

RACH-Series Aluminum Cylinders

▼ Shown from left to right: RACH-1504, RACH-15010, RACH-2010 and RACH-308



- Integral stop ring prevents plunger over-travel and is capable of withstanding the full cylinder capacity
- Floating center tube increases seal life
- Hard-Kote finish on all surfaces resists damage and extends cylinder life
- High-strength return spring for rapid cylinder retraction
- Composite bearings prevent metal to metal contact, increasing cylinder life and resistance to side-loads of up to 10%
- Steel baseplate and saddle for protection against load-induced damage



◀ An RACH-602, powered by a P-392 handpump, is used to extract corroded carriage pins from refuse collection vehicles.

The Lightweight Solution for Tensioning and Testing



Saddles

All RACH-Series cylinders are equipped with screw-on removable grooved saddles.



Gauges

Minimize the risk of overloading and ensure long, dependable service from your equipment. Refer to the

System Components section for a full range of gauges.



Optimum Performance

Enerpac's range of Titan electric pumps, fitted with manual or solenoid operated 3-way valves,

offer optimum combinations with RACH cylinders.



Aluminum Lock Nut Cylinders

When lightweight, positive mechanical load holding is required, the RACL-Series of Aluminum cylinders offers

all the features of the RACH-Series, with the advantage of a mechanical Lock Nut.



Standard Features

- CR-400 coupler and dust cap
- Handles are standard on 60, 100 and 150-ton models; optional on 20 and 30-ton models.
- All cylinders meet ASME B-30.1 and ISO 10100 standards

Single-Acting, Spring Return, Hollow Plunger Cylinders



Aluminum vs. Steel

Aluminum cylinders, while offering the most lightweight solution for many lifting, stressing and lowering applications, also have some unique limitations due to material properties.

Aluminum differs from steel in that it has a lower finite fatigue life. This means aluminum cylinders should NOT be used in high-cycle applications such as production.

The Enerpac line of aluminum cylinders are designed to provide 5,000 full-pressure cycles. **This limit should not be exceeded.** In normal lifting and many maintenance applications, this should provide a lifetime of use.

RACH Series



Capacity:
20-150 tons

Stroke:
1.97-9.84 inch

Center Hole Diameter:
1.06-3.11 inch

Maximum Operating Pressure:
10,000 psi

▼ QUICK SELECTION CHART

For complete technical information see next page.

Cylinder Capacity (tons) Nominal [maximum]	Stroke (in)	Model Number	Cylinder Effective Area (in ²)	Oil Capacity (in ³)	Collapsed Height (in)	Weight (lbs)
20 [25]	1.97	RACH-202•	5.07	9.98	9.53	8.4
	3.94	RACH-204•	5.07	19.96	11.50	9.2
	5.91	RACH-206•	5.07	29.94	13.46	10.1
	7.87	RACH-208•	5.07	39.92	15.43	11.0
	9.84	RACH-2010•	5.07	49.90	17.40	11.9
30 [39]	1.97	RACH-302•	7.92	15.59	10.12	23.3
	3.94	RACH-304	7.92	31.18	12.09	24.6
	5.91	RACH-306	7.92	46.77	14.06	26.2
	7.87	RACH-308	7.92	62.36	16.02	27.7
	9.84	RACH-3010•	7.92	77.95	17.99	29.0
60 [72]	1.97	RACH-602•	14.34	28.23	12.28	52.6
	3.94	RACH-604	14.34	56.46	14.25	55.4
	5.91	RACH-606	14.34	84.69	16.22	58.3
	7.87	RACH-608	14.34	112.91	18.19	61.2
	9.84	RACH-6010•	14.34	141.14	20.16	64.0
100 [120]	1.97	RACH-1002•	24.05	47.34	11.46	95.9
	3.94	RACH-1004	24.05	94.69	13.43	101.6
	5.91	RACH-1006	24.05	142.03	15.39	107.1
	7.87	RACH-1008	24.05	189.37	17.36	112.6
	9.84	RACH-10010•	24.05	236.71	19.33	118.4
150 [168]	1.97	RACH-1502•	33.54	66.02	13.43	131.3
	3.94	RACH-1504•	33.54	132.05	15.39	137.9
	5.91	RACH-1506•	33.54	198.07	17.36	144.8
	7.87	RACH-1508•	33.54	264.09	19.33	151.4
	9.84	RACH-15010•	33.54	330.12	21.30	158.2

• Made to order. Consult Enerpac for delivery.



For complex lifting applications...

Contact your distributor or your nearest Enerpac office for advice and technical assistance in the layout of your ideal PC Synchronous Lift System.



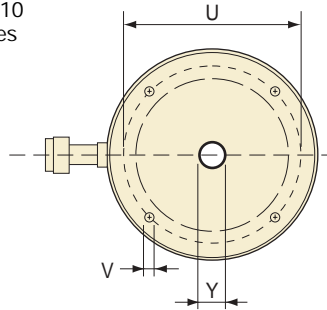
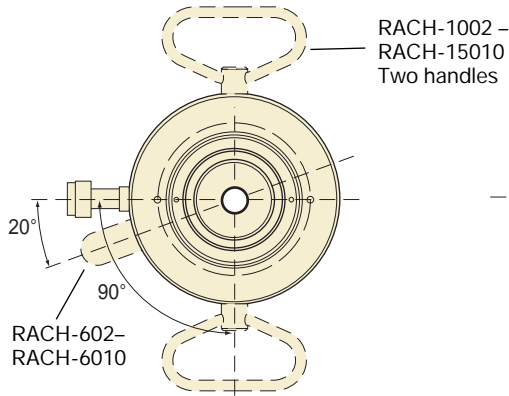
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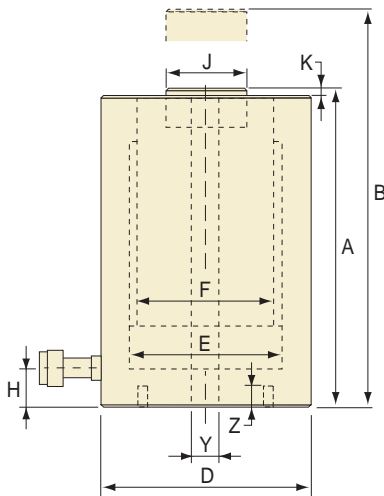
Baseplate Mounting Holes

Mounting holes are for fixturing of the baseplate only. They will not withstand the capacity of the cylinder.



Baseplate Mounting Hole Dimensions (in)			
Model / Capacity ton	Bolt Circle U	Thread Size (mm) V	Min. Thread Depth ¹⁾ Z
RACH-20	3.35	M6 x 1.0	.24
RACH-30	4.33	M6 x 1.0	.24
RACH-60	6.50	M6 x 1.0	.24
RACH-100	9.06	M6 x 1.0	.24
RACH-150	10.04	M6 x 1.0	.24

¹⁾Dimensions exclude standard baseplate height 0.24".



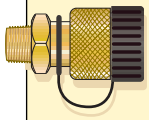
Baseplate not shown.

◀ For full features see page 10.

Cylinder Capacity (tons) Nominal [maximum]	Stroke (in)	Model Number	Cylinder Effective Area (in ²)	Oil Capacity (in ³)	Collapsed Height* A (in)
20 [25]	1.97	RACH-202•	5.07	9.98	9.53
	3.94	RACH-204•	5.07	19.96	11.50
	5.91	RACH-206•	5.07	29.94	13.46
	7.87	RACH-208•	5.07	39.92	15.43
	9.84	RACH-2010•	5.07	49.90	17.40
30 [39]	1.97	RACH-302•	7.92	15.59	10.12
	3.94	RACH-304	7.92	31.18	12.09
	5.91	RACH-306	7.92	46.77	14.06
	7.87	RACH-308	7.92	62.36	16.02
	9.84	RACH-3010•	7.92	77.95	17.99
60 [72]	1.97	RACH-602•	14.34	28.23	12.28
	3.94	RACH-604	14.34	56.46	14.25
	5.91	RACH-606	14.34	84.69	16.22
	7.87	RACH-608	14.34	112.91	18.19
	9.84	RACH-6010•	14.34	141.14	20.16
100 [120]	1.97	RACH-1002•	24.05	47.34	11.46
	3.94	RACH-1004	24.05	94.69	13.43
	5.91	RACH-1006	24.05	142.03	15.39
	7.87	RACH-1008	24.05	189.37	17.36
	9.84	RACH-10010•	24.05	236.71	19.33
150 [168]	1.97	RACH-1502•	33.54	66.02	13.43
	3.94	RACH-1504•	33.54	132.05	15.39
	5.91	RACH-1506•	33.54	198.07	17.36
	7.87	RACH-1508•	33.54	264.09	19.33
	9.84	RACH-15010•	33.54	330.12	21.30

• Made to order. Consult Enerpac for delivery.

Single-Acting, Spring Return, Hollow Plunger Cylinders



Couplers Included!
CR-400 couplers included on all models. Fits all HC-Series hoses.

RACH Series



Capacity:
20-150 tons

Stroke:
1.97-9.84 inch

Center Hole Diameter:
1.06-3.11 inch

Maximum Operating Pressure:
10,000 psi

Extended Height*	Outside Ø	Cylinder Bore Ø	Plunger Ø	Base to Advance Port*	Standard Saddle Ø	Saddle Protrusion from Plunger	Center Hole Ø	Weight	Model Number
B (in)	D (in)	E (in)	F (in)	H (in)	J (in)	K (in)	Y (in)	(lbs)	
11.50	3.94	2.95	2.17	1.15	2.17	.39	1.06	8.4	RACH-202•
15.43	3.94	2.95	2.17	1.15	2.17	.39	1.06	9.2	RACH-204•
19.37	3.94	2.95	2.17	1.15	2.17	.39	1.06	10.1	RACH-206•
23.31	3.94	2.95	2.17	1.15	2.17	.39	1.06	11.0	RACH-208•
27.24	3.94	2.95	2.17	1.15	2.17	.39	1.06	11.9	RACH-2010•
12.09	5.12	3.74	2.76	1.15	2.76	.39	1.34	23.3	RACH-302•
16.02	5.12	3.74	2.76	1.15	2.76	.39	1.34	24.6	RACH-304
19.96	5.12	3.74	2.76	1.15	2.76	.39	1.34	26.2	RACH-306
23.90	5.12	3.74	2.76	1.15	2.76	.39	1.34	27.7	RACH-308
27.83	5.12	3.74	2.76	1.15	2.76	.39	1.34	29.0	RACH-3010•
14.25	7.09	5.31	4.33	2.37	4.33	.39	2.20	52.6	RACH-602•
18.19	7.09	5.31	4.33	2.37	4.33	.39	2.20	55.4	RACH-604
22.13	7.09	5.31	4.33	2.37	4.33	.39	2.20	58.3	RACH-606
26.06	7.09	5.31	4.33	2.37	4.33	.39	2.20	61.2	RACH-608
30.00	7.09	5.31	4.33	2.37	4.33	.39	2.20	64.0	RACH-6010•
13.43	9.84	7.28	5.91	2.41	5.91	.39	3.11	95.9	RACH-1002•
17.36	9.84	7.28	5.91	2.41	5.91	.39	3.11	101.6	RACH-1004
21.30	9.84	7.28	5.91	2.41	5.91	.39	3.11	107.1	RACH-1006
25.24	9.84	7.28	5.91	2.41	5.91	.39	3.11	112.6	RACH-1008
29.17	9.84	7.28	5.91	2.41	5.91	.39	3.11	118.4	RACH-10010•
15.39	10.83	8.07	6.30	2.41	5.91	.39	3.11	131.3	RACH-1502•
19.33	10.83	8.07	6.30	2.41	5.91	.39	3.11	137.9	RACH-1504•
23.27	10.83	8.07	6.30	2.41	5.91	.39	3.11	144.8	RACH-1506•
27.20	10.83	8.07	6.30	2.41	5.91	.39	3.11	151.4	RACH-1508•
31.14	10.83	8.07	6.30	2.41	5.91	.39	3.11	158.2	RACH-15010•

* Dimensions include standard baseplate height of 0.24".