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.

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

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.

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

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

Optional wick provides teflon lube for non-lube service

Magnetic piston available to operate Aurora stainless proximity switches

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

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

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

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.

O ring static tube seal

Adjustable cushions to provide deceleration at the end of the stroke are available on most models above 3/4” bore
### Single Acting Cylinders

Pneumatic only  
Adds to cylinder length

<table>
<thead>
<tr>
<th>TYPE</th>
<th>STROKE</th>
<th>ADD. TO CYL. O.A.L.</th>
<th>STROKE</th>
<th>ADD. TO CYL. O.A.L.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring return</td>
<td>0-1”</td>
<td>1”</td>
<td>Not available over 2” stroke</td>
<td></td>
</tr>
<tr>
<td>Spring extend</td>
<td>0-1”</td>
<td>1”</td>
<td>1 1/8”-2”</td>
<td></td>
</tr>
</tbody>
</table>

Spring Force: Spring fully extended approx. 4#  
Spring fully compressed approx. 12#

---

### 7/8 -14SS Nut

Nose Mounting Nut

Not included with cylinder  
Order Separately

---

### SS-312

Rod Clevis and Nut

---

### SS-200

Clevis Pin Assembly

Used on SS-312  
303 Stainless

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Suitable for Submerged Service with Reverse Polypak Wiper
SS Options

- Shock Pads
- Wrench flats
- Viton Seals
- Non-lube Service
- Non-Metallic Rod Br’g
- Reverse Polyprop Wiper
- Stainless Piston
- Magnetic Piston
- Hollow Piston Rod
- 90° Rear Clevis

Wrench Flats Optional

STAIN · LESS
(STÁN’LÍS) Adjective
1. Without blemish or stain: a stainless reputation

SS-40
St’d Clevis Brk’t
Used on SS 2 Series 300 Stainless

SSC-30
Low Profile Clevis Brk’t
Used on SS 2 Series 303 Stainless

STAIN • LESS
(STÁN’LÍS) Adjective
1. Without blemish or stain: a stainless reputation
1 1/8” BORE SERIES SS STAINLESS

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

Single Acting Cylinders
Pneumatic only Adds to cylinder length

<table>
<thead>
<tr>
<th>TYPE</th>
<th>STROKE Add to</th>
<th>STROKE Add to</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring extend</td>
<td>0-2”</td>
<td>1/2”</td>
</tr>
<tr>
<td>Spring return</td>
<td>0-2”</td>
<td>1 1/2”</td>
</tr>
</tbody>
</table>

Spring Force: Spring fully extended approx. 7# Spring fully compressed approx. 22#

1 -14SSNut
Nose Mounting Nut
Not included with cylinder
Order Separately

1 1/2
17/32
18-8 STAINLESS

SS-375
Rod Clevis
and Nut

303 Stainless

SS-301
Clevis Pin Assembly
Used on SS-375

303 Stainless

Conventional Cylinder
Cost

+ Warranty Repairs
+ Downtime
+ Liability

> Aurora Stainless

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**SOLID STAINLESS CYLINDERS IN 24 HOURS**

**SS Options**
- Shock Pads
- Wrench Flats
- Viton Seals
- Non-lube Service
- Non-Metallic Rod Br’g
- Reverse Poly Pak Wiper
- Stainless Piston
- Magnetic Piston
- Hollow Piston Rod
- 90° Rear Clevis
- Adjustable Cushions

**Wrench Flats Optional**

**Series SS**
**Stainless have been field proven since 1983**

**SS-90**
St’d Clevis Brk’t
Used on SS 2
Series 300 Stainless

**SSC-40**
St’d Clevis Brk’t
Used on SS 2
Series 300 Stainless

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**SS10**

**SS11**

**SS12**

**SS13**

**SS14**

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1 1/2” BORE SERIES SS STAINLESS

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

Single Acting Cylinders
Pneumatic only  Adds to cylinder length

<table>
<thead>
<tr>
<th>TYPE</th>
<th>STROKE</th>
<th>Add to</th>
<th>STROKE</th>
<th>Add to</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring</td>
<td>0.2&quot;</td>
<td>1 1/2&quot;</td>
<td>2 1/8&quot;-4&quot;</td>
<td>3&quot;</td>
</tr>
<tr>
<td>Spring</td>
<td>0.2&quot;</td>
<td>1 1/2&quot;</td>
<td>2 1/8&quot;-4&quot;</td>
<td>3&quot;</td>
</tr>
<tr>
<td>Spring Force: Spring fully extended approx. 154</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Spring fully compressed approx. 504</td>
<td></td>
</tr>
</tbody>
</table>

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

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# 2" BORE SERIES SS STAINLESS

## Single Acting Cylinders

Pneumatic only |
| Adds to cylinder length |

<table>
<thead>
<tr>
<th>TYPE</th>
<th>STROKE</th>
<th>Add to cyl. O.A.L.</th>
<th>STROKE</th>
<th>Add to cyl. O.A.L.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring return</td>
<td>0.2&quot;</td>
<td>1 1/2&quot;</td>
<td>2 1/8&quot;-4&quot;</td>
<td>3&quot;</td>
</tr>
<tr>
<td>Spring extend</td>
<td>0.2&quot;</td>
<td>1 1/2&quot;</td>
<td>2 1/8&quot;-4&quot;</td>
<td>3&quot;</td>
</tr>
</tbody>
</table>

Spring Force:
- Spring fully extended approx. 20#  
- Spring fully compressed approx. 75#

### 1 1/4 -12SS Nut

Nose Mounting Nut

Not included with cylinder

Order Separately

### SS-625

Rod Clevis and Nut

303 Stainless

### SS-601

Clevis Pin Assembly

Used on SS-625 | 303 Stainless

---

**Make the Best Choice**

1 630 851 4515

ask for Technical Support

---

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**SS Options**

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

**Wrench Flats** Optional

---

**UNIQUE APPLICATIONS SOMETIMES REQUIRE UNIQUE CYLINDERS**

See our custom design capabilities on page 87

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**SS-100**

St’d Clevis Brk’t

Used on SS 2 Series 300 Stainless

---

**Series SS Solid Stainless**

- SS10
- SS11
- SS12
- SS13
- SS14

---

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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.

### Bore and Code

<table>
<thead>
<tr>
<th>Bore</th>
<th>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>

### Type and Code

<table>
<thead>
<tr>
<th>Type</th>
<th>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>

*Adds to cyl. length
If double rod end model is to be single acting, select \( A \).

### Service and Code

<table>
<thead>
<tr>
<th>Service</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pneumatic</td>
<td>E</td>
</tr>
<tr>
<td>Hydraulic</td>
<td>G</td>
</tr>
</tbody>
</table>

### Stroke and Code

**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”

### Mounting Style/Code

<table>
<thead>
<tr>
<th>Mounting Style/Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>SS 1</td>
</tr>
<tr>
<td>SS 2</td>
</tr>
<tr>
<td>SS 3</td>
</tr>
<tr>
<td>SS 4</td>
</tr>
<tr>
<td>SS 5</td>
</tr>
<tr>
<td>SS 6</td>
</tr>
</tbody>
</table>

### Option Description and Code

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extra rod extension</td>
<td>Specify code letter ( J ) followed by the extra length as a two place decimal. Example: ( J .50 ) = 1/2” extra ( J 1.25 ) = 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.</td>
<td>( J )</td>
</tr>
<tr>
<td>Wrench flats</td>
<td>Specify if required if specified will be added to both ends of SS6, 14 double rod cylinders</td>
<td>( K )</td>
</tr>
<tr>
<td>Shock pads</td>
<td>Double acting cylinders only — must be added to both ends Adds 1/2” to length — pneumatic use only to 180°F</td>
<td>( N )</td>
</tr>
<tr>
<td>Non-lube service</td>
<td>Pneumatic only — Not available with magnetic piston or solid stainless piston</td>
<td>( P )</td>
</tr>
<tr>
<td>Viton seals</td>
<td>Standard seals are nitrile and urethane +10 to +180°F For service -10 to +400°F specify viton</td>
<td>( R )</td>
</tr>
<tr>
<td>Reverse polypak rod wiper</td>
<td>More effective at keeping liquids and gases out of the cylinder</td>
<td>( S )</td>
</tr>
<tr>
<td>Clevis 90° to st’d</td>
<td>SS 2 only</td>
<td>( T )</td>
</tr>
<tr>
<td>Stainless piston</td>
<td>303 Stainless with teflon wear strip Not available with magnet, non lube, or cushion options</td>
<td>( V )</td>
</tr>
<tr>
<td>Magnetic piston</td>
<td>Adds 1/2” to length on 3/4” bore only Not available with Non-lube or stainless piston options</td>
<td>( W )</td>
</tr>
<tr>
<td>Hollow piston rod</td>
<td>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</td>
<td>( X )</td>
</tr>
<tr>
<td>Non - metallic rod bushings</td>
<td>Fiberglass backed teflon</td>
<td>( Y )</td>
</tr>
<tr>
<td>Adjustable Cushions</td>
<td>Not Available on: 3/4” bore cylinders Rear port caps (SS1, 10) Solid stainless piston Cylinders with shock pads</td>
<td>Cushion head end only Cushion cap end only Cushion both ends</td>
</tr>
</tbody>
</table>

### Part No. Example:

Part No. Example: 15 SS10 C 16 G 8 K W

- Mounting style SS10
- 2” stroke
- 1/2-20 x 1 th’d rod
- Magnetic piston
- Double acting
- Hydraulic
- Wrench flats

## Courtesy

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www.stevenengineering.com
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.

<table>
<thead>
<tr>
<th>Key</th>
<th>Description</th>
<th>3/4 Bore</th>
<th>1 1/8 Bore</th>
<th>1 1/2 Bore</th>
<th>2 Bore</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seal kit - Pneumatic, Nitrile</td>
<td>Add suffix NL for Non-lube Add suffix REV for Reverse Polypak Wiper Add suffix W with Stainless Piston</td>
<td>SS 2207 PB</td>
<td>SS 2211 PB</td>
<td>SS 2215 PB</td>
<td>SS 2220 PB</td>
</tr>
<tr>
<td>Seal kit - Pneumatic, Viton</td>
<td>Add suffix NL for Non-lube Add suffix REV for Reverse Polypak Wiper Add suffix W with Stainless Piston</td>
<td>SS 2207 PV</td>
<td>SS 2211 PV</td>
<td>SS 2215 PV</td>
<td>SS 2220 PV</td>
</tr>
<tr>
<td>Seal kit - Hydraulic, Urethane</td>
<td>Add suffix REV for Reverse Polypak Wiper Add suffix W with Stainless Piston</td>
<td>SS 2207 HU</td>
<td>SS 2211 HU</td>
<td>SS 2215 HU</td>
<td>SS 2220 HU</td>
</tr>
<tr>
<td>Seal kit - Hydraulic, Viton</td>
<td>Add suffix REV for Reverse Polypak Wiper Add suffix W with Stainless Piston</td>
<td>SS 2207 HV</td>
<td>SS 2211 HV</td>
<td>SS 2215 HV</td>
<td>SS 2220 HV</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
<th>3/4 Bore</th>
<th>1 1/8 Bore</th>
<th>1 1/2 Bore</th>
<th>2 Bore</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Rear port cap</td>
<td>SS 1007</td>
<td>SS 1011</td>
<td>SS 1015</td>
<td>SS 1020</td>
</tr>
<tr>
<td>2</td>
<td>Rear pivot cap</td>
<td>SS 1107</td>
<td>SS 1111</td>
<td>SS 1115</td>
<td>SS 1120</td>
</tr>
<tr>
<td>3</td>
<td>90° Rear pivot cap</td>
<td>SS 110790</td>
<td>SS 111190</td>
<td>SS 111590</td>
<td>SS 112090</td>
</tr>
<tr>
<td>4</td>
<td>Rear stud cap</td>
<td>SS 1207</td>
<td>SS 1211</td>
<td>SS 1215</td>
<td>SS 1220</td>
</tr>
<tr>
<td>5</td>
<td>Side port cap</td>
<td>SS 1307</td>
<td>SS 1311</td>
<td>SS 1315</td>
<td>SS 1320</td>
</tr>
<tr>
<td>6</td>
<td>Square cap</td>
<td>SS 1507</td>
<td>SS 1511</td>
<td>SS 1515</td>
<td>SS 1520</td>
</tr>
<tr>
<td>7</td>
<td>Tube</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Piston rod assembly</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Spring guide</td>
<td>SS 2007</td>
<td>SS 2011</td>
<td>SS 2015</td>
<td>SS 2020</td>
</tr>
<tr>
<td>10</td>
<td>Spring</td>
<td>SS 2107</td>
<td>SS 2111</td>
<td>SS 2115</td>
<td>SS 2120</td>
</tr>
<tr>
<td>11</td>
<td>Magnet</td>
<td>SS 3207</td>
<td>SS 3211</td>
<td>SS 3215</td>
<td>SS 3220</td>
</tr>
<tr>
<td>12</td>
<td>Shock pad</td>
<td>SS 75MSP</td>
<td>SS 11MSP</td>
<td>SS 15MSP</td>
<td>SS 2MSP</td>
</tr>
<tr>
<td>13</td>
<td>Rod bearing</td>
<td>SS 0107</td>
<td>SS 0111</td>
<td>SS 0115</td>
<td>SS 0120</td>
</tr>
<tr>
<td>14</td>
<td>Head w/ Bronze br’g</td>
<td>SS 1407</td>
<td>SS 1411</td>
<td>SS 1415</td>
<td>SS 1420</td>
</tr>
<tr>
<td>15</td>
<td>Head w/ Non-metallic br’g</td>
<td>SS 1007</td>
<td>SS 1011</td>
<td>SS 1015</td>
<td>SS 1020</td>
</tr>
<tr>
<td>16</td>
<td>Rod seal retaining washer</td>
<td>SS 1107</td>
<td>SS 1111</td>
<td>SS 1115</td>
<td>SS 1120</td>
</tr>
<tr>
<td>17</td>
<td>Rod seal/Rod wiper snap ring</td>
<td>SS 0107</td>
<td>SS 0111</td>
<td>SS 0115</td>
<td>SS 0120</td>
</tr>
<tr>
<td>18</td>
<td>Rod wiper inside retaining washer</td>
<td>SS 0107</td>
<td>SS 0111</td>
<td>SS 0115</td>
<td>SS 0120</td>
</tr>
<tr>
<td>19</td>
<td>Rod wiper outside retaining washer</td>
<td>SS 0107</td>
<td>SS 0111</td>
<td>SS 0115</td>
<td>SS 0120</td>
</tr>
<tr>
<td>20</td>
<td>Cushion screw</td>
<td>SS 2707</td>
<td>SS 2711</td>
<td>SS 2715</td>
<td>SS 2720</td>
</tr>
</tbody>
</table>