

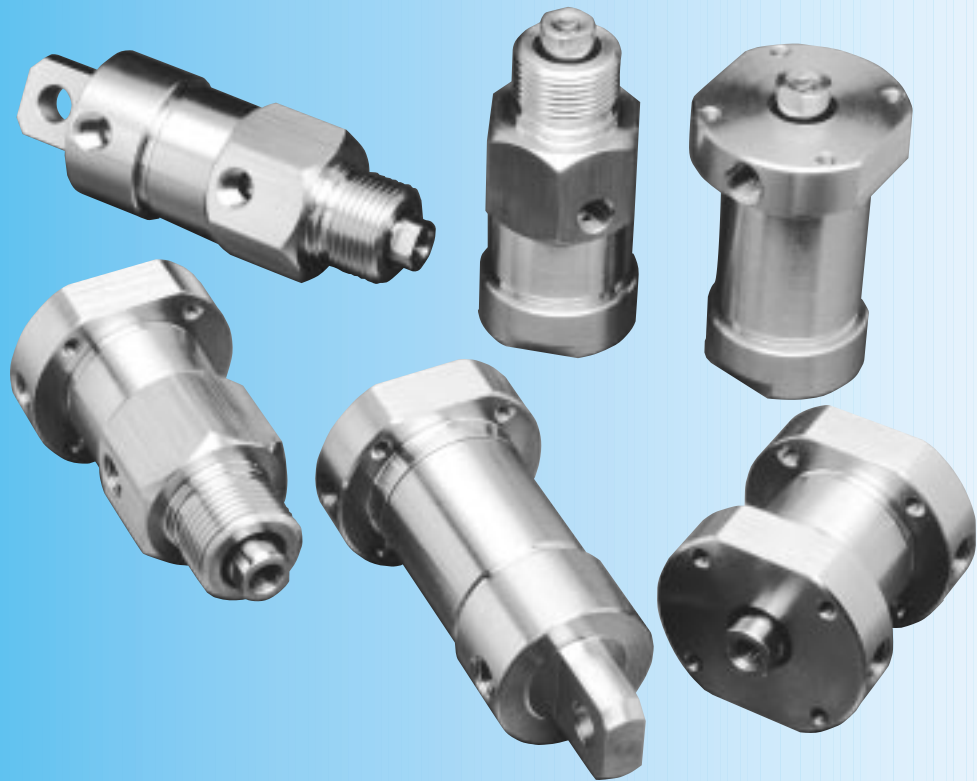
# SMS Solid Stainless Cylinders

*Space Saving and Conventional Lengths*

*Pneumatic to 200 PSI*

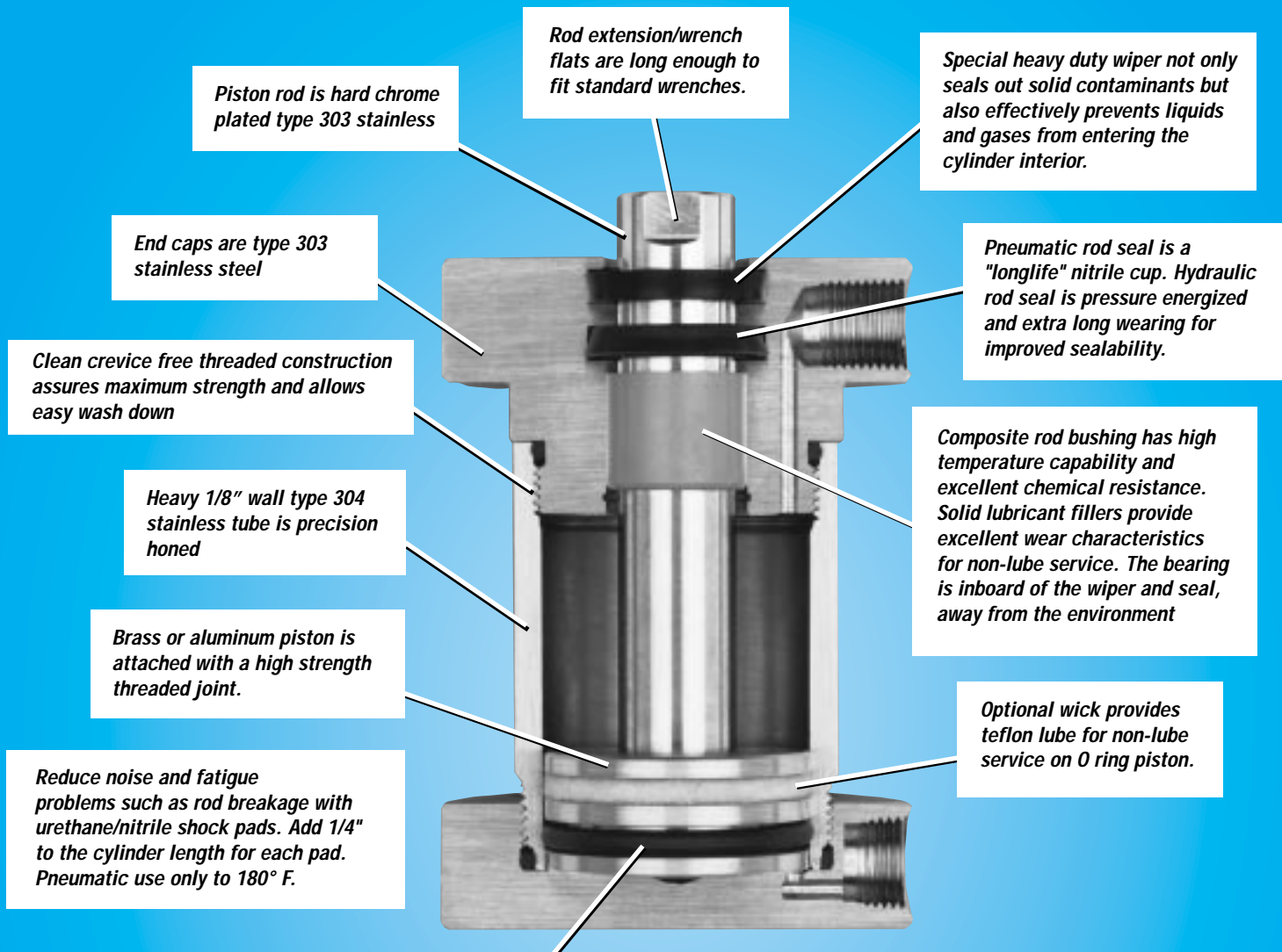
*Hydraulic 400 to 500 PSI Non shock*

*1 1/8", 1 1/2", 2", 3" Bore*



***300 Series Stainless Exterior Assures Aesthetics and Function  
in Washdown Applications or other Harsh Environments***

# SMS DESIGN FEATURES



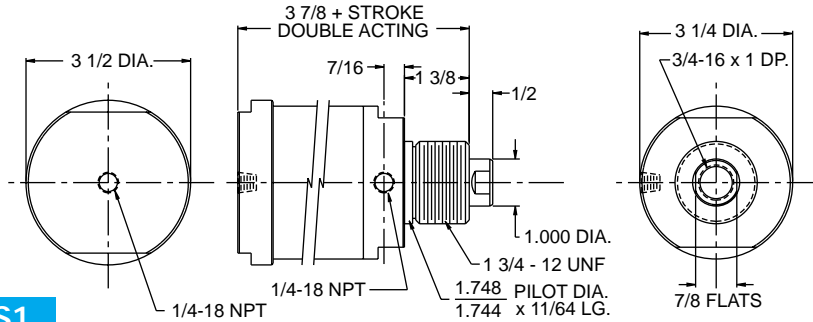
**Standard piston seal is large cross section O ring. Compounds are carefully selected for maximum cycle life. Optional U cup piston seals with teflon wear strip stretch the limits of service even further. Reduce friction and operate without lube in the severest applications while extending or eliminating the service interval.**



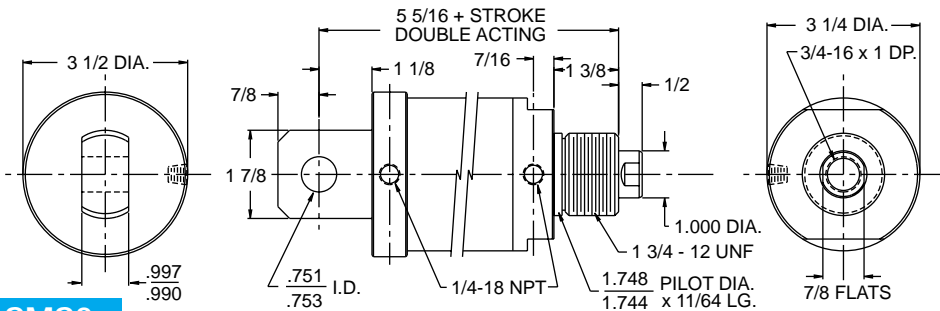
**If space permits for applications involving side loads or long strokes, select SMS 1, 2, 3, 5, 7, 8, 9, which have extra long bearings with added space between support points.**

**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.**

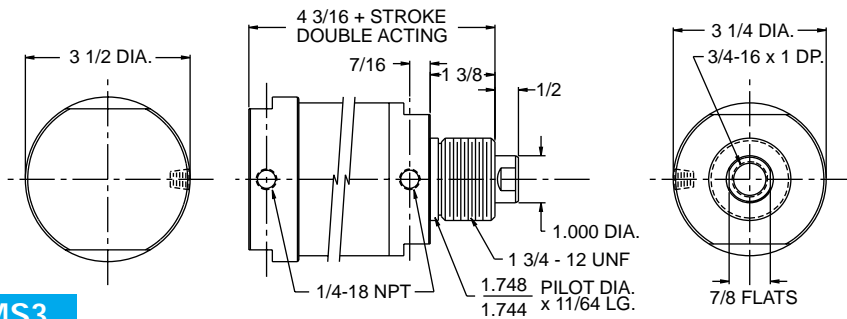
TM



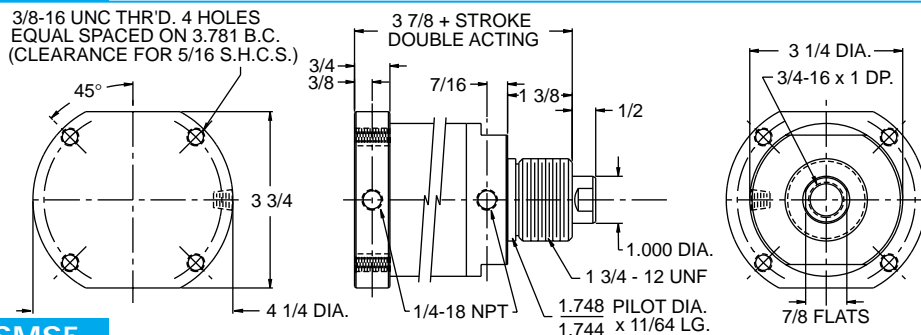
**SMS1**



**SMS2**



**SMS3**



**SMS5**

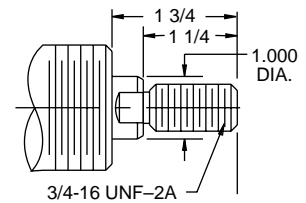
**STANDARD CYLINDERS + CORROSION = LIABILITY**  
**AURORA STAINLESS + CORROSION = PEACE OF MIND**

## 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

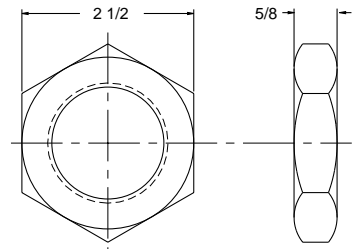
Spring force  
Fully extended—20#  
Fully compressed—75#  
Spring material—Stainless steel

## Optional Male Rod Thread

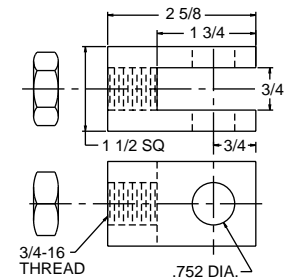


## 1 3/4 -12SS Nut Nose Mounting Nut

Not included with cylinder Order Separately



## SMS-750 Rod Clevis and Nut

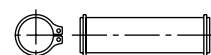


303 Stainless

## SS-701

### Clevis Pin Assembly

Used on SMS-750 303 Stainless

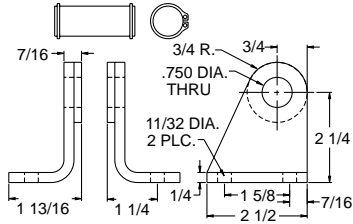


**SMS Options**

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

**SSC-300**

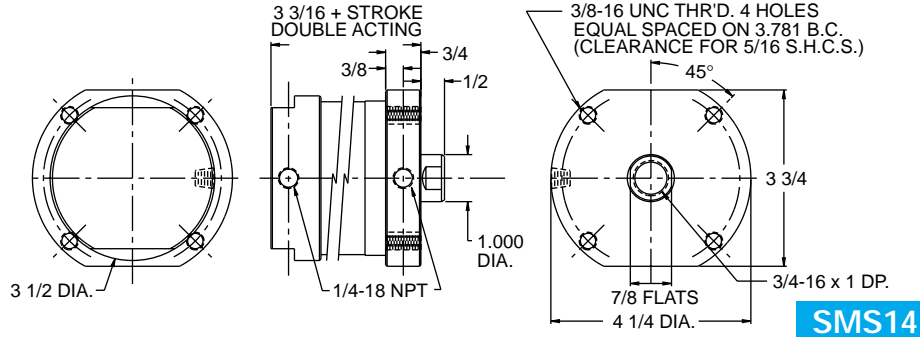
Clevis Brk't  
Used on SMS2, 16  
Series 300 Stainless steel



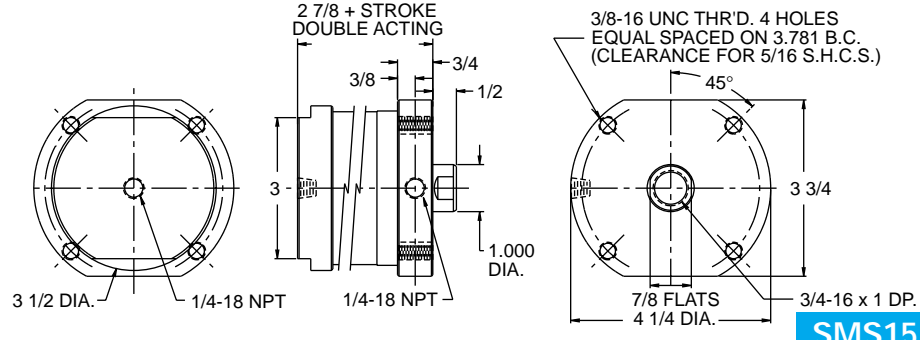
**STAINLESS  
CYLINDERS**



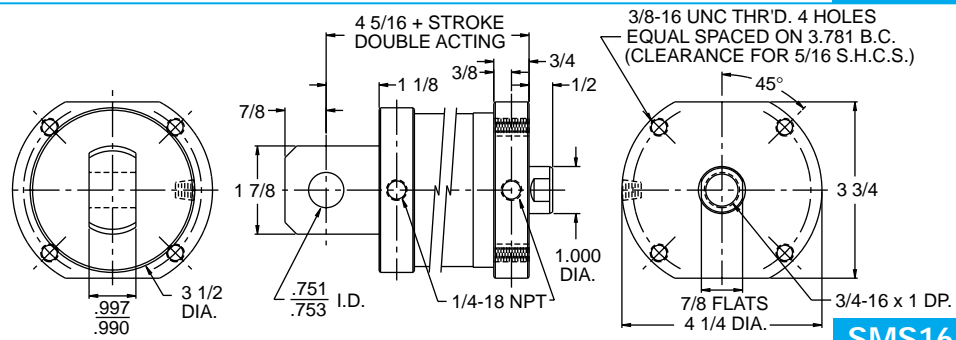
**STAINLESS  
ACCESSORIES**



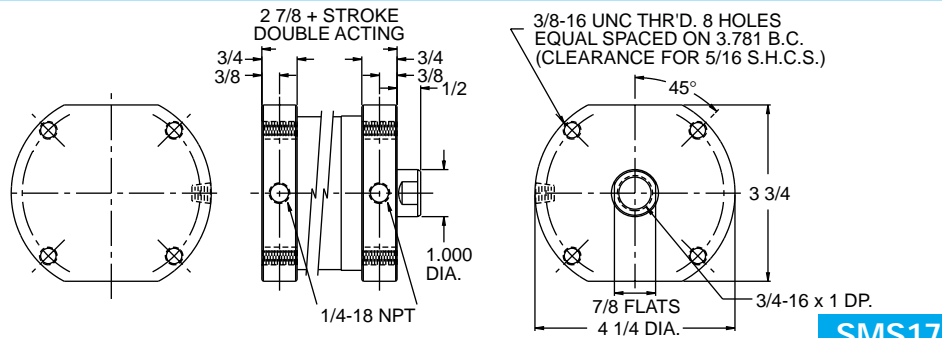
**SMS14**



**SMS15**



**SMS16**



**SMS17**

Series SMS Solid Stainless

*Help in Making the Best Choice*

*Technical Assistance @ 630 851 4515*

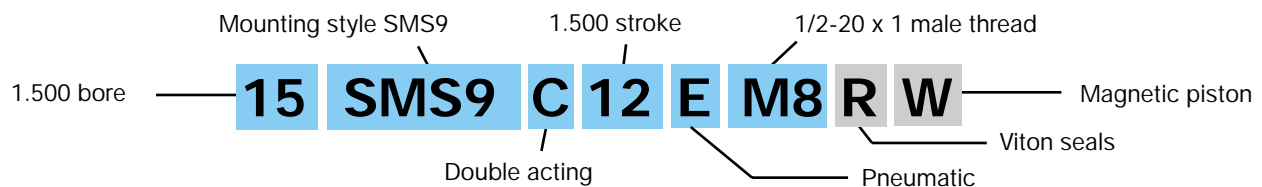
# ORDERING PROCEDURE - SMS Stainless

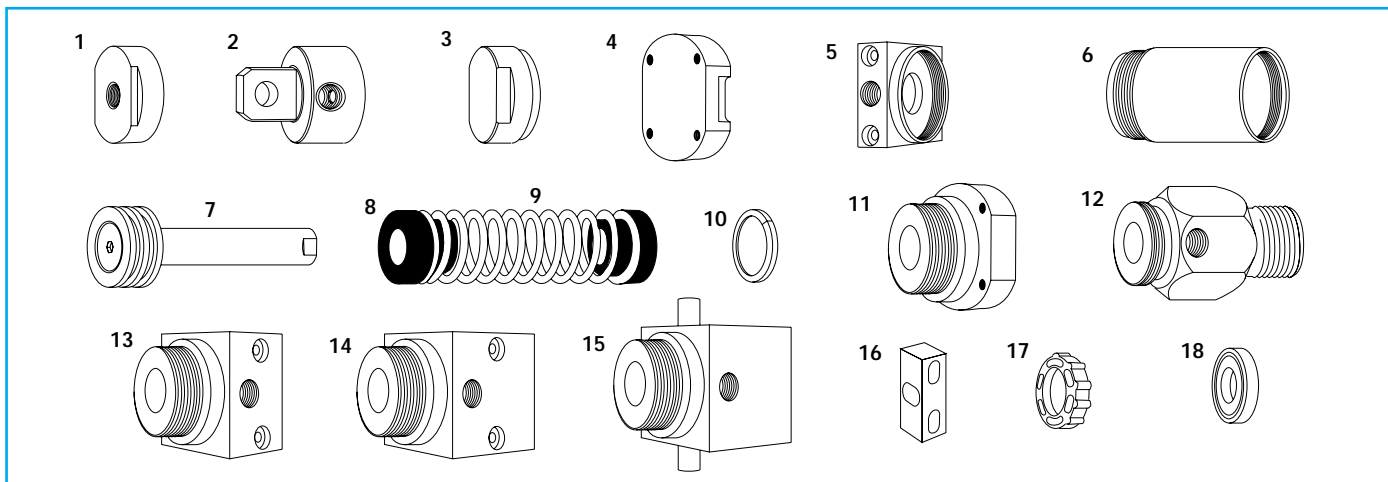
Select code numbers/letters (**bold type**) from each of the six boxes below - then select options desired from the table below. List codes in the same sequence as shown.

<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr><th>Bore</th><th>Code</th></tr> </thead> <tbody> <tr><td>1 1/8"</td><td><b>11</b></td></tr> <tr><td>1 1/2"</td><td><b>15</b></td></tr> <tr><td>2"</td><td><b>20</b></td></tr> <tr><td>3"</td><td><b>30</b></td></tr> </tbody> </table>	Bore	Code	1 1/8"	<b>11</b>	1 1/2"	<b>15</b>	2"	<b>20</b>	3"	<b>30</b>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr><th>Type</th><th>Code</th></tr> </thead> <tbody> <tr><td>Double acting</td><td><b>C</b></td></tr> <tr><td>Single acting spring return (Adds to cyl. length) Spring extend not available</td><td><b>A</b></td></tr> </tbody> </table>	Type	Code	Double acting	<b>C</b>	Single acting spring return (Adds to cyl. length) Spring extend not available	<b>A</b>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr><th>Service</th><th>Code</th></tr> </thead> <tbody> <tr><td>Pneumatic</td><td><b>E</b></td></tr> <tr><td>Hydraulic</td><td><b>G</b></td></tr> </tbody> </table>	Service	Code	Pneumatic	<b>E</b>	Hydraulic	<b>G</b>																																																		
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Option	Description	Code
Extra rod extension 1/4 " increments	Specify code letter <b>J</b> followed by extra length required as a two place decimal Example: <b>J.50</b> = 1/2" extra <b>J1.25</b> = 1 1/4"extra	<b>J</b>
Shock pads	Add to either or both ends in 1 1/8", 1 1/2", 2" bore up to 2" stroke.	Rod end only <b>L</b>
Pneu. only to 180° F	Over 2" stroke and on all 3" bore must be added to both ends	Cap end only <b>M</b>
Double acting only	Each pad adds 1/4" length	Both ends <b>N</b>
Non-lube service	Available on standard O ring Piston. Not available or necessary on U cup piston	<b>P</b>
Viton seals	Standard seals are nitrile and urethane +10 to +200° F For service -10 to +400° F specify viton	<b>R</b>
U cup piston	Extends cycle life and reduces friction Piston is aluminum and includes teflon wear strip — adds 1/2" to length	<b>S</b>
Clevis 90° to std	SMS 2, 16, only	<b>T</b>
Magnetic piston	Adds 1/2" to length	<b>W</b>
Non rotate	Available only on double acting SMS 7, 8, 9, 14, 15, 17	with male stud <b>X</b> without male stud <b>Y</b>
1/4" oversize ports	2" bore only — SMS 1, 2, 3, 6, 7, 8, 9, only    Not available with option x,y	<b>Z</b>

## Part No. Example:





Key	Description	1 1/8 Bore	1 1/2 Bore	2 Bore	3 Bore
<b>Seal kits for cylinders with O ring piston</b>					
	Pneumatic, Nitrile Add suffix NL for Non-Lube	SMS 3411	SMS 3415	SMS 3420	SMS 3430
	Pneumatic, Viton Add suffix NL for Non-Lube	SMS 3411V	SMS 3415V	SMS 3420V	SMS 3430V
	Hydraulic, Nitrile	SMS 3511	SMS 3515	SMS 3520	SMS 3530
	Hydraulic, Viton	SMS 3511V	SMS 3515V	SMS 3520V	SMS 3530V
<b>Seal kits for cylinders with U cup piston – includes Teflon wear strip</b>					
	Pneumatic, Nitrile	SMS 5411	SMS 5415	SMS 5420	SMS 5430
	Pneumatic, Viton	SMS 5411V	SMS 5415V	SMS 5420V	SMS 5430V
	Hydraulic, Nitrile	SMS 5511	SMS 5515	SMS 5520	SMS 5530
	Hydraulic, Viton	SMS 5511V	SMS 5515V	SMS 5520V	SMS 5530V
1	Rear port cap Add suffix 250 for 2" bore 1/4 NPT	SMS 1011	SMS 1015	SMS 1020	SMS 1030
2	Rear pivot cap Add suffix 250 for 2" bore 1/4 NPT	SMS 1111	SMS 1115	SMS 1120	SMS 1130
2	90° Rear pivot cap Add suffix 250 for 2" bore 1/4 NPT	SMS 111190	SMS 111590	SMS 112090	SMS 113090
3	Side port cap Add suffix 250 for 2" bore 1/4 NPT	SMS 4811	SMS 4815	SMS 4820	SMS 4830
4	Rear flange cap	SMS 1311	SMS 1315	SMS 1320	SMS 1330
5	Square cap Add suffix 250 for 2" bore 1/4 NPT	SMS 4611	SMS 4615	SMS 4620	
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	SMS 1211	SMS 1215	SMS 1220	SMS 1230
9	Spring	SS 2111	SS 2115	SS 2120	SS 2120
10	Magnet SMS5911 and SS3215 supplied in pairs	SMS 5911	SS 3215	SS 3220	SS 3230
11	Flange head Add suffix NR for non-rotate	SMS 1411	SMS 1415	SMS 1420	SMS 1430
12	Nose Mount Head Add suffix 250 for 2" bore, 1/4 NPT	SMS 0111	SMS 0115	SMS 0120	SMS 0130
13	Short square Head Add suffix 250 for 2" bore, 1/4 NPT	SMS 4411	SMS 4415	SMS 4420	
14	Long square Head Add suffix 250 for 2" bore, 1/4 NPT	SMS 4511	SMS 4515	SMS 4520	
14	Square non rotate head	SMS 4511NR	SMS 4515NR	SMS 4520NR	
15	Trunnion head	SMS 4511T	SMS 4515T	SMS 4520T	
16	Non-rotate guide bushing Pair	SMS 5111	SMS 5111	SMS 5111	
17	Cap end shock pad	Consult factory			3MSP
18	Head end shock pad	11CSP	15CSP	2CSP	3MSP