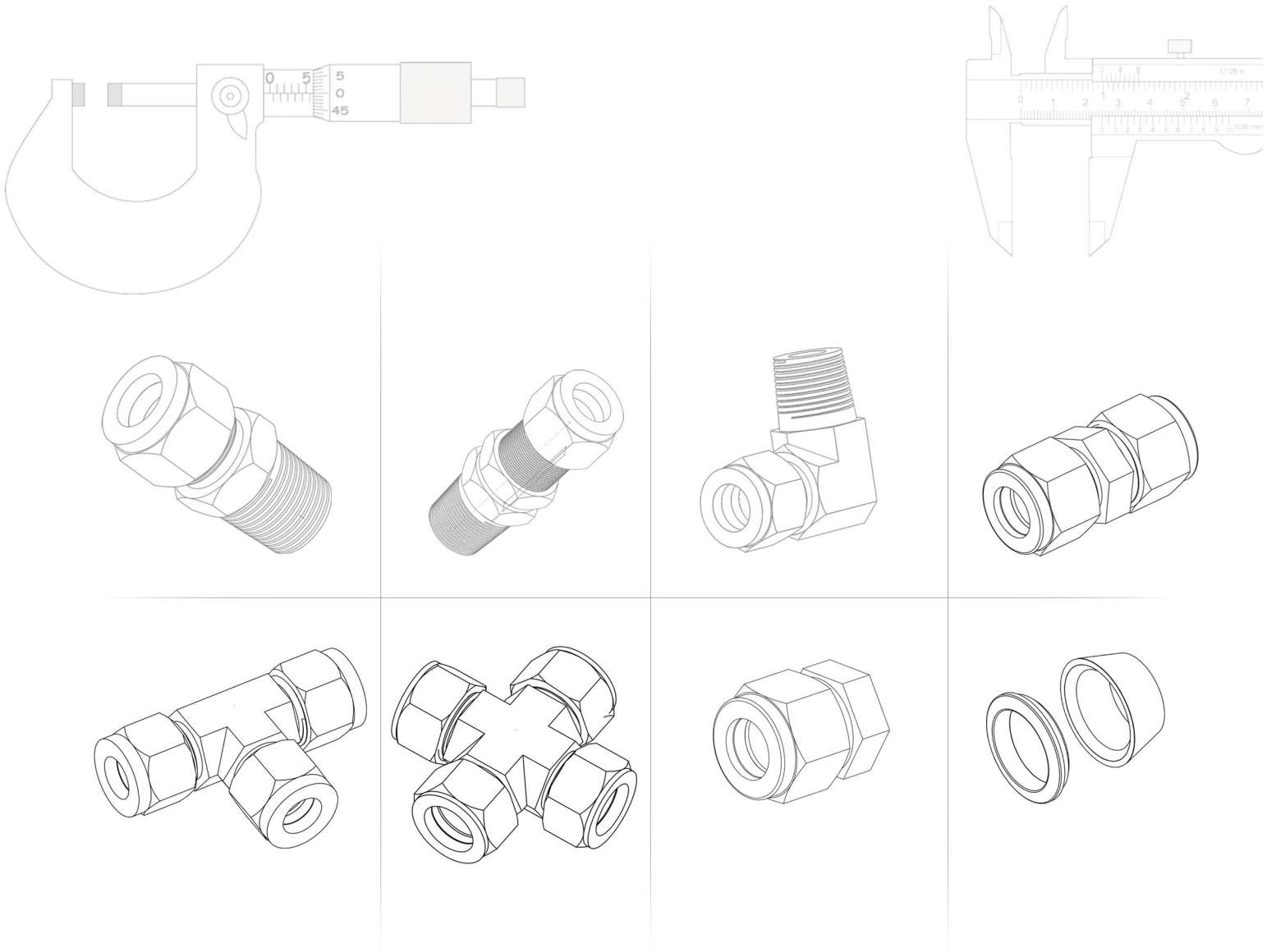




HP VALVES & FITTINGS INDIA PVT. LTD.

Instrumentation Valves & Fittings and Sealant Injection Grease Fittings



TUBE FITTINGS DIMENSIONAL CATALOGUE



AN IMS CERTIFIED COMPANY



SL.NO.	DETAILS	MODEL. NO.	PAGE NO.
1	INSTALLATION PROCEDURE	NA	3
2	MAIN PRODUCTS LIST	NA	4
3	MALE CONNECTOR	HPTDFMC	5
4	FEMALE CONNECTOR	HPTDFFC	6
5	BULKHEAD MALE CONNECTOR	HPTDFMBH	7
6	BULKHEAD FEMALE CONNECTOR	HPTDFFBH	
7	EQUAL UNION	HPTDFEU	8
8	UNEQUAL UNION	HPTDFRU	
9	BULKHEAD UNION	HPTDFBHU	9
10	EQUAL UNION CROSS	HPTDFEUC	
11	MALE ELBOW	HPTDFME	10
12	FEMALE ELBOW	HPTDFFE	11
13	UNION ELBOW	HPTDFUE	12
14	BULKHEAD UNION ELBOW	HPTDFBUE	
15	EQUAL TEE	HPTDFET	13
16	UN-EQUAL TEE	HPTDFUET	
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TUBE FITTINGS INSTALLATION PROCEDURE

In installations that may require occasional disassembly or partial removal for maintenance purpose, Ferrule fittings plays key functional role here. As these joints can be broken and remade without affecting the integrity of the joint.

As the ferrule(s) moves axially into the fitting body, the body's angled shape radially compresses the end of the ferrule onto the outer diameter of the tubing. It is this radial compression that creates the leak tight seal between the fitting, ferrule and tubing.

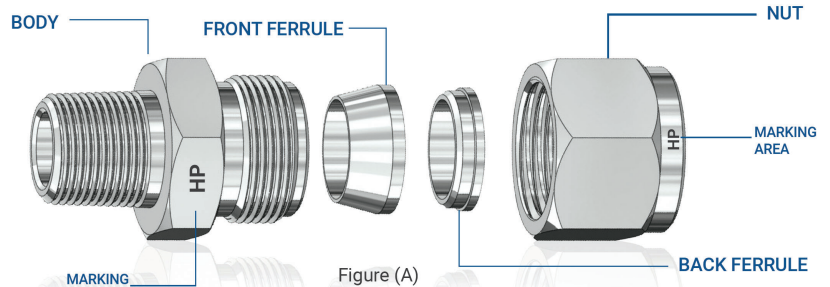
TECHNICAL STANDARDS

The following two standards applicable for Single Compression Fittings, can also be used for Double Compression Fittings,

(a). BS 4368; Part IV, 1984

(b). IS 10103: 1982;

as because there is no separate standard for Double Ferrules Compression.



In the above fig.(A) we have Body, Front Ferrule, Back Ferrule & Nut to show the assembly the tube, nut & ferrules into the body of the fitting and hold the fitting in a rigid vice then tighten the nut upto hand tight as per fig.(C) to fig.(F)

- A. Mark 6'o clock position on the nut using a marker
- B. Using a wrench tighten the nut as described in the fig.(B)
- C. If the nut is overtightened the ferrule will deform improperly causing the joint to fail (so tighten the nut as per the given parameters)

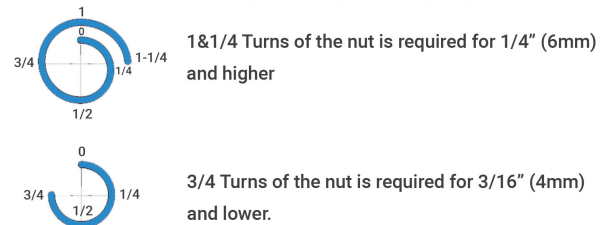


Figure (B)

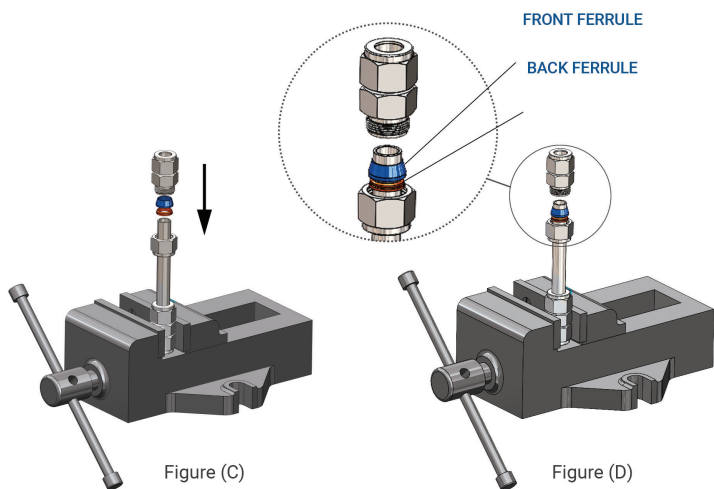


Figure (C)

Figure (D)

1-1/4 Turns of nut required for 1/4" and higher
3/4 Turns of nut required for 3/16" and lower

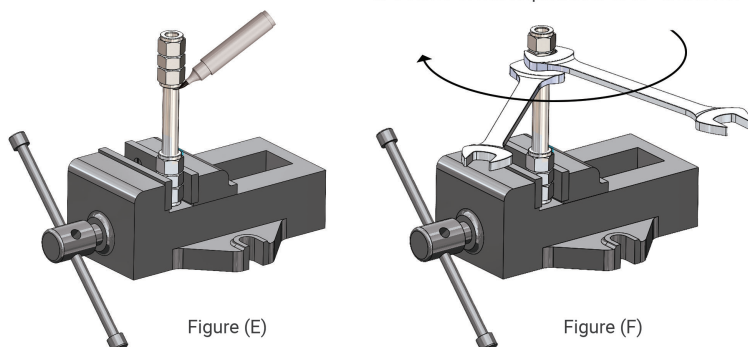


Figure (E)

Figure (F)

DISASSEMBLY & REASSEMBLY

The ease of assembly and disassembly is one of the reasons why compression fittings are so widely used. Disassembly involves simply loosening the compression nut. Reassembly can be accomplished in a similar manner to the initial assembly, although typically fewer turns of the nut are required, since the ferrule is already swaged to the tubing.

TUBE SELECTION

Tube OD & wall thickness should be as given in ASTM A269/213 standard. Tube End should be squarely cut, to allow the tubing to sit symmetrically in the fitting body & remove burr using burr tool Fig.(G). Hardness of tube should not be more than Rockwell HRB 90 for SS316 MOC for other MOC contact to HP Valves.

Note : The hardness & the required fittings varies with respect to change in MOC & its hardness of tube.

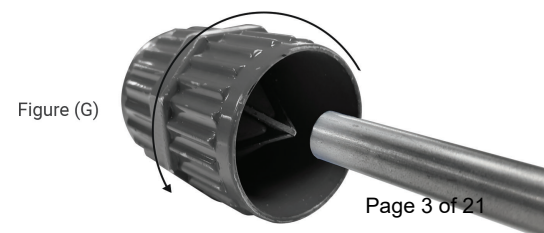


Figure (G)

M.O.C : CS / AS / SS / DSS / SDSS / SASS / MONEL / HASTELLOY / INCONEL / TITANIUM / TANTALUM / BRASS / PTFE

Size : 1/8" to 2" ; 3mm to 50mm OD

End Connections : NPT / BSP / BSPT / UNF / METRIC / SW / Plain

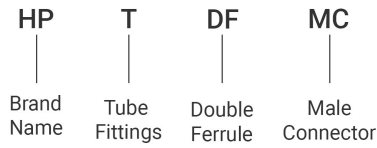
Pressure Rating : Upto 9000 psi

<p>MALE CONNECTOR</p> <p>HPTDFMC</p>	<p>FEMALE CONNECTOR</p> <p>HPTDFFC</p>	<p>BULKHEAD MALE CONN.</p> <p>HPTDFMBH</p>	<p>BULKHEAD FEMALE CONN.</p> <p>HPTDFFBH</p>
<p>EQUAL UNION</p> <p>HPTDFEU</p>	<p>UNEQUAL UNION (REDUCING)</p> <p>HPTDFRU</p>	<p>BULKHEAD UNION</p> <p>HPTDFBHU</p>	<p>EQUAL UNION CROSS</p> <p>HPTDFEUC</p>
<p>MALE ELBOW</p> <p>HPTDFME</p>	<p>FEMALE ELBOW</p> <p>HPTDFFE</p>	<p>UNION ELBOW</p> <p>HPTDFUE</p>	<p>BULKHEAD UNION ELBOW</p> <p>HPTDFBUE</p>
<p>45° MALE ELBOW</p> <p>HPTDF45ME</p>	<p>45° FEMALE ELBOW</p> <p>HPTDF45FE</p>	<p>45° UNION ELBOW</p> <p>HPTDF45UE</p>	<p>45° BULKHEAD UNION ELBOW</p> <p>HPTDF45BUE</p>
<p>EQUAL TEE</p> <p>HPTDFET</p>	<p>UN EQUAL TEE</p> <p>HPTDFUET</p>	<p>MALE BRANCH TEE</p> <p>HPTDFMBT</p>	<p>FEMALE BRANCH TEE</p> <p>HPTDFFBT</p>
<p>MALE RUN TEE</p> <p>HPTDFMRT</p>	<p>FEMALE RUN TEE</p> <p>HPTDFFRRT</p>	<p>MALE ADAPTOR</p> <p>HPTDFMA</p>	<p>FEMALE ADAPTOR</p> <p>HPTDFFA</p>
<p>TUBE ADAPTOR</p> <p>HPTDFAD</p>	<p>PLAIN CONNECTOR</p> <p>HPTDFPC</p>	<p>TUBE CAP</p> <p>HPTDFCA</p>	<p>TUBE PLUG</p> <p>HPTDFPL</p>
<p>DIELECTRIC UNION</p> <p>HPTDFDEU</p>	<p>NUT</p> <p>HPTDFN</p>	<p>DOUBLE FERRULES</p> <p>HPTDFFF & HPTDFBF</p>	

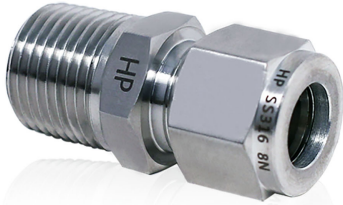
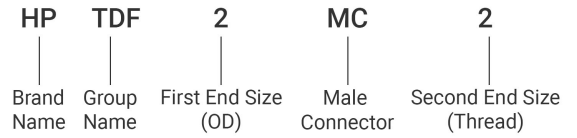


MOC	CS / AS / SS / DSS / SDSS / SASS / MONEL / HASTELLOY / INCONEL / TITANIUM / TANTALUM / BRASS / PTFE	OD Size	1/8" to 2" & 4mm to 50mm. If Above 1" to 2" & 25mm to 50mm contact factory
Pressure	Upto 6000 psi. If Above 6000 psi Contact Factory (For Brass Upto 1500 psi) (For PTFE Upto 150 psi)	Thread size & type	1/8" to 2", If Above 1" to 2" contact factory NPT / BSPP / BSPT / METRIC / UNF

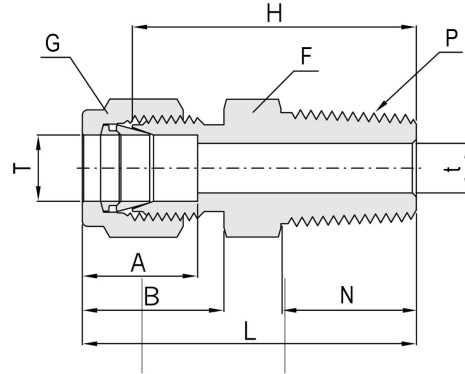
MODEL NO ORDERING SYSTEM



PART NO ORDERING SYSTEM



MODEL NO HPTDFMC



METRIC RANGE

Part No.	Tube O.D. T (mm)	P* Size	N (mm)	t (mm)	Width across flat (mm)		A (mm)	B (mm)	H (mm)	L (mm)
					F	G				
HPTDF4mMC2	4	1/8	10	2.4	12	12	13.7	16.1	24.6	31.2
HPTDF4mMC4	4	1/4	14	2.4	14	12	13.7	16.1	29.7	36.3
HPTDF6mMC2	6	1/8	10	4.8	14	14	15.3	17.7	25.4	32.8
HPTDF6mMC4	6	1/4	14	4.8	14	14	15.3	17.7	30.5	37.9
HPTDF6mMC6	6	3/8	14	4.8	17	14	15.3	17.7	31	38.4
HPTDF6mMC8	6	1/2	19	4.8	22	14	15.3	17.7	37.3	44.7
HPTDF8mMC2	8	1/8	10	4.8	14	16	16.2	18.6	26.7	34.2
HPTDF8mMC4	8	1/4	14	6.3	14	16	16.2	18.6	31.2	38.7
HPTDF8mMC6	8	3/8	14	6.3	17	16	16.2	18.6	31.8	39.2
HPTDF8mMC8	8	1/2	19	6.3	22	16	16.2	18.6	38.1	45.6
HPTDF10mMC2	10	1/8	10	4.8	17	19	17.2	19.5	28.7	36.3
HPTDF10mMC4	10	1/4	14	7	17	19	17.2	19.5	33.3	40.9
HPTDF10mMC6	10	3/8	14	8	17	19	17.2	19.5	33.3	40.9
HPTDF10mMC8	10	1/2	19	8	22	19	17.2	19.5	38.9	46.5
HPTDF10mMC12	10	3/4	19	8	27	22	17.2	19.5	39	46.8
HPTDF12mMC4	12	1/4	14	7	22	22	22.8	22	33.3	43.4
HPTDF12mMC6	12	3/8	14.2	9.5	22	22	22.8	22	33.3	43.4
HPTDF12mMC8	12	1/2	19	9.5	22	22	22.8	22	38.9	49
HPTDF12mMC12	12	3/4	19	9.5	27	22	22.8	22	40.4	50.5
HPTDF15mMC8	15	1/2	19	12	24	25	24.4	22	38.9	49
HPTDF16mMC4	16	1/4	14	7	24	25	24.4	22	34	44.1
HPTDF16mMC6	16	3/8	14	9.5	24	25	24.4	22	34	44.1
HPTDF16mMC8	16	1/2	19	12	24	25	24.4	22	38.9	49
HPTDF16mMC12	16	3/4	19	12.7	27	25	24.4	22	40.4	49
HPTDF18mMC8	18	1/2	19	12	27	30	24.4	22	40.4	50.5
HPTDF18mMC12	18	3/4	19	15	27	30	24.4	22	40.4	50.5
HPTDF20mMC8	20	1/2	19	12	30	32	26	22	42.2	52.3
HPTDF20mMC12	20	3/4	19	15.7	30	32	26	22	42.2	52.3
HPTDF20mMC16	20	1	24	15.7	36	30	26	22	46	56.4
HPTDF22mMC12	22	3/4	19	15.7	30	32	26	22	42.2	52.3
HPTDF22mMC16	22	1	24	18.3	35	32	26	22	47	57
HPTDF25mMC12	25	3/4	19	15.7	35	38	31.3	26.5	45.2	57.5
HPTDF25mMC16	25	1	24	21.8	35	38	31.3	26.5	50	62.3
HPTDF28mMC16	28	1	24	21.8	41	46	36.6	36.6	51.6	72.4

IMPERIAL RANGE

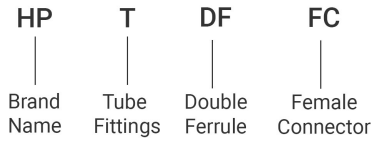
Part No.	Tube O.D. T		P* Size	N (mm)	T (mm)	Width across flat (in.)		A (mm)	B (mm)	H (mm)	L (mm)
	Inch	mm				F	G				
HPTDF2MC2	1/8	3.17	1/8	9.65	2.28	12.7	12.7	12.7	15.24	23.87	30.48
HPTDF2MC4	1/8	3.17	1/4	14.22	2.28	14.0	12.47	12.7	15.24	28.95	35.56
HPTDF2MC6	1/8	3.17	3/8	14.22	2.28	19.0	12.7	12.7	15.24	29.21	35.81
HPTDF2MC8	1/8	3.17	1/2	19.05	2.28	22.0	12.7	12.7	15.24	35.56	42.16
HPTDF4MC2	1/4	6.35	1/8	9.65	4.82	14.0	14.0	15.24	17.78	25.4	32.76
HPTDF4MC4	1/4	6.35	1/4	14.22	4.82	14.0	14.0	15.24	17.78	30.48	37.84
HPTDF4MC6	1/4	6.35	3/8	14.22	4.82	19.0	14.0	15.24	17.78	30.98	38.35
HPTDF4MC8	1/4	6.35	1/2	19.05	4.82	22.0	14.0	15.24	17.78	37.33	44.7
HPTDF4MC12	1/4	6.35	3/4	19.05	4.82	27.0	14.0	15.24	17.78	38.86	46.22
HPTDF5MC2	5/16	7.93	1/8	9.65	4.82	17.0	17.0	16.25	18.54	26.67	34.03
HPTDF5MC4	5/16	7.93	1/4	14.22	6.35	17.0	17.0	16.25	18.54	31.24	38.6
HPTDF5MC6	5/16	7.93	3/8	14.22	6.35	17.0	17.0	16.25	18.54	31.75	39.11
HPTDF6MC2	3/8	9.52	1/8	9.65	4.82	17.0	17.0	16.76	19.3	27.94	35.3
HPTDF6MC4	3/8	9.52	1/4	14.22	7.00	17.0	17.0	16.76	19.3	32.51	39.87
HPTDF6MC6	3/8	9.52	3/8	14.22	7.11	19.0	17.0	16.76	19.3	32.51	39.87
HPTDF6MC8	3/8	9.52	1/2	19.05	7.11	22.0	17.0	16.76	19.3	38.86	46.22
HPTDF6MC12	3/8	9.52	3/4	19.05	7.11	27.0	17.0	16.76	19.3	40.38	47.75
HPTDF8MC2	1/2	12.7	1/8	9.65	4.82	22.0	22.0	22.86	21.84	28.7	38.86
HPTDF8MC4	1/2	12.7	1/4	14.22	7	22.0	22.0	22.86	21.84	33.27	43.43
HPTDF8MC6	1/2	12.7	3/8	14.22	9.5	22.0	22.0	22.86	21.84	33.27	43.43
HPTDF8MC8	1/2	12.7	1/2	19.05	10.41	22.0	22.0	22.86	21.84	38.86	49.02
HPTDF8MC12	1/2	12.7	3/4	19.05	10.41	27.0	22.0	22.86	21.84	40.38	50.54
HPTDF8MC16	1/2	12.7	1	23.87	10.41	36.0	22.0	22.86	21.84	46.99	57.15
HPTDF10MC6	5/8	15.87	3/8	14.22	9.5	27.0	27.0	24.38	21.84	34.03	44.19
HPTDF10MC8	5/8	15.87	1/2	19.05	12	27.0	27.0	24.38	21.84	38.86	49.02
HPTDF10MC12	5/8	15.87	3/4	19.05	12.7	27.0	27.0	24.38	21.84	40.38	50.54
HPTDF12MC8	3/4	19.05	1/2	19.05	12	27.0	28.5	24.38	21.84	40.38	50.54
HPTDF12MC12	3/4	19.05	3/4	19.05	15.74	27.0	27.0	28.5	21.84	40.38	50.54
HPTDF12MC16	3/4	19.05	1	23.87	15.74	1.75	36.0	28.5	21.84	46.99	57.15
HPTDF16MC8	1	25.4	1/2	19.05	12	1.37	36.0	36.0	26.41	45.21	57.4
HPTDF16MC12	1	25.4	3/4	19.05	15.74	1.37	36.0	36.0	26.41	45.21	57.4
HPTDF16MC16	1	25.4	1	23.87	22.35	1.37	36.0	36.0	26.41	50.03	62.23

NOTE: 1. * Threads are available upon request.
2. Above dimensions are only for reference and are subject to change.
3. Material standards are as per ASTM.
4. Dimension standards are as per ASME B16.11.

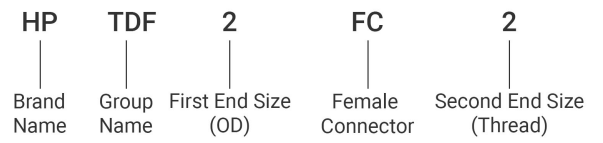


MOC	CS / AS / SS / DSS / SDSS / SASS / MONEL / HASTELLOY / INCONEL / TITANIUM / TANTALUM / BRASS / PTFE	OD Size	1/8" to 2" & 4mm to 50mm. If Above 1" to 2" & 25mm to 50mm contact factory
Pressure	Upto 6000 psi. If Above 6000 psi Contact Factory (For Brass Upto 1500 psi) (For PTFE Upto 150 psi)	Thread size & type	1/8" to 2", If Above 1" to 2" contact factory NPT / BSPP / BSPT / METRIC / UNF

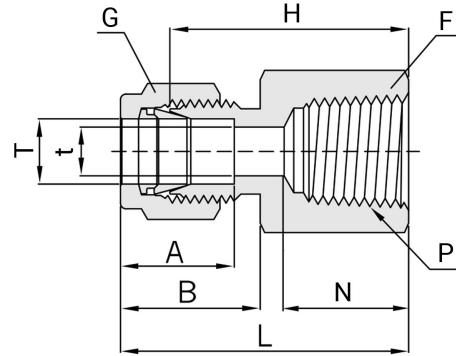
MODEL NO ORDERING SYSTEM



PART NO ORDERING SYSTEM



MODEL NO HPTDFFC



METRIC RANGE

Part No.	Tube O.D. T (mm)	P* Size	N (mm)	t (mm)	Width across flat (mm)		A (mm)	B (mm)	H (mm)	L (mm)
					F	G				
HPTDF4mFC2	4	1/8	10	2.4	14	12	13.7	16.1	23.1	29.7
HPTDF6mFC2	6	1/8	10	4.8	14	14	15.3	17.7	23.9	31.3
HPTDF6mFC4	6	1/4	14	4.8	19	14	15.3	17.7	28.4	35.8
HPTDF6mFC6	6	3/8	14	4.8	22	14	15.3	17.7	29.5	36.9
HPTDF6mFC8	6	1/2	19	4.8	27	14	15.3	17.7	35.1	42.5
HPTDF8mFC2	8	1/8	10	6.3	14	16	16.2	18.6	24.6	32.1
HPTDF8mFC4	8	1/4	14	6.3	19	16	16.2	18.6	29.5	37
HPTDF8mFC6	8	3/8	14	6.3	22	16	16.2	18.6	30.2	37.7
HPTDF8mFC8	8	1/2	19	6.3	27	16	16.2	18.6	35.8	43.3
HPTDF10mFC2	10	1/8	10	8	17	19	17.2	19.5	25.4	33
HPTDF10mFC4	10	1/4	14	8	19	19	17.2	19.5	30.2	37.8
HPTDF10mFC6	10	3/8	14	8	22	19	17.2	19.5	31	38.6
HPTDF10mFC8	10	1/2	19	8	27	19	17.2	19.5	36.6	44.2
HPTDF10mFC12	10	3/4	19	8	32	19	17.2	19.5	37	45
HPTDF12mFC2	12	1/8	10	9.5	22	22	22.8	22	28.4	38.5
HPTDF12mFC4	12	1/4	14	9.5	22	22	22.8	22	30.2	40.3
HPTDF12mFC6	12	3/8	14.2	9.5	22	22	22.8	22	31	41.1
HPTDF12mFC8	12	1/2	19	9.5	27	22	22.8	22	36.6	46.7
HPTDF12mFC12	12	3/4	19	9.5	35	22	22.8	22	38.9	49
HPTDF15mFC8	15	1/2	19	12	27	25	24.4	22	36.6	46.7
HPTDF16mFC6	16	3/8	14	12.7	24	27	24.4	22	31.8	42
HPTDF16mFC8	16	1/2	19	12.7	27	25	24.4	22	36.8	46.9
HPTDF16mFC12	16	3/4	19	12.7	32	27	24.4	22	37	47.3
HPTDF18mFC8	18	1/2	19	12	27	30	26	22	36.5	46.8
HPTDF18mFC12	18	3/4	19	15	32	30	26	22	38.1	48.4
HPTDF20mFC8	20	1/2	19	16	30	32	26	22	37.8	47.9
HPTDF20mFC12	20	3/4	19	16	35	32	26	22	39.6	49.7
HPTDF22mFC12	22	3/4	19	18.3	35	32	26	22	39.6	49.7
HPTDF22mFC16	22	1	24	18.3	41	32	26	22	47.8	57.9
HPTDF25mFC12	25	3/4	19	21.8	35	38	31.3	26.5	41.1	53.4
HPTDF25mFC16	25	1	24	21.8	41	38	31.3	26.5	50	62.3

IMPERIAL RANGE

Part No.	Tube O.D. T		P* Size	N (mm)	t (mm)	Width across flat (in.)		A (mm)	B (mm)	H (mm)	L (mm)
	Inch	mm				F	G				
HPTDF2FC2	1/8	3.17	1/8	9.65	2.28	14.00	14.00	12.7	15.24	22.09	28.7
HPTDF2FC4	1/8	3.17	1/4	14.22	2.28	19.00	19.00	12.7	15.24	26.92	33.5
HPTDF4FC2	1/4	6.35	1/8	9.65	4.82	14.00	14.00	15.24	17.78	23.87	31.2
HPTDF4FC4	1/4	6.35	1/4	14.22	4.82	19.00	19.00	15.24	17.78	28.44	35.8
HPTDF4FC6	1/4	6.35	3/8	14.22	4.82	22.00	22.00	15.24	17.78	30.22	37.6
HPTDF4FC8	1/4	6.35	1/2	19.05	4.82	27.00	27.00	15.24	17.78	35.05	42.4
HPTDF5FC2	5/16	7.93	1/8	9.65	6.35	14.00	14.00	16.25	18.54	24.63	32.0
HPTDF5FC4	5/16	7.93	1/4	14.22	6.35	19.00	19.00	16.25	18.54	29.46	36.8
HPTDF6FC2	3/8	9.52	1/8	9.65	7.11	17.00	17.00	16.76	19.3	25.4	32.8
HPTDF6FC4	3/8	9.52	1/4	14.22	7.11	19.00	19.00	16.76	19.3	30.22	37.6
HPTDF6FC6	3/8	9.52	3/8	14.22	7.11	22.00	22.00	16.76	19.3	31.75	39.1
HPTDF6FC8	3/8	9.52	1/2	19.05	7.11	27.00	27.00	16.76	19.3	36.57	43.9
HPTDF6FC12	3/8	9.52	3/4	19.05	7.11	32.00	32.00	16.76	19.3	40.38	47.8
HPTDF8FC4	1/2	12.7	1/4	14.22	10.41	22.00	22.00	22.86	21.84	30.22	40.4
HPTDF8FC6	1/2	12.7	3/8	14.22	10.41	22.00	22.00	22.86	21.84	31.75	41.9
HPTDF8FC8	1/2	12.7	1/2	19.05	10.41	27.00	27.00	22.86	21.84	36.57	46.7
HPTDF8FC12	1/2	12.7	3/4	19.05	10.41	32.00	32.00	22.86	21.84	38.1	48.3
HPTDF10FC6	5/8	15.87	3/8	14.22	12.7	22.00	22.00	24.38	21.84	31.75	41.9
HPTDF10FC8	5/8	15.87	1/2	19.05	12.7	27.00	27.00	24.38	21.84	36.57	46.7
HPTDF10FC12	5/8	15.87	3/4	19.05	12.7	32.00	32.00	24.38	21.84	38.1	48.3
HPTDF12FC8	3/4	19.05	1/2	19.05	15.74	27.00	27.00	24.38	21.84	36.57	46.7
HPTDF12FC12	3/4	19.05	3/4	19.05	15.74	32.00	32.00	24.38	21.84	38.1	48.3
HPTDF12FC16	3/4	19.05	1	23.87	15.74	41.00	41.00	24.38	21.84	43.18	53.3
HPTDF16FC12	1	25.4	3/4	19.05	22.35	36.00	36.00	31.24	26.41	41.14	53.3
HPTDF16FC16	1	25.4	1	23.87	22.35	41.00	41.00	31.24	26.41	50.03	62.2

NOTE : 1. * Threads are available upon request.
2. Above dimensions are only for reference and are subject to change.
3. Material standards are as per ASTM.
4. Dimension standards are as per ASME B16.11.

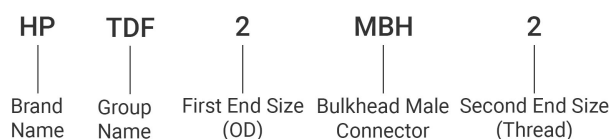


MOC	CS / AS / SS / DSS / SDSS / SASS / MONEL / HASTELLOY / INCONEL / TITANIUM / TANTALUM / BRASS / PTFE	OD Size	1/8" to 2" & 4mm to 50mm. If Above 1" to 2" & 25mm to 50mm contact factory
Pressure	Upto 6000 psi. If Above 6000 psi Contact Factory (For Brass Upto 1500 psi) (For PTFE Upto 150 psi)	Thread size & type	1/8" to 2", If Above 1" to 2" contact factory NPT / BSPP / BSPT / METRIC / UNF

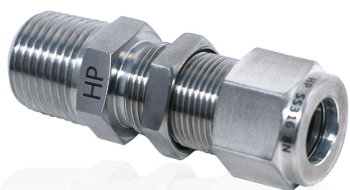
MODEL NO ORDERING SYSTEM



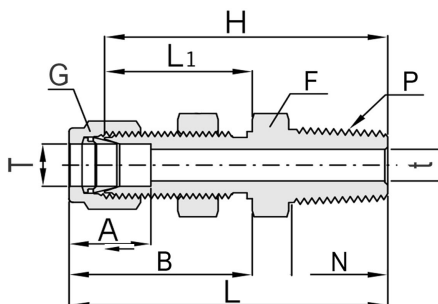
PART NO ORDERING SYSTEM



BULKHEAD MALE CONNECTOR



MODEL NO
HPTDFMBH



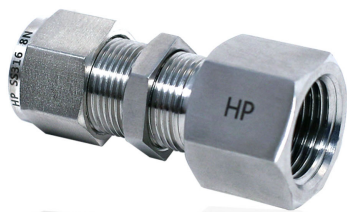
METRIC RANGE

Part No.	Tube O.D. T (mm)	P* Size	N (mm)	t (mm)	Width across flat (in.)		A (mm)	B (mm)	L1 (mm)	H (mm)	L (mm)
					F	G					
HPTDF6mMBH4	6.00	1/4	14.00	4.80	16.00	14.00	15.30	33.60	26.20	46.10	53.34
HPTDF8mMBH4	8.00	1/4	14.00	6.30	19.00	16.00	16.20	35.55	28.00	48.30	55.40
HPTDF8mMBH4	10.00	1/4	14.00	8.00	22.00	19.00	17.20	36.80	29.50	50.10	57.40
HPTDF10mMBH6	10.00	3/8	14.00	8.00	22.00	19.00	17.20	37.00	30.00	50.80	58.50
HPTDF12mMBH12	12.00	1/2	19.00	9.50	24.00	22.00	22.80	41.90	31.80	58.10	68.10

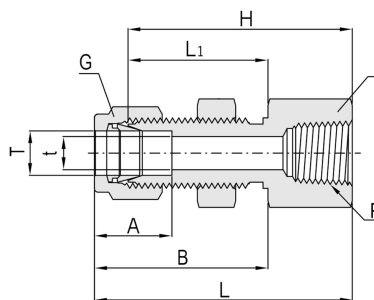
IMPERIAL RANGE

Part No.	Tube O.D. T		P* Size	N (mm)	t (mm)	Width across flat (in.)		A (mm)	B (mm)	L1 (mm)	H (mm)	L (mm)
	Inch	mm				F	G					
HPTDF2MBH2	1/8	3.17	1/8	9.65	2.28	0.5	0.43	12.70	31.24	24.63	39.87	46.48
HPTDF4MBH2	1/4	6.35	1/8	9.65	4.82	0.62	0.56	15.24	33.52	26.16	42.16	49.53
HPTDF4MBH4	1/4	6.35	1/4	14.2	4.82	0.62	0.56	15.24	33.52	26.16	45.97	53.34
HPTDF6MBH4	3/8	9.52	1/4	14.2	7.11	0.75	0.68	16.76	36.83	29.46	50.03	57.40
HPTDF6MBH6	3/8	9.52	3/8	14.2	7.11	0.75	0.68	16.76	36.83	29.46	50.03	57.40
HPTDF6MBH8	3/8	9.52	1/2	19.05	7.11	0.87	0.68	16.76	36.83	29.46	56.38	63.75
HPTDF8MBH4	1/2	12.7	1/4	14.2	9.39	0.93	0.87	22.86	41.91	31.75	52.83	62.99
HPTDF8MBH6	1/2	12.7	3/8	14.2	9.39	0.93	0.87	22.86	41.91	31.75	53.08	63.24
HPTDF8MBH8	1/2	12.7	1/2	19.05	10.41	1	0.87	22.86	41.91	31.75	58.67	68.83
HPTDF12MBH12	3/4	19.05	3/4	19.05	15.74	1.18	1.12	24.38	47.49	37.33	66.04	76.20
HPTDF16MBH16	1	25.4	1	23.8	22.35	1.62	1.5	31.24	57.40	45.21	81.02	93.21

BULKHEAD FEMALE CONNECTOR



MODEL NO
HPTDFFBH



METRIC RANGE

Part No.	Tube O.D. T (mm)	P* Size	N (mm)	t (mm)	Width across flat (mm)		A (mm)	B (mm)	L1 (mm)	H (mm)	L (mm)
					F	G					
HPTDF6mFBH2	6	1/8	10	4.8	16	14	15.3	35	26.2	39.6	44.7
HPTDF6mFBH4	6	1/4	14	4.8	19	14	15.3	33.6	26.2	44.4	46.99
HPTDF6mFBH6	6	3/8	14	4.8	22	14	15.3	34.5	27.3	45	51.81
HPTDF8mFBH4	8	1/4	14	6.3	19	16	16.2	35.55	28.6	46.7	55.11
HPTDF8mFBH4	10	1/4	14	8	22	19	17.2	37.6	29.5	48.2	61.72
HPTDF10mFBH6	10	3/8	14	8	22	19	17.2	37.6	29.5	49.2	66.54
HPTDF12mFBH12	12	1/2	19	9.5	27	22	22.8	41.9	31.8	56.4	73.51

IMPERIAL RANGE

Part No.	Tube O.D. T		P* Size	N (mm)	t (mm)	Width across flat (in.)		A (mm)	B (mm)	L1 (mm)	H (mm)	L (mm)
	Inch	mm				F	G					
HPTDF2FBH2	1/8	3.17	1/8	9.65	2.28	0.56	0.43	12.70	31.24	24.63	38.10	44.7
HPTDF4FBH2	1/4	6.35	1/8	9.65	4.82	0.62	0.56	15.24	33.52	26.16	39.62	46.99
HPTDF4FBH4	1/4	6.35	1/4	14.2	4.82	0.75	0.56	15.24	33.52	26.16	44.45	51.81
HPTDF6FBH4	3/8	9.52	1/4	14.2	7	0.75	0.68	16.76	36.83	29.46	47.75	55.11
HPTDF6FBH6	3/8	9.52	3/8	14.2	7	0.87	0.68	16.76	36.83	29.46	48.76	56.38
HPTDF8FBH4	1/2	12.7	1/4	14.2	10.41	0.93	0.87	22.86	41.91	31.75	50.80	61.96
HPTDF8FBH6	1/2	12.7	3/8	14.2	10.41	0.93	0.87	22.86	41.91	31.75	51.56	61.97
HPTDF8FBH8	1/2	12.7	1/2	19.05	10.41	1.06	0.87	22.86	41.91	31.75	56.38	66.54
HPTDF12FBH12	3/4	19.05	3/4	19.05	15.74	1.31	1.12	24.38	47.21	38.30	63.60	73.51

- NOTE: 1. * Threads are available upon request.
 2. Above dimensions are only for reference and are subject to change.
 3. Material standards are as per ASTM.
 4. Dimension standards are as per ASME B16.11

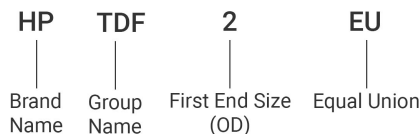


MOC	CS / AS / SS / DSS / SDSS / SASS / MONEL / HASTELLOY / INCONEL / TITANIUM / TANTALUM / BRASS / PTFE	OD Size	1/8" to 2" & 4mm to 50mm. If Above 1" to 2" & 25mm to 50mm contact factory
Pressure	Upto 6000 psi. If Above 6000 psi Contact Factory (For Brass Upto 1500 psi) (For PTFE Upto 150 psi)	Thread size & type	1/8" to 2", If Above 1" to 2" contact factory TUBE OD

MODEL NO ORDERING SYSTEM



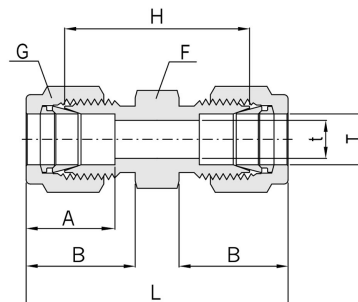
PART NO ORDERING SYSTEM



EQUAL UNION



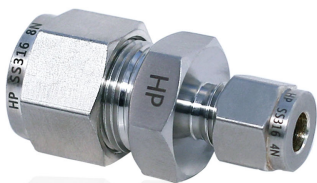
MODEL NO
HPTDFEU



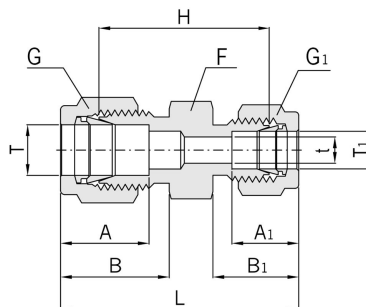
Part No.	Tube O.D. T (mm)	t (mm)	Width across flat (mm)		A (mm)	B (mm)	H (mm)	L (mm)
			F	G				
			HPTDF6mEU	6				
HPTDF8mEU	8	6.3	14.2	17	16.2	18.6	21.3	28.8
HPTDF10mEU	10	8	17	19	17.2	19.5	23.9	31.5
HPTDF12mEU	12	9.5	22	22	22.8	22	25.9	36
HPTDF16mEU	16	12.7	22	25.4	24.4	22	28.7	38.8
HPTDF18mEU	18	15	27	32	24.4	22	28.7	39.8
HPTDF20mEU	20	16	32	32	26	22	32.5	42.6
HPTDF25mEU	25	21.8	36	36	31.3	26.5	36.8	49.1

Part No.	Tube O.D. T		t (mm)	Width across flat (in.)		A (mm)	B (mm)	H (mm)	L (mm)
	Inch	mm		F	G				
	HPTDF2EU	1/8		3.17	2.3				
HPTDF4EU	1/4	6.35	4.8	14.0	14.0	15.2	17.8	26.2	40.9
HPTDF6EU	3/8	9.52	7.0	17.0	17.0	16.8	19.3	30.2	45.0
HPTDF8EU	1/2	12.7	10.4	22.0	22.0	22.9	21.8	31.0	51.3
HPTDF10EU	5/8	15.87	12.7	27.0	27.0	24.4	21.8	31.8	52.1
HPTDF12EU	3/4	19.05	15.7	27.0	27.0	24.4	21.8	33.3	53.6
HPTDF16EU	1	25.4	22.4	36.0	36.0	31.2	26.4	40.4	64.8

UNEQUAL UNION



MODEL NO
HPTDFEU



Part No.	Tube O.D. (mm)		t (mm)	Width across flat (mm)			A (mm)	A1 (mm)	B (mm)	B1 (mm)	H (mm)	L (mm)
	T	T1		F	G	G1						
	HPTDF8mRU6	8		6	4.8	14						
HPTDF10mRU6	10	6	4.8	17	19	14	17.2	15.3	19.5	17.7	29.5	44.5
HPTDF10mRU8	10	8	6.3	17	19	16	17.2	16.2	19.5	18.6	30	45.1
HPTDF12mRU6	12	6	4.8	22	22	14	22.8	15.3	22	17.7	29.5	47
HPTDF12mRU8	12	8	6.3	22	22	16	22.8	16.2	22	18.6	30.2	47.8
HPTDF12mRU10	12	10	8	22	22	19	22.8	17.2	22	19.5	31	48.7
HPTDF16mRU10	16	10	8	24	25	19	24.4	17.2	22	19.5	31.8	49.5
HPTDF16mRU12	16	12	9.5	24	25	22	24.4	22.8	22	22	31.8	52
HPTDF18mRU12	18	12	9.5	27	30	22	24.4	22.8	22	22	33.3	53.5
HPTDF20mRU12	20	12	9.5	27	30	22	24.4	22.8	22	22	33.4	54
HPTDF25mRU18	25	18	15	35	38	30	31.3	24.4	26.5	22	38.6	61
HPTDF25mRU20	25	20	16	35	38	32	31.3	26	26.5	22	39.9	62.3

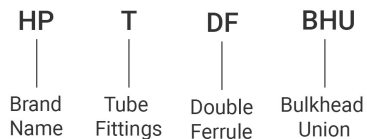
Part No.	Tube O.D.				t (mm)	Width across flat (in.)			A (mm)	A1 (mm)	B (mm)	B1 (mm)	H (mm)	L (mm)
	T		T1			F	G	G1						
	Inch	mm	Inch	mm		F	G	G1						
HPTDF4RU2	1/4	6.35	1/8	3.17	2.28	14.0	14.0	12.7	15.24	12.70	17.78	15.24	24.63	38.6
HPTDF6RU2	3/8	9.52	1/8	3.17	2.28	17.0	17.0	12.7	16.76	12.70	19.30	15.24	26.92	40.89
HPTDF6RU4	3/8	9.52	1/4	6.35	4.82	17.0	17.0	14.0	16.76	15.24	19.30	17.78	28.44	43.18
HPTDF8RU2	1/2	12.7	1/8	3.17	2.28	22.0	22.0	12.7	22.86	12.70	21.84	15.24	28.44	45.21
HPTDF8RU4	1/2	12.7	1/4	6.35	4.82	22.0	22.0	14.0	22.86	15.24	21.84	17.78	29.46	46.99
HPTDF8RU6	1/2	12.7	3/8	9.52	7.11	22.0	22.0	17.0	22.86	16.76	21.84	19.30	30.98	48.51
HPTDF12RU4	3/4	19.05	1/4	6.35	4.82	27.0	27.0	14.0	24.38	15.24	21.84	17.78	31.75	49.27
HPTDF12RU6	3/4	19.05	3/8	9.52	7.11	27.0	27.0	17.0	24.38	16.76	21.84	19.30	33.27	50.80
HPTDF12RU8	3/4	19.05	1/2	12.7	10.41	27.0	27.0	22.0	24.38	22.86	21.84	21.84	33.27	53.59
HPTDF16RU8	1	25.4	1/2	12.7	10.41	36.0	36.0	22.0	31.24	22.86	26.41	21.84	40.89	63.24
HPTDF16RU12	1	25.4	3/4	19.05	15.74	36.0	36.0	27.0	31.24	24.38	26.41	21.84	40.38	62.73

NOTE : 1. * Threads are available upon request.
2. Above dimensions are only for reference and are subject to change.
3. Material standards are as per ASTM.
4. Dimension standards are as per ASME B16.11.

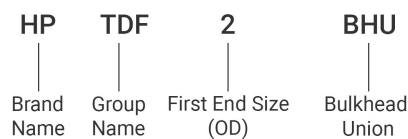


MOC	CS / AS / SS / DSS / SDSS / SASS / MONEL / HASTELLOY / INCONEL / TITANIUM / TANTALUM / BRASS / PTFE	OD Size	1/8" to 2" & 4mm to 50mm. If Above 1" to 2" & 25mm to 50mm contact factory
Pressure	Upto 6000 psi. If Above 6000 psi Contact Factory (For Brass Upto 1500 psi) (For PTFE Upto 150 psi)	Thread size & type	1/8" to 2", If Above 1" to 2" contact factory TUBE OD

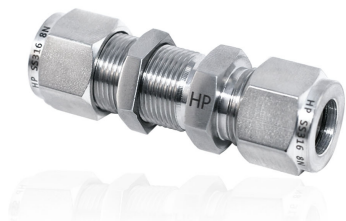
MODEL NO ORDERING SYSTEM



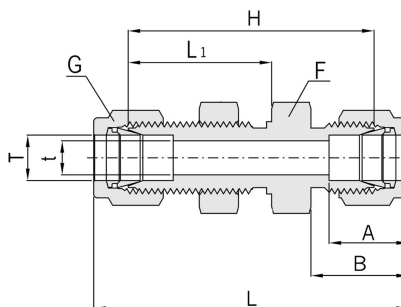
PART NO ORDERING SYSTEM



BULKHEAD UNION



**MODEL NO
HPTDFBHU**



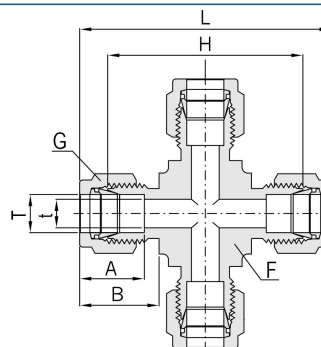
METRIC RANGE									
Part No.	Tube O.D. T (mm)	t (mm)	Width across flat (mm)		A (mm)	B (mm)	L1 (mm)	H (mm)	L (mm)
			F	G					
HPTDF6mBHU	6	4.8	15	14	15.3	17.7	26.2	42.9	57.7
HPTDF8mBHU	8	6.3	17	16	16.2	18.6	28.6	46	61
HPTDF10mBHU	10	8	22	19	17.2	19.5	29.4	48.5	63.7
HPTDF12mBHU	12	9.5	24	22	22.8	22	31.8	50.8	71
HPTDF16mBHU	16	12.7	27	25	24.4	22	32.5	52.3	72.5
HPTDF18mBHU	18	15	30	30	24.4	22	37.3	58.7	78.9
HPTDF20mBHU	20	16	35	32	26	22	42.9	64.3	84.5
HPTDF22mBHU	22	18.3	35	32	26	22	42.9	64.3	84.5
HPTDF25mBHU	25	21.8	41	38	31.3	26.5	45.2	71.4	95.9

IMPERIAL RANGE										
Part No.	Tube O.D. T		t (mm)	Width across flat (in.)		A (mm)	B (mm)	L1 (mm)	H (mm)	L (mm)
	Inch	mm		F	G					
HPTDF2BHU	1/8	3.17	2.28	12.7	12.7	12.70	15.24	24.63	38.10	51.3
HPTDF4BHU	1/4	6.35	4.82	14.0	14.0	15.24	17.78	26.16	42.92	57.65
HPTDF6BHU	3/8	9.52	7.11	17.0	17.0	16.76	19.30	29.46	47.49	62.23
HPTDF8BHU	1/2	12.7	10.41	22.0	22.0	22.86	21.84	31.75	50.80	71.12
HPTDF10BHU	5/8	15.87	12.70	27.0	27.0	24.38	21.84	32.51	52.32	72.64
HPTDF12BHU	3/4	19.05	15.74	27.0	27.0	24.38	21.84	37.33	58.67	78.99
HPTDF16BHU	1	25.4	22.35	36.0	36.0	31.24	26.41	45.21	71.37	95.75

EQUAL UNION CROSS



**MODEL NO
HPTDFEUC**



METRIC RANGE								
Part No.	Tube O.D. T (mm)	t (mm)	Width across flat (mm)		A (mm)	B (mm)	H (mm)	L (mm)
			F	G				
HPTDF6mEUC	6	4.8	12.7	13.97	15.3	17.7	39.2	54
HPTDF8mEUC	8	6.3	14.2	15.7	16.2	18.6	42.6	57.6
HPTDF10mEUC	10	8	17.2	18.7	17.2	19.5	47.8	63
HPTDF12mEUC	12	9.5	20.5	21.8	22.8	22	51.8	72
HPTDF16mEUC	16	12.7	23.6	24.8	24.4	22	57.4	77.6
HPTDF18mEUC	18	15	26.9	29.9	24.4	22	56.4	79.6
HPTDF20mEUC	20	16	29.9	31.75	26	22	69	85.2
HPTDF25mEUC	25	21.8	34.7	37.84	31.3	22	73.6	98.2

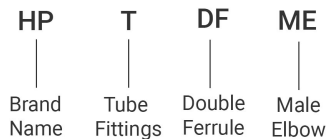
IMPERIAL RANGE										
Part No.	Tube O.D. T		t (mm)	Width across flat (in.)		A (mm)	B (mm)	H (mm)	L (mm)	
	Inch	mm		F	G					
HPTDF2EUC	1/8	3.17	2.28	12.7	12.7	12.70	15.24	31.48	44.7	
HPTDF4EUC	1/4	6.35	4.82	14.0	14.0	15.24	17.78	39.10	53.84	
HPTDF6EUC	3/8	9.52	7.11	17.0	17.0	16.76	19.30	46.22	60.96	
HPTDF8EUC	1/2	12.7	10.41	22.0	22.0	22.86	21.84	51.80	72.12	
HPTDF10EUC	5/8	15.87	12.70	27.0	27.0	24.38	21.84	57.40	77.60	
HPTDF12EUC	3/4	19.05	15.74	27.0	27.0	24.38	21.84	59.42	79.74	
HPTDF16EUC	1	25.4	22.35	36.0	36.0	31.24	26.41	73.66	98.04	

NOTE: 1. * Threads are available upon request.
 2. Above dimensions are only for reference and are subject to change.
 3. Material standards are as per ASTM.
 4. Dimension standards are as per ASME B16.11.



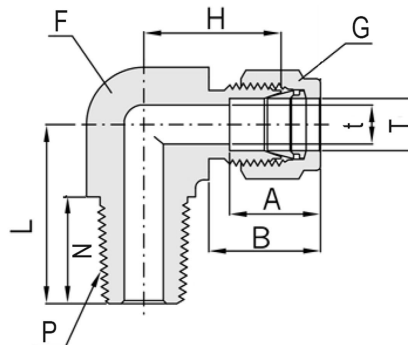
MOC	CS / AS / SS / DSS / SDSS / SASS / MONEL / HASTELLOY / INCONEL / TITANIUM / TANTALUM / BRASS / PTFE	OD Size	1/8" to 2" & 4mm to 50mm. If Above 1" to 2" & 25mm to 50mm contact factory
Pressure	Upto 6000 psi. If Above 6000 psi Contact Factory (For Brass Upto 1500 psi) (For PTFE Upto 150 psi)	Thread size & type	1/8" to 2", If Above 1" to 2" contact factory NPT / BSPP / BSPT / METRIC / UNF

MODEL NO ORDERING SYSTEM



MODEL NO HPTDFME

PART NO ORDERING SYSTEM



METRIC RANGE

Part No.	Tube O.D. T (mm)	P* Size	N (mm)	t (mm)	Width across flat (mm)		A (mm)	B (mm)	H (mm)	L (mm)
					F	G				
HPTDF6mME2	6	1/8	10	4.8	12.7	14.0	15.3	17.7	19.6	18.8
HPTDF6mME4	6	1/4	14	4.8	12.7	14.0	15.3	17.7	19.6	23.4
HPTDF6mME6	6	3/8	14	4.8	17.46	14.0	15.3	17.7	22.4	26.2
HPTDF6mME8	6	1/2	19	4.8	20.63	14.0	15.3	17.7	24.4	33.0
HPTDF8mME2	8	1/8	10	4.8	14.28	17.0	16.2	18.6	21.3	19.8
HPTDF8mME4	8	1/4	14	4.8	14.28	17.0	16.2	18.6	21.3	24.4
HPTDF8mME6	8	3/8	14	6.3	17.46	17.0	16.2	18.6	23.1	26.2
HPTDF8mME8	8	1/2	19	6.3	13/16	17.0	16.2	18.6	25.1	33.0
HPTDF10mME2	10	1/8	10	4.8	20.63	19.0	17.2	19.5	23.9	23.6
HPTDF10mME4	10	1/4	14	7	17.46	19.0	17.2	19.5	23.9	26.2
HPTDF10mME6	10	3/8	14	8	17.46	19.0	17.2	19.5	23.9	26.2
HPTDF10mME8	10	1/2	19	8	20.63	19.0	17.2	19.5	25.9	33.0
HPTDF12mME2	12	1/8	10	4.8	20.63	22.0	22.8	22.0	25.9	23.6
HPTDF12mME4	12	1/4	14	7	20.63	22.0	22.8	22.0	25.9	28.2
HPTDF12mME6	12	3/8	14.2	9.5	20.63	22.0	22.8	22.0	25.9	28.2
HPTDF12mME8	12	1/2	19	9.5	20.63	22.0	22.8	22.0	25.9	33.0
HPTDF12mME12	12	3/4	19	9.5	25.4	22.0	22.8	22.0	29.7	36.8
HPTDF16mME6	16	3/8	14	9.5	23.81	25.4	24.4	22.0	27.9	30.2
HPTDF16mME8	16	1/2	19	12	23.81	25.4	24.4	22.0	27.9	35.1
HPTDF16mME12	16	3/4	19	12.7	26.9	25.4	24.4	22.0	29.7	36.8
HPTDF18mME8	18	1/2	19	12	26.9	32.0	24.4	22.0	29.7	36.8
HPTDF18mME12	18	3/4	19	15	26.9	32.0	24.4	22.0	29.7	36.8
HPTDF20mME8	20	1/2	19	12	32.0	32.0	26	22.0	34.5	41.7
HPTDF20mME12	20	3/4	19	15.7	32.0	32.0	26	22.0	34.5	41.7
HPTDF22mME12	22	3/4	19	15.7	32.0	32.0	26	22.0	34.5	41.7
HPTDF22mME16	22	1	24	18.3	36.0	36.0	26	22.0	34.5	46.5

IMPERIAL RANGE

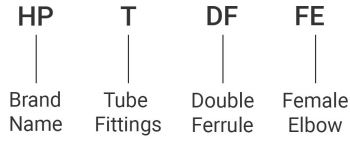
Part No.	Tube O.D. T		P* Size	N (mm)	t (mm)	Width across flat (in.)		A (mm)	B (mm)	H (mm)	L (mm)
	Inch	mm				F	G				
HPTDF2ME2	1/8	3.17	1/8	9.7	2.3	12.7	12.7	12.7	15.2	17.0	17.8
HPTDF2ME4	1/8	3.17	1/4	14.2	2.3	14.0	12.7	12.7	15.2	18.0	22.8
HPTDF4ME2	1/4	6.35	1/8	9.7	4.8	14.0	14.0	15.2	17.8	19.6	19.1
HPTDF4ME4	1/4	6.35	1/4	14.2	4.8	14.0	14.0	15.2	17.8	19.6	23.9
HPTDF4ME6	1/4	6.35	3/8	14.2	4.8	19.0	14.0	15.2	17.8	22.4	28.4
HPTDF4ME8	1/4	6.35	1/2	19.1	4.8	22.0	14.0	15.2	17.8	24.6	33.0
HPTDF5ME2	5/16	7.93	1/8	9.7	4.8	17.0	17.0	16.3	18.5	21.3	19.8
HPTDF5ME4	5/16	7.93	1/4	14.2	6.4	17.0	17.0	16.3	18.5	21.3	24.4
HPTDF5ME6	5/16	7.93	3/8	14.2	6.4	17.0	17.0	16.3	18.5	23.1	28.4
HPTDF6ME2	3/8	9.52	1/8	9.7	4.8	17.0	17.0	16.8	19.3	23.1	20.6
HPTDF6ME4	3/8	9.52	1/4	14.2	7.0	17.0	17.0	16.8	19.3	23.1	25.4
HPTDF6ME6	3/8	9.52	3/8	14.2	7.1	19.0	17.0	16.8	19.3	25.9	28.4
HPTDF6ME8	3/8	9.52	1/2	19.1	7.1	22.0	17.0	16.8	19.3	25.9	33.0
HPTDF6ME12	3/8	9.52	3/4	19.1	7.1	27.0	17.0	16.8	19.3	29.7	36.8
HPTDF8ME4	1/2	12.7	1/4	14.2	7.0	22.0	22.0	22.9	21.8	25.9	28.3
HPTDF8ME6	1/2	12.7	3/8	14.2	9.5	22.0	22.0	22.9	21.8	25.9	28.3
HPTDF8ME8	1/2	12.7	1/2	19.1	10.4	22.0	22.0	22.9	21.8	25.9	33.0
HPTDF8ME12	1/2	12.7	3/4	19.1	10.4	27.0	22.0	22.9	21.8	29.7	36.8
HPTDF10ME6	5/8	15.87	3/8	14.2	9.7	27.0	25.4	24.4	21.8	27.9	30.2
HPTDF10ME8	5/8	15.87	1/2	19.1	12.0	27.0	25.4	24.4	21.8	27.9	35.0
HPTDF10ME12	5/8	15.87	3/4	19.1	12.7	27.0	25.4	24.4	21.8	29.7	36.8
HPTDF12ME8	3/4	19.05	1/2	19.1	12.0	27.0	27.0	24.4	21.8	29.7	36.8
HPTDF12ME12	3/4	19.05	3/4	19.1	15.7	27.0	27.0	24.4	21.8	29.7	36.8
HPTDF16ME12	1	25.4	3/4	19.1	15.7	36.0	36.0	31.2	26.4	36.8	42.2
HPTDF16ME16	1	25.4	1	23.9	22.4	36.0	36.0	31.2	26.4	36.8	46.5

- NOTE : 1. * Threads are available upon request.
 2. Above dimensions are only for reference and are subject to change.
 3. Material standards are as per ASTM.
 4. Dimension standards are as per ASME B16.11.

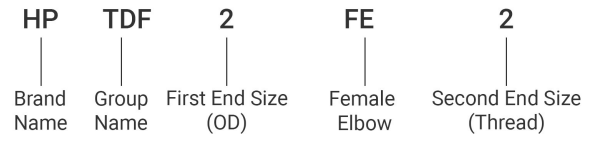


MOC	CS / AS / SS / DSS / SDSS / SASS / MONEL / HASTELLOY / INCONEL / TITANIUM / TANTALUM / BRASS / PTFE	OD Size	1/8" to 2" & 4mm to 50mm. If Above 1" to 2" & 25mm to 50mm contact factory
Pressure	Upto 6000 psi. If Above 6000 psi Contact Factory (For Brass Upto 1500 psi) (For PTFE Upto 150 psi)	Thread size & type	1/8" to 2", If Above 1" to 2" contact factory NPT / BSPP / BSPT / METRIC / UNF

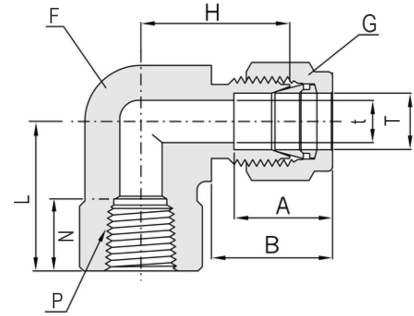
MODEL NO ORDERING SYSTEM



PART NO ORDERING SYSTEM



MODEL NO HPTDFFE



METRIC RANGE

Part No.	Tube O.D. T (mm)	P* Size	N (mm)	t (mm)	Width across flat (mm)		A (mm)	B (mm)	H (mm)	L (mm)
					F	G				
HPTDF6mFE2	6	1/8	10	4.8	14.0	14.0	15.3	17.7	19.6	19
HPTDF6mFE4	6	1/4	14	4.8	17.0	14.0	15.3	17.7	22.4	22.4
HPTDF6mFE6	6	3/8	14	4.8	22.0	14.0	15.3	17.7	24.4	22.4
HPTDF6mFE8	6	1/2	19	4.8	25.4	14.0	15.3	17.7	27.2	28.4
HPTDF8mFE2	8	1/8	10	6.3	14.0	17.0	16.2	18.6	21	19
HPTDF8mFE4	8	1/4	14	6.3	17.0	17.0	16.2	18.6	23.1	22.4
HPTDF8mFE4	8	1/2	19	6.3	25.4	17.0	16.2	18.6	28	28.4
HPTDF10mFE2	10	1/8	10	8	17.0	19.0	17.2	19.5	23.9	19
HPTDF10mFE4	10	1/4	14	8	17.0	19.0	17.2	19.5	23.9	22.4
HPTDF10mFE6	10	3/8	14	8	22.0	19.0	17.2	19.5	25.9	22.4
HPTDF10mFE8	10	1/2	19	8	25.4	19.0	17.2	19.5	28.7	28.4
HPTDF10mFE8	10	3/4	19	8	32.0	19.0	17.2	19.5	33	29.5
HPTDF12mFE4	12	1/4	14	9.5	22.0	22.0	22.8	22	24.6	22.4
HPTDF12mFE6	12	3/8	14.2	9.5	22.0	22.0	22.8	22	25.9	22.4
HPTDF12mFE8	12	1/2	19	9.5	25.4	22.0	22.8	22	25.9	22.4
HPTDF12mFE12	12	3/4	19	9.5	32.0	22.0	22.8	22	28.7	28.4
HPTDF16mFE6	16	3/8	14	12.7	25.4	25.4	24.4	22	24.5	24.5
HPTDF16mFE8	16	1/2	19	12.7	25.4	25.4	24.4	22	29.7	28.4
HPTDF16mFE12	16	3/4	19	12.7	32.0	25.4	24.4	22	31.5	31.5

IMPERIAL RANGE

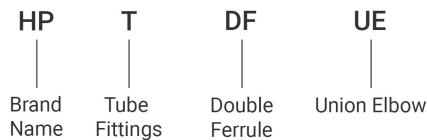
Part No.	Tube O.D. T		P* Size	N (mm)	t (mm)	Width across flat (in.)		A (mm)	B (mm)	H (mm)	L (mm)
	Inch	mm				F	G				
HPTDF2FE2	1/8	3.17	1/8	9.65	2.28	14.0	12.7	12.70	15.24	18.03	19.05
HPTDF2FE4	1/8	3.17	1/4	14.2	2.28	19.0	12.7	12.70	15.24	20.82	22.35
HPTDF4FE2	1/4	6.35	1/8	9.65	4.82	14.0	14.0	15.24	17.78	19.55	19.05
HPTDF4FE4	1/4	6.35	1/4	14.2	4.82	19.0	14.0	15.24	17.78	22.35	22.35
HPTDF4FE6	1/4	6.35	3/8	14.2	4.82	22.0	14.0	15.24	17.78	24.38	22.35
HPTDF4FE8	1/4	6.35	1/2	19.05	4.82	27.0	14.0	15.24	17.78	27.17	28.44
HPTDF5FE2	5/16	7.93	1/8	9.65	6.35	14.0	17.0	16.25	18.54	21.33	19.05
HPTDF5FE4	5/16	7.93	1/4	14.2	6.35	19.0	17.0	16.25	18.54	23.11	22.35
HPTDF6FE2	3/8	9.52	1/8	9.65	7.11	17.0	17.0	16.76	19.30	23.11	19.05
HPTDF6FE4	3/8	9.52	1/4	14.2	7.11	19.0	17.0	16.76	19.30	23.87	22.35
HPTDF6FE6	3/8	9.52	3/8	14.2	7.11	22.0	17.0	16.76	19.30	25.90	22.35
HPTDF6FE8	3/8	9.52	1/2	19.05	7.11	27.0	17.0	16.76	19.30	28.70	28.44
HPTDF6FE12	3/8	9.52	3/4	19.05	7.11	32.0	17.0	16.76	19.3	31.75	31.75
HPTDF8FE4	1/2	12.7	1/4	14.2	10.41	22.0	22.0	22.86	21.84	25.90	22.35
HPTDF8FE6	1/2	12.7	3/8	14.2	10.41	22.0	22.0	22.86	21.84	25.90	22.35
HPTDF8FE8	1/2	12.7	1/2	19.05	10.41	27.0	22.0	22.86	21.84	28.70	28.44
HPTDF8FE12	1/2	12.7	3/4	19.05	10.41	32.0	22.0	22.86	21.84	31.75	31.75
HPTDF10FE6	5/8	15.87	3/8	14.2	12.70	22.0	27.0	24.38	21.84	27.94	22.35
HPTDF10FE8	5/8	15.87	1/2	19.05	12.70	27.0	27.0	24.38	21.84	29.71	28.44
HPTDF10FE12	5/8	15.87	3/4	19.05	12.7	32.0	27.0	24.38	21.84	33.52	33.52
HPTDF12FE8	3/4	19.05	1/2	19.05	15.74	27.0	27.0	24.38	21.84	29.71	28.44
HPTDF12FE12	3/4	19.05	3/4	19.05	15.74	32.0	27.0	24.38	21.84	34.54	31.75
HPTDF16FE16	3/4	19.05	1	23.8	15.74	41.0	27.0	24.38	21.84	38.10	38.10
HPTDF16FE12	1	25.4	3/4	19.05	22.35	36.0	38.0	31.24	26.41	36.83	31.75
HPTDF16FE16	1	25.4	1	23.8	22.35	41.0	38.0	31.24	26.41	41.40	38.10

NOTE: 1. * Threads are available upon request.
2. Above dimensions are only for reference and are subject to change.
3. Material standards are as per ASTM.
4. Dimension standards are as per ASME B16.11.

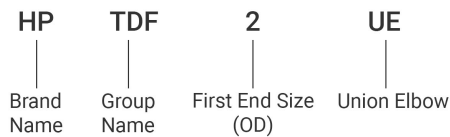


MOC	CS / AS / SS / DSS / SDSS / SASS / MONEL / HASTELLOY / INCONEL / TITANIUM / TANTALUM / BRASS / PTFE	OD Size	1/8" to 2" & 4mm to 50mm. If Above 1" to 2" & 25mm to 50mm contact factory
Pressure	Upto 6000 psi. If Above 6000 psi Contact Factory (For Brass Upto 1500 psi) (For PTFE Upto 150 psi)	Thread size & type	1/8" to 2", If Above 1" to 2" contact factory TUBE OD

MODEL NO ORDERING SYSTEM



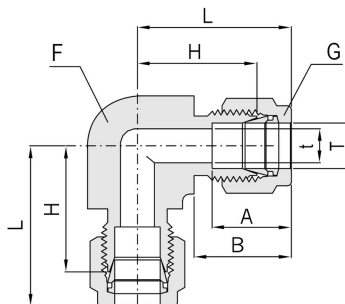
PART NO ORDERING SYSTEM



UNION ELBOW



**MODEL NO
HPTDFUE**



METRIC RANGE

Part No.	Tube O.D. T (mm)	t (mm)	Width across flat (mm)		A (mm)	B (mm)	H (mm)	L (mm)
			F	G				
HPTDF6mUE	6	4.8	12.7	14	14	17.7	19.6	27
HPTDF8mUE	8	6.3	14.2	17	16.2	18.6	21.3	28.8
HPTDF10mUE	10	8	17	19	17.2	19.5	23.9	31.5
HPTDF12mUE	12	9.5	22	22	22.8	22	25.9	36
HPTDF16mUE	16	12.7	22	25.4	24.4	22	28.7	38.8
HPTDF18mUE	18	15	27	32	24.4	22	28.7	39.8
HPTDF20mUE	20	16	32	32	26	22	32.5	42.6
HPTDF25mUE	25	21.8	36	36	31.3	26.5	36.8	49.1

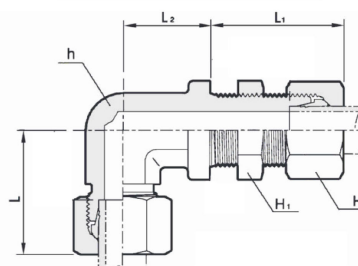
IMPERIAL RANGE

Part No.	Tube O.D. T		t (mm)	Width across flat (in.)		A (mm)	B (mm)	H (mm)	L (mm)
	Inch	mm		F	G				
HPTDF2UE	1/8	3.17	2.28	12.7	12.7	12.70	15.24	15.74	22.35
HPTDF4UE	1/4	6.35	4.82	14.0	14.0	15.24	17.78	19.55	26.92
HPTDF6UE	3/8	9.52	7.11	17.0	17.0	16.76	19.30	23.11	30.48
HPTDF8UE	1/2	12.7	10.41	22.0	22.0	22.86	21.84	25.90	36.06
HPTDF10UE	5/8	15.87	12.70	27.0	27.0	24.38	21.84	28.70	38.80
HPTDF12UE	3/4	19.05	15.74	27.0	27.0	24.38	21.84	29.71	39.87
HPTDF16UE	1	25.4	22.35	36.0	36.0	31.24	26.41	36.83	49.02

BULKHEAD UNION ELBOW



**MODEL NO
HPTDFBUE**



IMPERIAL RANGE

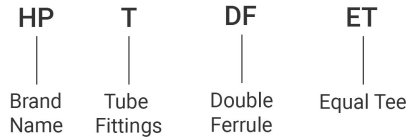
Part No.	Tube O.D. (mm)	Width across flat (mm)			L (mm)	L 1 (mm)	L 2 (mm)
		H (mm)	H 1 (mm)	h (mm)			
HPTDF6BUE	6	14	17	12	27	42	14
HPTDF8BUE	8	17	19	12	29	42	17
HPTDF10BUE	10	19	22	14	30	43	18
HPTDF12BUE	12	22	24	17	32	44	20
HPTDF15BUE	15	27	30	19	36	46	23
HPTDF18BUE	18	32	36	24	40	49	24
HPTDF22BUE	22	36	41	27	44	51	30
HPTDF28BUE	28	41	46	36	47	52	34
HPTDF35BUE	35	50	55	41	56	58	39
HPTDF42BUE	42	60	65	50	63	59	43

- NOTE: 1. * Threads are available upon request.
2. Above dimensions are only for reference and are subject to change.
3. Material standards are as per ASTM.
4. Dimension standards are as per ASME B16.11.

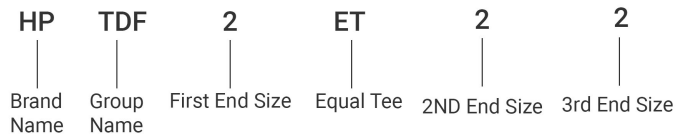


MOC	CS / AS / SS / DSS / SDSS / SASS / MONEL / HASTELLOY / INCONEL / TITANIUM / TANTALUM / BRASS / PTFE	OD Size	1/8" to 2" & 4mm to 50mm. If Above 1" to 2" & 25mm to 50mm contact factory
Pressure	Upto 6000 psi. If Above 6000 psi Contact Factory (For Brass Upto 1500 psi) (For PTFE Upto 150 psi)	Thread size & type	1/8" to 2", If Above 1" to 2" contact factory TUBE OD

MODEL NO ORDERING SYSTEM



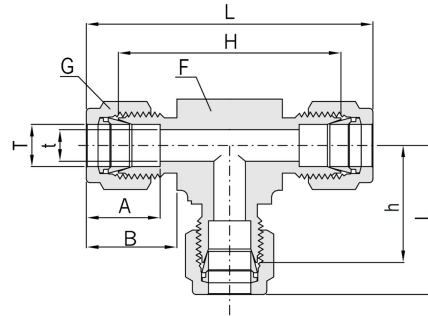
PART NO ORDERING SYSTEM



EQUAL TEE



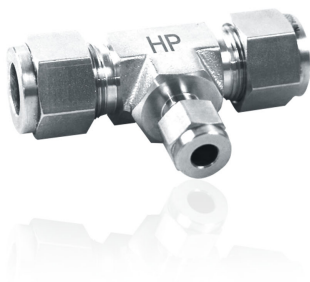
**MODEL NO
HPTDFET**



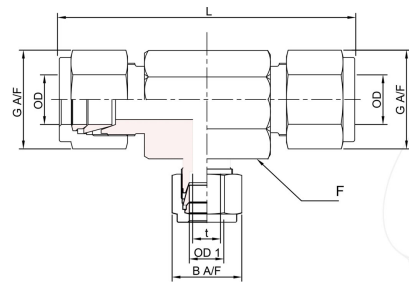
Part No.	Tube O.D. T (mm)	t (mm)	Width across flat (mm)		A (mm)	B (mm)	H (mm)	L (mm)
			F	G				
			HPTDF6mET	6				
HPTDF8mET	8	6.3	14.2	17	16.2	18.6	42.6	57.6
HPTDF10mET	10	8	17	19	17.2	19.5	47.8	63
HPTDF12mET	12	9.5	22	22	22.8	22	51.8	72
HPTDF16mET	16	12.7	22	25.4	24.4	22	57.4	77.6
HPTDF18mET	18	15	27	32	24.4	22	57.4	79.6
HPTDF20mET	20	16	32	32	26	22	65	85.2
HPTDF25mET	25	21.8	36	36	31.3	26.5	73.6	98.2

Part No.	Tube O.D. T		t (mm)	Width across flat (in.)		A (mm)	B (mm)	H (mm)	L (mm)
	Inch	mm		F	G				
	HPTDF2ET	1/8		3.17	2.28				
HPTDF4ET	1/4	6.35	4.82	14.0	14.0	15.24	17.78	39.10	53.84
HPTDF6ET	3/8	9.52	7.11	17.0	17.0	16.76	19.30	46.22	60.96
HPTDF8ET	1/2	12.7	10.41	22.0	22.0	22.86	21.84	51.80	72.12
HPTDF10ET	5/8	15.87	12.70	27.0	27.0	24.38	21.84	57.40	77.60
HPTDF12ET	3/4	19.05	15.74	27.0	27.0	24.38	21.84	59.42	79.74
HPTDF16ET	1	25.4	22.35	36.0	36.0	31.24	26.41	73.66	98.04

UN EQUAL TEE



**MODEL NO
HPTDFUET**



Part No.	Tube O.D. (mm)	Tube O.D. 1 (mm)	t (mm)	Width across flat (mm)			L (mm)
				F	G	B	
				HPTDF6mUET6m-4	6	4	
HPTDF8mUET8m-6	8	6	4.8	14	14	14	57.6
HPTDF10mUET10m-8	10	8	6.3	17	17	14	63
HPTDF12mUET12m-10	12	10	8	22	22	17	72
HPTDF16mUET16m-12	16	12	9.5	24	24	22	77.6
HPTDF18mUET18m-16	18	16	12.7	27	27	24	79.6
HPTDF20mUET20m-18	20	18	15	30	32	27	85.2
HPTDF25mUET25m-20	25	20	16	35	38	30	98.2

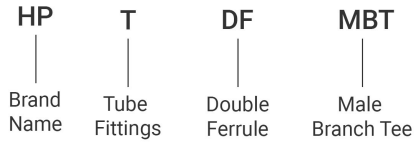
Part No.	Tube O.D.	Tube O.D. 1	t (mm)	Width across flat (mm)			L (mm)
				F	G	B	
				HPTDF4UET4-2	1/4	1/8	
HPTDF6UET6-4	3/8	1/4	4.82	17.0	17.0	14.0	61.0
HPTDF8UET8-6	1/2	3/8	7.11	22.0	22.0	17.0	72.1
HPTDF10UET10-8	5/8	1/2	10.41	25.4	25.4	22.0	77.6
HPTDF12UET12-10	3/4	5/8	12.70	27.0	27.0	25.4	79.7
HPTDF16UET16-12	1	3/4	15.74	36.0	36.0	27.0	98.0

NOTE : 1. * Threads are available upon request.
2. Above dimensions are only for reference and are subject to change.
3. Material standards are as per ASTM.
4. Dimension standards are as per ASME B16.11.

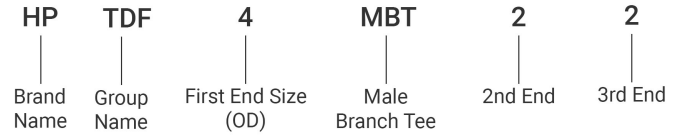


MOC	CS / AS / SS / DSS / SDSS / SASS / MONEL / HASTELLOY / INCONEL / TITANIUM / TANTALUM / BRASS / PTFE	OD Size	1/8" to 2" & 4mm to 50mm. If Above 1" to 2" & 25mm to 50mm contact factory
Pressure	Upto 6000 psi. If Above 6000 psi Contact Factory (For Brass Upto 1500 psi) (For PTFE Upto 150 psi)	Thread size & type	1/8" to 2", If Above 1" to 2" contact factory NPT / BSPP / BSPT / METRIC / UNF

MODEL NO ORDERING SYSTEM



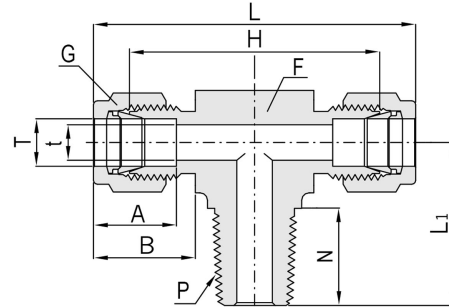
PART NO ORDERING SYSTEM



MALE BRANCH TEE



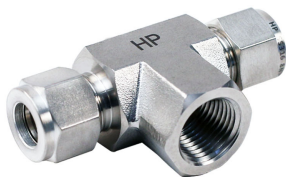
MODEL NO HPTDFMBT



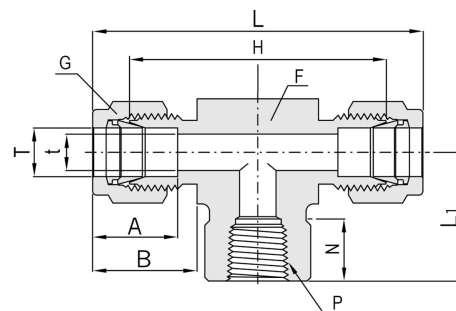
METRIC RANGE											
Part No.	Tube O.D. T (mm)	P* Size	N (mm)	t (mm)	Width across flat (mm)		A (mm)	B (mm)	L1 (mm)	H (mm)	L (mm)
					F	G					
HPTDF6mMBT6m-4	6	1/4	14	4.8	12.7	14.0	15.3	17.7	23.4	39.2	54
HPTDF8mMBT8m-4	8	1/4	14	6.3	14.0	17.0	16.2	18.6	24.4	42.6	57.6
HPTDF8mMBT8m-6	8	3/8	14	6.3	17.0	17.0	16.2	18.6	25.4	44.4	59.4
HPTDF10mMBT10m-4	10	3/8	14	8	17.0	19.0	17.2	19.5	28.2	47.8	63
HPTDF10mMBT10m-6	10	1/2	19	8	22.0	19.0	17.2	19.5	32	49.8	65.2
HPTDF12mMBT12m-4	12	1/4	14	7	22.0	22.0	22.8	22	28.2	51.8	72
HPTDF12mMBT12m-6	12	3/8	14.2	9	22.0	22.0	22.8	22	28.2	51.8	72
HPTDF12mMBT12m-8	12	1/2	19	9.5	22.0	22.0	22.8	22	28.2	51.8	72
HPTDF16mMBT16m-6	16	3/8	14	9.5	25.4	25.4	24.4	22	30.2	55.8	76
HPTDF16mMBT16m-8	16	1/2	19	12	25.4	25.4	24.4	22	35.1	55.8	76
HPTDF20mMBT20m-12	20	3/4	19	15.7	32.0	32.0	26	22	41.7	69	89.2
HPTDF25mMBT25m-16	25	1	23.8	21.8	36.0	38.0	31.3	26.5	46.8	66.6	90.4

IMPERIAL RANGE												
Part No.	Tube O.D. T		P* Size	N (mm)	t (mm)	Width across flat (in.)		A (mm)	B (mm)	L1 (mm)	H (mm)	L (mm)
	Inch	mm				F	G					
HPTDF4MBT2	1/4	6.35	1/8	9.65	4.82	14.0	14.0	15.24	17.78	18.79	39.1	53.84
HPTDF4MBT4	1/4	6.35	1/4	14.2	4.82	14.0	14.0	15.24	17.78	23.87	39.1	53.84
HPTDF6MBT4	3/8	9.52	1/4	14.2	7	17.0	17.0	16.76	19.3	25.4	46.22	60.96
HPTDF6MBT6	3/8	9.52	3/8	14.2	7.11	19.0	17.0	16.76	19.3	26.2	47.74	62.48
HPTDF8MBT4	1/2	12.7	1/4	14.2	10.41	22.0	22.0	22.86	21.84	27.43	51.8	72.12
HPTDF8MBT6	1/2	12.7	3/8	14.2	10.41	22.0	22.0	22.86	21.84	28.19	51.8	72.12
HPTDF8MBT8	1/2	12.7	1/2	19.05	10.41	22.0	22.0	22.86	21.84	33.02	51.8	72.12
HPTDF10MBT8	5/8	15.87	1/2	19.05	12	27.0	27.0	24.38	21.84	35.05	55.88	76.2
HPTDF12MBT12	3/4	19.05	3/4	19.05	15.74	27.0	27.0	24.38	21.84	36.83	59.42	79.74
HPTDF16MBT16	1	25.4	1	24.13	22.35	36.0	36.0	31.24	26.41	46.99	73.66	98.04

FEMALE BRANCH TEE



MODEL NO HPTDFFBT



METRIC RANGE											
Part No.	Tube O.D. T (mm)	P* Size	N (mm)	t (mm)	Width across flat (mm)		A (mm)	B (mm)	L1 (mm)	H (mm)	L (mm)
					F	G					
HPTDF6mFBT6m-4	6	1/4	14	4.8	19.0	14.0	15.3	17.7	22.4	44.8	59.6
HPTDF8mFBT8m-4	8	1/4	14	6.3	19.0	17.0	16.2	18.6	22.4	46.2	61.2
HPTDF8mFBT8m-6	8	3/8	14	6.3	22.0	17.0	16.2	18.6	22.4	50.4	64.8
HPTDF10mFBT10m-4	10	3/8	14	8	22.0	19.0	17.2	19.5	22	51.8	66.6
HPTDF10mFBT10m-6	10	1/2	19	8	27.0	19.0	17.2	19.5	22.4	57.4	72.2
HPTDF12mFBT12m-4	12	1/4	14	9.5	22.0	22.0	22.8	22	22.4	51.8	72
HPTDF12mFBT12m-6	12	3/8	14	9.5	22.0	22.0	22.8	22	22.4	51.8	72
HPTDF12mFBT12m-8	12	1/2	19	9.5	27.0	22.0	22.8	22	28.4	57.4	77.6
HPTDF16mFBT16m-6	16	3/8	14	9.5	25.4	27.0	24.4	22	28.4	57.4	77.6
HPTDF16mFBT16m-8	16	1/2	19	12.7	25.4	25.0	24.4	22	28.4	57.4	77.6

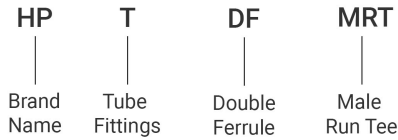
IMPERIAL RANGE												
Part No.	Tube O.D. T		P* Size	N (mm)	t (mm)	Width across flat (in.)		A (mm)	B (mm)	L1 (mm)	H (mm)	L (mm)
	Inch	mm				F	G					
HPTDF4FBT2	1/4	6.35	1/8	14	4.82	14.0	14.0	15.24	17.78	19.05	39.10	53.84
HPTDF4FBT4	1/4	6.35	1/4	14	4.82	19.0	14.0	15.24	17.78	22.35	44.70	59.42
HPTDF6FBT4	3/8	9.52	1/4	14	7.11	19.0	17.0	16.76	19.30	22.35	47.74	62.48
HPTDF6FBT6	3/8	9.52	3/8	14	7.11	22.0	17.0	16.76	19.30	22.35	47.74	62.48
HPTDF8FBT4	1/2	12.7	1/4	19	10.41	22.0	22.0	22.86	21.84	22.35	51.80	72.12
HPTDF8FBT6	1/2	12.7	3/8	19	10.41	22.0	22.0	22.86	21.84	22.35	51.80	72.12
HPTDF8FBT8	1/2	12.7	1/2	19	10.41	27.0	22.0	22.86	21.84	28.44	57.40	77.72
HPTDF10FBT8	5/8	15.87	1/2	19	12.70	25.4	25.4	24.38	21.84	28.44	57.40	77.72
HPTDF12FBT12	3/4	19.05	3/4	19	15.74	27.0	27.0	24.38	21.84	31.75	69.08	89.40
HPTDF16FBT16	1	25.4	1	22	22.35	41.0	38.0	31.24	26.41	38.10	82.80	107.18

NOTE : 1. * Threads are available upon request. 2. Above dimensions are only for reference and are subject to change. 3. Material standards are as per ASTM. 4. Dimension standards are as per ASME B16.11.

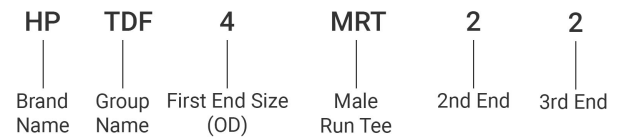


MOC	CS / AS / SS / DSS / SDSS / SASS / MONEL / HASTELLOY / INCONEL / TITANIUM / TANTALUM / BRASS / PTFE	OD Size	1/8" to 2" & 4mm to 50mm. If Above 1" to 2" & 25mm to 50mm contact factory
Pressure	Upto 6000 psi. If Above 6000 psi Contact Factory (For Brass Upto 1500 psi) (For PTFE Upto 150 psi)	Thread size & type	1/8" to 2", If Above 1" to 2" contact factory NPT / BSPP / BSPT / METRIC / UNF

MODEL NO ORDERING SYSTEM



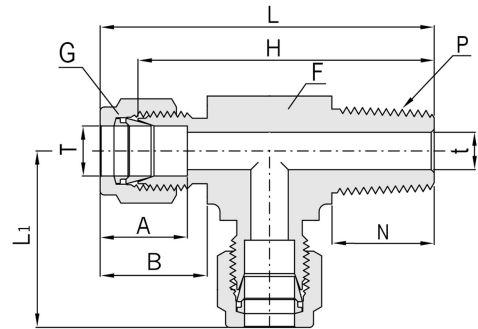
PART NO ORDERING SYSTEM



MALE RUN TEE



MODEL NO HPTDFMRT



METRIC RANGE

Part No.	Tube O.D. T (mm)	P* Size	N (mm)	t (mm)	Width across flat (mm)		A (mm)	B (mm)	L1 (mm)	H (mm)	L (mm)
					F	G					
HPTDF6mMRT4-6m	6	1/4	14	4.8	12.7	14	15.3	17.7	23.4	19.6	54
HPTDF8mMRT4-8m	8	1/4	14	6.3	14.2	16	16.2	18.6	24.4	21.3	57.6
HPTDF10mMRT6-10m	10	3/8	14	8	17.4	19	17.2	19.5	28.2	23.9	63
HPTDF12mMRT4-12m	12	1/4	14	7	20.6	22.8	22.8	22	28.2	25.9	72
HPTDF12mMRT6-12m	12	3/8	14	9.5	20.6	22.8	22.8	22	28.2	25.9	72
HPTDF12mMRT8-12m	12	1/2	19	9.5	20.6	22.8	22.8	22	33	25.9	72
HPTDF16mMRT6-16m	16	3/8	14	9.5	23.8	24.4	24.4	22	30.2	27.9	76
HPTDF16mMRT8-16m	16	1/2	19	12	23.8	24.4	24.4	22	35.1	27.9	76
HPTDF20mMRT12-20m	20	3/4	19	15.7	30	26	26	22	41.7	34.5	89.2
HPTDF25mMRT16-25m	25	1	24	21.8	36	38	31.3	26.5	46.8	66.6	90.4

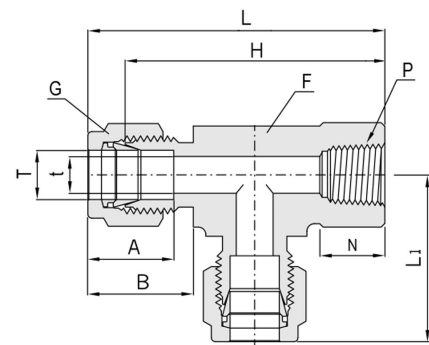
IMPERIAL RANGE

Part No.	Tube O.D. T		P* Size	N (mm)	t (mm)	Width across flat (in.)		A (mm)	B (mm)	L1 (mm)	H (mm)	L (mm)
	Inch	mm				F	G					
HPTDF4MRT2	1/4	6.35	1/8	9.65	4.82	14.0	14.0	15.24	17.78	26.92	38.34	45.71
HPTDF4MRT4	1/4	6.35	1/4	14.2	4.82	14.0	14.0	15.24	17.78	26.92	43.42	50.79
HPTDF6MRT4	3/8	9.52	1/4	14.2	7.00	17.0	17.0	16.75	19.30	30.48	48.51	55.88
HPTDF6MRT6	3/8	9.52	3/8	14.2	7.11	19.0	17.0	16.76	19.30	31.24	50.07	57.44
HPTDF8MRT6	1/2	12.7	3/8	14.2	9.50	22.0	22.0	22.86	21.84	36.06	54.09	64.25
HPTDF8MRT8	1/2	12.7	1/2	19.05	10.41	22.0	22.0	22.86	21.84	36.10	58.92	69.08
HPTDF10MRT8	5/8	15.87	1/2	19.05	12.00	25.4	25.4	24.38	21.84	38.10	62.99	73.15
HPTDF12MRT12	3/4	19.05	3/4	19.05	15.74	27.0	27.0	24.38	21.84	39.87	66.54	76.70
HPTDF16MRT16	1	25.4	1	23.87	22.35	36.0	36.0	31.24	26.41	45.21	80.01	92.20

FEMALE RUN TEE



MODEL NO HPTDFFRT



METRIC RANGE

Part No.	Tube O.D. T (mm)	P* Size	N (mm)	t (mm)	Width across flat (mm)		A (mm)	B (mm)	L1 (mm)	H (mm)	L (mm)
					F	G					
HPTDF6mFRT4-6m	6	1/4	14	4.8	19	14	15.3	17.7	29.8	44.8	52.2
HPTDF8mFRT4-8m	8	1/4	14	6.3	19	17	16.2	18.6	30.6	45.5	53
HPTDF10mFRT4-10m	10	1/4	14	8	19	19	17.2	19.5	32.6	46.3	55
HPTDF10mFRT6-10m	10	3/8	14	8	22	19	17.2	19.5	32.6	46.3	55
HPTDF12mFRT4-12m	12	1/4	14	9.5	22	22	22.8	22	36	48.3	58.4
HPTDF12mFRT6-12m	12	3/8	14	9.5	22	22	22.8	22	36	48.3	58.4
HPTDF12mFRT8-12m	12	1/2	22	9.5	27	22	22.8	22	38.8	57.1	67.2
HPTDF16mFRT8-16m	16	1/2	22	12.7	27	25	24.4	22	39.5	58.1	67.9

IMPERIAL RANGE

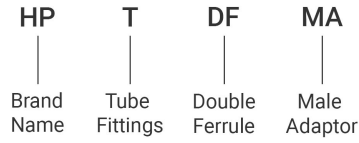
Part No.	Tube O.D. T		P* Size	N (mm)	t (mm)	Width across flat (in.)		A (mm)	B (mm)	L1 (mm)	H (mm)	L (mm)
	Inch	mm				F	G					
HPTDF4FRT2	1/4	6.35	1/8	14	4.82	14	14	15.24	17.78	26.92	38.60	45.97
HPTDF4FRT4	1/4	6.35	1/4	14	4.82	19	14	15.24	17.78	29.71	44.70	52.06
HPTDF6FRT4	3/8	9.52	1/4	14	7.11	19	17	16.75	19.30	31.24	46.22	53.59
HPTDF6FRT6	3/8	9.52	3/8	14	7.11	22	17	16.76	19.30	31.24	46.22	53.59
HPTDF8FRT6	1/2	12.7	3/8	19	10.41	22	22	22.86	21.84	36.06	48.25	58.41
HPTDF8FRT8	1/2	12.7	1/2	19	10.41	27	22	22.86	21.84	38.86	57.14	67.30
HPTDF12FRT12	3/4	19.05	3/4	19	15.74	32	27	24.38	21.84	44.70	66.29	76.45
HPTDF16FRT12	1	25.4	3/4	22	22.35	36	38	31.24	26.41	49.02	68.58	80.77
HPTDF16FRT16	1	25.4	1	22	22.35	41	38	31.24	26.41	53.59	79.50	91.69

NOTE: 1. * Threads are available upon request.
 2. Above dimensions are only for reference and are subject to change.
 3. Material standards are as per ASTM.
 4. Dimension standards are as per ASME B16.11.

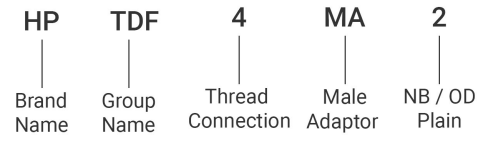


MOC	CS / AS / SS / DSS / SDSS / SASS / MONEL / HASTELLOY / INCONEL / TITANIUM / TANTALUM / BRASS / PTFE	OD Size	1/8" to 2" & 4mm to 50mm. If Above 1" to 2" & 25mm to 50mm contact factory
Pressure	Upto 6000 psi. If Above 6000 psi Contact Factory (For Brass Upto 1500 psi) (For PTFE Upto 150 psi)	Thread size & type	1/8" to 2", If Above 1" to 2" contact factory NPT / BSPP / BSPT / METRIC / UNF

MODEL NO ORDERING SYSTEM



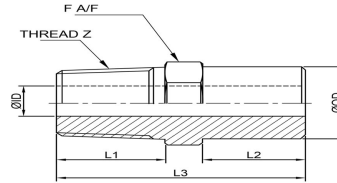
PART NO ORDERING SYSTEM



MALE ADAPTOR



MODEL NO
HPTDFMA



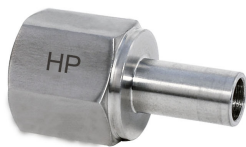
METRIC RANGE

Part No.	Tube O.D. T (mm)	P+ Size	N (mm)	Width across flat F (mm)	I.D. (mm)	L1 (mm)	L2 (mm)	L3 (mm)
HPTDF3mMA2	3	1/8	13.5	12.7	2.1	10	19	30
HPTDF3mMA4	3	1/4	13.5	14	2.1	14	19	35.3
HPTDF6mMA4	6	1/8	15.7	12.7	4	10	13.5	32.8
HPTDF6mMA4	6	1/4	15.7	14	4	14	13.5	38.1
HPTDF6mMA6	6	3/8	15.7	18	4	14	15.7	37
HPTDF6mMA8	6	1/2	15.7	22	4	19	15.7	43.4
HPTDF8mMA2	8	1/8	16.8	12	4.8	10	15.7	33.5
HPTDF8mMA4	8	1/4	16.8	14	5.6	14	15.7	39.1
HPTDF8mMA6	8	3/8	16.8	18	5.6	14	16.8	37.8
HPTDF8mMA8	8	1/2	16.8	22	5.6	19	16.8	43
HPTDF10mMA4	10	1/4	17.5	14	7.1	14	16.8	39.9
HPTDF10mMA6	10	3/8	17.5	18	7.1	14	16.8	40.6
HPTDF10mMA8	10	1/2	17.5	22	7.1	19	17.5	46.2
HPTDF12mMA4	12	1/4	23.1	16	7.1	14	17.5	46.5
HPTDF12mMA6	12	3/8	23.1	18	8.8	14	17.5	46.5
HPTDF12mMA8	12	1/2	23.1	22	8.8	19	23.1	52.3
HPTDF16mMA8	16	1/2	24.7	22	11.9	19	23.1	50.5
HPTDF20mMA12	20	3/4	26.6	27	15.1	19	23.1	54.3
HPTDF21.3mMA8	21.3	1/2	19	22	13.5	19	24.7	43
HPTDF33.4mMA16	33.4	1	19	36	16	22	26.6	47

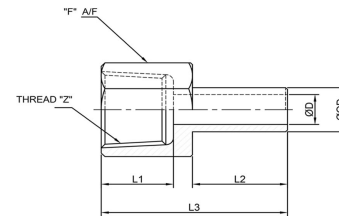
IMPERIAL RANGE

Part No.	Tube O.D. T (Inch)	P+ Size	N (mm)	Width across flat F (mm)	ID (mm)	L1 (mm)	L2 (mm)	L3 (mm)
HPTDF2MA2	1/8	3/16	12.7	2	10	13.45	29.5	
HPTDF2MA4	1/8	3/16	14	2	14	13.45	34.8	
HPTDF3MA4	3/16	4/16	12.7	3	10	14.2	30.2	
HPTDF3MA6	3/16	4/16	14	3	14	14.2	35.6	
HPTDF4MA4	1/4	6/32	12.7	4.2	10	15.75	31.8	
HPTDF4MA6	1/4	6/32	14	4.2	14	15.75	37.1	
HPTDF4MA8	1/4	6/32	19	4.2	14	15.75	37.9	
HPTDF4MA10	1/4	6/32	11	4.2	19	15.75	43.4	
HPTDF5MA4	5/16	7/32	12.7	5.6	10	16.75	32.7	
HPTDF5MA6	5/16	7/32	14	5.6	14	16.75	38.1	
HPTDF6MA4	3/8	9/32	12.7	6.9	10	17.5	33.5	
HPTDF6MA6	3/8	9/32	14	6.9	14	17.5	38.9	
HPTDF6MA8	3/8	9/32	19	6.9	14	17.5	39.6	
HPTDF6MA10	3/8	9/32	22	6.9	19	17.5	45.2	
HPTDF8MA4	1/2	12/16	14	7.1	14	23.1	44.5	
HPTDF8MA6	1/2	12/16	19	9.4	14	23.1	45.2	
HPTDF8MA8	1/2	12/16	22	9.4	19	23.1	50.8	
HPTDF10MA4	5/8	15/16	19	9.5	14	24.65	47.6	
HPTDF10MA6	5/8	15/16	22	11.9	19	24.65	52.3	
HPTDF10MA8	5/8	15/16	27	12.7	19	24.65	52.3	
HPTDF12MA4	3/4	19/32	22	11.9	19	24.65	52.3	
HPTDF12MA6	3/4	19/32	27	15	19	24.65	52.3	
HPTDF12MA8	3/4	19/32	36	15	22	24.65	57.3	
HPTDF14MA4	7/8	25/32	27	15.9	19	26.6	54.3	
HPTDF6MA1	1	25.4	27	15.8	19	33	58.7	

FEMALE ADAPTOR



MODEL NO
HPTDFFA



METRIC RANGE

Part No.	Tube O.D. T (mm)	Z+ Size	Width Hex. flat F (mm)	D (mm)	L1 (mm)	L2 (mm)	L3 (mm)
HPTDF3mFA2	3	1/8	14	2.1	10	13.5	31.5
HPTDF3mFA4	3	1/4	19	2.1	14	13.5	35.3
HPTDF4mFA2	4	1/8	19	2.2	14	14.2	35
HPTDF6mFA4	6	1/4	14	4	10	15.7	32.5
HPTDF6mFA6	6	3/8	19	4	14	15.7	37.1
HPTDF6mFA8	6	1/2	22	4	14	15.7	39.6
HPTDF6mFA10	6	1/8	27	4	14	15.7	45.5
HPTDF8mFA4	8	1/4	14	5.6	10	16.8	34.3
HPTDF8mFA6	8	3/8	19	5.6	14	16.8	37.6
HPTDF8mFA8	8	1/2	27	5.6	19	16.8	46
HPTDF10mFA4	10	1/4	19	7.1	14	17.5	38.1
HPTDF10mFA6	10	3/8	22	7.1	14	17.5	40.1
HPTDF10mFA8	10	1/2	27	7.1	19	17.5	46.5
HPTDF12mFA4	12	1/4	19	8.8	14	23.1	43.4
HPTDF12mFA6	12	3/8	22	8.8	14	23.1	45.5
HPTDF12mFA8	12	1/2	27	8.8	19	23.1	52.3
HPTDF16mFA8	16	1/2	22	12.7	14	24.7	48
HPTDF16mFA12	16	3/4	27	12.7	19	24.7	53.1
HPTDF20mFA8	20	1/2	27	15.1	19	26.6	56
HPTDF20mFA16	20	1	32	15.1	19	26.6	56

IMPERIAL RANGE

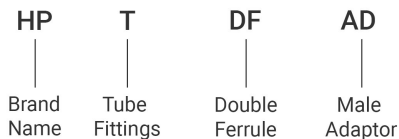
PART NO.	Ordering Information	O.D Tube O.D (mm)		Z NPT (inch)	D (mm)	F Hex. (inch)	L1 (mm)	L2 (mm)	L3 (mm)
		mm	inch						
HPTDF2FA2	1/8" OD (PL) X 1/8" NPT (F)	3.17	1/8	1/8	2	14	10	13.45	31.5
HPTDF2FA4	1/8" OD (PL) X 1/4" NPT (F)	3.17	1/8	1/4	2	19	14	13.45	35.3
HPTDF3FA4	3/16" OD (PL) X 1/4" NPT (F)	4.76	3/16	1/4	3	19	14	14.2	35.8
HPTDF4FA2	1/4" OD (PL) X 1/8" NPT (F)	6.35	1/4	1/8	4.2	14	10	15.75	33
HPTDF4FA4	1/4" OD (PL) X 1/4" NPT (F)	6.35	1/4	1/4	4.2	19	14	15.75	37.1
HPTDF4FA6	1/4" OD (PL) X 3/8" NPT (F)	6.35	1/4	3/8	4.2	22	14	15.75	39.4
HPTDF4FA8	1/4" OD (PL) X 1/2" NPT (F)	6.35	1/4	1/2	4.2	27	19	15.75	45.5
HPTDF5FA4	5/16" OD (PL) X 1/4" NPT (F)	7.93	5/16	1/4	5.6	19	14	16.75	37.6
HPTDF6FA2	3/8" OD (PL) X 1/8" NPT (F)	9.52	3/8	1/8	6.9	14	10	17.5	34.3
HPTDF6FA4	3/8" OD (PL) X 1/4" NPT (F)	9.52	3/8	1/4	6.9	19	14	17.5	38.1
HPTDF6FA6	3/8" OD (PL) X 3/8" NPT (F)	9.52	3/8	3/8	6.9	22	14	17.5	40.4
HPTDF6FA8	3/8" OD (PL) X 1/2" NPT (F)	9.52	3/8	1/2	6.9	27	19	17.5	46.7
HPTDF8FA4	1/2" OD (PL) X 1/4" NPT (F)	12.7	1/2	1/4	9.4	19	14	23.1	43.4
HPTDF8FA6	1/2" OD (PL) X 3/8" NPT (F)	12.7	1/2	3/8	9.4	22	14	23.1	45.5
HPTDF8FA8	1/2" OD (PL) X 1/2" NPT (F)	12.7	1/2	1/2	9.4	27	19	23.1	52.1
HPTDF10FA8	5/8" OD (PL) X 1/2" NPT (F)	15.87	5/8	1/2	12.7	27	19	24.65	53.1
HPTDF12FA8	3/4" OD (PL) X 1/2" NPT (F)	19.05	3/4	1/2	15	27	19	24.65	52.8
HPTDF12FA12	3/4" OD (PL) X 3/4" NPT (F)	19.05	3/4	3/4	15	32	19	24.65	54.9
HPTDF12FA16	3/4" OD (PL) X 1" NPT (F)	19.05	3/4	1	15	46	22	24.65	58.4
HPTDF16FA12	1" OD (PL) X 3/4" NPT (F)	25.4	1	3/4	20.3	32	19	31.2	60.7
HPTDF16FA16	1" OD (PL) X 1" NPT (F)	25.4	1	1	20.3	46	22	31.2	64.3

- NOTE: 1. * Threads are available upon request.
 2. Above dimensions are only for reference and are subject to change.
 3. Material standards are as per ASTM.
 4. Dimension standards are as per ASME B16.11.

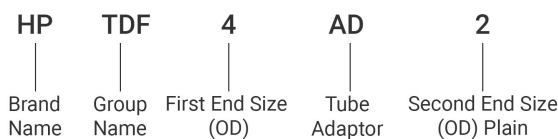


MOC	CS / AS / SS / DSS / SDSS / SASS / MONEL / HASTELLOY / INCONEL / TITANIUM / TANTALUM / BRASS / PTFE	OD Size	1/8" to 2" & 4mm to 50mm. If Above 1" to 2" & 25mm to 50mm contact factory
Pressure	Upto 6000 psi. If Above 6000 psi Contact Factory (For Brass Upto 1500 psi) (For PTFE Upto 150 psi)	End Connection Size	TUBE OD / plain

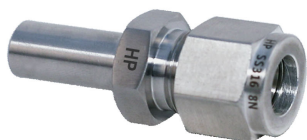
MODEL NO ORDERING SYSTEM



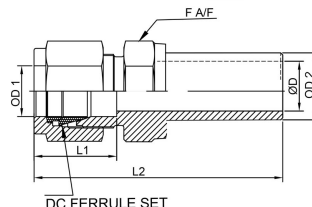
PART NO ORDERING SYSTEM



TUBE ADAPTOR



MODEL NO HPTDFAD



METRIC RANGE

Part No.	Ordering Information	O.D1 Tube OD (mm)	O.D2 Tube OD (mm)	Width Hex. flat (mm) F	D (mm)	L1 (mm)	L2 (mm)
HPTDF2mAD2	2mm OD X 1/8 OD (PL)	2	1/8	12	2	33.5	33.5
HPTDF2mAD2	3mm OD X 1/8 OD (PL)	3	1/8	12	2	33.5	33.5
HPTDF3mAD4	3mm OD X 1/4 OD (PL)	3	1/4	12	2.4	36.1	36.1
HPTDF4mAD4	4mm OD X 1/4 OD (PL)	4	1/4	12	2.4	37.1	37.1
HPTDF6mAD2	6mm OD X 1/8 OD (PL)	6	1/8	14	2.2	36.9	36.9
HPTDF6mAD5	6mm OD X 5/16 OD (PL)	6	5/16	14	4.8	39.9	39.9
HPTDF6mAD8	6mm OD X 3/8 OD (PL)	6	3/8	14	4.8	40.7	40.7
HPTDF6mAD8	6mm OD X 1/2 OD (PL)	6	1/2	14	4.8	46.3	46.3
HPTDF8mAD6	8mm OD X 3/8 OD (PL)	8	3/8	15	6.4	42	42
HPTDF8mAD8	8mm OD X 1/2 OD (PL)	8	1/2	15	6.4	47.6	47.6
HPTDF10mAD6	10mm OD X 3/8 OD (PL)	10	3/8	18	6.8	44.2	44.2
HPTDF10mAD8	10mm OD X 1/2 OD (PL)	10	1/2	18	7.9	49.8	49.8
HPTDF12mAD8	12mm OD X 1/2 OD (PL)	12	1/2	22	9.4	52.3	52.3
HPTDF12mAD12	12mm OD X 3/4 OD (PL)	12	3/4	22	9.4	53.8	53.8
HPTDF15mAD12	18mm OD X 3/4 OD (PL)	18	3/4	27	15	56.1	56.1
HPTDF18mAD16	18mm OD X 1 OD (PL)	18	1	27	15.1	62.4	62.4
HPTDF25mAD16	25mm OD X 1 OD (PL)	25	1	35	20.3	69.5	69.5

IMPERIAL RANGE

Part No.	Ordering Information	O.D1 Tube OD (inch)	O.D2 Tube OD (inch)	Width Hex. flat (inch) F	D (mm)	L1 (mm)	L2 (mm)
HPPTDF2AD2	1/8 OD X 1/8 OD (PL)	1/8	1/8	7/16	2.03	12.7	33.52
HPPTDF2AD4	1/8 OD X 1/4 OD (PL)	1/8	1/4	7/16	2.28	12.7	36.06
HPPTDF2AD6	1/8 OD X 3/8 OD (PL)	1/8	3/8	7/16	2.28	12.7	37.59
HPPTDF2AD8	1/8 OD X 1/2 OD (PL)	1/8	1/2	9/16	2.28	12.7	44.2
HPPTDF6AD2	3/16 OD X 1/8 OD (PL)	3/16	1/8	7/16	2.03	13.7	34.8
HPPTDF3AD4	3/16 OD X 1/4 OD (PL)	3/16	1/4	7/16	3.04	13.7	37.08
HPTDF4AD2	1/4 OD X 1/8 OD (PL)	1/4	1/8	1/2	2.03	15.2	36.83
HPTDF4AD3	1/4 OD X 3/16 OD (PL)	1/4	3/16	1/2	3.04	15.2	37.59
HPTDF4AD4	1/4 OD X 1/4 OD (PL)	1/4	1/4	1/2	4.2	15.2	39.11
HPPTDF4AD5	1/4 OD X 5/16 OD (PL)	1/4	5/16	1/2	4.82	15.2	39.87
HPTDF4AD6	1/4 OD X 3/8 OD (PL)	1/4	3/8	1/2	4.82	15.2	40.64
HPTDF4AD8	1/4 OD X 1/2 OD (PL)	1/4	1/2	9/16	4.82	15.2	46.22
HPTDF4AD10	1/4 OD X 5/8 OD (PL)	1/4	5/8	11/16	4.82	15.2	48
HPTDF4AD12	1/4 OD X 3/4 OD (PL)	1/4	3/4	13/16	4.82	15.2	47.75
HPPTDF5AD6	5/16 OD X 3/8 OD (PL)	5/16	3/8	9/16	6.35	16.2	41.91
HPPTDF5AD8	5/16 OD X 1/2 OD (PL)	5/16	1/2	9/16	6.35	16.2	47.49
HPPTDF6AD4	3/8 OD X 1/4 OD (PL)	3/8	1/4	5/8	4.2	16.8	41.4
HPPTDF6AD4	3/8 OD X 3/8 OD (PL)	3/8	3/8	5/8	6.85	16.8	43.18
HPPTDF6AD8	3/8 OD X 1/2 OD (PL)	3/8	1/2	5/8	7.11	16.8	48.51
HPPTDF6AD10	3/8 OD X 5/8 OD (PL)	3/8	5/8	11/16	7.11	16.8	50.29
HPTDF6AD12	3/8 OD X 3/4 OD (PL)	3/8	3/4	13/16	7.11	16.8	50.29
HPPTDF8AD11	1/2 OD X 1/4 OD (PL)	1/2	1/4	13/16	4.2	22.9	44.96
HPPTDF8AD6	1/2 OD X 3/8 OD (PL)	1/2	3/8	13/16	6.85	22.9	46.74
HPTDF8AD8	1/2 OD X 1/2 OD (PL)	1/2	1/2	13/16	9.4	22.9	52.32
HPPTDF8AD10	1/2 OD X 5/8 OD (PL)	1/2	5/8	13/16	10.41	22.9	53.84
HPTDF8AD12	1/2 OD X 3/4 OD (PL)	1/2	3/4	13/16	10.41	22.9	53.84
HPPTDF8AD16	1/2 OD X 1 OD (PL)	1/2	1	1 1/16	10.41	22.9	60.19
HPPTDF10AD12	5/8 OD X 3/4 OD (PL)	5/8	3/4	15/16	12.7	24.4	54.61
HPPTDF10AD14	5/8 OD X 7/8 OD (PL)	5/8	7/8	15/16	12.7	24.4	56.13
HPPTDF10AD16	5/8 OD X 1 OD (PL)	5/8	1	1 1/16	12.7	24.4	60.96
HPTDF12AD8	3/4 OD X 1/2 OD (PL)	3/4	1/2	1 1/16	9.4	24.4	54.61
HPPTDF12AD16	3/4 OD X 1 OD (PL)	3/4	1	1 1/16	15.75	24.4	62.48

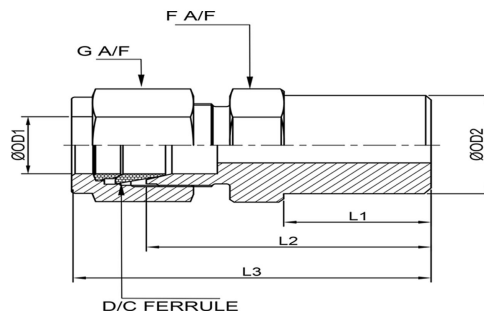
PLAIN CONNECTOR



MODEL NO HPTDFPC

IMPERIAL RANGE

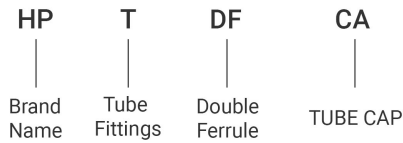
Part No.	Ordering Information	O.D 1 (inch)	O.D 2 (mm)	L1 (mm)	L2 (mm)	L3 (mm)	F A/F
HPTDF2PC2	1/2" OD X 1/2" NB (PL)	1/2" OD	21.3	16	36	46	22
HPTDF2PC12	1/2" OD X 3/4" NB (PL)	1/2" OD	26.6	16	37	47	27
HPTDF10PC6	5/8" OD X 3/8" NB (PL)	5/8" OD	17.1	16	37	48	1"
HPTDF10PC8	5/8" OD X 1/2" NB (PL)	5/8" OD	21.3	16	37	48	1"
HPTDF10PC12	5/8" OD X 3/4" NB (PL)	5/8" OD	26.6	20	41	52	28.5
HPTDF10PC16	5/8" OD X 1" NB (PL)	5/8" OD	33.4	23	47	58	36
HPTDF12PC8	3/4" OD X 1/2" NB (PL)	3/4" OD	21.3	16	37	48	27
HPTDF12PC12	3/4" OD X 3/4" NB (PL)	3/4" OD	26.6	16	37	48	27
HPTDF16PC8	1" OD X 1/2" NB (PL)	1" OD	21.3	23	37	48	1"



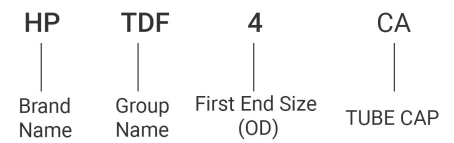
- NOTE: 1. * Threads are available upon request.
 2. Above dimensions are only for reference and are subject to change.
 3. Material standards are as per ASTM.
 4. Dimension standards are as per ASME B16.11.

MOC	CS / AS / SS / DSS / SDSS / SASS / MONEL / HASTELLOY / INCONEL / TITANIUM / TANTALUM / BRASS / PTFE	OD Size	1/8" to 2" & 4mm to 50mm. If Above 1" to 2" & 25mm to 50mm contact factory
Pressure	Upto 6000 psi. If Above 6000 psi Contact Factory (For Brass Upto 1500 psi) (For PTFE Upto 150 psi)	Thread size & type	1/8" to 2", If Above 1" to 2" contact factory TUBE OD

MODEL NO ORDERING SYSTEM



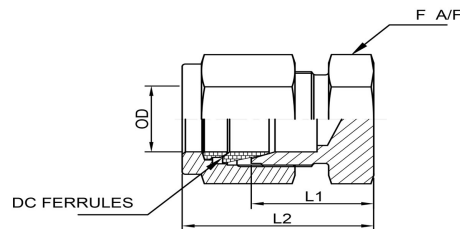
PART NO ORDERING SYSTEM



TUBE CAP



MODEL NO HPTDFCA



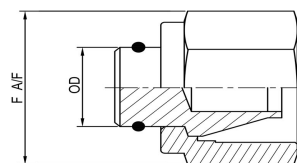
METRIC RANGE					
Part No.	OD Tube OD (mm)	Width Hex. flat (mm)F	D (mm)	L1 (mm)	L2 (mm)
HPTDF4mCA	4	12.7	2.03	14.7	21.3
HPTDF6mCA	6	14	2.28	15.7	23.1
HPTDF8mCA	8	17	2.28	17	24.5
HPTDF10mCA	10	24	2.28	19	26.6
HPTDF12mCA	12	22	2.03	19	29.1
HPTDF14mCA	14	24	3.04	19.8	29.9
HPTDF15mCA	15	24	2.03	19.8	29.9
HPTDF16mCA	16	25.4	3.04	19.8	29.9
HPTDF18mCA	18	27	4.2	21.3	31.4
HPTDF20mCA	20	30	4.82	23.9	34
HPTDF22mCA	22	32	4.82	23.9	34
HPTDF25mCA	25	36	4.82	26.2	38.5

IMPERIAL RANGE			
Part No.	SIZE	OD Tube OD (inch)	Hex. flat (inch) F*
HPTDF4CA	1/4 OD	1/4	14
HPTDF6CA	3/8 OD	3/8	24
HPTDF8CA	1/2 OD	1/2	22
HPTDF10CA	5/8 OD	5/8	24
HPTDF12CA	3/4 OD	3/4	27
HPTDF16CA	1 OD	1	36

TUBE PLUG



MODEL NO HPTDFPL



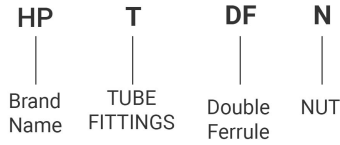
METRIC RANGE		
Part No.	OD Tube OD (mm)	Width Hex. flat (inch)F
HPTDF2mPL	2	14
HPTDF3mPL	3	12
HPTDF4mPL	4	12
HPTDF6mPL	6	14
HPTDF8mPL	8	16
HPTDF10mPL	10	19
HPTDF12mPL	12	22
HPTDF14mPL	14	25
HPTDF15mPL	15	25
HPTDF16mPL	16	25
HPTDF18mPL	18	30
HPTDF20mPL	20	32
HPTDF22mPL	22	32
HPTDF25mPL	25	38

IMPERIAL RANGE		
Part No.	OD Tube OD (inch)	Hex. flat (inch)F
HPTDF2PL	1/8	7/16
HPTDF3PL	3/16	1/2
HPTDF4PL	1/4	9/16
HPTDF5PL	5/16	5/8
HPTDF6PL	3/8	11/16
HPTDF8PL	1/2	7/8
HPTDF10PL	5/8	1
HPTDF12PL	3/4	1 1/8
HPTDF14PL	7/8	1 1/4
HPTDF16PL	1	1 1/2

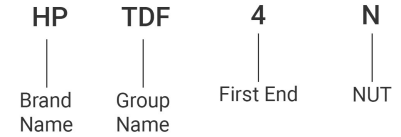
NOTE : 1. * Threads are available upon request.
2. Above dimensions are only for reference and are subject to change.
3. Material standards are as per ASTM.
4. Dimension standards are as per ASME B16.11.

MOC	CS / AS / SS / DSS / SDSS / SASS / MONEL / HASTELLOY / INCONEL / TITANIUM / TANTALUM / BRASS / PTFE	OD Size	1/8" to 2" & 4mm to 50mm. If Above 1" to 2" & 25mm to 50mm contact factory
Pressure	Upto 6000 psi. If Above 6000 psi Contact Factory (For Brass Upto 1500 psi) (For PTFE Upto 150 psi)	Thread size & type	1/8" to 2", If Above 1" to 2" contact factory TUBE OD

MODEL NO ORDERING SYSTEM

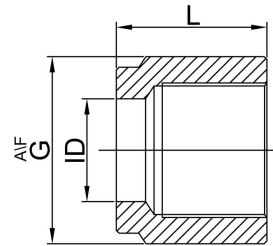


PART NO ORDERING SYSTEM



NUT

MODEL NO HPTDFNT

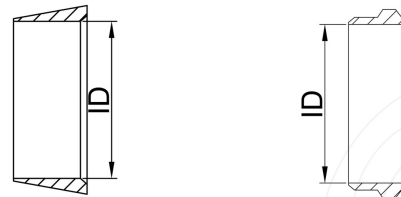


METRIC RANGE				
Part No.	Tube O.D. T (mm)	ID Size (inch)	A/F (mm)	L (mm)
HPTDF4mNT	4	4	12.7	11.8
HPTDF6mNT	6	6	14	12.7
HPTDF8mNT	8	8	17	13.5
HPTDF10mNT	10	10	19	15.1
HPTDF12mNT	12	12	22	17.5
HPTDF16mNT	16	16	17	17.5
HPTDF18mNT	18	18	30	17.5
HPTDF20mNT	20	20	32	18.3
HPTDF25mNT	25	25	41	20.64

IMPERIAL RANGE				
Part No.	Tube O.D. T (inch)	ID Size (inch)	A/F (mm)	L (mm)
HPTDF2NT	1/8	1/8	11.00	12.00
HPTDF3NT	3/16	3/16	12.70	12.00
HPTDF4NT	1/4	1/4	14.00	12.70
HPTDF5NT	5/16	5/16	15.80	13.50
HPTDF6NT	3/8	3/8	17.00	14.50
HPTDF8NT	1/2	1/2	22.00	17.50
HPTDF10NT	5/8	5/8	25.40	17.50
HPTDF12NT	3/4	3/4	28.50	17.50
HPTDF16NT	1	1	38.00	21.00

DOUBLE FERRULES

MODEL NO HPTDFFF & HPTDFBF



METRIC RANGE			
Part No.	Part No.	Tube O.D. T (mm)	ID Size
HPTDF4mFF	HPTDF4mBF	4	4
HPTDF6mFF	HPTDF6mBF	6	6
HPTDF8mFF	HPTDF8mBF	8	9
HPTDF10mFF	HPTDF10mBF	10	10
HPTDF12mFF	HPTDF12mBF	12	12
HPTDF16mFF	HPTDF16mBF	16	16
HPTDF18mFF	HPTDF18mBF	18	18
HPTDF20mFF	HPTDF20mBF	20	20
HPTDF25mFF	HPTDF25mBF	25	25

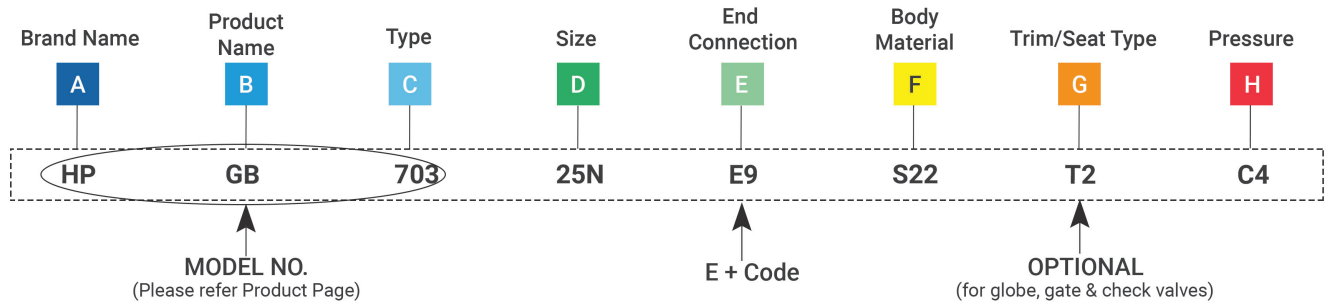
IMPERIAL RANGE			
Part No.	Part No.	Tube O.D. T (inch)	ID Size
HPTDF1FF	HPTDF1BF	1/16	1/16
HPTDF2FF	HPTDF2BF	1/8	1/8
HPTDF3FF	HPTDF3BF	3/16	3/17
HPTDF4FF	HPTDF4BF	1/4	1/5
HPTDF5FF	HPTDF5BF	5/16	5/17
HPTDF6FF	HPTDF6BF	3/8	3/9
HPTDF8FF	HPTDF8BF	1/2	1/3
HPTDF10FF	HPTDF10BF	5/8	5/9
HPTDF12FF	HPTDF12BF	3/4	3/5
HPTDF16FF	HPTDF16BF	1	2

NOTE: 1. * Threads are available upon request.
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 4. Dimension standards are as per ASME B16.11.



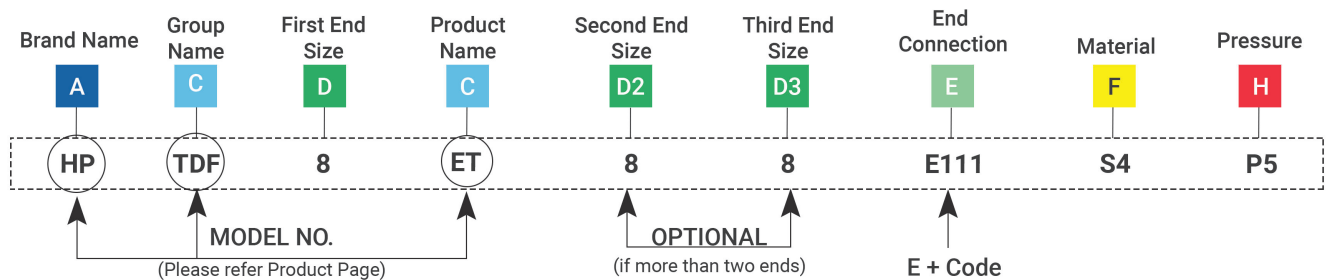
VALVES - PART NO. ORDERING SYSTEM

Example: Globe Valve (Forged Steel - OS & Y), 25NB SW, SS CF8M, Trim-2, Class 800#



FITTINGS - PART NO. ORDERING SYSTEM

Example: Equal Tee, 1/2"OD X 1/2"OD X 1/2"OD, SS316, 3000 psi



D	SIZE	
6m	6mm	INCH
8m	8mm	1 1/16"
10m	10mm	2 1/8"
12m	12mm	3 3/16"
16m	16mm	4 1/4"
18m	18mm	5 5/16"
20m	20mm	6 3/8"
25m	25mm	8 1/2"
28m	28mm	10 5/8"
METRIC		12 3/4"
M10	M10	14 7/8"
M12	M12	16 1"
M14	M14	20 1-1/4"
M16	M16	24 1-1/2"
M18	M18	26 1-5/8"
M20	M20	28 1-3/4"
NOMINAL BORE		32 2"
15N	15 NB	40 2-1/2"
20N	20 NB	48 3"
25N	25 NB	56 3-1/2"
32N	32 NB	64 4"
40N	40 NB	96 6"
50N	50 NB	- -
80N	80 NB	- -
100N	100 NB	- -
150N	150 NB	- -
200N	200 NB	- -
250N	250 NB	- -
300N	300 NB	- -

E	END CONN.
1	OD
2	NPT
3	BSPP
4	BSPT
5	UNF
6	METRIC
7	NB(PL) or NB
8	OD(PL)
9	SW
10	Tube Ends
11	Flanged Ends (Raised Face)
12	Flanged Ends (Ring Type Joint)
13	Flanged Ends (Flat Face)
14	Butt Weld Ends
15	Screwed Ends
16	Lugged Ends
17	Wafer Ends

G	SEAL TYPE
GL	Grafoil
PE	PTFE
PK	PEEK

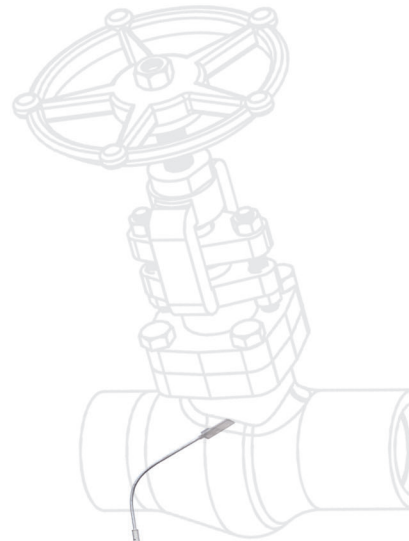
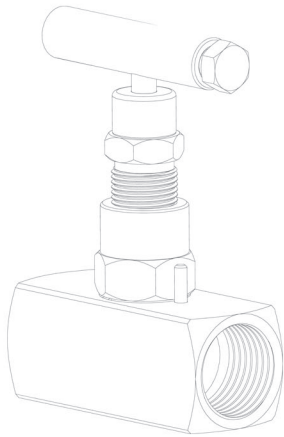
G	TRIM
T1	1
T2	2
T3	5
T4	8
T5	10
T6	12
T7	15
T8	16

F	BODY MATERIAL		
Carbon Steel		High Nickel Alloy Steel	
C1	ASTM A105	N1 Monel K400	
C2	ASTM A106	N2 Monel K500	
C3	ASTM A350 Gr.LF2	N3 Inconel 600	
C4	EN 1215	N4 Inconel 625	
C5	EN 4140	N5 Inconel 718	
C6	ASTM A216 Gr.WCB	N6 Inconel 750	
C7	ASTM A352 Gr. LCB	N7 Inconel 825	
C8	ASTM A216 Gr.WCC	N8 Hastelloy C276	
Stainless Steel		N9 ASTM A484 CU5MCuC	
S1	ASTM A182/A479/A312/A213/A269 Gr.304	N10 ASTM A494 CY40	
S2	ASTM A182/A479/A312/A213/A269 Gr.304L	N11 ASTM A494 M35-1	
S3	ASTM A182/A479/A312/A213 Gr.304H	Alloy Steel	
S4	ASTM A182/A479/A312/A213/A269 Gr.316	A1	ASTM A182 Gr.F11
S5	ASTM A182/A479/A312/A213/A269 Gr.316L	A2	ASTM A335 Gr.P11
S6	ASTM A182/A479/A312/A213/A269 Gr.316/316L	A3	ASTM A182 Gr.F22
S7	ASTM A182/A479/A312/A213 Gr.316H	A4	ASTM A335 Gr.P22
S8	ASTM A182 Gr.316Ti	A5	ASTM A182 Gr.F91
S9	ASTM A182/479 Gr.317	A6	ASTM A335 Gr.P91
S10	ASTM A182/479 Gr.321	A7	ASTM A182 Gr.F92
S11	ASTM A182 Gr. F347	A8	ASTM A335 Gr.P92
S12	ASTM A479 Gr.410	Other Material	
S13	ASTM A182 F44	MS	MS
S14	Duplex - F51	CU	Copper
S15	Super Duplex-F53	BR	Brass
S16	Super Duplex-F55	PE	PTFE
S17	Duplex - F60	TC	Tungsten Carbide
S18	ASTM A351 Gr.CF3	PE4	PTFE with SS304 Braided
S19	ASTM A351 Gr. CF3M	PE6	PTFE with SS316 Braided
S20	ASTM A351 CN7M	PP	Polypropylene
S21	ASTM A351 Gr.CF8	GI	Galvanized
S22	ASTM A351 Gr.CF8M	CP	CPVC
S23	ASTM A351 Gr. CF8C	UP	UPVC
S24	ASTM A351 Gr. CF10	PL	Plastic
S25	ASTM A995 Gr.1B (CD4MCuN)	AL	Aluminium
S26	ASTM A995 Gr. 4A	-	-
S27	ASTM A995 Gr. 5A	-	-
S28	ASTM CK3MCuN	-	-

H	PRESSURE
PSI (Bar)	
P1	150 (10)
P2	210 (15)
P3	1000 (70)
P4	2000 (140)
P5	3000 (200)
P6	6000 (400)
P7	9000 (630)
P8	10000 (700)
P9	15000 (1055)
P10	20000 (1400)
P11	30000 (2110)
P12	40000 (2800)
Class Rating	
C1	150
C2	300
C3	600
C4	800
C5	900
C6	1500
C7	2500
C8	2500SPL
C9	3000
C10	3000SPL
C11	4500
Schedule	
SC1	10
SC2	20
SC3	40
SC4	80
SC5	160
SC6	XXS

Note : Above ordering system doesn't include Sealant Injection Grease Fittings

CLIENT LOCATIONS ACROSS THE WORLD



HP VALVES & FITTINGS INDIA PRIVATE LIMITED

Instrumentation Valves & Fittings and Sealant Injection Grease Fittings

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HP-DC/2021/R-01 Dt: 15/03/2021