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Catalog No. H-250CF
Mar. 2011

Clean Fittings

for Weld & ZCR Metal Gasket Face Seal

- 1/4 to 1 inch and 6 to 18mm size
- 316, 316L, 316L VOD and 316L VIM VAR Stainless steel material
- Weld Fitting for manual or Automatic welding equipment

HY-LOK CORPORATION

Pressure Ratings

The HY-LOK clean weld fittings and metal gasket face seal fittings are manufactured from material in accordance with material table, and calculated in accordance with ASME code for Pressure Piping B 31.3, Process Piping for allowable stress value of 20,000 psi (equivalent ASTM A269-tubing) wall thickness.

Pressure ratings for fittings are also determined by temperature applied to the fittings.
Allowalbe working pressure at temperatures greater than 100°F (37°C) may be obtained by muliplying factors shown in Table 1

To determine pressure ratings in accordance with ASME B31.1, Power Piping, multiply working pressure by 0.94

Table 1. Derating Factors

Temperature °F (°C)	Factor	
	316 Stainless Steel	316L Stainless Steel
-20 to 100 (-28 to 37)	1.00	0.84
200 (93)	0.86	0.71
300 (148)	0.78	0.63
400 (204)	0.71	0.57
600 (315)	0.66	0.53
500 (260)	0.63	0.5
650 (343)	0.62	0.49
750 (398)	0.60	0.48
700 (371)	0.60	0.47
850 (454)	0.59	0.46
800 (426)	0.58	0.45
900 (482)	0.57	-
950 (510)	0.57	-
1000 (537)	0.56	-

Temperature Rating

Type	Material	Temperature, °F (°C)
Fittings	316L Stainless Steel	1000 (537)
	316L Stainless Steel	
	Single Vacuum Melt 316L Stainless Steel	
	Double Vacuum Melt 316L Stainless Steel	
Gaskets	316L Stainless Steel	1000 (537)
	Nickel	600 (315)
	Copper	400 (204)

Material

Material	Designator	Specification	
		Bar Stock	Forging
316 Stainless Steel	SB16	ASME SA479 ASTM A479 ASTM A276	ASME SA182 ASTM A182
316L Stainless Steel	B16L		
Single Vacuum Melt 316L Stainless Steel	SM6L		
Double Vacuum Melt 316L Stainless Steel	VV6L		

Surface Finishes

Grade	Designator	Roughness Average Ra	EP	Material	Packing Standard Class 10
B.A.	B	0.25pm (10pin)	N/A	SB16, B16L or SM6L	Double
High	H	0.13pm (5pin)	Yes	SM6L or VV6L	Double
Super	S	0.1pm (4pin)	Yes	VV6L	Triple

Cleaning

Passivation is done in a Nitric environment.
Precision cleaning is done by Ultra-sonic cleansing with resistivity over 18MS D.I. water after finishing the passivation.

Packing & Handling

HY-LOK clean fittings are double packed In anti-static polyethylene bags pressurized with high purity nitrogen gas.
Care should be used to maintain cleanliness.
Packing done in a clean room of Class 10 needs additional packing.

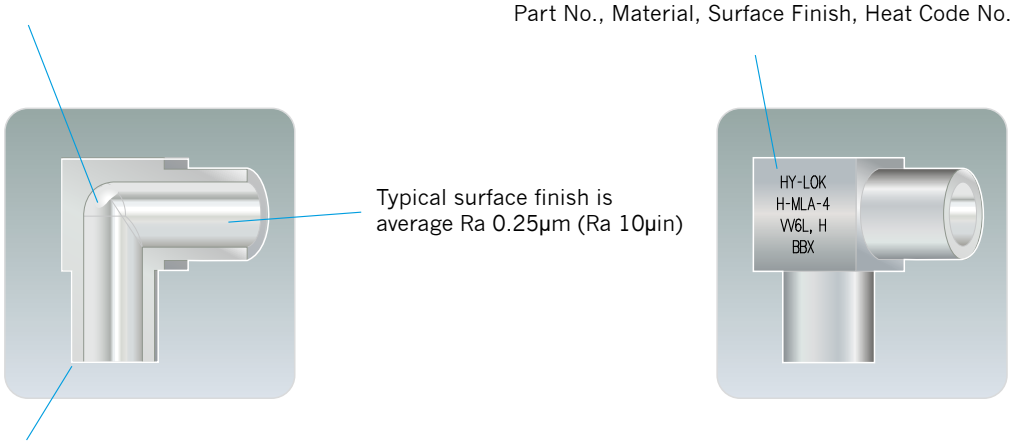
A. To maintain and transport in standard-pack condition.
B. Remove particles from outer package, open the card boad or outer package before carrying into clean room.
C. To move in double pack condition in clean room, take off the 1st package when used.
D. Remove the 2nd package just before welding.

Mini Tube Butt Weld Fittings

- is suitable for the miniature tubing system.
- is available to install the parts closetogether.
- has the equivalent flow capacity with bigger sized weld fitting.

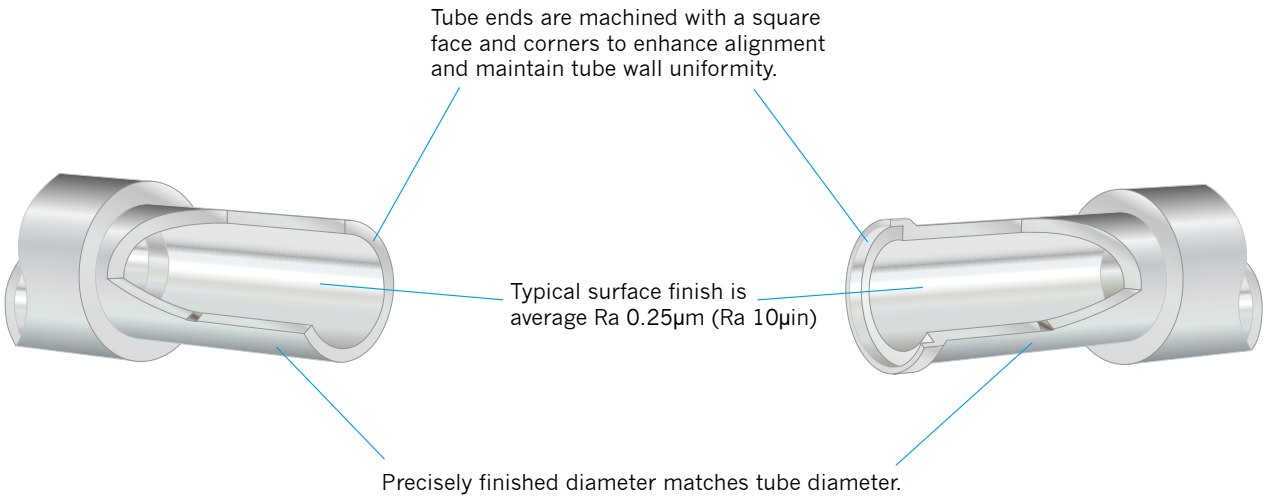
Radius junction means smooth flow transitions and elimination of pockets and entrapment zones.

Laser etch Marking Heat Code Traceability
HY-LOK Clean fittings are marked with Manufacturer, Part No., Material, Surface Finish, Heat Code No. designation.



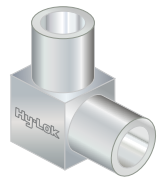
TBW (Tube Butt Weld) and ATW (Automatic Tube Butt Weld) Fittings

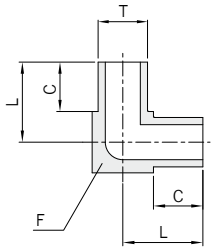
- HY-LOK Clean fittings are applicable for two welding shapes. TBW (Tube Butt Weld) and ATW (Automatic Tube Butt Weld)
- TBW is machined for optimal Butt Welding by Automatic TIG welder.



Mini Elbow

H-MLA

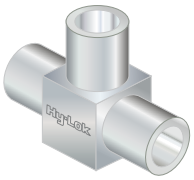


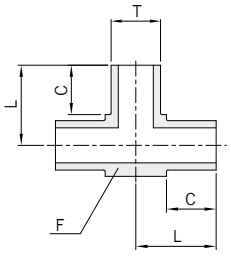


Part No.	T Tube O.D.	Wall Thick-ness	L		C		F Body Cube	Working Pressure	
			mm	in.	mm	in.	in.	psig	bar
H-MXA- 4	1/4	0.035 in.	10.4	0.41	6.35	0.25	5/16	5100	351
H-MXA- 6	3/8		11.9	0.47			7/16	3300	227
H-MXA- 8	1/2	0.049 in.	13.5	0.53			9/16	3700	254
H-MXA- 6M	6mm	1.0 mm	10.4	0.41			5/16	6095	420
H-MXA- 8M	8mm		11.9	0.47			7/16	4499	310
H-MXA-10M	10mm							3483	240
H-MXA-12M	12mm		13.5	0.53			9/16	2902	200

Mini Tee

H-MTA

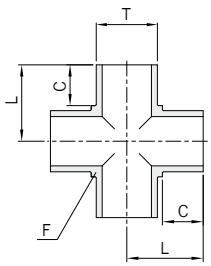




Part No.	T Tube O.D.	Wall Thick-ness	L		C		F Body Cube	Working Pressure	
			mm	in.	mm	in.	in.	psig	bar
H-MXA- 4	1/4	0.035 in.	10.4	0.41	6.35	0.25	5/16	5100	351
H-MXA- 6	3/8		11.9	0.47			7/16	3300	227
H-MXA- 8	1/2	0.049 in.	13.5	0.53			9/16	3700	254
H-MXA- 6M	6mm	1.0 mm	10.4	0.41			5/16	6095	420
H-MXA- 8M	8mm		11.9	0.47			7/16	4499	310
H-MXA-10M	10mm							3483	240
H-MXA-12M	12mm		13.5	0.53			9/16	2902	200

Mini Cross

H-MXA

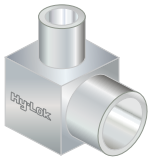


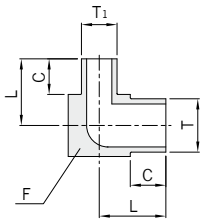
Part No.	T Tube O.D.	Wall Thick-ness	L		C		F Body Cube	Working Pressure	
			mm	in.	mm	in.	in.	psig	bar
H-MXA- 4	1/4	0.035 in.	10.4	0.41	6.35	0.25	5/16	5100	351
H-MXA- 6	3/8		11.9	0.47			7/16	3300	227
H-MXA- 8	1/2	0.049 in.	13.5	0.53			9/16	3700	254
H-MXA- 6M	6mm	1.0 mm	10.4	0.41			5/16	6095	420
H-MXA- 8M	8mm		11.9	0.47			7/16	4499	310
H-MXA-10M	10mm							3483	240
H-MXA-12M	12mm		13.5	0.53			9/16	2902	200

Dimensions are reference only, subject to change.

Mini Reducing Elbow

H-MLA

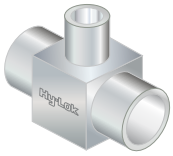


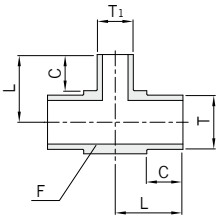


Part No.	T Tube O.D.	Wall Thick-ness	T1 Tube O.D.	Wall Thick-ness	L		C		F Body Cube	Working Pressure	
					mm	in.	mm	in.	in.	psig	bar
H-MLA 6-4	3/8	0.035 in.	1/4	0.035 in.	11.9	0.47	6.35	0.25	7/16	3300	227
H-MLA 8-4	1/2	0.049 in.			13.5	0.53			7/16	3700	254
H-MLA 8-6			3/8							3300	227
H-MLA 8M-6M	8mm	1.0 mm	6mm	1.0 mm	11.9	0.47			7/16	4499	310
H-MLA10M-6M	10mm									3483	240
H-MLA12M-6M	12mm				13.5	0.53			7/16	2902	200
H-MLA12M-8M			8mm								

Mini Reducing Tee

H-MTA

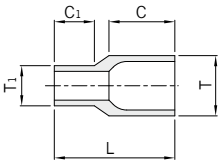




Part No.	T Tube O.D.	Wall Thick-ness	T1 Tube O.D.	Wall Thick-ness	L		C		F Body Cube	Working Pressure	
					mm	in.	mm	in.	in.	psig	bar
H-MTA 6-4	3/8	0.035 in.	1/4	0.035 in.	11.9	0.47	6.35	0.25	7/16	3300	227
H-MTA 8-4	1/2	0.049 in.			13.5	0.53			7/16	3700	254
H-MTA 8-6			3/8							3300	227
H-MTA 8M-6M	8mm	1.0 mm	6mm	1.0 mm	11.9	0.47			7/16	4499	310
H-MTA10M-6M	10mm									3483	240
H-MTA12M-6M	12mm				13.5	0.53			7/16	2902	200
H-MTA12M-8M			8mm								

Mini Reducing Coupling

H-MCA



Part No.	T Tube O.D.	Wall Thick-ness	T1 Tube O.D.	Wall Thick-ness	L		C		F Body Cube	Working Pressure	
					mm	in.	mm	in.	in.	psig	bar
H-MCA 6-4	3/8	0.035 in.	1/4	0.035 in.	11.9	0.47	6.35	0.25	7/16	3300	227
H-MCA 8-4	1/2	0.049 in.			13.5	0.53			7/16	3700	254
H-MCA 8-6			3/8							3300	227
H-MCA 8M- 6M	8mm	1.0 mm	6mm	1.0 mm	11.9	0.47			7/16	4499	310
H-MCA10M- 8M	10mm									3483	240
H-MCA12M- 8M	12mm				13.5	0.53			7/16	2902	200
H-MCA12M-10M			8mm								

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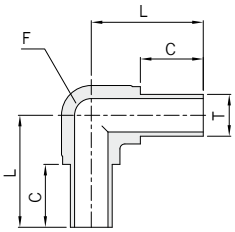
Long Elbow

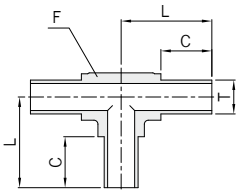
H-ML



Part No.	T Tube O.D.	Wall Thick-ness	L		C		F Body Cube	Working Pressure	
			mm	in.	mm	in.	in.	psig	bar
H-ML- 4	1/4	0.035 in.	31.2	1.23	19.05	0.75	7/16	5100	351
H-ML- 6	3/8		30.5	1.20				3300	227
H-ML- 8	1/2	0.049 in.	34.0	1.34			11/16	3700	254
H-ML-12	3/4		37.1	1.46			15/16	2400	165
H-ML-16	1	0.065 in.	47.0	1.85	24.40	0.94	1 1/4		
H-ML- 6M	6mm	1.0 mm	31.2	1.23	19.05	0.75	7/16	6095	420
H-ML- 8M	8mm							4499	310
H-ML-10M	10mm		34.0	1.34			11/16	3483	240
H-ML-12M	12mm							2902	200
H-ML-18M	18mm	1.5 mm	37.6	1.48			15/16		

Long Tee

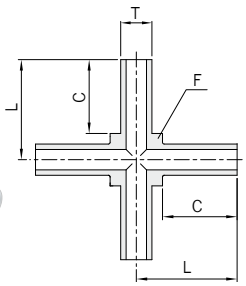
H-MT



Part No.	T Tube O.D.	Wall Thick-ness	L		C		F Body Cube	Working Pressure	
			mm	in.	mm	in.	in.	psig	bar
H-MT- 4	1/4	0.035 in.	31.2	1.23	19.05	0.75	7/16	5100	351
H-MT- 6	3/8		30.5	1.20				3300	227
H-MT- 8	1/2	0.049 in.	34.0	1.34			11/16	3700	254
H-MT-12	3/4		37.1	1.46			15/16	2400	165
H-MT-16	1	0.065 in.	47.0	1.85	24.40	0.94	1 1/4		
H-MT- 6M	6mm	1.0 mm	31.2	1.23	19.05	0.75	7/16	6095	420
H-MT- 8M	8mm							4499	310
H-MT-10M	10mm		34.0	1.34			11/16	3483	240
H-MT-12M	12mm							2902	200
H-MT-18M	18mm	1.5 mm	37.6	1.48			15/16		

Long Cross

H-MX



Part No.	T Tube O.D.	Wall Thick-ness	L		C		F Body Cube	Working Pressure	
			mm	in.	mm	in.	in.	psig	bar
H-MX- 4	1/4	0.035 in.	31.2	1.23	19.05	0.75	7/16	5100	351
H-MX- 6	3/8		30.5	1.20				3300	227
H-MX- 8	1/2	0.049 in.	34.0	1.34			11/16	3700	254
H-MX- 6M	3/4		37.1	1.46			15/16	2400	165
H-MX- 8M	1	0.065 in.	47.0	1.85	24.40	0.94	1 1/4		
H-MX-10M	6mm	1.0 mm	31.2	1.23	19.05	0.75	7/16	6095	420
H-MX-12M	8mm							4499	310
H-MT-10M	10mm		34.0	1.34			11/16	3483	240
H-MT-12M	12mm							2902	200

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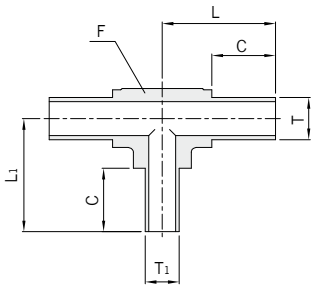
Long Reducing Tee

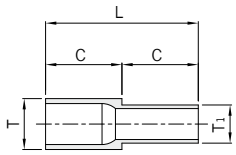
H-MT



Part No.	T Tube O.D.	Wall Thick-ness	T1 Tube O.D.	Wall Thick-ness	L		L1		C		F Body Cube	Working Pressure	
					mm	in.	mm	in.	mm	in.	in.	psig	bar
H-MT 6-4	3/8	0.035 in.	1/4	0.035 in.	30.5	1.20	31.2	1.23	19.05	0.75	7/16	3300	227
H-MT 8-4	1/2	0.049 in.			34.0	1.34	34.0	1.34			11/16	3700	254
H-MT 8-6			3/8				34.3	1.35				3300	227
H-MT12-6	3/4				37.1	1.46					15/16	2400	165
H-MT12-4			1/4				37.6	1.48					
H-MT 8M-6M	8mm	1.0 mm	6mm	1.0 mm	31.3	1.23	31.3	1.23			7/16	4499	310
H-MT10M-6M	10mm				34.0	1.34	34.0	1.34			11/16	3483	240
H-MT10M-8M			8mm									2902	200
H-MT12M-6M	12mm		6mm										
H-MT12M-8M			8mm										

Reducing Union

H-MU

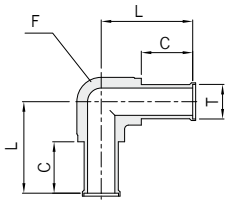


Part No.	T Tube O.D.	Wall Thick-ness	T1 Tube O.D.	Wall Thickness	L		C		Working Pressure	
					mm	in.	mm	in.	psig	bar
H-MU 6- 4	3/8	0.035 in.	1/4	0.035 in.	38.1	1.50	19.05	0.75	3300	227
H-MU 8- 4	1/2	0.049 in.							3700	254
H-MU 8- 6			3/8						3300	227
H-MU12- 8	3/4		1/2	0.049 in.					2400	165
H-MU16- 8	1	0.065 in.								
H-MU16-12			3/4							
H-MU10M- 6M	10mm	1.0 mm	6mm	1.0 mm					3483	240
H-MU10M- 8M			8mm							
H-MU12M- 6M	12mm		6mm						2902	200
H-MU12M- 8M			8mm							
H-MU12M-10M			10mm							
H-MU18M- 6M	18mm	1.5 mm	6mm	1.5 mm						
H-MU18M-12M			12mm							

Dimensions are reference only, subject to change.

Long Elbow with Shoulder

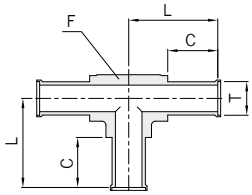
H-ML-A



Part No.	T Tube O.D.	Wall Thick-ness	L		C		F Body Cube	Working Pressure	
			mm	in.	mm	in.	in.	psig	bar
H-ML- 4A	1/4	0.035 in.	31.2	1.23	19.05	0.75	7/16	5100	351
H-ML- 6A	3/8		30.5	1.20				3300	227
H-ML- 8A	1/2	0.049 in.	34.0	1.34			11/16	3700	254
H-ML-12A	3/4		37.1	1.46			15/16	2400	165
H-ML-16A	1	0.065 in.	47.0	1.85	24.40	0.94	1 1/4		
H-ML- 6MA	6mm	1.0 mm	31.2	1.23	19.05	0.75	7/16	6095	420
H-ML- 8MA	8mm							4499	310
H-ML-10MA	10mm		34.0	1.34			11/16	3483	240
H-ML-12MA	12mm							2902	200
H-ML-18MA	18mm	1.5 mm	37.6	1.48			15/16		

Long Tee with Shoulder

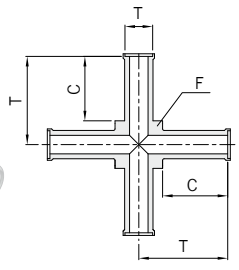
H-MT-A



Part No.	T Tube O.D.	Wall Thick-ness	L		C		F Body Cube	Working Pressure	
			mm	in.	mm	in.	in.	psig	bar
H-MT- 4A	1/4	0.035 in.	31.2	1.23	19.05	0.75	7/16	5100	351
H-MT- 6A	3/8		30.5	1.20				3300	227
H-MT- 8A	1/2	0.049 in.	34.0	1.34			11/16	3700	254
H-MT-12A	3/4		37.1	1.46			15/16	2400	165
H-MT-16A	1	0.065 in.	47.0	1.85	24.40	0.94	1 1/4		
H-MT- 6MA	6mm	1.0 mm	31.2	1.23	19.05	0.75	7/16	6095	420
H-MT- 8MA	8mm							4499	310
H-MT-10MA	10mm		34.0	1.34			11/16	3483	240
H-MT-12MA	12mm							2902	200
H-MT-18MA	18mm	1.5 mm	37.6	1.48			15/16		

Long Cross with Shoulder

H-MX-A

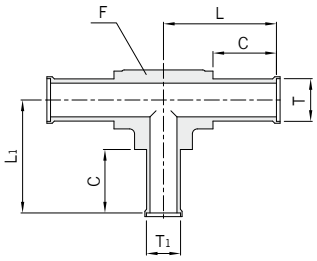


Part No.	T Tube O.D.	Wall Thick-ness	L		C		F Body Cube	Working Pressure	
			mm	in.	mm	in.	in.	psig	bar
H-MX- 4A	1/4	0.035 in.	31.2	1.23	19.05	0.75	7/16	5100	351
H-MX- 6A	3/8		30.5	1.20				3300	227
H-MX- 8A	1/2	0.049 in.	34.0	1.34			11/16	3700	254
H-MX-12A	3/4		37.1	1.46			15/16	2400	165
H-MX-16A	1	0.065 in.	47.0	1.85	24.40	0.94	1 1/4		
H-MX- 6MA	6mm	1.0 mm	31.2	1.23	19.05	0.75	7/16	6095	420
H-MX- 8MA	8mm							4499	310
H-MX-10MA	10mm		34.0	1.34			11/16	3483	240
H-MX-12MA	12mm							2902	200

Dimensions are reference only, subject to change.

Long Reducing Tee with Shoulder

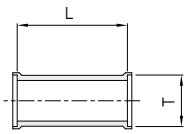
H-MT-A



Part No.	T Tube O.D.	Wall Thick-ness	T1 Tube O.D.	Wall Thick-ness	L		L1		C		F Body Flat	Working Pressure	
					mm	in.	mm	in.	mm	in.	in.	psig	bar
H-MT 6- 4A	3/8	0.035 in.	1/4	0.035 in.	30.5	1.20	31.2	1.23	19.05	0.75	7/16	3300	227
H-MT 8- 4A	1/2	0.049 in.			34.0	1.34	34.5	1.36			11/16	3700	254
H-MT 8- 6A			3/8				34.0	1.34				3300	227
H-MT12- 6A	3/4				37.1	1.46	37.1	1.46			15/16	2400	165
H-MT12- 8A			1/2	0.049 in.									
H-MT12M-6MA	12mm	1.0 mm	6mm	1.0 mm	34.0	1.34	34.0	1.34			11/16	200	227

Union with Shoulder

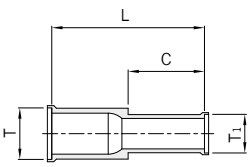
H-MU-A



Part No.	T Tube O.D.	Wall Thickness	L		Working Pressure	
			mm	in.	psig	bar
H-MU- 4A	1/4	0.035 in.	24.4	0.96	5100	351
H-MU- 6A	3/8		23.8	0.94	3300	227
H-MU- 8A	1/2	0.049 in.	23.4	0.92	3700	254
H-MU-12A	3/4				2400	165
H-MU-16A	1	0.065 in.	29.8	1.17		
H-MU- 6MA	6mm	1.0 mm	30.8	1.21	6095	420
H-MU- 8MA	8mm		30.2	1.19	4499	310
H-MU-10MA	10mm				3483	240
H-MU-12MA	12mm		29.8	1.17	2902	200
H-MU-18MA	18mm	1.5 mm				

Reducing Union with Shoulder

H-MU-A



Part No.	T Tube O.D.	Wall Thick-ness	T1 Tube O.D.	Wall Thick-ness	L		C		Working Pressure	
					mm	in.	mm	in.	psig	bar
H-MU 6-4A	3/8	0.035 in.	1 / 4	0.035 in.	38.8	1.53	18.6	0.73	3300	227
H-MU 8-4A	1/2	0.049 in.			38.6	1.52			3700	254
H-MU 8-6A			3 / 8		38.3	1.51	18.3	0.72	3300	227
H-MU 8M-6MA	8mm	1.0 mm	6mm	1.0 mm	38.6	1.52	18.6	0.73	4499	310
H-MU12M-6MA	12mm								2902	200
H-MU12M-8MA			8mm				18.3	0.72		

Dimensions are reference only, subject to change.

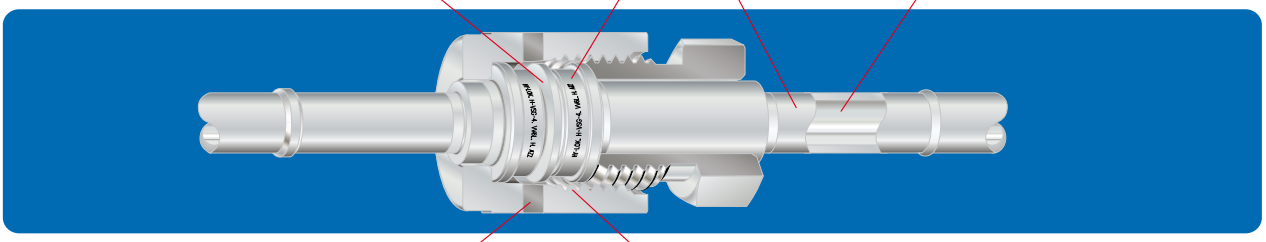
Feature

- Provides ultra-high purity Metal to metal seal for vacuum and positive pressure applications.
- Sealing is accomplished by compressing the gasket between the two beads during assembly of the male nut or body and female nut.

Gasket options include -
silver plated stainless steel 316L, Nickel plated, unplated nikel or special request.

Roll stamped or Laser etch Marking & Heat Code Traceability
HY-LOK Clean fittings are marked with Manufacturer, Part No., Material, Surface finish, Heat Code No. designation.

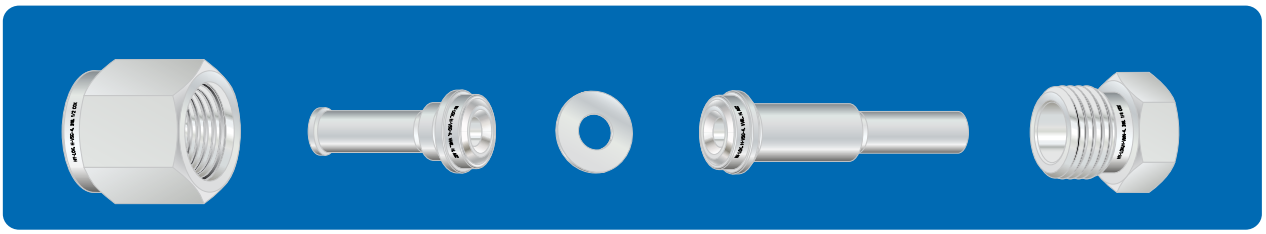
Typical surface finish is average Ra 0.25μm (Ra 10μin)



QA leak test port also allows visual inspection of sealing gasket prior to assembly.

The internal surface finish of the female nut is silver plated to ensure consistent, low make up torque.

Typical Assembly



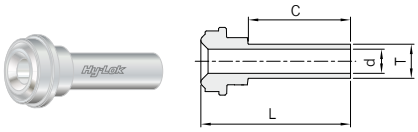
Plating

- Female Nut-The internal surface of the nut is silver plated to avoid galling and reduce the pull up torque.
- Gasket options include-Silver plated stainless steel 316L, Nickel plated, unplated nickel or special request.

Testing

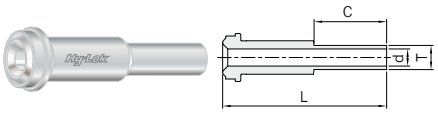
- ZCR Fittings have been helium leak tested to a rate of 1 X 10-10 atm/cc/sec with unplated, silver plated and copper gasket.
- Optional tests are available upon request.

Short Tube Butt Weld Gland
H-ZSG



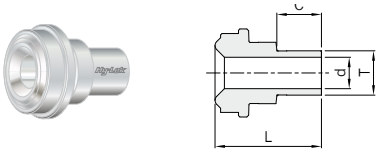
Part No.	ZCR Size	T Tube O.D.	Nominal Wall Thick-ness	d		L		C		Working Pressure psig (bar)		
				mm	in.	mm	in.	mm	in.	NI	SS	CU
H-ZSG - 2	1/8	1/8	0.028 in.	1.50	0.06	27.4	1.08	19.05	0.75	8500 (585)		6800 (468)
H-ZSG - 4	1/4	1/4	0.035 in.	4.55	0.18	27.9	1.10			5100 (351)		
H-ZSG8- 4	1/4					28.4	1.12			3500 (241)	4300 (296)	2800 (192)
H-ZSG - 6	1/2	3/8		7.67	0.30					3300 (227)		2600 (179)
H-ZSG - 8		1/2	0.049 in.	10.14	0.40					3500 (241)		2800 (192)
H-ZSG - 6M	1/4	6mm	1.0 mm	4.06	0.16	29.5	1.16			6800 (468)		5400 (372)
H-ZSG - 8M		8mm		6.12	0.24					4900 (337)		
H-ZSG -10M	1/2	10mm		8.12	0.32					3500 (241)		2800 (192)
H-ZSG -12M		12mm		9.96	0.39					3100 (213)		2400 (165)
H-ZSG -18M	3/4	18mm	1.5 mm	15.00	0.59	31.0	1.22			3000 (206)		

Long Tube Butt Weld Gland
H-ZLG



Part No.	ZCR Size	T Tube O.D.	Nominal Wall Thick-ness	d		L		C		Working Pressure psig (bar)		
				mm	in.	mm	in.	mm	in.	NI	SS	CU
H-ZLG - 2	1/8	1/8	0.028 in.	1.50	0.06	36.1	1.42	19.05	0.75	8500 (585)		6800 (468)
H-ZLG - 4	1/4	1/4	0.035 in.	4.55	0.18	43.2	1.70			5100 (351)		
H-ZLG8- 4	1/4					45.7	1.80			3500 (241)	4300 (296)	2800 (192)
H-ZLG - 6	1/2	3/8		7.67	0.30	45.5	1.79			3300 (227)		2600 (179)
H-ZLG - 8		1/2	0.049 in.	10.14	0.40					3500 (241)		2800 (192)
H-ZLG -12	3/4	3/4		16.50	0.65	51.6	2.03			2400 (165)		1900 (130)
H-ZLG -12T065			0.065 in.	15.75	0.62							
H-ZLG -16	1	1		22.10	0.87	58.9	2.32					
H-ZLG - 6M	1/4	6mm	1.0 mm	4.06	0.16	43.2	1.70			6800 (468)		5400 (372)
H-ZLG - 8M		8mm		6.12	0.24					4900 (337)		
H-ZLG -10M	3/4	10mm		8.12	0.32	45.5	1.79			3500 (241)		2800 (192)
H-ZLG -12M		12mm		9.96	0.39					3100 (213)		2400 (165)
H-ZLG -18M		18mm	1.5 mm	15.00	0.59	51.6	2.03			3000 (206)		

Mini Short Tube Butt Weld Gland
H-ZMSG

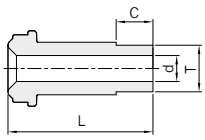


Part No.	ZCR Size	T Tube O.D.	Nominal Wall Thick-ness	d		L		C		Working Pressure psig (bar)		
				mm	in.	mm	in.	mm	in.	NI	SS	CU
H-ZMSG- 4	1/4	1/4	0.035 in.	4.55	0.18	15.2	0.60	6.35	0.25	5100 (351)		
H-ZMSG- 6	3/8	3/8		7.67	0.30	15.8	0.62			3300 (227)		2600 (179)
H-ZMSG- 8	1/2	1/2	0.049 in.	10.14	0.40					3500 (241)		2800 (192)
H-ZMSG- 6M	1/4	6mm	1.0 mm	4.06	0.16	15.2	0.60			6800 (468)		5400 (372)
H-ZMSG- 8M		8mm		6.12	0.24	15.8	0.62			4900 (337)		
H-ZMSG-10M	1/2	10mm		8.12	0.32					3500 (241)		2800 (192)
H-ZMSG-12M		12mm		9.96	0.39					3100 (213)		2400 (165)

Dimensions are reference only, subject to change.

Mini Long Tube Weld Gland

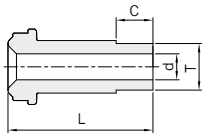
H-ZMLG



Part No.	ZCR Size	T Tube O.D.	Nominal Wall Thick-ness	d		L		C		Working Pressure psig (bar)		
				mm	in.	mm	in.	mm	in.	NI	SS	CU
H-ZMLG- 4	1/4	1/4	0.035 in.	4.55	0.18	30.5	1.20	6.35	0.25	5100 (351)		
H-ZMLG- 6	1/2	3/8		7.67	0.30	32.8	1.29			3300 (227)		2600 (179)
H-ZMLG- 8		1/2	0.049 in.	10.14	0.40					3500 (241)		2800 (192)
H-ZMLG- 6M	1/4	6mm	1.0 mm	4.06	0.16	31.0	1.22			6800 (468)		5400 (372)
H-ZMLG- 8M		8mm		6.12	0.24	31.2	1.23			4900 (337)		
H-ZMLG-10M	1/2	10mm		8.12	0.32	32.8	1.29			3500 (241)		2800 (192)
H-ZMLG-12M		12mm		9.96	0.39	33.8	1.33			3100 (213)		2400 (165)

Short Tube Weld Gland with Shoulder

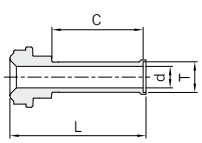
H-ZSG-A



Part No.	ZCR Size	T Tube O.D.	Nominal Wall Thick-ness	d		L		C		Working Pressure psig (bar)		
				mm	in.	mm	in.	mm	in.	NI	SS	CU
H-ZSG- 4A	1/4	1/4	0.035 in.	4.55	0.18	28.4	1.12	19.05	0.75	5100 (351)		
H-ZSG- 6A	1/2	3/8		7.67	0.30	29.2	1.15			3300 (227)		2600 (179)
H-ZSG- 8A		1/2	0.049 in.	10.14	0.40	29.5	1.16			3500 (241)		2800 (192)
H-ZSG- 6MA	1/4	6mm	1.0 mm	4.06	0.16	30.0	1.18			6800 (468)		5400 (372)
H-ZSG- 8MA		8mm		6.12	0.24	30.2	1.19			4900 (337)		
H-ZSG-10MA	1/2	10mm		8.12	0.32	31.0	1.22			3500 (241)		2800 (192)
H-ZSG-12MA		12mm		9.96	0.39	30.5	1.20			3100 (213)		2400 (165)

Long Tube Weld Gland with Shoulder

H-ZLG-A

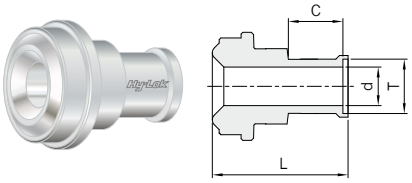


Part No.	ZCR Size	T Tube O.D.	Nominal Wall Thick-ness	d		L		C		Working Pressure psig (bar)		
				mm	in.	mm	in.	mm	in.	NI	SS	CU
H-ZLG - 4A	1/4	1/4	0.035 in.	4.55	0.18	43.7	1.72	19.05	0.75	5100 (351)		
H-ZLG8- 4A	1/2					46.2	1.82			3500 (241)		2800 (192)
H-ZLG - 6A		3/8		7.67	0.30					3300 (227)		2600 (179)
H-ZLG - 8A		1/2	0.049 in.	10.14	0.40	46.5	1.83			3500 (241)		2800 (192)
H-ZLG -12A	3/4	3/4		16.50	0.65	52.6	2.07			2400 (165)		2400 (165)
H-ZLG -16A	1	1	0.065 in.	22.10	0.87	65.3	2.57	24.40	0.87			2800 (192)
H-ZLG - 6MA	1/4	6mm	1.0 mm	4.06	0.16	43.7	1.72	19.05	0.75	6800 (468)		5400 (372)
H-ZLG - 8MA		8mm		6.12	0.24	43.9	1.73			4900 (337)		
H-ZLG -10MA	1/2	10mm		8.12	0.32	46.5	1.83			3500 (241)		2800 (192)
H-ZLG -12MA		12mm		9.96	0.39					3100 (213)		2400 (165)
H-ZLG -18MA	3/4	18mm	1.5 mm	15.00	0.59	52.6	2.07			3000 (206)		

Dimensions are reference only, subject to change.

Mini Short Tube Weld Gland with Shoulder

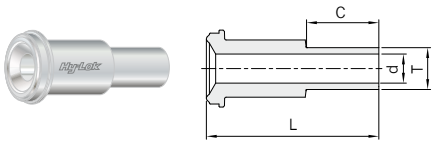
H-ZMSG-A



Part No.	ZCR Size	T Tube O.D.	Nominal Wall Thick-ness	d		L		C		Working Pressure psig (bar)		
				mm	in.	mm	in.	mm	in.	NI	SS	CU
H-ZMSG- 4A	1/4	1/4	0.035 in.	4.55	0.18	15.7	0.62	6.35	0.25	5100 (351)		
H-ZMSG- 6A	1/2	3/8		7.67	0.30	16.6	0.65			3300 (227)		2600 (179)
H-ZMSG- 8A		1/2	0.049 in.	10.14	0.40	16.8	0.66			3500 (241)		2800 (192)
H-ZMSG- 6MA	1/4	6mm	1.0 mm	4.06	0.16	15.7	0.62			6800 (468)		5400 (372)
H-ZMSG- 8MA		8mm		6.12	0.24	16.6	0.65			4900 (337)		
H-ZMSG-10MA	1/2	10mm		8.12	0.32					3500 (241)		2800 (192)
H-ZMSG-12MA		12mm		9.96	0.39	16.8	0.66			3100 (213)		2400 (165)

Male Weld Gland

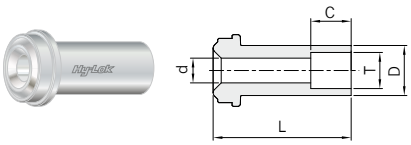
H-ZGM



Part No.	ZCR Size	T Tube O.D.	d		L		C		Working Pressure psig (bar)		
			mm	in.	mm	in.	mm	in.	NI	SS	CU
H-ZGM - 2	1/8	1/8	1.50	0.06	17.8	0.70	7.1	0.28	9000 (620)	11200 (771)	7200 (496)
H-ZGM4- 2	1/4				33.3	1.31			8000 (551)	10000 (689)	6400 (440)
H-ZGM - 4		1/4	3.00	0.12			10.4	0.41			
H-ZGM8- 4	1/2				38.1	1.50			3500 (241)	4300 (296)	2800 (192)
H-ZGM - 6		3/8	7.10	0.28							
H-ZGM - 8		1/2	10.14	0.40			12.7	0.50		3500 (241)	
H-ZGM -12	3/4	3/4	13.50	0.53	50.8	2.00	15.7	0.62	3000 (206)	3700 (254)	2400 (165)
H-ZGM -16	1	1	19.10	0.75	56.4	2.22	20.6	0.81	2400 (165)	3000 (206)	1900 (130)

Socket Weld Gland

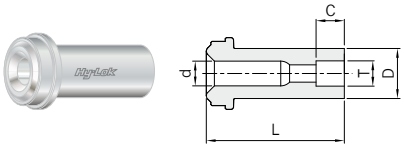
H-ZGS



Part No.	ZCR Size	T Tube Socket	d		D		L		C		Working Pressure psig (bar)		
			mm	in.	mm	in.	mm	in.	mm	in.	NI	SS	CU
H-ZGS- 2S	1/8	1/8	2.30	0.09	5.1	0.20	17.8	0.70	2.5	0.10	7100 (489)		
H-ZGS- 4S	1/4	1/4	4.55	0.18	00	0.35	33.3	1.31	7.1	0.28	5500 (378)		
H-ZGS- 6S	1/2	3/8	7.67	0.30	15.2	0.60	38.1	1.50	7.9	0.31	3500 (241)	4300 (291)	2800 (192)
H-ZGS- 8S		1/2	10.14	0.40					9.7	0.38	3000 (206)		2400 (165)
H-ZGS-12S	3/4	3/4	13.50	0.53	22.4	0.88	50.8	2.00	11.2	0.44	2800 (192)		2200 (151)
H-ZGS-16S	1	1	19.10	0.75	30.2	1.19	56.4	2.22	15.7	0.62	2400 (165)	3000 (206)	1900 (130)

Reducing Socket Weld Gland

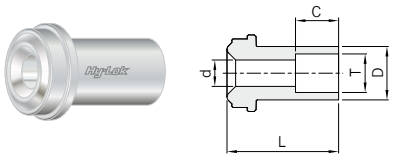
H-ZGS



Part No.	ZCR Size	T Tube Socket	d		D		L		C		Working Pressure psig (bar)		
			mm	in.	mm	in.	mm	in.	mm	in.	NI	SS	CU
H-ZGS- 2S	1/8	1/8	2.30	0.09	5.1	0.20	17.8	0.70	2.5	0.10	8000 (551)		
H-ZGS- 4S	1/4	1/4	4.55	0.18	00	0.35	33.3	1.31	7.1	0.28	3500 (241)		

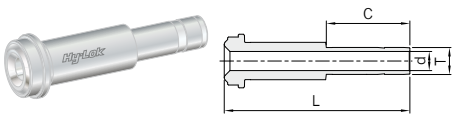
Dimensions are reference only, subject to change.

Short Socket Weld Gland
H-ZGS



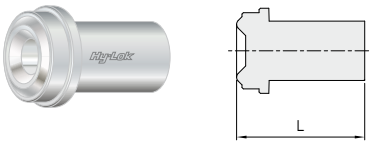
Part No.	ZCR Size	T Tube Socket	d		D		L		C		Working Pressure psig (bar)		
			mm	in.	mm	in.	mm	in.	mm	in.	NI	SS	CU
H-ZMSG- 4A	1/4	1/4	4.55	0.18	8.9	0.35	12.7	0.50	7.1	0.28	5500 (378)		
H-ZMSG- 6A							19.1	0.75					

Tube Adapter Gland
H-ZGT



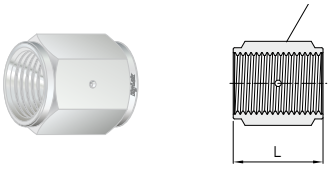
Part No.	ZCR Size	T Tube Socket	d		L		C		Working Pressure psig (bar)		
			mm	in.	mm	in.	mm	in.	NI	SS	CU
H-ZGT-4	1/4	1/4	4.30	0.17	41.0	1.62	16.2	0.64	8000 (511)	10000 (689)	6400 (440)
H-ZGT-6	1/2	3/8	6.80	0.27	46.0	1.81	17.8	0.70	3500 (241)	4300 (296)	2800 (192)
H-ZGT-8		1/2	9.40	0.37	49.3	1.94	24.4	0.96			

Blind Gland
H-ZBG



Part No.	ZCR Size	L	
		mm	in.
H-ZBG- 2	1/8	17.8	0.70
H-ZBG- 4	1/4	33.3	1.31
H-ZBG- 8	1/2	38.1	1.50
H-ZBG-12	3/4	50.8	2.00
H-ZBG-16	1	56.4	2.22

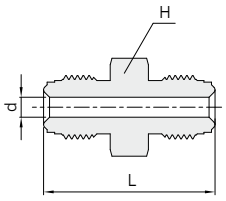
Coupling
H-ZC



Part No.	ZCR Size	L		H
		mm	in.	in.
H-ZC- 2	1/8	16.8	0.66	7/16
H-ZC- 4	1/4	30.2	1.19	3/4
H-ZC- 8	1/2	33.3	1.31	1 1/16
H-ZC-12	3/4	42.7	1.68	1 1/2
H-ZC-16	1	51.8	2.04	1 3/4

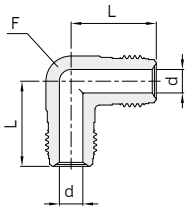
Dimensions are reference only, subject to change.

Double Male Union
H-ZUA



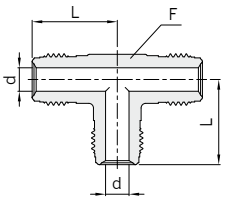
Part No.	ZCR Size	d		L		H	Working Pressure psig (bar)		
		mm	in.	mm	in.	in.	NI	SS	CU
H-ZUA- 2	1/8	2.30	0.09	28.7	1.13	3/8	9000 (620)	11200 (771)	7200 (496)
H-ZUA- 4	1/4	4.55	0.18	39.4	1.55	5/8	8000 (551)	10000 (689)	6400 (440)
H-ZUA- 8	1/2	10.14	0.40	46.7	1.84	15/16	3500 (241)	4300 (296)	2800 (192)
H-ZUA-12	3/4	15.70	0.62	62.0	2.44	1 5/16	3000 (206)	3700 (254)	2400 (165)
H-ZUA-16	1	22.10	0.87	65.8	2.59	1 5/8	2400 (165)	3000 (206)	1900 (130)

Union Elbow
H-ZLA



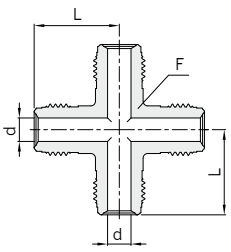
Part No.	ZCR Size	d		L		F Body Flat	Working Pressure psig (bar)		
		mm	in.	mm	in.	in.	NI	SS	CU
H-ZLA- 2	1/8	2.30	0.09	22.6	0.89	7/16	9000 (620)	11200 (771)	7200 (496)
H-ZLA- 4	1/4	4.55	0.18	27.2	1.07	1/2	8000 (551)	10000 (689)	6400 (440)
H-ZLA- 8	1/2	10.14	0.40	36.8	1.45	13/16	3500 (241)	4300 (296)	2800 (192)
H-ZLA-12	3/4	15.70	0.62	48.8	1.92	1 1/4	3000 (206)	3700 (254)	2400 (165)
H-ZLA-16	1	22.10	0.87	50.8	2.00	1 11/16	2400 (165)	3000 (206)	1900 (130)

Union Tee
H-ZTA



Part No.	ZCR Size	d		L		F Body Flat	Working Pressure psig (bar)		
		mm	in.	mm	in.	in.	NI	SS	CU
H-ZTA- 2	1/8	2.30	0.09	22.6	0.89	7/16	9000 (620)	11200 (771)	7200 (496)
H-ZTA- 4	1/4	4.55	0.18	27.2	1.07	1/2	8000 (551)	10000 (689)	6400 (440)
H-ZTA- 8	1/2	10.14	0.40	36.8	1.45	13/16	3500 (241)	4300 (296)	2800 (192)
H-ZTA-12	3/4	15.70	0.62	48.8	1.92	1 1/4	3000 (206)	3700 (254)	2400 (165)
H-ZTA-16	1	22.10	0.87	50.8	2.00	1 11/16	2400 (165)	3000 (206)	1900 (130)

Union Cross
H-ZXA

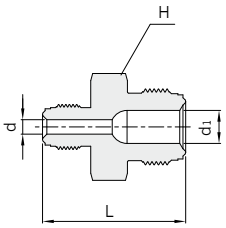


Part No.	ZCR Size	d		L		F Body Flat	Working Pressure psig (bar)		
		mm	in.	mm	in.	in.	NI	SS	CU
H-ZXA- 2	1/8	2.30	0.09	22.6	0.89	7/16	9000 (620)	11200 (771)	7200 (496)
H-ZXA- 4	1/4	4.55	0.18	27.2	1.07	1/2	8000 (551)	10000 (689)	6400 (440)
H-ZXA- 8	1/2	10.14	0.40	36.8	1.45	13/16	3500 (241)	4300 (296)	2800 (192)
H-ZXA-12	3/4	15.70	0.62	48.8	1.92	1 1/4	3000 (206)	3700 (254)	2400 (165)
H-ZXA-16	1	22.10	0.87	50.8	2.00	1 11/16	2400 (165)	3000 (206)	1900 (130)

Dimensions are reference only, subject to change.

Double Male Reducing Union

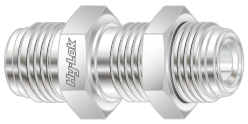
H-ZUR

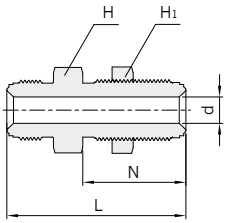


Part No.	ZCR Size		d		d1		L		H	Working Pressure psig (bar)		
			mm	in.	mm	in.	mm	in.	in.	NI	SS	CU
H-ZUR4-2	1/4	1/8	4.55	0.18	2.30	0.09	34.8	1.37	5/8	8000 (551)	10000 (689)	6400 (440)
H-ZUR8-4	1/2	1/4	10.14	0.40	4.55	0.18	43.4	1.71	15/16	3500 (241)	4300 (296)	2800 (192)

Bulkhead Union

H-ZBHU

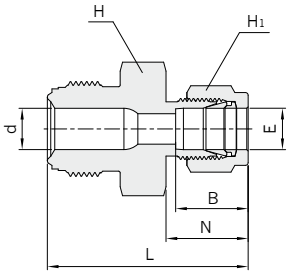




Part No.	ZCR Size	d		L		N		H	H1	Panel Hole size		Max. Panel Thickness		Working Pressure		
		mm	in.	mm	in.	mm	in.	in.	in.	mm	in.	mm	in.	NI	SS	CU
H-ZBHU-4	1/4	4.55	0.18	56.6	2.23	33.0	1.30	3/4	3/4	14.5	0.57	11.10	0.44	8000 (551)	10000 (689)	6400 (440)
H-ZBHU-4L46				46.2	1.82	25.1	0.99					3.30	0.13			
H-ZBHU-8	1/2	10.14	0.40	65.3	2.57	37.6	1.48	1 1/16	1 1/16	22.5	0.89	12.70	0.50	3500 (241)	4300 (296)	2800 (192)
H-ZBHU-8L54				54.4	2.14	28.2	1.11					3.30	0.13			

Hy-Lok Tube Fitting Connector

H-ZHC



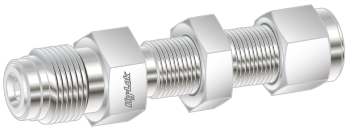
Part No.	ZCR Size	E Tube O.D.	d		L		B		N		H	H1	Working Pressure* psig (bar)		
			mm	in.	mm	in.	mm	in.	mm	in.	in.	in.	NI	SS	CU
H-ZHC4-2	1/4	1/8	4.55	0.18	38.6	1.52	12.7	0.50	15.2	0.60	5/8	7/16	8000 (551)	10000 (689)	6400 (440)
H-ZHC4-4		1/4			41.1	1.62	15.2	0.60	17.8	0.70		9/16			
H-ZHC4-6		3/8			43.0	1.70	16.8	0.66	19.3	0.76	11/16	11/16	6500 (447)		
H-ZHC8-6	1/2		10.14	0.40	46.7	1.84					15/16		3500 (241)	4300 (296)	2800 (192)
H-ZHC8-8		1/2			49.5	1.95	22.9	0.90	21.8	0.86		7/8			

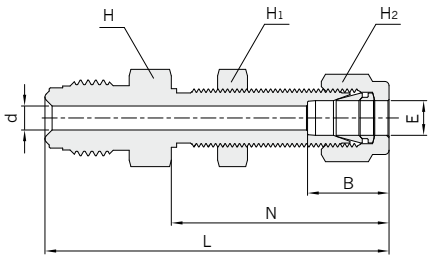
* Note : B,N,L are finger - tight dimensions.

Dimensions are reference only, subject to change.

Hy-Lok Tube Fitting Bulkhead Connector

H-ZBHC



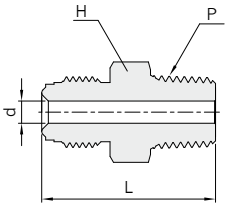


Part No.	ZCR Size	E Tube O.D.	d		L		B		N		H	H1	H2	Panel Hole size		Max. Panel Thickness		Working Pressure		
			mm	in.	mm	in.	mm	in.	mm	in.	in.	in.	in.	mm	in.	mm	in.	NI	SS	CU
H-ZBHC4-4	1/4	1/4	4.55	0.18	57.2	2.25	15.2	0.60	33.5	1.32	5/8	5/8	9/16	11.9	15/32	10.2	0.40	8000 (551)	10000 (689)	6400 (440)
H-ZBHC4-4L48					47.8	1.88			26.7	1.05						3.3	0.13			
H-ZBHC8-6	1/2	3/8	7.10	0.28	64.5	2.54	16.8	0.66	36.8	1.45	15/16	3/4	11/16	15.1	19/32	11.1	0.44	3500 (241)	4300 (296)	2800 (192)
H-ZBHC8-8		1/2	10.14	0.40	69.6	2.74	22.9	0.90	41.9	1.65		15/16	7/8	19.8	25/32	12.7	0.50			

Note : B,N,L are finger - tight dimensions.

Male NPT Connector

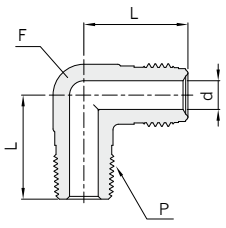
H-ZMC



Part No.	ZCR Size	d		L		H	P NPT	Working Pressure psig (bar)		
		mm	in.	mm	in.	in.		NI	SS	CU
H-ZMC 2- 1N	1/8	2.30	0.09	27.2	1.07	3/8	1/16	9000 (620)		7200 (496)
H-ZMC 2- 2N						7/16	1/8			
H-ZMC 4- 2N	1/4	4.55	0.18	33.3	1.31	5/8		8000 (551)	10000 (689)	6400 (440)
H-ZMC 4- 4N				37.8	1.49		1/4			
H-ZMC 8- 6N	1/2	9.65	0.38	41.9	1.65	15/16	3/8	3500 (241)	4300 (296)	2800 (192)
H-ZMC 8- 8N		10.14	0.40	46.7	1.84		1/2			
H-ZMC12-12N	3/4	15.70	0.62	55.6	2.19	1 5/8	3/4	3000 (206)	3700 (254)	2400 (165)
H-ZMC16-16N	1	22.10	0.87	62.7	2.47		1	2400 (165)	3000 (206)	1900 (130)

Male NPT Elbow

H-ZLMA

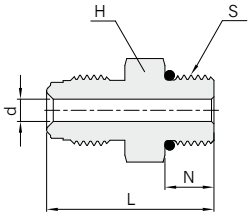


Part No.	ZCR Size	d		L		L1		P NPT	F	Working Pressure psig (bar)		
		mm	in.	mm	in.	mm	in.		Flat	NI	SS	CU
H-ZLMA4-2N	1/4	4.55	0.18	27.2	1.07	22.1	0.87	1/8	1/2	8000 (551)	10000 (689)	6400 (440)
H-ZLMA4-4N						26.7	1.05	1/4			8000 (551)	8000 (551)
H-ZLMA8-6N	1/2	10.14	0.40	36.8	1.45	32.0	1.26	3/8	13/16	3500 (241)	4300 (296)	2800 (192)
H-ZLMA8-8N						36.8	1.45	1/2				

Dimensions are reference only, subject to change.

Straight thread O-Ring Seal Male Connector

H-ZSC

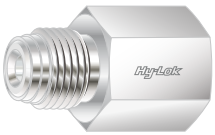


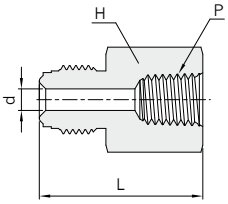
Part No.	ZCR Size	d		L		N		H	S Straight Thread	O-Ring Uniform Size	Working Pressure		
		mm	in.	mm	in.	mm	in.	in.			NI	SS	CU
H-ZSC4-6U	1/4	4.55	0.18	33.8	1.33	9.9	0.39	3/4	9/16-18	-906	4500 (310)		
H-ZSC8-6U	1/2	10.14	0.40	37.6	1.48			15/16					
H-ZSC8-10U				42.2	1.66	12.7	0.50	1	7/8-14	-910	3500 (241)		2800 (192)

Note : B,N,L are finger - tight dimensions.

Female NPT Connector

H-ZFC

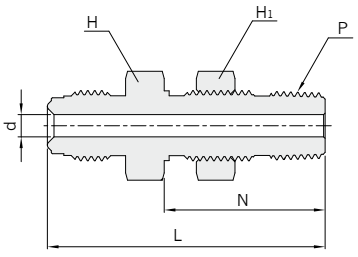




Part No.	ZCR Size	d		L		H	P NPT	Working Pressure psig (bar)		
		mm	in.	mm	in.	in.		NI	SS	CU
H-ZFC 2-1N	1/8	2.30	0.09	27.9	1.10	7/16	1/16	9000 (620)		
H-ZFC 2-2N				30.2	1.19	9/16	1/8	6500 (447)		
H-ZFC 4-2N	1/4	4.55	0.18	35.8	1.41	5/8		8000 (551)		6400 (440)
H-ZFC 4-4N				39.1	1.54	3/4	1/4	6600 (454)		5200 (358)
H-ZFC 8-6N	1/2	10.14	0.40	44.7	1.76	15/16	3/8	3500 (241)	4300 (296)	2800 (192)
H-ZFC 8-8N				50.5	1.99	1 1/16	1/2			
H-ZFC12-12N	3/4	15.70	0.62	59.9	2.36	1 5/16	3/4	3000 (206)	3700 (254)	2400 (165)
H-ZFC16-16N	1	22.10	0.87	63.8	2.51	1 5/8	1	2400 (165)	3000 (206)	1900 (130)

Bulkhead Male Connector

H-ZBMC

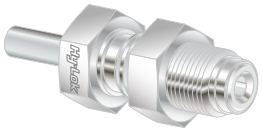


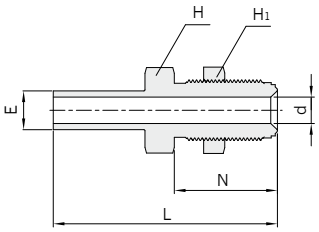
Part No.	ZCR Size	d		L		N		H	H1	P NPT	Panel Hole size		Max. Panel Thickness		Working Pressure		
		mm	in.	mm	in.	mm	in.	in.	in.		mm	in.	mm	in.	NI	SS	CU
H-ZBMC4-4N	1/4	4.55	0.18	56.1	2.21	31.5	1.24	13/16	13/16	1/4	16.7	0.66	9.6	0.38	8000 (551)		6400 (440)
H-ZBMC8-4N	1/2	10.14	0.40	59.4	2.34			15/16							3500 (241)	4300 (296)	2800 (192)

Dimensions are reference only, subject to change.

Tube Butt Weld Bulkhead Connector

H-ZBT

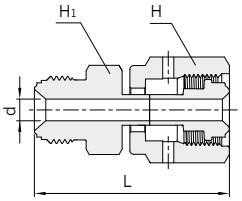




Part No.	ZCR Size	E Tube O.D.	d		L		N		H	H1	Panel Hole size		Max. Panel Thickness		Working Pressure		
			mm	in.	mm	in.	mm	in.	in.	in.	mm	in.	mm	in.	NI	SS	CU
H-ZBT4-4	1/4	1/4	4.55	0.18	59.9	2.36	33.0	1.30	3/4	3/4	14.5	0.57	11.1	0.44	5100 (351)		
H-ZBT4-4L50					49.5	1.95	25.1	0.99					3.30	0.13			

Swivel Male/Female Union

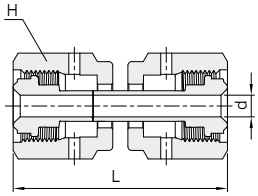
H-ZSMU



Part No.	ZCR Size	d		L		H	H1	Working Pressure psig (bar)		
		mm	in.	mm	in.	in.	in.	NI	SS	CU
H-ZSMU-4	1/4	4.55	0.18	42.9	1.69	3/4	5/8	8000 (551)	1000 (689)	6400 (440)

Swivel Female Union

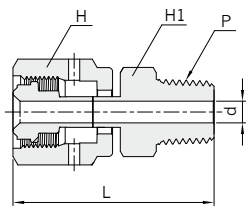
H-ZSUA



Part No.	ZCR Size	d		L		H	Working Pressure psig (bar)		
		mm	in.	mm	in.	in.	NI	SS	CU
H-ZSUA-4	1/4	4.55	0.18	43.4	1.71	3/4	8000 (551)	1000 (689)	6400 (440)
H-ZSUA-8	1/2	10.14	0.40	46.7	1.84	1 1/16	3500 (241)	4300 (296)	2800 (192)

Swivel Male NPT Connector

H-ZSMC

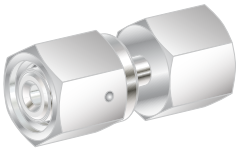


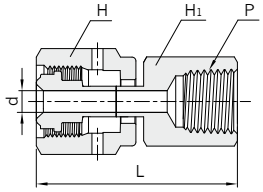
Part No.	ZCR Size	d		L		H	H1	P NPT	Working Pressure psig (bar)		
		mm	in.	mm	in.	in.	in.		NI	SS	CU
H-ZSMC4-2N	1/4	4.55	0.18	40.1	1.58	3/4	7/16	1/8	8000 (551)		6400 (440)
H-ZSMC4-4N				45.5	1.79		9/16	1/4			
H-ZSMC8-6N	1/2	10.14	0.40	48.0	1.89	1 1/16	11/16	3/8	3500 (241)	4300 (296)	2800 (192)
H-ZSMC8-8N				53.1	2.09		7/8	1/2			

Dimensions are reference only, subject to change.

Swivel Female NPT Connector

H-ZSFC

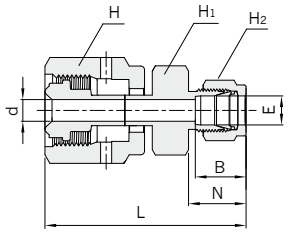




Part No.	ZCR Size	d		L		H	H1	p NPT	Working Pressure psig (bar)		
		mm	in.	mm	in.	in.	in.		NI	SS	CU
H-ZSFC4-4N	1/4	4.55	0.18	45.0	1.77	3/4	3/4	1/4	6400 (440)		5200 (358)
H-ZSFC8-6N	3/8	10.14	0.40	49.5	1.95	1 1/16	7/8	3/8	3500 (241)	4300 (296)	2800 (192)
H-ZSFC8-8N	1/2			55.4	2.18		1 1/16	1/2			

Swivel Hy-Lok Tube Fitting Connector

H-ZSMH

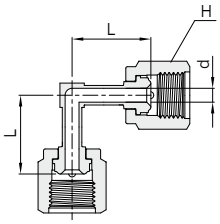


Part No.	Tube O.D.	E Tube O.D.	d		L		B		N		H	H1	H2	Working Pressure* psig (bar)		
			mm	in.	mm	in.	mm	in.	mm	in.	in.	in.	in.	NI	SS	CU
H-ZSMH4-4	1/4	1/4	4.55	0.18	49.3	1.94	15.2	0.60	17.8	0.70	3/4	1/2	9/16	8000 (551)	1000 (689)	6400 (440)
H-ZSMH4-6		3/8			50.0	1.97	16.8	0.66	19.3	0.76		5/8	11/16	6500 (447)		5200 (358)
H-ZSMH8-8	1/2	1/2	10.14	0.40	56.6	2.23	22.9	0.90	21.8	0.86	1 1/16	13/16	7/8	3500 (241)	4300 (296)	2800 (192)

* Note : B,N,L are finger · tight dimensions.

Swivel Elbow

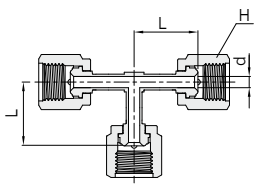
H-ZSLA



Part No.	ZCR Size	d		L		H	Working Pressure psig (bar)		
		mm	in.	mm	in.	in.	NI	SS	CU
H-ZSLA-4	1/4	4.55	0.18	25.4	1.00	3/4	5100 (351)		

Swivel Tee

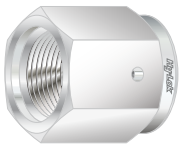
H-ZSTA-4

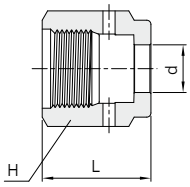


Part No.	ZCR Size	d		L		H	Working Pressure psig (bar)		
		mm	in.	mm	in.	in.	NI	SS	CU
H-ZSTA-4	1/4	4.55	0.18	25.4	1.00	3/4	5100 (351)		

Dimensions are reference only, subject to change.

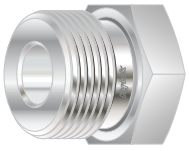
Female Nut
H-ZFN

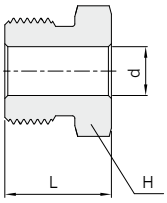




Part No.	ZCR Size	d		L		H
		mm	in.	mm	in.	in.
H-ZFN- 2	1/8	5.30	0.21	13.5	0.53	7/16
H-ZFN- 4	1/4	9.15	0.36	20.6	0.81	3/4
H-ZFN- 8	1/2	15.50	0.61	22.4	0.88	1 1/16
H-ZFN-12	3/4	22.60	0.89	28.4	1.12	1 1/2
H-ZFN-16	1	30.50	1.20	34.0	1.34	1 3/4

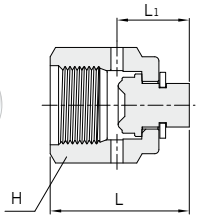
Male Nut
H-ZMN





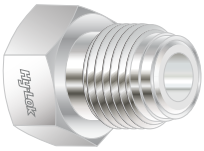
Part No.	ZCR Size	d		L		H
		mm	in.	mm	in.	in.
H-ZMN- 2	1/8	5.30	0.21	12.7	0.50	3/8
H-ZMN- 4	1/4	9.15	0.36	18.0	0.71	5/8
H-ZMN- 8	1/2	15.50	0.61	20.6	0.81	15/16
H-ZMN-12	3/4	22.60	0.89	25.4	1.00	1 5/16
H-ZMN-16	1	30.50	1.20	30.2	1.19	1 5/8

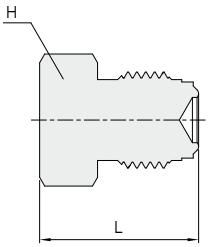
Cap
H-ZCP



Part No.	ZCR Size	L		L1		H
		mm	in.	mm	in.	in.
H-ZCP- 2	1/8	16.0	0.63	7.6	0.30	7/16
H-ZCP- 4	1/4	23.9	0.94	11.3	0.44	3/4
H-ZCP- 8	1/2	25.6	1.01	11.4	0.45	1 1/16
H-ZCP-12	3/4	32.8	1.29	13.7	0.54	1 1/2
H-ZCP-16	1	39.1	1.54	16.0	0.63	1 3/4

Plug
H-ZP

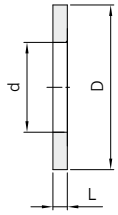




Part No.	ZCR Size	L		H
		mm	in.	in.
H-ZP- 2	1/8	17.3	0.68	3/8
H-ZP- 4	1/4	23.4	0.92	5/8
H-ZP- 8	1/2	27.4	1.08	15/16
H-ZP-12	3/4	36.3	1.43	1 5/16
H-ZP-16	1	38.6	1.52	1 5/8

Dimensions are reference only, subject to change.

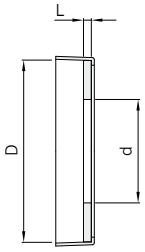
Gasket
H-ZGSK



Part No.	ZCR Size	d		D		L	
		mm	in.	mm	in.	mm	in.
H-ZGSK- 2	1/8	2.3	0.09	6.6	0.26	0.5	0.02
H-ZGSK- 4	1/4	5.6	0.22	12.5	0.49	0.8	0.03
H-ZGSK- 8	1/2	11.2	0.44	19.8	0.78		
H-ZGSK-12	3/4	16.8	0.66	29.0	1.14		
H-ZGSK-16	1	22.6	0.89	35.6	1.40		

Note : Cannot be used in a gasket retainer assembly.

Gasket Retainer
H-ZGRT



Part No.	ZCR Size	d		D		L	
		mm	in.	mm	in.	mm	in.
H-ZGRT- 4	1/4	5.6	0.22	11.9	0.47	0.8	0.03
H-ZGRT- 8	1/2	11.2	0.44	19.2	0.76		
H-ZGRT-12	3/4	16.8	0.66	28.5	1.12		
H-ZGRT-16	1	22.6	0.89	35.1	1.38		

Ordering Information for Gasket & Gasket Retainer Assembly

H — **HY-LOK Clean**

ZGSK — **Product Pattern Designator**
- ZGSK · Gasket
- ZGRT · Gasket Retainer Assembly

8 — **Size Designator**

Designator	ZCR Size
2	1/8
4	1/4
8	1/2
12	3/4
16	1

SP — **Gasket Plating Option***
- Nil · unplated (standard)
- SP · with silver plated

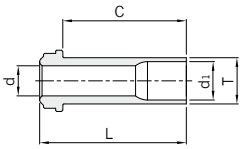
BL — **Blind Gasket Option***
- Nil · Standard
- BL · Blind gasket

316L — **Gasket Material Designator**
- 316L · 316L stainless steel
- NI · Nickel
- CU · Copper

Note
1. Retainer Material for 316L Stainless Steel, Nickel and Copper gasket Retainer Assemblies are 316L Stainless Steel.
2. , * , No designator is required for standard gasket e.g. H-ZGSK-8 · 316L
3. For application of Blind Gaskets exceed not a differential pressure rating of 100 psi(6.8 bar)

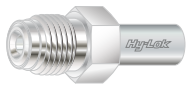
Dimensions are reference only, subject to change.

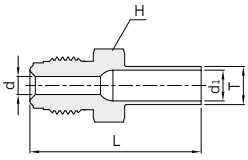
High Flow Tube Butt Weld Gland
H-ZHG



Part No.	ZCR Size	T Tube O.D.	d		d1		L		Working Pressure psig (bar)		
			mm	in.	mm	in.	mm	in.	NI	SS	CU
H-ZHG-6L15.2	1/4	3/8	6.35	0.25	7.9	0.31	15.2	0.60	3300 (227)		
H-ZHG-6L30.2							30.2	1.19			
H-ZHG-6L33.3							33.3	1.31			

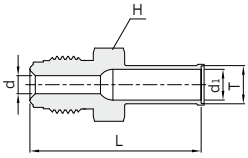
High Flow Tube Butt Weld Reducer
H-ZR





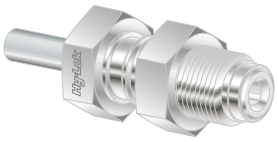
Part No.	ZCR Size	T Tube O.D.	d		d1		L		H	Working Pressure psig (bar)		
			mm	in.	mm	in.	mm	in.	in.	NI	SS	CU
H-ZR4-6	1/4	3/8	6.35	0.25	7.9	0.31	42.7	1.68	5/8	3300 (227)		

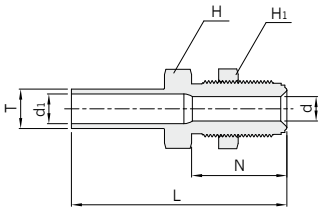
High Flow Tube Weld Reducer with Shoulder
H-ZR-A



Part No.	ZCR Size	T Tube O.D.	d		d1		L		H	Working Pressure psig (bar)		
			mm	in.	mm	in.	mm	in.	in.	NI	SS	CU
H-ZR4-6A	1/4	3/8	6.35	0.25	7.9	0.31	43.4	1.71	5/8	3300 (227)		

High Flow Tube Butt Weld Bulkhead Connector
H-ZHBT



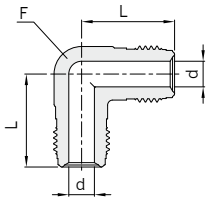


Part No.	ZCR Size	E Tube O.D.	d		d1		L		N		H	H1	Panel Hole size		Max. Panel Thickness		Working Pressure		
			mm	in.	mm	in.	mm	in.	mm	in.	in.	in.	mm	in.	mm	in.	NI	SS	CU
H-ZBT4-4	11/4	3/8	6.35	0.25	7.9	0.31	59.9	2.36	33.0	1.30	3/4	3/4	14.5	0.57	11.1	0.44	3300 (227)		
H-ZHBT4-6																			
H-ZBT4-4L50																			

Dimensions are reference only, subject to change.

High Flow Union Elbow

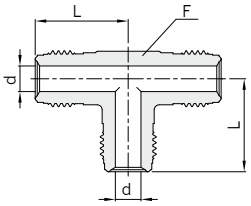
H-ZHLA



Part No.	ZCR Size	d		L		F Body Flat	Working Pressure psig (bar)		
		mm	in.	mm	in.	in.	NI	SS	CU
H-ZHLA-4	1/4	6.35	0.25	27.2	1.07	1/2	8000 (551)	10000 (689)	6400 (440)

High Flow Union Tee

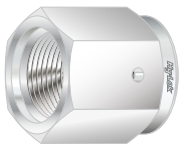
H-ZHTA

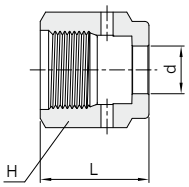


Part No.	ZCR Size	d		L		F Body Flat	Working Pressure psig (bar)		
		mm	in.	mm	in.	in.	NI	SS	CU
H-ZHTA-4	1/4	6.35	0.25	27.2	1.07	1/2	8000 (551)	10000 (689)	6400 (440)

High Flow Female Nut

H-ZHFN

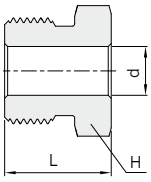




Part No.	ZCR Size	d		L		H
		mm	in.	mm	in.	in.
H-ZHFN-4	1 / 4	9.9	0.39	20.6	0.81	3/4

High Flow Male Nut

H-ZHMN



Part No.	ZCR Size	d		L		H
		mm	in.	mm	in.	in.
H-ZHMN-4	1 / 4	9.9	0.39	18.0	0.71	5/8

Dimensions are reference only, subject to change.

Assembly Instruction

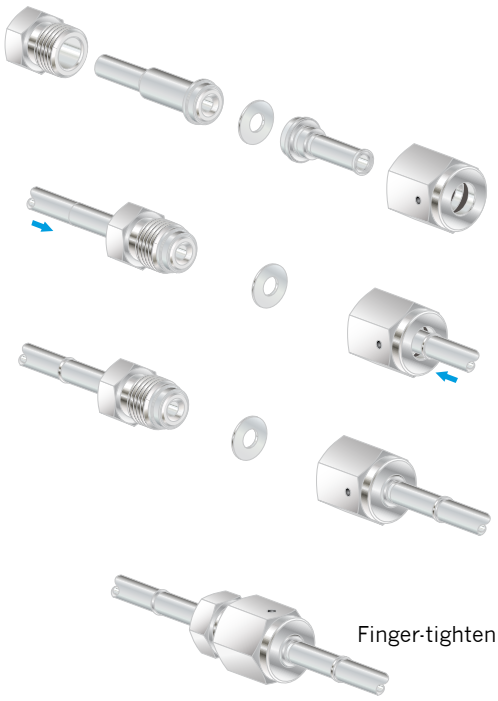
Step 1. Prior to tightening fittings, make sure beads and gaskets are free of scratches and dirt.

Step 2. Insert non-retained gasket into the female nut. The gasket is self aligning. Use caution not to damage sealing surfaces while inserting gasket into female nut.

Step 3. Finger tighten male and female nuts assuring that all components have made proper contact and are in position for final tightening with wrenches. Inspection port in female nut allows for easy visual inspection.

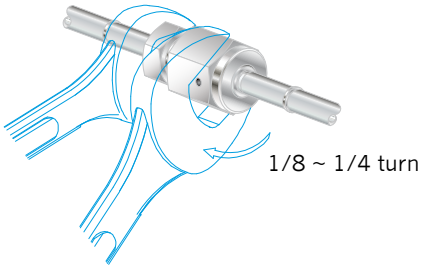
Step 4. Make a reference mark on both the female nut and male nut or body hex.

Step 5. Hold the male nut or male body with the appropriate back up wrench and tighten the female nut 1/8 ~ 1/4 (1/8 for 316L and Ni gasket, 1/4 for copper gasket) turn past finger tight.



Caution

Do not rotate fixed thread components against the gasket. Hold the fixed thread component and tighten the corresponding rotating female or male nut 1/8 ~ 1/4 turn past finger tight.



Care for Installation

1. Do not attempt to reuse gaskets, use new gasket for remake installations.
2. Protect bead end of ZCR during welding, shipping or storage by using the appropriate cap or plug.
3. ZCR Fittings will not compensate for tube misalignment.
4. Protect internal silver plating on threads of female nuts during polishing, brazing, operations or additional cleaning. These operations could remove the silver plating and cause thread galling.

Dimensions are reference only, subject to change.

Assembly Instruction

H	MLA	8	6	A	S	VV6L
1	2	3	4	5	6	7

1. Clean Fitting : Designator „H“
2. Name of Fitting : See Title Name of product.
3. Tube O.D. : See Tube O.D. or ZCR Size Designator.
4. Reduced Ends : See Tube O.D. or ZCR Size Designator in case of Reducing or other connection.
5. Type of Weld : See Weld Designator
6. Surface Grade : See Surface Finish Designator.
7. Material : See Material Designator.

Tube O.D. Designator

Size (Inch)	1/4	3/8	1/2	3/4	1
Identifier	4	6	8	12	16
Size (Metric)	6mm	8mm	10mm	12mm	18mm
Identifier	4M	6M	8M	12M	16M

Weld Designator

Type of Weld	Identifier
Butt Weld (Without Shoulder)	Standard
Automatic Weld (With Shoulder)	A
Socket Weld	S
Male Weld	M

ZCR Size Designator

Size (Inch)	1/8	1/4	1/2	3/4	1
Identifier	2	4	8	12	16

Surface Finish Designator

Grade	B.A. Grade	High Grade	Super Grade
Identifier	B	H	S

Note : Surface Finishes Information see page 3.

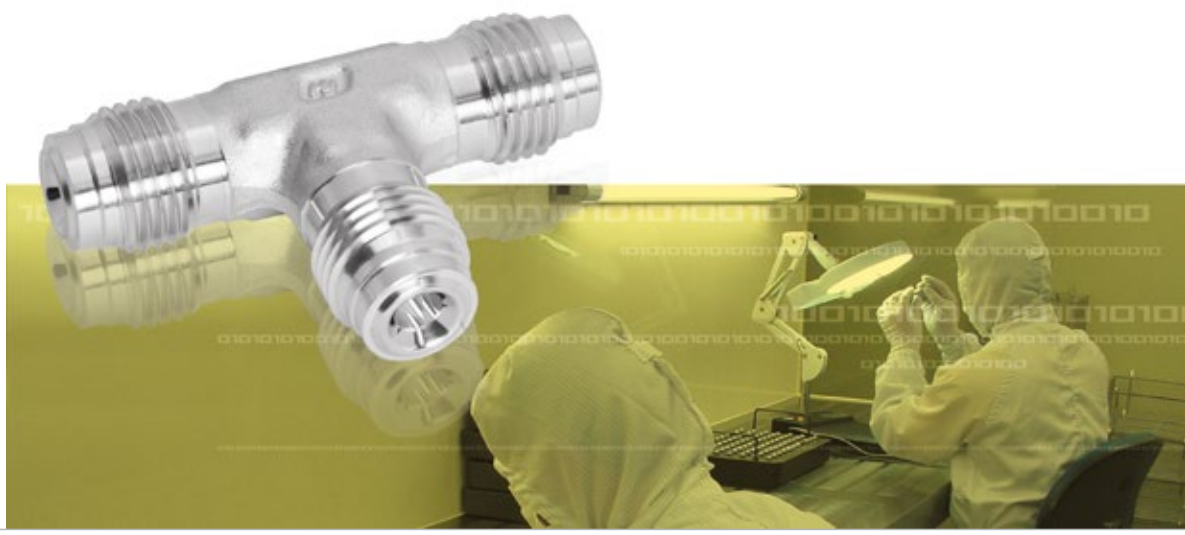
Material Designator

Identifier	Material
S316	316 Stainless Steel
316L	316L Stainless Steel
SM6L	Single Vacuum Melt 316L Stainless Steel
VV6L	Double Vacuum Melt 316L Stainless Steel

SAFETY in FITTING SELECTION

For proper, safe, trouble-free installation, operation and maintenance of fluid systems, material compatibility, pressure/temperature ratings, and application details must be considered in the selection of fittings.
Improper selection or use of products described in this catalog can cause personal injury or property losses. It is the responsibility of system designer and user to select and use the products for their specific applications.

Dimensions are reference only, subject to change.



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