC500-50
300	245	85	110	228	60	14	400	500	125	80	M14	331	HDC500-100
300	245	85	110	228	60	14	450	600	125	80	M14	365	HDC500-150
300	245	85	110	228	60	14	500	700	125	80	M14	398	HDC500-200
300	245	85	110	228	60	14	550	800	125	80	M14	431	HDC500-250
300	245	85	110	228	60	14	600	900	125	80	M14	464	HDC500-300
300	245	85	110	228	60	14	650	1000	125	80	M14	498	HDC500-350
300	245	85	110	228	60	14	800	1300	125	80	M14	597	HDC500-500
300	245	85	110	228	60	14	2300	4300	125	80	M14	1595	HDC500-2000
330	245	90	115	228	60	14	366	416	137.5	80	M14	387	HDC600-50
330	245	90	115	228	60	14	416	516	137.5	80	M14	426	HDC600-100
330	245	90	115	228	60	14	466	616	137.5	80	M14	465	HDC600-150
330	245	90	115	228	60	14	516	716	137.5	80	M14	504	HDC600-200
330	245	90	115	228	60	14	566	816	137.5	80	M14	543	HDC600-250
330	245	90	115	228	60	14	616	916	137.5	80	M14	582	HDC600-300
330	245	90	115	228	60	14	666	1016	137.5	80	M14	620	HDC600-350
330	245	90	115	228	60	14	816	1316	137.5	80	M14	737	HDC600-500
330	245	90	115	228	60	14	2316	4316	137.5	80	M14	1904	HDC600-2000
380	315	98	130	297	80	18	407	457	165	80	M20	572	HDC800-50
380	315	98	130	297	80	18	457	557	165	80	M20	627	HDC800-100
380	315	98	130	297	80	18	507	657	165	80	M20	683	HDC800-150
380	315	98	130	297	80	18	557	757	165	80	M20	738	HDC800-200
380	315	98	130	297	80	18	607	857	165	80	M20	794	HDC800-250
380	315	98	130	297	80	18	657	957	165	80	M20	849	HDC800-300
380	315	98	130	297	80	18	707	1057	165	80	M20	905	HDC800-350
380	315	98	130	297	80	18	857	1357	165	80	M20	1071	HDC800-500
380	315	98	130	297	80	18	2357	4357	165	80	M20	2736	HDC800-2000
420	340	110	149	323	98	20	462	512	180	90	M20	802	HDC1000-50
420	340	110	149	323	98	20	512	612	180	90	M20	868	HDC1000-100
420	340	110	149	323	98	20	562	712	180	90	M20	934	HDC1000-150
420	340	110	149	323	98	20	612	812	180	90	M20	1000	HDC1000-200
420	340	110	149	323	98	20	662	912	180	90	M20	1066	HDC1000-250
420	340	110	149	323	98	20	712	1012	180	90	M20	1132	HDC1000-300
420	340	110	149	323	98	20	762	1112	180	90	M20	1198	HDC1000-350
420	340	110	149	323	98	20	912	1412	180	90	M20	1396	HDC1000-500
420	340	110	149	323	98	20	2412	4412	180	90	M20	3376	HDC1000-2000
523	407	210	210	400	100	30	738	888	300	150	M24	2106	HDC1500-150
523	407	210	210	400	100	30	888	1188	300	150	M24	2440	HDC1500-300
604	500	255	255	450	108	30	837	987	350	150	M24	3286	HDC2000-150
604	500	255	255	450	108	30	987	1287	350	150	M24	3767	HDC2000-300

▼HCG Series Single- Acting High-Tonnage Cylinders

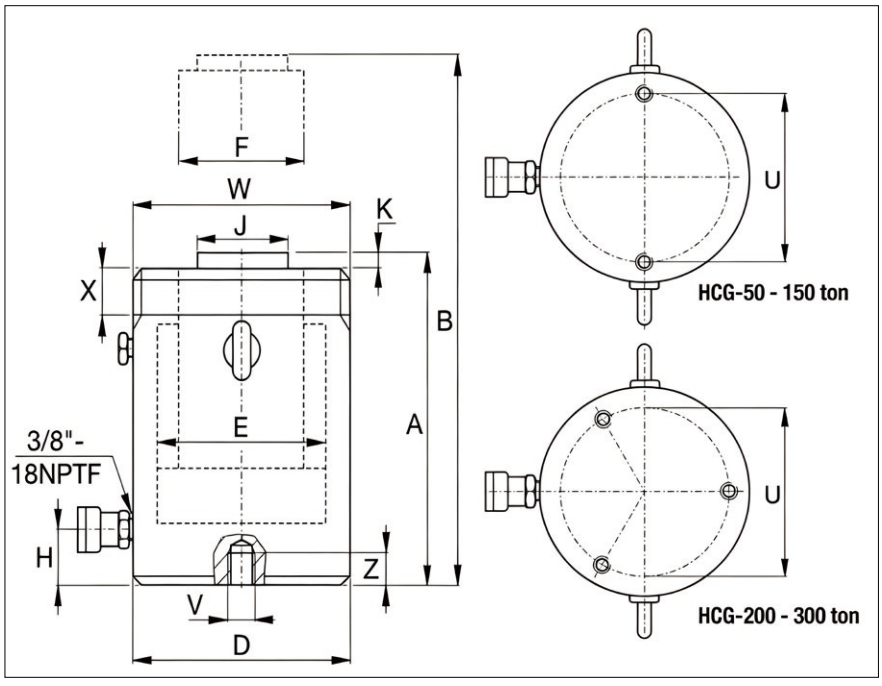


HCG Series

Rated Pressure: 70MPa

Rated Tonnage: 50 -1000ton

Stroke Range: 50-300mm



Bottom Mounting Hole					
Model/ Capacity ton	Bolt Pitch Circle Diameter U (mm)	Thread Size V	Min. Thread Depth Z (mm)	Hole Qty.	Angle From Coupler
HCG50	105	M12 x1.75	22	2	90°
HCG100	150	M12 x1.75	22	2	90°
HCG150	185	M12 x1.75	22	2	90°
HCG200	215	M12 x1.75	22	3	60°
HCG250	245	M12 x1.75	22	3	60°
HCG300	260	M16 x2	25	3	60°

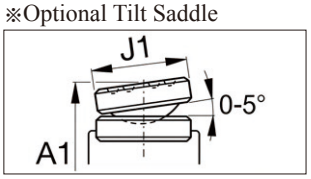
Capacity (ton)	Stroke (mm)	Model	Max. Capacity (ton (kN))
50	50	HCG502	56 (550)
50	100	HCG504	56 (550)
50	150	HCG506	56 (550)
50	200	HCG508	56 (550)
50	250	HCG5010	56 (550)
50	300	HCG5012	56 (550)
100	50	HCG1002	102 (1002)
100	100	HCG1004	102 (1002)
100	150	HCG1006	102 (1002)
100	200	HCG1008	102 (1002)
100	250	HCG10010	102 (1002)
100	300	HCG10012	102 (1002)
150	50	HCG1502	153 (1497)
150	100	HCG1504	153 (1497)
150	150	HCG1506	153 (1497)
150	200	HCG1508	153 (1497)
150	250	HCG15010	153 (1497)
150	300	HCG15012	153 (1497)
200	50	HCG2002	202 (1985)
200	100	HCG2004	202 (1985)
200	150	HCG2006	202 (1985)
200	200	HCG2008	202 (1985)
200	250	HCG20010	202 (1985)
200	300	HCG20012	202 (1985)
250	50	HCG2502	259 (2541)
250	100	HCG2504	259 (2541)
250	150	HCG2506	259 (2541)
250	200	HCG2508	259 (2541)
250	250	HCG25010	259 (2541)
250	300	HCG25012	259 (2541)
300	50	HCG3002	310 (3036)
300	100	HCG3004	310 (3036)
300	150	HCG3006	310 (3036)
300	200	HCG3008	310 (3036)
300	250	HCG30010	310 (3036)
300	300	HCG30012	310 (3036)

- Gravity return high-tonnage cylinders
- The cylinder can withstand up to 10% eccentric load at 90% of the maximum stroke
- The stop ring, treated with gas nitriding and post-oxidation, prevents the plunger from over-stroking
- Adopts an all-dimensional protection design to achieve all-weather protection from the inside out
- Replaceable bearings are installed at both the upper and lower parts of the cylinder to support the plunger throughout the entire stroke
- Equipped with certified lifting lugs and base mounting holes for easy lifting and fixed installation
- The gas nitriding and post-oxidation surface treatment process provides superior corrosion resistance and eccentric load resistance
- All models are equipped with CEJN quick coupling and dust cap

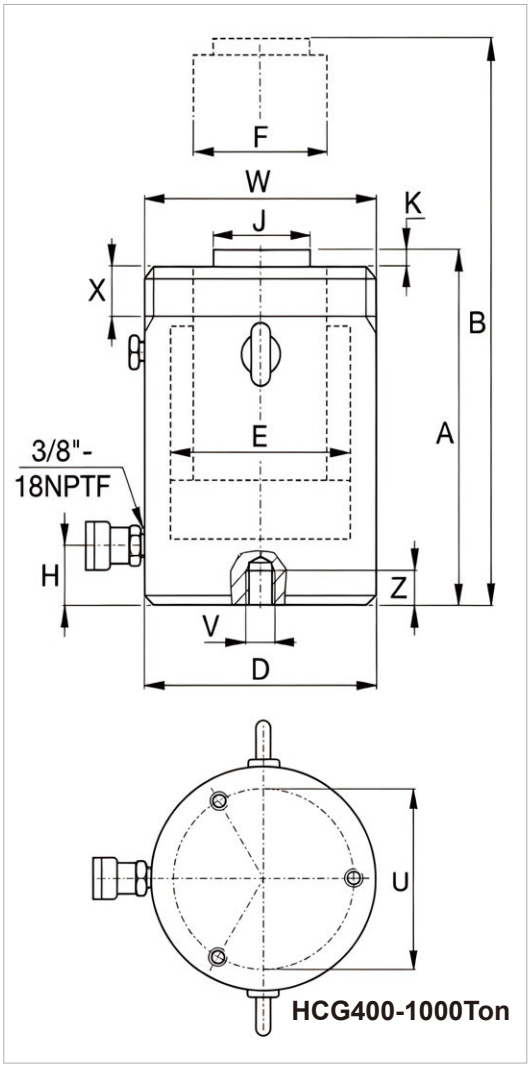
Outer Thread		
Model/ Capacity ton	Thread Size W	Thread Length X(mm)
HCG50	M130 x2	30
HCG100	M175 x3	46
HCG150	M215 x3	55
HCG200	M250 x3	63
HCG250	M280 x3	64
HCG300*	M305 x3	73

The outer thread length is designed for the maximum rated cylinder capacity.
Outer thread is standard for specifications of 250 tons and below. For cylinder specifications of 300 tons and above, outer thread is optional.
♦ If the outer thread on the cylinder is required, add the suffix "E002" to the model number. Example: HCG30010E002

※Optional Tilt Saddle



Effec-tive Area (cm^2)	Usable Oil (cm^3)	Collapsed Height A (mm)	Extended Height B (mm)	Outer Dia.D (mm)	Inner Bore E (mm)	Plunger Dia. F (mm)	Port Height from Bottom H (mm)	Saddle Dia. J (mm)	Saddle Protru-sion Ht. K (mm)	Weight (kg)	Model	Saddle Dia. J1 (mm)	Retracted Ht. A1 (mm)	Saddle Model
78.5	393	183	233	130	100	70	38	50	3	17	HCG502	71	197	CATS50
78.5	785	233	333	130	100	70	38	50	3	20	HCG504	71	247	CATS50
78.5	1178	283	433	130	100	70	38	50	3	24	HCG506	71	297	CATS50
78.5	1571	346	546	130	100	70	38	50	3	29	HCG508	71	360	CATS50
78.5	1963	396	646	130	100	70	38	50	3	32	HCG5010	71	410	CATS50
78.5	2356	446	746	130	100	70	38	50	3	36	HCG5012	71	460	CATS50
143.1	716	202	252	175	135	95	38	75	3	33	HCG1002	71	212	CATS101
143.1	1431	252	352	175	135	95	38	75	3	40	HCG1004	71	262	CATS101
143.1	2147	302	452	175	135	95	38	75	3	46	HCG1006	71	312	CATS101
143.1	2863	379	579	175	135	95	38	75	3	58	HCG1008	71	389	CATS101
143.1	3578	429	679	175	135	95	38	75	3	65	HCG10010	71	439	CATS101
143.1	4294	479	779	175	135	95	38	75	3	71	HCG10012	71	489	CATS101
213.8	1069	220	270	215	165	120	41	94	3	56	HCG1502	97	239	CATS150
213.8	2138	270	370	215	165	120	41	94	3	66	HCG1504	97	289	CATS150
213.8	3207	320	470	215	165	120	41	94	3	76	HCG1506	97	339	CATS150
213.8	4276	397	597	215	165	120	41	94	3	94	HCG1508	97	416	CATS150
213.8	5346	447	697	215	165	120	41	94	3	104	HCG15010	97	466	CATS150
213.8	6415	497	797	215	165	120	41	94	3	115	HCG15012	97	516	CATS150
283.5	1418	231	281	250	190	140	47	113	3	81	HCG2002	126	249	CATS200
283.5	2835	281	381	250	190	140	47	113	3	95	HCG2004	126	299	CATS200
283.5	4253	331	481	250	190	140	47	113	3	109	HCG2006	126	349	CATS200
283.5	5671	408	608	250	190	140	47	113	3	136	HCG2008	126	426	CATS200
283.5	7088	458	708	250	190	140	47	113	3	150	HCG20010	126	476	CATS200
283.5	8506	508	808	250	190	140	47	113	3	164	HCG20012	126	526	CATS200
363.1	1815	241	291	280	215	170	53	140	4	107	HCG2502	175	280	CATS300
363.1	3631	291	391	280	215	170	53	140	4	125	HCG2504	175	330	CATS300
363.1	5446	341	491	280	215	170	53	140	4	144	HCG2506	175	380	CATS300
363.1	7261	431	631	280	215	170	53	140	4	182	HCG2508	175	470	CATS300
363.1	9076	481	731	280	215	170	53	140	4	201	HCG25010	175	520	CATS300
363.1	10892	531	831	280	215	170	53	140	4	219	HCG25012	175	570	CATS300
433.7	2169	296	346	305	235	200	58	140	4	158	HCG3002	175	335	CATS300
433.7	4337	346	446	305	235	200	58	140	4	182	HCG3004	175	385	CATS300
433.7	6506	396	546	305	235	200	58	140	4	206	HCG3006	175	435	CATS300
433.7	8675	446	646	305	235	200	58	140	4	230	HCG3008	175	485	CATS300
433.7	10843	496	746	305	235	200	58	140	4	254	HCG30010	175	535	CATS300
433.7	13012	546	846	305	235	200	58	140	4	278	HCG30012	175	585	CATS300



HCG Series



Rated Tonnage: 400-1000ton

Stroke Range: 50-300mm

Capacity (ton)	Stroke (mm)	Model	Max. Capacity (ton (kN))
400	50	HCG4002	409 (4008)
400	100	HCG4004	409 (4008)
400	150	HCG4006	409 (4008)
400	200	HCG4008	409 (4008)
400	250	HCG40010	409 (4008)
400	300	HCG40012	409 (4008)
500	50	HCG5002	522 (5114)
500	100	HCG5004	522 (5114)
500	150	HCG5006	522 (5114)
500	200	HCG5008	522 (5114)
500	250	HCG50010	522 (5114)
500	300	HCG50012	522 (5114)
600	50	HCG6002	611 (5987)
600	100	HCG6004	611 (5987)
600	150	HCG6006	611 (5987)
600	200	HCG6008	611 (5987)
600	250	HCG60010	611 (5987)
600	300	HCG60012	611 (5987)
800	50	HCG8002	831 (8149)
800	100	HCG8004	831 (8149)
800	150	HCG8006	831 (8149)
800	200	HCG8008	831 (8149)
800	250	HCG80010	831 (8149)
800	300	HCG80012	831 (8149)
1000	50	HCG10002	1085 (10.644)
1000	100	HCG10004	1085 (10.644)
1000	150	HCG10006	1085 (10.644)
1000	200	HCG10008	1085 (10.644)
1000	250	HCG100010	1085 (10.644)
1000	300	HCG100012	1085 (10.644)

Outer Thread		
Model/ Capacity ton	Thread Size W	Thread Length X(mm)
HCG400	M350 x3	83
HCG500	M400 x4	90
HCG600	M430 x4	100
HCG800	M505 x5	122
HCG1000	M570 x5	137

The outer thread length is designed for the maximum rated cylinder capacity.
Outer thread is standard for specifications of 250 tons and below. For cylinder specifications of 300 tons and above, outer thread is optional.

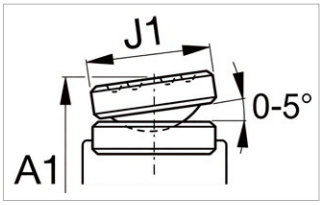
♦ If the outer thread on the cylinder is required, add the suffix "E002" to the model number. Example: HCG30010E002

Bottom Mounting Hole					
Model/ Capacity ton	Bolt Pitch Circle Diameter U (mm)	Thread Size V	Min. Thread Depth Z (mm)	Hole Qty.	Angle From Coupler
HCG400	300	M16 x2	25	3	60°
HCG500	340	M24 x3	36	3	60°
HCG600	370	M24 x3	36	3	60°
HCG800	440	M24 x3	36	3	60°
HCG1000	500	M24 x3	36	3	60°

Hydraulic Cylinders

- Gravity Return High-Tonnage Hydraulic Cylinders
- Withstands up to 10% eccentric load at 90% of full stroke
- Gas-nitrided & post-oxidized stop ring prevents plunger over-travel
- Omni-directional protection design for all-round weather resistance
- Replaceable upper and lower bearings support plunger over full stroke
- Certified lifting lugs and base mounting holes for easy hoisting and installation
- Gas nitriding plus post-oxidation treatment delivers superior corrosion and eccentric load resistance
- All models are equipped with CEJN quick coupling and dust cap

※Optional Tilt Saddle



Effective Area (cm^2)	Usable Oil (cm^3)	Collapsed Height A (mm)	Extended Height B (mm)	Outer Dia.D (mm)	Inner Bore E (mm)	Plunger Dia. F (mm)	Port Height from Bottom H (mm)	Saddle Dia. J (mm)	Saddle Protrusion Ht. K (mm)	Weight (kg)	Model	Saddle Dia. J1 (mm)	Retracted Ht.A1 (mm)	Saddle Model
572.6	2863	321	371	350	270	220	74	159	4	227	HCG4002	210	369	CATS400
572.6	5726	371	471	350	270	220	74	159	4	257	HCG4004	210	419	CATS400
572.6	8588	421	571	350	270	220	74	159	4	287	HCG4006	210	469	CATS400
572.6	11451	471	671	350	270	220	74	159	4	317	HCG4008	210	519	CATS400
572.6	14314	521	771	350	270	220	74	159	4	347	HCG40010	210	569	CATS400
572.6	17177	571	871	350	270	220	74	159	4	378	HCG40012	210	619	CATS400
730.6	3653	344	394	400	305	250	79	179	4	319	HCG5002	230	392	CATS500
730.6	7306	394	494	400	305	250	79	179	4	359	HCG5004	230	442	CATS500
730.6	10959	444	594	400	305	250	79	179	4	399	HCG5006	230	492	CATS500
730.6	14612	494	694	400	305	250	79	179	4	439	HCG5008	230	542	CATS500
730.6	18265	544	794	400	305	250	79	179	4	479	HCG50010	230	592	CATS500
730.6	21918	594	894	400	305	250	79	179	4	519	HCG50012	230	642	CATS500
855.3	4276	352	402	430	330	270	85	194	4	378	HCG6002	250	405	CATS600
855.3	8553	402	502	430	330	270	85	194	4	424	HCG6004	250	455	CATS600
855.3	12829	452	602	430	330	270	85	194	4	470	HCG6006	250	505	CATS600
855.3	17106	502	702	430	330	270	85	194	4	516	HCG6008	250	555	CATS600
855.3	21382	552	802	430	330	270	85	194	4	562	HCG60010	250	605	CATS600
855.3	25659	602	902	430	330	270	85	194	4	608	HCG60012	250	655	CATS600
1164.2	5821	404	454	505	385	320	100	224	4	606	HCG8002	275	461	CATS800
1164.2	11642	454	554	505	385	320	100	224	4	671	HCG8004	275	511	CATS800
1164.2	17462	504	654	505	385	320	100	224	4	735	HCG8006	275	561	CATS800
1164.2	23283	554	754	505	385	320	100	224	4	800	HCG8008	275	611	CATS800
1164.2	29104	604	854	505	385	320	100	224	4	864	HCG80010	275	661	CATS800
1164.2	34925	654	954	505	385	320	100	224	4	929	HCG80012	275	711	CATS800
1520.5	7603	442	492	570	440	340	114	249	4	840	HCG10002	300	519	CATS1000
1520.5	15205	492	592	570	440	340	114	249	4	916	HCG10004	300	569	CATS1000
1520.5	22808	542	692	570	440	340	114	249	4	992	HCG10006	300	619	CATS1000
1520.5	30411	592	792	570	440	340	114	249	4	1068	HCG10008	300	669	CATS1000
1520.5	38013	642	892	570	440	340	114	249	4	1145	HCG100010	300	719	CATS1000
1520.5	45616	692	992	570	440	340	114	249	4	1221	HCG100012	300	769	CATS1000

▼HCR Double-Acting Large-Tonnage Cylinders



Rated Pressure: 70MPa

Rated Tonnage: 50 -1000ton

Stroke Range: 50-300mm

- Double-acting design for fast, controlled extension and retraction
- Gas nitriding with post-oxidation surface treatment delivers superior corrosion resistance and side-load resistance
- Withstands up to 10% side load at maximum capacity
- Stop ring prevents plunger over-travel
- All-weather protection inside and out
- Optional spherical saddle for improved load stability
- Replaceable upper and lower bearings support plunger throughout full stroke
- Collar thread as standard on models up to 250 ton; optional on 300 ton and larger

►HCR Series Performance Introduction

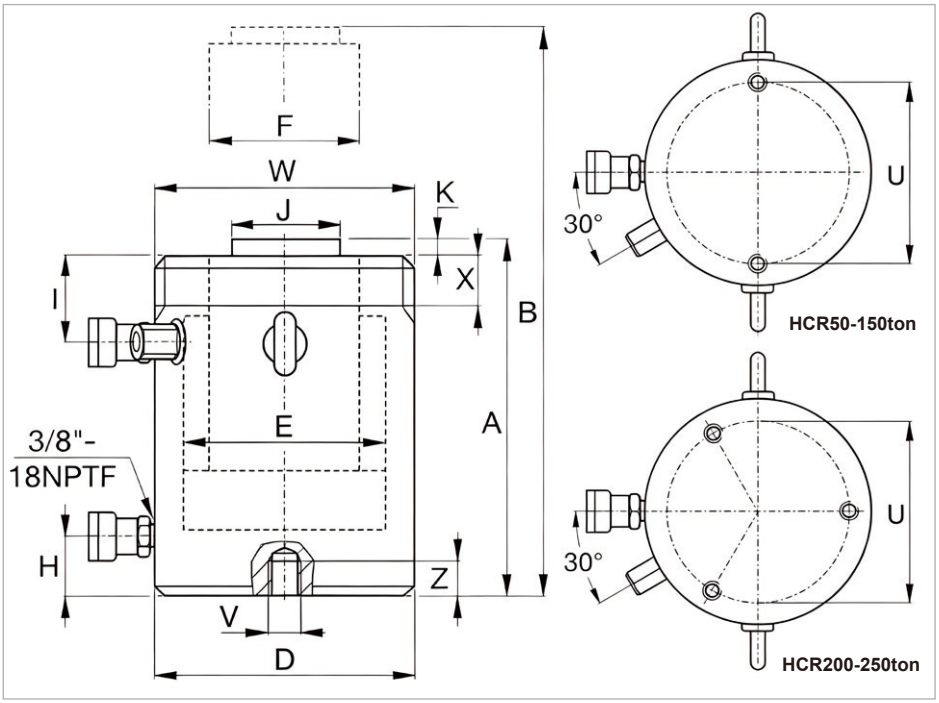


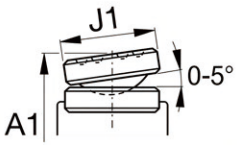
Capacity (ton)	Stroke (mm)	Model	Max. Cylinder Capacity (ton (kN))
50	50	HCR502	56 (550)
50	100	HCR504	56 (550)
50	150	HCR506	56 (550)
50	200	HCR508	56 (550)
50	250	HCR5010	56 (550)
50	300	HCR5012	56 (550)
100	50	HCR1002	102 (1002)
100	100	HCR1004	102 (1002)
100	150	HCR1006	102 (1002)
100	200	HCR1008	102 (1002)
100	250	HCR10010	102 (1002)
100	300	HCR10012	102 (1002)
150	50	HCR1502	153 (1497)
150	100	HCR1504	153 (1497)
150	150	HCR1506	153 (1497)
150	200	HCR1508	153 (1497)
150	250	HCR15010	153 (1497)
150	300	HCR15012	153 (1497)
200	50	HCR2002	202 (1985)
200	100	HCR2004	202 (1985)
200	150	HCR2006	202 (1985)
200	200	HCR2008	202 (1985)
200	250	HCR20010	202 (1985)
200	300	HCR20012	202 (1985)
250	50	HCR2502	259 (2541)
250	100	HCR2504	259 (2541)
250	150	HCR2506	259 (2541)
250	200	HCR2508	259 (2541)
250	250	HCR25010	259 (2541)
250	300	HCR25012	259 (2541)

♦Standard outer thread is provided for cylinders with a capacity of 250 tons and below.

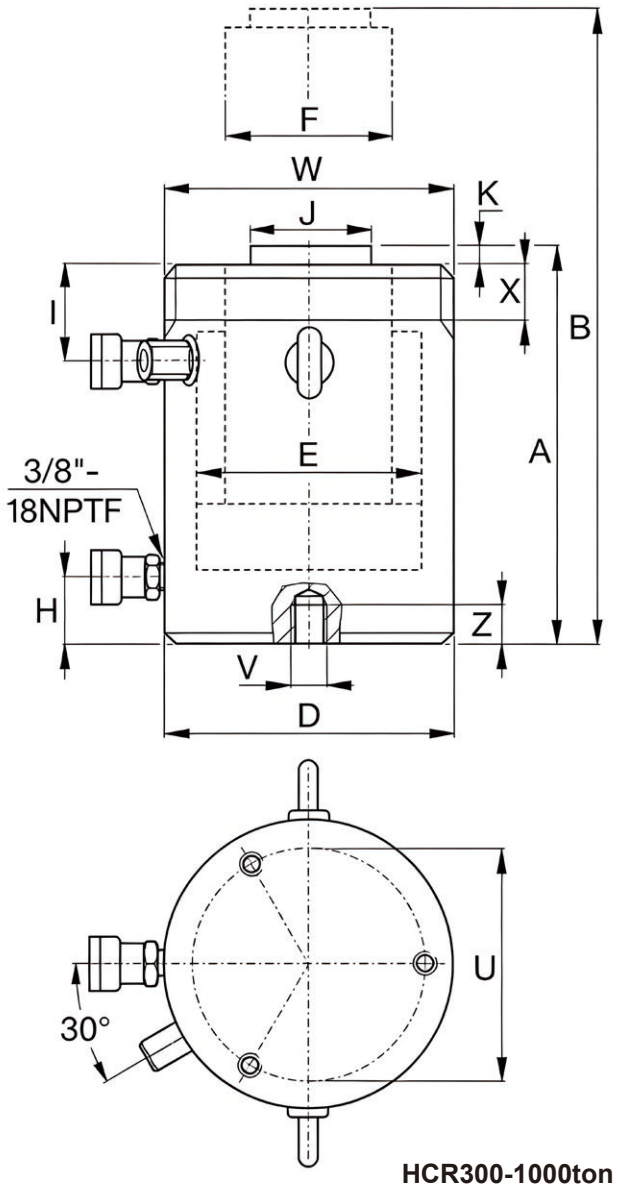
Outer Thread		
Model/ Capacity ton	Thread Size W	Thread Length X(mm)
HCR50	M130 x2	30
HCR100	M175 x3	46
HCR150	M215 x3	55
HCR200	M250 x3	63
HCR250	M280 x3	64

Bottom Mounting Hole					
Model/ Capacity ton	Bolt Pitch Circle Dia.U (mm)	Thread Size V	Min. Thread Depth Z (mm)	Hole Qty.	Angle From Coupler
HCR50	105	M12 x1.75	22	2	90°
HCR100	150	M12 x1.75	22	2	90°
HCR150	185	M12 x1.75	22	2	90°
HCR200	215	M12 x1.75	22	3	60°
HCR250	245	M12 x1.75	22	3	60°





Effective Area (cm^2)	Oil Capacity (cm^3)	Collapsed Height A (mm)	Extended Height B (mm)	Outer Dia. D (mm)	Inner Bore E (mm)	Plunger Dia. (Thread) F (mm)	Inlet Height from Base H (mm)	Return Port Height I (mm)	Saddle Dia. J (mm)	Saddle Protrusion K (mm)	Weight (kg)	Model	*Optional Tilt Saddle		
													Saddle Dia. J1 (mm)	Saddle Height K1 (mm)	Saddle Model
78.5	393	183	233	130	100	70	38	45	50	3	17	HCR502	71	197	CATS50
78.5	785	233	333	130	100	70	38	45	50	3	21	HCR504	71	247	CATS50
78.5	1178	283	433	130	100	70	38	45	50	3	25	HCR506	71	297	CATS50
78.5	1571	346	546	130	100	70	38	55	50	3	31	HCR508	71	360	CATS50
78.5	1963	396	646	130	100	70	38	55	50	3	34	HCR5010	71	410	CATS50
78.5	2356	446	746	130	100	70	38	55	50	3	38	HCR5012	71	460	CATS50
143.1	716	202	252	175	135	95	38	65	75	3	34	HCR1002	71	212	CATS101
143.1	1431	252	352	175	135	95	38	65	75	3	41	HCR1004	71	262	CATS101
143.1	2147	302	452	175	135	95	38	65	75	3	49	HCR1006	71	312	CATS101
143.1	2863	379	579	175	135	95	38	80	75	3	58	HCR1008	71	389	CATS101
143.1	3578	429	679	175	135	95	38	80	75	3	66	HCR10010	71	439	CATS101
143.1	4294	479	779	175	135	95	38	80	75	3	73	HCR10012	71	489	CATS101
213.8	1069	270	270	215	165	120	41	70	94	3	56	HCR1502	97	239	CATS150
213.8	2138	270	370	215	165	120	41	70	94	3	67	HCR1504	97	289	CATS150
213.8	3207	320	470	215	165	120	41	70	94	3	78	HCR1506	97	339	CATS150
213.8	4276	397	597	215	165	120	41	90	94	3	95	HCR1508	97	416	CATS150
213.8	5346	447	697	215	165	120	41	90	94	3	106	HCR15010	97	466	CATS150
213.8	6415	497	797	215	165	120	41	90	94	3	116	HCR15012	97	516	CATS150
283.5	1418	231	381	250	190	140	47	79	113	3	81	HCR2002	126	249	CATS200
283.5	2853	281	481	250	190	140	47	79	113	3	96	HCR2004	126	299	CATS200
283.5	4271	331	608	250	190	140	47	97	113	3	139	HCR2006	126	349	CATS200
283.5	5671	408	708	250	190	140	47	97	113	3	153	HCR2008	126	426	CATS200
283.5	7088	458	808	250	190	140	47	97	113	3	168	HCR20010	126	476	CATS200
283.5	8506	508	808	250	190	140	47	97	113	3	168	HCR20012	126	526	CATS200
363.1	1815	241	291	280	215	170	53	79	140	4	107	HCR2502	175	280	CATS300
363.1	3631	291	391	280	215	170	53	79	140	4	127	HCR2504	175	330	CATS300
363.1	5446	341	491	280	215	170	53	104	140	4	146	HCR2506	175	380	CATS300
363.1	7261	431	631	280	215	170	53	104	140	4	184	HCR2508	175	470	CATS300
363.1	9076	481	731	280	215	170	53	104	140	4	207	HCR25010	175	520	CATS300
363.1	10892	531	831	280	215	170	53	104	140	4	227	HCR25012	175	570	CATS300



HCR300-1000ton

Outer Thread		
Model/ Capacity ton	Thread Size W	Thread Length X(mm)
HCR300	M305 x3	73
HCR400	M350 x3	83
HCR500	M400 x4	90
HCR600	M430 x4	100
HCR800	M505 x5	122
HCR1000	M570 x5	137

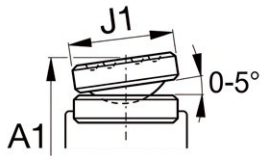
The length of the outer thread is designed for the maximum rated cylinder capacity.
Outer thread comes as standard for cylinders with a capacity of 250 tons and below. Outer thread is optional for cylinders with a capacity of 300 tons and above.
♦If outer thread on the cylinder is required, please add the suffix "E002" to the model. Example: HCR30010E002

HCR Series Cylinders:

- Double-acting design for fast, controlled extension and retraction
- Gas nitriding with post-oxidation surface treatment delivers superior corrosion resistance and side-load resistance
- Withstands up to 10% side load at maximum capacity
- Stop ring prevents plunger over-travel
- All-weather protection inside and out
- Optional spherical saddle for improved load stability
- Replaceable upper and lower bearings support plunger throughout full stroke
- Collar thread as standard on models up to 250 ton; optional on 300 ton and larger

Capacity (ton)	Stroke (mm)	Model	Max. Cylinders Capacity (ton (kN))	Effective Area (cm^2)	Oil Capacity (cm^3)
300	50	HCR3002	310 (3036)	433.7	2169
300	100	HCR3004	310 (3036)	433.7	4337
300	150	HCR3006	310 (3036)	433.7	6506
300	200	HCR3008	310 (3036)	433.7	8675
300	250	HCR30010	310 (3036)	433.7	10843
300	300	HCR30012	310 (3036)	433.7	13012
400	50	HCR4002	409 (4008)	572.6	2826
400	100	HCR4004	409 (4008)	572.6	5723
400	150	HCR4006	409 (4008)	572.6	8588
400	200	HCR4008	409 (4008)	572.6	11451
400	250	HCR40010	409 (4008)	572.6	14314
400	300	HCR40012	409 (4008)	572.6	17177
500	50	HCR5002	522 (5114)	730.6	3653
500	100	HCR5004	522 (5114)	730.6	7306
500	150	HCR5006	522 (5114)	730.6	10959
500	200	HCR5008	522 (5114)	730.6	14612
500	250	HCR50010	522 (5114)	730.6	18265
500	300	HCR50012	522 (5114)	730.6	21918
600	50	HCR6002	611 (5987)	855.3	4276
600	100	HCR6004	611 (5987)	855.3	8553
600	150	HCR6006	611 (5987)	855.3	12829
600	200	HCR6008	611 (5987)	855.3	17106
600	250	HCR60010	611 (5987)	855.3	21382
600	300	HCR60012	611 (5987)	855.3	25659
800	50	HCR8002	831 (8149)	1164.2	5821
800	100	HCR8004	831 (8149)	1164.2	11642
800	150	HCR8006	831 (8149)	1164.2	17462
800	200	HCR8008	831 (8149)	1164.2	23283
800	250	HCR80010	831 (8149)	1164.2	29104
800	300	HCR80012	831 (8149)	1164.2	34925
1000	50	HCR10002	1085 (10644)	1520.5	7603
1000	100	HCR10004	1085 (10644)	1520.5	15205
1000	150	HCR10006	1085 (10644)	1520.5	22808
1000	200	HCR10008	1085 (10644)	1520.5	30411
1000	250	HCR100010	1085 (10644)	1520.5	38013
1000	300	HCR100012	1085 (10644)	1520.5	45616

Bottom Mounting Hole					
Model/ Capacity ton	Bolt Pitch Circle Diameter U (mm)	Thread Size V	Min. Thread Depth Z (mm)	Hole Qty.	Angle From Coupler
HCR300	260	M16 x2	25	3	60°
HCR400	300	M16 x2	25	3	60°
HCR500	340	M24 x3	36	3	60°
HCR600	370	M24 x3	36	3	60°
HCR800	440	M24 x3	36	3	60°
HCR1000	500	M24 x3	36	3	60°



Collapsed Height A (mm)	Extended Height B (mm)	Outer Dia. D (mm)	Inner Bore E (mm)	Plunger Dia. (Thread) F (mm)	Inlet Height from Base H (mm)	Return Port Height I (mm)	Saddle Dia. J (mm)	Saddle Protrusion K (mm)	Weight (kg)	Model	*Optional Tilt Saddle		
											Saddle Dia. J1 (mm)	Saddle Height K1 (mm)	Saddle Model
296	346	305	235	200	58	101	140	4	159	HCR3002	175	335	CATS300
346	446	305	235	200	58	101	140	4	183	HCR3004	175	385	CATS300
396	546	305	235	200	58	101	140	4	208	HCR3006	175	435	CATS300
446	646	305	235	200	58	101	140	4	232	HCR3008	175	485	CATS300
496	746	305	235	200	58	101	140	4	257	HCR30010	175	535	CATS300
546	846	305	235	200	58	101	140	4	281	HCR30012	175	585	CATS300
321	371	350	270	220	74	111	159	4	227	HCR4002	210	369	CATS400
371	471	350	270	220	74	111	159	4	258	HCR4004	210	419	CATS400
421	571	350	270	220	74	111	159	4	289	HCR4006	210	469	CATS400
471	671	350	270	220	74	111	159	4	321	HCR4008	210	519	CATS400
521	771	350	270	220	74	111	159	4	352	HCR40010	210	569	CATS400
571	871	350	270	220	74	111	159	4	383	HCR40012	210	619	CATS400
344	394	400	305	250	79	121	179	4	320	HCR5002	230	392	CATS500
394	494	400	305	250	79	121	179	4	361	HCR5004	230	442	CATS500
444	594	400	305	250	79	121	179	4	402	HCR5006	230	492	CATS500
494	694	400	305	250	79	121	179	4	443	HCR5008	230	542	CATS500
544	794	400	305	250	79	121	179	4	484	HCR50010	230	592	CATS500
594	894	400	305	250	79	121	179	4	525	HCR50012	230	642	CATS500
402	402	430	330	270	85	121	194	4	379	HCR6002	250	405	CATS600
452	502	430	330	270	85	121	194	4	427	HCR6004	250	455	CATS600
502	602	430	330	270	85	121	194	4	474	HCR6006	250	505	CATS600
552	702	430	330	270	85	121	194	4	521	HCR6008	250	555	CATS600
602	802	430	330	270	85	121	194	4	568	HCR60010	250	605	CATS600
652	902	430	330	270	85	121	194	4	615	HCR60012	250	655	CATS600
404	454	505	385	320	100	143	224	4	608	HCR8002	275	461	CATS800
454	554	505	385	320	100	143	224	4	674	HCR8004	275	511	CATS800
504	654	505	385	320	100	143	224	4	740	HCR8006	275	561	CATS800
554	754	505	385	320	100	143	224	4	806	HCR8008	275	611	CATS800
604	854	505	385	320	100	143	224	4	872	HCR80010	275	661	CATS800
654	954	505	385	320	100	143	224	4	938	HCR80012	275	711	CATS800
442	492	570	440	340	114	153	249	4	843	HCR10002	300	519	CATS1000
492	592	570	440	340	114	153	249	4	921	HCR10004	300	569	CATS1000
542	692	570	440	340	114	153	249	4	1000	HCR10006	300	619	CATS1000
592	792	570	440	340	114	153	249	4	1079	HCR10008	300	669	CATS1000
642	892	570	440	340	114	153	249	4	1158	HCR100010	300	719	CATS1000
692	992	570	440	340	114	153	249	4	1236	HCR100012	300	769	CATS1000

▼HCL Single-Acting Nut Locking High-Tonnage Cylinders

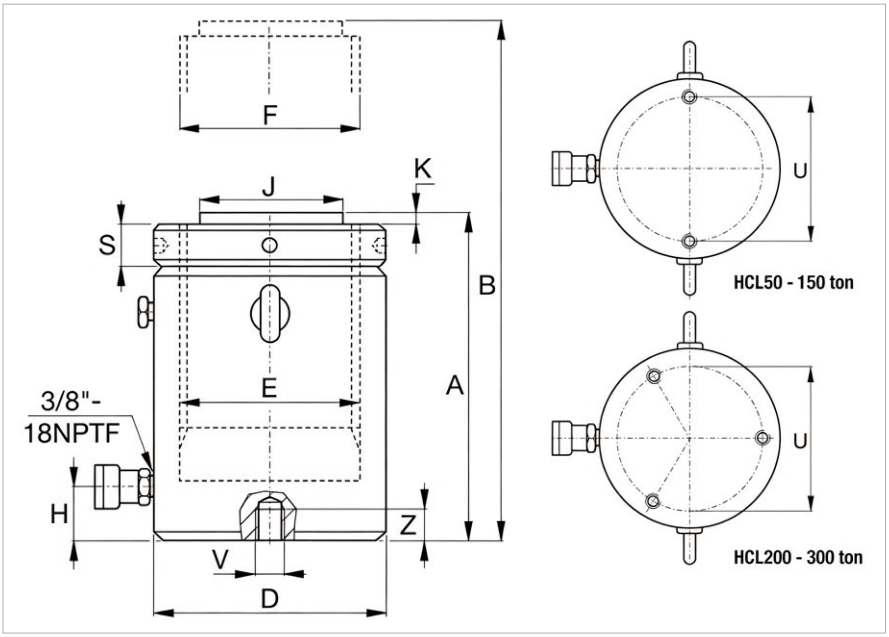


HCL Series

Rated Pressure: 70MPa

Rated Tonnage：50 -1000ton

Stroke Range: 50-300mm

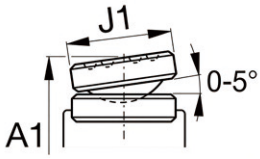


Bottom Mounting Hole					
Model/ Capacity ton	Bolt Pitch Circle Diameter U (mm)	Thread Size V	Min. Thread Depth Z (mm)	Hole Qty.	Angle From Coupler
HCL50	105	M8 x1.25	10	2	90°
HCL100	150	M12 x1.75	17	2	90°
HCL150	185	M12 x1.75	22	2	90°
HCL200	215	M12 x1.75	22	3	60°
HCL250	245	M12 x1.75	22	3	60°
HCL300	260	M16 x2	25	3	60°

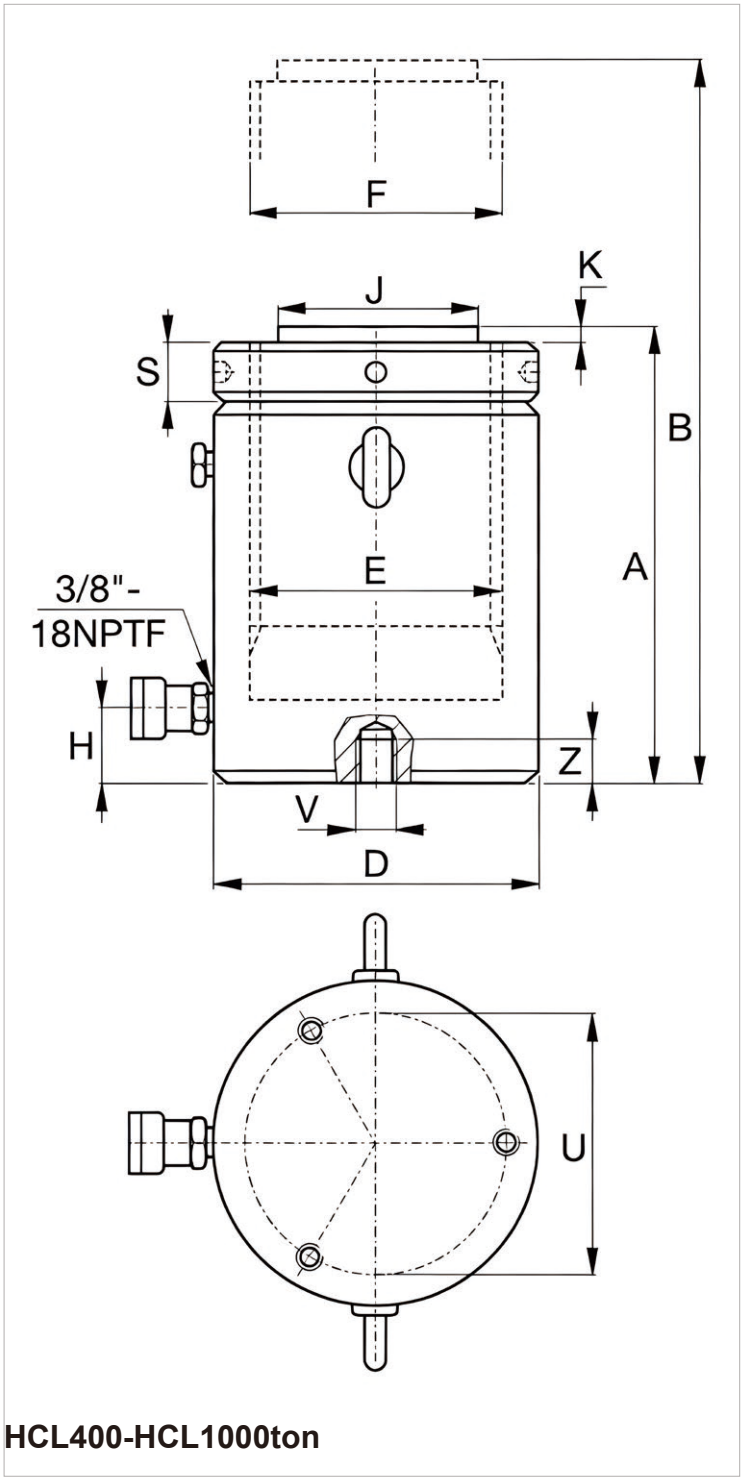
Load Capacity (ton)	Stroke (mm)	Model	Max. Cylinders Capacity (ton (kN))	Effective Area (cm^2)
50	50	HCL502	56 (550)	78.5
50	100	HCL504	56 (550)	78.5
50	150	HCL506	56 (550)	78.5
50	200	HCL508	56 (550)	78.5
50	250	HCL5010	56 (550)	78.5
50	300	HCL5012	56 (550)	78.5
100	50	HCL1002	102 (1002)	143.1
100	100	HCL1004	102 (1002)	143.1
100	150	HCL1006	102 (1002)	143.1
100	200	HCL1008	102 (1002)	143.1
100	250	HCL10010	102 (1002)	143.1
100	300	HCL10012	102 (1002)	143.1
150	50	HCL1502	153 (1497)	213.8
150	100	HCL1504	153 (1497)	213.8
150	150	HCL1506	153 (1497)	213.8
150	200	HCL1508	153 (1497)	213.8
150	250	HCL15010	153 (1497)	213.8
150	300	HCL15012	153 (1497)	213.8
200	50	HCL2002	202 (1985)	283.5
200	100	HCL2004	202 (1985)	283.5
200	150	HCL2006	202 (1985)	283.5
200	200	HCL2008	202 (1985)	283.5
200	250	HCL20010	202 (1985)	283.5
200	300	HCL20012	202 (1985)	283.5
250	50	HCL2502	259 (2541)	363.1
250	100	HCL2504	259 (2541)	363.1
250	150	HCL2506	259 (2541)	363.1
250	200	HCL2508	259 (2541)	363.1
250	250	HCL25010	259 (2541)	363.1
250	300	HCL25012	259 (2541)	363.1
300	50	HCL3002	310 (3036)	433.7
300	100	HCL3004	310 (3036)	433.7
300	150	HCL3006	310 (3036)	433.7
300	200	HCL3008	310 (3036)	433.7
300	250	HCL30010	310 (3036)	433.7
300	300	HCL30012	310 (3036)	433.7

- Equipped with lock nut to realize mechanical locking under load and ensure stable load holding
- Low-friction locking design for easy rotation, saving time and effort
- The cylinder can withstand up to 10% eccentric load at 90% of maximum stroke
- Built-in overflow port with stroke limiting function prevents plunger over-travel
- Adopts all-round protection design for all-weather internal and external protection
- Replaceable bearings support the plunger throughout the full stroke
- Fitted with certified lifting lugs and base mounting holes for convenient lifting and fixed installation
- Gas nitriding and post-oxidation surface treatment provide excellent corrosion resistance and eccentric load resistance
- All models are equipped with CEJN quick coupling and dust cap

※Optional Tilt Saddle



Oil Capacity (cm^3)	Collapsed Height A (mm)	Extended Height B (mm)	Outer Dia. D (mm)	Inner Bore E (mm)	Plunger Dia. F (mm)	Port Height from Bottom H (mm)	Saddle Dia. J (mm)	Saddle Protrusion Height K (mm)	Lock Nut Height S (mm)	Weight (kg)	Model	Saddle Dia. J1 (mm)	Retracted Ht. A1 (mm)	Saddle Model
393	164	214	130	100	Tr100 x4	24	71	2	25	17	HCL502	71	179	CATS100
785	214	314	130	100	Tr100 x4	24	71	2	25	22	HCL504	71	229	CATS100
1178	314	414	130	100	Tr100 x4	24	71	2	25	32	HCL506	71	279	CATS100
1571	364	514	130	100	Tr100 x4	24	71	2	25	38	HCL508	71	329	CATS100
1963	414	614	130	100	Tr100 x4	24	71	2	25	43	HCL5010	71	379	CATS100
2356	464	714	130	100	Tr100 x4	24	71	2	25	48	HCL5012	71	429	CATS100
716	187	237	175	135	Tr135 x6	33	71	2	33	35	HCL1002	71	202	CATS100
1431	237	337	175	135	Tr135 x6	33	71	2	33	44	HCL1004	71	252	CATS100
2147	287	437	175	135	Tr135 x6	33	71	2	33	54	HCL1006	71	302	CATS100
2863	337	537	175	135	Tr135 x6	33	71	2	33	63	HCL1008	71	352	CATS100
3578	387	637	175	135	Tr135 x6	33	71	2	33	73	HCL10010	71	402	CATS100
4294	437	737	175	135	Tr135 x6	33	71	2	33	82	HCL10012	71	452	CATS100
1069	259	259	215	165	Tr165 x6	41	130	2	40	59	HCL1502	126	225	CATS201
2138	309	359	215	165	Tr165 x6	41	130	2	40	73	HCL1504	126	275	CATS201
3207	359	459	215	165	Tr165 x6	41	130	2	40	87	HCL1506	126	325	CATS201
4276	409	559	215	165	Tr165 x6	41	130	2	40	102	HCL1508	126	375	CATS201
5346	459	659	215	165	Tr165 x6	41	130	2	40	116	HCL15010	126	425	CATS201
6415	509	759	215	165	Tr165 x6	41	130	2	40	130	HCL15012	126	475	CATS201
1418	238	288	250	190	Tr190 x6	47	130	2	45	85	HCL2002	126	254	CATS201
2853	338	388	250	190	Tr190 x6	47	130	2	45	105	HCL2004	126	304	CATS201
4271	388	488	250	190	Tr190 x6	47	130	2	45	143	HCL2006	126	354	CATS201
5671	438	588	250	190	Tr190 x6	47	130	2	45	163	HCL2008	126	404	CATS201
7088	488	688	250	190	Tr190 x6	47	130	2	45	182	HCL20010	126	454	CATS201
8506	538	788	250	190	Tr190 x6	47	130	2	45	197	HCL20012	126	504	CATS201
1815	249	299	280	215	Tr215 x6	53	140	2	52	119	HCL2502	175	288	CATS300
3631	299	399	280	215	Tr215 x6	53	140	2	52	143	HCL2504	175	338	CATS300
5446	349	499	280	215	Tr215 x6	53	140	2	52	192	HCL2506	175	388	CATS300
7261	399	599	280	215	Tr215 x6	53	140	2	52	216	HCL2508	175	438	CATS300
9076	449	699	280	215	Tr215 x6	53	140	2	52	240	HCL25010	175	488	CATS300
10892	499	799	280	215	Tr215 x6	53	140	2	52	255	HCL25012	175	538	CATS300
2169	278	328	305	235	Tr235 x6	58	140	2	56	158	HCL3002	175	317	CATS300
4337	328	428	305	235	Tr235 x6	58	140	2	56	186	HCL3004	175	367	CATS300
6506	378	528	305	235	Tr235 x6	58	140	2	56	215	HCL3006	175	417	CATS300
8675	428	628	305	235	Tr235 x6	58	140	2	56	244	HCL3008	175	467	CATS300
10843	478	728	305	235	Tr235 x6	58	140	2	56	272	HCL30010	175	517	CATS300
13012	528	828	305	235	Tr235 x6	58	140	2	56	301	HCL30012	175	567	CATS300



HCL400-HCL1000ton

HCL Series



Rated Tonnage: 400 -1000ton

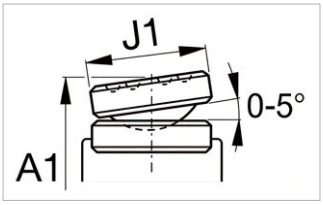
Stroke Range: 50-300mm

Load Capacity (ton)	Stroke (mm)	Model	Max. Cylinders Capacity (ton (kN))	Effective Area (cm²)
400	50	HCL4002	409 (4008)	572.6
400	100	HCL4004	409 (4008)	572.6
400	150	HCL4006	409 (4008)	572.6
400	200	HCL4008	409 (4008)	572.6
400	250	HCL40010	409 (4008)	572.6
400	300	HCL40012	409 (4008)	572.6
500	50	HCL5002	522 (5114)	730.6
500	100	HCL5004	522 (5114)	730.6
500	150	HCL5006	522 (5114)	730.6
500	200	HCL5008	522 (5114)	730.6
500	250	HCL50010	522 (5114)	730.6
500	300	HCL50012	522 (5114)	730.6
600	50	HCL6002	611 (5987)	855.3
600	100	HCL6004	611 (5987)	855.3
600	150	HCL6006	611 (5987)	855.3
600	200	HCL6008	611 (5987)	855.3
600	250	HCL60010	611 (5987)	855.3
600	300	HCL60012	611 (5987)	855.3
800	50	HCL8002	831 (8149)	1164.2
800	100	HCL8004	831 (8149)	1164.2
800	150	HCL8006	831 (8149)	1164.2
800	200	HCL8008	831 (8149)	1164.2
800	250	HCL80010	831 (8149)	1164.2
800	300	HCL80012	831 (8149)	1164.2
1000	50	HCL10002	1085 (10644)	1520.5
1000	100	HCL10004	1085 (10644)	1520.5
1000	150	HCL10006	1085 (10644)	1520.5
1000	200	HCL10008	1085 (10644)	1520.5
1000	250	HCL100010	1085 (10644)	1520.5
1000	300	HCL100012	1085 (10644)	1520.5

Bottom Mounting Hole					
Model/ Capacity ton	Bolt Pitch Circle Diameter U (mm)	Thread Size V	Min. Thread Depth Z (mm)	Hole Qty.	Angle From Coupler
HCL400	300	M16 x2	25	3	60°
HCL500	340	M24 x3	36	3	60°
HCL600	370	M24 x3	36	3	60°
HCL800	440	M24 x3	36	3	60°
HCL1000	500	M24 x3	36	3	60°

- Equipped with locking nut to achieve mechanical locking under load and ensure stable load retention
- Low-friction locking structure enables easy rotation, saving time and labor
- The cylinder can withstand a maximum eccentric load of 10% at 90% of the full stroke
- Built-in overflow port integrates stroke limiting function to prevent plunger over-travel
- Fitted with certified lifting lugs and base mounting holes for convenient lifting and fixed installation
- Gas nitriding and post-oxidation surface treatment process provides excellent corrosion resistance and eccentric load resistance
- All models are equipped with CEJN quick coupling and dust cap

※Optional Tilt Saddle



Oil Capacity (cm^3)	Collapsed Height A (mm)	Extended Height B (mm)	Outer Dia. D (mm)	Inner Bore E (mm)	Plunger Dia. F (mm)	Port Height from Bottom H (mm)	Saddle Dia. J (mm)	Saddle Protrusion Height K (mm)	Lock Nut Height S (mm)	Weight (kg)	Model	Saddle Dia. J1 (mm)	Retracted Ht. A1 (mm)	Saddle Model
2826	317	367	350	270	Tr270 x6	67	159	5	65	236	HCL4002	210	365	CATS400
5723	367	467	350	270	Tr270 x6	67	159	5	65	274	HCL4004	210	415	CATS400
8588	417	567	350	270	Tr270 x6	67	159	5	65	311	HCL4006	210	465	CATS400
11451	467	667	350	270	Tr270 x6	67	159	5	65	349	HCL4008	210	515	CATS400
14314	517	767	350	270	Tr270 x6	67	159	5	65	387	HCL40010	210	565	CATS400
17177	567	867	350	270	Tr270 x6	67	159	5	65	425	HCL40012	210	615	CATS400
3653	357	407	400	305	Tr305 x6	75	179	5	72	341	HCL5002	230	405	CATS500
7306	407	507	400	305	Tr305 x6	75	179	5	72	390	HCL5004	230	455	CATS500
10959	457	607	400	305	Tr305 x6	75	179	5	72	439	HCL5006	230	505	CATS500
14612	507	707	400	305	Tr305 x6	75	179	5	72	489	HCL5008	230	555	CATS500
18265	557	807	400	305	Tr305 x6	75	179	5	72	538	HCL50010	230	605	CATS500
21918	607	907	400	305	Tr305 x6	75	179	5	72	587	HCL50012	230	655	CATS500
4276	380	430	430	330	Tr330 x6	81	194	5	80	427	HCL6002	250	433	CATS600
8553	430	530	430	330	Tr330 x6	81	194	5	80	484	HCL6004	250	483	CATS600
12829	480	630	430	330	Tr330 x6	81	194	5	80	598	HCL6006	250	533	CATS600
17106	530	730	430	330	Tr330 x6	81	194	5	80	655	HCL6008	250	583	CATS600
21382	580	830	430	330	Tr330 x6	81	194	5	80	712	HCL60010	250	633	CATS600
25659	630	930	430	330	Tr330 x6	81	194	5	80	765	HCL60012	250	683	CATS600
5821	430	480	505	385	Tr385 x6	95	224	5	90	668	HCL8002	275	487	CATS800
11642	480	580	505	385	Tr385 x6	95	224	5	90	746	HCL8004	275	537	CATS800
17462	530	680	505	385	Tr385 x6	95	224	5	90	825	HCL8006	275	587	CATS800
23283	580	780	505	385	Tr385 x6	95	224	5	90	904	HCL8008	275	637	CATS800
29104	630	880	505	385	Tr385 x6	95	224	5	90	982	HCL80010	275	687	CATS800
34925	680	980	505	385	Tr385 x6	95	224	5	90	1061	HCL80012	275	737	CATS800
7603	484	534	570	440	Tr440 x6	110	249	5	105	959	HCL10002	300	561	CATS1000
15205	534	634	570	440	Tr440 x6	110	249	5	105	1059	HCL10004	300	611	CATS1000
22808	584	734	570	440	Tr440 x6	110	249	5	105	1160	HCL10006	300	661	CATS1000
30411	634	834	570	440	Tr440 x6	110	249	5	105	1260	HCL10008	300	711	CATS1000
38013	684	934	570	440	Tr440 x6	110	249	5	105	1360	HCL100010	300	761	CATS1000
45616	734	1034	570	440	Tr440 x6	110	249	5	105	1460	HCL100012	300	811	CATS1000

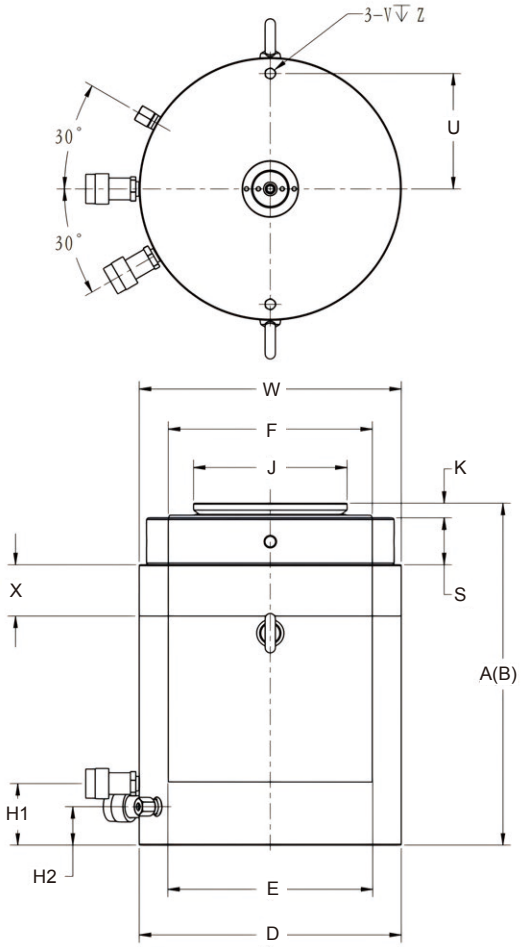
▼HCRL Double Acting Lock Nut Cylinders



Rated Pressure: 70MPa

Rated Tonnage: 30 -500ton

Stroke Range: 50-300mm

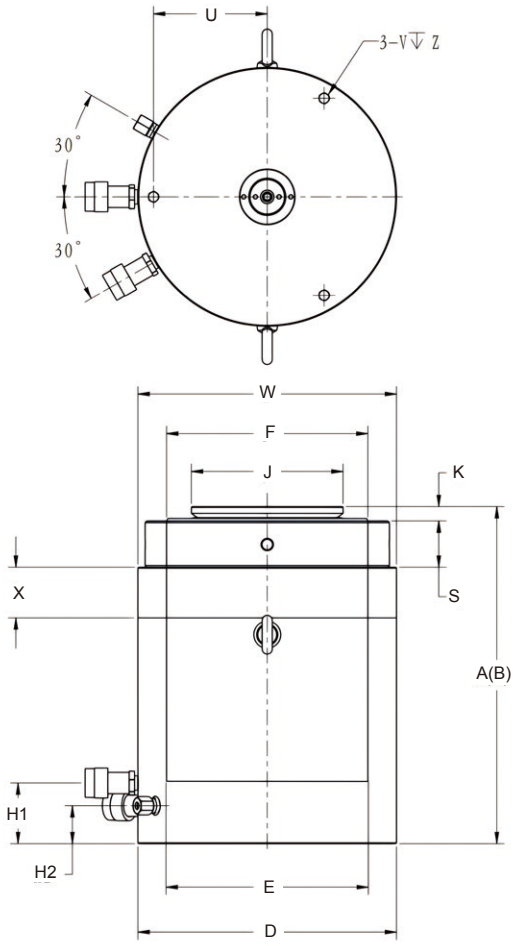


HCRL50-150

- Hydraulically controlled rapid retraction for efficient operation.
- Locking nut provides mechanical load holding to ensure a safe working environment.
- Capable of withstanding eccentric loads up to 10% of the maximum rated capacity.
- Integrated tilting saddle allows a maximum misalignment angle of 5°.
- Hardened gas nitriding surface treatment delivers exceptional resistance to eccentric loads, cyclic wear, and corrosion, with all-weather internal and external protection.
- Replaceable bearings surround the plunger, offering full-stroke internal and external support.
- Certified lifting lugs, base mounting holes, and collar threads are supplied as standard.
- Retaining ring (stop-ring) prevents plunger over-travel and blow-out.
- Low-friction locking nut is easy to operate, significantly saving time and effort.
- HCRL Series cylinders are available with capacities up to 1000 ton and strokes up to 600 mm upon request. For further details, please contact RIVERLAKE.

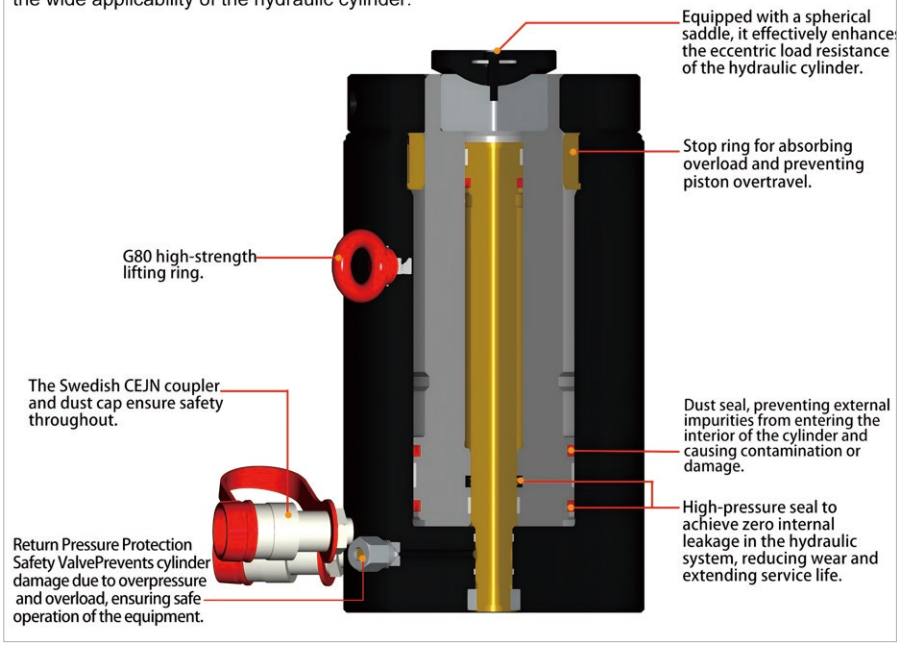
Specification	Bolt Pitch Circle Diameter U (mm)	Thread Size V	Minimum Thread Depth Z (mm)
HCRL50	105	M12 x 1.75	22
HCRL100	150	M12 x 1.75	22
HCRL150	185	M12 x 1.75	22
HCRL200	215	M12 x 1.75	22
HCRL250	245	M12 x 1.75	22
HCRL300	260	M16 x 2	25

Outer Ring Thread		
Specification	Thread Size W	Thread Length X (mm)
HCRL50	M130 x 2	42
HCRL100	M185 x 2	57
HCRL150	M222 x 3	70
HCRL200	M260 x 3	79
HCRL250	M290 x 3	85
HCRL300	M315 x 3	94



►HCRL Cylinders Performance Introduction

All components are surface-treated by gas nitriding and post-oxidation process (except for the hard saddle), providing superior corrosion resistance. High durability and high hardness ensure the wide applicability of the hydraulic cylinder.



HCRL200-300

Capacity (ton)	Stroke (mm)	Model	Cylinders Effective Area (cm²)	Oil Capacity (cm³)		Collapsed Height A (mm)	Extended Height B (mm)	Outside Diameter D (mm)	Cylinders Bore Diameter E (mm)	Plunger Diameter (threaded) F (mm)	Base to Advance Port H1 (mm)	Base to Retract Port H2 (mm)	Saddle Diameter J (mm)	Saddle Protrusion K (mm)	Lock Nut Height S (mm)	Weight (kg)
				Push	Pull											
50	150	HCRL506	68.4	1025	86	310	460	130	100	Tr90×4	41	27	77	15	26	30
50	200	HCRL508	68.4	1367	115	377	577	130	100	Tr90×4	41	27	77	15	26	36
50	250	HCRL5010	68.4	1709	143	427	677	130	100	Tr90×4	41	27	77	15	26	40
50	300	HCRL5012	68.4	2051	172	477	777	130	100	Tr90×4	41	27	77	15	26	45
100	150	HCRL1006	141.4	2121	236	346	446	185	140	Tr120×6	50	36	77	15	36	64
100	200	HCRL1008	141.4	2827	314	421	621	185	140	Tr120×6	50	36	77	15	36	77
100	250	HCRL10010	141.4	3534	393	471	721	185	140	Tr120×6	50	36	77	15	36	85
100	300	HCRL10012	141.4	4241	471	521	821	185	140	Tr120×6	50	36	77	15	36	94
150	150	HCRL1506	214.4	3216	236	359	534	222	170	Tr150×6	46	32	126	13	45	97
150	200	HCRL1508	214.4	4288	314	434	609	222	170	Tr150×6	46	32	126	13	45	116
150	250	HCRL15010	214.4	5360	393	484	734	222	170	Tr150×6	46	32	126	13	45	129
150	300	HCRL15012	214.4	6432	471	534	834	222	170	Tr150×6	46	32	126	13	45	142
200	150	HCRL2006	285.9	4288	530	399	549	260	200	Tr170×6	71	49	126	13	50	145
200	200	HCRL2008	285.9	5718	707	469	669	260	200	Tr170×6	71	49	126	13	50	168
200	250	HCRL20010	285.9	7147	884	519	769	260	200	Tr170×6	71	49	126	13	50	184
200	300	HCRL20012	285.9	8577	1060	569	869	260	200	Tr170×6	71	49	126	13	50	200
250	150	HCRL2506	351.9	5278	530	416	561	290	220	Tr190×6	71	49	160	15	55	190
250	200	HCRL2508	351.9	7037	707	491	698	290	220	Tr190×6	71	49	160	15	55	224
250	250	HCRL25010	351.9	8796	884	541	791	290	220	Tr190×6	71	49	160	15	55	244
250	300	HCRL25012	351.9	10566	1060	591	891	290	220	Tr190×6	71	49	160	15	55	265
300	150	HCRL3006	424.1	6362	530	421	571	315	240	Tr210×6	71	49	160	15	55	230
300	200	HCRL3008	424.1	8462	707	496	696	315	240	Tr210×6	71	49	160	15	55	269
300	250	HCRL30010	424.1	10603	884	546	796	315	240	Tr210×6	71	49	160	15	55	294
300	300	HCRL30012	424.1	12723	1060	596	896	315	240	Tr210×6	71	49	160	15	55	319

▼Manual Integrated Hydraulic Track Jack



Rated Pressure: 70MPa

Stroke Range: 120-160mm

The manual integrated hydraulic track jack is an essential tool for road maintenance in the mining industry, suitable for rail shifting operations. It is used for heavy machinery straightening and lifting within minimum access space.

Features

•Manual handle operation, fast, effortless and simple

•Rotatable handle assembly, enables handle insertion and lifting from various directions

•Dual lifting force at top head and claw for more application options

•One-piece alloy steel claw, robust and durable

•Low-profile lifting toe for confined narrow spaces

•High-strength return spring for fast retraction

•Built-in safety valve to prevent overload

Built-in overflow valve to avoid over-stroke lifting



Model	Capacity (Ton)		Stroke (mm)	Body Height (mm)	Claw Height (mm)	Weight (Kg)	Packing Dimension (mm)
	Claw	Top					
TJ05	2.5	5	120	222	16	14.2	300×200×320
TJ10	5	10	150	265	18	20.7	330×220×320
TJ20	10	20	160	285	20	31	350×240×320
TJ30	15	30	160	305	20	46.4	380×270×340

▼JHA Series, Aluminium Jacks



Rated Pressure: 70MPa

Rated Tonnage: 7 -100ton

Stroke Range: 76-155mm

•The JHA series products are made of aluminum alloy with a sandblasted and anodized outer surface, resulting in lightweight construction, significantly improved corrosion resistance, and effectively extended equipment lifespan.
• External pressure relief valve to prevent equipment overload
• Precision-machined front and rear surfaces, suitable for confined spaces
• Gas nitriding treated plungers offer higher strength, stronger corrosion resistance, and longer service life
• Standard operating handle
• 7-ton, 15-ton, and 35-ton JHA series products support all-around operation



Hydraulic Lifter & Track Jack
Designed for the initial few centimeters of lifting before full load engagement, making it an ideal tool for lifting applications. The LW-16 Hydraulic Lifter requires a minimum installation clearance of only 10 mm.

▼JHA Model Specifications

Type	Jack Capacity ton(kN)	Stroke (mm)	Model	Effective Piston Area(cm^2)	Collapsed Height (mm)	Extended Height (mm)	Base Size W×L(mm)	Plunger Diameter (mm)	Pump Speed	Weight (kg)
Aluminium Jacks	7 (62)	76	JHA-73	9.6	133	209	73 × 158	30.2	Single Speed	5.0
	15 (133)	153	JHA-156	20.3	247	401	92 × 238	41.4	Single Speed	13.2
	35 (311)	155	JHA-356	45.6	257	412	117 × 254	54.1	Single Speed	18.1

▼RTC Ultra-Thin Hydraulic Cylinder



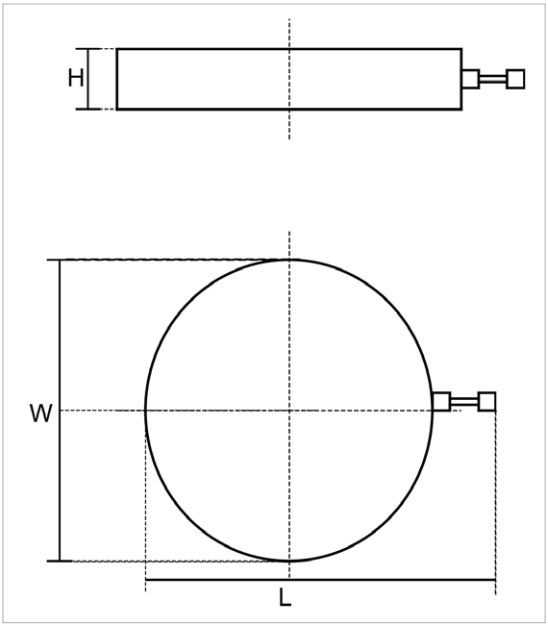
Rated Pressure: 150MPa

Rated Tonnage: 5 -200ton

Stroke Range: 10mm

- Ideal for confined-space applications
- All components undergo gas nitriding and post-oxidation treatment, resulting in enhanced corrosion resistance and extended service life.
- Single-acting, load return
- Working pressure: 1500 bar
- All models are equipped with CEJN 116 male coupler.
- Custom specifications available





▼ RTC Model Specifications

Model Number	Capacity (Ton)	Stroke (mm)	Oil Capacity (cm^3)	Collapsed Height H(mm)	Extended Height (mm)	Outside Dia(mm)	Plunger Dia(mm)	Self-alignment Angle	Body Length L(mm)	Body Width W(mm)
RTC-00510	5	10	3.46	30	40	60	21	*	125	60
RTC-01010	10	10	7.07	30	40	70	30	*	135	70
RTC-02510	25	10	17.35	30	40	90	47	*	155	90
RTC-05010	50	10	36.32	30	40	118	70	*	180	115
RTC-10010	100	10	69.40	33	43	152	94	3°	217	152
RTC-15010	150	10	105.68	34	44	180	116	3°	245	180
RTC-20010	200	10	135.85	35	45	204	132	3°	270	205

▼ P Series Hand Pumps

Shown from top to bottom: P80，P392，P84-GC，P464，P804，P80-GC，P804-GC，PHS70-450，P142，P392-GC



Mmaximum Pressure: 70MPa

High Pressure Flow : 0.9-4.75 cm^3/Stroke

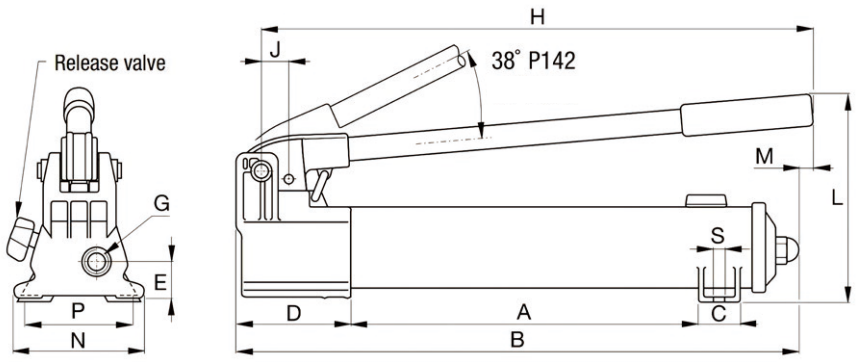
Reservoir Capacity: 317 - 7423cm^3

- Ergonomic design with low operating force on the handle, reducing labor intensity.
- Two-speed operation increases the outlet flow rate per unit time.

Built-in safety valve for overload protection.

- Large oil tank capacity, compatible with a wide range of cylinders and tools.
- P142/P392 features a durable high-strength engineering plastic oil tank; the nylon-coated aluminum pump body offers excellent corrosion resistance.

▼P142 Single-Acting Lightweight Manual Pump

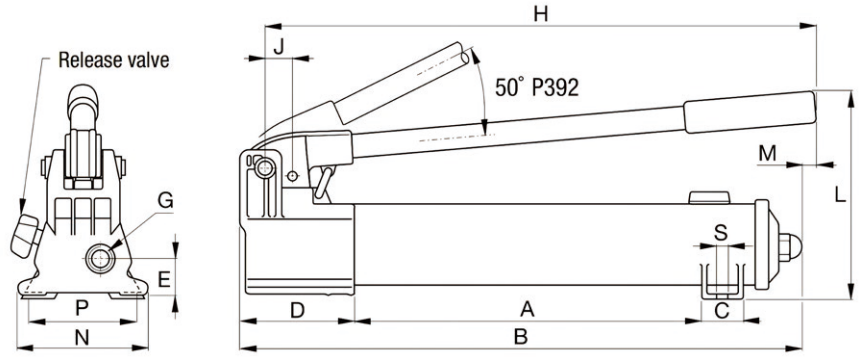
P142	Outline Dimension Drawing	Weight (Kg)
		2.4

Usable Oil Capacity (cm^3)	Rated Pressure (bar)		Oil Displacement per Stroke (cm^3)		Max. Handle Effort (Kg)	Piston Stroke (mm)	Dimensions (mm)											
	1st Stage	2nd Stage	1st Stage	2nd Stage			A	B	C	D	E	S	H	J	L	N	P	G
327	13	700	3.62	0.9	35.4	12.7	185	336	28	85	28	7	319	19	143	95	80	NPTF 3/8-18

▼P142GC Single-Acting Lightweight Manual Pump

P142-GC	Technical Features	Weight (Kg)
	Equipped with GA45GC pressure gauge and fitting assembly for enhanced usability. Integrated pressure gauge allows direct observation of working pressure.	3.5

▼P392 Single-Acting Lightweight Manual Pump

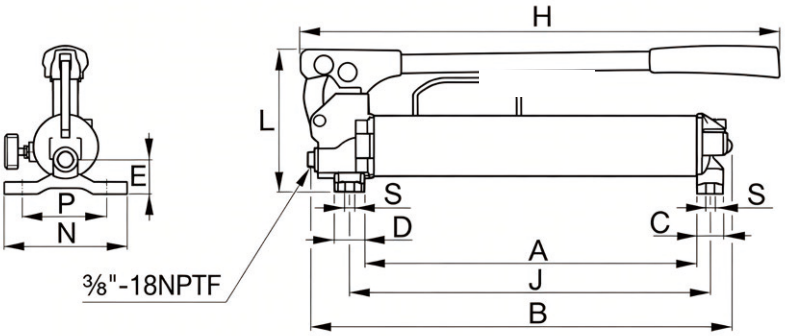
P392	Outline Dimension Drawing	Weight (Kg)
		4.1

Usable Oil Capacity (cm^3)	Rated Pressure (bar)		Oil Displacement per Stroke (cm^3)		Max. Handle Effort (Kg)	Piston Stroke (mm)	Dimensions (mm)										
	1st Stage	2nd Stage	1st Stage	2nd Stage			A	B	C	D	E	H	J	L	M	N	G
901	13	700	11.26	2.47	42.2	25.4	344	533	36	99	33	522	30	177	16	120	NPTF 3/8-18

▼P392GC Single-acting Lightweight Manual Pump

P392-GC	Technical Features	Weight (Kg)
	Equipped with GA45GC pressure gauge and fitting assembly for enhanced usability. Integrated pressure gauge allows direct observation of working pressure.	5.2

▼P39 Single-Acting Steel Hand Pumps

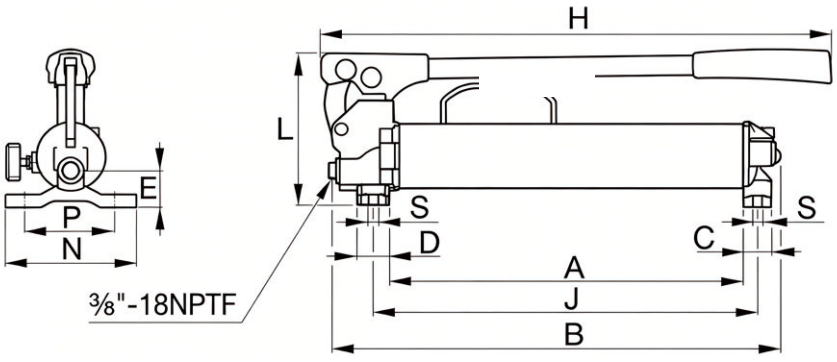
P39	Outline Dimension Drawing	Weight (Kg)
		6.2

Usable Oil Capacity (cm³)	Rated Pressure (bar)		Oil Displacement per Stroke (cm³)		Max. Handle Effort (Kg)	Piston Stroke (mm)	Dimensions (mm)										
	1st Stage	2nd Stage	1st Stage	2nd Stage			A	B	C	D	E	H	J	L	N	P	S
672	-	700	-	2.46	39	25.4	383	480	30	35	37	550	416	163	140	111	8.4

▼P39GC Single-Acting Steel Hand Pumps

P39GC	Technical Features	Weight (Kg)
	Equipped with GA45GC pressure gauge and fitting assembly for enhanced usability. Integrated pressure gauge allows direct observation of working pressure.	7.3

▼P77 Single-Acting Steel Hand Pumps

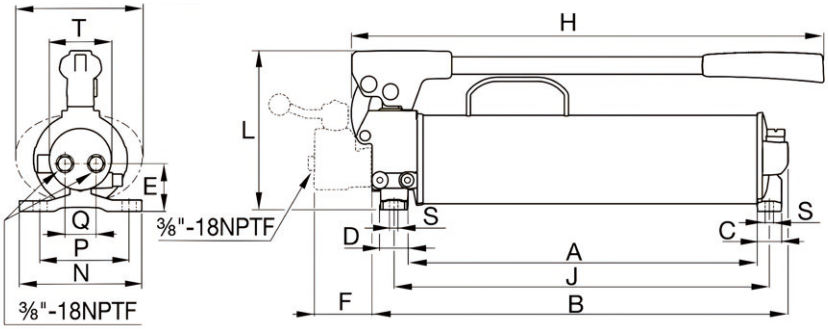
P77	Outline Dimension Drawing	Weight (Kg)
		7.1

Usable Oil Capacity (cm³)	Rated Pressure (bar)		Oil Displacement per Stroke (cm³)		Max. Handle Effort (Kg)	Piston Stroke (mm)	Dimensions (mm)										
	1st Stage	2nd Stage	1st Stage	2nd Stage			A	B	C	D	E	H	J	L	N	P	S
672	34	700	16.39	2.46	39	25.4	391	487	30	35	47	550	424	163	140	111	8.4

▼P77GC Single-Acting Steel Hand Pump

P77GC	Technical Features	Weight (Kg)
	Equipped with GA45GC pressure gauge and fitting assembly for enhanced usability. Integrated pressure gauge allows direct observation of working pressure.	8.2

▼P80 Single-Acting Steel Hand Pump

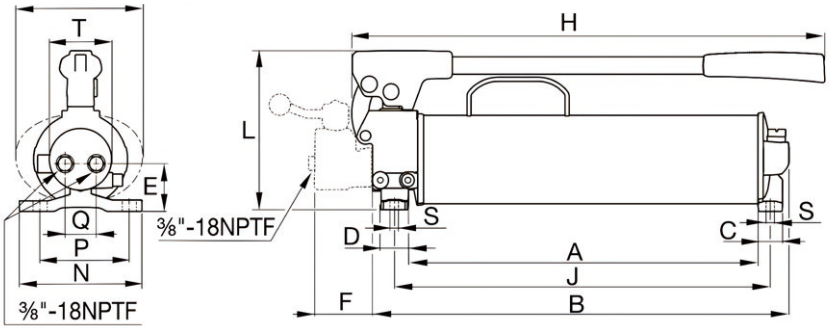
P80	Technical Features	Weight (Kg)
		10.7

Usable Oil Capacity (cm^3)	Rated Pressure (bar)		Oil Displacement per Stroke (cm^3)		Max. Handle Effort (Kg)	Piston Stroke (mm)	Dimensions (mm)											
	1st Stage	2nd Stage	1st Stage	2nd Stage			A	B	C	D	E	H	J	L	N	P	Q	S	T
2200	34	700	16.39	2.46	35	25.4	428	511	30	35	55	579	460	195	150	121	42	8.4	74

▼P80GC Single-Acting Steel Hand Pump

P80-GC	Technical Features	Weight (Kg)
	Equipped with GA45GC pressure gauge and fitting assembly for enhanced usability. Integrated pressure gauge allows direct observation of working pressure.	11.8

▼P801 Single-Acting Steel Hand Pump

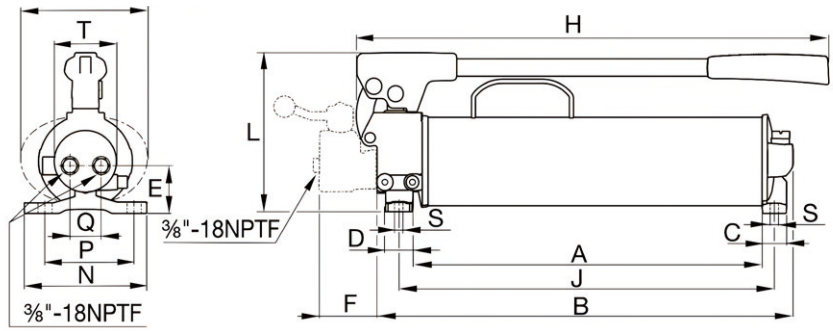
P801	Outline Dimension Drawing	Weight (Kg)
		14.1

Usable Oil Capacity (cm³)	Rated Pressure (bar)		Oil Displacement per Stroke (cm³)		Max. Handle Effort (Kg)	Piston Stroke (mm)	Dimensions (mm)												
	1st Stage	2nd Stage	1st Stage	2nd Stage			A	B	C	D	E	H	J	L	N	P	Q	S	T
4100	34	700	16.39	2.46	35	25.4	428	511	30	35	55	579	460	195	150	121	42	8.4	176

▼P801-GC Single-Acting Steel Hand Pump

P801-GC	Technical Features	Weight (Kg)
	Equipped with GA45GC pressure gauge and fitting assembly for enhanced usability. Integrated pressure gauge allows direct observation of working pressure.	16.4

▼P84 Double-Acting Steel Manual Pump

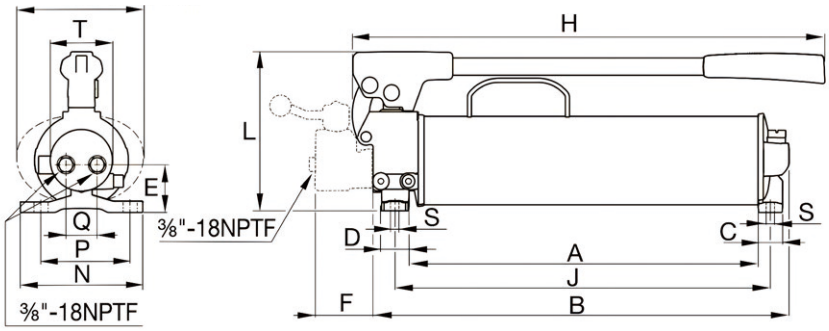
P84	Outline Dimension Drawing	Weight (Kg)
		12

Usable Oil Capacity (cm³)	Rated Pressure (bar)		Oil Displacement per Stroke (cm³)		Max. Handle Effort (Kg)	Piston Stroke (mm)	Dimensions (mm)													
	1st Stage	2nd Stage	1st Stage	2nd Stage			A	B	C	D	E	H	J	L	N	P	Q	F	S	T
2200	34	700	16.39	2.46	35	25.4	428	510	30	35	55	579	460	195	150	121	38	70	8.4	74

▼P84-GC Double-acting Steel Manual Pump

P84-GC	Technical Features		Weight (Kg)
		•P84/P84-GC double-acting manual pumps are equipped with manual 4-way control valves, suitable for one double-acting hydraulic cylinder and two single-acting hydraulic cylinders. •P84-GC double-acting manual pump with pressure gauge and quick-release coupling, enhancing operation convenience and enabling direct visual monitoring of working pressure.	12.9

▼P804 Double-acting Steel Manual Pump

P804	Outline Dimension Drawing	Weight (Kg)
		13.3

Usable Oil Capacity (cm³)	Rated Pressure (bar)		Oil Displacement per Stroke (cm³)		Max. Handle Effort (Kg)	Piston Stroke (mm)	Dimensions (mm)													
	1st Stage	2nd Stage	1st Stage	2nd Stage			A	B	C	D	E	H	J	L	N	P	Q	F	S	T
4100	34	700	16.39	2.46	35	25.4	428	511	30	35	55	579	460	195	150	121	42	70	8.4	176

▼P804-GC Double-acting Steel Manual Pump

P804-GC	Technical Features		Weight (Kg)
		•P804/P804-GC double-acting manual pumps are equipped with manual 4-way control valves, suitable for one double-acting hydraulic cylinder and two single-acting hydraulic cylinders. •P804-GC double-acting manual pump with pressure gauge and quick-release coupling, enhancing operation convenience and enabling direct visual monitoring of working pressure.	14.2

▼P462,P464 High-flow Manual Pump

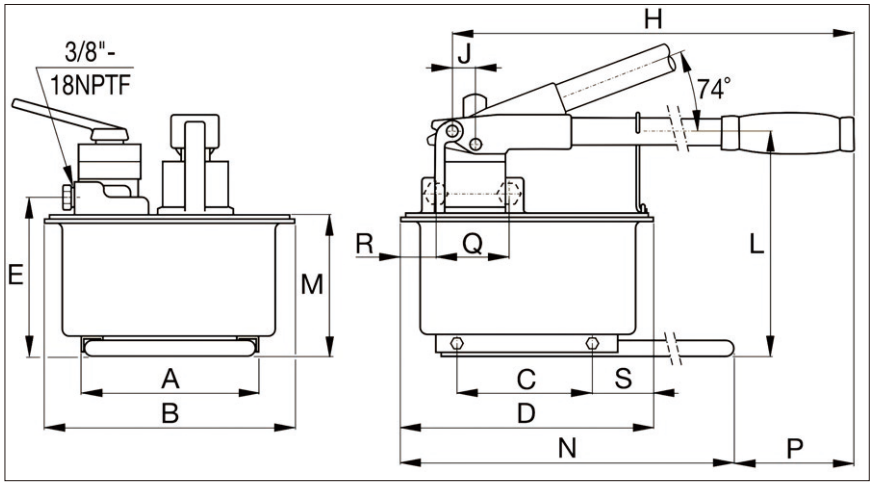
P462 Single-acting High-flow Manual Pump



P462 Double-acting High-flow Manual Pump



▼P462,P464 Technical Parameters



P462,P464

•P462 and P464 feature extra-large oil tanks and high first-stage flow rate. These pumps are ideal for driving large-tonnage hydraulic cylinders.

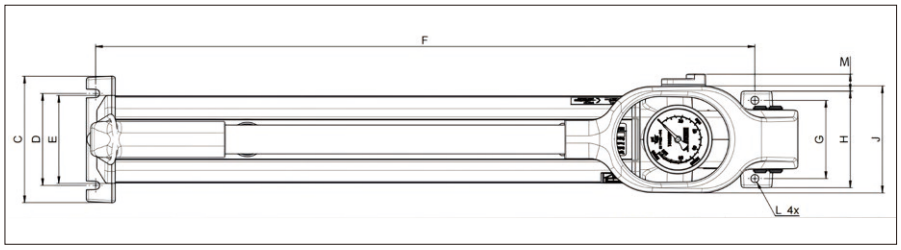
Model	Usable Oil Capacity (cm^3)	Rated Pressure (bar)		Oil Displacement per Stroke(cm^3)		Max. Handle Effort (Kg)	Piston Stroke (mm)	Dimensions (mm)														Weight (Kg)
		1st Stage	2nd Stage	1st Stage	2nd Stage			A	B	C	D	E	H	J	L	M	N	P	Q	S	R	
P462	7423	14	700	126.2	4.75	49	38.1	210	308	163	320	195	671	25	270	175	650	92	–	80	–	27.7
P464	7423	14	700	126.2	4.75	49	38.1	210	308	163	320	195	671	25	270	175	650	92	89	80	68	27.7

▼PHS Integrated Single-acting Manual Pump



PHS Series:

- Dual-speed operation with low handle operating force, reducing operator labor intensity
- Sturdy aluminum reservoir, lightweight and easy for oil filling
- Equipped with a pressure release valve for precise control of system pressure.
- Oil outlet thread size is unified to NPTF3/8-18



HPS70-450,HPS70-1000



PHS70-450/1000 is available as a complete assembly, including manual hydraulic pump, hydraulic cylinder, pressure gauge, quick couplings and hydraulic hose.

Model	Usable Oil Capacity (cm^3)	Rated Pressure (bar)		Oil Displacement per Stroke(cm^3)		Max. Handle Effort (Kg)	Piston Stroke (mm)	Dimensions (mm)											Weight (Kg)
		1st Stage	2nd Stage	1st Stage	2nd Stage			A	B	C	D	E	F	G	H	J	L	M	
PHS70-450	450	15	70	20	1	35.7	23.3	320	170	110	80	75.3	322	68	84	93	6.6	14	5.7
PHS70-1000	1000	15	70	20	2	32.6	23.3	620	170	110	80	75.3	575	68	84	93	6.6	14	8

▼Post Tension Hydraulic Pump



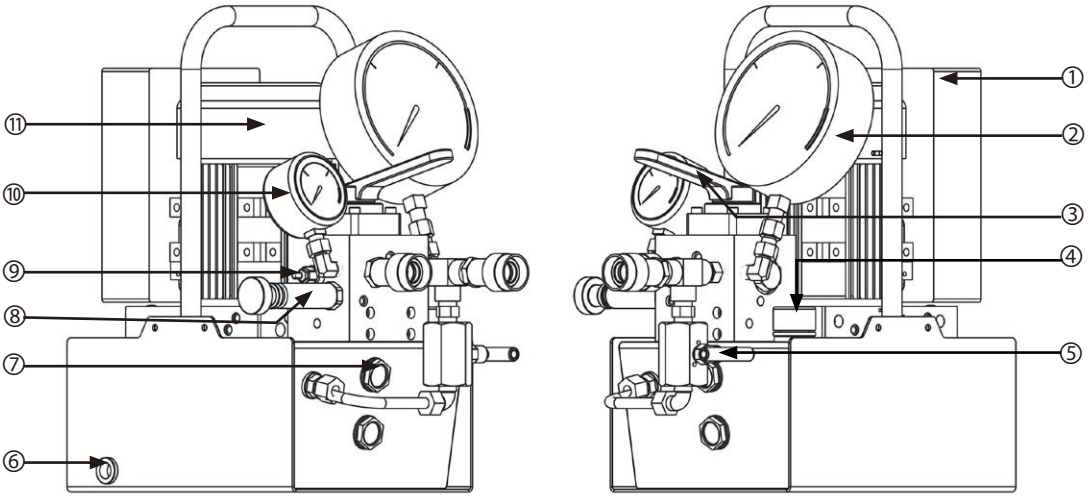
Maximum output pressure:	70MPa
Motor size:	1.1KW
Low pressure flow:	6/6.5L/Min
Medium pressure flow:	1.5L/Min
High pressure flow:	0.7L/Min

- Brushless motor, maintenance-free
- P port is equipped with a precision pressure regulating valve for continuous and precise pressure adjustment
- A port is configured with a 150mm-diameter precision pressure gauge, featuring quick-acting non-rotating disassembly and assembly
- Port A is equipped with a hydraulic lock, ensuring long-term pressure retention without leakage
- A port is equipped with a pressure relief needle valve for precise pressure reduction control
- Configure the R port with a 20MPa pressure limit valve
- Configure an independent pressure gauge for the R port
- Configure 3-meter wired controller

▼HE4007MVL43-SP Specification Sheet:

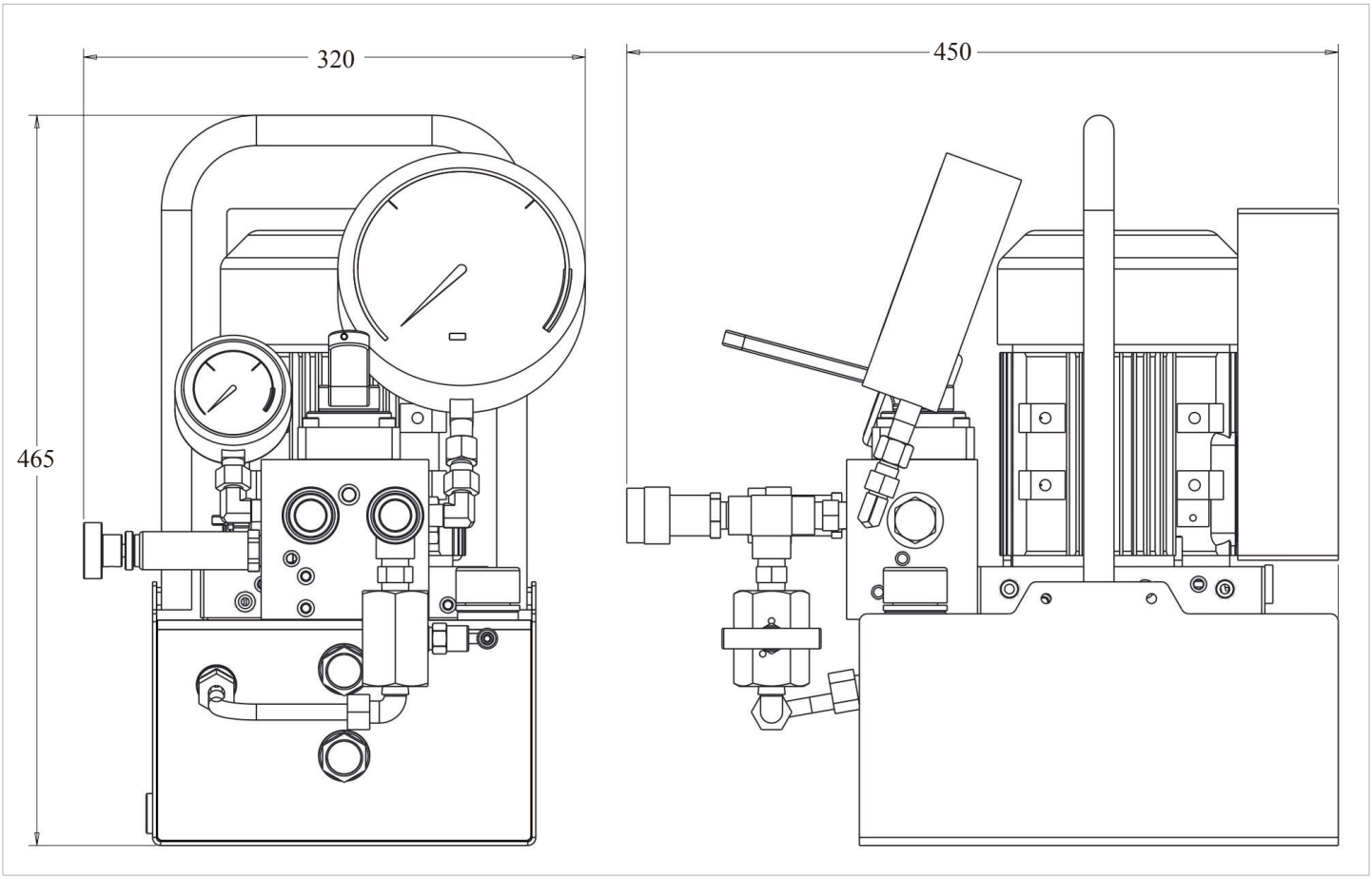
Model Number	Voltage (VAC/HZ)	Motor Size (KW)	Low Pressure Flow(L/Min)	Medium Pressure Flow(L/Min)	High Pressure Flow(L/Min)	Reservoirs Capacity (L)	Weight without oil (KG)
HE4007MVL43-SP	230/50	1.1	6	1.5	0.7	7	30
HE4007MVL43-SP-115/60	115/60	1.1	6.5	1.5	0.7	7	30

▼HE4007MVL43-SP Product Illustration:

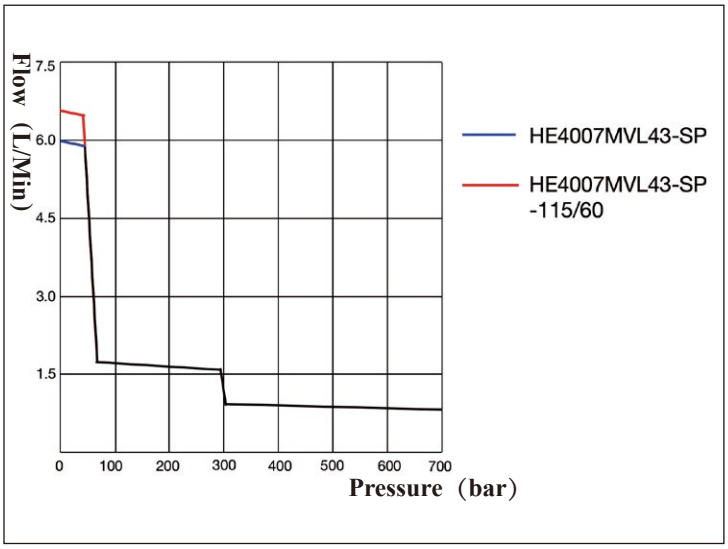


NO	Name
1	Electrical Control Box
2	A Port Pressure Gauge
3	Manual Directional Control Valve
4	Filler & Vent Port
5	V82 Needle Valve
6	Oil Drain Port
7	Oil Level Gauge
8	P Port Relief Valve
9	R Port Pressure Limiting Valve
10	A Port Pressure Gauge
11	Power Motor

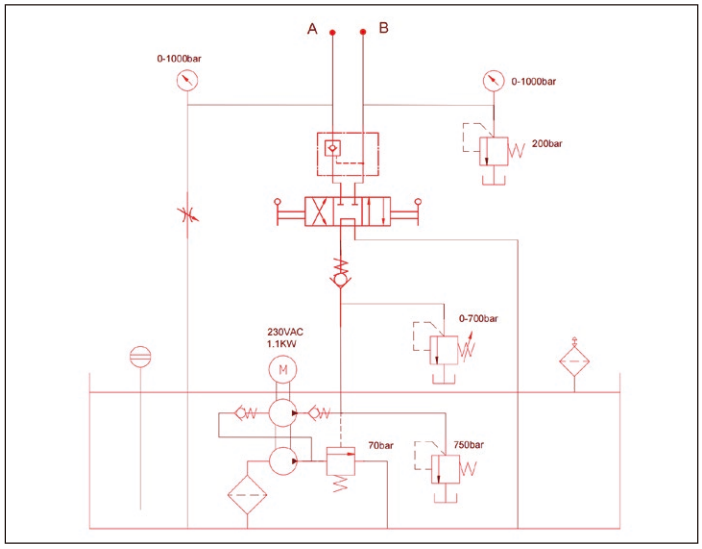
▼ HE4007MVL43-SP Overall Dimensions：



▼ HE4007MVL43-SP Flow Curve：



▼ Hydraulic Schematic Diagram：



▼BPS Lithium Battery Hydraulic Pumps



Maximum output pressure:	70MPa
Motor size:	0.35KW
Reservoirs capacity:	2L
High pressure flow:	0.2L/Min

- The brushless motor is main- tenance free and has a noise level of less than 85dB
- Equipped with 12AH large capacity lithium battery for high endurance
- Two-stage pump, high efficiency
- Built-in safety valve, external adjustable overflow valve
- The shoulder strap is configured for portable operation
- The intake valve and exhaust valve are configured to be active without operation
- Install pressure gauge and quick connector
- Transparent visible PC high strength tank
- Optional high configuration package, high protection seal box

▼ BPS700 Function Introduction:



Configure a lock switch. Pushing it to the middle position can lock the start button to prevent accidental contact from causing danger.

Start button: It is used to control the start and stop of the pump and the oil output speed of the pump.

The automatic intake/exhaust port has dual functions of exhaust and sealing to prevent oil leakage and ensure the safe operation of the equipment.

High-precision oil suction filters can filter out impurities in the oil and prevent contaminants from entering the pump body.

Lithium batteries: Lithium batteries provide efficient power for hydraulic pumps. They are lightweight and portable, supporting rapid charging and discharging. They are suitable for mobile pumping stations, enhancing operational flexibility and endurance, and reducing maintenance costs.

Swedish GEJN connectors ensure safety throughout.

The pressure gauge is equipped with a protective sleeve to prevent collision and is filled with glycerin to ensure the accuracy of the hydraulic system monitoring.

Manual pressure relief valve, easier pressure relief, leak-free design, better pressure holding effect.

The precision Relief Valve regulates the pressure of the hydraulic system. After locking, the pressure remains constant.

It is equipped with a reliable safety valve and overpressure protection to prevent operational risks caused by overpressure.

▼ BPS700K Set List:

Name	Specifi cations	Quantity
BPS700	Lithium battery hydraulic pump	1
BP-B2112	70MPa, 1M tubing	1
Lithium cell	The battery capacity is 12AH	2
Portable shoul- der straps	The length is adjustable	1
Fast chargers	21V ⎓ 4A	1
Packing case	-	1



Hydraulic Oil Cylinder Pumps（70MPa）

▼ BPS700K Packing List In- Troduction:



Fast chargers
With an output of 21V to 4A, it only takes 3 hours to charge, and the charger has a battery level indicator light to indicate.



Hydraulic hose
Optional configuration of PC sheath high quality hydraulic hose.Rated pressure class 70MPa.



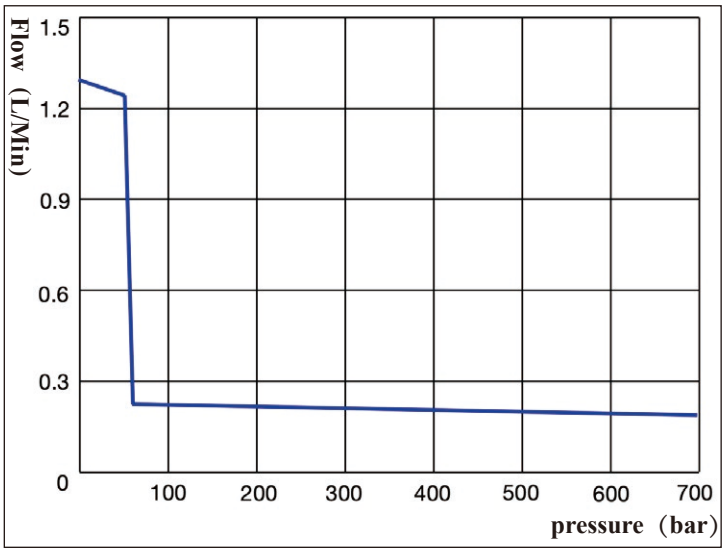
Lithium battery
12AH battery with extended working time, suitable for large hydraulic tools and hydraulic cylinder applications.

♦BP-B2112 lithium-ion battery available for separate purchase.

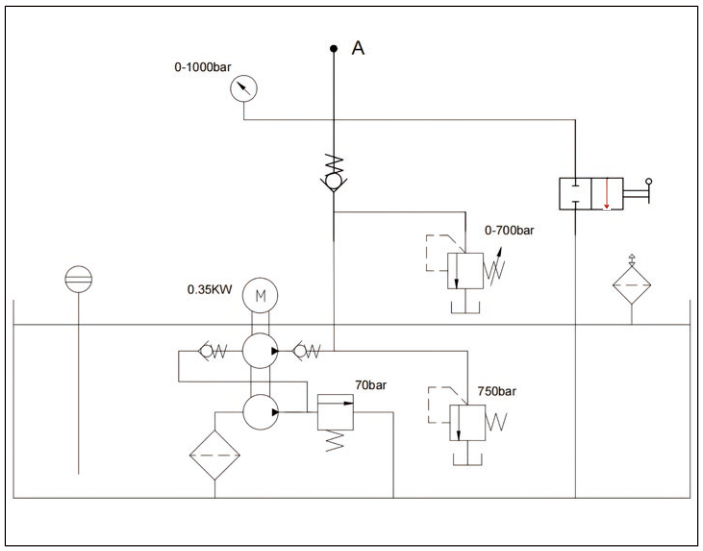
▼ BPS700 Specification Parameter Table:

Model	Battery power	Motor size	High pressure flow	Low pressure flow	Reservoirs capacity	No oil Weight	Length of the kit	width of the kit	height of the kit
BPS700K	21V	350W	0.2L/Min	1.3L/Min	2L	14.5KG	52cm	43cm	20cm

▼ BPS700 Flow Curve:



▼ BPS700 Hydraulic Schematic Diagram



▼BPS700 Industrial Applications





▼BPD700 Lithium Battery Hydraulic Pumps



Maximum output pressure: 70MPa

Power size: 750W

Low pressure flow: 4.8L/Min

High pressure flow: 0.45L/Min

- All-encompassing integrated frame design with built-in cable winder for easy cable management and enhanced protection.
- 6m wired control handle for easier operation.
- Equipped with a precision pressure regulating valve that can lock at the target pressure.
- Fitted with a servo motor, operating noise is below 75dB.
- Standard configuration includes one 26AH large-capacity lithium battery for long-lasting performance.
- Lithium batteries can be purchased separately, and a charger is included with the battery.
- Comes with a pressure gauge and couplers. The pressure gauge can be quickly installed and removed without rotation.
- Equipped with an electromagnetic automatic exhaust valve that automatically opens for intake and exhaust when powered on.
- Three-speed settings (high, medium, low) to meet a wider range of application scenarios.

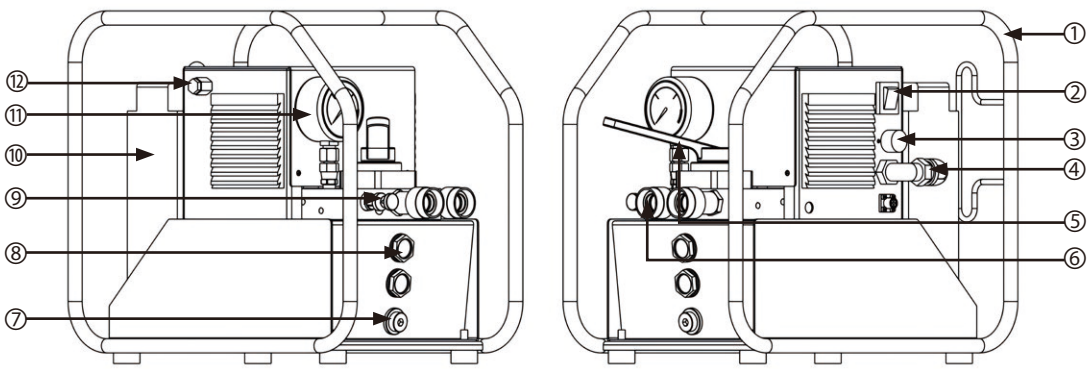
▼ BPD700 Type Specification Sheet

Model	Voltage	Power Size	Low-pressure Flow	High-pressure Flow	Tank Capacity	Weight without Oil	Number of Oil Outlets
BPD7007MV33	48VDC	750W	4.8L/Min	0.45L/Min	7L	26KG	2
BPD7007MV43	48VDC	750W	4.8L/Min	0.45L/Min	7L	26KG	2
BPD7020MV33	48VDC	750W	4.8L/Min	0.45L/Min	20L	38KG	2
BPD7020MV43	48VDC	750W	4.8L/Min	0.45L/Min	20L	38KG	2

▼ BPD700 Packaging list

Model	Specification	Quantity
BPD700	Lithium battery wrench pump	1
BP-B4826	Lithium battery, 48V 26AH	1
Quick charger	48V ⎓ 5A	1
Wooden case	Wooden case packaging	1

▼ BPD700 Product Illustration



NO	Name
1	Protection Frame
2	Main Power Switch
3	Motor Speed Control Button
4	Power Connection Cable
5	Manual Directional Valve
6	Quick Connector
7	Oil Drain Port
8	Oil Level Gauge
9	Relief Valve
10	Lithium Battery
11	Pressure Gauge
12	Exhaust Port

▼Introduction to theBP-B4826lithium battery



♦BP-B4826 lithium battery can be purchased separately.

▼BP-B4826 Packaging list

Model	Specification	Quantity
BP-B4826	Lithium battery, 48V 26AH	1
Quick charger	48V ⎓ 5A	1
Carton	Carton packaging	1

Technical Features:

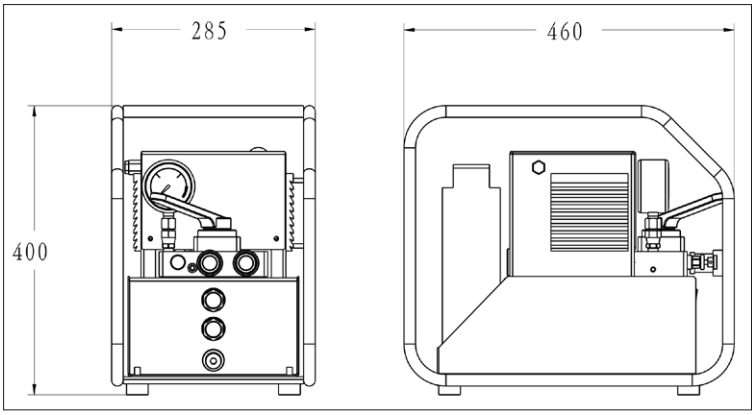
Safety Protection:

- •Built-in High-quality BMS Battery Management System: This system can accurately monitor and manage the charging and discharging processes of the battery, ensuring the safe and stable operation of the battery. It effectively prevents issues such as overcharging, over-discharging, and overheating, extends the battery's service life, and improves the battery's utilization efficiency.
- •Overcharge Protection: Effectively prevents the battery from overcharging, avoiding battery damage or safety hazards caused by overcharging.
- •Over-discharge Protection: Prevents the battery from over-discharging, extending the battery's service life and ensuring safe use.
- •Over-temperature Protection: Automatically protects the battery when it is in an over-temperature state, preventing various risks caused by high temperatures.
- •Short-circuit Protection: The fuse automatically protects the battery in case of a short circuit, avoiding equipment damage caused by short circuits.
- •PTC Protection: It can balance temperature and current, providing comprehensive safety protection.

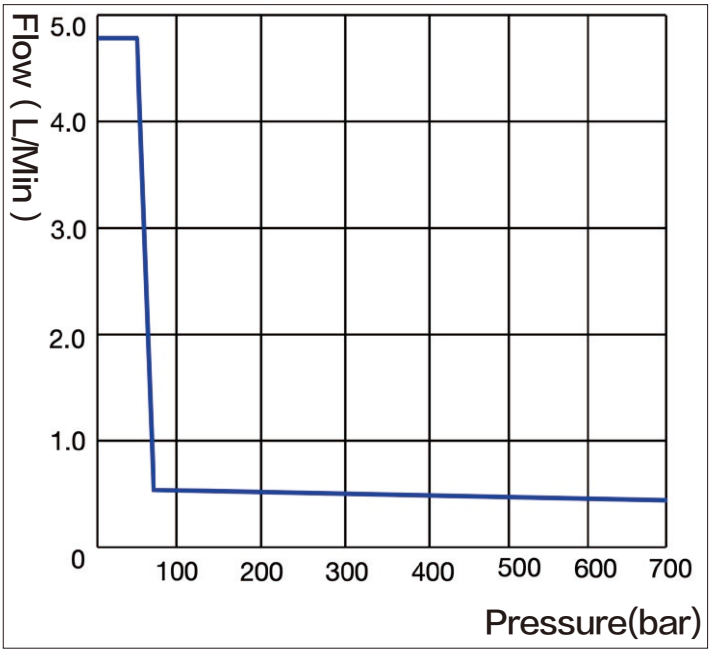
Performance:

- •Powerful Performance: Equipped with an intelligent chip, the product performs excellently in operation and processing.
- •Large Capacity: It has a large capacity, meeting more usage requirements.
- •Portable Design: The product is designed for easy carrying, facilitating users in various scenarios.
- •Shock and Impact Resistance: It has the ability to resist shock and impact, effectively protecting internal components when subjected to external forces and improving the product's durability.

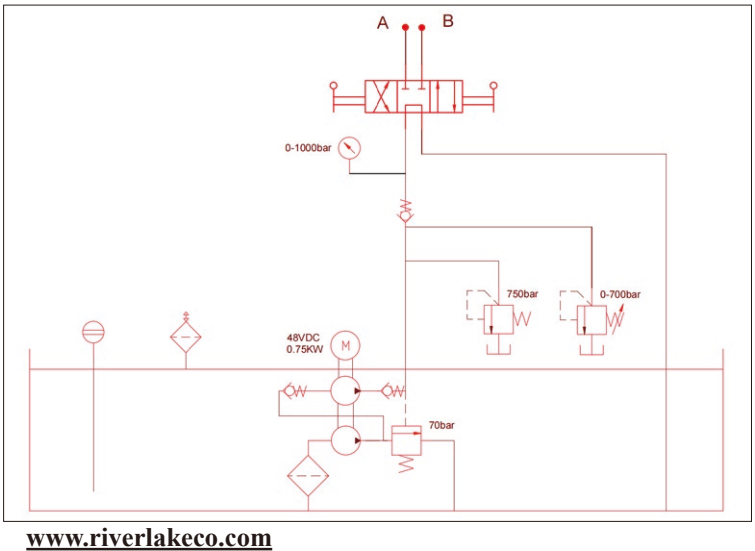
▼BPD700 Outline Dimensional Drawing:



▼BPD700 Pressure Flow Diagram:



▼BPD700 Hydraulic Schematic Diagram:



▼ HC3 Portable Electric Hydraulic Pumps



HC3 portable electric pumps

Maximum output pressure: 70MPa

Motor Size : 0.375KW

Low pressure flow: 3.5L/Min

High pressure flow: 0.35L/Min

Reservoirs capacity: 5L

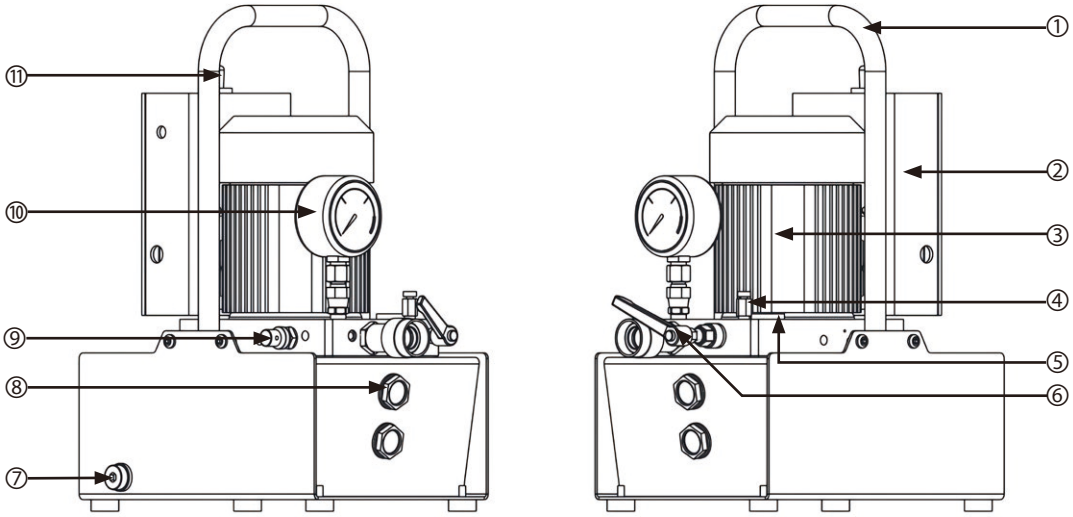
- Gear pump plus 3 pairs radial piston pump structure, high efficiency, low noise, strong self-priming ability Brushless motor maintenance free
- Equipped with 3-meter wire co.ntrol handle, pump button switch, motor overload protector.
- Built-in safety valve, external adjustable relief valve The fuel tank is equipped with fuel port, hand twist exhaust port, Sight Glass, oil drain port, handle and non-slip footing.

▼ HC3 Type Specification Sheet:

Model number	Voltage	Low pressure flow	High pressure flow	Reservoirs Capacity	Control valve function	Number of Oil Drains	Weight without oil
HC3005MV32	230VAC	3.5L/Min	0.35L/Min	5L	Manual unloading valve	1	19KG
HC3005MV43	230VAC	3.5L/Min	0.35L/Min	5L	M type manual reversing valve	2	19KG
HC3005EVC32	230VAC	3.5L/Min	0.35L/Min	5L	Pressure, pressure holding, unloading	1	19KG
HC3005EVO32	230VAC	3.5L/Min	0.35L/Min	5L	Pressure and unload	1	19KG
HC3005EVL43	230VAC	3.5L/Min	0.35L/Min	5L	Solenoid directional valve with liquid Pressure lock	2	21KG
HC3005EVB43	230VAC	3.5L/Min	0.35L/Min	5L	Solenoid directional valve with load balancing valve	2	21KG

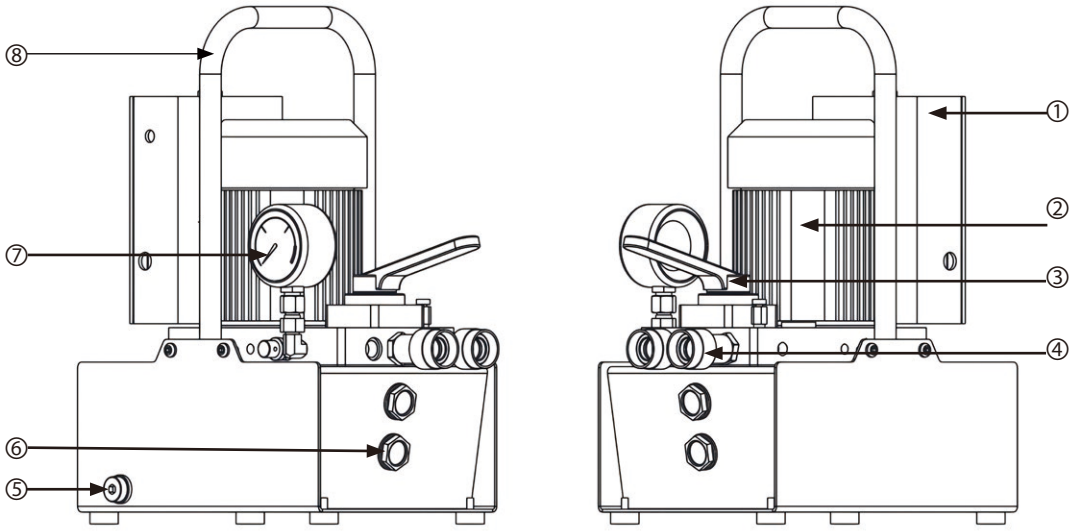
Note: If the product needs 115VAC/60HZ operating voltage, please add -115/60HZ after it.
For example, the HE3002MV32R-115/60HZ.

▼ HC3MV32 Product Illustration:



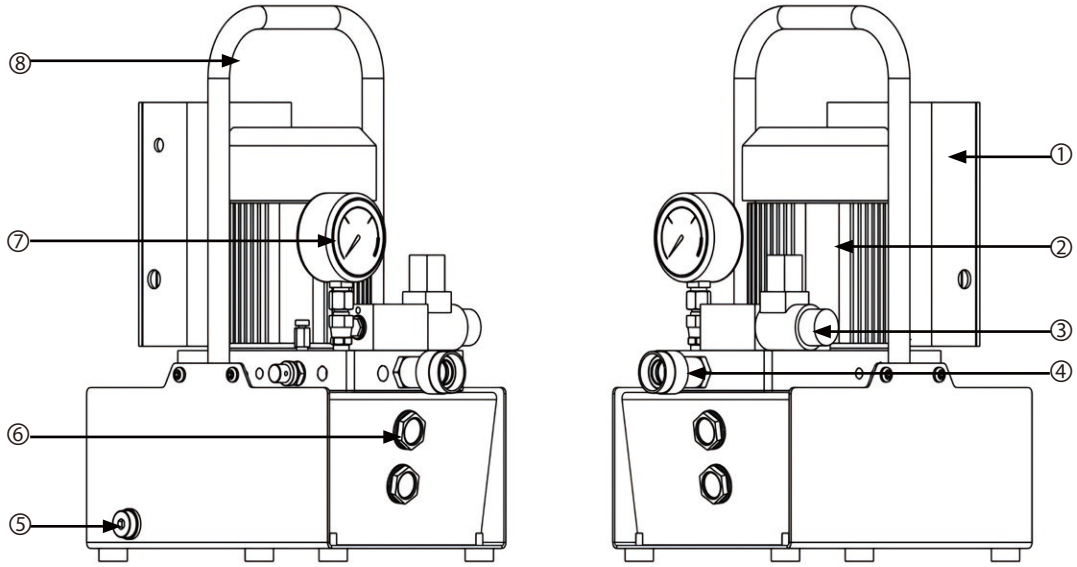
NO	Name
1	Lifting handle
2	Electric box
3	Motor
4	Exhaust port
5	Oil fill port
6	Release valve
7	Oil drain
8	Sight glass
9	Relief valve
10	Gauge
11	Twist switch

▼ HC3MV43 Product Illustration:



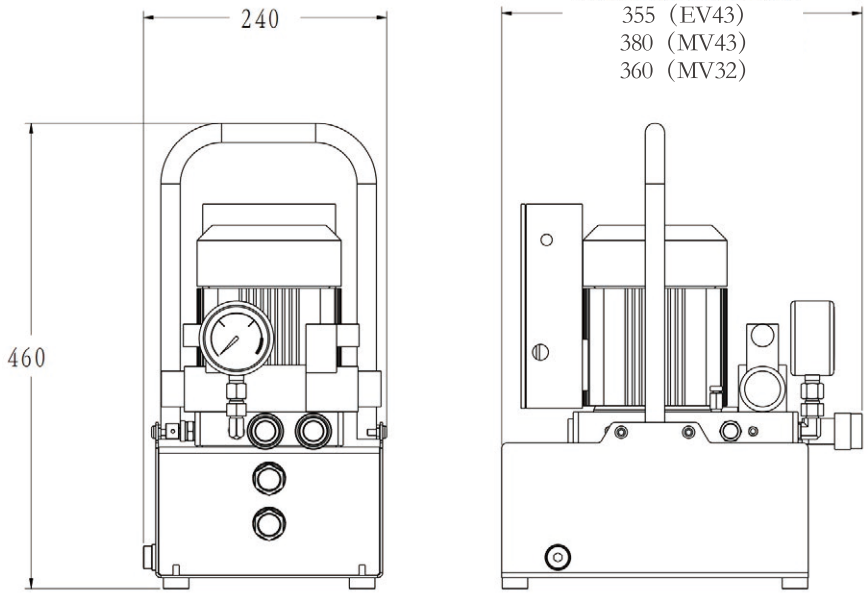
NO	Name
1	Electric box
2	Motor
3	Manual directional valve
4	Couplers
5	Oil drain
6	Sight glass
7	Gauge
8	Lifting handle

▼ HC3EV Product Illustration:

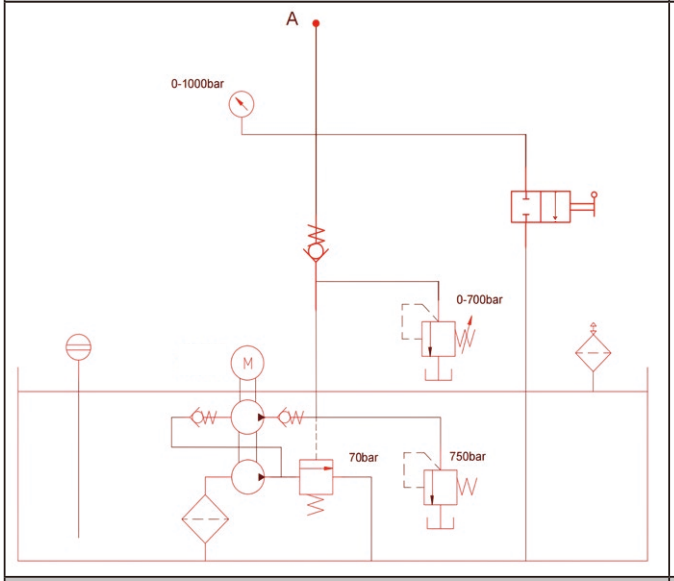
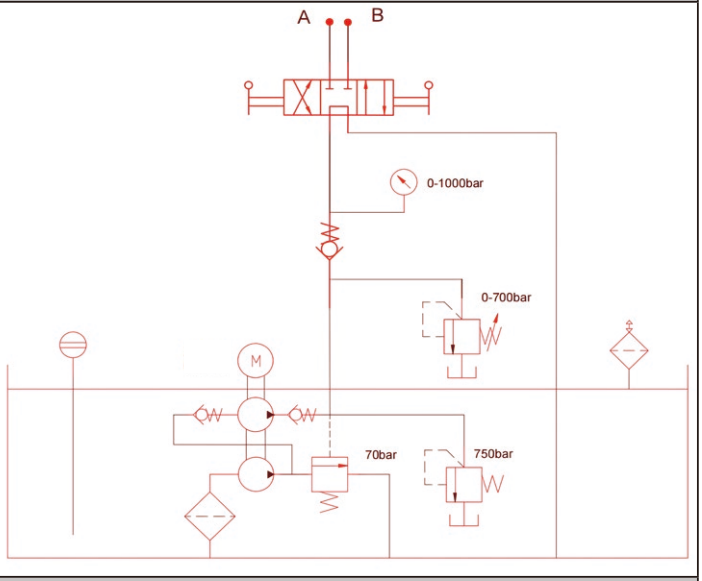
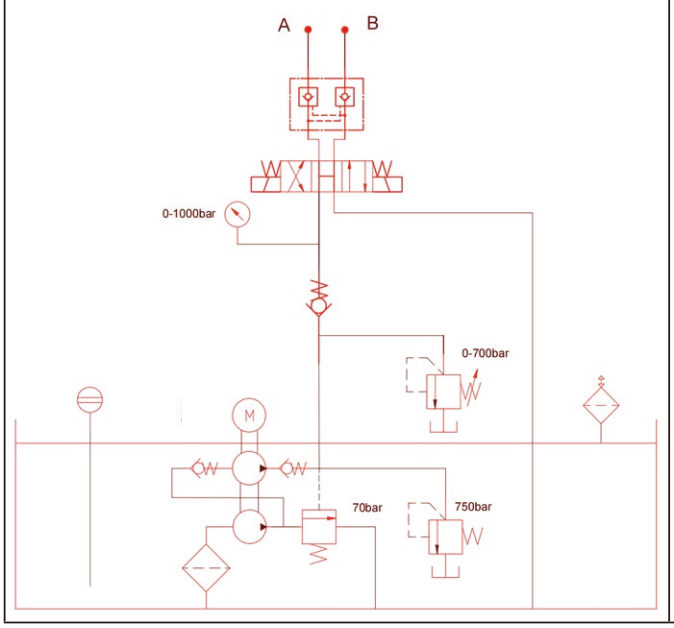
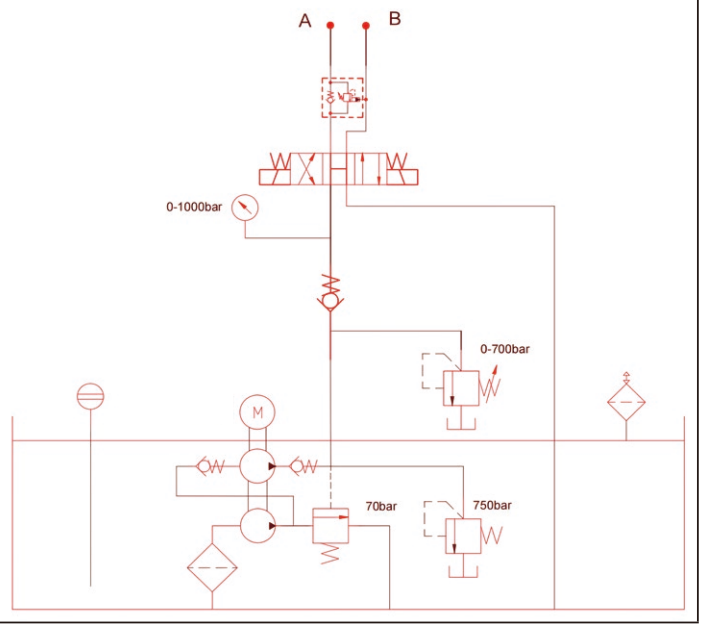


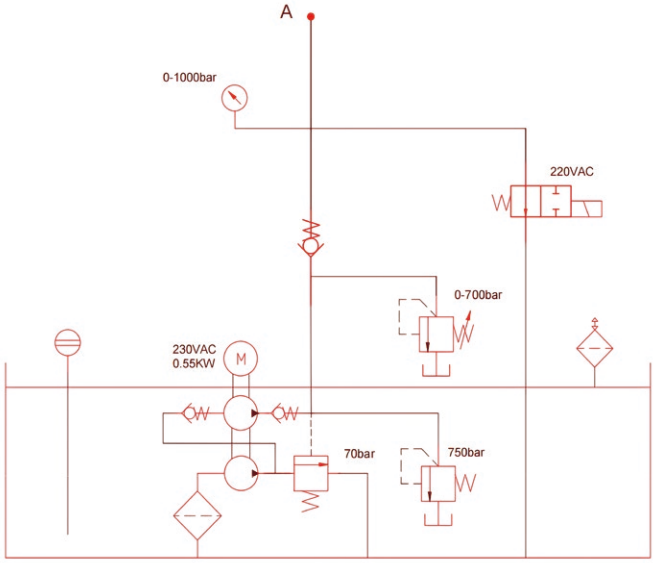
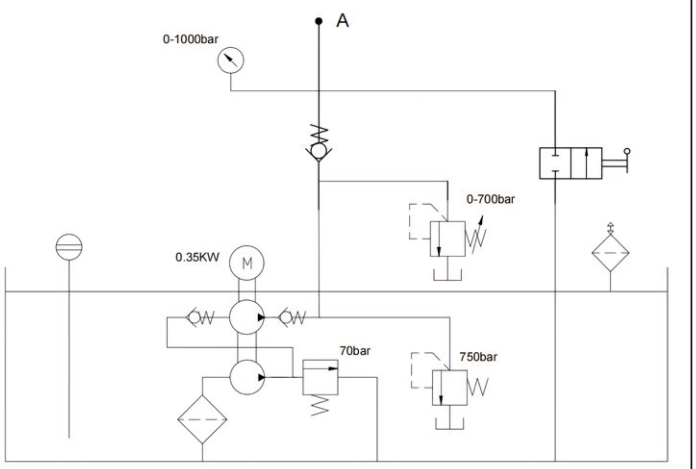
NO	Name
1	Electric Box
2	Motor
3	Solenoid ball valve
4	Couplers
5	Oil drain
6	Sight glass
7	Gauge
8	Lifting handle

▼ HC3 Outline Dimensional Drawing:



▼ HC3 Hydraulic Schematic Diagram:

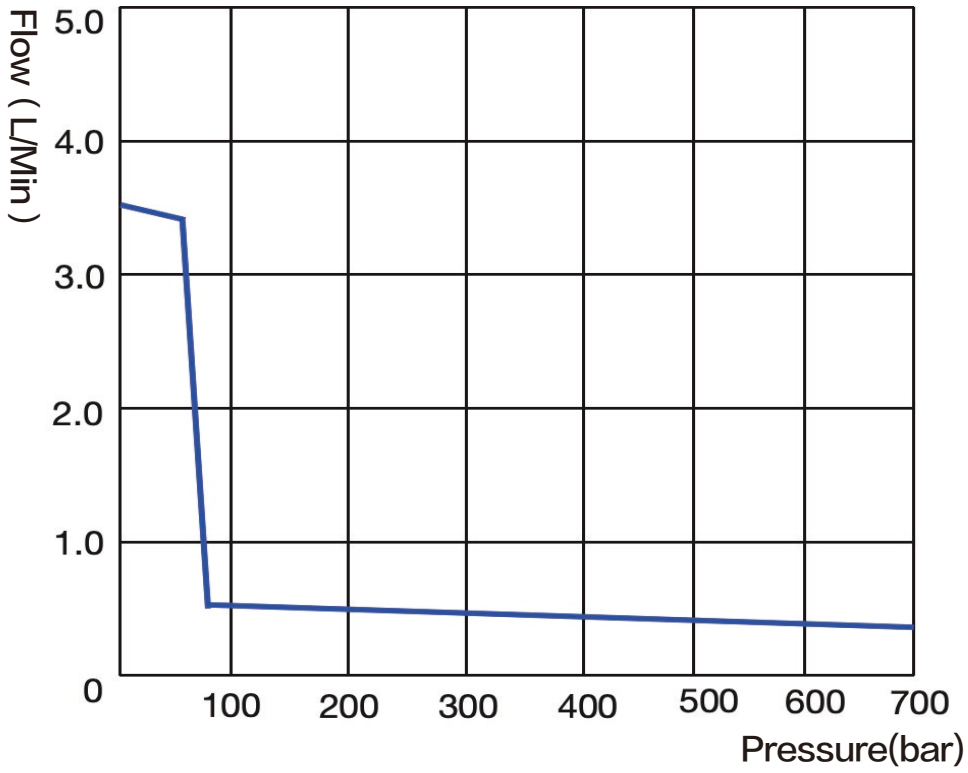
HC3005MV32	HC3005MV43
	
HC3005EVL43	HC3005EVB43
	

HC3005EVO43	HC3005EVC43
	

▼ HC3 Series Typical Models Schematic Diagram

HC3005MV32	HC3005MV43	HC3005EVB43	HC3005EVL43
			
HC3005EVO32	**HC3005EVC32**		
			

▼ HC3 Flow-Pressure Curve:



▼HC4 Portable Electric Hydraulic Pumps



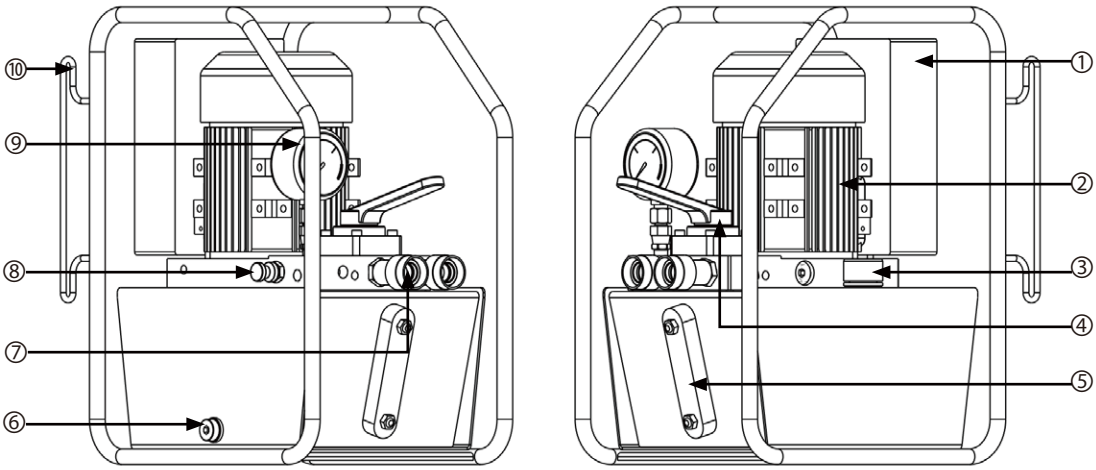
HC4 portable electric hydraulic pumps	
Maximum output pressure:	70MPa
Motor size:	1.1KW
Low pressure flow:	6L/Min
High pressure flow:	0.7L/Min
Reservoirs capacity:	7L

- Dual pump, high efficiency.
- Built-in safety valve, external adjustable relief valve.
- Dual action manual reversing valve.
- Equipped with P-port pressure gauge.
- Fully protected frame, equipped with cable collector.
- Standard 5-meter weak wire handle.
- Equipped with motor thermal overload protector.

▼HC4 Type specification sheet:

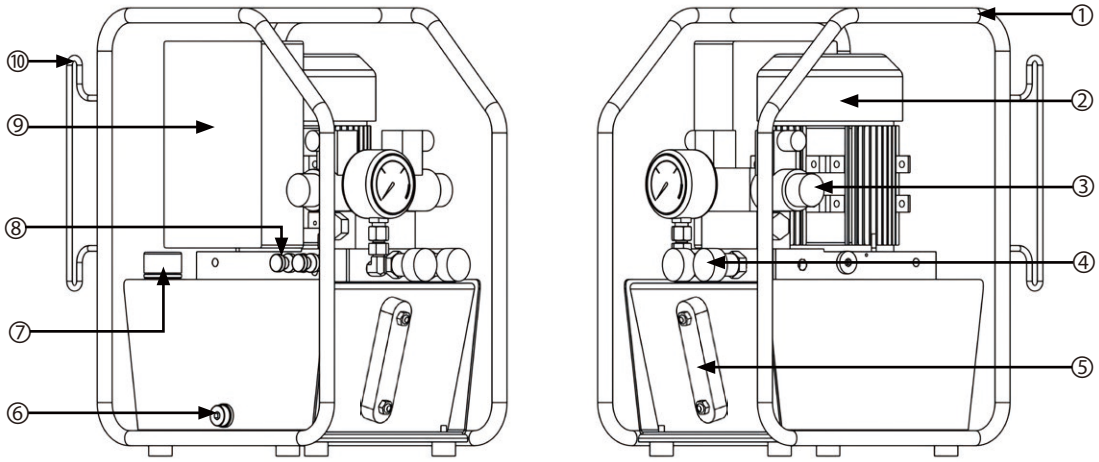
Model number	Voltage	Motor size	Low pressure flow	High pressure flow	Control valve function	Number of Oil Drains	Weight without oil
HC4007MV43R	230VAC	1.1KW	6L/Min	0.7L/Min	Manual directional valve	2	27KG
HC4007MV43R-115/60	115VAC	1.1KW	6L/Min	0.7L/Min	Manual directional valve	2	27KG
HC4007EVL43R	230VAC	1.1KW	6L/Min	0.7L/Min	Solenoid directional valve with liquid Pressure lock	2	27KG
HC4007EVL43R-115/60	115VAC	1.1KW	6L/Min	0.7L/Min	Solenoid directional valve with liquid Pressure lock	2	27KG

▼HC4MV43 Product illustration:



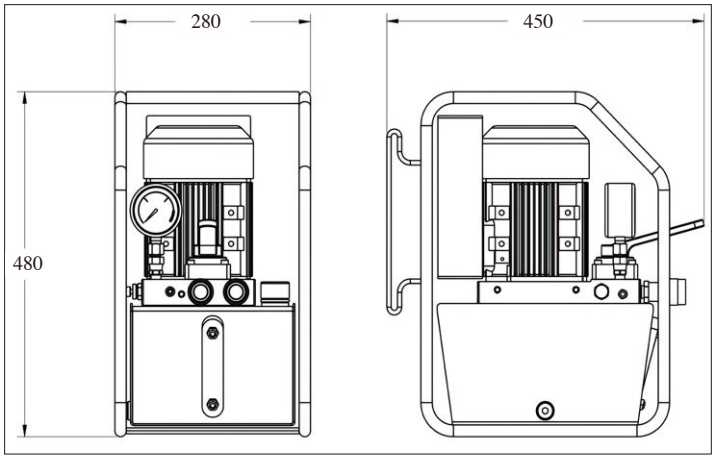
NO	Name
1	Electric box
2	Motor
3	Refueling and exhaust outlet
4	Manual directional valve
5	Sight Glass
6	Oil Drain
7	Couplers
8	Relief Valve
9	Gauge
10	Cable Collector

▼ HC4EVL43 Product illustration:

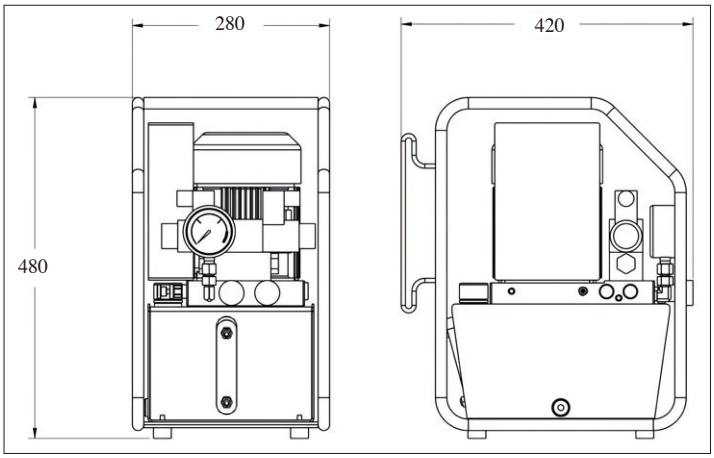


NO	Name
1	Protected Framework
2	Motor
3	Solenoid Directional Valve
4	Couplers
5	Sight Glass
6	Oil Drain
7	Refueling and exhaust outlet
8	Relief Valve
9	Electric box
10	Cable Collector

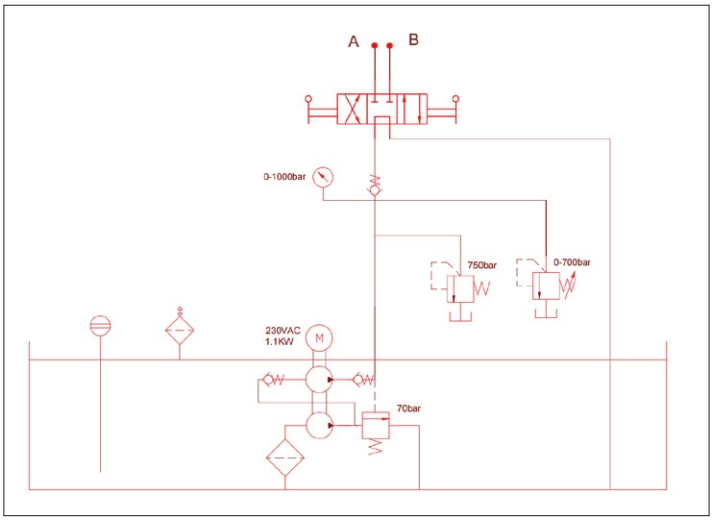
▼ HC4MV43 Outline Dimensional Drawing:



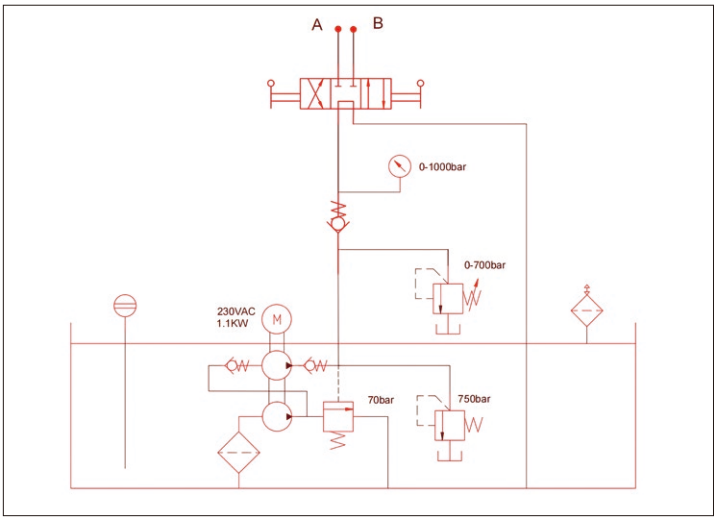
▼ HC4EVL43 Outline Dimensional Drawing:



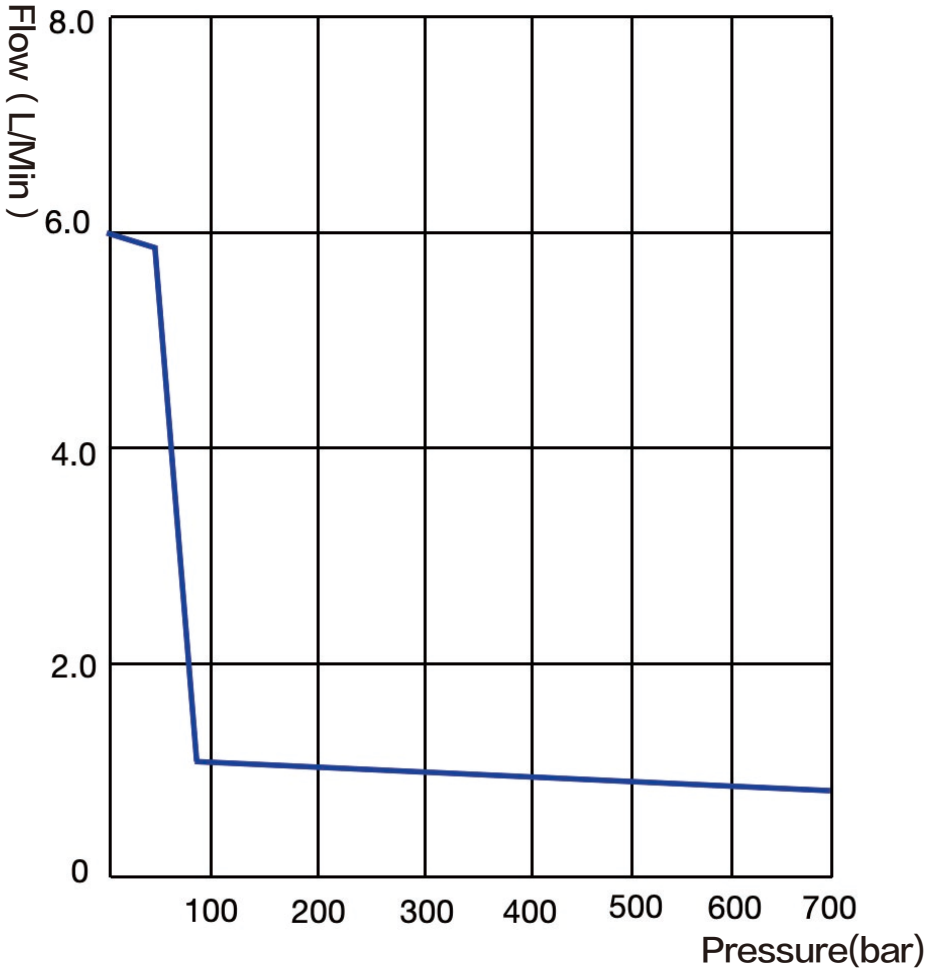
▼ HC4MV43 Hydraulic Schematic Diagram:



▼ HC4EVL43 Hydraulic Schematic Diagram:



▼ HC4 Flow-Pressure Curve:



▼ HE Heavy Duty Electric Hydraulic Pumps



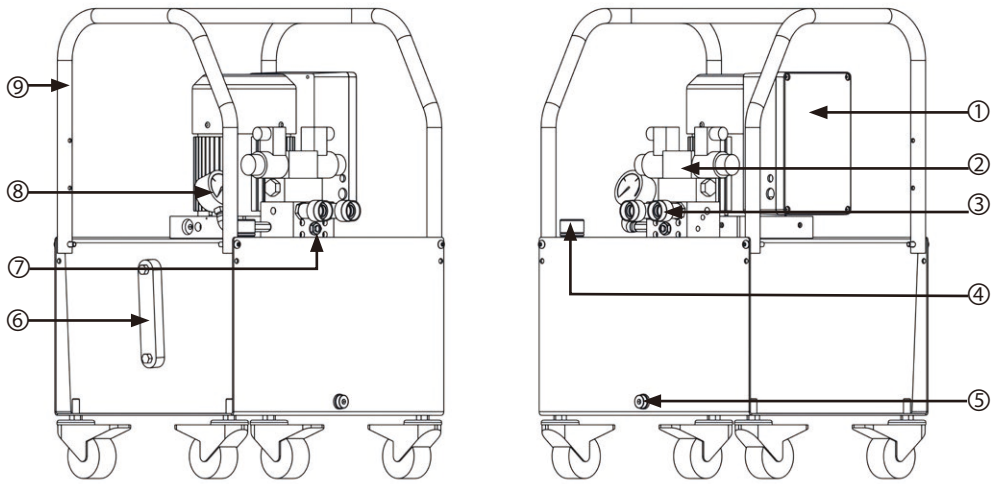
HE series	
Maximum output pressure:	70MPa
Motor size:	1.1KW-7.5KW
Low pressure flow:	7-20L/Min
High pressure flow:	0.7-4.2L/Min
Reservoirs capacity:	10-200L

•IEC brushless motor, maintenance-free
•Gear pump+radial piston pump two-stage pump structure, high efficiency
•Motor pump head integrated design, light weight
•75dB ultra-low noise
•Built-in safety valve, External adjustable relief valve
•Standard pressure gauge, threaded Oil Drain quick connector
•Standard visual Sight Glass, fuel outlet air filter, Oil Drain plug
•Standard pump start/stop switch, power plug cable
•Optional configuration: wire control handle, fuel tank lockable caster, protection frame, air cooled radiator, multiple valve groups, different operating voltages, etc

▼ HE series Type Specification Sheet:

Model Numbe	Optional voltage(VAC)	Power phase number	Motor size (KW)	Low pressure flow (L/Min)	High pressure flow (L/Min)
HE4	230（50HZ）/ 115（60HZ）	1	1.1	7	0.7
HE5	230（50HZ）/ 115（60HZ）	1	1.5	9	1
HE6	380/220	3	1.5	9	1
HE7	380/220	3	2.2	12	1.5
HE83	380/220V/440	3	3	12	1.8
HE84	380/660/440	3	4	12	2.3
HE95	380/660/440	3	5.5	20	3
HE97	380/660/440	3	7.5	20	4.2

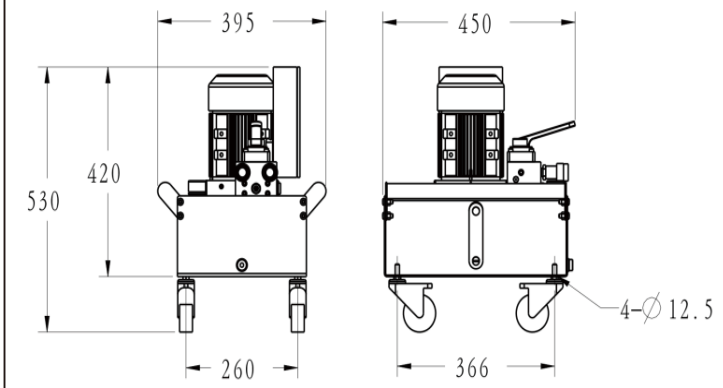
▼ HE Series Product Illustration:



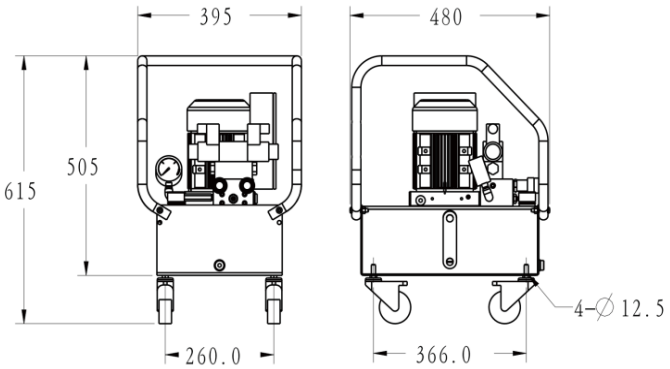
NO	Name
1	Electric Box
2	Solenoid Directional Valve
3	Couplers
4	Filler & Vent Port
5	Oil Drain
6	Sight Glass
7	Relief Valve
8	Gauge
9	Protected Framework

▼ HE series commonly used models outline size diagram:

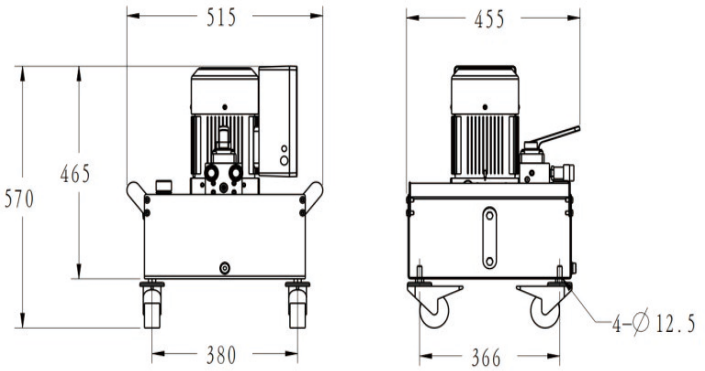
HE4010MV43W



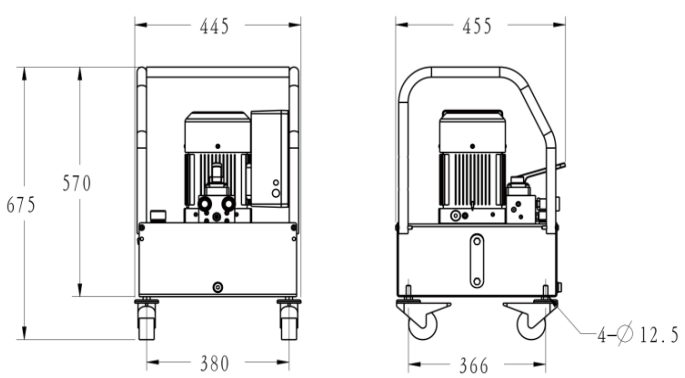
HE4010EVL43WLR



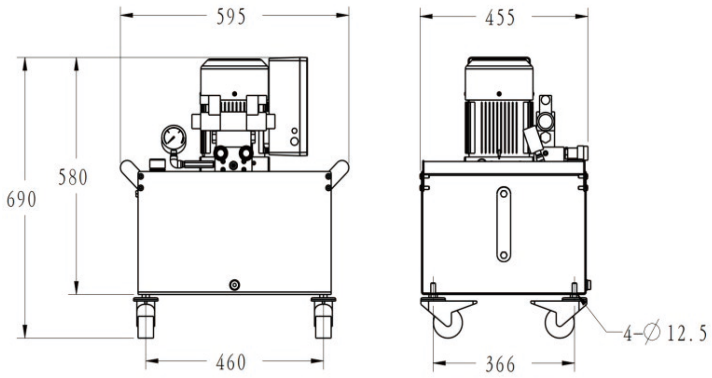
HE7020MV43W



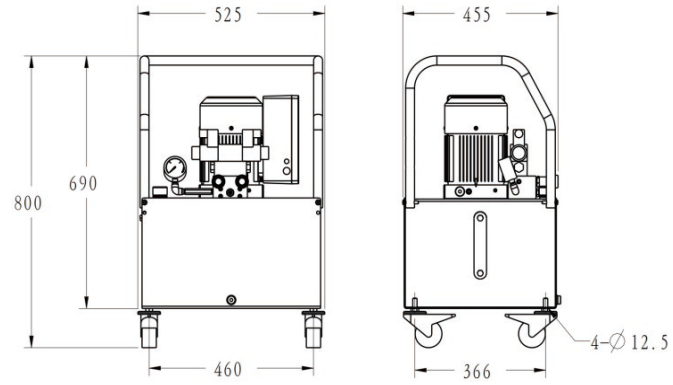
HE7020MV43WL



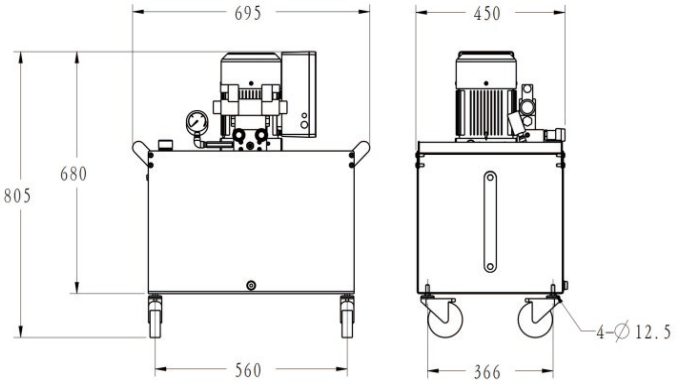
HE7040EVL43W



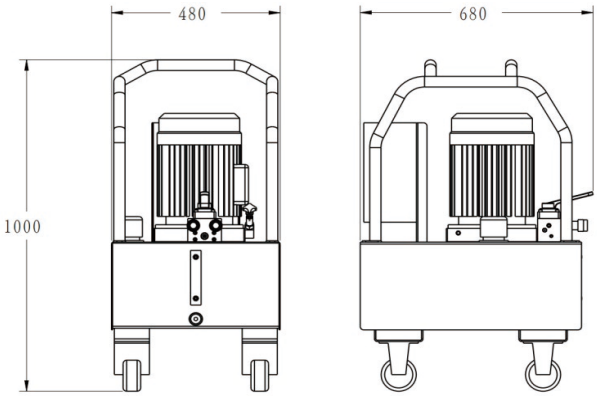
HE7040EVL43WL

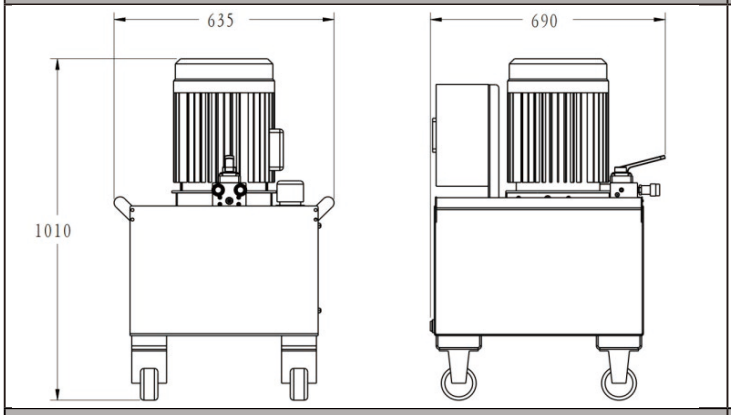
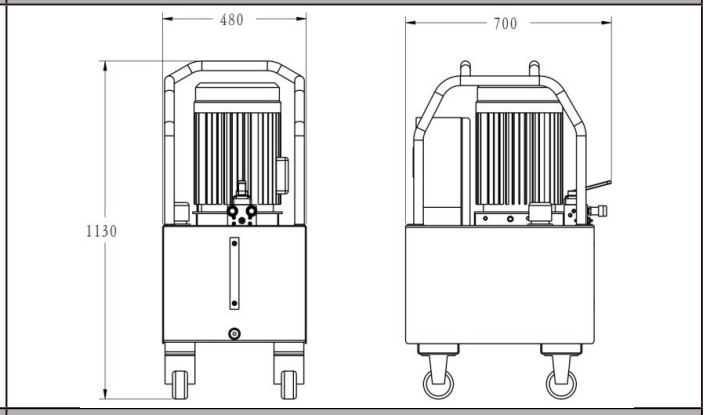
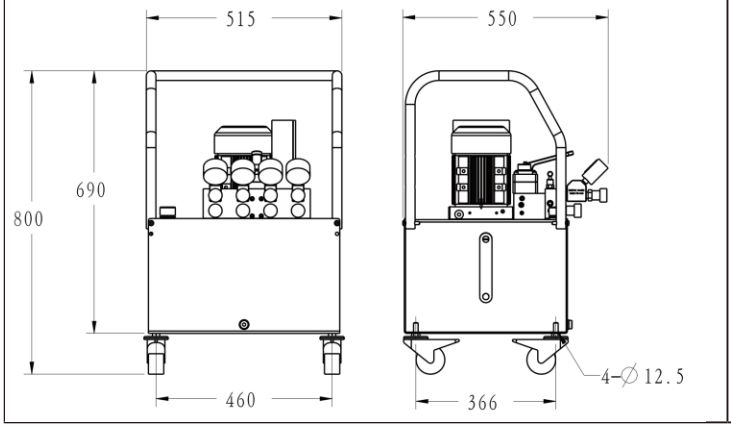
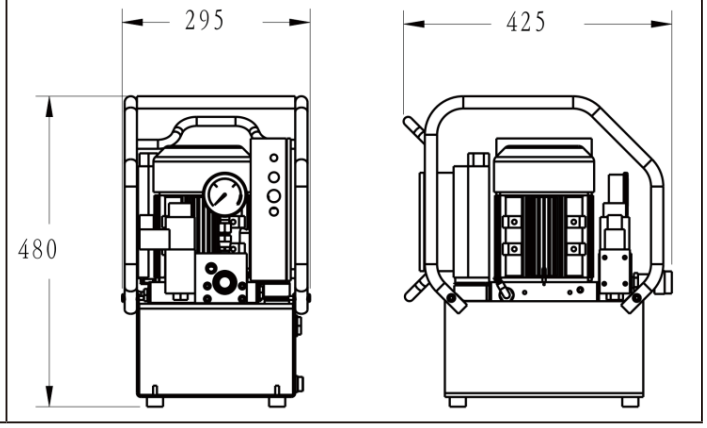


HE7080MV43W

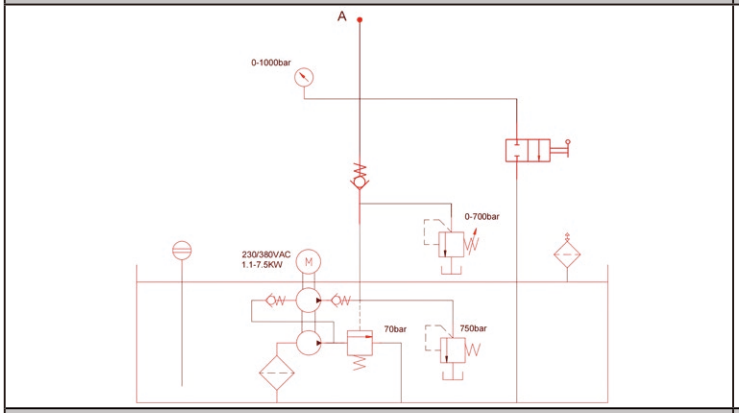
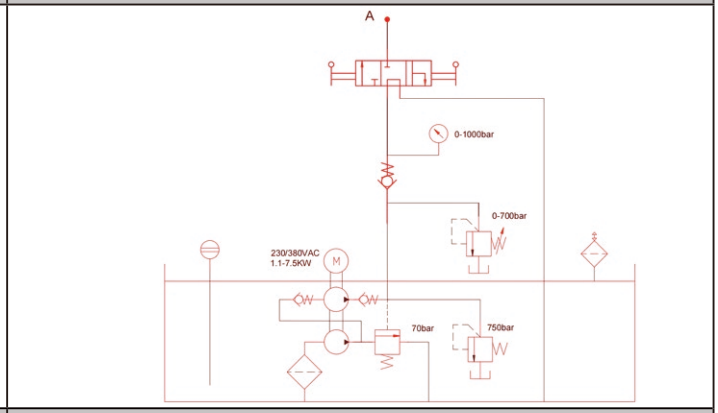
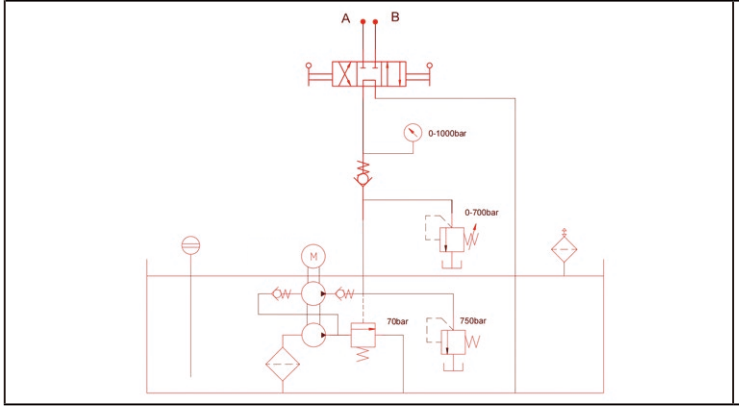
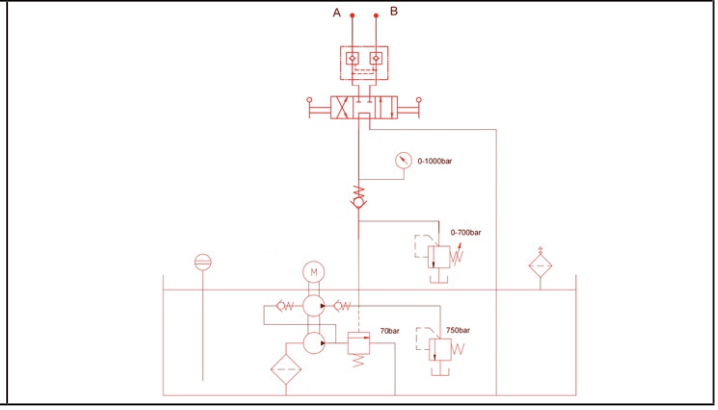


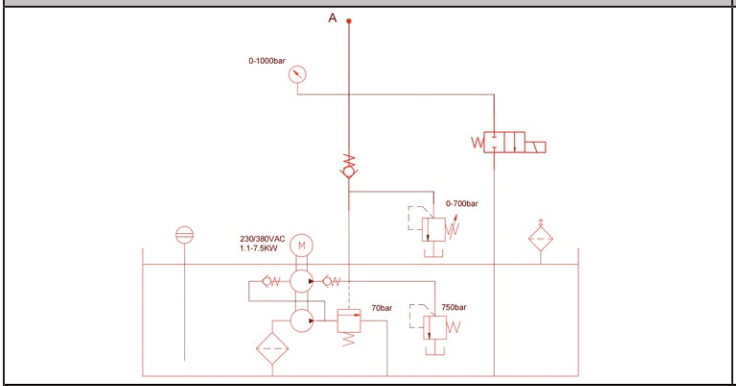
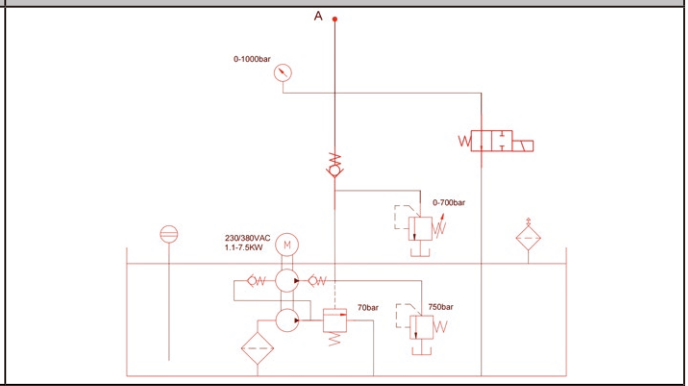
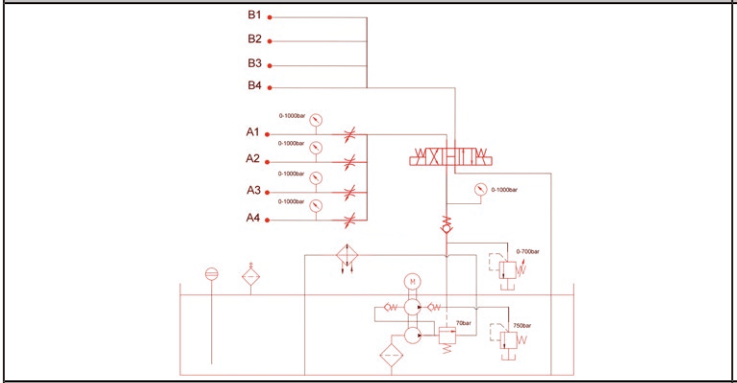
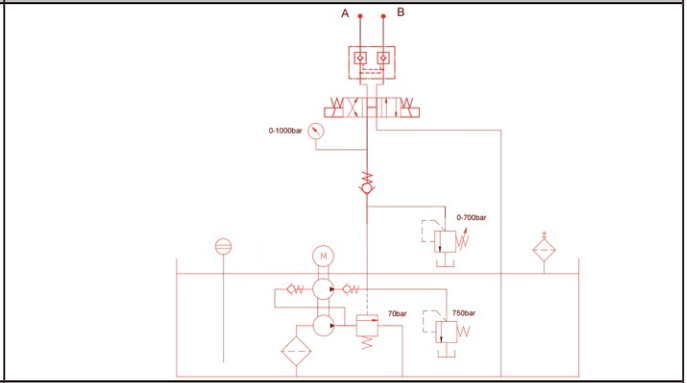
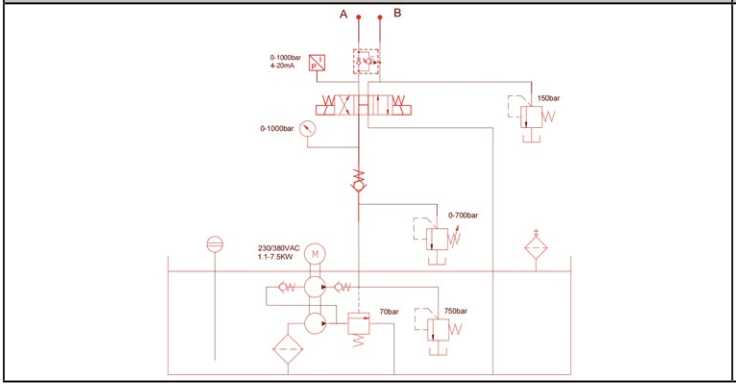
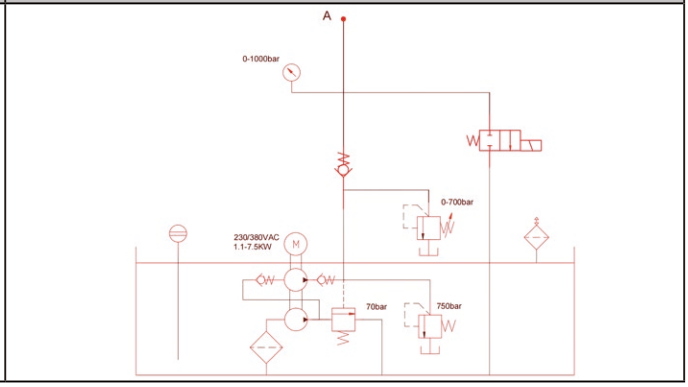
HE84060MV43WL



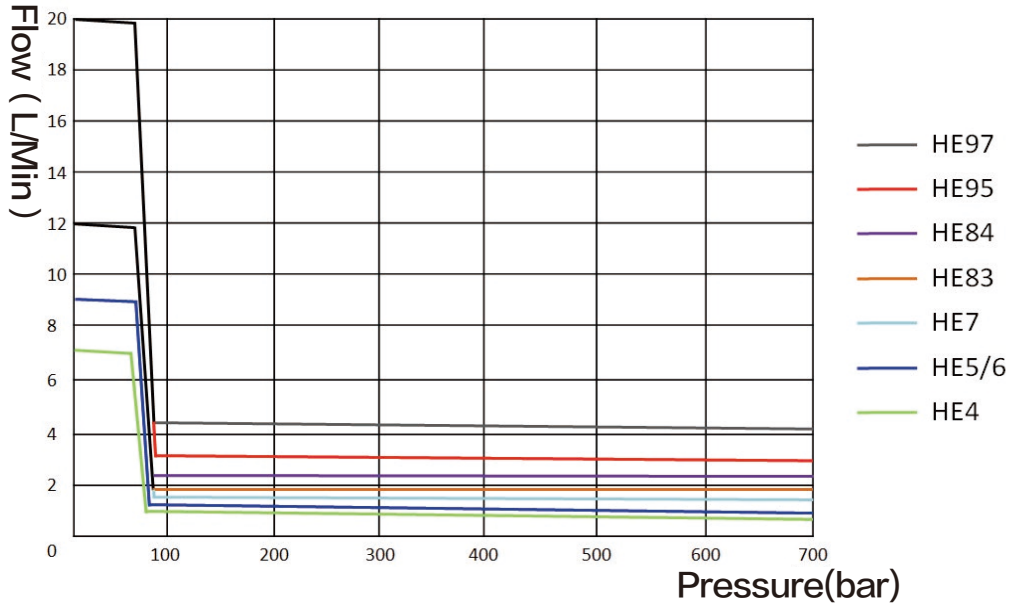
HE95100MV43W	HE97100MV43WL
	
HE4040MV43WLR-4DV-GA	**HE4005EV32FLR**
	

▼ Hydraulic schematic diagram:

HE-MV32	HE-MV33
	
HE-MV43	**HE-MVL43**
	

HE-EVC32	HE-EVO32
	
HE-EV43	**HE-EVL43**
	
HE-EVB43	**HE-HV22**
	

▼HE series pressure flow curve:



▼ HE Series Selection Table Tools:

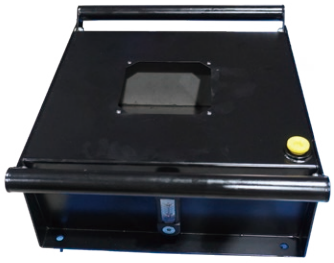
Power	Tank Capacity	Function	Caster	Air-cooled Radiator	Protected Framework	Control way	Multi-way Valve	Relief Valve
HE4 HE4(115V) HE5 HE5(115V) HE6 HE6(220V) HE7 HE7(220V) HE83 HE83(220V) HE83(440V) HE84 HE84(440V) HE84(660V) HE95 HE95(440V) HE95(660V) HE97 HE97(440V) HE97(660V)	▪010 ▪020 ▪040 ▪060 ▪080 ▪100 ▪200	▪MV32 ▪MV33 ▪MV43 ▪MVL43 ▪EVC32 ▪EVO32 ▪EV43 ▪EVL43 ▪EVB43	▪Blank (without casters) ▪W (with lockable casters)	▪ Blank (no air cooled radiator) ▪F (Configured radiator	▪Blank (standard handling handle) ▪L (full protection frame)	▪Blank (with pump start-stop switch) ▪R (wire handle)	▪Blank (without multiple valves) ▪-2SV(2-way single acting needle valve) ▪2SV-2GA ▪-2DV(2-way double acting needle valve) ▪2DV-2GA ▪-4SV(4-way single acting needle valve) ▪4SV-4GA ▪-4DV(4-way double acting needle valve) ▪4DV-4GA ▪-6SV(4-way single acting needle valve) ▪6SV-6GA ▪-6DV(4-way double acting needle valve) ▪6DV-6GA	▪ Blank ▪PRV1000 □Precision Relief Valve□

◆Tank capacity is the maximum oil capacity, unit L
◆ Valve group function please refer to the valve group function table
◆ A variety of other non-standard customization method is optional, For example, multi-way solenoid valve group, multi-way manual reversing valve group, foot switch, custom tank capacity shape, pressure sensor, pressure switch, pressure gauge, custom electrical control, different appearance color, etc. The above naming method does not represent the full range of supply, more options please consult for details

▼ Introduction to HE Series Selection:

Name	Characteristics
HE4	1.1KW,1PH,230VAC/50HZ
HE4(115V)	1.1KW,1PH,115VAC/60HZ
HE5	1.5KW,1PH,230VAC/50HZ
HE5(115V)	1.5KW,1PH,115VAC/60HZ
HE6	1.5KW,3PH,380VAC
HE6(220V)	1.5KW,3PH,220VAC
HE7	2.2KW,3PH,380VAC
HE7(220V)	2.2KW,3PH,220VAC
HE83	3KW,3PH,380VAC
HE83(220V)	3KW,3PH,220VAC
HE83(440V)	3KW,3PH,440VAC
HE84	4KW,3PH,380VAC
HE84(440V)	4KW,3PH,440VAC
HE84(660V)	4KW,3PH,660VAC
HE95	5.5KW,3PH,380VAC
HE95(440V)	5.5KW,3PH,440VAC
HE95(660V)	5.5KW,3PH,660VAC
HE97	7.5KW,3PH,380VAC
HE97(440V)	7.5KW,3PH,440VAC
HE97(660V)	7.5KW,3PH,660VAC

▼ Fuel tank capacity, frame and caster selection:

-10WL	-20W	-20WL	-40
			
-20	**-40W**	**-40WL**	**-60W**
			

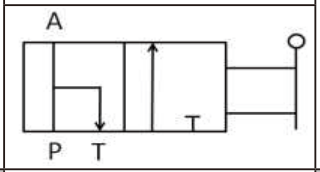
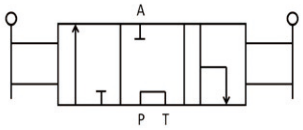
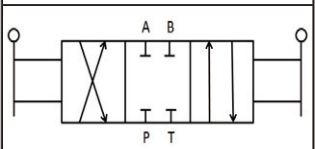
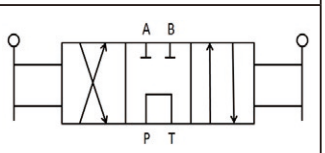
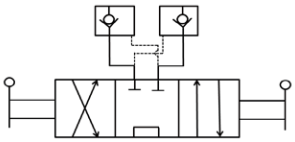
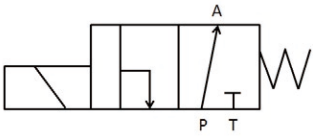
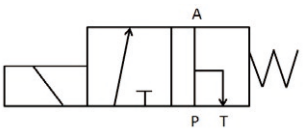
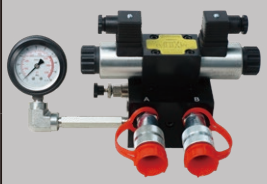
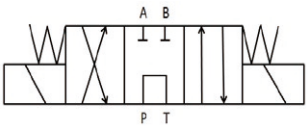
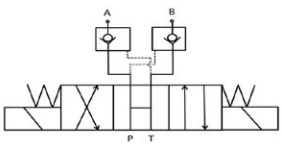
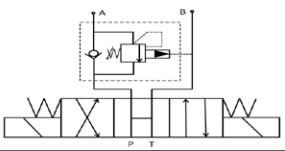
◆The above display pictures do not represent the entire supply scope. For more options, please consult in detail.

▼ Air-cooled Radiator:

-F (220V)	-F (380V)
	

▼ Control method:

-R□Single-button handle□	-R □Dual-button handle□
	
-R □Three-button handle□	**-RC□Digital-display handle□**
	

Name	Image	Functions	Name	Image	Functions
MV32		Manual Control, Single Acting, Advance/Hold/Retract, Zero Leakage 	MV33		Manual Control, Single Acting, Advance/Hold/Retract, Micro Leakage 
MV43-O		Manual Control, Double Acting, Advance/Hold/Retract, Micro Leakage 	MV43-M		Manual Control, Double Acting, Advance/Hold/Retract, Micro Leakage 
MV43L		Manual Control, Double Acting, Advance/Hold/Retract, Zero Leakage With Load Holding Valve 	EVC32		Solenoid Valve Control, Single Acting, Advance/Hold/Retract, Micro Leakage 
EVO32		Solenoid Valve Control, Single Acting, Advance/Retract 	EV43-M		Solenoid Valve Control, Double Acting, Advance/Hold/Retract, Micro Leakage 
EVL43		Solenoid Valve Control, Double Acting, Advance/Hold/Retract, Zero Leakage, With Load Holding Valve 	EVB43		Solenoid Valve Control,Double Acting,Advance/Hold/Retract, Zero Leakage, With Load Lowering Valve 

▼ Multi-Way Valve Selection

2SV	2DV	4SV	4DV
			

▼ PRV Precision Relief Valve

PRV1000


▼ Examples of Typical Models:

HE4010MV32-PRV	HE4010MV43	HE4010MV43R	HE7040EVL43LR
			
HE6040EVL43R	**HE5010MV43W**	**HE4010EVL43WFLR**	**HE84040EVL43WR**
			

HE7040MV43W-4DV	HE83080MV43WL	HE4010MV32-2SV-PRV	HE4010MV32-4SV-PRV
			
HE5010MV43R-2DV	HE4010MV43WFLR-2DV	HE4040EVL43RLF	HE5040MV32-10SV-PRV
			
HE4010MV33-6SV	HE84080MV33WL-4SV	HE7040MV43W-4DV	HE4010MV43(2)
			
HE5010EVL43(4)RL	HE4010EVL43(2)R	HE4007EVO32WFLP	HE83040EVO32WLP
			

Hydraulic Oil Cylinder Pumps（70MPa）

HE4005EVL43FLR	HE7(2)080EVB43-2R	HE4010MV43R-2SV-115/60	HE4005MV32L
			
HE6020EVL43R	HE97100MV43(2)WL	HE95080MV43-2-WLR	HE97150MV43WLR
			
HE7080MV43W-4DV-4GA	HE97080MV43(2)WL	HE97080MV43(2)WL	HE97150MV43WLR-PRV
			
HE97080EVB43RW	HE7020MV33LR-4SV	HE84040MV33WL-4SV-PRV	HE97300MV43W
			

▼ HA Series Pneumatic Hydraulic Pumps



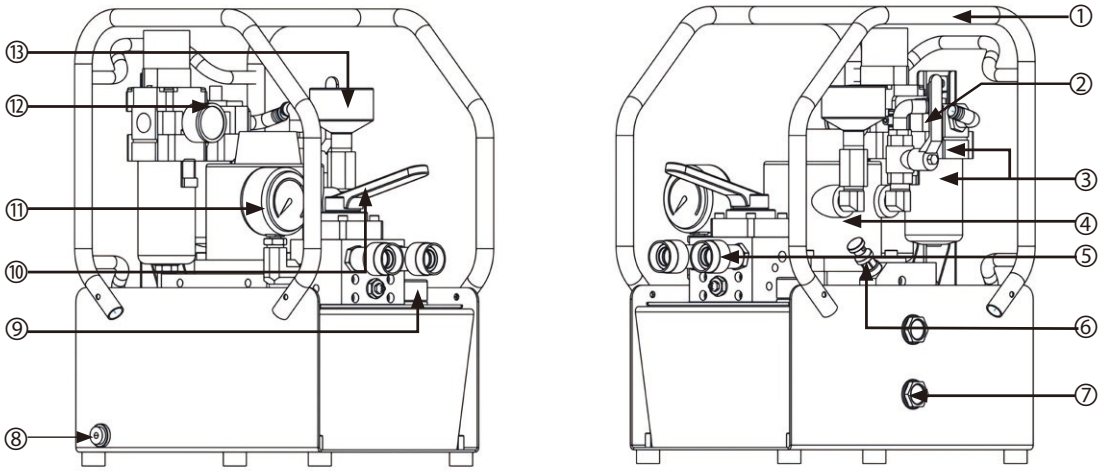
Motor size:	1.5/5.4KW
Maximum output pressure:	70MPa
Low pressure flow:	7/15L/Min
Medium pressure flow:	4L/Min
High pressure flow:	1/2L/Min
Reservoirs capacity:	

•Equipped with a pneumatic service unit
•Motor start ball valve for easy on/off operation
•Optional single-acting & double-acting manual directional control valves
•Built-in safety valve and external adjustable relief valve
•Standard pressure gauge and air pressure gauge
•Steel oil tank with full protective frame

▼ HA Series Pneumatic Pumps Specification Sheet:

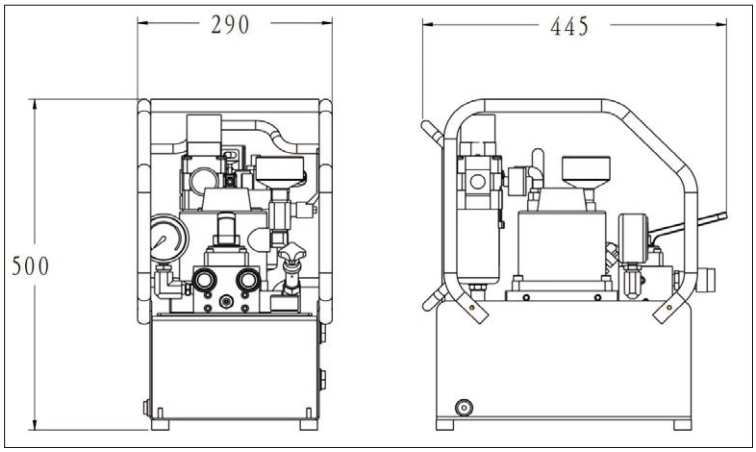
Model	Motor size	Maximum air consumption	Reservoirs capacity	Low Pressure Flow	Medium Pressure Flow	High Pressure Flow	Weight Without Oil
HA5007MV32	1.5KW	220M^3/H	7L	7L/Min	-	1L/Min	36KG
HA5007MV43	1.5KW	220M^3/H	7L	7L/Min	-	1L/Min	48KG
HA5020MV32	1.5KW	220M^3/H	20L	7L/Min	-	1L/Min	48KG
HA5020MV43	1.5KW	220M^3/H	20L	7L/Min	-	1L/Min	48KG
HA6040MV32	5.4KW	396M^3/H	40L	15L/Min	4L/Min	2L/Min	70KG
HA6040MV43	5.4KW	396M^3/H	40L	15L/Min	4L/Min	2L/Min	70KG

▼ HA5 Product Illustration:

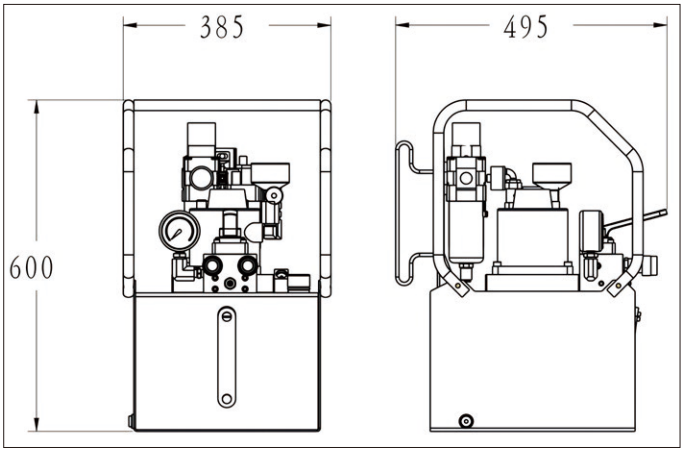


NO	Name
1	Protected Framework
2	Ball valve switch
3	triplet
4	Air Motor
5	Couplers
6	Relief Valve
7	Sight Glass
8	Oil Drain
9	Refueling And Exhaust Outlet
10	Manual Directional Valve
11	Gauge
12	Barometer
13	Suppressor

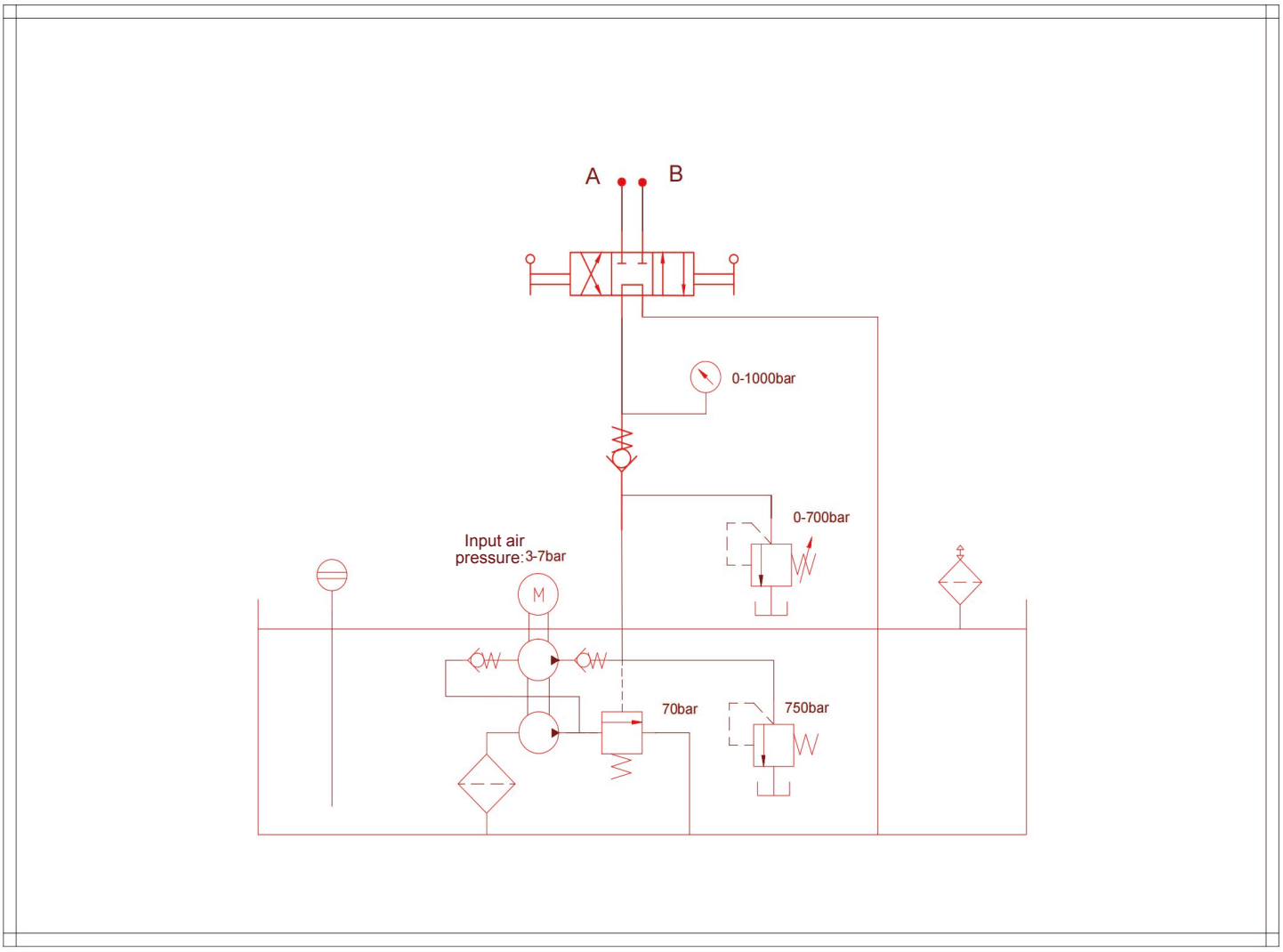
▼ HA5007MV43 Outline Drawing:



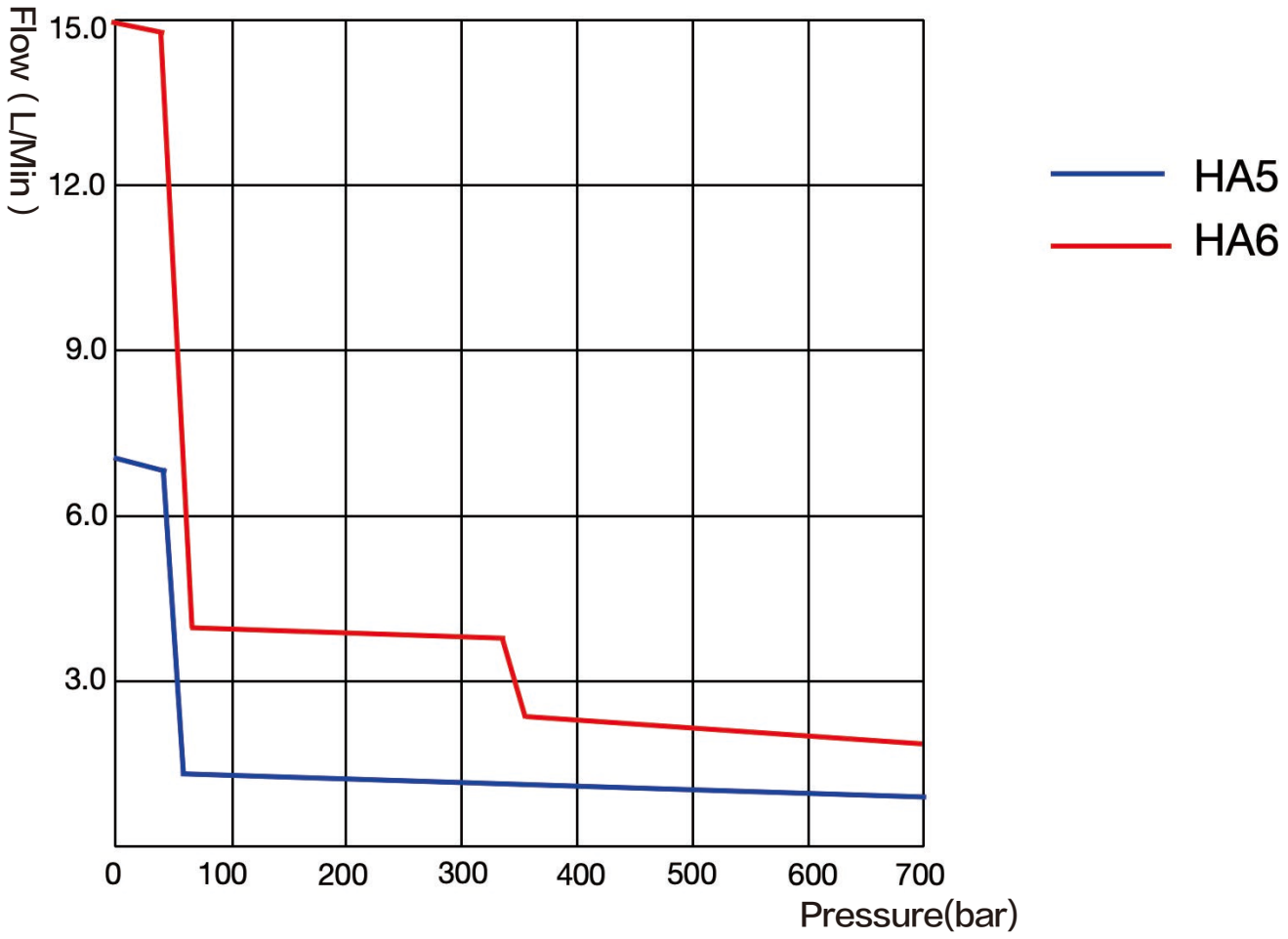
▼ HA5007MV43 Outline Drawing:



▼ HA Series Pneumatic Pump Hydraulic Schematic Diagram:



▼ HA Series Pneumatic Pump Pressure Flow Diagram:



▼ HSE700AT Servo Intelligent Pressure Pumps



Maximum output pressure:	70MPa
Motor size:	1KW/1.5KW
Low pressure flow:	5/6.4L/Min
High pressure flow:	0.6/0.85L/Min
Reservoirs capacity:	20/60L

- Configure PLC touch screen, built-in automatic pressure control program
- Set the target pressure after one key start, pressure automatic maintenance
- pressure holding accuracy can be set, 0.3-5MPa Control accuracy
- Real-time recording of pressure-time curve
- External adjustable pressure limiting valve
- With boost pressure timeout alarm nd sensor signal alarm function
- Display unit MPa/BAR/psi/KN can be switched
- Equipped with liquid level sensor, with oil temperature level alarm function

▼ Main interface display:

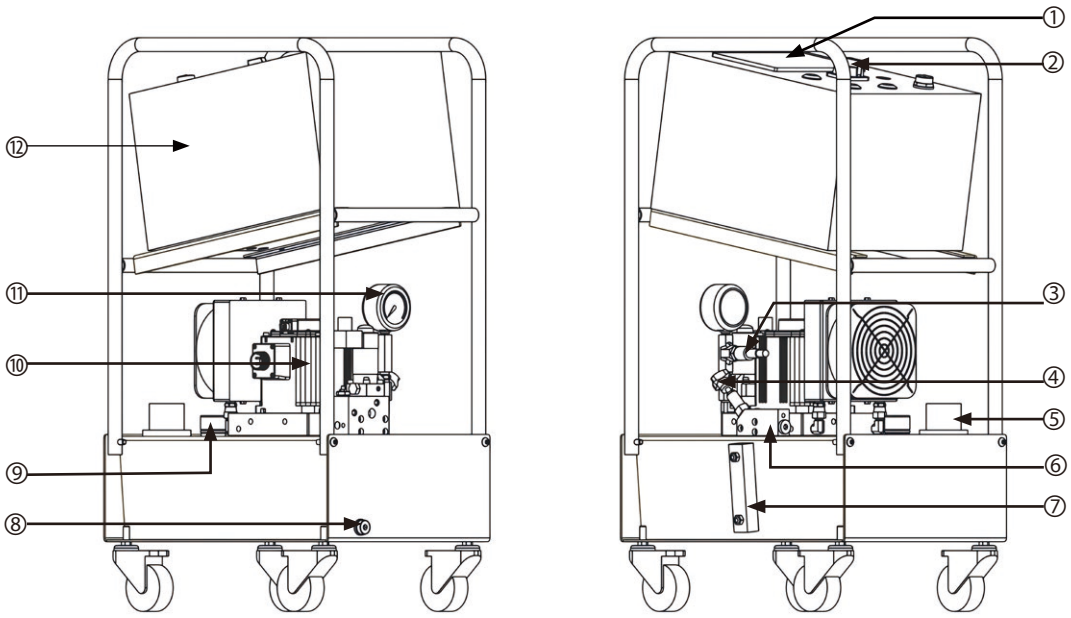




▼ HSE Series Type Specification Sheet:

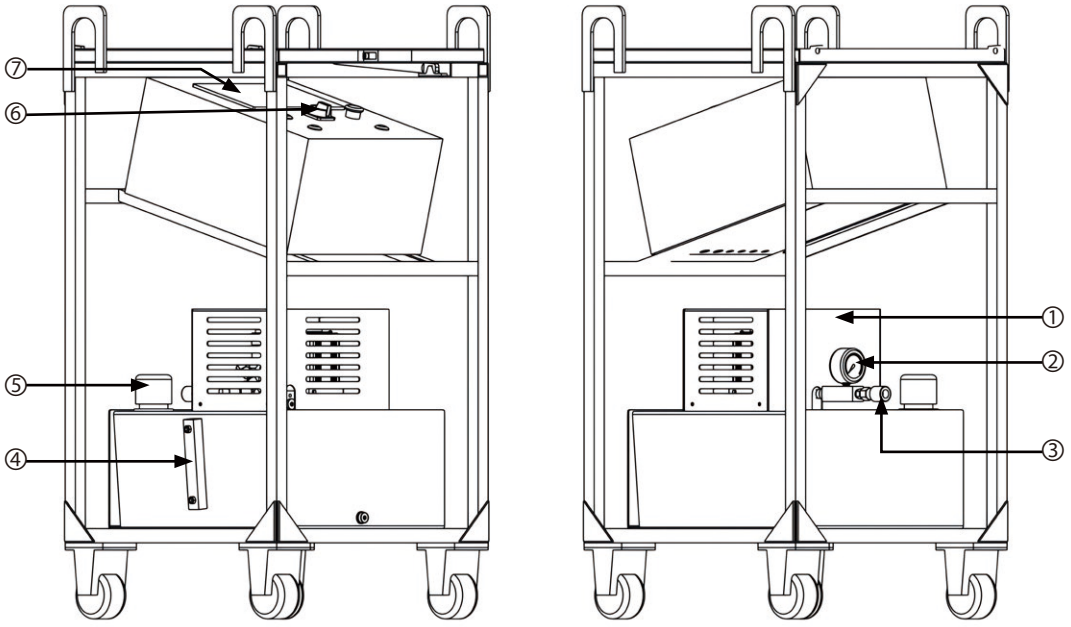
Model Number	Voltage	Motor Size	High Pressure Flow	Low Pressure Flow	Reservoirs capacity	Touch screen size	Weight without oil
HSE700AT20	230VAC	1KW	0.6L/Min	5L/Min	20L	7inches	53KG
HSE700AT60	230VAC	1.5KW	0.85L/Min	6.4L/min	60L	10inches	123KG

▼ HSE700AT20 Product Illustration:



NO	Name
1	PLC touch screen
2	Mains switch
3	Pressure Transducer
4	Relief Valve
5	Level And Temperature Transducer
6	Pilot relief valve block
7	Sight Glass
8	Oil Drain
9	Refueling And Exhaust Outlet
10	Motor
11	Gauge
12	Electric Box

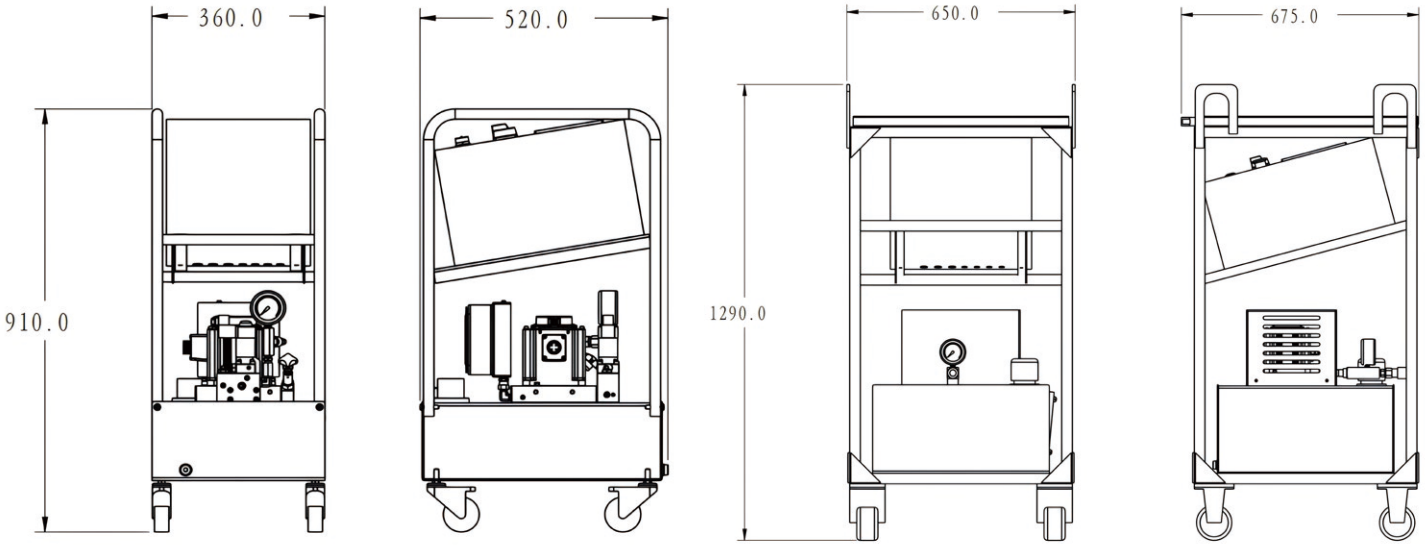
▼ HSE700AT60 Product Illustration:



NO	Name
1	Shield
2	Gauge
3	Couplers
4	Sight Glass
5	Refueling And Exhaust Outlet
6	Mains switch
7	PLC touch screen

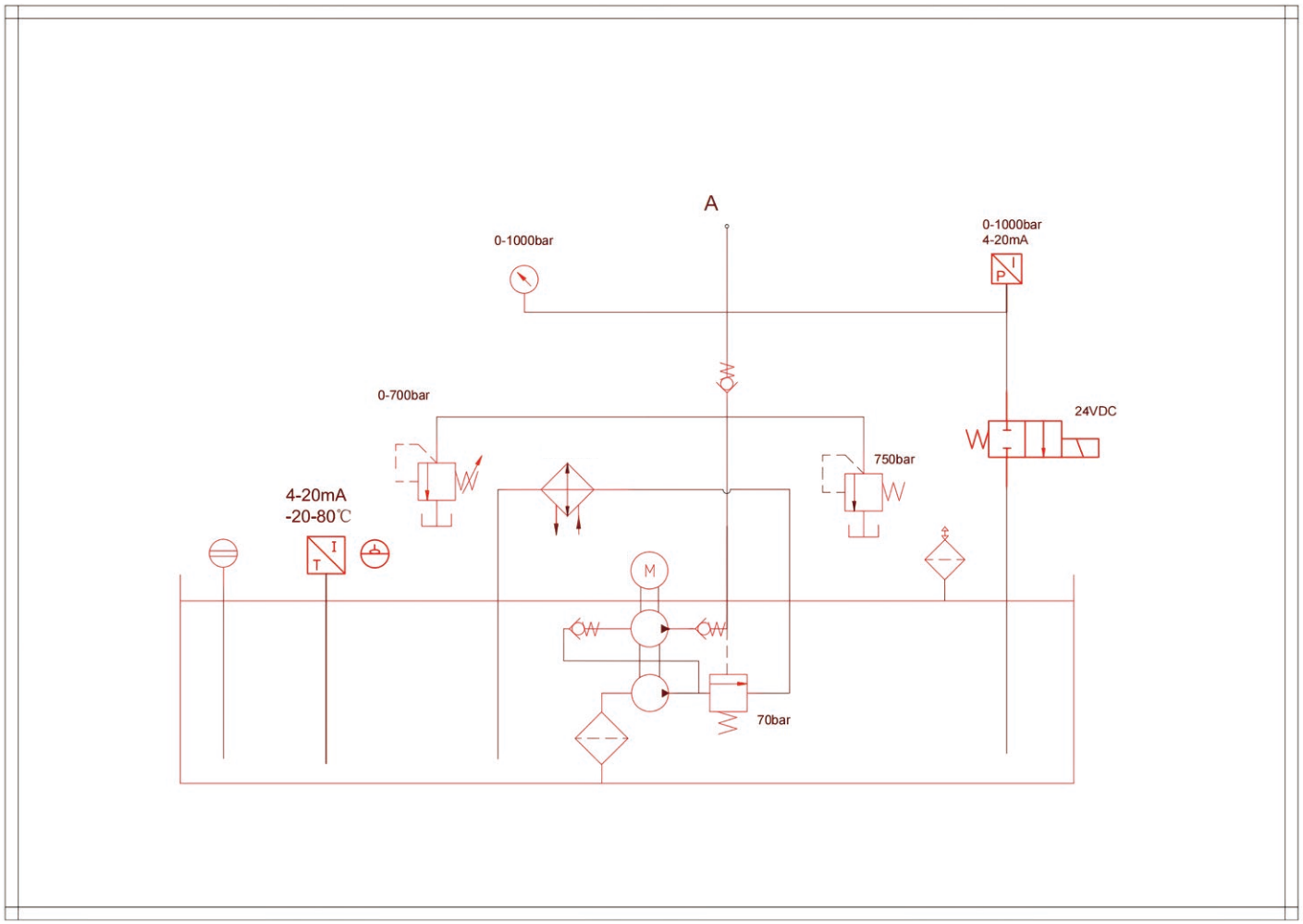
♦ The guard is equipped with servo motor, solenoid valve, pressure sensor and external safety valve.

▼ HSE series Outline Dimensional Drawing:

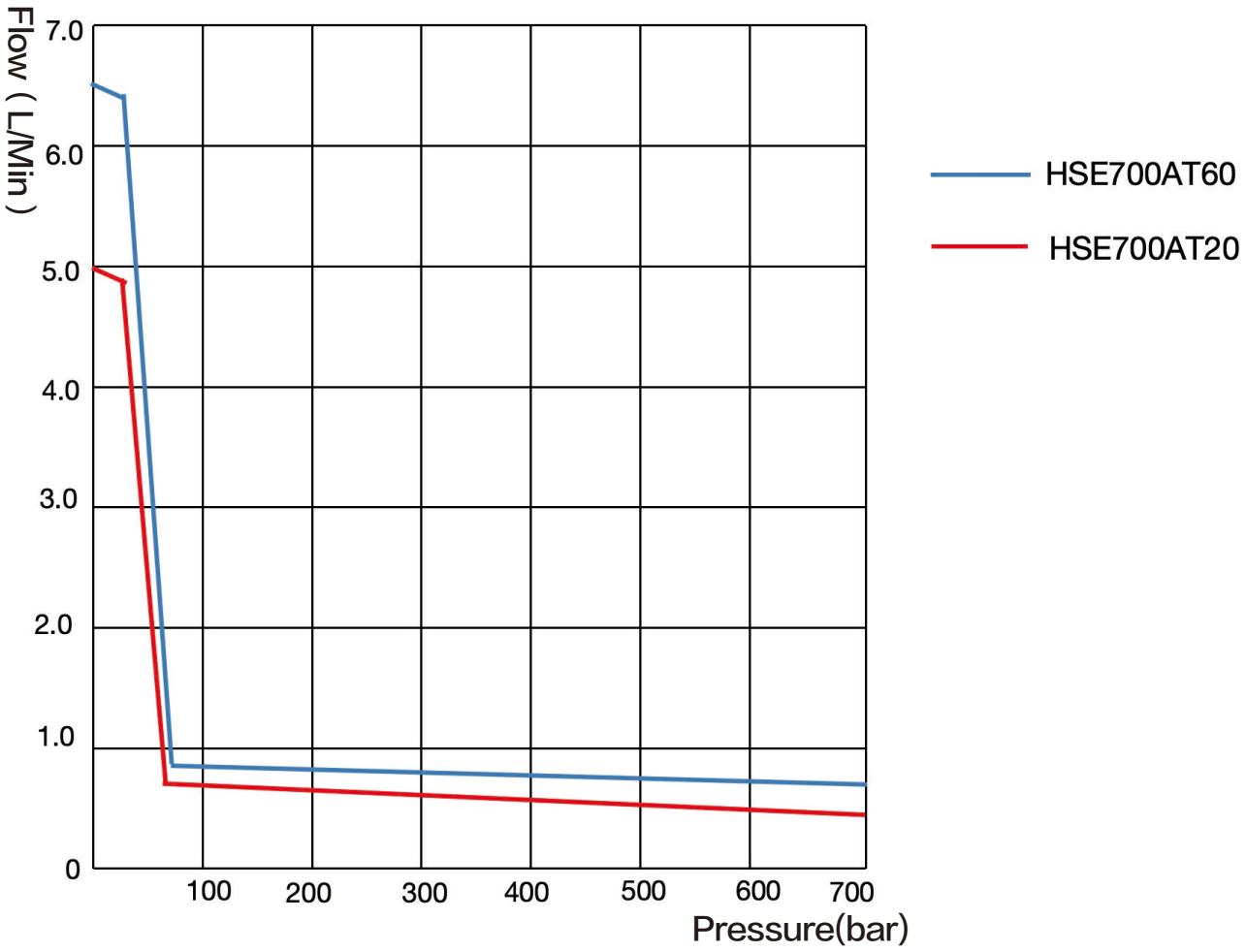


HSE700AT20　　HSE700AT60

▼ HSE series Hydraulic Schematic Diagram:



▼ HSE Hydraulic Schematic Diagram:



▼BTW700 Lithium Battery Digital Wrench Pumps



Maximum output pressure:	70MPa
Power size:	750W
Low pressure flow:	4.8L/Min
High pressure flow:	0.45L/Min

•The integrated frame is designed with a built-in cable winder, which facilitates the storage of control cables.
•It is equipped with a precision pressure regulating valve that can lock the pressure when the target pressure is reached.
•A servo motor is installed, and the working noise is below 75dB.
•It comes standard with one 26AH high-capacity lithium battery, providing long - lasting power.
•The lithium battery can be purchased separately, and a charger is included as standard for the battery.
•It is equipped with a pressure gauge and a couplers. The pressure gauge can be quickly disassembled and assembled without rotation.
•A 6-meter digital display handle is included as standard. The handle can monitor the real - time pressure value.
•An electromagnetic automatic exhaust valve is installed, which automatically opens the intake and exhaust functions when powered on.

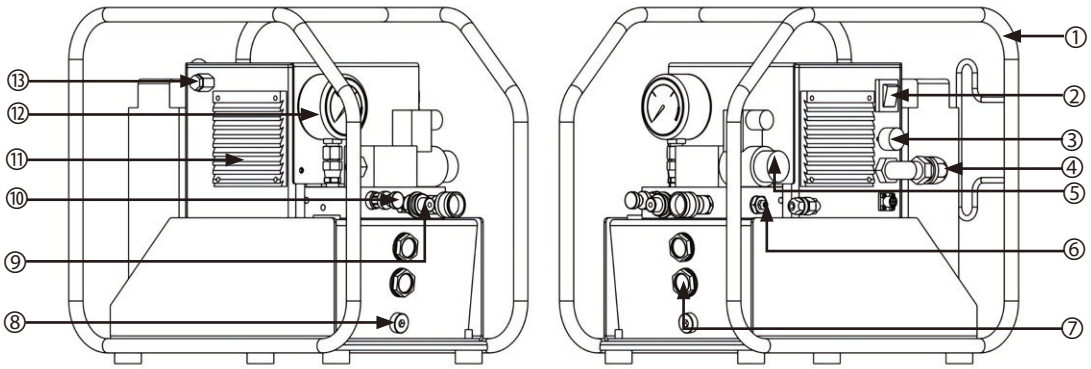
▼ BTW700 Type Specification Sheet:

Model	Voltage	Power Size	Low-pressure Flow	High-pressure Flow	Tank Capacity	Weight without Oil	Number of Oil Outlets
BTW700	48VDC	750W	4.8L/Min	0.45L/Min	5L	26KG	2

▼ BTW700 Packaging list

Model	Specification	Quantity
BTW700	Lithium battery wrench pump	1
BP-B4826	Lithium battery, 48V 26AH	1
Quick charger	48V ⎓ 5A	1

▼ BTW700 Product Illustration:



NO	Name
1	Protection Frame
2	Main Switch
3	Motor Speed Knob
4	Battery Connection Cable
5	Solenoid Directional Valve
6	R Port Pressure Limiting Valve
7	Oil Level Gauge
8	Oil Drain Port
9	Quick Connector
10	Relief Valve
11	Heat Dissipation Port
12	Pressure Gauge
13	Exhaust Port

▼Introduction to the BP-B4826 lithium battery



♦BP-B4826 lithium battery can be purchased separately.

Technical Features:

Safety Protection:

- •Built-in High-quality BMS Battery Management System: This system can accurately monitor and manage the charging and discharging processes of the battery, ensuring the safe and stable operation of the battery. It effectively prevents issues such as overcharging, over-discharging, and overheating, extends the battery's service life, and improves the battery's utilization efficiency.
- •Overcharge Protection: Effectively prevents the battery from overcharging, avoiding battery damage or safety hazards caused by overcharging.
- •Over-discharge Protection: Prevents the battery from over-discharging, extending the battery's service life and ensuring safe use.
- •Over-temperature Protection: Automatically protects the battery when it is in an over-temperature state, preventing various risks caused by high temperatures.
- •Short-circuit Protection: The fuse automatically protects the battery in case of a short circuit, avoiding equipment damage caused by short circuits.
- •PTC Protection: It can balance temperature and current, providing comprehensive safety protection.

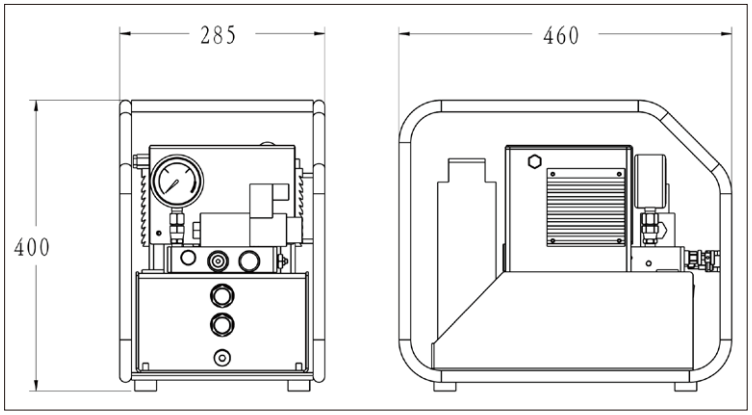
Performance:

- •Powerful Performance: Equipped with an intelligent chip, the product performs excellently in operation and processing.
- •Large Capacity: It has a large capacity, meeting more usage requirements.
- •Portable Design: The product is designed for easy carrying, facilitating users in various scenarios.
- •Shock and Impact Resistance: It has the ability to resist shock and impact, effectively protecting internal components when subjected to external forces and improving the product's durability.

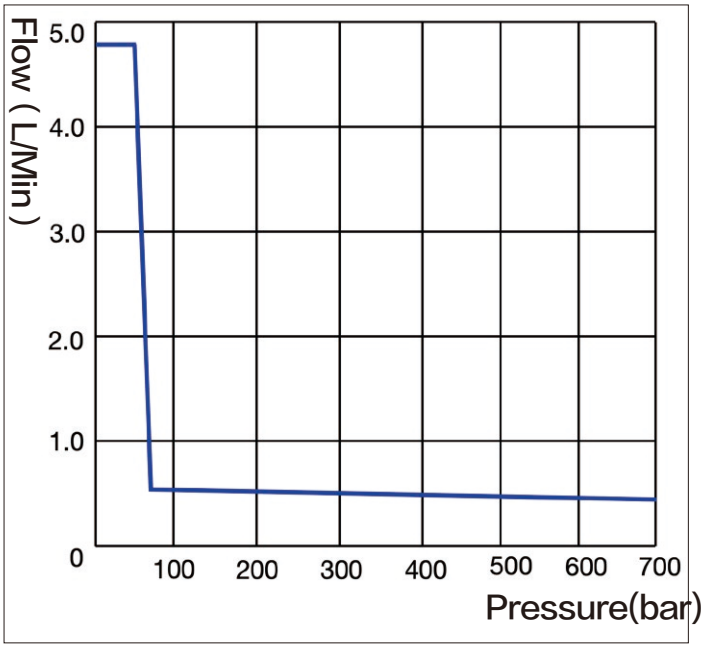
▼BP-B4826 Packaging list

Model	Specification	Quantity
BP-B4826	Lithium battery, 48V 26AH	1
Quick charger	48V ⎓ 5A	1
Carton	Carton packaging	1

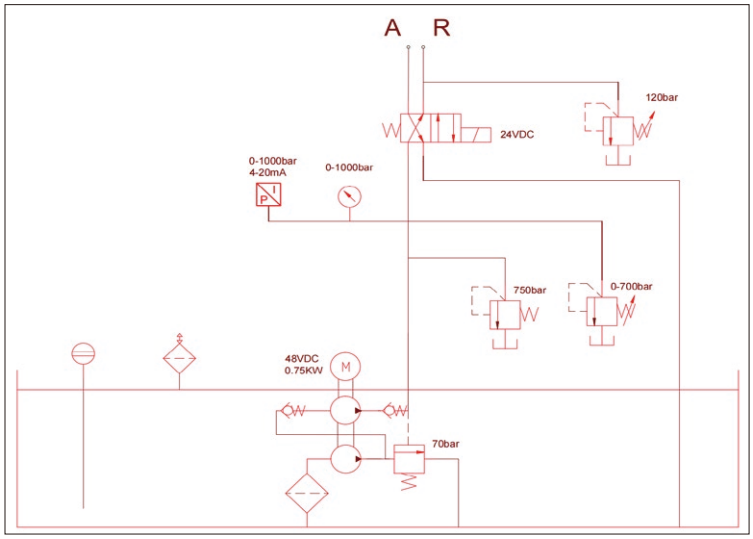
▼BTW700 Outline Dimensional Drawing:



▼BTW700 Pressure Flow Diagram:



▼ BTW700 Hydraulic Schematic Diagram:



▼HATW Air Hydraulic Wrench Pumps



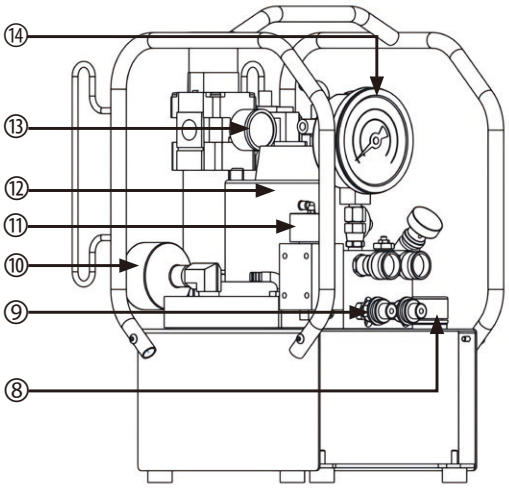
Motor size:	1.5KW
Low pressure flow:	7L/Min
Low pressure flow:	7L/Min
High pressure flow:	1L/Min
Reservoirs capacity:	5L

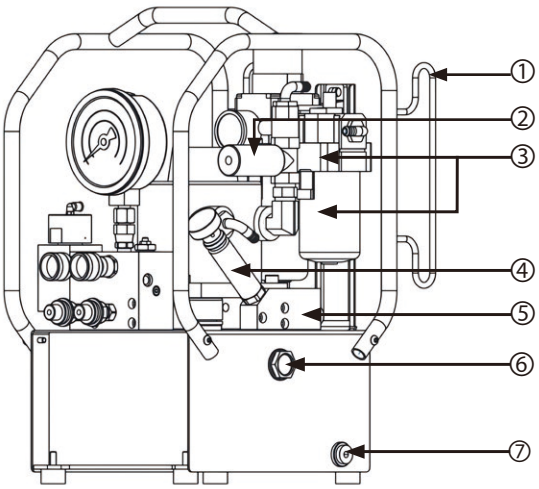
- High-power pneumatic motor for high working efficiency
- One-input-two-output design
- Standard air source triple unit
- High-efficiency silencer for effective noise reduction
- Immersion-type air cooling design for effective oil temperature reduction
- 6-meter metal pneumatic control handle with threaded tubing for the pneumatic control line — reliable and durable
- Tool-free pressure gauge mounting for easy installation and removal
- Equipped with a hose reel for convenient collection of the control air hose
- HA6TW three-stage flow control for improved efficiency

▼ HATW Type Specification Sheet:

Model	Motor Power	Maximum Air Consumption	Usable Oil Capacity	Low Pressure Flow	Medium Pressure Flow	High Pressure Flow	Number of Driven Wrenches	Weight (Without Oil)
HA5TW-2	3KW	220M^3/H	5L	7L/Min	-	1L/Min	2	27KG
HA5TW-4	3KW	220M^3/H	5L	7L/Min	-	1L/Min	4	29KG
HA6TW-4	5.4KW	396M^3/H	10L	15L/Min	4L/Min	2L/Min	4	56KG

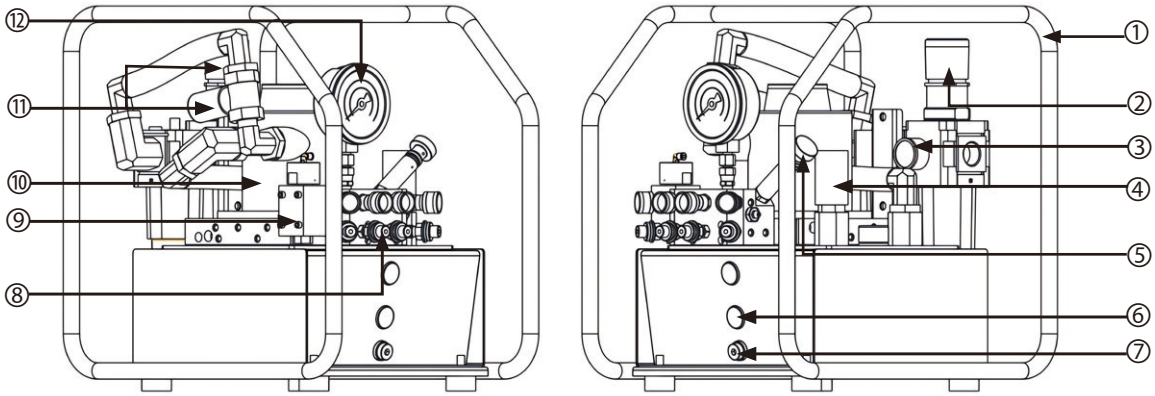
▼ HA5TW Product Illustration:





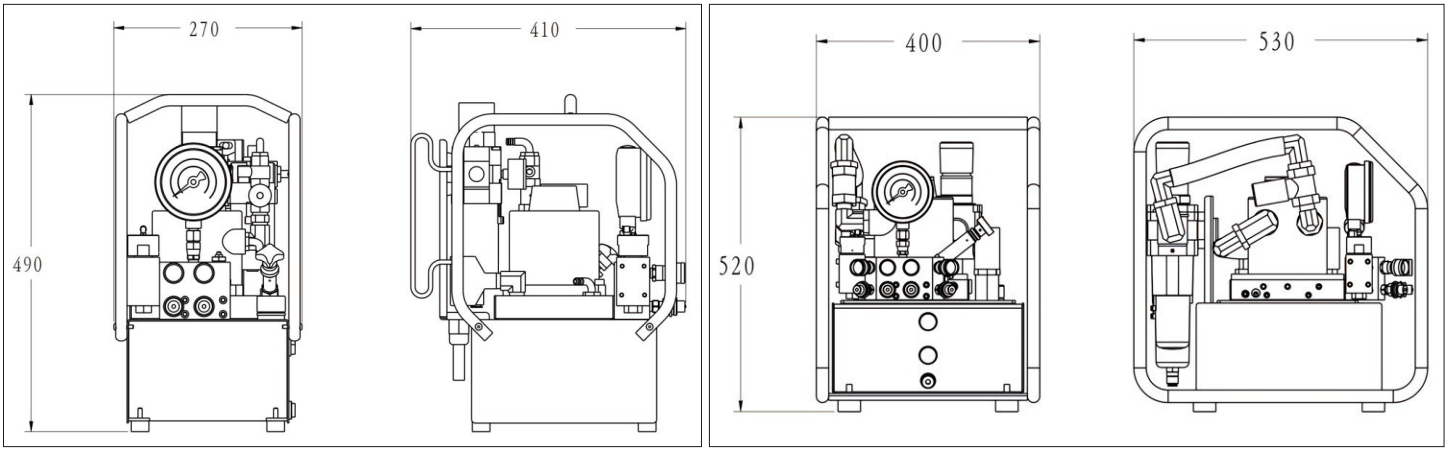
NO	Name
1	Wire winder
2	Pneumatic switch
3	Triplet
4	Relief Valve
5	Pilot Relief Valve Block
6	Sight Glass
7	Oil Drain
8	Refueling And Exhaust Outlet
9	Couplers
10	Suppressor
11	Air controlled directional valve
12	Air Motor
13	Barometer
14	Gauge

▼ HA6TW Product illustration:

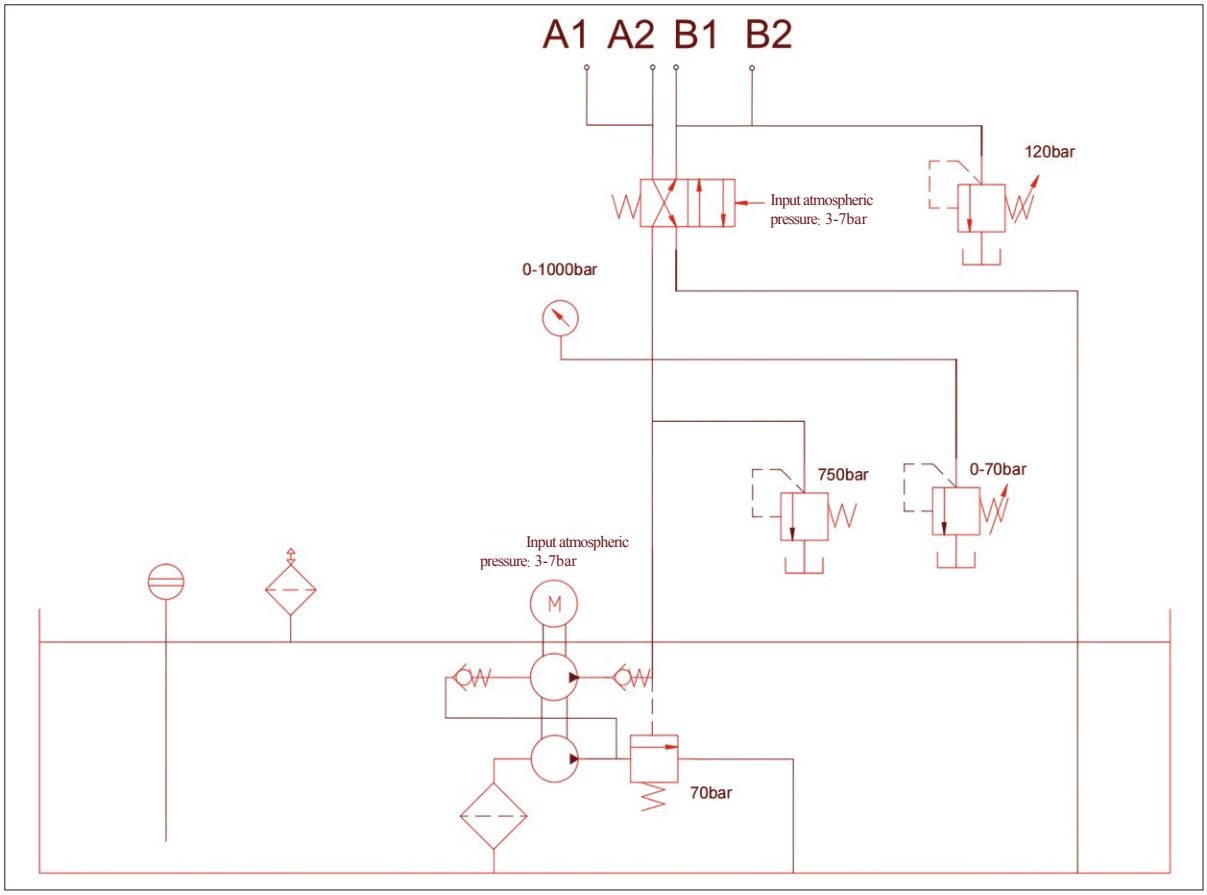


No.	Item Name
1	Protective Frame
2	Air Service Unit
3	Air Pressure Gauge
4	Silencer
5	Pressure Regulator
6	Oil Level Gauge
7	Oil Drain Port
8	Quick Coupler
9	Pneumatically Operated Directional Valve
10	Pneumatic Motor
11	Pneumatic Control Switch
12	Pressure Gauge

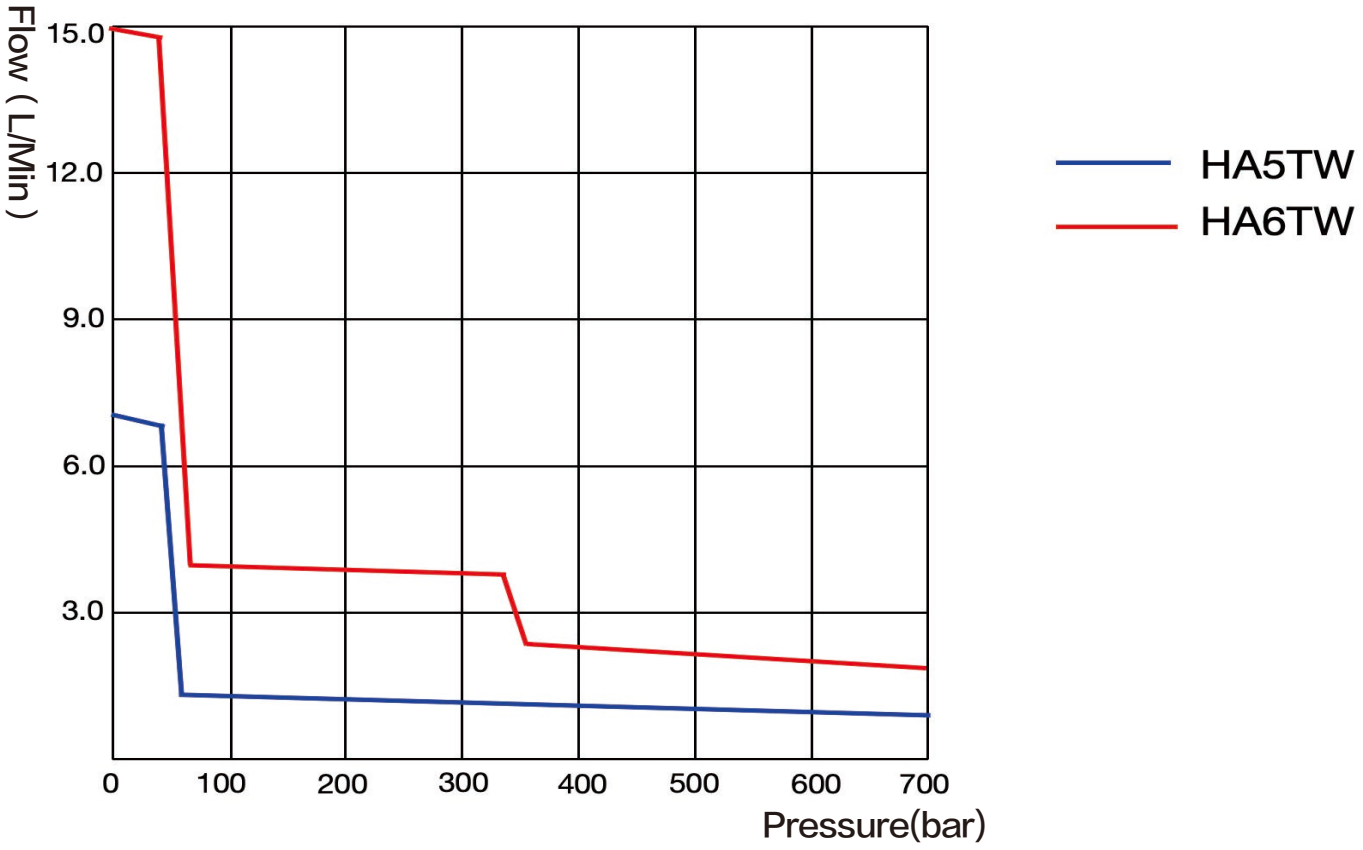
▼ HATW Outline Dimensional Drawing:



▼ HATW Hydraulic Schematic Diagram:



▼ HATW Pressure-Flow Diagram:



▼HSTW Intelligent Electric Hydraulic Wrench Pump



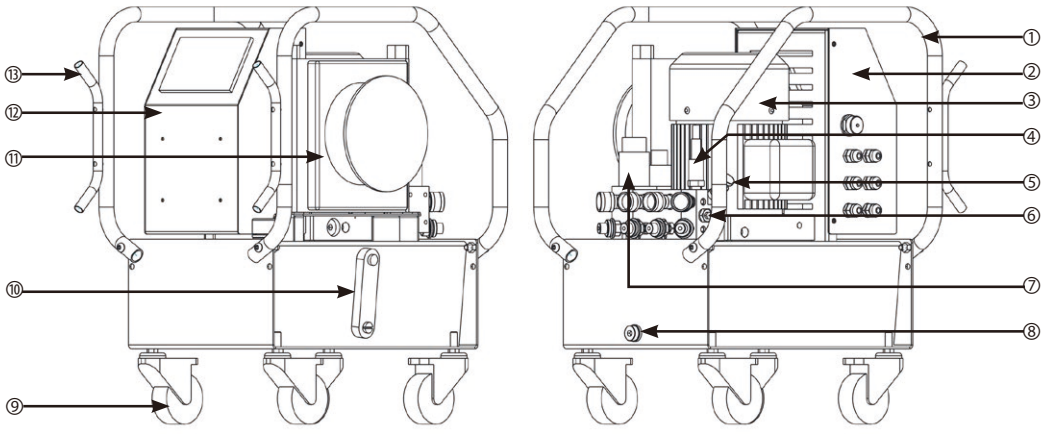
Maximum output pressure:	70MPa
Power size:	1.1/1.5/2.2KW
Low pressure flow:	7-12L/Min
High pressure flow:	0.7-1.5L/Min
Available oil capacity:	10L

•Brushless motor with noise level as low as 75dB
•Lockable precision pressure regulating valve
•2/4-way splitter (distributor)
•PLC touch screen: Supports fully automatic, semi-automatic, and manual modes;
•Features data storage and USB copy function
•Integrated protective frame with built-in winding structure

▼HSTW Product Specifications:

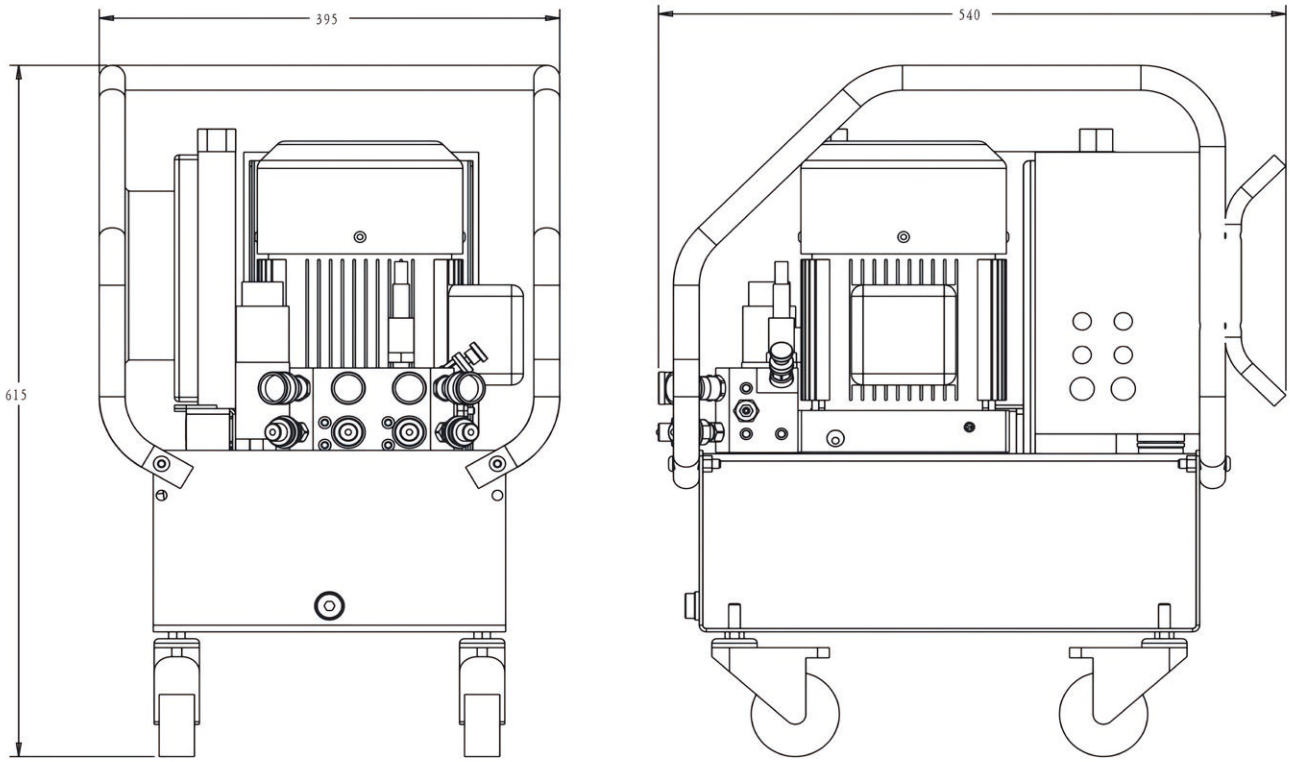
Model	Voltage / Phase (VAC/PH)	Usable Oil Capacity (L)	Motor Power (W)	Low Pressure Flow (L/min)	High Pressure Flow (L/min)	Weight (Without Oil) (kg)
HS4TW-C2	230/1P	10	1100	7	0.7	46.7
HS4TW-C2-115/60	115/1P	10	1100	7	0.7	46.7
HS5TW-C4	230/1P	10	1500	9	1	50
HS5TW-C4-115/60	115/1P	10	1500	9	1	50
HS7TW-C4	380/3P	10	2200	12	1.5	53

▼HSTW Product illustration:

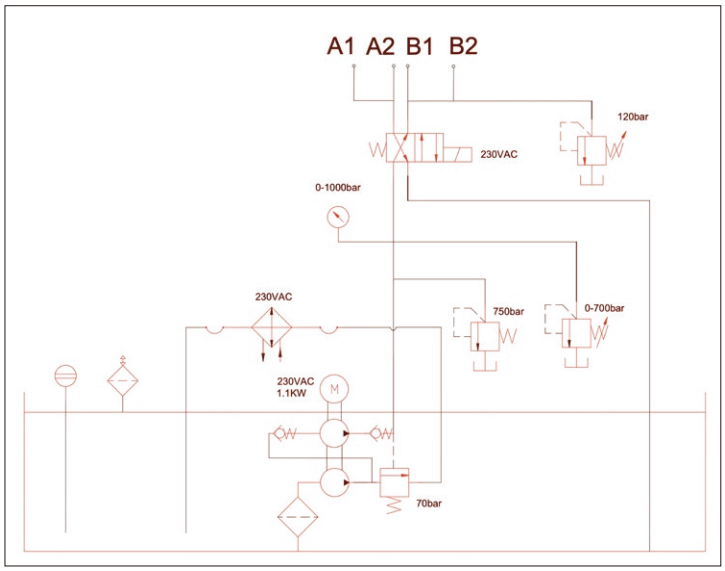


No.	Item Name
1	Protective Frame
2	Electrical Control Box
3	Motor
4	Pressure Sensor
5	Pressure Regulator
6	Port R Pressure Limiting Valve
7	Solenoid Directional Valve
8	Oil Drain Port
9	Caster
10	Hydraulic Oil Level Gauge
11	Air-cooled Radiator
12	PLC Touch Screen
13	Cable Reel

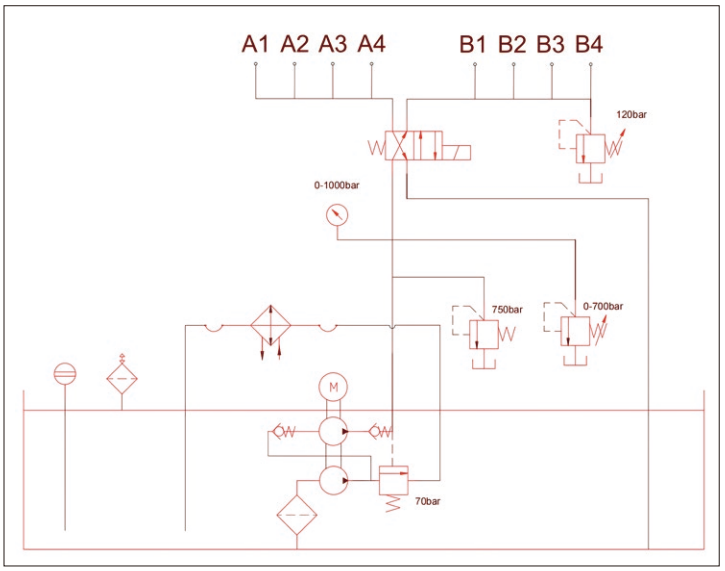
▼ HS5TW-C4 Outline Dimensions



▼ HSTW-C2 Hydraulic Schematic Diagram



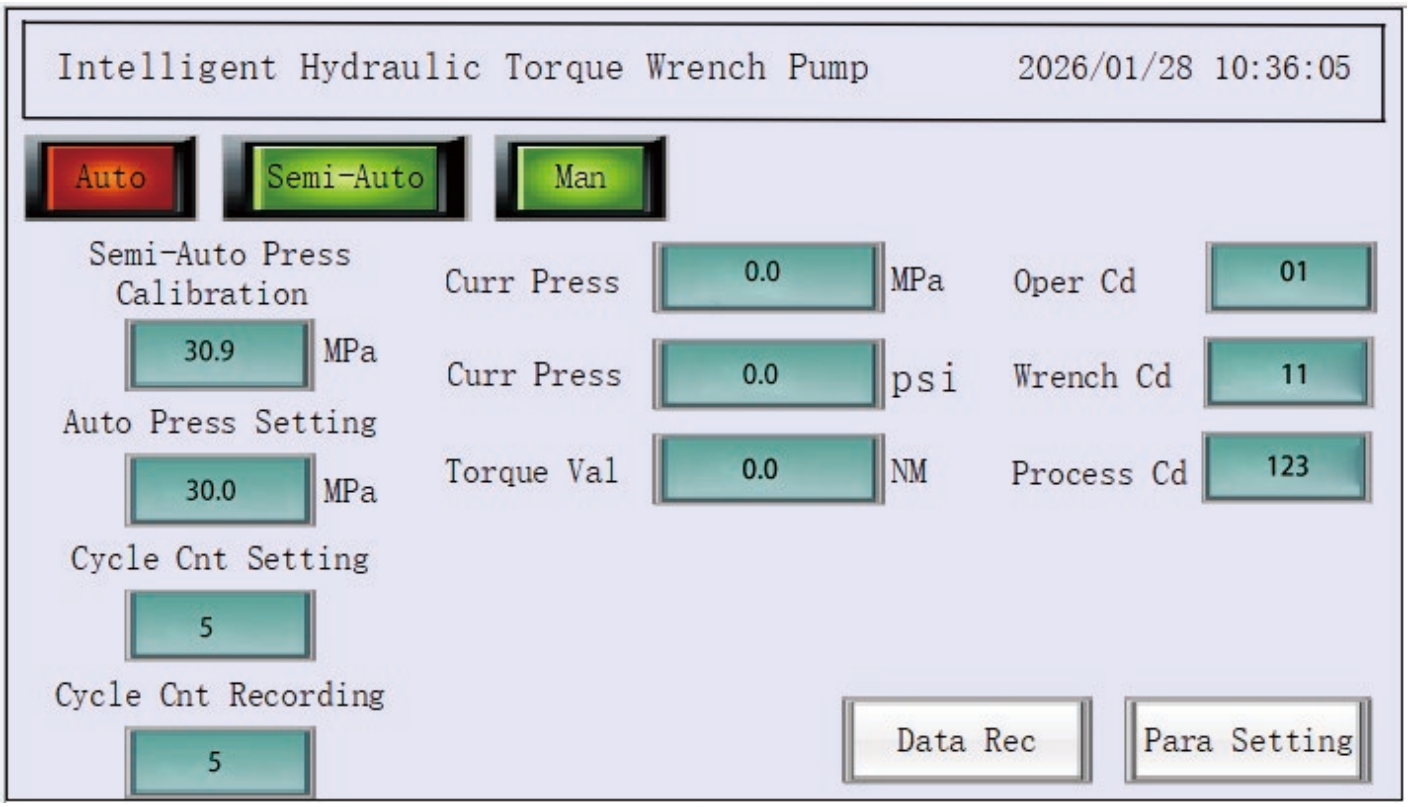
▼ HSTW-C4 Hydraulic Schematic Diagram



▼ HSTW Interface Display

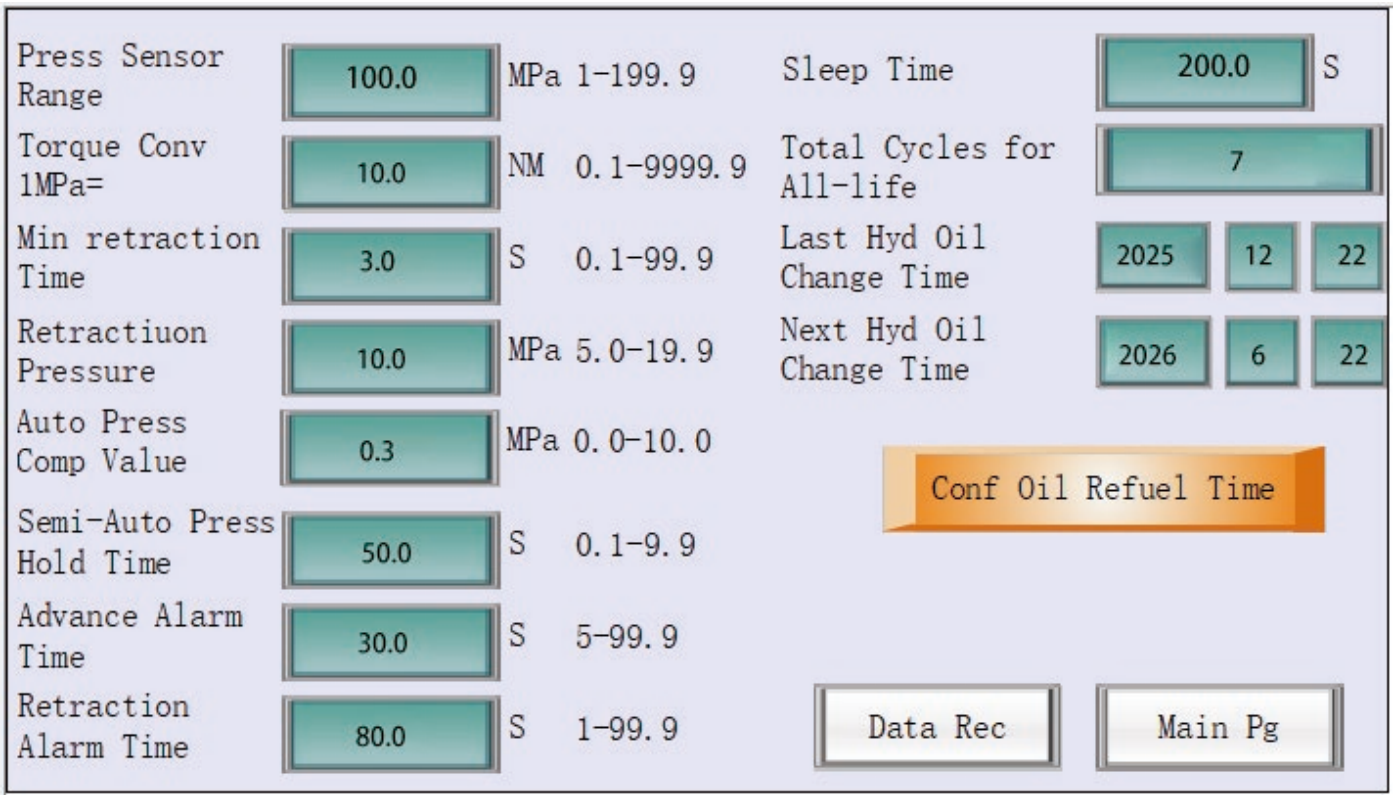
▼ HSTW Main Interface Display

It supports automatic, semi-automatic, and manual modes, and allows setting pressure and cycle count. It displays equipment status and indicators, and includes data recording and parameter setting keys.



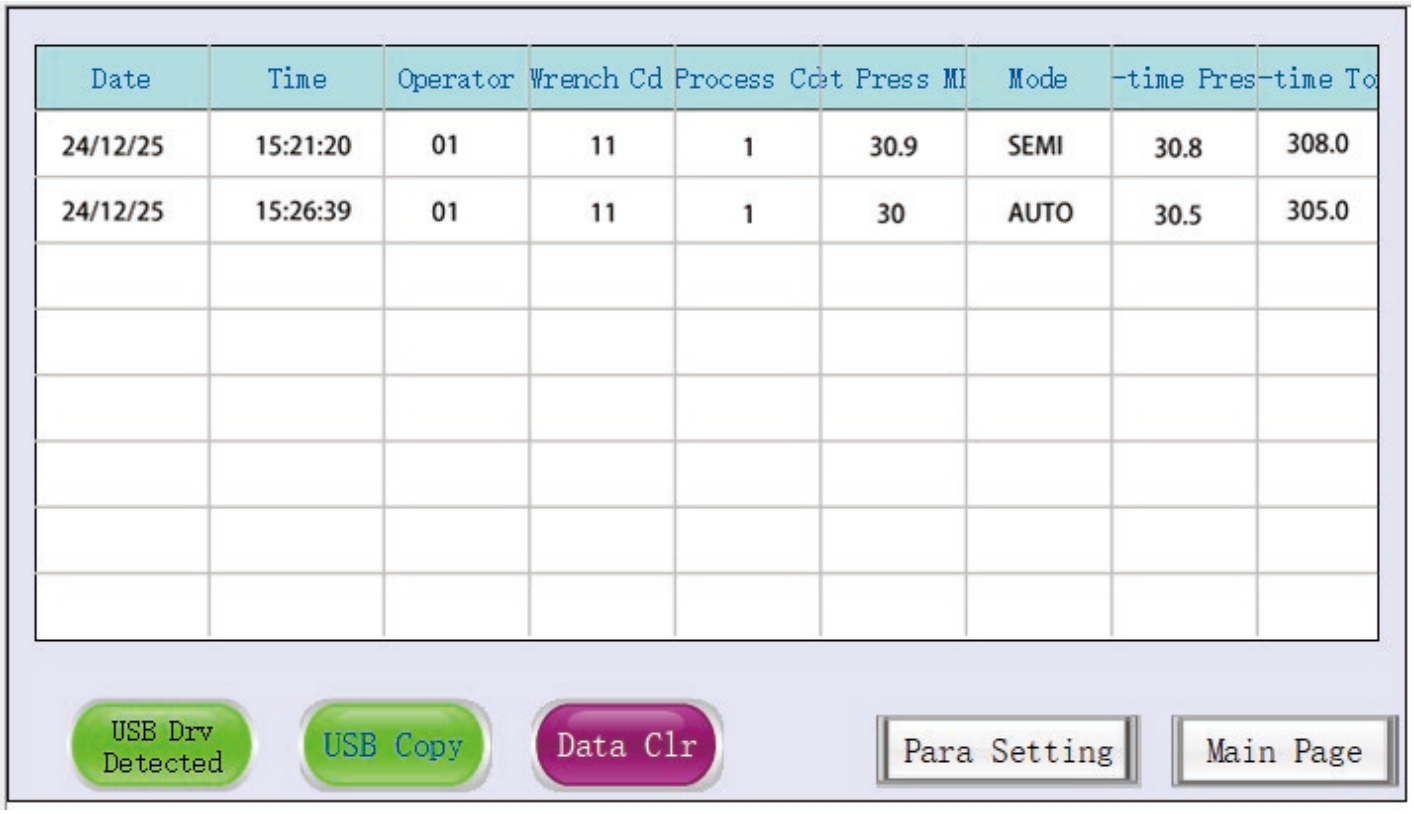
▼ HSTW Parameter Settings

The parameter settings allow you to configure pressure sensor range, torque conversion, return pressure, minimum return/semi-automatic pressure holding/pressure alarm, and other time parameters and their corresponding adjustment ranges. It also displays the factory cumulative cycle count, the last and next hydraulic oil change times, and includes operation buttons for confirming refueling time and setting the clock time.

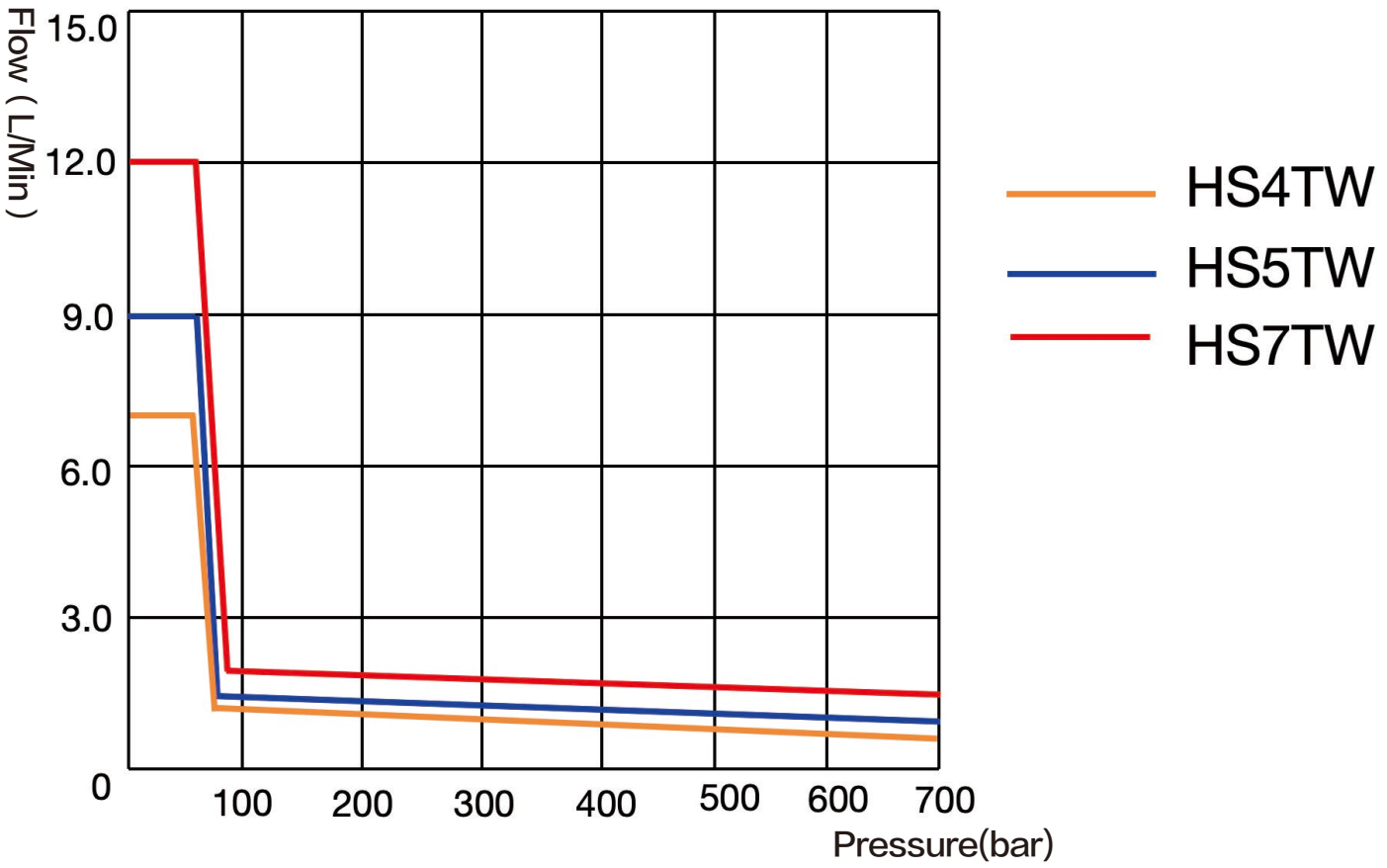


▼ HSTW Data Records

The hydraulic wrench pump's data recording interface displays table columns for date, time, operator, and other information. It records operational data (including SEMI/AUTO mode, pressure, and torque), and allows users to copy data to a USB flash drive and clear data for data management.



▼ HSTW Pressure-Flow Diagram



▼ HGTW Digital 3-Stage Electric Wrench Pumps



Maximum output pressure:	70MPa
Motor size:	1.1/1.5KW
Low pressure flow:	6/8.5L/Min
High pressure flow:	0.7/1L/Min

- Brushless motor: maintenance-free, low noise
- Integrated frame with built-in winding reel for easy control line storage
- Pressure gauge with tool-free quick-release design
- Standard two-channel or four-channel output for simultaneously driving multiple hydraulic torque wrenches
- Equipped with an automatic solenoid exhaust valve that activates intake and exhaust functions upon power-on
- High-efficiency air-cooled radiator
- Standard configuration includes a 6m wired remote control cable.
- Optional R2/R4 digital display remote control with real-time pressure monitoring
- Aluminum oil tank: lightweight with excellent heat dissipation
- Meets a safety factor of 4:1, ensuring safe operation of the system under various working conditions.

▼ HGTW Type Specification Sheet:

Model Number	Voltage (VAC/HZ)	Motor Size (KW)	Low Pressure Flow(L/Min)	Medium Pressure Flow(L/Min)	High Pressure Flow(L/Min)	Reservoirs Capacity (L)	Weight without oil (KG)
HG4TW-C2	230/50	1.1	6	1.5	0.7	7	30
HG4TW-C2-115/60	115/60	1.1	6.5	1.5	0.7	7	30
HG5TW-C2	230/50	1.5	8	2	1	7	33
HG5TW-C2-115/60	115/60	1.5	8.5	2	1	7	33
HG5TW-C4	230/50	1.5	8	2	1	7	36
HG5TW-C4-115/60	115/60	1.5	8.5	2	1	7	36
HG4TW-R2	230/50	1.1	6	1.5	0.7	7	30
HG4TW-R2-115/60	115/60	1.1	6.5	1.5	0.7	7	30
HG5TW-R2	230/50	1.5	8	2	1	7	33
HG5TW-R2-115/60	115/60	1.5	8.5	2	1	7	33
HG5TW-R4	230/50	1.5	8	2	1	7	36
HG5TW-R4-115/60	115/60	1.5	8.5	2	1	7	36

▼ HGTW-R/-HGTW-C Illustration：

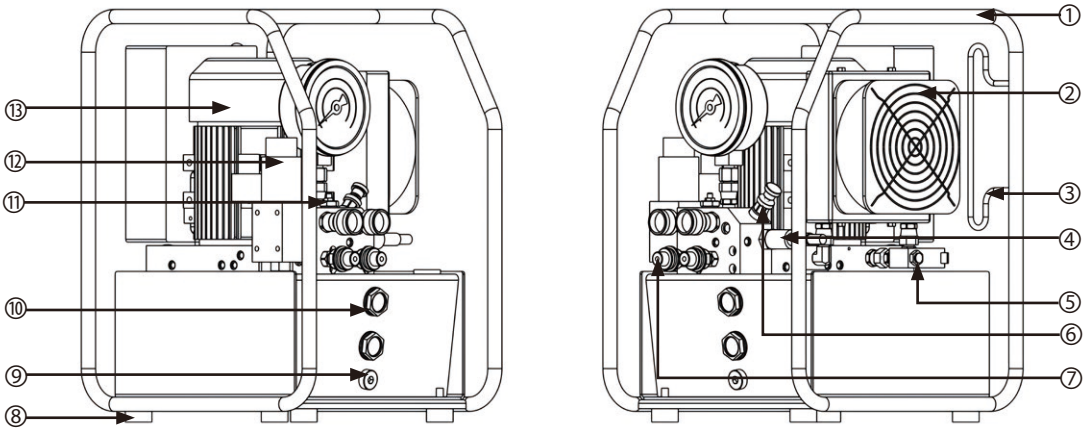


HG5TW-C4



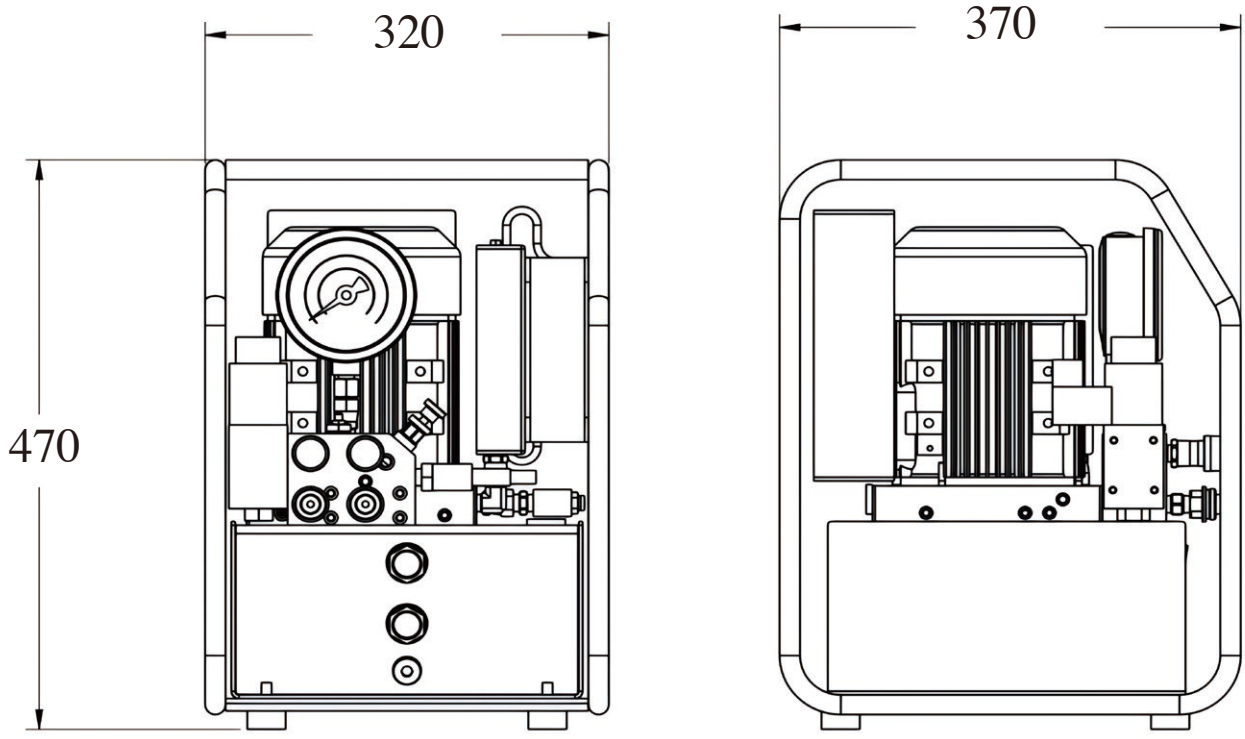
HG5TW-R2

▼ HGTW Product Illustration:

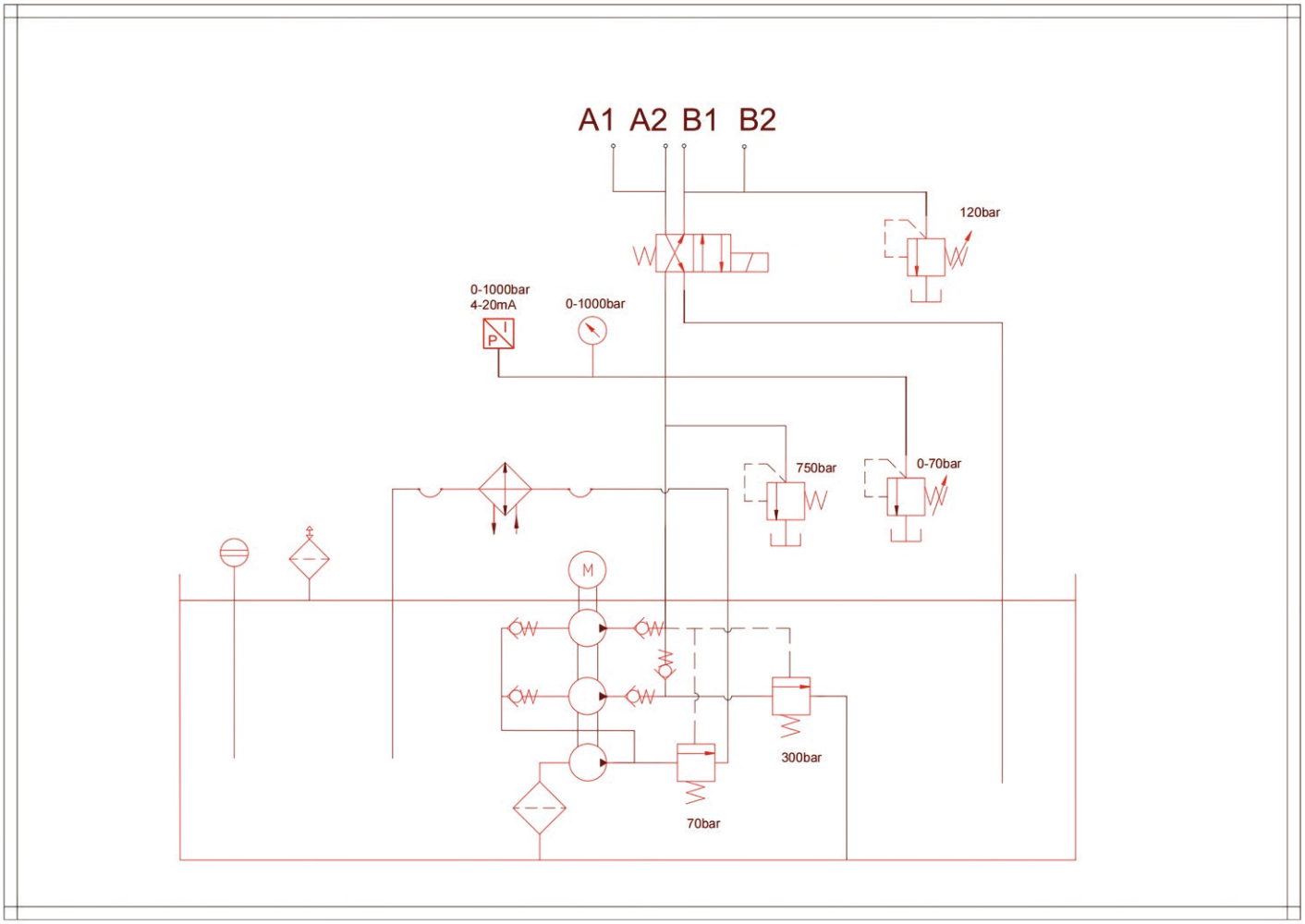


No	Name
1	Protected Framework
2	Heat Exchanger
3	Cable Collector
4	Pressure Transducer
5	Solenoid Exhaust Valve
6	Relief Valve
7	Couplers
8	Base Foot
9	Oil Drain
10	Sight Glass
11	R Port Pressure Limiting Valve
12	Solenoid Directional Valve
13	Electric Box

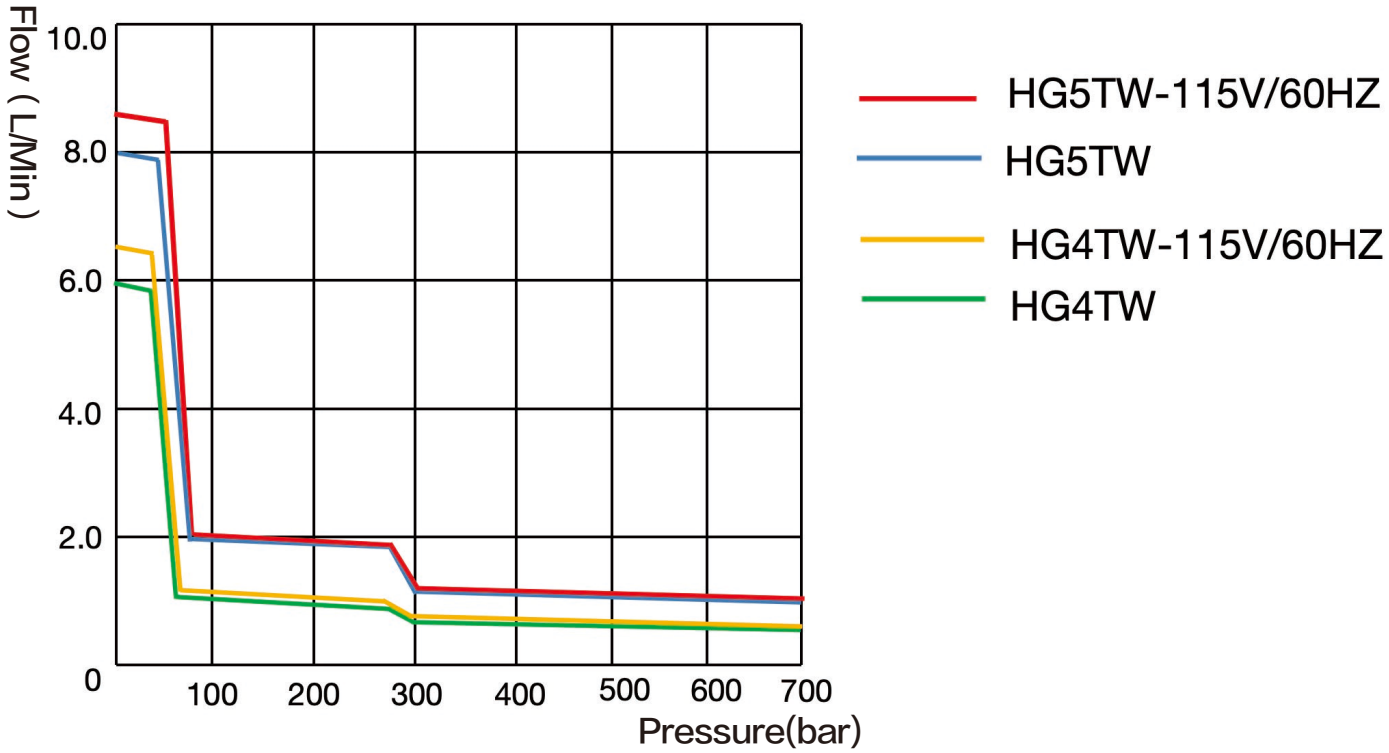
▼HGTW Outline Dimensional Drawing:



▼HGTW Hydraulic Schematic Diagram:



▼HGTW Flow-Pressure Curve:



▼ HETW-C High Power Electro-Hydraulic Wrench Pumps



Maximum output pressure:	70MPa
Motor size:	2.2/4KW
Low pressure flow:	12L/Min
High pressure flow:	1.5-2.3L/Min
Reservoirs capacity:	10-40L

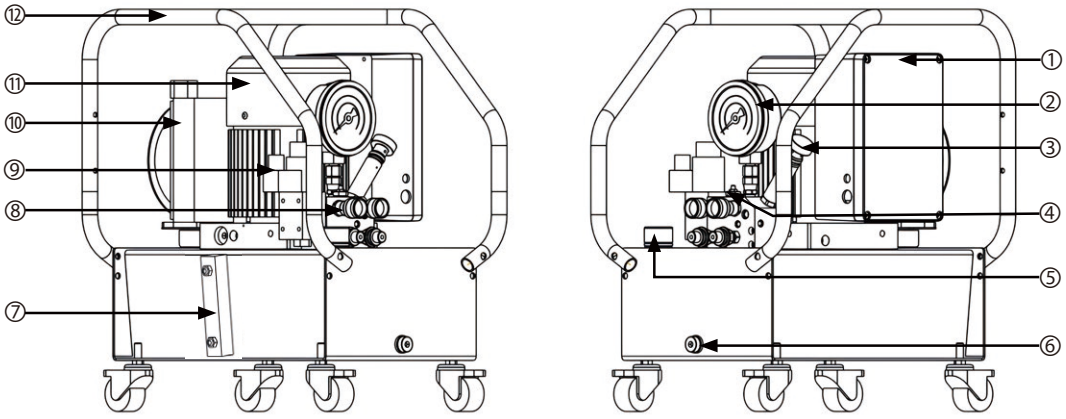
- Brushless motor, noise as low as 75dB
- Aluminum fuel tank, good cooling effect, light weight
- Lockable precision pressure regulator
- two-stage pump, High efficiency
- 6-meter weak current control handle
- Efficient air cooled radiator
- Visual Sight Glass
- Motor overload protector
- 3-meter plug wire
- Integrated protection frame, wire winding structure
- Pressure gauge non-rotating disassembly structure

▼ HETW-C Type Specification Sheet:

Model Number	Voltage	Motor Size	Reservoirs Capacity	Low Pressure Flow	High Pressure Flow	Weight Without Oil	Number Of Driver Wrench
HE7TW10-C2	380/220VAC	2.2KW	10L	12L/Min	1.5L/Min	50KG	2
HE7TW10-C4	380/220VAC	2.2KW	10L	12L/Min	1.5L/Min	52KG	4
HE55TW40-C4	230/115VAC	4KW	40L	12L/Min	2L/Min	70KG	4
HE77TW40-C4	380/220VAC	4KW	40L	20L/Min	2.5L/Min	80KG	4
HE84TW40-C2	380/440/660VAC	4KW	40L	12L/Min	2.3L/Min	108KG	2
HE84TW40-C4	380/440/660VAC	4KW	40L	12L/Min	2.3L/Min	110KG	4

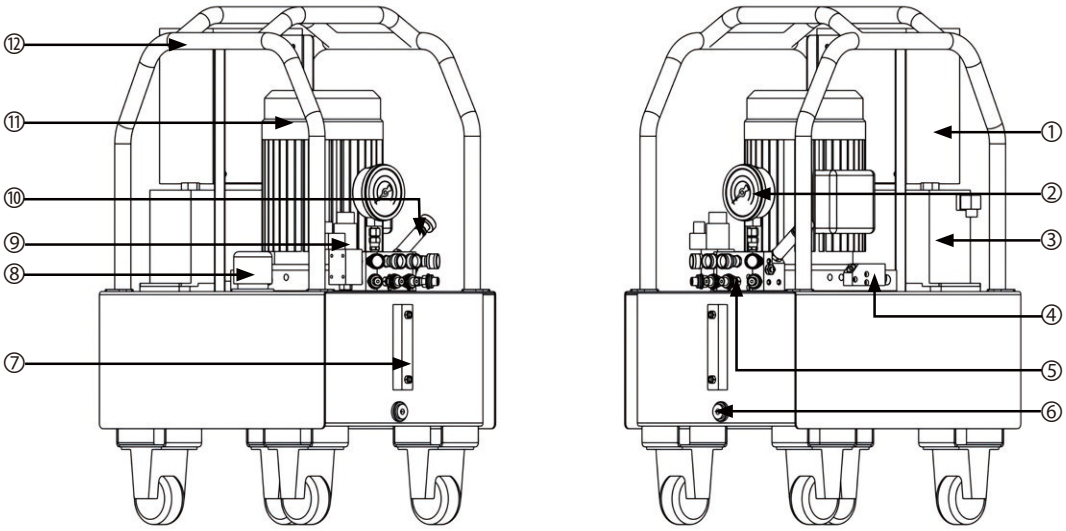
◆ Multiple voltage options are available. Please specify the voltage model if needed.
◆ 380VAC three-phase Motor size supply for three-phase four-wire, product configuration of high-voltage switching power supply, motor protector.

▼ HE7TW10 Product Illustration:



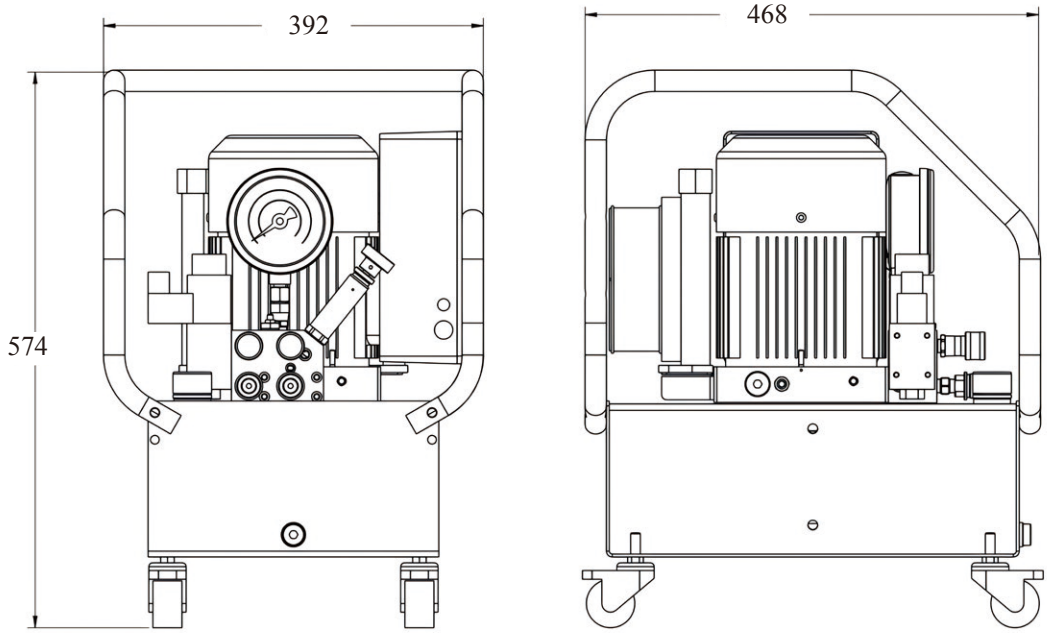
NO	Name
1	Electric Box
2	Gauge
3	Relief Valve
4	R Port Pressure Limiting Valve
5	Refueling And Exhaust Outlet
6	Oil Drain
7	Sight Glass
8	Couplers
9	Solenoid Directional Valve
10	Heat Exchanger
11	Motor
12	Protected Framework

▼ HE84TW40 Product Illustration:

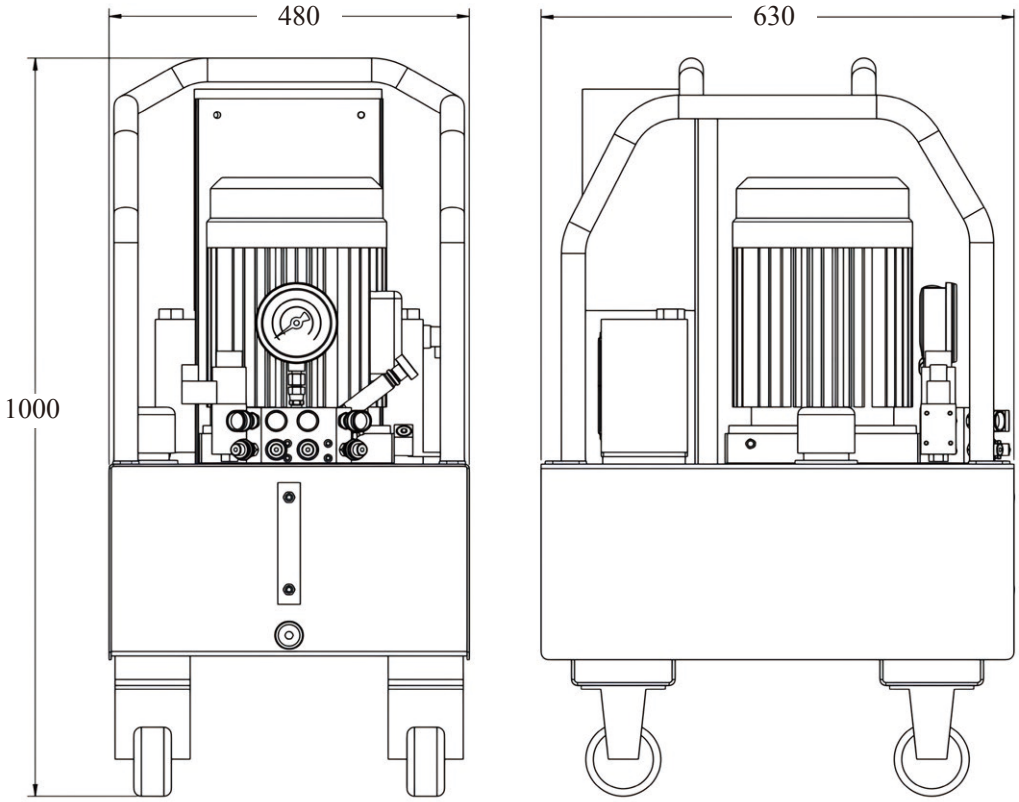


NO	Name
1	Electric Box
2	Gauge
3	Heat Exchanger
4	Pilot Relief Valve Block
5	Couplers
6	Oil Drain
7	Sight Glass
8	Refueling And Exhaust Outlet
9	Solenoid Directional Valve
10	Relief Valve
11	Motor
12	Protected Framework

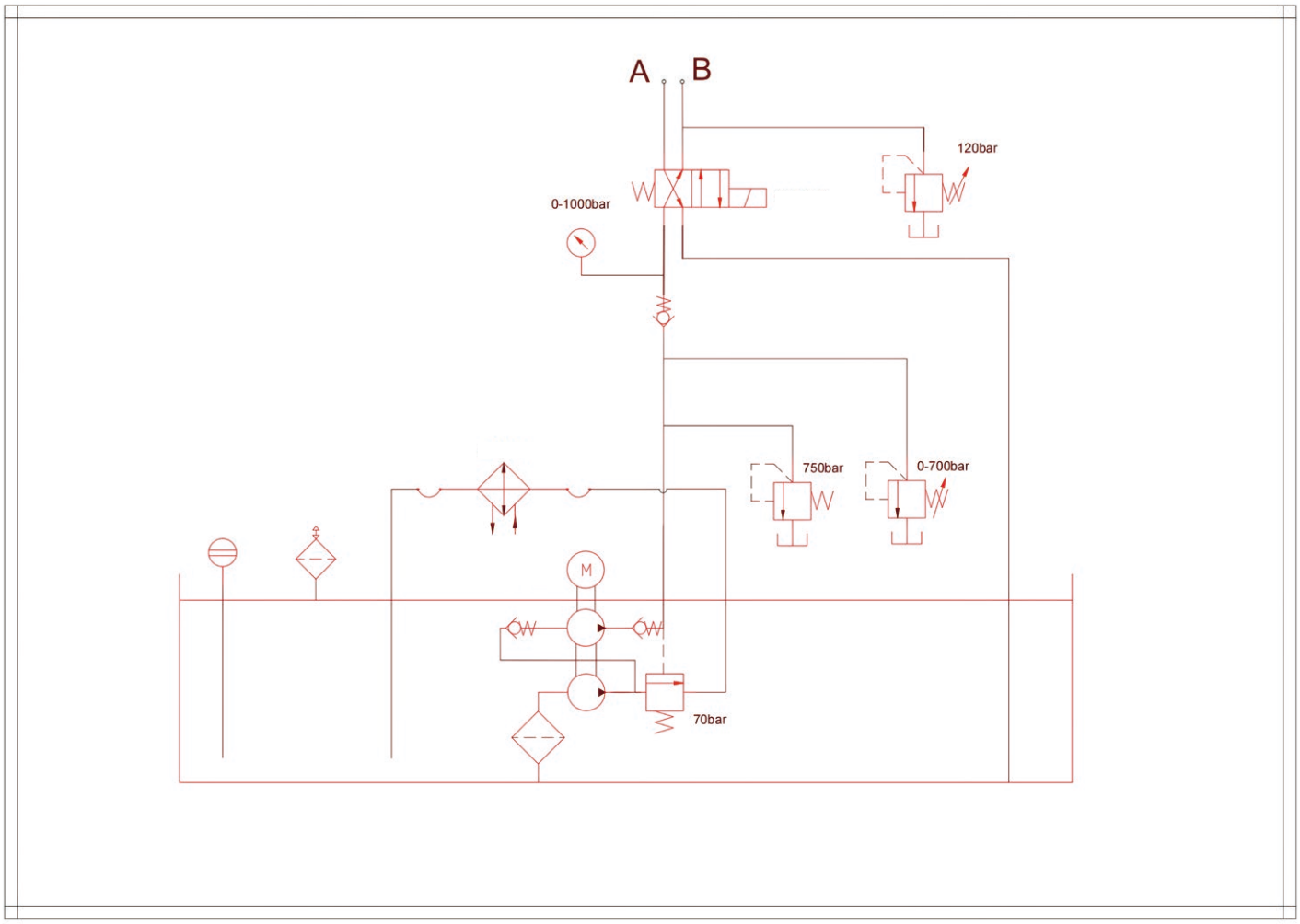
▼ HE7TW10 外形尺寸图：



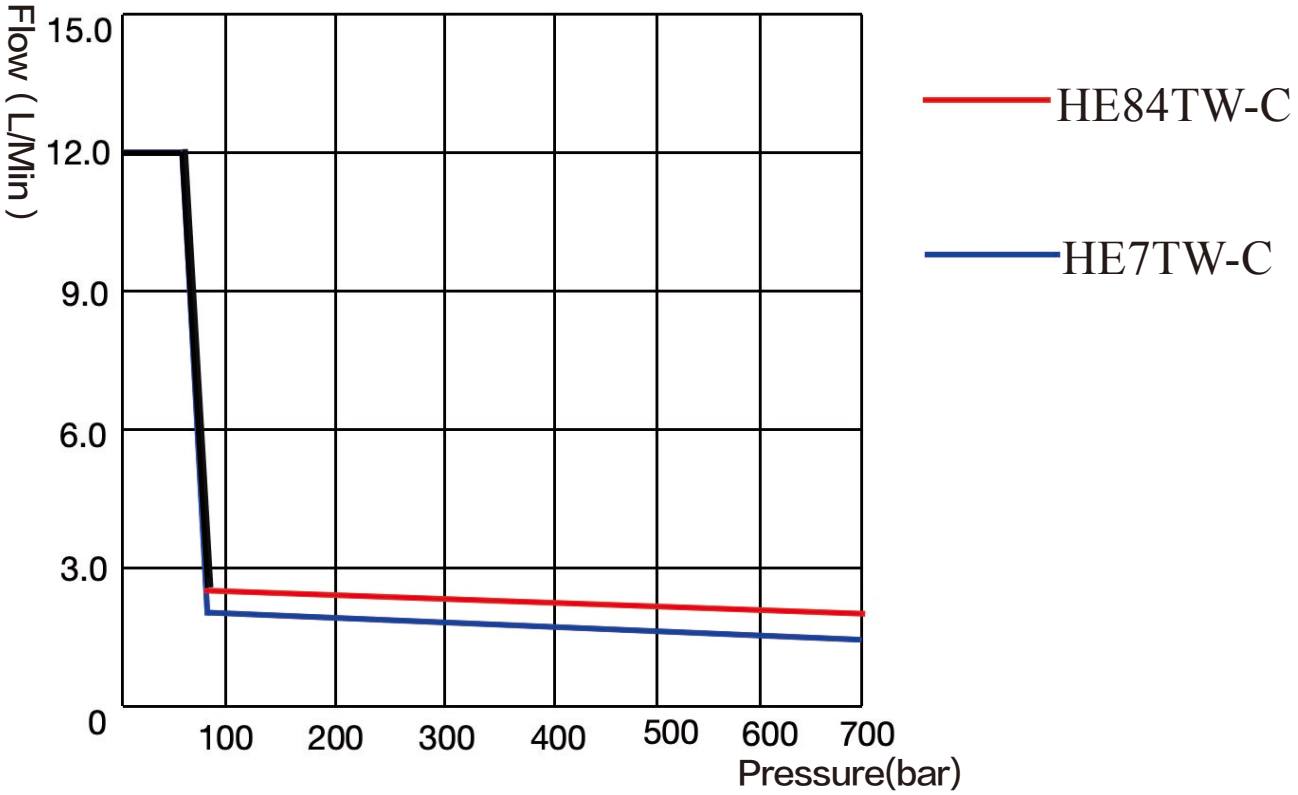
▼ HE84TW40 Outline Dimensional Drawing:



▼ HETW-C Hydraulic Schematic Diagram:



▼ HETW-C 压力流量图：


Flow (L/Min)
15.0
12.0
9.0
6.0
3.0
0
100
200
300
400
500
600
700
Pressure(bar)
HE84TW-C
HE7TW-C

▼EX-HE5TW Explosion-Proof Hydraulic Wrench Pumps



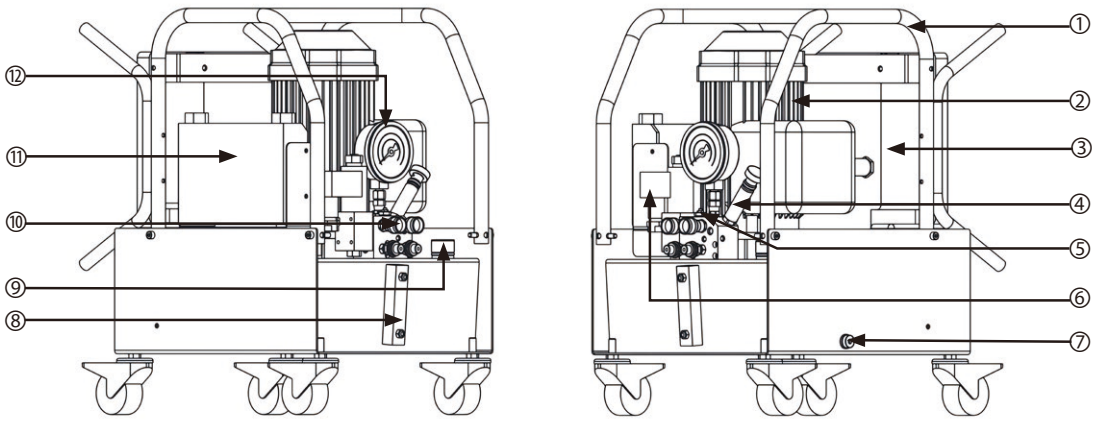
Motor size:	1.5KW
High pressure flow:	9L/Min
Low pressure flow:	1L/Min
Reservoirs capacity:	20L

- Explosion-proof design grade: Exd II BT4
- Increased safety electric control box, equipped with three-phase overload protector
- German import reversing valve
- ABB explosion-proof motor
- Two-stage flow, high efficiency
- Adjustable relief valve, continuous pressure adjustable
- Heat dissipation aluminum bar, Low temperature rise
- 6M wire handle
- Protection frame, lockable casters
- Oil weight: 120KG

▼EX-HE5TW Type Specification Sheet:

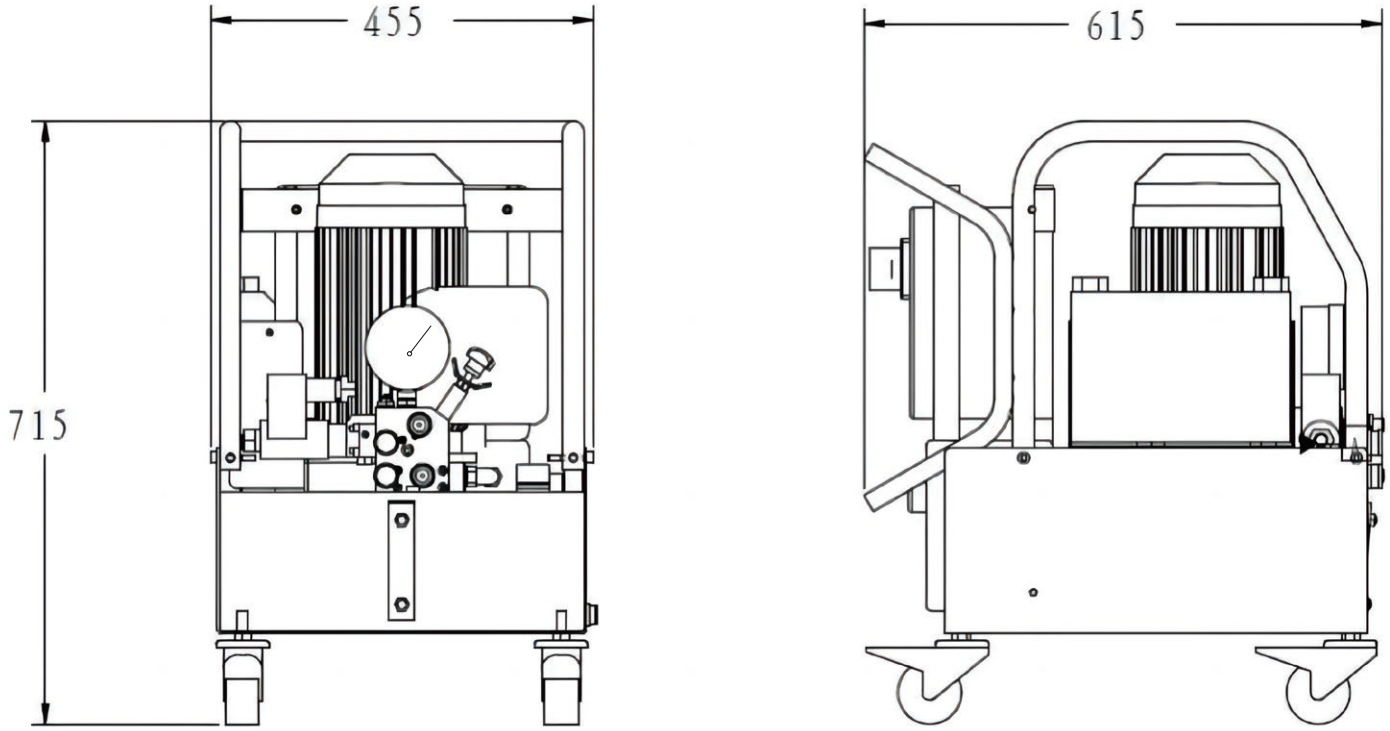
Model Number	Motor size	Voltage/ phase	High Pressure Flow	Low Pressure Flow	Reservoirs capacity	Number of driver wrench	Number of oil drains
EX-HE5TW-2	1.5KW	380VAC/3PH	1L/Min	9L/Min	20L	2	4
EX-HE5TW-4	1.5KW	380VAC/3PH	1L/Min	9L/Min	20L	4	8

▼EX-HE5TW Product Illustration:

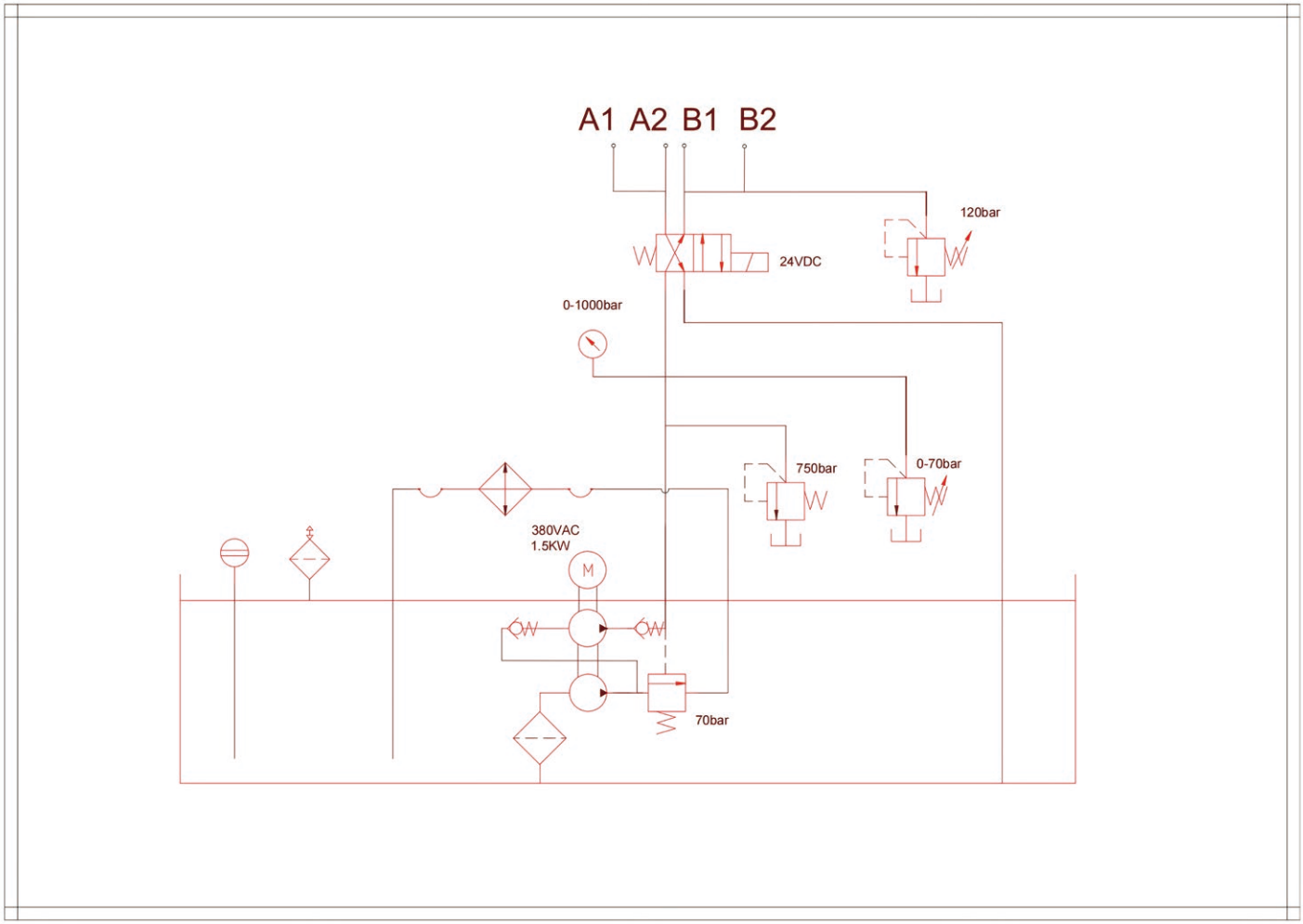


NO	Name
1	Protected Framework
2	Explosion-proof machine
3	Explosion-proof Electric Box
4	Relief Valve
5	R Port Pressure Limiting Valve
6	Explosion-proof Solenoid Directional Valve
7	Oil Drain
8	Sight Glass
9	Refueling And Exhaust Outlet
10	Couplers
11	Cooling aluminum bar
12	Gauge

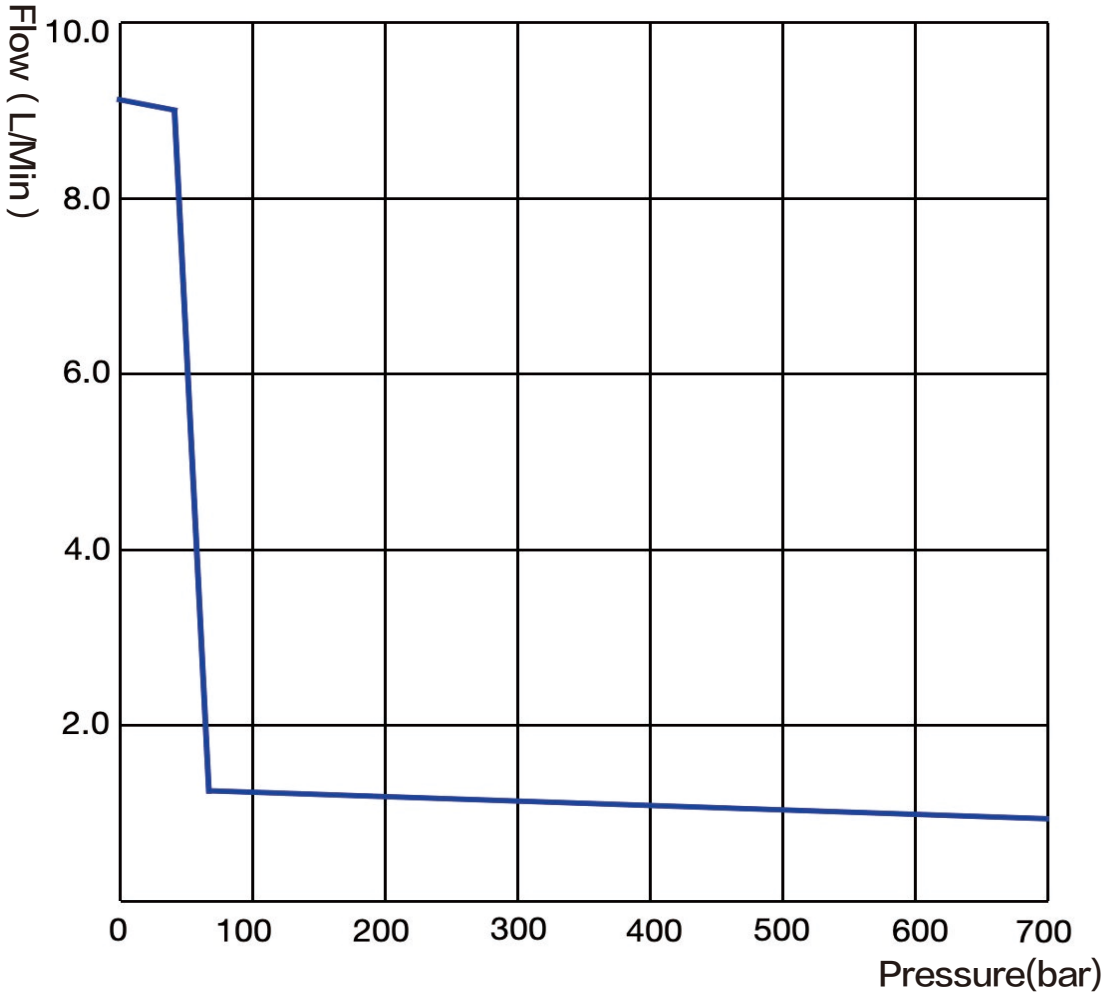
▼ EX-HE5TW Outline Dimensional Drawing:



▼ EX-HE5TW Hydraulic Schematic Diagram:



▼ EX-HE5TW Flow-Pressure Curve:



▼ P2282 Ultra-High Pressure Hand Pump

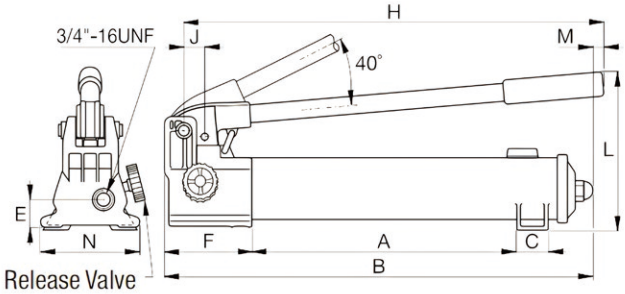


Max.output pressure: 150/250MPa

Flow: 0.61 - 2.49 cm^3/Stroke

Usable Oil Capacity: 983cm^3

- P2282 two-speed operation mode enables faster pressurization, thereby reducing cycle times for a variety of testing applications.
- Large-sized release knob for enhanced pressure release control.
- Standard CEJN 116/125 ultra-high pressure couplings offering higher safety performance.
- Complete set of accessories supplied as a package – saves time on self-assembly, effectively improves working efficiency, and enhances safety performance.



▼ P2282 Specification Table:

Pump Type	Usable Oil Volume (cm^3)	Model	Pressure Rating (bar)		Displacement per Stroke (cm^3)		Max Handle Force (kN)	Piston Stroke (mm)	Dimensions (mm)														Weight (Kg)
			Stage 1	Stage 2	Stage 1	Stage 2			A	B	C	D	E	F	H	J	L	M	N	S	T		
Two-speed pump	983	P2282	13	2800	16.22	0.61	48.1	25.4	344	558	35	-	31	133	527	29	228	7	120	-	-		6.5

▼ P2282 Quick Selection Table:

Model	Pump and Pump Pressure Rating		Connector	Pressure Gauge	Gauge Connector	Gauge Base (Built-in Relief Valve)	Hydraulic Hose
		-					
P2282-1500K	P2282-1500	1500bar	CEJN116	3000Bar	3000Bar	3000Bar	1800Bar*3M
P2282-2500K	P2282-2500	2500bar	CEJN125	3000Bar	3000Bar	3000Bar	2800Bar*3M

▼ HP Series Ultra-High Pressure Hand Pump

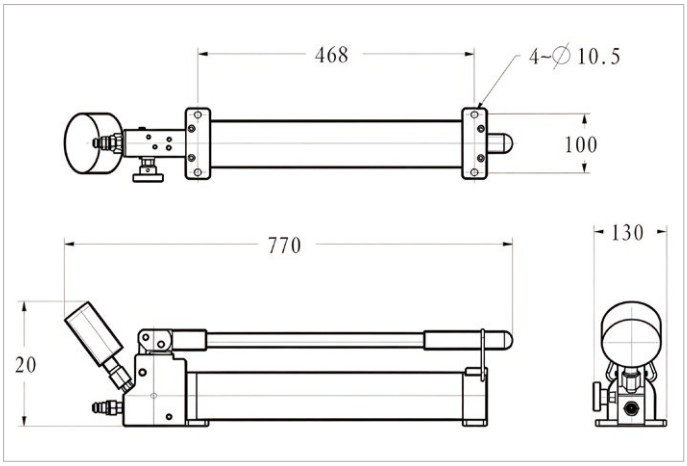


Max.output pressure: 200/300MPa

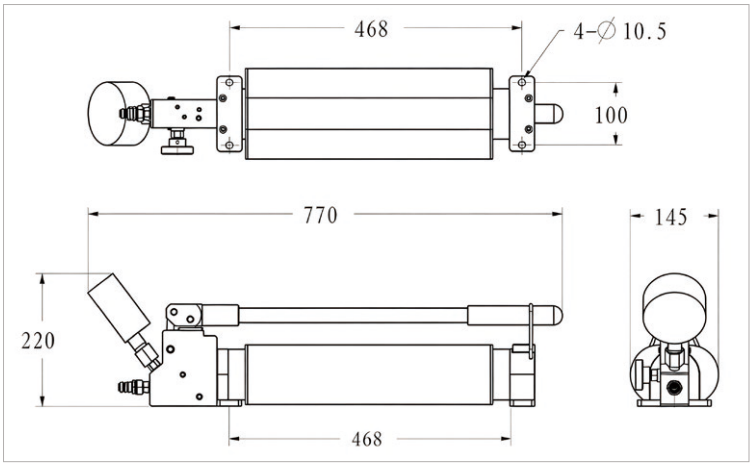
Usable Oil Capacity: 1.5/3L

- Dual-speed pump for improved work efficiency.
- Pump head made of 42CrMo alloy steel, treated with integral gas nitriding for high strength, corrosion resistance, and wear resistance.
- Oil tank made of aluminum alloy for high strength and light weight (the 3L tank is made of steel).
- Standard equipped with a shock-resistant pressure gauge and CEJN quick couplings.
- Equipped with an externally adjustable safety valve for convenient setting of the maximum output pressure.
- Features a pressure-compensated automatic vent port — requires no manual operation, is leak-free, and vents automatically.
- Optional kit available that includes hydraulic hoses and a composite material carrying case.

▼ HP Series Specification Table:



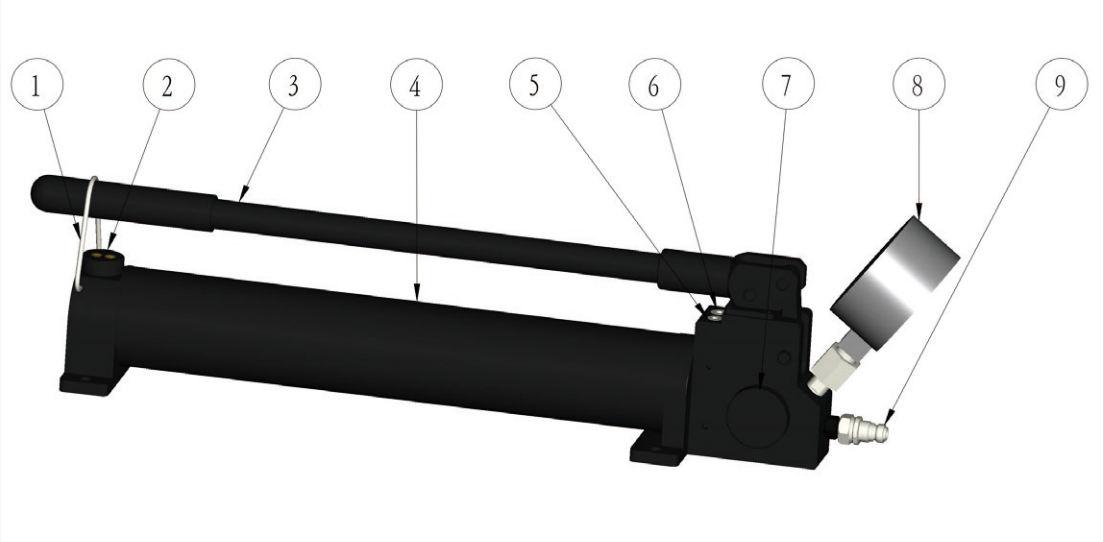
HP2001GM | HP3001GM



HP2003GM | HP3003GM

Model Number	Rated Pressure (MPa)	Pressure Gauge Range (MPa)	Connector	Oil Tank Capacity (L)	Low Pressure Displacement (mL)	High Pressure Displacement (mL)	Weight (KG)
HP2001GM	200MPa	200	116 Male	1500	32.5	1.6	8.6
HP2003GM	200MPa	200	116 Male	3000	32.5	1.6	12.5
HP3001GM	300MPa	300	125 Male	1500	32.5	0.9	8.6
HP3003GM	300MPa	300	125 Male	3000	32.5	0.9	12.5

▼ HP Series Product Illustration:



NO	Name
1	Lifting Ring
2	Oil Filling & Air Vent Port
3	Handle
4	Oil Tank
5	Low Pressure Relief Valve
6	High Pressure Relief Valve
7	Unloading Valve
8	Pressure Gauge
9	Oil Outlet

▼ HP Series Optional Packages

Model	Pump and Pump Pressure Rating	Connector	Packing Case and Matching Hydraulic Hose
		 CEJN 116  CEJN 125 ※1 pc hex nipple supplied 	
HP2001GMHK	HP2001GM	CEJN116+2500G0303	HSP1800PC-3-FF
HP3001GMHK	HP3001GM	CEJN125+2500G0303	HSP3000PC-3-FF

▼ HP Optional Service Pack

Repair Kit Images	Model	Manual Pump Model
	HP2000-SK	HP2001GM HP2003GM
	HP3000-SK	HP3001GM HP3003GM

▼ BEP Lithium Battery Ultra-High Pressure Pumps



Maxium Pressure:	150/250MPa
Motor size:	750W
Low pressure flow:	1.5L/Min
Reservoirs capacity:	5L

- One-piece frame with integrated wire winder design, facilitating control wire storage
- Equipped with a precision pressure regulating valve, which can be locked when the target pressure is reached
- Equipped with a servo motor, with operating noise below 75dB
- Comes standard with one 26AH high-capacity lithium battery for long endurance
- Lithium batteries can be purchased separately; a charger is included as standard with the battery
- Equipped with a pressure gauge and quick connector; the pressure gauge supports rotary-free quick assembly and disassembly
- Equipped with an electromagnetic automatic exhaust valve, which automatically activates air intake and exhaust functions when powered on
- Equipped with a motor speed adjustment button, supporting 3-speed regulation
- Aluminum oil tank, featuring light weight and excellent heat dissipation performance

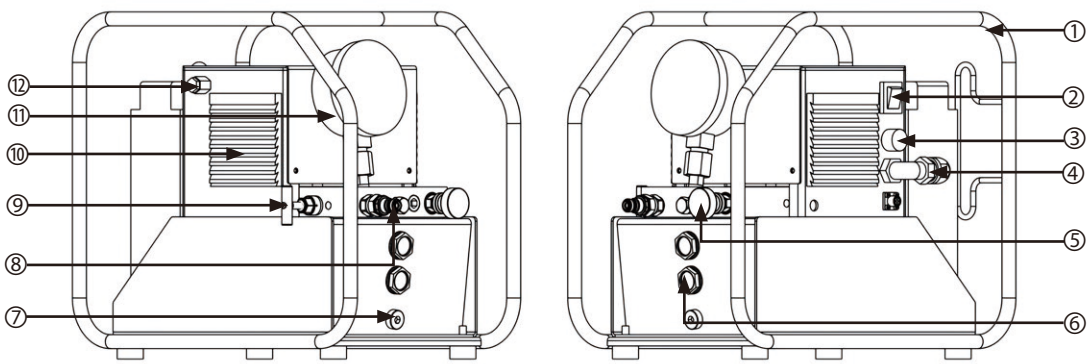
▼ BEP Product Specification Sheet:

Model	Maxium Pressure	Voltage	Power	Low Pressure Flow	High Pressure Flow	Usable Oil Capacity	Weight (Without Oil)	Number of Oil Outlet Ports
BEP1500	150MPa	48VDC	750W	1.5L/Min	0.25L/Min	5L	22KG	2
BEP2500	250MPa	48VDC	750W	1.5L/Min	0.15L/Min	5L	22KG	2

▼ BEP Packing List:

Model	Specification	Quantity
BPD700	Lithium battery ultra-high pump	1
BP-B4826	Lithium battery, 48V 26AH	1
Quick charger	48V ⎓ 5A	1

▼ BEP Product Schematic Diagram:



NO	Name
1	Protective Frame
2	Main Switch
3	Motor Speed Knob
4	Battery Connection Cable
5	Relief Valve
6	Oil Level Gauge
7	Oil Drain Port
8	Male Connector
9	Release Valve
10	Heat Dissipation Port
11	Pressure Gauge
12	Air Exhaust Port

▼Introduction to theBP-B4826lithium battery



♦BP-B4826 lithium battery can be purchased separately.

▼BP-B4826 Packaging list

Model	Specification	Quantity
BP-B4826	Lithium battery, 48V 26AH	1
Quick charger	48V ⎓ 5A	1
Carton	Carton packaging	1

Technical Features:

Safety Protection:

•Built-in High-quality BMS Battery Management System: This system can accurately monitor and manage the charging and discharging processes of the battery, ensuring the safe and stable operation of the battery. It effectively prevents issues such as overcharging, over-discharging, and overheating, extends the battery's service life, and improves the battery's utilization efficiency.

•Overcharge Protection: Effectively prevents the battery from overcharging, avoiding battery damage or safety hazards caused by overcharging.

•Over-discharge Protection: Prevents the battery from over-discharging, extending the battery's service life and ensuring safe use.

•Over-temperature Protection: Automatically protects the battery when it is in an over-temperature state, preventing various risks caused by high temperatures.

•Short-circuit Protection: The fuse automatically protects the battery in case of a short circuit, avoiding equipment damage caused by short circuits.

•PTC Protection: It can balance temperature and current, providing comprehensive safety protection.

Performance:

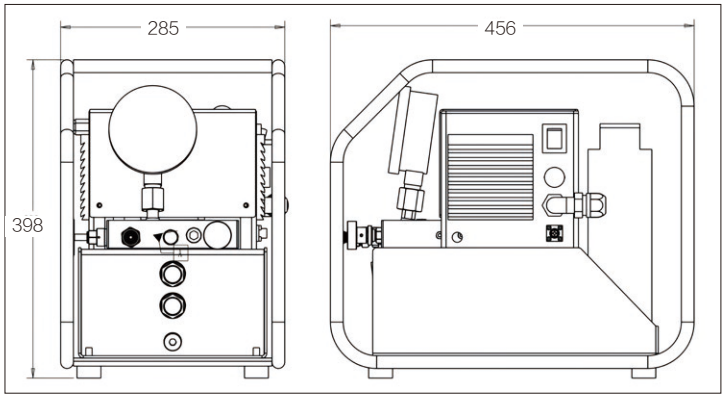
•Powerful Performance: Equipped with an intelligent chip, the product performs excellently in operation and processing.

•Large Capacity: It has a large capacity, meeting more usage requirements.

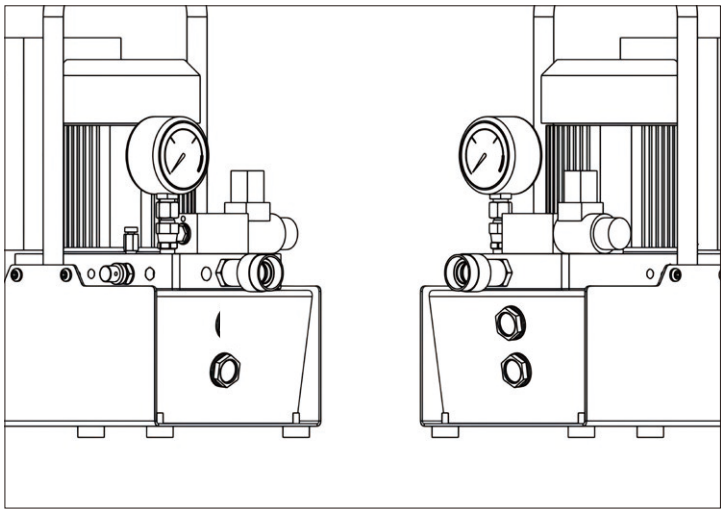
•Portable Design: The product is designed for easy carrying, facilitating users in various scenarios.

•Shock and Impact Resistance: It has the ability to resist shock and impact, effectively protecting internal components when subjected to external forces and improving the product's durability.

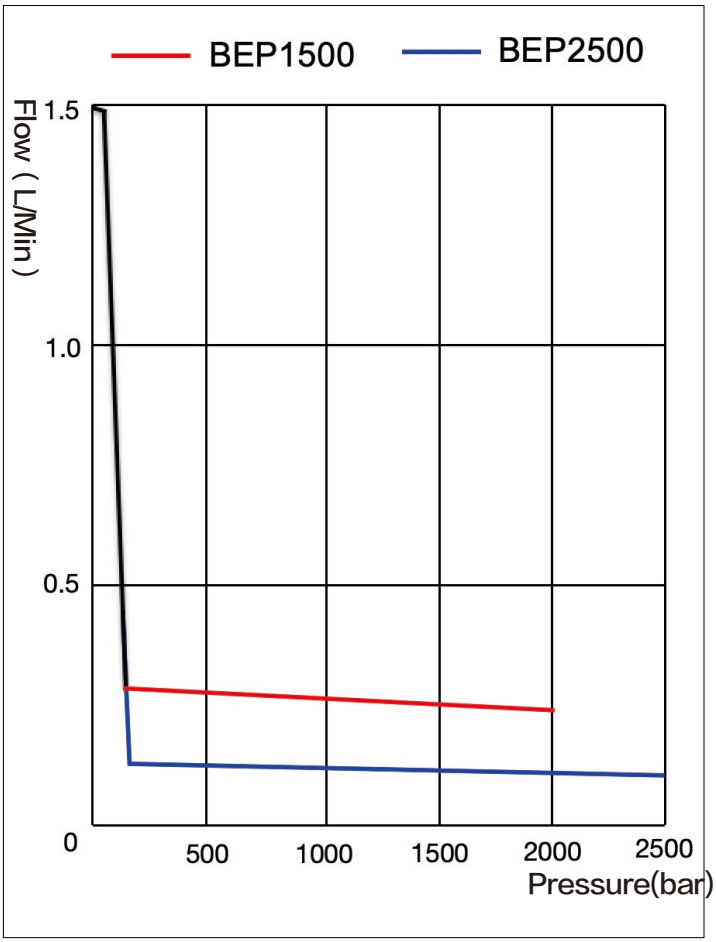
▼ BEP Outline Dimension Drawing:



▼ BEP Hydraulic Schematic Diagram:



▼ BEP Pressure-Flow Diagram:



▼ HAP Pneumatic Ultra-high Pressure Pumps



Maximum output pressure: 150/250MPa

Supercharging ratio: 150:1/370:1

Displacement: 4.2-6.3mL

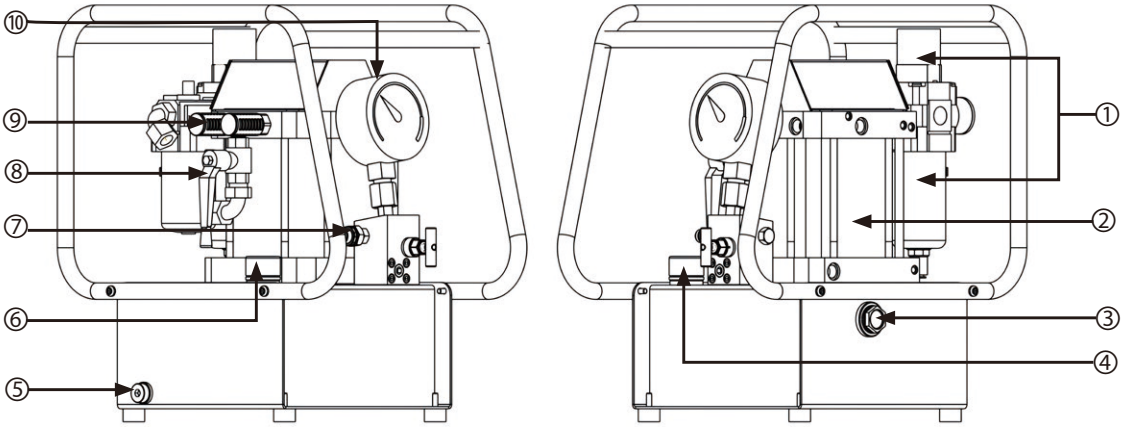
Reservoirs capacity: 5L

- •Standard air supply handling triconnector, precise control of hydraulic output pressure
- •Manual ball valve to achieve intake control manual unloading valve
- •Built-in safety valve to prevent overpressure
- •Steel tank frame, all-direction protection
- •Inclined pressure gauge design, easy to read pressure
- •Large displacement design, effective operation efficiency
- •Dual Oil Drain, Strong compatibility
- •Adopts PEEK, FKM and other high-life seals
- •Plate seal design, no hydraulic steel pipe, high sealing stability

▼ HAP Type Specification Sheet:

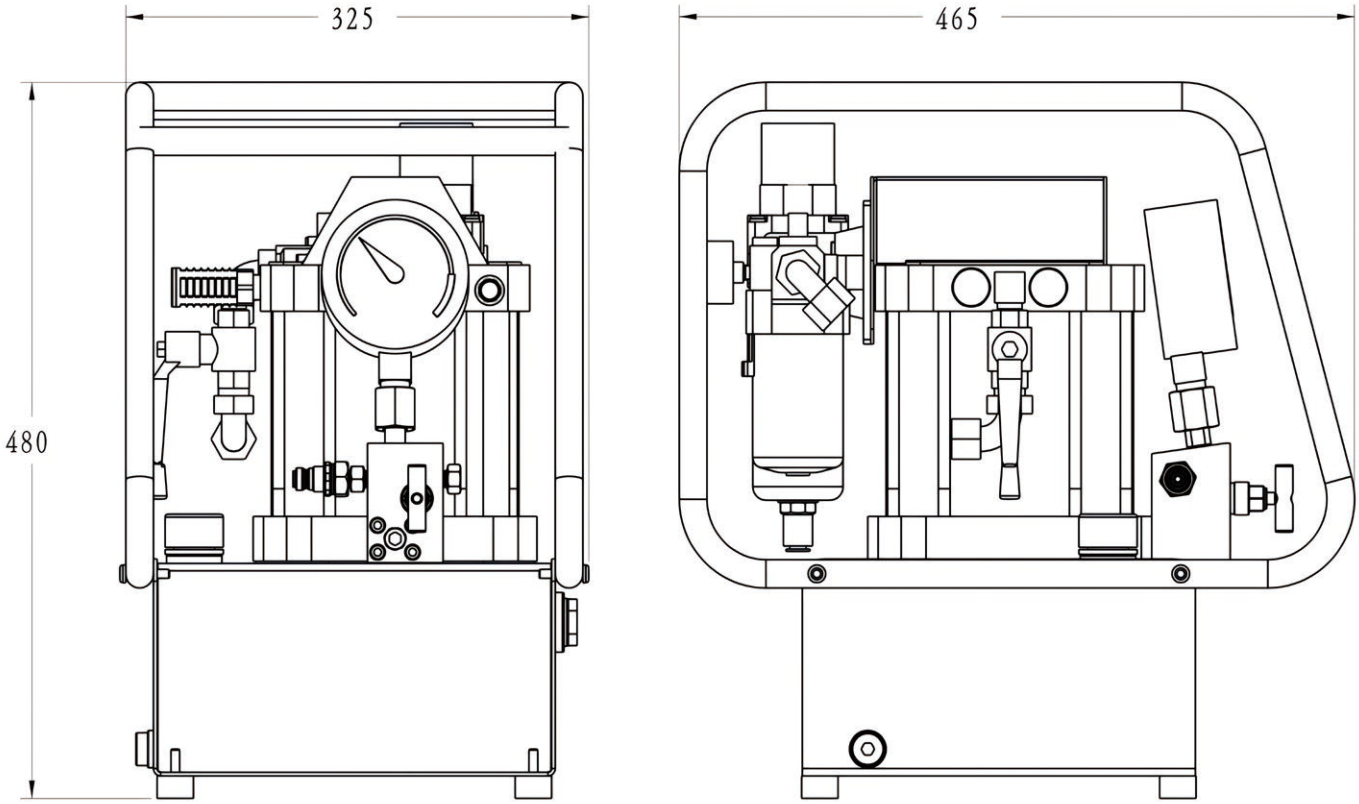
Model Number	Rated Pressure	Average Flow	Pressure Ratio	Displacement	Reservoirs capacity	Weight without oil	Air Source Pressure
HAP1500	150MPa	0.3L/Min	250:1	6.3mL	5L	25KG	3-7bar
HAP2500	250MPa	0.15L/Min	370:1	4.2mL	5L	25KG	3-7bar

▼ HAP Product Illustration:

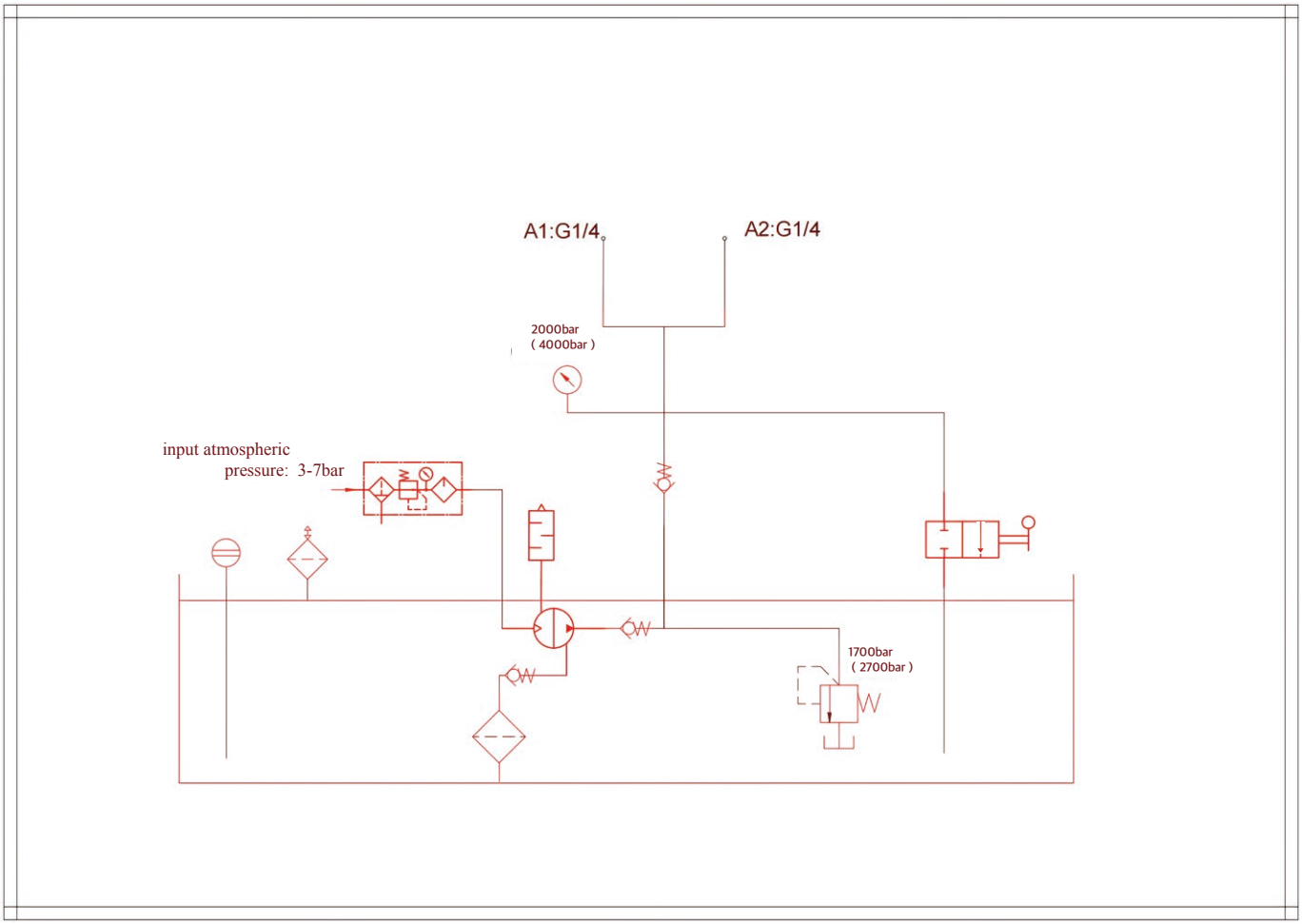


NO	Name
1	Triple Parts
2	Air cylinder
3	Sight Glass
4	Release Valve
5	Oil Drain
6	Refueling And Exhaust Outlet
7	Male Coupler
8	Air supply switch
9	Suppressor
10	Gauge

▼HAP Outline Dimensional Drawing:



▼HAP Hydraulic Schematic Diagram:



▼ EPL Portable Electric Ultra-high Pressure Pumps



EPL ultra-high pressure pumps

Maximum output pressure:	150MPa
Motor power:	1KW
Low pressure flow:	1.5L/Min
High pressure flow:	0.15/0.25L/Min
Repeated pressure accuracy:	2MPa
Available oil capacity:	5L

- •EPL series are two-stage plunger pump design, no supercharger
- •Brushless motor drive, maintenance-free, low noise
- •Adjustable relief valve, precise pressure regulation
- •Manual unloading valve, safe and reliable
- •No leakage design, pressure maintenance after power failure
- •Aluminum alloy welded tank, compact design, Light weight
- •CEJN 116/125 series snap-in connector
- • Weak wire control handle

▼ EPL Type Specification Sheet:

Model Number	Rated Pressure (bar)	Low Pressure Flow(L/Min)	High Pressure Flow(L/Min)	Available oil capacity(L)	Oil outlet thread	Matching joint	Weight without oil(KG)
EPL1500S5	1500	1.5	0.25	5	G1/4	CEJN: 116 series	18
EPL2500S5	2500	1.5	0.15	5	G1/4	CEJN: 125 series	19

▼ Two output valve blocks are available:

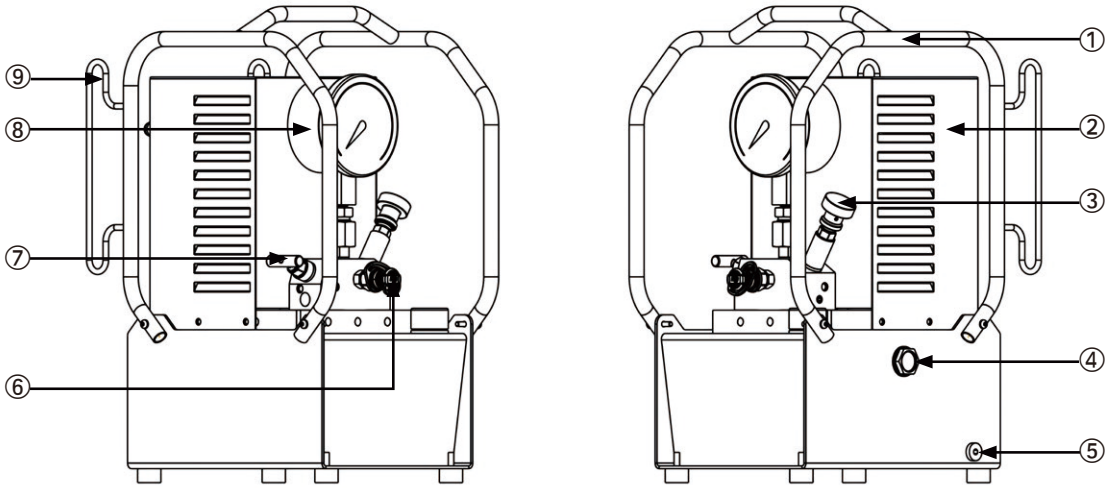


EPL1500S5



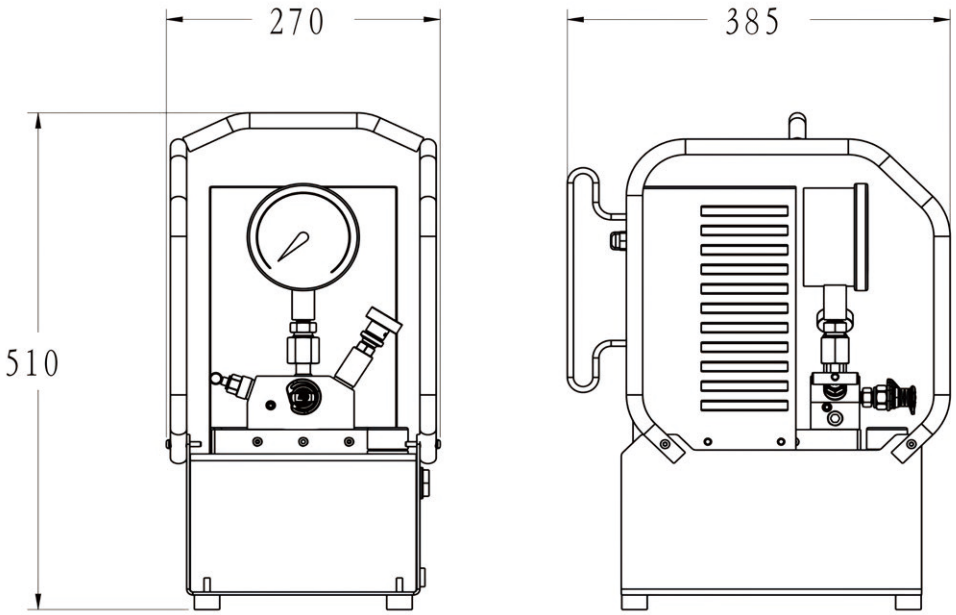
EPL2500S5-2

▼ EPL Product Illustration:

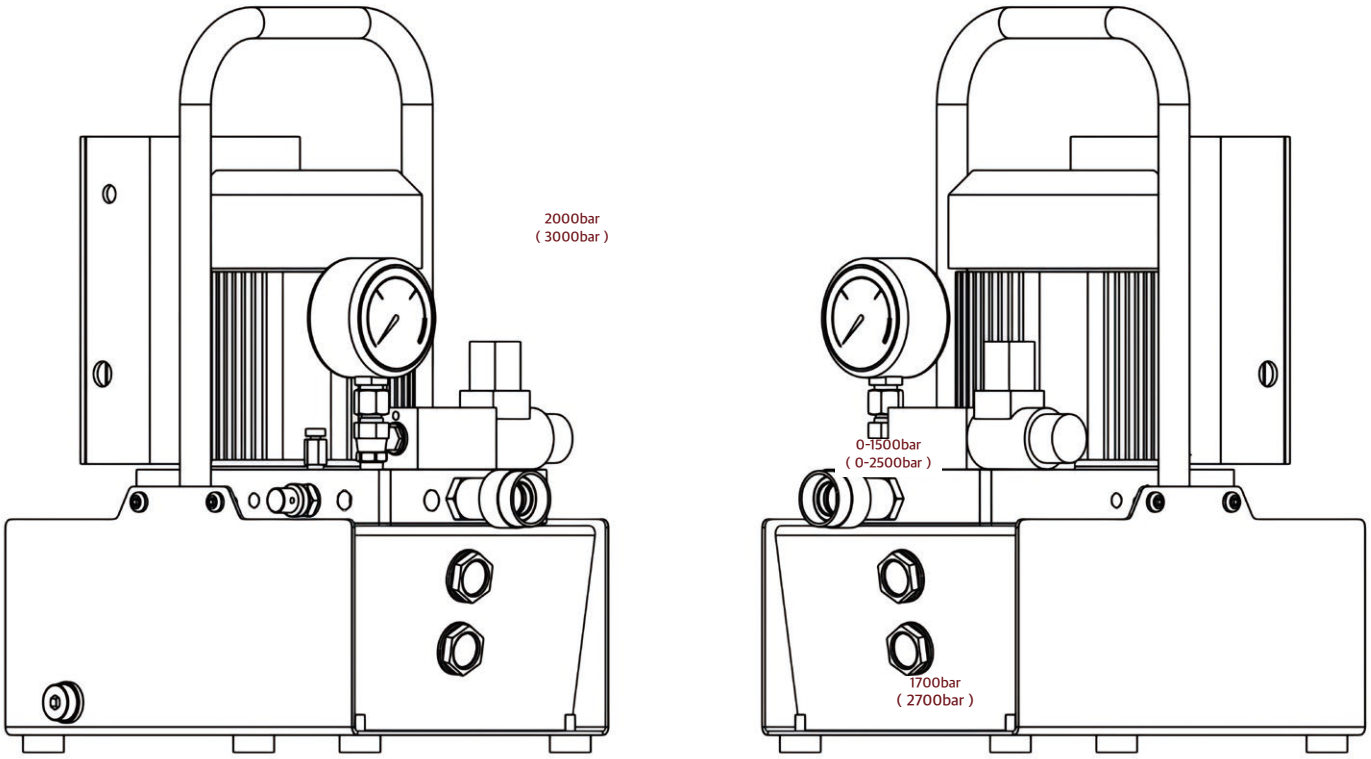


NO	Name
1	Protected Framework
2	Shield
3	Relief Valve
4	Oil Level Gauge
5	Oil Outlet
6	Quick Interface
7	Release Valve
8	Manometer
9	Wire winder

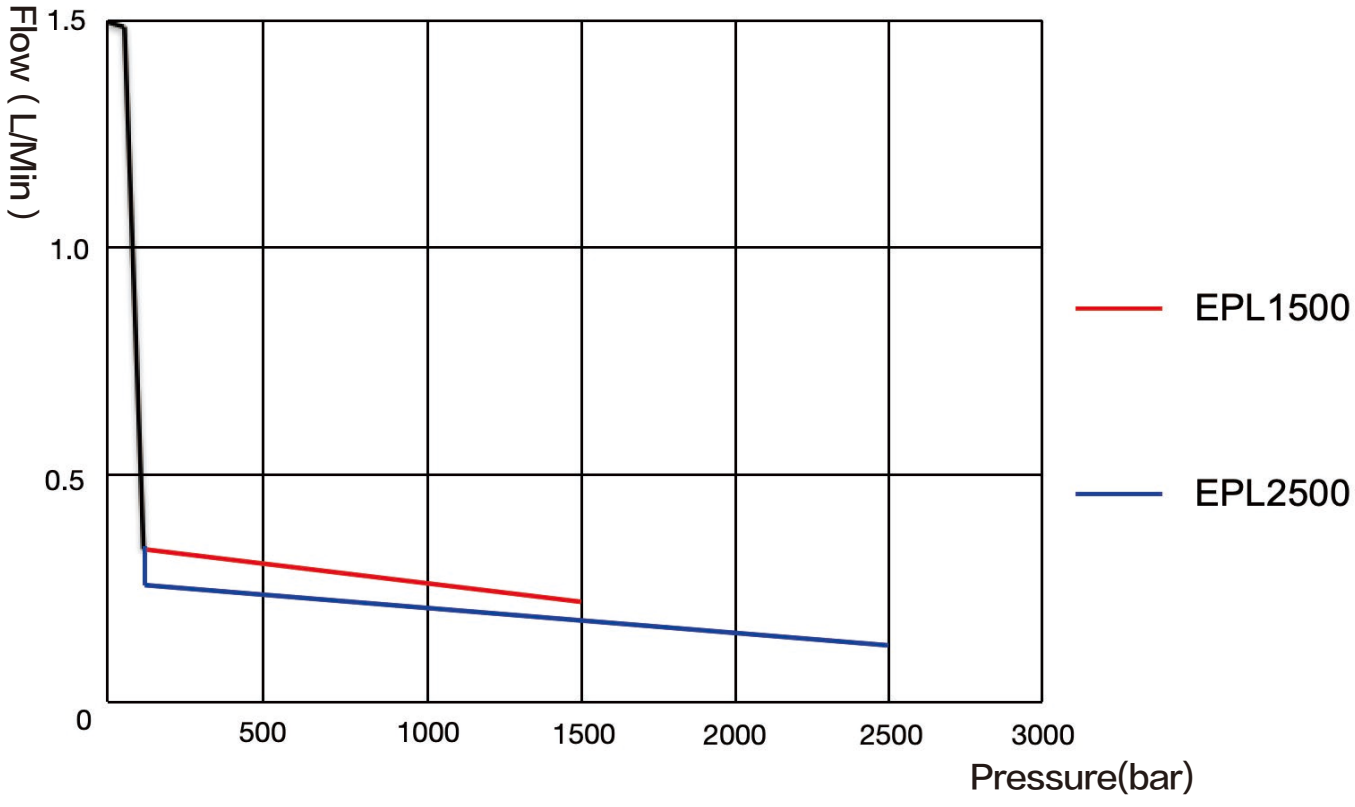
▼ EPL Outline Dimensional Drawing:



▼EPL 液压原理图:



▼EPL 压力流量图:



▼NEP Electric Ultra-High Pressure Pumps



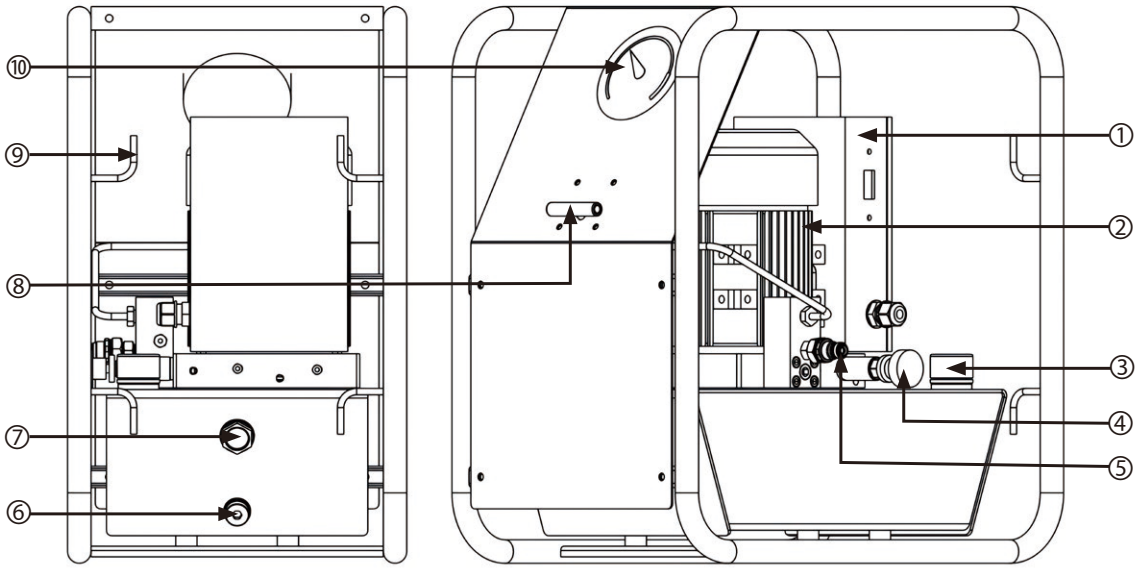
Maximum output pressure:	150/250MPa
Reservoirs capacity:	5L
Low pressure flow:	2.5L/Min
High pressure flow:	0.2/ 0.3L/Min

- Brushless motor
- 100% protection rack
- Adjustable relief valve
- Pressure control accuracy: ±2MPa
- Maximum pressure: 150-250MPa
- Motor size: 1.1KW
- Voltage: 230VAC/50HZ or 115VAC/60HZ
- Noise level: 75dB
- 24VDC security control buttons
- Easy to operate cable collector
- CEJN meters and couplers

▼NEP Type Specification Sheet:

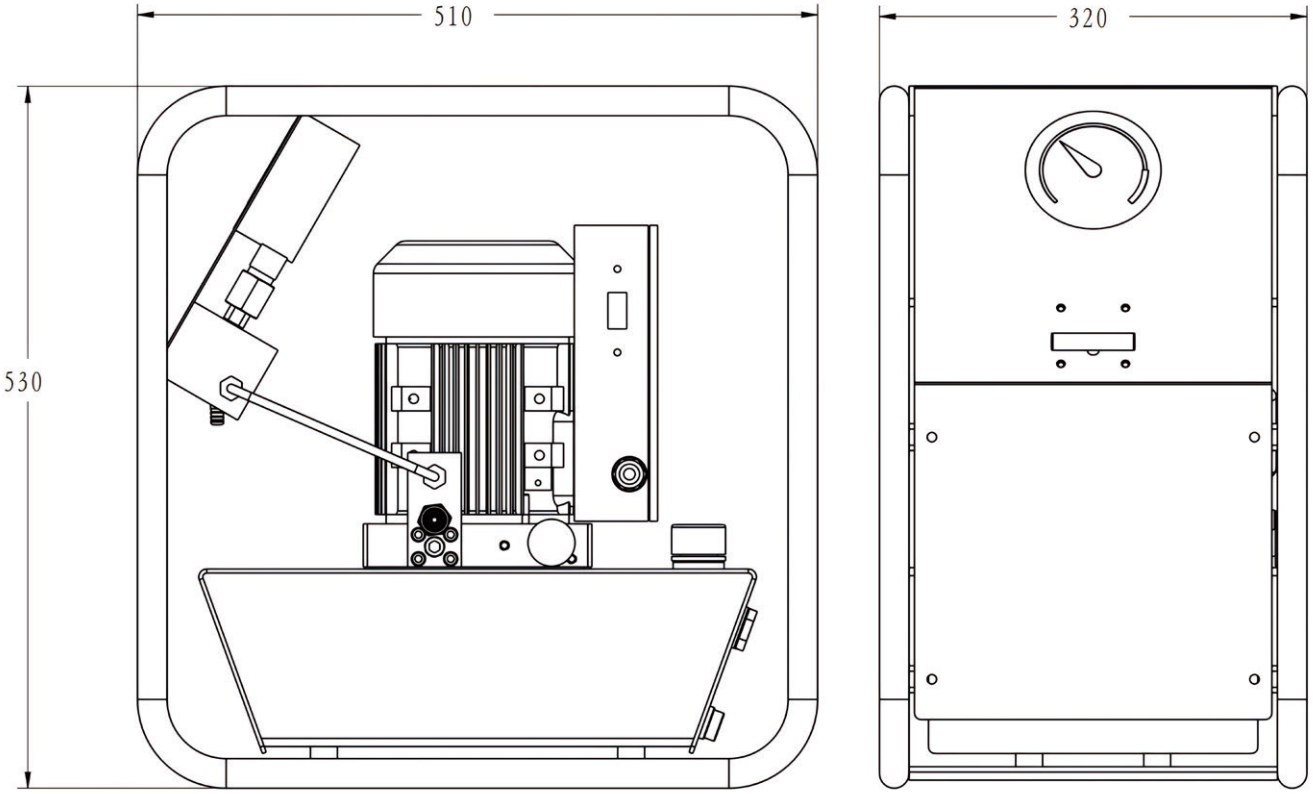
Model Number	Rated Pressure(MPa)	Motor size (KW)	Reservoirs capacity(L)	Low Pressure Flow (L/Min)	High Pressure Flow (L/Min)	Matching joint	Gauge range (MPa)	Weight Without Oil (KG)
NEP1500	150	1.1	7	2.5	0.3	116	200	36
NEP2500	250	1.1	7	2.5	0.2	125	400	36

▼NEP Product Illustration:

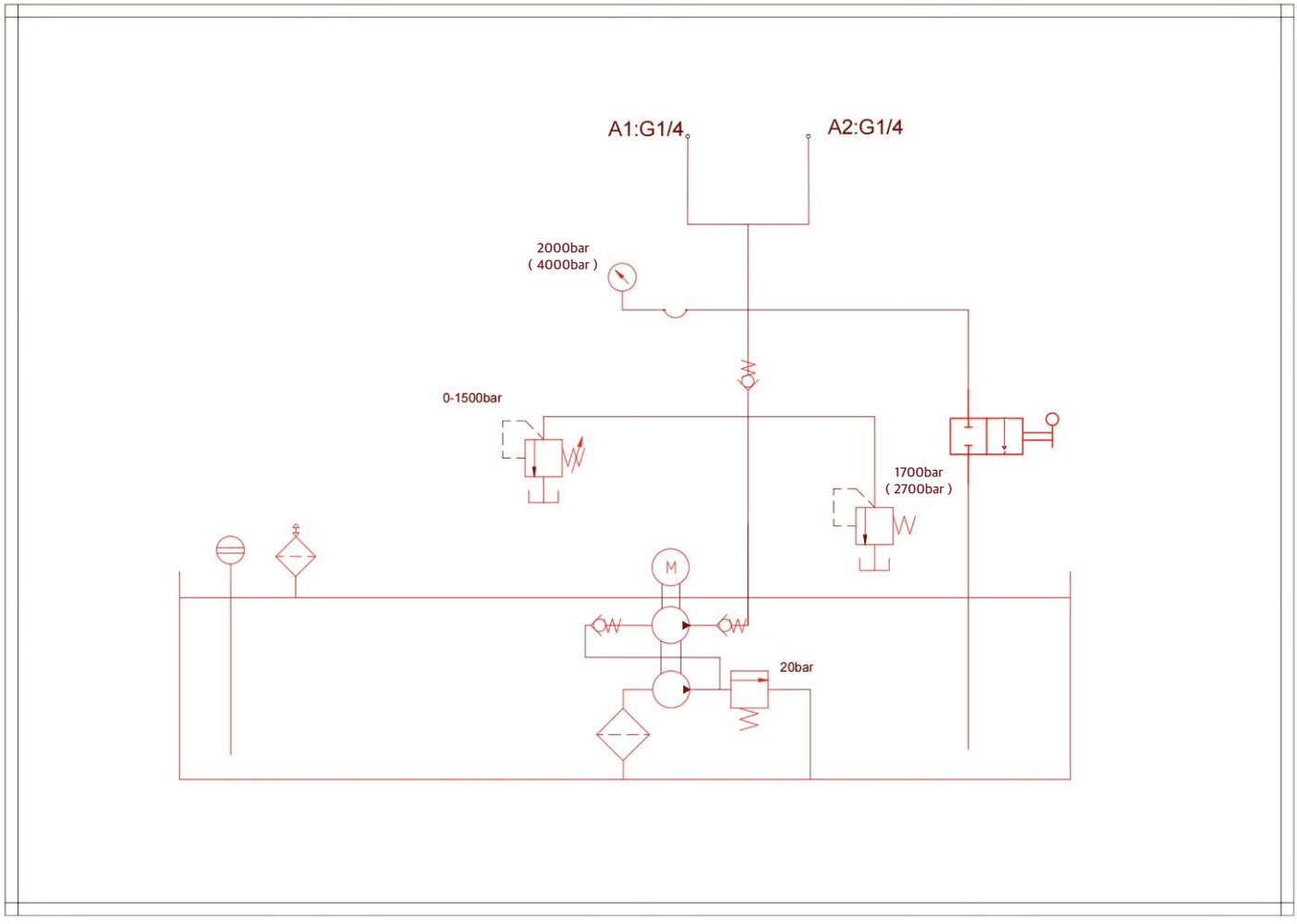


NO	Name
1	Electric Box
2	Motor
3	Refueling And Exhaust Outlet
4	Relief Valve
5	Male Coupler
6	Oil Drain
7	Sight Glass
8	Release Valve
9	Cable Collector
10	Gauge

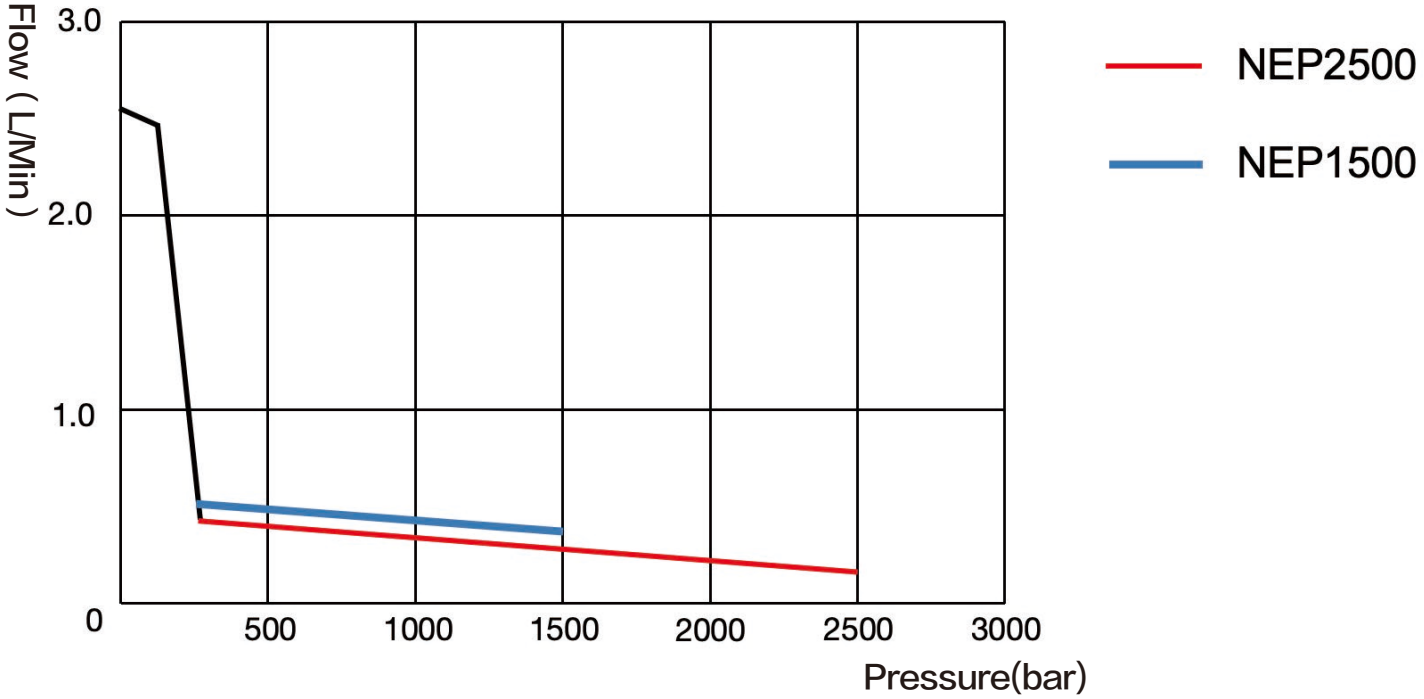
▼ NEP Outline Dimensional Drawing:



▼ NEP High Pressure Flow:



▼ NEP Flow-Pressure Curve:



EPA Digital Indication Electric Pressure Pumps



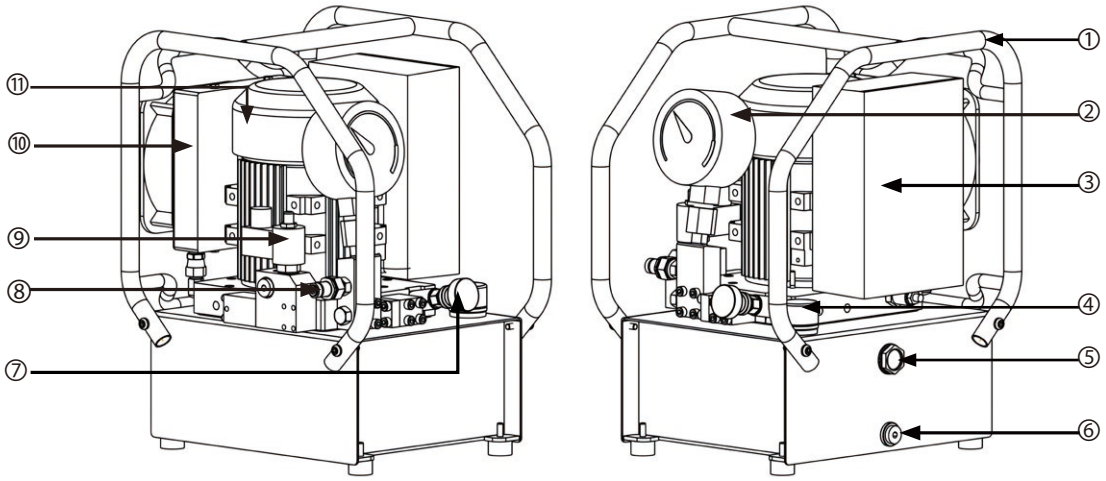
Maximum output pressure:	150MPa
Motor size:	1.1KW
Low pressure flow:	2.5L/Min
High pressure flow:	0.3L/Min
Reservoirs capacity:	5L

- Ultra-high pressure electromagnetic unloading with an emergency manual unloading valve
- Optional dual-button digital display remote control (RC) featuring an LCD screen that displays system pressure values in real time with high precision
- Built-in safety valve in the pump
- External lockable pressure regulating valve
- Brushless motor: maintenance-free and low noise
- Gear pump and plunger pump structure with two-stage flow
- High-efficiency air-cooled radiator for low temperature rise during continuous operation
- Integrated frame with built-in winding reel for convenient control line storage
- Tool-free quick-mount/dismount pressure gauge
- Standard two output ports

EPA Type Specification Sheet:

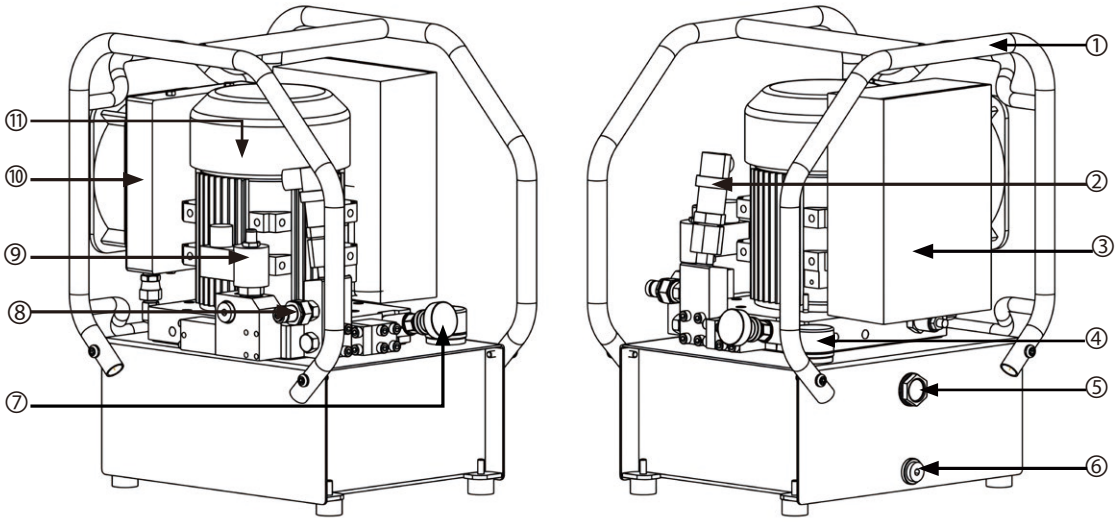
Model Number	Voltage	Motor size	Low Pressure Flow	High Pressure Flow	Reservoirs capacity	Number of Oil Drains	Weight without oil
EPA1500	230VAC	1.1KW	2.5L/Min	0.3L/Min	5L	2	30KG
EPA1500-115/60	115VAC	1.1KW	2.5L/Min	0.3L/Min	5L	2	30KG
EPA1500RC	230VAC	1.1KW	2.5L/Min	0.3L/Min	5L	2	30KG
EPA1500RC-115/60	115VAC	1.1KW	2.5L/Min	0.3L/Min	5L	2	30KG

▼ EPA1500Product Illustration:

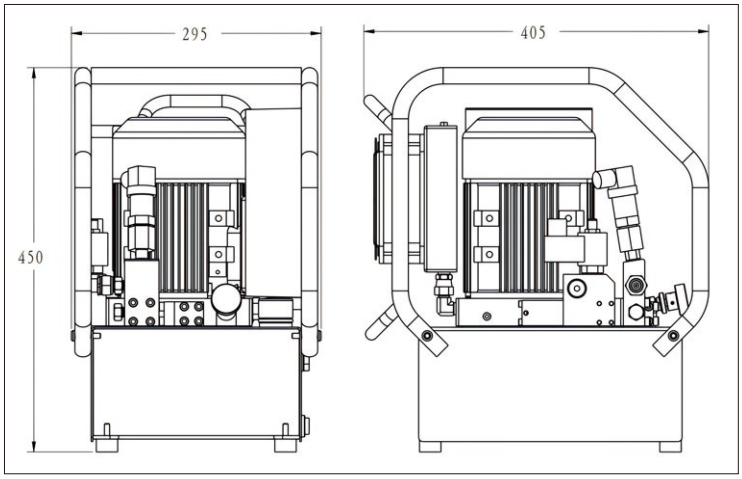


NO	Name
1	Protected Framework
2	Gauge
3	Electric Box
4	Refueling And Exhaust Outlet
5	Sight Glass
6	Oil Drain
7	Relief Valve
8	Male Coupler
9	Solenoid unloading valve
10	Air cooled radiator
11	Motor

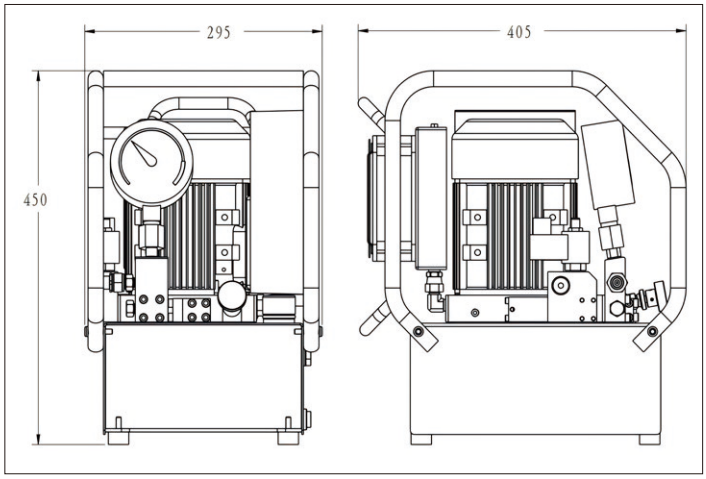
▼ EPA1500-RC Product Illustration:



NO	Name
1	Protected Framework
2	Gauge
3	Electric Box
4	Refueling And Exhaust Outlet
5	Sight Glass
6	Oil Drain
7	Relief Valve
8	Male Coupler
9	Solenoid Unloading Valve
10	Air Cooled Radiator
11	Motor

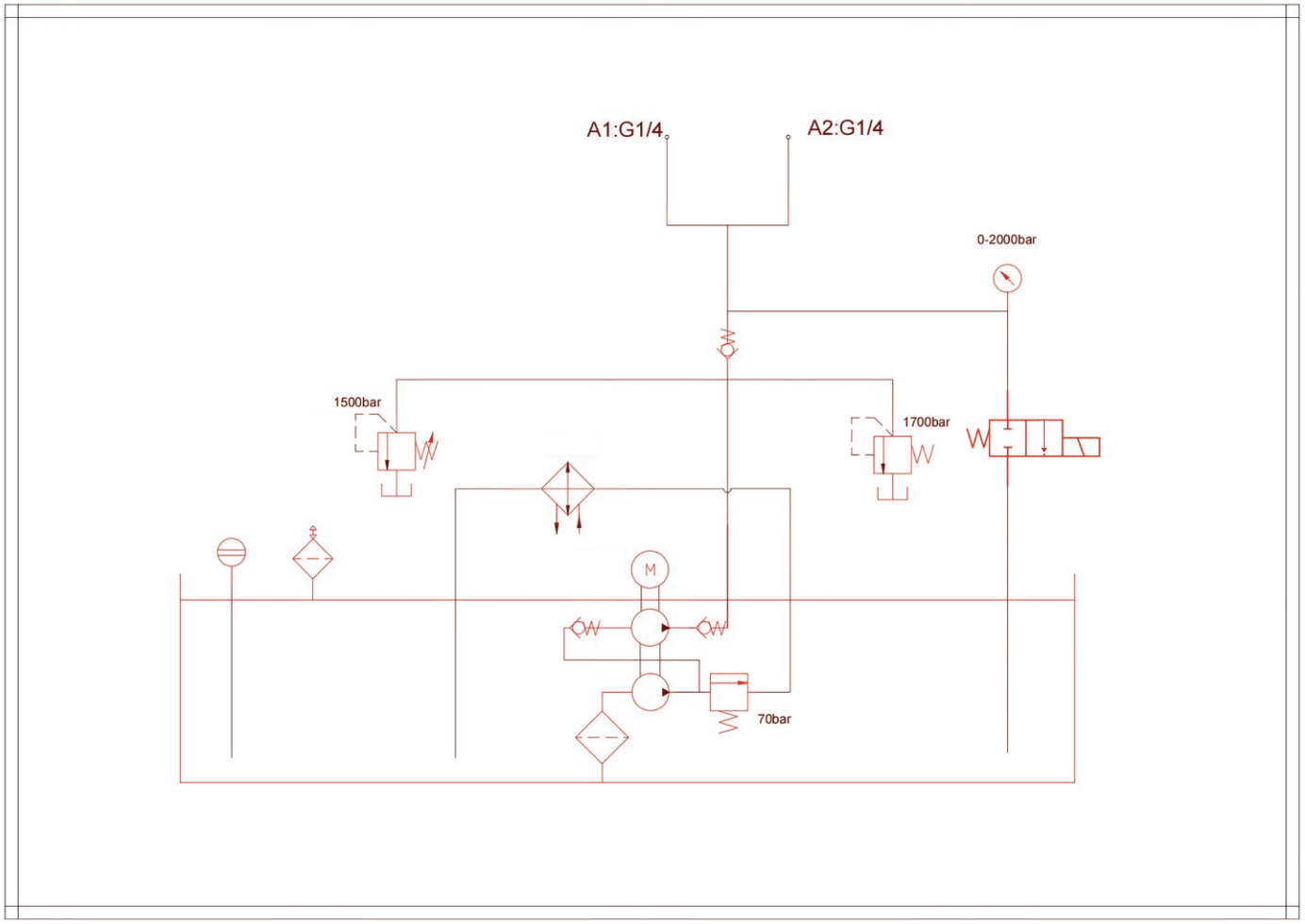


EPA1500-RC

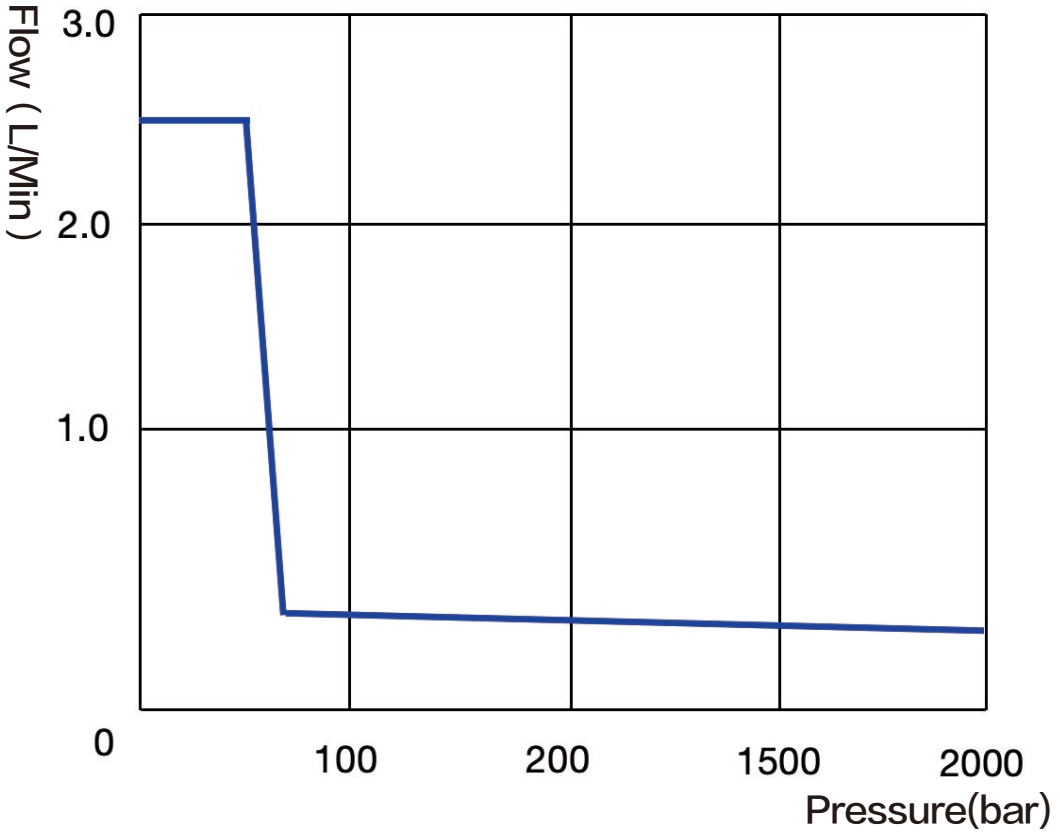


EPA1500

▼ EPA Hydraulic Schematic Diagram:



▼ EPA Flow-Pressure Curve:



EPW Electric Ultra-high Pressure Pumps



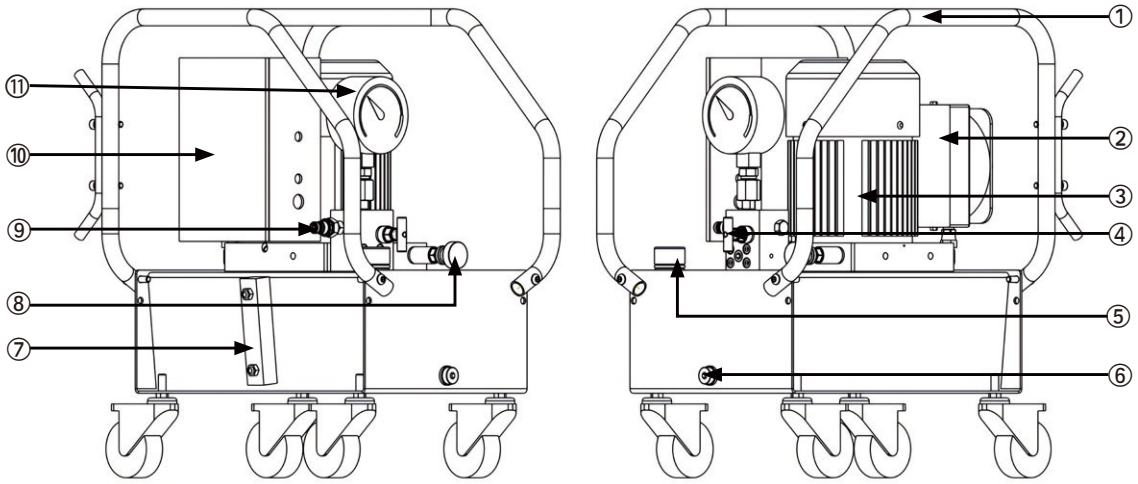
Motor size:	1.1KW
Low pressure flow:	3L/Min
High pressure flow:	0.4-0.8L/Min
Reservoirs capacity:	10/40L

- Brushless motor, maintenance-free
- Two-stage pump, high efficiency
- High pressure radial piston pump, no supercharger, long life
- Three-phase motor protector, effectively ensure motor safety
- Air-cooled radiator, continuous working temperature rise low
- High pressure regulator, continuous pressure adjustable
- Weak wire control handle
- Media: ISO VG46 or water glycol
- Removable wire winder for easy cable collection

EPW Product Specification Sheet:

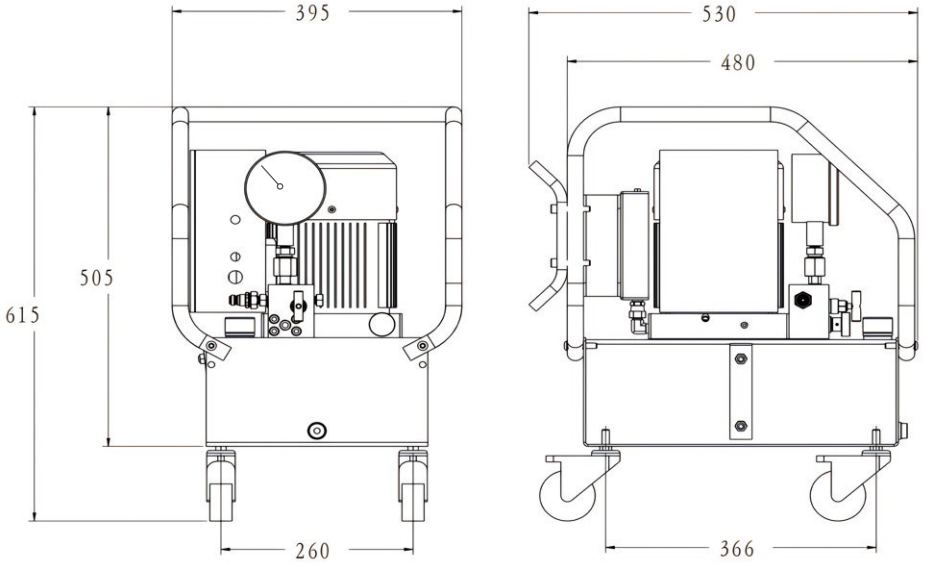
Model Number	Rated Pressure(bar)	Voltage (VAC)	Motor size (KW)	Low Pressure Flow(L/Min)	High Pressure Flow(L/Min)	Noise level(dB)	Reservoirs capacity(L)	Weight Without Oil(Kg)
EPW1500F10	1500	380/230	2.2	3	0.8	80	10	46
EPW2500F10	2500	380/230	2.2	3	0.45	80	10	46
EPW1500F20	1500	380/230	2.2	3	0.8	80	20	54
EPW2500F20	2500	380/230	2.2	3	0.45	80	20	54
EPW1500F40	1500	380/230	2.2	3	0.8	80	40	72
EPW2500F40	2500	380/230	2.2	3	0.45	80	40	72

▼ EPW Product Illustration:

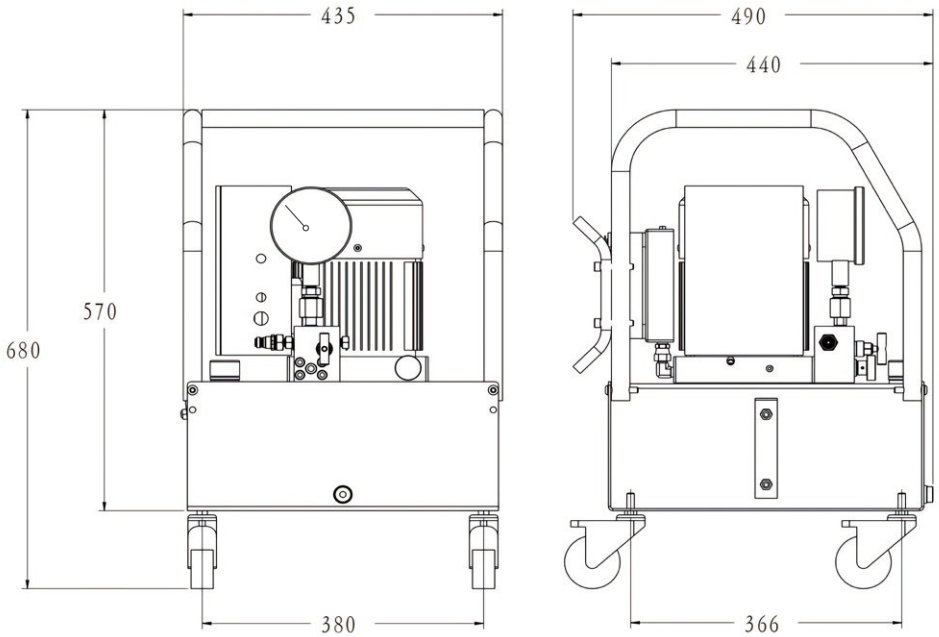


NO	Name
1	Protected Framework
2	Heat Exchanger
3	Motor
4	Release Valve
5	Refueling And Exhaust Outlet
6	Oil Drain
7	Sight Glass
8	Relief Valve
9	Male Coupler
10	Electric Box
11	Gauge

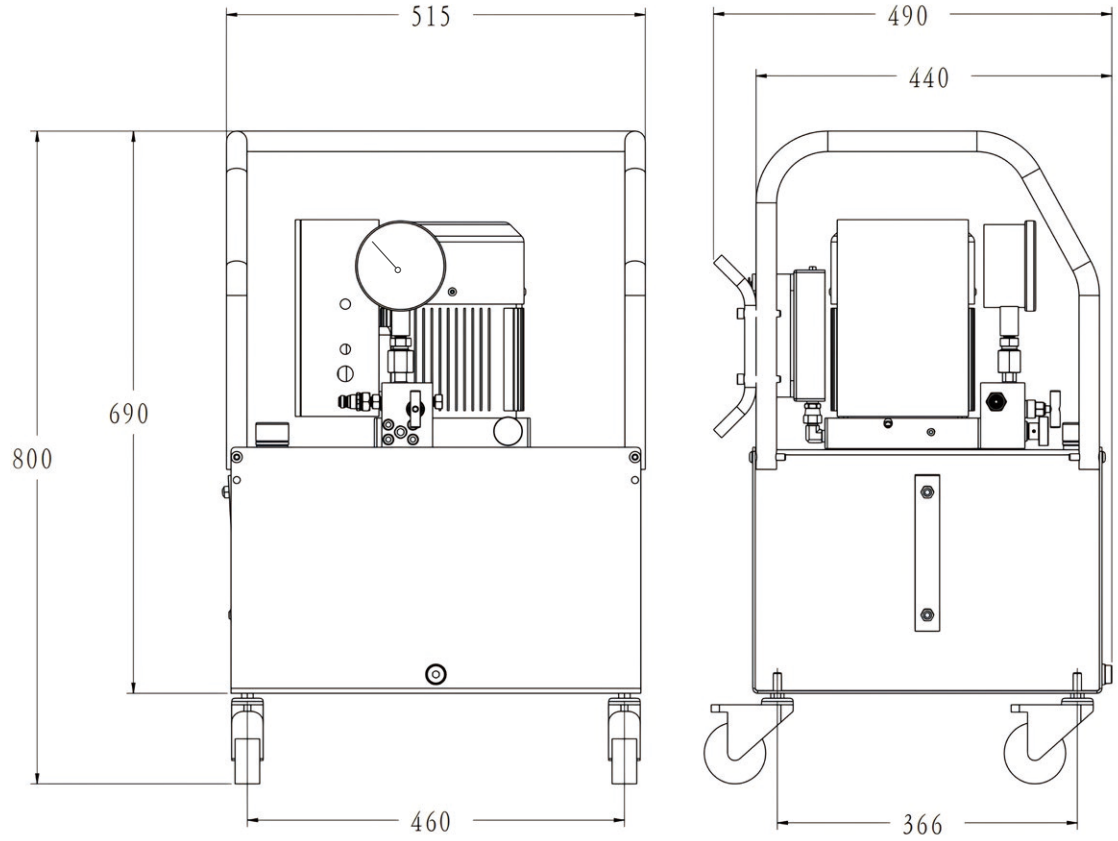
▼ EPW-F10 Outline Dimensional Drawing:



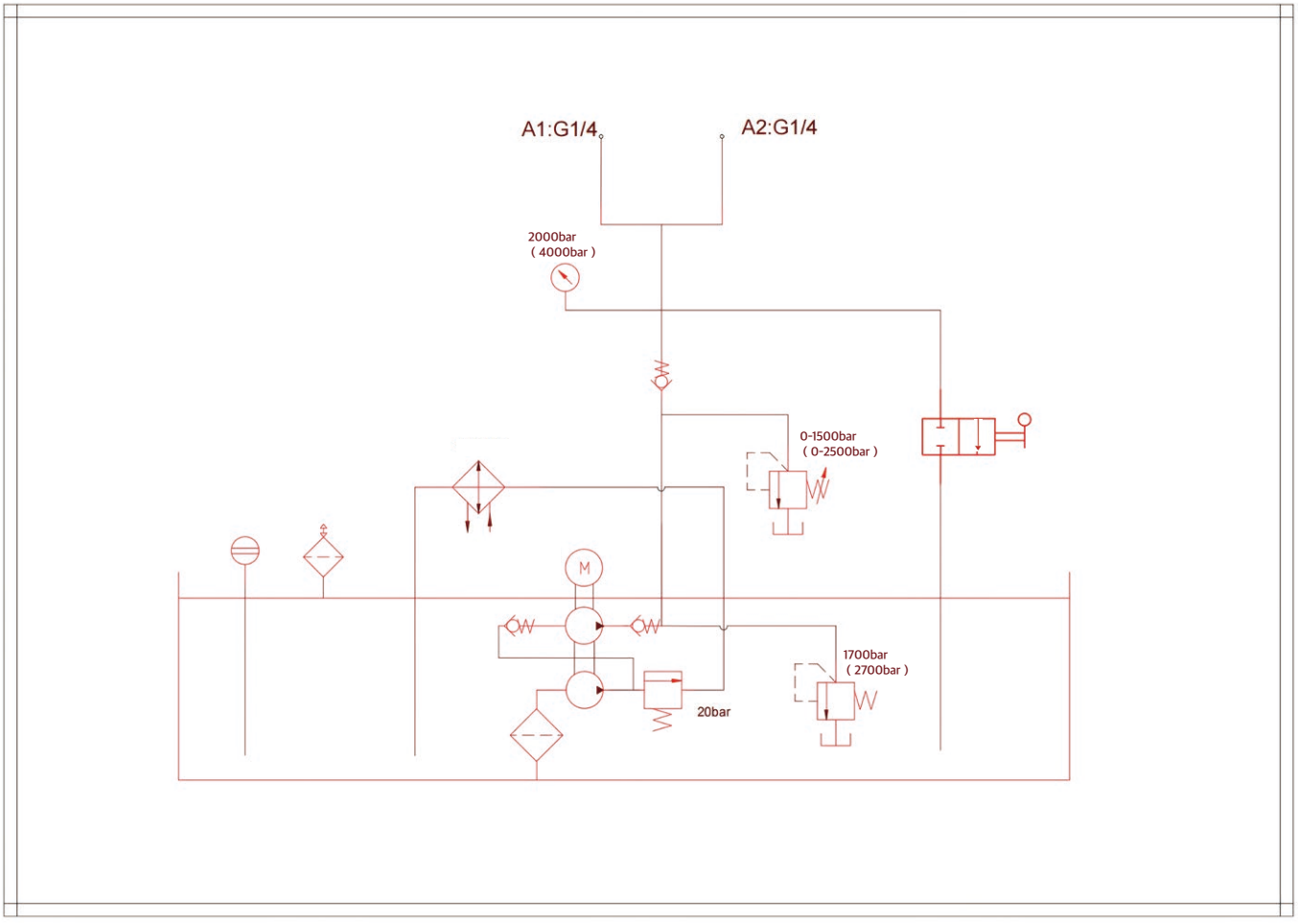
▼ EPW-F20 Outline Dimensional Drawing: ：



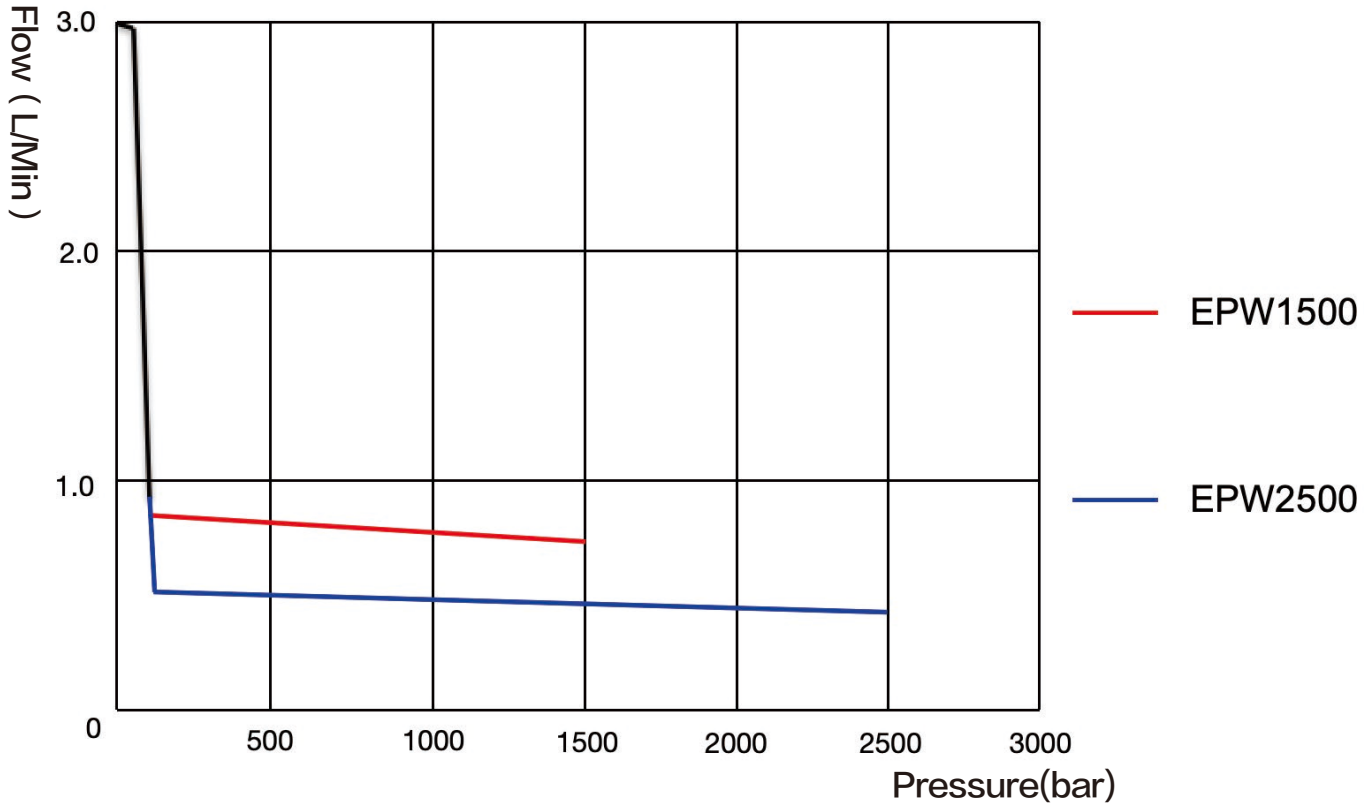
▼ EPW-F40 Outline Dimensional Drawing:



▼ EPW Hydraulic Schematic Diagram:



▼ EPW Flow-Pressure Curve:



▼ EPU Heavy-Duty Electric Ultra-High Pressure Pumps



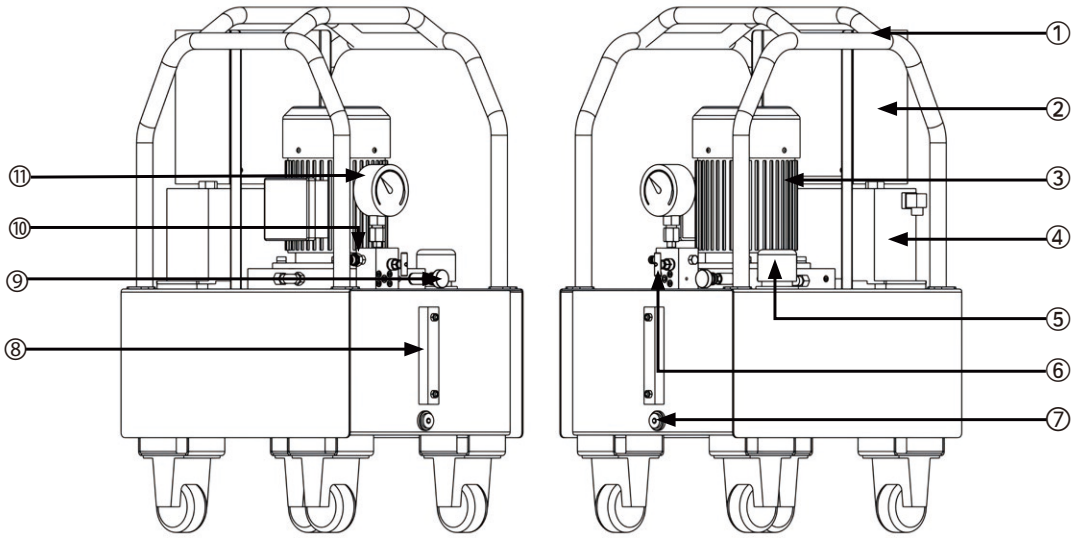
Motor size:	4KW
Low pressure flow:	4.8L/Min
High pressure flow:	0.6-1.2L/Min
Reservoirs capacity:	60L

- •ABB IEC brushless motor, maintenance-free
- •Two-stage pump, high efficiency
- •High pressure radial piston pump, no supercharger, long life
- •Three-phase motor protector, effectively ensure motor safety
- •Air-cooled radiator, low continuous operating temperature rise
- •High pressure regulator, continuous pressure adjustable
- •Weak wire control handle
- •Media: ISO VG46 or Water glycol
- •Equipped with heavy-duty casters and frames for easy movement and lifting

▼ EPU Type Specification Sheet:

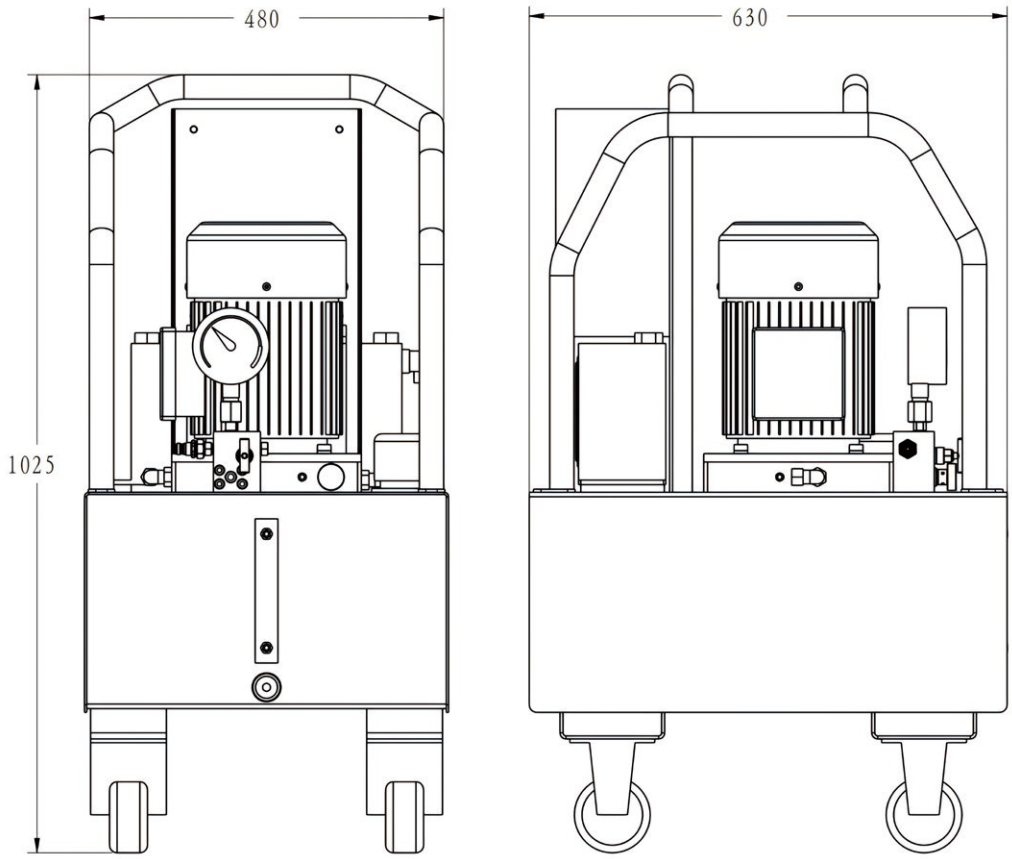
Model Number	Rated Pressure(bar)	Low Pressure Flow(L/Min)	High Pressure Flow(L/Min)	Voltage (VAC)	Motor size (KW)	Noise level(dB)	Reservoirs capacity(L)	Weight Without Oil(Kg)
EPU1500	1500	4.8	1.2	380VAC	4	80	60	110
EPU2500	2500	4.8	0.8	380VAC	4	80	60	110
EPU3500	3500	4.8	0.6	380VAC	4	80	60	110

▼ EPU Product Illustration:

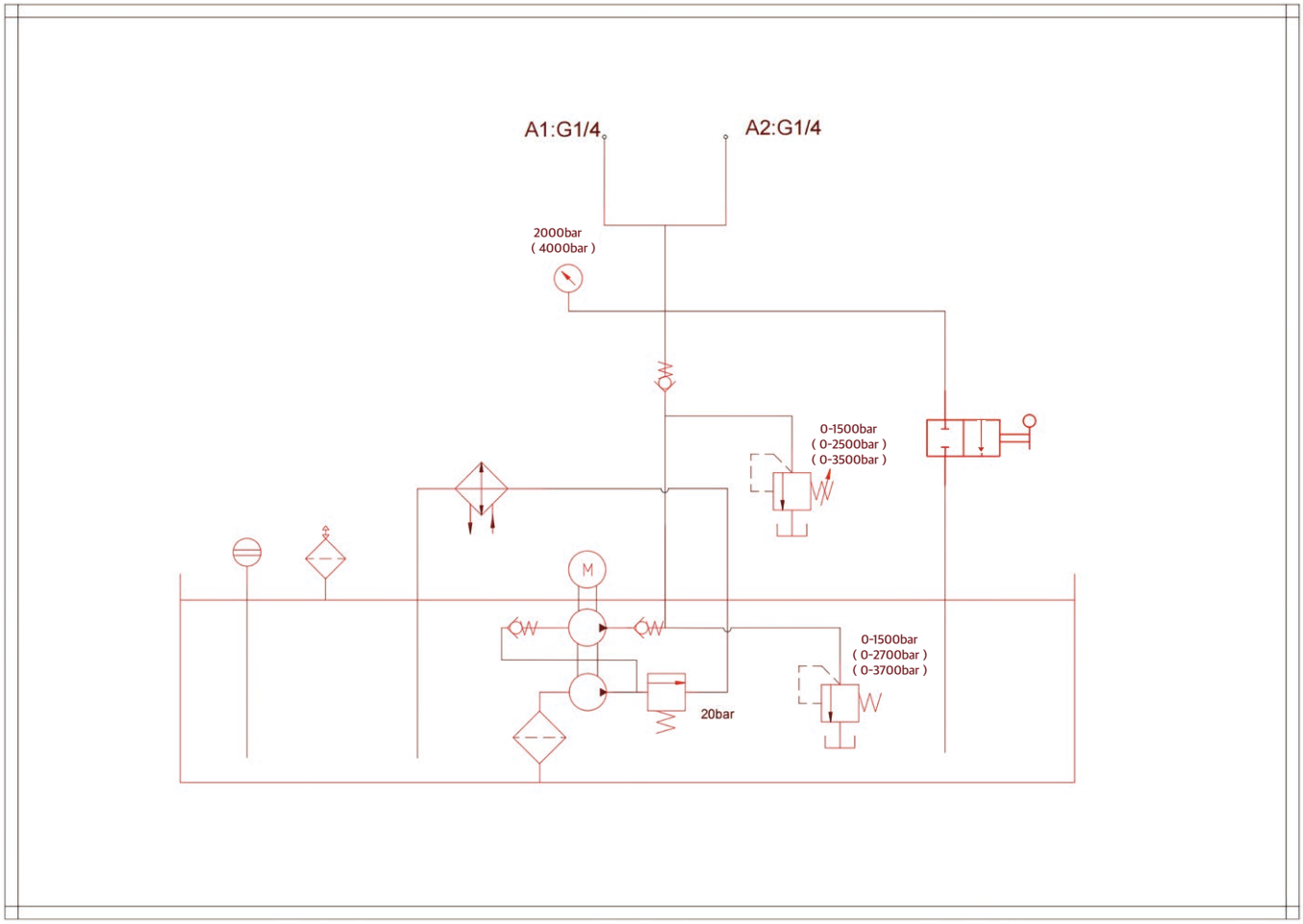


NO	Name
1	Protection Frame
2	Electric Box
3	Motor
4	Air-Cooled Radiator
5	Oil and Exhaust Port
6	Release Valve
7	Drain Port
8	Sight Glass
9	Relief Valve
10	Male Coupler
11	Gauge

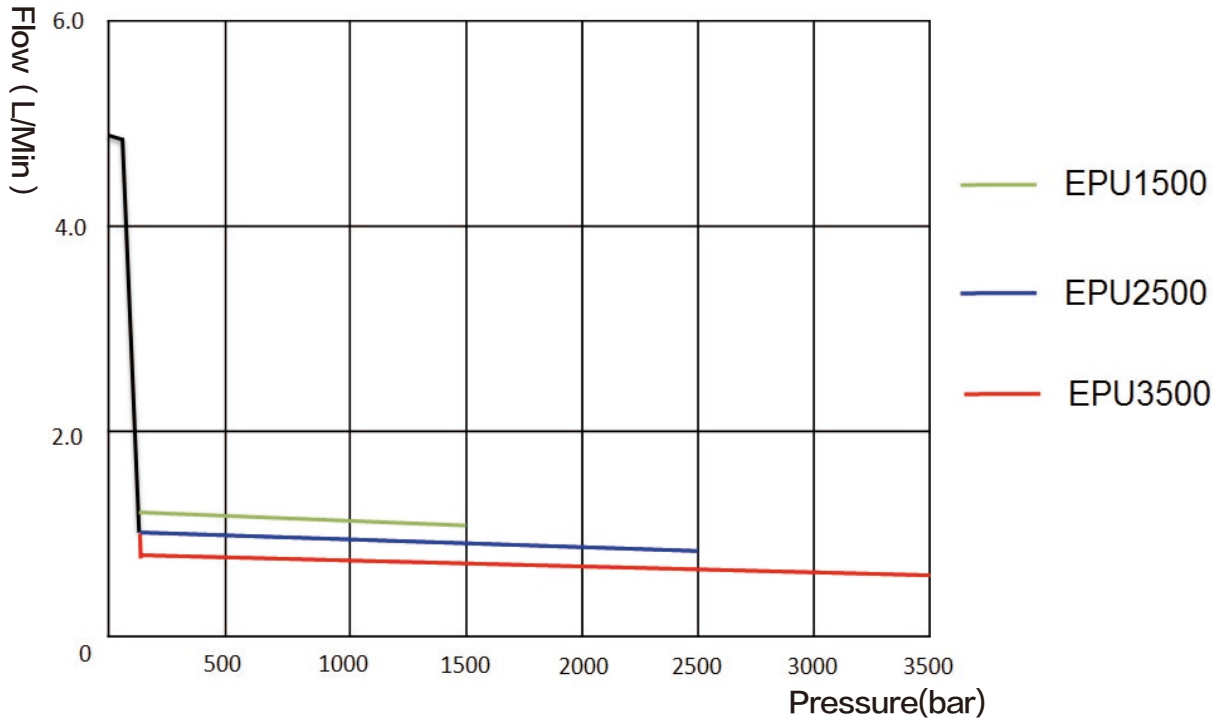
▼ EPU Outline Dimensional Drawing:



▼ EPU Hydraulic Schematic Diagram:



▼ EPU High Pressure Flow:



RIVERLAKE
ultra high pressure hydraulic tools www.riverlakeco.com

▼ EDP Double Acting Ultra-high Pressure Electric Pumps



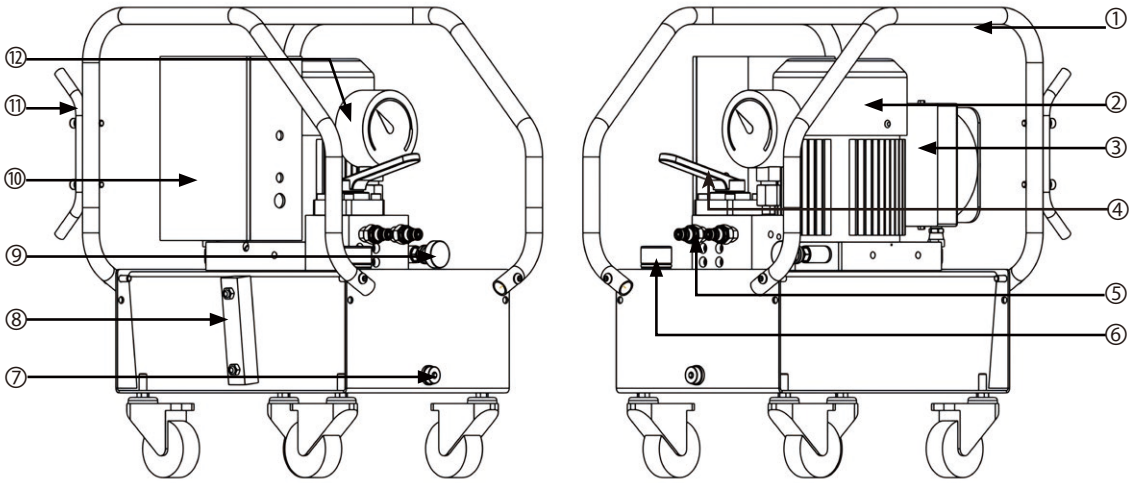
Maximum output pressure:	150/250MPa
Motor size:	1.5KW
High pressure flow:	0.5/1.0L/Min
Low pressure flow:	3/4.8L/Min
Reservoirs capacity:	20L

- IEC brushless motor, maintenance-free
- High pressure plunger pump direct drive, no supercharger, long life
- Built-in safety valve, external adjustable relief valve
- Air cooled radiator, low continuous operating temperature rise
- Weak wire control handle
- Micro-leakage manual reversing valve
- P-port pressure gauge
- Lockable casters
- Four-core industrial plug

▼ EDP Type Specification Sheet:

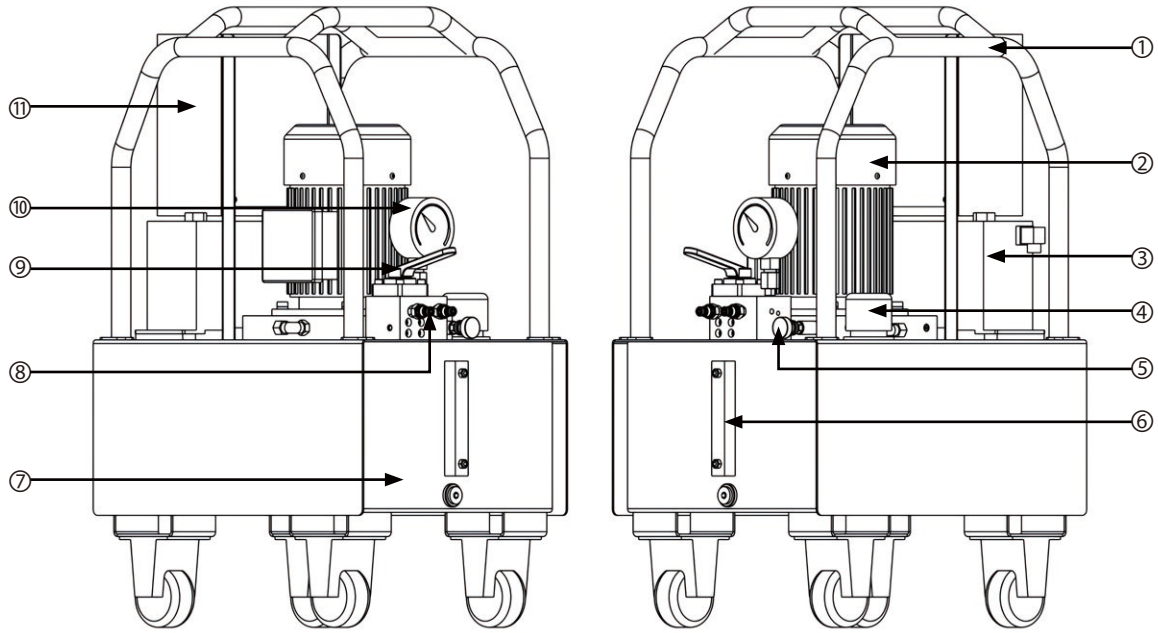
Model Number	Rated Pressure	Low Pressure Flow	High Pressure Flow	Motor size	Voltage	Noise level	Reservoirs capacity	Weight Without Oil
EDP2000-10	2000bar	3L/Min	0.5L/Min	1.5KW	380VAC	80dB	10L	48KG
EDP2000-60	2000bar	4.8L/Min	1.0L/Min	4KW	380VAC	80dB	60L	112KG

▼EDP2000-10 Product Illustration:



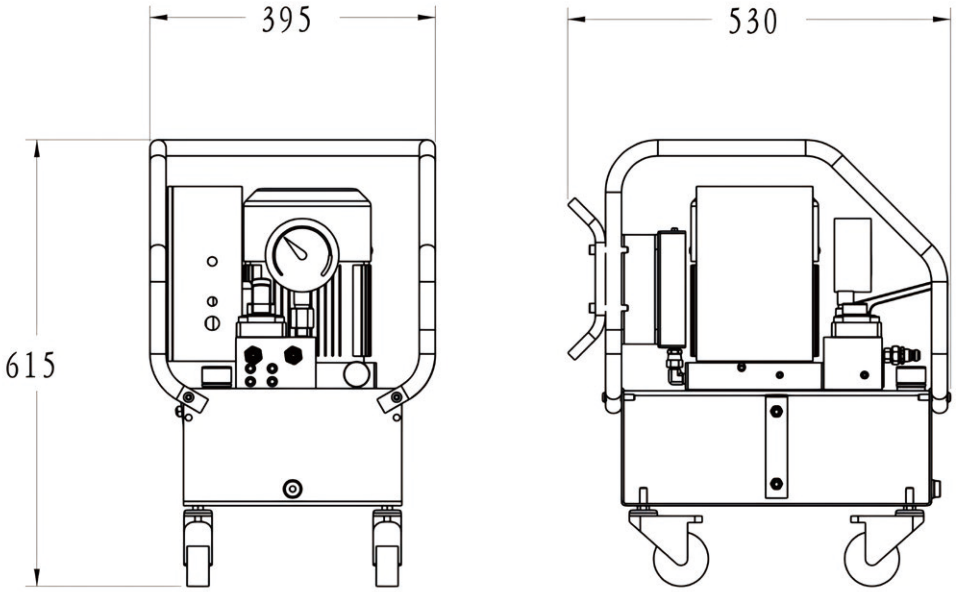
NO	Name
1	Protected Framework
2	Motor
3	Heat Exchanger
4	Manual Directional Valve
5	Male Coupler
6	Refueling And Exhaust Outlet
7	Oil Drain
8	Sight Glass
9	Relief Valve
10	Electric Box
11	Cable Collector
12	Gauge

▼ EDP2004-60 Product Illustration:

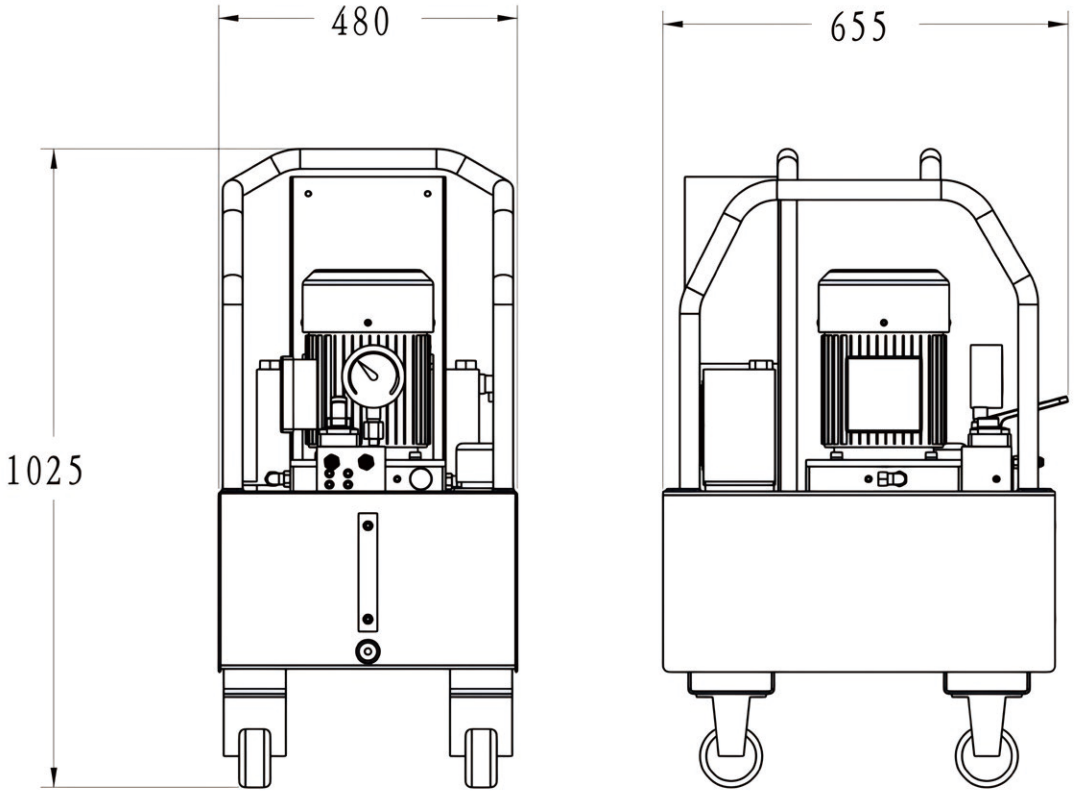


NO	Name
1	Protected Framework
2	Motor
3	Heat Exchanger
4	Refueling And Exhaust Outlet
5	Relief Valve
6	Sight Glass
7	Oil Drain
8	Male Coupler
9	Manual Directional Valve
10	Gauge
11	Electric Box

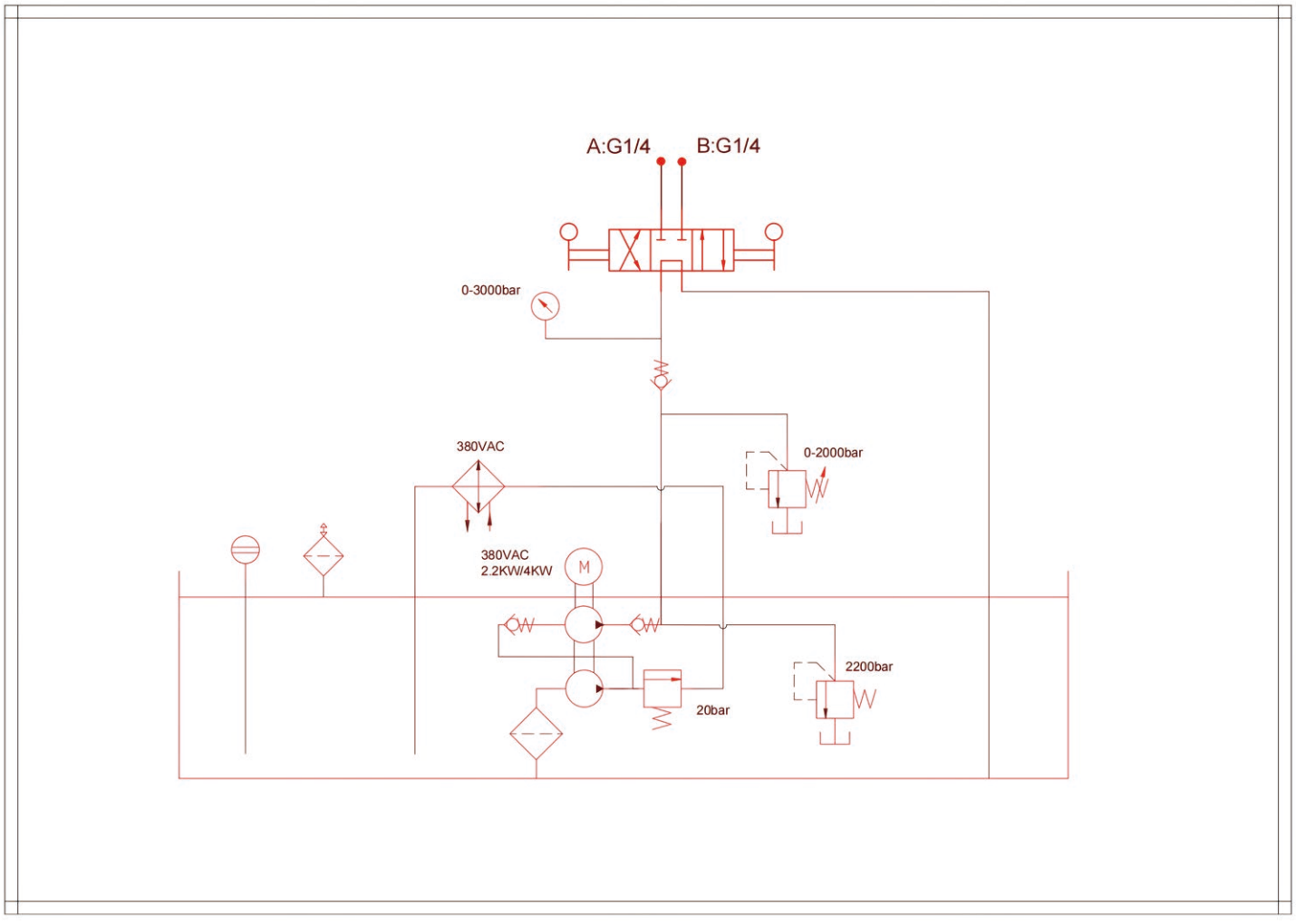
▼EDP2000-10 Outline Dimensional Drawing:



▼EDP2004-60 Outline Dimensional Drawing:



▼EDP Hydraulic Schematic Diagram:



▼EX-EPW Explosion-Proof Electric Ultra-high Pressure Pumps



Maximum output pressure: 150/250MPa	
Motor size:	1.5KW
Low Pressure Flow:	3L/Min
High Pressure Flow: 0.2/0.35l/Min	
Reservoirs capacity:	20L

- Explosion-proof design grade: Exd II BT4
- Increased safety electric control box, equipped with three-phase overload protector
- ABB explosion-proof motor
- Equipped with adjustable relief valve, pressure continuously adjustable 6M explosion-proof wire control handle
- Equipped with protection frame, lockable casters
- Two-stage pump design, low pressure fast oil supply, high pressure stable pressure boost, High efficiency
- Single/dual Oil Drain options
- 116/125 series quick plug connectors

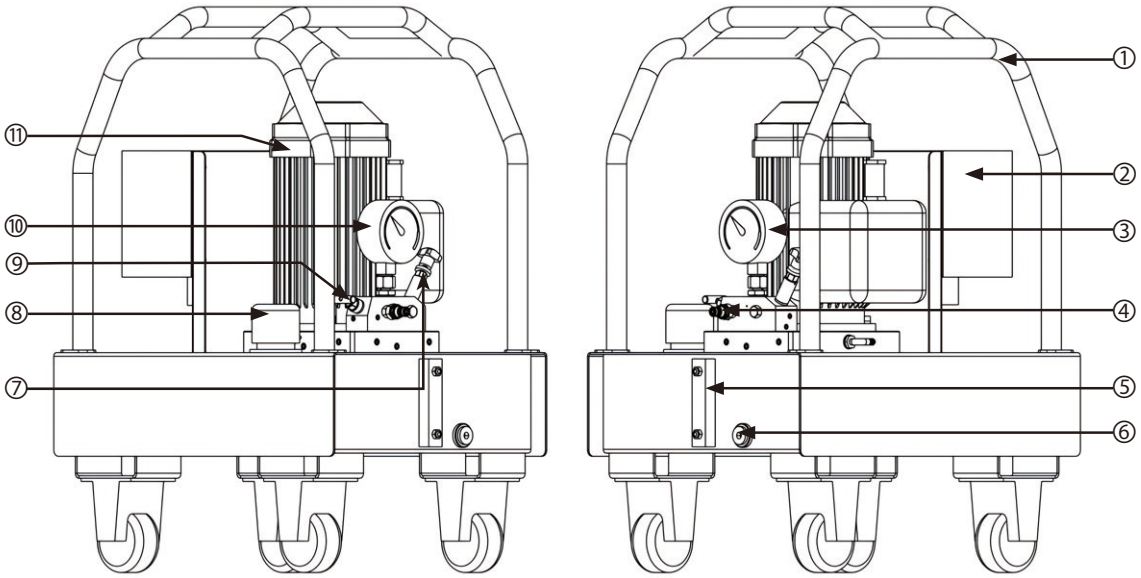
◆ EX-EPW series explosion-proof ultra-high pressure electric pump for the need of explosion-proof occasions.

◆ Can adapt to high strength conditions, suitable for harsh working environment.

▼ EX-EPW Type Specification Sheet:

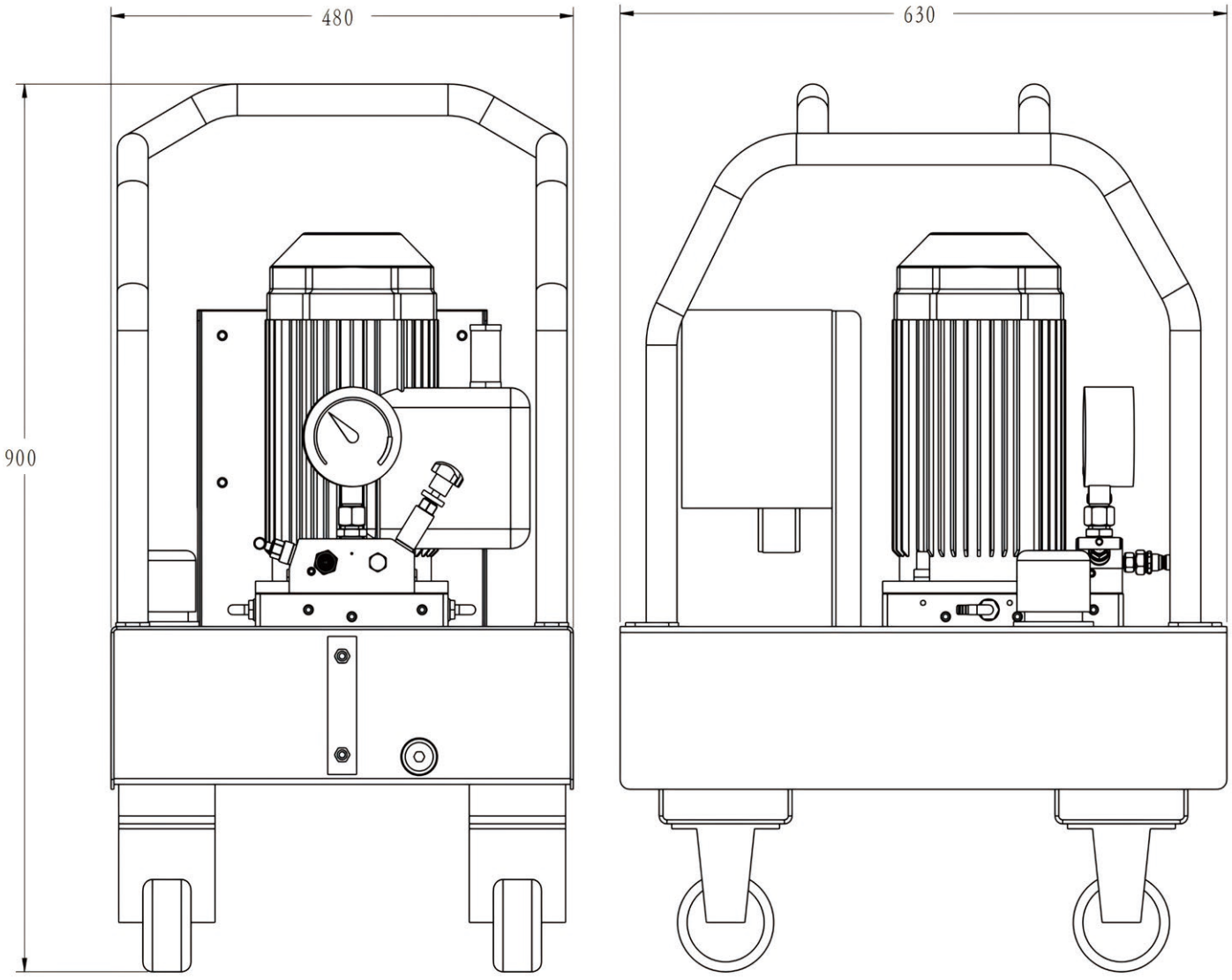
Model Number	Rated Pressure	Low Pressure Flow	High Pressure Flow	Motor size	Voltage	Noise level	Reservoirs capacity	Weight Without Oil
EX-EPW1500	1500bar	3L/Min	0.35L/Min	1.5KW	380/220VAC	80dB	20L	110KG
EX-EPW2500	2500bar	3L/Min	0.2L/Min	1.5KW	380/220VAC	80dB	20L	110KG

▼EX-EPW Product Illustration:

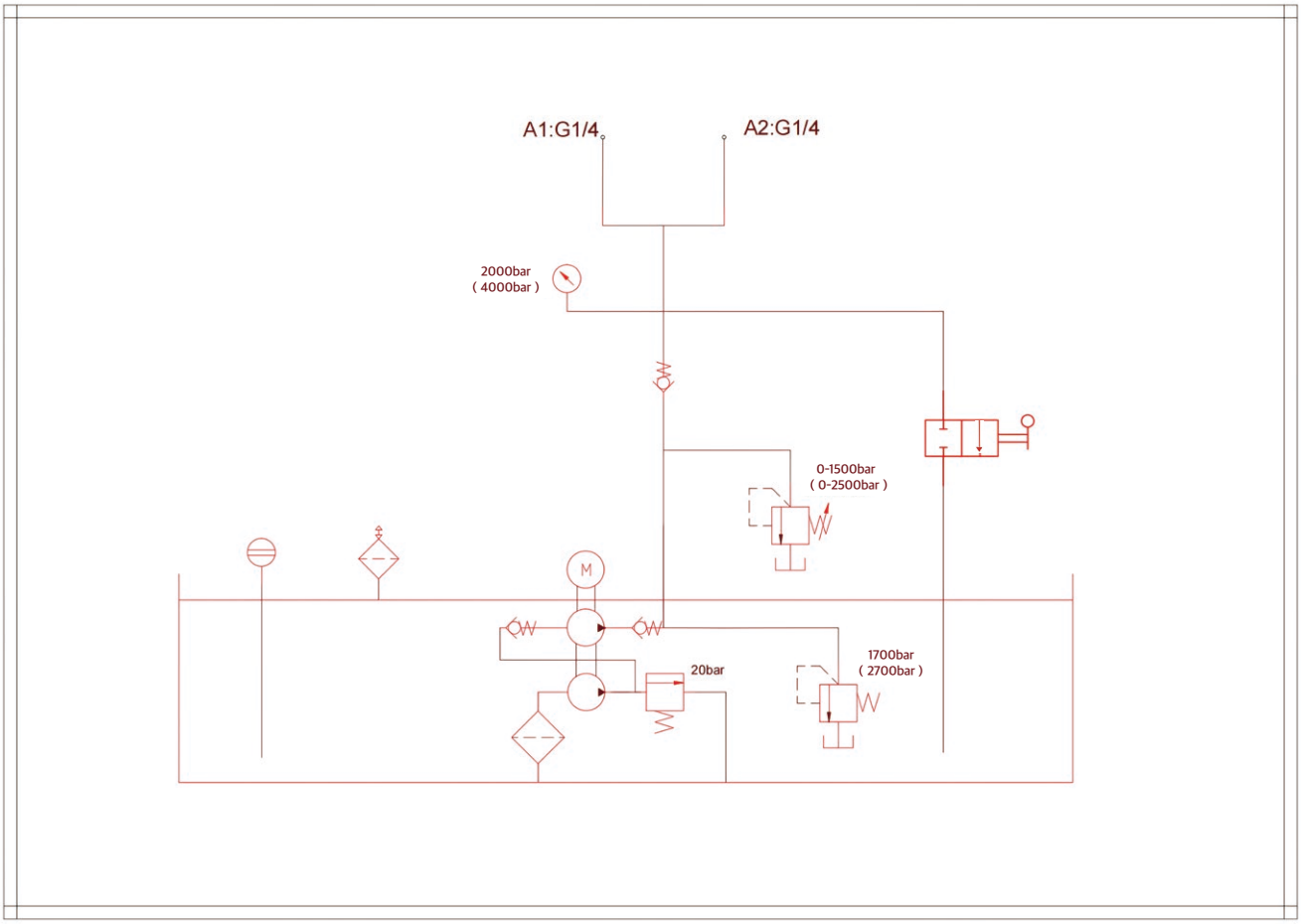


NO	Name
1	Protection Frame
2	Explosion-proof Electric Box
3	Pressure Gauge
4	Male Coupler
5	Oil Level Gauge
6	Oil Drain Port
7	Pressure Regulating Valve
8	Oil Filling and Exhaust Port
9	Unloading Valve
10	Gauge
11	Explosion-proof Motor

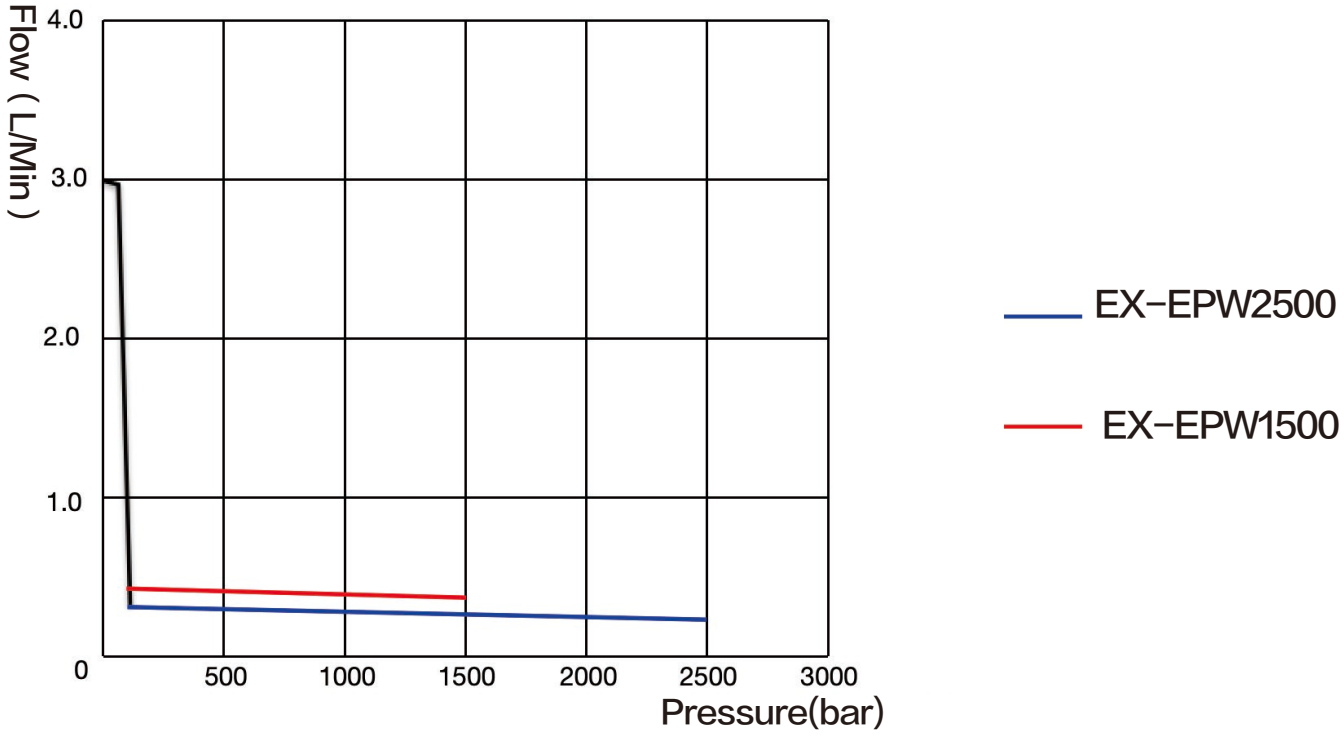
▼EX-EPW Outline Dimensional Drawing:



▼EX-EPW Hydraulic Schematic Diagram:



▼ EX-EPW Pressure Flow Diagram:



▼ ESP1500/2500 Servo Intelligent Pressure Pumps



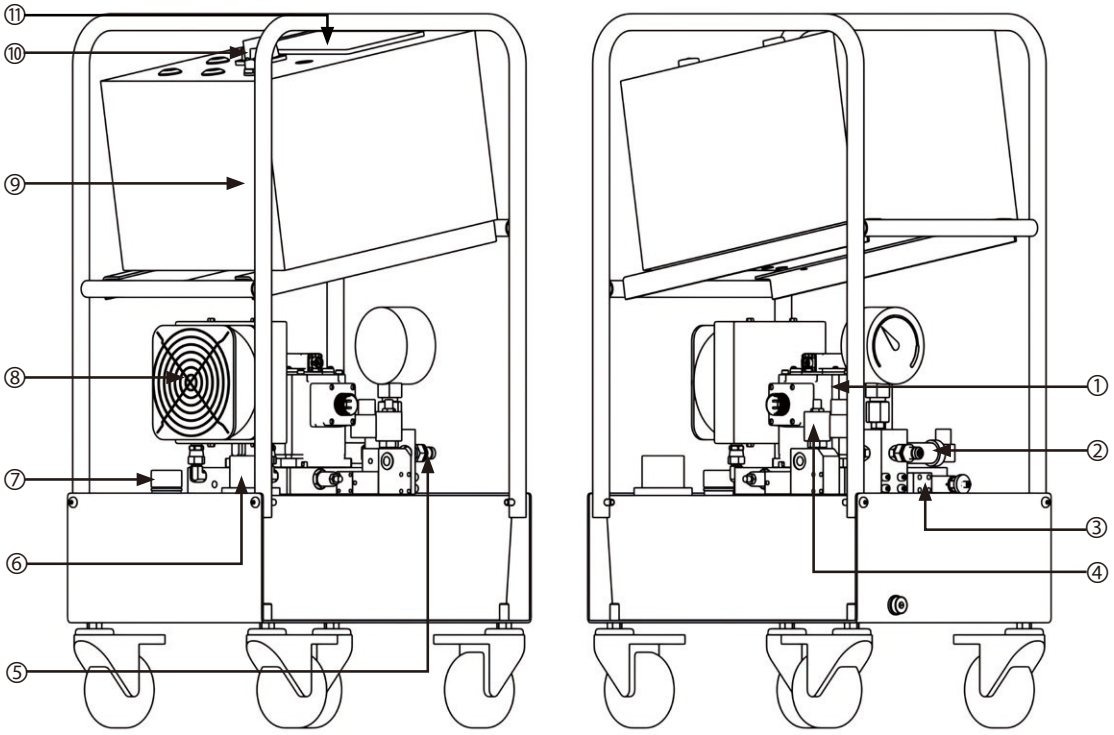
Maximum output pressure: 150/250MPa	
Motor size:	1.5KW
Low pressure flow:	2.5L/Min
High pressure flow:	0.2/0.3L/Min
Reservoirs capacity:	20L

- PLC touch screen, built-in automatic pressure control program
- Set the target pressure after a key start, automatic pressure maintenance
- Direct drive pressure pump structure, no supercharger, high life, good pressure stability
- Manual emergency pressure relief knob, can still be emergency pressure relief in the case of power failure
- Air-cooled radiator, continuous work of low hydraulic oil temperature rise
- pressure holding accuracy can be set, 0.5MPa Control accuracy
- Real-time recording of pressure-time curve
- External adjustable pressure limiting valve
- With boost pressure timeout alarm and sensor signal alarm function
- Display unit MPa/BAR/PSI/KN can be switched
- Equipped with liquid level sensor, with oil temperature level alarm function

▼ ESP Series Type Specification Sheet:

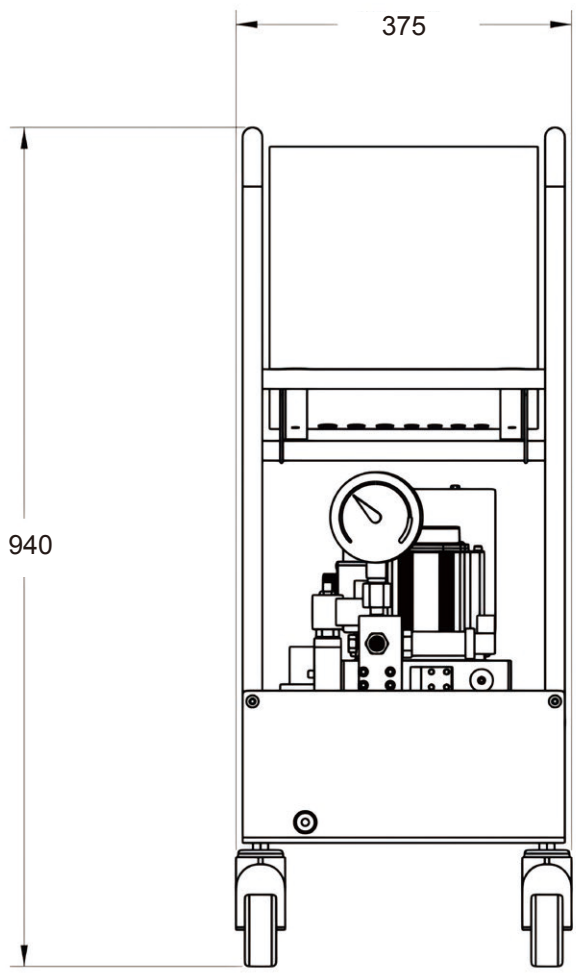
Model Number	Maximum output pressure	Voltage	Motor size	Low Pressure Flow	High Pressure Flow	Reservoirs capacity	Touch screen size	Weight without oil
ESP1500	150MPa	230VAC	1.5KW	2.5L/Min	0.3L/Min	20L	7 inches	55KG
ESP2500	250MPa	230VAC	1.5KW	2.5L/Min	0.2L/Min	20L	7 inches	55KG

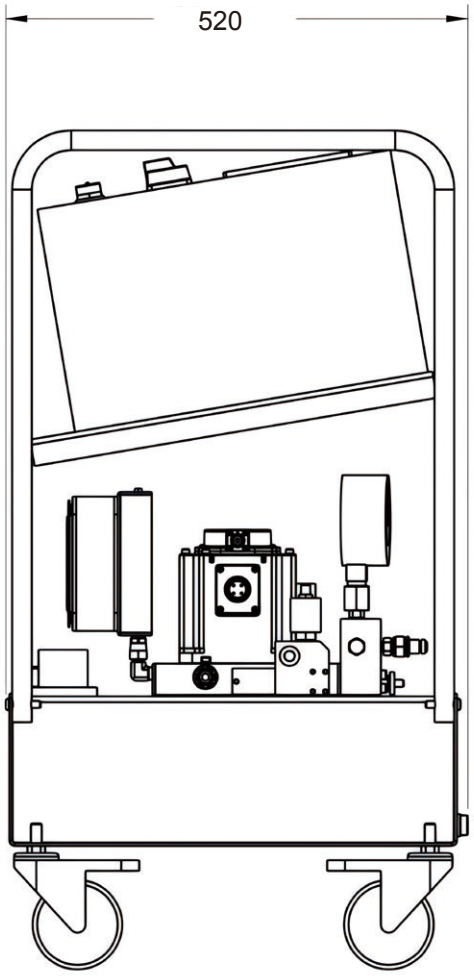
▼ ESP Series Product Illustration:



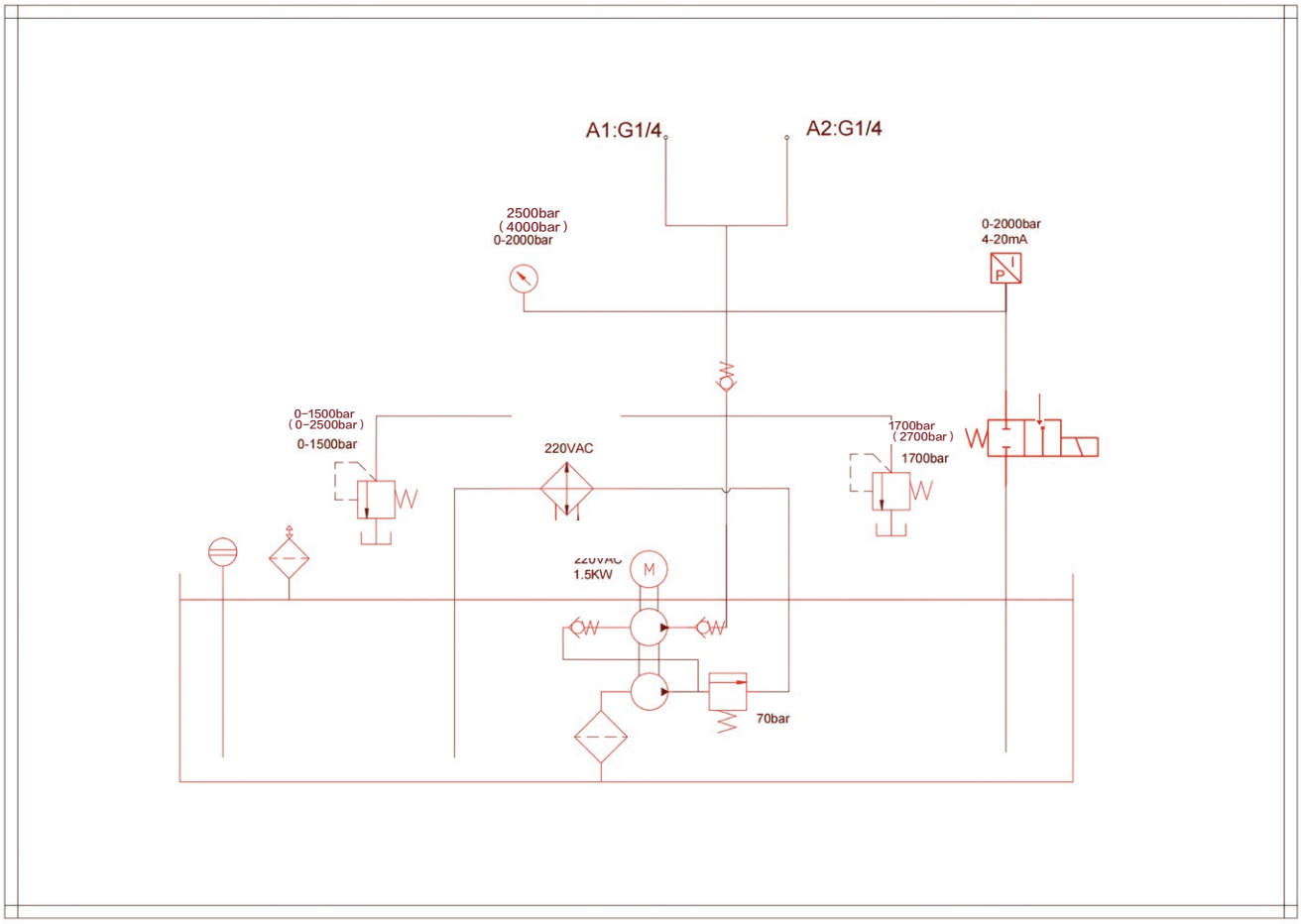
NO	Name
1	Servo motor
2	Pressure sensor
3	Pressure retaining valve block
4	Solenoid release valve
5	Male Coupler
6	Liquid level temperature sensor
7	Refueling and exhaust outlet
8	Heat exchanger
9	Electric box
10	Mains switch
11	PLC touch screen

▼ ESP Series Outline Dimensional Drawing:

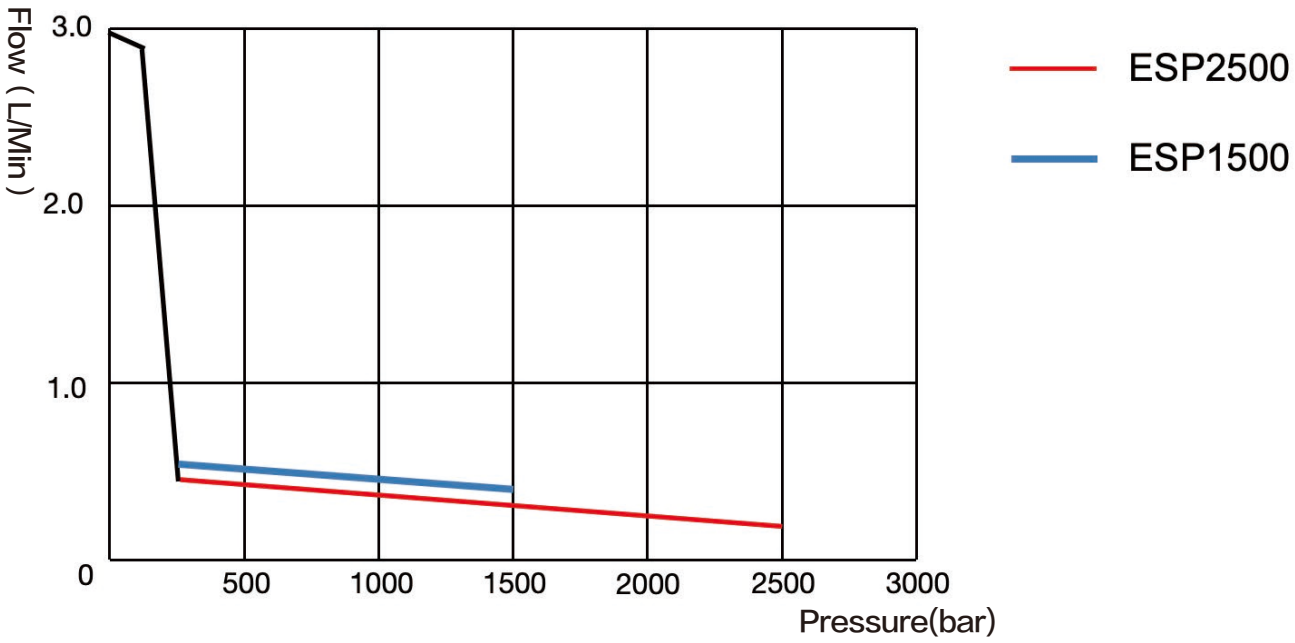




▼ ESP Series Hydraulic Schematic Diagram:



▼ ESP Series Flow-Pressure Curve:



▼ Operation main interface diagram:

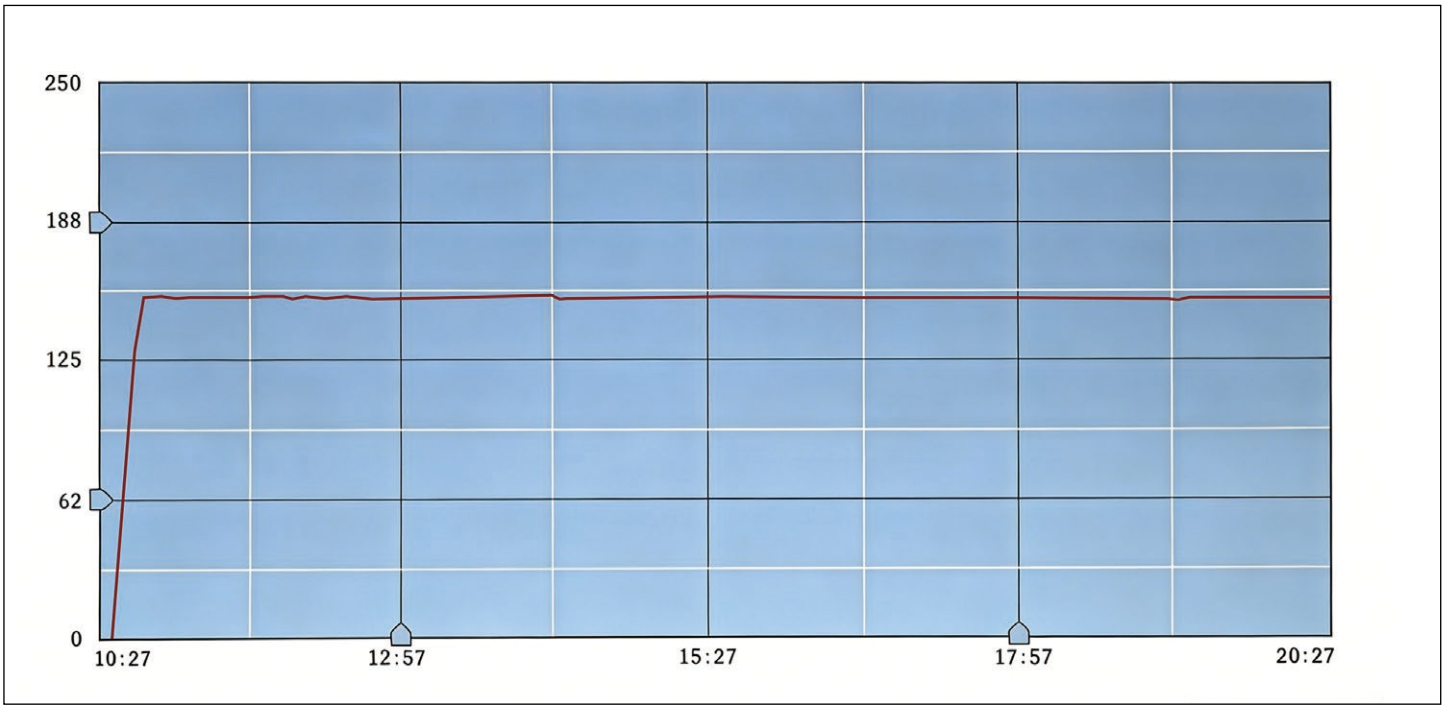




Procedure of use:

1.Set the target pressure on the screen.
2.Click the start button.
3.The hydraulic pump automatically increases the pressure and reaches the target pressure, giving a status indication.
4.Perform pre-tightening, disassembly and installation, etc.
5.When the pressure drops to the set precision value, the servo starts the pressure compensation operation, and the pressure rises again to the target value.
6.Work completed, click the pressure relief button, the pressure is automatically unloaded.

▼ Historical Curve Query:



▼ Couplers



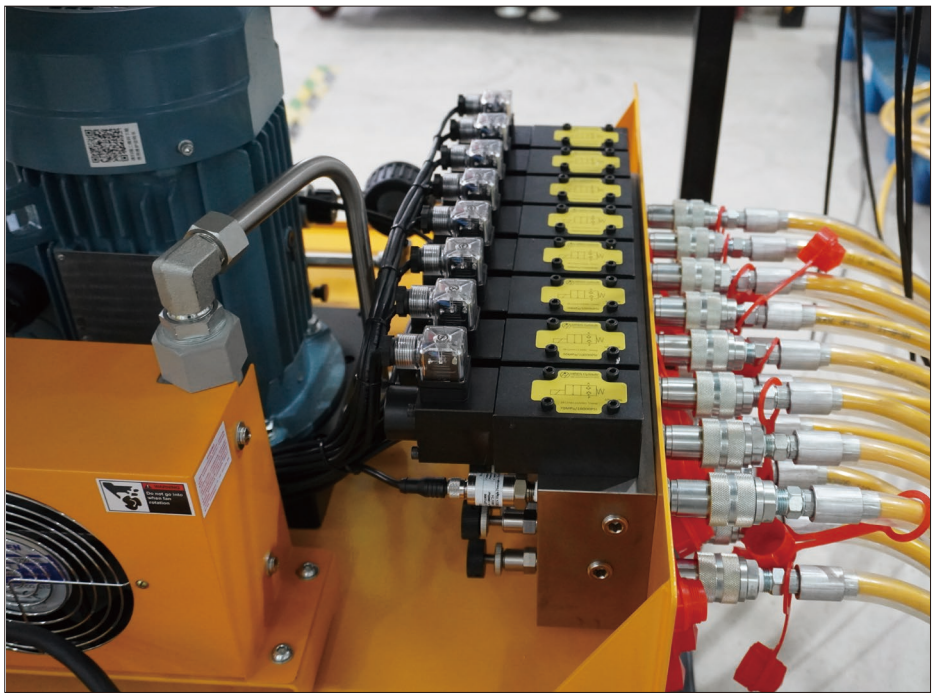
Couplers	
FLOW:	4.6-35L/min
Diameter:	2.5-10mm
Pressure:	70-400MPa

NPT 3/8" High-flow Couplers

- It is a standard component for most RIVERLAKE hydraulic cylinders.
- When space and interfaces permit, it is recommended for all RIVERLAKE pumps and hydraulic cylinders.
- It comes with a "two-in-one"dust cap that can be used for both male and female couplers.

G 1/4" Ultra-high Pressure Quick Couplers

- It is used in conjunction with ultra-high pressure pumps operating at 150MPa, 250MPa, and 300MPa、400MPa, as well as HSP hydraulic hoses.
- It is equipped with a warning ring and a safety lock for secure connections.
- The metal seal ensures safety and reliability under high pressure.

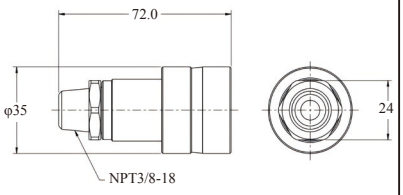
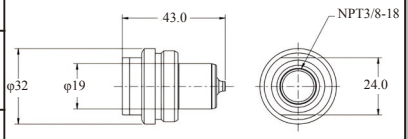
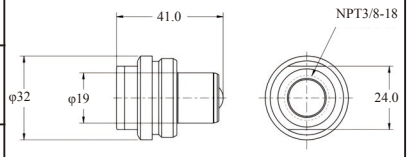
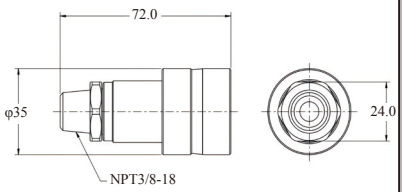
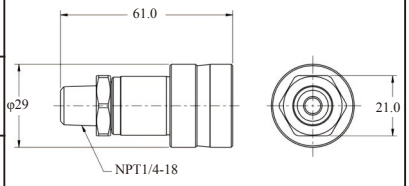
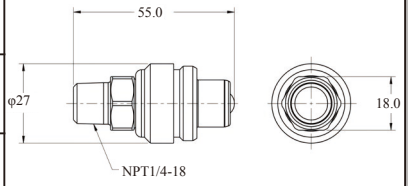
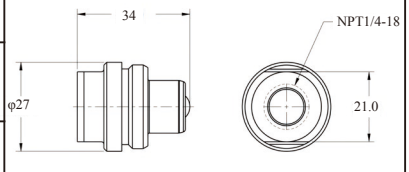


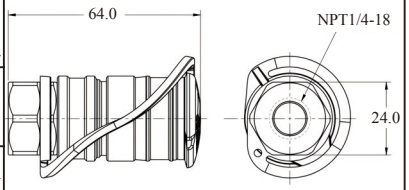
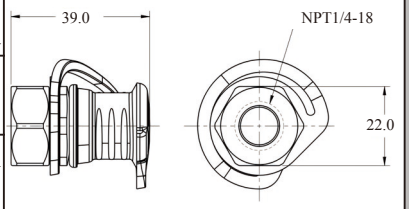
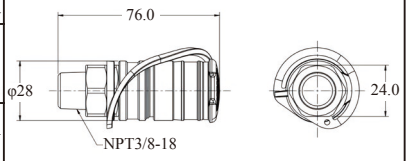
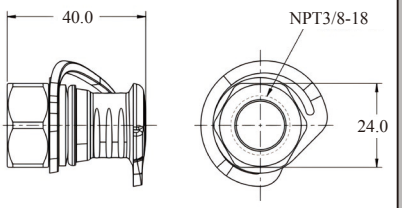
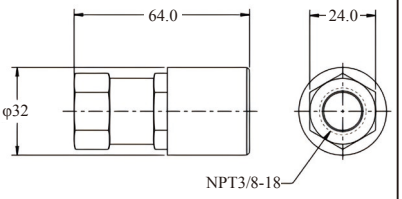
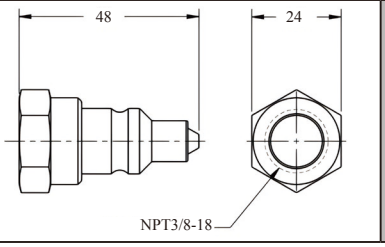
With the RIVERLAKE high-flow quick couplers, hydraulic hoses can be easily and quickly connected to the PLC-controlled synchronous jacking hydraulic system.



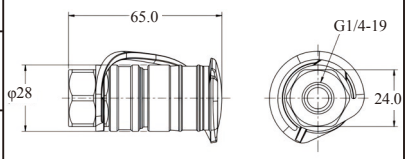
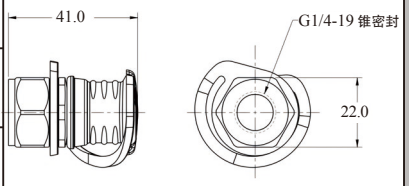
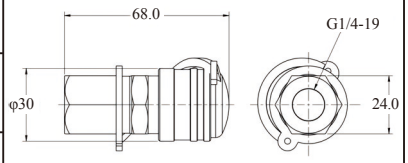
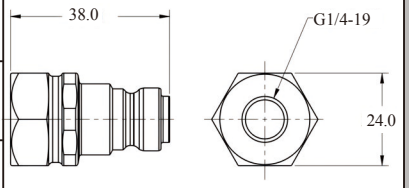
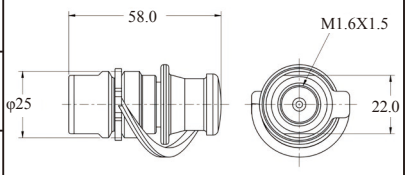
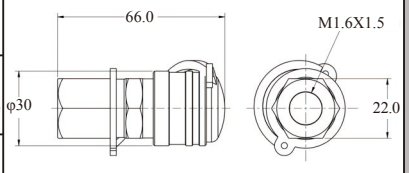
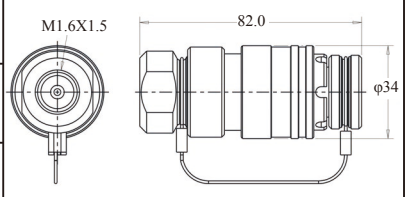
It is used in conjunction with a pneumatic wrench pump with a working pressure of 70MPa.

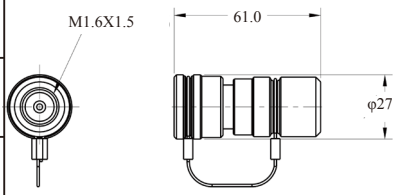
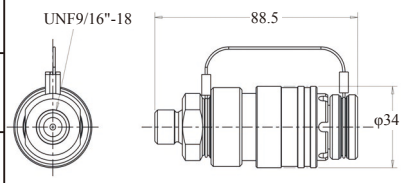
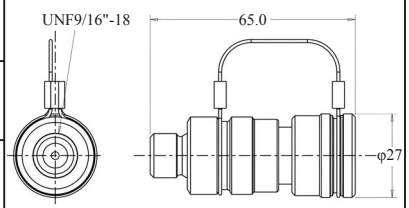
▼70MPa-100MPa Quick Couplings

Model Number	Pictures	Thread	Argument	Dimensional Drawing	Weight
102321494		NPT 3/8-18	Maximum working pressure : 72MPa Diameter: Conical 10mm Flow: 35L/Min (8.8 GPM UK)		212g
102326444		NPT 3/8-18	Maximum working pressure : 72MPa Diameter: Conical 10mm Flow: 35L/Min (8.8 GPM UK)		20g
102326434		NPT 3/8-18	Maximum working pressure : 72MPa Diameter: spherical 10mm Flow: 21.2L/Min (4.7 GPM UK)		120g
102321484		NPT 3/8-18	Maximum working pressure : 72MPa Diameter: spherical 10mm Flow: 21.2L/Min (4.7 GPM UK)		230g
102321452		NPT 1/4-18	Maximum working pressure : 72MPa Diameter: spherical 6.3mm Flow: 16.1L/Min (3.5GPM UK)		130g
102326452		NPT 1/4-18	Maximum working pressure : 72MPa Diameter: spherical 6.3mm Flow: 16.1L/Min (3.5GPM UK)		110g
102326402		NPT 1/4-18	Maximum working pressure : 72MPa Diameter: spherical 6.3mm Flow: 16.1L/Min (3.5GPM UK)		110g

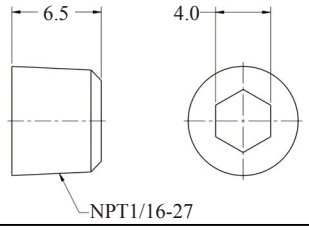
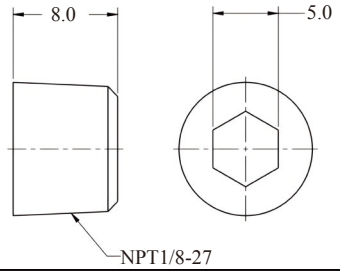
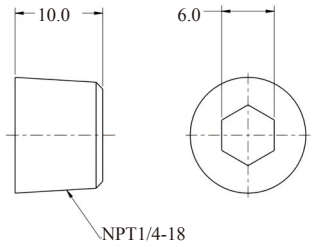
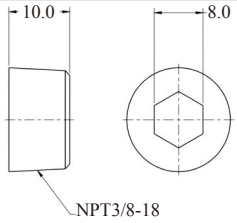
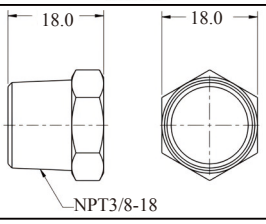
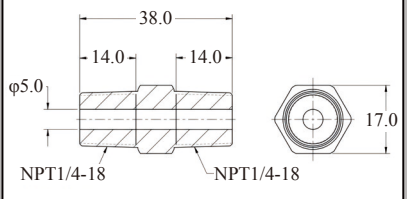
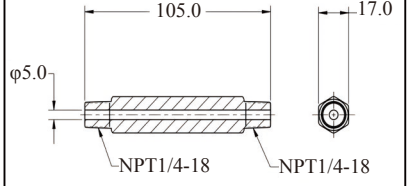
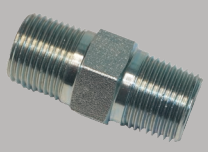
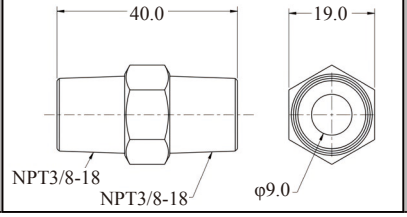
Model Number	Pictures	Thread	Argument	Dimensional Drawing	Weight
101151402		NPT 1/4-18	Maximum working pressure : 100 MPa Diameter: 2.5mm Flow: 6L/Min (1.3GPM UK)		220g
101156402		NPT 1/4-18	Maximum working pressure : 100 MPa Diameter : 2.5mm Flow: 5.3L/Min (1.2GPM UK)		70g
101151454		NPT 3/8-18	Maximum working pressure : 100 MPa Diameter : 2.5mm Flow: 6L/Min (1.3GPM UK)		220g
101156404		NPT 3/8-18	Maximum working pressure : 100 MPa Diameter: 2.5mm Flow: 5.3L/Min (1.2GPM UK)		65g
700C3F		NPT 3/8-18	Maximum working pressure : 70MPa Diameter: Conical 10mm Flow: 23L/Min (6.1 GPM UK)		220g
700C3M		NPT 3/8-18	Maximum working pressure : 70MPa Diameter: Conical 10mm Flow: 23L/Min (6.1 GPM UK)		110g

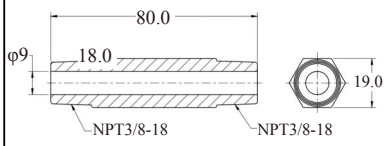
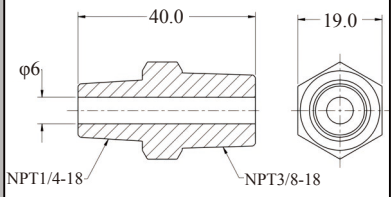
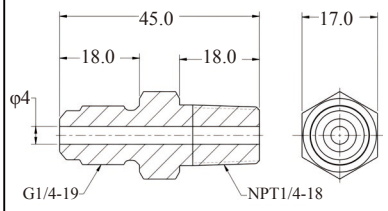
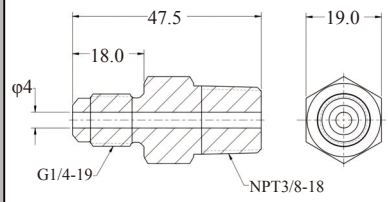
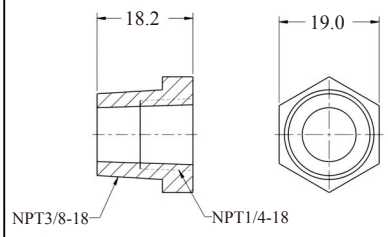
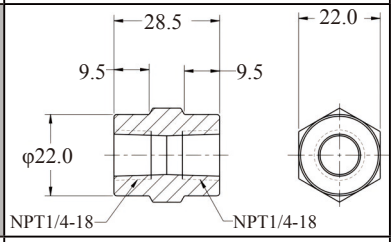
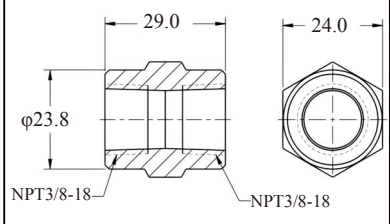
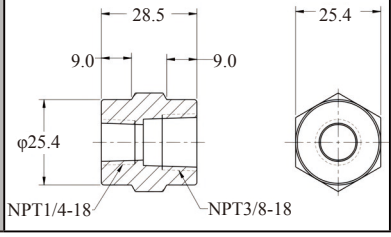
▼High Pressure Quick Connectors

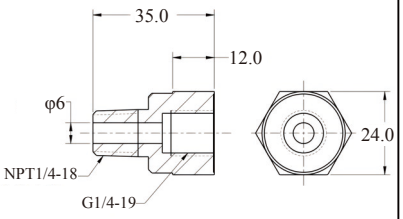
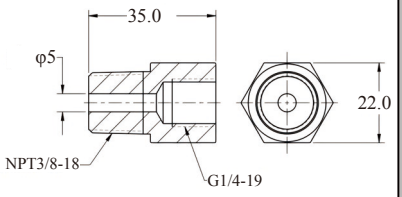
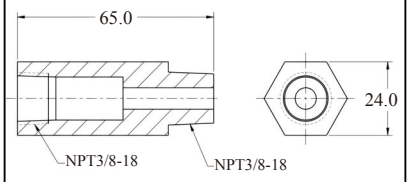
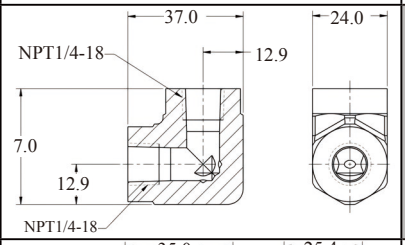
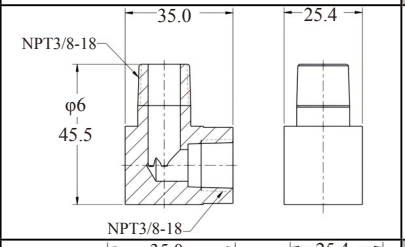
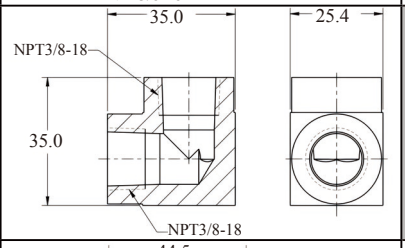
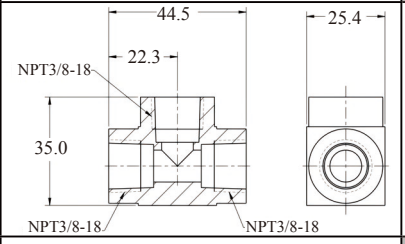
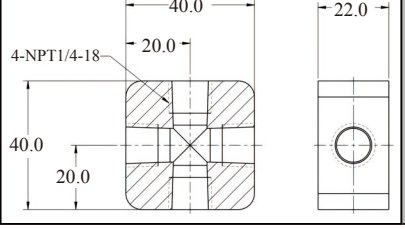
Model Number	Pictures	Thread	Argument	Dimensional Drawing	Weight
101161202		G1/4-19	Maximum working pressure : 150MPa Diameter: 2.5mm Flow: 6.0L/Min (1.3GPM UK)		200g
101166202		G1/4-19	Maximum working pressure : 150MPa Diameter: 2.5mm Flow: 6.0L/Min (1.3GPM UK)		80g
101251203		G1/4-19	Maximum working pressure : 250MPa Diameter: 2.5mm FLow: 5.8L/Min (1.3GPM UK)		230g
101256203		G1/4-19	Maximum working pressure : 250MPa Diameter: 2.5mm Flow: 5.8L/Min (1.3GPM UK)		70g
101351505		M16x1.5	Maximum working pressure : 300MPa Diameter: 2.5mm Flow: 4.6L/Min (1.0GPM UK)		200g
101356505		M16x1.5	Maximum working pressure : 300MPa Diameter: 2.5mm Flow: 4.6L/Min (1.0GPM UK)		230g
101401505		M16x1.5	Maximum working pressure : 400MPa Diameter: 2.5mm Flow: 4.6L/Min (1.0GPM UK)		200g

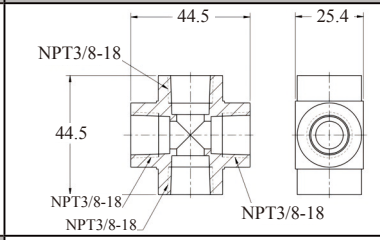
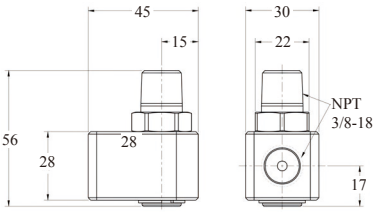
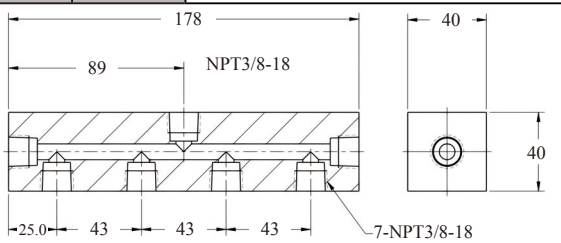
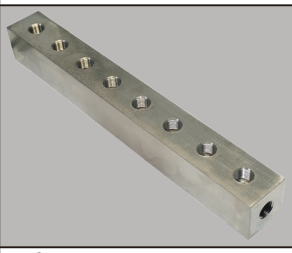
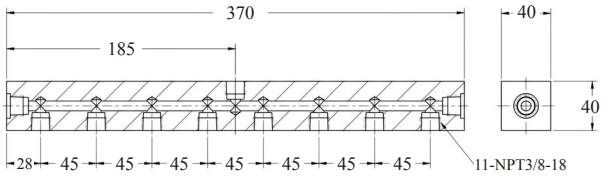
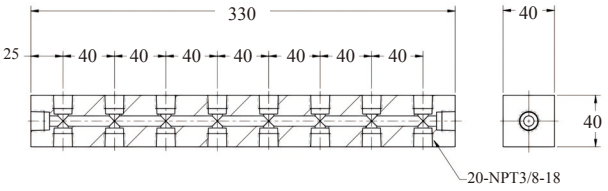
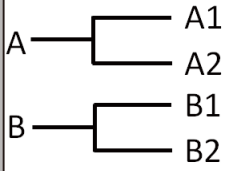
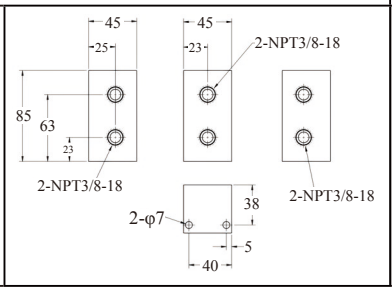
Model Number	Pictures	Thread	Argument	Dimensional Drawing	Weight
101406506		M16x1.5	Maximum working pressure : 400MPa Diameter: 2.5mm Flow: 4.6L/Min (1.0GPM UK)		200g
101401708		UNF 9/16"-18	Maximum working pressure : 400MPa Diameter: 2.5mm Flow: 4.6L/Min (1.0GPM UK)		200g
101406708		UNF 9/16"-18	Maximum working pressure : 400MPa Diameter: 2.5mm Flow: 4.6L/Min (1.0GPM UK)		230g

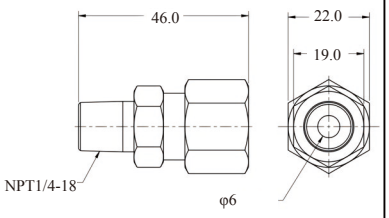
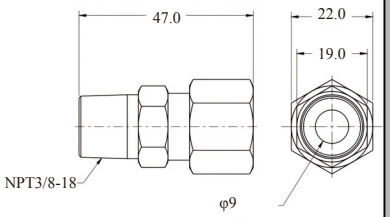
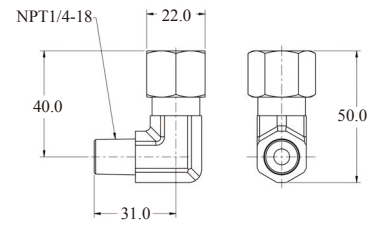
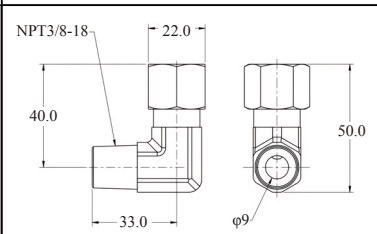
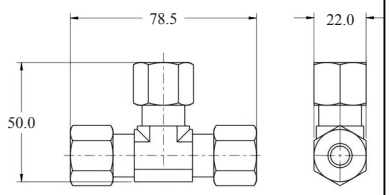
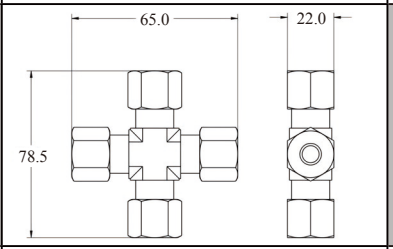
▼70MPa Adapter And Distributors

Model Number	Pictures	Thread A	Thread B	Thread C	Thread D	Dimension drawing	Weight (g)
700C01		NPT 1/16-27	-	-	-		3
700C02		NPT 1/8-27	-	-	-		4
700C03		NPT 1/4-18	-	-	-		7
700C04		NPT 3/8-18	-	-	-		12
700H04		NPT 3/8-18	-	-	-		31
FZ1608		NPT 1/4-18	NPT 1/4-18	-	-		29
NML0303		NPT 1/4-18	NPT 1/4-18	-	-		98
FZ1617		NPT 3/8-18	NPT 3/8-18	-	-		49

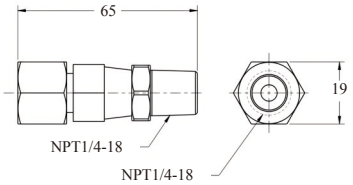
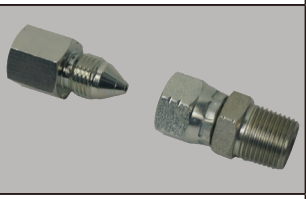
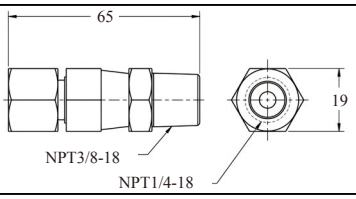
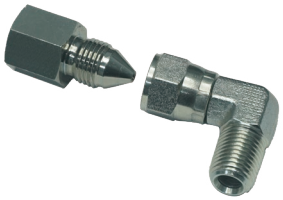
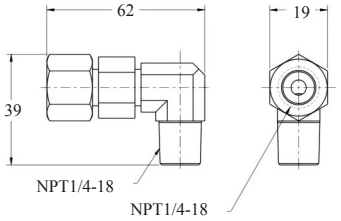
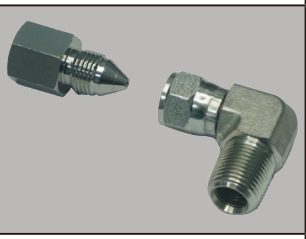
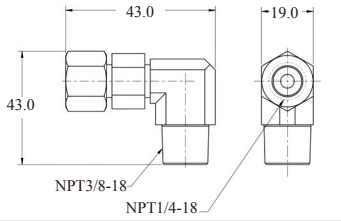
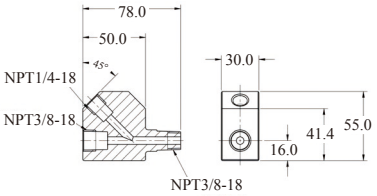
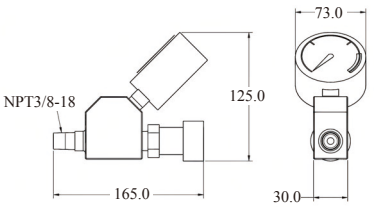
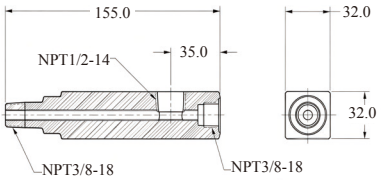
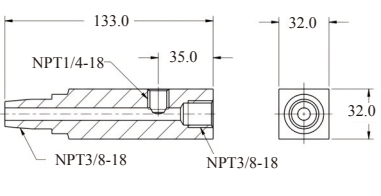
Model Number	Pictures	Thread A	Thread B	Thread C	Thread D	Dimension drawing	Weight (g)
NML0404		NPT 3/8-18	NPT 3/8-18	-	-		127
NM0304		NPT 1/4-18	NPT 3/8-18	-	-		48
NM03G03		G1/4-19	NPT 1/4-18	-	-		45
NM04G03		G1/4-19	NPT 3/8-18	-	-		68
FZ1630		NPT 3/8-18	NPT 1/4-18	-	-		18
FZ1605		NPT 1/4-18	NPT 1/4-18	-	-		39
FZ1614		NPT 3/8-18	NPT 3/8-18	-	-		60
FZ1615		NPT 1/4-18	NPT 3/8-18	–	–		39

Model Number	Pictures	Thread A	Thread B	Thread C	Thread D	Dimension drawing	Weight (g)
BFZ-16411		NPT 1/4-18	G1/4-19	-	-		66
NM04GF03		NPT 3/8-18	G1/4-19	-	-		68
NM04F04		NPT 3/8-18	NPT 3/8-18	–	–		137
FZ1638		NPT 1/4-18	NPT 1/4-18	-	-		132
FZ1616		NPT 3/8-18	NPT 3/8-18	-	-		142
FZ1610		NPT 3/8-18	NPT 3/8-18	-	-		143
FZ1612		NPT 3/8-18	NPT 3/8-18	NPT 3/8-18	-		156
SF03		NPT 1/4-18	NPT 1/4-18	NPT 1/4-18	NPT 1/4-18		210

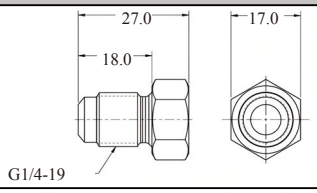
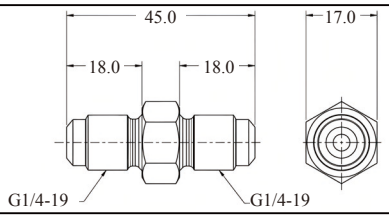
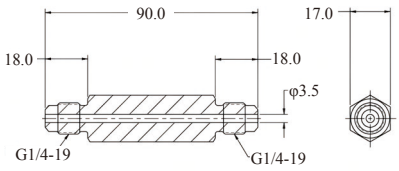
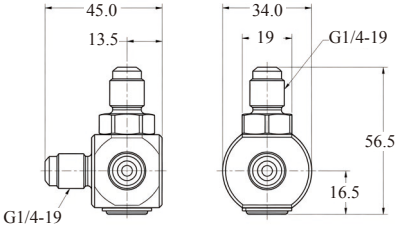
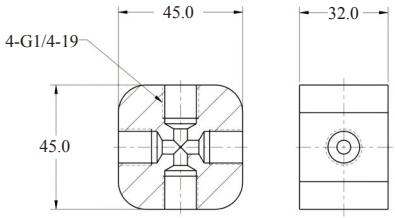
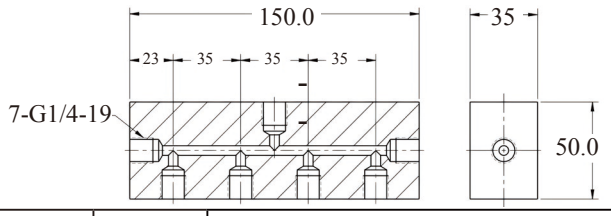
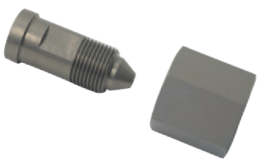
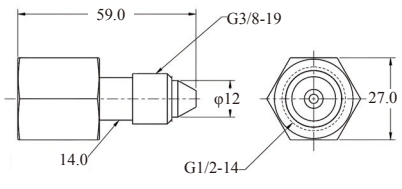
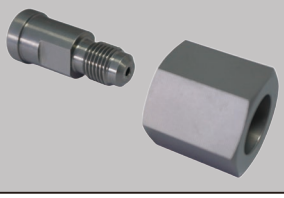
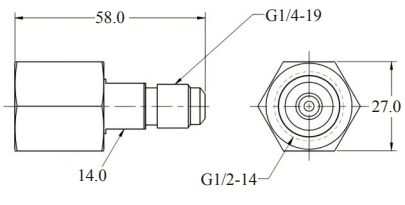
Model Number	Pictures	Thread A	Thread B	Thread C	Thread D	Dimension drawing	Weight (g)
FZ1613		NPT 3/8-18	NPT 3/8-18	NPT 3/8-18	NPT 3/8-18		171
RJ04		NPT 3/8-18	NPT 3/8-18	-	-		330
A-65		7-NPT 3/8-18	7-NPT 3/8-18				2000
700D10		11-NPT 3/8-18	11-NPT 3/8-18				4250
700D17		18-NPT 3/8-18	18-NPT 3/8-18				3640
700D2-2		3-NPT 3/8-18	3-NPT 3/8-18				1147

Model Number	Pictures	Thread A	Stuck tube size	Nut size	Dimension drawing	Weight (g)
FM03-10		NPT 1/4-18	Ø10	M18x1.5		74
FM04-10		NPT 3/8-18	Ø10	M18x1.5		77
FLM03-10		NPT 1/4-18	Ø10	M18x1.5		96
FLM04-10		NPT 3/8-18	Ø10	M18x1.5		112
FT-10		-	Ø10	M18x1.5		182
FS-10		-	Ø10	M18x1.5		272
FSS10		-	Ø10	-	—	134

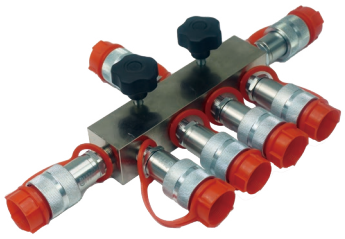
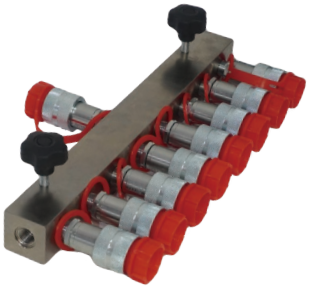
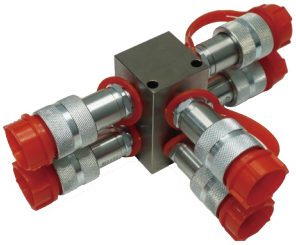
▼ 70MPa Pressure Gauge Base And Adapters

Model Number	Pictures	Thread A	Thread B	Thread C	Thread D	Dimension drawing	Weight (g)
GAN03		NPT 1/4-18	NPT 1/4-18	-	-		79
GAN04		NPT 1/4-18	NPT 3/8-18	-	-		96
GAL03		NPT 1/4-18	NPT 1/4-18	-	-		96
GAL04		NPT 1/4-18	NPT 3/8-18	-	-		126
GA45		NPT 3/8-18	NPT 1/4-18	NPT 3/8-18	-		590
GA45GC		NPT 3/8-18	 *Optional battery-powered digital pressure gauge				1100
GA2		NPT 3/8-18	NPT 1/4-18	NPT 1/2-14	-		1000
GA3		NPT 3/8-18	NPT 1/4-18	NPT 3/8-18	-		744

▼ Ultra High Pressure Adapter

Model Number	Pictures	Thread A	Thread B	Thread C	Thread D	Dimension drawing	Weight (g)
2500G03		G1/4-19	-	-	-		33
2500G0303		G1/4-19	G1/4-19	-	-		43
2500GL0303		G1/4-19	G1/4-19	-	-		124
2500RG03		G1/4-19	G1/4-19	-	-		50
2500D3		G1/4-19	G1/4-19	G1/4-19	G1/4-19		430
2500D6		7-G1/4-19	7-G1/4-19				2000
2500GA05		G1/2-14	G3/8-19	-	-		129
2500GA03		G1/2-14	G1/4-19	-	-		129g

▼Products display pictures of adapter distributors

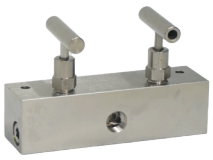
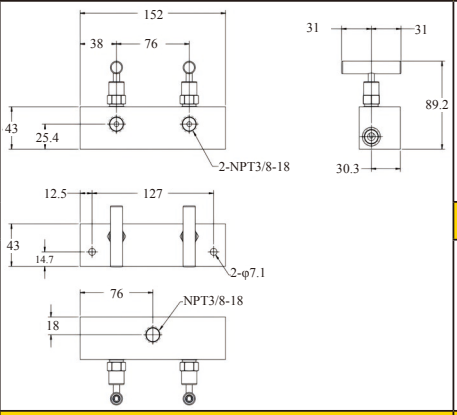
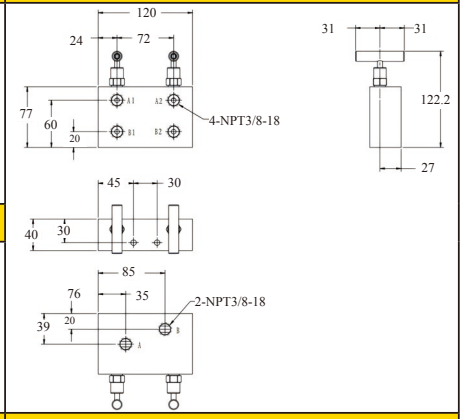
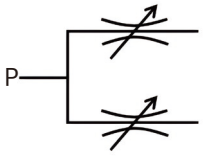
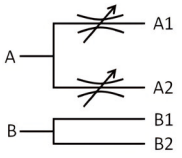
700D6-232	700D10-232	700D17-232	700D2-2-232
			

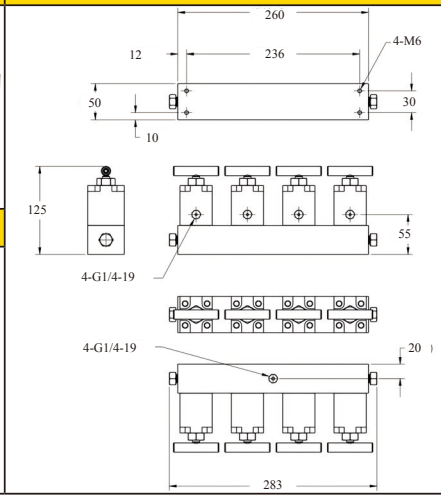
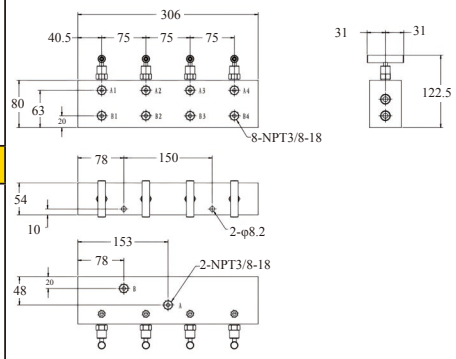
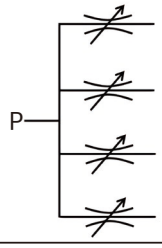
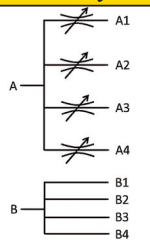
▼Product display pictures of ultra-high pressure adapter distributors

2500D3-125	2500D6-125	2500D6-125	2500GA05-125	2500GA05
				

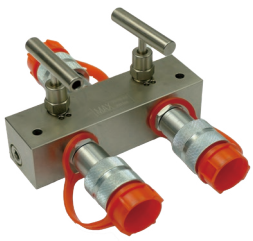
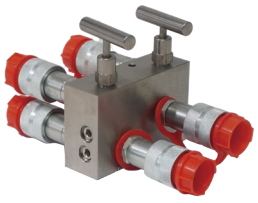
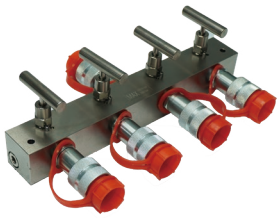
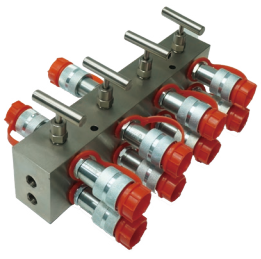
Control Manifold And Valve

Split Flow Hydraulic Manifold

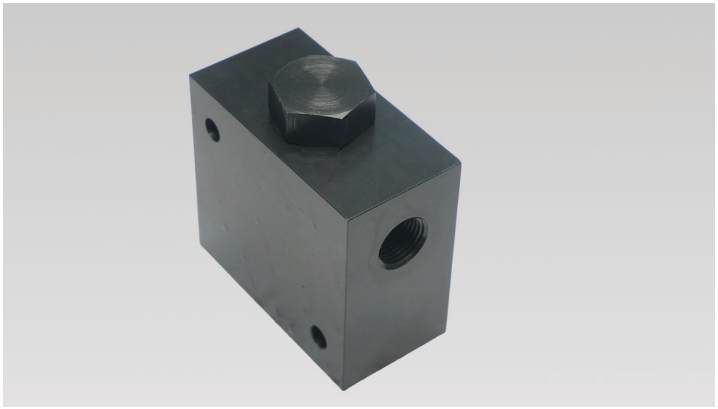
AM21	Dimension drawing	AM22	Dimension drawing
			
Function symbols		Function symbols	
			

AM41	Dimension drawing	AM42	Dimension drawing
			
Function symbols		Function symbols	
			

Product Display Pictures Of Split Flow Hydraulic Manifold

AM21C	AM22C	AM41C	AM42C
			
AM21GC	AM41GC	AM42GC	AMGC41
			

▼ V42 Hydraulic Check Valve



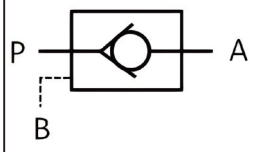
Technical features:

•High efficiency ball valve design

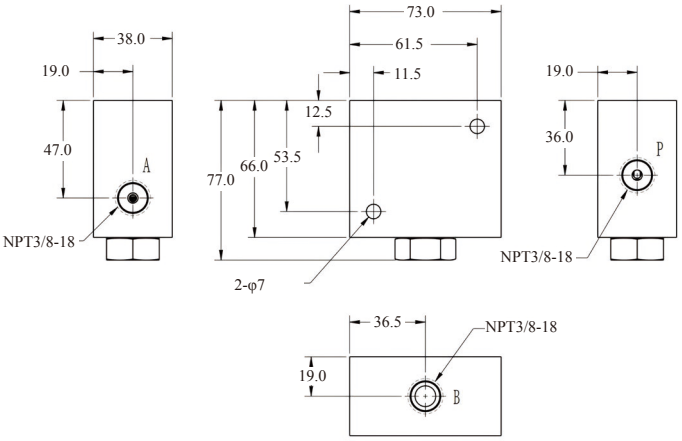
•42CrMo high strength material, QPQ surface treatment, long-term corrosion resistance

•P, A, Pilot port can be pressurized 70MPa

▼ V42 Type Specification Sheet:

Model Number	Functional symbol	Rated pressure	Maximum flow	Installation form
V42		70MPa	30L/Min	Tubular NPT3/8

▼V42 Dimensional Drawing:



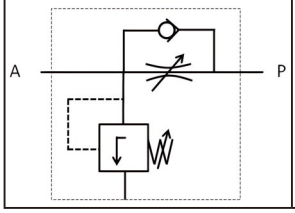
▼ V66 Manually Operated Check Valve



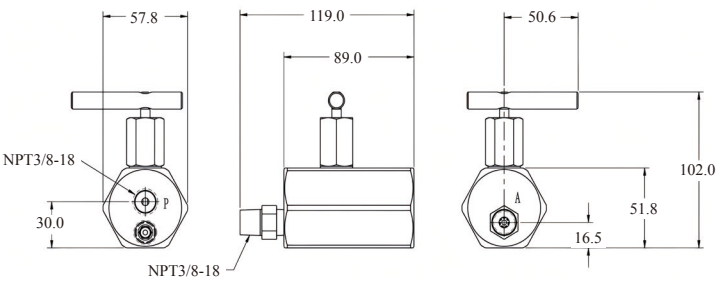
Technical features:

•42CrMo tempered material, QPQ surface treatment, long-term corrosion resistance
•Precision pressure holding ball valve, good pressure holding effect
•Adjustable safety valve is configured to effectively ensure the safety of hydraulic cylinder
•Precise control of hydraulic cylinder return speed, providing safe and controllable load

▼ V66 Model Specification Sheet:

Model Number	Rated pressure	Maximum flow	Installation form
V66	70MPa	30L/Min	Tubular NPT3/8
Functional symbol			
			

▼V66 Dimensional Drawing:



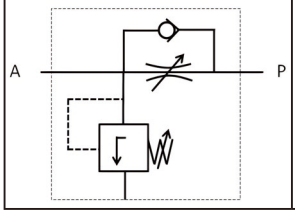
▼V66F Manually Operated Check Valve



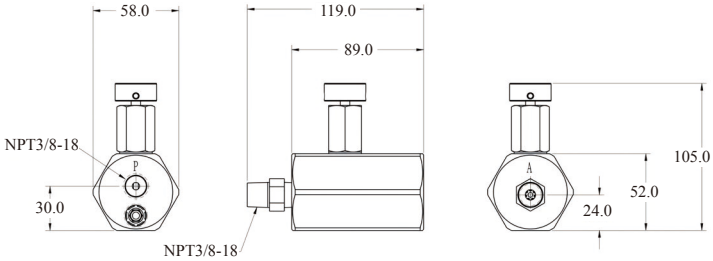
Technical features:

•42CrMo tempered material, QPQ surface treatment, long-term corrosion resistance
•Precision pressure holding ball valve, good pressure holding effect
•Adjustable safety valve is configured to effectively ensure the safety of hydraulic cylinder
•Similar to V66, but with extremely fine measurement capabilities for precision flow control.

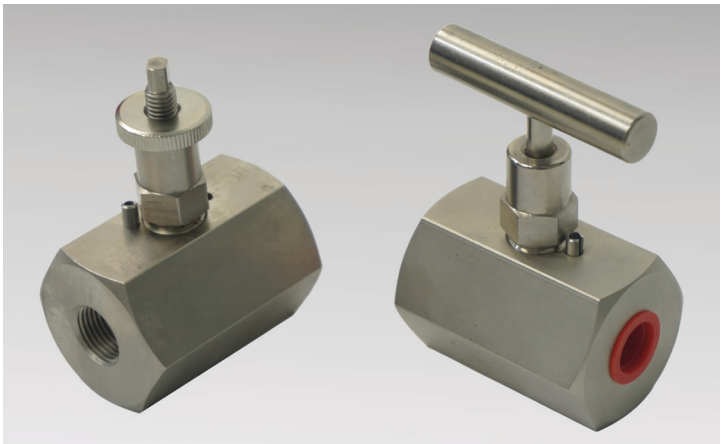
▼V66F Model Specification Sheet:

Model Number	Rated pressure	Maximum flow	Installation form
V66F	70MPa	30L/Min	Tubular NPT3/8
Functional symbol			
			

▼V66F Dimensional Drawing:



▼V82 Check Valve

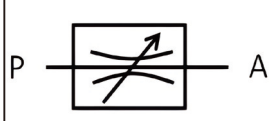


◆The models shown are V82L and V82 from left to right

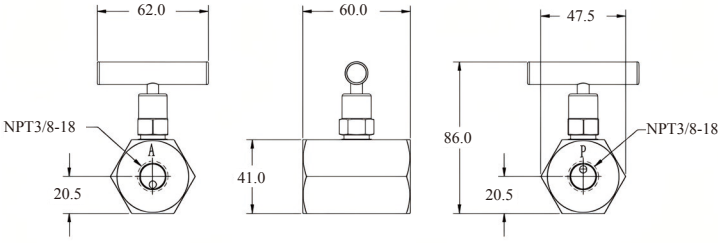
Technical features:

• 42CrMo modified steel with electroplated nickel treatment
• Precision needle valve with leak-free locking
• Used as a speed-regulating valve to control cylinder speed
• Optional model with locking nut to prevent misoperation

▼V82 Model Specification Sheet:

Model Number	Rated pressure	Maximum flow	Installation form
V82	70MPa	30L/Min	Tubular NPT3/8
Functional symbol			
			

▼V82 Dimensional Drawing:



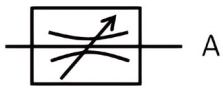
▼V91 Snubber Valve



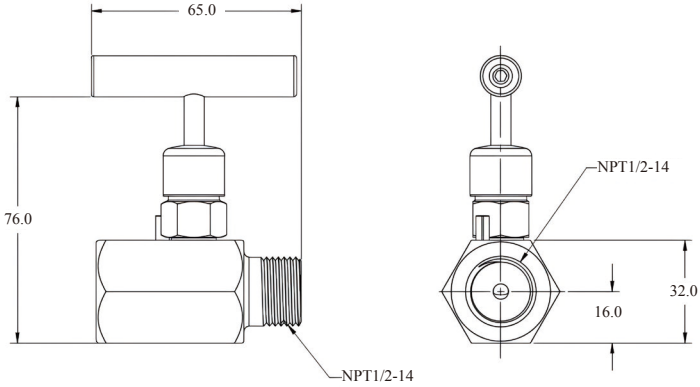
Technical features:

• The material is 42CrMo quenched and tempered steel, and the surface is treated with electroless nickel plating to enhance the corrosion resistance.
• All valves are equipped with dry-seal tapered pipe thread ports to ensure no leakage under the rated pressure.
• Fluororubber seals are used, which are suitable for high-temperature environments and can extend the service life.

▼V91 Model Specification Sheet:

Model Number	Rated pressure	Maximum flow	Installation form
V91	70MPa	30L/Min	Pipe mounting NPT3/8
Functional symbol			
P  A			

▼V91 Dimensional Drawing:



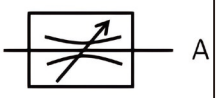
▼ HV2500T Ultra-High Pressure Neddle Valve



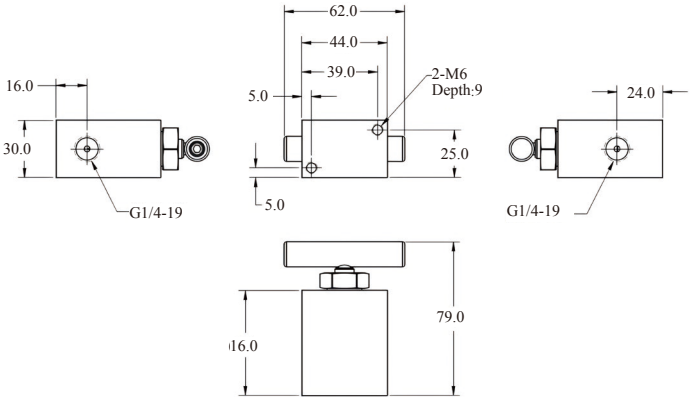
Technical features:

• High-strength needle valve, providing reliable hydraulic locking.
• Made of 42CrMo quenched and tempered material with electroless nickel plating surface treatment.
• Multiple throttle valves can be used side by side.
• Compact structure, saving installation space.
• High-strength seals, resistant to high pressure and leak-free.

▼HV2500T Model Specification Sheet:

Model Number	Rated pressure	Maximum flow	Installation form
HV2500T	250MPa	10L/Min	Pipe mounting NPT3/8
Functional symbol			
P  A			

▼HV2500T Dimensional Drawing:



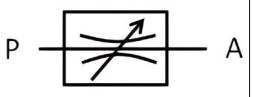
▼HV2500P Ultra-High Pressure Neddle Valve



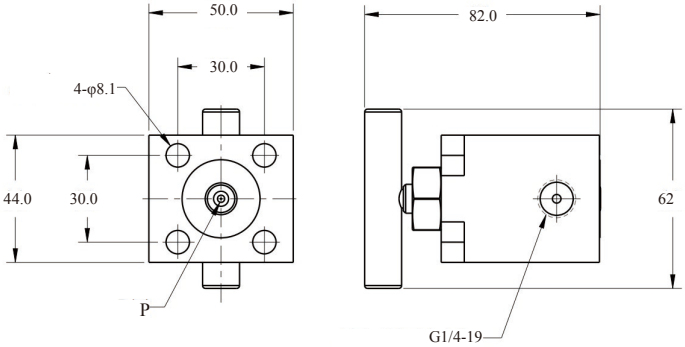
Technical features:

- High-strength needle valve, providing reliable hydraulic locking
- 42CrMo conditioning material, electroplated chemical nickel surface treatment
- Multiple throttle valves can be used side-by-side
- Compact structure, saving installation space
- High-strength sealing, high pressure resistance and no leakage

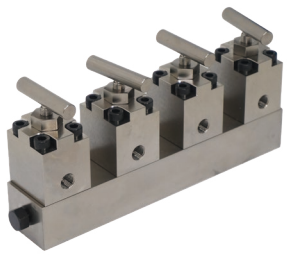
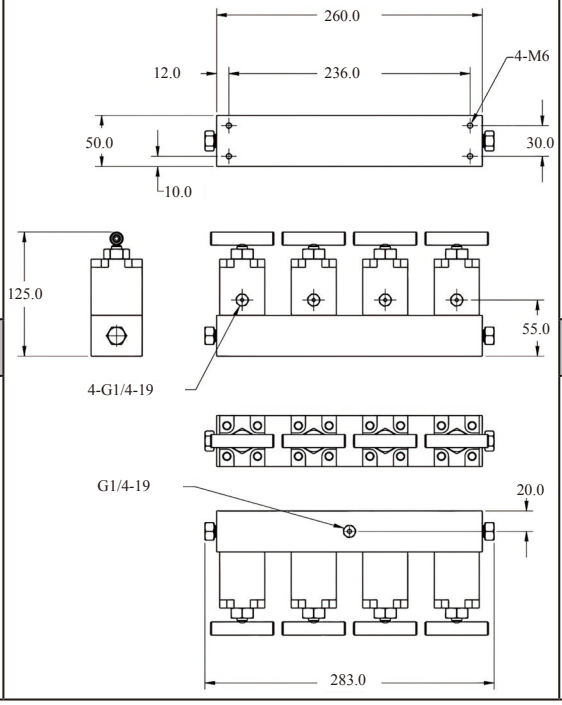
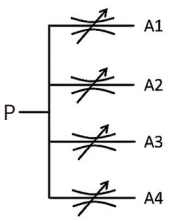
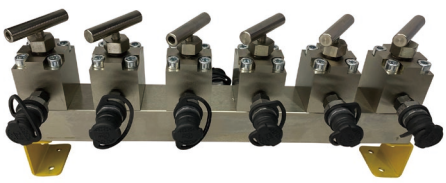
▼HV2500P Model Specification Sheet:

Model Number	Rated pressure	Maximum flow	Installation form
HV2500P	250MPa	10L/Min	Panel mounting G1/4-19
Functional symbol			
			

▼HV2500P Dimensional Drawing:



▼Product Example Diagram:

UHM41	Overall dimension	UHM41 Finished product
		
Functional symbol		UHM61 Finished product
		

▼Relief Valve&Safety Valve

▼ Relief Valve



Technical features:

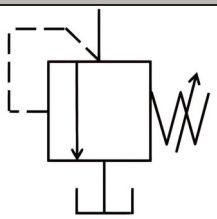
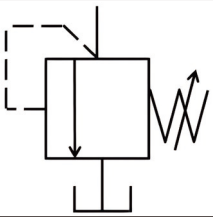
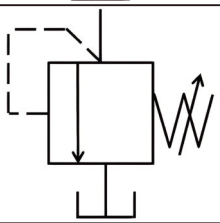
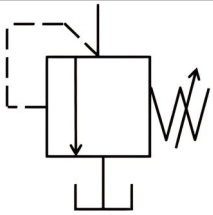
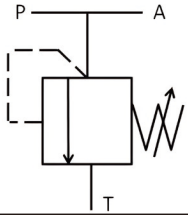
•Precision pressure adjustment up to 2500bar

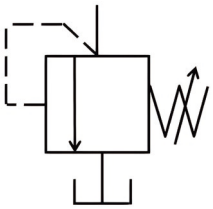
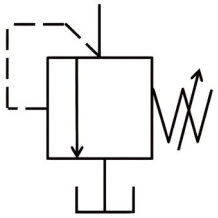
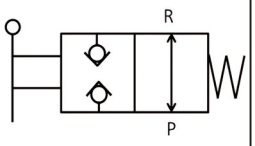
•High life die steel ball seat, high overall life

•High temperature resistance fluorine rubber seal

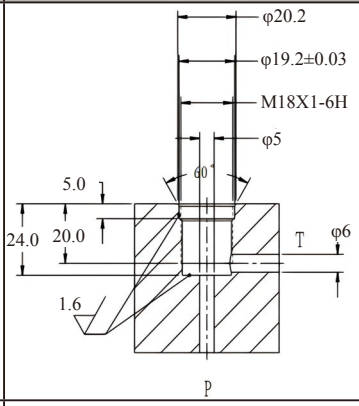
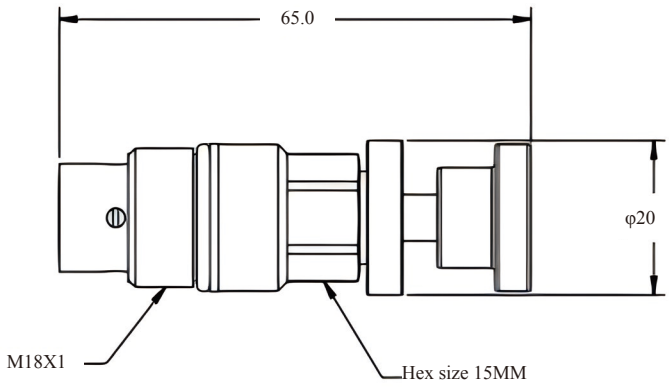
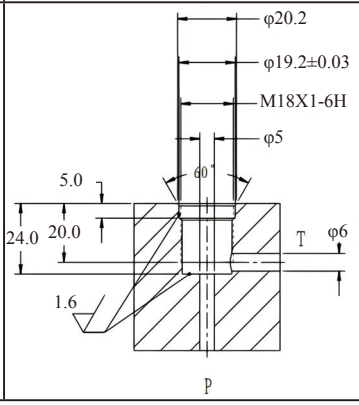
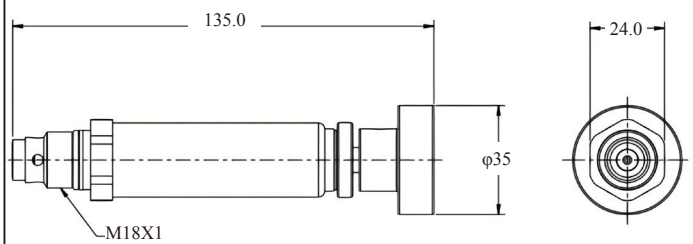
•Insert, tube installation optional • Equipped with locking nuts and precision adjustment handwheel

▼ PRV Model Specification Table:

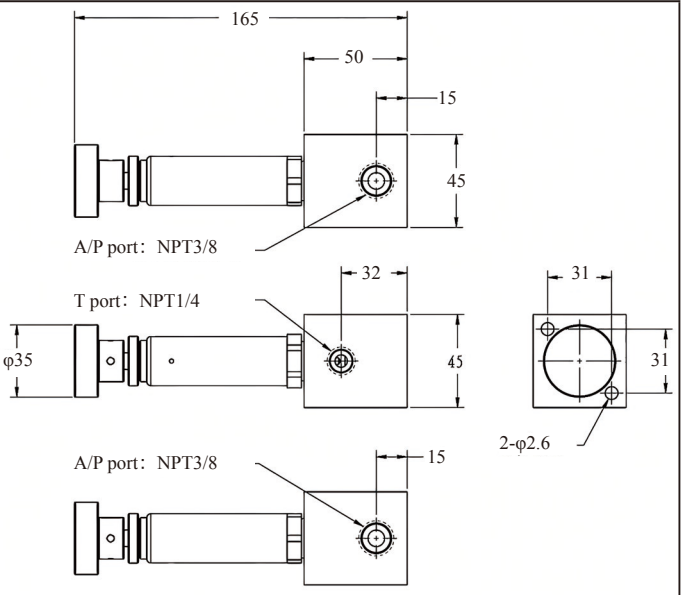
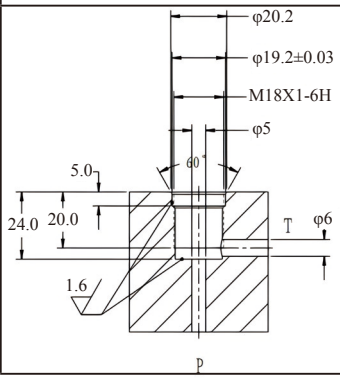
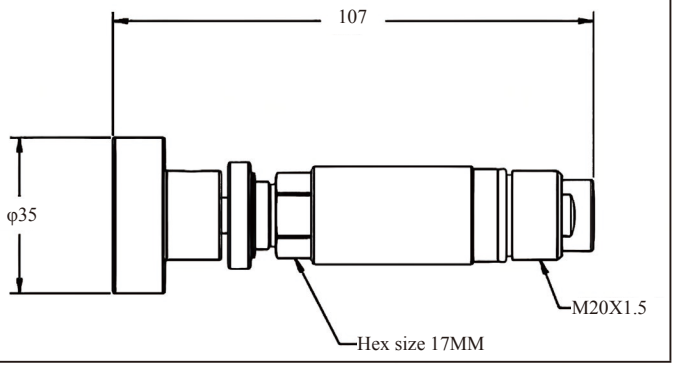
Model Number	Pictures	Installation mode	Functional symbol	Rated pressure (MPa)	Maximum overflow flow (L/Min)	Weight (g)
PV120		Threaded insert type		100	17	83
PV700		Threaded insert type		100	17	300
PV1000		Threaded insert type		100	17	847
PRV1000		Threaded insert type		150	10	300
PRV1000-T		Tubular mounting seat		250	10	300

Model Number	Pictures	Installation mode	Functional symbol	Rated pressure (MPa)	Maximum overflow flow (L/Min)	Weight (g)
PRV1500		Threaded insert type		150	10	300
PRV2500		Threaded insert type		250	10	300
POV2500		Threaded insert type		250	10	200

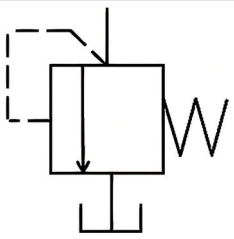
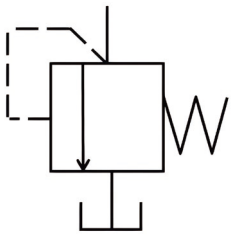
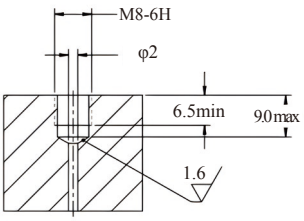
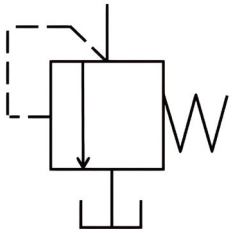
▼PRV Outline Dimensional Drawing:

Model Number	Installation dimensions	Outline dimensional
PV1000		
PRV1000		

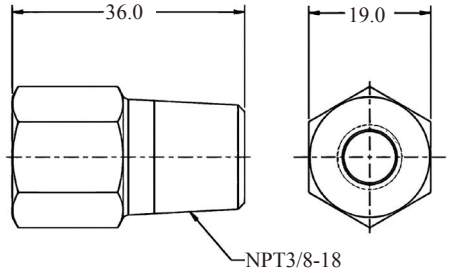
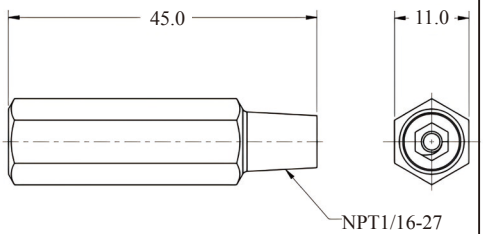
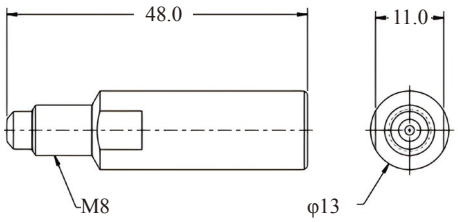
▼PRV Outline Dimensional Drawing:

	Mounting dimension	Overall dimension
PRV1000 - Tube type	-	
PRV1500/2500		

▼Safety Valve:

Model	Pictures	Thread A	Pressure rating	Mounting dimension	Functional symbol	Weight
SV700-4		NPT3/8	75MPa	-		62g
SV700-1		NPT 1/16-27	75MPa	-		23g
SV1700-M8		-	170/270 MPa			29g

▼ Safety Valve Outline Dimensional Drawing:

SV700-4	SV700-1	SV1700-M8
		

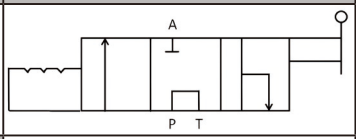
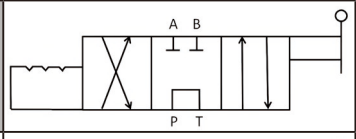
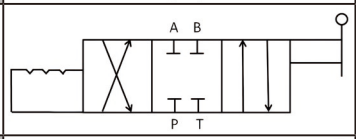
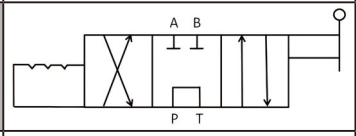
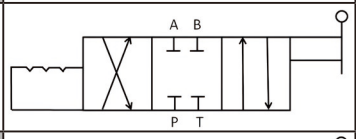
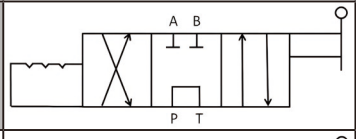
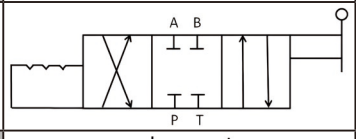
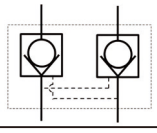
▼MV Manual Directional Control Valve



Technical Features:

- Micro-leakage mirror seal structure, good pressure holding effect
- A variety of functional forms can be selected • Aluminum body, light weight, corrosion resistance
- Low friction, small reversing force, easy to operate
- Positioning spring structure, easy to reverse positioning and maintain
- Reversing handle adjustable direction, easy to use multi-way valves

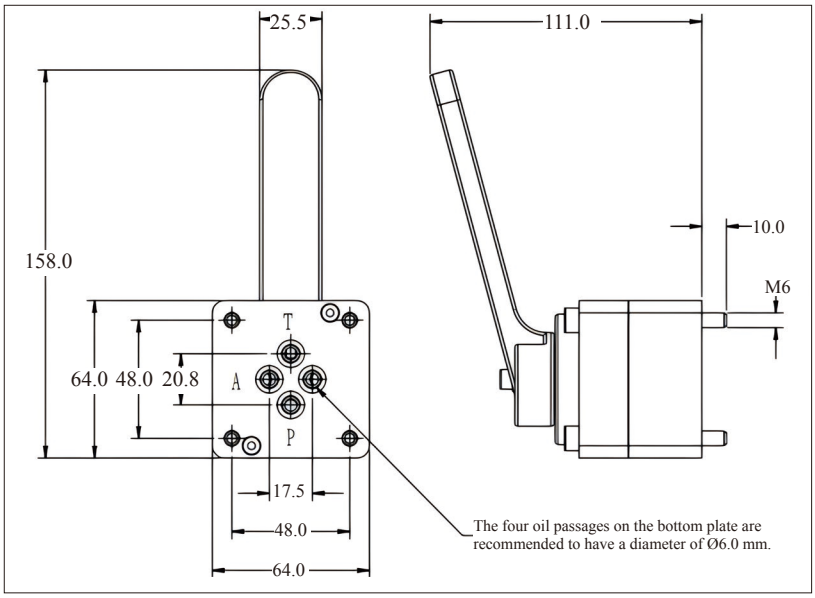
▼ MV Manual Directional Control Valve specification:

Model number	Functional symbol	Median function	Rated pressure	Maximum flow	Installation form
MV33-P		-	70MPa	17L/Min	Plate mounting
MV43-M-P		M	70MPa	17L/Min	Plate mounting
MV43-O-P		O	70MPa	17L/Min	Plate mounting
MV43-M-T		M	70MPa	17L/Min	Tubular, NPT3/8
MV43-O-T		O	70MPa	17L/Min	Tubular, NPT3/8
MV43-2000-M		M	200MPa	12L/Min	Plate mounting
MV43-2000-O		O	200MPa	12L/Min	Plate mounting
HMC700		-	70MPa	17L/Min	Plate mounting

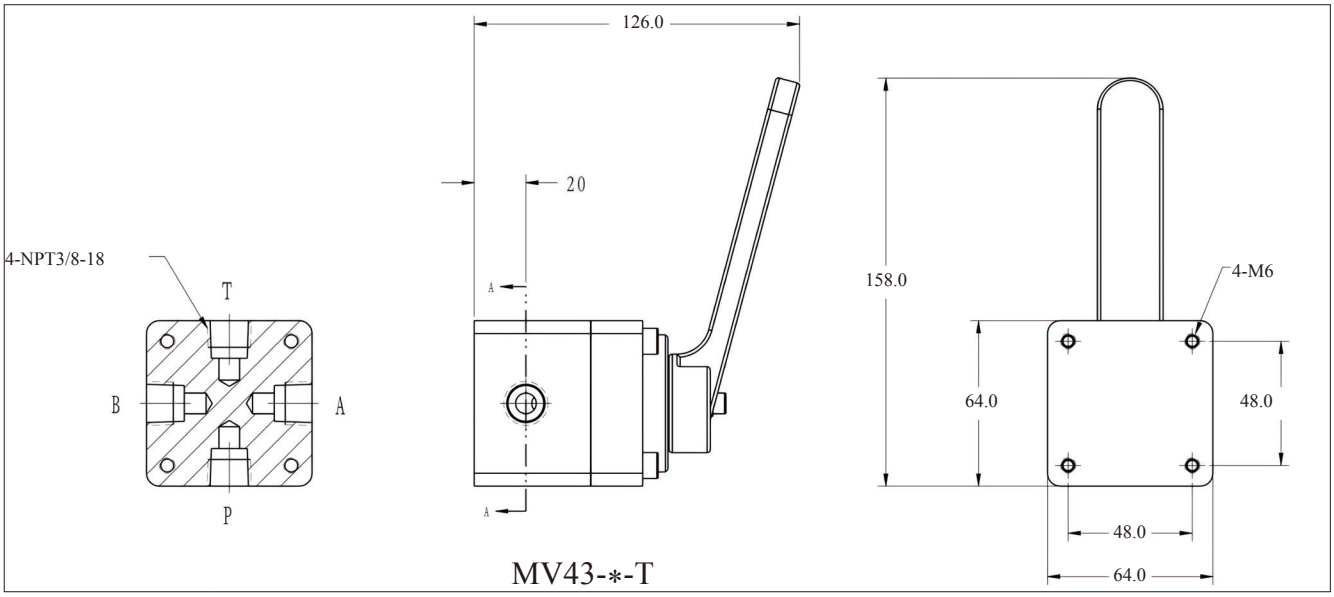
◆ Multi-way valve is recommended to choose the O-type medium function, single-way valve is recommended to choose the M-type medium function.

◆ Plate installation needs to be matched according to the size of the oil distribution valve block, tubular installation can be directly installed joints or hoses.

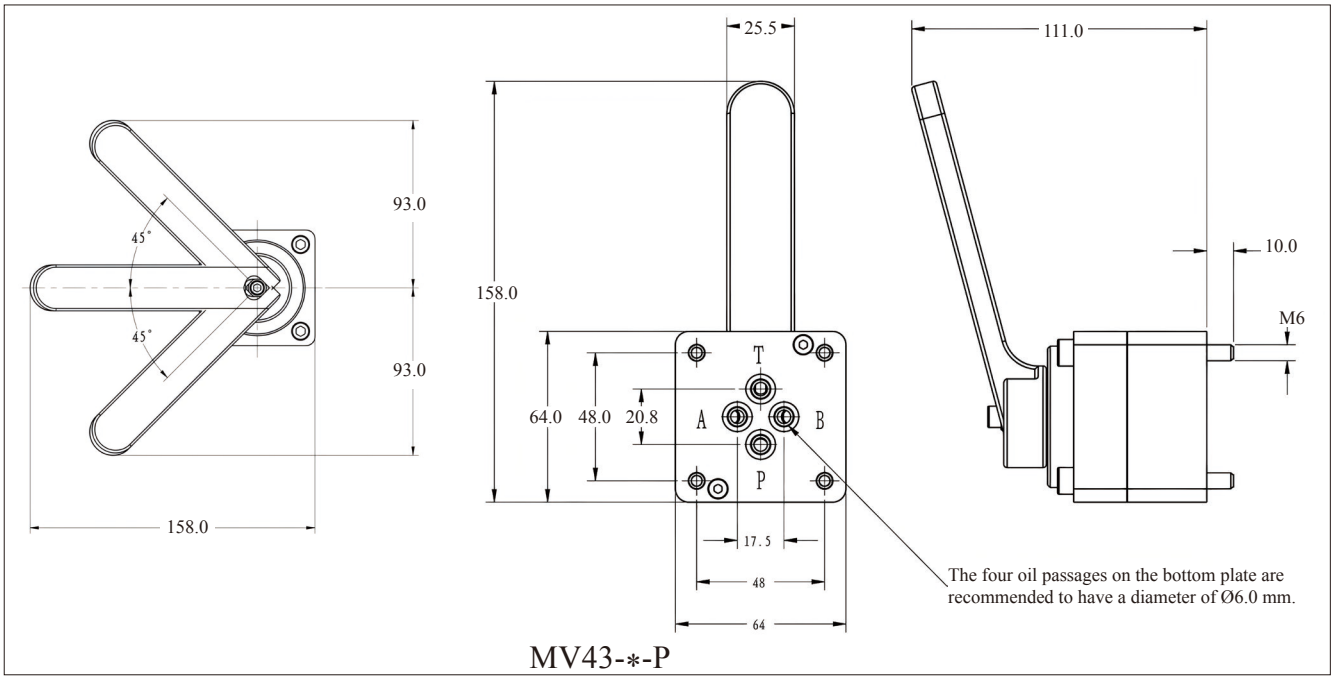
▼MV Manual Directional Control Valve Dimension Drawing



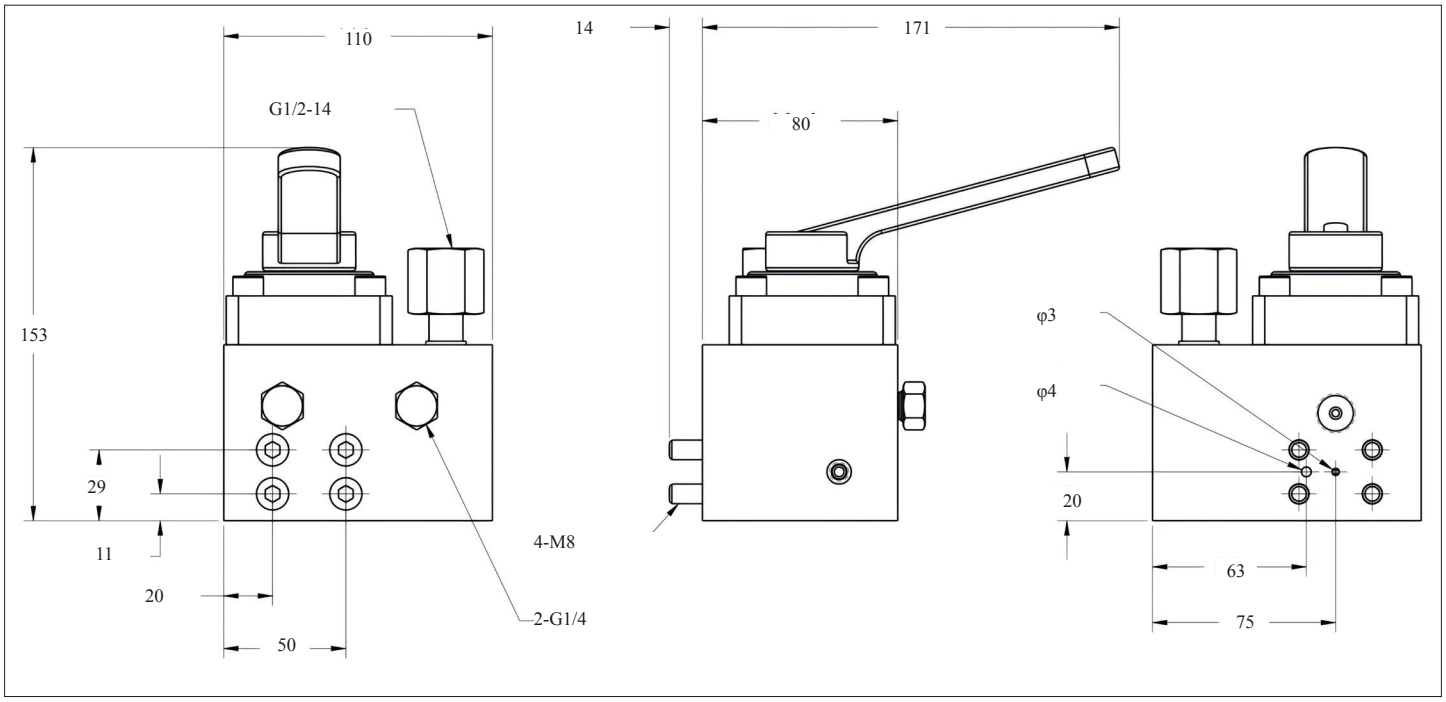
MV33-P



MV43-∗-T



MV43-∗-P

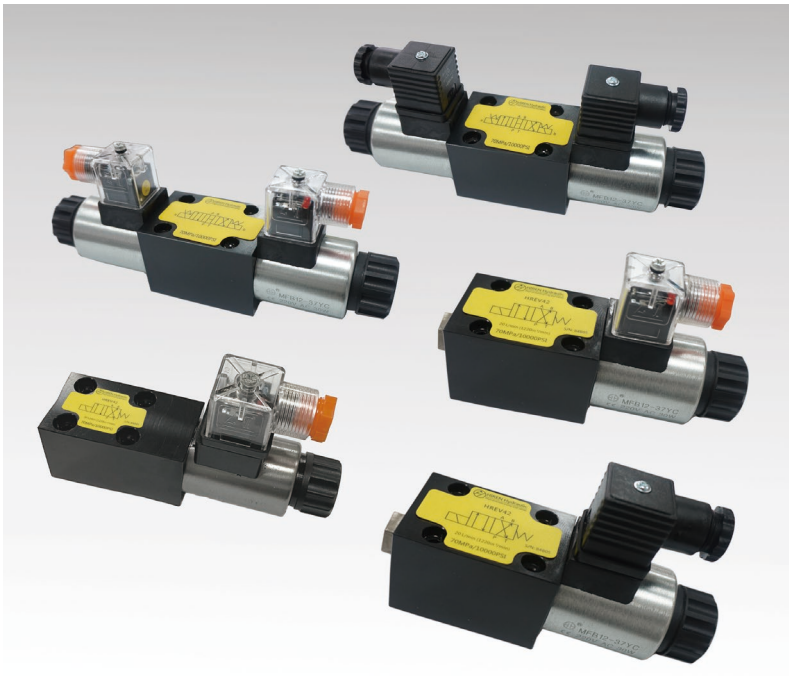


MV43-2000-O/M

▼ Application Example Diagram:



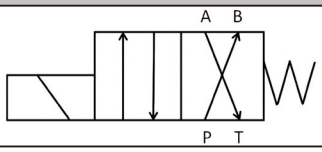
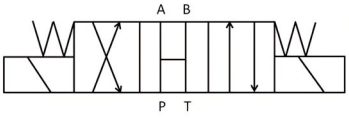
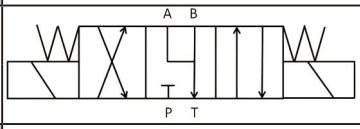
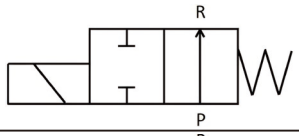
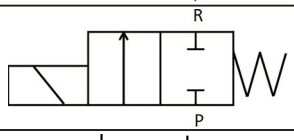
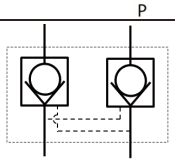
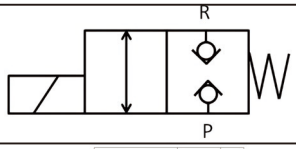
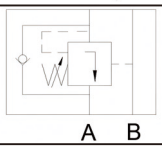
▼ Solenoid directional valve



Technical features:

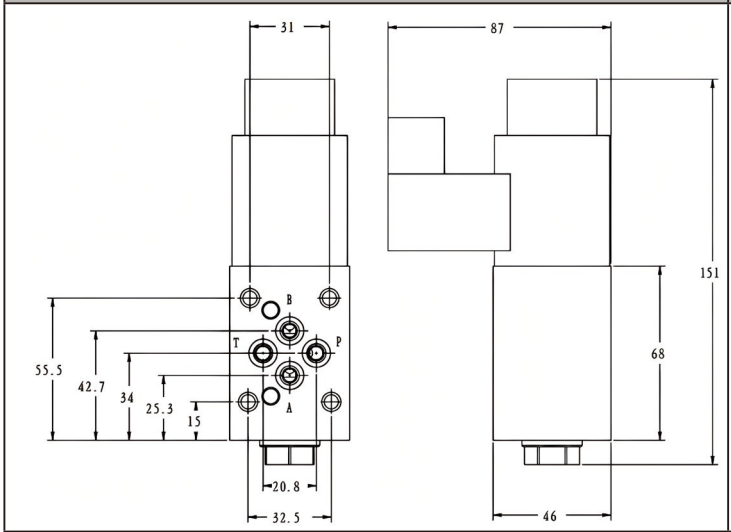
- 42CrMo tempered material, high strength and long life
- QPQ carbonitriding surface treatment, strong wear and corrosion resistance
- Optional 220VAC or 110VAC control coil
- 100%ED design, suitable for complex working conditions
- Precise matching of reversing spool, low leakage
- Superposition liquid controlled check valve, locking load Improved safety
- Multiple functions available
- Multi-way valve systems can be integrated on demand

▼ Solenoid Directional Valve Specification Table:

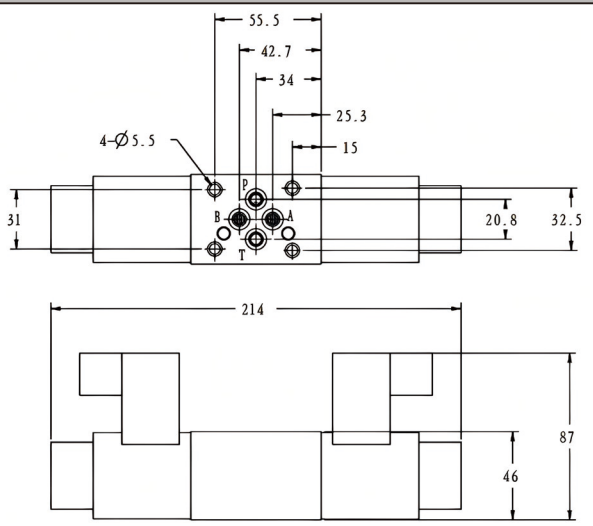
Model number	Rated pressure	Functional symbol	Voltage	Function	Maximum flow
HEV42-AC220 HEV42-DC24	70MPa		AC220/DC24	Two Position Four Way Valve	17L/Min
HEV43-H-AC220 HEV43-H-DC24	70MPa		AC220/DC24	Three position four-way valve H type center position	17L/Min
HEV43-Y-AC220 HEV43-Y-DC24	70MPa		AC220/DC24	Three position four-way valve Y type center position	17L/Min
EVO32-AC220 EVO32-DC24	70MPa		AC220/DC24	Normally open unloading valve	17L/Min
EVC32-AC220 EVC32-DC24	70MPa		AC220/DC24	Normally Closed Unloading Valve	17L/Min
HPC700	70MPa		AC220/DC24	Bidirectional hydraulic lock	17L/Min
HEV22-DC24	70MPa		DC24	Two-position two-way switch valve	17L/Min
HBV700	70MPa		-	Port A Load Control Valve	17L/Min

▼ EV Solenoid Directional Valve Dimensions:

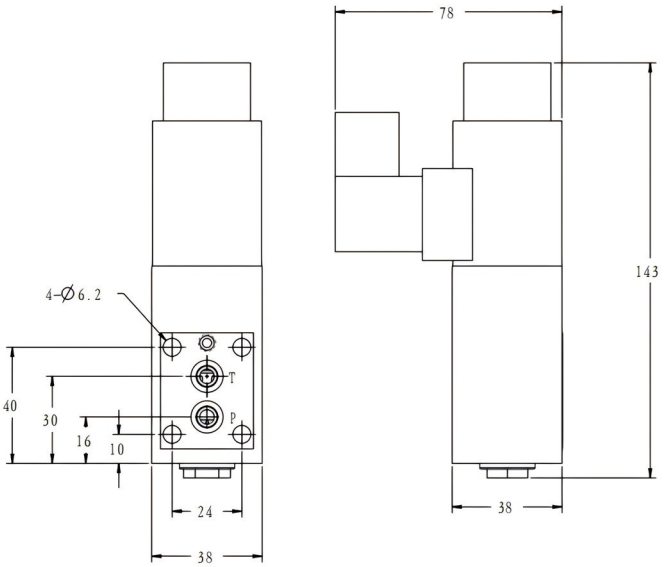
HEV42



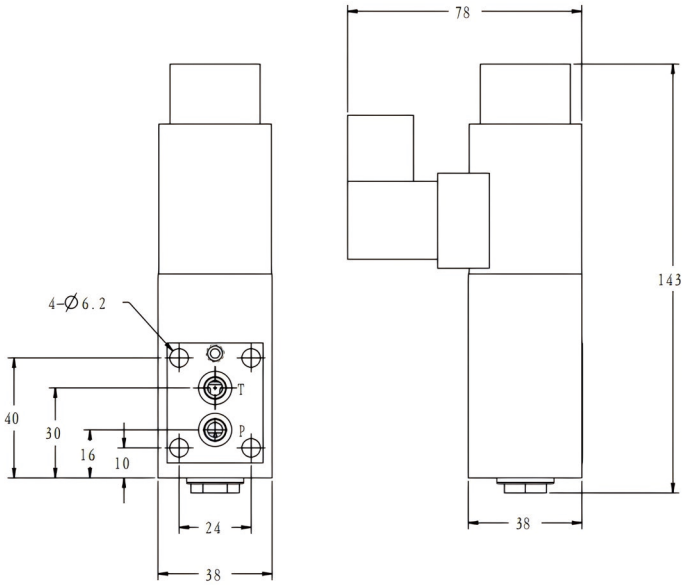
HEV43



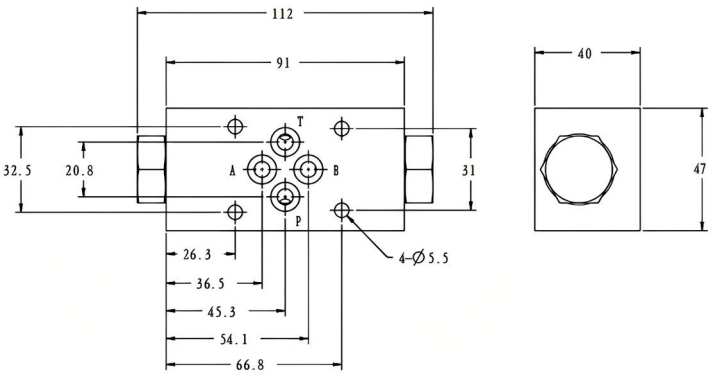
EVC32



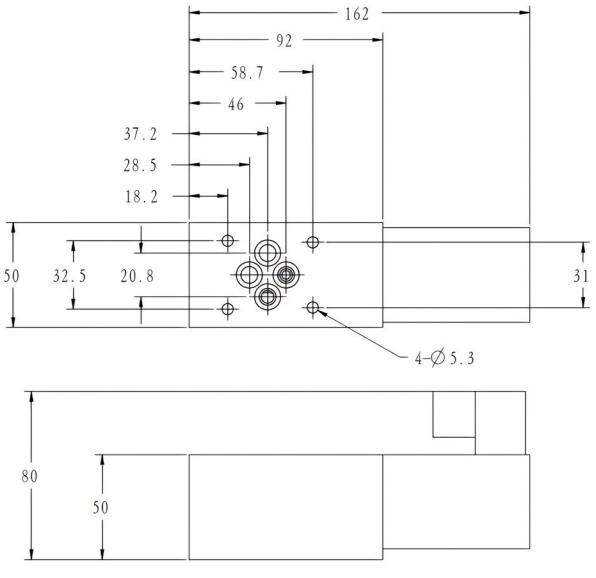
EVO32



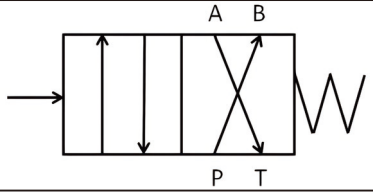
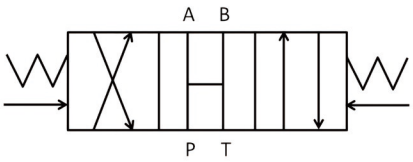
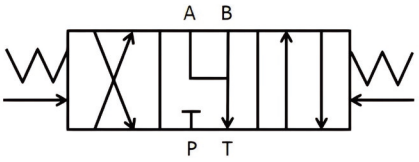
Superimposed hydraulic lock



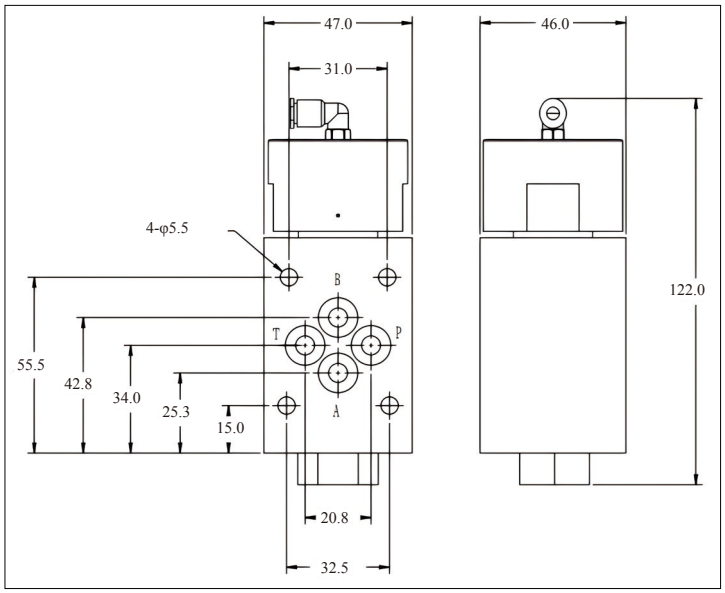
HEV22



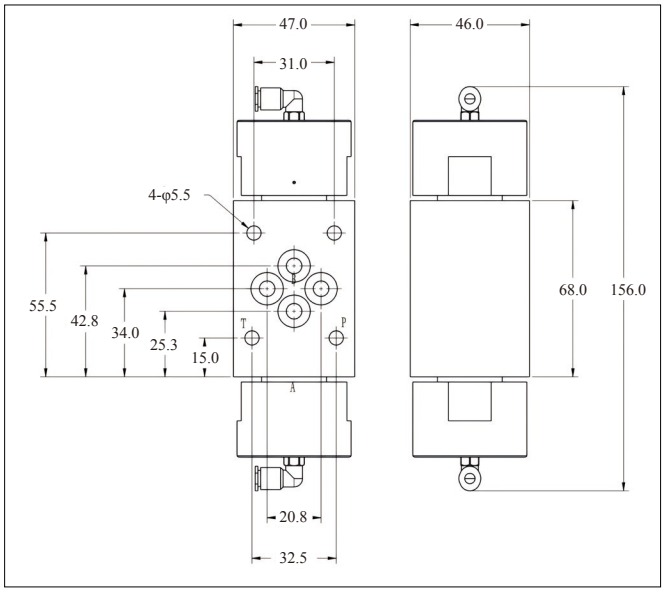
▼ AV Pneumatic Control Solenoid Valve

Model Number	Pictures	Rated pressure	Functional symbol	Input Atmospheric pressure	Maximum flow (L/Min)
AV42		70MPa		>3-10bar	17L/Min
AV43-H		70MPa		>3-10bar	17L/Min
AV43-Y		70MPa		>3-10bar	17L/Min

▼ AV Outline Dimensional Drawing:



AV42



AV43

▼ Application Example Diagram:







▼Gauge And Transducer

▼Gauge



Gauge Series

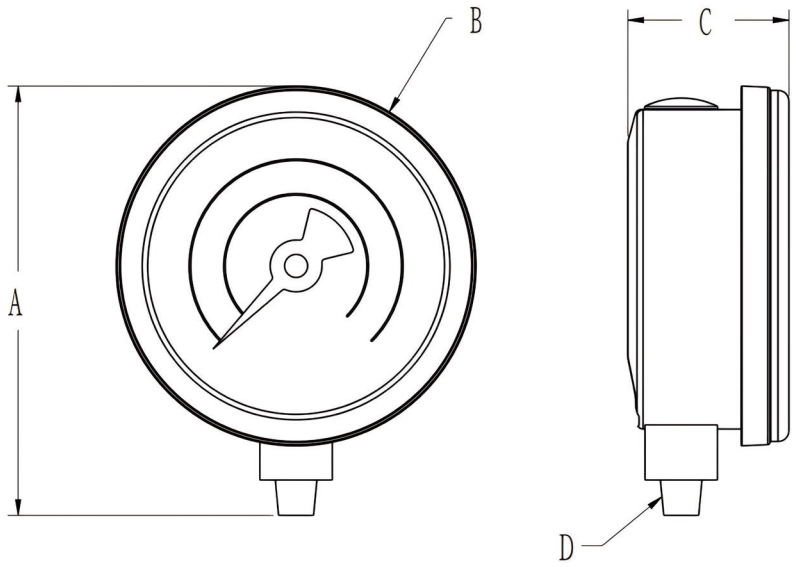
Pressure measuring range: 0-4000bar

Surface diameter: 60-100mm

Accuracy is full range: ±1.0-1.6%

- Dual scale reading bar and psi.
- All pressure sensing components are sealed in glycerine and seismic to ensure long life and long-lasting corrosion resistance.
- Includes pressure limiting devices and pressure equivalent film.
- Pressure gauge buffer valves and needle valves recommended for heavy duty applications.
- Pressure gauge buffer valves and needle valves recommended for heavy duty applications.
- Ideal for most applications Especially in high cycles and harsh environments.
- Pressure gauge buffer valves and needle valves are recommended as stop valves when the pressure gauge is not in use.
- Optional high-precision digital pressure gauges HDPS-800/HDPS-1000, high-pressure resistant to 800–1000 bar, with NPT1/4 compatible ports.

▼Gauge Outline Dimensional Drawing:



▼Gauge Specification Table:

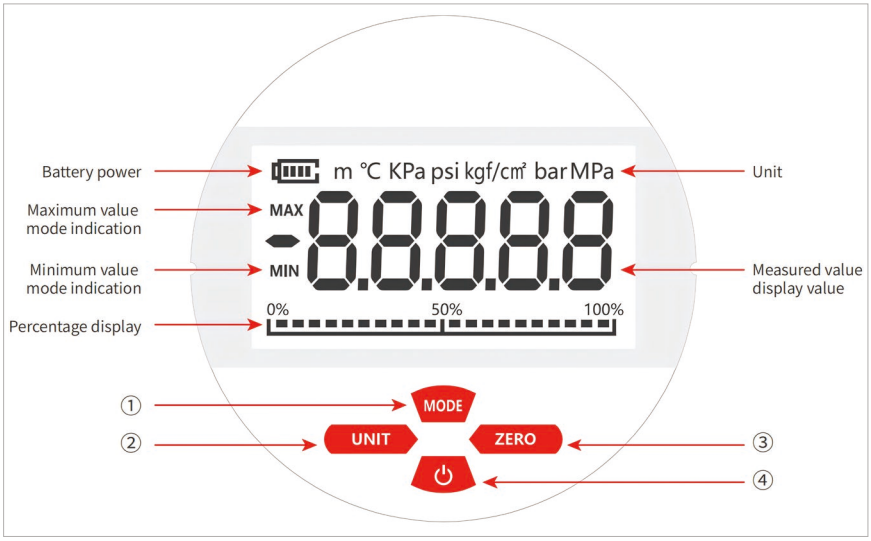
Model Number	Pressure range		Dimension (mm)			
	(bar)	(psi)	A	B	C	D
HG100-60	0-1000	0-14500	92	73	43	NPT1/4
HG100-100	0-1000	0-14500	138	Ø112	58	NPT1/4
HG200-100	0-2000	0-29000	145	Ø110	49	G1/2
HG300-100	0-3000	0-43500	145	Ø100	49	G1/2
HG400-100	0-4000	0-58000	140	Ø110	63	M16x1.5
HDPS-800	0-800	0-11603	-	-	-	NPT1/4
HDPS-1000	0-1000	0-14500	-	-	-	-

▼BDPS Precision Digital Battery-Powered Pressure Gauge



- •High-precision all-electronic digital pressure gauge
- •Built-in high-accuracy pressure sensor, real-time pressure reading
- •Excellent long-term stability
- •Large LCD screen
- •Functions: zero reset, backlight, power on/off, unit conversion, over-range alarm
- •Simple operation & easy installation
- •304 stainless steel housing, welded construction
- •Good structural stability & shock resistance
- •Suitable for water, air, oil, hydraulic and other non-corrosive media compatible with stainless steel
- •Ideal for field pressure testing, equipment integration and calibration
- • 5-digit real-time pressure display
- • Switchable normal measurement / peak hold mode
- • Overload warning for instrument protection
- • 8 international pressure units selectable
- • 3.6V lithium battery, replaceable
- • Auto power-off to save battery

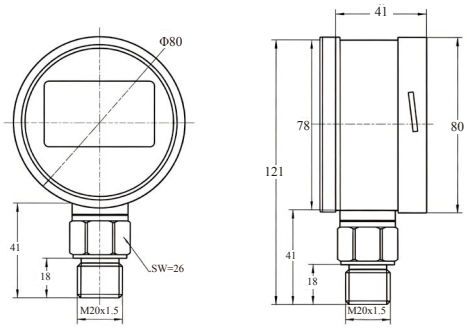
▼BDPS Outline Dimensional Drawing:



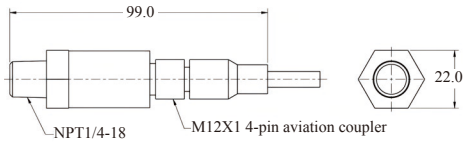
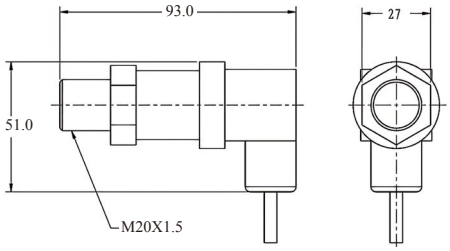
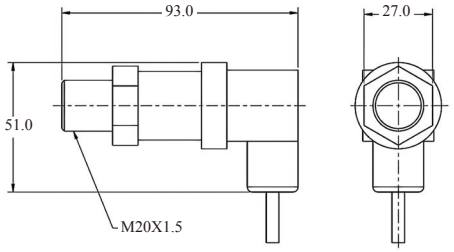
No.	Operation Instructions
1	MODE SWITCHING Short press: toggle normal/max/ min mode. Long press: enter password for user setting.
2	UNIT Switching Short press to switch pressure units.
3	ZERO SWITCHING Short press: clear max/min records. Long-press 3s → show ZERO, hold another 3s to complete zeroing. Cancel zeroing: long-press 3s → show rZERO, hold 3s to reset.
4	POWER Short press: power on. Long press 3s: power off. Short press when powered on: turn backlight ON/OFF.

Note: The installation thread is M20X1.5 by default;
G1/4, NPT1/4, G1/2, NPT1/2, M14X1.5 and other threads can be customized.

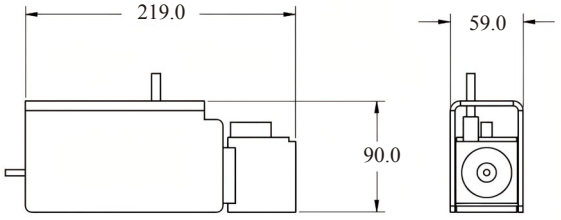
▼BDPS Specification Table:

Model Number	Pictures	Pressure Range (bar/PSI)	Thread	Voltage	External Drawing
BDPS-1000		0-1000 (0-14500)	M20x1.5	Battery-Powered	

▼ Pressure Transducer And Cable

Model Number	Pictures	Pressure rating (MPa)	Thread A	Voltage	External drawing
HPS1000-5C		100	NPT1/4	24VDC 4-20mA	 ◆Standard configuration of 5 meters of shielded communication cable
HPS2000-5C		200	M20x1.5	24VDC 4-20mA	 ◆Standard configuration of 5 meters of shielded communication cable
HPS3000-5C		300	M20x1.5	24VDC 4-20mA	 ◆Standard configuration of 5 meters of shielded communication cable

▼ Displacement Sensors And Cables

Model Number	Pictures	Range	Voltage	External drawing
HR -1000-A1		1000mm	24VDC 4-20mA	 ◆Standard with 30 m Displacement Sensor Cable
HR -1000-C30		-	-	30M Displacement Sensor Cable
HR -1000-C50		-	-	50M Displacement Sensor Cable

▼Hydraulic Hose



HP Hydraulic Hose

Inner diameter: 5-10mm

Length: 1-50m

Pressure: 70-280MPa

- The maximum working pressure is 280 MPa.
- It has a small volume expansion under pressure, which helps to improve the efficiency of the entire system.
- Corrugated rubber handle prevents damage to extend service life and durability.
- Optional wear-resistant plastic sleeve available.

▼Hydraulic Hose Specification Table:

Model Number	Pressure Rating	Inner Diameter (mm)	Outer Diameter (mm)	Safety Factor	Inner Layer Material	Reinforcement Layer Material	Outer Layer Material
HSP700	70 MPa	6	13.2	2	Nylon	High-strength Tensile Steel Wire	Polyurethane
HLP700	70 MPa	10	18	2	Nylon	High-strength Tensile Steel Wire	Polyurethane
HDP700	70 MPa	6	13.8	4	Nylon	High-strength Tensile Steel Wire	Polyurethane
HSP1800	180 MPa	5	14.2	2.5	Nylon	High-strength Tensile Steel Wire	Polyurethane
HSP2500	250 MPa	5	13.8	2.5	Polyoxymethylene	High-strength Tensile Steel Wire	Nylon
HSP3000	280 MPa	5	13.8	2.5	Polyoxymethylene	High-strength Tensile Steel Wire	Nylon

▼Production And Factory Inspection:



Hydraulic hose manufacturing



All hydraulic hoses are subjected to rated pressure tests before leaving the factory. After passing the tests, a certificate of conformity will be attached to each hose. There may be a small amount of residual hydraulic oil left from the tests inside the hoses. All hydraulic hoses are equipped with hydraulic couplers or threaded protective dust caps.

▼ HSP/HLP700 Naming Rules

HSP **700** **PC** – **10** – **MM**

1	2	3	4
Product type	PC Protective Sleeve	Length(m)	Couplers
HSP700 (70 MPa single hose) HLP700 (70 MPa single hoses)	Blank: Without PC protective sleeve PC: Equipped with PC protective sleeve	1- 50m	Blank: Equipped with threaded protective dust cap M: 1PCS male 232 coupler MM: 2PCS male 232 couplers

▼HSP/HLP700 Hose Typical Model Sheet

Model	Product Picture	Pressure (MPa)	length(m)	Specification information
HSP700PC-3-MM		70MPa	3m	3m, 70MPa hose with PC protective sheath, NPT3/8 external thread, with 2 pcs 232 male cone couplers
HSP700-20		70MPa	3m	20m, 70MPa hose, NPT3/8 external thread, rubber handles at both ends
HSP700PC-3-M		70MPa	3m	3m, 70MPa hose with PC protective sheath, NPT3/8 external thread, with 1 pc 232 male cone coupler
HSP700-3-M		70MPa	3m	3m, 70MPa hose with rubber handles at both ends, NPT3/8 external thread, with 1 pc 232 male cone coupler
HLP700-3		70MPa	3m	3m, 70MPa hose, bore 10mm, NPT3/8 external thread, rubber handles at both ends

▼ HDP700 Naming Rules:

HDP 700 – 10 – 232

1	3	4
Product type	Length(m)	Couplers
HDP700 (70 MPa double hose)	1- 50m	Blank: Equipped with threaded protective dust cap 232: 2 pairs of 232 couplers

▼HDP Hose Typical Model Sheet

Model	Product Picture	Pressure (MPa)	length(m)	Specification information
HDP700-6-232		70MPa	6m	70MPa double-tube, 6 meters long, with external thread NPT1/4; both ends equipped with rubber handles and 2 pairs of 232 quick-connect couplers

▼ HSP High Pressure Hose Naming Rules:

HSP 1800 PC – 10 – FM

1	2	3	4
Product type	PC Protective Sleeve	Length(m)	Couplers
HSP1800 (180MPa Single Hose) HSP2500 (250MPa Single Hose) HSP3000 (300MPa Single Hose)	Blank: Without PC protective sleeve PC: Equipped with PC protective sleeve	1- 50m	Blank: with thread protection dust cap M: 1PCS male coupler MM:2PCS male couplers FF:2PCS female couplers FM: 1 pair of male and female couplers

▼HSP High Pressure Hose Typical Model Sheet

Model	Product Picture	Pressure (MPa)	length (m)	Specification information
HSP1800PC-6-MM		180MPa	6m	180MPa hose 6m, PC protective sleeve, external thread G1/4, with 2 pcs 116 male couplers
HSP2500PC-6-MM		250MPa	6m	250MPa hose 6m, PC protective sleeve, external thread G1/4, with 2 pcs125 male couplers

▼Hydraulic Hose Model and Specification Table

Model	Pressure (MPa)	length (m)	Specification information
HSP700-1	70	1	70MPa hose 1 meter with corrugated handle, external thread NPT3/8
HSP700-1- M	70	1	70MPa hose 1 meter with corrugated handle, external thread NPT3/8, with 1 male taper Coupler
HSP700-1- MM	70	1	70MPa hose 1 meter with corrugated handle, external thread NPT3/8, with 2 male taper Couplers
HSP700-3	70	3	70MPa hose 3 meters with corrugated handle, external thread NPT3/8
HSP700-3-M	70	3	70MPa hose 3 meters with corrugated handle, external thread NPT3/8, with 1 male taper Coupler
HSP700-3-MM	70	3	70MPa hose 3 meters with corrugated handle, external thread NPT3/8, with 2 male taper Couplers
HSP700PC-6	70	6	70MPa hose 6 meters with PC protective sleeve, external thread NPT3/8
HSP700PC-6-M	70	6	70MPa hose 6 meters with PC protective sleeve, external thread NPT3/8, with 1 male taper Coupler
HSP700PC-6-MM	70	6	70MPa hose 6 meters with PC protective sleeve, external thread NPT3/8, with 2 male taper Couplers
HSP700PC-10	70	10	70MPa hose 10 meters with PC protective sleeve, external thread NPT3/8
HSP700PC-10-M	70	10	70MPa hose 10 meters with PC protective sleeve, external thread NPT3/8, with 1 male taper Coupler
HSP700PC-10-MM	70	10	70MPa hose 10 meters with PC protective sleeve, external thread NPT3/8, with 2 male taper Couplers
HSP700-20	70	20	70MPa hose 20 meters with corrugated handle, external thread NPT3/8
HSP700-20-M	70	20	70MPa hose 20 meters with corrugated handle, external thread NPT3/8, with 1 male taper Coupler
HSP700-20-MM	70	20	70MPa hose 20 meters with corrugated handle, external thread NPT3/8, with 2 male taper Couplers
HSP700-30	70	30	70MPa hose 30 meters with corrugated handle, external thread NPT3/8
HSP700-30-M	70	30	70MPa hose 30 meters with corrugated handle, external thread NPT3/8, with 1 male taper Coupler
HSP700-30-MM	70	30	70MPa hose 30 meters with corrugated handle, external thread NPT3/8, with 2 male taper Couplers
HLP700-1	70	1	70MPa hose 1 meter, 10mm diameter, external thread NPT3/8
HLP700-1- M	70	1	70MPa hose 1 meter, 10mm diameter, external thread NPT3/8, with 1 tapered male Coupler
HLP700-1- MM	70	1	70MPa hose 1 meter, 10mm diameter, external thread NPT3/8, with 2 tapered male Couplers
HLP700-3	70	3	70MPa hose 3 meters, 10mm diameter, external thread NPT3/8
HLP700-3-M	70	3	70MPa hose 3 meters, 10mm diameter, external thread NPT3/8, with 1 male taper Coupler
HLP700-3-MM	70	3	70MPa hose 3 meters, 10mm diameter, external thread NPT3/8, with 2 male taper Couplers
HDP700-6-232	70	6	70MPa twin hose 6 meters with corrugated handle, with quick connect Couplers, external thread NPT1/4
HDP700-12-232	70	12	70MPa twin hose 12 meters with corrugated handle, with quick connect Couplers, external thread NPT1/4
HSP1800-3	180	3	180MPa hose 3 meters with PC protective sleeve, external thread G1/4
HSP1800-3-MM	180	3	180MPa hose 3 meters, with corrugated handle, external thread G1/4, with 2 male 116 Couplers
HSP1800-3- FF	180	3	180MPa hose 3 meters, with corrugated handle, external thread G1/4, with 2 pieces of 116 female couplers
HSP1800-3- FM	180	3	180MPa hose 3 meters, with corrugated handle, external thread G1/4, with 1 pair of 116 male and female couplers
HSP1800PC-6	180	6	180MPa hose 6 meters, PC protective sleeve, external thread G1/4

▼Hydraulic Hose Model and Specification Table

Model	Pressure (MPa)	Length (m)	Specification information
HSP1800PC-6-MM	180	6	180MPa hose 6 meters, PC protective sleeve, external thread G1/4, with 2 pieces of 116 male couplers
HSP1800PC-6- FF	180	6	180MPa hose 6 meters, PC protective sleeve, external thread G1/4, with 2 pieces of 116 female couplers
HSP1800PC-6-FM	180	6	180MPa hose 6 meters, PC protective sleeve, external thread G1/4, with 1 pair of 116 male and female couplers
HSP1800PC-10	180	10	180MPa hose 10 meters, PC protective sleeve, external thread G1/4
HSP1800-10- FF	180	10	180MPa hose 10 meters, with corrugated handle, external thread G1/4, with 2 x 116 female couplers
HSP1800-10-FM	180	10	180MPa hose 10 meters, with corrugated handle, external thread G1/4, with 1 pair of 116 male and female couplers
HSP2500PC-6	250	6	250MPa hose 6 meters, PC protective sleeve, external thread G1/4
HSP2500PC-6-MM	250	6	250MPa hose 6 meters, PC protective sleeve, external thread G1/4, with 2 x 125 male couplers
HSP2500PC-6-FM	250	6	250MPa hose 6 meters, PC protective sleeve, external thread G1/4, with 1 pair of 125 male and female couplers
HSP2500PC-10	250	10	250MPa hose 10 meters, PC protective sleeve, external thread G1/4
HSP2500PC-10-MM	250	10	250MPa hose 10 meters, PC protective sleeve, external thread G1/4, with 2 x 125 male couplers
HSP2500PC-10-FF	250	10	250MPa hose 10 meters, PC protective sleeve, external thread G1/4, with 2 x 125 female couplers
HSP2500PC-10-FM	250	10	250MPa hose 10 meters, PC protective sleeve, external thread G1/4, with 1 pair of 125 male and female couplers
HSP2500-20	250	20	250MPa hose 20 meters, with corrugated handle, external thread G1/4
HSP2500-20-MM	250	20	250MPa hose 20 meters, with corrugated handle, external thread G1/4, with 2 x 125 male couplers
HSP2500-20-FF	250	20	250MPa hose 20 meters, with corrugated handle, external thread G1/4, with 2 x 125 female couplers
HSP2500-20-FM	250	20	250MPa hose 20 meters, with corrugated handle, external thread G1/4, with 1 pair of 125 male and female couplers
HSP3000-3	280	3	280MPa hose 3 meters, with corrugated handle, external thread G1/4
HSP3000-3-MM	280	3	280MPa hose 3 meters, with corrugated handle, external thread G1/4, with 2 x 125 male couplers
HSP3000-3-FM	280	3	280MPa hose 3 meters, with corrugated handle, external thread G1/4, with 1 pair of 125 male and female couplers
HSP3000PC-10-MM	280	10	280MPa hose 10 meters, PC protective sleeve, external thread G1/4, with 2 x 125 male couplers
HSP3000PC-10-FF	280	10	280MPa hose 10 meters, PC protective sleeve, external thread G1/4, with 2 x 125 female couplers
HSP3000PC-10-FM	280	10	280MPa hose 10 meters, PC protective sleeve, external thread G1/4, with 1 pair of 125 male and female couplers
HSP3000-10	280	10	280MPa hose 10 meters, with corrugated handle, external thread G1/4
HSP3000-10-MM	280	10	280MPa hose 10 meters, with corrugated handle, external thread G1/4, with 2 x 125 male couplers
HSP3000-10-FF	280	10	280MPa hose 10 meters, with corrugated handle, external thread G1/4, with 2 x 125 female couplers
HSP3000-10-FM	280	10	280MPa hose 10 meters, with corrugated handle, external thread G1/4, with 1 pair of 125 male and female couplers
HSP3000-20	280	20	280MPa hose 20 meters, with corrugated handle, external thread G1/4
HSP3000-20-MM	280	20	280MPa hose 20 meters, with corrugated handle, external thread G1/4, with 2 x 125 male couplers
HSP3000-20-FF	280	20	280MPa hose 20 meters, with corrugated handle, external thread G1/4, with 2 x 125 female couplers
HSP3000-20-FM	280	20	280MPa hose 20 meters, with corrugated handle, external thread G1/4, with 1 pair of 125 male and female couplers

♦No PC sleeve selected, hydraulic hose is equipped with anti-slip corrugated rubber handle.

♦Any length can be customized.

♦The above naming method does not represent the entire supply range. For more options, please consult for details.

▼MXT Square Drive Hydraulic



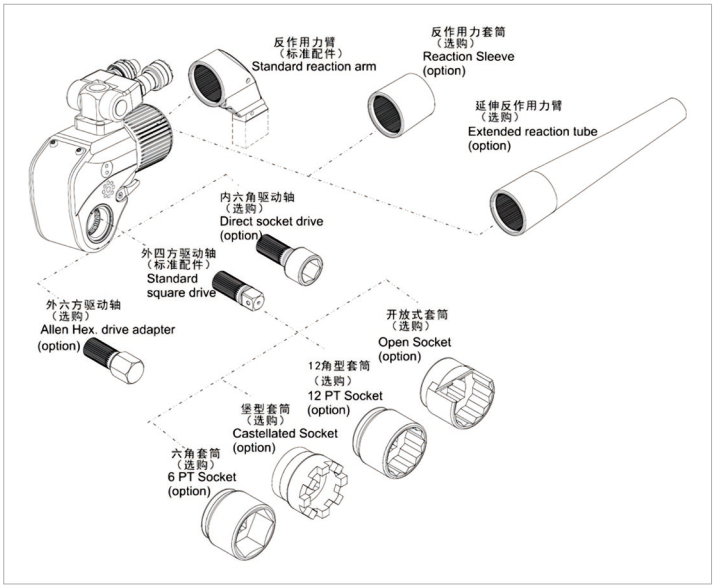
Maximum Torque: 54—72000N·m

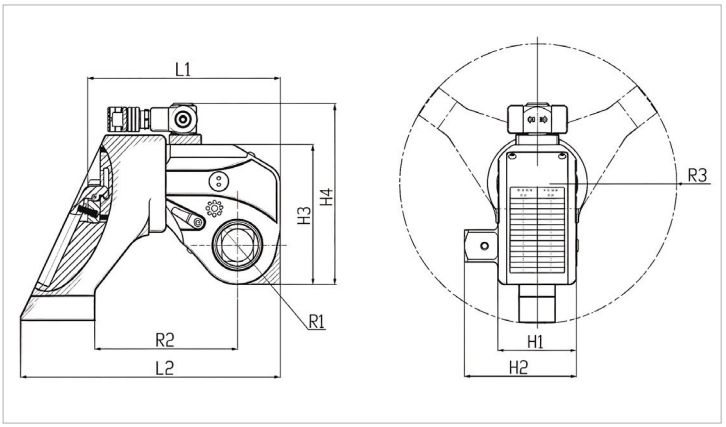
Torque Torque Accuracy: ±3%

Maximum Working Pressure: 70MPa

- One-piece body made of aluminum-titanium alloy, featuring high strength, high toughness and light weight
- 360°×180° rotating hydraulic tube connector, no space restriction for use, convenient operation
- Square Drive Sizewith button release for quick switching between tightening and loosening modes
- Trigger-type lock, allowing 360° adjustable reaction arm to be placed on any fixed fulcrum
- Reset trigger design to overcome wrench reversal caused by bolt deformation
- Ratchet and pawl adopt coarse-tooth structure design, with higher tooth strength and better durability
- Torque accuracy: 3%, repeatability: 100%

▼MXT Wrench Technical Specifications





Model	MXT-05	MXT-07	MXT-1	MXT-3	MXT-5	MXT-8	MXT-10	MXT-15	MXT-20	MXT-25	MXT-35	MXT-50
Torque Range (N·m)	54-538	112-1120	183-1837	451-4512	752-7528	1078-10780	1551-15516	2063-20627	2666-26664	3472-34725	4866-48666	7200-72000
A/F Size (mm)	16-30	22-46	24-55	41-75	41-85	46-95	55-105	60-115	65-130	75-145	95-170	105-180
Weight(Kg)	1.5	1.6	2.6	5.4	8.7	11.7	14.8	22	27.8	35.5	49.4	90
L1	95.3	110.8	145.0	181.0	217.5	216.0	252.5	285.0	319.5	333.0	381.5	400.0
L2	129.3	139.3	173.0	244.0	285.5	311.0	339.7	395.0	450.8	459.2	495.5	418.5
H1	33.0	42.0	50.0	68.0	80.0	90.0	100.0	110.0	120.0	137.0	153.0	160.0
H2	50.5	65.8	71.9	95.3	122.9	130.5	140.8	178.7	188.2	199.8	215.6	222.6
H3	61.0	76.2	95.5	127.0	149.0	167.0	182.0	200.4	220.0	247.0	282.0	290.5
H4	103.8	119.0	138.3	176.5	198.5	216.5	231.5	249.9	269.5	296.5	331.5	340.0
R1	17.0	20.5	26.0	34.0	39.0	47.0	51.0	55.0	59.0	66.0	77.0	81.0
R2	93.0	68.3	84.5	131.3	158.0	171.0	174.0	222.5	250.5	250.5	279.0	258.5
R3	57.0	76.0	91.5	125.8	141.0	165.0	170.3	201.5	216.5	224.1	237.6	258.0
Square Drive	1/2"	3/4"	3/4"	1"	1-1/2"	1-1/2"	1-1/2"	2-1/2"	2-1/2"	2-1/2"	2-1/2"	2-1/2"

▼ XLCT Low Profile Hydraulic Torque Wrench



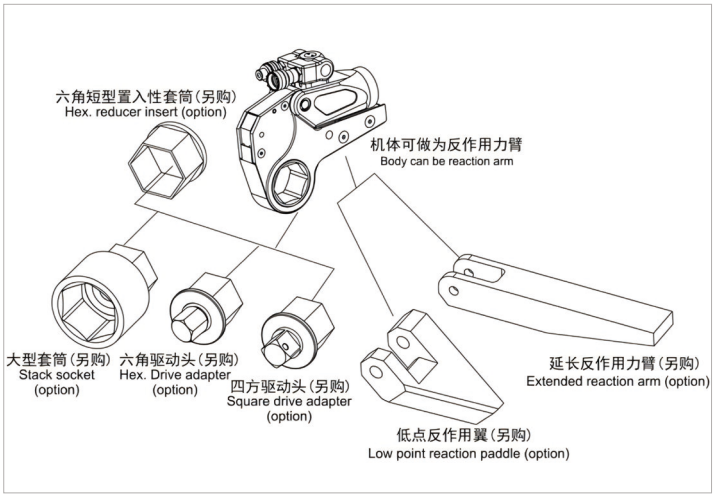
Maximum Torque: 232-44593N·m

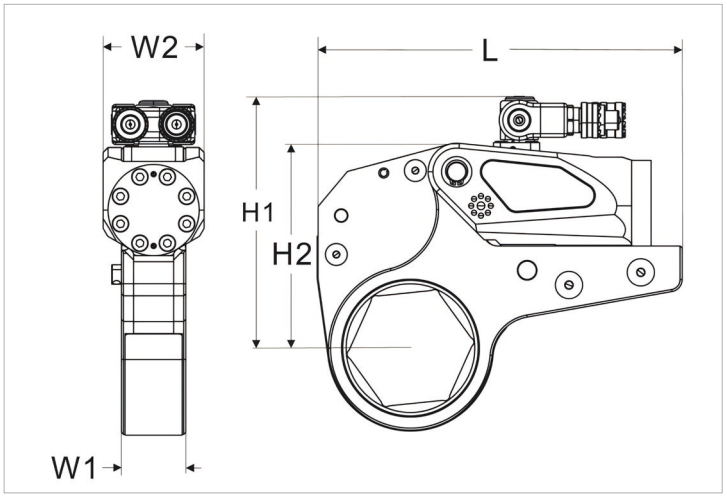
Torque Accuracy: ±3%

Maximum Working Pressure: 70MPa

- The Link body can be used as a reaction arm
- 360°×180° rotating hydraulic tube connector, no space restriction for use
- Anti-reverse pawl design to prevent wrench from reversing and jamming
- Multiple specifications and models of Links and reducing sleeves to adapt to more working conditions
- Power head with one-piece body made of aluminum-titanium alloy, featuring high strength, high toughness and wear resistance
- Torque accuracy: 3%, repeatability: 100%

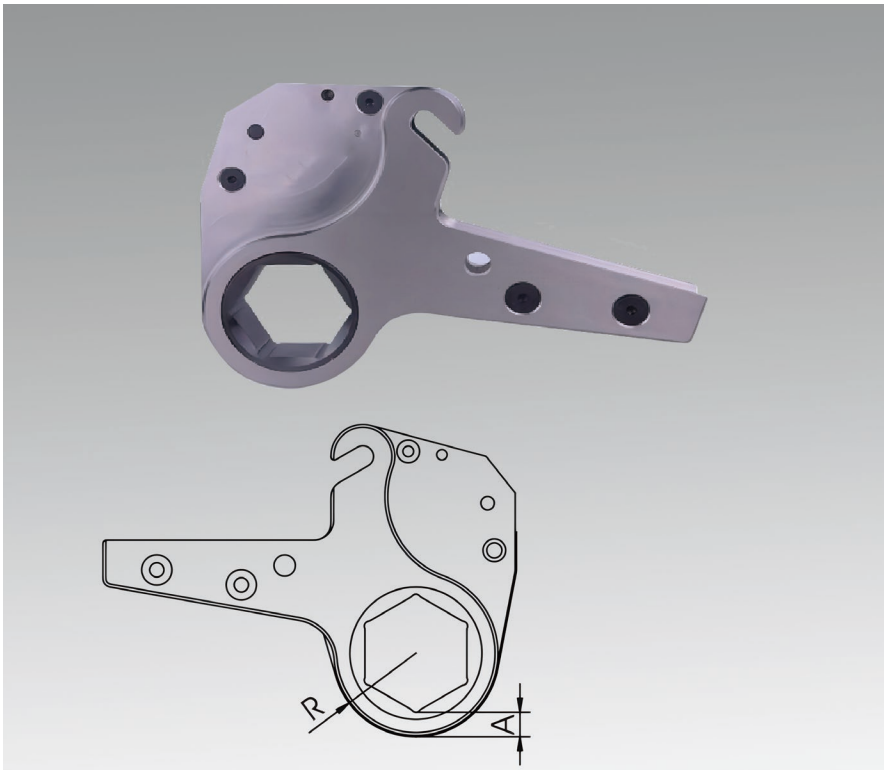
▼ XLCT Wrench Technical Specifications





Model	XLCT-2		XLCT-4		XLCT-8		XLCT-14	XLCT-18	XLCT-30	
Torque Range (N·m)	232	241	585	647	1094	1177	1852	2601	4188	4459
	2328	2414	5858	6474	10941	11774	18521	26011	41882	44593
A/F Size (mm)	19-55	60	34-65	70-80	41-95	100-105	50-117	75-135	110-155	160-175
Drive Unit Weight(Kg)	1	1	2	2	3.3	3.3	5.5	6	11.4	11.4
links weight (Kg)	1.6	1.7	4.4	4.6	8	8.4	11.6	12.8	29	30
L	196.4	196.4	245	246	300	301	361	364.3	430	441
H1	125.9	128.5	177	187	207	216	239	268.7	303	315
H2	102.3	105	135.7	145.7	169	178	204	230.7	272	285
W1	32	32	42	42	53	53	64	70	85	85
W2	51	51	66	66	83	83	99	111	131	131

Links for XLCT Series



- Each model of XLCT hollow torque wrench power head is equipped with a complete set of Links, covering all sizes of bolts within the torque range provided by the power head of that model.
- When selecting a suitable Link for the bolt, it should be noted that the distance between the bolt and the wall should be greater than the distance between the inner hexagonal side of the Link and the outer edge of the Link.
- Special attention should be paid to whether there is sufficient space between bolts.
- XLCT series Links can be used with reducing sleeves, enabling a single Link to match multiple bolt sizes, greatly improving adaptability and diversity in different working conditions.

Bolt Size (M)	A/F Size (mm)	XLCT-2			XLCT-4			XLCT-8		
		Link Model	R (mm)	A (mm)	Link Model	R (mm)	A (mm)	Link Model	R (mm)	A (mm)
12	19	XLCT-2-S19	27	16	-	-	-	-	-	-
14	22	XLCT-2-S22	27	14	-	-	-	-	-	-
18	27	XLCT-2-S27	27	11	-	-	-	-	-	-
20	30	XLCT-2-S30	29	12	-	-	-	-	-	-
22	32	XLCT-2-S32	29	11	-	-	-	-	-	-
22	34	XLCT-2-S34	31	11	XLCT-4-S34	36	16	-	-	-
24	36	XLCT-2-S36	31	10	XLCT-4-S36	36	15	-	-	-
27	41	XLCT-2-S41	34	10	XLCT-4-S41	39	15	XLCT-8-S41	46	22
30	46	XLCT-2-S46	37	10	XLCT-4-S46	42	15	XLCT-8-S46	46	19
33	50	XLCT-2-S50	40	11	XLCT-4-S50	44	15	XLCT-8-S50	46	17
36	55	XLCT-2-S55	43	11	XLCT-4-S55	46	14	XLCT-8-S55	50	18
39	60	XLCT-2-S60	46	11	XLCT-4-S60	50	15	XLCT-8-S60	52	17
42	65	-	-	-	XLCT-4-S65	53	15	XLCT-8-S65	55	17
45	70	-	-	-	XLCT-4-S70	56	15	XLCT-8-S70	58	17
48	75	-	-	-	XLCT-4-S75	59	15	XLCT-8-S75	60	17
52	80	-	-	-	XLCT-4-S80	61	15	XLCT-8-S80	63	16
56	85	-	-	-	-	-	-	XLCT-8-S85	66	16
60	90	-	-	-	-	-	-	XLCT-8-S90	69	17
64	95	-	-	-	-	-	-	XLCT-8-S95	71	16
68	100	-	-	-	-	-	-	XLCT-8-S100	75	17
72	105	-	-	-	-	-	-	XLCT-8-S105	78	17

（Continued from the previous table）

Bolt Size (M)	A/F Size (mm)	XLCT-14			XLCT-18			XLCT-30		
		Link Model	R (mm)	A (mm)	Link Model	R (mm)	A (mm)	Link Model	R (mm)	A (mm)
33	50	XLCT-14-S50	60	31	-	-	-	-	-	-
36	55	XLCT-14-S55	60	28	-	-	-	-	-	-
39	60	XLCT-14-S60	60	25	-	-	-	-	-	-
42	65	XLCT-14-S65	60	22	-	-	-	-	-	-
45	70	XLCT-14-S70	60	19	-	-	-	-	-	-
48	75	XLCT-14-S75	63	19	XLCT-18-S75	65	22	-	-	-
52	80	XLCT-14-S80	66	19	XLCT-18-S80	68	22	-	-	-
56	85	XLCT-14-S85	69	19	XLCT-18-S85	71	22	XLCT-30-S85	78	28
60	90	XLCT-14-S90	72	20	XLCT-18-S90	74	22	XLCT-30-S90	78	27
64	95	XLCT-14-S95	74	19	XLCT-18-S95	77	22	XLCT-30-S95	83	28
68	100	XLCT-14-S100	77	19	XLCT-18-S100	80	22	XLCT-30-S100	83	25
72	105	XLCT-14-S105	80	19	XLCT-18-S105	84	23	XLCT-30-S105	89	28
76	110	XLCT-14-S110	83	19	XLCT-18-S110	87	23	XLCT-30-S110	89	25
80	115	XLCT-14-S115	87	20	XLCT-18-S115	89	23	XLCT-30-S115	95	28
-	117	XLCT-14-S117	87	19	-	-	-	XLCT-30-S117	95	27
85	120	-	-	-	XLCT-18-S120	92	23	XLCT-30-S120	95	25
85	125	-	-	-	XLCT-18-S125	95	23	XLCT-30-S125	101	29
90	130	-	-	-	XLCT-18-S130	98	23	XLCT-30-S130	101	26
95	135	-	-	-	XLCT-18-S135	101	23	XLCT-30-S135	104	26
-	140	-	-	-	-	-	-	XLCT-30-S140	110	29
100	145	-	-	-	-	-	-	XLCT-30-S145	110	26
105	150	-	-	-	-	-	-	XLCT-30-S150	116	29
110	155	-	-	-	-	-	-	XLCT-30-S155	116	26
-	160	-	-	-	-	-	-	XLCT-30-S160	128	36
115	165	-	-	-	-	-	-	XLCT-30-S165	128	33
120	170	-	-	-	-	-	-	XLCT-30-S170	128	30
-	175	-	-	-	-	-	-	XLCT-30-S175	128	27

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▼ AVANTI Hydraulic Torque Wrenches



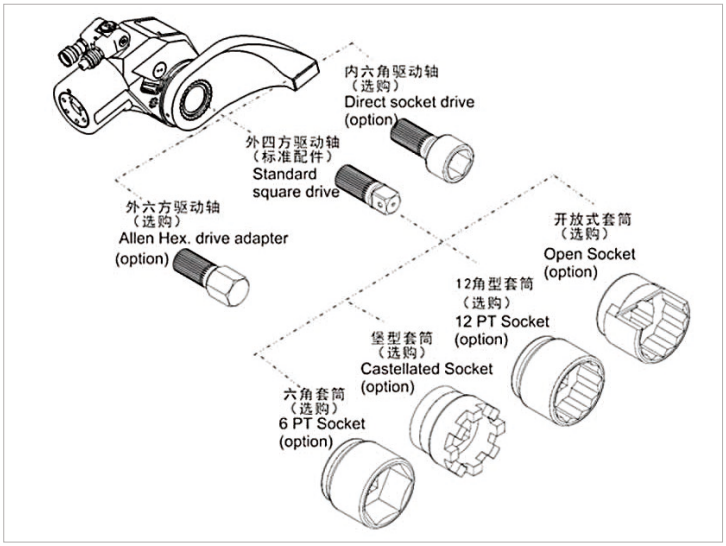
Maximum Torque: 158-16682N·m

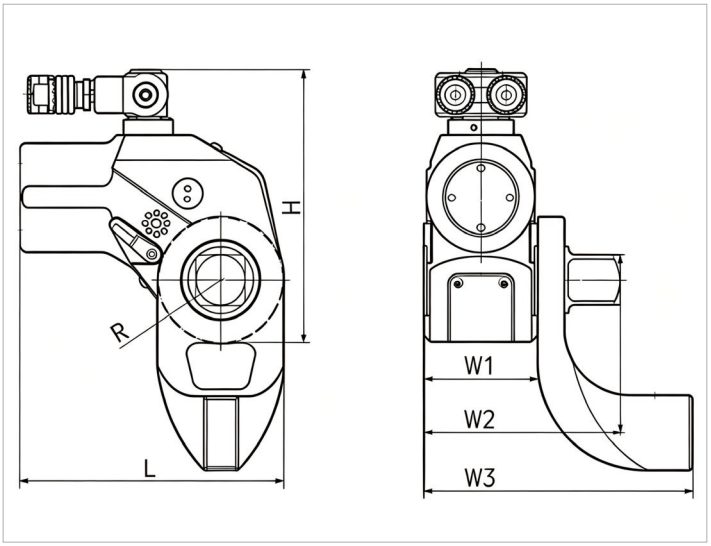
Torque Accuracy: ±3%

Maximum Working Pressure: 70MPa

- One-piece body made of aluminum-titanium alloy, featuring high strength and high toughness
- Square Drive Sizeadopts coaxial double-layer spline design, the front reaction arm is combined with the Square Drive Sizealong the bolt axis, which can rotate 360°
- 6 models in this series, with torque range covering 158N·m to 16682 N·m
- 360°×180° rotating hydraulic tube connector, meeting the freedom of hydraulic tube rotation

▼ AVANTI Wrench Technical Specifications





Model	AVANTI-07	AVANTI-3	AVANTI-5	AVANTI-10
Torque Range （N·m）	158-1104	620-4314	1053-7370	2359-16682
Weight (Kg)	1.4	4.3	7.1	13.3
L(mm)	111	170.0	202	252
H(mm)	110	175	207	249
R(mm)	26	41	48	60
W1(mm)	46	74	87	111
W2(mm)	80	121	152	177
W3(mm)	128	178	204	257
Square Drive Size	3/4"	1"	1-1/2"	1-1/2"

▼RGH Hollow Hydraulic Torque Wrenches



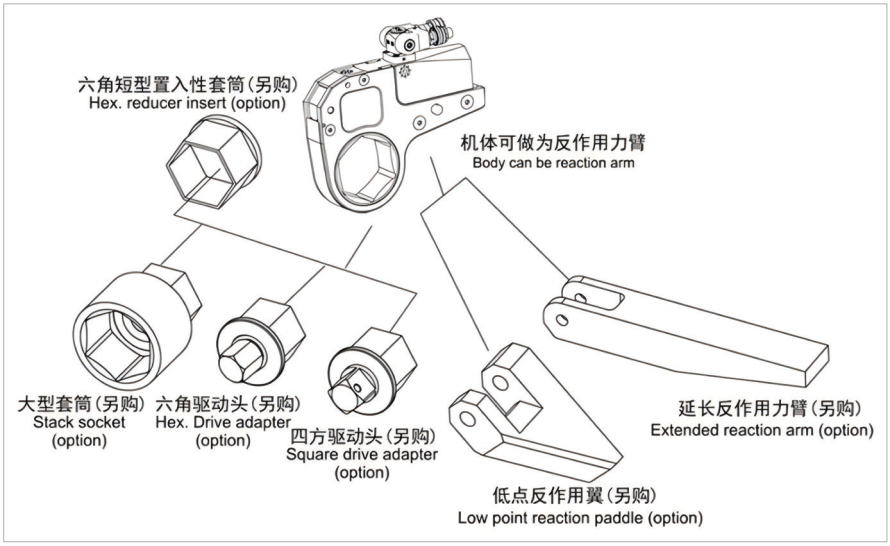
Maximum Torque: 223-30408N·m

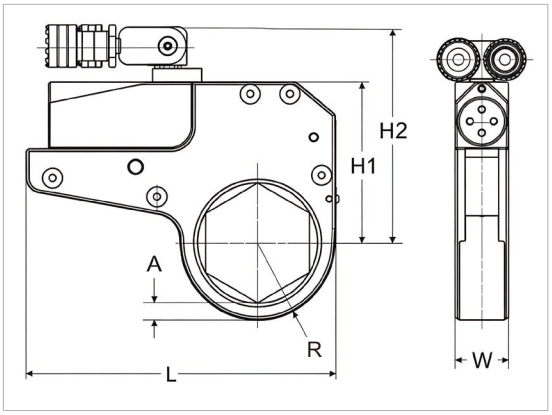
Torque Accuracy: ±3%

Maximum Working Pressure: 70MPa

- Flat design, the thickness of the power head and Link is the same, excellent for narrow space applications
- 360°×180° rotation allows the wrench to be operated freely without space restrictions
- The wrench acts directly on the nut, with higher Torque Accuracy and more convenient operation
- Power head made of high-strength alloy steel, featuring high strength, wear resistance and compact design

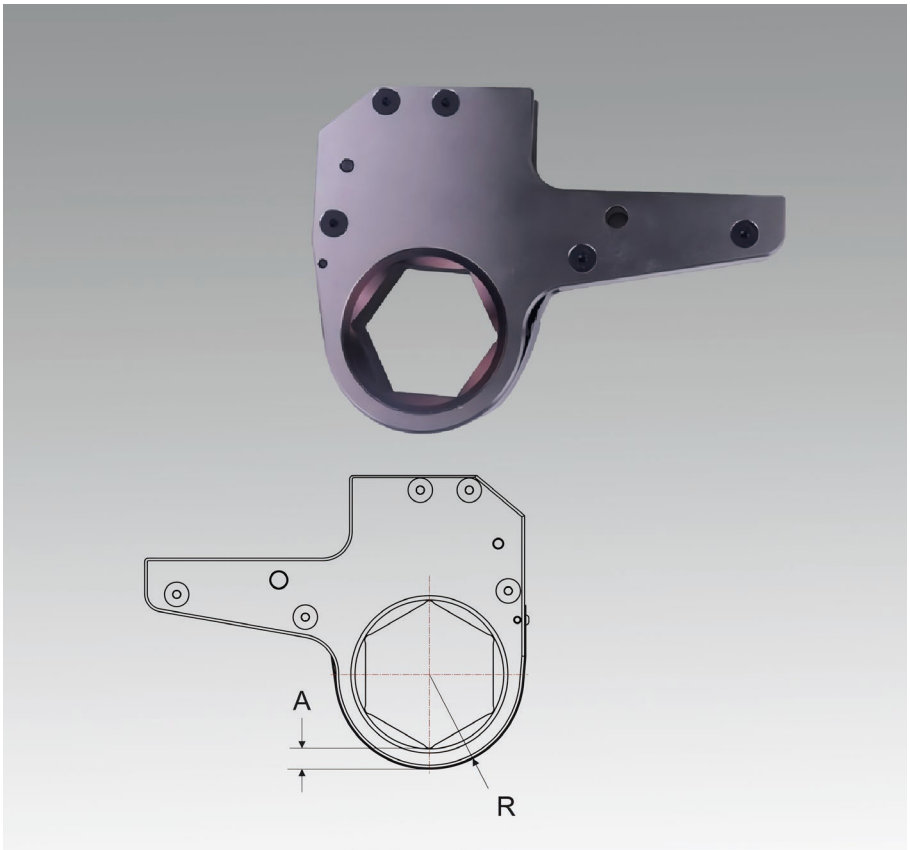
▼RGH Wrench Technical Specifications





Model	RGH-2			RGH-3		RGH-4				RGH-8		RGH-14	RGH-22
Torque Range (N·m)	223	241	249	314	314	586	586	586	647	1094	1177	1852	3041
	2238	2414	2492	2245	3143	2511	5021	5858	6474	10941	11774	18521	30408
A/F Size(mm)	19-55	60	70	27-46	50-70	34-36	41	46-65	70-80	41-95	100-105	50-117	75-135
Drive Unit Weight(Kg)	1.2	1.2	1.2	1.4	1.4	1.6	1.6	1.6	1.6	3.1	3.1	4.8	7.8
Links Weight (Kg)	1.5	1.8	1.9	1.7	2	4	4.1	4.3	4.5	8.1	8.9	13.5	23.9
L(mm)	186	186	188	207	207	241	243	245	246	300	300	361	412
H1(mm)	95	98	98	110	110	127	127	127	137	156	165	188	220
H2(mm)	133	136	136	153	153	177	177	177	187	206	215	238	270
W1(mm)	32	32	32	36	36	43	43	43	43	53	53	64	77

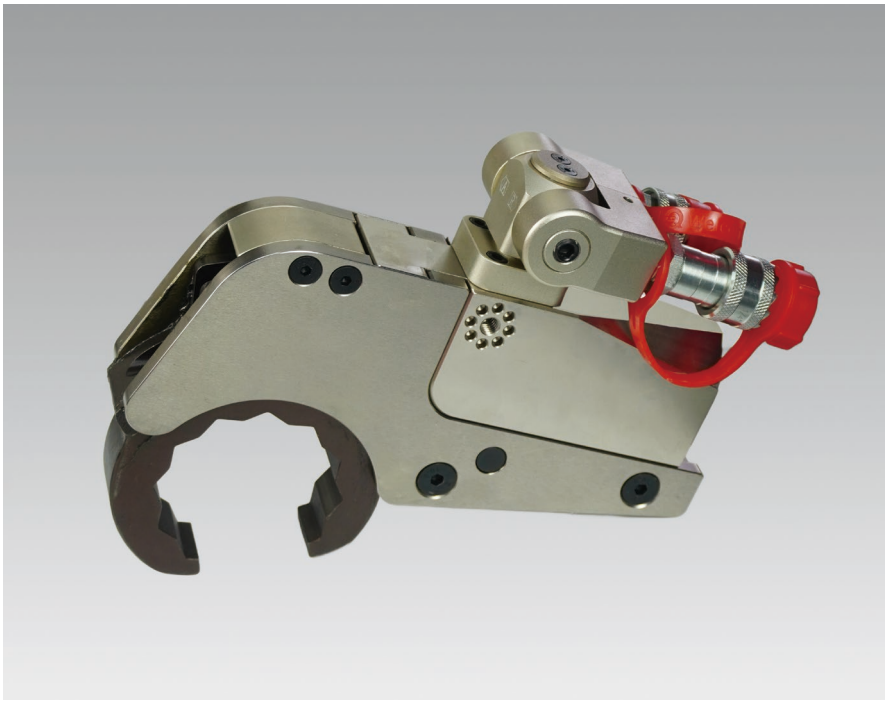
Links for RGH Series



- Each model of RGH hollow torque wrench power head is equipped with a complete set of Links, covering all sizes of bolts within the torque range provided by the power head of that model.
- When selecting a suitable Link for the bolt, it should be noted that the distance between the bolt and the wall should be greater than the distance between the inner hexagonal side of the Link and the outer edge of the Link.
- Special attention should be paid to whether there is sufficient space between bolts.
- RGH series Links can be used with reducing sleeves, enabling a single Link to match multiple bolt sizes, greatly improving adaptability and diversity in different working conditions.

Bolt Size (M)	A/F Size (mm)	RGH-2			RGH-3			RGH-4			RGH-8			RGH-14			RGH-22		
		Link Model	R (mm)	A (mm)	Link Model	R (mm)	A (mm)	Link Model	R (mm)	A (mm)	Link Model	R (mm)	A (mm)	Link Model	R (mm)	A (mm)	Link Model	R (mm)	A (mm)
12	19	RGH-2-S19	27	16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	22	RGH-2-S22	27	14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	27	RGH-2-S27	27	11	RGH-3-S27	34	19	-	-	-	-	-	-	-	-	-	-	-	-
20	30	RGH-2-S30	29	12	RGH-3-S30	34	17	-	-	-	-	-	-	-	-	-	-	-	-
22	32	RGH-2-S32	29	11	RGH-3-S32	34	16	-	-	-	-	-	-	-	-	-	-	-	-
22	34	RGH-2-S34	31	11	RGH-3-S34	34	15	RGH-4-S34	36	16	-	-	-	-	-	-	-	-	-
24	36	RGH-2-S36	31	10	RGH-3-S36	34	13	RGH-4-S36	36	15	-	-	-	-	-	-	-	-	-
27	41	RGH-2-S41	34	10	RGH-3-S41	37	13	RGH-4-S41	39	15	RGH-8-S41	46	22	-	-	-	-	-	-
30	46	RGH-2-S46	37	10	RGH-3-S46	40	13	RGH-4-S46	42	15	RGH-8-S46	46	19	-	-	-	-	-	-
33	50	RGH-2-S50	40	11	RGH-3-S50	43	14	RGH-4-S50	44	15	RGH-8-S50	46	17	RGH-14-S50	60	31	-	-	-
36	55	RGH-2-S55	43	11	RGH-3-S55	45	13	RGH-4-S55	46	14	RGH-8-S55	50	18	RGH-14-S55	60	28	-	-	-
39	60	RGH-2-S60	45	10	RGH-3-S60	48	13	RGH-4-S60	50	15	RGH-8-S60	52	17	RGH-14-S60	60	25	-	-	-
42	65	-	-	-	RGH-3-S65	51	13	RGH-4-S65	53	15	RGH-8-S65	55	17	RGH-14-S65	60	22	-	-	-
45	70	-	-	-	RGH-3-S70	53	13	RGH-4-S70	56	15	RGH-8-S70	58	17	RGH-14-S70	63	19	-	-	-
48	75	-	-	-	-	-	-	RGH-4-S75	59	15	RGH-8-S75	60	17	RGH-14-S75	60	19	RGH-22-S75	73	30
52	80	-	-	-	-	-	-	RGH-4-S80	61	15	RGH-8-S80	63	16	RGH-14-S80	66	19	RGH-22-S80	73	27
56	85	-	-	-	-	-	-	-	-	-	RGH-8-S85	66	16	RGH-14-S85	69	19	RGH-22-S85	73	24
60	90	-	-	-	-	-	-	-	-	-	RGH-8-S90	69	17	RGH-14-S90	72	20	RGH-22-S90	79	27
64	95	-	-	-	-	-	-	-	-	-	RGH-8-S95	71	16	RGH-14-S95	74	19	RGH-22-S95	79	24
68	100	-	-	-	-	-	-	-	-	-	RGH-8-S100	75	17	RGH-14-S100	77	19	RGH-22-S100	85	27
72	105	-	-	-	-	-	-	-	-	-	RGH-8-S105	78	17	RGH-14-S105	80	19	RGH-22-S105	85	24
76	110	-	-	-	-	-	-	-	-	-	-	-	-	RGH-14-S110	83	19	RGH-22-S110	92	28
80	115	-	-	-	-	-	-	-	-	-	-	-	-	RGH-14-S115	87	20	RGH-22-S115	92	26
85	117	-	-	-	-	-	-	-	-	-	-	-	-	RGH-14-S117	87	19	RGH-22-S117	92	25
85	120	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	RGH-22-S120	97	28
90	130	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	RGH-22-S130	102	27
95	135	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	RGH-22-S135	102	24
100	140	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
105	145	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
110	155	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
110	160	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
115	165	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
120	170	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	175	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

▼RTO Hydraulic Torque Wrenches

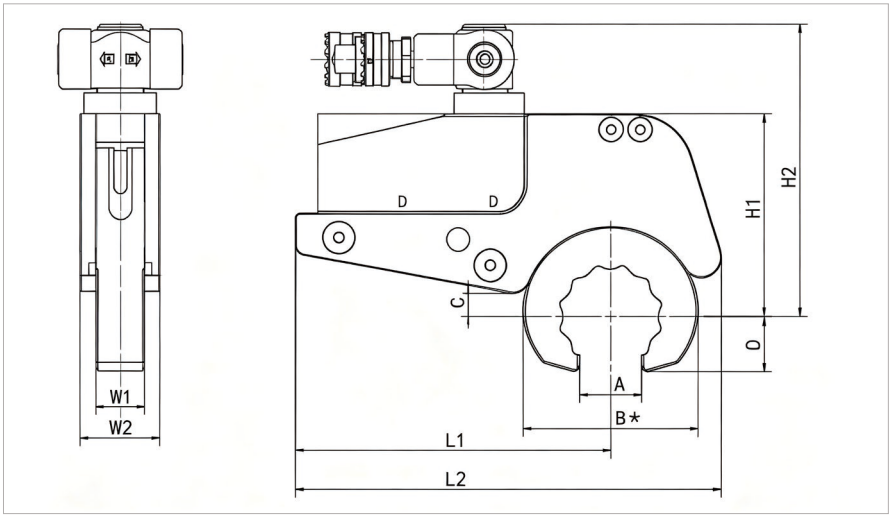


Torque Accuracy: ±3%

Maximum Working Pressure: 70MPa

- Flat design, the thickness of the power head and working head is the same, excellent for narrow space applications
- 360°×186° rotation allows the wrench to be operated freely without space restrictions
- The wrench acts directly on the nut, with higher Torque Accuracy and more convenient operation
- Power head made of high-strength alloy steel, featuring high strength, wear resistance and compact design
- Open-end wrenches are custom products with no standard torque range. We manufacture them according to the specific torque values required by our customers, as well as their bolt size and material strength grade.

▼RTO Wrench Technical Specifications



Model	A/F Size (mm)	Dimension (mm)									
		A	B*	C	D	H1	H2	L1	L2	W1	W2
RTO-2-S27	27	20	50	13	15	88	126	139	184	20	32
RTO-2-S32	32	22	60	13	17	88	126	139	184	20	32
RTO-2-S36	36	25	68	13	20	88	126	139	184	20	32
RTO-2-S41	41	28	77	13	24	88	126	139	184	20	32
RTO-2-S46	46	31	83	13	27	88	126	139	184	20	32
RTO-2-S50	50	34	88	13	31	88	126	139	184	20	32
RTO-2-S55	55	37	93	13	34	88	126	139	184	20	32

Note: The parameters of B can be determined based on the customer's actual working conditions.

Model	A/F Size (mm)	Dimension (mm)									
		A	B*	C	D	H1	H2	L1	L2	W1	W2
RTO-3-S32	32	22	61	12	17	98	136	151	203	22	36
RTO-3-S36	36	25	69	12	20	98	136	151	203	22	36
RTO-3-S41	41	28	78	12	24	98	136	151	203	22	36
RTO-3-S46	46	31	84	12	27	98	136	151	203	22	36
RTO-3-S50	50	34	89	12	31	98	136	151	203	22	36
RTO-3-S55	55	37	93	12	34	98	136	151	203	22	36
RTO-3-S60	60	41	106	12	37	98	136	151	203	22	36
RTO-3-S65	65	43	115	12	39	98	136	151	203	22	36
RTO-4-S41	41	28	78	13	26	113	163	176	238	26	43
RTO-4-S46	46	31	85	13	29	113	163	176	238	26	43
RTO-4-S50	50	34	90	13	32	113	163	176	238	26	43
RTO-4-S55	55	37	99	13	34	113	163	176	238	26	43
RTO-4-S60	60	41	108	13	37	113	163	176	238	26	43
RTO-4-S65	65	43	117	13	39	113	163	176	238	26	43
RTO-4-S70	70	46	123	13	42	113	163	176	238	26	43
RTO-4-S75	75	50	128	13	45	113	163	176	238	26	43
RTO-8-S50	50	34	99	14	32	137	187	215	288	32	53
RTO-8-S55	55	37	108	14	34	137	187	215	288	32	53
RTO-8-S60	60	41	113	14	37	137	187	215	288	32	53
RTO-8-S65	65	43	117	14	39	137	187	215	288	32	53
RTO-8-S70	70	46	123	14	43	137	187	215	288	32	53
RTO-8-S75	75	50	134	14	45	137	187	215	288	32	53
RTO-8-S80	80	53	142	14	47	137	187	215	288	32	53
RTO-8-S85	85	57	148	14	52	137	187	215	288	32	53
RTO-8-S90	90	61	154	14	54	137	187	215	288	32	53
RTO-8-S60	60	41	108	28	37	159	209	257	345	38	64
RTO-8-S65	65	43	117	28	39	159	209	257	345	38	64
RTO-8-S70	70	46	123	28	43	159	209	257	345	38	64
RTO-8-S75	75	50	134	28	45	159	209	257	345	38	64
RTO-8-S80	80	53	142	28	48	159	209	257	345	38	64
RTO-8-S85	85	57	152	28	52	159	209	257	345	38	64
RTO-8-S90	90	61	163	28	54	159	209	257	345	38	64
RTO-8-S95	95	65	168	28	57	159	209	257	345	38	64
RTO-8-S100	100	69	173	28	59	159	209	257	345	38	64
RTO-22-S75	75	50	134	30	46	188	238	293	388	46	77
RTO-22-S80	80	53	143	30	49	188	238	293	388	46	77
RTO-22-S90	90	61	162	30	54	188	238	293	388	46	77
RTO-22-S100	100	69	174	30	61	188	238	293	388	46	77
RTO-22-S110	110	77	186	30	67	188	238	293	388	46	77
RTO-22-S115	115	83	192	30	71	188	238	293	388	46	77
RTO-22-S120	120	85	199	30	75	188	238	293	388	46	77

Note: The parameters of B can be determined based on the customer's actual working conditions.

▼ S Series Back Up Wrench

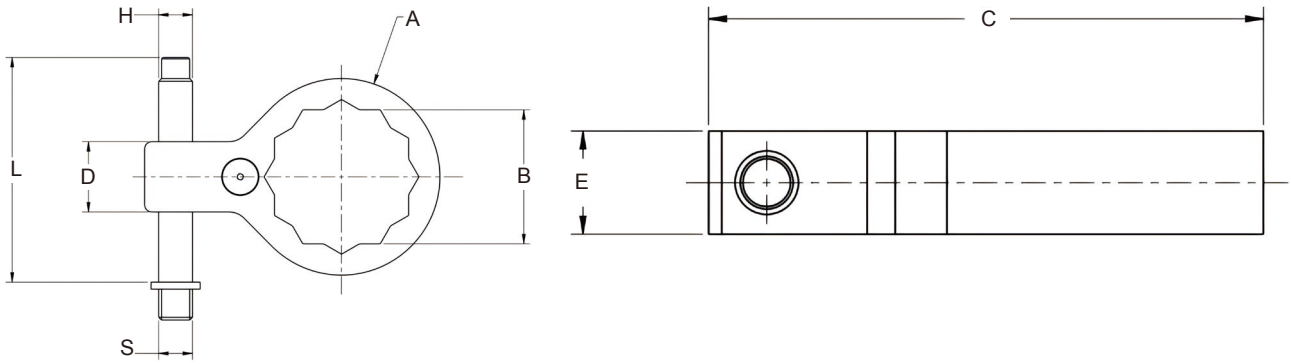


Maximum Torque: 3254-37962N·m

Maximum Working Pressure: 70MPa

- Made of 42CrMo alloy steel, heat-treated for high strength and good toughness.
- Rust-proof primer and outer ceramic coating for excellent corrosion resistance.
- Extended high-strength adjusting bolts provide a wide adjustment range.
- Thickened for high-torque applications.
- Equipped with a strong magnet for inverted attachment to the flange surface.

▼S Series Back Up Wrench Technical Parameters

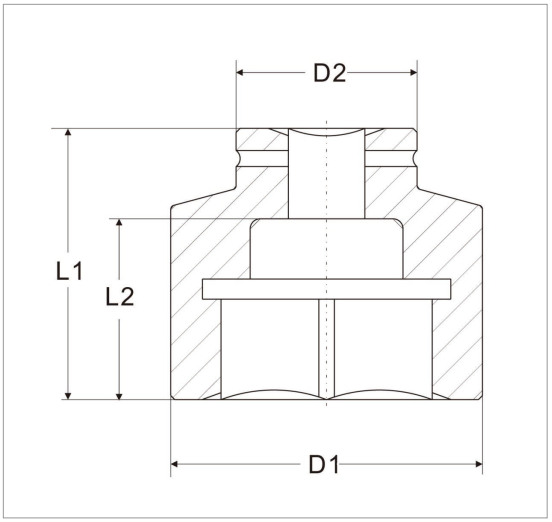


Model	A/F Size(mm)		Maximum Torque		Dimensions (mm)								Weight (KG)
	mm	in	Ft.lbs	N·m	A	B	C	D	E	H	L	S	
S30	30	1-3/16"	2400	3254	Ø50	30.2	83	28	19	M12	100	12	0.45
S36	36	1-7/16"	2500	3390	Ø55	36.2	90	28	19	M12	100	12	0.46
S41	41	1-5/8"	3500	4745	Ø64	41.2	99	30	19	M12	100	12	0.53
S46	46	1-13/16"	3500	4745	Ø74	46.2	107	30	24	M14	120	14	0.8
S50	50	2"	4100	5559	Ø80	50.2	115	30	24	M14	120	14	0.87
S55	55	2-3/16"	4200	5694	Ø85	55.2	122.5	30	24	M14	120	14	0.92
S57	57	2-1/4"	4300	5830	Ø88	57.2	125	30	24	M14	120	14	0.96
S60	60	2-3/8"	4300	5830	Ø92	60.2	131	34	24	M14	120	14	1.04
S65	65	2- /16"	4500	6169	Ø100	65.2	145	34	29	M16	120	17	1.5
S70	70	2-3/4"	5600	7592	Ø106	70.3	158	40	29	M16	120	17	1.7
S75	75	2-15/16"	6300	8542	Ø115	75.3	167.5	40	29	M16	120	17	2.4
S80	80	3-1/8"	7000	9491	Ø125	80.4	182.5	44	34	M18	150	19	2.7
S85	85	3-3/8"	7200	9762	Ø130	85.4	195	44	34	M18	150	19	2.9
S90	90	3-9/16"	7300	9897	Ø135	90.4	202.5	50	39	M24	160	24	3.7
S95	95	3-3/4"	9000	12202	Ø140	95.4	210	50	39	M24	160	24	3.8
S100	100	3-15/16"	24000	32539	Ø147	100.4	220	60	44	M30	200	30	5.5
S105	105	4-1/8"	24000	32539	Ø153	105.5	230	60	44	M30	200	30	5.7
S110	110	4-5/16"	24000	32539	Ø158	110.5	238	60	44	M30	200	30	5.8
S115	115	4-1/2"	25000	33895	Ø165	115.5	245	60	44	M30	200	30	6.1
S120	120	4-3/4"	27000	36607	Ø170	120.5	254	60	44	M30	200	30	6.2
S130	130	5-1/8"	27000	36607	Ø182	130.5	268	65	49	M30	250	30	7.6
S135	135	5-5/16"	27000	36607	Ø188	135.5	278	65	49	M30	250	30	8
S145	145	5-11/16"	28000	37962	Ø200	145.5	290	65	49	M30	250	30	8.3

▼ Sleeve



- Made of high-strength alloy steel
- Black oxide finish on the surface
- Can be specially customized according to on-site conditions



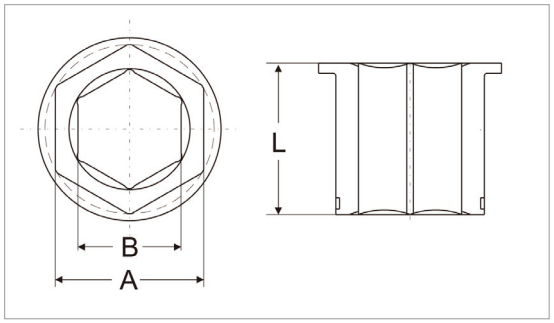
▼ Sleeve Technical Specifications

Bolt Size (M)	A/F Size (mm)	3/4"(19×19)					1"(25×25)					1-1/2"(38×38)					2-1/2"(63×63)				
		Model	D1 (mm)	D2 (mm)	L1 (mm)	L2 (mm)	Model	D1 (mm)	D2 (mm)	L1 (mm)	L2 (mm)	Model	D1 (mm)	D2 (mm)	L1 (mm)	L2 (mm)	Model	D1 (mm)	D2 (mm)	L1 (mm)	L2 (mm)
M16	24	R19S24	40	40	54	33	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
M18	27	R19S27	42	42	54	33	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
M20	30	R19S30	46	42	54	33	R25S30	54	54	59	32	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	R25S32	53	59	58	31	-	-	-	-	-	-	-	-	-	-
M22	34	R19S34	50	44	54	32	R25S34	54	54	59	32						-	-	-	-	-
M24	36	R19S36	53	44	57	34	R25S36	54	54	62	34	R38S36	60	69	85	45	-	-	-	-	-
M27	41	R19S41	60	44	58	35	R25S41	63	54	65	37	-	-	-	-	-	-	-	-	-	-
M30	46	R19S46	66	44	63	40	R25S46	68	54	65	37	R38S46	69	69	85	45	-	-	-	-	-
M33	50	R19S50	71	44	65	40	R25S50	74	60	70	43	R38S50	79	79	90	50	-	-	-	-	-
M36	55	R19S55	78	54	70	45	R25S55	79	60	80	52	R38S55	79	79	90	50	R63S55	84	109	110	52
M39	60	R19S60	84	54	85	57	R25S60	84	60	85	57	R38S60	88	88	100	60	R63S60	106	109	110	52
M42	65	R19S65	89	54	85	57	R25S65	94	70	85	57	R38S65	98	80	100	60	R63S65	106	109	110	42
M45	70	R19S70	99	54	90	62	R25S70	98	70	90	62	R38S70	98	80	105	60	R63S70	119	119	120	40
M48	75	R19S75	99	54	95	67	R25S75	108	70	95	67	R38S75	108	85	110	65	R63S75	119	119	120	40
M52	80	-	-	-	-	-	R25S80	113	70	95	67	R38S80	118	90	115	70	R63S80	119	119	130	45
M56	85	R19S85	113	54	110	80	R25S85	118	70	108	77	R38S85	118	90	125	80	R63S85	119	119	130	71
M60	90	-	-	-	-	-	-	-	-	-	-	R38S90	129	90	125	80	R63S90	128	119	140	73
M64	95	R19S95	124	54	115	85	R25S95	128	70	118	85	R38S95	129	90	130	85	R63S95	128	119	140	73
M68	100	-	-	-	-	-	-	-	-	-	-	R38S100	138	90	135	90	R63S100	138	119	140	81
M72	105	-	-	-	-	-	-	-	-	-	-	R38S105	147	90	135	90	R63S105	138	119	150	89
M76	110	-	-	-	-	-	-	-	-	-	-	R38S110	147	90	135	90	R63S110	147	119	150	90
M80	115	-	-	-	-	-	-	-	-	-	-	R38S115	158	90	135	90	R63S115	158	119	150	92
M85	120	-	-	-	-	-	-	-	-	-	-	R38S120	158	95	135	90	R63S120	168	127	150	92
M90	130	-	-	-	-	-	-	-	-	-	-	R38S130	175	95	155	100	R63S130	178	127	170	98
M95	135	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R63S135	188	127	170	105
M100	145	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R63S145	198	127	170	105
M105	150	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R63S150	216	127	190	125
M110	155	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R63S155	226	150	190	125
M115	165	-	-	-	-	-	-	-	-	-	-						R63S165	236	150	210	130

▼Reducing Sleeve



- Made of high-strength alloy steel
- Black oxide finish on the surface
- Can be specially customized according to on-site conditions



▼Reducing Sleeve Technical Specifications

Model	Dimensions (mm)			Model	Dimensions (mm)			Model	Dimensions (mm)			Model	Dimensions (mm)			Model	Dimensions (mm)		
	A	B	L		A	B	L		A	B	L		A	B	L		A	B	L
XLCT2-32-27	32	27	50	XLCT3-65-60	65	60	54	XLCT8-60-46	60	46	71	XLCT14-100-90	100	90	82	XLCT30-85-75	85	75	103
XLCT2-36-27	36	27	50	XLCT3-70-60	70	60	54	XLCT8-60-50	60	50	71	XLCT14-105-90	105	90	82	XLCT30-90-75	90	75	103
XLCT2-36-30	36	30	50	XLCT3-70-65	70	65	54	XLCT8-65-50	65	50	71	XLCT14-105-95	105	95	82	XLCT30-90-80	90	80	103
XLCT2-41-30	41	30	50	XLCT4-32-27	32	27	60	XLCT8-65-55	65	55	71	XLCT14-110-95	110	95	82	XLCT30-95-80	95	80	103
XLCT2-41-32	41	32	50	XLCT4-36-27	36	27	60	XLCT8-70-55	70	55	71	XLCT14-110-100	110	100	82	XLCT30-95-85	95	85	103
XLCT2-46-32	46	32	50	XLCT4-36-30	36	30	60	XLCT8-70-60	70	60	71	XLCT14-117-100	115	100	82	XLCT30-100-85	100	85	103
XLCT2-46-36	46	36	50	XLCT4-41-30	41	30	60	XLCT8-75-60	75	60	71	XLCT14-117-105	115	105	82	XLCT30-100-90	100	90	103
XLCT2-50-36	50	36	50	XLCT4-41-32	41	32	60	XLCT8-75-65	75	65	71	XLCT22-75-65	75	65	92	XLCT30-105-90	105	90	103
XLCT2-50-41	50	41	50	XLCT4-46-32	46	32	60	XLCT8-80-65	80	65	71	XLCT22-80-65	80	65	92	XLCT30-105-95	105	95	103
XLCT2-55-46	55	45	50	XLCT4-46-36	46	36	60	XLCT8-80-70	80	70	71	XLCT22-80-70	80	70	92	XLCT30-110-95	110	95	103
XLCT2-55-50	55	50	50	XLCT4-50-36	50	36	60	XLCT8-85-70	85	70	71	XLCT22-85-70	85	70	92	XLCT30-110-100	110	100	103
XLCT2-60-50	60	50	50	XLCT4-50-41	50	41	60	XLCT8-85-75	85	75	71	XLCT22-85-75	85	75	92	XLCT30-117-100	117	100	103
XLCT2-60-55	60	55	50	XLCT4-55-41	55	41	60	XLCT8-90-75	90	75	71	XLCT22-90-75	90	75	92	XLCT30-117-105	117	105	103
XLCT3-36-27	36	27	54	XLCT4-55-46	55	46	60	XLCT8-90-80	90	80	71	XLCT22-90-80	90	80	92	XLCT30-120-110	120	110	103
XLCT3-36-30	36	30	54	XLCT4-60-46	60	46	60	XLCT8-95-80	95	80	71	XLCT22-95-80	95	80	92	XLCT30-120-115	120	115	103
XLCT3-41-30	41	30	54	XLCT4-60-50	60	50	60	XLCT8-95-85	95	85	71	XLCT22-95-85	95	85	92	XLCT30-130-117	130	117	103
XLCT3-41-32	41	32	54	XLCT4-65-50	65	50	60	XLCT14-75-65	75	65	82	XLCT22-100-85	100	85	92	XLCT30-130-120	130	120	103
XLCT3-46-36	46	36	54	XLCT4-65-55	65	55	60	XLCT14-80-65	80	65	82	XLCT22-100-90	100	90	92	XLCT30-135-120	135	120	103
XLCT3-46-41	46	41	54	XLCT4-70-55	70	55	60	XLCT14-80-70	80	70	82	XLCT22-105-90	105	90	92	XLCT30-135-125	135	125	103
XLCT3-50-41	50	41	54	XLCT4-70-60	70	60	60	XLCT14-85-70	85	70	82	XLCT22-105-95	105	95	92	XLCT30-140-125	140	125	103
XLCT3-50-46	50	46	54	XLCT4-75-60	75	60	60	XLCT14-85-75	85	75	82	XLCT22-117-105	117	105	92	XLCT30-140-130	140	130	103
XLCT3-55-46	55	46	54	XLCT4-75-65	75	65	60	XLCT14-90-75	90	75	82	XLCT22-117-110	117	110	92	XLCT30-145-130	145	130	103
XLCT3-55-50	55	50	54	XLCT4-80-65	80	65	60	XLCT14-90-80	90	80	82	XLCT22-130-115	130	115	92	XLCT30-145-135	145	135	103
XLCT3-60-50	60	50	54	XLCT4-80-70	80	70	60	XLCT14-95-80	95	80	82	XLCT22-130-120	130	120	92	XLCT30-150-135	150	135	103
XLCT3-60-55	60	55	54	XLCT8-55-41	55	41	71	XLCT14-95-85	95	85	82	XLCT22-135-120	135	120	92	XLCT30-150-140	150	140	103
XLCT3-65-55	65	55	54	XLCT8-55-46	55	46	71	XLCT14-100-85	100	85	82	XLCT22-135-125	135	125	92	XLCT30-155-145	155	145	103

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RIVERLAKE
ultra high pressure hydraulic tools www.riverlakeco.com

HM-Series Topside Tensioners



Max. Force: 134 - 4650 kN

Stroke: 10/15mm

Max. working pressure: 150MPa



Tensioning Pumps, Hoses and Couplers
High pressure pumps, hoses and fittings matched for use with the RIVERLAKE Bolt Tensioners.

- Fifteen load cells available in sizes from ¾" to 4" (M20 to M100)
- Dual ports enable quick connection of multiple tools
- High bolt load capacity, max. 1500 bar (21,750 psi)
- Long stroke of 15 mm (9/16 in.) with over-stroke prevention
- HM01 to HM05: mechanical over-stroke protection, no spring return; HM06 to • HM15: over-stroke protection via relief valve, spring-assisted return
- Quick-release bridge
- Stroke indicator
- Captive socket eliminates the risk of falling objects
- Interchangeable adapter kits available
- Anti-slip grip for safer handling

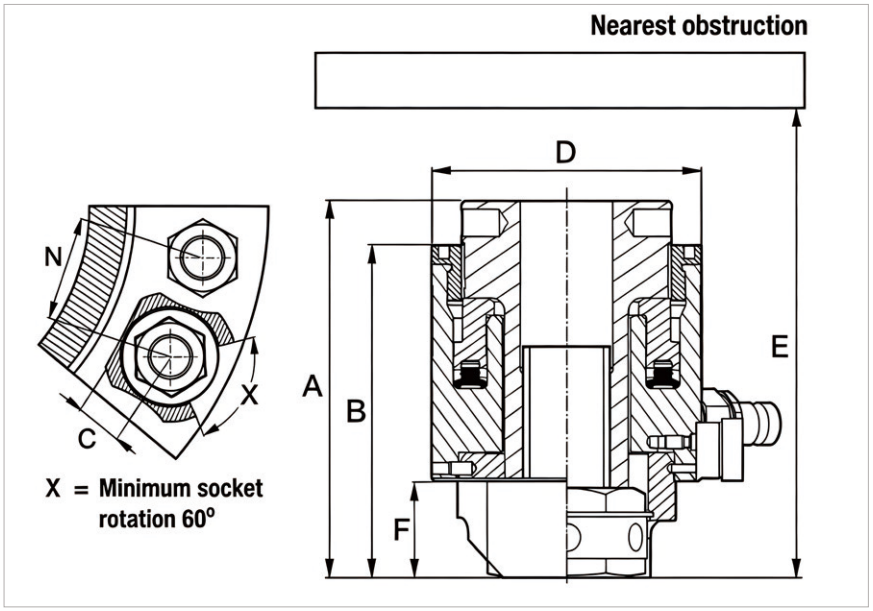
Ordering Examples

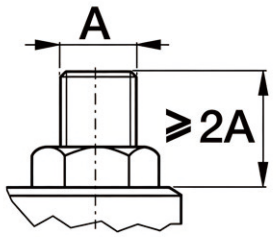
To provide maximum flexibility Load Cells are ordered separately from Adaptor and Bridge Kits.

Example,order a complete tensioner
For M20 x 2.5 threaded bolt order:

1 x Load Cell and Bridge:
HM01-LC

1 x Adaptor Kit:
HM01BPM-NRS02025



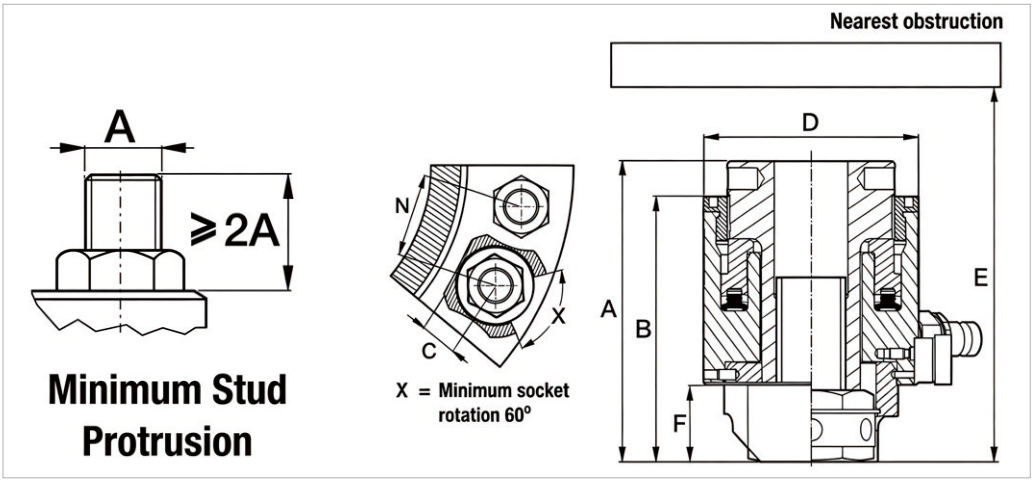


Minimum Stud Protrusion

▼HM-Series Topside Tensioners Selection Chart

Load Cell and Bridge Model Number	Thread Size	Adaptor Kit Model Number	Cylinder Effective Area (mm^2)	Maximum Load Capacity (kN)	Dimensions(mm)							Load Cell Weight (kg)	Adaptor and Bridge Kit Weight(kg)
					A	B	C	D	E	F	N		
HM01-LC	M20 x 2.5	HM01BPM-NRS02025	894	134	112	96	15	61	208	28	51	1.6	0.6
	¾"- 10 UN	HM01BP-NRS0750U10	894	134	112	96	15	61	208	28	51	1.6	0.6
HM02-LC	M20 x 2.5	HM02BPM-NRS02025	1240	186	119	103	15	69	227	28	53	1.8	0.9
	M22 x 2.5	HM02BPM-NRS02225	1240	186	119	103	18	69	225	28	54	1.8	0.9
	¾"- 10 UN	HM02BP-NRS0750U10	1240	186	119	103	15	69	227	28	52	1.8	0.9
	⅞"-9 UN	HM02BP-NRS0875U09	1240	186	119	103	18	69	225	28	56	1.8	0.8
HM03-LC	M20 x 2.5	HM03BPM-NRS02025	1628	244.1	120	105	15	77	230	28	57	2.2	1.1
	M22 x 2.5	HM03BPM-NRS02225	1628	244.1	120	105	18	77	228	28	58	2.2	1.1
	M24 x 3	HM03BPM-NRS02430	1628	244.1	120	110	20	77	232	33	59	2.2	1.1
	¾"- 10 UN	HM03BP-NRS0750U10	1628	244.1	120	105	15	77	230	28	56	2.2	1.1
	⅞"- 9 UN	HM03BP-NRS0875U09	1628	244.1	120	105	18	77	228	28	58	2.2	1.1
	1"- 8 UN	HM03BP-NRS1000U08	1628	244.1	125	110	20	77	232	33	60	2.2	1.1
HM04-LC	M22 x 2.5	HM04BPM-NRS02225	2159	323.8	128	112	18	90	250	28	62	2.7	1.6
	M24 x 3	HM04BPM-NRS02430	2159	323.8	129	117	20	90	255	33	63	2.7	1.6
	M27 x 3	HM04BPM-NRS02730	2159	323.8	134	117	20	90	256	34	65	2.7	1.7
	M30 x 3.5	HM04BPM-NRS03035	2159	323.8	137	120	23	90	257	36	66	2.7	1.7
	⅞"- 9 UN	HM04BP-NRS0875U09	2159	323.8	129	112	18	90	250	28	62	2.7	1.6
	1"- 8 UN	HM04BP-NRS1000U08	2159	323.8	134	117	20	90	255	33	64	2.7	1.7
	1⅛"- 8 UN	HM04BP-NRS1125U08	2159	323.8	137	120	23	90	257	36	65	2.7	1.7
HM05-LC	M24 x 3	HM05BPM-NRS02430	2752	412.7	131	119	20	99	263	33	68	3.3	1.9
	M27 x 3	HM05BPM-NRS02730	2752	412.7	136	119	20	99	263	34	69	3.3	2
	M30 x 3.5	HM05BPM-NRS03035	2752	412.7	139	122	23	99	261	36	71	3.3	2
	M33 x 3.5	HM05BPM-NRS03335	2752	412.7	142	125	27	99	262	39	72	3.3	2.1
	1"-8 UN	HM05BP-NRS1000U08	2752	412.7	136	119	20	99	263	33	68	3.3	2.1
	1⅛"-8 UN	HM05BP-NRS1125U08	2752	412.7	139	122	23	99	261	36	70	3.3	2.1
	1¼"-8 UN	HM05BP-NRS1250U08	2752	412.7	142	125	27	99	262	39	71	3.3	2.1
HM06-LC	M30 x 3.5	HM06BPM-NRS03035	4162	624.1	143	125	23	118	266	36	80	4.5	2.8
	M33 x 3.5	HM06BPM-NRS03335	4162	624.1	146	128	27	118	269	39	82	4.5	2.9
	M36 x 4	HM06BPM-NRS03640	4162	624.1	149	131	32	118	273	42	83	4.5	3
	M39 x 4	HM06BPM-NRS03940	4162	624.1	152	134	33	118	277	45	85	4.5	3.1
	1⅛"- 8 UN	HM06BP-NRS1125U08	4162	624.1	143	125	23	118	266	36	79	4.5	2.8
	1¼"- 8 UN	HM06BP-NRS1250U08	4162	624.1	146	128	27	118	269	39	81	4.5	2.9
	1⅜"- 8 UN	HM06BP-NRS1375U08	4162	624.1	149	131	32	118	273	32	82	4.5	3
	1½"- 8 UN	HM06BP-NRS1500U08	4162	624.1	152	134	33	118	277	45	84	4.5	3.1

※Tommy Bar is included with Load Cell



Load Cell and Bridge Model Number	Thread Size	Adaptor Kit Model Number	Cylinder Effective Area (mm²)	Maximum Load Capacity (kN)	Dimensions(mm)							Load Cell Weight (kg)	Adaptor and Bridge Kit Weight(kg)
					A	B	C	D	E	F	N		
HM07-LC	M33 x 3.5	HM07BPM-NRS03335	4980	746.8	145	128	27	127	278	39	86	5.2	3.4
	M36 x 4	HM07BPM-NRS03640	4980	746.8	148	131	32	127	279	42	88	5.2	3.5
	M39 x 4	HM07BPM-NRS03940	4980	746.8	151	134	33	127	280	45	89	5.2	3.6
	M42 x 4.5	HM07BPM-NRS04245	4980	746.8	154	137	34	127	280	48	91	5.2	3.7
	1¼"- 8 UN	HM07BP-NRS1250U08	4980	746.8	145	128	27	127	278	39	85	5.2	3.4
	1⅜"- 8 UN	HM07BP-NRS1375U08	4980	746.8	148	131	32	127	279	42	87	5.2	3.5
	1½"- 8 UN	HM07BP-NRS1500U08	4980	746.8	151	134	33	127	280	45	89	5.2	3.6
	1⅝"- 8 UN	HM07BP-NRS1625U08	4980	746.8	154	137	34	127	280	48	90	5.2	3.7
HM08-LC	M36 x 4	HM08BPM-NRS03640	5869	880.1	149	133	32	137	283	42	93	6.3	3.9
	M39 x 4	HM08BPM-NRS03940	5869	880.1	152	136	33	137	284	45	94	6.3	4
	M42 x 4.5	HM08BPM-NRS04245	5869	880.1	155	139	34	137	284	48	96	6.3	4.1
	M45 x 4.5	HM08BPM-NRS04545	5869	880.1	158	142	39	137	285	51	97	6.3	4.4
	1⅜"- 8 UN	HM08BP-NRS1375U08	5869	880.1	149	133	32	137	283	42	92	6.3	3.9
	1½"- 8 UN	HM08BP-NRS1500U08	5869	880.1	152	136	33	137	284	45	94	6.3	4
	1⅝"- 8 UN	HM08BP-NRS1625U08	5869	880.1	155	139	34	137	284	48	95	6.3	4.1
	1¾"- 8 UN	HM08BP-NRS1750U08	5869	880.1	158	142	39	137	285	51	97	6.3	4.4
HM09-LC	M39 x 4	HM09BPM-NRS03940	6834	1024.9	152	136	33	145	278	45	98	6.5	5
	M42 x 4.5	HM09BPM-NRS04245	6834	1024.9	155	139	34	145	281	48	100	6.5	6.1
	M45 x 4.5	HM09BPM-NRS04545	6834	1024.9	158	142	39	145	285	51	101	6.5	5.1
	M48 x 5	HM09BPM-NRS04850	6834	1024.9	161	145	43	145	288	54	103	6.5	5.5
	1½"- 8 UN	HM09BP-NRS1500U08	6834	1024.9	152	136	33	145	278	45	98	6.5	5.1
	1⅝"- 8 UN	HM09BP-NRS1625U08	6834	1024.9	155	139	34	145	281	48	99	6.5	5.1
	1¾"- 8 UN	HM09BP-NRS1750U08	6834	1024.9	158	142	39	145	285	51	101	6.5	5
	1⅞"- 8 UN	HM09BP-NRS1875U08	6834	1024.9	161	145	43	145	288	54	102	6.5	5.4
HM10-LC	M42 x 4.5	HM10BPM-NRS04245	7868	1179.8	159	143	34	156	289	48	105	8.3	5.7
	M45 x 4.5	HM10BPM-NRS04545	7868	1179.8	162	146	39	156	293	51	107	8.3	5.7
	M48 x 5	HM10BPM-NRS04850	7868	1179.8	165	149	43	156	296	54	108	8.3	6.1
	M52 x 5	HM10BPM-NRS05250	7868	1179.8	169	153	44	156	301	58	110	8.3	6.3
	1⅝"- 8 UN	HM10BP-NRS1625U08	7868	1179.8	159	143	34	156	289	48	105	8.3	5.7
	1¾"- 8 UN	HM10BP-NRS1750U08	7868	1179.8	162	146	39	156	293	51	106	8.3	5.6
	1⅞"- 8 UN	HM10BP-NRS1875U08	7868	1179.8	165	149	43	156	296	54	108	8.3	6
	2"- 8 UN	HM10BP-NRS2000U08	7868	1179.8	169	153	44	156	301	58	109	8.3	6.3

(Link to the previous table)

Load Cell and Bridge Model Number	Thread Size	Adaptor Kit Model Number	Cylinder Effective Area (mm^2)	Maximum Load Capacity (kN)	Dimensions(mm)							Load Cell Weight (kg)	Adaptor and Bridge Kit Weight(kg)
					A	B	C	D	E	F	N		
HM11-LC	M45 x 4.5	HM11BPM-NRS04545	10152	1522.5	167	146	39	175	297	51	116	10.5	7.4
	M48 x 5	HM11BPM-NRS04850	10152	1522.5	170	149	43	175	301	54	118	10.5	7.9
	M52 x 5	HM11BPM-NRS05250	10152	1522.5	174	153	44	175	306	58	120	10.5	8.1
	M56 x 5.5	HM11BPM-NRS05655	10152	1522.5	182	161	50	175	318	66	122	10.5	9.1
	M60 x 5.5	HM11BPM-NRS06055	10152	1522.5	182	161	50	175	323	66	124	10.5	8.7
	1¾"- 8 UN	HM11BP-NRS1750U08	10152	1522.5	167	146	39	175	297	51	116	10.5	7.5
	1⅞"- 8 UN	HM11BP-NRS1875U08	10152	1522.5	170	149	43	175	301	54	117	10.5	7.9
	2"- 8 UN	HM11BP-NRS2000U08	10152	1522.5	174	153	44	175	306	58	119	10.5	8.1
	2¼"- 8 UN	HM11BP-NRS2250U08	10152	1522.5	182	161	50	175	318	66	122	10.5	8.8
HM12-LC	M48 x 5	HM12BPM-NRS04850	12722	1907.7	170	149	43	194	301	54	127	13.3	9.7
	M52 x 5	HM12BPM-NRS05250	12722	1907.7	174	153	44	194	306	58	129	13.3	9.8
	M56 x 5.5	HM12BPM-NRS05655	12722	1907.7	182	161	50	194	318	66	131	13.3	10.7
	M60 x 5.5	HM12BPM-NRS06055	12722	1907.7	182	161	50	194	323	66	133	13.3	10.4
	M64 x 6	HM12BPM-NRS06460	12722	1907.7	186	165	56	194	320	70	135	13.3	11.1
	1⅞"- 8 UN	HM12BP-NRS1875U08	12722	1907.7	170	149	43	194	301	54	127	13.3	9.6
	2"- 8 UN	HM12BP-NRS2000U08	12722	1907.7	174	153	44	194	306	58	128	13.3	9.8
	2¼"- 8 UN	HM12BP-NRS2250U08	12722	1907.7	182	161	50	194	318	66	132	13.3	10.4
	2½"- 8 UN	HM12BP-NRS2500U08	12722	1907.7	186	165	56	194	320	70	135	13.3	10.8
HM13-LC	M64 x 6	HM13BPM-NRS06460	16964	2544	195	172	56	219	337	70	148	17.6	14.5
	M68 x 6	HM13BPM-NRS06860	16964	2544	195	180	63	219	350	78	150	17.6	16.5
	M72 x 6	HM13BPM-NRS07260	16964	2544	203	185	69	219	347	82	152	17.6	16
	M76 x 6	HM13BPM-NRS07660	16964	2544	207	185	69	219	352	82	154	17.6	16.3
	2½"- 8 UN	HM13BP-NRS2500U08	16964	2544	195	172	56	219	337	70	147	17.6	14.2
	2¾"- 8 UN	HM13BP-NRS2750U08	16964	2544	203	180	63	219	350	78	150	17.6	15.8
	3"- 8 UN	HM13BP-NRS3000U08	16964	2544	207	185	69	219	352	82	161	17.6	15.8
HM14-LC	M72 x 6	HM14BPM-NRS07260	23451	3516.7	203	185	69	259	351	82	172	25.8	20.8
	M76 x 6	HM14BPM-NRS07660	23451	3516.7	207	185	69	259	352	82	174	25.8	21.3
	M80 x 6	HM14BPM-NRS08060	23451	3516.7	207	193	70	259	367	91	176	25.8	21.2
	M85 x 6	HM14BPM-NRS08560	23451	3516.7	216	193	70	259	374	91	178	25.8	22.9
	M90 x 6	HM14BPM-NRS09060	23451	3516.7	221	198	79	259	389	96	181	25.8	23.3
	3"- 8 UN	HM14BP-NRS3000U08	23451	3516.7	207	185	69	259	352	82	174	25.8	20.4
	3¼"- 8 UN	HM14BP-NRS3250U08	23451	3516.7	216	193	70	259	374	91	177	25.8	22.7
	3½"- 8 UN	HM14BP-NRS3500U08	23451	3516.7	221	198	79	259	389	96	184	25.8	23.9
HM15-LC	M90 x 6	HM15BPM-NRS09060	31008	4650	221	199	79	296	389	96	199	32.5	30
	M95 x 6	HM15BPM-NRS09560	31008	4650	226	205	81	296	405	101	202	32.5	33.7
	M100 x 6	HM15BPM-NRS10060	31008	4650	232	211	90	296	421	107	204	32.5	35.1
	3½"- 8 UN	HM15BP-NRS3500U08	31008	4650	221	199	79	296	389	96	198	32.5	29.5
	3¾"- 8 UN	HM15BP-NRS3750U08	31008	4650	226	205	81	296	405	101	202	32.5	32.8
	4"- 8 UN	HM15BP-NRS4000U08	31008	4650	232	211	90	296	421	107	210	32.5	34

※Tommy Bar is included with Load Cell

RIVERLAKE
ultra high pressure hydraulic tools www.riverlakeco.com

GT-Series Topside Tensioners



Max. Force: 224 - 3958kN

Stroke: 10mm

Max. working pressure: 150MPa

- Seven load cells available in sizes from M16 to M105 (or ⅝ to 4 inches)
- Twin ports allow rapid connection of multiple tools
- One bridge size per load cell size – no additional options needed
- Detachable and rotatable bridge makes tool positioning easier
- Full bridge window provides better access to the socket
- Captive socket eliminates the risk of falling objects
- Piston stroke indicator included
- Black corrosion-resistant surface treatment
- Anti-slip grip for safer handling
- Universal and multi-purpose tool design

Ordering Examples

To provide maximum flexibility Load Cells are ordered separately from Adaptor and Bridge Kits.

Example,order a complete tensioner For M39 x 4 threaded bolt order:

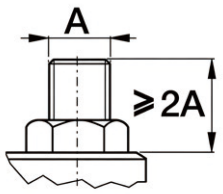
1 x Load Cell and Bridge:

GT3-LCB

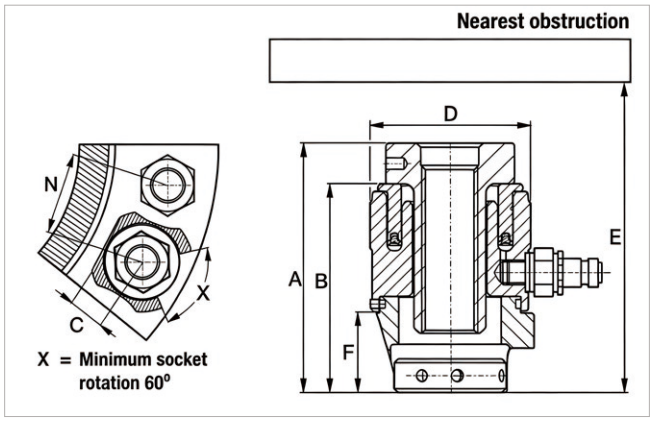
1 x Adaptor Kit:

GT3PM-NRS03940

Load Cell and Bridge Model Number	Thread Size	Adaptor Kit Model Number	Cylinder Effective Area (mm²)	Maximum Load Capacity (kN)	Dimensions(mm)							Load Cell Weight (kg)	Adaptor and Bridge Kit Weight(kg)
					A	B	C	D	E	F	N		
GT1-LCB	M16 x 2	GT1PM-NRS01620	1495.4	224.3	135	113	27	86	243	44	57	3	1.6
	M18 x 2.5	GT1PM-NRS01825	1495.4	224.3	135	113	27	86	243	44	58	3	1.5
	M20 x 2.5	GT1PM-NRS02025	1495.4	224.3	135	113	27	86	243	44	59	3	1.4
	M24 x 3	GT1PM-NRS02430	1495.4	224.3	135	113	27	86	243	44	61	3	1.3
	M27 x 3	GT1PM-NRS02730	1495.4	224.3	135	113	27	86	243	44	64	3	1.2
	M30 x 3.5	GT1PM-NRS03035	1495.4	224.3	135	113	27	86	243	44	66	3	1
	⅝"- 11 UN	GT1P-NRS0625U11	1495.4	224.3	135	113	27	86	243	44	57	3	1.6
	¾"- 10 UN	GT1P-NRS0750U10	1495.4	224.3	135	113	27	86	243	44	59	3	1.4
	⅞"- 9 UN	GT1P-NRS0875U09	1495.4	224.3	135	113	27	86	243	44	62	3	1.3
	1"- 8 UN	GT1P-NRS1000U08	1495.4	224.3	135	113	27	86	243	44	64	3	1.2
	1⅛"- 8 UN	GT1P-NRS1125U08	1495.4	224.3	135	113	27	86	243	44	66	3	1
GT2-LCB	M30 x 3.5	GT2PM-NRS03035	2677.2	401.5	136	111	35	107	226	41	75	4.1	2.6
	M33 x 3.5	GT2PM-NRS03335	2677.2	401.5	136	111	35	107	226	41	76	4.1	2.4
	M36 x 4	GT2PM-NRS03640	2677.2	401.5	136	111	35	107	226	41	79	4.1	2.2
	M39 x 4	GT2PM-NRS03940	2677.2	401.5	136	111	35	107	226	41	82	4.1	1.9
	1⅛"- 8 UN	GT2P-NRS1125U08	2677.2	401.5	136	111	35	107	226	41	74	4.1	2.6
	1¼"- 8 UN	GT2P-NRS1250U08	2677.2	401.5	136	111	35	107	226	41	76	4.1	2.4
	1⅜"- 8 UN	GT2P-NRS1375U08	2677.2	401.5	136	111	35	107	226	41	79	4.1	2.2
	1½"- 8 UN	GT2P-NRS1500U08	2677.2	401.5	136	111	35	107	226	41	82	4.1	2



Minimum Stud Protrusion



▼GT-Series Topside Tensioners Selection Chart

Load Cell and Bridge Model Number	Thread Size	Adaptor Kit Model Number	Cylinder Effective Area (mm²)	Maximum Load Capacity (kN)	Dimensions(mm)							Load Cell Weight (kg)	Adaptor and Bridge Kit Weight(kg)
					A	B	C	D	E	F	N		
GT3-LCB	M39 × 4	GT3PM-NRS03940	5127.1	768.9	160	126	46	138	256	56	96	7	5.7
	M42 × 4.5	GT3PM-NRS04245	5127.1	768.9	160	126	46	138	256	56	98	7	5.4
	M45 × 4.5	GT3PM-NRS04545	5127.1	768.9	160	126	46	138	256	56	101	7	5
	M48 × 5	GT3PM-NRS04850	5127.1	768.9	160	126	46	138	256	56	104	7	4.7
	M52 × 5	GT3PM-NRS05250	5127.1	768.9	160	126	46	138	256	56	107	7	4.2
	1½"- 8UN	GT3P-NRS1500U08	5127.1	768.9	160	126	46	138	256	56	95	7	5.7
	1⅝"- 8UN	GT3P-NRS1625U08	5127.1	768.9	160	126	46	138	256	56	98	7	5.3
	1¾"- 8UN	GT3P-NRS1750U08	5127.1	768.9	160	126	46	138	256	56	101	7	5
	1⅞"- 8UN	GT3P-NRS1875U08	5127.1	768.9	160	126	46	138	256	56	104	7	4.6
	2"- 8UN	GT3P-NRS2000U08	5127.1	768.9	160	126	46	138	256	56	106	7	4.2
GT4-LCB	M52 × 5	GT4PM-NRS05250	9782.1	1466.9	180	141	62	174	281	71	121	12.2	10.7
	M56 × 5.5	GT4PM-NRS05655	9782.1	1466.9	180	141	62	174	281	71	124	12.2	10.1
	M60 × 5.5	GT4PM-NRS06055	9782.1	1466.9	180	141	62	174	281	71	127	12.2	9.4
	M64 × 6	GT4PM-NRS06460	9782.1	1466.9	180	141	62	174	281	71	129	12.2	8.8
	M68 × 6	GT4PM-NRS06860	9782.1	1466.9	180	141	62	174	281	71	132	12.2	8.1
	2"- 8UN	GT4P-NRS2000U08	9782.1	1466.9	180	141	62	174	281	71	120	12.2	10.7
	2¼"- 8UN	GT4P-NRS2250U08	9782.1	1466.9	180	141	62	174	281	71	126	12.2	9.7
	2½"- 8UN	GT4P-NRS2500U08	9782.1	1466.9	180	141	62	174	281	71	132	12.2	8.5
GT5-LCB	M68 × 6	GT5PM-NRS06860	15079.7	2261.4	202	157	78	210	302	86	148	18.7	17.3
	M72 × 6	GT5PM-NRS07260	15079.7	2261.4	202	157	78	210	302	86	149	18.7	16.4
	M76 × 6	GT5PM-NRS07660	15079.7	2261.4	202	157	78	210	302	86	152	18.7	15.5
	M80 × 6	GT5PM-NRS08060	15079.7	2261.4	202	157	78	210	302	86	155	18.7	14.6
	2½"- 8UN	GT5P-NRS2500U08	15079.7	2261.4	202	157	78	210	302	86	148	18.7	17.8
	2¾"- 8UN	GT5P-NRS2750U08	15079.7	2261.4	202	157	78	210	302	86	153	18.7	16.3
	3"- 8UN	GT5P-NRS3000U08	15079.7	2261.4	202	157	78	210	302	86	158	18.7	14.8
	3¼"- 8UN	GT5P-NRS3250U08	15079.7	2261.4	202	157	78	210	302	86	161	18.7	13.1
GT6-LCB	M80 × 6	GT6PM-NRS08060	18972.1	2845.1	219	173	82	240	323	95	167	27.8	22.3
	M85 × 6	GT6PM-NRS08560	18972.1	2845.1	219	173	82	240	323	95	170	27.8	21
	M90 × 6	GT6PM-NRS09060	18972.1	2845.1	219	173	82	240	323	95	175	27.8	19.4
	M95 × 6	GT6PM-NRS09560	18972.1	2845.1	219	173	82	240	323	95	179	27.8	18
	3¼"- 8UN	GT6P-NRS3250U08	18972.1	2845.1	219	173	82	240	323	95	173	27.8	20.7
	3½"- 8UN	GT6P-NRS3500U08	18972.1	2845.1	219	173	82	240	323	95	181	27.8	18.8
	3¾"- 8UN	GT6P-NRS3750U08	18972.1	2845.1	219	173	82	240	323	95	188	27.8	16.8
GT7-LCB	M100 × 6	GT7PM-NRS10060	26389.4	3958.4	243	182	89	277	332	110	196	38.2	28.5
	M105 × 6	GT7PM-NRS10560	26389.4	3958.4	243	182	89	277	332	110	199	38.2	27.3
	4"- 8UN	GT7P-NRS4000U08	26389.4	3958.4	243	182	89	277	332	110	204	38.2	27.3

※Tommy Bar is included with Load Cell

▼EAJ-Series,Subsea Tensioners



Max. Force: 151.3-2320.9kN

Stroke: 20-30mm

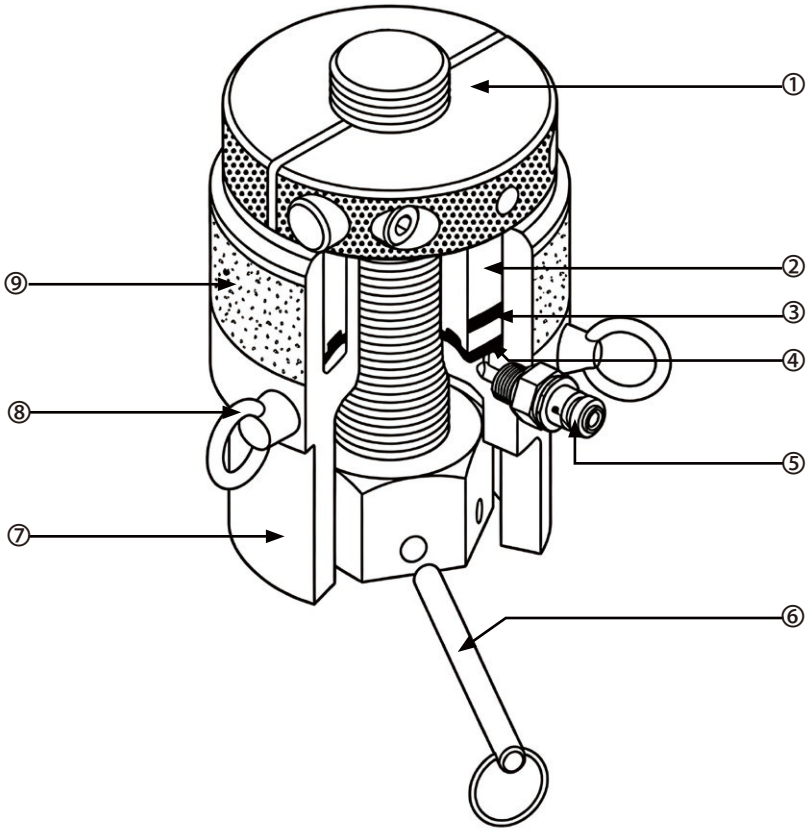
Max. working pressure: 150MPa

- •Compact design
- •Long piston stroke
- •Compensates for misalignment
- •Quick and simple hose connection
- •Visible piston stroke indicator
- •"No spill"over-stroke prevention
- •Quick fastening or solid reaction nut



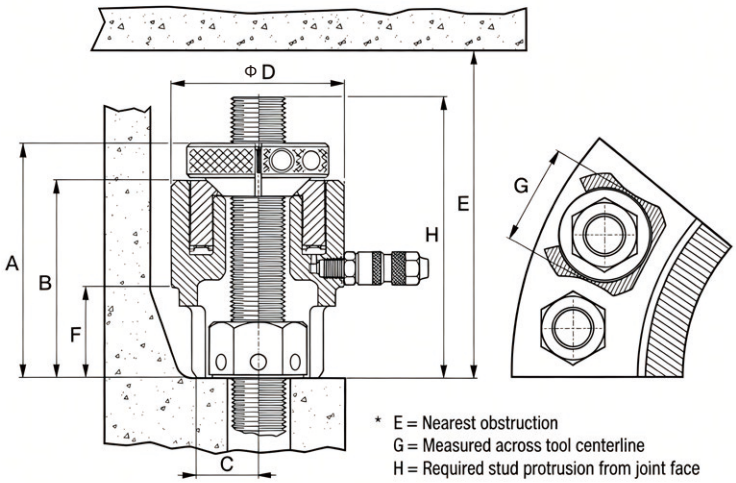
Quick Fastening Nut Design
Easily positioned in poor visibility conditions, subsea tensioners feature a compact design and long piston stroke.
The unique Nut design of these tools allows rapid application to long bolts and damaged threads, and rapid tool removal.

▼EAJ Product Introduction



NO	Name
1	Quick Fastening Reaction Nut
2	Long Piston Stroke
3	Maximum Stroke Indicator Band
4	Self-Energising Seals
5	Hose Connections
6	Tommy Bar
7	Compact Body Design
8	Lifting Eyes
9	Anti-Slip Tool Surface

Subsea Bolt Tensioners



* E = Nearest obstruction
G = Measured across tool centerline
H = Required stud protrusion from joint face

Load Cell Model Number	Thread Size	Quick Fastening Nut Model Number	Cylinder Effective Area (mm²)	Max.Load Capacity (kN)	Stroke (mm)	Dimensions (mm)								Tool Weight (kg)
						A	B	C	D	E	F	G	H	
EAJ1LC	¾" – 10 UN	EAJ1QFN0750U10	1008.7	151.3	20	114	91	19	66	217	35	53	119	1.5
	⅞" – 9 UN	EAJ1QFN0875U09	1008.7	151.3	20	114	91	19	66	217	35	53	119	1.5
	M20 × 2.5	EAJ1QFNM02025	1008.7	151.3	20	114	91	19	66	217	35	53	119	1.5
	M22 × 2.5	EAJ1QFNM02225	1008.7	151.3	20	114	91	19	66	217	35	53	119	1.5
EAJ2LC	1" – 8 UN	EAJ2QFN1000U08	1658.4	248.7	30	147	120	25	82	289	50	62	152	3
	M24 × 3.0	EAJ2QFNM02430	1658.4	248.7	30	147	120	25	82	289	50	62	152	3
	M27 × 3.0	EAJ2QFNM02730	1658.4	248.7	30	147	120	25	82	289	50	62	152	3
	1⅛" – 8 UN	EAJ2QFN1125U08	1658.4	248.7	30	147	120	25	82	289	50	62	152	3
	M30 × 3.5	EAJ2QFNM03035	1658.4	248.7	30	147	120	25	82	289	50	62	152	3
EAJ3LC	1¼" – 8 UN	EAJ3QFN1250U08	2524.3	378.6	30	158	131	28	98	307	58	78	163	4.5
	M33 × 3.5	EAJ3QFNM03335	2524.3	378.6	30	158	131	28	98	307	58	78	163	4.5
	1⅜" – 8 UN	EAJ3QFN1375U08	2524.3	378.6	30	158	131	28	98	307	58	78	163	4.5
	M36 × 4.0	EAJ3QFNM03640	2524.3	378.6	30	158	131	28	98	307	58	78	163	4.5
EAJ4LC	1½" – 8 UN	EAJ4QFN1500U08	3686.7	553	30	171	136	33	114	319	63	91	176	6
	M39 × 4.0	EAJ4QFNM03940	3686.7	553	30	171	136	33	114	319	63	91	176	6
	1⅝" – 8 UN	EAJ4QFN1625U08	3686.7	553	30	171	136	33	114	319	63	91	176	6
	M42 × 4.5	EAJ4QFNM04245	3686.7	553	30	171	136	33	114	319	63	91	176	6
EAJ5LC	1¾" – 8 UN	EAJ5QFN1750U08	5908.7	886.3	30	184	146	40	139	342	70	114	189	9
	M45 × 4.5	EAJ5QFNM04545	5908.7	886.3	30	184	146	40	139	342	70	114	189	9
	1⅞" – 8 UN	EAJ5QFN1875U08	5908.7	886.3	30	184	146	40	139	342	70	114	189	9
	M48 × 5.0	EAJ5QFNM04850	5908.7	886.3	30	184	146	40	139	342	70	114	189	9
	2" – 8 UN	EAJ5QFN2000U08	5908.7	886.3	30	184	146	40	139	342	70	114	189	9
	M52 × 5.0	EAJ5QFNM05250	5908.7	886.3	30	184	146	40	139	342	70	114	189	9
	M56 × 5.5	EAJ6QFNM05655	5908.7	886.3	30	184	146	40	139	342	70	114	189	9
EAJ6LC	2¼" – 8 UN	EAJ6QFN2250U08	8312.8	1246.9	30	201	161	49	164	367	82	138	206	13
	M60 × 5.5	EAJ6QFNM06055	8312.8	1246.9	30	201	161	49	164	367	82	138	206	13
	2½" – 8 UN	EAJ6QFN2500U08	8312.8	1246.9	30	201	161	49	164	367	82	138	206	13
	M64 × 6.0	EAJ6QFNM06460	8312.8	1246.9	30	201	161	49	164	367	82	138	206	13
EAJ7LC	M68 × 6.0	EAJ7QFNM06860	12.369.0	1855.4	30	230	178	75	192	400	95	154	235	19
	2¾" – 8 UN	EAJ7QFN2750U08	12.369.0	1855.4	30	230	178	75	192	400	95	154	235	19
	M72 × 6.0	EAJ7QFNM07260	12.369.0	1855.4	30	230	178	75	192	400	95	154	235	19
	M76 × 6.0	EAJ7QFNM07660	12.369.0	1855.4	30	230	178	75	192	400	95	154	235	19
	3" – 8 UN	EAJ7QFN3000U08	12.369.0	1855.4	30	230	178	75	192	400	95	154	235	19
EAJ8LC	M80 × 6.0	EAJ8QFNM08060	15.473.0	2320.9	30	247	193	68	216	412	109	182	252	24.5
	3¼" – 8 UN	EAJ8QFN3250U08	15.473.0	2320.9	30	247	193	68	216	412	109	182	252	24.5
	M85 × 6.0	EAJ8QFNM08560	15.473.0	2320.9	30	247	193	68	216	412	109	182	252	24.5
	3½" – 8 UN	EAJ8QFN3500U08	15.473.0	2320.9	30	247	193	68	216	412	109	182	252	24.5
	M90 × 6.0	EAJ8QFNM09060	15.473.0	2320.9	30	247	193	68	216	412	109	182	252	24.5

※Tommy Bar is included with Load Cell

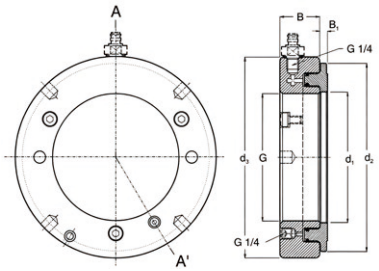
▼HMV Mounting or Dismounting of Bearings



•Facilitates easy and quick application of the high drive-up forces required for mounting bearings on tapered seatings.
•The hydraulic nut can also be used for dismounting bearings mounted on either adapter or withdrawal sleeves.
•Quick connection coupling can be fitted on the face or side of the nut
•A spare set of piston seals and maintenance kit is included
•Supplied with a quick connection coupling to fit the RIVERLAKE hydraulic pumps
•Equipped with eyebolts, two tommy bars and four mating holes on their front face

Model	Thread	d1 (MM)	d2 (MM)	d3 (MM)	B (MM)	B1 (MM)	Stroke (MM)	Piston Area (mm^2)	weight (KG)
HMV10E	M50x1.5	50.5	104	114	38	4	5	2900	2.70
HMV11E	M55x2	55.5	109	120	38	4	5	3150	2.75
HMV12E	M60x2	60.5	115	125	38	5	5	3300	2.80
HMV13E	M65x2	65.5	121	130	38	5	5	3600	3.00
HMV14E	M70x2	70.5	127	135	38	5	5	3800	3.20
HMV15E	M75×2	75.5	132	140	38	5	5	4000	3.40
HMV16E	M80x2	80.5	137	146	38	5	5	4200	3.70
HMV17E	M85x2	85.5	142	150	38	5	5	4400	3.75
HMV18E	M 90x2	90.5	147	156	38	5	5	4700	4.00
HMV19E	M95x2	95.5	153	162	38	5	5	4900	4.30
HMV 20E	M100x2	100.5	158	166	38	6	5	5100	4.40
HMV 21E	M105x2	105.5	163	172	38	6	5	5300	4.65
HMV 22E	M110x2	110.5	169	178	38	6	5	5600	4.95
HMV 23E	M115x2	115.5	174	182	38	6	5	5800	5.00
HMV 24E	M120x2	120.5	179	188	38	6	5	6000	5.25
HMV 25E	M125x2	125.5	184	192	38	6	5	6200	5.35
HMV 26E	M130x2	130.5	190	198	38	6	5	6400	5.65
HMV27E	M135x2	135.5	195	204	38	6	5	6600	5.90
HMV 28E	M140x2	140.5	200	208	38	7	5	6800	6.00
HMV 29E	M145×2	145.5	206	214	39	7	5	7300	6.50
HMV30E	M150x2	150.5	211	220	39	7	5	7500	6.60
HMV31E	M155x3	155.5	218	226	39	7	5	8100	6.95
HMV32E	M160x3	160.5	224	232	40	7	6	8600	7.60
HMV33E	M165x3	165.5	229	238	40	7	6	8900	7.90
HMV34E	M170x3	170.5	235	244	41	7	6	9400	8.40
HMV36E	M180x3	180.5	247	256	41	7	6	10300	9.15
HMV38E	M190x3	191	259	270	42	8	7	11500	10.5
HMV40E	M 200x3	201	271	282	43	8	8	12500	11.5
HMV41E	Tr 205x4	207	276	288	43	8	8	12800	12.0
HMV42E	Tr 210x4	212	282	294	44	8	9	13400	12.5
HMV43E	Tr 215×4	217	287	300	44	8	9	13700	13.0
HMV44E	Tr 220x4	222	293	306	44	8	9	14400	13.5
HMV45E	Tr 225×4	227	300	312	45	8	9	15200	14.5
HMV46E	Tr 230x4	232	305	318	45	8	9	15500	14.5
HMV47E	Tr 235x4	237	311	326	46	8	10	16200	16.0

Hydraulic Nuts

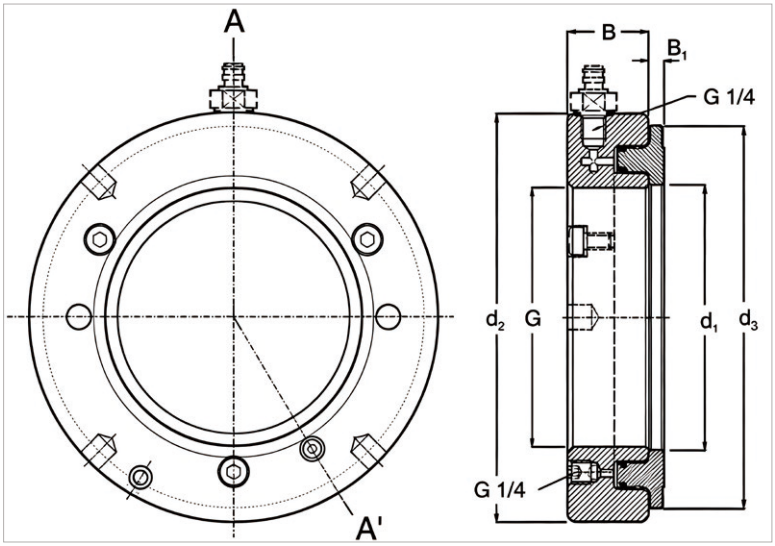


Model	Thread	d1 (MM)	d2 (MM)	d3 (MM)	B (MM)	B1 (MM)	Stroke (MM)	Piston Area (mm^2)	weight (KG)
HMV48E	Tr 240x4	242	316	330	46	9	10	16500	16.0
HMV50E	Tr 250x4	252	329	342	46	6	10	17600	17.5
HMV52E	Tr 260x4	262	341	356	47	6	11	18800	19.5
HMV54E	Tr 270x4	272	352	368	48	9	12	19800	20.5
HMV56E	Tr 280x4	282	363	380	49	6	12	21100	22.0
HMV58E	Tr 290x4	292	375	390	49	9	13	22400	22.5
HMV60E	Tr 300x4	302	386	404	51	10	14	23600	25.5
HMV62E	Tr 310x5	312	397	416	52	10	14	24900	27.0
HMV64E	Tr 320x5	322	409	428	53	10	14	26300	29.5
HMV66E	Tr 330x5	332	419	438	53	10	14	27000	30.0
HMV 68E	Tr340x5	342	430	450	54	10	14	28400	31.5
HMV69E	Tr 345×5	347	436	456	54	10	14	29400	32.5
HMV 70E	Tr350x5	352	442	464	56	10	14	29900	35.0
HMV 72E	Tr 360x5	362	455	472	56	10	15	31300	35.5
HMV 73E	Tr365x5	367	460	482	57	11	15	31700	38.5
HMV 74E	Tr 370x5	372	466	486	57	11	16	32800	39.0
HMV 76E	Tr 380x5	382	476	498	58	11	16	33500	40.5
HMV 77E	Tr 385x5	387	483	504	58	11	16	34700	41.0
HMV 80E	Tr 400x5	402	499	522	60	11	17	36700	45.5
HMV 82E	Tr 410x5	412	510	534	61	11	17	38300	48.0
HMV 84E	Tr 420x5	422	522	546	61	11	17	40000	50.0
HMV 86E	Tr 430x5	432	532	556	62	11	17	40800	52.5
HMV 88E	Tr 440x5	442	543	566	62	12	17	42500	54.0
HMV 90E	Tr 450x5	452	554	580	64	12	17	44100	57.5
HMV 92E	Tr 460x5	462	565	590	64	12	17	45100	60.0
HMV 94E	Tr 470x5	472	576	602	65	12	18	46900	62.0
HMV96E	Tr 480x5	482	587	612	65	12	19	48600	63.0
HMV 98E	Tr 490×5	492	597	624	66	12	19	49500	66.0
HMV 100E	Tr 500×5	502	609	636	67	12	19	51500	70.0
HMV 102E	Tr510x6	512	624	648	68	12	20	53300	74.0
HMV 104E	Tr 520x6	522	634	658	68	13	20	54300	75.0
HMV 106E	Tr 530x6	532	645	670	69	13	21	56200	79.0
HMV 108E	Tr540x6	542	657	682	69	13	21	58200	81.0
HMV 110E	Tr 550x6	552	667	693	70	13	21	59200	84.0
HMV 112E	Tr 560x6	562	678	704	71	13	22	61200	88.0
HMV 114E	Tr 570x6	572	689	716	72	13	23	63200	91.0
HMV 116E	Tr 580x6	582	699	726	72	13	23	64200	94.0
HMV 120E	Tr 600x6	602	721	748	73	13	23	67300	100
HMV 126E	Tr 630x6	632	754	782	74	14	23	72900	110
HMV 130E	Tr650x6	652	775	804	75	14	23	76200	115
HMV 134E	Tr670x6	672	796	826	76	14	24	79500	120
HMV 138E	Tr690x6	692	819	848	77	14	25	84200	127
HMV 142E	Tr 710x7	712	840	870	78	15	25	87700	135
HMV 150E	Tr750x7	752	883	912	79	15	25	95200	146
HMV160E	Tr 800x7	802	936	965	80	16	25	103900	161
HMV 170E	Tr850x7	852	990	1020	83	16	26	114600	181
HMV 180E	Tr900x7	902	1043	1075	86	17	30	124100	205
HMV 190E	Tr950×8	952	1097	1126	86	17	30	135700	218
HMV 200E	Tr 1000x8	1002	1150	1180	88	17	34	145800	239

▼HMVC Mounting or Dismounting of Bearings



•Hydraulic nut for mounting or dismounting of bearings, with inch thread
•Facilitates easy and quick application of the high drive-up forces required for mounting bearings on tapered seatings.
•The hydraulic nut can also be used for dismounting bearings mounted on either adapter or withdrawal sleeves.
•Quick connection coupling can be fitted on the face or side of the nut
•A spare set of piston seals and maintenance kit is included
•Supplied with a quick connection coupling to fit the RIVERLACK hydraulic pumps
•Equipped with eyebolts, two tommy bars and four mating holes on their front face



▼HMVC Selection Sheet:

Model	Thread	Pitch diameter (IN)	Threads per IN	d1 (IN)	d2 (IN)	d3 (IN)	B (IN)	B1 (IN)	Stroke (IN)	piston Area (in²)	Weight (lb)
HMVC10E	1 967	1 9309	18	2	4.1	4.5	1.5	0.16	0.2	4.5	6
HMVC11E	2 157	2 1209	18	2.2	4.3	4.7	1.5	0.16	0.2	4.9	6.1
HMVC12E	2 360	2 3239	18	2.4	4.5	4.9	1.5	0.2	0.2	5.1	6.2
HMVC13E	2 548	2 5119	18	2.6	4.8	5.1	1.5	0.2	0.2	5.6	6.6
HMVC14E	2 751	2 7149	18	2.8	5	5.3	1.5	0.2	0.2	5.9	7.1
HMVC15E	2 933	2 8789	12	3	5.2	5.5	1.5	0.2	0.2	6.2	7.5
HMVC 16E	3 137	3 0829	12	3.2	5.4	5.7	1.5	0.2	0.2	6.5	8.2
HMVC 17E	3 340	3 2859	12	3.4	5.6	5.9	1.5	0.2	0.2	6.8	8.3
HMVC18E	3 527	3 4729	12	3.6	5.8	6.1	1.5	0.2	0.2	7.3	8.8
HMVC19E	3 730	3 6759	12	3.8	6	6.4	1.5	0.2	0.2	7.6	9.5
HMVC 20E	3 918	3 8639	12	4	6.2	6.5	1.5	0.24	0.2	7.9	9.7

Hydraulic Nuts

Model	Thread	Pitch diameter (IN)	Threads per IN	d1 (IN)	d2 (IN)	d3 (IN)	B (IN)	B1 (IN)	Stroke (IN)	piston Area (IN^2)	Weight (lb)
HMVC 21E	4 122	4 0679	12	4.2	6.4	6.8	1.5	0.24	0.2	8.2	10.3
HMVC 22E	4 325	4 2709	12	4.4	6.7	7	1.5	0.24	0.2	8.7	10.9
HMVC 24E	4 716	4 6619	12	4.7	7	7.4	1.5	0.24	0.2	9.3	11.6
HMVC 26E	5 106	5 0519	12	5.1	7.5	7.8	1.5	0.24	0.2	9.9	12.5
HMVC 28E	5 497	5 4429	12	5.5	7.9	8.2	1.5	0.28	0.2	10.5	13.2
HMVC 30E	5 888	5 8339	12	5.9	8.3	8.7	1.5	0.28	0.2	11.6	14.6
HMVC 32E	6 284	6 2028	8	6.3	8.8	9.1	1.6	0.28	0.24	13.3	16.8
HMVC 34E	6 659	6 5778	8	6.7	9.3	9.6	1.6	0.28	0.24	14.6	18.5
HMVC 36E	7 066	6 9848	8	7.1	9.7	10.1	1.6	0.28	0.24	16	20.2
HMVC 38E	7 472	7 3908	8	7.5	10.2	10.6	1.7	0.31	0.28	17.8	23.1
HMVC40E	7 847	7 7658	8	7.9	10.7	11.1	1.7	0.31	0.31	19.4	25.4
HMVC44E	8 628	8 5468	8	8.7	11.5	12	1.7	0.31	0.35	22.3	29.8
HMVC48E	9 442	9 3337	6	9.5	12.4	13	1.8	0.35	0.39	25.6	35.3
HMVC52E	10 192	10 0837	6	10.3	13.4	14	1.9	0.35	0.43	29.1	41.9
HMVC54E	10 604	10 4960	6	10.7	13.9	14.5	1.9	0.35	0.47	30.7	45.2
HMVC56E	11 004	10 8957	6	11.1	14.3	15	1.9	0.35	0.47	32.7	48.5
HMVC60E	11 785	11 6767	6	11.9	15.2	15.9	2	0.39	0.55	36.6	56.2
HMVC64E	12 562	12 4537	6	12.7	16.1	16.9	2.1	0.39	0.55	40.8	65
HMVC68E	13 339	13 2190	5	13.5	16.9	17.7	2.1	0.39	0.55	44	69.4
HMVC72E	14 170	14 0500	5	14.3	17.9	18.6	2.2	0.39	0.59	48.5	78.3
HMVC76E	14 957	14 8370	5	15	18.7	19.6	2.3	0.43	0.63	51.9	89.3
HMVC80E	15 745	15 6250	5	15.8	19.6	20.6	2.4	0.43	0.67	56.9	100
HMVC84E	16 532	16 4120	5	16.6	20.6	21.5	2.4	0.43	0.67	62	110
HMVC88E	17 319	17 1990	5	17.4	21.4	22.3	2.4	0.47	0.67	65.9	119
HMVC92E	18 107	17 9870	5	18.2	22.2	23.3	2.5	0.47	0.67	69.9	132
HMVC96E	18 894	18 7740	5	19	23.1	24.1	2.6	0.47	0.75	75.3	139
HMVC100E	19 682	19 5620	5	19.8	24	25	2.6	0.47	0.75	79.8	154
HMVC106E	20 867	20 7220	4	20.9	25.4	26.4	2.7	0.51	0.83	87.1	174
HMVC112E	22 048	21 9030	4	22.1	26.7	27.7	2.8	0.51	0.87	94.9	194
HMVC120E	23 623	23 4780	4	23.7	28.4	29.4	2.9	0.51	0.91	104.3	220
HMVC126E	24 804	24 6590	4	24.9	29.7	30.8	2.9	0.55	0.91	113	243
HMVC134E	26 379	26 2340	4	26.5	31.3	32.5	3	0.55	0.94	123.2	265
HMVC142E	27 961	27 7740	3	28	33.1	34.3	3.1	0.59	0.98	135.9	298
HMVC150E	29 536	29 3490	3	29.6	34.8	35.9	3.1	0.59	0.98	147.6	322
HMVC160E	31 504	31 3170	3	31.6	36.9	38	3.1	0.63	0.98	161	355
HMVC 170E	33 473	33 2860	3	33.5	39	40.2	3.3	0.63	1.02	177.6	399
HMVC180E	35 441	35 2540	3	35.5	41.1	42.3	3.4	0.67	1.18	192.4	452
HMVC190E	37 410	37 2230	3	37.5	43.2	44.3	3.4	0.67	1.18	210.3	481

▼RHM Bolt Hydraulic Nut



•**Precision Friction-Free Pre-Tensioning:** Generates pure friction-free axial preload to eliminate side-load defects inherent to traditional torque tightening.

•**Mechanical Lock Load Holding:** Locks axial load mechanically after tensioning. Maintains stable preload without continuous pressurization, allowing permanent installation.

•**Durable & Compact Structure:** Made of high-strength heat-treated alloy steel, featuring high load capacity, fatigue resistance and corrosion resistance for stable operation in harsh environments.

•**Strong Adaptability:** Fits bolts with limited thread projection, enabling direct replacement and equipment retrofitting without structural modifications.

•**Workpiece Protection & Reusability:** Prevents workpiece surface damage with pure axial tension. Removable and reusable for easy maintenance and inspection.

•**Efficient Synchronized Tensioning:** Reduces multi-bolt tensioning time by up to 99%. Synchronized tensioning ensures uniform clamping force for reliable joint sealing.

Model	Thread	Force/KN	Stroke/MM
RHM24	M24X3	200	10
RHM27	M27X3	260	10
RHM30	M30X3.5	320	10
RHM33	M33X3.5	400	10
RHM36	M36X4	470	10
RHM42	M42X4.5	650	10
RHM45	M45X4.5	750	10
RHM48	M48X5	850	12
RHM52	M52X5	1000	12
RHM56	M56X5.5	1200	12
RHM60	M60X5.5	1350	12
RHM64	M64X6	1550	12
RHM68	M68X6	1750	12
RHM72	M72X6	2000	12
RHM76	M76X6	2250	12
RHM80	M80X6	2500	12
RHM85	M85X6	2800	12
THM90	M90X6	3250	14
RHM95	M95X6	3600	14
RHM100	M100X6	4000	14
RHM110	M110X6	5000	14
RHM120	M120X6	6000	14
RHM130	M130X8	7000	16
RHM140	M140X8	8000	16
RHM150	M150X8	9300	16
RHM160	M160X8	10700	16
RHM170	M170X8	12000	18
RHM180	M180X8	13600	18

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ultra high pressure hydraulic tools www.riverlakeco.com

▼EPH Series Safety Cage Hydraulic Puller



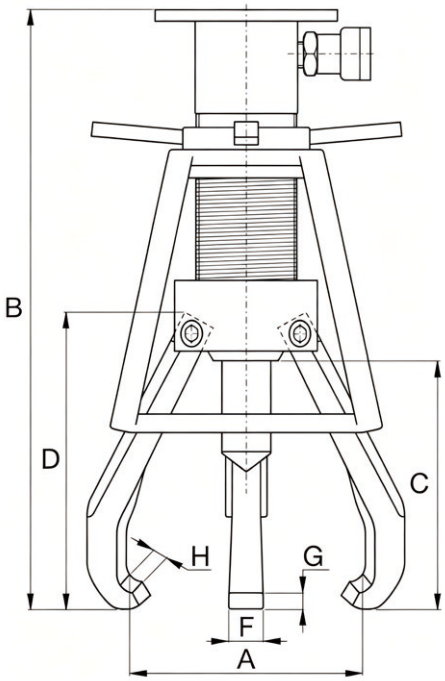
Working capacity: 10-50ton

Elongation: 203-355mm

Length: 19-635mm

Maximum working pressure: 70MPa

- Safety Cage jaw retention system
- High force hydraulic system for effortless pulling oflarge components
- Slim tapered jaws for better gripping in tight spots
- Available in 2 and 3 jaw design
- More efficient pulling, as one man can do the job wheremanual pullers often require two operators.
- Standard accessories include ram point set and lifting plate.



▼ EPH Quick Selection Sheet

Model	Working ability (ton)	Frame wheel puller	Hydraulic cylinder	working stroke	Weight (KG)
2 Jaw Puller	10	EPH-208	RC-106	152	12
	15	EPH-210	RC-1510	254	20
	25	EPH-213	RC-2514	362	43
	50	EPH-216	RC-5013	336	107
3 Jaw Puller	10	EPH-108	RC-10	152	13
	15	EPH-110	RC-1510	254	21
	25	EPH-113	RC-2514	362	46
	50	EPH-116	RC-5013	336	110

▼EPH Specification Sheet

Number Of Jaws	Maximum Spread	Working Capacity (Ton)	Model Number	Dimension (mm)							Weight (KG)
				Spread A (Min - Max)	Overall Length B	Maximum Reach C	Jaw length D	Jaw width F	Tip Clearance G	Tip Depth H	
2	304	10 (101)	EPH-208	19-304	498	203	237	22	7.4	6.9	12
	381	15 (142)	EPH-210	25-381	665	245	270	25	11.2	9.1	20
	457	25 (232)	EPH-213	63-457	846	304	348	31	12.9	9.7	43
	635	50 (498)	EPH-216	76-635	919	355	413	36	15	11.7	107
3	304	10 (101)	EPH-108	19-304	498	203	237	22	7.4	6.9	13
	381	15 (142)	EPH-110	25-381	665	245	270	25	11.2	9.1	21
	457	25 (232)	EPH-113	63-457	846	304	348	31	12.9	9.7	46
	635	50 (498)	EPH-116	76-635	919	355	413	36	15	11.7	110

▼Ram Point Set Specification Sheet:

Fit Puller Set Model Number	EPH-208, EPH-210 EPH-108, EPH-110	EPH-213 EPH-113	EPH-216 EPH-116
			
Ram Point Set Model Number	EPH-155	EPH-257	EPH-508
Ram Point Includes	Ram Point Diameter: diameter × length (mm)		
Flat Ram Point	Ø25 x 25	Ø38 x 57	Ø51 x 76
	Ø25 x 76	Ø51 x 57	Ø70 x 76
	——	Ø51 x 102	Ø70 x 127
Tapered Ram Point	Ø25 x 38	Ø38 x 64	Ø51x 95
	Ø25 x 89	Ø51 x 64	Ø51x 95
	——	Ø51 x 114	Ø70x140
Screw fitting	——	——	Ø71x57

▼Lift Plate Specification Table:

Fit Puller Set Model Number	Lift Plate Model Number	Thickness(mm)	Diameter(mm)
EPH-208	EPH-11052	6.4	Ø153
EPH-210	EPH-11052	6.4	Ø153
EPH-213	EPH-11052	6.4	Ø153
EPH-216	EPH-11052	6.4	Ø153
EPH-108	EPH-11352	9.7	Ø203
EPH-110	EPH-11352	9.7	Ø203
EPH-113	EPH-11652	9.7	Ø254
EPH-116	EPH-11652	9.7	Ø254



◆Includes mounting screws.

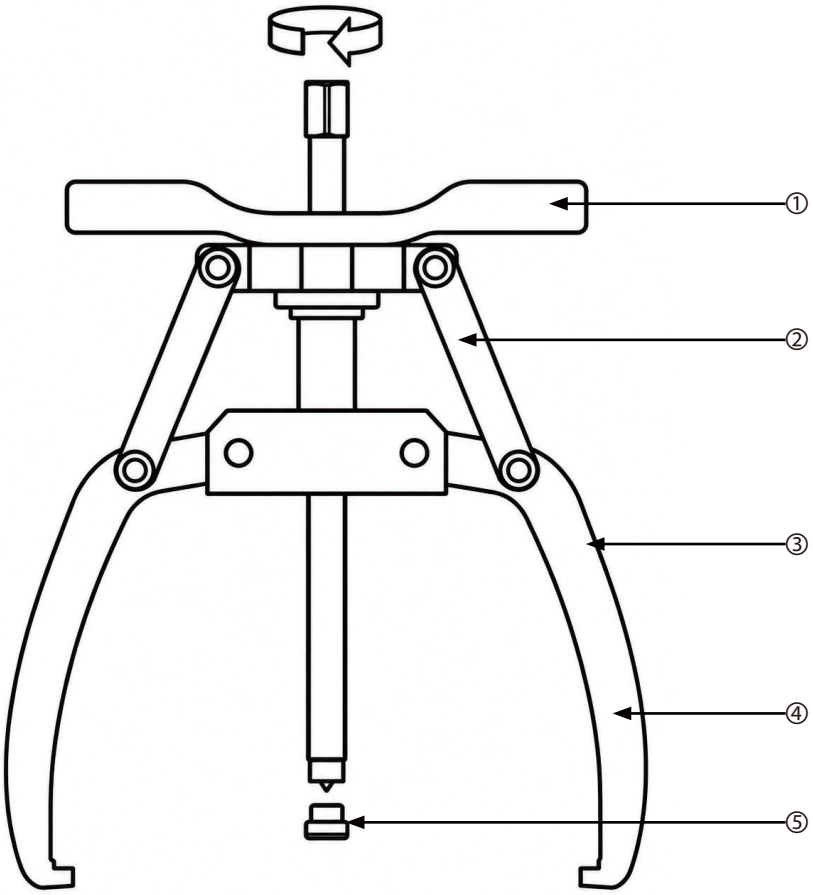
▼ LGM Series,Mechanical Lock-Grip Pullers



Working capacity:	3-40ton
Elongation:	102-355mm
Length:	132-635mm

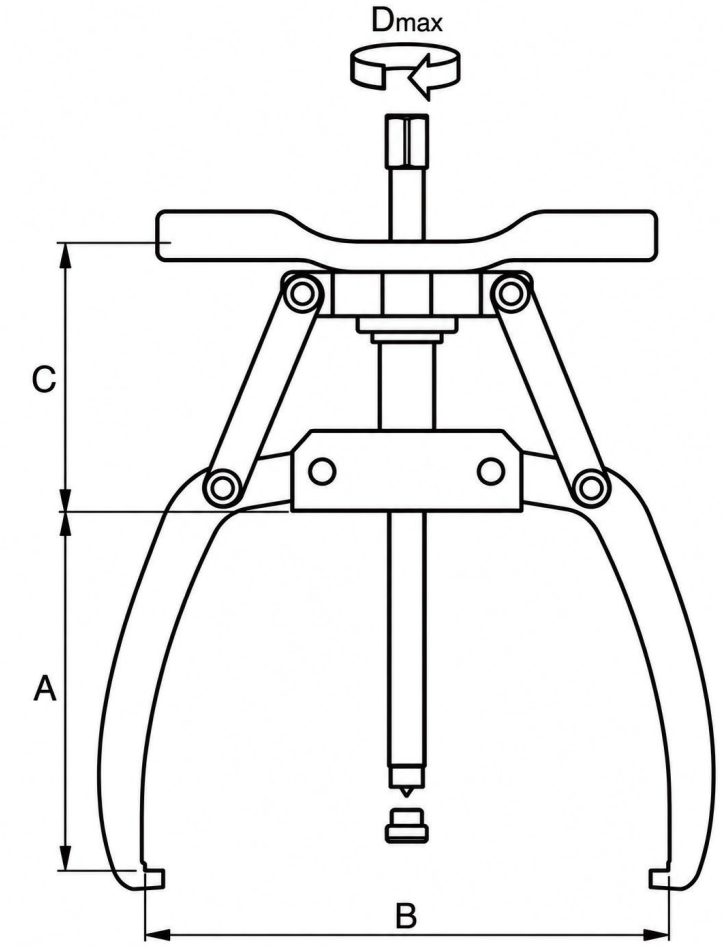
- •Simple, fast installation compatible with numerous working scenarios
- •Lockable jaws deliver stable clamping force to guarantee secure, hassle-free operation
- •Synchronized jaw travel allows one-person completion of all pulling tasks
- •Available in 2 and 3-jaw configurations.
- •Lock-GnipPullers-the simple, safe and cost-effective way to remove shaft-mounted parts.

▼LGM Puller Introduction



Number	Feature Description
1	The convenient adjustment handle simplifies jaw positioning on workpieces and boosts operating efficiency.
2	Built-in locking structure stops puller jaws from slipping off components throughout the pulling process.
3	The wider spread design at the upper section of jaws supports disassembly work on thicker workpieces.
4	Synchronized jaw motion delivers user-friendly operation, so a single operator can set up the tool and finish all pulling tasks alone.
5	The point protector avoids spindle abrasion or damage when pulling against flat surfaces.

▼LGM Outline Dimension Drawing

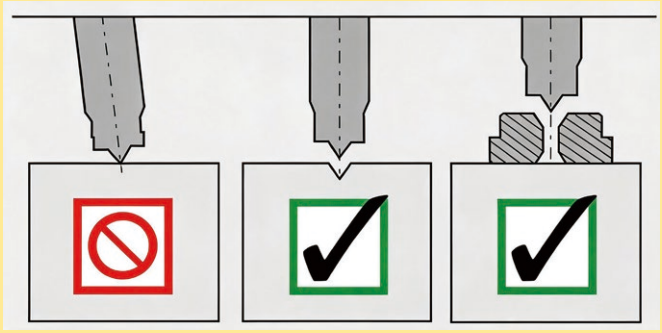


LGM-Series pullers serve as the optimal choice for removing small and medium-sized wheels, sprockets, bearings and other shaft-mounted components of the same type.

Equipped with a self-centering synchronous jaw system, this puller enables simultaneous movement of all jaws, so one operator can effortlessly set up the tool and carry out pulling work.

Rotate the puller handle to secure the jaws firmly against the workpiece; then turn the spindle to extract the target component smoothly.

⚠ LGM-Series Pullers MUST be used with a point protector if the shaft end
does not contain a drilled center hole.
One point protector is included with every puller.



▼LGM Series Puller Specification Table

Puller Model Number	Dimensions (mm)				Number of Jaws	Puller Capacity ton (kN)	Maximum Torque Dmax (Nm)	Weight (kg)	Replacement Point Protector Part Number
	Maximum Reach A	Minimum Spread Diameter B	Maximum Spread Diameter B	C					
LGM203	102	28	132	60	2	3 (2 7)	41	17	SGM0404
LGM305	102	28	132	60	3	5(45)	68	21	
LGM204	142	30	186	90	2	4(36)	68	25	
LGM306	142	30	186	90	3	6(49)	100	31	
LGM207	177	35	260	134	2	7(62)	117	49	SGM0704
LGM308	177	35	260	134	3	8(71)	134	69	
LGM211	215	84	300	126	2	11 (98)	203	67	
LGM318	215	110	390	140	3	18(160)	332	99	
LGM324	265	90	460	140	3	24(214)	443	139	LGH14K6
LGM340	335	100	635	210	3	40(356)	996	360	LGH24K6

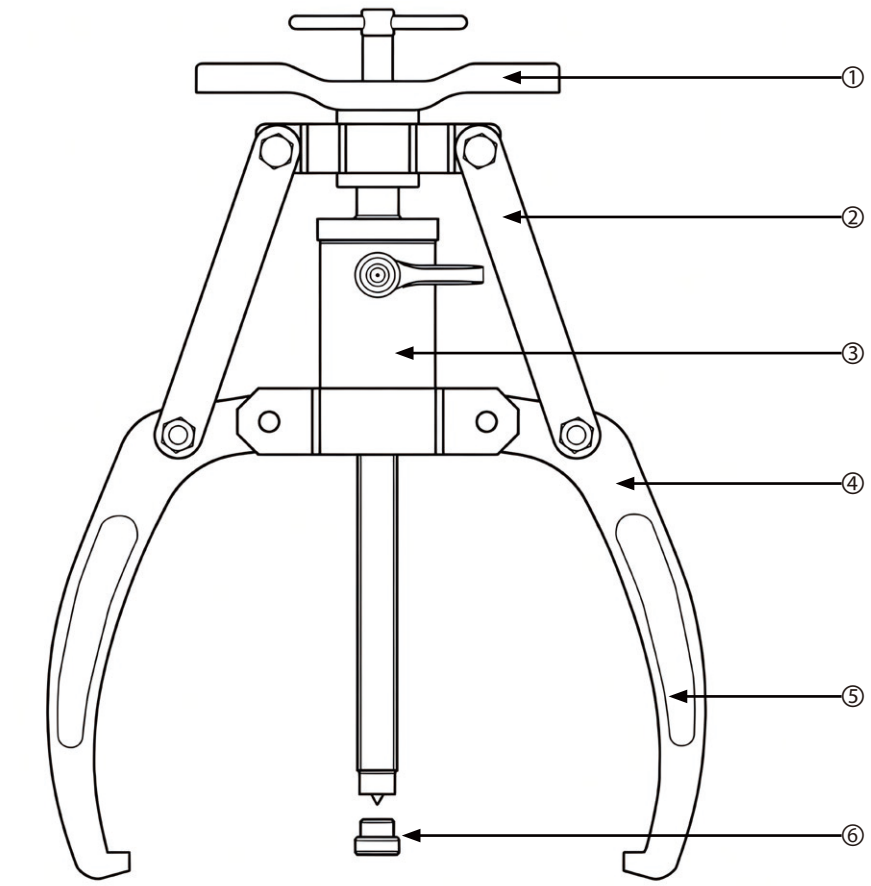
▼ LGH Hydraulic Lock-Grip Pullers



Working capacity:	10-64ton
Elongation:	215-408mm
Length:	300-660mm
Maximum working pressure: 70MPa	

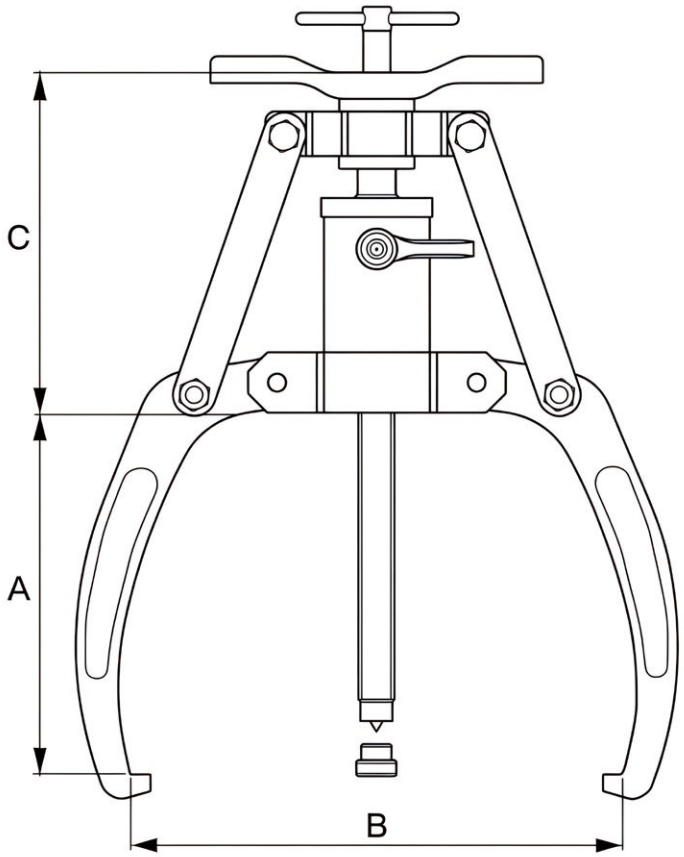
- •Fast, effortless installation compatible with various working scenarios
- •Hydraulic pulling power delivers superior load capacity while lessening operator exhaustion
- •Lockable jaws provide stable clamping to ensure safe, trouble-free operation
- •Synchronized jaw travel allows one single worker to complete all pulling tasks independently
- •Two-jaw and three-jaw models are optional, with or without removable hollow cylinders

▼LGH Puller Introduction



Number	Feature Description
1	Convenient adjustment handle simplifies positioning of jaws on application and increases speed of operation.
2	Locking mechanism helps prevent jaws from slipping off application during pulling process.
3	Detachable hollow cylinder offers increased pulling capacity compared to mechanical alternatives.
4	Greater spreading width on jaws enables use on thicker objects.
5	Synchronous jaw movement increases ease of use, allowing one operator to mount the tool and perform the pulling application.
6	Point protector helps prevent damage to spindle when pulling against a flat surface.

▼LGH Outline Dimension Drawing

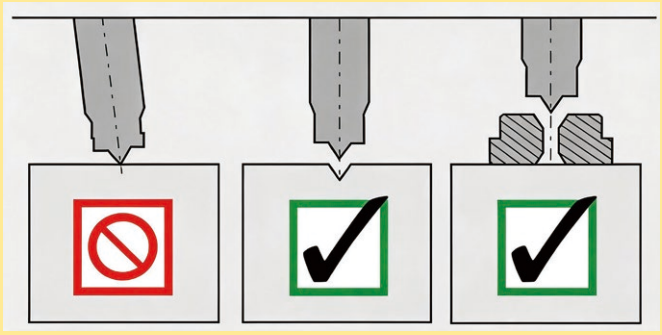


LGH-Series pullers deliver the same safe, user-friendly performance as mechanical puller models, while generating pulling power via a standard 700bar hydraulic cylinder.

Capable of generating a maximum pulling force of 64 tons, LGH series pullers excel at extracting large shaft-mounted workpieces with diameters up to 660 mm.

Rotate the puller handle to fasten the jaws tightly to the workpiece; you can then separate the target component by operating the spindle.

⚠ LGH-Series Pullers MUST be used with a point protector if the shaft end
does not contain a drilled center hole.
One point protector is included with every puller.



▼LGH Series Puller Specification Table

Puller Mode	Dimensions（mm）				Qty.of Jaws	Puller Capacity ton (KN)	Weight (kg)	Replacement Point Protector Part Number
	Max. Reach A	Max. Spread Dia.B	Max. Spread Dia.B	C				
LGH210	215	84	300	192	2	10(92)	10	SGM0704
LGH310	215	84	300	192	3	10(92)	13	SGM0704
LGH214	260	125	380	186	2	14(125)	14	LGH14K6
LGH314	260	125	380	186	3	14(125)	18	LGH14K6
LGH224	336	165	480	325	2	24(215)	37	LGH24K6
LGH324	336	165	480	325	3	24(215)	47	LGH24K6
LGH253	408	230	660	473	2	53(467)	111	LGH253K6
LGH364	408	230	660	473	3	64(576)	139	LGH253K6

* Hydraulic puller models include cylinder. To receive puller without cylinder add “NC” after LGH **(Example: LGHNC214).**

▼LGH Hydraulic Puller Sets

Hydraulic Puller Sets Model Number			
			
Manual pump (with GA45GC)	Foot Pneumatic Pump(with GA45GC)	Electric Pump	Lithium Battery Pump
	PATG1102N	HC3005EVC32R	BPS700
-	-	-	-
LGHS310H	LGHS310A	LGHS310EE	LGHS310CE
-	-	-	-
LGHS314H	LGHS314A	LGHS314EE	LGHS314CE
-	-	-	-
LGHS324H	LGHS324A	LGHS324EE	LGHS324CE
-	-	-	-
LGHS364H	LGHS364A	LGHS364EE	LGHS364CE

▼ LGHMS Hydraulic Lock-Grip Master Puller Sets



Working capacity: 10-64ton

Elongation: 215-408mm

Length: 300-660mm

Maximum working pressure: 70MPa

•All LGHMS-Series Master Puller Sets include an LGH-Series Hydraulic Puller with 3 jaws, a Cross Puller, a Bearing Separator, a Bearing Cup Puller, a detachable Hollow Cylinder, a hose, a gauge and a pump

•Set options include hand, air or electric pump for an optimal solution to every application.

LGH-Series, Hydraulic Pullers
Hydraulic Pullers include puller and hydraulic cylinder.

LGHMS-Series, Hydraulic Master Puller Sets
Hydraulic Master Pullers Sets include LGH-hydraulic puller, pump, gauge and HC7206C hydraulic hose.
Choose pump options below.

▼LGHMS Puller Set Selection Chart

Hydraulic Puller Capacity ton (kN)	Hydraulic Puller Sets Model Number				Master Puller Sets Include Following Components					
							Maximum Capacity Accessories ton (kN)			
	Manual pump (with GA45GC)	Foot Pneumatic Pump(with GA45GC)	Electric Pump	Lithium Battery Pump	Hydraulic Hose	Hydraulic 3-Jaws Puller		Cross Puller Model	Bearing Separator Model	Bearing Cup Puller Model
		PATG1102N	HC3005EVC32	BPS700						
10 (92)	LGHMS310H	LGHMS310A	LGHMS310EE	LGHMS310CE	HSP700PC-2-MM	LGH310	7 (75)	BHP112	BHP181	BHP180
14 (125)	LGHMS314H	LGHMS314A	LGHMS314EE	LGHMS314CE	HSP700PC-2-MM	LGH314	7 (75)	BHP172	BHP282	BHP190
24 (215)	LGHMS324H	LGHMS324A	LGHMS324EE	LGHMS324CE	HSP700PC-2-MM	LGH324	12 (107)	BHP272	BHP292	BHP280
64 (576)	LGHMS364H	LGHMS364A	LGHMS364EE	LGHMS364CE	HSP700PC-2-MM	LGH364	25 (227)	BHP672	BHP682	BHP580

Master Puller Sets include a hydraulic puller, cylinder, a pump with hose and gauge for standard pulling applications, as well as a selection of accessories designed for work environments where clearance prevents direct application of the puller jaws.

Lock-Grip Pullers:
All sets come with a hydraulic LGH-Series Puller.Both two jaw and three jaw versions are available.

Detachable Hollow Cylinder:
Provided with all hydraulic pullers as well as the Cross Bearing Puller.

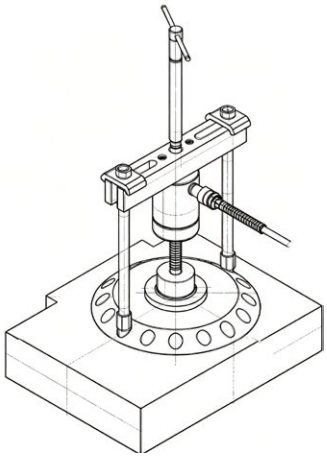
Pump with Hose and Gauge:
Hydraulic Puller Sets and Master Puller Sets are supplied with a hose,gauge,and your choice of a hand,air or electric pump.

Cross Puller:
Hydraulically powered via a detachable hydraulic cylinder and pump.The Cross Puller can be used individually as a 'push'puller,or in conjunction with the Bearing Separator or Bearing Cup Puller.

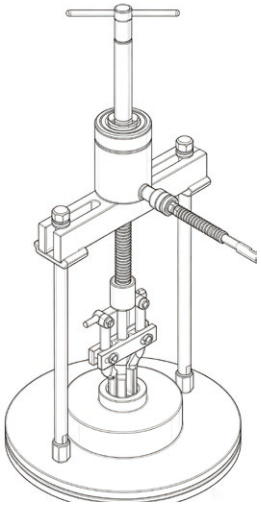
Bearing-Cup Puller:
Specifically designed to pullcup style bearings and other applications requiring an internal style puller.

Bearing Separator (used with Cross Bearing Puller):
Features narrow edges,which enable puller to be placed behind hard to reach bearings,gears,etc.,where limited clearance prevents the direct application of puller arms.

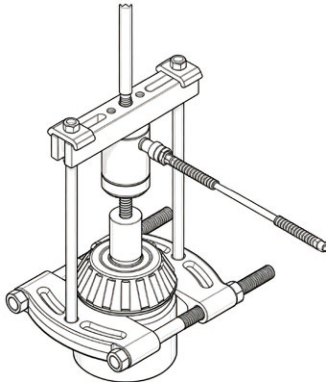
▼Cross Bearing puller on application



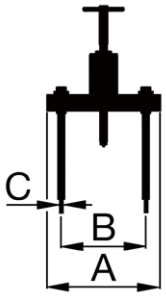
▼Bearing Cup Puller on application



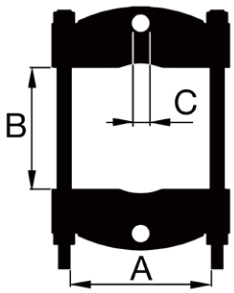
▼Cross Bearing Puller with Bearing Separator on application



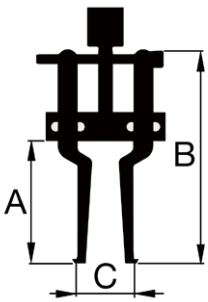
▼ Parameter Selection Table



Cross Bearing Puller



Bearing Separator



Bearing Cup Puller

Model Number	Cross Bearing Puller (mm)			Weight (kg)
	A	B min.	Thread Size C	
BHP112	280	115	5/8"-18 UNF	2
BHP172	280	115	5/8"-18 UNF	2.1
BHP272	370	140	5/8"-18 UNF	2.4
BHP672	615	220	1 1/4"-12 UNF	6.4

Model Number	Bearing Separator (mm)				Weight (kg)
	A	B min.	B max.	Thread Size C	
BHP181	110	10	110	5/8"-18 UNF	2.8
BHP282	156	12	134	5/8"-18 UNF	5.7
BHP292	182	13	210	5/8"-18 UNF	12.5
BHP682	300	20	300	1 1/4"-12 UNF	43.5

Model Number	Bearing Cup Puller (mm)				Weight (kg)
	A	B	C min.	C max.	
BHP180	135	236	40	145	2
BHP190	164	265	40	145	2
BHP280	164	265	40	145	2.4
BHP580	150	310	60	240	6.4

PH Series Hydraulic Puller



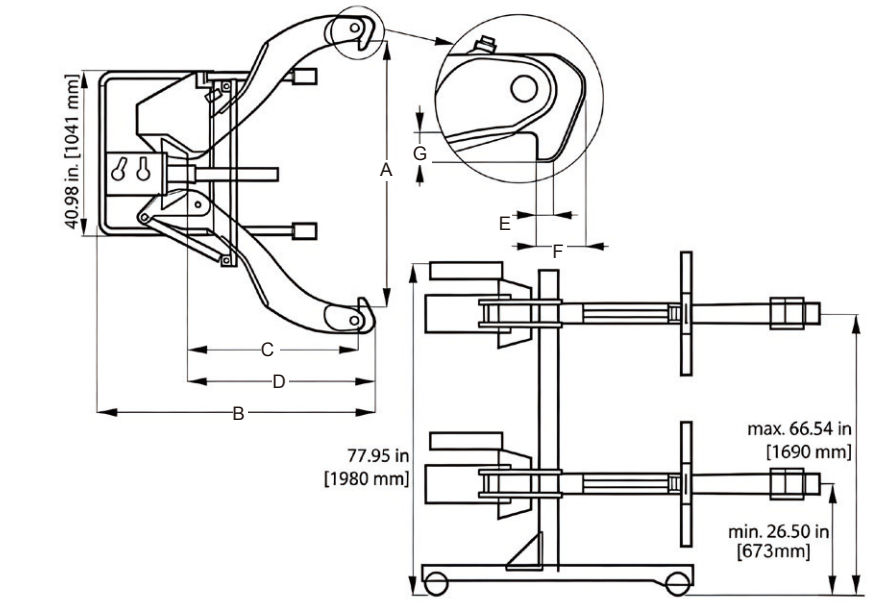
Capacity: 100/200ton

Max. Elongation: 1219mm

Length: 190-1778mm

Maximum working pressure: 70MPa

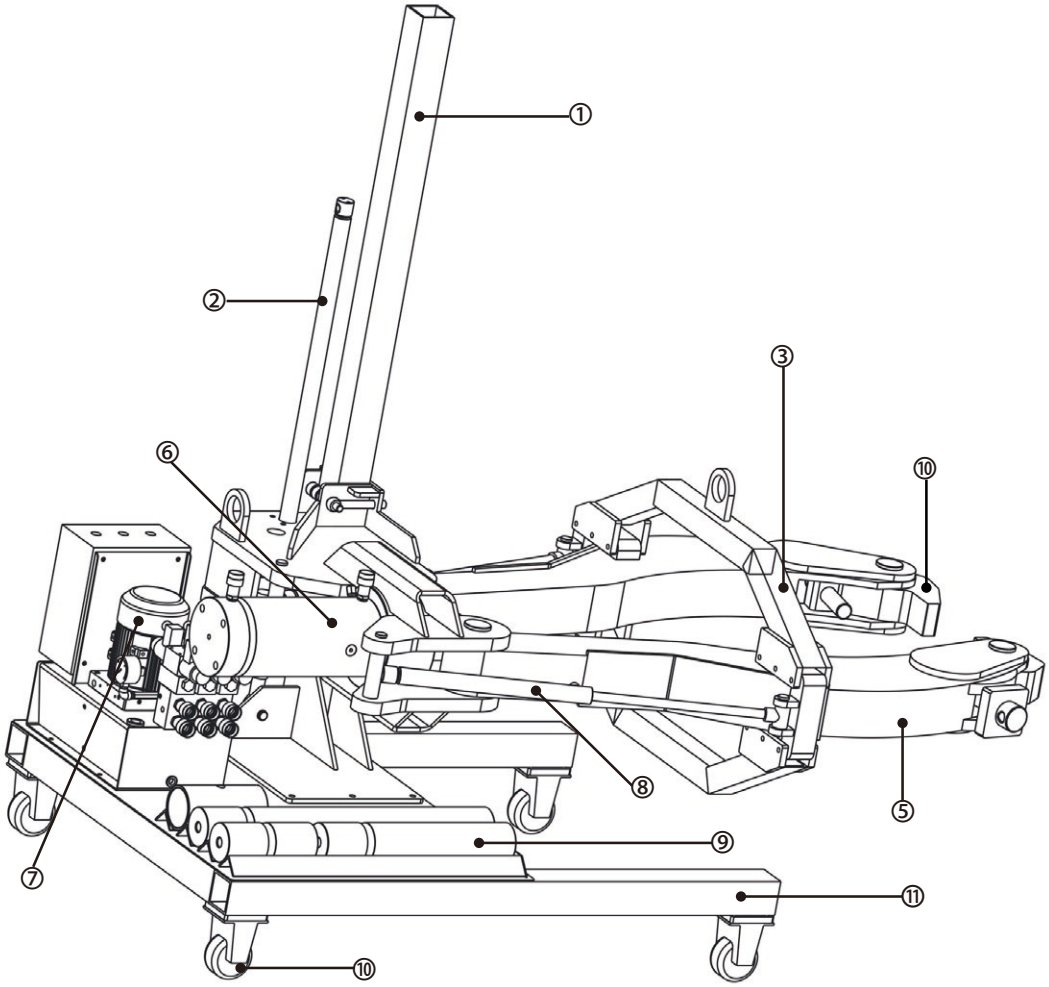
- Motorized lifting roller chassis
- Hydraulic lifting mechanism can raise the puller to 1.7m above ground
- Adjustable jaw structure
- Puller can be quickly removed from the lifting cart
- Equipped with two-stage electric hydraulic pump with remote control, supporting cable-controlled pulling operation
- Working height range of puller: 673mm-1690mm
- Supplied with various special pulling accessories



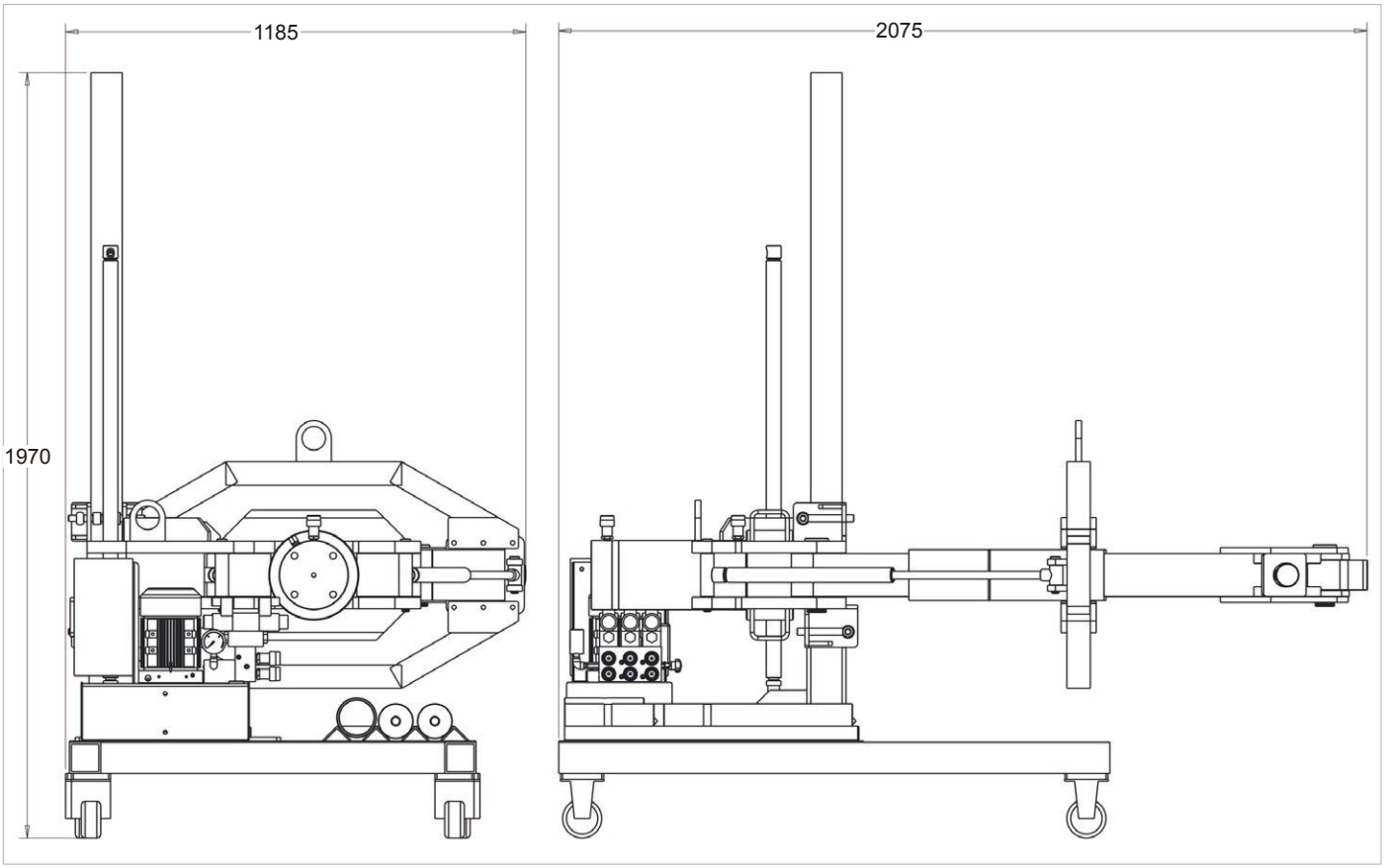
PH Series Puller Specification Table

Model	Pulling Force (ton (kN))	Number of Jaws	Opening Range A (mm)	Overall Length B (mm)	Extension Length C (mm)	Jaw Length D (mm)	Jaw End Width E (mm)	End Clearance F (mm)	End Depth G (mm)	Weight (kg)
PH-102T	100(890)	2	191-1778	1956	1270	1346	32	89	89	771
PH-100T	100(890)	3	191-1778	1956	1270	1346	32	89	89	885
PH-123T	100(890)	3	191-1778	1956	1270	1346	32	89	89	885
PH-200T	200 (1779)	4	203-1778	1994	1219	1346	32	89	89	1882

▼PH-102T Puller Introduction



▼PH-102T Outline Dimension Drawing



EP Series Hydraulic Pullers



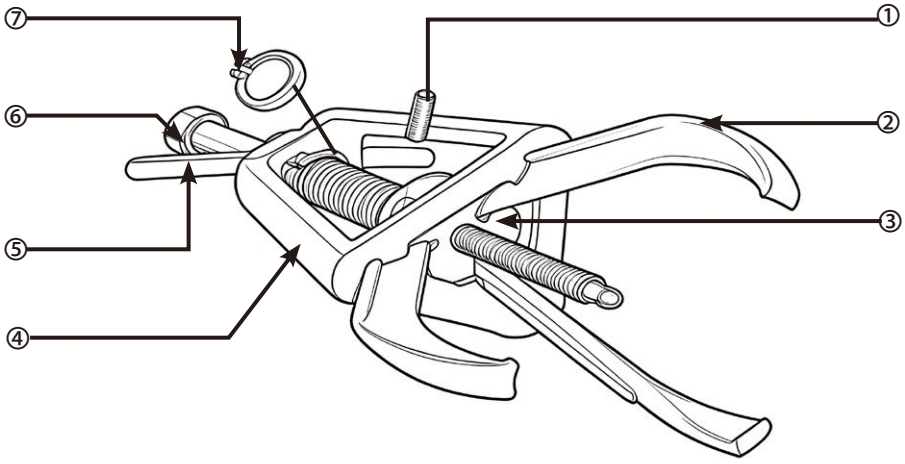
Working capacity: 2-40ton

Elongation: 101-355mm

Length: 12-635mm

Maximum working pressure: 70MPa

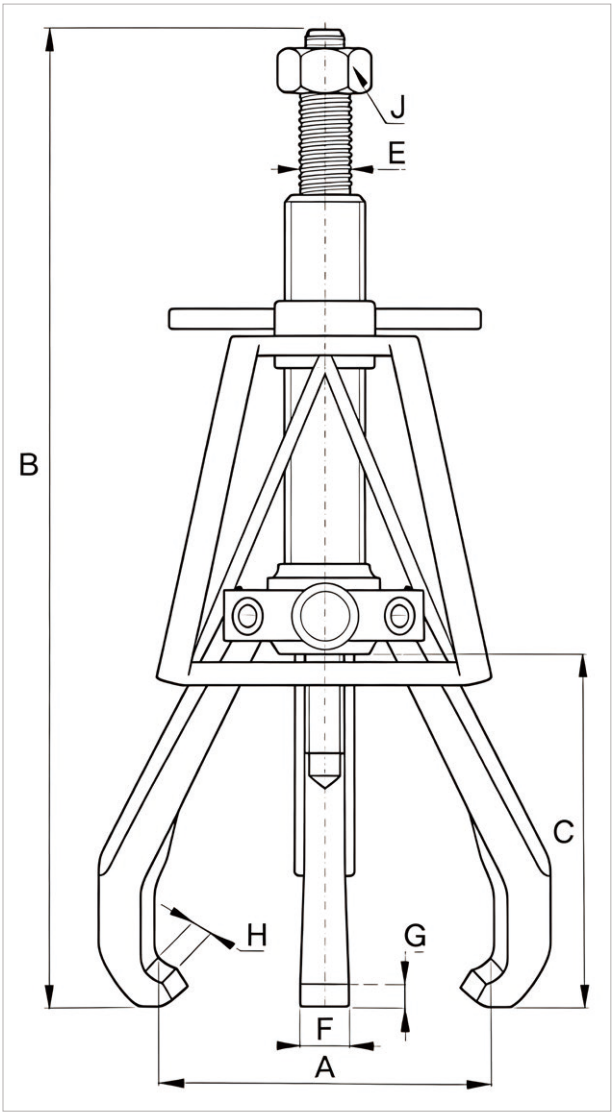
•Safety cage jaw design ensures safe gripping of workpieces and eliminates slipping risks.
•High-efficiency threaded drive shaft delivers high torque output with less effort, greatly reducing operating intensity.
•Slim, tapered jaws are ideal for pulling operations in narrow working spaces.
•Full range of structures available: 2/3-jaw types, built-in / external puller structures.
•Pulling operations can be efficiently completed by a single operator, significantly improving work efficiency.



NO	Name
1	Safety cage design protects jaws and safely grips workpieces
2	Forged jaws for durability and reliable positioning
3	Jaw head serves as the fulcrum and force application point of the jaw
4	Pin-type design enables quick assembly, disassembly and replacement of jaws
5	T-handle controls the opening and closing of jaws
6	Rolled threaded drive rod delivers high force with low torque
7	Snap ring secures the safety cage for easy assembly, disassembly and maintenance

Model	Number of jaws	Max. reach (mm)	Opening range Min.–Max. (mm)	Working capacity (ton (kN))	Jaw arm length (mm)	Max. torque (N•m)
EP-204	2	101	12 - 127	2 (17)	14	27
EP-104	3	101	12 - 127	5 (45)	14	54
EP-206	2	152	12 - 178	6 (53)	16	102
EP-106	3	152	12 - 178	10 (89)	16	176
EP-208	2	203	19 - 304	12 (106)	20	203
EP-108	3	203	19 - 304	17 (151)	20	298
EP-210	2	245	25 - 381	14 (124)	20	237
EP-110	3	245	25 - 381	20 (178)	20	373
EP-213	2	304	63 - 457	25 (222)	29	644
EP-113	3	304	63 - 457	30 (267)	29	814
EP-216	2	355	76 - 635	35 (311)	31	1085
EP-116	3	355	76 - 635	40 (356)	31	1153

▼EP Series 2/3-Jaw External Puller





Shaft Attachments combine shaft protection and extension functions, are easily installed on standard pullers, and protect the rod end while increasing reach.

▼Shaft Attachments Sheet

Length (mm)	Dia. (mm)	Center Screw Length Increase (mm)	Model
25	19	9	EPP-4
50	19	38	EPX-4
31	22	12	EPP-6
50	22	38	EPX-6
31	25	12	EPP-10
50	25	38	EPX-10
50	35	21	EPP-1316

*Optional Accessories

Dimensions								Model		
Opening Min.–Max. (mm)	Overall Length (mm)	Max. Reach (mm)	Center Screw Diameter (mm)	Jaw Width (mm)	Jaw Tip Spacing (mm)	Jaw Thickness (mm)	Hex Nut Size (inch)			
12 - 127	245 - 323	101	14	15	4.1	4.6	7/8	EP-204	EPX-4	–
12 - 127	245 - 323	101	14	15	4.1	4.6	7/8	EP-104	EPX-4	–
12 - 178	323 - 476	152	16	19	8.1	6.1	1 1/16	EP-206	EPX-6	–
12 - 178	323 - 476	152	16	19	8.1	6.1	1 1/16	EP-106	EPX-6	–
19 - 304	412 - 615	203	20	22	6.4	9.1	1 1/4	EP-208	EPX-10	EP-11054
19 - 304	412 - 615	203	20	22	6.4	9.1	1 1/4	EP-108	EPX-10	EP-11054
25 - 381	489 - 736	245	20	25	6.4	9.1	1 1/4	EP-210	EPX-10	EP-11054L
25 - 381	489 - 736	245	20	25	6.4	9.1	1 1/4	EP-110	EPX-10	EP-11054L
63 - 457	660 - 965	304	29	31	12.7	9.7	1 11/16	EP-213	–	EP-11354L
63 - 457	660 - 965	304	29	31	12.7	9.7	1 11/16	EP-113	–	EP-11354L
76 - 635	800 - 1155	355	31	36	13.5	11.7	1 13/16	EP-216	–	EP-11654L
76 - 635	800 - 1155	355	31	36	13.5	11.7	1 13/16	EP-116	–	EP-11654L

▼BHP Master Puller Set



Capacity:	12,20,30,50ton
Reach:	252-700mm
Spread:	249-1100mm
Maximum working pressure:70MPa	

• The RIVERLAKE puller kit features precise hydraulic control, ensuring fast, efficient, and safe pulling operations.
•The
• Core components are made of high-quality forged steel, ensuring high reliability and durability.
• Equipped with a complete hydraulic kit, including a manual pump, high-pressure hose, hydraulic cylinder, pressure gauge, pressure gauge connector, and solid wood crate.
• The complete standard puller kit includes: a claw puller, a cross-position puller, a bearing cup puller, and a bearing separator; these items can be ordered individually (see item numbers 10, 20, 30, and 40).
• Warning: When using the cross-position puller (2 grip arms) or in combination with the puller claw hook and bearing pulling attachment, do not exceed 50% of the rated pulling distance capacity.

▼Master Puller Set Selection Chart

Master Puller Set Capacity ▶	12ton	20ton	30 ton	50ton
Model Number▶	BHP1752 [1])	BHP2751G	BHP3751G	BHP5751G
Included Hydraulics Set Weight ▶	37KG	90KG	172KG	298KG
•Hand Pump	P142	P392	P392	P80
•Cylinder	RCH1211	RCH202	RCH302	RCH603
•Saddle	–	HP2015	HP3015	HP5016
•Hose	HSP700-2-M	HSP700-2-M	HSP700-2-M	HSP700-2-M
•Gauge	HG100-60	HG100-100	HG100-100	HG100-100
• Gauge Adapter	GA3	GA3	GA3	GA3
▼Included Pullers				
10Grip Puller	BHP1762	BHP252	BHP352	BHP552
20 Cross Bearing Puller	BHP1772	BHP262	BHP362	BHP562
30 Bearing Cup Puller	BHP180	BHP280	BHP380	BHP580
40Bearing Separator	BHP181	BHP282	BHP382	BHP582
Case	Wooden Case Packaging			

•The maximum working capacity of the cylinder is 60 ton at 700 bar, while the rated working capacity of the puller is 540 bar.
※1)Including adapter FZ1630.

▼BHP Grip Puller Set

Shown:BHP551G



Capacity: 12,20,30,50ton

Reach: 252-700mm

Spread: 249-1100mm

Maximum working pressure:70MPa

- The RIVERLAKE puller kit features precise hydraulic control, ensuring fast, efficient, and safe pulling operations.
- Core components are made of high-quality forged steel, ensuring high reliability and durability.
- Available with or without a complete hydraulic kit.

Ordering Examples

Model BHP251G: Includes the BHP252 type jaw puller and complete hydraulic kit (manual pump, cylinder, saddle, hoses, pressure gauge, and pressure gauge connector).

Model BHP252: Includes only the jaw puller mechanical components and can be used with the user's existing hydraulic system.

▼Grip Puller Set Selection Chart

Grip Puller Set Set Capacity ▶		12ton	20ton	30 ton	50ton
Model Number ▶		BHP152 [1])	BHP251G	BHP351G	BHP551G
Included Hydraulics Set Weight ▶		22KG	56KG	91KG	160KG
•Hand Pump		P142	P392	P392	P80
•Cylinder		RCH1211	RCH202	RCH302	RCH603
•Saddle		–	HP2015	HP3015	HP5016
•Hose		HSP700-2-M	HSP700-2-M	HSP700-2-M	HSP700-2-M
•Gauge		HG100-60	HG100-100	HG100-100	HG100-100
• Gauge Adapter		GA3	GA3	GA3	GA3
10 Grip Puller Model Number▶		BHP1762 *	BHP252 *	BHP352 *	BHP552 *
Maximum Spread (mm)	2-jaw	249	400	593	899
	3-jaw	249	499	800	1100
Maximum Reach (mm)	2-jaw	252	300	387	700
	3-jaw	252	300	387	700
Jaw (mm)	Thickness	15	20	24	30
	Width	23	27	38	39
Adjusting Screw (mm)	Thread	¾" - 16 UNF	1" - 8 UNC	1¼" - 7 UNC	1⅝" - 5.5 UNS
	Length	400	670	790	975
Case		Wooden Case Packaging			

※1) Including adapter FZ1630
Order number of jaw-type puller without hydraulic components

▼BHP Cross Bearing Puller Set

Shown:BHP316G



Capacity:	12,20,30,50ton
Reach:	354-863mm
Spread:	266-570mm
Maximum working pressure:70MPa	

• The RIVERLAKE puller kit features precise hydraulic control, ensuring fast, efficient, and safe pulling operations.

• Core components are made of high-quality forged steel, ensuring high reliability and durability.

Cross Bearing Puller			
			
Manual pump (with pressure gauge)	Foot Pneumatic Pump	Electric Pump	Lithium Battery Pump
	PATG1102N	HC3005EVO32R	BPS700
BHP162	BHP161GA	BHP161G	BHP161GCE
BHP261G	BHP261GA	BHP261GE	BHP261GCE
BHP361G	BHP361GE	BHP361GE	BHP361GCE
BHP561G	BHP561GA	BHP561GCE	BHP561GCE

▼Cross Bearing Puller Selection Chart

Puller Standard Kit	Load Capacity ▶	12ton	20ton	30 ton	50ton
	Model Number ▶	BHP162 [1])	BHP261G	BHP361G	BHP561G
Included Hydraulics	Set Weight ▶	26KG	62KG	121KG	185KG
•Hand Pump		P142	P392	P392	P80
•Cylinder		RCH1211	RCH202	RCH302	RCH603
•Saddle		–	HP2015	HP3015	HP5016
•Hose		HSP700-2-M	HSP700-2-M	HSP700-2-M	HSP700-2-M
•Gauge		HG100-60	HG100-100	HG100-100	HG100-100
• Gauge Adapter		GA3	GA3	GA3	GA3
20 Cross Bearing Puller	Model Number ▶	BHP1772	BHP262	BHP362	BHP562
Spread (mm)	Maximum	266	351	454	570
	Minimum	106	139	179	220
Reach (mm)	Maximum	462	571	711	863
Adjusting Screw (mm)	Thread	¾" - 16 UNF	1" - 8 UNC	1¼" - 7 UNC	1½" - 5.5 UNS
	Length	400	675	795	975
Leg (mm)	Length	105	239	203	609
	Length	354	419	457	863
	Length	–	571	711	–
	Length	–	114	–	–
Upper Leg Ends (mm)	Thread	¾" - 16 x25	¾" - 16 x25	1-14 x35	1¼" - 12 x38
Lower Leg Ends (mm)	Thread	⅝" - 18 x25	⅝" - 18 x25	1-14 x27	1¼" - 12 x38
30 Bearing Cup Puller	Model Number ▶	BHP180	BHP280	BHP380	BHP580
40 Bearing Separato	Model Number ▶	BHP181	BHP282	BHP382	BHP582
Wooden Case		Wooden Case Packaging			

▼Bearing Cup Puller

Shown:BHP380



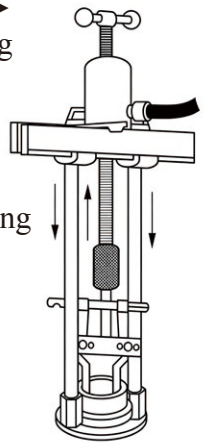
Capacity:	12,20,30,50ton
Reach:	115-145mm
Spread:	110-359mm
Maximum working pressure:70MPa	

•Made of high strength steel alloy
•Easily adapted to Cross Bearing Pullers for fast and efficient removal of the most difficult parts
•Adjustable to fit a variety of bearings and seals.
•Bearing puller capacity: 50% of puller capacity.

▼Bearing Cup Puller Selection Chart

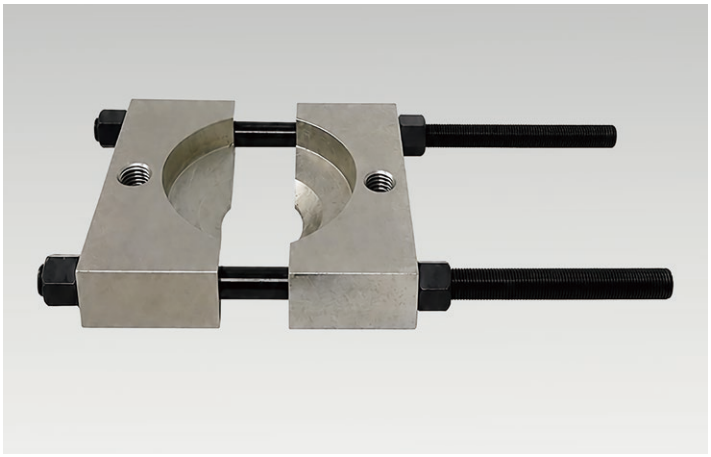
	Capacity▶	12ton	20ton	30 ton	50ton
30Bearing Cup Puller	Model▶	BHP180	BHP280	BHP380	BHP580
Spread (mm)	Max.	110	220	359	359
	Min.	26	25	50	50
Reach (mm)	Min.	110	140	145	145
Center Screw	Thread	¾" - 16 UNF	1" - 8 UNC	1¼" - 7 UNC	1½" - 5.5 UNS

▶ The bearing cup puller is used together with the cross-bearing puller.



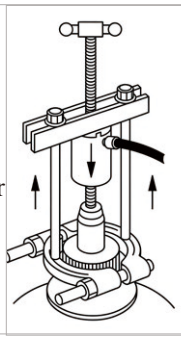
▼Bearing Puller

Shown:BHP382



•Bearing Separator shown with Crosshead Puller Attachment.
•The Bearing Separator has wedge shaped edges for placing puller behind hard to reach bearings, gears, etc., where clearance prevents direct application of grip puller arms.
•The Bearing Separator can be used with the Cross Bearing Puller or the Grip Puller.
•Bearing Separator rate at 50% of puller capacity

▶ The Bearing Separator can be used with the Cross Bearing Puller or the Grip Puller.



▼Bearing Puller Selection Chart

Capacity		12ton	20ton	30 ton	50ton
40 Bearing Puller	Model Number ▶	BHP181	BHP282	BHP382	BHP582
Spread (mm)	Max.	104	130	245	245
	Min.	25	9	17	17
	Width (mm)	126	150	292	292
	Thread	⅝" - 18 UNF	¾" - 18 UNF	1" - 14 UNS	1¼" - 12 UNF

RIVERLAKE
ultra high pressure hydraulic tools www.riverlakeco.com

NC-Series,Hydraulic Nut Splitters



Bolt Range:	M6-M48
Hexagon Nut Range:	10-75mm
Capacity:	49-882kN
Maximum working pressure:	70MPa



The **P392GC** hand pump is fitted with GA45GC pressure gauge and connector assembly. Equipped with an integrated all-in-one pressure gauge, it can be matched with NC nut splitters to greatly improve operational convenience.

- Brand New NC Series Nut Splitters
- High-strength blades made of SKD11 tool steel, suitable for Grade 12.9 nuts.
- Angled cutting edges ensure sharp and effortless splitting.
- Blades can be reground repeatedly for maintenance reuse.
- The entire body is gas-nitrided for outstanding wear and corrosion resistance.
- Heavy-duty return spring enables rapid piston retraction.
- Equipped with CEJN quick couplings for safe and reliable performance.
- Quick-change blade structure for easy replacement.
- Supplied with a plastic carry case.

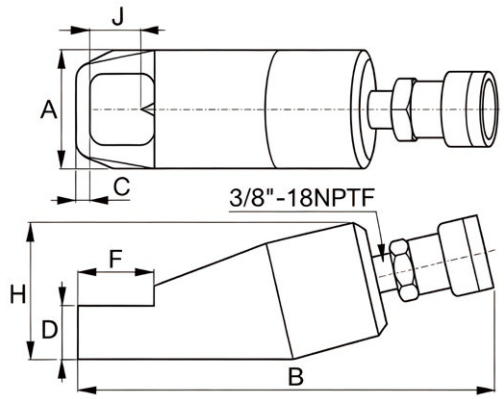
Frozen or Corroded Nuts

Often nuts are difficult to remove, while loosening using tightening tools is possible, it generally requires larger equipment and is time consuming.

The use of cutting torches or hammers and chisels can cause damage to the joint components, requires significantly longer setup and operationalal time, and can present a potential safety risk.

Hydraulic Nut Splitters

Nut splitting with the RIVERLAKE Hydraulic Nut Splitters is the safest method. It takes less time and avoids costly damage to joint components. The head design fitted with heavy-duty chisels permits the splitting of nuts on a wide variety of applications. With the two blades models nuts are split from two side in one action.



Single Blade Models (NC)

Model Number	Bolt Range (mm)	Hexagon Nut Range (mm)
NC1019	M6-M12	10-19
NC1924	M12-M16	19-24
NC2432	M16-M22	24-32
NC3241	M22-M27	32-41
NC4150	M27-M33	41-50
NC5060	M33-M39	50-60
NC6075	M39-M48	60-75

Tool-Pump Sets►

NC splitters can work in coordination with the BPS7000 portable lithium battery hydraulic pump. Matched as a complete set （NC1924H） the unit enables independent operation without external power supply to meet the requirements of mobile bolt and nut cutting applications.



Tool Kit Options	NC Model►	NC1019	NC1924	NC2432	NC3241	NC4150	NC5060	NC6075
	Pump Model▼	Tool Kit Model▼						
	**P392GC** Hand Pump	STN1019H	STH1924H	STN2432H	STN3241H	STN4150H	STN5060H	STN6075H
	**PATG1102N** Foot Pump	STN1019A	STH1924A	STN2432A	STN3241A	STN4150A	STN5060A	STN6075A
	**HC3005EVO32** Electric Pump	STN1019E	STH1924E	STN2432E	STN3241E	STN4150E	STN5060E	STN6075E
	**BPS700** Lithium Battery Pump	STN1019B	STH1924B	STN2432B	STN3241B	STN4150B	STN5060B	STN6075B

Maximum Cutting Force ton(kN)	Oil Capacity (cm^3)	Replacement Blade Model	Dimensions (mm)							Weight (kg)
			A	B	C	D	F	H	J	
5(49)	15	NC1019-KH	40	170	7	19	28	48	21	0.8
10(98)	20	NC1924-KH	55	191	8	26	40	62	25	2.0
15(147)	60	NC2432-KH	64	222	10	29	51	72	33	3.0
20(196)	80	NC3241-KH	75	244	17	36	66	88	43	4.4
35(343)	155	NC4150-KH	94	288	21	45	74	105	54	8.2
50(490)	240	NC5060-KH	106	318	23	54	90	128	60	11.8
90(882)	492	NC6075-KH	156	393	26	72	110	181	80	34.1

RIVERLAKE
ultra high pressure hydraulic tools www.riverlakeco.com

NS-Series,Hydraulic Nut Splitters



Bolt Range: M45-M90

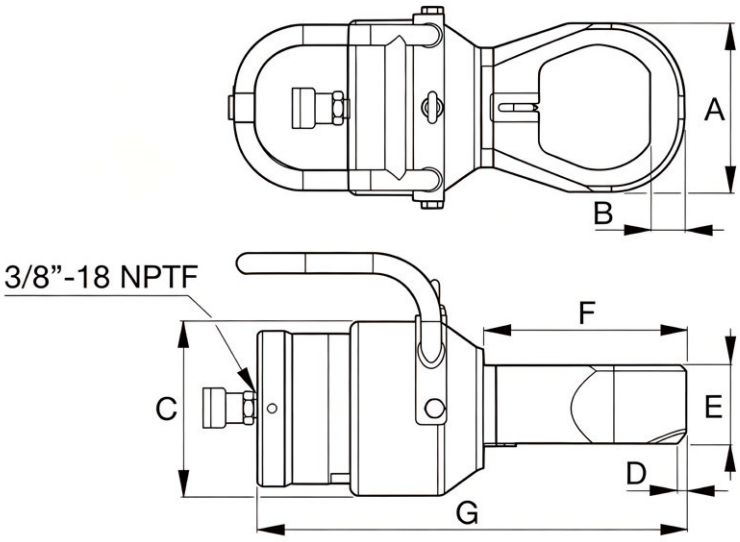
Hexagon Nut Range: 70-130mm

Capacity: 917-1711kN

Maximum working pressure:70MPa

- Specially designed to suit standard ANSI B16.5 / BS1560 flanges
- Single-acting (spring return) or double-acting cylinder
- Tri-blade technology provides three cutting surfaces on a single blade
- Interchangeable heads provide maximum nut range flexibility
- Preset scale allows controlled blade extension, which avoids damage to bolt threads
- Grip tape and handle included for more secure manoeuvrability
- Nickel-plated cylinder body for excellent corrosion protection and improved durability in harsh environments
- Internal Pressure Relief Valve for overload protection

High-strength SKD11 material blades, suitable for grade 12.9 nuts.





The **NS series nut splitter** can be used to quickly break open and remove severely rusted, weathered and aged nuts.

Hexagon Nut Range	Bolt Range	Capacity (ton/kN)	Oil Capacity (cm^3)	Model Number	Dimensions							Weight (KG)	Hydraulic Cylinder	Splitter Head	Replace-ment Blade
					A	B	C	D	E	F	G				
M45-M52	70-80	103 (917)	377	NS-7080	132	28	180	8	81	186	412	37	NSC-70	NSH-7080	NSB-70
M45-M56	70-85	103 (917)	377	NS-7085	145	30	180	8	81	196	422	37	NSC-70	NSH-7085	NSB-70
M45-M64	70-95	103 (917)	377	NS-7095	160	32	180	8	81	201	432	38.5	NSC-70	NSH-7095	NSB-70
M45-M72	70-105	103 (917)	377	NS-70105	174	35	180	9	81	209	443	39.5	NSC-70	NSH-70105	NSB-70
M76-M80	110-115	193 (1711)	819	NS-110115	189	36	234	3.7	111	234	472	69	NSC-110	NSH-110115	NSB-110
M76-M90	110-130	193 (1711)	819	NS-110130	219	41	234	2.5	111	242	493	71.5	NSC-110	NSH-110130	NSB-110

▼ IPR-Series, Roll-Frame Presses



Capacity:	50-200ton
Max. Daylight :	1295mm
Max. Width :	1222mm
Max. Working Presure:	70MPa

•Adopts high-quality welded frame with excellent strength for long service life.
•Fitted with four stainless steel casters for easy movement.
•Features a unique hydraulic lifting platform to adjust vertical platen clearance effortlessly.
•Standard rolling structure enables lateral movement and positioning locking of hydraulic cylinder.
•All models in the selection chart come complete with matched pump, hydraulic cylinder, hoses and pressure gauge for full package solution.
•Rolling frame integrates a heavy-duty fixed platform.
•Hydraulic clamping cylinder locks the press frame securely.



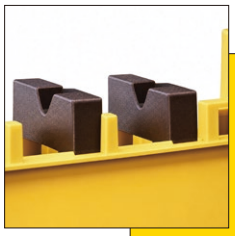
Hydraulic Lifting Device
Compatible with RIVERLAKE presses for retrofitting existing units. Standard equipment for most H-frame presses.

▼IPR Series Press Specifications:

Press Capacity (ton (kN))	Vertical Daylight A(mm)		Maximum Bed Width E (mm)	Electric Pump Model Number	Press Model Number	Double-Acting Cylinder		Speed (mm/sec)	
	Min	Max				Stroke (mm)	Model Number	Rapid Advance	Pressing
50 (498)	152	942	730	HE4010EVL43R	IPR-5075	334	RR-5013	4.1	3.9
100 (933)	159	1048	889	HE5010EVL43R	IPR-10075	333	RR-10013	7.7	0.7
200 (1995)	279	1295	1219	HE7020EVL43R	IPR-20075	330	RR-20013	5.2	0.5



Hydraulic Cylinder Mounting Bracket
Used to install the hydraulic cylinder into the press, allowing for left-right adjustment of the cylinder position.

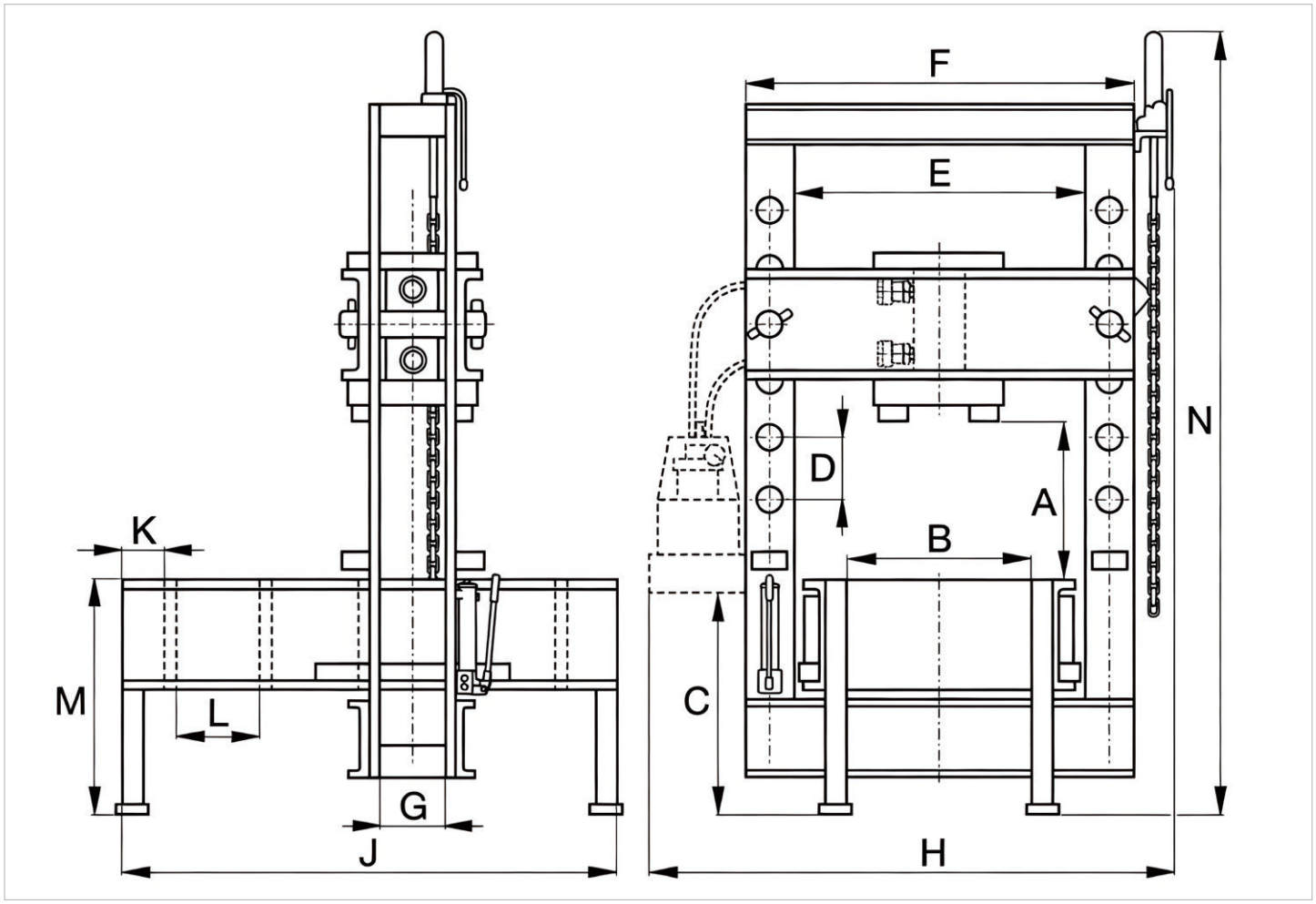


200T Optional V-Blocks
V-blocks(A200R) are used for positioning complex components and are made of durable high-strength steel.



Rolling Frame Press Pressure Gauge
All press models include a pressure gauge and accessories, matched to the press working capacity.

Press Capacity（ton）	Gauge Adaptor Model	Adaptor Model
50	HG100-60	FZ1638+NML0303
100	HG100-60	FZ1638+NML0303
200	HG100-60	FZ1638+NML0303



Roll-Frame Press Dimensions (mm)												Weight (KG)	Press Model Number
A（min.-max.）	B	C	D	F	G	H	J	K	L	M	N		
152-942	526	971	264	933	127	1420	1626	203	270	762	2870	917	IPR-5075
159-1048	673	965	222	1143	146	1605	1676	203	270	813	3021	1767	IPR-10075
279-1295	984	933	254	1626	232	2150	2197	203	381	915	3200	4186	IPR-20075

▼ H-Type Hydraulic Press



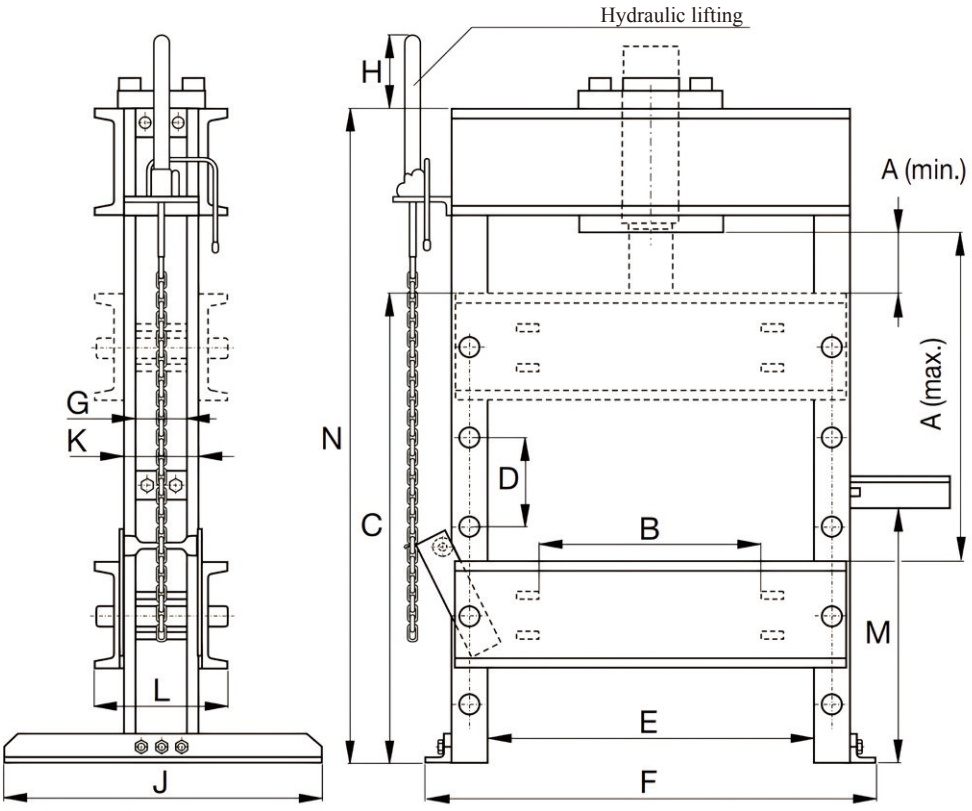
Capacity: 10-200ton

Max. Working Presure:70MPa

• Utilizes a high-quality welded frame, ensuring excellent structural strength and long-lasting durability of the press; equipped with a hydraulic lifting platform for easy adjustment of the vertical platen spacing (manual adjustment for 10-12 ton models).
• Powerful performance and wide range of applications; maximum opening spacing × width up to 1384 × 1219.
• Employs a precision rolling design; the hydraulic cylinder can move left and right and lock reliably.
• All models in the specification sheet come standard with a compatible pump, hydraulic cylinder, hydraulic hoses, and pressure gauge; complete and ready to use upon installation.

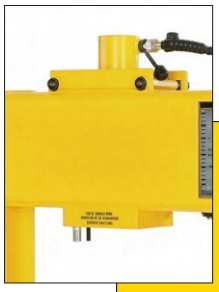
Working Capacity (ton)	Press Model	Pump Model	Cylinder Model	Dimensions (mm)			
				A (Max)	A (Min)	B	C
10	IPE-1215	HC3005MV32	RC-1010	1016	62	-	1187
10	IPH-1240	P392	RC-1010	1016	62	-	1187
10	IPH-1234	P84	RR-1010	1016	62	-	1187
10	IPA-1244	HC3005EVL43	RR-1010	1016	62	-	1187
25	IPE-2505	HC3005MV32	RC-256	1384	177	-	1447
25	IPE-2510	HC3005MV32	RC-2514	1384	177	-	1447
25	IPH-2531	P80	RC-2514	1384	177	-	1447
30	IPE-3060	HC3005EVL43	RR-3014	1384	177	-	1447
30	IPH-3080	P84	RR-3014	1384	177	-	1447
50	IPE-5010	HE4010EVL33R	RC-5013	1233	179	476	1371
50	IPH-5030	P462	RC-506	1233	179	476	1371
50	IPH-5031	P80	RC-506	1233	179	476	1371
50	IPE-5005	HC3005MV32	RC-506	1233	179	476	1371
50	IPA-5073	HA5007MV43	RR-5013	1233	179	476	1371
50	IPE-5060	HE4010EVL43R	RR-5013	1233	179	476	1371
50	IPH-5080	P464	RR-5013	1233	179	476	1371
100	IPA-10023	HA5007MV32	RC-10010	1079	177	508	1295
100	IPE-10010	HE4010EVL33R	RC-10010	1079	177	508	1295
100	IPH-10030	P462	RC-10010	1079	177	508	1295
100	IPE-10060	HE4010EVL43R	RR-10013	1079	177	508	1295
100	IPH-10080	P464	RR-1006	1079	177	508	1295
150	IPE-15065	HE5020EVL43R	RR-15013	1231	317	711	1384
200	IPE-20065	HE5020EVL43R	RR-20013	1231	317	711	1384

▼H-Type Press Series Press Outline Dimensions





Cylinder mounting bracket
Used for mounting hydrauliccylinders into the press, allowing for left and right adjustment of the hydraulic cylinder position.



Hydraulic Lifting Device
Fits non-RIVERLAKE branded presses and retrofits existing presses; standard fitment for most H-type presses.

Dimensions (mm)										Press Model	Weight (kg)
D	E	F	G	H	J	K	L	M	N		
127	473	632	-	-	755	108	189	889	1320	IPE-1215	135
127	473	632	-	-	755	108	189	889	1320	IPH-1240	71
127	473	632	-	-	755	108	189	889	1320	IPH-1234	85
127	473	632	-	-	755	108	189	889	1320	IPA-1244	73
301	736	1028	101	336	762	133	271	673	1930	IPE-2505	274
301	736	1028	101	336	762	133	271	673	1930	IPE-2510	313
301	736	1028	101	336	762	133	271	673	1930	IPH-2531	281
301	736	1028	101	336	762	133	271	673	1930	IPE-3060	325
301	736	1028	101	336	762	133	271	673	1930	IPH-3080	301
263	730	1085	127	222	914	184	333	781	1930	IPE-5010	495
263	730	1085	127	222	914	184	333	781	1930	IPH-5030	439
263	730	1085	127	222	914	184	333	781	1930	IPH-5031	420
263	730	1085	127	222	914	184	333	781	1930	IPE-5005	421
263	730	1085	127	222	914	184	333	781	1930	IPA-5073	479
263	730	1085	127	222	914	184	333	781	1930	IPE-5060	499
263	730	1085	127	222	914	184	333	781	1930	IPH-5080	455
296	889	1295	171	222	914	222	395	841	1930	IPA-10023	770
296	889	1295	171	222	914	222	395	841	1930	IPE-10010	776
296	889	1295	171	222	914	222	395	841	1930	IPH-10030	751
296	889	1295	171	222	914	222	395	841	1930	IPE-10060	816
296	889	1295	171	222	914	222	395	841	1930	IPH-10080	755
254	1219	1706	231	333	1117	333	555	1212	2286	IPE-15065	1794
254	1219	1706	231	333	1117	333	555	1212	2286	IPE-20065	1794

▼ XLP and VLP Hydraulic Press



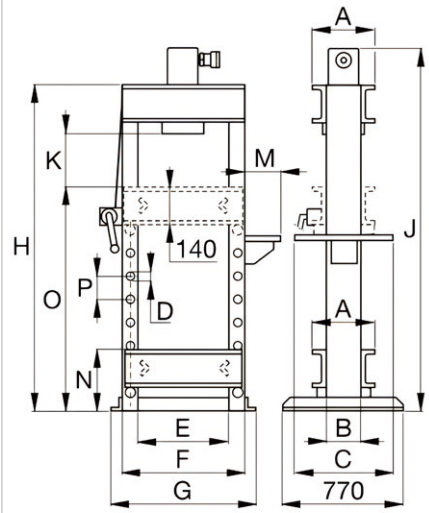
► XLP Series Presses
• 50-ton and 75-ton models are multi-functional presses, supplied as individual components.
• The 50-ton and 75-ton models are equipped with forklift loading/unloading ports for easy handling and loading/unloading.
• The height of the worktable can be adjusted via a winch (applicable to 50-ton and 75-ton models).
• Equipped with a width adjustment mechanism, allowing for left and right movement and positioning of the hydraulic cylinder.
• The press can be paired with a corresponding pump; the pressure gauge is integrated into the pump body for better control.
• Supports variable flow control, suitable for high-precision pressing and stamping operations.
► VLP Series Presses
• 50-ton and 75-ton models are multi-functional presses, supplied as individual components.

Shown from left to right: VLP106P142, XLP256P392

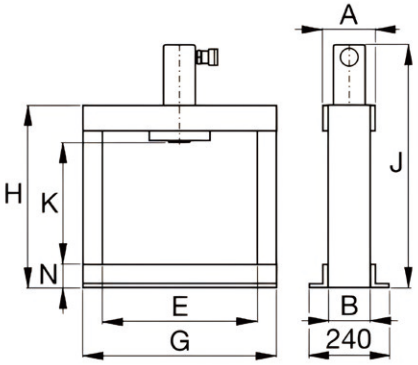


Side-To-Side Cylinder Movement

Hydraulic cylinder can be positioned horizontally side-to-side on all XLP Series presses.



XLP 25 ton



VLP 10 ton

▼ VLP and XLP Specifications

Working Capacity of Press (ton(kN))	Max Daylight (mm)		Press Model	Pump Model	Cylinder Stroke (mm)	Hydraulic Cylinder Model	Speed (mm/s)	
	Vertical	Horizo-ntal					Rapid Advance	Pressing
10 (101)	430	435	VLP-106P142	P142	156	RC106	{2.5}	{0.6}
10 (101)	430	435	VLP-106HC3	HC3005MV32	156	RC106	10	1.8
25 (232)	1265	510	XLP-256P392	P392	158	RC256	{3.4}	{0.7}
25 (232)	1265	510	XLP-256HC3	HC3005MV32	158	RC256	10	1.3
50 (498)	980	990	XLP-506P80	P80	159	RC506	{5.5}	{0.3}
50 (498)	980	990	XLP-506HE4	HE4010EVL43R	156	RR506	10	2
50 (498)	980	990	XLP-5013HE4	HE4010EVL43R	334	RR5013	10	2
75 (718)	970	990	XLP-756HC3	HC3005MV32	156	RC756	3.2	0.4
100 (933)	989	990	VLP-1006HE4	HE4010EVL43R	168	RR1006	10	2.1
100 (933)	989	990	VLP-10013HE5	HE5010EVL43R	333	RR10013	10	2.1
200 (1995)	1340	1220	VLP-20013HE7	HE7020EVL43R	330	RR20013	6.6	1.6



Optional V-Blocks
To facilitate positioning of pipes and bars, or placed upside-down, to serve as a convenient worktable. Featuring precise fit into the press bolster. Each model number includes two V-Blocks.

To Be Used With Press (ton)	V-Blocks Model Number
10	VB10
25	VB25
50	VB501
75, 100	VB101
200	A200

XLP,VLP Hydraulic Press

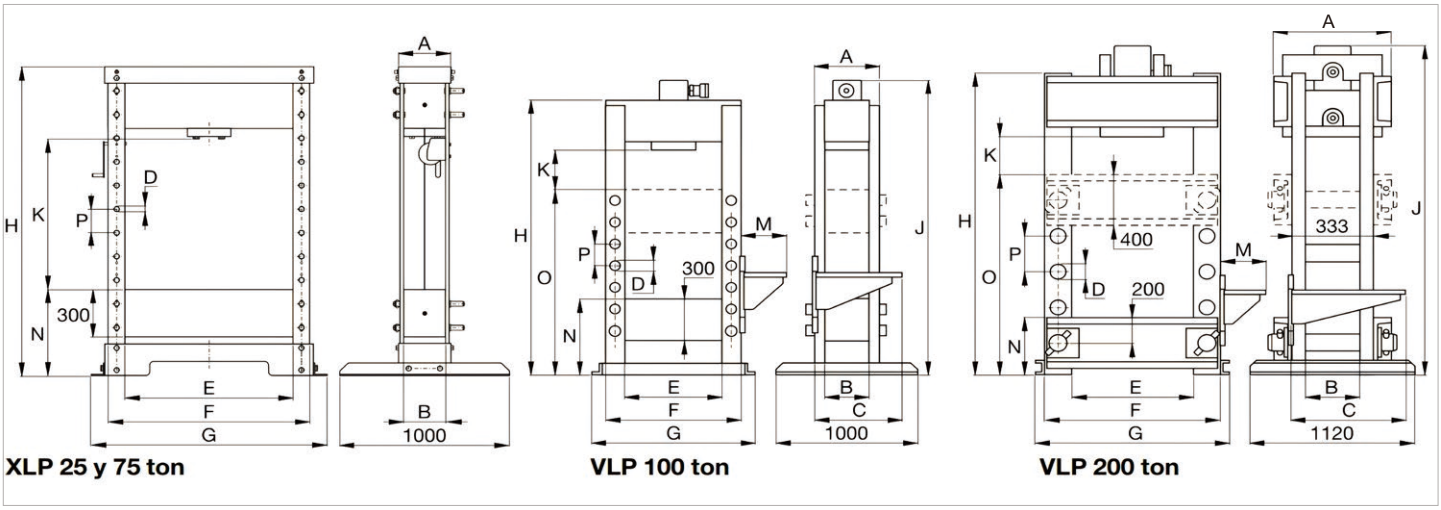


Capacity: 10-200ton

Max. Working Presure:70MPa

Max. Daylight : 1340mm

Max. Width : 1220mm



♦"{...}" The advancing speed is specified in millimeters per stroke of the hand pump.

Dimensions (mm)														Weight (kg)	Press Model
A	B	C	D	E	F	G	H	J	K	M	N	O	P		
110	80	-	-	435	-	542	620	748	430	-	80	-	-	49	VLP-106P142
110	80	-	-	435	-	542	620	748	430	-	80	-	-	54	VLP-106HC3
260	140	510	32	510	630	700	1622	1740	370	1265	140	212	1070	122	XLP-256P392
260	140	610	32	510	630	700	1622	1740	370	1265	323	212	1070	177	XLP-256HC3
310	240	-	32	990	1190	1390	1995	-	210	980	-	540	-	150	XLP-506P80
310	240	-	32	990	1190	1390	1995	-	210	980	-	540	-	150	XLP-506HE4
310	240	-	32	990	1190	1390	1995	-	210	980	-	540	-	150	XLP-5013HE4
420	330	-	40	990	1240	1430	1995	-	210	970	-	540	-	150	XLP-756HC3
400	340	560	40	990	1240	1400	1879	1885	239	425	540	1290	150	970	VLP-1006HE4
400	340	560	40	990	1240	1400	1879	2050	239	425	540	1290	150	993	VLP-10013HE5
553	353	560	76	1220	1620	1740	2285	2370	377	425	453	1415	254	1992	VLP-20013HE7

▼ IPR-Series, Roll-Frame Presses



Capacity: 50-200ton

Max. Daylight : 1295mm

Max. Width : 1222mm

Max. Working Presure:70MPa

- Adopts high-quality welded frame with excellent strength for long service life.
- Fitted with four stainless steel casters for easy movement.
- Features a unique hydraulic lifting platform to adjust vertical platen clearance effortlessly.
- Standard rolling structure enables lateral movement and positioning locking of hydraulic cylinder.
- All models in the selection chart come complete with matched pump, hydraulic cylinder, hoses and pressure gauge for full package solution.
- Rolling frame integrates a heavy-duty fixed platform.
- Hydraulic clamping cylinder locks the press frame securely.



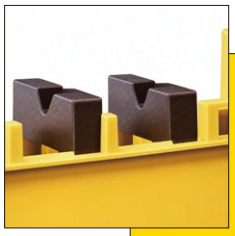
Hydraulic Lifting Device
Compatible with RIVERLAKE presses for retrofitting existing units. Standard equipment for most H-frame presses.

▼IPR Series Press Specifications:

Press Capacity (ton (kN))	Vertical Daylight A(mm)		Maximum Bed Width E (mm)	Electric Pump Model Number	Press Model Number	Double-Acting Cylinder		Speed (mm/sec)	
	Min	Max				Stroke (mm)	Model Number	Rapid Advance	Pressing
50 (498)	152	942	730	HE4010EVL43R	IPR-5075	334	RR-5013	4.1	3.9
100 (933)	159	1048	889	HE5010EVL43R	IPR-10075	333	RR-10013	7.7	0.7
200 (1995)	279	1295	1219	HE7020EVL43R	IPR-20075	330	RR-20013	5.2	0.5



Hydraulic Cylinder Mounting Bracket
Used to install the hydraulic cylinder into the press, allowing for left-right adjustment of the cylinder position.

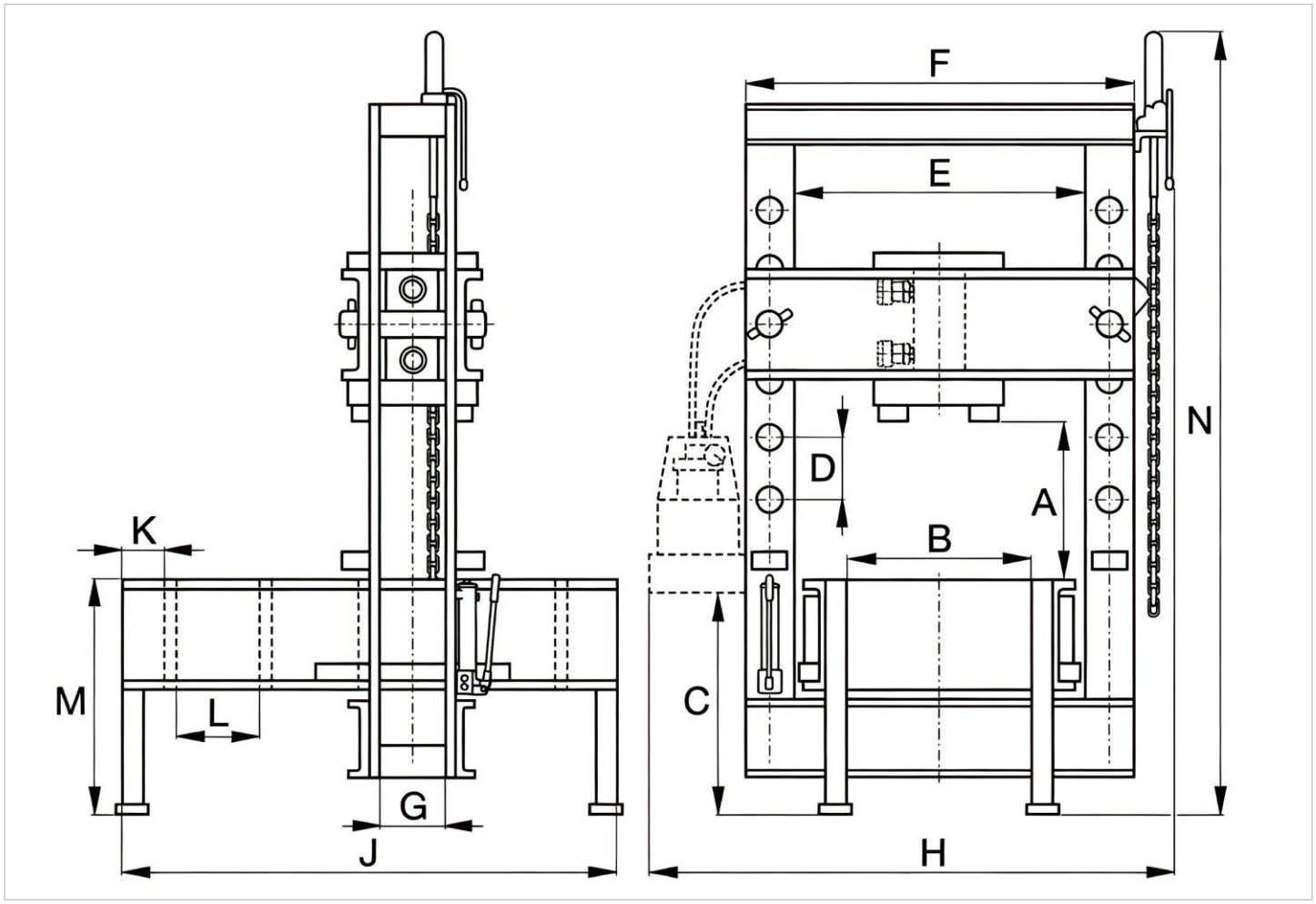


200T Optional V-Blocks
V-blocks(A200R) are used for positioning complex components and are made of durable high-strength steel.



Rolling Frame Press Pressure Gauge
All press models include a pressure gauge and accessories, matched to the press working capacity.

Press Capacity（ton）	Gauge Adaptor Model	Adaptor Model
50	HG100-60	FZ1638+NML0303
100	HG100-60	FZ1638+NML0303
200	HG100-60	FZ1638+NML0303



Roll-Frame Press Dimensions (mm)												Weight (KG)	Press Model Number
A（min.-max.）	B	C	D	F	G	H	J	K	L	M	N		
152-942	526	971	264	933	127	1420	1626	203	270	762	2870	917	IPR-5075
159-1048	673	965	222	1143	146	1605	1676	203	270	813	3021	1767	IPR-10075
279-1295	984	933	254	1626	232	2150	2197	203	381	915	3200	4186	IPR-20075

▼Multiple Pump-Valve Synchronous System



Technical features:

- Each pump valve can be controlled s eparately or at the same time, can be compensated operation
- Load balancing valve, can achieve synchronous lifting/synchronous falling operation
- Under uniform load, synchronization error is less than 5%
- Each pump valve configuration safety valve, external pressure regulator valve, pressure gauge
- Configuration of wire control handle, simple operation

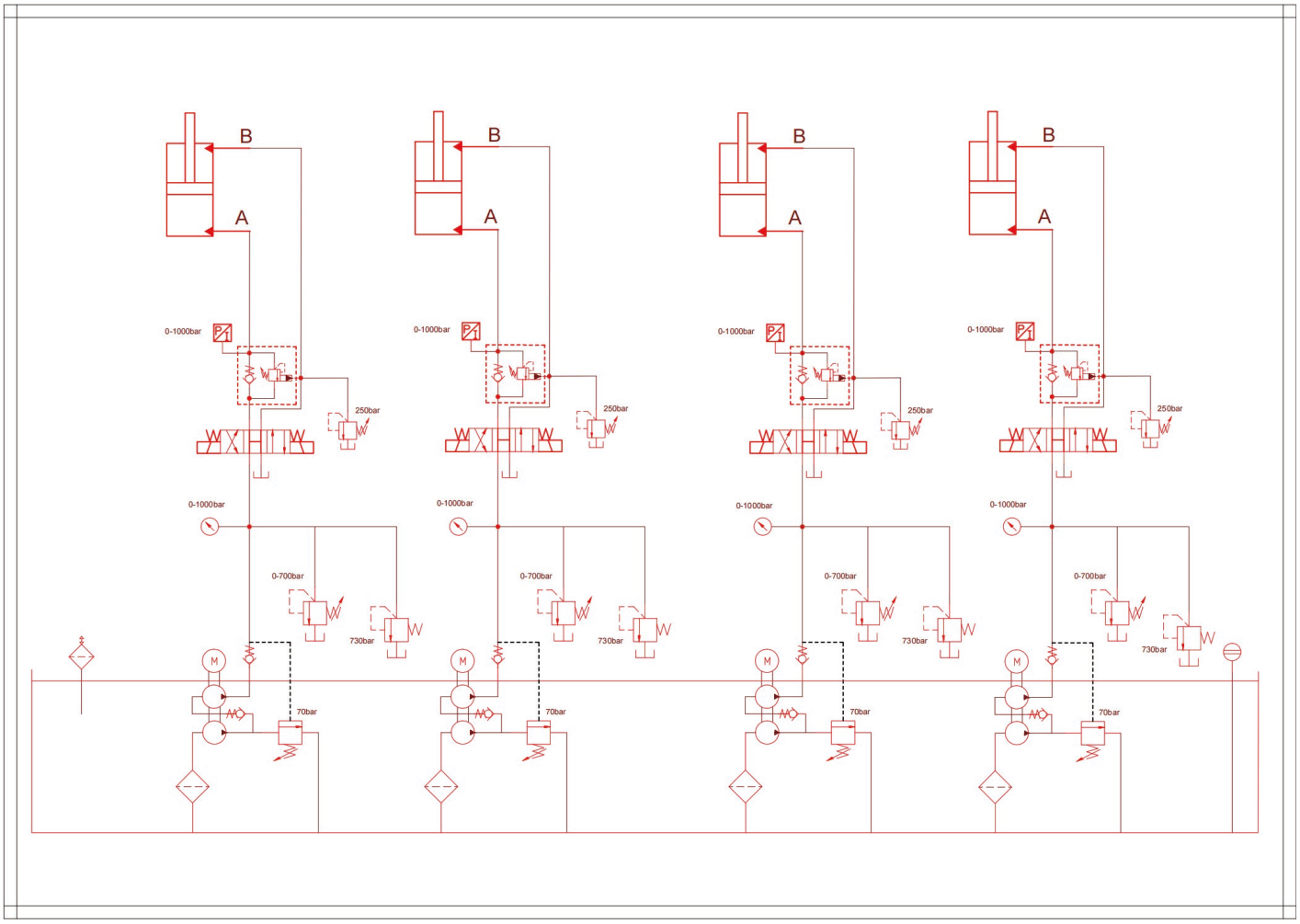
▼Operation steps:

1.Select the pump group that needs to be operated and start the motor.
2. Press the up or down button (knob) of each way according to the demand to carry out operation.
3. Compensation is carried out according to the actual load position, and compensation is carried out at the point where the traveling speed is fast.

▼Type Specification Sheet:

Model	Number of Points	Voltage (VAC)/Phase	Power (KW)	Oil Available (L)	Flow Rate (L/Min)
MC3-040-2EVB	2	230(115)/1PH	0.55×2	40	0.35*2
MH4-040-2EVB	2	380(220)/3PH	0.75×2	40	0.55*2
MC3-080-4EVB	4	230(115)/1PH	0.55×4	80	0.35*4
MC3-150-8EVB	8	230(115)/1PH	0.55×8	150	0.35*8
MC4-080-4EVB	4	230(115)/1PH	1.1×4	80	0.7*4
MC4-150-8EVB	8	230(115)/1PH	1.1×8	150	0.7*8
MH4-080-4EVB	4	380(220)/3PH	0.75×4	80	0.55*4
MH4-150-8EVB	8	380(220)/3PH	0.75×8	150	0.55*8
ME7-080-4EVB	4	380(220)/3PH	2.2×4	80	1.5*4
ME7-150-8EVB	8	380(220)/3PH	2.2×8	150	1.5*8
*-4EVL	4	single acting, only advance SYNC			
*-8EVL	8	single acting, only advance SYNC			

▼ Hydraulic Schematic Diagram:



▼ Application Drawings:





▼PLC Valve-Controlled Synchronization System



Technical features:

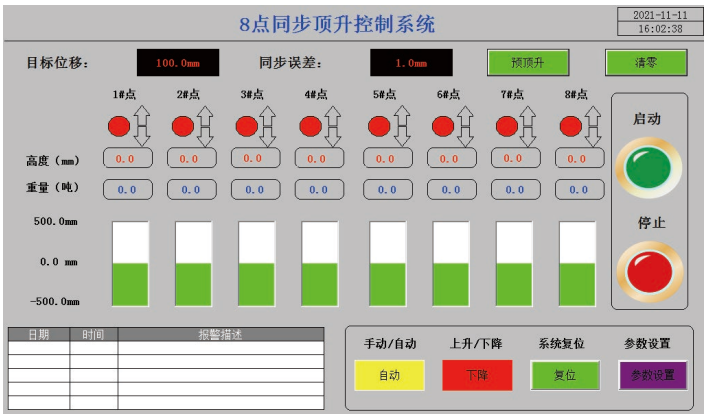
- 10 inch touch screen, built-in control program, parameter open setting.
- Siemens computing and analog processing module.
- High protection PLC electric control box, optional line control independent touch screen.
- Configure 20 meters /30 meters displacement sensor data line.
- Function configuration: Sensor parameter setting, pre-jacking pressure setting, overload alarm setting, sensor loss alarm, out-of-tolerance alarm, pre-jacking/synchronous jacking/synchronous drop function panel interface, clear identification of tubing, displacement sensor, cylinder interface.
- Optional multi-pump station link control function, Internet remote control function, etc.

▼PLC Synchronous System Specification Table:

Model Number	Voltage (VAC)	Phase (PH)	Power (KW)	Flow Rate (L/Min)	Available Oil (L)	Number of Points	Displacement Sensor Range (MM)	Cable Length
HE5080LL-4	230	1	1.5	1	80	4	1000	30
HE7080LL-4	380V/230	3	2.2	1.5	80	4	1000	30
HE84120LL-4	380/440/660	3	4	2.3	120	4	1000	30
HE97150LL-4	380/440/660	3	7.5	4.2	150	4	1000	30
HE84150LL-8	380/440/660	3	4	2.3	150	8	1000	30
HE97200LL-8	380/440/660	3	7.5	4.2	200	8	1000	30
HE97300LL-16	380/440/660	3	7.5	4.2	300	16	1000	30
HE70100LL-8-2	380V/230	3	2.2*2	1.5*2	100*2	8*2	1000	30
HE84200LL-8-3	380/440/660	3	4*3	2.3*3	200*3	8*3	1000	30

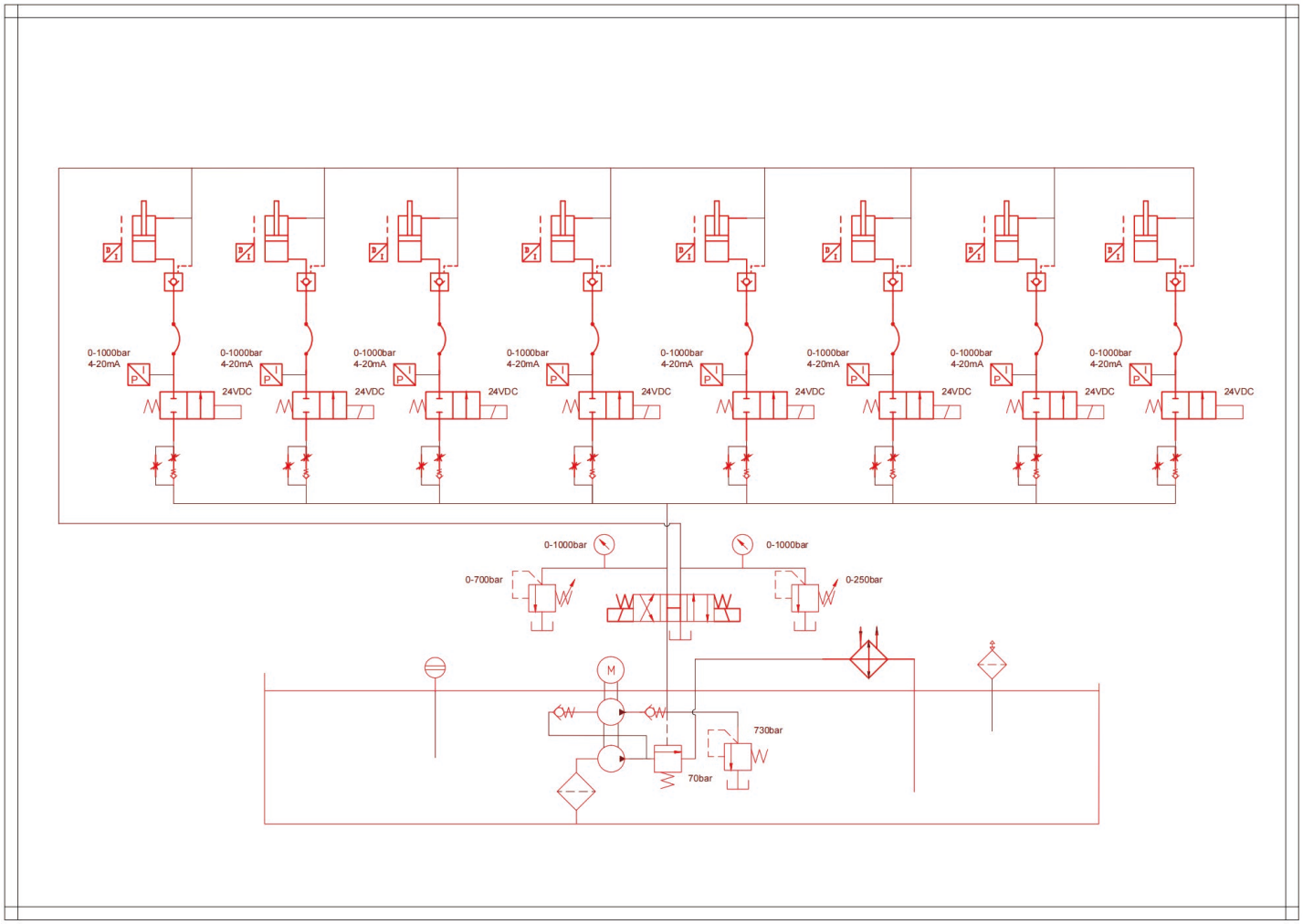
▼Control interface:





▼ Hydraulic schematic diagram:

4 point synchronous system hydraulic schematic diagram:



▼Product Renderings:







Synchronous Lifting System













▼ OSC Distributed Synchronous System



Technical Features:

•16/32-point control cabinet connected to sub-pump stations via power lines and communication lines, eliminating the need for long-distance hydraulic pipelines.

• Sub-pump stations can be used as independent pump stations, equipped with wire-controlled handles.

• Pump stations come standard with displacement sensors, pressure sensors, and storage boxes.

• 16-22 inch large-size touch screen.

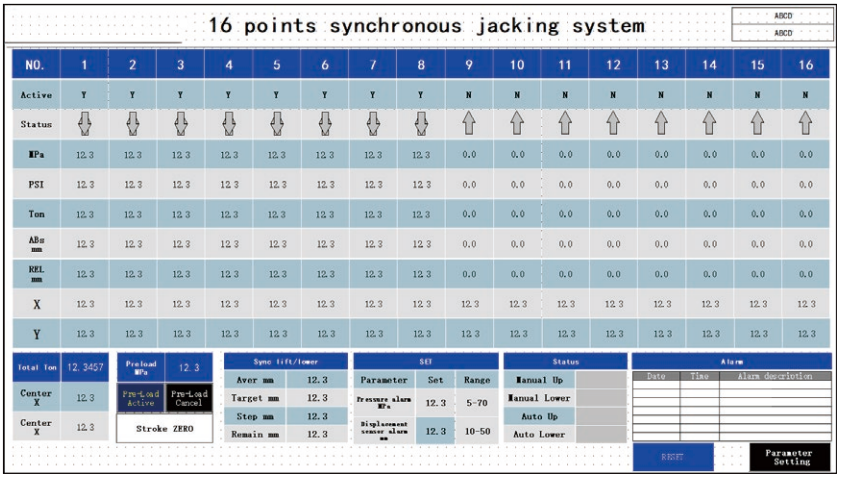
• Synchronous lifting / synchronous lowering / pressure sensor weighing analysis control program.

• Standard 50-meter power lines and communication lines, optional up to 100-meter cables.

• Multiple systems can be combined to achieve synchronous control systems with up to 128 points.

▼System Main Interface:





1.Any point can be selected for control.

2.Real-time display of pressure value, tonnage value, absolute and relative values of displacement sensors for each point

3.Manually input X and Y coordinate values for each control point.

4,Manual control: manual lifting / manual lowering.

5,Pre-lifting: set low pressure, after startup, the cylinder automatically stops when reaching the set pressure value, effectively contacting the load without moving it.

6.Automatic control: after setting the target position, automatically perform synchronous lifting / synchronous lowering work.

7.Weighing analysis: total tonnage calculation, automatic center of gravity analysis.

8.Other functions: pressure and displacement signal loss alarm, overpressure alarm, stroke over-tolerance alarm, etc.

▼Purchase Model Specification Table:

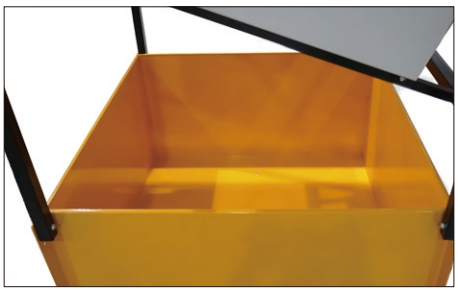
Item	Voltage	Phase	Motor(KW)	Flow rate (L/Min)	Oil available (L)	Points	Displacement Sensor	Cable Length (M)	Weight (KG)
OSC-16	380V	3	14	/	/	16	/	/	175
OSC-32	380V	3	28	/	/	32	/	/	200
OSC-3030EVB43R	380V	3	0.75	0.5	30	1	1000MM	/	93
OSC-PC-50	380V	3	/	/	/	1	/	50M	7
OSC-SC-50	/	/	/	/	/	1	/	50M	3
OSC-PC-100	380V	3	/	/	/	1	/	100M	14
OSC-SC-100	/	/	/	/	/	1	/	100M	6

▼OSC16/32:





16/32 sets of power plugs, 16/32 sets of communication line plugs



Cable Storage Box

▼OSC-3030EVB43R



Sub-pump Station OSC-3030EVB43R

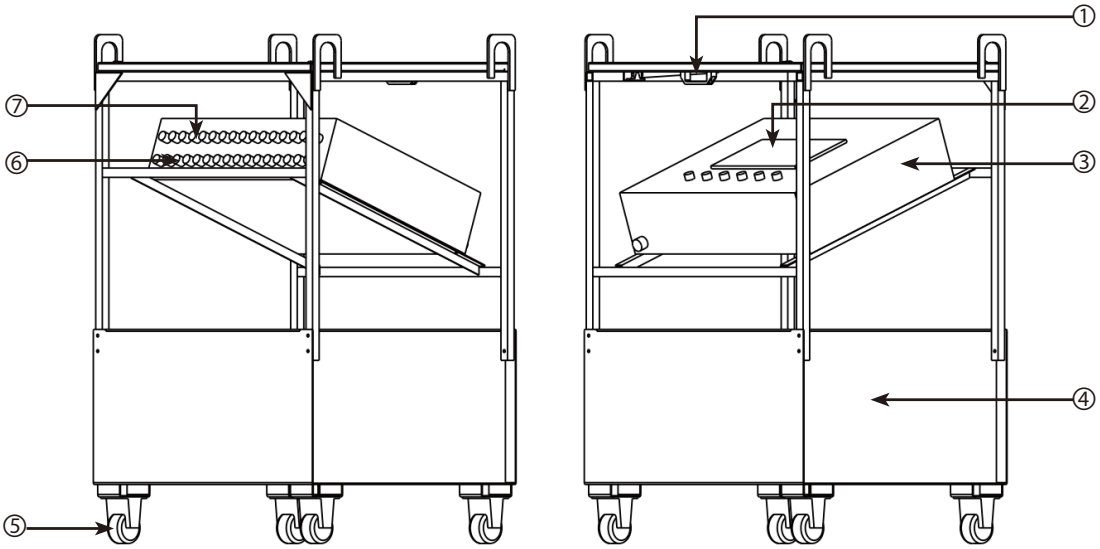
▼OSC-PC-50/100



▼OSC-SC-50/100

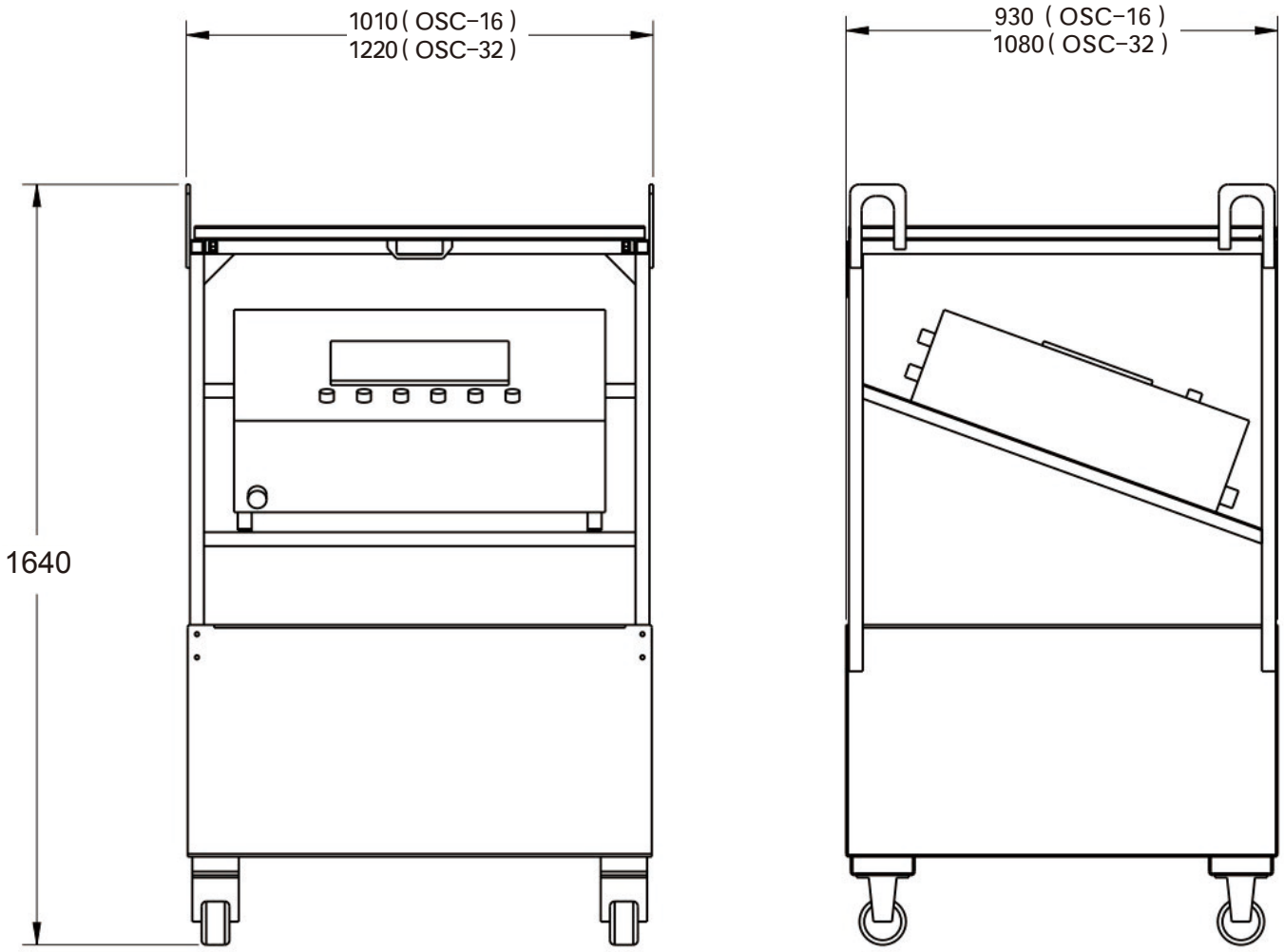


▼OSC-16 Product Illustration



NO	Name
1	Openable Protective Cover
2	16-inch Touch Screen
3	Electric Control Box
4	Cable Storage Box
5	Lockable Casters
6	16 Sets of Communication Line Plugs
7	16 Sets of Power Line Plugs

▼OSC Outline Dimensional Drawing:



▼ OSC-3030EVB43R Hydraulic Pumps



OSC-3030EVB43 hydraulic pumps

Maximum pressure: 70MPa

Motor size: 750W

High pressure flow: 0.5L/Min

Low pressure flow: 3.5L/Min

- IEC brushless motor, maintenance-free
- Gear pump and radial piston pump two-stage pump structure, high efficiency work
- Integral design of motor and pump head, light weight
- 75dB ultra-low noise
- Built-in safety valve, external adjustable relief valve
- Standard pressure gauge, oil outlet thread quick connector
- Standard visual oil level gauge, oil filler port air filter, oil drain port plug
- Standard 6-meter power line, 1000MM range displacement sensor with 10-meter cable, detachable 6-meter wire-controlled handle, 3-phase 4-core aviation plug

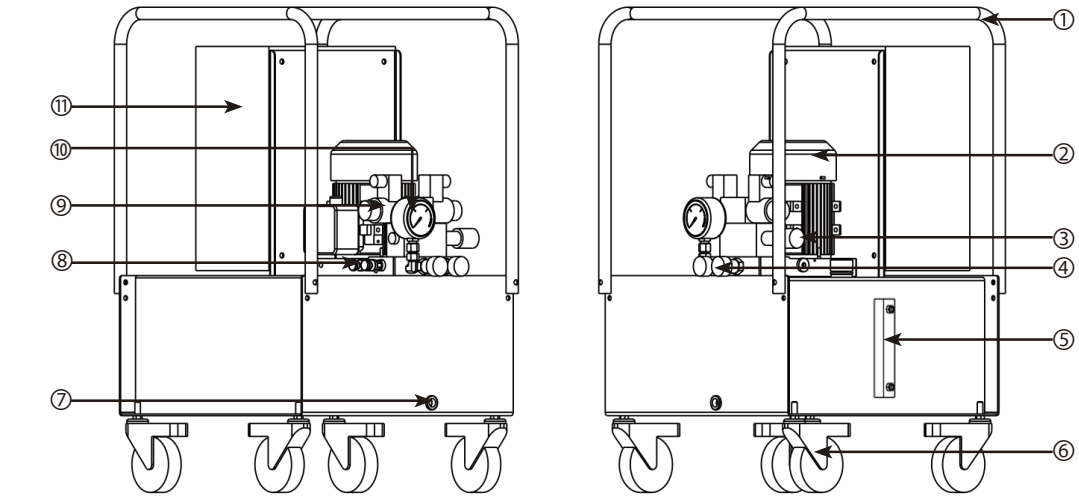
▼ OSC-3030EVB43R Product Specification Sheet

Model	Voltage	Motor Power	Reservoirs capacity	Power Phase	Low Pressure Flow	High Pressure Flow	Weight
OSC-3030EVB43R	380VAC	750W	30L	3PH	3.5L/Min	0.5L/Min	93KG

▼ Packaging list

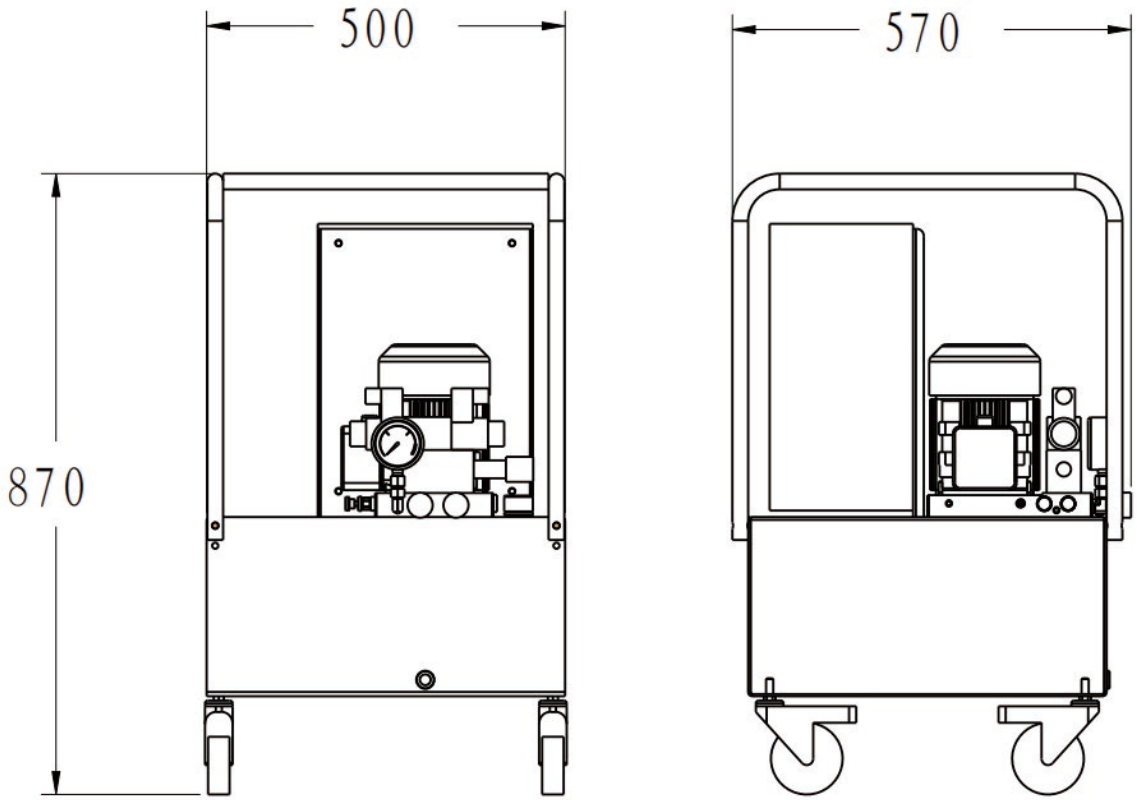
Name	Specification	Quantity
Power Cable	6M Cable	1
Displacement Sensor	1000MM Range	1
Displacement Sensor Cable	10M Cable	1
Wire-Controlled Handle	3-button Control, 6M Cable	1
Aviation Plug	3-phase 4-core	1
Matching Socket	-	1

▼ OSC-3030EVB43R Product Illustration

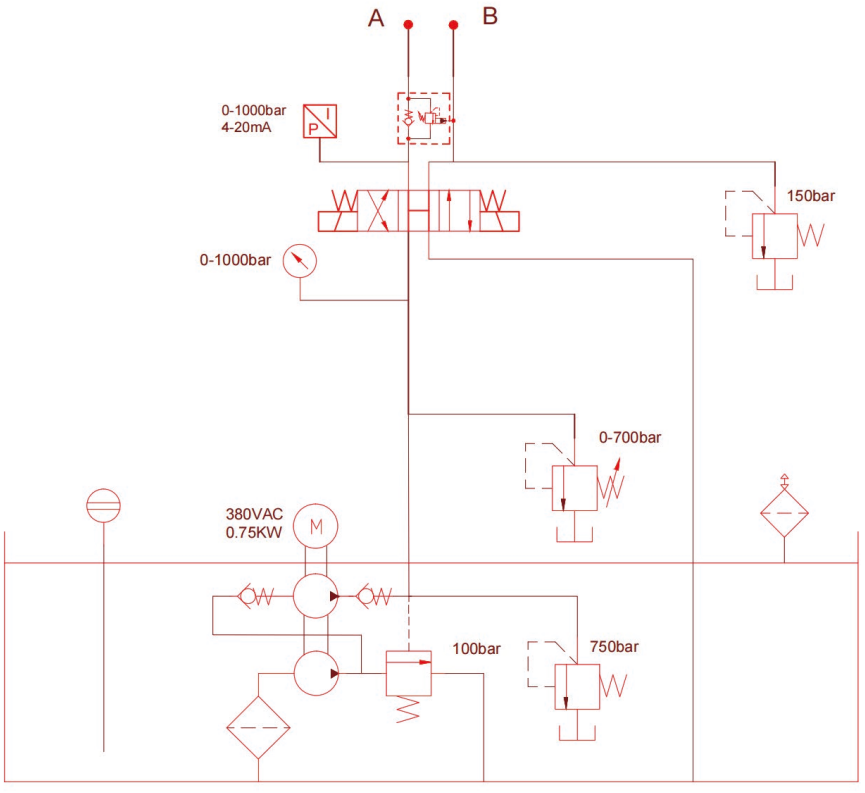


NO	Name
1	Protected Framework
2	Motor
3	Pressure Transducer
4	Couplers
5	Sight Glass
6	Lockable Casters
7	Oil Drain Port
8	Relief Valve
9	Solenoid Directional Valve
10	Pressure Gauge
11	Electric Box

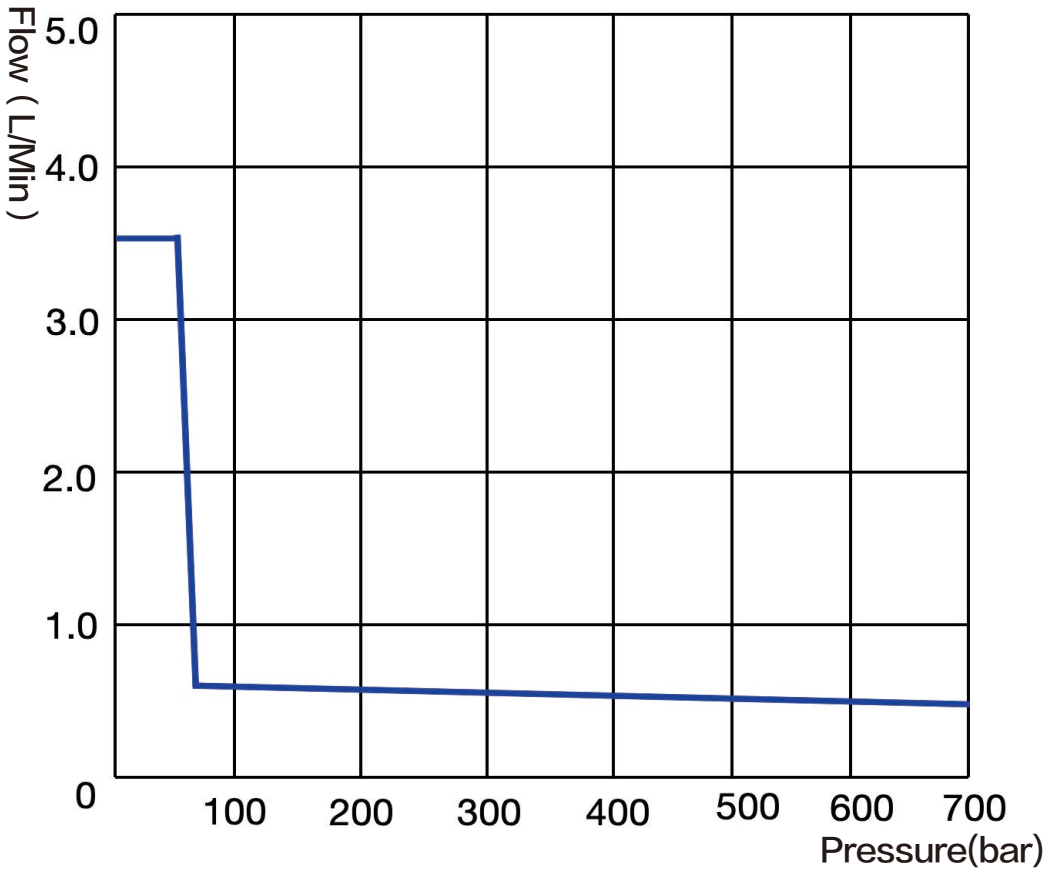
▼ OSC-3030EVB43R Outline Dimensional Drawing



▼ OSC-3030EVB43R Hydraulic Schematic Diagram



▼ OSC-3030EVB43R Flow-Pressure Curve



▼ Distributed Synchronous Top Ordering List

Model	Configuration	Order Quantity
OSC-16	Control program accurately controls equipment and improves operation efficiency; 16-point control cabinet is suitable for multiple positions and integrated to save space; cable storage box organizes cables for easy access.	
OSC-32	Control program accurately controls equipment and improves operation efficiency; 32-point control cabinet is suitable for multiple positions and integrated to save space; cable storage box organizes cables for easy access.	
OSC-3030EVB43R	Standard configuration includes 1000MM range displacement sensor and 10-meter cable to meet long-distance installation needs; detachable 6-meter wired remote control handle is flexible to operate.	
OSC-PC-50	It has 4-core aviation connector, 50M length; bayonet connection and three-point locking structure design ensure stable connection; engineering plastic shell is effectively corrosion-resistant.	
OSC-SC-50	It has 50M length; oxygen-free thickened copper core ensures stable transmission; multi-layer protective sleeve is waterproof, sun-proof, anti-freezing and anti-tensile.	
OSC-PC-100	It has 4-core aviation connector, 100M length; bayonet connection and three-point locking structure design ensure stable connection; engineering plastic shell is effectively corrosion-resistant.	
OSC-SC-100	It has 100M length; oxygen-free thickened copper core ensures stable transmission; multi-layer protective sleeve is waterproof, sun-proof, anti-freezing and anti-tensile.	

▼ PLC Servo Synchronous Hydraulic System



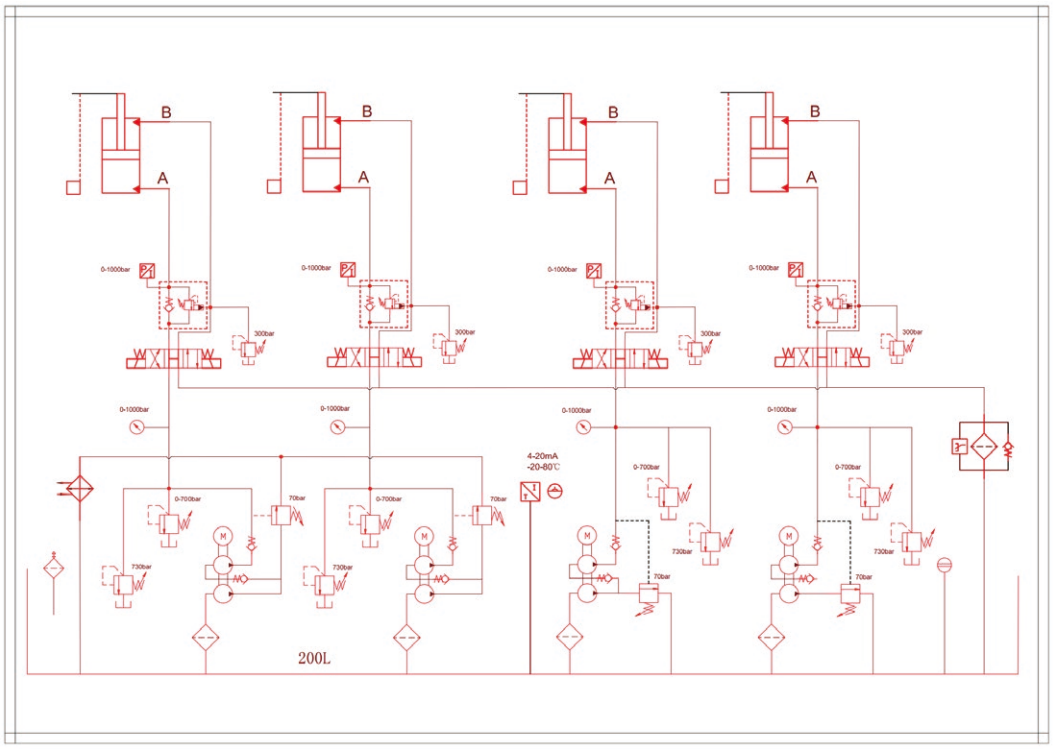
Technical features:

- Each point independent servo drive high pressure pump and valve group
- Continuous operation, no stuck, fast jacking speed
- Standard load balancing valve, high synchronous falling precision
- Speed continuously adjustable, stepless setting of running speed
- Pre-jacking, synchronous jacking, synchronous falling function
- Proportional slope displacement function, each point set the target displacement separately. The same proportion of operation
- Air cooled radiator, filter system
- Sensor parameter setting, pre-jacking tonnage setting, alarm pressure setting
- Overpressure alarm, overdifference alarm, sensor signal error alarm, displacement sensor overstroke alarm, servo alarm, liquid temperature level alarm
- Full protection frame, rain cover plate, forklift bottom, lifting lug
- Optional on-line control of multiple pump stations, Realize any combination of points

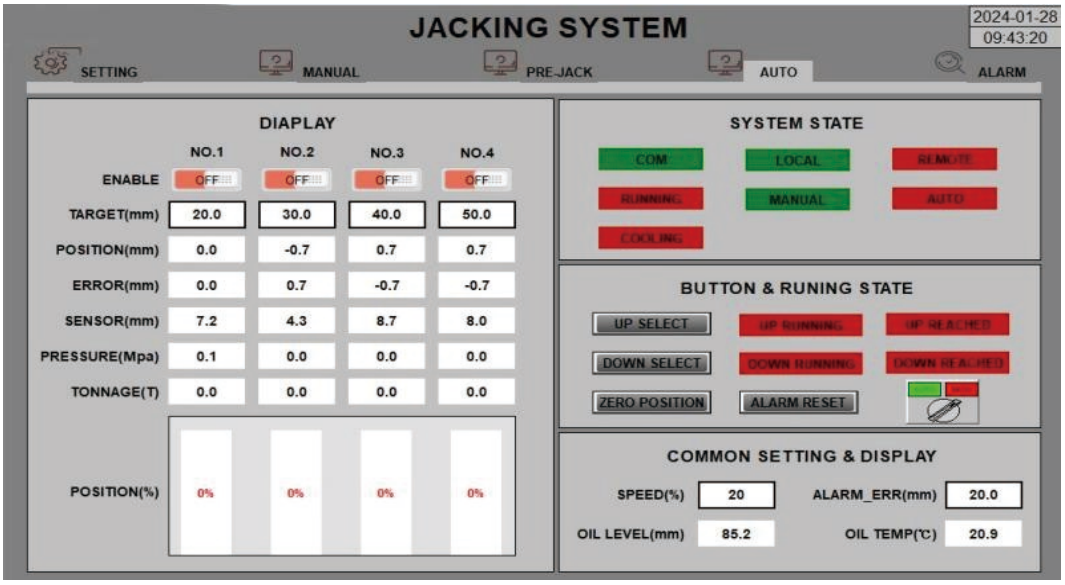
▼PLC Type Specification Sheet:

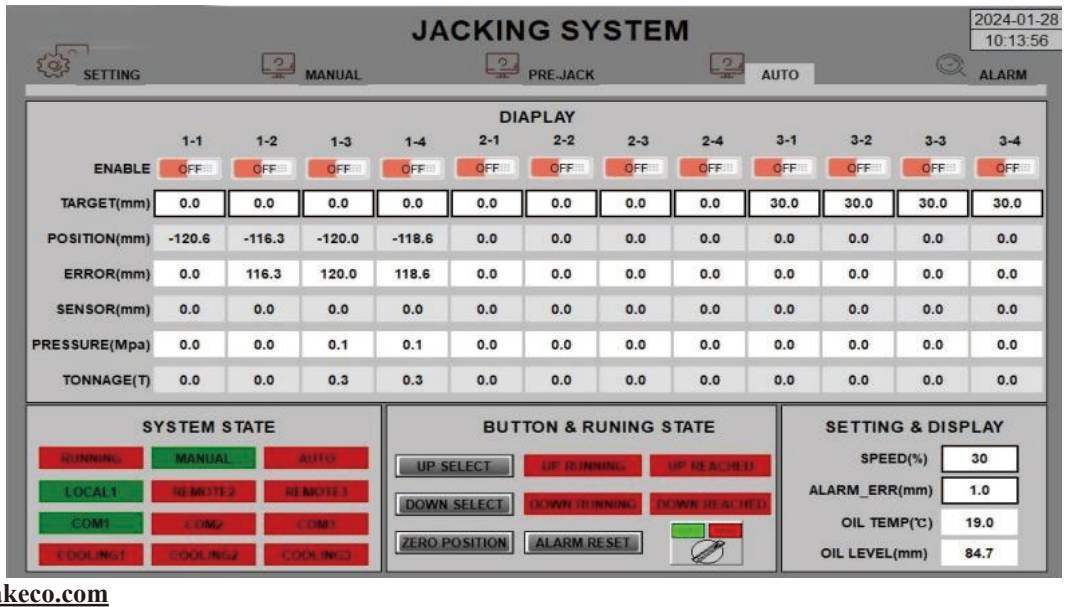
Model Number	Voltage (VAC)	Phase (PH)	power (KW)	Flow Rate (L/Min)	Reservoirs capacity (L)	Number of points	Displacement sensor range (MM)	Cable Length (M)	Function
HSE40120-4	230	1	1*4	0.5*4	120	4	1000	20	Pre-jacking/synchronous jacking/synchronous landing
HSE80120-4	380	3	3*4	1.5*4	120	4	1000	20	Pre-jacking/synchronous jacking/synchronous landing
HSE80200-8	380	3	3*8	1.5*8	200	8	1000	30	Pre-jacking/synchronous jacking/synchronous landing
HSE950200-4	380	3	5.5*4	2.7*4	200	4	1000	20	Pre-jacking/synchronous jacking/synchronous landing
HSE950300-8	380	3	5.5*8	2.7*8	300	8	1000	30	Pre-jacking/synchronous jacking/synchronous landing
HSE830120-4-3	380	3	3*12	1.5*12	120*3	4*3	1000	30	Three sets of 12-point joint control, independent

▼ PLC Servo Hydraulic Schematic Diagram:



▼ Operation main interface:





▼Typical products:





WLJ Wheeled Lifting Jack



Capacity: 60-200Ton

Stroke: 350-700mm

Maximum Pressure: 70MPa

- All cylinders adopt gas nitriding surface treatment for high corrosion resistance.
- Double-acting lock nut cylinders ensure safe and reliable operation.
- The lock nut is equipped with 4 manual levers for easy operation.
- Equipped with a spherical saddle and two extension rods of different lengths.
- Enlarged welded base ensures stability, suitable for off-road and unpaved surfaces.
- Covers various tonnage requirements from 60 tons to 200 tons.
- Equipped with a 10-meter manual or pneumatic remote control handle.
- Integrated design of pump body, oil tank and cylinder mounting base for stable structure.
- Electric pump, pneumatic hydraulic pump or lithium battery pump can be selected as power source.
- Equipped with solid rubber wheels, maintenance-free.
- Adjustable-angle transport handle for convenient packaging and transportation.

WJL Specification Table

Model	Capacity (Ton)	Stroke (mm)	Pump	Collapsed Height(mm)	Rod A(mm)	Rod B(mm)	MAX anvanced height (mm) (no rod/rod A/rod B)
WLJ60350E	60	350	HE4 electric pump	600	100	200	950/1050/1150
WLJ60350A	60	350	HA5 air driven pump	600	100	200	950/1050/1150
WLJ60350B	60	350	BPD battery pump	600	100	200	950/1050/1150
WLJ60700E	60	700	HE4 electric pump	950	200	400	1650/1850/2050
WLJ60700A	60	700	HA5 air driven pump	950	200	400	1650/1850/2050
WLJ60700B	60	700	BPD battery pump	950	200	400	1650/1850/2050
WLJ100400E	100	400	HE4 electric pump	660	100	200	1060/1160/1260
WLJ100400A	100	400	HA5 air driven pump	660	100	200	1060/1160/1260
WLJ100400B	100	400	BPD battery pump	660	100	200	1060/1160/1260
WLJ100700E	100	700	HE4 electric pump	960	200	400	1660/1860/2060
WLJ100700A	100	700	HA5 air driven pump	960	200	400	1660/1860/2060
WLJ100700B	100	700	BPD battery pump	960	200	400	1660/1860/2060
WLJ150400E	150	400	HE4 electric pump	660	100	200	1060/1160/1260
WLJ150400A	150	400	HA5 air driven pump	660	100	200	1060/1160/1260
WLJ150400B	150	400	BPD battery pump	660	100	200	1060/1160/1260
WLJ150700E	150	700	HE4 electric pump	960	200	400	1660/1860/2060
WLJ150700A	150	700	HA5 air driven pump	960	200	400	1660/1860/2060
WLJ150700B	150	700	BPD battery pump	960	200	400	1660/1860/2060
WLJ200400E	200	400	HE4 electric pump	660	100	200	1060/1160/1260
WLJ200400A	200	400	HA5 air driven pump	660	100	200	1060/1160/1260
WLJ200400B	200	400	BPD battery pump	660	100	200	1060/1160/1260
WLJ200700E	200	700	HE4 electric pump	960	200	400	1660/1860/2060
WLJ200700A	200	700	HA5 air driven pump	960	200	400	1660/1860/2060
WLJ200700B	200	700	BPD battery pump	960	200	400	1660/1860/2060

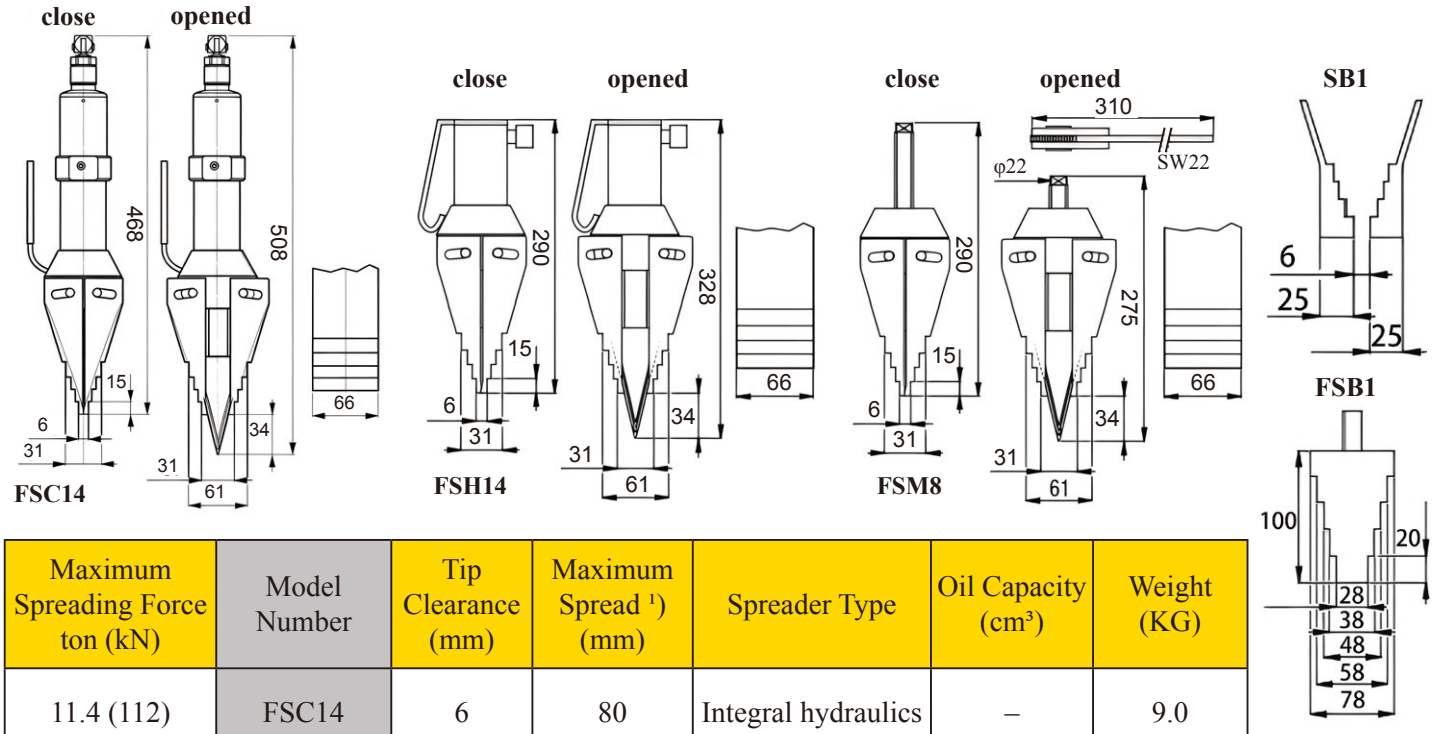
▼ FSC,FSM,FSH, Flange Spreading Wedges



Tip Clearance:	72-125 kN
Maximum Spread:	80mm
Max. Spread Force:	8-14Ton
Max. Operating Pressure:	70MPa

•Unique interlocking wedge design avoids initial bending and joint slippage risks
•Fits tight 6 mm clearance gaps
•Minimal moving parts for long service life and low maintenance
•SB1 safety block and FSB1 stepped Blocks included with FSC14, FSH14 & FSM8
•SW22 ratchet spanner supplied with FSM8 mechanical spreader
•Single-acting cylinder fitted with FSH14 hydraulic spreader
•FSC14 features an integrated hydraulic hand pump.Ready for immediate use without extra hydraulic connections.Compact unit delivering 14ttton force, operable from a minimal 6 mm clearance gap.

▼ Specifications Sheet



Maximum Spreading Force ton (kN)	Model Number	Tip Clearance (mm)	Maximum Spread [1]) (mm)	Spreader Type	Oil Capacity (cm^3)	Weight (KG)
11.4 (112)	FSC14	6	80	Integral hydraulics	–	9.0
12.7 (125)	FSH14	6	80	External hydraulics	78	7.1
7.3 (72)	FSM8	6	80	Mechanical	–	6.5

•Includes stepped blocks FSB-1

Flange Spreading Wedges

Flange spreaders are engineered to streamline flange joint maintenance work.
Traditionally, technicians rely on ropes, pulleys, pry bars, cable pullers and hammers to separate flanges. Our RIVERLAKE spreaders serve as a safer, faster and more efficient replacement.

These spreaders use mechanical and hydraulic principles for separating flanges and can spread small, medium or large flange joints. Tool selection is made on the basis of the access gap between the flange faces, the flange size and the required scope of work



AM-Series Control Manifolds
Designed for simultaneous and even spreading of flange joints when FSH14 spreaders are placed 180° apart.



Flange Maintenance Tools
Secure-Grip and Zero-Gap flange spreading tools intended for application on flanges with zero or small gap.



Two FSH14 flange spreaders used simultaneously with a RIVERLAKE hand pump, Hose 1 and AM21 manifold block.

▼Optional Kit

FSH14M



Packing List

Model Number	Product Description	Qty.
FSH14 Flange Spreading Wedges	Includes 1pc SB1 safety block and 1pc FSB1 stepped blocks	2
AM21-232-GA Ctntorl Manifolds	1-to-2 manifold block, with CEJN 232 quick couplings and pressure gauge display	1
P142	Hand Pump	1
HSP700PC-2-MM	70MPa hydraulic hose with PC cover, fitted with CEJN 232 male couplings at both ends, with a swivel fitting at one end for easy operation	2
Hard Plastic Case	Portable rigid plastic tool case	1

STF14H



Packing List

Model Number	Product Description	Qty.
FSH14 Flange Spreading Wedges	Includes 1pc SB1 safety block and 1pc FSB1 stepped blocks	1
P142GC	Hand Pump,Integrated with GA45GC for direct pressure reading	1
HSP700PC-2-MM	70MPa hydraulic hose with PC cover, fitted with CEJN 232 male couplings at both ends, with a swivel fitting at one end for easy operation	1
Hard Plastic Case	Portable rigid plastic tool case	1

RIVERLAKE
ultra high pressure hydraulic tools www.riverlakeco.com

▼ LW-Series, Hydraulic Vertical Lifting Wedges

Shown: LWC16, LW16 with SB2 and optional LWB1



Max. Lifting Force: 16T(157kN)

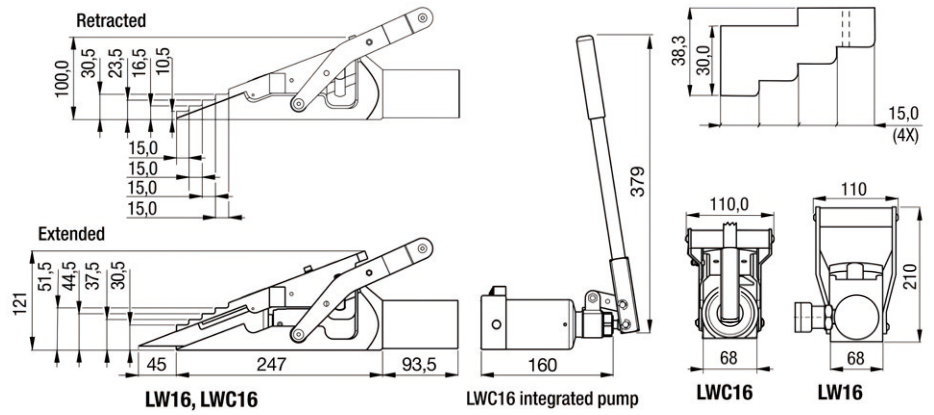
Minimum Clearance: 10mm

Maximum Lift Height: 51-69mm

Max. Operating Pressure:70MPa

- Integrated hand pump offers greater maneuverability (LWC16 only)
- Minimized access gap for greater accessibility on applications with limited insertion space
- Equipped with a red travel indicator that clearly shows the travel distance.
- Secure, stable lifting and lowering motion with no slippage
- Single-acting, spring-return cylinder allows for automatic, mechanical retraction
- Includes safety block SB2
- LW16 can be used in multiple set-up.

▼ Specifications Sheet



Max. Lifting Force ton (kN)	Model Number	Minimum Clearance Gap (mm)	Max. Lift per Stage (mm)	Max. Lifting Height (mm)	Max. Lifting Height using Stepped Block LWB1 (mm)	Oil Capacity (cm^3)	Pump Power Source	Weight (kg)
16 (157)	LW16[1])	10	21	51.5	69	78	External	7.0
	LWC16[2])					—	Integrated	10.0

[1]) Includes SB2.
[2]) Includes SB2, LWB1 and carrying case.



AM-Series Control Manifolds
Control manifold to operate two or four LW16 lifting wedges simultaneously.
AM21: 3 ports, 3/8" NPTF
AM41: 5 ports, 3/8" NPTF



Power Box
Tool box with hand pump, pressure gauge and adapter connector assembly, hose and LW16.

Model	Description	Qty.
P142GC	P142GC integrated with GA45GC for visible pressure reading	1
LW16	LW16 Lifting Wedges	1
HSP700PC -2-MM	70MPa high-pressure oil pipe, with PC protective sleeve, 2m long, with CEJN232 male connectors at both ends.	1
Portable hard plastic case		1

▼ FS-Series, Hydraulic Flange Spreaders



Capacity: 5 and 10Ton

Spread: 70-216mm

Max. Operating Pressure: 70MPa

- Friction-free, smooth and parallel wedge movement with unique interlock wedge design.
- Lightweight, ergonomic design for ease of use Adjustable jaw widths from 70 mm to 216 mm for a wide range of applications
- Single-acting, spring return RC-Series cylinders for fast trouble-free operation.

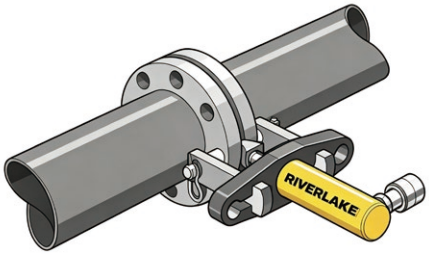


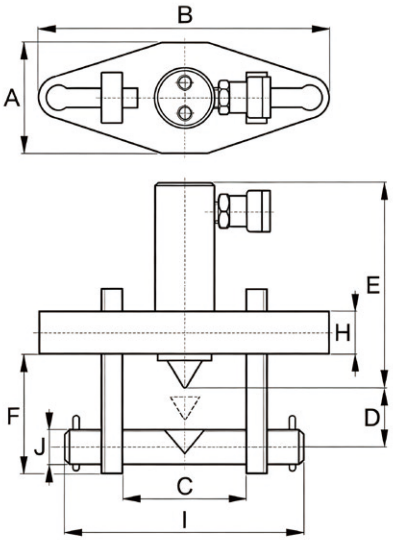
Tool-Pump Sets

Flange Spreaders are available as sets (pump, tool, gauge, gauge adaptor, couplers and hose) for your ordering convenience.

Spreader Model	Pump Model	Set Model
FS-56	P-392	**STF-56H**
FS-109	P-392	**STF-109H**
FS-109	PATG-1102N	**STF-109A**

▼ Specifications Sheet





▼ Flange Spreader Matching Chart

ASA Rating (bar)	Pipe Size (mm)	
	FS-56	FS-109
10	127 - 508	558 - 1066
20	63 - 355	406 - 711
27	63 - 304	355 - 609
35	63 - 254	304 - 508
62	12 - 152	203 - 406
103	12 - 88	101 - 203
172	12 - 63	76 - 101

Maximum Flange Thickness (mm)	Stud Size (mm)	Standard Wedge (mm)	Capacity (ton)	Stroke (mm)	Oil Capacity (cm^3)	Model Number	Dimensions (mm)										Weight (kg)
							A	B	C Min.	C Max.	D	E	F	H	I	J	
2 × 57	19 - 28	3-28	5	38	24.6	FS-56*	76	209	70	155	32	196	88	25	206	19	11.5
2 × 92	31 - 41	3-28	10	54	78.7	FS-109*	108	279	104	216	50	152	114	38	273	31	18.1

* Available as Tool-Pump Set, see note on this page.

▼ WR5 Hydraulic Wedgie and Spread Cylinders



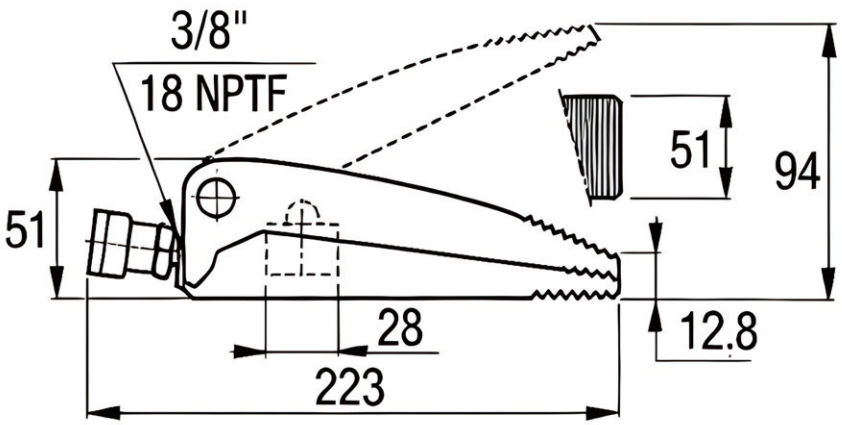
Capacity:	1.0Ton
Tip Clearance:	12.8mm
Maximum Spread:	94mm
Max. Operating Pressure:	70MPa

•Optimized for confined-space use: Ultra-slim wedge tip fits narrow gaps inaccessible to larger spreaders for flange separation, component lifting and working-clearance creation.
•Safe & easy operation: Single-acting spring-return design. Wedge tip auto-retracts upon pressure release for fast reset, no external operation needed.
•Lightweight & portable: Perfect for overhead, confined-space and remote-site work.
•Durable: Corrosion-resistant materials for harsh working conditions.



RC-Trio Series Cylinders
10 ton RC-Trio Series cylinders (except RC101) fit into A92 Spreader Attachment.

▼ WR5 Specifications Sheet



Cylinder Capacity ton (kN)	Tip Clearance (mm)	Model Number	Maximum Spread (mm)	Cylinder Effective Area (cm^2)	Oil Capacity (cm^3)	Weight (kg)
1.0 (8.9)	12.8	WR5	94	6.5	10	2.3



Power Box
Tool box with P392 hand pump, pressure gauge and adapter connector assembly, hose and LW16.

Model	Description	Qty.
P392GC	P392GC integrated with GA45GC for visible pressure reading	1
WR5	Hydraulic Vertical Lifting Wedges	1
HSP700PC-2-MM	70MPa high-pressure oil pipe, with PC protective sleeve, 2m long, with CEJN232 male connectors at both ends.	1
Portable hard plastic case		1

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▼ FA-Series, Flange Alignment Tools

Shown From top to bottom: FA9TE, FA1TM and FA4TM



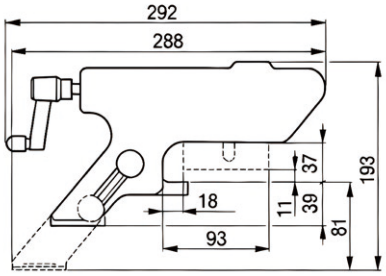
Max. Lifting Force:1-9(10-90kN)

Min. Bolt Size: 16-35.5mm

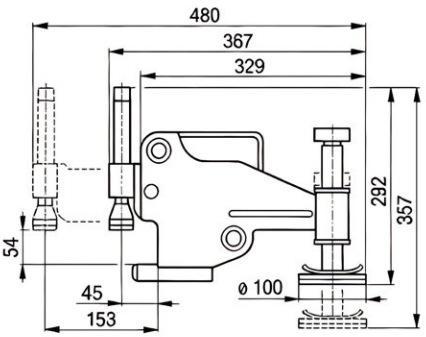
Flange Wall Thickness:14-228mm

•FA-Series Tools help correct flange misalignment, and allow bolts to be placed into joints. This alignment takes place during pipework construction, or maintenance.
•These tools provide pipe installers and maintenance personnel with some of the simplest, safest and most productive solutions available for flange alignment in the market today.
•Extendable wing provides usage on wide variety of flanges.
•Portable, lightweight design enables easy transport and use.
•Hand-adjustable base for easy positioning by a single operator.
•Safety strap helps provide secure operation from a horizontal or vertical position.

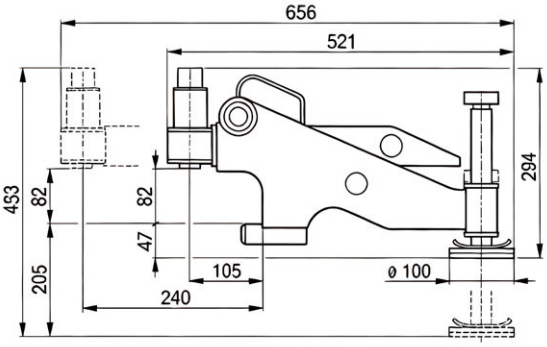
▼ Specifications Sheet



FA1TM



FA4TM

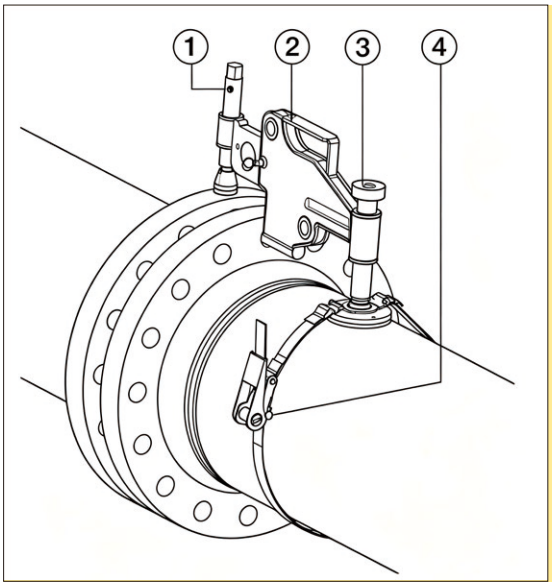


FA9TM

Maximum Lifting		Model Number	Minimum Bolt Size		Flange Wall Thickness		Weight (kg)
Force (ton)	Force (kN)		(mm)	(inch)	(mm)	(inch)	
1	10	FA1TMSTD	16	0.63	14- 82	0.55-3.29	1.6
4	40	FA4TMSTD	24	0.95	30-133	1.18-5.23	8.6
9	90	FA9TESTD	35.5	1.40	93-228	3.66-9.00	14.5



Adjustable Reach
The FA Series the faster, simpler and safer way to align flanges
The highly adjustable reach of the wing and drop leg on FA4TM and FA9TE allow precise alignment.



RIVERLAKE FA-Series flange alignment tools correct flange misalignment to facilitate bolt insertion into flange joints. They are widely applied to pipeline construction and maintenance projects.
For pipeline installers and maintenance staff, these tools deliver one of the simplest, safest and most efficient flange alignment solutions currently available on the market.

KEY FEATURES:

① Telescopic extendable wing fits a wide range of flange sizes
② Compact and lightweight design for easy transport and on-site operation
③ Manually adjustable base allows single-person positioning
④ Built-in safety strap ensures stable operation in horizontal or vertical working positions

▼Optional Kit

FA4TMSTD



Packing List

Model Number	Product Description	Qty.
FA4TM	Hydraulic Flange Alignment Tool	1
Ratchet Handle	-	1
Safety Strap	-	1
Hard Plastic Case	Portable rigid plastic tool case	1

FA9TESTD



Packing List

Model Number	Product Description	Qty.
FA9TE	Hydraulic Flange Alignment Tool	1
P142GC	Hand Pumpwith CEJN 232 quick couplings and pressure gauge display	1
HSP700PC-2-MM	70MPa hydraulic hose with PC cover, fitted with CEJN 232 male couplings at both ends, with a swivel fitting at one end for easy operation	1
Safety Strap	-	1
Hard Plastic Case	Portable rigid plastic tool case	1

▼ SWI-Series, Flange Spreading Tools



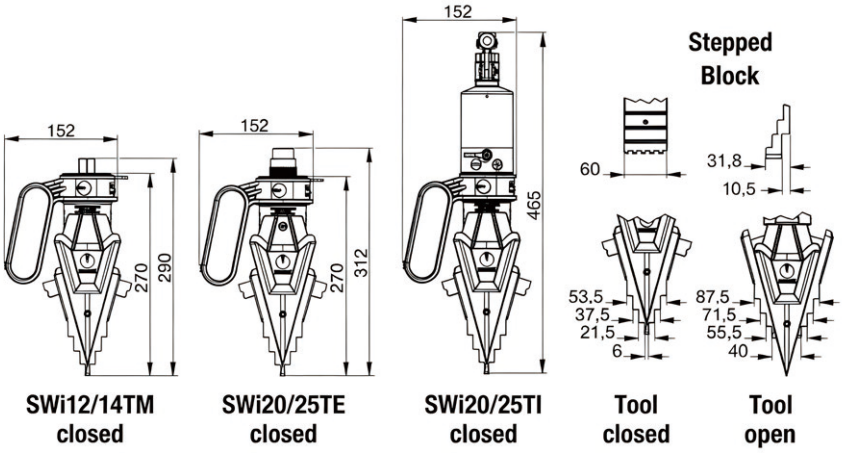
Max. Lifting Force: 140/240kN

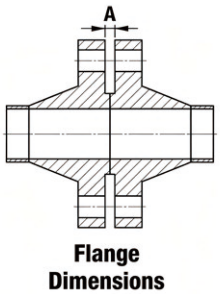
Spreading Distance: 103.5mm

Max. Operating Pressure: 700 bar

- Practical, portable and lightweight. The practical portable design reduces operator fatigue and allows easy transport in tool bags or small carrying cases.
- Self-contained hydraulic system eliminates hose management and leak points, enhancing efficiency and safety on every job.
- Revolving handle to aid horizontal or vertical spreading.
- Removable handle for improved access.
- No finger pinch-point.
- Increased step-depth on upper steps.
- 1.0-meter safety lanyard prevents accidental drops when working at height or over open structures.
- Forged key load-bearing components deliver exceptional strength and long-term reliability under repeated use.
- Rapid disassembly and assembly for cleaning, inspection, or parts replacement — minimizing downtime and simplifying maintenance.
- Narrow jaw teeth improve tool wear, extending service life even on rough, corroded, or painted flange surfaces.

▼ Specifications Sheet





Model Number Tool Kit	Type	Maximum Spreading Force Per Tool (kN)	Maximum Spreading Distance * (mm)	Flange Dimensions Minimum Access Gap A (mm)	Jaw Width (mm)	Tool Weight (kg)	Kit Weight (kg)	Case Dimensions (mm)	Tool Number
SWi1214TMSTDSPB	Mechanical	140	103.5	6	60	6.2	13	580 x 330 x 165	SWi12/14TM
SWi2025TEMINSPB	External Hydraulic	240	103.5	6	60	6.4	11.6	580 x 330 x 165	SWi20/25TE
SWi2025TESTDSPB	External Hydraulic	240	103.5	6	60	6.4	20.7	920 x 500 x 205	SWi20/25TE
SWi2025TEMAXSPB	External Hydraulic	240	103.5	6	60	6.4	33	920 x 500 x 205	SWi20/25TE
SWi2025TISTDSPB	Integral Hydraulic	240	103.5	6	60	8.5	13.8	580 x 330 x 165	SWi20/25TI

* Using stepped blocks.

CAUTION:A minimum of two Flange Spreading Tools must be used when opening flange joints. This will enable the operator to maintain an equal spreading distance across the flange faces.

Product Image	Product Series	Kit Name	Kit Contents	QTY.
	**SWi1214TMSTDSPB** Mechanical Flange Spreading Wedge	SWi12/14TM STD Kit	SWi12/14TM Flange Spreading Tool	1
			Torque Wrench with 22 mm Socket	1
			Set of Safety Blocks	1
			Pair of Stepped Blocks	1
			Lanyard	1
			Hex Key	1
			Plastic Carry Case	1
	**SWi2025TEMINSPB** Hydraulic Flange Spreading Wedge	SWi20/25TE MIN Kit	SWi20/25TE Flange Spreading Tool	1
			Set Safety Blocks	1
			Pair of Stepped Blocks	1
			Lanyard	1
			Hex Key	1
			Plastic Carry Case	1
	**SWi2025TESTDSPB** Hydraulic Flange Spreading Wedge	SWi20/25TE STD Kit	SWi20/25TE Flange Spreading Tool	1
			700 bar Hydraulic Hose, 2m with 90° Rotary joint	1
			700 bar Hand Pump with Gauge	1
			Set Safety Blocks	1
			Pair of Stepped Blocks	1
			Lanyard	1
			Hex Key	1
			Plastic Carry Case	1
	**SWi2025TEMAXSPB** Hydraulic Flange Spreading Wedge	SWi20/25TE MAX Kit	SWi20/25TE Flange Spreading Tools	2
			700 bar Hydraulic Hoses, 2m with 90° Rotary joint	2
			700 bar Hand Pump with Gauge	1
			Set Safety Blocks	2
			Pair of Stepped Blocks	2
			Lanyards	2
			Hex Keys	2
			Plastic Carry Case	1
	**SWi2025TISTDSPB** Integral Hydraulic Flange Spreading Wedge	SWi20/25TI STD Kit	SWi20/25TI Flange Spreading Tool	1
			Set of Safety Blocks	1
			Pair of Stepped Blocks	1
			Lanyard	1
			Hex Key	1
			Carry-Strap	1
			Plastic Carry Case	1

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▼ SG-Series, Flange Spreading Tools

Shown From top to bottom: SG13TE



Spreading Force: 37.0-150.0kN

Spreading Distance: 0-115mm

Max. Operating Pressure: 700 bar

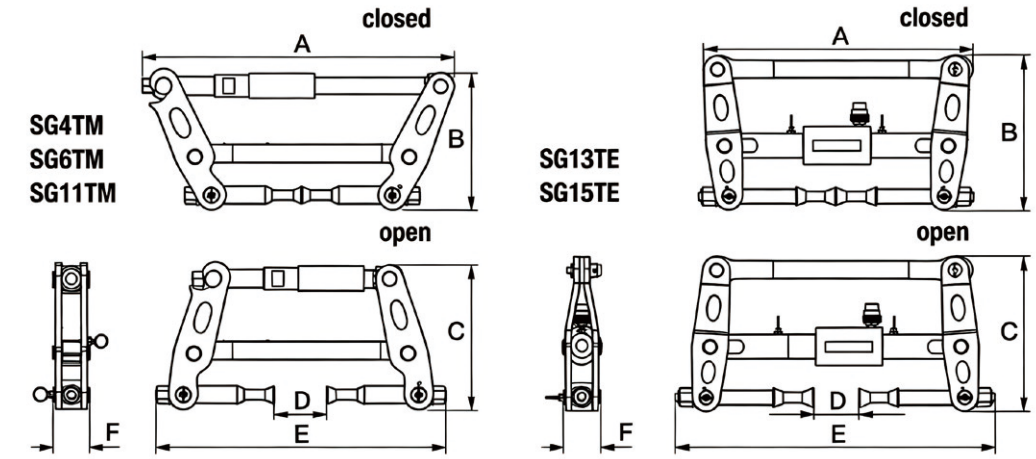
- Suitable for use on all flange types with bolt-hole sizes from 17.5 mm to 62.0 mm
- Features unique expanding collet technology
- Requires little or no access gap
- Equipped with a secure bolt-hole locking mechanism

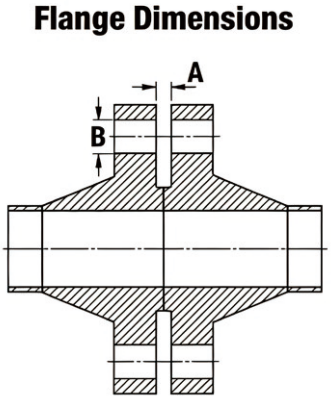
OPERATING BENEFITS

- Time-saving and simple to operate
- Provides measurable, controlled flange spreading force.

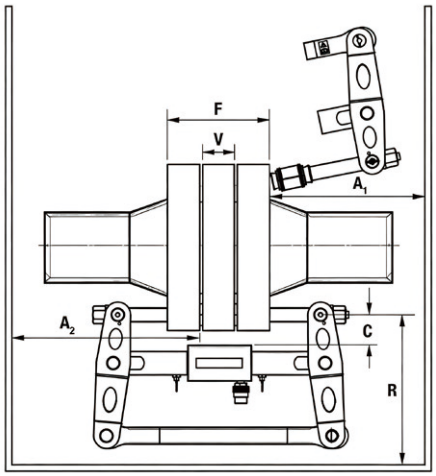
CAUTION

A minimum of two Flange Spreading Tools must be used when opening flange joints. This will enable the operator to maintain an equal spreading distance across the flange faces.





Model Number Tool Kit	Type*	Max. Spreading Force Per Tool (kN)	Spreading Distance Maximum (mm)	Flange Dimensions		Tool Dimensions						Tool Weight (kg)	Kit Weight (kg)	Tool Number
				Min. Access Gap A	Bolt-hole Diameter B	A	B	C	D	E	F			
SG4TMSTD	M	37.0	75	0	17.5 - 23	398	190	182	75	385	48	4.5	12.8	SG4TM
SG6TMSTD	M	60.0	80	0	24 - 30	468	245	252	80	444	52	7.5	16.0	SG6TM
SG11TMSTD	M	110.0	90	0	30 - 39	516	250	263	90	462	60	10.5	20.0	SG11TM
SG13TESTD	H	130.0	115	0	38 - 49	516	303	314	115	630	72	21.5	40.5	SG13TE
SG15TESTD	H	150.0	100	0	47.5 - 62	600	346	380	100	720	80	26.0	45.0	SG15TE



*Short Collet Holder Kits (SCH) are available which can offer improved range of application.

Model Number	Flange Joint Thickness F			Valve / Spacer Thickness V			Flange Clearance C		Radial Space R		Axial Space (for installation) A_1		Axial Space (installed) A_2	
	Min. (mm)	Max. (mm)	Measured: From / To	Min. (mm)	Max. (mm)	Measured: From / To	Max. (mm)	Measured: From / To	Min. (mm)	Measured: From / To	Min. (mm)	Measured: From / To	Min. (mm)	Measured: From / To
SG4TMSTD	60	185	Outside face of flange	0*	45*	Inside face of flange	50	Bolt-hole circle / Largest OD of valve/ spacer	170	Bolt-hole circle / Closest obstruction	170	Outside face of flange	200	Inner face of flange / Closest obstruction
SG6TMSTD	60	210		0*	50*		55		230		200		234	
SG11TMSTD	96	240		0*	60*		60		240		223		258	
SG13TESTD	120	310		0*	95*		70		280		310		260	
SG15TESTD	140	400		0*	80*		80		370		380		315	

SG4TM MECHANICAL TOOL KIT



1 x SG4TM Tool
1 x 150 mm Vernier Calliper
1 x 3/8" Drive Torque Wrench and 16 mm Socket
1 x Safety Block
2 x M16 (5/8") Collets
2 x M20 (3/4") Collets
1 x Aluminium Carry Case with Protective Foam Inserts

SG6TM MECHANICAL TOOL KIT



1 x SG6TM Tool
1 x 150 mm Vernier Calliper
1 x 3/8" Drive Torque Wrench and 21 mm Socket
1 x Safety Block
2 x M24 (7/8") Collets
2 x M27 (1") Collets
1 x Aluminium Carry Case with Protective Foam Inserts

SG11TM MECHANICAL TOOL KIT



1 x SG11TM Tool
1 x 150 mm Vernier calliper
1 x 1/2" Drive torque wrench and 24 mm socket
1 x Safety block
2 x M30 (1-1/8") Collets
2 x M33 (1-1/4") Collets
2 x M36 (1-3/8") Collets
1 x Aluminium Carry Case with Protective Foam Inserts

SG13TE HYDRAULIC TOOL KIT



1 x SG13TE Tool
1 x 700 bar HP550S Single Port Sealed Hand Pump with Gauge
1 x 700 bar Hydraulic Hose, 2 m
1 x 150 mm Vernier Calliper
1 x 1/2" Square Drive Flexible Handle
1 x 30 mm Socket
1 x Safety Block
2 x M39 (1-1/2") Collets
2 x M42 (1-5/8") Collets
2 x M45 (1-3/4") Collets
1 x Aluminium Carry Case with Protective Foam Inserts

SG15TE HYDRAULIC TOOL KIT



1 x SG15TE Tool
1 x 700 bar HP550S Single Port Sealed Hand Pump with Gauge
1 x 700 bar Hydraulic Hose, 2 m
1 x 300 mm Vernier Calliper
1 x 1/2" Square Drive Flexible Handle
1 x 36 mm Socket
1 x Safety Block
2 x M48 (1-7/8") Collets
2 x M52 (2") Collets
2 x M56 (2-1/4") Collets
1 x Aluminium Carry Case with Protective Foam Inserts

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▼ SG Series Secure-Grip Flange Spreaders

Shown From top to bottom: SG18TE, SG25TE



Spreading Force: 180-250kN

Spreading Distance: 0-115mm

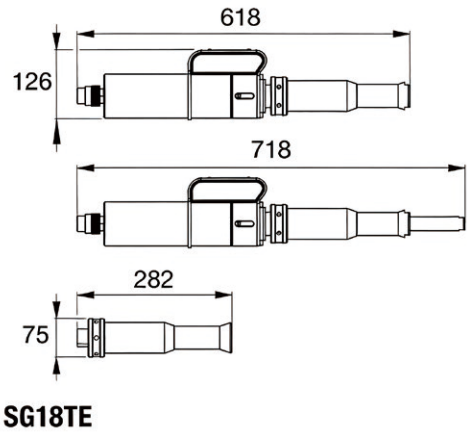
Max. Operating Pressure: 700 bar

- Applicable for larger-sized flanges
- Actuated by an external hand pump
- Suitable for bolt holes from 59,5 to 108 mm.

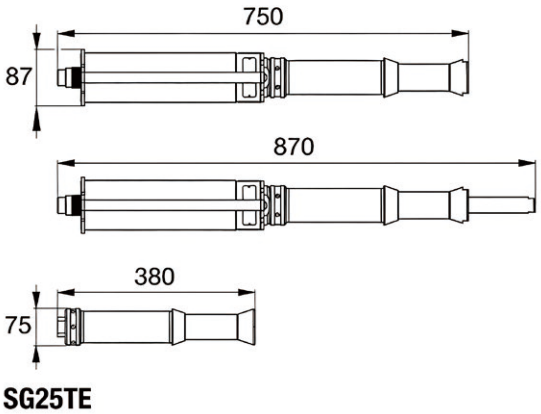
CAUTION

A minimum of two Flange Spreading Tools must be used when opening flange joints. This will enable the operator to maintain an equal spreading distance across the flange faces.

▼ Specifications Sheet

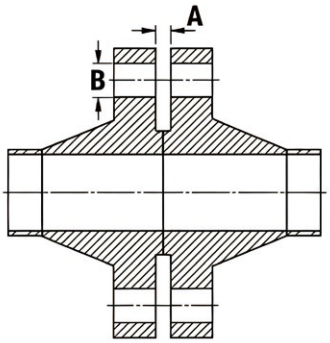


SG18TE

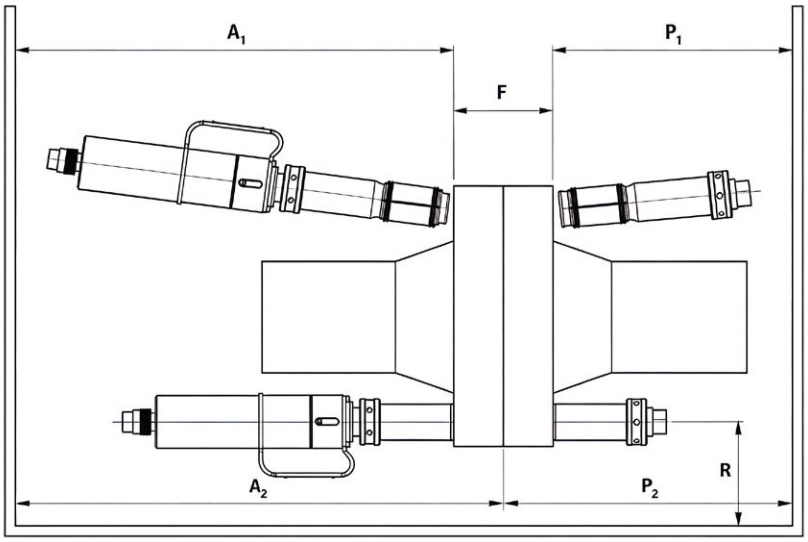


SG25TE

Flange Dimensions



Model Number Tool Kit	Type	Maximum Spreading Force Per Tool (kN)	Spreading Distance Maximum (mm)	Minimum Access Gap A (mm)	Bolt-hole Diameter B (mm)	Tool Weight (kg)	Kit Weight (kg)	Case Dimensions (mm)	Tool Number
SG18TESTD	Hydraulic	180.0	100	0	59.5 - 75	14	45	890 x 570 x 165	SG18TE
SG25TESTD	Hydraulic	250.0	120	0	75 - 108	24	50	890 x 570 x 165	SG25TE



Model Number Tool Kit	Flange Joint Thickness F			Radial Space R		Axial Space (for installation) A1		Axial Space (installed) A2		Axial Plug Space (for installation) P1		Axial Plug Space (installed) P2	
	Min (mm)	Max (mm)	Measured: From/To	Min (mm)	Measured: From / To	Min (mm)	Measured: From / To	Min (mm)	Measured: From / To	Min (mm)	Measured: From / To	Min (mm)	Measured: From / To
SG18TESTD	190	450	Outside face of flange / Outside face of flange	55	Bolt-hole circle / Closest obstruction	620	Outside face of flange / Closest obstruction	900	Inner face of flange / Closest obstruction	283	Outside face of flange/ Closest obstruction	283	Inner face of flange / Closest obstruction
SG25TESTD	210	570		55	Bolt-hole circle / Closest obstruction	750		1100		380	Outside face of flange/ Closest obstruction	380	Inner face of flange / Closest obstruction

SG18TESTD HYDRAULIC TOOL KIT



1xSG18TE Tool
1xSpreading Plug
1x700 bar HP550S Single Port Sealed Hand Pump with Gauge
1x700 bar Hydraulic Hose, 2 m
1x300 mm Vernier Calliper
1x12,5 mm Spacer Plate
1x5 mm Allen Key
1x50 mm Spacer
1xSafety Block
2xM60 (2-3/8") Collets
2xM64 (2-1/2") Collets
2xM70 (2-3/4") Collets
1xAluminium Carry Case with Protective Foam Inserts

SG25TESTD HYDRAULIC TOOL KIT



1xSG25TE Tool
1xSpreading Plug
1x700 bar HP550S Single Port Sealed Hand Pump with Gauge
1x700 bar Hydraulic Hose, 2 m
1x300 mm Vernier Calliper
1x12,5 mm Spacer Plate
1xSafety Block
1xAluminium Carry Case with Protective Foam Inserts

▼ SG25TE Thimble（Supplied separately）

Model Number	Description
673601-01	2x M76 (3") Collets
674801-01	2x M90 (3-1/2") Collets
673901-01	2x M80 (3-1/4") Collets
675101-01	2x M95 (3-3/4") Collets
674501-01	2x M84 (3-3/8") Collets
675601-01	2x M100 (4") Collets