

CYLINDERS

FROM
2
TO
1220
TONS!

SUPERIOR FEATURES OF POWER TEAM HYDRAULIC CYLINDERS:

We build our own cylinders in our ISO 9001 registered manufacturing facilities. All Power Team cylinders are date coded and stamped with a maximum pressure rating and capacity. Each cylinder we make complies with the demanding ASME B30.1 standard and are assembled/tested by certified assemblers and pressure tested to 125% of capacity before leaving our factories. Some other key features included:

- Cylinder bores are roller burnished to harden and smooth the surface, improving seal life by 30%.
- Base mounting holes withstand full cylinder capacity.
- Typical cylinder burst pressure range is from 25,000 to 35,000 psi, well-beyond extreme usage.
- Cylinders with gland nuts may be “dead-ended” at 10,000 psi.
- Eddy current and mag-particle inspections detect flaws in the steel.
- Material is removed from surface to ensure that any flaws are eliminated.



Page Description	Cylinder Movement	Type of Return	Tonnage Range	Page(s)
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C	Single-Acting	Spring	5-100	11-12
CBT	Single-Acting	Spring	5-25	13
RP	Single-Acting	Spring	2-5	14
C Accessories	-	-	-	5-16
RA	Single-Acting	Spring	20-100	17
RLS	Single-Acting	Spring	5-150	18
RSS	Single-Acting Double-Acting	Spring	10-250	19-20
RH	Single-Acting Double-Acting	Spring Hydraulic	100-100 30-200	21-22
RT	Single-Acting	Spring	17.5-100	23-24
RGG	Single-Acting	Load	55-600	25-28
RDG	Double-Acting	Hydraulic	55-600	29-32
RD	Double-Acting	Hydraulic	10-500	33-34
R	Single-Acting Double-Acting	Spring Hydraulic	55-565 100-565	35-36
RC_C RC_D	Single-Acting Double-Acting	Load Hydraulic	740-1220 740-1220	37-38
RA_L R_L	Single-Acting, Locking	Load	55-100 55-565	39-40
RC_P	Single-Acting, Locking	Load	55-620	41
RC_L Series	Single-Acting, Locking	Load	740-1220	42

Model Shown:
RD10013, RD556, RD300



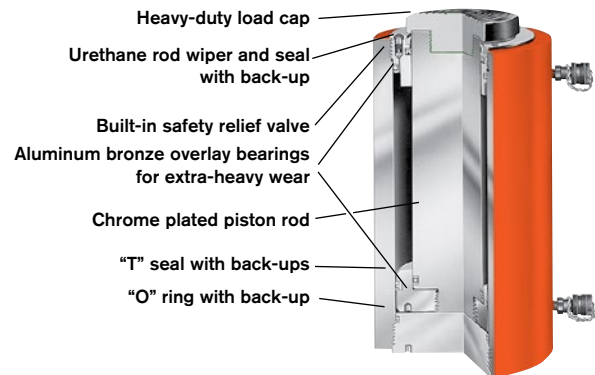
Features

HIGH TONNAGE PREMIUM DESIGN FOR HIGH CYCLE LIFE.

- Perfect for bridge lifting, building reconstruction, shipyard, utility and mining equipment maintenance.
- Aluminum bronze overlay bearings provide long life.
- Chrome plated piston rod resists corrosion.
- Rod and collar threads are designed to withstand full tonnage.
- Grooved ring pattern in load cap helps guard against load slippage.
- Each cylinder has two 9796 3/8" NPTF female half couplers.
- Built-in safety relief valve prevents over-pressurization of the retract circuit.
- Feature mounting holes and collar threads.
- Complies with ANSI / ASME B30.1 Safety Standards.



RD Series Design Features



RD Series Performance

The table at right gives you an idea of what to expect when coupling RD series cylinders to a Power Team pump. Actual performance will vary according to job conditions.

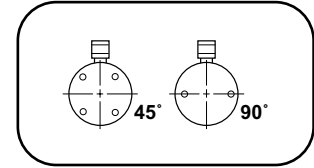
Pump	Cylinder	Time to Extend Cylinder 1"	
		100 psi	10,000 psi
PE55	RD55	1.0 sec.	12.0 sec.
	RD100	1.8 sec.	22.5 sec.
	RD200	3.5 sec.	45.0 sec.
	RD400	7.2 sec.	85.0 sec.
PQ120 Series	RD200	3.4 sec.	20.6 sec.
	RD300	4.9 sec.	30.0 sec.
	RD400	6.4 sec.	39.0 sec.
PE400 Series	RD300	3.0 sec.	8.5 sec.
	RD400	3.9 sec.	11.1 sec.
	RD500	4.9 sec.	14.1 sec.

▶ Four special order 500 ton, 24" stroke cylinders used in a swaging press for crimping 3 1/2" wire rope.

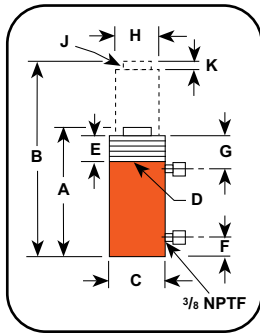


Technical Dimensions, Base Mounting Holes

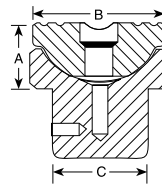
Cylinder Tonnage	10	25	55	80	100	150	200	300	400	500
# of Holes	2	4	4	4	4		4	4	4	6
Thread Size	3/8"-16	1/2"-13	5/8"-11	5/8"-11	3/4"-10	1"-8	1 1/4"-7	1 1/4"-7	1 1/2"-12	1 3/8"-12
Thread Depth (in)	0.63	0.75	0.88	0.88	1.00	1.00	1.25	1.75	1.88	2.00
Bolt Circle Diameter (in.)	2.00	2.75	3.50	4.50	5.50	6.00	6.50	6.25	7.25	8.00
Orientation*	90°	45°	45°	45°	45° †	45°	45°	Random	Random	Random



NOTE: Base mounting holes are standard on all RD cylinders. *Orientation of base mounting holes to coupler.
† Excludes RD10020.



Optional Swivel Load Caps Ordering Info



Cylinder Tonnage	Swivel Cap Order No.	Wt. (lbs.)	A (in.)	B (in.)	C (in.)
10	350144	0.8	0.88	1.44	0.86
25	350145	1.3	1.13	2.13	1.44
55	351325	4.2	2.44	2.50	1.55
100	351324	11.2	2.95	3.75	2.66
150/200	351334	12.8	2.63	4.38	3.06

Ordering Information

Cyl. Cap.	Stroke	Order No.	Oil Cap.	A		B		C		D		E		F		G		H		J		K		Load Cap. Dia.	Bore Dia.	Cylinder Effective Area		Int. Press. at Cap.		Tons at 10,000		Prod. Wt.
				Re-tracted Height	Ex-tended Height	Outside Dia.	Collar Thread Size	Thread Length Thread	Base to Port	Cyl. Piston Top to Port	Piston Rod Dia.	Rod Int. Thread & Depth	Piston Rod Protru-sion	Push	Pull	Push	Pull	Push	Pull	Push	Pull											
				(in.)	(in.)	(in.)	(in.)	(in.)	(in.)	(in.)	(in.)	(in.)	(in.)	(in.)	(in.)	(in.)	(in.)	(in.)	(in.)	(in.)	(in.)	(in.)	(in.)			(in.)	(in.)	(in.)	(in.)	(in.)	(in.)	
10	4	6.25	RD106	13.9	5.5	11.69	17.94	3.00	2 3/4 - 12	1.63	1.00	2.50	0.94	1-8 x 1	0.25	1.38	1.69	2.23	0.88	8,943	9,055	11.2	4.4	22.0								
	4	10.00	RD1010	22.3	8.8	15.69	25.69	3.00	2 3/4 - 12	1.63	1.00	2.50	0.94	1-8 x 1	0.25	1.38	1.69	2.23	0.88	8,943	9,055	11.2	4.4	28.0								
25	8	6.25	RD256	32.2	10.1	12.38	18.63	4.00	4 - 12	1.63	1.00	2.50	2.13	1 1/2-16 x 1	0.38	2.13	2.56	5.15	1.61	9,695	9,934	25.8	8.0	39.8								
	8	14.25	RD2514	73.5	22.9	20.38	34.63	4.00	4 - 12	1.63	1.00	2.50	2.13	1 1/2-16 x 1	0.38	2.13	2.56	5.15	1.61	9,695	9,934	25.8	8.0	65.0								
55	28	6.25	RD556	69.0	35.2	12.97	19.22	5.00	5 - 12	1.63	1.31	2.50	2.63	1 11/16-8 x 13/16	0.63	2.63	3.75	11.04	5.63	9,959	9,941	55.2	28.2	61.4								
	28	13.13	RD5513	144.9	73.9	19.84	32.97	5.00	5 - 12	1.63	1.29	2.50	2.63	1 11/16-8 x 13/16	0.63	2.63	3.75	11.04	5.63	9,959	9,941	55.2	28.2	90.0								
80	28	18.13	RD5518	200.0	102.0	25.88	44.00	5.00	5 - 12	1.63	1.28	2.50	2.63	1 11/16-8 x 13/16	0.63	2.63	3.75	11.04	5.63	9,959	9,941	55.2	28.2	142.0								
	44	13.13	RD8013	208.6	115.9	20.38	33.50	5.75	5 3/4 - 12	1.63	1.50	2.50	3.00	2-4 1/2 x 1 1/2	0.56	2.88	4.50	15.9	8.84	10,060	9,954	79.5	44.2	118.0								
100	44	6.63	RD1006	136.7	58.5	13.78	20.41	6.88	6 7/8 - 12	1.63	1.50	2.50	3.88	2 3/4-12 x 1 5/32	0.63	3.88	5.13	20.63	8.84	9,695	9,959	103.1	44.2	126.0								
	44	13.13	RD10013	270.7	116.0	20.28	33.41	6.88	6 7/8 - 12	1.63	1.50	2.50	3.88	2 3/4-12 x 1 5/32	0.63	3.88	5.13	20.63	8.84	9,695	9,959	103.1	44.2	181.0								
150	44	20.13	RD10020	415.2	178.0	30.50	50.63	6.88	6 7/8 - 12	1.63	2.78	2.50	3.88	2 3/4-12 x 1 5/32	0.63	3.88	5.13	20.63	8.84	9,695	9,959	103.1	44.2	260.0								
	73	6.63	RD1506	203.3	97.9	14.88	21.50	8.25	8 1/4 - 12	1.63	2.00	2.50	4.50	3 1/4-8 x 1 1/2	0.81	4.50	6.25	30.68	14.78	9,779	9,880	153.4	73.8	188.0								
200	73	13.13	RD15013	402.7	193.9	21.38	34.50	8.25	8 1/4 - 12	1.63	2.00	2.50	4.50	3 1/4-8 x 1 1/2	0.81	4.50	6.25	30.68	14.78	9,779	9,880	153.4	73.8	272.0								
	73	18.13	RD15018	556.8	267.8	26.53	44.66	8.25	8 1/4 - 12	1.63	2.00	2.50	4.50	3 1/4-8 x 1 1/2	0.75	4.50	6.25	30.68	14.78	9,779	9,880	153.4	73.8	376.0								
300	113	6.63	RD2006	273.5	149.8	16.00	22.63	9.50	9 1/2 - 12	1.63	2.50	2.69	4.88	3 1/4-8 x 2 1/4	1.06	4.50	7.25	41.28	22.62	9,689	9,992	206.4	113.1	262.0								
	113	13.13	RD20013	541.8	296.9	22.50	35.63	9.50	9 1/2 - 12	1.63	2.33	2.69	4.88	3 1/4-8 x 2 1/4	1.06	4.50	7.25	41.28	22.62	9,689	9,992	206.4	113.1	356.0								
	113	18.13	RD20018	748.2	409.9	28.50	46.63	9.50	9 1/2 - 12	1.63	2.25	2.69	4.88	3 1/4-8 x 2 1/4	1.06	4.50	7.25	41.28	22.62	9,689	9,992	206.4	113.1	442.0								
400	147	6.00	RD3006	361.0	177.0	17.28	23.28	10.75	10 1/2 - 12	2.38	3.38	3.38	6.25	2 1/2-12 x 3 1/4	1.13	6.88	8.75	60.13	29.45	9,978	10,000	300.7	147.3	380.0								
	147	13.00	RD30013	782.0	383.0	24.81	37.81	10.75	10 1/2 - 12	2.38	3.38	3.38	6.25	2 1/2-12 x 3 1/4	1.13	6.88	8.75	60.13	29.45	9,978	10,000	300.7	147.3	654.0								
500	186	6.00	RD4006	471.0	247.0	19.28	25.28	12.63	12 1/2 - 8	2.75	3.84	3.84	7.25	3-12 x 3 3/4	1.25	7.81	10.00	78.54	37.26	10,185	10,000	392.7	186.3	585.0								
	186	13.00	RD40013	1021.0	536.0	26.28	39.28	12.63	12 1/2 - 8	2.75	3.82	3.84	7.25	3-12 x 3 3/4	1.25	7.81	10.00	78.54	37.26	10,185	10,000	392.7	186.3	770.0								
500	245	6.00	RD5006	596.0	295.0	20.56	26.56	14.75	14 3/4 - 8	3.13	4.16	4.16	8.00	3 1/4-12 x 4 1/4	1.5	8.50	11.25	99.40	49.14	10,060	10,000	497.0	245.6	819.0								
	245	13.00	RD50013	1292.0	639.0	27.56	40.56	14.75	14 3/4 - 8	3.13	4.16	4.16	8.00	3 1/4-12 x 4 1/4	1.5	8.50	11.25	99.40	49.14	10,060	10,000	497.0	245.6	1092.0								