

▼ Shown from left to right: RACL1006, RACL504, RACL5010



- Aluminium Lock Nut provides mechanical load holding for extended periods
- Hardened steel stop ring increasing cylinder life and resistance to side-loads of up to 5%
- Hard-Coat finish on all surfaces resists damage and extends cylinder life
- Composite bearings increase cylinder life and side load resistance
- Handles included on all models
- Steel base plate and saddle for protection against load-induced damage
- Integral stop ring prevents plunger over-travel and is capable of withstanding the full cylinder capacity
- High strength return spring for rapid cylinder retraction
- CR400 coupler and dustcap included on all models
- All cylinders meet ASME B-30.1 standards.



◀ The portable lock nut cylinder RACL1506 used for extended load supports during epoxy injection for bridge reinforcement.



## Saddles

All RACL-cylinders are equipped with bolt-on removable hardened steel saddles. For Tilt Saddles see next page.

Page: **15**



## Hoses

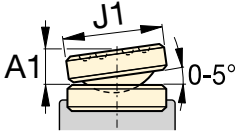
Enerpac offers a complete line of high quality hydraulic hoses. To ensure the integrity of your system, specify only Enerpac hydraulic hoses.

Page: **128**

| Cylinder Capacity<br>@ 700 bar<br>ton (kN) | Stroke<br>(mm) | Model Number     | Cylinder Effective Area<br>(cm <sup>2</sup> ) |
|--------------------------------------------|----------------|------------------|-----------------------------------------------|
| 20 (218)                                   | 50             | <b>RACL202</b>   | 31,2                                          |
|                                            | 100            | <b>RACL204</b>   | 31,2                                          |
|                                            | 150            | <b>RACL206</b>   | 31,2                                          |
|                                            | 200            | <b>RACL208</b>   | 31,2                                          |
|                                            | 250            | <b>RACL2010</b>  | 31,2                                          |
| 30 (309)                                   | 50             | <b>RACL302</b>   | 44,2                                          |
|                                            | 100            | <b>RACL304</b>   | 44,2                                          |
|                                            | 150            | <b>RACL306</b>   | 44,2                                          |
|                                            | 200            | <b>RACL308</b>   | 44,2                                          |
|                                            | 250            | <b>RACL3010</b>  | 44,2                                          |
| 50 (496)                                   | 50             | <b>RACL502</b>   | 70,9                                          |
|                                            | 100            | <b>RACL504</b>   | 70,9                                          |
|                                            | 150            | <b>RACL506</b>   | 70,9                                          |
|                                            | 200            | <b>RACL508</b>   | 70,9                                          |
|                                            | 250            | <b>RACL5010</b>  | 70,9                                          |
| 100 (1002)                                 | 50             | <b>RACL1002</b>  | 143,1                                         |
|                                            | 100            | <b>RACL1004</b>  | 143,1                                         |
|                                            | 150            | <b>RACL1006</b>  | 143,1                                         |
|                                            | 200            | <b>RACL1008</b>  | 143,1                                         |
|                                            | 250            | <b>RACL10010</b> | 143,1                                         |
| 150 (1589)                                 | 50             | <b>RACL1502</b>  | 227,0                                         |
|                                            | 100            | <b>RACL1504</b>  | 227,0                                         |
|                                            | 150            | <b>RACL1506</b>  | 227,0                                         |
|                                            | 200            | <b>RACL1508</b>  | 227,0                                         |
|                                            | 250            | <b>RACL15010</b> | 227,0                                         |

# Single-Acting, Aluminium Lock Nut Cylinders

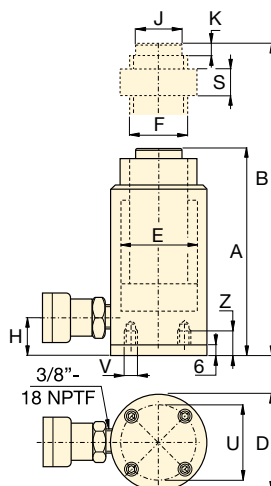
**Optional Bolt-on Tilt Saddle Dimensions (mm)**

| For Cylinder Model / Capacity ton | Tilt Saddle Model Number | Tilt Saddle Diameter | Addition to Collapsed Height A1 |  |
|-----------------------------------|--------------------------|----------------------|---------------------------------|-----------------------------------------------------------------------------------|
| <b>RACL20, 30</b>                 | <b>CATS30</b>            | 55                   | 11                              |                                                                                   |
| <b>RACL50</b>                     | <b>CATS50</b>            | 71                   | 14                              |                                                                                   |
| <b>RACL100</b>                    | <b>CATS150</b>           | 97                   | 19                              |                                                                                   |
| <b>RACL150</b>                    | <b>CATS200</b>           | 126                  | 18                              |                                                                                   |

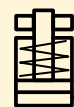
**Steel Base Plate Mounting Holes**

| Cylinder Model / Capacity ton | Bolt Circle U (mm) | Thread V (mm) | Thread Depth <sup>1)</sup> Z (mm) |
|-------------------------------|--------------------|---------------|-----------------------------------|
| <b>RACL20</b>                 | 70                 | M6            | 12                                |
| <b>RACL30</b>                 | 80                 | M6            | 12                                |
| <b>RACL50</b>                 | 110                | M6            | 12                                |
| <b>RACL100</b>                | 150                | M10           | 12                                |
| <b>RACL150</b>                | 200                | M10           | 12                                |

<sup>1)</sup> Including Base Plate Height of 6 mm and four (4) base plate bolts M6.



## RACL Series



Capacity:

**20 - 150 ton**

Stroke:

**50 - 250 mm**

Maximum Operating Pressure:

**700 bar**

|  | Oil Capacity<br>(cm <sup>3</sup> ) | Collapsed Height<br>A (mm) | Extended Height<br>B (mm) | Outside Diameter<br>D (mm) | Cylinder Bore Diameter<br>E (mm) | Plunger Diameter (Threaded)<br>F (mm) | Bottom to Advance Port<br>H (mm) | Saddle Diameter<br>J (mm) | Saddle Protrusion from Plunger<br>K (mm) | Lock Nut Height<br>S (mm) |  (kg) | Model Number     |
|--|------------------------------------|----------------------------|---------------------------|----------------------------|----------------------------------|---------------------------------------|----------------------------------|---------------------------|------------------------------------------|---------------------------|--------------------------------------------------------------------------------------------|------------------|
|  | 156                                | 224                        | 274                       | 85                         | 63                               | Tr 55 x 4                             | 27                               | 40                        | 3                                        | 50                        | 4,0                                                                                        | <b>RACL202</b>   |
|  | 312                                | 274                        | 374                       | 85                         | 63                               | Tr 55 x 4                             | 27                               | 40                        | 3                                        | 50                        | 4,6                                                                                        | <b>RACL204</b>   |
|  | 468                                | 324                        | 474                       | 85                         | 63                               | Tr 55 x 4                             | 27                               | 40                        | 3                                        | 50                        | 5,2                                                                                        | <b>RACL206</b>   |
|  | 624                                | 374                        | 574                       | 85                         | 63                               | Tr 55 x 4                             | 27                               | 40                        | 3                                        | 50                        | 5,8                                                                                        | <b>RACL208</b>   |
|  | 780                                | 424                        | 674                       | 85                         | 63                               | Tr 55 x 4                             | 27                               | 40                        | 3                                        | 50                        | 6,4                                                                                        | <b>RACL2010</b>  |
|  | 221                                | 231                        | 281                       | 100                        | 75                               | Tr 60 x 4                             | 33                               | 40                        | 3                                        | 50                        | 5,4                                                                                        | <b>RACL302</b>   |
|  | 442                                | 281                        | 381                       | 100                        | 75                               | Tr 60 x 4                             | 33                               | 40                        | 3                                        | 50                        | 6,1                                                                                        | <b>RACL304</b>   |
|  | 663                                | 331                        | 481                       | 100                        | 75                               | Tr 60 x 4                             | 33                               | 40                        | 3                                        | 50                        | 6,8                                                                                        | <b>RACL306</b>   |
|  | 883                                | 381                        | 581                       | 100                        | 75                               | Tr 60 x 4                             | 33                               | 40                        | 3                                        | 50                        | 7,5                                                                                        | <b>RACL308</b>   |
|  | 1105                               | 431                        | 681                       | 100                        | 75                               | Tr 60 x 4                             | 33                               | 40                        | 3                                        | 50                        | 8,2                                                                                        | <b>RACL3010</b>  |
|  | 354                                | 236                        | 286                       | 130                        | 95                               | Tr 80 x 4                             | 30                               | 50                        | 3                                        | 50                        | 9,3                                                                                        | <b>RACL502</b>   |
|  | 709                                | 286                        | 386                       | 130                        | 95                               | Tr 80 x 4                             | 30                               | 50                        | 3                                        | 50                        | 10,6                                                                                       | <b>RACL504</b>   |
|  | 1063                               | 336                        | 486                       | 130                        | 95                               | Tr 80 x 4                             | 30                               | 50                        | 3                                        | 50                        | 12,6                                                                                       | <b>RACL506</b>   |
|  | 1417                               | 386                        | 586                       | 130                        | 95                               | Tr 80 x 4                             | 30                               | 50                        | 3                                        | 50                        | 13,2                                                                                       | <b>RACL508</b>   |
|  | 1771                               | 436                        | 686                       | 130                        | 95                               | Tr 80 x 4                             | 30                               | 50                        | 3                                        | 50                        | 14,5                                                                                       | <b>RACL5010</b>  |
|  | 716                                | 296                        | 346                       | 180                        | 135                              | Tr 110 x 6                            | 46                               | 94                        | 3                                        | 75                        | 21,9                                                                                       | <b>RACL1002</b>  |
|  | 1431                               | 346                        | 446                       | 180                        | 135                              | Tr 110 x 6                            | 46                               | 94                        | 3                                        | 75                        | 24,2                                                                                       | <b>RACL1004</b>  |
|  | 2147                               | 396                        | 546                       | 180                        | 135                              | Tr 110 x 6                            | 46                               | 94                        | 3                                        | 75                        | 26,5                                                                                       | <b>RACL1006</b>  |
|  | 2863                               | 446                        | 646                       | 180                        | 135                              | Tr 110 x 6                            | 46                               | 94                        | 3                                        | 75                        | 28,8                                                                                       | <b>RACL1008</b>  |
|  | 3578                               | 496                        | 746                       | 180                        | 135                              | Tr 110 x 6                            | 46                               | 94                        | 3                                        | 75                        | 31,1                                                                                       | <b>RACL10010</b> |
|  | 1135                               | 323                        | 373                       | 230                        | 170                              | Tr 140 x 6                            | 51                               | 113                       | 3                                        | 80                        | 32,2                                                                                       | <b>RACL1502</b>  |
|  | 2270                               | 373                        | 473                       | 230                        | 170                              | Tr 140 x 6                            | 51                               | 113                       | 3                                        | 80                        | 36,2                                                                                       | <b>RACL1504</b>  |
|  | 3405                               | 423                        | 573                       | 230                        | 170                              | Tr 140 x 6                            | 51                               | 113                       | 3                                        | 80                        | 40,2                                                                                       | <b>RACL1506</b>  |
|  | 4540                               | 473                        | 673                       | 230                        | 170                              | Tr 140 x 6                            | 51                               | 113                       | 3                                        | 80                        | 44,2                                                                                       | <b>RACL1508</b>  |
|  | 5675                               | 523                        | 773                       | 230                        | 170                              | Tr 140 x 6                            | 51                               | 113                       | 3                                        | 80                        | 48,2                                                                                       | <b>RACL15010</b> |