

## ▼ HCL Single-Acting Nut Locking High-Tonnage Cylinder

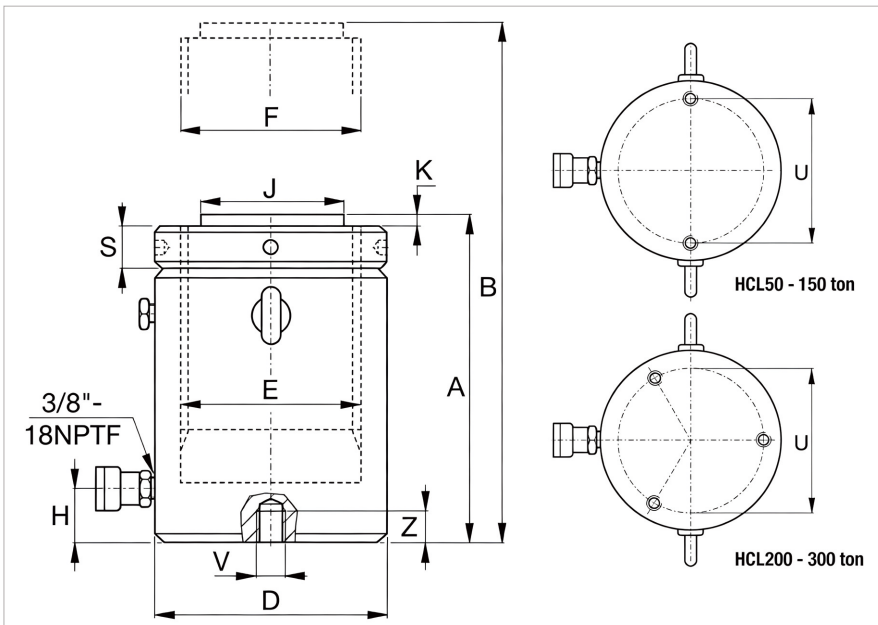


### HCL Series

Rated Pressure: 70MPa

Rated Tonnage : 50 -1000ton

Stroke Range: 50-300mm

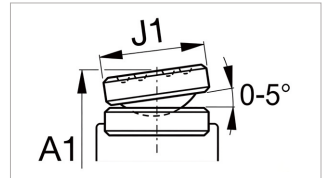


Bottom Mounting Hole					
Model/ Capacity ton	Bolt Pitch Circle Diameter U (mm)	Thread Size V	Min. Thread Depth Z (mm)	Hole Qty.	Angle From Coupler
HCL50	105	M8 x1.25	10	2	90°
HCL100	150	M12 x1.75	17	2	90°
HCL150	185	M12 x1.75	22	2	90°
HCL200	215	M12 x1.75	22	3	60°
HCL250	245	M12 x1.75	22	3	60°
HCL300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

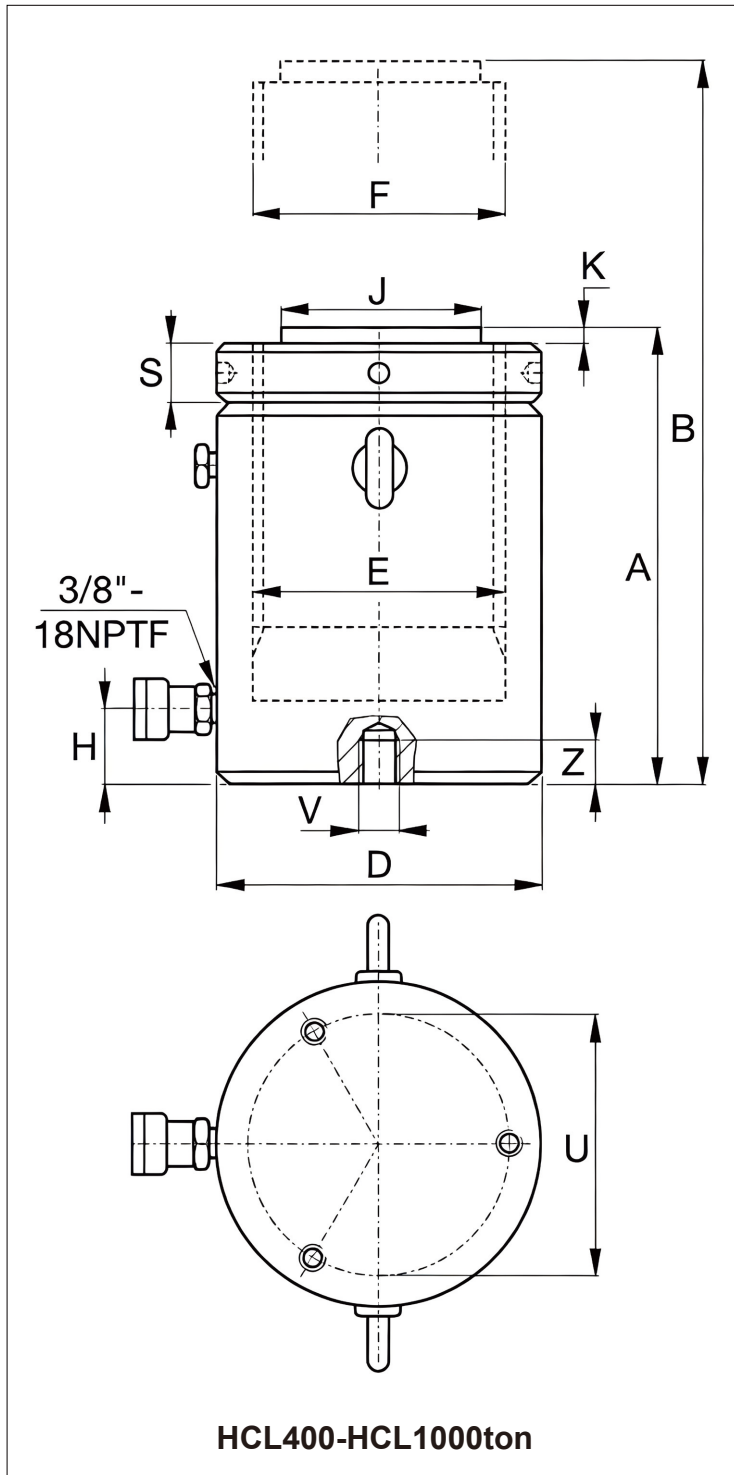
Load Capacity (ton)	Stroke (mm)	Model	Max. Cylinder Capacity (ton (kN))	Effective Area (cm <sup>2</sup> )
50	50	HCL502	56 (550)	78.5
50	100	HCL504	56 (550)	78.5
50	150	HCL506	56 (550)	78.5
50	200	HCL508	56 (550)	78.5
50	250	HCL5010	56 (550)	78.5
50	300	HCL5012	56 (550)	78.5
100	50	HCL1002	102 (1002)	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
- Hardened and reinforced plunger surface resists eccentric load and long-term cyclic wear
- 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

※Optional Tilt Saddle



	Oil Capacity (cm <sup>3</sup> )	Retracted 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



## HCL Series



**Rated Tonnage: 400 -1000ton**

**Stroke Range: 50-300mm**

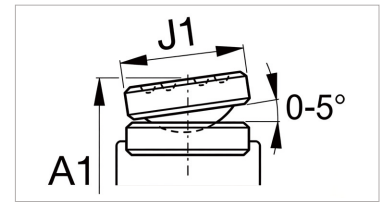
Load Capacity (ton)	Stroke (mm)	Model	Max. Cylinder Capacity (ton (kN))	Effective Area (cm <sup>2</sup> )
400	50	HCL4002	409 (4008)	572.6
400	100	HCL4004	409 (4008)	572.6
400	150	HCL4006	409 (4008)	572.6
400	200	HCL4008	409 (4008)	572.6
400	250	HCL40010	409 (4008)	572.6
400	300	HCL40012	409 (4008)	572.6
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
- The plunger surface is hardened and reinforced to resist eccentric load stress and long-term cyclic wear
- 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

※Optional Tilt Saddle



Oil Capacity (cm <sup>3</sup> )	Retracted 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