

**ENERPAC** 

# Aluminium Cylinders

**NEW!**



**ENERPAC**<sup>®</sup>  
INDUSTRIAL TOOLS

## Pick up the Power

The NEW lightweight range Enerpac Aluminium Cylinders. Full range of single-acting, lock nut, hollow plunger and double-acting 700 bar aluminium cylinders.



# Enerpac Lightweight Aluminium Cylinders

Enerpac, the name you have come to trust for reliability, innovation, breadth of product line and quality in High Force Hydraulic Tools, has raised the bar for Aluminium Cylinder Technology. With the most complete line available, Enerpac has the Aluminium Cylinder to tackle your toughest requirements.

Utilizing the latest in Alloy technology, high-strength coatings, seal design and bearing materials, the new Aluminium Cylinder line from Enerpac can change the way you think about your cylinder applications. Our cylinders provide the strength of steel with the light weight, transportability and easy positioning of aluminium.

Let us show you the new world of Aluminium Cylinders we have to offer.

## The Enerpac Aluminium Advantage:

- Lightweight, easy to carry and position to allow a higher cylinder capacity-to-weight-ratio
- Non-corrosive by design, aluminium has always been a good material for use in many caustic environments
- Made from 7075T-6 Alloy, with a complete Hard-Kote treatment, to provide strength that rivals the strength of steel
- Composite Bearings on all moving surfaces guarantee NO metal-to-metal contact, to resist side loads and increase cylinder life
- A removable steel base plate and hardened steel saddle resist wear caused by use on concrete and other abrasive surfaces
- Full Capacity range, from 20 to 150 ton – we have a size to suit your application
- Full Stroke range, from 50 to 250 millimetres – we have a model to fit almost any requirement
- With four versions, Single-Acting Solid, Lock Nut, Hollow Plunger and Double-Acting Solid – Enerpac offers the most extensive Aluminium Cylinder line in the industry.



# The Advantage - Pick Up The Power

## The World of Enerpac

- Recognized Market Leader for High Pressure Hydraulic Tools
- Global Support, with sales offices in more than 10 countries worldwide
- The leader in product innovation and breadth of product line
- All products backed by the Enerpac Lifetime Guarantee



Single-acting, spring return  
RAC-Series

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Lock Nut, spring return  
RACL-Series

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Hollow Plunger, spring return  
RACH-Series

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Double-acting,  
RAR-Series

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▼ Shown from left to right: RAC-5010, RAC-15010, RAC-304, RAC-208



- Composite bearings prevent metal to metal contact, increasing cylinder life and resistance to side-loads of up to 10%
- Hard-Kote finish on all surfaces resists damage and extends cylinder life
- Handles standard on 50, 100 and 150 ton models, optional on 20 and 30 ton
- Steel base plate and saddle for protection against load-induced damage
- Integral stopring prevents plunger over-travel and is capable of withstanding the full cylinder capacity
- High strength return spring for rapid cylinder retraction
- CR-400 coupler and dustcap included on all models
- All cylinders meet ASME B-30.1 and ISO 10100 standards



◀ The Enerpac RAC-serie lightweight aluminium cylinders are easily positioned.

## Lightweight for Maximum Portability



### Saddles

All RAC-cylinders are equipped with bolt-on removable hardened steel saddles.



### Lightweight Handpumps

The Enerpac composite lightweight handpumps P-392 or P-802 make the optimal lightweight set.



### Lock Nut Cylinders

When positive mechanical load holding is required, the lightweight RACL-Series Aluminium Lock Nut cylinders are the ideal choice.

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### ▼ SELECTION CHART

| Cylinder Capacity @ 700 bar<br>ton<br>(kN) | Stroke<br>(mm) | Model Number * | Cylinder Effective Area<br>(cm <sup>2</sup> ) |
|--|----------------|----------------|---|
| 20 (218)                                   | 50             | RAC-202        | 31,2  |
|  | 100            | RAC-204        | 31,2  |
|  | 150            | RAC-206        | 31,2  |
| 30 (309)                                   | 50             | RAC-302        | 44,2  |
|  | 100            | RAC-304        | 44,2  |
|  | 150            | RAC-306        | 44,2  |
| 50 (496)                                   | 50             | RAC-502        | 70,9  |
|  | 100            | RAC-504        | 70,9  |
|  | 150            | RAC-506        | 70,9  |
| 100 (1002)                                 | 100            | RAC-1004       | 143,1   |
|  | 150            | RAC-1006       | 143,1   |
|  | 200            | RAC-1008       | 143,1   |
| 150 (1589)                                 | 150            | RAC-1506       | 227,0   |

\* Note: All cylinder capacities available in strokes from 50 - 250 mm.

# Single-Acting, Aluminium Cylinders

**RAC Series**



Capacity:  
**20-150 ton**

Stroke:  
**50-250 mm**

Maximum Operating Pressure:  
**700 bar**



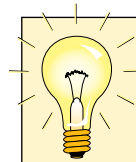
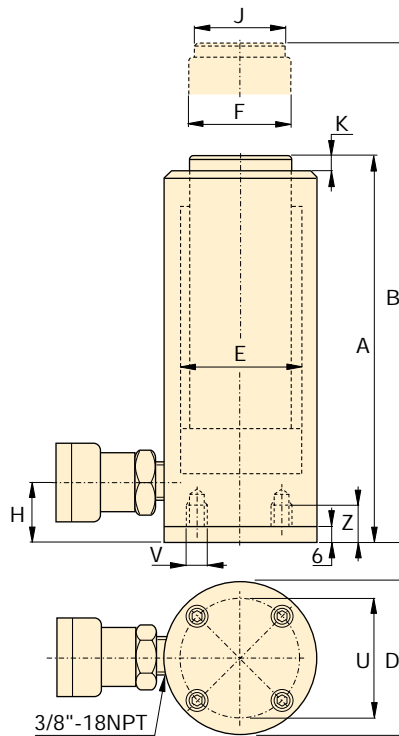
### Steel Base Plate Mounting Holes

The mounting holes in these aluminium cylinders are designed for fixturing the steel base plate. They will not withstand the capacity of the cylinder.

### Steel Base Plate Mounting Holes

| Cylinder Model / Capacity ton | Bolt Circle U (mm) | Thread V (mm) | Thread Depth <sup>1)</sup> Z (mm) |
|-------------------------------|--------------------|---------------|-----------------------------------|
| RAC-20                        | 70,0               | M6            | 12                                |
| RAC-30                        | 80,0               | M6            | 12                                |
| RAC-50                        | 110,0              | M6            | 12                                |
| RAC-100                       | 160,0              | M6            | 12                                |
| RAC-150                       | 200,0              | M6            | 12                                |

<sup>1)</sup> Including Base Plate Height of 6 mm.



### Additional Stroke Lengths

All cylinder models are available with standard stroke lengths of 50, 100, 150, 200 and 250 mm.

Please contact Enerpac for ordering information.



### Hoses

Enerpac offers a complete line of high quality hydraulic hoses. To ensure the integrity of your system, specify only Enerpac hydraulic hoses.

| Oil Capacity (cm <sup>3</sup> ) | Collapsed Height A (mm) | Extended Height B (mm) | Outside Diameter D (mm) | Cylinder Bore Diameter E (mm) | Plunger Diameter F (mm) | Bottom to Advance Port H (mm) | Saddle Diameter J (mm) | Saddle Protrusion from Plunger K (mm) | Weight (kg) | Model Number * |
|---------------------------------|-------------------------|------------------------|-------------------------|-------------------------------|-------------------------|-------------------------------|------------------------|---------------------------------------|-------------|----------------|
| 156                             | 174                     | 224                    | 85                      | 63,0                          | 50,0                    | 27                            | 40                     | 3                                     | 4,2         | RAC-202        |
| 312                             | 224                     | 324                    | 85                      | 63,0                          | 50,0                    | 27                            | 40                     | 3                                     | 4,5         | RAC-204        |
| 468                             | 274                     | 424                    | 85                      | 63,0                          | 50,0                    | 27                            | 40                     | 3                                     | 4,7         | RAC-206        |
| 221                             | 181                     | 231                    | 100                     | 75,0                          | 60,0                    | 32                            | 40                     | 3                                     | 5,0         | RAC-302        |
| 442                             | 231                     | 331                    | 100                     | 75,0                          | 60,0                    | 32                            | 40                     | 3                                     | 5,4         | RAC-304        |
| 663                             | 281                     | 431                    | 100                     | 75,0                          | 60,0                    | 32                            | 40                     | 3                                     | 5,8         | RAC-306        |
| 354                             | 186                     | 236                    | 130                     | 95,0                          | 80,0                    | 30                            | 50                     | 3                                     | 9,5         | RAC-502        |
| 709                             | 236                     | 336                    | 130                     | 95,0                          | 80,0                    | 30                            | 50                     | 3                                     | 10,1        | RAC-504        |
| 1063                            | 286                     | 436                    | 130                     | 95,0                          | 80,0                    | 30                            | 50                     | 3                                     | 10,8        | RAC-506        |
| 1431                            | 271                     | 271                    | 180                     | 135,0                         | 110,0                   | 46                            | 94                     | 3                                     | 19,1        | RAC-1004       |
| 2147                            | 321                     | 471                    | 180                     | 135,0                         | 110,0                   | 46                            | 94                     | 3                                     | 20,2        | RAC-1006       |
| 2863                            | 371                     | 571                    | 180                     | 135,0                         | 110,0                   | 46                            | 94                     | 3                                     | 21,4        | RAC-1008       |
| 3405                            | 348                     | 498                    | 230                     | 170,0                         | 140,0                   | 51                            | 113                    | 3                                     | 36,4        | RAC-1506       |

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



- Aluminium Lock Nut provides mechanical load holding for extended periods
- Hardened steel stopring increasing cylinder life and resistance to side-loads of up to 5%
- Hard-Kote finish on all surfaces resists damage and extends cylinder life
- Handles standard on 50, 100 and 150 ton models, optional on 20 and 30 ton
- Steel base plate and saddle for protection against load-induced damage
- Integral stopring prevents plunger over-travel and is capable of withstanding the full cylinder capacity
- High strength return spring for rapid cylinder retraction
- CR-400 coupler and dustcap included on all models
- All cylinders meet ASME B-30.1 and ISO 10100 standards



◀ The portable lock nut cylinder RACL-1506 used for extended load support during epoxy injection for bridge reinforcement.

## To Secure Loads Mechanically



### Saddles

All RACL-cylinders are equipped with bolt-on removable hardened steel saddles.



### Remote Lifting

For heavy lifting in remote locations use the Enerpac GPE-series electric Hushh pumps.



### Hoses

Enerpac offers a complete line of high quality hydraulic hoses. To ensure the integrity of your system, specify only Enerpac hydraulic hoses.



### 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.

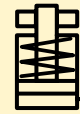
### ▼ SELECTION CHART

| Cylinder Capacity @ 700 bar ton (kN) | Stroke (mm) | Model Number * | Cylinder Effective Area (cm <sup>2</sup> ) |
|--------------------------------------|-------------|----------------|--|
| 50 (496)                             | 50          | RACL-502       | 70,9                                       |
|                                      | 100         | RACL-504       | 70,9                                       |
|                                      | 150         | RACL-506       | 70,9                                       |
| 100 (1002)                           | 50          | RACL-1002      | 143,1                                      |
|                                      | 100         | RACL-1004      | 143,1                                      |
|                                      | 150         | RACL-1006      | 143,1                                      |
| 150 (1589)                           | 50          | RACL-1502      | 227,0                                      |
|                                      | 100         | RACL-1504      | 227,0                                      |
|                                      | 150         | RACL-1506      | 227,0                                      |

\* Note: All cylinder capacities available in strokes from 50 - 250 mm.

# Single-Acting, Aluminium Lock Nut Cylinders

**RACL**  
Series



Capacity:  
**20-150 ton**

Stroke:  
**50-250 mm**

Maximum Operating Pressure:  
**700 bar**



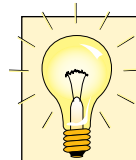
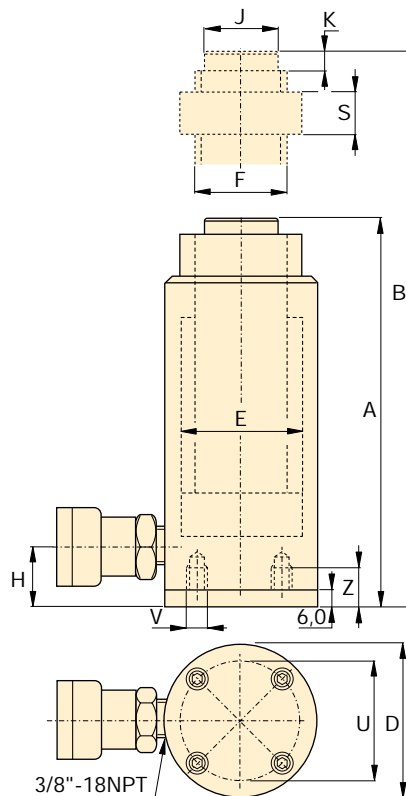
### Steel Base Plate Mounting Holes

The mounting holes in these aluminium cylinders are designed for fixturing the steel base plate. They will not withstand the capacity of the cylinder.

### Steel Base Plate Mounting Holes

| Cylinder Model / Capacity ton | Bolt Circle U (mm) | Thread V (mm) | Thread Depth <sup>1)</sup> Z (mm) |
|-------------------------------|--------------------|---------------|-----------------------------------|
| RACL-50                       | 110,0              | M6            | 12                                |
| RACL-100                      | 160,0              | M6            | 12                                |
| RACL-150                      | 200,0              | M6            | 12                                |

<sup>1)</sup> Including Base Plate Height of 6 mm.



### Other Cylinder Capacities

Lock Nut Aluminium Cylinders are also available in capacities of 20 and 30 ton.

### Additional Stroke Lengths

All cylinder models are available with standard stroke lengths of 50, 100, 150, 200 and 250 mm. Please contact Enerpac for ordering information.



Order your free copy of the Enerpac brochure on hydraulic systems for structural engineering. [www.enerpac.com](http://www.enerpac.com) or call.

| Oil Capacity (cm <sup>3</sup> ) | Collapsed Height A (mm) | Extended Height B (mm) | Outside Diameter D (mm) | Cylinder Bore Diameter E (mm) | Plunger Diameter (Threaded) F (mm) | Bottom to Advance Port H (mm) | Saddle Diameter J (mm) | Saddle Potrusion fr. Plunger K (mm) | Lock Nut Height S (mm) | Weight (kg) | Model Number * |
|---------------------------------|-------------------------|------------------------|-------------------------|-------------------------------|------------------------------------|-------------------------------|------------------------|-------------------------------------|------------------------|-------------|----------------|
| 354                             | 236                     | 286                    | 130                     | 95,0                          | Tr 80 x 4                          | 30                            | 50                     | 3                                   | 50                     | 10,9        | RACL-502       |
| 709                             | 286                     | 386                    | 130                     | 95,0                          | Tr 80 x 4                          | 30                            | 50                     | 3                                   | 50                     | 12,6        | RACL-504       |
| 1063                            | 336                     | 486                    | 130                     | 95,0                          | Tr 80 x 4                          | 30                            | 50                     | 3                                   | 50                     | 14,2        | RACL-506       |
| 716                             | 296                     | 346                    | 180                     | 135,0                         | Tr 110 x 6                         | 46                            | 94                     | 3                                   | 75                     | 21,5        | RACL-1002      |
| 1431                            | 346                     | 446                    | 180                     | 135,0                         | Tr 110 x 6                         | 46                            | 94                     | 3                                   | 75                     | 25,1        | RACL-1004      |
| 2147                            | 396                     | 546                    | 180                     | 135,0                         | Tr 110 x 6                         | 46                            | 94                     | 3                                   | 75                     | 28,7        | RACL-1006      |
| 1135                            | 323                     | 373                    | 230                     | 170,0                         | Tr 140 x 6                         | 51                            | 113                    | 3                                   | 80                     | 39,4        | RACL-1502      |
| 2270                            | 373                     | 473                    | 230                     | 170,0                         | Tr 140 x 6                         | 51                            | 113                    | 3                                   | 80                     | 46,5        | RACL-1504      |
| 3405                            | 423                     | 573                    | 230                     | 170,0                         | Tr 140 x 6                         | 51                            | 113                    | 3                                   | 80                     | 53,5        | RACL-1506      |

# Aluminium Hollow Plunger Cylinders

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



- Hollow plunger design allows for both pull and push forces
- Internal plunger thread allows easy mounting of attachments
- Composite bearings prevent metal to metal contact, increasing cylinder life and resistance to side-loads of up to 10%
- Hard-Kote finish on all surfaces resists damage and extends cylinder life
- Floating center tube increases seal and product life
- Handles standard on 60, 100 and 150 ton models, optional on 20 and 30 ton
- Steel base plate and saddle for protection against load-induced damage
- Integral stopring prevents plunger over-travel and is capable of withstanding the full cylinder capacity
- High strength return spring for rapid cylinder retraction



◀ An RACH-606 powered by a P-392 handpump used to extract corroded carriage pins of refuse collection vehicles.

## The Lightweight Solution for Tensioning and Testing



### Saddles

All RACH-cylinders are equipped with threaded hollow removable saddles of hardened steel.



### Lightweight Handpumps

The Enerpac composite lightweight handpumps P-392 or P-802 make the optimal lightweight set.



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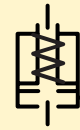
### ▼ SELECTION CHART

| Cylinder Capacity @ 700 bar<br>ton<br>(kN) | Stroke<br>(mm) | Model Number * | Cylinder Effective Area<br>(cm <sup>2</sup> ) |
|--|----------------|----------------|---|
| 20 (229)                                   | 50             | RACH-202       | 32,7  |
|  | 150            | RACH-206       | 32,7  |
| 30 (358)                                   | 50             | RACH-302       | 51,1  |
|  | 150            | RACH-306       | 51,1  |
| 60 (648)                                   | 100            | RACH-604       | 92,5  |
|  | 150            | RACH-606       | 92,5  |
| 100 (1086)                                 | 150            | RACH-1006      | 155,1   |

\* Note: All cylinder capacities available in strokes from 50 - 250 mm.

# Single-Acting, Aluminium Hollow Plunger Cylinders

## RACH Series



Capacity:  
**20-150 ton**

Stroke:  
**50-250 mm**

Center Hole Diameter:  
**27-79 mm**

Maximum Operating Pressure:  
**700 bar**



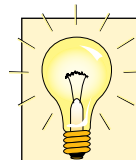
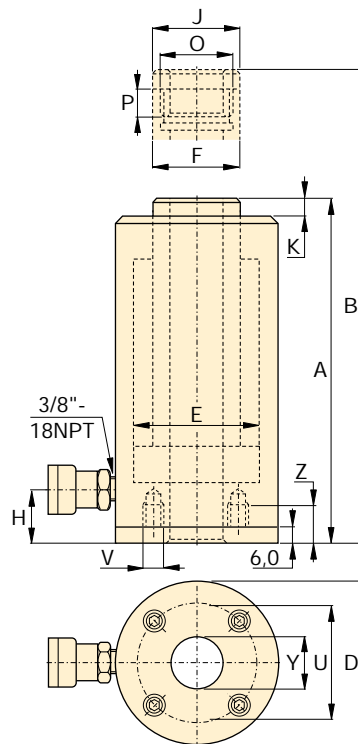
### Steel Base Plate Mounting Holes

The mounting holes in these aluminium cylinders are designed for fixturing the steel base plate. They will not withstand the capacity of the cylinder.

### Steel Base Plate Mounting Holes

| Cylinder Model / Capacity ton | Bolt Circle U (mm) | Thread V (mm) | Thread Depth <sup>1)</sup> Z (mm) |
|-------------------------------|--------------------|---------------|-----------------------------------|
| RACH-20                       | 85,0               | M6            | 12                                |
| RACH-30                       | 110,0              | M6            | 12                                |
| RACH-60                       | 165,0              | M6            | 12                                |
| RACH-100                      | 230,0              | M6            | 12                                |

<sup>1)</sup> Including Base Plate Height of 6 mm.



### Other Cylinder Capacities

Aluminium Hollow Plunger Cylinders are also available in capacities of 150 ton.

### Additional Stroke Lengths

All cylinder models are available with standard stroke lengths of 50, 100, 150, 200 and 250 mm. Please contact Enerpac for ordering information.



### Standard Features

- CR-400 coupler and dustcap included on all models.
- All cylinders meet ASME B-30.1 and ISO 10100 standards.

| Oil Capacity (cm <sup>3</sup> ) | Collapsed Height A (mm) | Extended Height B (mm) | Outside Dia. D (mm) | Cylinder Bore Dia. E (mm) | Plunger Dia. F (mm) | Bottom to Adv. Port H (mm) | Saddle Dia. J (mm) | Saddle Pot. fr. Plunger K (mm) | Plunger Internal Thread O (mm) | Plunger Thread Length P (mm) | Center Hole Dia. Y (mm) | Weight (kg) | Model Number * |
|---------------------------------|-------------------------|------------------------|---------------------|---------------------------|---------------------|----------------------------|--------------------|--------------------------------|--------------------------------|------------------------------|-------------------------|-------------|----------------|
| 164                             | 242                     | 292                    | 100                 | 75,0                      | 55,0                | 29                         | 55                 | 10,0                           | M45 x 1,5                      | 15                           | 27,0                    | 2,4         | RACH-202       |
| 491                             | 342                     | 492                    | 100                 | 75,0                      | 55,0                | 29                         | 55                 | 10,0                           | M45 x 1,5                      | 15                           | 27,0                    | 4,1         | RACH-206       |
| 256                             | 257                     | 307                    | 130                 | 95,0                      | 70,0                | 29                         | 70                 | 10,0                           | M48 x 1,5                      | 15                           | 34,0                    | 8,1         | RACH-302       |
| 767                             | 357                     | 507                    | 130                 | 95,0                      | 70,0                | 29                         | 70                 | 10,0                           | M48 x 1,5                      | 15                           | 34,0                    | 10,5        | RACH-306       |
| 925                             | 362                     | 462                    | 180                 | 135,0                     | 110,0               | 60                         | 110                | 10,0                           | M90 x 1,5                      | 15                           | 56,0                    | 20,3        | RACH-604       |
| 1388                            | 412                     | 562                    | 180                 | 135,0                     | 110,0               | 60                         | 110                | 10,0                           | M90 x 1,5                      | 15                           | 56,0                    | 22,9        | RACH-606       |
| 2327                            | 391                     | 541                    | 250                 | 185,0                     | 150,0               | 61                         | 150                | 10,0                           | M130 x 1,5                     | 15                           | 79,0                    | 43,4        | RACH-1006      |

# Double-acting, Aluminium Cylinders

▼ Shown from left to right: RAR-5010, RAR-308, RAR-204



- Composite bearings prevent metal to metal contact, increasing cylinder life and resistance to side-loads of up to 10%
- Hard-Kote finish on all surfaces resists damage and extends cylinder life
- Handles standard on 50, 100 and 150 ton models, optional on 20 and 30 ton
- Steel base plate and saddle for protection against load-induced damage
- Integral stopring prevents plunger over-travel and is capable of withstanding the full cylinder capacity
- Built-in safety valve prevents accidental over-pressurization
- Double-acting for rapid retraction, regardless of hose lengths or system losses

## Portable Power Lifters for Double-Acting Applications



### Saddles

All RAR-cylinders are equipped with bolt-on removable hardened steel saddles.



### Hoses

Enerpac offers a complete line of high quality hydraulic hoses. To ensure the integrity of your system, specify only Enerpac hydraulic hoses.



### Remote Lifting

For heavy lifting in remote locations use the Enerpac GPE-series electric Hushh pumps.

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



Order your free copy of the Enerpac brochure on hydraulic systems for structural engineering. [www.enerpac.com](http://www.enerpac.com) or call.

### ▼ SELECTION CHART

| Cylinder Capacity @ 700 bar ton | Stroke (mm) | Model Number * | Maximum Cylinder Capacity (kN) |      | Cylinder Effective Area (cm <sup>2</sup> ) |       | Oil Capacity (cm <sup>3</sup> ) |      |
|---------------------------------|-------------|----------------|--------------------------------|------|--|-------|---------------------------------|------|
|                                 |             |                | Push                           | Pull | Push                                       | Pull  | Push                            | Pull |
| 50                              | 50          | RAR-502        | 496                            | 187  | 70,9                                       | 26,7  | 354                             | 134  |
|                                 | 100         | RAR-504        | 496                            | 187  | 70,9                                       | 26,7  | 709                             | 267  |
|                                 | 150         | RAR-506        | 496                            | 187  | 70,9                                       | 26,7  | 1063                            | 401  |
| 100                             | 100         | RAR-1004       | 1002                           | 557  | 143,1                                      | 79,5  | 1431                            | 795  |
|                                 | 150         | RAR-1006       | 1002                           | 557  | 143,1                                      | 79,5  | 2147                            | 1193 |
|                                 | 200         | RAR-1008       | 1002                           | 557  | 143,1                                      | 79,5  | 2863                            | 1590 |
| 150                             | 150         | RAR-1506       | 1589                           | 924  | 227,0                                      | 131,9 | 3405                            | 1979 |



◀ A RAR-506 was easy to position under a bulldozer for repair of frame member.

\* Note: All cylinder capacities available in strokes from 50 - 250 mm.

# Double-Acting, Aluminium Cylinders

**RAR Series**



Capacity:  
**20-150 ton**

Stroke:  
**50-250 mm**

Maximum Operating Pressure:  
**700 bar**



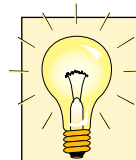
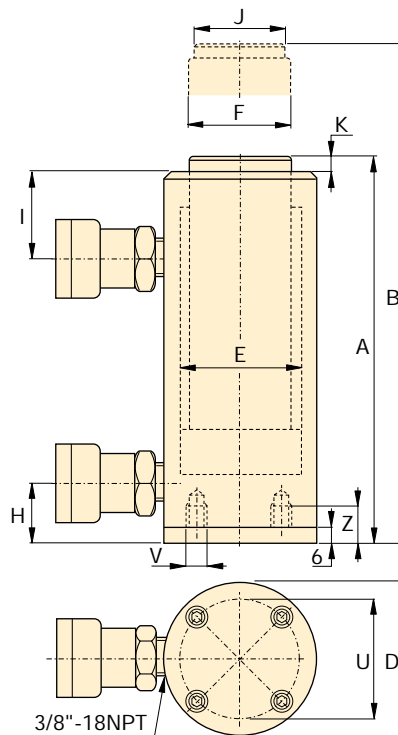
### Steel Base Plate Mounting Holes

The mounting holes in these aluminium cylinders are designed for fixturing the steel base plate. They will not withstand the capacity of the cylinder.

### Steel Base Plate Mounting Holes

| Cylinder Model / Capacity ton | Bolt Circle U (mm) | Thread V (mm) | Thread Depth <sup>1)</sup> Z (mm) |
|-------------------------------|--------------------|---------------|-----------------------------------|
| RAR-50                        | 110,0              | M6            | 12                                |
| RAR-100                       | 165,0              | M6            | 12                                |
| RAR-150                       | 200,0              | M6            | 12                                |

<sup>1)</sup> Including Base Plate Height of 6 mm.



### Other Cylinder Capacities

Double-Acting Aluminium Cylinders are also available in capacities of 20-30 ton.

### Additional Stroke Lengths

All cylinder models are available with standard stroke lengths of 50, 100, 150, 200 and 250 mm. Please contact Enerpac for ordering information.

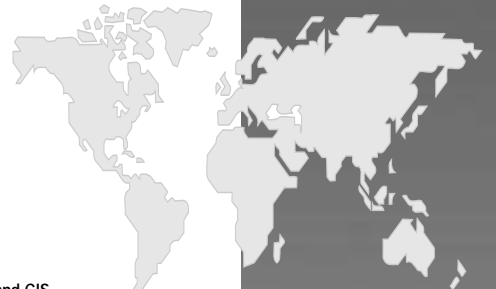


### Synchronous Lift Systems

When lifting an unbalanced load Enerpac PC-controlled Synchronous Lift Systems can be the solution with multiple lift point capabilities from 2 to 24 points. Call Enerpac for advice and technical assistance.

| Collapsed Height<br>A<br>(mm) | Extended Height<br>B<br>(mm) | Outside Diameter<br>D<br>(mm) | Cylinder Bore Diameter<br>E<br>(mm) | Plunger Diameter<br>F<br>(mm) | Bottom to Advance Port<br>H<br>(mm) | Top to Retract Port<br>I<br>(mm) | Saddle Diameter<br>J<br>(mm) | Saddle Protrusion from Plunger<br>K<br>(mm) | (kg) | Model Number * |
|-------------------------------|------------------------------|-------------------------------|-------------------------------------|-------------------------------|-------------------------------------|----------------------------------|------------------------------|---|------|----------------|
| 201                           | 251                          | 145                           | 95,0                                | 75,0                          | 30                                  | 56                               | 50                           | 3   | 10,5 | RAR-502        |
| 251                           | 351                          | 145                           | 95,0                                | 75,0                          | 30                                  | 56                               | 50                           | 3   | 12,4 | RAR-504        |
| 301                           | 451                          | 145                           | 95,0                                | 75,0                          | 30                                  | 56                               | 50                           | 3   | 14,4 | RAR-506        |
| 301                           | 401                          | 185                           | 135,0                               | 90,0                          | 43                                  | 80                               | 94                           | 3   | 21,0 | RAR-1004       |
| 351                           | 501                          | 185                           | 135,0                               | 90,0                          | 43                                  | 80                               | 94                           | 3   | 23,7 | RAR-1006       |
| 401                           | 601                          | 185                           | 135,0                               | 90,0                          | 43                                  | 80                               | 94                           | 3   | 26,5 | RAR-1008       |
| 353                           | 503                          | 230                           | 170,0                               | 110,0                         | 38                                  | 75                               | 113                          | 3   | 38,7 | RAR-1506       |

# Aluminium Cylinders



**ENERPAC**

## The Industrial Tools Line

### Cylinders

- General Purpose
- Pancake
- Aluminium Lightweight
- Low Height
- Heavy Duty
- Hollow Plunger
- Industrial
- Pull
- Long Stroke
- Stage Lift Systems
- Synchronous Lift System
- Jacks
- Spread

### Pumps

- Manual
- Electric Driven
- Compressed Air Driven
- Petrol Driven

### System Components

- Hoses, Couplers, Oil
- Gauges, Adaptors
- Manifolds, Fittings

### Valves

- 3-and 4-Way Directional
- Pressure and Flow Control

### Presses

- Bench and Workshop
- Roll Frame Presses
- Arbor and C-Clamps

### Pullers

- Master Pullers Sets
- Multi Purpose Puller Sets
- Posi Lock® Pullers

### Tools

- Maintenance Sets
- Punches
- Machine Lifts
- Load Skates
- Cutters
- Pipe Benders

### Bolting Tools

- Nut Splitters
- Flange/Wedge Spreaders
- Flange Alignment Tools
- Torque Wrenches
- Torque Wrench Pumps
- Twin Safety Hoses

e-mail: [info@enerpac.com](mailto:info@enerpac.com)

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

## Enerpac Worldwide Locations

### Australia

Tel: +61 297 438 988  
Fax: +61 297 438 648

### Brazil

Tel: +55 11 5687 2211  
Fax: +55 11 5686 5583  
**Toll Free in Brazil:**  
Tel: 000 817 200 6718  
[vendasbrasil@enerpac.com](mailto:vendasbrasil@enerpac.com)

### Canada

Tel: +1 905 564 5749  
Fax: +1 905 564 0305  
**Toll Free in Canada:**  
Tel: +1 800 268 4987  
Fax: +1 800 461 2456

### China

Shanghai  
Tel: +86 21 5866 9099  
Fax: +86 21 5866 7156  
Beijing  
Tel: +86 10 845 36166  
Fax: +86 10 845 36220

### Eastern Europe

Tel: +49 (211) 47149-44  
Fax: +49 (211) 47149-40

### France, Greece, Africa

Tel: +33 1 601 368 68  
Fax: +33 1 692 037 50

### Germany, Switzerland, Austria

Tel: +49 211 471 490  
Fax: +49 211 471 49 28

### India

Tel: +91 22 778 1779  
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Tel: +39 02 4861 111  
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### Japan

Tel: +81-048-430-2311  
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Tel: +52 771 71851 60  
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### The Netherlands, Belgium, Luxembourg, Sweden, Denmark, Norway, Finland

Tel: +31 318 535 911  
Fax: +31 318 525 613  
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### Russia and CIS (excl. Caspian Sea Countries)

Tel/Fax: +7(095) 936-2005  
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Tel/Fax: +7(095) 938-4655  
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### Singapore

Tel: +65 6484 5108  
Fax: +65 6484 5669

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Tel: +82 32 675 08 36  
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### Spain, Portugal

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Fax: +34 91 661 47 89

### Middle East, Turkey and Caspian Sea

Tel: +971 (0)4 8872686  
Fax: +971 (0)4 8872687

### United Kingdom, Ireland

Tel: +44 01527 598 900  
Fax: +44 01527 585 500

### USA, Latin America and Caribbean

Tel: +1 262 781 6600  
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### User inquiries:

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