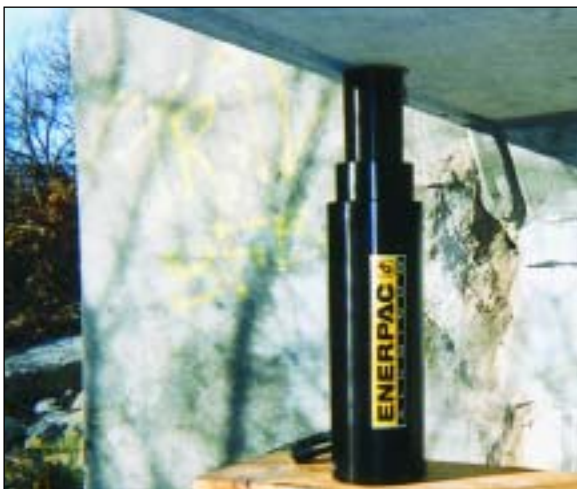


▼ Shown from left to right: RACL-1006, RACL-504 and RACL-5010



- Aluminum Lock Nut provides mechanical load holding for extended periods
- Integral stop ring prevents plunger over-travel and is capable of withstanding the full cylinder capacity
- 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 up to 5%
- Steel baseplate and saddle for protection against load-induced damage



◀ *The RACL-5010 cylinder is used for extended load support during epoxy injection for bridge reinforcement.*

## The Lightweight Solution for Lifting and Mechanical Locking



### Saddles

All RACL-Series cylinders are equipped with bolt-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 RACL cylinders.



### Standard Features

- CR-400 coupler and dust cap
- Handles are standard on 50, 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, Lock Nut, Aluminum 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.

## RACL Series



Capacity:

**20-150 tons**

Stroke:

**1.97-9.84 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 <sup>2</sup> )	Oil Capacity (in <sup>3</sup> )	Collapsed Height (in)	Weight (lbs)
20 [24]	1.97	<b>RACL-202•</b>	4.83	9.51	8.82	10.6
	3.94	<b>RACL-204•</b>	4.83	19.02	10.79	12.1
	5.91	<b>RACL-206•</b>	4.83	28.52	12.76	13.6
	7.87	<b>RACL-208•</b>	4.83	38.03	14.72	15.0
	9.84	<b>RACL-2010•</b>	4.83	47.54	16.69	16.5
30 [34]	1.97	<b>RACL-302•</b>	6.85	13.48	9.09	12.8
	3.94	<b>RACL-304</b>	6.85	26.97	11.06	14.7
	5.91	<b>RACL-306</b>	6.85	40.45	13.03	16.5
	7.87	<b>RACL-308</b>	6.85	53.94	15.00	18.5
	9.84	<b>RACL-3010•</b>	6.85	67.42	16.97	20.5
50 [55]	1.97	<b>RACL-502•</b>	10.99	21.63	9.29	24.0
	3.94	<b>RACL-504</b>	10.99	43.27	11.26	27.7
	5.91	<b>RACL-506</b>	10.99	64.90	13.23	31.2
	7.87	<b>RACL-508</b>	10.99	86.54	15.20	35.0
	9.84	<b>RACL-5010•</b>	10.99	108.17	17.17	38.7
100 [111]	1.97	<b>RACL-1002•</b>	22.19	43.68	11.65	47.3
	3.94	<b>RACL-1004</b>	22.19	87.36	13.62	55.2
	5.91	<b>RACL-1006</b>	22.19	131.04	15.59	63.1
	7.87	<b>RACL-1008</b>	22.19	174.72	17.56	70.8
	9.84	<b>RACL-10010•</b>	22.19	218.41	19.53	80.7
150 [176]	1.97	<b>RACL-1502•</b>	35.18	69.25	12.72	86.7
	3.94	<b>RACL-1504•</b>	35.18	138.50	14.69	102.3
	5.91	<b>RACL-1506•</b>	35.18	207.76	16.65	117.7
	7.87	<b>RACL-1508•</b>	35.18	277.01	18.62	133.3
	9.84	<b>RACL-15010•</b>	35.18	346.26	20.59	148.7

• 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.



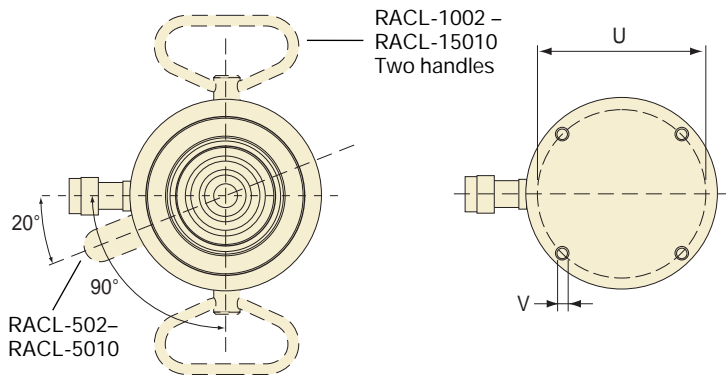
Order your free copy of the Enerpac brochure, *Hydraulic Systems for Bridge and Structural Engineering*. Call or visit us at

[www.enerpac.com](http://www.enerpac.com).



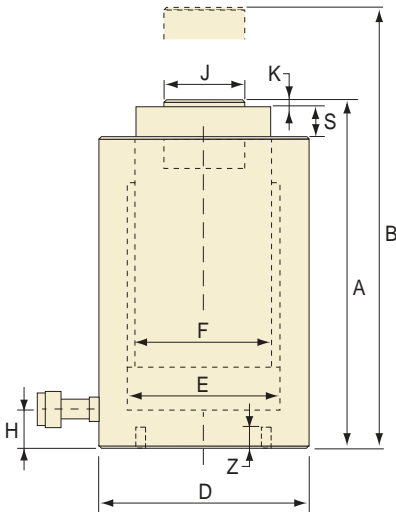
### Baseplate Mounting Holes

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 Z
RACL-20	2.76	M6 x 1.0	.24
RACL-30	3.15	M6 x 1.0	.24
RACL-50	4.33	M6 x 1.0	.24
RACL-100	6.30	M6 x 1.0	.24
RACL-150	7.87	M6 x 1.0	.24

<sup>1</sup>Dimensions exclude standard baseplate height 0.24".



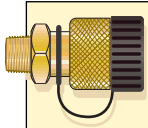
Baseplate not shown.

◀ For full features see page 18.

Cylinder Capacity (tons) Nominal [maximum]	Stroke (in)	Model Number	Cylinder Effective Area (in <sup>2</sup> )	Oil Capacity (in <sup>3</sup> )	Collapsed Height* A (in)
20 [24]	1.97	RACL-202•	4.83	9.51	8.82
	3.94	RACL-204•	4.83	19.02	10.79
	5.91	RACL-206•	4.83	28.52	12.76
	7.87	RACL-208•	4.83	38.03	14.72
	9.84	RACL-2010•	4.83	47.54	16.69
30 [34]	1.97	RACL-302•	6.85	13.48	9.09
	3.94	RACL-304	6.85	26.97	11.06
	5.91	RACL-306	6.85	40.45	13.03
	7.87	RACL-308	6.85	53.94	15.00
	9.84	RACL-3010•	6.85	67.42	16.97
50 [55]	1.97	RACL-502•	10.99	21.63	9.29
	3.94	RACL-504	10.99	43.27	11.26
	5.91	RACL-506	10.99	64.90	13.23
	7.87	RACL-508	10.99	86.54	15.20
	9.84	RACL-5010•	10.99	108.17	17.17
100 [111]	1.97	RACL-1002•	22.19	43.68	11.65
	3.94	RACL-1004	22.19	87.36	13.62
	5.91	RACL-1006	22.19	131.04	15.59
	7.87	RACL-1008	22.19	174.72	17.56
	9.84	RACL-10010•	22.19	218.41	19.53
150 [176]	1.97	RACL-1502•	35.18	69.25	12.72
	3.94	RACL-1504•	35.18	138.50	14.69
	5.91	RACL-1506•	35.18	207.76	16.65
	7.87	RACL-1508•	35.18	277.01	18.62
	9.84	RACL-15010•	35.18	346.26	20.59

• Made to order. Consult Enerpac for delivery.

# Single-Acting, Spring Return, Lock Nut, Aluminum Cylinders



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

## RACL Series



Capacity:  
**20-150 tons**

Stroke:  
**1.97-9.84 inch**

Maximum Operating Pressure:  
**10,000 psi**

Extended Height*	Outside Ø	Cylinder Bore Ø	Plunger Ø (threaded)	Base to Advance Port* H	Standard Saddle Ø J	Saddle Protrusion from Plunger K	Lock Nut Height S	Weight (lbs)	Model Number
B (in)	D (in)	E (in)	F (in)	H (in)	J (in)	K (in)	S (in)		
10.79	3.35	2.48	Tr 55 x 4	1.07	1.57	.12	1.97	10.6	RACL-202•
14.72	3.35	2.48	Tr 55 x 4	1.07	1.57	.12	1.97	12.1	RACL-204•
18.66	3.35	2.48	Tr 55 x 4	1.07	1.57	.12	1.97	13.6	RACL-206•
22.60	3.35	2.48	Tr 55 x 4	1.07	1.57	.12	1.97	15.0	RACL-208•
26.54	3.35	2.48	Tr 55 x 4	1.07	1.57	.12	1.97	16.5	RACL-2010•
11.06	3.94	2.95	Tr 60 x 4	1.30	1.57	.12	1.97	12.8	RACL-302•
15.00	3.94	2.95	Tr 60 x 4	1.30	1.57	.12	1.97	14.7	RACL-304
18.94	3.94	2.95	Tr 60 x 4	1.30	1.57	.12	1.97	16.5	RACL-306
22.87	3.94	2.95	Tr 60 x 4	1.30	1.57	.12	1.97	18.5	RACL-308
26.81	3.94	2.95	Tr 60 x 4	1.30	1.57	.12	1.97	20.5	RACL-3010•
11.26	5.12	3.74	Tr 80 x 4	1.18	1.97	.12	1.97	24.0	RACL-502•
15.20	5.12	3.74	Tr 80 x 4	1.18	1.97	.12	1.97	27.7	RACL-504
19.13	5.12	3.74	Tr 80 x 4	1.18	1.97	.12	1.97	31.2	RACL-506
23.07	5.12	3.74	Tr 80 x 4	1.18	1.97	.12	1.97	35.0	RACL-508
27.01	5.12	3.74	Tr 80 x 4	1.18	1.97	.12	1.97	38.7	RACL-5010•
13.62	7.09	5.31	Tr 110 x 6	1.81	3.70	.12	2.95	47.3	RACL-1002•
17.56	7.09	5.31	Tr 110 x 6	1.81	3.70	.12	2.95	55.2	RACL-1004
21.50	7.09	5.31	Tr 110 x 6	1.81	3.70	.12	2.95	63.1	RACL-1006
25.43	7.09	5.31	Tr 110 x 6	1.81	3.70	.12	2.95	70.8	RACL-1008
29.37	7.09	5.31	Tr 110 x 6	1.81	3.70	.12	2.95	80.7	RACL-10010•
14.69	9.06	6.69	Tr 140 x 6	2.01	4.45	.12	3.15	86.7	RACL-1502•
18.62	9.06	6.69	Tr 140 x 6	2.01	4.45	.12	3.15	102.3	RACL-1504•
22.56	9.06	6.69	Tr 140 x 6	2.01	4.45	.12	3.15	117.7	RACL-1506•
26.50	9.06	6.69	Tr 140 x 6	2.01	4.45	.12	3.15	133.3	RACL-1508•
30.43	9.06	6.69	Tr 140 x 6	2.01	4.45	.12	3.15	148.7	RACL-15010•

\* Dimensions include standard baseplate height of 0.24".