

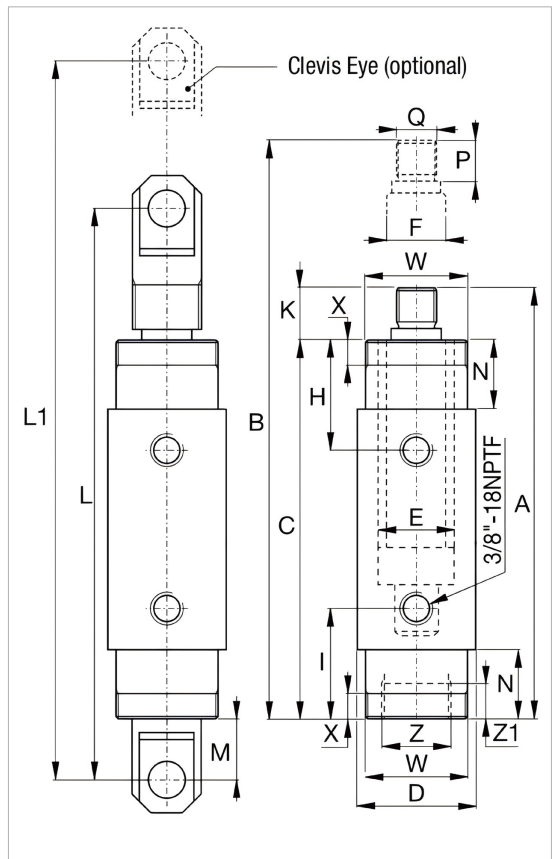
## ▼ RD Precision Production Cylinder



Rated Pressure: 70MPa

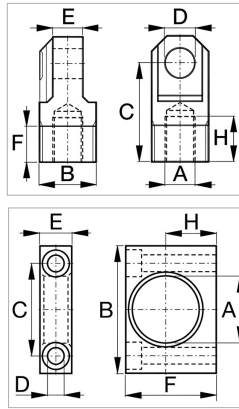
Rated Tonnage: 4-23ton

Stroke Range: 28-260mm



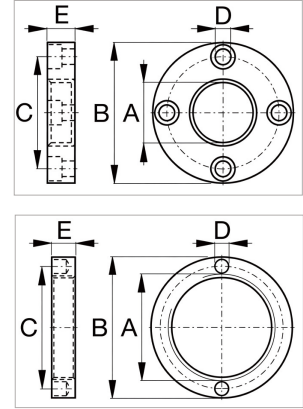
- Designed for long service life, ideal for production applications
- Unique mounting configurations simplify fixturing
- The cylinder body adopts gas nitriding and post-oxidation surface treatment processes, with the outer surface finished by painting, delivering superior corrosion resistance.
- Double-acting 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)		Cylinder Effective Area (in <sup>2</sup> )		Oil Volume (in <sup>3</sup> )		Retracted Height A (in)	Extended Height B (in)	Cylinder Length C (in)	Outer Dia. D (in)	Cylinder 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.

Foot Mounting  
Mounts onto  
cylinder collar.



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 with Retainer Nut		Dimensions (in)						
Model	BRD Cylinder (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	BRD Cylinder (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	BRD Cylinder (tons)	A	B	C	D	E	F	H
AD-143	4	1 <sup>3</sup> / <sub>8</sub> "-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	2 <sup>5</sup> / <sub>8</sub> "-16	3.63	3.12	0.27	0.75	-	-
AD-193	25	3 <sup>1</sup> / <sub>4</sub> "-16	4.25	3.75	0.27	1.00	-	-
Clevis Eye		Dimensions (in)						
Model	BRD Cylinder (tons)	A	B	C	D	E	F	H
AD-150	4	1/2"-20	1 <sup>1</sup> / <sub>8</sub> "-20	1.12	0.63	0.63	0.75	0.94
AD-151	9	3/4"-16	1 <sup>11</sup> / <sub>16</sub> "-18	1.31	0.75	1.00	1.00	0.94
AD-152	16	1 <sup>1</sup> / <sub>8</sub> "-12	2 <sup>3</sup> / <sub>16</sub> "-16	1.88	1.00	1.25	1.00	1.19
AD-153	25	1 <sup>1</sup> / <sub>2</sub> "-12	2 <sup>3</sup> / <sub>4</sub> "-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 (in)	Plunger Thread Len. P (in)	Plunger Male Thread Len. Q	Cylinder Mount Dia.(in)				Weight (lbs)	Model
						Outer Ring Thread	uter Ring Thread Len.	Base Female Thread Len.	Base Thread Len.		
						W	X	Z	Z1		
1.84	1.84	0.94	1.13	0.75	1/2"-20	1 <sup>3</sup> / <sub>8</sub> "-12	0.44	1 <sup>1</sup> / <sub>8</sub> "-20	0.35	4.8	RD41
1.84	1.84	0.94	1.13	0.75	1/2"-20	1 <sup>3</sup> / <sub>8</sub> "-12	0.44	1 <sup>1</sup> / <sub>8</sub> "-20	0.35	6.4	RD43
1.84	1.84	0.94	1.13	0.75	1/2"-20	1 <sup>3</sup> / <sub>8</sub> "-12	0.44	1 <sup>1</sup> / <sub>8</sub> "-20	0.35	9	RD46
2.25	2.25	0.98	1.5	0.75	3/4"-16	2"-12	0.56	1 <sup>11</sup> / <sub>16</sub> "-18	0.55	9	RD91
2.25	2.25	0.98	1.5	0.75	3/4"-16	2"-12	0.56	1 <sup>11</sup> / <sub>16</sub> "-18	0.55	11	RD93
2.25	2.25	0.98	1.5	0.75	3/4"-16	2"-12	0.56	1 <sup>11</sup> / <sub>16</sub> "-18	0.55	14	RD96
2.25	2.25	0.98	1.5	0.75	3/4"-16	2"-12	0.56	1 <sup>11</sup> / <sub>16</sub> "-18	0.55	19	RD910
2.88	2.88	1.19	2.13	1	1 <sup>1</sup> / <sub>8</sub> "-12	2 <sup>5</sup> / <sub>8</sub> "-16	0.88	2 <sup>3</sup> / <sub>16</sub> "-16	0.94	22	RD166
2.88	2.88	1.19	2.13	1	1 <sup>1</sup> / <sub>8</sub> "-12	2 <sup>5</sup> / <sub>8</sub> "-16	0.88	2 <sup>3</sup> / <sub>16</sub> "-16	0.94	29	RD1610
3.5	3.5	1.06	2.75	1	1 <sup>1</sup> / <sub>2</sub> "-12	3 <sup>1</sup> / <sub>4</sub> "-16	1.13	2 <sup>3</sup> / <sub>4</sub> "-16	1.02	36	RD256
3.5	3.5	1.06	2.75	1	1 <sup>1</sup> / <sub>2</sub> "-12	3 <sup>1</sup> / <sub>4</sub> "-16	1.13	2 <sup>3</sup> / <sub>4</sub> "-16	1.02	46	RD2510