

# CYLINDERS

FROM  
**2**  
TO  
**1220**  
TONS!

## SUPERIOR FEATURES OF POWER TEAM HYDRAULIC CYLINDERS:

We build our own cylinders in our ISO 9001 registered manufacturing facilities. All Power Team cylinders are date coded and stamped with a maximum pressure rating and capacity. Each cylinder we make complies with the demanding ASME B30.1 standard and are assembled/tested by certified assemblers and pressure tested to 125% of capacity before leaving our factories. Some other key features included:

- Cylinder bores are roller burnished to harden and smooth the surface, improving seal life by 30%.
- Base mounting holes withstand full cylinder capacity.
- Typical cylinder burst pressure range is from 25,000 to 35,000 psi, well-beyond extreme usage.
- Cylinders with gland nuts may be “dead-ended” at 10,000 psi.
- Eddy current and mag-particle inspections detect flaws in the steel.
- Material is removed from surface to ensure that any flaws are eliminated.

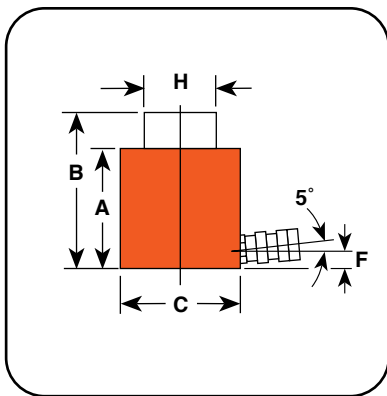


| Page Description | Cylinder Movement              | Type of Return      | Tonnage Range        | Page(s) |
|------------------|--------------------------------|---------------------|----------------------|---------|
| Introduction     | -                              | -                   | -                    | 5-10    |
| C                | Single-Acting                  | Spring              | 5-100                | 11-12   |
| CBT              | Single-Acting                  | Spring              | 5-25                 | 13      |
| RP               | Single-Acting                  | Spring              | 2-5                  | 14      |
| C Accessories    | -                              | -                   | -                    | 5-16    |
| RA               | Single-Acting                  | Spring              | 20-100               | 17      |
| RLS              | Single-Acting                  | Spring              | 5-150                | 18      |
| RSS              | Single-Acting<br>Double-Acting | Spring              | 10-250               | 19-20   |
| RH               | Single-Acting<br>Double-Acting | Spring<br>Hydraulic | 100-100<br>30-200    | 21-22   |
| RT               | Single-Acting                  | Spring              | 17.5-100             | 23-24   |
| RGG              | Single-Acting                  | Load                | 55-600               | 25-28   |
| RDG              | Double-Acting                  | Hydraulic           | 55-600               | 29-32   |
| RD               | Double-Acting                  | Hydraulic           | 10-500               | 33-34   |
| R                | Single-Acting<br>Double-Acting | Spring<br>Hydraulic | 55-565<br>100-565    | 35-36   |
| RC_C<br>RC_D     | Single-Acting<br>Double-Acting | Load<br>Hydraulic   | 740-1220<br>740-1220 | 37-38   |
| RA_L<br>R_L      | Single-Acting,<br>Locking      | Load                | 55-100<br>55-565     | 39-40   |
| RC_P             | Single-Acting,<br>Locking      | Load                | 55-620               | 41      |
| RC_L Series      | Single-Acting,<br>Locking      | Load                | 740-1220             | 42      |

Model Shown:  
**RSS2503, RSS302**



### Technical Dimensions



RSS302 is perfect for any bridge construction application.



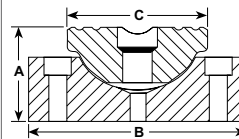
### Features

**IDEAL FOR CONFINED AREAS WITH 3 1/2" TO 11 7/16" CLEARANCE.**

- "Power-Tech" nitro-carburization surface treatment inhibits corrosion and provides exceptional durability for the rod and piston.
- Heavy-duty return spring (except for double-acting models) provides fast piston return & low collapsed height.
- Coupler on 10 - 50 ton models is angled upward 5° for added clearance.
- Grooved piston top keeps load from sliding.
- Cylinders can be "dead-ended" at full capacity.
- Removable carrying handles on 100 and 250 ton models.
- Complies with ANSI / ASME B30.1 Safety Standards.



### Optional Swivel Load Caps Ordering Info



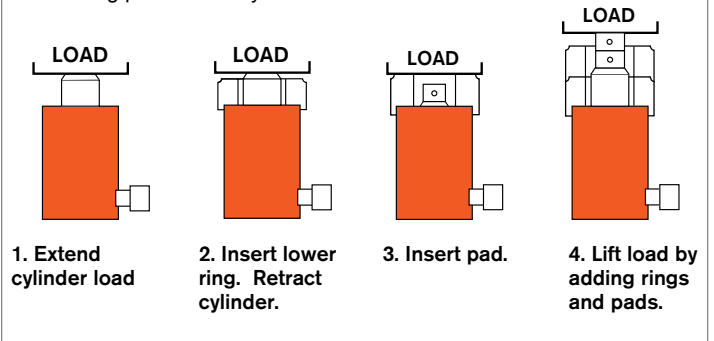
Reduce the effects of off-center loading. Tilts up to 5 degrees. Radial grooves on top of cap reduce load slippage. Notch across face of each cap helps keep loads having a protruding or round shaped centered.

| Use with Cyl. No. | Swivel Cap Order No. | Wt. (lbs.) | A (in.) | B (in.) | C (in.) |
|-------------------|----------------------|------------|---------|---------|---------|
| RSS101            | 350320               | 0.5        | 1.00    | 1.44    | 1.44    |
| RSS202            | 350321               | 1.3        | 1.38    | 2.13    | 2.13    |
| RSS302            | 350322               | 1.6        | 1.38    | 2.50    | 2.13    |
| RSS502            | 350331               | 2.7        | 1.44    | 3.25    | 2.13    |
| RSS1002           | 350332               | 6.6        | 1.81    | 4.38    | 3.13    |



### Cribbing Block Operation

Convert Power Team "Shorty" cylinders to mechanical cribbing devices. They are more stable and safe than timber or other awkward, makeshift methods. Ideal for lifting applications such as structure moving. Reduces cribbing time dramatically. In effect, increases the stroke of the cylinder as stacking pads act as cylinder extensions:



Ordering Information

| Cyl. Cap.<br><br>(tons) | Stroke<br><br>(in.) | Order No. | Oil Cap.<br><br>(cu. in.) |        | A                             | B                            | C                         | F                         | H                            | Bore Dia.<br><br>(in.) | Cylinder Effective Area<br><br>(sq. in.) | Int. Press. at Cap.<br><br>(psi) | Tons at 10,000<br><br>(tons) | Prod. Wt.<br><br>(lbs.) |
|-------------------------|---------------------|-----------|---------------------------|--------|-------------------------------|------------------------------|---------------------------|---------------------------|------------------------------|------------------------|--|----------------------------------|------------------------------|-------------------------|
|                         |                     |           |                           |        | Retracted Height<br><br>(in.) | Extended Height<br><br>(in.) | Outside Dia.<br><br>(in.) | Base to Port<br><br>(in.) | Piston Rod Dia.<br><br>(in.) |                        |  |                                  |                              |                         |
|                         |                     |           | Push                      | Return | Push                          |                              | Push                      | Push                      |                              |                        |  |                                  |                              |                         |
| 10                      | 1.50                | RSS101    | 3.40                      | –      | 3.50                          | 5.00                         | 2.75                      | 0.63                      | 1.50                         | 1.69                   | 2.24                                     | 8,943                            | 11.20                        | 6.00                    |
| 20                      | 1.75                | RSS202    | 7.70                      | –      | 3.75                          | 5.50                         | 3.56                      | 0.63                      | 2.16                         | 2.38                   | 4.43                                     | 9,029                            | 22.10                        | 9.90                    |
| 30                      | 2.44                | RSS302    | 15.80                     | –      | 4.63                          | 7.06                         | 4.00                      | 0.63                      | 2.50                         | 2.88                   | 6.49                                     | 9,243                            | 32.50                        | 14.70                   |
| 50                      | 2.38                | RSS502    | 22.80                     | –      | 5.00                          | 7.38                         | 4.88                      | 0.75                      | 3.13                         | 3.50                   | 9.62                                     | 10,393                           | 48.10                        | 23.20                   |
| 100                     | 2.25                | RSS1002   | 44.20                     | –      | 5.50                          | 7.75                         | 6.63                      | 0.94                      | 4.38                         | 5.00                   | 19.63                                    | 10,186                           | 98.20                        | 47.30                   |
| 100                     | 1.50                | RSS1002D* | 29.40                     | 12.90  | 5.69                          | 7.19                         | 6.88                      | 0.94                      | 3.75                         | 5.00                   | 19.63                                    | 10,186                           | 98.20                        | 54.60                   |
| 250                     | 3.00                | RSS2503   | 150.60                    | –      | 11.44                         | 14.44                        | 9.88                      | 1.81                      | 5.50                         | 8.00                   | 50.22                                    | 9,956                            | 251.10                       | 220.00                  |

\* Note: RSS1002D is double-acting.

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**Optional Cylinders Cribbing Blocks**

Cribbing blocks are shown on a 30 ton RSS302 "Shorty" cylinder. Each kit includes:

The Insertion tool (45589) is used for keeping hand from load.

Cribbing Block Ordering Information

| For Use With                         |        | 30 Ton Cylinder Number RSS302 |            |              | 50 Ton Cylinder Number RSS502 |            |              | 100 Ton Cylinder Number RSS1002 |            |              |
|--------------------------------------|--------|-------------------------------|------------|--------------|-------------------------------|------------|--------------|---------------------------------|------------|--------------|
| Order No.                            |        | 30 Ton Set Number CB30        |            |              | 50 Ton Set Number CB50        |            |              | 100 Ton Set Number CB100        |            |              |
|                                      |        | Lower Ring                    | Upper Ring | Stacking Pad | Lower Ring                    | Upper Ring | Stacking Pad | Lower Ring                      | Upper Ring | Stacking Pad |
| Number included in set               |        | 1                             | 2          | 3            | 1                             | 2          | 3            | 1                               | 3          | 4            |
| Outside Diameter                     | (in.)  | 4.50                          | 4.50       | 2.75         | 5.50                          | 5.50       | 3.38         | 7.39                            | 7.39       | 4.75         |
| Inside Diameter                      | (in.)  | 2.81                          | 2.81       | –            | 3.45                          | 3.45       | –            | 4.81                            | 4.81       | –            |
| Height, each                         | (in.)  | 2.28                          | 1.80       | 1.78         | 2.22                          | 1.72       | 1.69         | 2.13                            | 1.75       | 1.72         |
| Total stacked height of Rings in Set | (in.)  | 5.88                          |            |              | 5.66                          |            |              | 7.38                            |            |              |
| Weight of Set                        | (lbs.) | 20                            |            |              | 28                            |            |              | 64                              |            |              |

Note: Each set includes one Insertion Handle 45589 - 0.5" Hex x 18" Long, 4" Bend