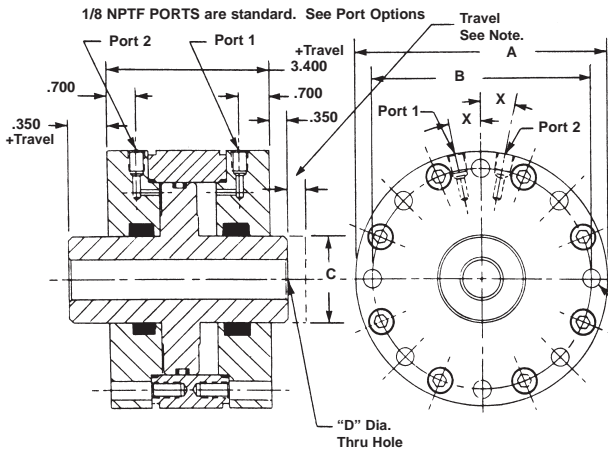


SHORT STROKE HYDRAULIC CYLINDERS, HI-ENERGY® SERIES 1500-LS-SP-FM

Double Acting-Double Ended Pistons With Thru Hole-Side Ported-Either Face Mounted



SPECIFICATIONS:

SERVICE, HYDRAULIC OIL
M.O.P., 1500 PSI
TEMPERATURE, -40 TO 200 deg. F
MATERIALS:
BODY, STAINLESS STEEL.
GUIDE COVERS, BEARING BRONZE
PISTONS, STAINLESS STEEL
FASTENERS, ALLOY STEEL, I.S.H.C.S.
ROD SEALS, LIP STYLE
PISTON HEAD SEAL, "O" RING

NOTES:

Dimensions are nominal in U.S. Customary units. Metric cylinders are dimensionally equivalent except for conversion in mounting details where threads, fasteners, clearance holes & counter-bores are to metric standards. See inside rear cover for a table of metric fastener conversion. There is no added cost for this metric modification. Angular relationship between PORTS 1 & 2 may be adjusted in increments of "G" degrees by removing cover bolts from one side, indexing the cover to a new location and re-torque to values shown in column "H".

Mounting Holes.
 "E" Internal Threads.
 "F" Locations, Equally Spaced
 On Front & Rear Faces.
 See mounting notes.

BASIC PART NUMBER	O.D. A	BOLT CIRCLE B	ROD DIA. C	HOLE DIA. D	THD. E	NO. F	DEG. G	TORQUE (IN. LB.) H	DEG. X	PISTON DIA. (IN.)	NET. PISTON AREA (SQ. IN.)
S-2373 - () - LS	3.000	2.375	0.875	0.513	1/4-28	4	90	75	22-1/2	1.750	1.804
S-2374 - () - LS	4.000	3.188	1.250	0.656	5/16-24	5	72	145	18	2.500	3.681
S-2375 - () - LS	5.000	4.188	1.500	0.813	3/8-24	6	60	265	15	3.500	7.854
S-2376 - () - LS	6.000	5.188	2.000	1.063	3/8-24	8	45	265	11-1/4	4.500	12.762

Nom. Force (lbs) = Pressure (psi) times Area (sq. in.)

International Port Options:

U.S.A - S.A.E. - 4 (7/16-20 Thd.)
 Straight thread with "O" ring sealing.
 Add suffix -SAE to the BASIC PART NUMBER.

BRITISH 1/8 - 28 BSPT port.
 Flared thread sealing.
 Add suffix -BSPT to the BASIC PART NUMBER.

BRITISH 1/8-28 BSPP port.
 Straight thread with "O" ring sealing.
 Add suffix -BSPP to the BASIC PART NUMBER.

METRIC M10 X 1 port per ISO 6149
 Straight thread with captive "O" ring sealing.
 Add suffix -M10 to the BASIC PART NUMBER.

OPTIONAL PORTS ARE FURNISHED AT NO ADDED COST.

Mounting Options:

Clearance holes for thru bolts of the size shown as "E" in the table.
 Add suffix -CL to the BASIC PART NUMBER.

Clearance holes with counter-bores in the cover which incorporates "PORT # 1" for internal socket head cap screws of size shown as "E" in the table.
 Add suffix -CB1 to the BASIC PART NUMBER.

Clearance holes with counter-bores in the cover which incorporates "PORT # 2" for internal socket head cap screws of size shown as "E" in the table.
 Add suffix -CB2 to the BASIC PART NUMBER.

OPTIONAL MOUNTING IS SUPPLIED AT NO ADDED COST

Rod End Options:

Thru hole pistons are normally supplied without wrench flats. Please consult the Factory for any special piston design.

Wiper Option:

Rod wipers are optional and are incorporated on both ends of a double ended cylinder.
 Add suffix -W to a BASIC PART NUMBER.
 Add 4% to the BASE PRICE.

Ordering Information:

HOW TO ORDER BASIC CYLINDERS:

A BASIC PART NUMBER consists of the letter "S" and four digits followed by a dash number to indicate piston travel in increments of 1/10 (0.100) inch followed by the suffix -LS. Travel to -40 (4.000) is standard.

EXAMPLE = S2373 - 8 - LS
 BASIC PART NUMBER
 Lip Seal Suffix
 Indicates Piston Travel
 Letter & Four Digits From the Table

HOW TO ORDER CYLINDERS WITH OPTIONS:

Add options to the BASIC PART NUMBER as suffixes in any order.

EXAMPLE = S2373 - 8 - LS - CB1
 C'bored cover option
 BASIC PART NUMBER

HOW TO ORDER ALL STAINLESS STEEL CYLINDERS:

Add another letter "S" as a prefix to a BASIC PART NO.
 Add 20% to the BASE PRICE.

EXAMPLE = S-S2373 - 8 - LS
 BASIC PART NUMBER
 All Stainless Steel Prefix

HOW TO ORDER METRIC CYLINDERS.

A BASIC PART NUMBER FOR METRIC CYLINDERS, consists of the letter "S" and a four digit number from the table with a prefix "M" followed by a dash number to indicate travel in millimeters and the suffix LS. Please see inside rear cover for metric thread and travel conversions. There is no added cost.

EXAMPLE = M-S2373 - 20 - LS
 Metric Prefix
 Travel in Millimeters
 Suffix
 From the table

HOW TO ORDER CYLINDERS WITH SEALS FOR TEMPERATURES TO 275 deg. F

Add the letter "H" as a prefix to a BASIC PART NO.
 Add 10% to the BASE PRICE

EXAMPLE = H-S2373 - 8 - LS
 BASIC PART NUMBER
 High Temperature Seals

HOW TO ORDER SERVICE KITS.

Specify the complete part number followed by the suffix "SK"

EXAMPLE = S2373 - 8 - LS - SK
 SERVICE KIT ONLY
 BASIC PART NUMBER

