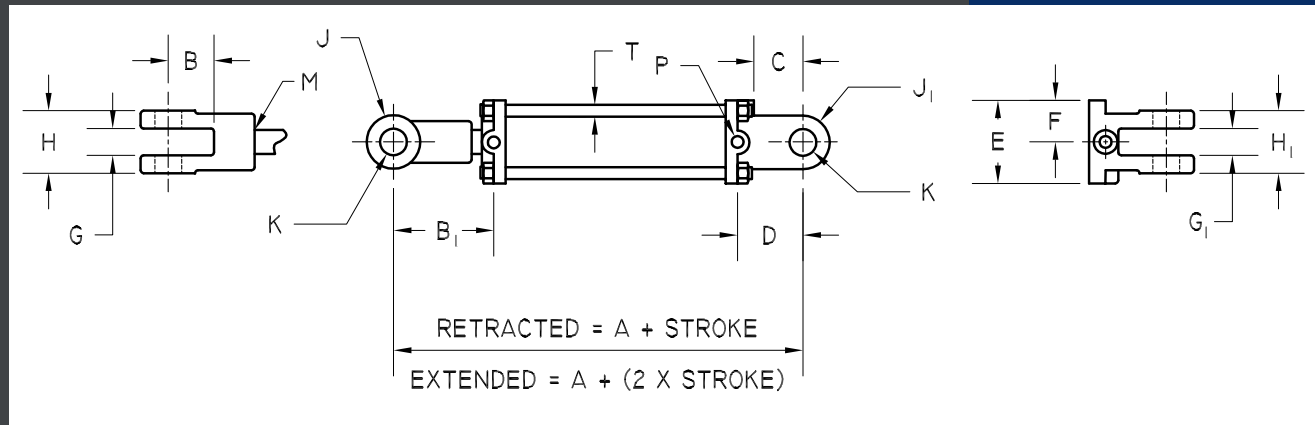


Dimensional Data



DIMENSIONS FOR 2500 PSI (TL); DIMENSIONS IN INCHES

BORE	2"	2 1/2"	2 3/4"***	3"	3 1/4"***	3 1/2"	3 3/4"***	4"	4 1/4"***	4 1/2"***	4 3/4"***	5"
A	10 1/4"	10 1/4"	10 1/4"	10 1/4"	10 1/4"	10 1/4"	10 1/4"	10 1/4"	10 1/4"	10 1/4"	12 1/4"	12 1/4"
B	2 1/8"	2 1/8"	2 1/8"	2 1/8"	2 1/8"	2 1/8"	2 1/8"	2 1/8"	2 1/8"	2 1/8"	2 1/8"	2 1/8"
B1	4 3/16"	4 3/16"	3 15/16"	3 15/16"	3 15/16"	3 15/16"	3 7/8"	3 7/8"	3 7/8"	3 7/8"	4 11/16"	4 11/16"
C	2 1/16"	2 1/16"	2 1/16"	2 1/16"	2 1/16"	2 1/16"	2 1/16"	2 1/16"	2 1/16"	2 1/16"	2 1/4"	2 1/4"
D	2 7/8"	2 7/8"	2 3/4"	2 3/4"	2 3/4"	2 3/4"	2 3/4"	2 3/4"	2 3/4"	2 3/4"	2 7/8"	2 7/8"
E	2 3/4"	3 1/8"	3 3/4"	3 3/4"	4 1/2"	4 1/2"	5 1/8"	5 1/8"	5 1/4"	5 1/4"	6.0	6.0
F	1 3/8"	1 9/16"	1 7/8"	1 7/8"	2 1/4"	2 1/4"	2 9/16"	2 9/16"	2 5/8"	2 5/8"	3.0	3.0
G	1 1/8"	1 1/8"	1 1/8"	1 1/8"	1 1/8"	1 1/8"	1 1/8"	1 1/8"	1 3/16"	1 3/16"	1 3/16"	1 3/16"
G1	1 1/8"	1 1/8"	1 1/8"	1 1/8"	1 1/8"	1 1/8"	1 1/8"	1 1/8"	1 1/8"	1 1/8"	1 5/16"	1 5/16"
H	2 1/2"	2 1/2"	2 1/2"	2 5/8"	2 5/8"	2 5/8"	2 5/8"	2 5/8"	3.0	3.0	3.0	3.0
H1	2 3/8"	2 1/2"	2 9/16"	2 9/16"	2 9/16"	2 9/16"	2 5/8"	2 5/8"	3.0	3.0	3 1/2"	3 1/2"
J	1.0	1.0	1.0	1 1/8"	1 1/8"	1 1/8"	1 1/8"	1 1/8"	1 5/16"	1 5/16"	1 5/16"	1 5/16"
J1	1.0	1.0	1.0	1.0	1 1/8"	1 1/8"	1 1/8"	1 1/8"	1 1/8"	1 1/8"	1 1/2"	1 1/2"
KTL	1 1/64"	1 1/64"	N/A	1 1/64"	N/A	1 1/64"	N/A	1 1/64"	N/A	1 1/64"	N/A	1 1/64"
KTH	1 1/64"	1 1/64"	N/A	1 1/64"	N/A	1 1/64"	N/A	1 1/64"	N/A	N/A	N/A	1 17/64"
KTP	1 1/64"	1 1/64"	1 1/64"	1 1/64"	1 1/64"	1 1/64"	1 1/64"	1 1/64"	1 1/64"	1 1/64"	1 1/64"	1 1/64"
M	1 1/8 - 12	1 1/8 - 12	1 1/8 - 12	1 1/4 - 12	1 1/4 - 12	1 1/4 - 12	1 1/4 - 12	1 1/4 - 12	1 1/2 - 12	1 1/2 - 12	1 1/2 - 12	1 1/2 - 12
PTL	3/8"	3/8"	N/A	1/2"	N/A	1/2"	N/A	1/2"	N/A	1/2"	N/A	1/2"
PTH	3/4-16	3/4-16	N/A	3/4-16	N/A	3/4-16	N/A	3/4-16	N/A	3/4-16	N/A	3/4-16
PTH	3/4-16	3/4-16	3/4-16	3/4-16	3/4-16	3/4-16	3/4-16	3/4-16	3/4-16	3/4-16	3/4-16	3/4-16
T	3/8"	3/8"	1/2"	1/2"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"	3/4"	3/4"

ASAE CYLINDERS

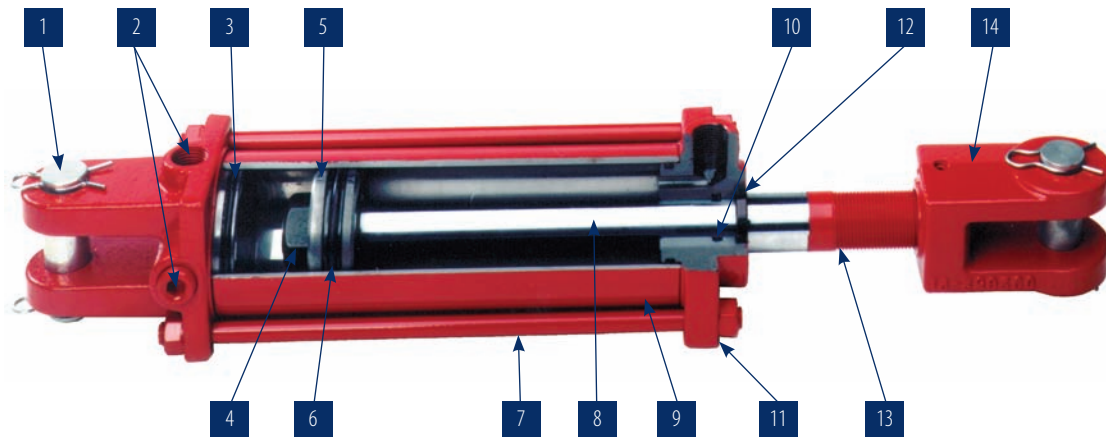
A ASAE-8	12 1/4"	12 1/4"	12 1/4"	12 1/4"	12 1/4"	12 1/4"	12 1/4"	12 1/4"	12 1/4"	12 1/4"	12 1/4"	12 1/4"
A ASAE-16	15 1/2"	15 1/2"	15 1/2"	15 1/2"	15 1/2"	15 1/2"	15 1/2"	15 1/2"	15 1/2"	15 1/2"	15 1/2"	15 1/2"
B1 ASAE-8	6 3/16"	6 3/16"	5 15/16"	5 15/16"	5 15/16"	5 15/16"	5 7/8"	5 7/8"	5 5/8"	5 5/8"	4 11/16"	4 11/16"
B1 ASAE-16	9 7/16"	9 7/16"	9 3/16"	9 3/16"	9 3/16"	9 3/16"	9 1/8"	9 1/8"	8 7/8"	8 7/8"	7 15/16"	7 15/16"
K ASAE-8	1 1/64"	1 1/64"	1 1/64"	1 1/64"	1 1/64"	1 1/64"	1 1/64"	1 1/64"	1 1/64"	1 1/64"	1 1/64"	1 1/64"
K ASAE-18	1 17/64"	1 17/64"	1 17/64"	1 17/64"	1 17/64"	1 17/64"	1 17/64"	1 17/64"	1 17/64"	1 17/64"	1 17/64"	1 17/64"

Note: Rod Clevis Threads are UNF -- Note: PTL = NPTF Ports -PTH = 3/4-16 UNF ORB Ports -PTP = 3/4-16 UNF ORB Ports

*Cylinder Column Load - Column strength loading normally affects all types of longer stroke cylinders. Affected cylinders should not be operated beyond these limits as the cylinder rod may buckle or bend causing failure. Stroke limitation applies to compressive loading only. Applications that fall outside the noted parameters, contact SPENCER FLUID POWER directly for further assistance.

**FACTORY ORDER

Cylinder Cut Away



- PINS & RETAINERS** - High tensile steel, zinc plated to prevent corrosion, comes with hair pin retainers.
- PORTS** - Double ported NPT for greater flexibility of assembly. Unless otherwise stated, cylinders assembled with ports inline.
- TUBE SEAL** - 90 durometer o-ring with anti-extrusion back-up washer to prevent leakage under high pressure and cycle loading.
- PISTON NUT** - Heavy duty, torqued, self locking piston nut holds piston in place under high cycle loading.
- PISTON** - Ductile iron, precision machined providing a malleable bearing surface for extended cylinder life.
- PISTON SEAL** - 90 durometer o-ring with anti-extrusion back-up washers provide sealing under high load conditions.
- TIE-RODS** - High tensile steel with rolled threads to prevent failure under high pressure.
- CYLINDER SHAFT** - 1045 high tensile steel, hard chrome plated shaft provides extended cylinder life in harsh applications. Rolled threads on shank and clevis end for higher strength and improved wear resistance.
- TUBE** - Precision finished skive and burnished heavy wall steel tubing for extended seal and cylinder life.
- ROD SEAL** - Polyurethane Ucup providing long wearing, positive seal.
- ROD CAP & CLEVIS CAP** - Ductile iron, comes with drilled oil passages, offering increased bearing surface for high shock and side load applications.
- ROD WIPER** - Heavy duty metal encased Nitrile, preventing contaminants from entering cylinder.
- THREAD SHAFT** (on ASAE cylinders)
- To accept optional mechanical stroke control, on a 8" stroke ASAE cylinders only.
NOTE: Not applicable to 5" bore cylinders.
- ROD CLEVIS** - Ductile iron, comes with 360 degree thread contact area and positive set screw locking device able to withstand continuous high load without wear or fracture.