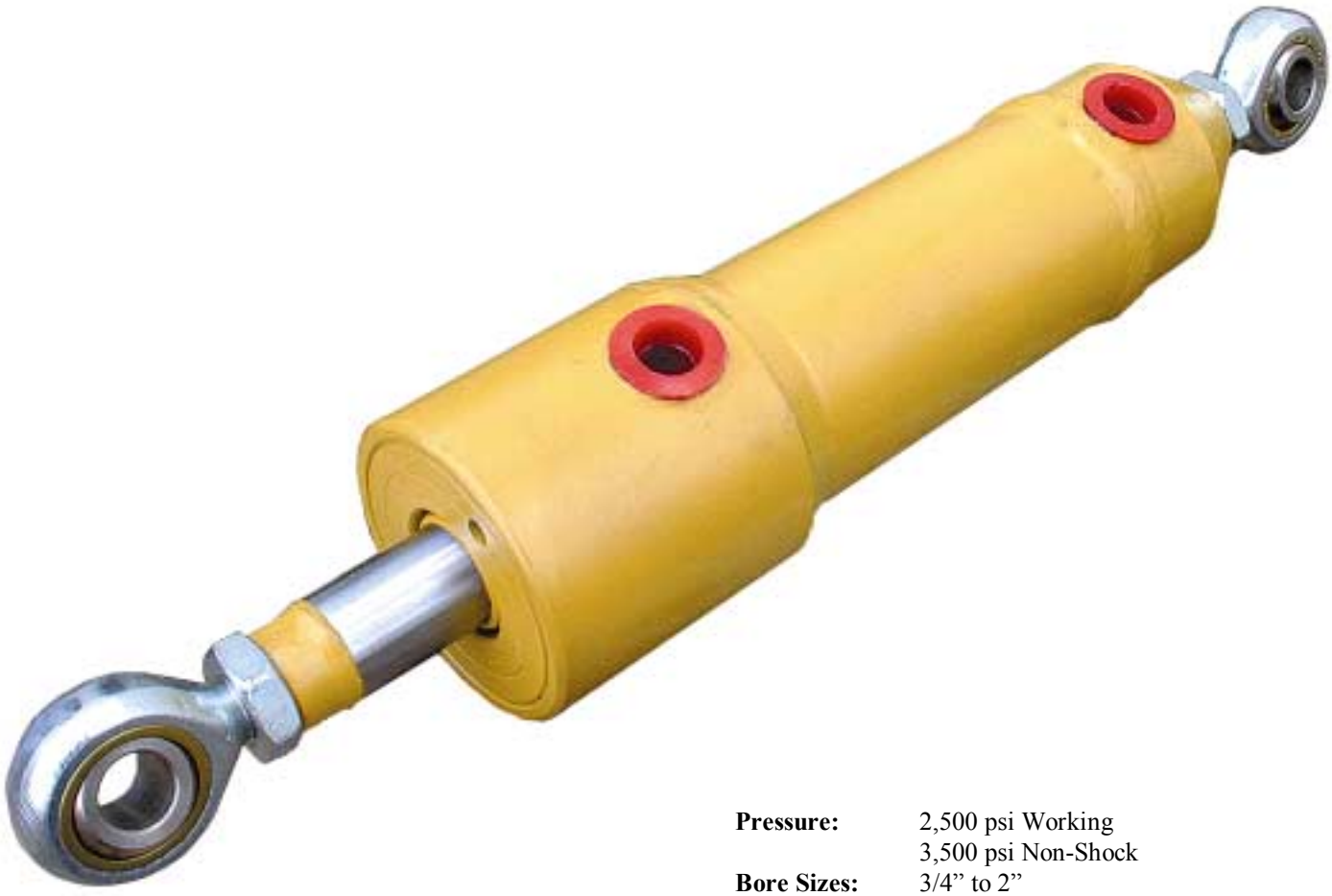
Series MIT Hydraulic Cylinder

Miniature Internal Thread



Pressure:	2,500 psi Working 3,500 psi Non-Shock
Bore Sizes:	3/4” to 2”
Rod Sizes:	3/8” to 1”
Ports:	1/16” to 3/8” NPT
Attachments:	Spherical Bearings Clevis Cross Hole

SEALUM INDUSTRIES LTD.
730 Eaton Way, Annacis Business Park
Delta, B.C. Canada V3M 6J9
Phone: (604) 521-1170 Toll Free 1-800-928-1170
Fax: (604) 522-0070 Website: www.sealum.com

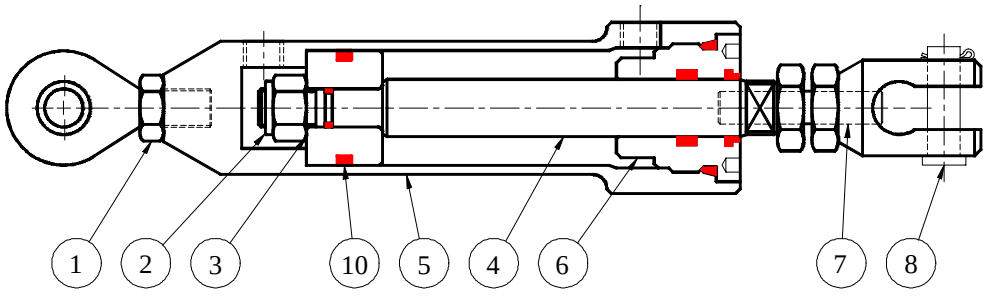
Series MIT Cylinder

Our Series **MIT** is our **M**iniature **I**nternal **T**hread hydraulic cylinder. It's a welded construction cylinder with an internal threaded gland rated for 3,000 psi working pressure and 4,000 psi non-shock pressure.

To strengthen the open end of the cylinder, a thick ring is welded to the barrel to carry the internal thread and port. Both ports are machined into the cylinder barrel itself, which means localized weld distortion and the stress concentration that arises from welding half couplings for ports are eliminated. The internal threads that hold the gland will not corrode since they are constantly submersed in oil. To accommodate our customers wide range of requirements, we manufacture the barrel and rod to order for every hydraulic cylinder to provide the exact stroke and pin to pin dimensions as required. Various combinations of mounting accessories can also be installed onto the cylinder to suit most applications. Other rod materials and mounting styles as needed, such as trunnion and flange mount, are available on request.

All MIT cylinders have National Pipe Thread (NPT) ports. The blind end port is normally placed at 90° to the center-line of a fixed pin axis, at the 12 o'clock position. The clevis style of blind end always has two ports, one in line with the rear port and one that is at 90° to this port.

Whenever possible, spherical bearings mounts should be used on both ends of the cylinders. This will reduce any mounting misalignment and side loading that may be introduced into the cylinder. This type of loading should definitely be avoided on cylinders with small diameter rods such as used on this series.

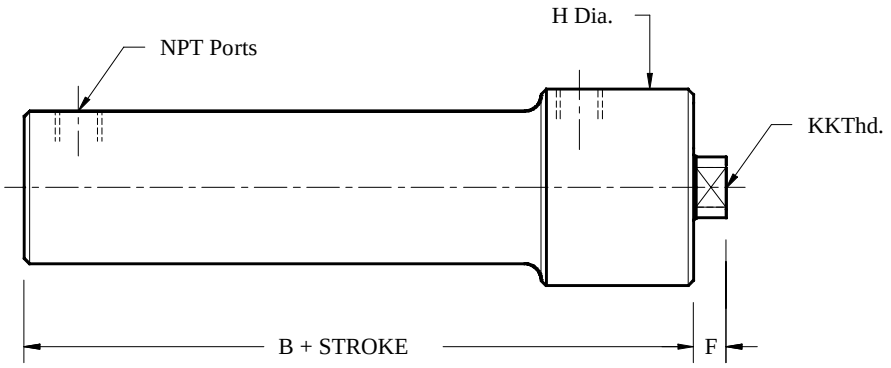


PART NUMBERS		Item 1	Item 2	Item 3	Item 4	Item 5	Item 6	Item 7	Item 8	Items 10
Bore	**Rod**	**Jam Nut**	**Lock Nut**	**Piston**	**Rod**	**Barrel**	**Gland**	**Stud**	**Pin**	**Seal Kit**
3/4	**3/8**	B3022-4	12714	B3405-8	Part Number is Model number and Stroke Followed by: B for barrel R for rod		B3704	B2078-4-4	B3708-4	12696
1	**1/2**	B3022-5	12715	B3405-10			B3460	B2078-5-5	B3708-5	12697
1 1/4	**5/8**	B3022-6	12716	B3405-13			B3408	B2078-6-6	B3708-6	12495
1 1/2	**3/4**	B3022-8	12717	B3405-15			B3456	B2078-8-8	B3708-8	12698
1 3/4	**7/8**	B3022-10	12718	B3405-18			B3454	B2078-10-10	B3708-10	12713
2	**1**	B3022-12	12719	B3405-20			B3368	B2078-12-12	B3708-12	12712

SEALUM INDUSTRIES LTD.
730 Eaton Way, Annacis Business Park
Delta, B.C. Canada V3M 6J9
Phone: (604) 521-1170 Toll Free 1-800-928-1170
Fax: (604) 522-0070 Website: www.sealum.com

Series MIT Cylinder – Basic

See the Accessories section of the catalogue for rod end & blind end options. The 'CD' (Pin Dia), the 'F' (Rod Extension) and 'KK' (Thread) dimensions given are standard but they can be changed to suit any special requirements. Threaded and welded ends are both available.



Bore	Rod	B	F	H	NPT	KK THD	CD
3/4	**3/8**	2.50	0.25	1.25	1/8	1/4-28	0.25
1	**1/2**	2.75	0.25	1.50	1/8	5/16-24	0.31
1 1/4	**5/8**	3.00	0.38	1.88	1/8	3/8-24	0.38
1 1/2	**3/4**	3.69	0.38	2.25	1/4	1/2-20	0.50
1 3/4	**7/8**	3.75	0.38	2.50	1/4	5/8-18	0.63
2	**1**	4.38	0.56	3.00	3/8	3/4-16	0.75

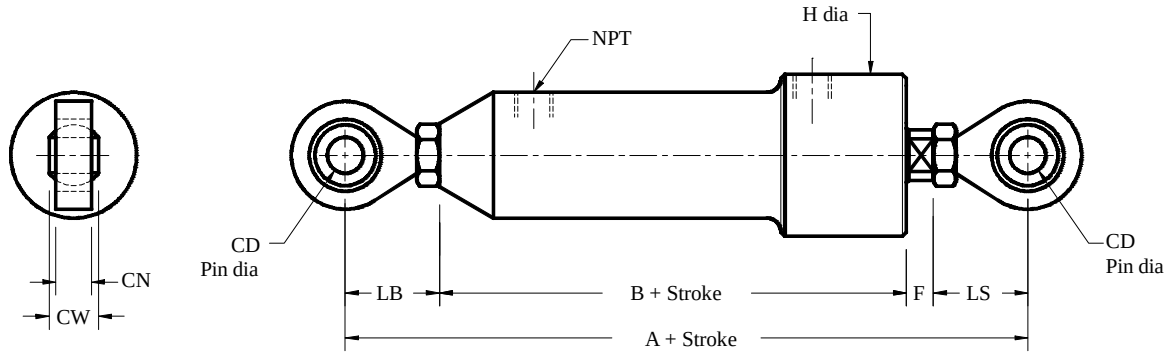
MATERIAL SPECIFICATIONS	
Barrel: DOM Tubing ASTM 513/519 Gr. 1020/1026	*Piston Seal:* Polyurethane with Nitrile Loader
Head: Ductile Iron ASTM A536 (65-45-12)	*Rod seal:* Polyurethane
Piston: Ductile Iron ASTM A536 (65-45-12)	*Wear Ring:* Reinforced Nylon
Rod: C1045 Chrome Plated	*Wiper:* Polyurethane
Accessories: Steel CSA G40-21 Gr. 44W	*O-Ring:* Nitrile
	Back-Up: Nitrile

Seal Temperature Range: -65º F to 225º F (-54º C to 107º C)

SEALUM INDUSTRIES LTD.
730 Eaton Way, Annacis Business Park
Delta, B.C. Canada V3M 6J9
Phone: (604) 521-1170 Toll Free 1-800-928-1170
Fax: (604) 522-0070 Website: www.sealum.com

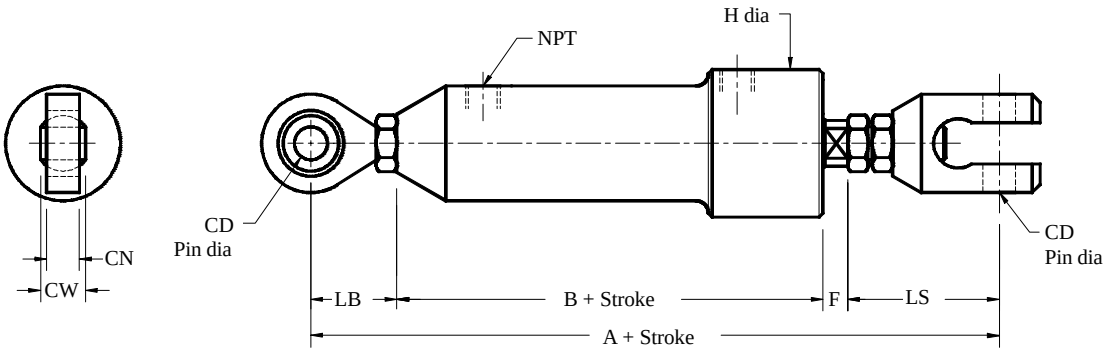
Series MIT Cylinder

Spherical Blind End / Spherical Rod End



Bore	Rod	CD	A	B	F	H	NPT	LB	LS	CN	CW
3/4	**3/8**	0.25	4.56	2.94	0.25	1.25	1/8	0.69	0.69	0.28	0.38
1	**1/2**	0.31	5.06	3.31	0.25	1.50	1/8	0.75	0.75	0.34	0.44
1 1/4	**5/8**	0.38	5.50	3.63	0.38	1.88	1/8	0.75	0.75	0.41	0.50
1 1/2	**3/4**	0.50	7.25	4.50	0.38	2.25	1/4	1.19	1.19	0.50	0.63
1 3/4	**7/8**	0.63	7.75	4.75	0.38	2.50	1/4	1.31	1.31	0.56	0.75
2	**1**	0.75	8.94	5.50	0.56	3.00	3/8	1.44	1.44	0.69	0.88

Spherical Bearing Blind End / Clevis Rod End

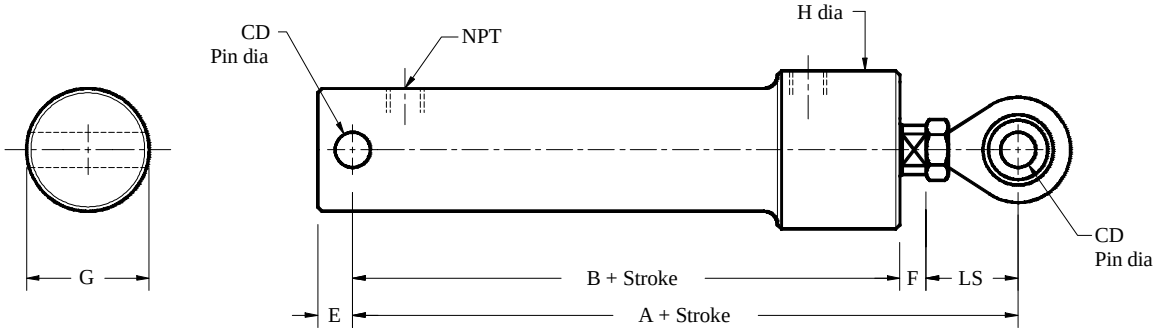


Bore	Rod	CD	A	B	F	H	NPT	LB	LS	CN	CW
3/4	**3/8**	0.25	5.25	2.94	0.25	1.25	1/8	0.69	1.38	0.28	0.38
1	**1/2**	0.31	5.88	3.31	0.25	1.50	1/8	0.75	1.56	0.34	0.44
1 1/4	**5/8**	0.38	6.50	3.63	0.38	1.88	1/8	0.75	1.75	0.41	0.50
1 1/2	**3/4**	0.50	8.38	4.50	0.38	2.25	1/4	1.19	2.31	0.50	0.63
1 3/4	**7/8**	0.63	9.13	4.75	0.38	2.50	1/4	1.31	2.69	0.56	0.75
2	**1**	0.75	10.50	5.50	0.56	3.00	3/8	1.44	3.00	0.69	0.88

SEALUM INDUSTRIES LTD.
730 Eaton Way, Annacis Business Park
Delta, B.C. Canada V3M 6J9
Phone: (604) 521-1170 Toll Free 1-800-928-1170
Fax: (604) 522-0070 Website: www.sealum.com

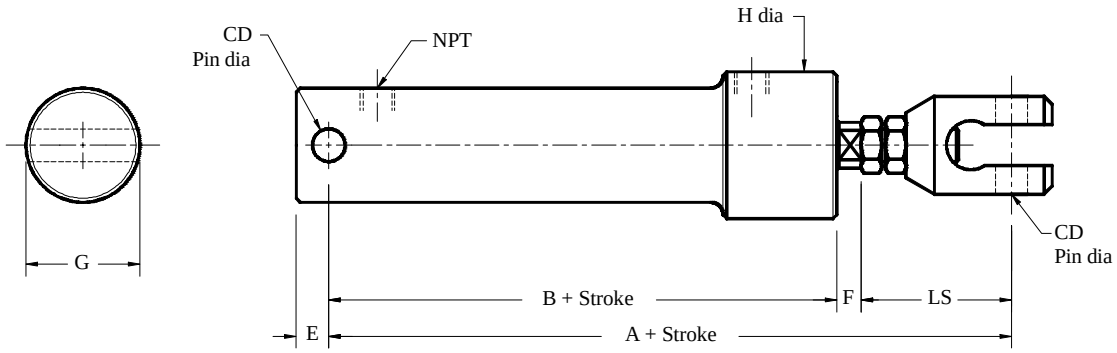
Series MIT Cylinder

Cross Hole Blind End / Spherical Rod End



Bore	Rod	CD	A	B	E	F	G	H	NPT	LS
3/4	**3/8**	0.25	3.56	2.63	0.25	0.25	1.00	1.25	1/8	0.69
1	**1/2**	0.31	3.88	2.88	0.31	0.25	1.25	1.50	1/8	0.75
1 1/4	**5/8**	0.38	4.25	3.13	0.38	0.38	1.50	1.88	1/8	0.75
1 1/2	**3/4**	0.50	5.50	3.94	0.50	0.38	1.75	2.25	1/4	1.19
1 3/4	**7/8**	0.63	5.75	4.06	0.63	0.38	2.13	2.50	1/4	1.31
2	**1**	0.75	6.69	4.69	0.69	0.56	2.38	3.00	3/8	1.44

Cross Hole Blind End / Clevis Rod End

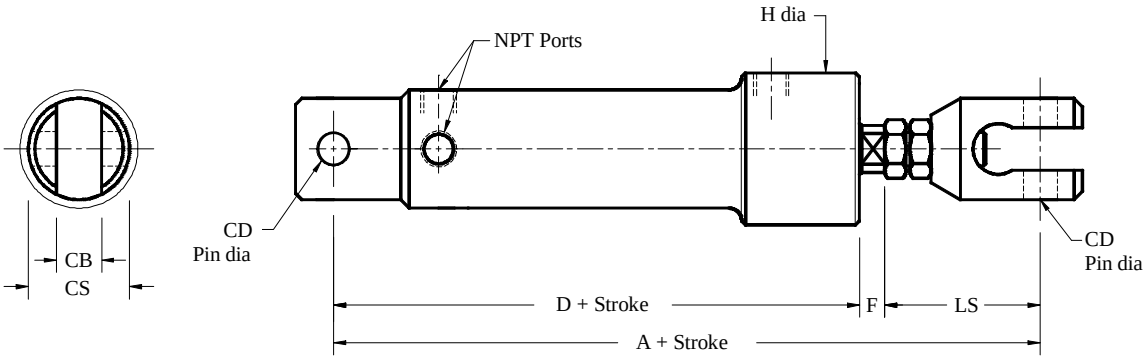


Bore	Rod	CD	A	B	E	F	G	H	NPT	LS
3/4	**3/8**	0.25	4.25	2.63	0.25	0.25	1.00	1.25	1/8	1.38
1	**1/2**	0.31	4.69	2.88	0.31	0.25	1.25	1.50	1/8	1.56
1 1/4	**5/8**	0.38	5.25	3.13	0.38	0.38	1.50	1.88	1/8	1.75
1 1/2	**3/4**	0.50	6.63	3.94	0.50	0.38	1.75	2.25	1/4	2.31
1 3/4	**7/8**	0.63	7.13	4.06	0.63	0.38	2.13	2.50	1/4	2.69
2	**1**	0.75	8.25	4.69	0.69	0.56	2.38	3.00	3/8	3.00

SEALUM INDUSTRIES LTD.
730 Eaton Way, Annacis Business Park
Delta, B.C. Canada V3M 6J9
Phone: (604) 521-1170 Toll Free 1-800-928-1170
Fax: (604) 522-0070 Website: www.sealum.com

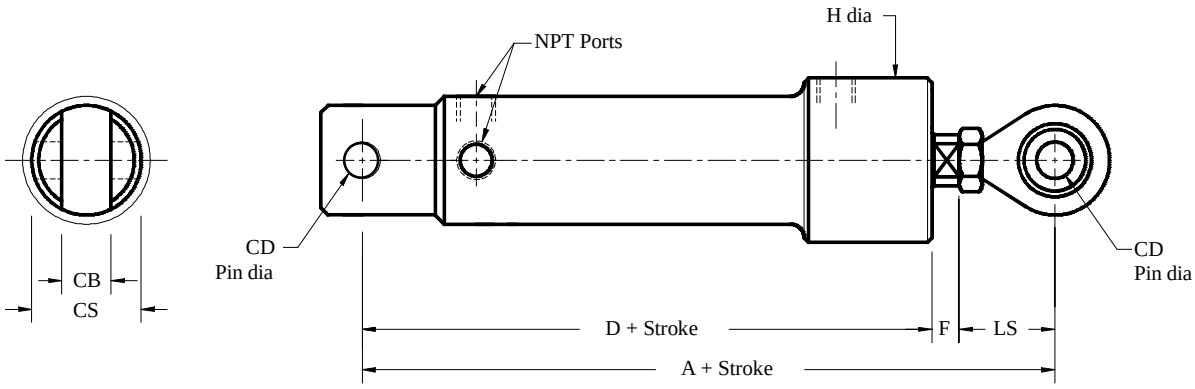
Series MIT Cylinder

Clevis Blind End / Clevis Rod End



Bore	Rod	CD	A	D	F	H	NPT	LS	CB	CS
3/4	**3/8**	0.25	4.81	3.19	0.25	1.25	1/8	1.38	0.38	0.81
1	**1/2**	0.31	5.38	3.56	0.25	1.50	1/8	1.56	0.45	0.94
1 1/4	**5/8**	0.38	6.00	3.88	0.38	1.88	1/8	1.75	0.51	1.19
1 1/2	**3/4**	0.50	7.50	4.81	0.38	2.25	1/4	2.31	0.66	1.47
1 3/4	**7/8**	0.63	8.06	5.00	0.38	2.50	1/4	2.69	0.76	1.69
2	**1**	0.75	9.31	5.75	0.56	3.00	3/8	3.00	0.88	1.97

Clevis Blind End / Spherical Rod End



Bore	Rod	CD	A	D	F	H	NPT	LS	CB	CS
3/4	**3/8**	0.25	4.13	3.19	0.25	1.25	1/8	0.69	0.38	0.81
1	**1/2**	0.31	4.56	3.56	0.25	1.50	1/8	0.75	0.45	0.94
1 1/4	**5/8**	0.38	5.00	3.88	0.38	1.88	1/8	0.75	0.51	1.19
1 1/2	**3/4**	0.50	6.38	4.81	0.38	2.25	1/4	1.19	0.66	1.47
1 3/4	**7/8**	0.63	6.69	5.00	0.38	2.50	1/4	1.31	0.76	1.69
2	**1**	0.75	7.75	5.75	0.56	3.00	3/8	1.44	0.88	1.97