

HI Connect

MANUAL EXTERNAL SEALING CONNECTOR



Connects to:

Straight Expanded Flared Swaged Beaded



Barbed End Form NPT SAE Metric



Highlights

- ✓ Test, fill, flush, and plug capabilities
- ✓ Adjustable seal compression
- ✓ Less/no tubing required
- ✓ Non-interference seal fit
- ✓ Long seal life
- ✓ Cut and abrasion resistant seal
- ✓ Easy seal replacement

Specifications

Body style	HIF – fill port
	HIH – fill port with handle
	HI – plug style
Test pressure	Vacuum – 120 psig (8.3 bar) maximum
Pilot pressure	N/A
Test media	Air, helium, nitrogen, water
Hole size options	0.290 – 3.005 in.
	1/4 – 2 in. NPT
	5/16 – 2-1/4 in. SAE
	M8 – M42 Metric
Materials of construction	Anodized aluminum and stainless steel
Seal material	Urethane
Actuation method	Manual – cam lever
Connect weight	0.5 – 3.5 lbs. (0.2 – 1.6 kg)

Accessories



[Spare Seal](#)
See website.



[Main Seal Kit](#)
See website.



[HIF Body Only](#)
See website.

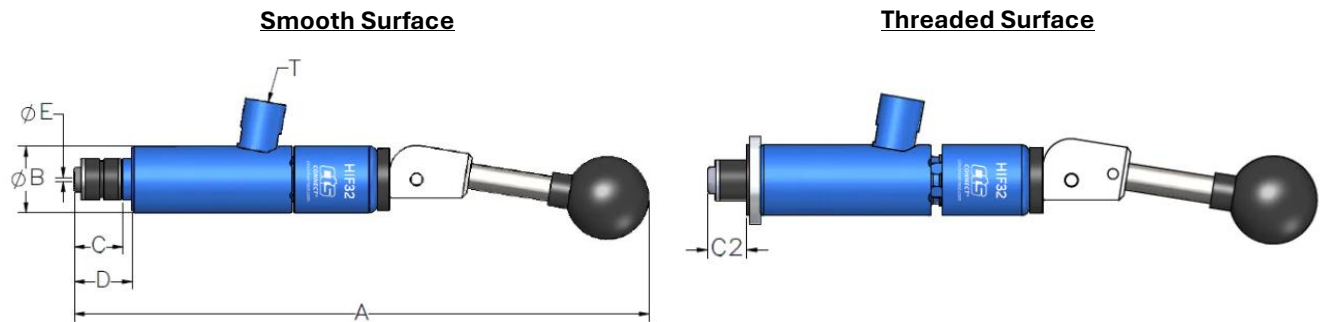


[HIH Body Only](#)
See website.



[HI Body Only](#)
See website.

HIF Dimensions

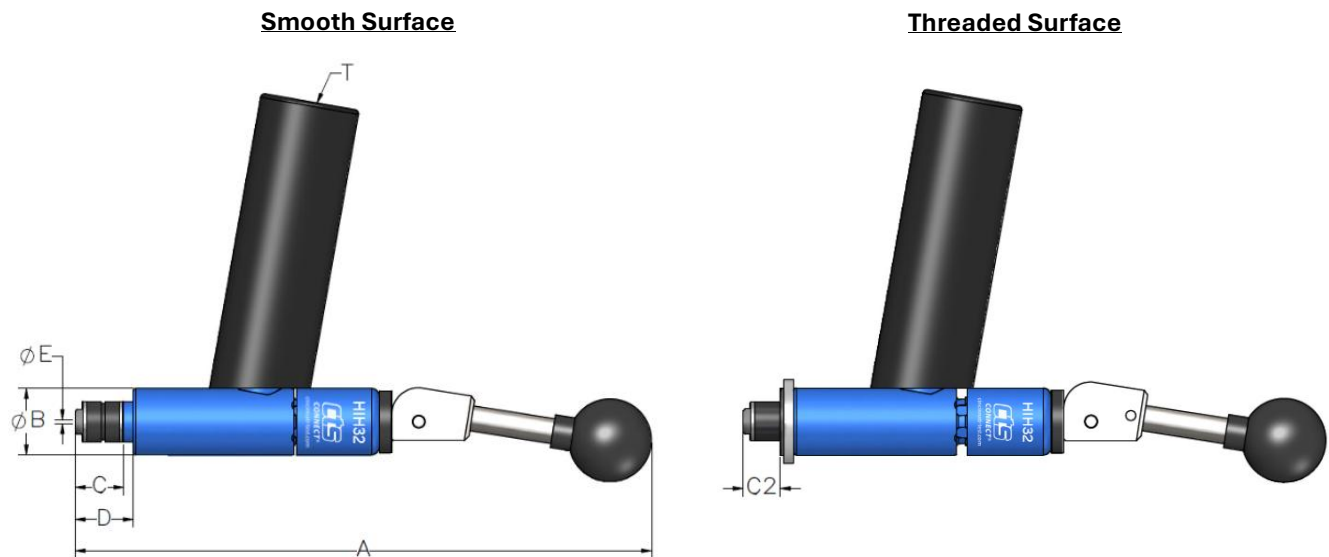


HIF	A Overall Length [in. (mm)]	B Overall Diameter [in. (mm)]	C Minimum Insertion [in. (mm)]	D Maximum Insertion [in. (mm)]	E Thru Hole [in. (mm)]	T Test Port [FNPT]	Weight [lbs. (kg)]
30	8.7 (221.0)	1.00 (25.4)	0.75 (19.1)	0.80 (20.3)	0.040 (1.0)	1/4-18	0.6 (0.3)
31	8.7 (221.0)	1.00 (25.4)	0.75 (19.1)	0.88 (22.4)	0.062 (1.6)	1/4-18	0.6 (0.3)
32	8.7 (221.0)	1.00 (25.4)	0.75 (19.1)	0.88 (22.4)	0.062 (1.6)	1/4-18	0.7 (0.3)
33	12.7 (322.6)	1.75 (44.5)	1.44 (36.6)	1.55 (39.4)	0.204 (5.2)	1/4-18	1.8 (0.8)
34	12.7 (322.6)	1.75 (44.5)	1.44 (36.6)	1.55 (39.4)	0.204 (5.2)	1/4-18	2.0 (0.9)
35	12.7 (322.6)	1.75 (44.5)	1.44 (36.6)	1.55 (39.4)	0.406 (10.3)	1/4-18	2.2 (1.0)
36	14.2 (360.7)	2.50 (63.5)	2.03 (51.6)	2.26 (57.4)	0.750 (19.1)	3/8-18	3.6 (1.6)
37	14.2 (360.7)	2.50 (63.5)	2.03 (51.6)	2.26 (57.4)	0.875 (22.2)	3/8-18	4.1 (1.9)
38	14.2 (360.7)	2.50 (63.5)	2.03 (51.6)	2.26 (57.4)	0.875 (22.2)	3/8-18	4.4 (2.0)

* Refer to 2D drawings for minimum insertion for threaded connects (C2).

** Weight shown is based on connect assembly with largest standard main seal kit size.

HIH Dimensions

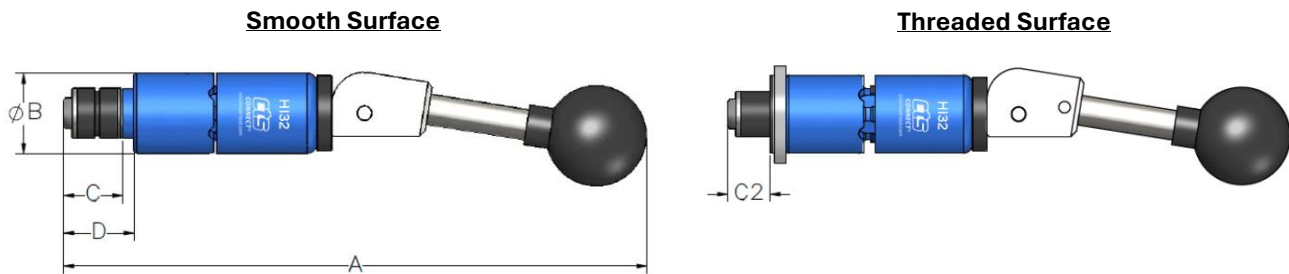


HIH	A Overall Length [in. (mm)]	B Overall Diameter [in. (mm)]	C Minimum Insertion [in. (mm)]	D Maximum Insertion [in. (mm)]	E Thru Hole [in. (mm)]	T Test Port [FNPT]	Weight [lbs. (kg)]
30	8.7 (221.0)	1.00 (25.4)	0.75 (19.1)	0.80 (20.3)	0.040 (1.0)	1/4-18	0.9 (0.4)
31	8.7 (221.0)	1.00 (25.4)	0.75 (19.1)	0.88 (22.4)	0.062 (1.6)	1/4-18	0.9 (0.4)
32	8.7 (221.0)	1.00 (25.4)	0.75 (19.1)	0.88 (22.4)	0.062 (1.6)	1/4-18	0.9 (0.4)
33	12.7 (322.6)	1.75 (44.5)	1.44 (36.6)	1.55 (39.4)	0.204 (5.2)	1/4-18	2.1 (1.0)
34	12.7 (322.6)	1.75 (44.5)	1.44 (36.6)	1.55 (39.4)	0.204 (5.2)	1/4-18	2.2 (1.0)
35	12.7 (322.6)	1.75 (44.5)	1.44 (36.6)	1.55 (39.4)	0.406 (10.3)	1/4-18	2.4 (1.1)

* Refer to 2D drawings for minimum insertion for threaded connects (C2).

** Weight shown is based on connect assembly with largest standard main seal kit size.

HI Dimensions



HI	A Overall Length [in. (mm)]	B Overall Diameter [in. (mm)]	C Minimum Insertion [in. (mm)]	D Maximum Insertion [in. (mm)]	Weight [lbs. (kg)]
30	7.3 (185.4)	1.00 (25.4)	0.75 (19.1)	0.80 (20.3)	0.5 (0.2)
31	7.3 (185.4)	1.00 (25.4)	0.75 (19.1)	0.88 (22.4)	0.5 (0.2)
32	7.3 (185.4)	1.00 (25.4)	0.75 (19.1)	0.88 (22.4)	0.6 (0.3)
33	12.0 (304.8)	1.75 (44.5)	1.44 (36.6)	1.44 (36.6)	1.7 (0.8)
34	12.0 (304.8)	1.75 (44.5)	1.44 (36.6)	1.58 (40.1)	1.8 (0.8)
35	12.0 (304.8)	1.75 (44.5)	1.59 (40.4)	1.83 (46.5)	2.1 (1.0)
36	13.3 (337.8)	2.50 (63.5)	2.03 (51.6)	2.26 (57.4)	3.2 (1.5)
37	13.3 (337.8)	2.50 (63.5)	2.03 (51.6)	2.26 (57.4)	3.9 (1.8)
38	13.3 (337.8)	2.50 (63.5)	2.03 (51.6)	2.26 (57.4)	4.2 (1.9)

* Refer to 2D drawings for minimum insertion for threaded connects (C2).

** Weight shown is based on connect assembly with largest standard main seal kit size.

Standard Smooth Surface HIF Connects

Seal Range [in. (mm)]	Connect	Number of Seals	Body Only Part Number	Assembly Part Number (Body Only + Main Seal Kit)	Main Seal Kit Part Number	Seal Part Number
0.290 – 0.310 (7.4 – 7.9)	HIF30-A	1	CTSC-003412	CTSC-003411	CTSC-003417	SEAL-005307
0.310 – 0.330 (7.9 – 8.4)	HIF30-AA	1	CTSC-003412	CTSC-003419	CTSC-003422	SEAL-005308
0.330 – 0.360 (8.4 – 9.1)	HIF30-AB	1	CTSC-003412	CTSC-003424	CTSC-003427	SEAL-005309
0.360 – 0.394 (9.1 – 10)	HIF30-AB1	1	CTSC-003412	CTSC-003429	CTSC-003432	SEAL-005310
0.394 – 0.433 (10 – 11)	HIF31-AA	1	CTSC-003435	CTSC-003434	CTSC-003440	SEAL-005313
0.433 – 0.472 (11 – 12)	HIF31-AA1	1	CTSC-003435	CTSC-003442	CTSC-003445	SEAL-005314
0.472 – 0.511 (12 – 13)	HIF31-AC	1	CTSC-003435	CTSC-003447	CTSC-003450	SEAL-005316
0.511 – 0.551 (13 – 14)	HIF31-AC1	1	CTSC-003435	CTSC-003452	CTSC-003455	SEAL-005317
0.551 – 0.590 (14 – 15)	HIF31-AD	1	CTSC-003435	CTSC-003457	CTSC-003460	SEAL-005318
0.590 – 0.630 (15 – 16)	HIF31-AD1	1	CTSC-003435	CTSC-003462	CTSC-003465	SEAL-005319
0.630 – 0.669 (16 – 17)	HIF32-AB	1	CTSC-003468	CTSC-003467	CTSC-003473	SEAL-005322
0.669 – 0.709 (17 – 18)	HIF32-AB1	1	CTSC-003468	CTSC-003475	CTSC-003478	SEAL-005324
0.709 – 0.748 (18 – 19)	HIF32-AD	1	CTSC-003468	CTSC-003480	CTSC-003483	SEAL-005326
0.748 – 0.787 (19 – 20)	HIF32-AD1	1	CTSC-003468	CTSC-003485	CTSC-003488	SEAL-005327
0.787 – 0.826 (20 – 21)	HIF32-AE	1	CTSC-003468	CTSC-003490	CTSC-003493	SEAL-005328
0.826 – 0.866 (21 – 22)	HIF32-AE1	1	CTSC-003468	CTSC-003495	CTSC-003498	SEAL-005329
0.866 – 0.905 (22 – 23)	HIF33-AA	1	CTSC-003501	CTSC-003500	CTSC-003506	SEAL-005330
0.905 – 0.945 (23 – 24)	HIF33-AA1	1	CTSC-003501	CTSC-003508	CTSC-003511	SEAL-005331
0.945 – 0.984 (24 – 25)	HIF33-AC	1	CTSC-003501	CTSC-003513	CTSC-003516	SEAL-005332
0.984 – 1.024 (25 – 26)	HIF33-AC1	1	CTSC-003501	CTSC-003518	CTSC-003521	SEAL-005333
1.024 – 1.063 (26 – 27)	HIF33-AD	1	CTSC-003501	CTSC-003523	CTSC-003526	SEAL-005334
1.063 – 1.102 (27 – 28)	HIF33-AD1	1	CTSC-003501	CTSC-003528	CTSC-003531	SEAL-005335
1.102 – 1.141 (28 – 29)	HIF34-AA	1	CTSC-003534	CTSC-003533	CTSC-003539	SEAL-005336

Seal Range [in. (mm)]	Connect	Number of Seals	Body Only Part Number	Assembly Part Number (Body Only + Main Seal Kit)	Main Seal Kit Part Number	Seal Part Number
1.141 – 1.181 (29 – 30)	HIF34-AA1	1	CTSC-003534	CTSC-003541	CTSC-003544	SEAL-005337
1.181 – 1.220 (30 – 31)	HIF34-AC	1	CTSC-003534	CTSC-003546	CTSC-003549	SEAL-005338
1.220 – 1.260 (31 – 32)	HIF34-AC1	1	CTSC-003534	CTSC-003551	CTSC-003554	SEAL-005339
1.260 – 1.299 (32 – 33)	HIF34-AD	1	CTSC-003534	CTSC-003556	CTSC-003559	SEAL-005340
1.299 – 1.339 (33 – 34)	HIF34-AD1	1	CTSC-003534	CTSC-003561	CTSC-003564	SEAL-005341
1.339 – 1.398 (34 – 35.5)	HIF35-AA	1	CTSC-003567	CTSC-003566	CTSC-003572	SEAL-005342
1.398 – 1.457 (35.5 – 37)	HIF35-AA1	1	CTSC-003567	CTSC-003574	CTSC-003577	SEAL-005343
1.457 – 1.516 (37 – 38.5)	HIF35-AB	1	CTSC-003567	CTSC-003579	CTSC-003582	SEAL-005344
1.516 – 1.575 (38.5 – 40)	HIF35-AB1	1	CTSC-003567	CTSC-003584	CTSC-003587	SEAL-005345
1.575 – 1.634 (40 – 41.5)	HIF35-AD	1	CTSC-003567	CTSC-003589	CTSC-003592	SEAL-005346
1.634 – 1.693 (41.5 – 43)	HIF35-AD1	1	CTSC-003567	CTSC-003594	CTSC-003597	SEAL-005347
1.693 – 1.771 (43 – 45)	HIF36-AA	1	CTSC-003600	CTSC-003599	CTSC-003603	SEAL-005349
1.771 – 1.850 (45 – 47)	HIF36-AA1	1	CTSC-003600	CTSC-003605	CTSC-003607	SEAL-005350
1.850 – 1.929 (47 – 49)	HIF36-AC	1	CTSC-003600	CTSC-003609	CTSC-003611	SEAL-005351
1.929 – 2.008 (49 – 51)	HIF36-AC1	1	CTSC-003600	CTSC-003613	CTSC-003615	SEAL-005352
2.008 – 2.087 (51 – 53)	HIF36-AD	1	CTSC-003600	CTSC-003617	CTSC-003619	SEAL-005353
2.087 – 2.165 (53 – 55)	HIF36-AD1	1	CTSC-003600	CTSC-003621	CTSC-003623	SEAL-005354
2.165 – 2.244 (55 – 57)	HIF37-AA	1	CTSC-003626	CTSC-003625	CTSC-003629	SEAL-005355
2.244 – 2.305 (57 – 58.5)	HIF37-AA1	1	CTSC-003626	CTSC-003631	CTSC-003633	SEAL-005356
2.305 – 2.384 (58.5 – 60.6)	HIF37-AC	1	CTSC-003626	CTSC-003635	CTSC-003637	SEAL-005357
2.384 – 2.445 (60.6 – 62.1)	HIF37-AC1	1	CTSC-003626	CTSC-003639	CTSC-003641	SEAL-005358
2.445 – 2.515 (62.1 – 63.9)	HIF37-AD	1	CTSC-003626	CTSC-003643	CTSC-003645	SEAL-005359
2.515 – 2.585 (63.9 – 65.7)	HIF37-AD1	1	CTSC-003626	CTSC-003647	CTSC-003649	SEAL-005360

Seal Range [in. (mm)]	Connect	Number of Seals	Body Only Part Number	Assembly Part Number (Body Only + Main Seal Kit)	Main Seal Kit Part Number	Seal Part Number
2.585 – 2.655 (65.7 – 67.4)	HIF38-AA	1	CTSC-003652	CTSC-003651	CTSC-003655	SEAL-005361
2.655 – 2.725 (67.4 – 69.2)	HIF38-AA1	1	CTSC-003652	CTSC-003657	CTSC-003659	SEAL-005362
2.725 – 2.795 (69.2 – 71)	HIF38-AB	1	CTSC-003652	CTSC-003661	CTSC-003663	SEAL-005363
2.795 – 2.865 (71 – 72.8)	HIF38-AB1	1	CTSC-003652	CTSC-003665	CTSC-003667	SEAL-005364
2.865 – 2.935 (72.8 – 74.5)	HIF38-AC	1	CTSC-003652	CTSC-003669	CTSC-003671	SEAL-005365
2.935 – 3.005 (74.5 – 76.3)	HIF38-AC1	1	CTSC-003652	CTSC-003673	CTSC-003675	SEAL-005366

NPT Threaded Surface HIF Connects

Seal Range [in.]	Connect	Number of Seals	Body Only Part Number	Assembly Part Number (Body Only + Main Seal Kit)	Main Seal Kit Part Number	Seal Part Number
1/4	HIF31-NPT-0250	1	CTSC-003435	CTSC-003682	CTSC-003685	SEAL-004767
3/8	HIF32-NPT-0375	1	CTSC-003468	CTSC-003687	CTSC-003690	SEAL-004805
1/2	HIF32-NPT-0500	1	CTSC-003468	CTSC-003692	CTSC-003695	SEAL-004818
3/4	HIF33-NPT-0750	1	CTSC-003501	CTSC-003697	CTSC-003700	SEAL-004854
1	HIF34-NPT-1000	1	CTSC-003534	CTSC-003702	CTSC-003705	SEAL-004881
1-1/4	HIF35-NPT-1250	1	CTSC-003567	CTSC-003707	CTSC-003710	SEAL-004931
1-1/2	HIF36-NPT-1500	1	CTSC-003600	CTSC-003712	CTSC-003714	SEAL-004961
2	HIF37-NPT-2000	1	CTSC-003626	CTSC-003716	CTSC-003718	SEAL-004979

Metric Threaded Surface HIF Connects

Seal Range	Connect	Number of Seals	Body Only Part Number	Assembly Part Number (Body Only + Main Seal Kit)	Main Seal Kit Part Number	Seal Part Number
M8	HIF30-M8	1	CTSC-003412	CTSC-003720	CTSC-003723	SEAL-004737
M10	HIF30-M10	1	CTSC-003412	CTSC-003725	CTSC-003728	SEAL-004739
M12	HIF31-M12	1	CTSC-003435	CTSC-003730	CTSC-003733	SEAL-004781
M14	HIF31-M14	1	CTSC-003435	CTSC-003735	CTSC-003738	SEAL-004786
M16	HIF31-M16	1	CTSC-003435	CTSC-003740	CTSC-003743	SEAL-004788
M18	HIF31-M18	1	CTSC-003435	CTSC-003745	CTSC-003748	SEAL-004791
M20	HIF32-M20	1	CTSC-003468	CTSC-003750	CTSC-003753	SEAL-004836
M22	HIF32-M22	1	CTSC-003468	CTSC-003755	CTSC-003758	SEAL-004838
M24	HIF32-M24	1	CTSC-003468	CTSC-003760	CTSC-003763	SEAL-004834
M26	HIF33-M26	1	CTSC-003501	CTSC-003765	CTSC-003768	SEAL-004864
M33	HIF34-M33	1	CTSC-003534	CTSC-003775	CTSC-003778	SEAL-004891

M42	HIF35-M42	1	CTSC-003567	CTSC-003785	CTSC-003788	SEAL-004930
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SAE Threaded Surface HIF Connects						
Seal Range [in.]	Connect	Number of Seals	Body Only Part Number	Assembly Part Number (Body Only + Main Seal Kit)	Main Seal Kit Part Number	Seal Part Number
5/16	HIF30-SAE-0312	1	CTSC-003412	CTSC-003799	CTSC-003802	SEAL-004744
3/8	HIF30-SAE-0375	1	CTSC-003412	CTSC-003804	CTSC-003807	SEAL-004746
7/16	HIF30-SAE-0437	1	CTSC-003412	CTSC-003809	CTSC-003812	SEAL-004748
1/2	HIF31-SAE-0500	1	CTSC-003435	CTSC-003814	CTSC-003817	SEAL-004793
9/16	HIF31-SAE-0562	1	CTSC-003435	CTSC-003819	CTSC-003822	SEAL-004795
11/16	HIF31-SAE-0687	1	CTSC-003435	CTSC-003829	CTSC-003832	SEAL-004797
3/4	HIF32-SAE-0750	1	CTSC-003468	CTSC-003834	CTSC-003837	SEAL-004842
13/16	HIF32-SAE-0812	1	CTSC-003468	CTSC-003839	CTSC-003842	SEAL-004838
7/8	HIF32-SAE-0875	1	CTSC-003468	CTSC-003844	CTSC-003847	SEAL-004839
1	HIF32-SAE-1000	1	CTSC-003468	CTSC-003854	CTSC-003857	SEAL-004840
1-1/16	HIF33-SAE-1062	1	CTSC-003501	CTSC-003859	CTSC-003862	SEAL-004866
1-1/8	HIF33-SAE-1125	1	CTSC-003501	CTSC-003864	CTSC-003867	SEAL-004867
1-1/4	HIF34-SAE-1250	1	CTSC-003534	CTSC-003874	CTSC-003877	SEAL-004868
1-5/16	HIF34-SAE-1312	1	CTSC-003534	CTSC-003879	CTSC-003882	SEAL-004893
1-7/16	HIF34-SAE-1437	2	CTSC-003534	CTSC-003889	CTSC-003892	SEAL-052415 SEAL-052416
1-1/2	HIF34-SAE-1500	1	CTSC-003534	CTSC-003894	CTSC-003897	SEAL-004894
1-5/8	HIF35-SAE-1625	1	CTSC-003567	CTSC-003904	CTSC-003907	SEAL-004932
1-3/4	HIF35-SAE-1750	1	CTSC-003567	CTSC-003914	CTSC-003917	SEAL-042155
2	HIF36-SAE-2000	3	CTSC-003600	CTSC-003933	CTSC-003935	SEAL-047820 SEAL-053983 SEAL-053988
2-1/4	HIF36-SAE-2250	1	CTSC-003600	CTSC-003937	CTSC-003939	SEAL-004963

Standard Smooth Surface HIH Connects

Seal Range [in. (mm)]	Connect	Number of Seals	Body Only Part Number	Assembly Part Number (Body Only + Main Seal Kit)	Main Seal Kit Part Number	Seal Part Number
0.290 – 0.310 (7.4 – 7.9)	HIH30-A	1	CTSC-003414	CTSC-003413	CTSC-003417	SEAL-005307
0.310 – 0.330 (7.9 – 8.4)	HIH30-AA	1	CTSC-003414	CTSC-003420	CTSC-003422	SEAL-005308
0.330 – 0.360 (8.4 – 9.1)	HIH30-AB	1	CTSC-003414	CTSC-003425	CTSC-003427	SEAL-005309
0.360 – 0.394 (9.1 – 10)	HIH30-AB1	1	CTSC-003414	CTSC-003430	CTSC-003432	SEAL-005310
0.394 – 0.433 (10 – 11)	HIH31-AA	1	CTSC-003437	CTSC-003436	CTSC-003440	SEAL-005313
0.433 – 0.472 (11 – 12)	HIH31-AA1	1	CTSC-003437	CTSC-003443	CTSC-003445	SEAL-005314
0.472 – 0.511 (12 – 13)	HIH31-AC	1	CTSC-003437	CTSC-003448	CTSC-003450	SEAL-005316
0.511 – 0.551 (13 – 14)	HIH31-AC1	1	CTSC-003437	CTSC-003453	CTSC-003455	SEAL-005317
0.551 – 0.590 (14 – 15)	HIH31-AD	1	CTSC-003437	CTSC-003458	CTSC-003460	SEAL-005318
0.590 – 0.630 (15 – 16)	HIH31-AD1	1	CTSC-003437	CTSC-003463	CTSC-003465	SEAL-005319
0.630 – 0.669 (16 – 17)	HIH32-AB	1	CTSC-003470	CTSC-003469	CTSC-003473	SEAL-005322
0.669 – 0.709 (17 – 18)	HIH32-AB1	1	CTSC-003470	CTSC-003476	CTSC-003478	SEAL-005324
0.709 – 0.748 (18 – 19)	HIH32-AD	1	CTSC-003470	CTSC-003481	CTSC-003483	SEAL-005326
0.748 – 0.787 (19 – 20)	HIH32-AD1	1	CTSC-003470	CTSC-003486	CTSC-003488	SEAL-005327
0.787 – 0.826 (20 – 21)	HIH32-AE	1	CTSC-003470	CTSC-003491	CTSC-003493	SEAL-005328
0.826 – 0.866 (21 – 22)	HIH32-AE1	1	CTSC-003470	CTSC-003496	CTSC-003498	SEAL-005329
0.866 – 0.905 (22 – 23)	HIH33-AA	1	CTSC-003503	CTSC-003502	CTSC-003506	SEAL-005330
0.905 – 0.945 (23 – 24)	HIH33-AA1	1	CTSC-003503	CTSC-003509	CTSC-003511	SEAL-005331
0.945 – 0.984 (24 – 25)	HIH33-AC	1	CTSC-003503	CTSC-003514	CTSC-003516	SEAL-005332
0.984 – 1.024 (25 – 26)	HIH33-AC1	1	CTSC-003503	CTSC-003519	CTSC-003521	SEAL-005333
1.024 – 1.063 (26 – 27)	HIH33-AD	1	CTSC-003503	CTSC-003524	CTSC-003526	SEAL-005334
1.063 – 1.102 (27 – 28)	HIH33-AD1	1	CTSC-003503	CTSC-003529	CTSC-003531	SEAL-005335
1.102 – 1.141 (28 – 29)	HIH34-AA	1	CTSC-003536	CTSC-003535	CTSC-003539	SEAL-005336

Seal Range [in. (mm)]	Connect	Number of Seals	Body Only Part Number	Assembly Part Number (Body Only + Main Seal Kit)	Main Seal Kit Part Number	Seal Part Number
1.141 – 1.181 (29 – 30)	HIH34-AA1	1	CTSC-003536	CTSC-003542	CTSC-003544	SEAL-005337
1.181 – 1.220 (30 – 31)	HIH34-AC	1	CTSC-003536	CTSC-003547	CTSC-003549	SEAL-005338
1.220 – 1.260 (31 – 32)	HIH34-AC1	1	CTSC-003536	CTSC-003552	CTSC-003554	SEAL-005339
1.260 – 1.299 (32 – 33)	HIH34-AD	1	CTSC-003536	CTSC-003557	CTSC-003559	SEAL-005340
1.299 – 1.339 (33 – 34)	HIH34-AD1	1	CTSC-003536	CTSC-003562	CTSC-003564	SEAL-005341
1.339 – 1.398 (34 – 35.5)	HIH35-AA	1	CTSC-003569	CTSC-003568	CTSC-003572	SEAL-005342
1.398 – 1.457 (35.5 – 37)	HIH35-AA1	1	CTSC-003569	CTSC-003575	CTSC-003577	SEAL-005343
1.457 – 1.516 (37 – 38.5)	HIH35-AB	1	CTSC-003569	CTSC-003580	CTSC-003582	SEAL-005344
1.516 – 1.575 (38.5 – 40)	HIH35-AB1	1	CTSC-003569	CTSC-003585	CTSC-003587	SEAL-005345
1.575 – 1.634 (40 – 41.5)	HIH35-AD	1	CTSC-003569	CTSC-003590	CTSC-003592	SEAL-005346
1.634 – 1.693 (41.5 – 43)	HIH35-AD1	1	CTSC-003569	CTSC-003595	CTSC-003597	SEAL-005347

NPT Threaded Surface HIH Connects

Seal Range [in.]	Connect	Number of Seals	Body Only Part Number	Assembly Part Number (Body Only + Main Seal Kit)	Main Seal Kit Part Number	Seal Part Number
1/4	HIH31-NPT-0250	1	CTSC-003437	CTSC-003683	CTSC-003685	SEAL-004767
3/8	HIH32-NPT-0375	1	CTSC-003470	CTSC-003688	CTSC-003690	SEAL-004805
1/2	HIH32-NPT-0500	1	CTSC-003470	CTSC-003693	CTSC-003695	SEAL-004818
3/4	HIH33-NPT-0750	1	CTSC-003503	CTSC-003698	CTSC-003700	SEAL-004854
1	HIH34-NPT-1000	1	CTSC-003536	CTSC-003703	CTSC-003705	SEAL-004881
1-1/4	HIH35-NPT-1250	1	CTSC-003569	CTSC-003708	CTSC-003710	SEAL-004931

Metric Threaded Surface HIH Connects

Seal Range	Connect	Number of Seals	Body Only Part Number	Assembly Part Number (Body Only + Main Seal Kit)	Main Seal Kit Part Number	Seal Part Number
M8	HIH30-M8	1	CTSC-003414	CTSC-003721	CTSC-003723	SEAL-004737
M10	HIH30-M10	1	CTSC-003414	CTSC-003726	CTSC-003728	SEAL-004739
M12	HIH31-M12	1	CTSC-003437	CTSC-003731	CTSC-003733	SEAL-004781
M14	HIH31-M14	1	CTSC-003437	CTSC-003736	CTSC-003738	SEAL-004786
M16	HIH31-M16	1	CTSC-003437	CTSC-003741	CTSC-003743	SEAL-004788
M18	HIH31-M18	1	CTSC-003437	CTSC-003746	CTSC-003748	SEAL-004791
M20	HIH32-M20	1	CTSC-003470	CTSC-003751	CTSC-003753	SEAL-004836
M22	HIH32-M22	1	CTSC-003470	CTSC-003756	CTSC-003758	SEAL-004838
M24	HIH32-M24	1	CTSC-003470	CTSC-003761	CTSC-003763	SEAL-004834
M26	HIH33-M26	1	CTSC-003503	CTSC-003766	CTSC-003768	SEAL-004864
M33	HIH34-M33	1	CTSC-003536	CTSC-003776	CTSC-003778	SEAL-004891
M42	HIH35-M42	1	CTSC-003569	CTSC-003786	CTSC-003788	SEAL-004930

SAE Threaded Surface HIH Connects

Seal Range [in.]	Connect	Number of Seals	Body Only Part Number	Assembly Part Number (Body Only + Main Seal Kit)	Main Seal Kit Part Number	Seal Part Number
5/16	HIH30-SAE-0312	1	CTSC-003414	CTSC-003800	CTSC-003802	SEAL-004744
3/8	HIH30-SAE-0375	1	CTSC-003414	CTSC-003805	CTSC-003807	SEAL-004746
7/16	HIH30-SAE-0437	1	CTSC-003414	CTSC-003810	CTSC-003812	SEAL-004748
1/2	HIH31-SAE-0500	1	CTSC-003437	CTSC-003815	CTSC-003817	SEAL-004793
9/16	HIH31-SAE-0562	1	CTSC-003437	CTSC-003820	CTSC-003822	SEAL-004795
11/16	HIH31-SAE-0687	1	CTSC-003437	CTSC-003830	CTSC-003832	SEAL-004797
3/4	HIH32-SAE-0750	1	CTSC-003470	CTSC-003835	CTSC-003837	SEAL-004842
13/16	HIH32-SAE-0812	1	CTSC-003470	CTSC-003840	CTSC-003842	SEAL-004838
7/8	HIH32-SAE-0875	1	CTSC-003470	CTSC-003845	CTSC-003847	SEAL-004839
1	HIH32-SAE-1000	1	CTSC-003470	CTSC-003855	CTSC-003857	SEAL-004840
1-1/16	HIH33-SAE-1062	1	CTSC-003503	CTSC-003860	CTSC-003862	SEAL-004866
1-1/8	HIH33-SAE-1125	1	CTSC-003503	CTSC-003865	CTSC-003867	SEAL-004867
1-1/4	HIH34-SAE-1250	1	CTSC-003536	CTSC-003875	CTSC-003877	SEAL-004868
1-5/16	HIH34-SAE-1312	1	CTSC-003536	CTSC-003880	CTSC-003882	SEAL-004893
1-7/16	HIH34-SAE-1437	2	CTSC-003536	CTSC-003890	CTSC-003892	SEAL-052415 SEAL-052416
1-1/2	HIH34-SAE-1500	1	CTSC-003536	CTSC-003895	CTSC-003897	SEAL-004894
1-5/8	HIH35-SAE-1625	1	CTSC-003569	CTSC-003905	CTSC-003907	SEAL-004932
1-3/4	HIH35-SAE-1750	1	CTSC-003569	CTSC-003915	CTSC-003917	SEAL-042155

Standard Smooth Surface HI Connects

Seal Range [in. (mm)]	Connect	Number of Seals	Body Only Part Number	Assembly Part Number (Body Only + Main Seal Kit)	Main Seal Kit Part Number	Seal Part Number
0.290 – 0.310 (7.4 – 7.9)	HI30-A	1	CTSC-003416	CTSC-003415	CTSC-003417	SEAL-005307
0.310 – 0.330 (7.9 – 8.4)	HI30-AA	1	CTSC-003416	CTSC-003421	CTSC-003422	SEAL-005308
0.330 – 0.360 (8.4 – 9.1)	HI30-AB	1	CTSC-003416	CTSC-003426	CTSC-003427	SEAL-005309
0.360 – 0.394 (9.1 – 10)	HI30-AB1	1	CTSC-003416	CTSC-003431	CTSC-003432	SEAL-005310
0.394 – 0.433 (10 – 11)	HI31-AA	1	CTSC-003439	CTSC-003438	CTSC-003440	SEAL-005313
0.433 – 0.472 (11 – 12)	HI31-AA1	1	CTSC-003439	CTSC-003444	CTSC-003445	SEAL-005314
0.472 – 0.511 (12 – 13)	HI31-AC	1	CTSC-003439	CTSC-003449	CTSC-003450	SEAL-005316
0.511 – 0.551 (13 – 14)	HI31-AC1	1	CTSC-003439	CTSC-003454	CTSC-003455	SEAL-005317
0.551 – 0.590 (14 – 15)	HI31-AD	1	CTSC-003439	CTSC-003459	CTSC-003460	SEAL-005318
0.590 – 0.630 (15 – 16)	HI31-AD1	1	CTSC-003439	CTSC-003464	CTSC-003465	SEAL-005319
0.630 – 0.669 (16 – 17)	HI32-AB	1	CTSC-003472	CTSC-003471	CTSC-003473	SEAL-005322
0.669 – 0.709 (17 – 18)	HI32-AB1	1	CTSC-003472	CTSC-003477	CTSC-003478	SEAL-005324
0.709 – 0.748 (18 – 19)	HI32-AD	1	CTSC-003472	CTSC-003482	CTSC-003483	SEAL-005326
0.748 – 0.787 (19 – 20)	HI32-AD1	1	CTSC-003472	CTSC-003487	CTSC-003488	SEAL-005327
0.787 – 0.826 (20 – 21)	HI32-AE	1	CTSC-003472	CTSC-003492	CTSC-003493	SEAL-005328
0.826 – 0.866 (21 – 22)	HI32-AE1	1	CTSC-003472	CTSC-003497	CTSC-003498	SEAL-005329
0.866 – 0.905 (22 – 23)	HI33-AA	1	CTSC-003505	CTSC-003504	CTSC-003506	SEAL-005330
0.905 – 0.945 (23 – 24)	HI33-AA1	1	CTSC-003505	CTSC-003510	CTSC-003511	SEAL-005331
0.945 – 0.984 (24 – 25)	HI33-AC	1	CTSC-003505	CTSC-003515	CTSC-003516	SEAL-005332
0.984 – 1.024 (25 – 26)	HI33-AC1	1	CTSC-003505	CTSC-003520	CTSC-003521	SEAL-005333
1.024 – 1.063 (26 – 27)	HI33-AD	1	CTSC-003505	CTSC-003525	CTSC-003526	SEAL-005334
1.063 – 1.102 (27 – 28)	HI33-AD1	1	CTSC-003505	CTSC-003530	CTSC-003531	SEAL-005335
1.102 – 1.141 (28 – 29)	HI34-AA	1	CTSC-003538	CTSC-003537	CTSC-003539	SEAL-005336

Seal Range [in. (mm)]	Connect	Number of Seals	Body Only Part Number	Assembly Part Number (Body Only + Main Seal Kit)	Main Seal Kit Part Number	Seal Part Number
1.141 – 1.181 (29 – 30)	HI34-AA1	1	CTSC-003538	CTSC-003543	CTSC-003544	SEAL-005337
1.181 – 1.220 (30 – 31)	HI34-AC	1	CTSC-003538	CTSC-003548	CTSC-003549	SEAL-005338
1.220 – 1.260 (31 – 32)	HI34-AC1	1	CTSC-003538	CTSC-003553	CTSC-003554	SEAL-005339
1.260 – 1.299 (32 – 33)	HI34-AD	1	CTSC-003538	CTSC-003558	CTSC-003559	SEAL-005340
1.299 – 1.339 (33 – 34)	HI34-AD1	1	CTSC-003538	CTSC-003563	CTSC-003564	SEAL-005341
1.339 – 1.398 (34 – 35.5)	HI35-AA	1	CTSC-003571	CTSC-003570	CTSC-003572	SEAL-005342
1.398 – 1.457 (35.5 – 37)	HI35-AA1	1	CTSC-003571	CTSC-003576	CTSC-003577	SEAL-005343
1.457 – 1.516 (37 – 38.5)	HI35-AB	1	CTSC-003571	CTSC-003581	CTSC-003582	SEAL-005344
1.516 – 1.575 (38.5 – 40)	HI35-AB1	1	CTSC-003571	CTSC-003586	CTSC-003587	SEAL-005345
1.575 – 1.634 (40 – 41.5)	HI35-AD	1	CTSC-003571	CTSC-003591	CTSC-003592	SEAL-005346
1.634 – 1.693 (41.5 – 43)	HI35-AD1	1	CTSC-003571	CTSC-003596	CTSC-003597	SEAL-005347
1.693 – 1.771 (43 – 45)	HI36-AA	1	CTSC-003602	CTSC-003601	CTSC-003603	SEAL-005349
1.771 – 1.850 (45 – 47)	HI36-AA1	1	CTSC-003602	CTSC-003606	CTSC-003607	SEAL-005350
1.850 – 1.929 (47 – 49)	HI36-AC	1	CTSC-003602	CTSC-003610	CTSC-003611	SEAL-005351
1.929 – 2.008 (49 – 51)	HI36-AC1	1	CTSC-003602	CTSC-003614	CTSC-003615	SEAL-005352
2.008 – 2.087 (51 – 53)	HI36-AD	1	CTSC-003602	CTSC-003618	CTSC-003619	SEAL-005353
2.087 – 2.165 (53 – 55)	HI36-AD1	1	CTSC-003602	CTSC-003622	CTSC-003623	SEAL-005354
2.165 – 2.244 (55 – 57)	HI37-AA	1	CTSC-003628	CTSC-003627	CTSC-003629	SEAL-005355
2.244 – 2.305 (57 – 58.5)	HI37-AA1	1	CTSC-003628	CTSC-003632	CTSC-003633	SEAL-005356
2.305 – 2.384 (58.5 – 60.6)	HI37-AC	1	CTSC-003628	CTSC-003636	CTSC-003637	SEAL-005357
2.384 – 2.445 (60.6 – 62.1)	HI37-AC1	1	CTSC-003628	CTSC-003640	CTSC-003641	SEAL-005358
2.445 – 2.515 (62.1 – 63.9)	HI37-AD	1	CTSC-003628	CTSC-003644	CTSC-003645	SEAL-005359
2.515 – 2.585 (63.9 – 65.7)	HI37-AD1	1	CTSC-003628	CTSC-003648	CTSC-003649	SEAL-005360

Seal Range [in. (mm)]	Connect	Number of Seals	Body Only Part Number	Assembly Part Number (Body Only + Main Seal Kit)	Main Seal Kit Part Number	Seal Part Number
2.585 – 2.655 (65.7 – 67.4)	HI38-AA	1	CTSC-003654	CTSC-003653	CTSC-003655	SEAL-005361
2.655 – 2.725 (67.4 – 69.2)	HI38-AA1	1	CTSC-003654	CTSC-003658	CTSC-003659	SEAL-005362
2.725 – 2.795 (69.2 – 71)	HI38-AB	1	CTSC-003654	CTSC-003662	CTSC-003663	SEAL-005363
2.795 – 2.865 (71 – 72.8)	HI38-AB1	1	CTSC-003654	CTSC-003666	CTSC-003667	SEAL-005364
2.865 – 2.935 (72.8 – 74.5)	HI38-AC	1	CTSC-003654	CTSC-003670	CTSC-003671	SEAL-005365
2.935 – 3.005 (74.5 – 76.3)	HI38-AC1	1	CTSC-003654	CTSC-003674	CTSC-003675	SEAL-005366

NPT Threaded Surface HI Connects

Seal Range [in.]	Connect	Number of Seals	Body Only Part Number	Assembly Part Number (Body Only + Main Seal Kit)	Main Seal Kit Part Number	Seal Part Number
1/4	HI31-NPT-0250	1	CTSC-003439	CTSC-003684	CTSC-003685	SEAL-004767
3/8	HI32-NPT-0375	1	CTSC-003472	CTSC-003689	CTSC-003690	SEAL-004805
1/2	HI32-NPT-0500	1	CTSC-003472	CTSC-003694	CTSC-003695	SEAL-004818
3/4	HI33-NPT-0750	1	CTSC-003505	CTSC-003699	CTSC-003700	SEAL-004854
1	HI34-NPT-1000	1	CTSC-003538	CTSC-003704	CTSC-003705	SEAL-004881
1-1/4	HI35-NPT-1250	1	CTSC-003571	CTSC-003709	CTSC-003710	SEAL-004931
1-1/2	HI36-NPT-1500	1	CTSC-003602	CTSC-003713	CTSC-003714	SEAL-004961
2	HI37-NPT-2000	1	CTSC-003628	CTSC-003717	CTSC-003718	SEAL-004979

Metric Threaded Surface HI Connects

Seal Range	Connect	Number of Seals	Body Only Part Number	Assembly Part Number (Body Only + Main Seal Kit)	Main Seal Kit Part Number	Seal Part Number
M8	HI30-M8	1	CTSC-003416	CTSC-003722	CTSC-003723	SEAL-004737
M10	HI30-M10	1	CTSC-003416	CTSC-003727	CTSC-003728	SEAL-004739
M12	HI31-M12	1	CTSC-003439	CTSC-003732	CTSC-003733	SEAL-004781
M14	HI31-M14	1	CTSC-003439	CTSC-003737	CTSC-003738	SEAL-004786
M16	HI31-M16	1	CTSC-003439	CTSC-003742	CTSC-003743	SEAL-004788
M18	HI31-M18	1	CTSC-003439	CTSC-003747	CTSC-003748	SEAL-004791
M20	HI32-M20	1	CTSC-003472	CTSC-003752	CTSC-003753	SEAL-004836
M22	HI32-M22	1	CTSC-003472	CTSC-003757	CTSC-003758	SEAL-004838
M24	HI32-M24	1	CTSC-003472	CTSC-003762	CTSC-003763	SEAL-004834
M26	HI33-M26	1	CTSC-003505	CTSC-003767	CTSC-003768	SEAL-004864
M33	HI34-M33	1	CTSC-003538	CTSC-003777	CTSC-003778	SEAL-004891
M42	HI35-M42	1	CTSC-003571	CTSC-003787	CTSC-003788	SEAL-004930

SAE Threaded Surface HI Connects						
Seal Range [in.]	Connect	Number of Seals	Body Only Part Number	Assembly Part Number (Body Only + Main Seal Kit)	Main Seal Kit Part Number	Seal Part Number
5/16	HI30-SAE-0312	1	CTSC-003416	CTSC-003801	CTSC-003802	SEAL-004744
3/8	HI30-SAE-0375	1	CTSC-003416	CTSC-003806	CTSC-003807	SEAL-004746
7/16	HI30-SAE-0437	1	CTSC-003416	CTSC-003811	CTSC-003812	SEAL-004748
1/2	HI31-SAE-0500	1	CTSC-003439	CTSC-003816	CTSC-003817	SEAL-004793
9/16	HI31-SAE-0562	1	CTSC-003439	CTSC-003821	CTSC-003822	SEAL-004795
11/16	HI31-SAE-0687	1	CTSC-003439	CTSC-003831	CTSC-003832	SEAL-004797
3/4	HI32-SAE-0750	1	CTSC-003472	CTSC-003836	CTSC-003837	SEAL-004842
13/16	HI32-SAE-0812	1	CTSC-003472	CTSC-003841	CTSC-003842	SEAL-004838
7/8	HI32-SAE-0875	1	CTSC-003472	CTSC-003846	CTSC-003847	SEAL-004839
1	HI32-SAE-1000	1	CTSC-003472	CTSC-003856	CTSC-003857	SEAL-004840
1-1/16	HI33-SAE-1062	1	CTSC-003505	CTSC-003861	CTSC-003862	SEAL-004866
1-1/8	HI33-SAE-1125	1	CTSC-003505	CTSC-003866	CTSC-003867	SEAL-004867
1-1/4	HI34-SAE-1250	1	CTSC-003538	CTSC-003876	CTSC-003877	SEAL-004868
1-5/16	HI34-SAE-1312	1	CTSC-003538	CTSC-003881	CTSC-003882	SEAL-004893
1-7/16	HI34-SAE-1437	2	CTSC-003538	CTSC-003891	CTSC-003892	SEAL-052415 SEAL-052416
1-1/2	HI34-SAE-1500	1	CTSC-003538	CTSC-003896	CTSC-003897	SEAL-004894
1-5/8	HI35-SAE-1625	1	CTSC-003571	CTSC-003906	CTSC-003907	SEAL-004932
1-3/4	HI35-SAE-1750	1	CTSC-003571	CTSC-003916	CTSC-003917	SEAL-042155
2	HI36-SAE-2000	3	CTSC-003602	CTSC-003934	CTSC-003935	SEAL-047820 SEAL-053983 SEAL-053988
2-1/4	HI36-SAE-2250	1	CTSC-003602	CTSC-003938	CTSC-003939	SEAL-004963