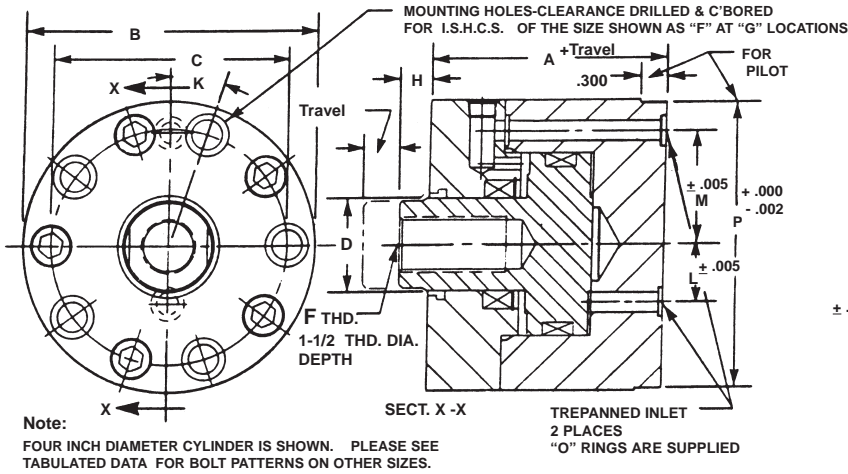


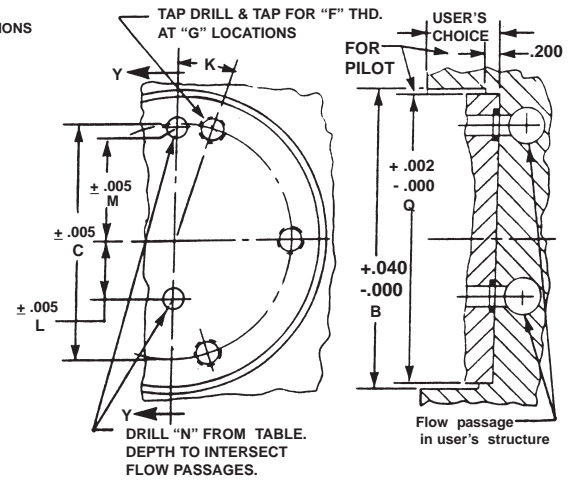
SHORT STROKE HYDRAULIC CYLINDERS - HI-ENERGY® SERIES 3000-LS-ET-PM

Double Acting-Single Ended Pistons-End Trepan Ported-Pocket Mounted™

PRODUCT DETAILS:



SUGGESTED MOUNTING DETAILS:



BASIC PART NUMBER	O.D.		B.C.	ROD DIA.	ROD THD.	THD.	NO.	W.F.	DEG.	OFF SET	OFF SET	DRILL	CLY. PILOT	POCKET PILOT	BORE DIA. (IN.)	EXT. PISTON AREA (SQ.IN.)	RETR. PISTON AREA (SQ.IN.)	
	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q			
HS6204(-) - LS	2.875	2.250	1.657	0.625	3/8-24	5/16-24	2	0.375	0.500	90	0.450	0.813	0.156	2.220	2.222	1.125	0.99	0.68
HS6205(-) - LS	2.875	2.500	1.907	0.750	3/8-24	5/16-24	2	0.375	0.625	90	0.438	0.938	0.156	2.470	2.472	1.375	1.48	1.04
HS6206(-) - LS	3.000	3.000	2.345	0.875	1/2-20	5/16-24	4	0.375	0.750	22.5	0.510	1.156	0.219	2.970	2.972	1.750	2.40	1.80
HS6207(-) - LS	3.125	3.500	2.782	1.125	5/8-18	3/8-24	4	0.407	0.938	22.5	0.640	1.344	0.219	3.470	3.472	2.125	3.54	2.55
HS6208(-) - LS	3.125	4.000	3.220	1.250	3/4-16	3/8-24	5	0.407	1.063	18	0.780	1.562	0.281	3.970	3.972	2.500	4.90	3.68
HS6209(-) - LS	3.375	4.500	3.657	1.375	3/4-16	7/16-20	5	0.407	1.125	18	0.880	1.750	0.281	4.470	4.472	2.875	6.49	5.00
HS6210(-) - LS	3.375	5.000	4.157	1.625	1-14	7/16-20	6	0.438	1.375	15	1.000	2.000	0.281	4.970	4.972	3.375	8.94	6.87
HS6211(-) - LS	3.375	5.500	4.595	1.750	1-14	1/2-20	6	0.438	1.500	15	1.040	2.188	0.281	5.470	5.472	3.750	11.04	8.63
HS6212(-) - LS	3.375	6.000	5.095	2.125	1 1/4-12	1/2-20	7	0.500	1.750	12.86	1.250	2.438	0.281	5.970	5.972	4.250	14.18	10.63

Ordering Information:

HOW TO ORDER BASIC CYLINDERS:
A BASIC PART NUMBER consists of two letters & 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 = HS6204 - 8 - LS

- HS6204 - BASIC PART NUMBER
- 8 - Lip seal suffix
- LS - Piston travel of 8/10 (0.800)

Two letters & four digits from the table

HOW TO ORDER CYLINDERS WITH OPTIONS:
Add options to the BASIC PART NUMBER as suffixes in any order.

EXAMPLE = HS6204 - 8 - LS - ETW

- ETW - External Rod Thd.

BASIC PART NUMBER.

HOW TO ORDER METRIC VERSIONS
A BASIC PART NUMBER FOR METRIC MODIFICATIONS consists of two letters & four digits from the table with a prefix "M" and a suffix to indicate piston travel in millimeters followed by the suffix -LS. Please see inside rear cover for travel and thread conversion.

EXAMPLE = M HS6204 - 10 - LS

- M - Metric prefix
- 10 - Travel in millimeters
- LS - Suffix

From the table

HOW TO ORDER SERVICE KITS
Specify the COMPLETE PART NO. followed by the suffix -SK.

EXAMPLE = HS6204 - 8 - LS - SK

- SK - Indicates service kit.

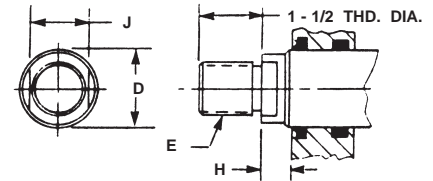
BASIC PART NO.

SPECIFICATIONS:

SERVICE, HYDRAULIC OIL
M.O.P., 3000 PSI
TEMPERATURE, -40 TO 275 deg. F
MATERIALS:
BODY, STAINLESS STEEL
GUIDE, BEARING BRONZE
PISTON, STAINLESS STEEL
FASTENERS, ALLOY STEEL, I.S.H.C.S
PISTON HEAD SEAL, "O" RING
BACKUP RINGS, TEFLON
ROD SEALS, LIP STYLE

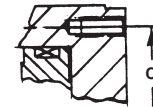
Rod End Options:

Rod end with External Thread and Wrench flats.
Add suffix -ETW to the BASIC PART NUMBER.
Add 8% to the BASE PRICE.



Mounting Option:

"F" internally threaded holes at "G" locations in the rear mounting face.
Add suffix -R to the BASIC PART NO.
There is no added cost.
Intended as an option where attachment from the rear is preferred.



Note:

DIMENSIONS ARE NOMINAL IN U.S. CUSTOMARY UNITS. METRIC VERSIONS ARE DIMENSIONALLY EQUIVALENT EXCEPT FOR CONVERSION IN MOUNTING DETAILS, WHERE FASTENERS, THREADS, CLEARANCE HOLES & COUNTER-BORES ARE TO METRIC STANDARDS. PLEASE SEE INSIDE REAR COVER FOR A TABLE OF U.S. CUSTOMARY TO METRIC FASTENER CONVERSION. THERE IS NO ADDED COST FOR THIS METRIC MODIFICATION. ALL INQUIRIES REGARDING MODIFICATIONS TO STANDARD CYLINDERS ARE WELCOME.