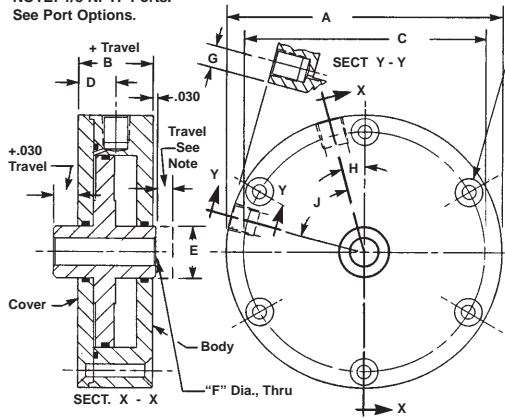


# SHORT STROKE PNEUMATIC CYLINDERS - LO-Profile® SERIES B-SP-FM

## Double Acting-Double Ended Pistons with Thread for Thru Holes-Side Ported-Either Face Mounted

NOTE: 1/8 NPTF Ports.  
See Port Options.



Mounting Holes, "K" Locations.  
See Optional Mounting Styles.

**SPECIFICATIONS:**  
SERVICE, PLANT AIR  
M.O.P., 150 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.

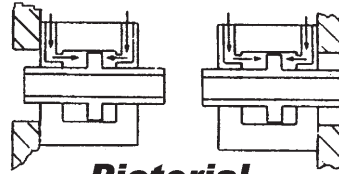
METRIC CYLINDERS are dimensionally equivalent with clearance holes, counterbores, threads & fasteners to metric specifications. See inside back cover for fastener conversion table. There is no added cost for METRIC CYLINDERS.

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**

| BASIC PART No. | O.D. A | BASIC BODY LENGTH B | B.C C | PORT OFFSET D | ROD DIA E | HOLE F | PORT OFFSET G | DEG. H | DEG. J | K | LENGTH L | WIDTH M | PISTON DIA. (IN.) | NET PISTON AREA (SQ.IN.) |
|----------------|--------|---------------------|-------|---------------|-----------|--------|---------------|--------|--------|---|----------|---------|-------------------|--------------------------|
| 806(-)         | 3.000  | 0.681               | 2.500 | 0.485         | 0.625     | 0.344  | 0.297         | 18     | 72     | 5 | 0.581    | 0.110   | 1.800             | 2.238                    |
| 8065(-)        | 3.500  | 0.775               | 3.000 | 0.551         | 0.750     | 0.406  | 0.324         | 15     | 60     | 6 | 0.675    | 0.149   | 2.300             | 3.713                    |
| 807(-)         | 4.000  | 0.775               | 3.500 | 0.551         | 0.750     | 0.406  | 0.324         | 15     | 60     | 6 | 0.675    | 0.149   | 2.800             | 5.716                    |
| 8075(-)        | 4.500  | 0.900               | 4.000 | 0.625         | 0.750     | 0.469  | 0.375         | 11-1/4 | 45     | 8 | 0.800    | 0.172   | 3.300             | 8.111                    |
| 808(-)         | 5.000  | 0.900               | 4.500 | 0.625         | 0.750     | 0.469  | 0.375         | 11-1/4 | 45     | 8 | 0.800    | 0.172   | 3.800             | 10.899                   |
| 8085(-)        | 5.500  | 0.900               | 5.000 | 0.625         | 1.000     | 0.531  | 0.375         | 11-1/4 | 45     | 8 | 0.800    | 0.172   | 4.300             | 13.737                   |
| 809(-)         | 6.000  | 0.900               | 5.500 | 0.625         | 1.000     | 0.531  | 0.375         | 11-1/4 | 45     | 8 | 0.800    | 0.172   | 4.800             | 17.311                   |

**ROD MODIFICATIONS**

Cylinders with THRU HOLE pistons are normally supplied without wrench flats. Please consult the Factory if wrench flats or other modification to the piston is required.

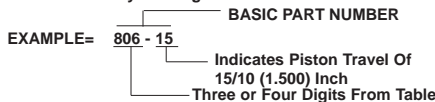
**INTERNATIONAL PORTS**

The following International Ports are available with minor modification to the product. Please consult the factory.

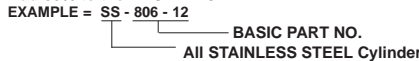
- U.S.A., S.A.E. -4
- British, 1/8 - 28 BSPT
- British, 1/8 - 28 BSPP
- Metric, M10x1, ISO 6149

**HOW TO ORDER BASIC CYLINDERS**

A BASIC PART NUMBER consists of a three or four digit number from the table followed by a dash number to indicate piston travel in increments of 1/10 (0.100) Inch. Travel to -20 (2.000) inches is standard. Please consult the Factory for longer travel.

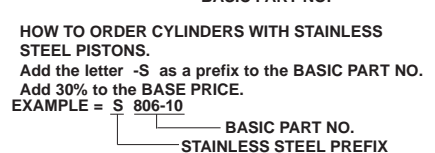


**HOW TO ORDER ALL STAINLESS STEEL CYLINDERS**  
Add the letter -SS as a prefix to the BASIC PART NO. Add 50% to the BASE PRICE.

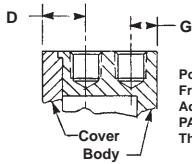


**HOW TO ORDER CYLINDERS WITH OPTIONS**

Add options to the BASIC PART NO. as suffixes in any order.



**OPTIONAL PORTS**



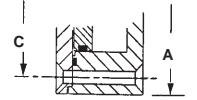
Ports May be IN-LINE for Travels From -7 Thru -20 Add suffix -IL to the BASIC PART NUMBER. There is no added cost.

U.S.A. 1/16 NPTF Ports Tapered Thread Sealing Add suffix -1/16 NPTF to the BASIC PART NUMBER. There is no added cost.

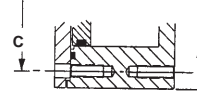


U.S.A. 10-32 Threaded Ports. Straight Thread - Flat Gasket Sealing. Add suffix -1032 to the BASIC PART NUMBER. There is no added cost.

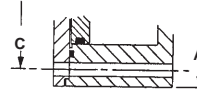
**OPTIONAL MOUNTING STYLES**



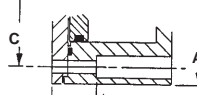
Clearance holes with 82° C'sinks on both faces For 10-32 Flat Head Screws. This mounting style is supplied for -1 thru -5 unless otherwise indicated.



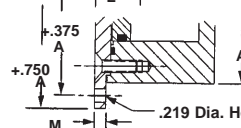
10-32 internally threaded holes on both faces. This mounting style is supplied for -6 thru -20 unless otherwise indicated.



Thru clearance holes for 10-32 screws. Add suffix -CL to the BASIC PART NO. There is no added cost.



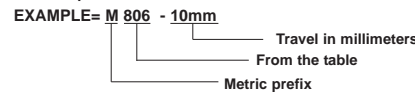
Thru clearance holes with C'bores on the body side for 10-32 I.S.H.C.S. Add suffix -CBB to the BASIC PART NO. There is no added cost.



This cover is larger for flange mounting. Clearance holes are for 10-32 screws at angular locations shown above. Add suffix -FL to the BASIC PART NO. Add 10% to the BASE PRICE.

**HOW TO ORDER METRIC CYLINDERS**

A BASIC PART NO. FOR METRIC CYLINDERS consists of a three or four 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 conversion.



**HOW TO ORDER CYLINDERS WITH VITON SEALS**

Add suffix -V to the BASIC PART NO. Add 10% to the BASE PRICE

EXAMPLE = 806-10 - V

BASIC PART NO.

Indicates VITON Seals

**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 suffix -VSK.

