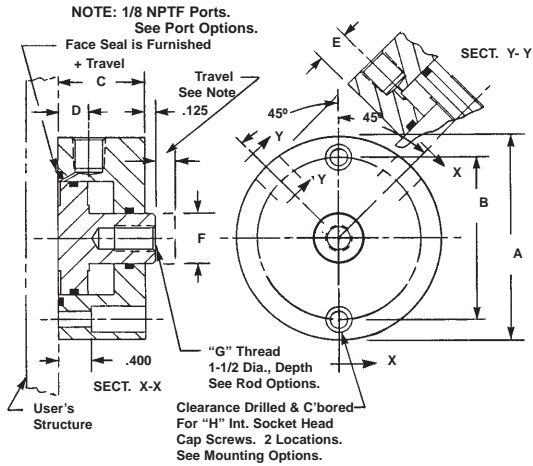


SHORT STROKE PNEUMATIC CYLINDERS - LO-Profile® SERIES A-PR2-SP-FM

Double Acting-Single Ended Pistons-Side Ported-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.

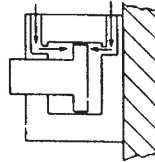
METRIC CYLINDERS are dimensionally equivalent with clearance holes, counterbores, threads & fasteners to metric specifications. See inside back cover for fastener conversion table. There is no added cost for METRIC CYLINDERS.

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.

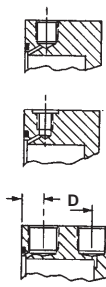
Inquiries regarding modifications to BASIC CYLINDERS are always welcome.



Pictorial

BASIC PART No.	O.D. A	BOLT CIRCLE B	BASIC BODY LENGTH C	PORT LOC. D	PORT LOC. E	ROD DIA. F	ROD THD. G	MNTG. HOLES H	WR. FLATS J	DEPTH K	LENGTH L	OFF-SET M	WIDTH N	WIDTH P	REAM Q	WIDTH R	PISTON DIA. (IN.)	EXT. AREA (SQ. IN)	RETR. AREA (SQ. IN)
1593(-)	1.250	0.982	0.500	0.327	0.273	0.250	4-40	4-40	0.188	0.305	0.380	0.141	0.063	0.156	0.094	0.250	0.450	0.159	0.110
1594(-)	1.500	1.232	0.500	0.327	0.273	0.375	10-32	4-40	0.281	0.406	0.481	0.188	0.125	0.188	0.125	0.250	0.700	0.385	0.275
1595(-)	1.750	1.378	0.500	0.327	0.273	0.375	10-32	8-32	0.281	0.406	0.481	0.188	0.125	0.188	0.125	0.250	0.800	0.502	0.392
1596(-)	2.000	1.628	0.625	0.375	0.336	0.625	5/16-24	8-32	0.500	0.610	0.685	0.281	0.188	0.250	0.188	0.313	1.050	0.866	0.559
1596S(-)	2.250	1.840	0.750	0.375	0.398	0.625	5/16-24	10-32	0.500	0.610	0.685	0.281	0.188	0.250	0.188	0.375	1.250	1.227	0.920
1597(-)	2.500	2.060	0.750	0.375	0.398	0.625	5/16-24	10-32	0.500	0.610	0.685	0.281	0.188	0.250	0.188	0.375	1.450	1.651	1.344

OPTIONAL PORTS



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.

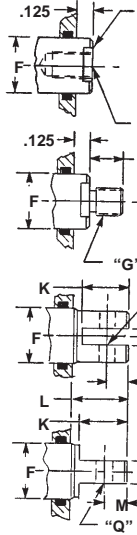
Ports May be IN-LINE for Travels From -6 Thru -20
 Add suffix -IL to the BASIC PART NUMBER.
 There is no added cost.

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

OPTIONAL ROD ENDS



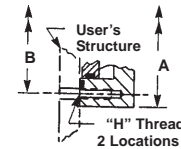
"J" Wrench Flats
 Internal Thread With Wrench Flats
 Add suffix -ITW To The BASIC PART NO.
 Add 5% to the BASE PRICE.

"G" Thd., 1-1/2 Dia., Depth
 External Thread With Wrench Flats
 Add suffix -ETW To The BASIC PART NO.
 Add 8% to the BASE PRICE

"Q" Ream
 Slotted Rod End
 Add suffix -SR TO THE BASIC PART NO.
 Add 8% to the BASE PRICE.

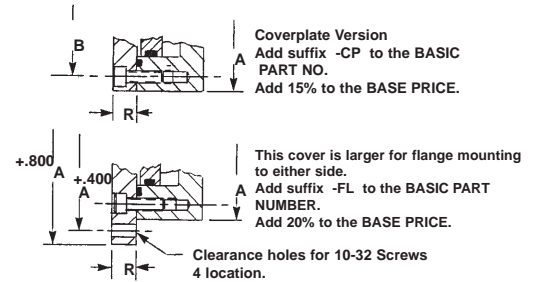
Rod End With Lug
 Add suffix -RL To The BASIC PART No.
 Add 8% to the BASE PRICE

MOUNTING OPTION



Internally threaded body
 Add suffix -T to the BASIC PART NO.
 There is no added cost.

OPTIONAL CONFIGURATIONS



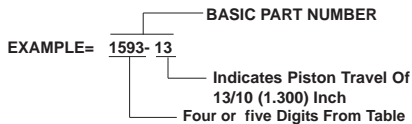
Coverplate Version
 Add suffix -CP to the BASIC PART NO.
 Add 15% to the BASE PRICE.

This cover is larger for flange mounting to either side.
 Add suffix -FL to the BASIC PART NUMBER.
 Add 20% to the BASE PRICE.

Clearance holes for 10-32 Screws 4 location.

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. Travel to -20 (2.000) 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.
 EXAMPLE= 1593-10-ETW
 External Rod Thread
 BASIC PART NO.

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 1593-15
 BASIC PART NO.
 Stainless piston prefix

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 1593-20
 BASIC PART NO.
 All STAINLESS STEEL Cylinder

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 1593-10mm
 Travel in millimeters
 From the table
 Metric prefix

HOW TO ORDER BUNA "N" SERVICE KITS

Specify the BASIC PART NO. followed by suffix -SK.
 EXAMPLE= 1593-1 -SK
 Indicates Buna "N" Service Kit
 BASIC PART NO.

HOW TO ORDER VITON SERVICE KITS

Specify the BASIC PART NO. followed by suffix -VSK
 EXAMPLE=1593-2 -VSK
 Indicates VITON service kit.
 BASIC PART NUMBER

HOW TO ORDER CYLINDERS WITH VITON SEALS

Add suffix -V to the BASIC PART NO.
 Add 10% to the BASE PRICE
 EXAMPLE= 1593-10 -V
 Indicates VITON Seals
 BASIC PART NO.

