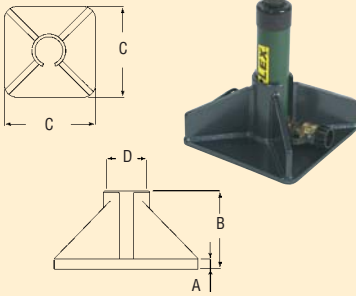


Cylinder Bases



| Model | A | B | C | D |
|-------|-----|------|-------|------|
| BA10 | .39 | 4.72 | 9.06 | 2.28 |
| BA25 | .63 | 4.96 | 11.02 | 3.39 |

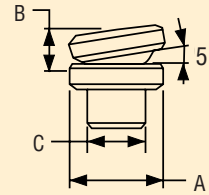
BA10 for R102 through R1014
BA25 for R252 through R2514

Cylinder Load Caps



| Model | Type of Cylinder |
|-------|--------------------------|
| 18347 | Used on R5 Series |
| 18348 | Used on R10 & R15 Series |
| 85525 | Used on R25 Series |
| 85525 | Used on R30 Series |
| 85546 | Used on R55 Series |
| 85546 | Used on R75 Series |
| 85546 | Used on R100 Series |
| 18348 | Used on RDA10 Series |
| 85525 | Used on RDA30 Series |
| 88390 | Used on RDA55 Series |
| 18323 | Used on RDA100 Series |
| 18326 | Used on RDA150 Series |
| 87721 | Used on RDA200 Series |

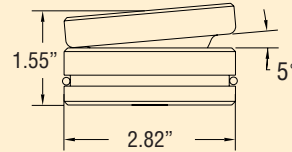
Tilt Saddles



| Model | A | B | C |
|-------|------|-----|------|
| ATS10 | 1.38 | .59 | .88 |
| ATS25 | 1.97 | .83 | 1.40 |

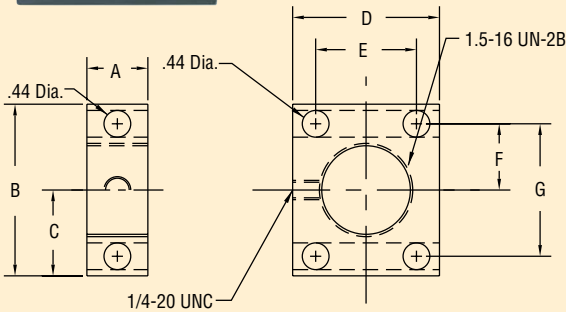
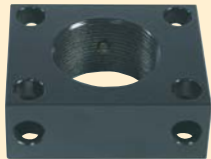
ATS10 for R102 through R1014
ATS25 for R251 through R2514

ATS100 for R-Series 55, 75 and 100 ton cylinders (See Page 13)



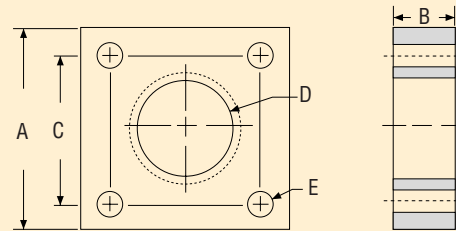
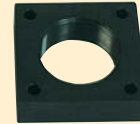
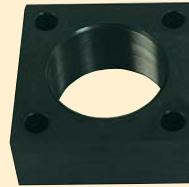
Mounting Blocks

Mounting Blocks For R5 Series Cylinders (See Page 11)



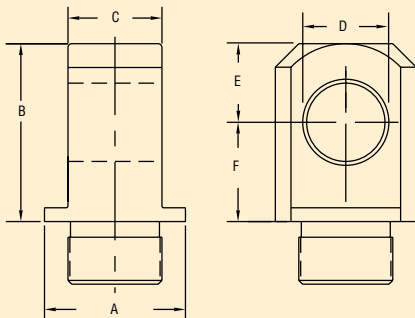
| Model | A | B | C | D | E | F | G |
|-------|-----|------|------|------|------|------|------|
| BR5 | .99 | 2.75 | 1.38 | 2.36 | 1.62 | 1.06 | 2.12 |

Mounting Blocks For R10 & R25 Series Cylinders (See Pages 11 & 12)



| Model No. | A (in) | B (in) | C (in) | D (in) | E (in) |
|-----------|--------|--------|--------|-----------------|--------|
| BR10 | 3.50 | 1 | 2.63 | 2 1/4-14 UNS-2B | 0.34 |
| BR25 | 5 | 2 | 3.66 | 3 5/16-12 UN-2B | 0.66 |

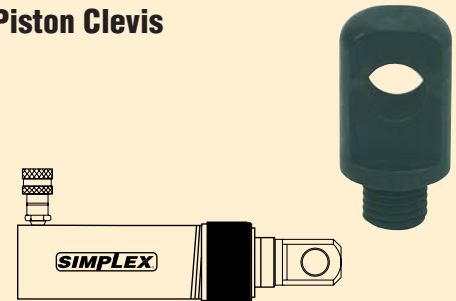
Piston Clevis



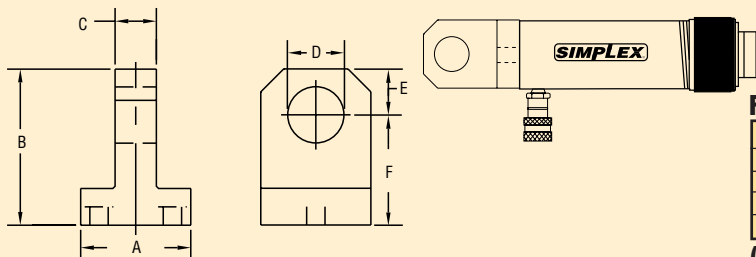
For R-Series 5, 10, 15 & 25

| Model | A | B | C | D | E | F |
|-------|------|------|------|------|------|------|
| BCR5 | 1.13 | 1.62 | .56 | .63 | .63 | .75 |
| BCR10 | 1.69 | 2.31 | 1.00 | .88 | 1.00 | 1.31 |
| BCR15 | 1.69 | 2.43 | 1.00 | .88 | 1.00 | 1.13 |
| BCR25 | 2.25 | 2.93 | 1.50 | 1.25 | 1.25 | 1.38 |

(See Pages 11 & 12)



Base Clevis



For R-Series 5, 10, 15 & 25

| Model | A | B | C | D | E | F |
|-------|------|------|------|------|------|------|
| BC5 | 1.75 | 1.88 | .56 | .63 | .63 | 1.00 |
| BC10 | 2.50 | 2.63 | 1.00 | .88 | 1.00 | 1.38 |
| BC15 | 2.50 | 2.63 | 1.00 | .88 | 1.00 | 1.38 |
| BC25 | 3.75 | 3.13 | 1.50 | 1.25 | 1.25 | 1.63 |

(See Pages 11 & 12)



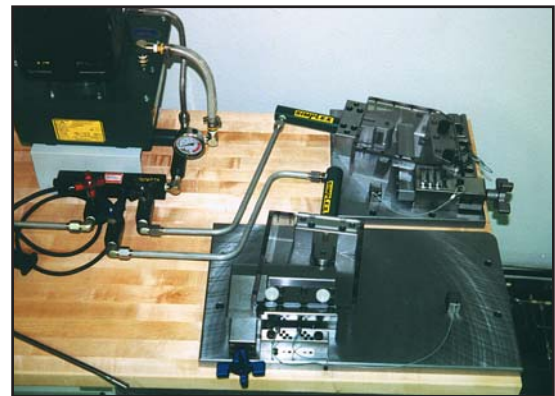
SPRING RETURN - 5-10 TON

CYLINDERS

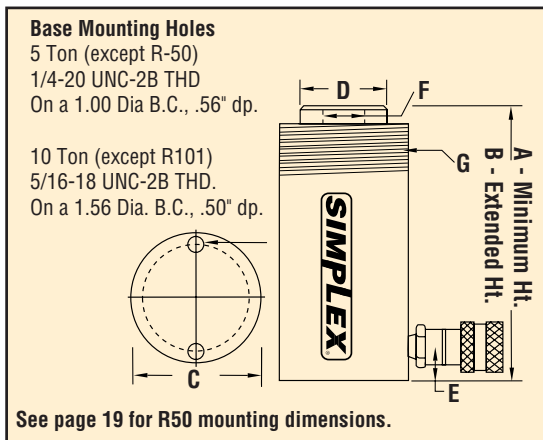
Simplex Cylinders Improve Manufacturing Efficiencies.



- 14 Models.
- High flow quality couplers.
- Collar threads designed for full load.
- Base & piston mountings for easy fixturing.
- Removable load caps for flexibility & safety.
- Stop ring for piston blow-out protection.
- Plated piston to resist scoring & corrosion.
- Large bearings resist side load.
- Rod wiper protects inner cylinder from dirt.



Simplex spring return cylinders, used in this fabricating fixture, provide fast and accurate forming of precision metal products.



| | | | |
|------------------------|--------------|------------------|---------------------------------|
| | | | |
| Cylinder Accys. pg. 10 | Bases pg. 10 | Hoses pgs. 70-71 | Pump & Cylinder Sets pgs. 31-32 |

Spring Return Cylinders 5 & 10 Ton Capacities

| Model Number | Cap. (tons) | Stroke (in) | A Min. Ht. (in) | B Ext. Ht. (in) | Ram Bore Dia. (in) | Effect Area (sq in) | Pres. @ Cap. (psi) | Oil Cap. Req'd (cu in) | C Body O.D. (in) | D Piston O.D. (in) | E Base To Port C/L (in) | F | | G | | Wgt. (lbs) | Sugstd. Hand Pump |
|--------------|-------------|-------------|-----------------|-----------------|--------------------|---------------------|--------------------|------------------------|------------------|--------------------|-------------------------|-------------------------|-------------------------|--------------------|-------------------------|------------|-------------------|
| | | | | | | | | | | | | Piston I.D. Thrds. (in) | Piston Thrd. Depth (in) | Collar Thrds. (in) | Collar Thrd. Lgth. (in) | | |
| R50 | 5 | 5/8 | 1 5/8 | 2 1/4 | 1 1/8 | .99 | 10,000 | .6 | 1.6x2.3 | 1 | 3/4 | None | None | None | None | 2.5 | P41 |
| R51 | | 1 | 4 11/32 | 5 11/32 | | | | 1.0 | | | | 2.5 | | | | | |
| R53 | | 3 | 6 1/2 | 9 1/2 | | | | 3.0 | | | | 3.3 | | | | | |
| R55 | | 5 | 8 1/2 | 13 1/2 | | | | 5.0 | | | | 4.0 | | | | | |
| R57 | | 7 | 10 5/8 | 17 5/8 | | | | 7.0 | | | | 5.0 | | | | | |
| R59 | | 9 1/8 | 12 3/4 | 21 7/8 | | | | 9.1 | | | | 5.5 | | | | | |
| R101 | 10 | 1 | 3 17/32 | 4 17/32 | 1 11/16 | 2.24 | 8,945 | 2.2 | 2 1/4 | 1 1/2 | 3/4 | None | None | 1 1/8 | 3.5 | P42 | |
| R102 | | 2 1/8 | 4 25/32 | 6 29/32 | | | | 5.22 | | | | 5.2 | | | | | |
| R104 | | 4 1/8 | 6 3/4 | 10 7/8 | | | | 9.2 | | | | 6.3 | | | | | |
| R106 | | 6 1/8 | 9 3/4 | 15 7/8 | | | | 13.7 | | | | 8.8 | | | | | |
| R108 | | 8 | 11 3/4 | 19 3/4 | | | | 18.0 | | | | 10.5 | | | | | |
| R1010 | | 10 1/8 | 13 3/4 | 23 7/8 | | | | 22.7 | | | | 12.0 | | | | | |
| R1012 | | 12 | 15 3/4 | 27 3/4 | | | | 27.0 | | | | 13.5 | | | | | |
| R1014 | | 14 | 17 3/4 | 31 3/4 | | | | 31.5 | | | | 15.3 | | | | | |

CYLINDERS

SPRING RETURN - 15-25 TON

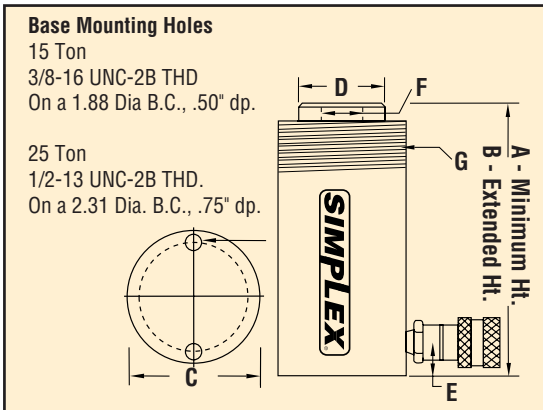
Simplex Cylinders Are Perfect For Heavy Maintenance.



- 13 Models.
- High flow quality couplers.
- Collar threads designed for full load.
- Base & piston mountings for easy fixturing.
- Removable load caps for flexibility & safety.
- Stop ring for piston blow-out protection.
- Plated piston to resist scoring & corrosion.
- Large bearings resist side load.
- Rod wiper protects inner cylinder from dirt.



Large steel coils that were damaged in handling are reshaped using a Simplex R256 cylinder and 70 Series pump.



| | | | |
|---------------------------|-----------------|---------------------|------------------------------------|
| | | | |
| Cylinder Accys. pg. 10 | Bases pg. 10 | Hoses pgs. 70-71 | Pump & Cylinder Sets pgs. 31-32 |

Spring Return Cylinders 15 & 25 Ton Capacities

| Model Number | Cap. (tons) | Stroke (in) | A Min. Ht. (in) | B Ext. Ht. (in) | Ram Bore Dia. (in) | Effect Area (sq in) | Pres. @ Cap. (psi) | Oil Cap. Req'd (cu in) | C Body O.D. (in) | D Piston O.D. (in) | E Base To Port C/L (in) | F | | G | | Wgt. (lbs) | Sugstd. Hand Pump |
|--------------|-------------|-------------|-----------------|-----------------|--------------------|---------------------|--------------------|------------------------|------------------|--------------------|-------------------------|-------------------------|-------------------------|--------------------|-------------------------|------------|-------------------|
| | | | | | | | | | | | | Piston I.D. Thrds. (in) | Piston Thrd. Depth (in) | Collar Thrds. (in) | Collar Thrd. Lgth. (in) | | |
| R152 | 15 | 2 | 5 7/8 | 7 7/8 | 2 | 3.14 | 9,554 | 6.3 | 2 3/4 | 15/8 | 3/4 | 1 x 8 | 1 | 23/4 x 16 | 1 3/16 | 8.3 | P42 |
| R154 | | 4 | 7 7/8 | 11 7/8 | | | | 12.6 | | | | | | | | 10.8 | |
| R156 | | 6 | 10 11/16 | 16 11/16 | | | | 19.0 | | | | | | | | 14.5 | |
| R1510 | | 10 | 14 11/16 | 24 11/16 | | | | 31.4 | | | | | | | | 19.5 | |
| R1514 | | 14 | 18 11/16 | 32 11/16 | | | | 44.0 | | | | | | | | 24.5 | |
| R251 | 25 | 1 | 5 1/2 | 6 1/2 | 2 9/16 | 5.15 | 9,700 | 5.2 | 3 3/8 | 2 1/4 | 1 | 1 1/2 x 16 | 1 1/8 | 35/16x12 | 1 15/16 | 12.0 | P42 |
| R252 | | 2 | 6 1/2 | 8 1/2 | | | | 10.3 | | | | | | | | 15.0 | |
| R254 | | 4 | 8 1/2 | 12 1/2 | | | | 20.6 | | | | | | | | 18.0 | |
| R256 | | 6 1/4 | 10 3/4 | 17 | | | | 32.2 | | | | | | | | 23.0 | |
| R258 | | 8 1/4 | 12 3/4 | 21 | | | | 42.5 | | | | | | | | 27.0 | |
| R2510 | | 10 1/4 | 14 3/4 | 25 | | | | 52.8 | | | | | | | | 31.0 | |
| R2512 | | 12 1/4 | 16 3/4 | 29 | | | | 63.1 | | | | | | | | 35.0 | |
| R2514 | | 14 1/4 | 18 3/4 | 33 | | | | 73.4 | | | | | | | | 39.0 | P140 |

SPRING RETURN - 30-100 TON

CYLINDERS

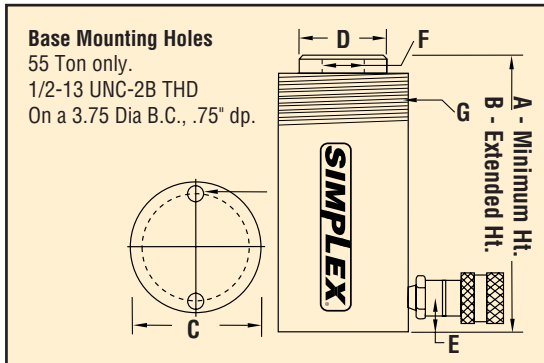
Simplex Cylinders Help Stand Up To Tough Construction Jobs.



- 9 Models.
- High flow quality couplers.
- Collar threads designed for full load.
- Base & piston mountings for easy fixturing.
- Removable load caps for flexibility & safety.
- Stop rings for piston blow-out protection.
- Plated piston to resist scoring & corrosion.
- Large bearings resist side load.
- Rod wiper protects inner cylinder from dirt.
- Removable carrying handles included on models R556 through R10010.



Contractors called on the brute force of Simplex R5513 cylinders to lift and position highway ramps in San Diego. The Simplex 50 Series power units provided the power and control in this rough outdoor application.



| | | |
|--|---|---|
|  |  |  |
| Power Pumps pgs. 44-62 | Hoses pgs. 70-71 | Cylinder Accessories pg. 10 |

Spring Return Cylinders 30 Through 100 Ton Capacities

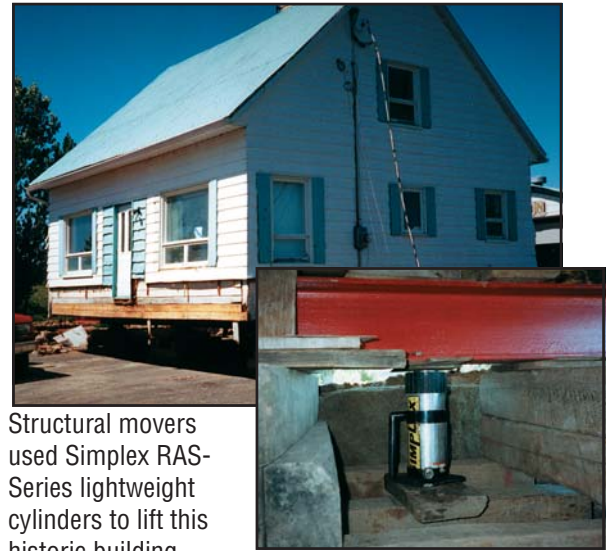
| Model Number | Cap. (tons) | Stroke (in) | A Min. Ht. (in) | B Ext. Ht. (in) | Ram Bore Dia. (in) | Effect Area (sq in) | Pres. @ Cap. (psi) | Oil Cap. Req'd (cu in) | C Body O.D. (in) | D Piston O.D. (in) | E Base To Port C/L (in) | F | | G | | Wgt. (lbs) | Sugstd. Hand Pump |
|--------------|-------------|-------------|-----------------|-----------------|--------------------|---------------------|--------------------|------------------------|------------------|--------------------|-------------------------|------------------|-------------------------|--------------------|-------------------------|------------|-------------------|
| | | | | | | | | | | | | Piston I.D. (in) | Piston Thrd. Depth (in) | Collar Thrds. (in) | Collar Thrd. Lgth. (in) | | |
| R308 | 30 | 8 1/4 | 15 1/4 | 23 1/2 | 2 7/8 | 6.49 | 9,245 | 53.6 | 4 | 2 1/4 | 2 1/4 | 1 1/2 x 16 | 1 3/16 | 35/16x12 | 1 15/16 | 40.0 | P82 |
| R552 | 55 | 2 | 6 15/16 | 8 15/16 | 3 3/4 | 11.05 | 9,955 | 22.1 | 5 | 3 1/8 | 1 3/8 | | | | | N/A | N/A |
| R554 | | 4 | 8 15/16 | 12 15/16 | | | | 54.0 | | | | 42.0 | P82 | | | | |
| R556 | | 6 1/4 | 11 1/8 | 17 3/8 | | | | 69.0 | | | | 50.0 | | | | | |
| R5513 | | 13 1/4 | 18 1/8 | 31 3/8 | | | | 146.3 | | | | 78.0 | | | | | |
| R756 | 75 | 6 1/8 | 11 1/4 | 17 3/8 | 4 1/2 | 15.90 | 9,430 | 97.4 | 5 3/4 | 3 3/4 | 1 3/16 | N/A | N/A | 53/4 x 12 | 1 3/4 | 63.0 | * |
| R7513 | | 13 1/8 | 19 3/8 | 32 1/2 | | | | 208.0 | | | | | | | | 130.0 | |
| R1006 | 100 | 6 5/8 | 13 1/4 | 20 11/16 | 5 1/8 | 20.63 | 9,695 | 137.0 | 6 1/4 | 4 1/8 | 1 3/16 | N/A | N/A | 61/4 x 12 | 2 1/4 | 90.0 | |
| R10010 | | 10 1/4 | 16 7/8 | 27 15/16 | | | | 212.0 | | | | | | | | 110.0 | |

*Power pumps are suggested for these units (see pages 44-62)

CYLINDERS

30 - 150 TON ALUMINUM

Simplex Silver Lite Aluminum Cylinders Cut Carrying Weights Up To 60%.

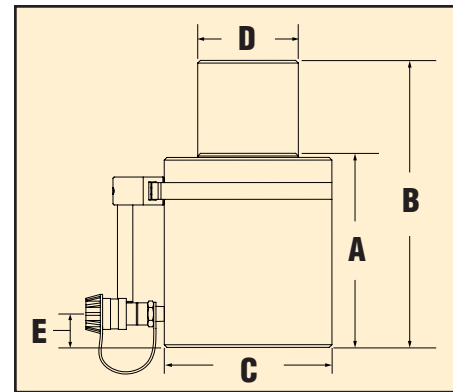


Structural movers used Simplex RAS-Series lightweight cylinders to lift this historic building.

"Simplex lightweight cylinders were easy to carry."

- 13 Standard Models from 30 through 150 tons.
- Heavy duty spring for fast & full retraction.
- Large bearing surfaces for side load protection.
- Carry handles standard on all models.
- Hard anodized coating reduces wear & corrosion.
- Stop rings for piston blow-out protection.
- Rod wiper protects inner cylinder from dirt.
- High flow couplers.
- Complies with ANSI/ASME B30.1 safety standards.

| | | |
|---|---|---|
|  |  |  |
| Power Pumps pgs. 44-62 | Hoses pgs. 70-71 | Accessories & Fittings pgs. 68-72 |



Aluminum Spring Return Cylinders 30 Through 150 Ton Capacities

| Model Number | Cap. (tons) | Stroke (in) | A Min. Ht. (in) | B Ext. Ht. (in) | Effect Area (sq in) | Oil Cap. Req'd (cu in) | C Body O.D. (in) | D Piston O.D. (in) | E Base To Port C/L (in) | Weight (lbs) | Sugstd. Hand Pumps |
|--------------|-------------|-------------|-----------------|-----------------|---------------------|------------------------|------------------|--------------------|-------------------------|--------------|--------------------|
| RAS302B | 30 | 2 | 6.5 | 8.5 | 6.5 | 13 | 4.5 | 2.5 | 1.5 | 14 | P42/P72 |
| RAS306B | | 6 | 10.5 | 16.5 | | 39 | | | | 18 | P72/P82 |
| RAS502B | 50 | 2 | 6.5 | 8.5 | 11 | 22.1 | 5.5 | 3.12 | 1.5 | 13 | P72/P82 |
| RAS504B | | 4 | 8.5 | 12.5 | | 44.2 | | | | 17 | P72/P82 |
| RAS506B | | 6 | 10.5 | 16.5 | | 66.2 | | | | 28 | P140 |
| RAS5010B | | 10 | 14.5 | 24.5 | | 110.4 | | | | 36 | * |
| RAS1002B | 100 | 2 | 6.5 | 8.5 | 20.7 | 41.2 | 8 | 4.25 | 1.5 | 40 | P72/P82 |
| RAS1004B | | 4 | 8.5 | 12.5 | | 82.4 | | | | 45 | P140 |
| RAS1006B | | 6 | 10.5 | 16.5 | | 123.7 | | | | 50 | * |
| RAS10010B | | 10 | 14.5 | 24.5 | | 206 | | | | 68 | * |
| RAS1502B | 150 | 2 | 6.5 | 8.5 | 30.7 | 61.4 | 10 | 4.875 | 1.5 | 58 | P140 |
| RAS1506B | | 6 | 10.5 | 16.5 | | 184.1 | | | | 86 | * |
| RAS15010B | | 10 | 14.5 | 24.5 | | 306.8 | | | | 110 | * |

*Power pumps are suggested for these units (see pages 44-62).

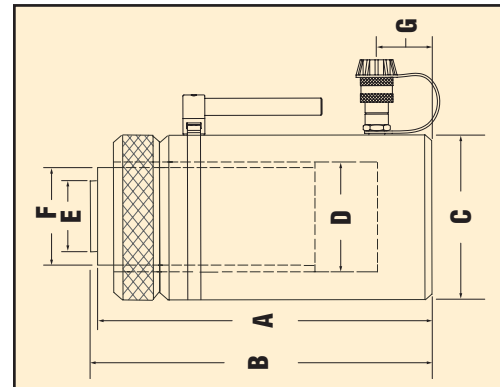
CUSTOM STROKES AND CAPACITIES AVAILABLE, CONTACT FACTORY

50 - 150 TON ALUMINUM LOCKNUT CYLINDERS

Simplex Silver Lite Aluminum Cylinders Cut Carrying Weights Up To 60%.



- 11 standard models from 50 through 150 tons.
- Locknuts for extended load holding.
- Large bearing surfaces for side load protection.
- Hard anodized coating reduces wear & corrosion.
- Carry handles standard on all models.
- Stop ring for piston blow-out protection.
- Heavy duty spring for fast & full retraction.
- High flow quality couplers.
- Complies with ANSI/ASME B30.1 safety standards.



Aluminum Lock Nut Spring Return Cylinders 50 Through 150 Ton Capacities

| Model Number | Cap. (tons) | A Stroke (in) | B Min. Ht. (in) | Ext. Ht. (in) | Effect Area (sq in) | Oil Cap. Req'd (cu in) | C Body O.D. (in) | D Cyl. Bore Dia. (in) | E Saddle Dia. (in) | F Piston O.D. (in) | G Base To Port C/L (in) | Weight (lbs) | Sugstd. Hand Pumps |
|--------------|-------------|---------------|-----------------|---------------|---------------------|------------------------|------------------|-----------------------|--------------------|--------------------|-------------------------|--------------|--------------------|
| RAL502 | 50 | 2 | 8.125 | 10.125 | 11.04 | 21.65 | 5.5 | 3.75 | 2.50 | 3.125 | 1.5 | 22 | P42/P72 |
| RAL504 | | 4 | 10.125 | 14.125 | | 43.30 | | | | | | 38 | P72/P82 |
| RAL506 | | 6 | 12.125 | 18.125 | | 64.92 | | | | | | 32 | P72/P82 |
| RAL5010 | | 10 | 16.125 | 26.125 | | 108.20 | | | | | | 40 | P140 |
| RAL1002 | 100 | 2 | 8.375 | 10.375 | 20.68 | 40.51 | 8 | 5.125 | 3.5 | 4.25 | 1.5 | 45 | P72/P82 |
| RAL1004 | | 4 | 10.375 | 14.375 | | 81.00 | | | | | | 55 | P82 |
| RAL1006 | | 6 | 12.375 | 18.375 | | 121.50 | | | | | | 64 | P140 |
| RAL10010 | | 10 | 16.375 | 26.375 | | 202.50 | | | | | | 82 | * |
| RAL1502 | 150 | 2 | 8.375 | 10.375 | 30.68 | 60.60 | 10 | 6.25 | 4.5 | 5 | 1.5 | 65 | P140 |
| RAL1506 | | 6 | 12.375 | 18.375 | | 181.80 | | | | | | 101 | * |
| RAL15010 | | 10 | 16.375 | 26.375 | | 303.00 | | | | | | 156 | * |

*Power pumps are suggested for these units (see pages 44-62).

CUSTOM STROKES AND CAPACITIES AVAILABLE, CONTACT FACTORY

905-814-6859 - 1-866-517-3289 - www.marcur.com

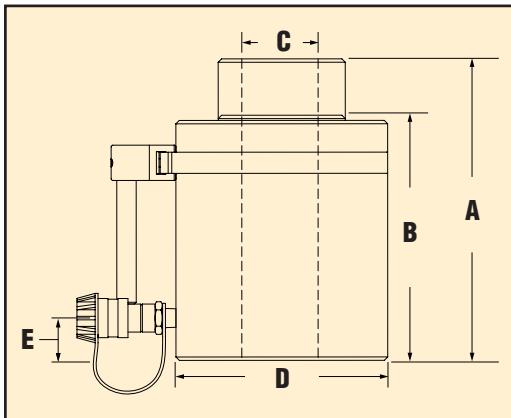
CYLINDERS

30 - 60 TON ALUMINUM CENTER HOLE

Simplex Silver Lite Aluminum Cylinders Cut Carrying Weights Up To 60%.



- 4 standard models in 30 and 60 ton capacities.
- Chrome plated center sleeve for extra protection against wear & corrosion.
- Heavy duty spring for fast & full retraction.
- Hard anodized housing & piston reduce wear & corrosion.
- Carrying handles standard on all models.
- Steel base & piston for protection against load damage.
- Large bearing surfaces for side load protection.
- Rod wiper protects inner cylinder from dirt.
- Complies with ANSI/ASME B30.1 safety standards.



Aluminum Center Hole Single Acting Spring Return Cylinders 30 & 60 Ton Capacities

| Model Number | Cap. (tons) | A Stroke (in) | B Min. Ht. (in) | Ext. Ht. (in) | Effect Area (sq in) | Oil Cap. Req'd (cu in) | C Center Hole (in) | D Cyl. Bore Dia. (in) | E Base To Port C/L (in) | Weight (lbs) | Sugstd. Hand Pumps |
|--------------|-------------|---------------|-----------------|---------------|---------------------|------------------------|--------------------|-----------------------|-------------------------|--------------|--------------------|
| RAC303 | 30 | 3 | 8 3/4 | 13 3/4 | 7.21 | 22 | 1 3/16 | 5 1/2 | 1 | 22 | P42/P72 |
| RAC306 | | 6 | 11 3/4 | 17 3/4 | | 44 | | | | | P72/P82 |
| RAC603 | 60 | 3 | 10 1/8 | 13 1/8 | 12.3 | 37 | 2 1/8 | 5 1/2 | 1 | 42 | P72/P82 |
| RAC606 | | 6 | 13 1/4 | 19 1/4 | | 74 | | | | | 55 |

CUSTOM STROKES AND CAPACITIES AVAILABLE, CONTACT FACTORY

30 - 150 TON D/A ALUMINUM CENTER HOLE **CYLINDERS**

Simplex Silver Lite Aluminum Cylinders Cut Carrying Weights Up To 60%.

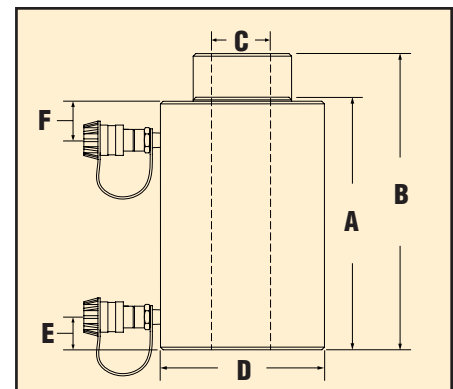
- 14 standard models in 30 through 150 ton capacities.
- Chrome plated center sleeve for extra protection against wear & corrosion.
- Hard anodized coating reduces wear & corrosion.
- Carrying handles standard on all models.
- Steel piston for protection against load damage.
- Large bearing surfaces for side load protection.
- Rod wiper protects inner cylinder from dirt.
- Complies with ANSI/ASME B30.1 safety standards.



Power Pumps
pgs. 44-62

Hoses
pgs. 70-71

Accessories & Fittings
pgs. 68-72



Aluminum Double Acting Center Hole Cylinders 30 Through 150 Ton Capacities

| Model Number | Cap. (tons) | Stroke (in) | A Min. Ht. (in) | B Ext. Ht. (in) | C Cent. Hole Dia (in) | Effect. Area | | Oil Cap. Req'd. | | D Body O.D. (in) | E Base To Port C/L (in) | F Collar To Port C/L (in) | Weight (lbs) | Sugstd. Hand Pumps |
|--------------|-------------|-------------|-----------------|-----------------|-----------------------|--------------|--------------|-----------------|--------------|------------------|-------------------------|---------------------------|--------------|--------------------|
| | | | | | | Push (sq.in) | Pull (sq.in) | Push (sq.in) | Pull (sq.in) | | | | | |
| RACD302 | 30 | 2 | 7 | 9 | 1 1/2 | 6.35 | 3.25 | 14.34 | 6.50 | 5 | | | 20 | P140D |
| RACD306 | | 6 | 11 | 17 | | | | 43.02 | 19.50 | | | | 28 | |
| RACD3010 | | 10 | 15 | 25 | | | | 71.70 | 32.50 | | | | 35 | |
| RACD502 | 50 | 2 | 7 | 9 | 2 1/8 | 10.30 | 3.43 | 21.71 | 6.86 | 8 | 1 3/4 | 1 3/4 | 33 | P140D |
| RACD504 | | 4 | 9 | 13 | | | | 43.44 | 13.72 | | | | 41 | |
| RACD506 | | 6 | 11 | 17 | | | | 65.16 | 20.58 | | | | 49 | |
| RACD5010 | | 10 | 15 | 25 | | | | 108.60 | 34.30 | | | | 65 | |
| RACD1002 | 100 | 2 | 10 | 12 | 3 1/2 | 20.28 | 7.8 | 41.52 | 15.60 | 11 | | | 85 | P140D |
| RACD1004 | | 4 | 12 | 16 | | | | 83.04 | 31.20 | | | | 93 | |
| RACD1006 | | 6 | 14 | 20 | | | | 124.56 | 46.80 | | | | 102 | |
| RACD10010 | | 10 | 18 | 28 | | | | 206.60 | 78.00 | | | | 132 | |
| RACD1502 | 150 | 2 | 10 | 12 | 3 1/2 | 31.47 | 9 | 61.26 | 17.96 | 12 | 2 1/2 | 2 1/2 | 109 | P140D |
| RACD1506 | | 6 | 14 | 20 | | | | 183.73 | 53.98 | | | | 132 | |
| RACD15010 | | 10 | 18 | 28 | | | | 306.30 | 89.82 | | | | 156 | |

*Power pumps are suggested for these units (see pages 44-62).

CUSTOM STROKES AND CAPACITIES AVAILABLE, CONTACT FACTORY

CYLINDERS

LOW PROFILE 10 - 100 TONS

"These Low Profile Cylinders Gave Us The Power We Wanted In The Compact Sizes We Needed."

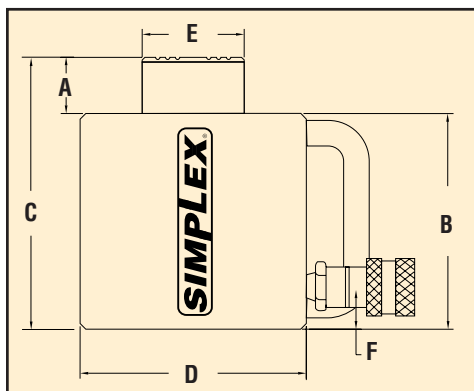


Low Profile Cylinders Up to 100 Tons!!



Simplex RLS Series provides the ideal fit & force required for most bridge lifting and pier cap maintenance jobs. Compact, light weight & tough as nails, Simplex cylinders are at home on any construction site.

- 5 Models.
- Plated pistons to resist scoring & corrosion.
- High flow couplers.
- Stop rings for piston blow-out protection.
- Rod wiper protects inner cylinder from dirt.
- Exceeds ANSI/ASME B30.1 safety standards.



| | | |
|---------------------------|---------------------|------------------------------------|
| | | |
| Power Pumps pgs. 44-62 | Hoses pgs. 70-71 | Pump & Cylinder Sets pgs. 31-32 |

Spring Return Low Profile Cylinders 10 Through 100 Ton Capacities

| Model Number | Cap. (tons) | A Stroke (in) | B Min. Ht. (in) | C Ext. Ht. (in) | Ram Bore Dia. (in) | Effect Area (sq.in.) | Pres. @ Cap. (psi) | Oil Cap. Req'd (cu.in.) | D Body O.D. (in) | E Piston O.D. (in) | F Base To Port C/L (in) | Wgt. (lbs) | Sugstd. Hand Pump |
|--------------|-------------|---------------|-----------------|-----------------|--------------------|----------------------|--------------------|-------------------------|------------------|--------------------|-------------------------|------------|-------------------|
| RLS101 | 10 | 1 1/2 | 3 15/32 | 4 31/32 | 1 11/16 | 2.23 | 8,940 | 3.4 | 2 3/4 | 1 1/2 | | 5.8 | P42/ P72 |
| RLS201 | 20 | 1 3/4 | 3 7/8 | 5 5/8 | 2 3/8 | 4.43 | 9,030 | 7.8 | 3 5/8 | 2 | 11/16 | 10.5 | |
| RLS302 | 30 | 2 7/16 | 4 5/8 | 7 1/16 | 2 7/8 | 6.49 | 9,250 | 15.8 | 4 | 2 1/4 | 3/4 | 13.8 | |
| RLS502 | 50 | 2 3/8 | 4 13/16 | 7 3/16 | 3 1/2 | 9.62 | 10,400 | 22.8 | 5 | 2 1/4 | 15/16 | 22.8 | |
| RLS1002 | 100 | 2 1/4 | 5 9/16 | 7 13/16 | 5 | 19.63 | 10,200 | 44.2 | 6 1/2 | 3 5/8 | 1 1/4 | 44.5 | |

5 - 150 TON FLAT JACK

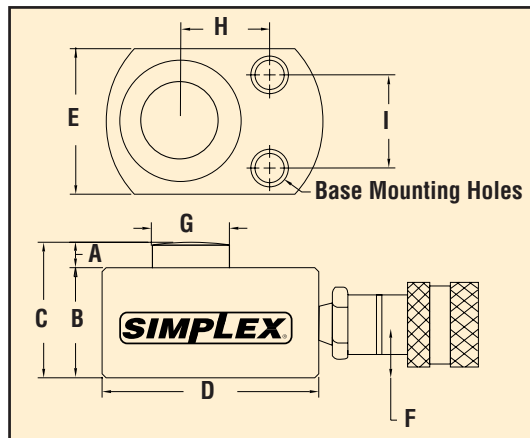
CYLINDERS

Simplex Flat Jacks, Designed To Fit In Tight Spots.



- 8 Models.
- Stop rings for piston blow-out protection.
- Bronze plated domed piston resists side load.
- Plated pistons to resist scoring & corrosion.
- High flow couplers.
- Mounting holes in 5, 10, & 20 ton models.
- Rod wiper protects inner cylinder from dirt.
- Exceeds ANSI/ASME B30.1 safety standards.

Simplex RFS Series are designed specifically for near impossible lifting, clamping or positioning jobs where space is at a premium. Ideal for break loose or start up spreading jobs. These mini-monsters pack up to 150 tons of force into a convenient, portable package.



Mounting Hole Dimensions

| Capacity | H (in) | I (in) | Base Mounting Hole Dimensions (in) |
|----------|---------|---------|---|
| 5 Ton | 1 | 1 1/8 | 7/32 through x 23/64 C'BORE (1/4 DEEP) |
| 10 Ton | 1 11/32 | 1 13/32 | 9/32 through x 27/64 C'BORE (5/16 DEEP) |
| 20 Ton | 1 9/16 | 1 15/16 | 25/64 through x 19/22 C'BORE (25/64 DEEP) |

Spring Return Flat Jacks 5 Through 150 Ton Capacities

| Model Number | Cap. (tons) | A Stroke (in) | B Min. Ht. (in) | C Ext. Ht. (in) | Ram Bore Dia. (in) | Effect Area (sq in) | Pres. @ Cap. (psi) | Oil Cap. Req'd (cu in) | D Body Length (in) | E Body Width (in) | F Base To Port C/L (in) | G | | Suggested Hand Pump |
|--------------|-------------|---------------|-----------------|-----------------|--------------------|---------------------|--------------------|------------------------|--------------------|-------------------|-------------------------|------------------|------------|---------------------|
| | | | | | | | | | | | | Piston O.D. (in) | Wgt. (lbs) | |
| R50 | 5 | 5/8 | 1 5/8 | 2 1/4 | 1 1/8 | .99 | 10,000 | .6 | 2 9/16 | 1 5/8 | 3/4 | 1 | 2.5 | P41/P71 |
| RFS10 | 10 | 7/16 | 1 11/16 | 2 1/8 | 1 11/16 | 2.24 | 8,940 | 1.0 | 3 1/4 | 2 3/16 | | 3/4 | 3.3 | |
| RFS20 | 20 | | 2 1/32 | 2 15/32 | 2 3/8 | 4.43 | 9,030 | 1.9 | 4 | 3 | | 1 1/8 | 6.0 | |
| RFS30 | 30 | 1/2 | 2 5/16 | 2 13/16 | 2 7/8 | 6.49 | 9,250 | 3.2 | 4 1/2 | 3 3/4 | 15/16 | 1 3/8 | 8.5 | P42/P72 |
| RFS50 | 50 | 5/8 | 2 5/8 | 3 1/4 | 3 1/2 | 9.62 | 10,400 | 6.0 | 5 1/2 | 4 1/2 | | 1 3/4 | 14.3 | |
| RFS75 | 75 | | 3 1/8 | 3 3/4 | 4 1/2 | 15.90 | 9,440 | 10.0 | 6 1/2 | 5 1/2 | | 2 1/8 | 24.5 | |
| RFS100 | 100 | | 3 3/8 | 4 | 5 | 19.63 | 10,200 | 12.3 | 7 | 6 | | 2 1/2 | 31.0 | |
| RFS150 | 150 | | 9/16 | 3 15/16 | 4 1/2 | 6 1/4 | 30.66 | 9,785 | 17.2 | 8 1/2 | | 7 1/2 | 3 | |

CYLINDERS

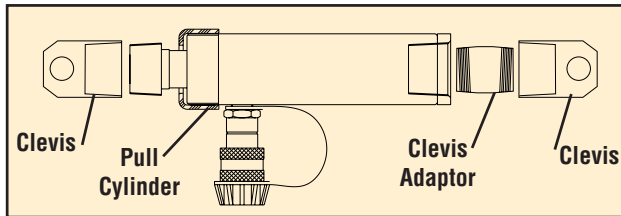
2 - 5 TON PULL CYLINDERS

Simplex Pull Cylinders Are Designed For Pulling & Tensioning Applications.

The RP25 & RP55 have rod, base and collar threads for maximum flexibility in fixturing using optional attachments.



- 2 Models.
- High flow couplers.
- Designed for pulling & tensioning applications.
- High strength all steel construction.
- Chrome plated piston rods resist corrosion.
- Rod wiper protects against contamination.
- Piston rod automatically extends when pressure is released.
- High strength compression spring provides long cycle life and quick piston extension.
- Complies with ANSI/ASME B30.1 safety standards.



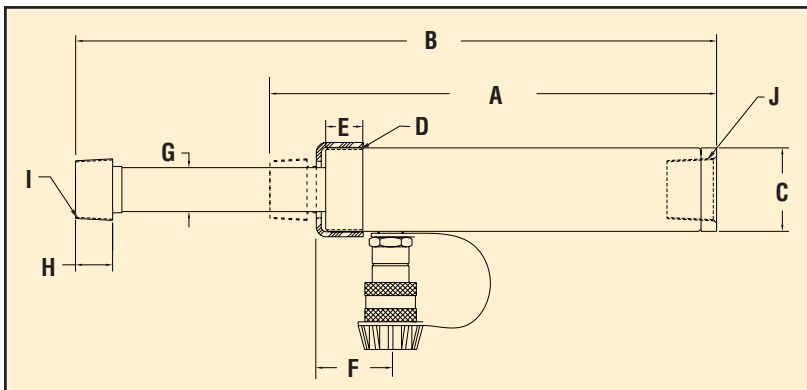
Base Clevis Adaptor

Clevis

Clevis Ends

| Model Number | A (in) | B (in) | C (in) | D (in) | E (in) | F (in) |
|--------------|--------|--------|--------|--------|--------|--------|
| RPC25 | 5 1/8 | 4 5/16 | 1 5/16 | 2 | 3/4 | 1 |
| RPC55 | 6 | 5 | 1 1/2 | 2 1/2 | 7/8 | 1 1/2 |

Both models include both adaptor and clevis.



Hydraulic Pull Cylinders

| Model Number | Cap. (tons) | Stroke (in) | A Min. Ht. (in) | B Ext. Ht. (in) | C O.D. (in) | D Collar Thrd. (in) | E Collar Length (in) | F Cyl. to Port (in) | G Piston Dia. (in) | H Piston Adpt. (in) | I NPTF Thrd. (in) | J NPTF Thrd. (in) | Oil Cap. (cu. in.) | Pres. @ Cap. (psi) | Wgt. (lbs) |
|--------------|-------------|-------------|-----------------|-----------------|-------------|---------------------|----------------------|---------------------|--------------------|---------------------|-------------------|-------------------|--------------------|--------------------|------------|
| RP25 | 2 | 5 | 9 9/16 | 14 9/16 | 1 3/4 | 1 1/2-16 | 1 | 1 11/16 | 3/4 | 1 | 3/4-14 | 3/4-14 | 2.8 | 7,250 | 4 |
| RP55 | 5 | 5 1/2 | 11 7/8 | 17 3/8 | 2 1/4 | 2 1/4-14 | 1 | 1 11/16 | 1 3/16 | 1 3/8 | 1 1/4-11 1/2 | 1 1/4-11 1/2 | 6.2 | 8,850 | 11 |

P42 is the suggested hand pump.

THE HARD-KOR™ CENTER HOLE CYLINDER

■ Wide Variety.

Hard-Kor™ Center Hole Cylinders are available from 12 through 600 tons with a variety of strokes to meet every requirement.

■ Built Solid For Maximum Durability.

Hard-Kor™ cylinders are manufactured from solid alloy steel, **eliminating sloppy threaded and welded tolerances**, potential leak points, and weak spots that cause base blowout.

■ Fast Retraction For Speed & Efficiency.

Simultaneous machining of the center tube & cylinder bore provides Hard-Kor™ cylinders with precision alignment that significantly **improves retraction time** and minimizes seal extrusion.

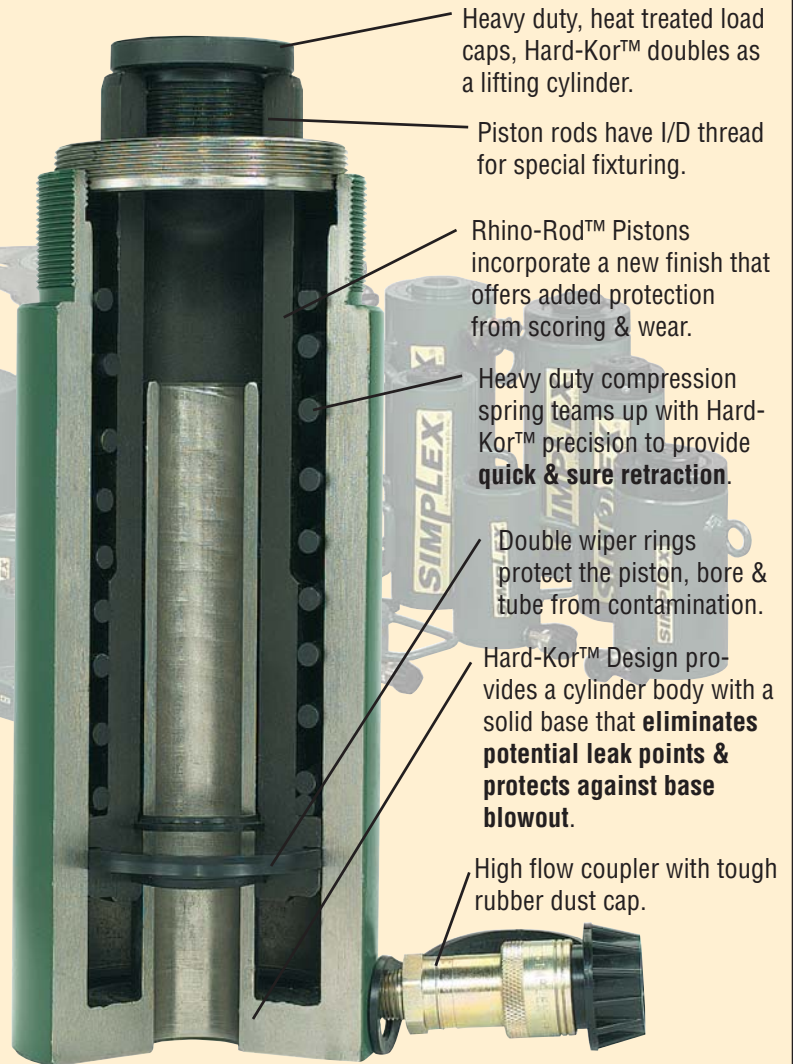
■ Low Profile For Greater Flexibility.

With lower profile & longer strokes, Hard-Kor™ cylinders fit in the tightest spaces.

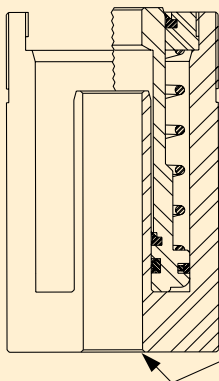
■ Reserve Power For The Toughest Jobs.

Most Hard-Kor™ cylinders develop their cataloged capacity below their maximum pressure rating. This provides Hard-Kor™ with reserve power that can be used for the toughest of jobs. The lower operating pressure extends pump life and reduces handle force and operator fatigue.

■ Exceeds ANSI/ASME B30.1 Safety Standards.

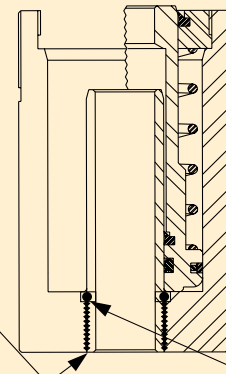


SIMPLEX HARD-KOR™ CYLINDERS



A **one piece, unified body** is significantly stronger than standard center hole cylinders. Special manufacturing eliminates potential leak points at the base, enhancing the integrity & alignment of the base and center tube.

TRADITIONAL CENTER HOLE CYLINDER



Weak spots created from threaded or welded construction are the **major cause of base blowout**.

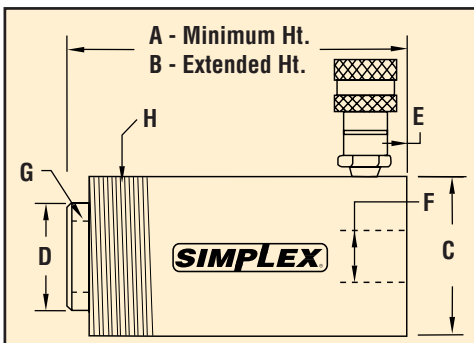
The additional base seals are potential leak points that contribute to early failure.

Simplex Hard-Kor™ Cylinders Make Light Work Of Structural Reconstruction.



Damage from earthquakes and age, caused the roof of the Mission San Juan Capistrano to be in need of repair. 24 Simplex RC121 cylinders were used to transfer the load, so repairs could be made.

- 12 standard models.
- **HARD-KOR™ DESIGN!**
- No potential leak points at base.
- Extra protection against base blow-out.
- Low profiles for more versatility.
- Double wipers protect against contamination.
- Faster retraction increases productivity.
- Large center holes for greater flexibility.
- Rhino-Rod™ pistons resist scoring & corrosion.
- Lower operating pressures.
- Doubles as lifting cylinder.
- High flow coupling with tough rubber dust cap.
- Precision construction that prevents seal extrusion.



Base Mounting Holes

| Capacity | Thread | | Bolt Circle Dia. (in) |
|----------|-----------|------------|-----------------------|
| | Size (in) | Dpth. (in) | |
| 12 Ton | 5/16-18 | 5/16 | 2 |
| 20 Ton | 3/8-16 | 7/16 | 3 1/4 |
| 30 Ton | 3/8-16 | 3/8 | 3 5/8 |
| 60 Ton | 1/2-13 | 7/16 | 5 1/8 |
| 100 Ton | 5/8-11 | 3/4 | 7 |

Optional Threaded Saddles

| AS20 | | | AS30 | | |
|------|-----|-----|------|--------|-----|
| A | B | C | A | B | C |
| 54 | 1-8 | .38 | 63 | 1.25-7 | .38 |

Single-Acting Center Hole Cylinders 12 Through 100 Ton Capacities

| Model Number | Cap. (tons) | Stroke (in) | A Min. Ht. (in) | B Ext. Ht. (in) | Effect Area (sq in) | Pres. @ Cap. (psi) | Oil Cap. Req'd (cu in) | C Body O.D. (in) | D Piston O.D. (in) | E Base To Port C/L (in) | F Center Hole Dia. (in) | H | | G | | Wgt. (lbs) |
|--------------|-------------|-------------|-----------------|-----------------|---------------------|--------------------|------------------------|------------------|--------------------|-------------------------|-------------------------|--------------------|-------------------------|--------------------|-------------------------|------------|
| | | | | | | | | | | | | Collar Thrds. (in) | Collar Thrd. Lgth. (in) | Piston Thrds. (in) | Piston Thrd. Lgth. (in) | |
| RC120 | 12 | 5/16 | 2 3/16 | 2 1/2 | 2.36 | 10,185 | .90 | 2 3/4 | 1 3/8 | 7/16 | 49/64 | 2 3/4 - 16 | 1 13/16 | 3/4 - 16 | 5/8 | 3.5 |
| RCQ120 | | 3/4 - 10 | | | | | | | | | | | | | | |
| RC121 | | 1 5/8 | 4 3/4 | 6 3/8 | | | | | | | | | | 25/32 | 5/8 | |
| RC1211 | | 3 | 7 1/4 | 10 1/4 | | | | | | | | | | ---- | ---- | |
| RC123 | 20 | 2 | 6 3/16 | 8 3/16 | 5.30 | 7,545 | 11 | 4 | 2 1/8 | 51/64 | 1 1/16 | 3 7/8 - 12 | 1 1/2 | 1 9/16 - 16 | 3/4 | 17 |
| RC202 | | 6 | 11 3/16 | 17 3/16 | | | | | | | | | | 32 | | |
| RC206 | | 2 1/2 | 7 | 9 1/2 | | | | | | | | | | 8.64 | 6,950 | |
| RC302 | 6 1/8 | 12 1/4 | 18 3/8 | 64 | 52 | | | | | | | | | | | |
| RC306 | 3 | 8 21/32 | 11 21/32 | 14.58 | 8,230 | 44 | 6 3/4 | 4 | 2 1/8 | 6 1/4 - 12 | 2 | 2 3/4 - 16 | 3/4 | | | 68 |
| RC603 | 6 | 12 21/32 | 18 21/32 | | | | | | | | | 88 | | 80 | | |
| RC606 | 100 | 3 | 9 | | | | | | | | | 12 | 20.60 | 9,700 | 62 | |

DOUBLE-ACTING CENTER HOLE

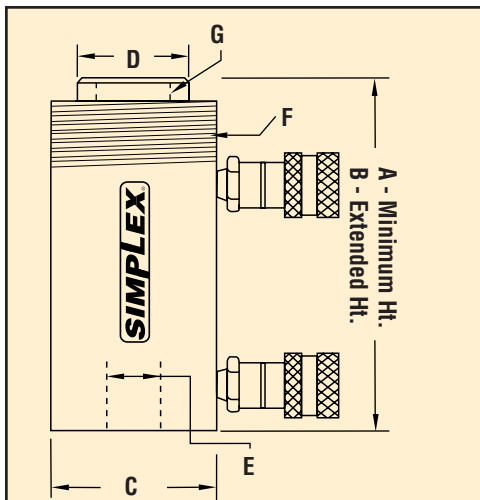
CYLINDERS

Simplex Center Hole Cylinders Raise 6,000 Ton Bridge Span 170 Ft.



Engineers from around the world watched as Simplex center hole cylinders raised a 6,000 ton bridge section more than 170 ft. over the Willamette River in Portland, OR. The span was constructed up river and barged into position. Using pull rods and couplings, Simplex RCD200 Series cylinders completed the lift in 40 hours.

- 11 standard models.
- **HARD-KOR™** Design for longer life.
- Relief valves protect against over pressurizing.
- High flow couplers.
- Large diameter center holes.
- Rhino-Rod™ pistons resist scoring & corrosion.
- Stop ring for piston blow-out protection.
- Available in custom strokes.
- Rod wiper protects inner cylinder from dirt.



Base Mounting Holes

| Capacity | Thread | | Bolt Circle Dia. (in) | Number of Holes |
|----------|-----------|------------|-----------------------|-----------------|
| | Size (in) | Dpth. (in) | | |
| 30 Ton | 3/8-16 | 3/8 | 3 5/8 | 2 |
| 60 Ton | 1/2-13 | 7/16 | 5 1/8 | |
| 100 Ton | 5/8-11 | 3/4 | 7 | |

Double-Acting Center Hole Cylinders 30 Through 500 Ton Capacities

| Model Number | Push Cap. (tons) | Pull Cap. (tons) | Stroke (in) | A Min. Ht. (in) | B Ext. Ht. (in) | Effect Area (sq in) | Pres. @ Cap. (psi) | Oil Cap. Req'd (cu in) | C Body O.D. (in) | D Piston O.D. (in) | E Center Hole Dia. (in) | F | | G | | Wgt. (lbs) |
|--------------|------------------|------------------|-------------|-----------------|-----------------|---------------------|--------------------|------------------------|------------------|--------------------|-------------------------|--------------------|-------------------------|--------------------|-------------------------|------------|
| | | | | | | | | | | | | Collar Thrds. (in) | Collar Thrd. Lgth. (in) | Piston Thrds. (in) | Piston Thrd. Lgth. (in) | |
| RCD302 | 30 | 17.7 | 2 | 7 | 9 | 8.6 | 6,950 | 8.6 | 5 | 2 1/2 | 1 5/16 | 4 1/2 - 12 | 1 3/4 | 1 13/16 - 16 | 7/8 | 48 |
| RCD307 | | | 7 | 12 1/4 | 19 1/4 | | | 24.75 | | | | | | | | 50 |
| RCD6010 | 60 | 45 | 10 | 15 1/2 | 25 1/2 | 14.5 | 8,230 | 55 | 6 3/4 | 4 | 2 1/8 | ---- | ---- | ---- | ---- | 95 |
| RCD1001 | 100 | 68 | 1 | 7 | 9 | 20.6 | 9,700 | 9.0 | 8 1/4 | 5 | 3 1/8 | ---- | ---- | ---- | ---- | 85 |
| RCD1003 | | | 3 | 9 | 12 | | | 21.1 | | | | 100 | | | | |
| RCD1006 | | | 6 | 12 | 18 | | | 42.3 | | | | 115 | | | | |
| RCD10010 | | | 10 | 16 | 26 | | | 70.5 | | | | 150 | | | | |
| RCD1505C | 150 | ---- | 5 | 13 1/8 | 18 1/8 | 31.60 | 9,491 | 78 | 10 | 6 | 3 1/8 | ---- | ---- | ---- | ---- | 240 |
| RCD2006C | 246 | ---- | 6 | 16 1/4 | 22 1/4 | 49.30 | 10,000 | 172 | 12 | 8 | 4 1/8 | ---- | ---- | ---- | ---- | 385 |
| RCD3006C | 434 | ---- | | 18 3/4 | 24 3/4 | 91.50 | | 296 | 15 | 9 1/2 | 4 1/4 | ---- | ---- | ---- | ---- | 720 |
| RCD5006C | 646 | ---- | | 21 1/2 | 27 1/2 | 129.30 | | 463 | 17 3/4 | 12 | 5 1/4 | ---- | ---- | ---- | ---- | 1230 |

CUSTOM STROKES AND CAPACITIES AVAILABLE, CONTACT FACTORY

THE SIMPLEX HIGH TONNAGE CYLINDER

■ Wide Variety

Simplex offers an extensive selection of high tonnage cylinders with capacities up to 1,000 tons. Single-acting, double-acting, and locking collar design with standard or **custom strokes** and capacities available.

■ Thick, Protective Bronze Inlays on All Internal Bearing Surfaces

All Simplex high tonnage cylinders incorporate thick, protective bronze inlaid bearings that are an integral part of a one piece piston. This design greatly reduces the effect of sideloading and promotes **long life**.

■ Unique Design

Simplex high tonnage cylinders use a one piece piston design that is machined to precise tolerances and is plated to resist corrosion. Cylinder housings are made of high strength alloy steel that is machined and heat treated for additional strength.

■ Positive Stop for Greater Safety

Most high tonnage cylinders rely on overflow ports or visual aids for piston blowout protection. At Simplex all high tonnage cylinders are built with a strong, steel positive stop, which provides complete piston blowout protection.

■ Built for Rugged Industrial and Construction Use

All Simplex high tonnage cylinders exceed **ANSI/ASME B30.1 Safety Standards**. Heavy duty construction provides trouble free operation and long life.

■ Protection from Contamination

Within the stop ring a polyurethane wiper cleans the rod surface during retraction, protecting the inner cylinder assembly from dirt, moisture, and other contaminants. (Not available on lock nut cylinders.)

■ RLR Series 30 to 1,000 Tons

Pages 25 - 26



■ RLN Series 30 to 1,000 Tons

Pages 27 - 28



■ RDA Series 10 to 1,000 Tons

Pages 29 - 30



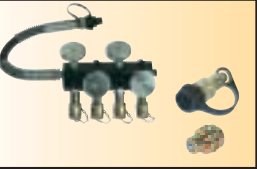


Simplex Cylinders Provided The Power & Reliability To Rearrange Our Shop Floor In One Day.



The problem was to reposition machine centers without disrupting production. "Using Simplex RLR Series cylinders and a 70 Series **Suc-O-Matic** pump, we rearranged our shop floor in one day." The low closed height and longer strokes eliminated extra jacking & blocking procedures, and the Simplex Suc-O-Matic valve retracted load return cylinders effortlessly.

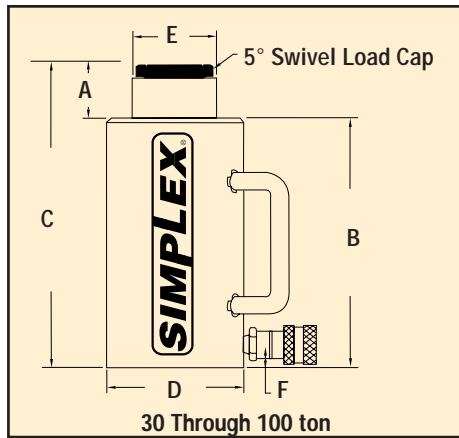
- 31 Models
- Rated for full duty.
- High flow couplers.
- Low closed heights.
- Plated pistons to resist scoring & corrosion.
- Stop rings for piston blow-out protection.
- Large bearings resist side load.
- Available in custom strokes & capacities.
- Rod wiper protects inner cylinder from dirt.
- Domed pistons on 150 to 1,000 ton capacities help resist side load.
- 5° Swivel on 30 to 100 ton capacity load caps for side load protection.
- Exceeds ANSI/ASME B30.1 safety standards.
- Optional swivel load caps are available for 150 through 1,000 ton models.
- Removable swivel lifting eyes on 100 through 1,000 ton models.

| | | |
|---|--|--|
|  |  |  |
| Power Pumps pgs. 44-62 | Hoses pgs. 70-71 | Couplers pg. 68 Manifolds & Fittings pg. 69 |

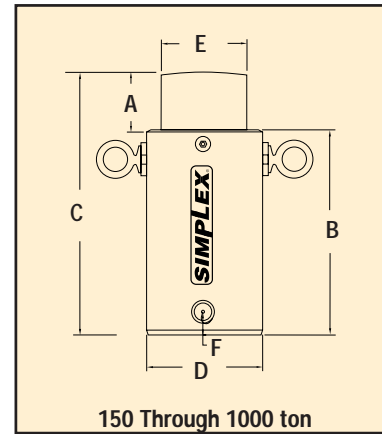


When railcar bulk heads need straightening, a 150 ton Simplex cylinder used with a SUC-O-MATIC™ power pump can save the day. Simplex load return cylinders completely retract in any position when used with the Simplex SUC-O-MATIC™ power pumps.





Note: 100 ton models have removable lifting eye bolts in lieu of carrying handles.



Note: Swivel eye bolts are removable.

Load Return Jacking Cylinders 30 Through 1000 Ton Capacities

| Model Number | Cap. (tons) | A Stroke (in) | B Min. Ht. (in) | C Ext. Ht. (in) | Ram Bore Dia. (in) | Effect Area (sq in) | Pres. @ Cap. (psi) | Oil Cap. Req'd (cu in) | D Body O.D. (in) | E Piston O.D. (in) | F Base To Port C/L (in) | Weight (lbs) | Suggested Power Pump |
|--------------|-------------|---------------|-----------------|-----------------|--------------------|---------------------|--------------------|------------------------|------------------|--------------------|-------------------------|--------------|---|
| RLR306 | 30 | 6 | 9 3/8 | 15 3/8 | 2 7/8 | 6.49 | 9,240 | 38.9 | 4 | 2 | 3/4 | 32.0 | Simplex Suc-O-Matic™ equipped Power Pumps are highly recommended to power load return cylinders. Unlike any other power unit, Simplex Suc-O-Matic™ equipped Pumps will fully retract load return cylinders automatically. |
| RLR502 | | 2 | 5 7/16 | 7 7/16 | | | | 22.1 | | | | 30.0 | |
| RLR506 | 50 | 6 | 9 7/16 | 15 7/16 | 3 3/4 | 11.05 | 9,054 | 66.3 | 5 | 3 | 25/32 | 55.0 | |
| RLR5010 | | 10 | 13 7/16 | 23 7/16 | | | | 133.0 | | | | 92.0 | |
| RLR1002 | | 2 | 6 9/16 | 8 9/16 | | | | 40.0 | | | | 60.0 | |
| RLR1006 | 100 | 6 | 10 9/16 | 16 9/16 | 5 | 19.63 | 10,200 | 118.0 | 6 3/8 | 3 3/8 | 1 1/4 | 90.0 | |
| RLR10010 | | 10 | 14 9/16 | 24 9/16 | | | | 196.0 | | | | 126.0 | |
| RLR1502 | | 2 | 7 | 9 | | | | 66.4 | | | | 117.0 | |
| RLR1506 | 150 | 6 | 11 | 17 | 6 1/4 | 30.68 | 9,778 | 199.0 | 9 | 5 9/16 | 1 15/16 | 189.0 | |
| RLR15012 | | 12 | 17 | 29 | | | | 398.0 | | | | 297.0 | |
| RLR2002 | | 2 | 8 | 10 | | | | 88.4 | | | | 184.0 | |
| RLR2006 | 200 | 6 | 12 | 18 | 7 1/4 | 41.28 | 9,054 | 265.0 | 10 | 6 9/16 | 2 1/16 | 282.0 | |
| RLR20012 | | 12 | 18 | 30 | | | | 530.0 | | | | 429.0 | |
| RLR3002 | | 2 | 11 3/4 | 13 3/4 | | | | 120.0 | | | | 277.0 | |
| RLR3006 | 300 | 6 | 13 3/4 | 19 3/4 | 8 3/4 | 60.13 | 9,978 | 361.0 | 12 | 7 13/16 | 2 7/16 | 405.0 | |
| RLR30012 | | 12 | 19 3/4 | 31 3/4 | | | | 722.0 | | | | 597.0 | |
| RLR4002 | | 2 | 11 13/16 | 11 13/16 | | | | 174.0 | | | | 455.0 | |
| RLR4006 | 400 | 6 | 15 13/16 | 21 13/16 | 10 1/2 | 86.59 | 9,238 | 520.0 | 14 | 6 9/16 | 3 | 612.0 | |
| RLR40012 | | 12 | 21 13/16 | 33 13/16 | | | | 1040.0 | | | | 842.0 | |
| RLR5002 | | 2 | 12 5/8 | 14 5/8 | | | | 208.0 | | | | 627.0 | |
| RLR5006 | 500 | 6 | 16 5/8 | 22 5/8 | 11 1/2 | 103.87 | 9,628 | 623.0 | 16 | 10 5/16 | 3 3/16 | 855.0 | |
| RLR50012 | | 12 | 22 5/8 | 34 5/8 | | | | 1246.0 | | | | 1197.0 | |
| RLR6002 | | 2 | 13 1/2 | 15 1/2 | | | | 246.0 | | | | 655.0 | |
| RLR6006 | 600 | 6 | 17 1/2 | 23 1/2 | 12 1/2 | 122.71 | 9,778 | 738.0 | 17 1/2 | 11 5/16 | 3 1/2 | 902.0 | |
| RLR60012 | | 12 | 23 1/2 | 35 1/2 | | | | 1476.0 | | | | 1273.0 | |
| RLR8002 | | 2 | 14 7/16 | 16 7/16 | | | | 330.0 | | | | 997.0 | |
| RLR8006 | 800 | 6 | 18 7/16 | 24 7/16 | 14 1/2 | 165.13 | 9,690 | 991.0 | 18 | 13 5/16 | 4 1/8 | 1256.0 | |
| RLR80012 | | 12 | 24 7/16 | 36 7/16 | | | | 1982.0 | | | | 1644.0 | |
| RLR10002 | | 2 | 16 1/8 | 18 1/8 | | | | 402.0 | | | | 1523.0 | |
| RLR10006 | 1000 | 6 | 20 1/8 | 26 1/8 | 16 | 201.06 | 9,950 | 1206.0 | 21 | 14 15/16 | 4 1/4 | 1883.0 | |
| RLR100012 | | 12 | 26 1/8 | 38 1/8 | | | | 2412.0 | | | | 2423.0 | |

Simplex Suc-O-Matic™ equipped Power Pumps are highly recommended to power load return cylinders. Unlike any other power unit, Simplex Suc-O-Matic™ equipped Pumps will fully retract load return cylinders automatically.

For more information on the Suc-O-Matic™ feature see page 64.



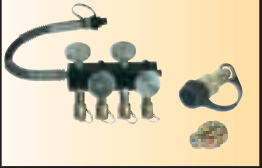
CUSTOM STROKES AND CAPACITIES UP TO 1,500 TONS AVAILABLE, CONTACT FACTORY

Simplex Lock Nut Cylinders Are Used In a Variety of Different Projects.

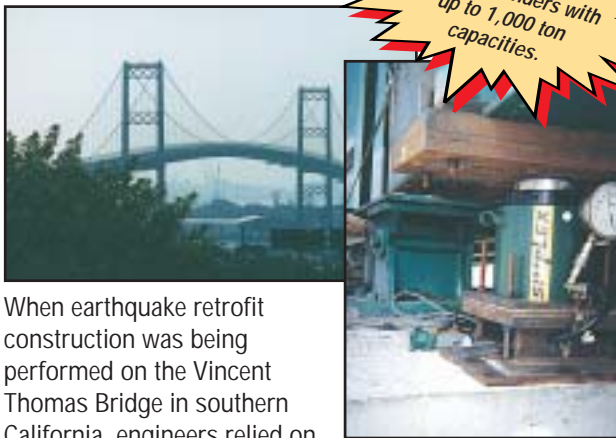


RLN Series lock nut cylinders cut installation time on this power generator by 25%. "The locknut held the load without the extra chore of cribbing." The job was completed even quicker with the use of Simplex SUC-O-MATIC™ power pumps.

- 32 Models
- Stop ring for piston blow-out protection.
- 5° Swivel load caps in 30 through 100 tons to resist side load.
- Optional swivel load caps are available for 150 through 1,000 ton models.
- Domed pistons in 150 through 1,000 tons to resist side load.
- Lock nuts for extended load holding.
- Plated pistons to resist scoring & corrosion.
- Grease fitting for added weather protection.
- High flow couplers.
- Available in custom strokes & capacities.
- Exceeds ANSI/ASME B30.1 safety standards.
- Removable swivel lifting eyes on 100 through 1,000 ton models.

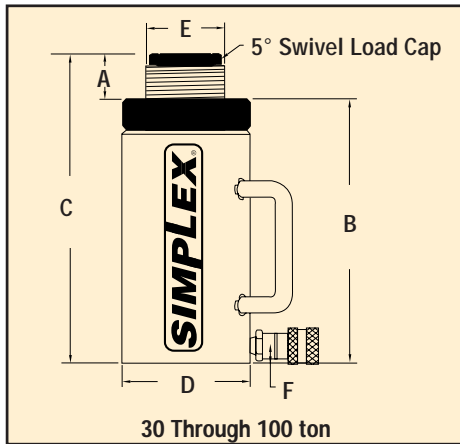
| | | |
|--|---|---|
|  |  |  |
| Power Pumps pgs. 44-62 | Hoses pgs. 70-71 | Couplers pg. 68 Manifolds & Fittings pg. 69 |

Simplex supplies custom cylinders with up to 1,000 ton capacities.

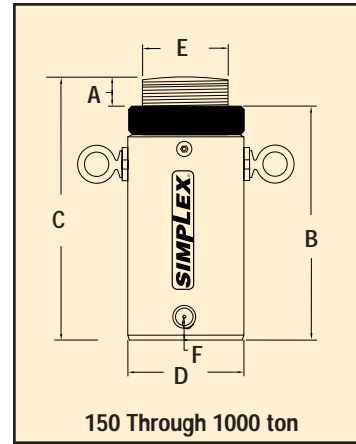


When earthquake retrofit construction was being performed on the Vincent Thomas Bridge in southern California, engineers relied on Simplex lock nut cylinders. "With bronze inlaid bearings, nickel plating and ANSI/ASME B30.1 design, Simplex cylinders were the only choice."





Note: 100 ton models have removable lifting eye bolts in lieu of carrying handles.



Note: Swivel eye bolts are removable.

Load Return Lock Nut Cylinders 30 Through 1000 Ton Capacities

| Model Number | Cap. (tons) | A Stroke (in) | B Min. Ht. (in) | C Ext. Ht. (in) | Ram Bore Dia. (in) | Effect Area (sq in) | Pres. @ Cap. (psi) | Oil Cap. Req'd (cu in) | D Body O.D. (in) | E Piston O.D. (in) | F Base To Port C/L (in) | Weight (lbs) | Suggested Power Pump |
|--------------|-------------|---------------|-----------------|-----------------|--------------------|---------------------|--------------------|------------------------|------------------|--------------------|-------------------------|--------------|--|
| RLN302 | 30 | 2 | 6 3/8 | 8 3/8 | 2 7/8 | 6.49 | 9,240 | 13.0 | 4 | 2 7/16 | 3/4 | 21.0 | Simplex Suc-O-Matic™ equipped Power Pumps are highly recommended to power load return cylinders. Unlike any other power unit, Simplex Suc-O-Matic™ equipped Pumps will fully retract load return cylinders automatically. For more information on the Suc-O-Matic™ feature see page 64. |
| RLN306 | | 6 | 10 3/8 | 16 3/8 | | | | 38.9 | | | | 35.0 | |
| RLN502 | 50 | 2 | 6 3/4 | 8 3/4 | 3 3/4 | 11.05 | 9,054 | 22.1 | 5 | 3 3/16 | 25/32 | 38.0 | |
| RLN506 | | 6 | 10 3/4 | 16 3/4 | | | | 66.2 | | | | 63.0 | |
| RLN5010 | | 10 | 14 3/4 | 24 3/4 | | | | 133.0 | | | | 100.0 | |
| RLN1002 | 100 | 2 | 8 | 10 | 5 | 19.63 | 10,200 | 40.0 | 6 3/8 | 4 5/16 | 1 1/4 | 87.0 | |
| RLN1006 | | 6 | 12 | 18 | | | | 118.0 | | | | 132.0 | |
| RLN10010 | | 10 | 16 | 26 | | | | 196.0 | | | | 202.0 | |
| RLN1502 | | 2 | 8 | 10 | | | | 66.4 | | | | 149.0 | |
| RLN1506 | 150 | 6 | 12 1/4 | 18 | 6 1/4 | 30.68 | 9,780 | 199.0 | 8 1/2 | 5 9/16 | 1 15/16 | 221.0 | |
| RLN15012 | | 12 | 18 | 30 | | | | 398.0 | | | | 311.0 | |
| RLN2002 | 200 | 2 | 9 1/2 | 11 1/2 | 7 1/4 | 41.28 | 9,054 | 88.4 | 10 | 6 9/16 | 2 1/16 | 233.0 | |
| RLN2006 | | 6 | 13 1/2 | 19 1/2 | | | | 265.0 | | | | 332.0 | |
| RLN20012 | | 12 | 19 1/2 | 31 1/2 | | | | 530.0 | | | | 479.0 | |
| RLN3002 | 300 | 2 | 11 1/2 | 13 1/2 | 8 3/4 | 60.13 | 9,978 | 120.0 | 12 | 7 13/16 | 2 7/16 | 357.0 | |
| RLN3006 | | 6 | 15 1/2 | 21 1/2 | | | | 361.0 | | | | 485.0 | |
| RLN30012 | | 12 | 21 1/2 | 33 1/2 | | | | 722.0 | | | | 677.0 | |
| RLN4002 | 400 | 2 | 13 13/16 | 15 13/16 | 10 1/2 | 86.59 | 9,238 | 174.0 | 14 | 9 5/16 | 3 | 520.0 | |
| RLN4006 | | 6 | 17 13/16 | 23 13/16 | | | | 520.0 | | | | 675.0 | |
| RLN40012 | | 12 | 23 13/16 | 25 13/16 | | | | 1040.0 | | | | 905.0 | |
| RLN5002 | 500 | 2 | 14 3/4 | 16 3/4 | 11 1/2 | 103.87 | 9,628 | 208.0 | 16 | 10 5/16 | 3 3/16 | 927.0 | |
| RLN5006 | | 6 | 18 3/4 | 24 3/4 | | | | 623.0 | | | | 1041.0 | |
| RLN50012 | | 12 | 24 3/4 | 36 3/4 | | | | 1246.0 | | | | 1383.0 | |
| RLN6002 | 600 | 2 | 15 5/8 | 17 5/8 | 12 1/2 | 122.79 | 9,778 | 246.0 | 17 1/2 | 11 5/16 | 3 1/2 | 985.0 | |
| RLN6006 | | 6 | 19 5/8 | 25 5/8 | | | | 738.0 | | | | 1232.0 | |
| RLN60012 | | 12 | 27 5/8 | 39 5/8 | | | | 1476.0 | | | | 1603.0 | |
| RLN8002 | 800 | 2 | 16 15/16 | 18 15/16 | 14 1/2 | 165.13 | 9,690 | 330.0 | 18 | 13 5/16 | 4 1/8 | 1148.0 | |
| RLN8006 | | 6 | 21 15/16 | 27 15/16 | | | | 991.0 | | | | 1407.0 | |
| RLN80012 | | 12 | 27 15/16 | 39 15/16 | | | | 1982.0 | | | | 1795.0 | |
| RLN10002 | 1000 | 2 | 19 5/8 | 21 5/8 | 16 | 201.06 | 9,950 | 402.0 | 21 | 14 13/16 | 4 1/4 | 1818.0 | |
| RLN10006 | | 6 | 23 5/8 | 29 5/8 | | | | 1206.0 | | | | 2178.0 | |
| RLN100012 | | 12 | 29 5/8 | 41 5/8 | | | | 2412.0 | | | | 2718.0 | |

CUSTOM STROKES AND CAPACITIES UP TO 1,500 TONS AVAILABLE, CONTACT FACTORY

DOUBLE-ACTING - 10-1000 TON

CYLINDERS

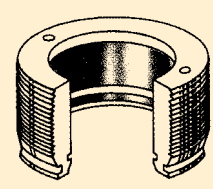
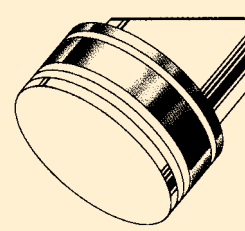
Simplex Double-Acting Cylinders Increase Productivity.



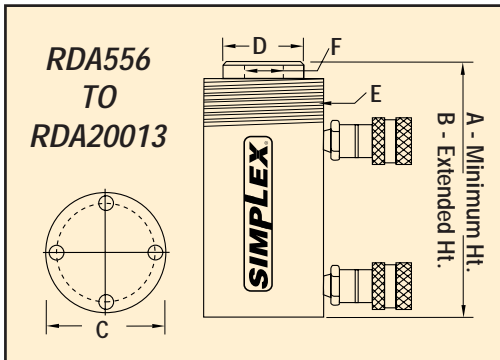
- 31 Models.
- Available in custom strokes & sizes.
- Relief valves protect against over pressurizing.
- Standard collar threads on models up to 200 tons.
- Optional custom base & collar threads available on models 300 tons and up.
- Ideal for heavy duty applications.
- Provides force in advance & return cycles.
- High flow quality couplers.
- Plated pistons to resist scoring & corrosion.
- Stop ring for piston blow-out protection.
- Large bearings resist side load.
- Rod wiper protects inner cylinder from dirt.
- Carrying handles included on models RDA556 through RDA15012.

Maintenance crews relied on Simplex RDA15018 cylinders to help lift, transport and launch a U.S. Navy research ship from dry dock to the ships launch site. "Simplex cylinders were key to a successful operation."

| | | |
|--|---|---|
|  |  |  |
| Power Pumps pgs. 44-62 | Hoses pgs. 70-71 | Couplers pg. 68 Manifolds & Fittings pg. 69 |

| 300 THROUGH 1,000 TON MODELS | |
|--|--|
| <p>RETAINING NUT</p>  <p>Thick bronze inlay on the inner diameter of the retaining nut protects the piston rod from scoring and minimizes the effect of damaging side loads.</p> | <p>PISTON FLANGE</p>  <p>Thick bronze inlay on the piston flange virtually eliminates scoring of cylinder bore while offering the best protection against accidental side loading.</p> |

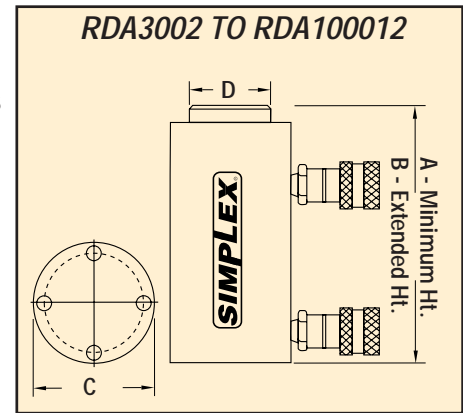




Base Mounting Dimensions

| Capacity | Thread | | Bolt Circle Dia. (in) |
|----------|-----------|------------|-----------------------|
| | Size (in) | Depth (in) | |
| 55 Ton | 5/8-11 | 3/4 | 3 3/4 |
| 100 Ton | 5/8-11 | 1 | 4 1/4 |
| 150 Ton | 1-8 | 1 3/8 | 5 |
| 200 Ton | 1-8 | 1 1/8 | 5 |

10 & 30 Ton Cylinders do not have base mounting holes.



Double-Acting Cylinders 10 Through 1000 Ton Capacities

| Model Number | Push Cap. (tons) | Pull Cap. (tons) | Stroke (in) | A Min. Ht. (in) | B Ext. Ht. (in) | Pull Effect Area (sq in) | Push Effect Area (sq in) | Pres. @ Cap. (psi) | Oil Cap. Req'd (cu in) | C Body O.D. (in) | D Piston O.D. (in) | Ram Bore Dia. (in) | F | | E | | Wgt. (lbs) |
|--------------|------------------|------------------|-------------|-----------------|-----------------|--------------------------|--------------------------|--------------------|------------------------|------------------|--------------------|--------------------|------------------|-------------------------|--------------------|-------------------------|------------|
| | | | | | | | | | | | | | Piston I.D. (in) | Piston Thrd. Lgth. (in) | Collar Thrds. (in) | Collar Thrd. Lgth. (in) | |
| RDA1010 | 10 | 4 | 10 | 16 1/8 | 26 1/8 | 0.80 | 2.23 | 8,960 | 22.33 | 2 7/8 | 1 3/8 | --- | 1 - 8 | 1 | 2 1/4-14 | 1 1/16 | 28 |
| RDA308 | 30 | 5 | 8 1/8 | 15 3/4 | 23 3/4 | 3.00 | 6.51 | 9,250 | 33.83 | 4 | 2 1/8 | --- | 1 1/2 - 16 | 1 | 35/16-12 | 1 15/16 | 40 |
| RDA3014 | | | 14 1/2 | 21 5/8 | 36 1/8 | | | | 92.70 | | | | | | | | 64 |
| RDA556 | 55 | 17 | 6 1/8 | 13 1/8 | 19 1/4 | 3.40 | 11.05 | 9,955 | 46 | 5 | 3 1/8 | --- | 1 - 12 | 1 1/2 | 5 - 12 | 1 3/4 | 68 |
| RDA5512 | | | 12 | 19 1/8 | 31 1/8 | | | | 92 | | | | | | | | 114 |
| RDA5524 | | | 24 | 31 5/8 | 55 5/8 | | | | 184 | | | | | | | | 201 |
| RDA1006 | 100 | 45 | 6 1/16 | 13 7/8 | 19 15/16 | 9.08 | 21.65 | 9,239 | 77 | 7 | 4 | --- | 3 1/4 - 12 | 2 1/2 | 7 - 12 | 2 1/2 | 140 |
| RDA10012 | | | 12 | 19 7/8 | 31 7/8 | | | | 151 | | | | | | | | 187 |
| RDA1506 | 150 | 67 | 6 1/16 | 15 7/16 | 21 1/2 | 13.55 | 33.18 | 9,041 | 120 | 8 1/2 | 5 | --- | 3 1/2 - 12 | 2 3/4 | 8 1/2-12 | 2 3/16 | 218 |
| RDA15012 | | | 12 | 21 1/2 | 33 1/2 | | | | 236 | | | | | | | | 295 |
| RDA2002 | 200 | 72 | 2 | 11 7/16 | 13 7/16 | 15.91 | 44.18 | 9,054 | 66 | 10 | 6 | 7 1/2 | --- | --- | 9 3/4-12 | 1 7/8 | 232 |
| RDA2006 | | | 6 | 15 7/16 | 21 7/16 | | | | 170 | | | | | | | | 315 |
| RDA20013 | | | 13 | 22 7/16 | 35 7/16 | | | | 368 | | | | | | | | 440 |
| RDA3002 | 300 | 51.55 | 2 | 13 1/4 | 15 1/4 | 20.62 | 70.9 | 8,460 | 101 | 12 | 8 | 9 1/2 | --- | --- | --- | --- | 277 |
| RDA3006 | | | 6 | 17 1/4 | 23 1/4 | | | | 302 | | | | | | | | 441 |
| RDA30012 | | | 12 | 23 1/4 | 35 1/4 | | | | 605 | | | | | | | | 688 |
| RDA4002 | 400 | 123 | 2 | 12 3/8 | 14 3/8 | 49.48 | 113 | 7,080 | 127 | 14 1/2 | 9 | 12 | --- | --- | --- | --- | 530 |
| RDA4006 | | | 6 | 16 5/8 | 22 5/8 | | | | 382 | | | | | | | | 670 |
| RDA40012 | | | 12 | 22 7/8 | 34 7/8 | | | | 762 | | | | | | | | 880 |
| RDA5002 | 500 | 135 | 2 | 16 1/2 | 18 1/2 | 54.19 | 132 | 7,590 | 156 | 16 | 10 | 13 | --- | --- | --- | --- | 722 |
| RDA5006 | | | 6 | 20 1/2 | 26 1/2 | | | | 471 | | | | | | | | 953 |
| RDA50012 | | | 12 | 26 1/2 | 38 1/2 | | | | 942 | | | | | | | | 1300 |
| RDA6002 | 600 | 110 | 2 | 15 | 17 | 44.17 | 122.71 | 10,000 | 158 | 17 | 10 | 12 1/2 | --- | --- | --- | --- | 917 |
| RDA6006 | | | 6 | 19 | 25 | | | | 472 | | | | | | | | 1188 |
| RDA60012 | | | 12 | 25 | 37 | | | | 944 | | | | | | | | 1595 |
| RDA8002 | 800 | 130 | 2 | 16 | 18 | 52.03 | 165.13 | 9,690 | 226 | 18 1/2 | 12 | 14 1/2 | --- | --- | --- | --- | 1166 |
| RDA8006 | | | 6 | 20 | 26 | | | | 680 | | | | | | | | 1440 |
| RDA80012 | | | 12 | 26 | 38 | | | | 1,360 | | | | | | | | 1776 |
| RDA10002 | 1000 | 75 | 2 | 16 | 18 | 50.27 | 227 | 8,810 | 354 | 21 | 15 | 17 | --- | --- | --- | --- | 1558 |
| RDA10006 | | | 6 | 20 | 26 | | | | 1,071 | | | | | | | | 2058 |
| RDA100012 | | | 12 | 27 | 39 | | | | 2,142 | | | | | | | | 2808 |

300 to 1,000 Ton double-acting cylinders retract relief pressure is set at 5,000 psi.

CUSTOM STROKES, BASE & COLLAR MOUNTINGS AND CAPACITIES UP TO 1,500 TONS AVAILABLE,

CONTACT FACTORY

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