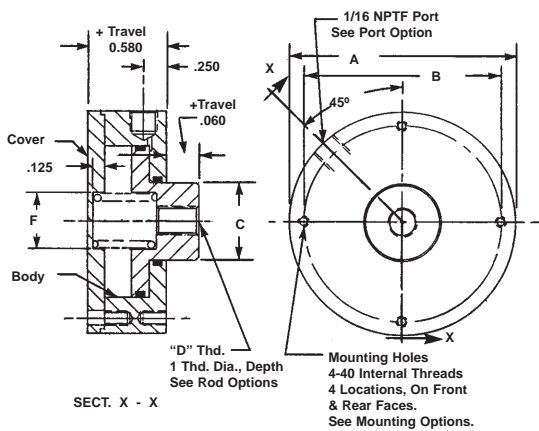


# SHORT STROKE PNEUMATIC CYLINDERS - LO-Profile® SERIES A-SP-FM

Single Acting-Spring Extending-Single Ended Pistons-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, Stainless Steel  
SPRINGS, MUSIC WIRE  
SEALS, BUNA "N" O RINGS  
FASTENERS, ALLOY STEEL

**NOTES:**

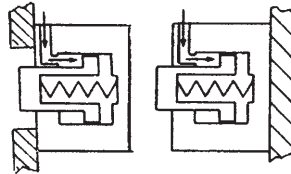
Dimensions are nominal in U.S. CUSTOMARY specifications.

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 service.

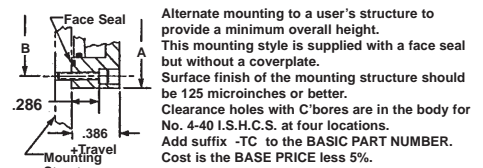
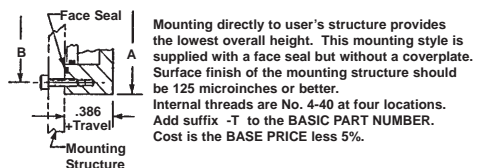
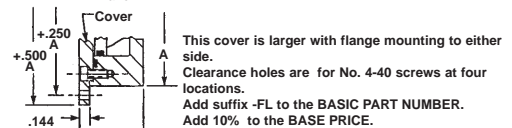
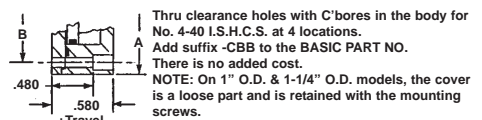
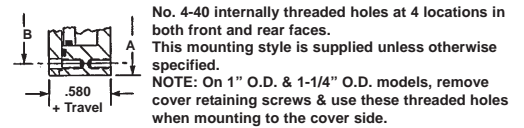
Inquiries regarding modifications to BASIC CYLINDERS are always welcome.



**Pictorial**

BASIC PART No.	O.D. A	BOLT CIRCLE B	ROD DIA. C	ROD THD. D	WR. FLATS E	SPRING POCKET F	PISTON O.D. (IN.)	NET PISTON AREA (SQ. IN)
S1866(-)	1.000	0.688	0.375	4-40	0.250	0.250	0.450	0.049
S18665(-)	1.250	0.938	0.438	10-32	0.313	0.313	0.575	0.110
S1867(-)	1.500	1.188	0.530	10-32	0.375	0.375	0.700	0.164
S18675(-)	1.750	1.438	.0625	1/4-28	0.438	0.500	0.950	0.402
S1868(-)	2.000	1.688	0.700	5/16-24	0.500	0.500	1.200	0.746
S18685(-)	2.250	1.938	0.750	5/16-24	0.625	0.625	1.450	1.209
S1869(-)	2.500	2.188	0.850	5/16-24	0.625	0.625	1.700	1.703

**OPTIONAL MOUNTING STYLES**



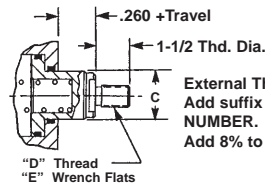
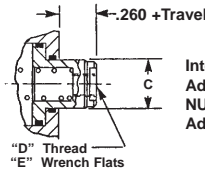
A Spring Pocket will be necessary in the user's structure when using mounting option -T or -TC. See diameter & depth in the mean view. The mounting bolt pattern should be concentric with the spring pocket within a total indicator reading of .005 inch.

**OPTIONAL PORT**



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.

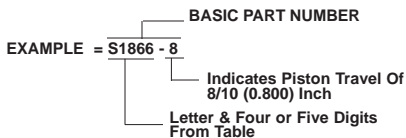
**OPTIONAL ROD ENDS**



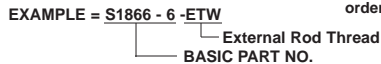
Spring force for BASIC CYLINDERS is sufficient to fully extend pistons. Higher spring force may be required in some cases. Please consult the Factory with your force requirements.

**HOW TO ORDER BASIC CYLINDERS**

A BASIC PART NUMBER consists of the letter "S" and a four or five digit number followed by a dash number to indicate piston travel in increments of 1/10 (0.100) Inch. Travel to -10 (1.000) inches is standard. Please consult the Factory for longer travel.

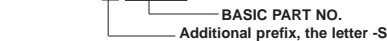


HOW TO ORDER CYLINDERS WITH OPTIONS  
Add options to the BASIC PART NO. as suffixes in any order.



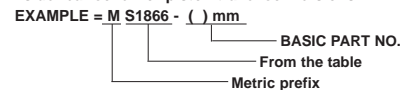
**HOW TO ORDER ALL STAINLESS STEEL CYLINDERS**

Add the letter -S as a prefix to the BASIC PART NO. Add 25% to the BASE PRICE.  
EXAMPLE = S-S1866-4

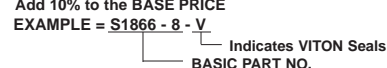


**HOW TO ORDER METRIC CYLINDERS**

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 piston travel in millimeters. See inside rear cover for piston travel conversions.



HOW TO ORDER CYLINDERS WITH VITON SEALS  
Add suffix -V to the BASIC PART NO. Add 10% to the BASE PRICE



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

Specify the BASIC PART NO. followed by suffix -SK.



**HOW TO ORDER VITON SERVICE KITS**

Specify the BASIC PART NO. followed by the suffix -VSK

