



Series TH Hydraulic Cylinder hydraulic THumb



Pressure: 5,000 psi Working
Bore Sizes: 2.00" to 6.00"
Rod Sizes: 1.38" to 3.50"
Ports: ORB (3.50" bore and smaller)
Code #61 (4.00" bore and larger)
Attachments: Spherical Bearings

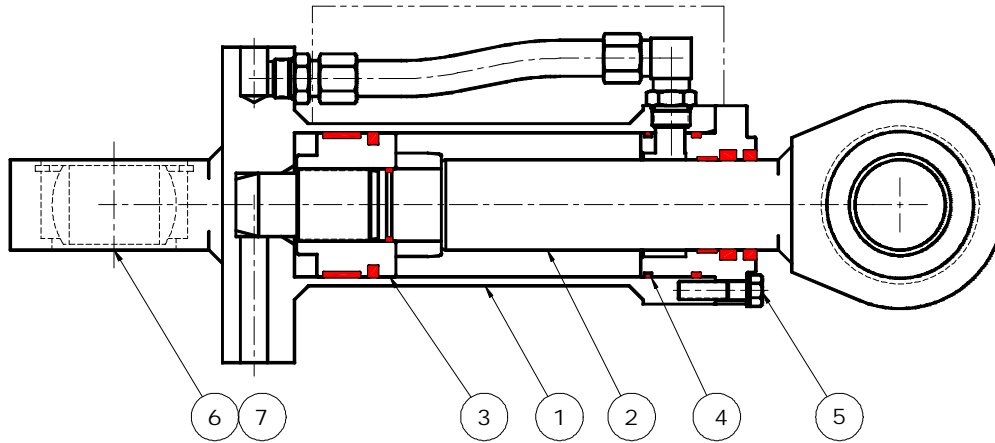
Guarded transfer hose
3.00" bore and larger

Series TH Cylinder

Our Series TH is designed specifically for hydraulic thumb applications on track mounted and wheeled excavators. Heavy duty construction, a guarded transfer hose and oversize spherical bearing mounts at both ends all contribute to long life and trouble free service in this rugged working environment.

FEATURES:

- Induction Hardened Chrome Plated Rod is standard.
- Heavy-duty piston is threaded and adhesive bonded to the rod.
- Large fixed cushions both ends are standard.
- Spherical bearings both ends are standard.
- Ports are Code 61 4-bolt flange on 4" bore and larger.
- Ports are ORB on 3 1/2" bore and smaller.
- Rated working pressure is 5000 psi.
- When retracting the rod end is the stop, not the piston, thereby reducing stress on the piston.
- Rugged construction with oversize pins, head bolts and thick wall barrels.
- The transfer hose is protected by a thick steel guard.



NOTE: picture shows the 4.00" bore and larger style of construc-

PART NUMBERS			Item 1	Item 2	Item 3	Item 4	Item 5	Item 6	Item 7
Bore	Model Number	*Seal Kit	Barrel	Rod	Piston	Head	Bolt Kit	Spherical Bearing	Snap Ring
2	TH20-(stroke)-14-H1281	11895	Part Number is model number and stroke followed by: B for barrel R for rod		B1655	B1678	11979	10334	12052
2 1/2	TH25-(stroke)-18-H1282	12083			B3869	B1680	11980	10334	12052
3	TH30-(stroke)-18-C1486	12337			B2098	B2774	12385	10803	10826
3 1/2	TH35-(stroke)-20-C1461	12338			B2988	B3150	12386	10804	11584
4	TH40-(stroke)-25-C1482	12223			B1802	B2149	12387	10806	10327
5	TH50-(stroke)-30-C1462	11809			B3165	B3151	12388	10806	10327
5 1/2	TH55-(stroke)-35-C1487	12335			B3186	B3167	12388	10228	11732
6	TH60-(stroke)-35-C1551	12336			B2095	B3224	12389	10228	11732

Series TH Cylinder

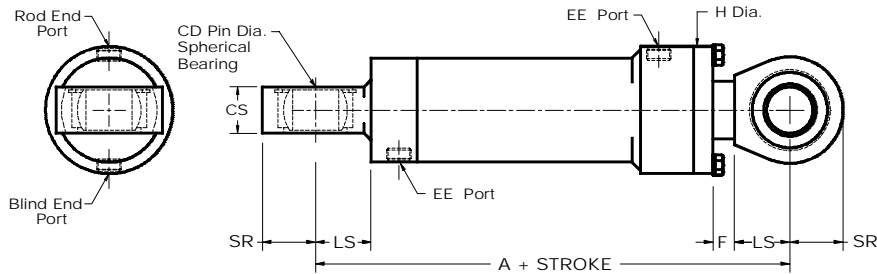


Figure 1. 2.00" and 2.50" bore cylinders

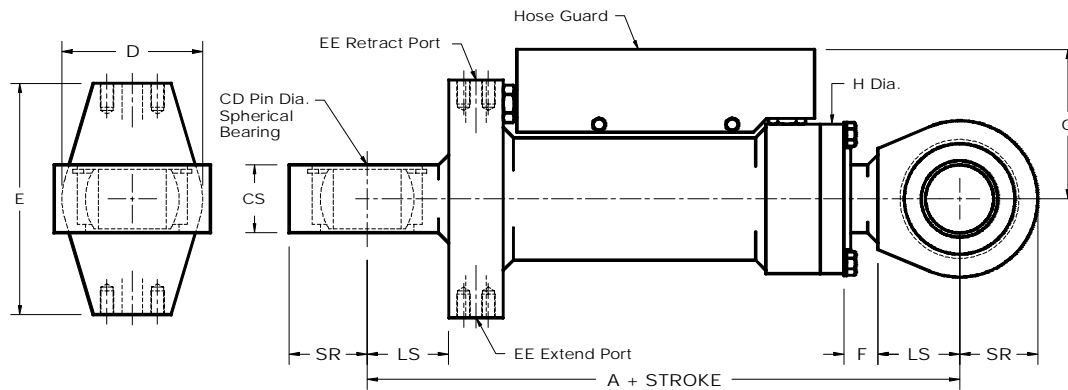


Figure 2. 3.00" bore and larger cylinders

Bore	Rod	A	D	E	EE	F	G	H	CD	LS	CS	SR
2	1 3/8	9.00	-	-	#8 ORB	0.50	-	3.25	1.00	1.50	1.25	1.31
2 1/2	1 3/4	9.50	-	-	#8 ORB	0.75	-	3.75	1.00	1.50	1.25	1.31
3	1 3/4	11.50	4.13	7.00	#8 ORB	0.75	4.75	4.50	1.50	2.25	1.75	2.00
3 1/2	2	13.00	4.88	8.00	#12 ORB	0.75	5.13	5.50	2.00	2.63	2.25	2.50
4	2 1/2	15.00	5.50	8.75	3/4" Code 61	1.63	5.38	6.00	2.50	3.00	2.50	2.88
5	3	15.25	6.50	10.25	3/4" Code 61	1.56	6.00	7.25	2.50	3.00	2.50	2.88
5 1/2	3 1/2	16.50	7.00	10.75	1" Code 61	0.69	6.25	8.00	3.00	3.75	2.75	3.63
6	3 1/2	17.25	7.50	11.25	1" Code 61	0.56	6.88	8.50	3.00	3.75	2.75	3.63

MATERIAL SPECIFICATIONS

<i>Barrel:</i> DOM Tubing ASTM 513/519 Gr. 1020/1026	<i>Piston Seal:</i> Filled Teflon with Nitrile Loader
<i>Head:</i> Ductile Iron ASTM A536 (65-45-12)	<i>Rod seal:</i> Polyurethane
<i>Piston:</i> Ductile Iron ASTM A536 (65-45-12)	<i>Wear Ring:</i> Reinforced Nylon
<i>Rod:</i> C1045 Induction Hardened Chrome Plated	<i>Wiper:</i> Polyurethane on Phosphated Steel
<i>Accessories:</i> Steel CSA G40-21 Gr. 44W	<i>O-Ring:</i> Nitrile
<i>Bolts:</i> SAE Grade 8	<i>Back-Up:</i> Nitrile

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

Series TH Cylinder

Upgrades

We have recently upgraded our thumb cylinder design. They are now rated for a 5,000 PSI working pressure (7500 psi non-shock) to accommodate the higher pressures used on modern mobile equipment. The old and new cylinders are interchangeable with each other, as they have the same mounting dimensions and porting. The new cylinders have thicker walls, larger bolts on the head gland and longer cushions. Parts will still be available for the older style cylinders.

New Style	Old Style	Bore	Rod	Pin / Pin Retracted	Spherical Bearing	Notes
TH20-(stroke)-14-H1281	H166	2	1 3/8	9.00 + Stroke	1.00	No transfer tube or guard
TH25-(stroke)-18-H1282	H350	2 1/2	1 3/4	9.50 + Stroke	1.00	No transfer tube or guard
TH30-(stroke)-18-C1486	C1238	3	1 3/4	11.50 + Stroke	1.50	
TH30-(stroke)-18-C1463	C1415	3	1 3/4	13.00 + Stroke	2.00	3.50" cyl. mounting dimensions.
TH35-(stroke)-20-C1461	C1215	3 1/2	2	13.00 + Stroke	2.00	
TH35-(stroke)-20-C1481	C1403	3 1/2	2	15.00 + Stroke	2.50	4.00" cyl. mounting dimensions.
TH40-(stroke)-25-C1482	C1216	4	2 1/2	15.00 + Stroke	2.50	
TH40-(stroke)-25-C1460	C1447	4	2 1/2	15.25 + Stroke	2.50	5.00" cyl. mounting dimensions.
TH50-(stroke)-30-C1462	C1217	5	3	15.25 + Stroke	2.50	
TH50-(stroke)-30-C1483	C1258	5	3	16.50 + Stroke	3.00	5.50" cyl. mounting dimensions.
TH55-(stroke)-35-C1487	C1218	5 1/2	3 1/2	16.50 + Stroke	3.00	
TH60-(stroke)-35-C1551	C1235	6	3 1/2	17.25 + Stroke	3.00	

Commonly Stocked Thumb Cylinders

Model Number	Bore	Stroke	Rod	Weight
TH35-36-20-C1461	3 1/2	36	2	160 lbs
TH40-40-25-C1482	4	40	2 1/2	215 lbs
TH40-45-25-C1482	4	45	2 1/2	225 lbs
TH50-40-30-C1462	5	40	3	305 lbs
TH50-45-30-C1462	5	45	3	320 lbs
TH55-44-35-C1487	5 1/2	44	3 1/2	450 lbs