SMS Solid Stainless Cylinders

Space Saving and Conventional Lengths
Pneumatic to 200 PSI
Hydraulic 400 to 500 PSI Non shock
1 1/8", 1 1/2", 2", 3" Bore

300 Series Stainless Exterior Assures Aesthetics and Function in Washdown Applications or other Harsh Environments
Strokes longer than the maximum listed in the ordering procedure can be produced but careful consideration must be given to how the cylinder is applied — how well is the load supported or guided, is the cylinder used in push or tension, is the cylinder vertical or horizontal, etc. Consult factory on all strokes longer than standard. Stroke increments other than standard can also be made. Special lengths are generally available in a few days and are priced as "non-standard" strokes.

If space permits for applications involving side loads or long strokes, select SMS 1, 2, 3, 5, 7, 8, 9, which have extra long bearings with added space between support points.
**1 1/8” BORE SMS STAINLESS**

**SMS Options**
- Shock Pads
- Viton Seals
- Non-lube Service
- Magnetic Piston
- U Cup Piston
- 90° Rear Clevis

**Spring Return Cylinders**
- Pneumatic only
- Springs add to cyl. length
- 0-2” stroke add 1 1/2” extra
- 2 1/2-4” stroke add 3” extra
- over 4” stroke not available

**Spring force**
- Fully extended—8#
- Fully compressed—22#
- Spring material—Stainless steel

**Optional Male Rod Thread**

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

**18-8 Stainless**

**SS-375**
- Rod Clevis & Nut
- 303 Stainless

**SS-301**
- Clevis Pin assembly
- Used on SS-375
- 303 Stainless

**SMS1**

**SMS2**

**SMS3**

**SMS4**

**SS-90**
- Std. Clevis Brk’t
- Used on SMS 2 Series 300 Stainless

**SSC-40**
- Low Profile Clevis Brk’t
- Used on SMS 2 Series 300 Stainless

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**Series SMS Solid Stainless**

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**Courtesy of Steven Engineering, Inc.**

- 230 Ryan Way, South San Francisco, CA, 94080-6370
- Main Office: (650) 588-9200
- Outside Local Area: (800) 258-9200
- www.stevenengineering.com
1 1/8” BORE SMS STAINLESS

Spring Return Cylinders
Pneumatic only
Springs add to cyl. length
0-2” stroke add 1 1/2” extra
2 1/2-4” stroke add 3” extra
over 4” stroke not available
Spring force
Fully extended—8#
Fully compressed—22#
Spring material—Stainless steel

Optional Male Rod
Thread

When you’ve finally had it with plated cylinders...

SS-375
Rod Clevis & Nut
303 Stainless

SS-301
Clevis Pin assembly
Used on SS-375
303 Stainless

Courtesy of Steven Engineering, Inc.
230 Ryan Way, South San Francisco, CA 94080-6370
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www.stevenengineering.com
24 HOUR DELIVERY

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

SMS Options

- Shock Pads
- Viton Seals
- Non-lube Service
- Magnetic Piston
- U Cup Piston
- Non-rotate
  (SMA 7, 8, 9, 14, 15, 17)
- 90° Rear Clevis

 SSC-40
Low Profile Clevis Brkt
Used on SMS16 303 Stainless

 SS-90
St’d Clevis Brkt
Used on SMS 16 Series 300 Stainless steel

 SS-90T
Trunnion Brkt
Used on SMS 10, 11 304 Stainless

RAISE THE BAR FOR YOUR COMPETITORS BY SELECTING AURORA SOLID STAINLESS PRODUCTS

Series SMS Solid Stainless

Courtesy of Steven Engineering, Inc. • 230 Ryan Way, South San Francisco, CA, 94080-6370 • Main Office: (650) 588-9200 • Outside Local Area: (800) 258-9200 • www.stevenengineering.com
1 1/2” BORE SMS STAINLESS

**SMS1**

- 2 3/16 + STROKE DOUBLE ACTING
- 1/8-27 NPT
- 1/8-27 NPT
- 1 1/4-12 UNF
- PILOT DIA. 1.249 x 11/64 LG.
- 1/2 FLATS
- 3/8-24 x 5/8 DP.
- 1 1/2 FLATS
- 3/8-24 x 5/8 DP.

**SMS2**

- 3 3/16 + STROKE DOUBLE ACTING
- 1/8-27 NPT
- 1 1/4-12 UNF
- PILOT DIA. 1.246 x 11/64 LG.
- 1/2 FLATS
- 3/8-24 x 5/8 DP.

**SMS3**

- 1/4-20 UNF THRD. 4 HOLES EQUAL SPACED ON 2.187 B.C. (CLEARANCE FOR #10 S.H.C.S.)
- 2 1/4
- 2 1/4
- 1/8-27 NPT
- 1/8-27 NPT

**SMS5**

- 1 1/4 -12SS Nut Nose Mounting Nut
- Not included with cylinder
- Order Separately

**SMS6**

- 2 5/32 + STR DOUBLE ACTING
- 1/8-27 N.P.T.
- 1/8-27 N.P.T.
- 1 5/8 + STR DOUBLE ACTING
- 1 5/8 + STR DOUBLE ACTING

**SS-500**

- Rod Clevis and Nut
- 303 Stainless

**SS-501**

- Clevis Pin Assembly
- Used on SS-500 303 Stainless

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**Spring Return Cylinders**

Pneumatic only

- Springs add to cyl. length
- 0-2” stroke add 1 1/2” extra
- 2 1/2-4” stroke add 3” extra
- over 4” stroke not available

Spring force

- Fully extended—15#
- Fully compressed—50#

Spring material—Stainless steel

**Optional Male Rod Thread**

- 1 1/8-27 N.P.T.

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**200 PSI MAX. AIR**

**500 PSI MAX. HYD. Non shock**
Spring Return Cylinders

Pneumatic only
Springs add to cyl. length
0-2" stroke add 1 1/2" extra
2 1/2-4" stroke add 3" extra
over 4" stroke not available

Spring force
Fully extended—20#
Fully compressed—75#

Spring material—Stainless steel

Optional Male
Rod Thread

1 1/4 -12SS Nut
Nose Mounting Nut
Not included with cylinder
Order Separately

SS-625
Rod Clevis
and Nut

SS-601
Clevis Pin Assembly
Used on SS-625 303 Stainless

SS-100
St’d Clevis Brk’t
Used on SMS 2 Series 300 Stainless

Make the
Best Choice
1 630 851 4515

ask for
Technical Support
2” BORE SMS STAINLESS

Spring Return Cylinders

Pneumatic only
Springs add to cyl. length
0-2” stroke add 1 1/2” extra
2 1/2” stroke add 3” extra
over 4” stroke not available

Spring force
Fully extended—20#
Fully compressed—75#
Spring material—Stainless steel

Optional Male Rod Thread

SS-625
Rod Clevis and Nut

SS-601
Clevis Pin Assembly
Used on SS-625  303 Stainless

You CAN Buy Peace of Mind

Aurora Stainless
ALL AURORA PRODUCTS AVAILABLE FOR 24 HOUR DELIVERY

SMS Options
• Shock Pads
• Viton Seals
• Non-lube Service
• Magnetic Piston
• U Cup Piston
• Non-rotate
(SMA 7, 8, 9, 14, 15, 17)
• 90° Rear Clevis

Unique Applications
Sometimes Require Unique Cylinders
See our custom design capabilities on page 87

SS-100
St’d Clevis Brkt
Used on SMS 16 Series 300 Stainless

SS-100T
Trunnion Brkt
Used on SMS 10, 11 304 Stainless steel

Series SMS Solid Stainless

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Spring Return Cylinders

Pneumatic only
Springs add to cyl. length
0.2" stroke add 1.125" extra
2.125" stroke add 3" extra
over 4" stroke not available

Spring force
Fully extended—20#
Fully compressed—75#
Spring material—Stainless steel

Optional Male Rod Thread

1 3/4-20 UNC THR'D. 4 HOLES
EQUAL SPACED ON 3.781 B.C.
(CLEARANCE FOR 5/16 S.H.C.S.)

SS-701
Clevis Pin Assembly
Used on SMS-750 303 Stainless

STANDARD CYLINDERS + CORROSION = LIABILITY
AURORA STAINLESS + CORROSION = PEACE OF MIND
SMS Options

- Shock Pads
- Viton Seals
- Non-lube Service
- Magnetic Piston
- U Cup Piston
- 90° Rear Clevis

SSC-300
Clevis Brkt
Used on SMS2, 16
Series 300 Stainless steel

HELP IN MAKING THE BEST CHOICE

Technical Assistance @ 630 851 4515
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 Code
- 1 1/8" 11
- 1 1/2" 15
- 2" 20
- 3" 30

### Type Code
- **Double acting**
  - Code C
- **Single acting spring return**
  - Code A

### Service Code
- **Pneumatic**
  - Code E
- **Hydraulic**
  - Code G

### Stroke
- Code is stroke in total 1/8" increments
- Example: 1" stroke = 8
- 2 1/4" stroke = 18
  - Stocked in the following strokes:
    - 1/8, 1/4, 3/8, 1/2, 3/4, 1, 1 1/4, 1 1/2, 1 3/4, 2
    - and 1/2" increments to 10"
  - 3" bore - Limited to 8" max. stroke

### Mounting Style/Code
- SMS 1 SMS 9
- SMS 2 SMS 10
- SMS 3 SMS 11
- SMS 4 SMS 14
- SMS 6 SMS 15
- SMS 7 SMS 16
- SMS 8 SMS 17

### Piston Rod Codes
- **Bore**
  - 1.125
  - 1.125
  - 1.500
  - 1.500
  - 1.500
  - 2.000
  - 2.000
  - 3.000
  - 3.000
  - 3/8-24 x 3/4
  - 5/16-18 x 5/8
  - 3/4-16 x 1 1/4

- **Thread Code**
  - 5/16-24 x 5/8
  - 5/8-18 x 1 1/8
  - 1/2-20 x 3/4
  - 3/8-16 x 5/8
  - 3/8-24 x 5/8

- **Stocked in the following strokes:**
  - 1/8, 1/4, 3/8, 1/2, 3/4, 1, 1 1/4, 1 1/2, 1 3/4, 2
  - and 1/2" increments to 10"  

### Part No. Example:

1.500 bore
1.500 stroke
1/2-20 x 1 male thread
Double acting
Mounting style SMS9
Viton seals
Pneumatic
Magnetic piston

**Part No. Example:**

15 | SMS9 | C | 12 | E | M8 | R | W

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### Seal kits for cylinders with O ring piston

<table>
<thead>
<tr>
<th>Key</th>
<th>Description</th>
<th>1 1/8 Bore</th>
<th>1 1/2 Bore</th>
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</thead>
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<tr>
<td>1</td>
<td>Rear port cap Add suffix 250 for 2&quot; bore 1/4 NPT</td>
<td>SMS 1011</td>
<td>SMS 1015</td>
<td>SMS 1020</td>
<td>SMS 1030</td>
</tr>
<tr>
<td>2</td>
<td>Rear pivot cap Add suffix 250 for 2&quot; bore 1/4 NPT</td>
<td>SMS 1111</td>
<td>SMS 1115</td>
<td>SMS 1120</td>
<td>SMS 1130</td>
</tr>
<tr>
<td>3</td>
<td>Side port cap Add suffix 250 for 2&quot; bore 1/4 NPT</td>
<td>SMS 111190</td>
<td>SMS 111590</td>
<td>SMS 112090</td>
<td>SMS 113090</td>
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<tr>
<td>4</td>
<td>Rear flange cap</td>
<td>SMS 4811</td>
<td>SMS 4815</td>
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<tr>
<td>5</td>
<td>Square cap Add suffix 250 for 2&quot; bore 1/4 NPT</td>
<td>SMS 4611</td>
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<td>SMS 4620</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Tube</td>
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### Seal kits for cylinders with U cup piston - Includes Teflon wear strip

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