

CHE/CHD Series Physical Differences vs CHL/CHH



ENGINEERING YOUR SUCCESS.

October 29, 2013

CHE/CHD vs CHL/CHH

Rated Operating Pressure (Bar)

Bore	CHE	CHD	CHL	CHH
20	140	207	100	160
25	140	207	100	160
32	140	207	100	160
40	140	207	100	160
50	120	207	100	160
63	100	207	100	160
80	100	207	100	160
100	100		100	

CHE/CHD vs CHL/CHH

Body Physical Dimensions

- “E” dimension is the same except 20mm & 25mm bores as follows:

Bore	CHE	CHD	CHL/CHH
20	43mm x 45mm	44mm x 44mm	44mm x 44mm
25	49mm x 49mm	50mm x 50mm	50mm x 50mm

- Body length “LB”:
 - Single rod - OAL same on all sizes except 3mm shorter on CHE/CHD 32mm bore size (same as SMC).
 - Double Rod (K) – CHE/CHD bodies are same length as single rod; CHE/CHD bodies are shorter than CHL/CHH on all sizes.
 - See following slide for length comparison.

CHE/CHD vs CHL/CHH

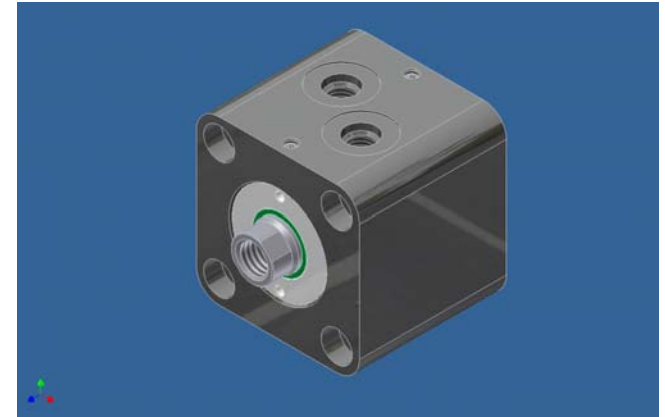
Body Length Comparison

Bore	CHE/CHD "LB" Dim.		CHL/CHH "LB/LD" Dim.		Difference in Length CHE/CHD vs CHH/CHL	
	Single Rod	Double Rod	Single Rod	Double Rod	Single Rod	Double Rod
20	43	43	43	54	0	-11
25	45	45	45	56	0	-11
32	51	51	54	72	-3	-21
40	55	55	55	72	0	-17
50	60	60	60	75	0	-15
63	67	67	67	82	0	-15
80	78	78	78	95	0	-17
100	96	96	96	108	0	-12

CHE/CHD vs CHL/CHH

T, TR & TN

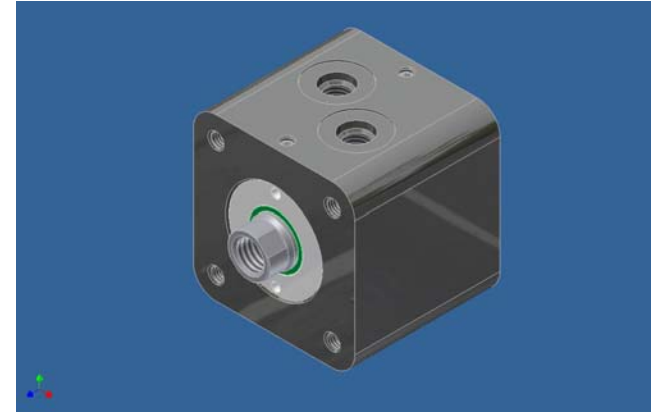
Thru-Bolt Mounts



- Single Rod – T Mounts are interchangeable.
(Note: 32mm bore is 3mm shorter in length.)
- Double Rod - all CHE/CHD's are shorter in length – body length is the same as single rod.
- TR & TN Piloted Mounts were not offered on CHL.

CHD vs CHH

A, M, AR, MR, AN, & MN Tapped Face Mounts

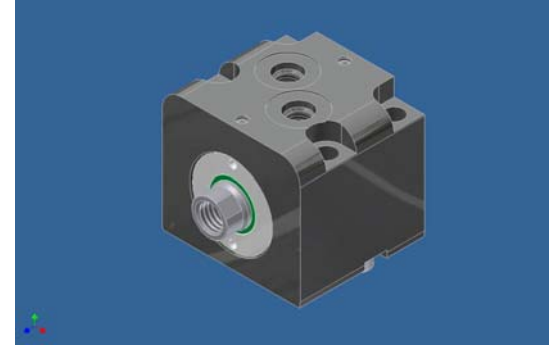


- New mounts available only as options on CHD.
- Tapped Face Mounts were not offered as options on CHH.

CHD vs CHH

C & CN

Foot Mounts



- Single Rod End - CHD C Mount interchanges with CHH C Mount.
- Double Rod End - CHD C Mount body is shorter and therefore does not interchange with CHH C Mount.
- CN Mount was not an option on the CHH.

CHE/CHD vs CHL/CHH

J & H Mounts

- J & H mounts are dimensionally interchangeable with the only exception being minor differences in flange thickness on the following sizes:

Bore	Flange Thickness Exceptions	
	CHE/CHD	CHL/CHH
25	12	10
32	12	15
40	16	20

CHE vs CHL

CA Foot Mounts

- CHE CA Mount does not interchange with CHL/CHH CA Mount.
- CHE CA Mount offers reduced OAL.
- On existing service replacement, customer could order basic T Mount CHE and re-use old CHL/CHH CA brackets and bolts; this requires adjusting the body length on the 32 mm bore and on all double rod units.

CHE/CHD vs CHL/CHH

Ports

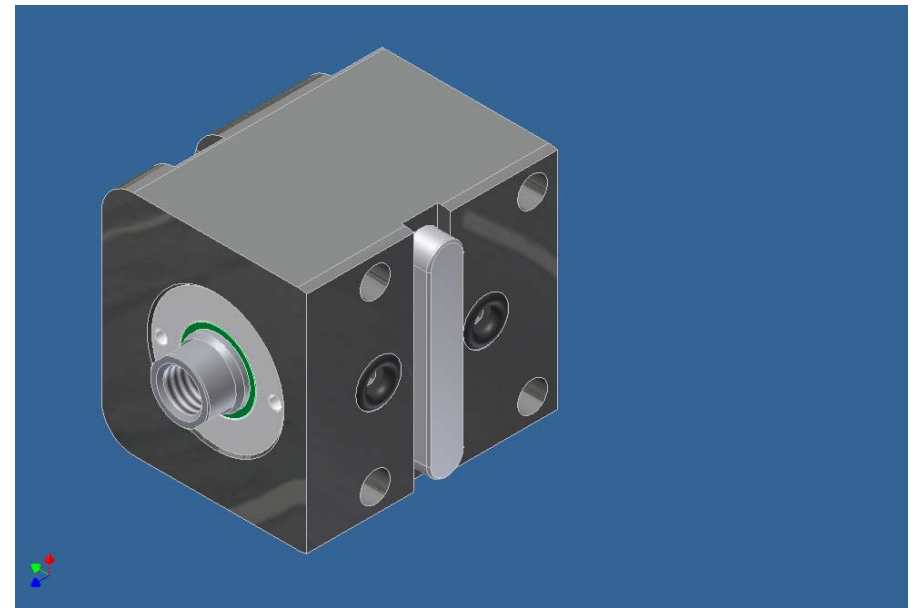
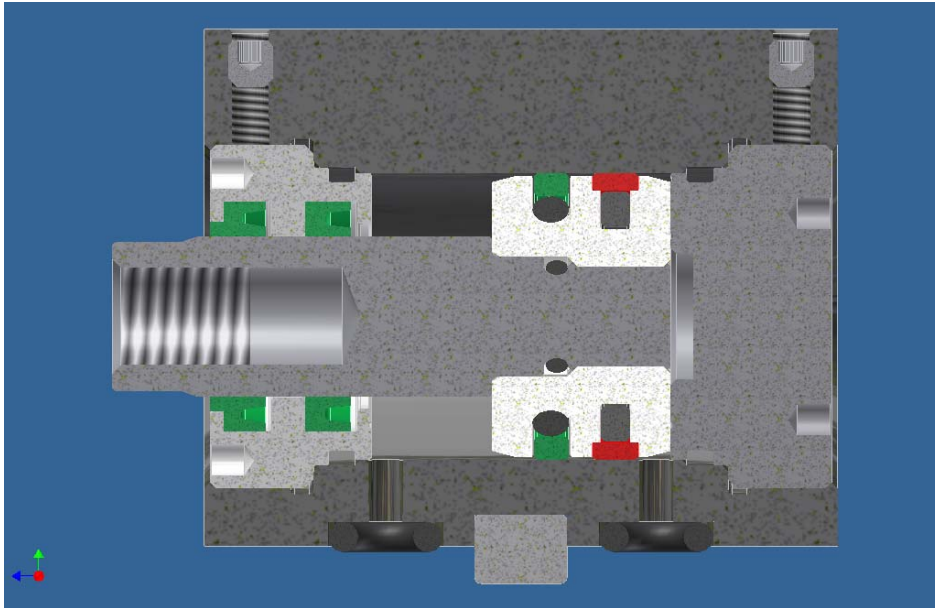
- Port locations differ on all sizes vs CHL/CHH.
- SAE, NPT and BSPP ports available as standard on all CHE/CHD sizes.
- Manifold port option available on CHD.

Bore	CHE/CHD Ports			CHL/CHH Ports		
	SAE	NPT	BSPP	SAE	NPT	BSPP
20	2	1/8	1/8	NA	1/8	NA
25	2	1/8	1/8	NA	1/8	NA
32	4	1/4	1/4	4	1/4	NA
40	4	1/4	1/4	4	1/4	NA
50	4	1/4	1/4	4	1/4	NA
63	4	1/4	1/4	4	1/4	NA
80	6	3/8	3/8	6	3/8	NA
100	6	3/8	3/8	6	3/8	NA

CHD vs CHH

“M” Manifold Ports

- CHD manifold port option “M” was not available on CHH.
 - Note: Keyway location “KM” changes on 50mm & 63mm bores with “M” option.



CHE/CHD vs CHL/CHH

Rod Ends

- All CHE/CHD rods have a NA turndown, CHL/CHH rods do not.
- "W" is the same on all sizes.
- Metric "4M", "9M", and "55M" and imperial "4A" rod ends were not offered as standard on the CHL/CHH.
- 5A rod end was eliminated as a standard offering – can still be ordered as "3A".

CHE/CHD vs CHL/CHH

Rod Ends

- Imperial rod ends compare (with differences highlighted) as follows:

Bore	Female 9A				Male 8A			
	CHE/CHD		CHL/CHH		CHE/CHD		CHL/CHH	
	KK	A	KK	A	CC	A	CC	A
20	5/16-24	10	1/4-20	10	3/8-24	16	7/16-20	15
25	3/8-24	12	3/8-24	12	1/2-20	18	1/2-20	18
32	7/16-20	15	7/16-20	15	9/16-18	25	9/16-18	25
40	5/8-18	20	5/8-18	20	3/4-16	30	3/4-16	30
50	3/4-16	24	3/4-16	24	7/8-14	35	7/8-14	35
63	1-14	30	1-14	33	1 1/4-12	45	1 1/8-12	45
80	1 1/4-12	35	1 1/4-12	36	1 1/2-12	56	1 3/8-12	60
100	1 1/2-12	45	1 7/8-12	45	1 3/4-12	70	1 1/2-12	75

CHE/CHD vs CHL/CHH

Rod Ends

- On double rod units, CHE/CHD rods have minimum rod extensions on the rod end 2 (v-notch) side of the cylinder (see catalog page 41).