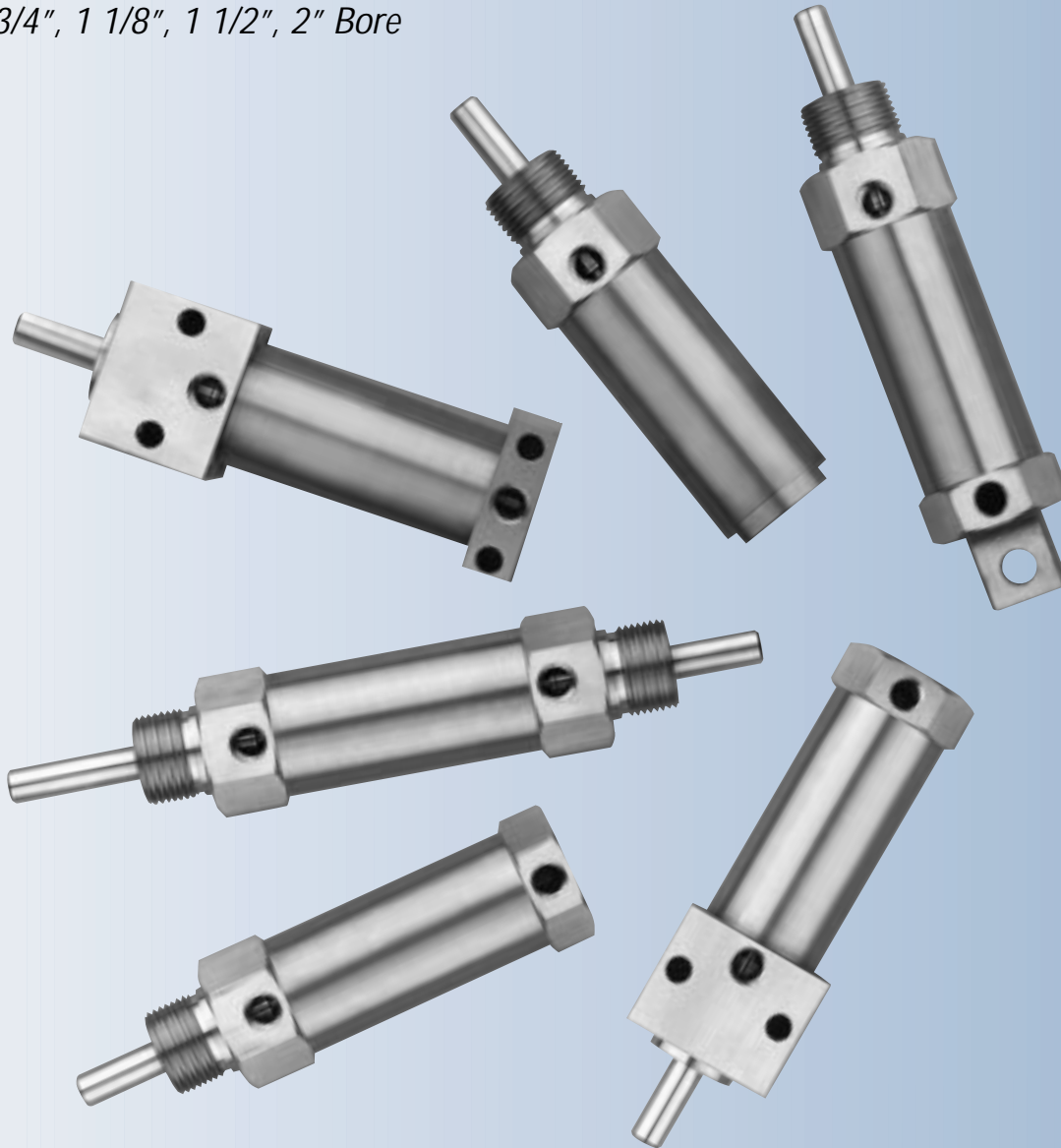


Series SS Solid Stainless Cylinders

*Pneumatic to 200 PSI
Hydraulic to 1000 PSI Non shock
3/4", 1 1/8", 1 1/2", 2" Bore*



*To Help Brighten Your Corner of the World.
All exterior components 300 series stainless*

SS STAINLESS DESIGN FEATURES

Piston rod is hard chrome plated type 303 stainless. Optional hollow piston rods available (hollow rod is not chrome plated)

End caps are machined from type 303 stainless steel.

Heavy duty urethane rod wipers seal out the environment. Other materials available.

Removable stainless retaining rings hold the seal and rod wiper in place.

Pneumatic Rod Seal is a "longlife" nitrile cup. Hydraulic Rod Seal is pressure energized and extra long wearing for improved stability

Extra long rod bearings of sintered bronze provide ample support and serve as an oil reservoir for pneumatic use. The bearing is inboard of the seal, away from the environment to ensure proper lubrication. Optional non metallic rod bearings available for chemically inert or severe applications

Tube is heavy 1/8 inch wall type 304 stainless steel and is precision honed to insure proper size, roundness, and finish for maximum cylinder life.

Brass piston silver brazed to the piston rod provides an almost indestructible joint. Optional solid stainless steel piston with teflon wearstrip available for chemically inert or clean applications.

Reduce noise and fatigue problems such as rod breakage with urethane shock pads. Pneumatic use only to 180° F.

Piston seals are extra long wearing pressure energized lip seals of the highest quality

O ring static tube seal

Optional wick provides teflon lube for non-lube service

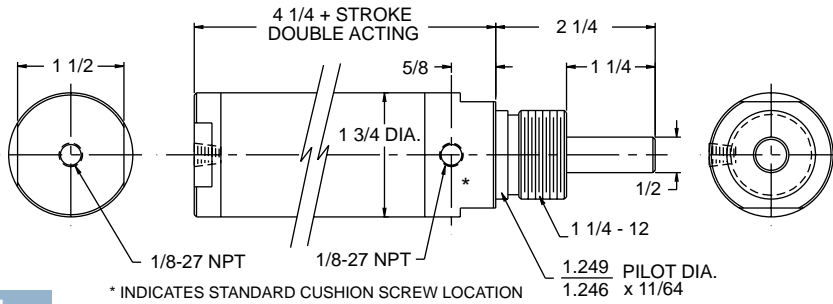
Adjustable cushions to provide deceleration at the end of the stroke are available on most models above 3/4" bore

Magnetic piston available to operate Aurora stainless proximity switches

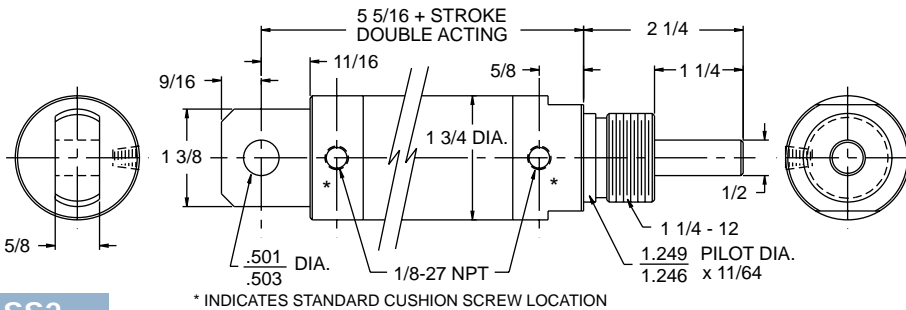


1 1/2" BORE SERIES SS STAINLESS

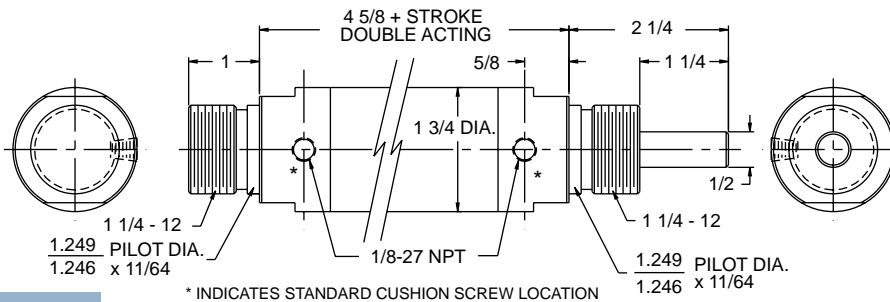
200 PSI MAX. AIR
1000 PSI MAX. HYD. Non shock



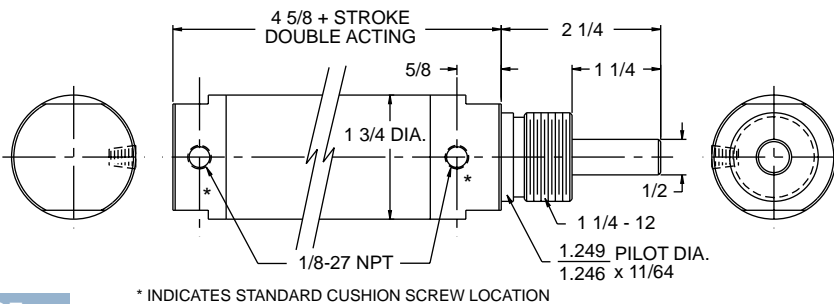
SS1



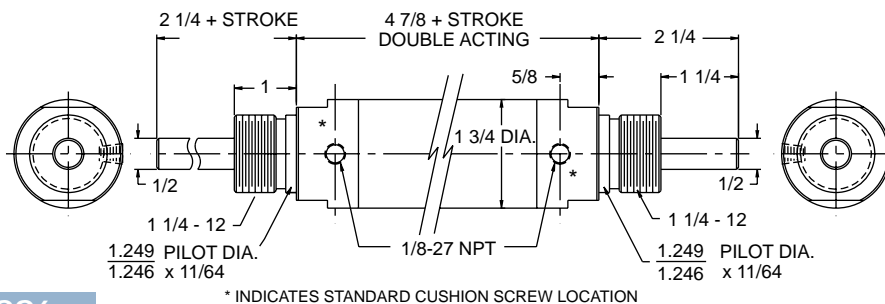
SS2



SS3



SS5



SS6

Single Acting Cylinders

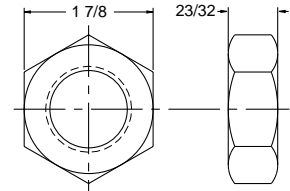
Pneumatic only Adds to cylinder length

| TYPE | STROKE | Add to cyl. O.A.L. | STROKE | Add to cyl. O.A.L. |
|---------------|--------|--------------------|-----------|--------------------|
| Spring extend | 0-2" | 1 1/2" | 2 1/8"-4" | 3" |
| Spring return | 0-2" | 1 1/2" | 2 1/8"-4" | 3" |

Spring Force: Spring fully extended approx. 15#
Spring fully compressed approx. 50#

1 1/4 - 12SS Nut Nose Mounting Nut

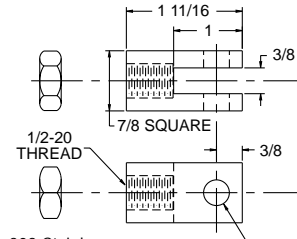
Not included with cylinder
Order Separately



18-8 Stainless

SS-500

Rod Clevis and Nut



303 Stainless

SS-501

Clevis Pin Assembly

Used on SS-500



303 Stainless

*We'll Bill You for the
Cylinders. . .*

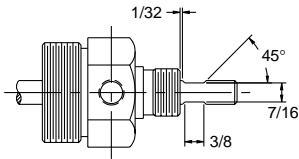
*but Our Experience is
Free*

630 851 4515

SS Options

- Shock Pads
- Wrench Flats
- Viton Seals
- Non-lube Service
- Non-Metallic Rod Br'g
- Reverse Polypak Wiper
- Stainless Piston
- Magnetic Piston
- Hollow Piston Rod
- 90° Rear Clevis
- Adjustable Cushions

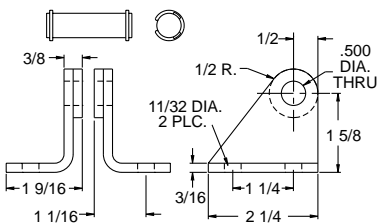
Wrench Flats Optional



See SMS Stainless for More Compact Size and Lower Cost

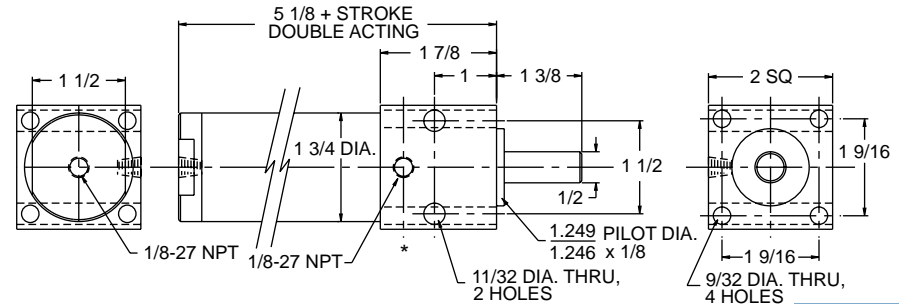
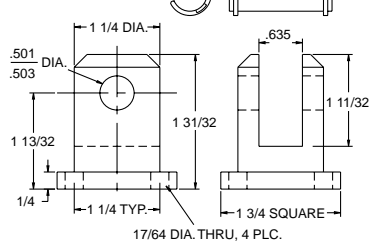
SS-100 St'd Clevis Brk't

Used on SS 2 Series 300 Stainless



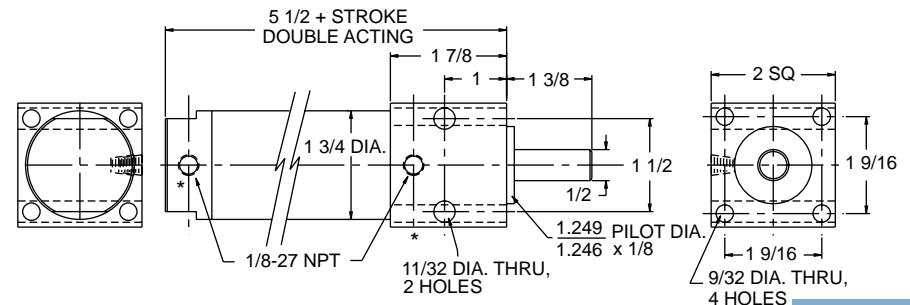
SSC-90 Low Profile Clevis Brk't

Used on SS 2 Series 300 Stainless



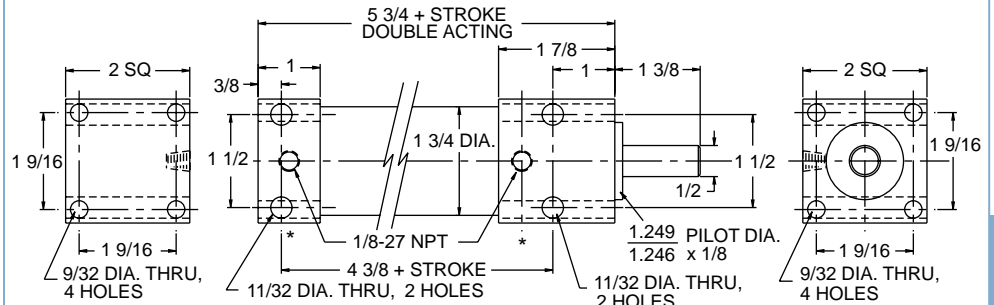
* INDICATES STANDARD CUSHION SCREW LOCATION

SS10



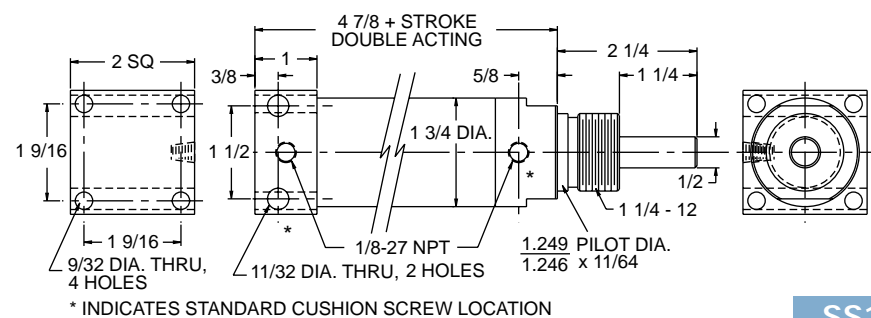
* INDICATES STANDARD CUSHION SCREW LOCATION

SS11



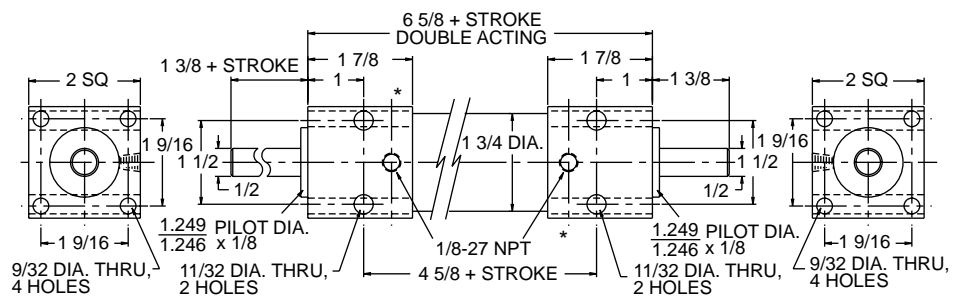
* INDICATES STANDARD CUSHION SCREW LOCATION

SS12



* INDICATES STANDARD CUSHION SCREW LOCATION

SS13



* INDICATES STANDARD CUSHION SCREW LOCATION

SS14

ORDERING PROCEDURE - Series SS Stainless

Select code numbers/letters (**bold type**) from each of the six boxes below - then select options desired from the table below. List codes in the same sequence as shown.

| <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%;">Bore</th> <th style="width: 50%;">Code</th> </tr> </thead> <tbody> <tr> <td>3/4"</td> <td>07</td> </tr> <tr> <td>1 1/8"</td> <td>11</td> </tr> <tr> <td>1 1/2"</td> <td>15</td> </tr> <tr> <td>2"</td> <td>20</td> </tr> </tbody> </table> | Bore | Code | 3/4" | 07 | 1 1/8" | 11 | 1 1/2" | 15 | 2" | 20 | | <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%;">Type</th> <th style="width: 50%;">Code</th> </tr> </thead> <tbody> <tr> <td>Single Acting Spring return*</td> <td>A</td> </tr> <tr> <td>Single Acting Spring extend*</td> <td>B</td> </tr> <tr> <td>Double acting</td> <td>C</td> </tr> </tbody> </table> <p style="font-size: small;">*Adds to cyl. length If double rod end model is to be single acting, select A</p> | Type | Code | Single Acting Spring return* | A | Single Acting Spring extend* | B | Double acting | C | <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%;">Service</th> <th style="width: 50%;">Code</th> </tr> </thead> <tbody> <tr> <td>Pneumatic</td> <td>E</td> </tr> <tr> <td>Hydraulic</td> <td>G</td> </tr> </tbody> </table> | Service | Code | Pneumatic | E | Hydraulic | G | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---------------------|-----------|-----------|-----------|--------|-----------|--------|-----------|------|-----------|------|--|---|--------|---|-------------------------------|------------------------------|--|--------------------------------------|--------------------------------------|---|------------------|------|-----------|----------|-----------|----------|--|-----|-----------|-----------|----------|------|---------------|--|----------|------|---------------|--|----------|-------|--------------|--|----------|-------|--------------|--|----------|-------|------------|--|----------|-------|------------|--|----------|-------|----------------|--|-----------|-------|----------------|--|-----------|
| Bore | Code | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3/4" | 07 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 1/8" | 11 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 1/2" | 15 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2" | 20 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Type | Code | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Single Acting Spring return* | A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Single Acting Spring extend* | B | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Double acting | C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Service | Code | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pneumatic | E | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Hydraulic | G | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2">Mounting Style/Code</th> </tr> </thead> <tbody> <tr> <td>SS 1</td> <td>SS 10</td> </tr> <tr> <td>SS 2</td> <td>SS 11</td> </tr> <tr> <td>SS 3</td> <td>SS 12</td> </tr> <tr> <td>SS 5</td> <td>SS 13</td> </tr> <tr> <td>SS 6</td> <td>SS 14</td> </tr> </tbody> </table> | Mounting Style/Code | | SS 1 | SS 10 | SS 2 | SS 11 | SS 3 | SS 12 | SS 5 | SS 13 | SS 6 | SS 14 | <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Stroke</th> </tr> </thead> <tbody> <tr> <td>Code is stroke in total 1/8" increments</td> </tr> <tr> <td>Example: 1" stroke = 8</td> </tr> <tr> <td>2 1/4" stroke = 18</td> </tr> <tr> <td>Stocked in 1/2" increments as follows:</td> </tr> <tr> <td>3/4" bore to 6" 1 1/8" bore to 8"</td> </tr> <tr> <td>1 1/2" bore to 10" 2" bore to 12"</td> </tr> </tbody> </table> | Stroke | Code is stroke in total 1/8" increments | Example: 1" stroke = 8 | 2 1/4" stroke = 18 | Stocked in 1/2" increments as follows: | 3/4" bore to 6" 1 1/8" bore to 8" | 1 1/2" bore to 10" 2" bore to 12" | <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="3">Piston Rod Codes</th> <th rowspan="2">Code</th> </tr> <tr> <th>Bore</th> <th colspan="2">Thread</th> </tr> </thead> <tbody> <tr> <td>All</td> <td>Plain rod</td> <td>No thread</td> <td>0</td> </tr> <tr> <td>.750</td> <td>5/16-18 x 3/4</td> <td></td> <td>3</td> </tr> <tr> <td>.750</td> <td>5/16-24 x 3/4</td> <td></td> <td>4</td> </tr> <tr> <td>1.125</td> <td>3/8-16 x 3/4</td> <td></td> <td>5</td> </tr> <tr> <td>1.125</td> <td>3/8-24 x 3/4</td> <td></td> <td>6</td> </tr> <tr> <td>1.500</td> <td>1/2-13 x 1</td> <td></td> <td>7</td> </tr> <tr> <td>1.500</td> <td>1/2-20 x 1</td> <td></td> <td>8</td> </tr> <tr> <td>2.000</td> <td>5/8-11 x 1 1/4</td> <td></td> <td>11</td> </tr> <tr> <td>2.000</td> <td>5/8-18 x 1 1/4</td> <td></td> <td>12</td> </tr> </tbody> </table> <p style="font-size: x-small;">SS 6, 14 Double rod models will have same rod thread both ends</p> | Piston Rod Codes | | | Code | Bore | Thread | | All | Plain rod | No thread | 0 | .750 | 5/16-18 x 3/4 | | 3 | .750 | 5/16-24 x 3/4 | | 4 | 1.125 | 3/8-16 x 3/4 | | 5 | 1.125 | 3/8-24 x 3/4 | | 6 | 1.500 | 1/2-13 x 1 | | 7 | 1.500 | 1/2-20 x 1 | | 8 | 2.000 | 5/8-11 x 1 1/4 | | 11 | 2.000 | 5/8-18 x 1 1/4 | | 12 |
| Mounting Style/Code | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SS 1 | SS 10 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SS 2 | SS 11 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SS 3 | SS 12 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SS 5 | SS 13 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SS 6 | SS 14 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Stroke | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Code is stroke in total 1/8" increments | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Example: 1" stroke = 8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 1/4" stroke = 18 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Stocked in 1/2" increments as follows: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3/4" bore to 6" 1 1/8" bore to 8" | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 1/2" bore to 10" 2" bore to 12" | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Piston Rod Codes | | | Code | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bore | Thread | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| All | Plain rod | No thread | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| .750 | 5/16-18 x 3/4 | | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| .750 | 5/16-24 x 3/4 | | 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.125 | 3/8-16 x 3/4 | | 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.125 | 3/8-24 x 3/4 | | 6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.500 | 1/2-13 x 1 | | 7 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.500 | 1/2-20 x 1 | | 8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2.000 | 5/8-11 x 1 1/4 | | 11 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2.000 | 5/8-18 x 1 1/4 | | 12 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| Option | Description | Code |
|-----------------------------|--|--|
| Extra rod extension | Specify code letter J followed by the extra length as a two place decimal. Example: J.50 = 1/2" extra J1.25 = 1 1/4" extra SS6, 14 double rod cylinders with extra extension cannot be ordered by a standard part number - consult factory for a special part number. | J |
| Wrench flats | Specify if required If specified will be added to both ends of SS6, 14 double rod cylinders | K |
| Shock pads | Double acting cylinders only — must be added to both ends Adds 1/2" to length — pneumatic use only to 180°F | N |
| Non-lube service | Pneumatic only — Not available with magnetic piston or solid stainless piston | P |
| Viton seals | Standard seals are nitrile and urethane +10 to +180°F For service -10 to +400°F specify viton | R |
| Reverse polypak rod wiper | More effective at keeping liquids and gases out of the cylinder | S |
| Clevis 90° to st'd | SS 2 only | T |
| Stainless piston | 303 Stainless with teflon wear strip Not available with magnet, non lube, or cushion options | V |
| Magnetic piston | Adds 1/2" to length on 3/4" bore only Not available with Non-lube or stainless piston options | W |
| Hollow piston rod | Available in 5/16 dia.rod – thru hole .135" Available in 3/8 dia.rod – thru hole .248" Available in 1/2 dia.rod – thru hole .313" Rod is plain 304 stainless - no chrome plating | X |
| Non - metallic rod bushings | Fiberglass backed teflon | Y |
| Adjustable Cushions | Not Available on: 3/4" bore cylinders Rear port caps (SS1, 10) Solid stainless piston Cylinders with shock pads | Cushion head end only AA Cushion cap end only BB Cushion both ends CC |

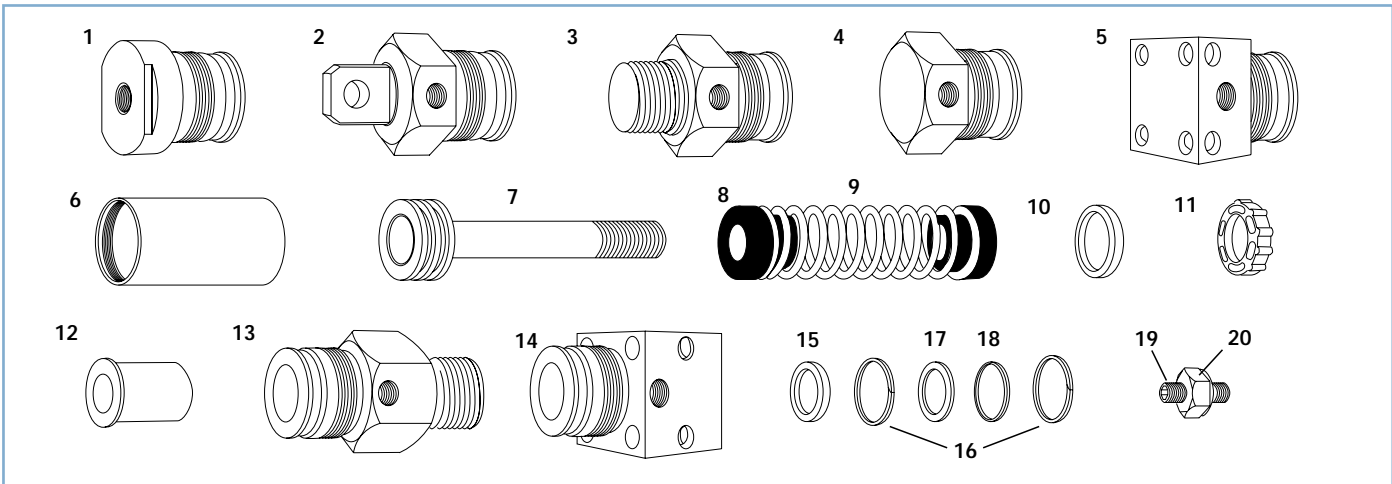
Part No. Example:

Mounting style SS10
2" stroke
1/2-20 x 1 th'd rod

1.500" bore — **15** **SS10** **C** **16** **G** **8** **K** **W** — Magnetic piston
Double acting
Hydraulic
Wrench flats

Series SS Service Parts

When ordering any repair part please provide the part number and description shown below along with the serial number and part number of the cylinder being serviced.



| Key | Description | 3/4 Bore | 1 1/8 Bore | 1 1/2 Bore | 2 Bore |
|-----|---|--|------------|------------|------------|
| | Seal kit - Pneumatic, Nitrile Add suffix NL for Non-lube Add suffix REV for Reverse Polypak Wiper Add suffix W with Stainless Piston | SS 2207 PB | SS 2211 PB | SS 2215 PB | SS 2220 PB |
| | Seal kit - Pneumatic, Viton Add suffix NL for Non-lube Add suffix REV for Reverse Polypak Wiper Add suffix W with Stainless Piston | SS 2207 PV | SS 2211 PV | SS 2215 PV | SS 2220 PV |
| | Seal kit - Hydraulic, Urethane Add suffix REV for Reverse Polypak Wiper Add suffix W with Stainless Piston | SS 2207 HU | SS 2211 HU | SS 2215 HU | SS 2220 HU |
| | Seal kit - Hydraulic, Viton Add suffix REV for Reverse Polypak Wiper Add suffix W with Stainless Piston | SS 2207 HV | SS 2211 HV | SS 2215 HV | SS 2220 HV |
| 1 | Rear port cap | SS 1007 | SS 1011 | SS 1015 | SS 1020 |
| 2 | Rear pivot cap Add suffix C for adjustable cushion | SS 1107 | SS 1111 | SS 1115 | SS 1120 |
| 2 | 90° Rear pivot cap Add suffix C for adjustable cushion | SS 110790 | SS 111190 | SS 111590 | SS 112090 |
| 3 | Rear stud cap Add suffix C for adjustable cushion | SS 1207 | SS 1211 | SS 1215 | SS 1220 |
| 4 | Side port cap Add suffix C for adjustable cushion | SS 1307 | SS 1311 | SS 1315 | SS 1320 |
| 5 | Square cap Add suffix C for adjustable cushion | SS 1507 | SS 1511 | SS 1515 | SS 15 20 |
| 6 | Tube | part No. is T followed by the complete cylinder part number | | | |
| 7 | Piston rod assembly | part No. is PR followed by the complete cylinder part number | | | |
| 8 | Spring guide Pair | SS 2007 | SS 2011 | SS 2015 | SS 2020 |
| 9 | Spring | SS 2107 | SS 2111 | SS 2115 | SS 2120 |
| 10 | Magnet 1 or 2 as necessary | SS 3207 | SS 3211 | SS 3215 | SS 3220 |
| 11 | Shock pad | 75MSP | 11MSP | 15MSP | 2MSP |
| 12 | Rod bearing Add suffix DU for non-metallic | | SS 0211 | SS 0215 | SS 0220 |
| 13 | Head w/ Bronze br'g Add suffix C for adjustable cushion | SS 0107 | SS 0111 | SS 0115 | SS 0120 |
| 13 | Head w/ Non-metallic br'g Add suffix C for adjustable cushion | SS 0107 DU | SS 0111 DU | SS 0115 DU | SS 0120 DU |
| 14 | Head w/ Bronze br'g Add suffix C for adjustable cushion | SS 1407 | SS 1411 | SS 1415 | SS 1420 |
| 14 | Head w/ Non-metallic br'g Add suffix C for adjustable cushion | SS 1407 DU | SS 1411 DU | SS 1415 DU | SS 1420 DU |
| 15 | Rod seal retaining washer | SS 0507 | SS 0511 | SS 0515 | SS 0520 |
| 16 | Rod seal/Rod wiper snap ring | SS 0607 | SS 0611 | SS 0615 | SS 0620 |
| 17 | Rod wiper inside retaining washer Add suffix REV for Reverse Polypak Wiper | SS 0307 | SS 0311 | SS 0315 | SS 0320 |
| 18 | Rod wiper outside retaining washer Add suffix REV for Reverse Polypak Wiper | SS 0407 | SS 0411 | SS 0415 | SS 0420 |
| 19 | Cushion screw 3/4" long | | SS 2611 | SS 2615 | |
| 19 | Cushion screw 7/8" long | | SS 2611L | SS 2615L | SS 2620L |
| 20 | Cushion screw locknut | | SS 2711 | SS 2715 | SS 2720 |