

▼ Shown from left to right: RR10013, RR1502, RR20013, RR1010, RR7513



- Collar threads, plunger threads and base mounting holes for easy fixturing (on most models)
- Baked enamel finish for increased corrosion resistance
- Removable hardened saddles protect plunger during lifting and pressing
- Built-in safety valve prevents accidental over-pressurization
- CR400 couplers included on all models
- Plunger wiper reduces contamination, extending cylinder life

## Most Versatile Performers

Rugged enough for the toughest job site uses and precision designed for high-cycle industrial uses.



### Saddles

RR-Series cylinders up to 75-ton have plunger thread for installation of **CATS-Series** tilt saddles.

Tilt saddles are secured to the plunger, enabling horizontal and upside-down use.

Page: 41



### Optimum Performance

Enerpac's range of **Z-Class** electric pumps, fitted with manual or solenoid operated 4-way valves, offer optimum combinations with RR cylinders.

Page: 104

▼ These long stroke RR-cylinders are attached to a sliding and guiding system pulling the arched roof assembly of Athen's Olympic Stadium step-by-step into the final position.



▼ RR-cylinders provide power and precision in a special hydraulic press.



# Double-Acting Long Stroke Cylinders



## Pump Selection

A double-acting cylinder must be powered by a pump with a 4-way valve.

Page: 139

## ▼ QUICK SELECTION CHART

For complete technical information see next page.

Cylinder Capacity (tons)	Stroke (in)	Model Number	Cylinder Effective Area (in <sup>2</sup> )		Oil Capacity (in <sup>3</sup> )		Collap. Height (in)
			Push	Pull	Push	Pull	
10	10.00	RR1010*	2.23	0.80	22.33	8.00	16.13
	12.00	RR1012*	2.23	0.80	26.80	9.00	18.00
30	8.25	RR308*	6.51	3.00	53.67	25.00	15.50
	14.50	RR3014*	6.51	3.00	92.70	43.00	21.63
50	6.13	RR506	11.06	3.40	67.77	21.00	13.06
	13.13	RR5013	11.06	3.40	145.17	44.00	20.06
	20.13	RR5020	11.06	3.40	222.56	68.00	28.88
75	6.13	RR756	15.92	4.90	97.58	29.00	13.69
	13.13	RR7513	15.92	4.90	209.00	64.00	20.69
100	6.63	RR1006	20.65	9.60	136.93	63.00	14.06
	13.13	RR10013	20.65	9.60	271.17	126.00	20.63
	18.13	RR10018	20.65	9.60	374.44	174.00	27.06
150	2.25	RR1502	30.71	14.80	69.11	33.00	7.19
	6.13	RR1506	30.71	14.80	188.28	91.00	15.19
	13.13	RR15013	30.71	14.80	403.27	194.00	22.20
	32.13	RR15032	30.71	14.80	986.84	475.00	43.94
200	6.00	RR2006	44.21	22.50	265.28	135.00	16.94
	13.00	RR20013	44.21	22.50	574.78	293.00	23.94
	18.00	RR20018	44.21	22.50	795.85	396.00	30.13
	24.00	RR20024	44.21	22.50	1,061	528.00	36.13
	36.00	RR20036	44.21	22.50	1,592	792.00	48.13
	48.00	RR20048	44.21	22.50	2,122	1,056	60.13
300	6.00	RR3006	70.93	38.00	425.56	228.00	19.13
	12.00	RR30012	70.93	38.00	851.12	456.00	25.13
	18.00	RR30018	70.93	38.00	1,277	684.00	31.13
	24.00	RR30024	70.93	38.00	1,702	912.00	37.13
	36.00	RR30036	70.93	38.00	2,553	1,368	49.13
	48.00	RR30048	70.93	38.00	3,405	1,824	61.13
400	6.00	RR4006	95.09	51.00	570.51	306.00	21.19
	12.00	RR40012	95.09	51.00	1,141	612.00	27.19
	18.00	RR40018	95.09	51.00	1,712	918.00	33.19
	24.00	RR40024	95.09	51.00	2,282	1,224	39.19
	36.00	RR40036	95.09	51.00	3,423	1,836	51.19
	48.00	RR40048	95.09	51.00	4,564	2,448	63.19
500	6.00	RR5006	113.15	63.00	678	378.00	22.75
	12.00	RR50012	113.15	63.00	1,358	756.00	28.75
	18.00	RR50018	113.15	63.00	2,037	1,134	34.75
	24.00	RR50024	113.15	63.00	2,716	1,512	40.75
	36.00	RR50036	113.15	63.00	4,074	2,264	52.75
	48.00	RR50048	113.15	63.00	5,431	3,024	64.75

## RR Series



Capacity:

**10 - 500 tons**

Stroke:

**2.25 - 48.00 inches**

Maximum Operating Pressure:

**10,000 psi**



### HCR-Series Cylinders

If you do not have a high-cycle application, Enerpac **HCR-Series** cylinders may be the right alternative.

Page: 52



### Speed Chart

See the Enerpac Cylinder Speed Chart in our "Yellow Pages" to determine your approximate cylinder speed.

Page: 409



### Optional Snap-in Saddles

Optional snap-in saddles for RR-Series double-acting cylinders:

Saddle Type	Cylinder Model Number	Saddle Model Number
Flat	RR10	A102F
Tilt	RR10	CATS12
	RR30	CATS52
	RR50, RR75	CATS100

### Standard Saddles

Grooved	RR10	A102G
	RR30	A252G

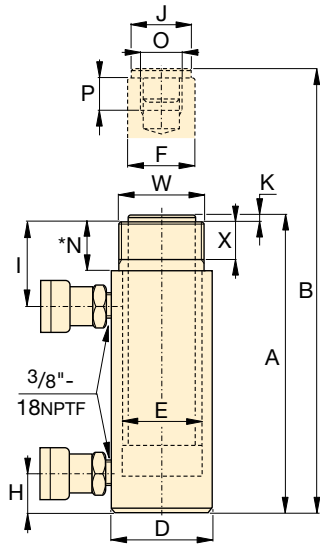
For additional information on saddles:

Page: 10

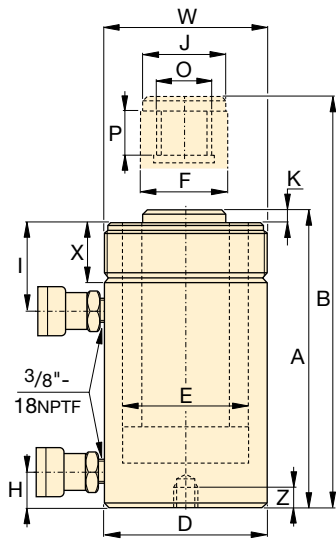


Cylinder retract capacity for certain RR cylinders may be less than theoretical values, as a result of reduced relief valve pressure settings:

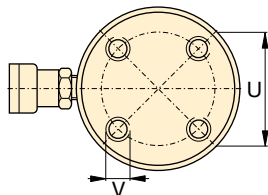
RR308/3014:4000 psi  
 RR506/5013/5020:6950 psi  
 RR756/7513:7200 psi



RR1010 to RR3014 models



RR506 to RR50048 models



RR1006 to RR30048

No mounting holes:

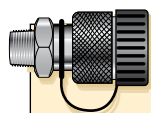
- RR506, 5013
- RR756, 7513
- RR1502, 15032

◀ For full features see page 41.

Cylinder Capacity (ton)	Stroke (in)	Model Number	Max. Cylinder Capacity (tons)		Cylinder Effective Area (in <sup>2</sup> )		Oil Capacity (in <sup>3</sup> )		Collap. Height	Ext. Height	Outside Diam.
			Push	Pull	Push	Pull	Push	Pull	A	B	D
									(in)	(in)	(in)
10	10.00	RR1010*	11.1	4.0	2.23	0.80	22.33	8.00	16.13	26.13	2.88
	12.00	RR1012*	11.1	4.0	2.23	0.80	26.80	9.00	18.00	30.00	2.88
30	8.25	RR308*	32.5	6.0	6.51	3.00	53.67	25.00	15.50	23.75	4.00
	14.50	RR3014*	32.5	6.0	6.51	3.00	92.70	43.00	21.63	36.13	4.00
50	6.13	RR506	55.3	11.8	11.06	3.40	67.77	21.00	13.06	19.19	5.00
	13.13	RR5013	55.3	11.8	11.06	3.40	145.17	44.00	20.06	33.19	5.00
	20.13	RR5020	55.3	11.8	11.06	3.40	222.56	68.00	28.88	49.00	5.00
75	6.13	RR756	79.6	17.6	15.92	4.90	97.58	29.00	13.69	19.81	5.75
	13.13	RR7513	79.6	17.6	15.92	4.90	209.00	64.00	20.69	33.81	5.75
100	6.63	RR1006	103.2	48.0	20.65	9.60	136.93	63.00	14.06	20.69	7.00
	13.13	RR10013	103.2	48.0	20.65	9.60	271.17	126.00	20.63	33.75	7.00
	18.13	RR10018	103.2	48.0	20.65	9.60	374.44	174.00	27.06	45.19	7.00
150	2.25	RR1502	153.5	74.0	30.71	14.80	69.11	33.00	7.19	9.44	8.00
	6.13	RR1506	153.5	74.0	30.71	14.80	188.28	91.00	15.19	21.31	8.00
	13.13	RR15013	153.5	74.0	30.71	14.80	403.27	194.00	22.20	35.31	8.00
	32.13	RR15032	153.5	74.0	30.71	14.80	986.84	475.00	43.94	76.06	8.00
200	6.00	RR2006	221.0	112.5	44.21	22.50	265.28	135.00	16.94	22.94	9.75
	13.00	RR20013	221.0	112.5	44.21	22.50	574.78	293.00	23.94	36.94	9.75
	18.00	RR20018	221.0	112.5	44.21	22.50	795.85	396.00	30.13	48.13	9.75
	24.00	RR20024	221.0	112.5	44.21	22.50	1,061	528.00	36.13	60.13	9.75
	36.00	RR20036	221.0	112.5	44.21	22.50	1,592	792.00	48.13	84.13	9.75
	48.00	RR20048	221.0	112.5	44.21	22.50	2,122	1,056	60.13	108.13	9.75
300	6.00	RR3006	354.6	190.0	70.93	38.00	425.56	228.00	19.13	25.13	12.25
	12.00	RR30012	354.6	190.0	70.93	38.00	851.12	456.00	25.13	37.13	12.25
	18.00	RR30018	354.6	190.0	70.93	38.00	1,277	684.00	31.13	49.13	12.25
	24.00	RR30024	354.6	190.0	70.93	38.00	1,702	912.00	37.13	61.13	12.25
	36.00	RR30036	354.6	190.0	70.93	38.00	2,553	1368	49.13	85.13	12.25
	48.00	RR30048	354.6	190.0	70.93	38.00	3,405	1824	61.13	109.13	12.25
400	6.00	RR4006	475.4	255.0	95.09	51.00	570.51	306.00	21.19	27.19	14.13
	12.00	RR40012	475.4	255.0	95.09	51.00	1,141	612.00	27.19	39.19	14.13
	18.00	RR40018	475.4	255.0	95.09	51.00	1,712	918.00	33.19	51.19	14.13
	24.00	RR40024	475.4	255.0	95.09	51.00	2,282	1224	39.19	63.19	14.13
	36.00	RR40036	475.4	255.0	95.09	51.00	3,423	1836	51.19	87.19	14.13
	48.00	RR40048	475.4	255.0	95.09	51.00	4,564	2448	63.19	111.19	14.13
500	6.00	RR5006	565.7	315.0	113.15	63.00	678.92	378.00	22.75	28.75	15.63
	12.00	RR50012	565.7	315.0	113.15	63.00	1,358	756.00	28.75	40.75	15.63
	18.00	RR50018	565.7	315.0	113.15	63.00	2,037	1134	34.75	52.75	15.63
	24.00	RR50024	565.7	315.0	113.15	63.00	2,716	1512	40.75	64.75	15.63
	36.00	RR50036	565.7	315.0	113.15	63.00	4,074	2268	52.75	88.75	15.63
	48.00	RR50048	565.7	315.0	113.15	63.00	5,431	3024	64.75	112.75	15.63

\*N: For RR1010 and RR1012: N = 1.26 inch; for RR308 and RR3014: N = 2.20 inch.

# Double-Acting Long Stroke Cylinders



## Couplers Included!

CR400 couplers included on all models. Fits all HC-Series hoses.

## Capacity:

**10 - 500 tons**

## Stroke:

**2.25 - 48.00 inches**

## Maximum Operating Pressure:

**10,000 psi**

## RR Series



Cylinder Bore Diameter	Plunger Diameter	Base to Adv. Port	Top to Return Port	Saddle Diameter	Saddle Protrusion from Plngr.	Plunger Internal Thread	Plunger Thread Length	Base Mounting Holes			Collar Thread	Collar Thread Length	Weight (lbs)	Model Number
								Bolt Cir. Diam.	Thread	Thread Depth				
E (in)	F (in)	H (in)	I (in)	J (in)	K (in)	O (in)	P (in)	U (in)	V (in)	Z (in)	W (in)	X (in)		
1.69	1.38	1.44	2.25	1.38	0.24	1-8	1.00	-	-	-	2 1/4-14	1.06	28	RR1010*
1.69	1.38	1.44	2.25	1.38	0.24	1-8	1.00	-	-	-	2 1/4-14	1.06	31	RR1012*
2.88	2.13	1.44	3.19	2.00	0.41	1 1/2-16	1.00	-	-	-	3 5/16-12	1.94	40	RR308*
2.88	2.13	1.56	3.19	2.00	0.41	1 1/2-16	1.00	-	-	-	3 5/16-12	1.94	64	RR3014*
3.75	3.13	1.13	3.00	2.81	0.11	1-12	1.00	-	-	-	5-12	2.00	67	RR506
3.75	3.13	1.13	3.00	2.81	0.11	1-12	1.00	-	-	-	5-12	2.00	115	RR5013
3.75	3.13	2.25	3.00	2.81	0.11	1-12	1.00	3.00	-	-	5-12	2.00	150	RR5020
4.50	3.75	1.19	3.00	2.81	0.25	1-12	1.10	-	-	-	5 3/4-12	1.97	92	RR756
4.50	3.75	1.19	3.19	2.81	0.25	1-12	1.10	-	-	-	5 3/4-12	1.97	150	RR7513
5.13	3.75	1.50	2.81	3.00	0.13	1 3/4-12	1.38	5.50	3/4-10	1.00	6 7/8-12	2.00	135	RR1006
5.13	3.75	1.50	2.81	3.00	0.13	1 3/4-12	1.38	5.50	3/4-10	1.00	6 7/8-12	2.00	205	RR10013
5.13	3.75	1.63	3.63	3.00	0.13	1 3/4-12	1.38	5.50	3/4-10	1.00	6 7/8-12	2.00	260	RR10018
6.25	4.50	0.88	2.63	3.67	0.06	-	-	-	-	-	-	-	110	RR1502
6.25	4.50	1.94	3.31	4.49	0.75	3 3/8-16	1.38	6.25	3/4-16	1.00	8-12	2.36	205	RR1506
6.25	4.50	1.94	3.31	4.49	0.75	3 3/8-16	1.38	6.25	3/4-16	1.00	8-12	2.36	275	RR15013
6.25	4.50	3.31	3.31	4.49	0.75	3 3/8-16	1.38	-	-	-	8-12	2.36	525	RR15032
7.50	5.25	2.25	3.81	5.25	0.88	-	-	5.00	1-8	1.00	-	-	325	RR2006
7.50	5.25	2.25	3.81	5.25	0.88	2 1/2-12	2.50	5.00	1-8	1.00	9 3/4-12	2.13	440	RR20013
7.50	5.25	3.38	4.00	5.25	0.88	2 1/2-12	2.50	5.00	1-8	1.00	9 3/4-12	2.13	450	RR20018
7.50	5.25	3.38	4.00	5.25	0.88	2 1/2-12	2.50	5.00	1-8	1.00	9 3/4-12	2.13	616	RR20024
7.50	5.25	3.38	4.00	5.25	0.88	2 1/2-12	2.50	5.00	1-8	1.00	9 3/4-12	2.13	845	RR20036
7.50	5.25	3.38	4.00	5.25	0.88	2 1/2-12	2.50	5.00	1-8	1.00	9 3/4-12	2.13	1065	RR20048
9.50	6.50	3.50	4.50	6.50	1.13	2 1/2-12	3.25	6.25	1 1/4-7	1.75	12 1/4-12	2.31	441	RR3006
9.50	6.50	3.50	4.50	6.50	1.13	2 1/2-12	3.25	6.25	1 1/4-7	1.75	12 1/4-12	2.31	608	RR30012
9.50	6.50	3.50	4.50	6.50	1.13	2 1/2-12	3.25	6.25	1 1/4-7	1.75	12 1/4-12	2.31	776	RR30018
9.50	6.50	3.50	4.50	6.50	1.13	2 1/2-12	3.25	6.25	1 1/4-7	1.75	12 1/4-12	2.31	1034	RR30024
9.50	6.50	3.50	4.50	6.50	1.13	2 1/2-12	3.25	6.25	1 1/4-7	1.75	12 1/4-12	2.31	1385	RR30036
9.50	6.50	3.50	4.50	6.50	1.13	2 1/2-12	3.25	6.25	1 1/4-7	1.75	12 1/4-12	2.31	1720	RR30048
11.00	7.50	4.25	5.25	7.50	1.13	3-12	3.75	8.00	1 1/2-6	2.00	14 1/8-8	2.56	670	RR4006
11.00	7.50	4.25	5.25	7.50	1.13	3-12	3.75	8.00	1 1/2-6	2.00	14 1/8-8	2.56	880	RR40012
11.00	7.50	4.25	5.25	7.50	1.13	3-12	3.75	8.00	1 1/2-6	2.00	14 1/8-8	2.56	1000	RR40018
11.00	7.50	4.25	5.25	7.50	1.13	3-12	3.75	8.00	1 1/2-6	2.00	14 1/8-8	2.56	1317	RR40024
11.00	7.50	4.25	5.25	7.50	1.13	3-12	3.75	8.00	1 1/2-6	2.00	14 1/8-8	2.56	1746	RR40036
11.00	7.50	4.25	5.25	7.50	1.13	3-12	3.75	8.00	1 1/2-6	2.00	14 1/8-8	2.56	2162	RR40048
12.00	8.00	4.75	6.00	8.00	1.13	3 1/4-12	4.25	8.00	1 3/4-5	2.12	15 5/8-8	3.13	953	RR5006
12.00	8.00	4.75	6.00	8.00	1.13	3 1/4-12	4.25	8.00	1 3/4-5	2.12	15 5/8-8	3.13	1300	RR50012
12.00	8.00	4.75	6.00	8.00	1.13	3 1/4-12	4.25	8.00	1 3/4-5	2.12	15 5/8-8	3.13	1500	RR50018
12.00	8.00	4.75	6.00	8.00	1.13	3 1/4-12	4.25	8.00	1 3/4-5	2.12	15 5/8-8	3.13	1800	RR50024
12.00	8.00	4.75	6.00	8.00	1.13	3 1/4-12	4.25	8.00	1 3/4-5	2.12	15 5/8-8	3.13	2210	RR50036
12.00	8.00	4.75	6.00	8.00	1.13	3 1/4-12	4.25	8.00	1 3/4-5	2.12	15 5/8-8	3.13	2700	RR50048