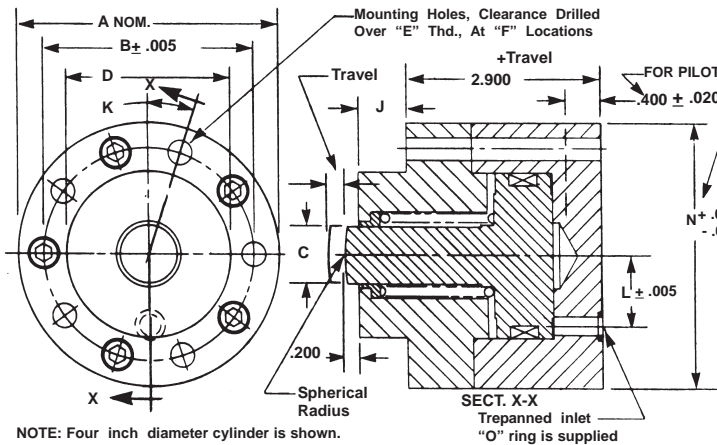


# SHORT STROKE HYDRAULIC CYLINDERS - HI-ENERGY® SERIES 1500-LS-ET-PM

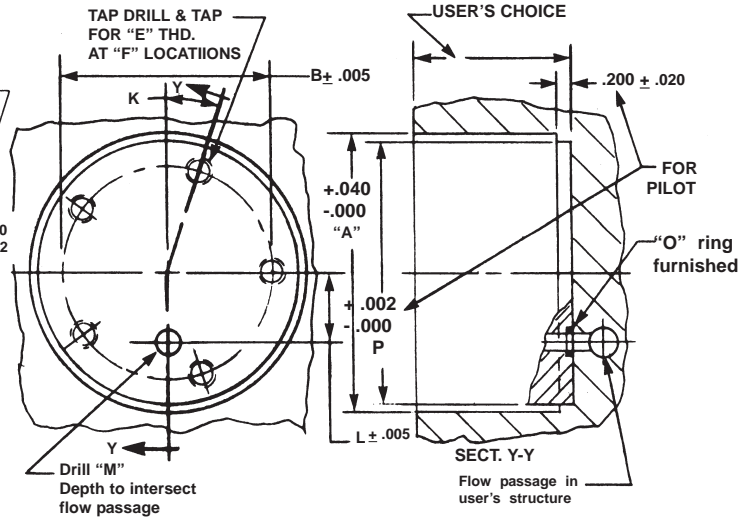
Single Acting-Spring Retracted-Single Ended Pistons-End Trepan Ported-Pocket Mounted™

### PRODUCT DETAILS:



NOTE: Four inch diameter cylinder is shown. See table for bolt patterns and related details for other sizes.

### SUGGESTED MOUNTING DETAILS:



BASIC PART NUMBER	O.D. A	B.C. B	ROD DIA. C	BOSS DIA. D	THD. E	NO. F	THD. G	WR FLATS H	DIM J	DEG. K	OFF SET L	DRILL M	CYL PILOT N	POCKET PILOT P	PISTON DIA. (IN.)	PISTON AREA (SQ.IN.)
S6164 (-)	3.000	2.375	0.750	1.750	1/4-28	4	1/2-20	0.625	0.725	22-1/2	0.727	3/16 (.188)	2.974	2.976	1.750	2.405
S6165 (-)	4.000	3.188	0.875	2.500	5/16-24	5	5/8-18	0.750	0.725	18	1.057	9/32 (.281)	3.974	3.976	2.500	4.908
S6166 (-)	5.000	4.188	1.125	3.250	3/8-24	6	3/4-16	0.875	0.875	15	1.557	9/32 (.281)	4.974	4.976	3.500	9.621
S6167 (-)	6.000	5.188	1.125	4.000	3/8-24	8	3/4-16	0.875	0.875	11-1/4	2.057	9/32 (.281)	5.974	5.976	4.500	15.904

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

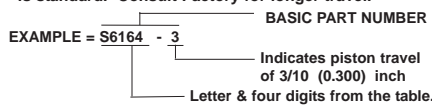
### SPECIFICATIONS:

SERVICE, HYDRAULIC OIL  
M.O.P., 1500 PSI  
TEMPERATURE. -40 TO +200 deg. F  
MATERIALS;  
COVER, BODY & PISTON, STAINLESS STEEL-  
BUSHINGS, SINTERED BRONZE  
SPRING, OIL TEMPERED STEEL WIRE  
SEALS, "O" RINGS  
FASTENERS, ALLOY STEEL, I.S.H.C.S.

### Ordering Information:

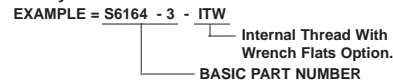
#### HOW TO ORDER BASIC CYLINDERS

A BASIC PART NUMBER consists of the letter and four digits followed by a dash number to indicate piston travel in increments of 1/10 (0.100) inch. Travel to -10 (1.000) is standard. Consult Factory for longer travel.



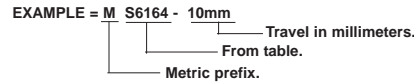
#### HOW TO ORDER CYLINDERS WITH OPTIONS

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



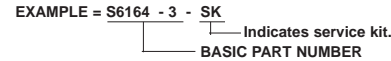
#### HOW TO ORDER METRIC VERSIONS

A BASIC PART NUMBER FOR THE METRIC VERSION consists of a letter and four digits from the table with a prefix "M" and a suffix to indicate travel in millimeters. See inside rear cover for thread and travel conversion.



#### HOW TO ORDER SERVICE KITS

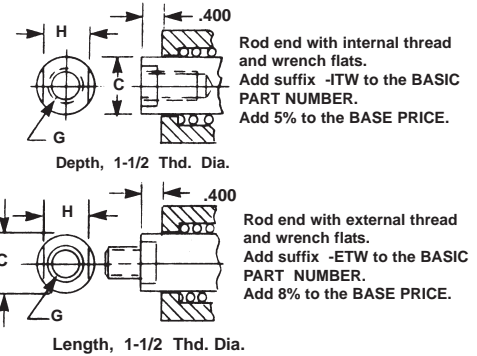
Specify the complete part number followed by the suffix -SK



#### HOW TO ORDER CYLINDERS FOR OPERATING AT TEMPERATURES TO 250 deg. F.

Upgrading springs to stainless steel and converting seals to a fluorocarbon compound will permit operating at higher temperatures. Please contact the Factory.

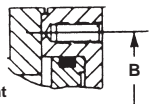
### OPTIONAL ROD ENDS:



SPRING FORCE FOR BASIC CYLINDERS IS SUFFICIENT TO FULLY RETRACT PISTONS. HIGHER SPRING FORCE MAY BE REQUIRED FOR RETRACTION WHERE ADDITIONAL LOAD IS ATTACHED TO THREADED ROD ENDS.

### Mounting Option:

"E" internally threaded holes at "F" 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.



### NOTES:

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.

