

# Single Acting Rams, ESR-Series

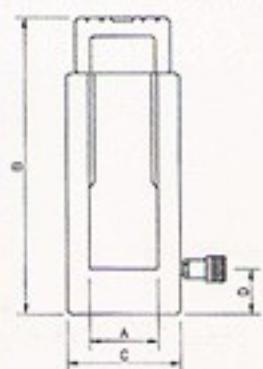
## ESR Series

- 24 Standard Model
- Spring-Return
- Steel Cover Nut
- Optional Collar Threads Available

**Capacity**  
10 ~ 100 tons

**Stroke**  
50 ~ 200 mm

**Max Operating Pressure**  
700 kg/cm<sup>2</sup>



## ▼ ORDER SELECTION CHART

| MODEL      | Cylinder Capacity (tons) | Stroke (mm) | Effective Area (cm <sup>2</sup> ) | Bore Diameter (mm) | Collapsed Diameter (mm) | Cylinder Diameter (mm) | Coupler Port Length (mm) | Coupler Port | Max. Pressure (kg/cm <sup>2</sup> ) | Weight (kg) |
|------------|--------------------------|-------------|-----------------------------------|--------------------|-------------------------|------------------------|--------------------------|--------------|-------------------------------------|-------------|
| ESR-550    | 5                        | 50          | 7.07                              | 30                 | 144                     | 50                     | 24                       | 3/8" PT      | 700                                 | 1.5         |
| ESR-5100   |                          | 100         |                                   |                    | 194                     |                        |                          |              |                                     | 1.9         |
| ESR-5150   |                          | 150         |                                   |                    | 244                     |                        |                          |              |                                     | 2.5         |
| ESR-5200   |                          | 200         |                                   |                    | 294                     |                        |                          |              |                                     | 3           |
| ESR-1050   | 10                       | 50          | 15.9                              | 45                 | 147                     | 62                     | 30                       | 3/8" PT      | 700                                 | 3.2         |
| ESR-10100  |                          | 100         |                                   |                    | 167                     |                        |                          |              |                                     | 3.8         |
| ESR-10150  |                          | 150         |                                   |                    | 247                     |                        |                          |              |                                     | 4.5         |
| ESR-10200  |                          | 200         |                                   |                    | 267                     |                        |                          |              |                                     | 5.2         |
| ESR-2050   | 20                       | 50          | 33.17                             | 65                 | 160                     | 86                     | 35                       | 3/8" PT      | 700                                 | 5.6         |
| ESR-20100  |                          | 100         |                                   |                    | 210                     |                        |                          |              |                                     | 7.8         |
| ESR-20150  |                          | 150         |                                   |                    | 260                     |                        |                          |              |                                     | 9.9         |
| ESR-20200  |                          | 200         |                                   |                    | 310                     |                        |                          |              |                                     | 12          |
| ESR-3050   | 30                       | 50          | 44.16                             | 75                 | 172                     | 102                    | 35                       | 3/8" PT      | 700                                 | 8           |
| ESR-30100  |                          | 100         |                                   |                    | 222                     |                        |                          |              |                                     | 11.8        |
| ESR-30150  |                          | 150         |                                   |                    | 272                     |                        |                          |              |                                     | 15.6        |
| ESR-30200  |                          | 200         |                                   |                    | 322                     |                        |                          |              |                                     | 19.4        |
| ESR-5050   | 50                       | 50          | 70.85                             | 95                 | 189                     | 130                    | 35                       | 3/8" PT      | 700                                 | 19          |
| ESR-50100  |                          | 100         |                                   |                    | 239                     |                        |                          |              |                                     | 22.7        |
| ESR-50150  |                          | 150         |                                   |                    | 289                     |                        |                          |              |                                     | 26.4        |
| ESR-50200  |                          | 200         |                                   |                    | 339                     |                        |                          |              |                                     | 30          |
| ESR-10050  | 100                      | 50          | 143.07                            | 135                | 222                     | 170                    | 45                       | 3/8" PT      | 700                                 | 22          |
| ESR-100100 |                          | 100         |                                   |                    | 272                     |                        |                          |              |                                     | 45          |
| ESR-100150 |                          | 150         |                                   |                    | 322                     |                        |                          |              |                                     | 57          |
| ESR-100200 |                          | 200         |                                   |                    | 372                     |                        |                          |              |                                     | 69          |

# Short Rams, ESSR / EHSR-Series

## ESSR, EHSR

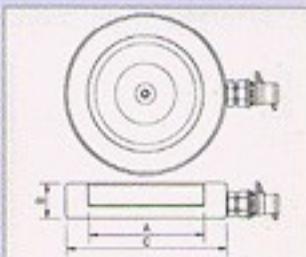
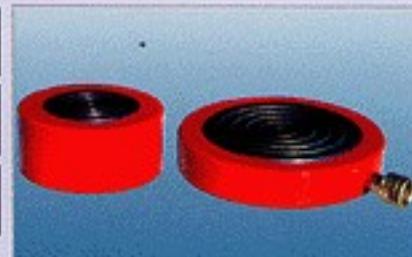
Series

- 12 Standard Model
- Load-Return
- Low Height

Capacity  
10 ~ 100 tons

Stroke  
50 ~ 20 mm

Max Operating Pressure  
700 kg/cm<sup>2</sup>



### ▼ ORDER SELECTION CHART

| MODEL      | Capacity (tons) | Stroke (mm) | Effective Area (cm <sup>2</sup> ) | Bore Diameter (mm) | Collapsed Height (mm) | Cylinder Diameter (mm) | Oil Capacity (cc) | Max Pressure (kg/cm <sup>2</sup> ) | Weight (kg) | Coupler Port |
|------------|-----------------|-------------|-----------------------------------|--------------------|-----------------------|------------------------|-------------------|------------------------------------|-------------|--------------|
| ESSR-3010  | 30              | 10          | 44.2                              | 75                 | 47                    | 98                     | 44                | 700                                | 3           | 3/8PT        |
| ESSR-1009  | 100             | 9           | 143.1                             | 135                | 35                    | 195                    | 129               |                                    | 8.2         |              |
| ESSR-10012 | 100             | 12          | 143.1                             | 135                | 40                    | 195                    | 172               |                                    | 9.4         |              |
| ESSR-1506  | 150             | 6           | 213.7                             | 165                | 33                    | 216                    | 128               |                                    | 9.2         |              |
| ESSR-15013 | 150             | 13          | 213.7                             | 165                | 40                    | 216                    | 278               |                                    | 11.2        |              |
| ESSR-15018 | 150             | 18          | 213.7                             | 165                | 50                    | 216                    | 385               |                                    | 14.1        |              |
| EHSR-1009  | 100             | 9           | 50.3                              | 80                 | 35                    | 125                    | 45                | 2000                               | 3.4         | 1/4PF        |
| EHSR-10012 | 100             | 12          | 50.3                              | 80                 | 40                    | 125                    | 60                |                                    | 3.9         |              |
| EHSR-10016 | 100             | 16          | 50.3                              | 80                 | 57                    | 125                    | 80                |                                    | 5.5         |              |
| EHSR-15016 | 150             | 16          | 100                               | 100                | 68                    | 150                    | 126               |                                    | 9.5         |              |
| EHSR-20016 | 200             | 16          | 113                               | 120                | 67                    | 175                    | 180.8             |                                    | 12          |              |
| EHSR-20020 | 200             | 20          | 113                               | 120                | 71                    | 175                    | 226               |                                    | 13.5        |              |

# Compact Profil Rams ECPR-Series

## ECPR

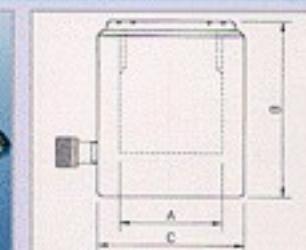
Series

- 18 Standard Model
- Spring-Return
- Steel Cover Nut
- Low Height

Capacity  
10 ~ 200 Tons

Stroke  
38 ~ 50 mm

Max Operating Pressure  
700 Kg/cm<sup>2</sup>



### ▼ ORDER SELECTION CHART

| MODEL      | Capacity (tons) | Stroke (mm) | Effective Area (cm <sup>2</sup> ) | Bore Diameter (mm) | Collapsed Height (mm) | Cylinder Diameter (mm) | Oil Capacity (mm) | Max Pressure (kg/cm <sup>2</sup> ) | Weight (kg) | Coupler Port |
|------------|-----------------|-------------|-----------------------------------|--------------------|-----------------------|------------------------|-------------------|------------------------------------|-------------|--------------|
| ECPR-1040  | 10              | 40          | 15.9                              | 45                 | 118                   | 63                     | 64                | 700                                | 2.6         | 3/8PT        |
| ECPR-1044  | 10              | 44          | 15.9                              | 45                 | 99                    | 68                     | 66                |                                    | 3.2         |              |
| ECPR-1050  | 10              | 50          | 15.9                              | 45                 | 128                   | 63                     | 80                |                                    | 2.7         |              |
| ECPR-1540  | 15              | 40          | 22.9                              | 54                 | 118                   | 74                     | 92                |                                    | 3.3         |              |
| ECPR-1550  | 15              | 50          | 22.9                              | 54                 | 128                   | 74                     | 115               |                                    | 3.7         |              |
| ECPR-2038  | 20              | 38          | 31.2                              | 63                 | 98                    | 85                     | 119               |                                    | 4           |              |
| ECPR-2040  | 20              | 40          | 31.2                              | 63                 | 118                   | 85                     | 125               |                                    | 4.5         |              |
| ECPR-2050  | 20              | 50          | 31.2                              | 63                 | 128                   | 85                     | 156               |                                    | 4.9         |              |
| ECPR-2540  | 25              | 40          | 36.3                              | 68                 | 130                   | 90                     | 145               |                                    | 5.5         |              |
| ECPR-2550  | 25              | 50          | 36.3                              | 68                 | 140                   | 90                     | 182               |                                    | 5.7         |              |
| ECPR-3040  | 30              | 40          | 44.2                              | 75                 | 130                   | 97                     | 177               |                                    | 6.5         |              |
| ECPR-3044  | 30              | 44          | 44.2                              | 75                 | 99                    | 105                    | 195               |                                    | 6.8         |              |
| ECPR-3050  | 30              | 50          | 44.2                              | 75                 | 140                   | 97                     | 221               |                                    | 6.8         |              |
| ECPR-5050  | 50              | 50          | 70.8                              | 95                 | 150                   | 122                    | 354               |                                    | 11.5        |              |
| ECPR-10050 | 100             | 50          | 132.7                             | 135                | 139                   | 175                    | 664               |                                    | 20.4        |              |
| ECPR-15035 | 150             | 35          | 165                               | 165                | 150                   | 216                    | 748               |                                    | 39          |              |
| ECPR-15050 | 150             | 50          | 213.7                             | 165                | 165                   | 216                    | 1069              |                                    | 42          |              |
| ECPR-20035 | 200             | 35          | 283.4                             | 190                | 155                   | 245                    | 992               |                                    | 53          |              |

# Aluminium Rams, ESRA-Series

## ESRA

Series

- 14 Standard Model
- Spring-Return
- Steel Cover Nut
- Low Weight

Capacity

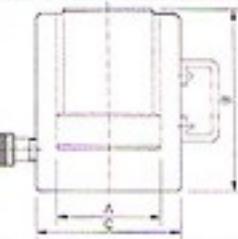
20 ~ 200 tons

Stroke

50 ~ 150 mm

Max Operating Pressure

700 kg/cm<sup>2</sup>



### ▼ ORDER SELECTION CHART

| MODEL       | Capacity<br>(tons) | Stroke<br>(mm) | Effective<br>Area<br>(cm <sup>2</sup> ) | Bore<br>Diameter<br>(mm) | Collapsed<br>Diameter<br>(mm) | Cylinder<br>Diameter<br>(mm) | Oil<br>Capacity<br>(cc) | Max.<br>Pressure<br>(kg/cm <sup>2</sup> ) | Weight<br>(kg) |
|-------------|--------------------|----------------|---|--------------------------|-------------------------------|------------------------------|-------------------------|---|----------------|
| ESRA-2050   | 20                 | 50             | 29                                      | 60                       | 140                           | 89                           | 145                     | 700                                       | 3              |
| ESRA-20100  | 20                 | 100            |   |                          | 193                           |                              | 290                     |   | 4              |
| ESRA-20150  | 20                 | 150            |   |                          | 243                           |                              | 435                     |   | 5              |
| ESRA-3050   | 30                 | 50             |   | 73                       | 163                           | 118                          | 220                     |   | 5              |
| ESRA-30100  | 30                 | 100            |   |                          | 213                           |                              | 440                     |   | 6.5            |
| ESRA-30150  | 30                 | 150            |   |                          | 263                           |                              | 660                     |   | 8              |
| ESRA-5050   | 50                 | 50             |   | 95                       | 173                           | 138                          | 355                     |   | 6              |
| ESRA-50100  | 50                 | 100            |   |                          | 223                           |                              | 780                     |   | 10.5           |
| ESRA-50150  | 50                 | 150            |   |                          | 273                           |                              | 1070                    |   | 15             |
| ESRA-10050  | 100                | 50             | 132                                     | 130                      | 185                           | 188                          | 660                     |   | 16             |
| ESRA-100100 | 100                | 100            |   |                          | 235                           |                              | 1320                    |   | 19.5           |
| ESRA-100150 | 100                | 150            |   |                          | 285                           |                              | 1980                    |   | 23             |
| ESRA-15050  | 150                | 50             | 214                                     | 165                      | 205                           | 250                          | 1070                    |   | 27             |
| ESRA-20050  | 200                | 50             | 284                                     | 190                      | 220                           | 280                          | 1420                    |   | 34             |

# Lock Nut Rams, ELNR-Series

## ENLR

Series

- 5 Standard Model
- Load-Return
- Steel Cover Nut

Capacity

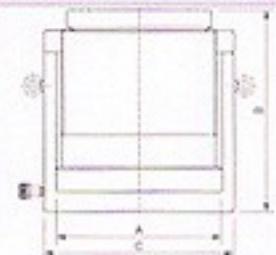
30 ~ 200 tons

Stroke

200 ~ 230 mm

Max Operating Pressure

700 Kg/cm<sup>2</sup>



### ▼ ORDER SELECTION CHART

| MODEL       | Capacity<br>(tons) | Stroke<br>(mm) | Effective<br>Area<br>(cm <sup>2</sup> ) | Bore<br>Diameter<br>(mm) | Collapsed<br>Height<br>(mm) | Cylinder<br>Diameter<br>(mm) | Oil<br>Capacity<br>(cc) | Max.<br>Pressure<br>(kg/cm <sup>2</sup> ) | Weight<br>(kg) |
|-------------|--------------------|----------------|---|--------------------------|-----------------------------|------------------------------|-------------------------|---|----------------|
| ELNR-30200  | 30                 | 200            | 38.4                                    | 70                       | 405                         | 102                          | 883                     | 700                                       | 23             |
| ELNR-50200  | 50                 | 200            | 63.6                                    | 90                       | 424                         | 127                          | 1141                    |   | 38             |
| ELNR-100230 | 100                | 230            | 132.7                                   | 130                      | 499                         | 185                          | 3292                    |   | 95             |
| ELNR-150230 | 150                | 230            | 201                                     | 160                      | 578                         | 225                          | 4918                    |   | 164            |
| ELNR-200230 | 200                | 230            | 268.8                                   | 185                      | 615                         | 255                          | 6562                    |   | 224            |

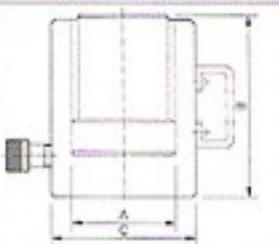
# Aluminium Rams, ESRA-Series

## ESRA

Series

- 14 Standard Model
- Spring-Return
- Steel Cover Nut
- Low Weight

|                        |                        |
|------------------------|------------------------|
| Capacity               | 20 ~ 200 tons          |
| Stroke                 | 50 ~ 150 mm            |
| Max Operating Pressure | 700 kg/cm <sup>2</sup> |



### ▼ ORDER SELECTION CHART

| MODEL       | Capacity<br>(tons) | Stroke<br>(mm) | Effective<br>Area<br>(cm <sup>2</sup> ) | A<br>Bore<br>Diameter<br>(mm) | B<br>Collapsed<br>Diameter<br>(mm) | C<br>Cylinder<br>Diameter<br>(mm) | Oil<br>Capacity<br>(cc) | Max.<br>Pressure<br>(kg/cm <sup>2</sup> ) | Weight<br>(kg) |
|-------------|--------------------|----------------|---|-------------------------------|------------------------------------|-----------------------------------|-------------------------|---|----------------|
| ESRA-2050   | 20                 | 50             | 29                                      | 60                            | 140                                | 89                                | 145                     | 700                                       | 3              |
| ESRA-20100  | 20                 | 100            |   |                               | 193                                |                                   | 290                     |   | 4              |
| ESRA-20150  | 20                 | 150            |   |                               | 243                                |                                   | 435                     |   | 5              |
| ESRA-3050   | 30                 | 50             | 42                                      | 73                            | 163                                | 118                               | 220                     |   | 5              |
| ESRA-30100  | 30                 | 100            |   |                               | 213                                |                                   | 440                     |   | 6.5            |
| ESRA-30150  | 30                 | 150            |   |                               | 263                                |                                   | 660                     |   | 8              |
| ESRA-5050   | 50                 | 50             | 71                                      | 95                            | 173                                | 138                               | 355                     |   | 6              |
| ESRA-50100  | 50                 | 100            |   |                               | 223                                |                                   | 780                     |   | 10.5           |
| ESRA-50150  | 50                 | 150            |   |                               | 273                                |                                   | 1070                    |   | 15             |
| ESRA-10050  | 100                | 50             | 132                                     | 130                           | 185                                | 188                               | 660                     |   | 16             |
| ESRA-100100 | 100                | 100            |   |                               | 235                                |                                   | 1320                    |   | 19.5           |
| ESRA-100150 | 100                | 150            |   |                               | 285                                |                                   | 1980                    |   | 23             |
| ESRA-15050  | 150                | 50             |   | 214                           | 165                                | 205                               | 250                     | 1070                                      | 27             |
| ESRA-20050  | 200                | 50             | 284                                     | 190                           | 220                                | 280                               | 1420                    | 34  |                |

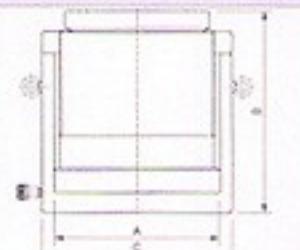
# Lock Nut Rams, ELNR-Series

## ENLR

Series

- 5 Standard Model
- Load-Return
- Steel Cover Nut

|                        |                        |
|------------------------|------------------------|
| Capacity               | 30 ~ 200 tons          |
| Stroke                 | 200 ~ 230 mm           |
| Max Operating Pressure | 700 Kg/cm <sup>2</sup> |



### ▼ ORDER SELECTION CHART

| MODEL       | Capacity<br>(tons) | Stroke<br>(mm) | Effective<br>Area<br>(cm <sup>2</sup> ) | A<br>Bore<br>Diameter<br>(mm) | B<br>Collapsed<br>Height<br>(mm) | C<br>Cylinder<br>Diameter<br>(mm) | Oil<br>Capacity<br>(cc) | Max.<br>Pressure<br>(kg/cm <sup>2</sup> ) | Weight<br>(kg) |
|-------------|--------------------|----------------|---|-------------------------------|----------------------------------|-----------------------------------|-------------------------|---|----------------|
| ELNR-30200  | 30                 | 200            | 38.4                                    | 70                            | 405                              | 102                               | 883                     | 700                                       | 23             |
| ELNR-50200  | 50                 | 200            | 63.6                                    | 90                            | 424                              | 127                               | 1141                    |   | 38             |
| ELNR-100230 | 100                | 230            | 132.7                                   | 130                           | 499                              | 185                               | 3292                    |   | 95             |
| ELNR-150230 | 150                | 230            | 201                                     | 160                           | 578                              | 225                               | 4918                    |   | 164            |
| ELNR-200230 | 200                | 230            | 268.8                                   | 185                           | 615                              | 255                               | 6562                    |   | 224            |

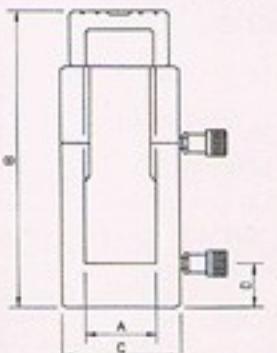
# Double Acting Rams, EDR-Series

## EDR

Series

- 27 Standard Model
- Hydraulic-Return
- Steel Cover Nut
- Optional Collar Threads Available

|                        |                        |
|------------------------|------------------------|
| Capacity               | 10 ~ 1,000 tons        |
| Stroke                 | 50 ~ 500 mm            |
| Max Operating Pressure | 700 kg/cm <sup>2</sup> |



## ▼ ORDER SELECTION CHART

| MODEL       | Cylinder Capacity (tons) | Stroke (mm) | Oil Capacity (mm) | Effective Area (cm <sup>2</sup> ) | Bore Diameter (mm) | Collapsed Height (mm) | Cylinder Diameter (mm) | Coupler Port Length (mm) | Coupler Port | Max. Pressure (kg/cm <sup>2</sup> ) | Weight (kg) |
|-------------|--------------------------|-------------|-------------------|-----------------------------------|--------------------|-----------------------|------------------------|--------------------------|--------------|-------------------------------------|-------------|
| EDR-10100   | 10                       | 100         | 152               | 15.6                              | 45                 | 264                   | 62                     | 35                       | 3/8"PT       | 700                                 | 4.5         |
| EDR-10250   |                          | 250         | 380               |                                   |                    | 414                   |                        |                          |              |                                     | 8           |
| EDR-20150   | 20                       | 150         | 497               | 33.17                             | 65                 | 362                   | 86                     | 40                       | 3/8"PT       | 700                                 | 13.5        |
| EDR-20300   |                          | 300         | 995               |                                   |                    | 512                   |                        |                          |              |                                     | 20          |
| EDR-20500   |                          | 500         | 1659              |                                   |                    | 712                   |                        |                          |              |                                     | 24          |
| EDR-30150   | 30                       | 150         | 663               | 44.16                             | 75                 | 396                   | 102                    | 45                       | 3/8"PT       | 700                                 | 24          |
| EDR-30300   |                          | 300         | 825               |                                   |                    | 546                   |                        |                          |              |                                     | 33          |
| EDR-30500   |                          | 500         | 1041              |                                   |                    | 746                   |                        |                          |              |                                     | 45          |
| EDR-50150   | 50                       | 150         | 1063              | 70.85                             | 95                 | 422                   | 130                    | 50                       | 3/8"PT       | 700                                 | 30          |
| EDR-50300   |                          | 300         | 2126              |                                   |                    | 572                   |                        |                          |              |                                     | 50          |
| EDR-50500   |                          | 500         | 3554              |                                   |                    | 772                   |                        |                          |              |                                     | 62          |
| EDR-100150  | 100                      | 150         | 2147              | 143.07                            | 135                | 474                   | 180                    | 60                       | 3/8"PT       | 700                                 | 64          |
| EDR-100300  |                          | 300         | 4294              |                                   |                    | 624                   |                        |                          |              |                                     | 83          |
| EDR-100500  |                          | 500         | 7157              |                                   |                    | 824                   |                        |                          |              |                                     | 140         |
| EDR-200150  | 200                      | 150         | 4285              | 283.53                            | 190                | 515                   | 240                    | 70                       | 3/8"PT       | 700                                 | 135         |
| EDR-200300  |                          | 300         | 8505              |                                   |                    | 665                   |                        |                          |              |                                     | 190         |
| EDR-200500  |                          | 500         | 14176             |                                   |                    | 865                   |                        |                          |              |                                     | 250         |
| EDR-300150  | 300                      | 150         | 6506              | 433.74                            | 235                | 570                   | 315                    | 80                       | 3/8"PT       | 700                                 | 150         |
| EDR-300300  |                          | 300         | 13012             |                                   |                    | 720                   |                        |                          |              |                                     | 298         |
| EDR-300500  |                          | 500         | 21607             |                                   |                    | 920                   |                        |                          |              |                                     | 450         |
| EDR-500150  | 500                      | 150         | 10603             | 706.85                            | 300                | 620                   | 395                    | 90                       | 3/8"PT       | 700                                 | 440         |
| EDR-500300  |                          | 300         | 21205             |                                   |                    | 770                   |                        |                          |              |                                     | 530         |
| EDR-500500  |                          | 500         | 35342             |                                   |                    | 970                   |                        |                          |              |                                     | 800         |
| EDR-800150  | 800                      | 150         | 17462             | 1164.2                            | 385                | 550                   | 525                    | 90                       | 3/8"PT       | 700                                 | 782         |
| EDR-800300  |                          | 300         | 34924             |                                   |                    | 700                   |                        |                          |              |                                     | 989         |
| EDR-1000150 | 1000                     | 150         | 21783             | 1452.2                            | 430                | 610                   | 585                    | 90                       | 3/8"PT       | 700                                 | 1216        |
| EDR-1000300 |                          | 300         | 43566             |                                   |                    | 760                   |                        |                          |              |                                     | 1533        |

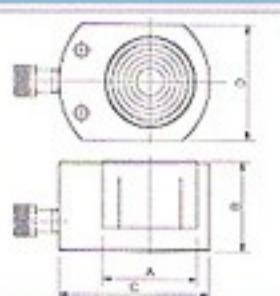
# Low Profile Rams, ELPR-Series

## ELPR

Series

- 7 Standard Model
- Spring-Return
- Steel Cover Nut
- Low Height

|                        |                        |
|------------------------|------------------------|
| Capacity               | 10 ~ 150 tons          |
| Stroke                 | 5 ~ 20 mm              |
| Max Operating Pressure | 700 kg/cm <sup>2</sup> |



### ▼ ORDER SELECTION CHART

| MODEL      | Capacity<br>(tons) | Stroke<br>(mm) | Effective<br>Area<br>(cm <sup>2</sup> ) | Bore<br>Diameter<br>(mm) | Collapsed<br>Height<br>(mm) | Cylinder<br>Diameter<br>(mm) | Width<br>Size<br>(mm) | Oil<br>Capacity<br>(cc) | Weight<br>(kg) |
|------------|--------------------|----------------|---|--------------------------|-----------------------------|------------------------------|-----------------------|-------------------------|----------------|
| ELPR-1010  | 10                 | 10             | 15.2                                    | 44                       | 53                          | 82                           | 55                    | 15.2                    | 1.6            |
| ELPR-2012  | 20                 | 12             | 31.2                                    | 63                       | 52                          | 100                          | 76                    | 37.4                    | 2.9            |
| ELPR-3013  | 30                 | 13             | 44.2                                    | 75                       | 59                          | 115                          | 94                    | 57.5                    | 3.9            |
| ELPR-5015  | 50                 | 15             | 70.8                                    | 95                       | 65                          | 145                          | 120                   | 106.2                   | 6.5            |
| ELPR-7515  | 75                 | 15             | 102.1                                   | 114                      | 79                          | 165                          | 135                   | 153.2                   | 11             |
| ELPR-10015 | 100                | 15             | 143.1                                   | 135                      | 85                          | 177                          | 152                   | 214.7                   | 14             |
| ELPR-15015 | 150                | 15             | 213.7                                   | 165                      | 100                         | 216                          | 188                   | 320.6                   | 25             |

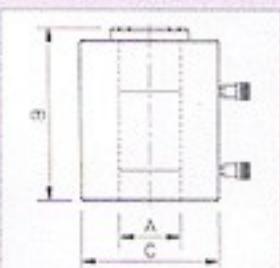
# Center Hole Rams, ESCH / EDCH - Series

## ESCH,EDCH

Series

- 9 Standard Model
- Spring-Return
- Hydraulic-Return
- Steel Cover Nut

|                        |                        |
|------------------------|------------------------|
| Capacity               | 10 ~ 100 Tons          |
| Stroke                 | 40 ~ 300 mm            |
| Max Operating Pressure | 700 kg/cm <sup>2</sup> |



### ▼ ORDER SELECTION CHART

| MODEL       | Capacity<br>(tons) | Stroke<br>(mm) | Effective<br>Area<br>(cm <sup>2</sup> ) | Center Hole<br>Diameter<br>(mm) | Collapsed<br>Height<br>(mm) | Cylinder<br>Diameter<br>(mm) | Oil<br>Capacity<br>(cc) | Weight<br>(kg) |
|-------------|--------------------|----------------|---|---------------------------------|-----------------------------|------------------------------|-------------------------|----------------|
| ESCH-1040   | 10                 | 40             | 17.2                                    | 20                              | 121                         | 70                           | 70.5                    | 2.8            |
| ESCH-2050   | 20                 | 50             | 31.7                                    | 27                              | 135                         | 98                           | 158.4                   | 5              |
| ESCH-3060   | 30                 | 60             | 47.7                                    | 36                              | 178                         | 115                          | 300.6                   | 11.5           |
| ESCH-5075   | 50                 | 75             | 85.5                                    | 54                              | 235                         | 159                          | 650                     | 28.1           |
| ESCH-10075  | 100                | 75             | 138.1                                   | 80                              | 254                         | 216                          | 1049                    | 52.5           |
| EDCH-10254  | 10                 | 254            | 14.4                                    | 20                              | 406                         | 70                           | 365                     | 11             |
| EDCH-30210  | 30                 | 210            | 44.2                                    | 33                              | 425                         | 115                          | 928                     | 24             |
| EDCH-50156  | 50                 | 156            | 70.9                                    | 54                              | 380                         | 159                          | 1106                    | 38             |
| EDCH-100168 | 100                | 168            | 132.7                                   | 80                              | 382                         | 216                          | 2230                    | 51             |

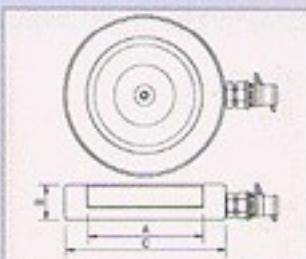
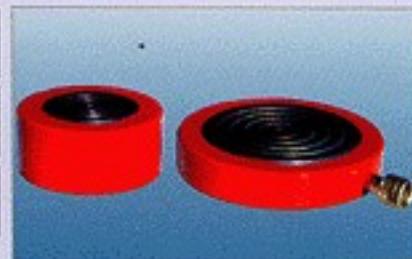
# Short Rams, ESSR / EHSR - Series

## ESSR.EHSR

Series

- 12 Standard Model
- Load-Return
- Low Height

|                        |                        |
|------------------------|------------------------|
| Capacity               | 10 ~ 100 tons          |
| Stroke                 | 50~ 20 mm              |
| Max Operating Pressure | 700 kg/cm <sup>2</sup> |
|                        |                        |



### ▼ ORDER SELECTION CHART

| MODEL      | Capacity<br>(tons) | Stroke<br>(mm) | Effective Area<br>(cm <sup>2</sup> ) | Bore<br>Diameter<br>(mm) | Collapsed<br>Height<br>(mm) | Cylinder<br>Diameter<br>(mm) | Oil<br>Capacity<br>(cc) | Max<br>Pressure<br>(kg/cm <sup>2</sup> ) | Weight<br>(kg) | Coupler<br>Port |
|------------|--------------------|----------------|--------------------------------------|--------------------------|-----------------------------|------------------------------|-------------------------|--|----------------|-----------------|
| ESSR-3010  | 30                 | 10             | 44.2                                 | 75                       | 47                          | 98                           | 44                      | 700                                      | 3              | 3/8PT           |
| ESSR-1009  | 100                | 9              | 143.1                                | 135                      | 35                          | 195                          | 129                     |  | 8.2            |                 |
| ESSR-10012 | 100                | 12             | 143.1                                | 135                      | 40                          | 195                          | 172                     |  | 9.4            |                 |
| ESSR-1506  | 150                | 6              | 213.7                                | 165                      | 33                          | 216                          | 128                     |  | 9.2            |                 |
| ESSR-15013 | 150                | 13             | 213.7                                | 165                      | 40                          | 216                          | 278                     |  | 11.2           |                 |
| ESSR-15018 | 150                | 18             | 213.7                                | 165                      | 50                          | 216                          | 385                     |  | 14.1           |                 |
| EHSR-1009  | 100                | 9              | 50.3                                 | 80                       | 35                          | 125                          | 45                      | 2000                                     | 3.4            | 1/4PF           |
| EHSR-10012 | 100                | 12             | 50.3                                 | 80                       | 40                          | 125                          | 60                      |  | 3.9            |                 |
| EHSR-10016 | 100                | 16             | 50.3                                 | 80                       | 57                          | 125                          | 80                      |  | 5.5            |                 |
| EHSR-15016 | 150                | 16             | 100                                  | 100                      | 68                          | 150                          | 126                     |  | 9.5            |                 |
| EHSR-20016 | 200                | 16             | 113                                  | 120                      | 67                          | 175                          | 180.8                   |  | 12             |                 |
| EHSR-20020 | 200                | 20             | 113                                  | 120                      | 71                          | 175                          | 226                     |  | 13.5           |                 |

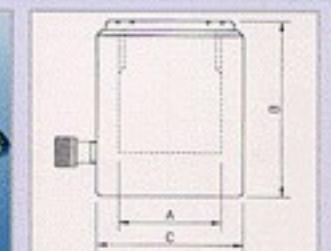
# Compact Profil Rams ECPR - Series

## ECPR

Series

- 18 Standard Model
- Spring-Return
- Steel Cover Nut
- Low Height

|                        |                        |
|------------------------|------------------------|
| Capacity               | 10 ~ 200 Tons          |
| Stroke                 | 38 ~ 50 mm             |
| Max Operating Pressure | 700 Kg/cm <sup>2</sup> |
|                        |                        |



### ▼ ORDER SELECTION CHART

| MODEL      | Capacity<br>(tons) | Stroke<br>(mm) | Effective Area<br>(cm <sup>2</sup> ) | Bore<br>Diameter<br>(mm) | Collapsed<br>Height<br>(mm) | Cylinder<br>Diameter<br>(mm) | Oil<br>Capacity<br>(mm) | Max<br>Pressure<br>(kg/cm <sup>2</sup> ) | Weight<br>(kg) | Coupler<br>Port |
|------------|--------------------|----------------|--------------------------------------|--------------------------|-----------------------------|------------------------------|-------------------------|--|----------------|-----------------|
| ECPR-1040  | 10                 | 40             | 15.9                                 | 45                       | 118                         | 63                           | 64                      | 700                                      | 2.6            | 3/8PT           |
| ECPR-1044  | 10                 | 44             | 15.9                                 | 45                       | 99                          | 68                           | 66                      |  | 3.2            |                 |
| ECPR-1050  | 10                 | 50             | 15.9                                 | 45                       | 128                         | 63                           | 80                      |  | 2.7            |                 |
| ECPR-1540  | 15                 | 40             | 22.9                                 | 54                       | 118                         | 74                           | 92                      |  | 3.3            |                 |
| ECPR-1550  | 15                 | 50             | 22.9                                 | 54                       | 128                         | 74                           | 115                     |  | 3.7            |                 |
| ECPR-2038  | 20                 | 38             | 31.2                                 | 63                       | 98                          | 85                           | 119                     |  | 4              |                 |
| ECPR-2040  | 20                 | 40             | 31.2                                 | 63                       | 118                         | 85                           | 125                     |  | 4.5            |                 |
| ECPR-2050  | 20                 | 50             | 31.2                                 | 63                       | 128                         | 85                           | 156                     |  | 4.9            |                 |
| ECPR-2540  | 25                 | 40             | 36.3                                 | 68                       | 130                         | 90                           | 145                     |  | 5.5            |                 |
| ECPR-2550  | 25                 | 50             | 36.3                                 | 68                       | 140                         | 90                           | 182                     |  | 5.7            |                 |
| ECPR-3040  | 30                 | 40             | 44.2                                 | 75                       | 130                         | 97                           | 177                     |  | 6.5            |                 |
| ECPR-3044  | 30                 | 44             | 44.2                                 | 75                       | 99                          | 105                          | 195                     |  | 6.8            |                 |
| ECPR-3050  | 30                 | 50             | 44.2                                 | 75                       | 140                         | 97                           | 221                     |  | 6.8            |                 |
| ECPR-5050  | 50                 | 50             | 70.8                                 | 95                       | 150                         | 122                          | 354                     |  | 11.5           |                 |
| ECPR-10050 | 100                | 50             | 132.7                                | 135                      | 139                         | 175                          | 664                     |  | 20.4           |                 |
| ECPR-15035 | 150                | 35             | 165                                  | 165                      | 150                         | 216                          | 748                     |  | 39             |                 |
| ECPR-15050 | 150                | 50             | 213.7                                | 165                      | 165                         | 216                          | 1069                    |  | 42             |                 |
| ECPR-20035 | 200                | 35             | 283.4                                | 190                      | 155                         | 245                          | 992                     |  | 53             |                 |