

RR-Series, Double-Acting Cylinders

ENERPAC

▼ 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 and dust caps 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.



Optional Snap-in Saddles

Optional snap-in saddles for RR-Series double-acting cylinders up to 75 ton.

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-Series cylinders.

Page: 96

▼ A lateral bridge slide method was utilized to slide the new bridge into position. Two RR-Series double acting hydraulic cylinders with ZU4-Series electric pumps were used to push the bridge into position over PTFE sliding elements.



▼ 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: 75

▼ QUICK SELECTION CHART

For complete technical information see next page.

Cylinder Capacity ton (kN)	Stroke (mm)	Model Number	Cylinder Effective Area (cm ²)		Oil Capacity (cm ³)		Coll. Height (mm)
			Push	Pull	Push	Pull	
10 (101)	254	RR1010	14,5	4,8	368	122	409
	305	RR1012	14,5	4,8	442	147	457
30 (295)	209	RR308	42,1	19,1	879	400	394
	368	RR3014	42,1	19,1	1549	703	549
50 (498)	156	RR506	71,2	21,5	1111	335	331
	334	RR5013	71,2	21,5	2378	718	509
	511	RR5020	71,2	21,5	3638	1099	733
75 (718)	156	RR756	102,6	31,4	1601	490	347
	333	RR7513	102,6	31,4	3417	1046	525
95 (933)	168	RR1006	133,3	62,2	2238	1045	357
	333	RR10013	133,3	62,2	4439	2071	524
	460	RR10018	133,3	62,2	6132	2861	687
140 (1386)	57	RR1502	198,1	95,4	1129	544	183
	156	RR1506	198,1	95,4	3090	1488	385
	333	RR15013	198,1	95,4	6597	3177	582
	815	RR15032	198,1	95,4	16.145	7775	1116
200 (1995)	152	RR2006	285,0	145,3	4332	2209	430
	330	RR20013	285,0	145,3	9405	4795	608
	457	RR20018	285,0	145,3	13.025	6640	765
	610	RR20024	285,0	145,3	17.385	8863	917
	914	RR20036	285,0	145,3	26.049	13.280	1222
325 (3201)	1219	RR20048	285,0	145,3	34.741	17.712	1527
	153	RR3006	457,3	243,2	6997	3721	485
	305	RR30012	457,3	243,2	13.947	7418	638
	457	RR30018	457,3	243,2	20.889	11.114	790
	609	RR30024	457,3	243,2	27.850	14.811	943
440 (4292)	915	RR30036	457,3	243,2	41.843	22.253	1247
	1219	RR30048	457,3	243,2	55.745	29.646	1552
	152	RR4006	613,1	328,1	9319	4987	538
	305	RR40012	613,1	328,1	18.700	10.007	690
	457	RR40018	613,1	328,1	28.018	14.995	843
520 (5108)	610	RR40024	613,1	328,1	37.400	20.014	995
	914	RR40036	613,1	328,1	56.037	29.988	1300
	1219	RR40048	613,1	328,1	74.737	39.996	1605
	153	RR5006	729,7	405,4	11.164	6203	577
	305	RR50012	729,7	405,4	22.256	12.365	730
520 (5108)	457	RR50018	729,7	405,4	33.347	18.526	882
	609	RR50024	729,7	405,4	44.440	24.689	1035
	915	RR50036	729,7	405,4	66.768	36.973	1339
	1219	RR50048	729,7	405,4	88.951	49.418	1644

RR Series



Capacity:
10 - 520 ton

Stroke:
57 - 1219 mm

Maximum Operating Pressure:
700 bar



Enerpac HCR-Series

If your application does not require high cycle, 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: 405



Optional Snap-in Saddles

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

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

Standard Saddles:

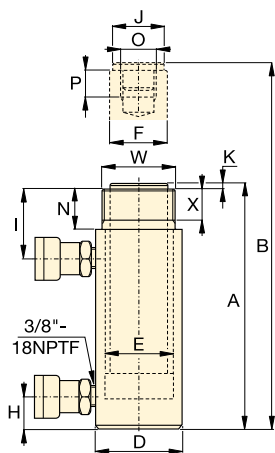
Grooved	RR10	A102G
	RR30	A252G

For additional information on saddles:

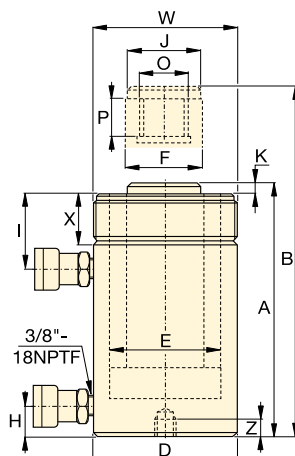
Page: 10

RR-Series, Double-Acting Cylinders

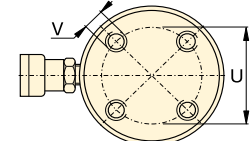
ENERPAC



RR1010 - RR3014

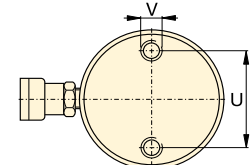


RR506 - RR50048



RR1006 - RR30048

No mounting holes on:
RR506, 5013
RR756, 7513
RR1502, 15032



RR4006 - RR50048

Base mounting hole location is for reference only, as it is affected by assembly.



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

RR308/3014: 275 bar
RR506/5013/5020: 480 bar
RR756/7513: 495 bar

For full features see previous page.

Cylinder Capacity ton	Stroke (mm)	Model Number	Max. Cylinder Capacity (kN)		Cylinder Effective Area (cm ²)		Oil Capacity (cm ³)		Coll. Height A (mm)	Ext. 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
	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
	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
	334	RR5013	498	103	71,2	21,5	2378	718	509	843	127
	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
	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
	333	RR10013	933	435	133,3	62,2	4439	2071	524	857	177
	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
	156	RR1506	1386	668	198,1	95,4	3090	1488	385	541	203
	333	RR15013	1386	668	198,1	95,4	6597	3177	582	915	203
	815	RR15032	1386	668	198,1	95,4	16.145	7775	1116	1931	203
200	152	RR2006	1995	1017	285,0	145,3	4332	2209	430	582	247
	330	RR20013	1995	1017	285,0	145,3	9405	4795	608	938	247
	457	RR20018	1995	1017	285,0	145,3	13.025	6640	765	1222	247
	610	RR20024	1995	1017	285,0	145,3	17.385	8863	917	1527	247
	914	RR20036	1995	1017	285,0	145,3	26.049	13.280	1222	2136	247
	1219	RR20048	1995	1017	285,0	145,3	34.741	17.712	1527	2746	247
325	153	RR3006	3201	1703	457,3	243,2	6997	3721	485	638	311
	305	RR30012	3201	1703	457,3	243,2	13.947	7418	638	943	311
	457	RR30018	3201	1703	457,3	243,2	20.889	11.114	790	1247	311
	609	RR30024	3201	1703	457,3	243,2	27.850	14.811	943	1552	311
	915	RR30036	3201	1703	457,3	243,2	41.843	22.253	1247	2162	311
	1219	RR30048	3201	1703	457,3	243,2	55.745	29.646	1552	2771	311
440	152	RR4006	4292	2297	613,1	328,1	9319	4987	538	690	358
	305	RR40012	4292	2297	613,1	328,1	18.700	10.007	690	995	358
	457	RR40018	4292	2297	613,1	328,1	28.018	14.995	843	1300	358
	610	RR40024	4292	2297	613,1	328,1	37.400	20.014	995	1605	358
	914	RR40036	4292	2297	613,1	328,1	56.037	29.988	1300	2214	358
	1219	RR40048	4292	2297	613,1	328,1	74.737	39.996	1605	2824	358
520	153	RR5006	5108	2838	729,7	405,4	11.164	6203	577	730	397
	305	RR50012	5108	2838	729,7	405,4	22.256	12.365	730	1035	397
	457	RR50018	5108	2838	729,7	405,4	33.347	18.526	882	1339	397
	609	RR50024	5108	2838	729,7	405,4	44.440	24.689	1035	1644	397
	915	RR50036	5108	2838	729,7	405,4	66.768	36.973	1339	2254	397
	1219	RR50048	5108	2838	729,7	405,4	88.951	49.418	1644	2863	397

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

Double-Acting Long Stroke Cylinders

Capacity:
10 - 520 ton

Stroke:
57 - 1219 mm

Maximum Operating Pressure:
700 bar

**RR
Series**



	Cyl. Bore Dia. E (mm)	Plgr. Dia. F (mm)	Base to Adv. Port H (mm)	Top to Ret. Port I (mm)	Saddle Dia. J (mm)	Saddle Protr. fr. Plgr. K (mm)	Plunger Internal Thread O	Plunger Thread Length P (mm)	Base Mounting Holes			Collar Thread W	Collar Thread Length X (mm)	 (kg)	Model Number
									Bolt Circle U (mm)	Thread V	Thread Depth Z (mm)				
	42,9	34,9	36	57	35	6	1" - 8	25	-	-	-	2 1/4" - 14	26	12	RR1010*
	42,9	34,9	36	57	35	6	1" - 8	25	-	-	-	2 1/4" - 14	26	14	RR1012*
	73,2	54,1	39	81	50	10	1 1/2" - 16	25	-	-	-	3 5/16" - 12	49	18	RR308*
	73,2	54,1	39	81	50	10	1 1/2" - 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	1/2" - 13	25	5" - 12	44	68	RR5020
	114,3	95,2	30	76	71	6	1" - 12	28	-	-	-	5 3/4" - 12	50	41	RR756
	114,3	95,2	30	81	71	6	1" - 12	28	-	-	-	5 3/4" - 12	50	68	RR7513
	130,3	95,2	38	71	76	3	1 3/4" - 12	35	139	3/4" - 10	25	6 7/8" - 12	50	61	RR1006
	130,3	95,2	38	71	76	3	1 3/4" - 12	35	139	3/4" - 10	25	6 7/8" - 12	50	93	RR10013
	130,3	95,2	41	92	76	3	1 3/4" - 12	35	139	3/4" - 10	25	6 7/8" - 12	50	117	RR10018
	158,8	114,3	22	66	95	19	-	-	-	-	-	-	-	49	RR1502
	158,8	114,3	49	84	114	19	3 3/8" - 16	35	158	3/4" - 16	28	8" - 12	55	93	RR1506
	158,8	114,3	49	84	114	19	3 3/8" - 16	35	158	3/4" - 16	28	8" - 12	55	124	RR15013
	158,8	114,3	76	88	114	19	3 3/8" - 16	35	-	-	-	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	2 1/2" - 12	63	127	1" - 8	25	9 3/4" - 12	54	199	RR20013
	190,5	133,4	85	101	133	22	2 1/2" - 12	63	127	1" - 8	25	9 3/4" - 12	54	204	RR20018
	190,5	133,4	85	101	133	22	2 1/2" - 12	63	127	1" - 8	25	9 3/4" - 12	54	279	RR20024
	190,5	133,4	85	101	133	22	2 1/2" - 12	63	127	1" - 8	25	9 3/4" - 12	54	383	RR20036
	190,5	133,4	85	101	133	22	2 1/2" - 12	63	127	1" - 8	25	9 3/4" - 12	54	483	RR20048
	241,3	165,1	88	114	165	28	2 1/2" - 12	82	158	1 1/4" - 7	44	12 1/4" - 12	58	200	RR3006
	241,3	165,1	88	114	165	28	2 1/2" - 12	82	158	1 1/4" - 7	44	12 1/4" - 12	58	312	RR30012
	241,3	165,1	88	114	165	28	2 1/2" - 12	82	158	1 1/4" - 7	44	12 1/4" - 12	58	385	RR30018
	241,3	165,1	88	114	165	28	2 1/2" - 12	82	158	1 1/4" - 7	44	12 1/4" - 12	58	469	RR30024
	241,3	165,1	88	114	165	28	2 1/2" - 12	82	158	1 1/4" - 7	44	12 1/4" - 12	58	628	RR30036
	241,3	165,1	88	114	165	28	2 1/2" - 12	82	158	1 1/4" - 7	44	12 1/4" - 12	58	780	RR30048
	279,4	190,5	108	133	190	28	3" - 12	95	203	1 1/2" - 6	50	14 1/8" - 8	65	303	RR4006
	279,4	190,5	108	133	190	28	3" - 12	95	203	1 1/2" - 6	50	14 1/8" - 8	65	399	RR40012
	279,4	190,5	108	133	190	28	3" - 12	95	203	1 1/2" - 6	50	14 1/8" - 8	65	453	RR40018
	279,4	190,5	108	133	190	28	3" - 12	95	203	1 1/2" - 6	50	14 1/8" - 8	65	597	RR40024
	279,4	190,5	108	133	190	28	3" - 12	95	203	1 1/2" - 6	50	14 1/8" - 8	65	792	RR40036
	279,4	190,5	108	133	190	28	3" - 12	95	203	1 1/2" - 6	50	14 1/8" - 8	65	980	RR40048
	304,8	203,2	120	152	203	28	3 1/4" - 12	108	203	1 3/4" - 5	57	15 5/8" - 8	79	432	RR5006
	304,8	203,2	120	152	203	28	3 1/4" - 12	108	203	1 3/4" - 5	57	15 5/8" - 8	79	589	RR50012
	304,8	203,2	120	152	203	28	3 1/4" - 12	108	203	1 3/4" - 5	57	15 5/8" - 8	79	680	RR50018
	304,8	203,2	120	152	203	28	3 1/4" - 12	108	203	1 3/4" - 5	57	15 5/8" - 8	79	816	RR50024
	304,8	203,2	120	152	203	28	3 1/4" - 12	108	203	1 3/4" - 5	57	15 5/8" - 8	79	1002	RR50036
	304,8	203,2	120	152	203	28	3 1/4" - 12	108	203	1 3/4" - 5	57	15 5/8" - 8	79	1224	RR50048