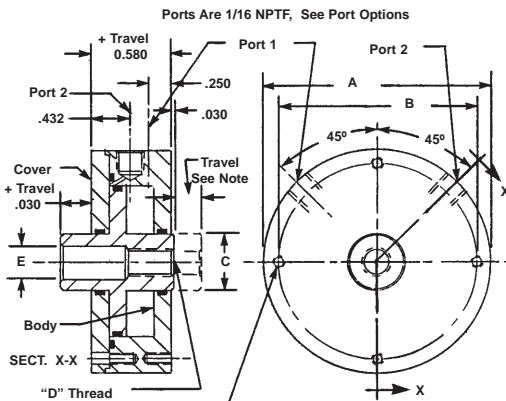


# SHORT STROKE PNEUMATIC CYLINDERS - LO-Profile® SERIES A-SP-FM

Double Acting-Double Ended Pistons With Thread For Thru Bolts-Side Ported-Either Face Mounted



**SPECIFICATIONS:**  
 SERVICE, PLANT AIR  
 M.O.P., 300 PSI  
 TEMPERATURE, -40°F to +250°F  
**MATERIALS:**  
 BODY & COVER, ALUMINUM ALLOY  
 PISTON, ALUMINUM ALLOY  
 SEALS, BUNA "N" O RINGS  
 FASTENERS, ALLOY STEEL

**NOTES:**  
 Dimensions are nominal in U.S. CUSTOMARY specifications.

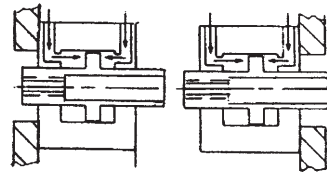
METRIC CYLINDERS are dimensionally equivalent with clearance holes, counterbores, threads & fasteners to metric specifications. See inside back cover for fastener conversion table. There is no added cost for METRIC CYLINDERS.

An air/oil mist unit is recommended for internal lubrication. Where such units are not practical, SERVICE KITS including seals & factory approved lube are available.

Cylinders may also be used in low pressure hydraulic and vacuum service.

Wrench flats may not be necessary if cylinders can be pressurized in the retracted or extended position while tightening the rod joint.

Inquiries regarding modifications to BASIC CYLINDERS are always welcome.

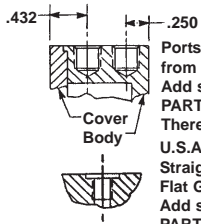


Pictorial

"D" Thread Threaded for the entire length on -1 thru -10 thread depth, 1-1/2 thd. dia. for -11 & longer. See Rod Options.  
 Mounting Holes 4-40 Internal Threads 4 Locations, On Front & Rear Faces. See Mounting Options.

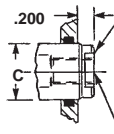
BASIC PART No.	O.D. A	BOLT CIRCLE B	ROD DIA. C	ROD THD. D	HOLE DIA. E	WR. FLATS F	DEPTH G	LENGTH H	REAM J	OFF-SET K	WIDTH L	WIDTH M	PISTON O.D. (IN.)	NET PISTON AREA (SQ. IN)
1015(-)	1.000	0.688	0.250	4-40	0.129	0.188	0.305	0.385	0.094	0.141	0.063	0.156	0.450	0.110
10155(-)	1.250	0.938	0.313	10-32	0.206	0.250	0.305	0.385	0.094	0.141	0.094	0.156	0.575	0.183
1016(-)	1.500	1.188	0.375	10-32	0.206	0.281	0.406	0.486	0.125	0.188	0.125	0.188	0.700	0.275
10165(-)	1.750	1.438	0.500	1/4-28	0.281	0.375	0.610	0.690	0.188	0.281	0.188	0.250	0.950	0.513
1017(-)	2.000	1.688	0.625	5/16-24	0.344	0.500	0.610	0.690	0.188	0.281	0.188	0.250	1.200	0.824
10175(-)	2.250	1.938	0.625	5/16-24	0.344	0.500	0.610	0.690	0.188	0.281	0.188	0.250	1.450	1.344
1018(-)	2.500	2.188	0.625	5/16-24	0.344	0.500	0.610	0.690	0.188	0.281	0.188	0.250	1.700	1.963

**PORT OPTIONS**

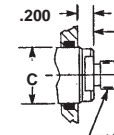


Ports may be IN-LINE for travels from -.5. Add suffix -IL to the BASIC PART NUMBER. There is no added cost.  
 U.S.A. 10-32 Threaded Ports. Straight Thread. Flat Gasket Sealing. Add suffix -1032 to the BASIC PART NUMBER. There is no added cost.

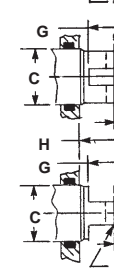
**OPTIONAL ROD ENDS**



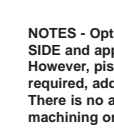
"F" Wrench Flats  
 Internal Thread With Wrench Flats  
 Add suffix -ITW To The BASIC PART NUMBER  
 Add 5% to the BASE PRICE.



"D" Thd., 1-1/2 Dia., Length  
 External Thread With Wrench Flats  
 Add suffix -ETW to the BASIC PART NUMBER  
 Add 8% to the BASE PRICE

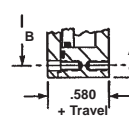


Slotted Rod End  
 Add suffix -SR to the BASIC PART NO.  
 Add 8% to the BASE PRICE

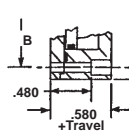


Rod End With Lug  
 Add suffix -RL to the BASIC PART NO.  
 Add 8% to the BASE PRICE.

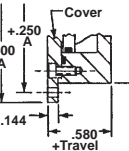
**OPTIONAL MOUNTING STYLES**



No. 4-40 internally threaded holes at 4 locations in both front and rear faces. This mounting style is supplied unless otherwise specified. NOTE: On 1" O.D. & 1-1/4" O.D. models, remove cover retaining screws & use these threaded holes when mounting to the cover side.



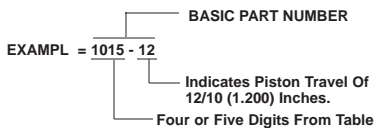
Thru clearance holes with C'bores in the body for No. 4-40 I.S.H.C.S. at 4 locations. Add suffix -CBB to the BASIC PART NO. There is no added cost. NOTE: On 1" O.D. & 1-1/4" O.D. models, the cover is a loose part and is retained with the mounting screws.



This cover is larger with flange mounting to either side. Clearance holes are for No. 4-40 screws at four locations. Add suffix -FL to the BASIC PART NUMBER. Add 10% to the BASE PRICE.

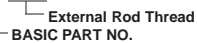
**HOW TO ORDER BASIC CYLINDERS**

A BASIC PART NUMBER consists of a four or five digit number followed by a dash number to indicate piston travel in increments of 1/10 (0.100) Inch.



**HOW TO ORDER CYLINDERS WITH OPTIONS**

Add options to the BASIC PART NO. as suffixes in any order. EXAMPLE = 1015 - 20 - ETW



**HOW TO ORDER CYLINDERS WITH STAINLESS STEEL PISTONS**

Add the letter -S as a prefix to the BASIC PART NO. Add 25% to the BASE PRICE. EXAMPLE = S - 1015 - 20



**HOW TO ORDER ALL STAINLESS STEEL CYLINDERS**

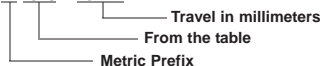
Add the letter -SS as a prefix to the BASIC PART NO. Add 40% to the BASE PRICE. EXAMPLE = SS-1015-12



NOTES - Optional piston rod ends extend from the BODY SIDE and apply to one end only unless otherwise specified. However, pistons may be reversed. (End for end) if required, add a suffix -R to the BASIC PART NUMBER. There is no added cost. Piston rods have to internal machining on options -ETW, -SR and -RL.

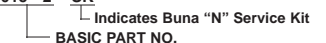
**HOW TO ORDER METRIC CYLINDERS**

A BASIC PART NO. FOR METRIC CYLINDERS consists of a four or five digit number from the table with a prefix "M" and a suffix to indicate travel in millimeters. See inside rear cover for piston travel conversion. EXAMPLE = M 1015 - 10mm



**HOW TO ORDER BUNA "N" SERVICE KITS**

Specify the BASIC PART NO. followed by suffix -SK. EXAMPLE = 1015 - 2 - SK



**HOW TO ORDER VITON SERVICE KITS**

Specify the BASIC PART NO. followed by the suffix -VSK. EXAMPLE = 1015 - 4 - VSK

