

▼ LPL-Series, Low-height Lock Nut Cylinders



- Lock nut provides mechanical load holding for a safe work environment
- Integrated tilt saddle allows for up to 5 degrees of misalignment
- Extreme low-height for use in confined areas
- Side-load resistance 5-10% of maximum capacity
- Overflow port as stroke limiter to prevent plunger blow-out
- Single-acting, gravity-return

▼ Only the extreme low-height LPL-cylinder fits in this confined area to lift the construction. The lock nut provides positive and safe mechanical load holding over a long period of time.



The Lowest Power Lifter



Integrated Tilt Saddles

All LPL-Series cylinders include integral tilt saddles with maximum tilt angles up to 5°.



The Summit Edition

Innovation is at the heart of the new Summit Edition cylinders, delivering the high-quality construction that you expect from Enerpac. Their durability ensures your job is done safely and reliably.

- Replaceable plunger support bearing adds support for eccentric loads *
- Nitrocarburization surface treatment for improved load and wear resistance and corrosion protection
- Replaceable composite bearing surrounds the seal, providing support for eccentric loads
- Low-wear, high-pressure seals provide longer service life.

* Eccentric load (or “side-load”) is inevitable in heavy lifting. Enerpac's unique *Summit Edition* features provide the ultimate protection against side load. Increased bearing surface maintains stability, and nitrocarburization treatment prevents scoring on the inside of the cylinder. Side-load poses a real problem.... our new cylinder features are the solution!

Cylinder Capacity (ton)	Stroke (in)	Model Number	Maximum Cylinder Cap. at 10,150 psi (ton)	Side-load Resistance of Maximum Capacity	Cylinder Effective Area (in ²)
60	1.97	LPL-602	68	10%	13.42
100	1.97	LPL-1002	113	10%	22.19
150	1.77	LPL-1602	179	8%	35.18
200	1.77	LPL-2002	223	8%	43.95
250	1.77	LPL-2502	286	5%	56.27
400	1.77	LPL-4002	450	5%	88.75
500	1.77	LPL-5002	575	5%	113.25

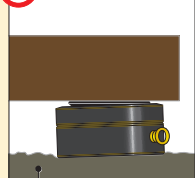
Single Acting, Low Height Lock-Nut Cylinders



IMPORTANT!

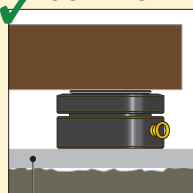
All LPL-Series cylinders require a solid lifting surface for correct support. The use of these cylinders on surfaces such as sand, mud or dirt, may result in cylinder damage.

INCORRECT!



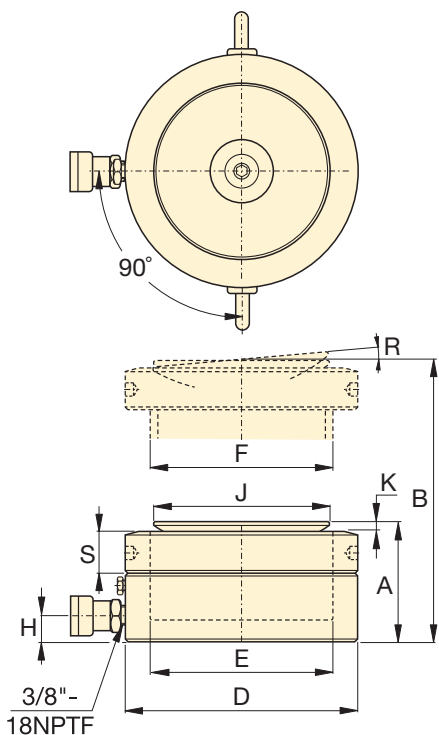
Rough soil

CORRECT!



Flat lifting surface

For more safety instructions see our 'Learning Center' on www.enerpac.com



LPL Series



Capacity:
60 - 500 ton

Stroke:
1.77 - 1.97 inch

Maximum Operating Pressure:
10,150 psi



Longer Stroke Lock-Nut Cylinders

For longer stroke applications HCL-Series Lock-Nut Cylinders are the perfect choice.

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Split-Flow Pumps

SFP-Series pumps with multiple outlets with equal oil flow. For lifting and lowering applications on multiple points these pumps are a far better alternative than using separately operated pumps.

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Synchronous Lifting Systems

Pumps for multiple lift-point capabilities. The economical EVOB-Series for basic applications and the multi-functional EVO-Series lifting system.

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Oil Capacity	Collapsed Height	Extended Height	Outside Diameter	Cylinder Bore Diameter	Plunger Diameter	Base to Advance Port	Saddle Diameter	Saddle Protrusion from Plunger	Saddle Max. Tilt Angle	Lock Nut Height	Wt.	Model Number
(in ³)	A (in)	B (in)	D (in)	E (in)	F (mm)	H (in)	J (in)	K (in)	R (degrees)	S (in)	(lbs)	
26.4	4.94	6.91	5.51	4.13	Tr 105 x 4	0.75	3.78	0.26	5°	1.10	33	LPL-602
43.7	5.39	7.36	6.81	5.31	Tr 135 x 6	0.83	4.96	0.31	5°	1.22	54	LPL-1002
62.3	5.83	7.60	8.66	6.69	Tr 170 x 6	1.06	6.30	0.35	5°	1.57	94	LPL-1602
77.9	6.10	7.87	9.65	7.48	Tr 190 x 6	1.18	7.09	0.39	5°	1.69	121	LPL-2002
99.7	6.24	8.01	10.83	8.46	Tr 215 x 6	1.26	7.87	0.45	5°	1.69	155	LPL-2502
157.2	7.01	8.78	13.78	10.63	Tr 270 x 6	1.56	9.84	0.45	4°	2.17	284	LPL-4002
200.6	7.56	9.33	15.75	12.01	Tr 305 x 6	1.91	11.42	0.39	3°	2.42	404	LPL-5002

▼ Shown from left to right: RSM-1000, RSM-300, RSM-50, RCS-1002, RCS-302



Maximum Power to Height Ratio



Saddles

All **RCS-Series** cylinders have plunger mounting holes for installation of tilt saddles. See table for selection and dimensional information.

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Low Clearance Lifting

The **LW-16** Lifting Wedge and **SOH-Series** Machine Lifts are the perfect choices for lifting loads that have low clearance.

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RSM-Series, Flat-Jac® Cylinders

- Compact, flat design for use where other cylinders will not fit
- RSM-750, 1000 and 1500 have handles for easy carrying
- Mounting holes permit easy fixturing
- Baked enamel finish for increased corrosion resistance
- CR-400 coupler and dust cap included on all models¹⁾
- Hard chrome plated high-quality steel plungers
- Grooved plunger ends require no saddle
- Single-acting spring return

RCS-Series, Low Height Cylinders

- Lightweight, low profile design for use in confined spaces
- Baked enamel finish for increased corrosion resistance
- Plunger wiper reduces contamination, extending cylinder life
- CR-400 coupler and dust cap included on all models
- Grooved plunger end with threaded holes for mounting tilt saddles
- Integral handle on RCS-1002 for easy carrying
- Plated steel plungers
- Single-acting spring return

▼ Only a couple of inches are needed for an RSM-cylinder to lift this large steel construction.

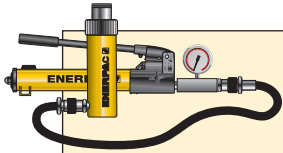


Cylinder Capacity	Stroke	Model Number	Cyl. Effect. Area	Oil Cap.
(tons) [max.]	(in)		(in ²)	(in ³)
5 [4.9]	.25	RSM-50 ¹⁾	.99	.25
10 [11.2]	.44	RSM-100	2.24	.98
20 [22.1]	.44	RSM-200	4.43	1.94
30 [32.4]	.50	RSM-300	6.49	3.25
50 [48.1]	.63	RSM-500	9.62	6.01
75 [79.5]	.63	RSM-750	15.90	9.94
100 [98.1]	.63	RSM-1000	19.63	12.27
150 [153.4]	.63	RSM-1500	30.68	19.17
10 [11.2]	1.50	RCS-101*	2.24	3.35
20 [22.1]	1.75	RCS-201*	4.43	7.75
30 [32.4]	2.44	RCS-302*	6.49	15.82
50 [48.1]	2.38	RCS-502*	9.62	22.85
100 [98.1]	2.25	RCS-1002*	19.63	44.18

¹⁾ RSM-50 is fitted with an AR-400 coupler.

* Available as a set. See note on next page.

Single-Acting, Low Height Cylinders



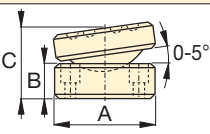
Pump and Cylinder Sets

All cylinders marked with an ** are available as **sets** (cylinder, gauge, couplers, hose and pump) for your ordering convenience.

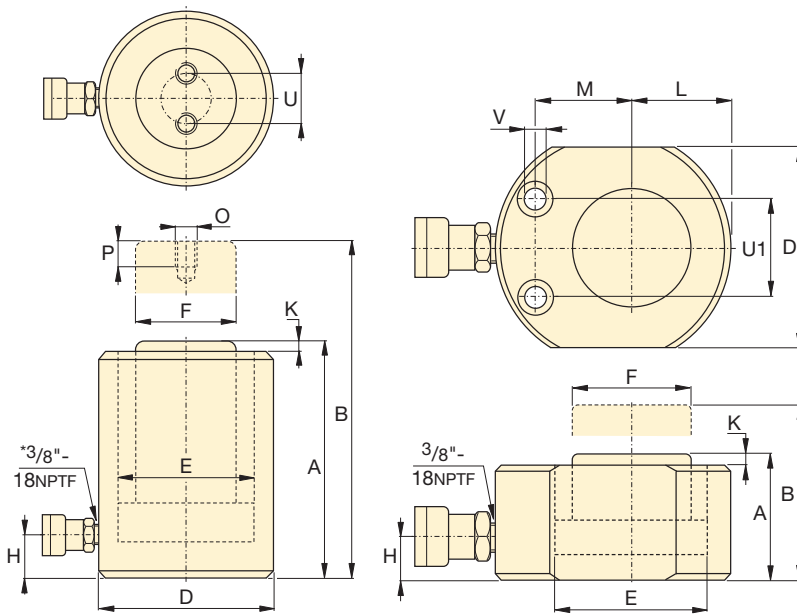
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Optional Bolt On Tilt Saddle Dimensions (in)

For cylinder model:	Model Number	A	B	C*
RCS-201, -302, -502	CAT-51	1.97	.59	1.14
RCS-1002	CAT-101	2.80	.67	1.39



* "C" dimension equals saddle protrusion from plunger. Mounting screws are included.



RCS-Series**

RSM-Series

** 5° angle position of coupler on RCS-101, 201, 302.

RSM RCS Series



Capacity:

5-150 tons

Stroke:

.25-2.44 inches

Maximum Operating Pressure:

10,000 psi

RSM Cylinder Mounting Hole Dimensions (in)

Model Number	Hole Pitch U1	Hole Diam. V	Counter Bore Diam.	Counter Bore Depth
RSM-50	1.12	.20	.312	.17
RSM-100	1.44	.28	.422	.31
RSM-200	1.94	.40	.594	.39
RSM-300	2.06	.40	.625	.44
RSM-500	2.62	.47	.750	.50
RSM-750	3.00	.53	.812	.56
RSM-1000	3.00	.53	.812	.56
RSM-1500	4.62	.53	.812	.56

Collapsed Height	Extended Height	Outside Diameter	Cylinder Bore Diameter	Plunger Diameter	Base to Advance Port	Plunger Protrusion from Base	Plunger to Base	Plunger to Mtg. Hole	Thread	Thread Depth	Bolt Circle	Weight	Model Number
A (in)	B (in)	D (in)	E (in)	F (in)	H (in)	K (in)	L (in)	M (in)	O (mm)	P (in)	U (in)	(lbs)	
1.28	1.53	2.31 x 1.63	1.13	1.00	.63	.04	.81	.88	-	-	-	2.3	RSM-50 ¹⁾
1.69	2.13	3.25 x 2.19	1.69	1.50	.75	.04	1.09	1.34	-	-	-	3.1	RSM-100
2.03	2.47	4.00 x 3.00	2.38	2.00	.75	.04	1.56	1.56	-	-	-	6.8	RSM-200
2.31	2.81	4.63 x 3.75	2.88	2.50	.75	.08	1.88	1.75	-	-	-	10	RSM-300
2.63	3.25	5.50 x 4.50	3.50	2.75	.75	.08	2.25	2.13	-	-	-	15	RSM-500
3.13	3.75	6.50 x 5.50	4.50	3.25	.75	.08	2.75	2.63	-	-	-	25	RSM-750
3.38	4.00	7.00 x 6.00	5.00	3.63	.75	.08	3.00	2.94	-	-	-	32	RSM-1000
3.94	4.56	8.50 x 7.50	6.25	4.50	.94	.08	3.75	3.25	-	-	-	58	RSM-1500
3.47	4.97	2.75	1.69	1.50	.69	.20	-	-	M4	.32	1.03	6	RCS-101*
3.88	5.63	3.63	2.38	2.00	.69	.13	-	-	M5	.32	1.57	11	RCS-201*
4.63	7.06	4.00	2.88	2.62	.75	.13	-	-	M5	.32	1.57	15	RCS-302*
4.81	7.19	4.88	3.50	2.75	.94	.08	-	-	M5	.32	1.57	22	RCS-502*
5.56	7.81	6.50	5.00	3.63	1.25	.06	-	-	M8	.40	2.17	46	RCS-1002*

HIGH-TONNAGE ULTRA FLAT CYLINDERS

Proven design for harsh conditions



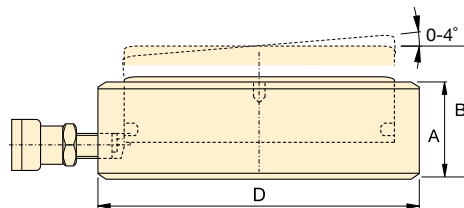
ENERPAC 

High-Tonnage, Ultra Flat Cylinders

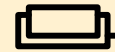
▼ CUSP-Series, Ultra Flat, High-Tonnage Cylinders, integrated tilting function



- Extremely low collapsed height
- Integrated tilting function up to 4 degrees
- Nitrocarburized surface treatment for harsh conditions
- “Red Line” for visual maximum stroke limitation



CUSP Series



Capacity:

10-1000 tons

Tilted Stroke / Straight Stroke:

.24-.39 in / .26-69 in

Integrated:

Tilting Function

Maximum Operating Pressure:

10,150 psi



Tilt Plunger

All CUSP-Series Cylinders include a tilting plunger to evenly distribute the load with maximum tilt angles up to 4 degrees.



IMPORTANT!

CUSP Cylinders DO NOT have a stop-ring for stroke limitation!

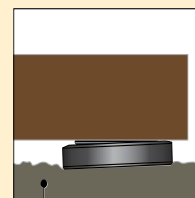


IMPORTANT!

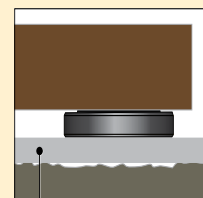
All Ultra Flat Cylinders require a solid lifting support.

The use of these flat cylinders on surfaces such as sand, mud or dirt, may result in cylinder damage.

INCORRECT!



CORRECT!



For more safety instructions see our ‘Learning Center’ on www.enerpac.com

Cylinder Capacity @ 10,150 psi ton (max.)	Model Number	Tilted Stroke (in)	Straight Stroke (in)	Tilting +/- (degrees)	Collapsed Height A (in)	Extended Height B (in)	Outside Diam. D (in)	Oil Capacity (in ³)	Wt. (lbs)
10 (10.9)	CUSP10 ¹⁾	0.24	0.26	2	1.40	1.66	2.83	0.57	2.6
20 (22.2)	CUSP20 ¹⁾	0.24	0.28	2	1.59	1.87	3.54	1.21	4.2
30 (34.8)	CUSP30 ¹⁾	0.24	0.29	2	1.67	1.96	4.13	1.97	6.0
50 (61.8)	CUSP50 ¹⁾	0.39	0.52	4	2.24	2.77	5.12	6.37	12.3
75 (89.0)	CUSP75 ¹⁾	0.39	0.55	4	2.38	2.93	5.91	9.66	17.6
100 (121.1)	CUSP100 ²⁾	0.39	0.58	4	2.50	3.08	6.69	13.81	23.8
150 (178.6)	CUSP150 ²⁾	0.39	0.56	3	2.56	3.12	7.87	19.81	33.7
200 (235.0)	CUSP200 ²⁾	0.39	0.59	3	2.72	3.30	9.02	27.15	47.4
250 (285.6)	CUSP250 ²⁾	0.39	0.61	3	2.85	3.46	9.92	34.34	60.2
300 (355.9)	CUSP300 ²⁾	0.39	0.56	2	2.85	3.41	11.10	38.93	75.8
400 (450.5)	CUSP400 ²⁾	0.39	0.57	2	3.05	3.63	12.44	51.01	101.9
500 (574.8)	CUSP500 ²⁾	0.39	0.60	2	3.25	3.85	14.02	67.77	138.2
600 (672.9)	CUSP600 ²⁾	0.39	0.61	2	3.44	4.06	15.20	81.42	172.8
750 (846.0)	CUSP750 ²⁾	0.39	0.64	2	3.68	4.32	17.01	106.95	231.9
1000(1142.6)	CUSP1000 ²⁾	0.39	0.69	2	4.06	4.74	19.76	154.20	346.1

¹⁾ Coupler AR630 including dustcap: Use HB7206 hose including AH630 coupler to connect to your pump.

²⁾ Coupler CR400 including dustcap: Use HC-Series hose including CH604 coupler to connect to your pump.

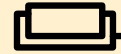
Ultra Flat Cylinders with Stop-Ring

▼ CULP-Cylinder, Ultra Flat Cylinder with Stop-Ring



- Stop-ring for maximum stroke limitation
- Extremely low collapsed height
- Nitrocarburized surface treatment for harsh conditions

CULP Series



Capacity:

10-50 tons

Stroke:

0.24 inches

Integrated:

Stop-Ring

Maximum Operating Pressure:

10,150 psi

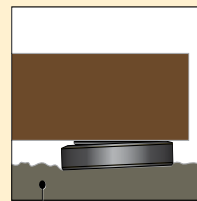


IMPORTANT!

All Ultra Flat Cylinders require a solid lifting surface for correct support.

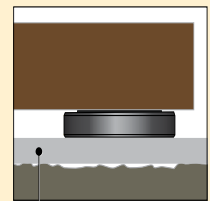
The use of these flat cylinders on surfaces such as sand, mud or dirt, may result in cylinder damage.

 **INCORRECT!**



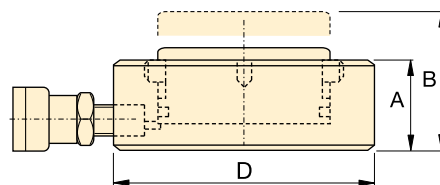
Rough soil

 **CORRECT!**



Flat lifting surface

For more safety instructions see our 'Learning Center' on www.enerpac.com



Cylinder Capacity @ 10,150 psi ton (max.)	Model Number	Stroke (in)	Collapsed Height A (in)	Extended Height B (in)	Outside Diameter D (in)	Oil Capacity (in ³)	Wt. (lbs)
10 (10.9)	CULP10 ¹⁾	0.24	1.08	1.32	2.83	0.51	2
20 (22.2)	CULP20 ¹⁾	0.24	1.26	1.50	3.54	1.04	4
30 (34.8)	CULP30 ¹⁾	0.24	1.38	1.61	4.13	1.62	6
50 (61.8)	CULP50 ¹⁾	0.24	1.75	1.99	5.12	2.88	10

¹⁾ Coupler AR630 including dustcap; Use HB7206 hose including AH630 coupler to connect to your pump.



HYDRAULIC PUMPS

Enerpac hydraulic pumps are available in over 1000 different configurations. Whatever your application needs are for speed, control, intermittent or heavy-duty, Enerpac has the right solution for you.

Featuring Hand, Battery, Electric, Air and Gasoline-powered models, Enerpac offers the most comprehensive pump line available.



P-Series, Hand Pumps



XC-Series, Cordless Pumps



XA-Series, Air-Driven Pumps



ZU4-Series, Portable Electric Pumps



ZE-Series, Electric Pumps



SFP-Series, Split-Flow Pumps

Your Enerpac Distributor: