

DE-LOK[®]
Fittings & Valves

- Instrumentation Valve
Ball/Globe/Needle
Angle/Check

- Tube Fitting
For Inch and Metric

- Precision Pipe Fitting

Instrumentation Pipe Fitting

6000PSI & 10000PSI Rating



DE-LOK® Thread Fittings

Two different ratings are available to fit your specific application

- 6000PSI Rating
- 10000PSI Rating

Features of DE-LOK® Thread Fittings

- a) Wrench flat body design allowing standard Hex. wrench assembly.
- b) Attractive finishes to suit precision equipment.
- c) Much less-weight design compared to class 3000 pipe fittings.
- d) Fine pipe thread construction equals or exceeds the requirement of ASME B1.20.1 to ensure max. thread engage
- e) Male pipe threads capped for protection from damages.
- f) Fitting material available in SS316, Brass and Carbon Steel.

Thread Fittings – Standard Rating

DE-LOK® Thread Fittings – Standard Rating are designed to the requirements of ASME B31.3 process piping code
The pipe thread sized are available 1/8" to 1"

Table 1. Pressure Ratings

Size Designator	NPT/ISO Pipe Size	Stainless Steel 316				Brass				Carbon Steel			
		Male		Female		Male		Female		Male		Female	
		bar	psig	bar	psig	bar	psig	bar	psig	bar	psig	bar	psig
2	1/8	689	10000	420	6100	337	4900	207	3000	689	10000	420	6100
4	1/4	558	8100	434	6300	275	4000	214	3200	558	8100	434	6300
6	3/8	524	7600	345	5000	262	3800	172	2500	524	7600	345	5000
8	1/2	517	7500	324	4700	255	3700	158	2300	517	7500	324	4700
12	3/4	496	7200	303	4400	248	3600	152	2200	496	7200	303	4400
16	1	365	5300	296	4300	172	2500	145	2100	365	5300	296	4300

- a) Pressure ratings listed are for temperature up to 37°C (100 °F)
- b) Pressure rating is calculated at -28 to 37°C (-20 to 100 °F) using allowable stress value of 20000psi for SS316, 10000psi for Brass and 20000psi for Carbon Steel as per ASME B31.3 Process Piping Code
- c) To determine the working pressure of ASME B31.1 Power Piping Code, multiply the ASME B31.3 rating by 0.94. Brass pressure rating remain the same.
- d) The pressure rating of reducing Hex Bushing (DRB), Pipe Plug (DPP), and shaped fittings such as Elbow, Tee, Cross are not covered in this table. See the pressure rating in the dimensional table.

Table 2. Material Standard and Temperature Range

Materials	Bar Stock	Forgings	Maximum Temperature
Stainless Steel 316	ASTM A276 Type 316 / ASTM A479 Type 316	ASTM A182 F316	537°C (1000 °F)
Brass	JIS H3250 C3604 / ASTM B453 C35300	JIS H3250 C3771 / ASTM B283 C37700	204°C (400 °F)
Carbon Steel	ASTM A108 / JIS G4051 S20C – S48C	ASTM A105 / JIS G4051 S20C – S48C	190°C (375 °F)

Table 3. Temperature De-rating Factors

Temp.	°C	100	200	300	400	500	600	700	800	900	1000	1200
		38	93	149	204	260	316	371	427	482	538	649
Factor	Stainless Steel	1.00	1.00	1.00	0.97	0.90	0.85	0.82	0.80	0.79	0.77	0.49
	Brass	1.00	0.78	0.69	0.13							
	Carbon Steel	1.00	0.94	0.91	0.88							

To determine the allowable working pressure at a specific temperature, multiply the working pressure by the applicable factor shown in table 3. Example: The working pressure of GNC-2N-S at 700 °F . 10000psig x 0.82 = 8200psig.

Table 4. Temperature

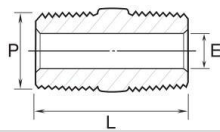
Materials	Bar Stock	Forgings	Maximum Temperature
O-ring	Designator: BN	NBR	-20 to 105°C (-4 to 221 °F)
	Designator: VT	FKM	-28 to 204°C (-18 to 400 °F)
	Designator: KZ	FFKM	-30 to 275°C (-22 to 527 °F)
Copper Gasket	DGC-	Copper	-198 to 204°C (-324 to 400 °F)
NBR Bonded Gasket	DGB-	NBR bonded Carbon Steel Ring	-40 to 110°C (-40 to 230 °F)
FKM Bonded Gasket	DGV-	FKM bonded Stainless Steel Ring	-28 to 204°C (-20 to 400 °F)

Table 5. Pipe Thread Designator

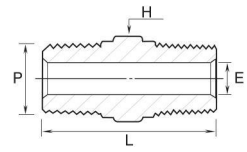
Designator	Pipe	NPT ASME B1.20.1	ISO Thread	
			Tapered ISO 7-1	Parallel ISO 228-1
2	1/8	2N	2R	2G
4	1/4	4N	4R	4G
6	3/8	6N	6R	6G
8	1/2	8N	8R	8G
12	3/4	12N	12R	12G
16	1	16N	16R	16G

THREADED FITTING

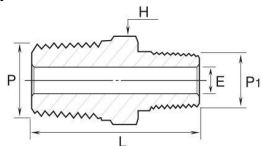
DCN Close Nipple	5		DPP Pipe Plug	7		DRT Run Tee	9	
DHN Hex Nipple	5		DHC Hex Coupling	7		DBT Branch Tee	9	
DRHN Reducing Hex Nipple	5		DRHC Reducing Hex Coupling	7		DMT Male Tee	10	
DHNR Hex Nipple	5		DUBJ Union Ball Joint	8		DCF Female Cross	10	
DHNG Hex Nipple	5		DGC ISO Parallel Copper	8				
DHLN Hex Long Nipple	5		DHHPU Hollow Hex Plug	8				
DA Adapter	6		DHHP Hollow Hex Plug	8				
DRA Reducing Adapter	6		DEF Female Elbow	8				
DAR Adapter	6		DSE Street Elbow	8				
DAG Adapter	6		DRSE Reducing Street Elbow	9				
DRB Reducing Hex Bushing	7		DEM Male Elbow	9				
DPC Pipe Cap	7		DFT Female Tee	9				

DCN Close Nipple
 Male NPT both ends


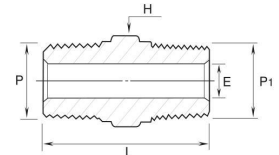
Part Number	P-NPT inch	L mm	E mm
DCN2N	1/8	19.05	4.8
DCN4N	1/4	28.4	7.1
DCN6N	3/8	28.4	9.6
DCN8N	1/2	38.1	11.9
DCN12N	3/4	38.1	15.7
DCN16N	1	47.8	22.4

DHN Hex Nipple
 Male NPT both ends


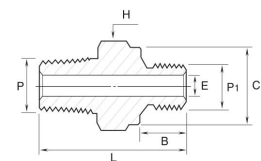
Part Number	P-NPT inch	L mm	E mm	H-Hex mm
DHN2N	1/8	25.65	4.8	11.1
DHN4N	1/4	35.56	7.1	14.2
DHN6N	3/8	36.32	9.6	17.4
DHN8N	1/2	46.73	11.9	22.2
DHN12N	3/4	46.73	15.7	26.9
DHN16N	1	58.92	22.4	34.9

DRHN Reducing Hex Nipple
 Male NPT to Reduced Male NPT


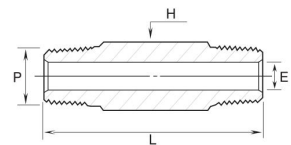
Part Number	P-NPT inch	P1-NPT inch	L mm	E mm	H-Hex mm
DRHN4N-2N	1/4	1/8	30.7	4.8	14.2
DRHN6N-2N	3/8	1/8	32.0	4.8	17.4
DRHN6N-4N	3/8	1/4	36.1	7.1	17.4
DRHN8N-2N	1/2	1/8	37.2	4.8	22.2
DRHN8N-4N	1/2	1/4	41.7	7.1	22.2
DRHN8N-6N	1/2	3/8	41.7	9.6	22.2
DRHN12N-4N	3/4	1/4	41.7	7.1	26.9
DRHN12N-8N	3/4	1/2	46.7	11.9	26.9
DRHN16N-4N	1	1/4	49.3	7.1	34.9
DRHN16N-8N	1	1/2	54.1	11.9	34.9
DRHN16N-12N	1	3/4	54.10	15.75	34.9

DHNR Hex Nipple
 Male NPT to ISO Tapered


Part Number	P-NPT inch	P1-ISO Thread	L mm	E mm	H-Hex mm
DHN2NR	1/8	1/8-28	24.6	4.8	11.1
DHN4NR	1/4	1/4-19	35.6	7.1	14.2
DHN6NR	3/8	3/8-19	36.3	9.6	17.4
DHN8NR	1/2	1/2-14	46.7	11.9	22.2
DHN12NR	3/4	3/4-14	46.7	15.7	26.9
DHN16NR	1	1-11	58.9	22.4	34.9

DHNG Hex Nipple
 Male NPT to Male ISO Parallel


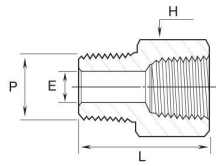
Part Number	P-NPT inch	P1-ISO Thread	L mm	B mm	C mm	E mm	H mm
DHN2NG	1/8	1/8-28	27.4	7.1	13.7	4.1	14.2
DHN4NG	1/4	1/4-19	36.8	11.2	17.8	5.8	19.0
DHN6NG	3/8	3/8-19	37.6	11.2	21.8	7.9	22.2
DHN8NG	1/2	1/2-14	45.0	14.2	26.1	11.9	26.9
DHN12NG	3/4	3/4-14	49.0	15.7	31.5	15.7	33.3
DHN16NG	1	1-11	56.9	18.3	38.9	19.8	41.0

DHLN Hex Long Nipple
 Male NPT both ends


Part Number	P-NPT inch	L mm	E mm	H-Hex mm
DHLN2N	1/8	*	4.8	11.1
DHLN4N	1/4	*	7.1	14.2
DHLN6N	3/8	*	9.6	17.4
DHLN8N	1/2	*	11.9	22.2
DHLN12N	3/4	*	15.7	26.9
DHLN16N	1	*	22.4	34.9

DA Adapter

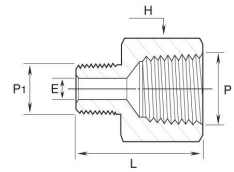
Male NPT to Equal Female NPT



Part Number	P-NPT inch	L mm	E mm	H-Hex mm
DA2N	1/8	27.94	4.8	14.2
DA4N	1/4	35.56	7.1	19.05
DA6N	3/8	38.35	9.6	22.2
DA8N	1/2	49.27	11.9	26.9
DA12N	3/4	51.3	15.7	33.3
DA16N	1	57.91	22.4	41.2

DRA Reducing Adapter

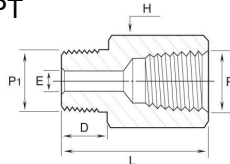
Male NPT to Larger Female NPT



Part Number	P1-NPT Inch	P-NPT Inch	L mm	E mm	H-Hex mm
DRA4N-2N	1/8	1/4	31.5	4.8	19.05
DRA6N-2N	1/8	3/8	33.5	4.8	22.2
DRA6N-4N	1/4	3/8	37.8	7.1	22.2
DRA8N-2N	1/8	1/2	40.0	4.8	26.9
DRA8N-4N	1/4	1/2	44.5	7.1	26.9
DRA8N-6N	3/8	1/2	44.5	9.6	26.9
DRA12N-4N	1/4	3/4	45.7	7.1	33.3
DRA12N-6N	3/8	3/4	45.7	9.6	33.3
DRA12N-8N	1/2	3/4	51.1	11.9	33.3
DRA16N-4N	1/4	1	50.8	7.1	41.2
DRA16N-8N	1/2	1	54.9	11.9	41.2
DRA16N-12N	3/4	1	55.1	15.7	41.2

DAR Adapter

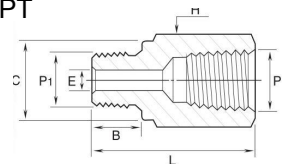
Male ISO Tapered to Female NPT



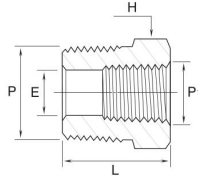
Part Number	P-NPT inch	P1-ISO Thread	L mm	D mm	E mm	H-Hex mm
DA2NR	1/8	1/8-28	27.94	9.7	4.8	14.2
DA4NR	1/4	1/4-19	35.8	14.2	7.1	19.05
DA6NR	3/8	3/8-19	37.6	14.2	9.7	22.2
DA8NR	1/2	1/2-14	49.0	19.1	11.9	26.9
DA12NR	3/4	3/4-14	50.3	19.1	15.7	33.3
DA16NR	1	1-11	58.0	23.9	22.3	41.2

DAG Adapter

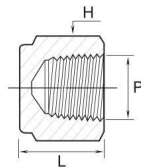
Male ISO Parallel to Female NPT



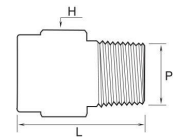
Part Number	P-NPT Inch	P1-NPT Thread	L mm	B mm	C mm	E mm	H-Hex mm
DA2NG	1/8	1/8-28	24.9	7.1	13.7	4.1	14.2
DA4NG	1/4	1/4-19	33.3	11.2	17.8	5.9	19.05
DA6NG	3/8	3/8-19	37.8	11.2	21.8	7.9	22.2
DA8NG	1/2	1/2-14	43.9	14.2	26.1	11.9	26.9
DA12N	3/4	3/4-14	50.8	15.7	31.5	15.7	33.3
DA16N	1	1-11	53.1	18.3	38.9	19.8	41.2

DRB Reducing Hex Bushing
 Male NPT to Reduce Female NPT


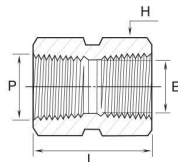
Part Number	P-NPT inch	P1-NPT inch	L mm	E mm	H-Hex mm	Working Pressure Bar (psi)	
						SS316, C Steel	Brass
DRB4N-2N	1/4	1/8	26.7	7.1	14.2	447 (6400)	227 (3200)
DRB6N-2N	3/8	1/8	21.8	8.5	17.4	633 (9100)	323 (4600)
DRB6N-4N	3/8	1/4	30.0	9.6	19.05	454 (6500)	227 (3200)
DRB8N-2N	1/2	1/8	27.4	8.5	22.2	840 (12100)	427 (6100)
DRB8N-4N	1/2	1/4	27.4	11.7	22.2	571 (8200)	303 (4300)
DRB8N-6N	1/2	3/8	35.6	11.9	22.2	365 (5200)	179 (2500)
DRB12N-4N	3/4	1/4	27.4	11.4	26.9	826 (11900)	413 (5900)
DRB12N-6N	3/4	3/8	27.4	15.0	26.9	564 (8100)	296 (4200)
DRB12N-8N	3/4	1/2	41.4	15.7	26.9	337 (4800)	165 (2300)
DRB16N-4N	1	1/4	34.8	11.4	34.9	999 (14400)	509 (7300)
DRB16N-8N	1	1/2	34.8	18.5	34.9	592 (8500)	296 (4200)
DRB16N-12N	1	3/4	34.8	22.4	34.9	365 (5200)	179 (2500)

DPC Pipe Cap
 Female NPT


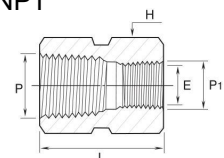
Part Number	P-NPT inch	L mm	H-Hex mm
DPC2N	1/8	19.1	14.2
DPC4N	1/4	22.9	19.05
DPC6N	3/8	26.2	22.2
DPC8N	1/2	34.0	26.9
DPC12N	3/4	36.6	33.3
DPC16N	1	41.1	41.2

DPP Pipe Plug
 Male NPT


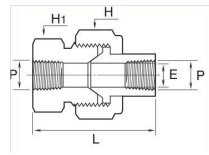
Part Number	P-NPT inch	L mm	H-Hex mm
DPP2N	1/8	19.05	11.1
DPP4N	1/4	24.1	14.2
DPP6N	3/8	25	17.4
DPP8N	1/2	30.5	22.2
DPP12N	3/4	30.5	26.9
DPP16N	1	38.1	34.9

DHC Hex Coupling
 Female NPT both ends


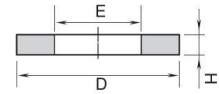
Part Number	P-NPT inch	L mm	E mm	H-Hex mm
DHC2N	1/8	20.57	8.9	14.2
DHC4N	1/4	30.22	10.87	19.05
DHC6N	3/8	33.27	15.0	22.2
DHC8N	1/2	39.62	18.7	26.9
DHC12N	3/4	41.14	23.5	33.3
DHC16N	1	50.8	29.7	41.2

DRHC Reducing Hex Coupling
 Female NPT to Reduce Female NPT


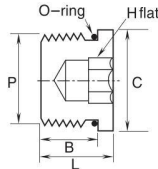
Part Number	P-NPT inch	P1-NPT Inch	L Mm	E mm	H-Hex mm
DRHC4N-2N	1/4	1/8	31.2	8.9	19.05
DRHC6N-4N	3/8	1/4	34.8	11.7	22.2
DRHC8N-2N	1/2	1/8	39.4	8.7	26.9
DRHC8N-4N	1/2	1/4	44.2	11.7	26.9
DRHC8N-6N	1/2	3/8	45.0	15.0	26.9
DRHC12N-4N	3/4	1/4	45.7	11.7	33.3
DRHC12N-8N	3/4	1/2	47.8	18.7	33.3
DRHC16N-12N	1	3/4	57.0	23.5	41.2
DEHC16N-8N	1	1/2	55.6	18.7	41.2

DUBJ Union Ball Joint
 Female NPT both ends


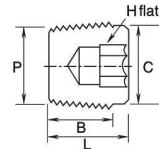
Part Number	P-NPT inch	L mm	E mm	H-Hex mm	H1-Flat mm
DUBJ2N	1/8	45.7	6.9	28.6	23.8
DUBJ4N	1/4	59.4	9.1	34.9	30.2
DUBJ6N	3/8	63.5	13.2	38.1	33.3
DUBJ8N	1/2	68.6	15.7	44.5	41.3
DUBJ12N	3/4	79.2	22.4	50.8	47.6
DUBJ16N	1	90.4	26.2	63.5	60.3

DGC ISO Parallel Copper Gasket
 For ISO Parallel Male Thread


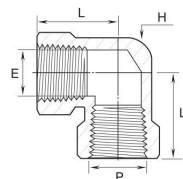
Part Number	P-NPT inch	E mm	H mm	D mm
DGC2N	1/8	9.9	1.0	15.0
DGC4N	1/4	13.2	1.5	19.1
DGC6N	3/8	16.8	1.5	23.1
DGC8N	1/2	21.1	1.5	26.9
DGC12N	3/4	26.7	2.0	33.0
DGC16N	1	33.3	2.0	40.1

DHHPU Hollow Hex Plug
 Male SAE /MS Straight Thread


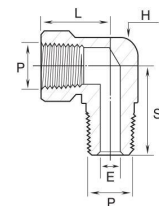
Part Number	P-SAE Thread	L mm	B mm	C mm	H mm
DHHP4U	7/16-20	11.4	9.1	14.2	4.76
DHHP6U	9/19-18	12.2	9.9	17.5	6.35
DHHP8U	3/4-16	14.2	11.2	22.4	7.92
DHHP12U	1-1/16-12	19.1	15.0	31.8	14.28
DHHP16U	1-5/16-12	19.1	15.0	38.1	15.87

DHHP Hollow Hex Plug
 Male NPT


Part Number	P-NPT inch	L mm	B mm	C mm	H mm
DHHP2N	1/8	10.4	7.4	9.4	4.76
DHHP4N	1/4	15.5	12.4	12.1	6.35
DHHP6N	3/8	15.0	11.9	15.7	7.93
DHHP8N	1/2	19.3	16.2	19.3	9.53

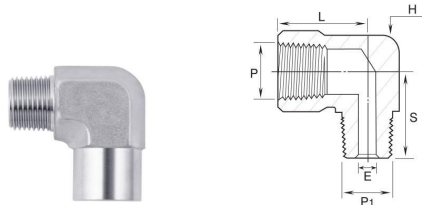
DEF Female Elbow
 Female NPT both ends


Part Number	P-NPT inch	L mm	E mm	H-Flat mm	Pressure psi(bar) SS316
DEF2N	1/8	24.1	8.9	12.7	6200(427)
DEF4N	1/4	29.1	11.7	17.5	7200(496)
DEF6N	3/8	34.5	15.0	20.6	5600(385)
DEF8N	1/2	37.0	18.7	25.4	5600(385)
DFE12N	3/4	46.5	23.5	31.8	5100(351)
DEF16N	1	48.8	29.7	42.9	6400(440)

DSE Street Elbow
 Female NPT to Male NPT


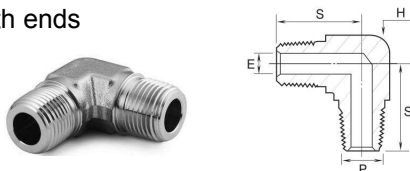
Part Number	P-NPT inch	L mm	S mm	E mm	H-Flat mm	Pressure psi(bar) SS316
DSE2N	1/8	24.1	4.8	12.7	1.0	6200(427)
DSE4N	1/4	29.0	7.1	17.5	1.5	7200(496)
DSE6N	3/8	34.5	9.6	20.6	1.5	5600(385)
DSE8N	1/2	37.0	11.9	25.4	1.5	5600(385)
DSE12N	3/4	46.5	15.7	31.8	2.0	5100(351)
DSE16N	1	48.8	22.3	42.9	2.0	5300(365)

DRSE Reducing Street Elbow
Female NPT to Reduce Male NPT

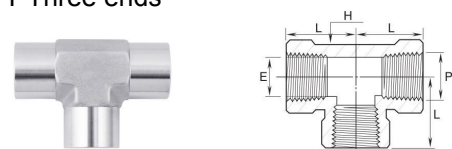


Part Number	P-NPT inch	P1-NPT inch	L mm	S mm	E mm	H-Flat mm	Pressure Rating SS316
DRSE4N-2N	1/4	1/8	29.0	22.4	4.8	17.5	7200(496)
DRSE6N-4N	3/8	1/4	34.5	28.2	7.1	20.6	5600(385)
DRSE8N-4N	1/2	1/4	37.0	30.5	7.1	25.4	5600(385)
DRSE8N-6N	1/2	3/8	37.0	30.5	9.6	25.4	5600(385)
DRSE12N-8N	3/4	1/2	46.5	41.6	11.9	31.8	5100(351)
DRSE16N-8N	1	1/2	48.8	45.5	11.9	42.9	5300(365)

DEM Male Elbow
Male NPT both ends

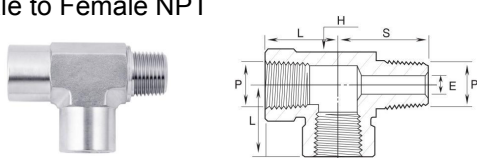


DFT Female Tee
Female NPT Three ends

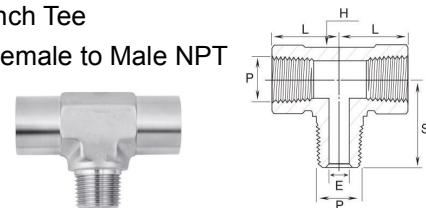


Part Number	P-NPT inch	L mm	E mm	H-Flat mm	Pressure psi(bar) SS316	Part Number	P-NPT inch	L mm	E mm	H-Flat mm	Pressure psi(bar) SS316
DEF2N	1/8	19.05	4.8	12.7	10000(689)	DFT2N	1/8	24.1	8.9	12.7	6200(427)
DEF4N	1/4	24.5	7.1	12.7	8000(551)	DFT4N	1/4	29.0	11.7	17.5	7200(496)
DEF6N	3/8	26.9	9.6	17.5	7800(537)	DFT6N	3/8	34.5	15.0	20.6	5600(385)
DEF8N	1/2	33.2	11.9	20.6	7800(530)	DFT8N	1/2	37.0	18.7	25.4	5600(385)
DEF12N	3/4	35.3	15.7	25.4	7300(502)	DFT12N	3/4	46.5	23.5	31.8	5100(351)
DEF16N	1	44.5	22.3	31.8	5300(365)	DFT16N	1	48.8	29.7	42.9	5300(365)

DRT Run Tee
Female to Male to Female NPT



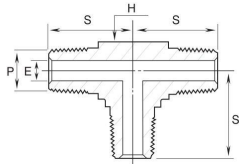
DBT Branch Tee
Female to Female to Male NPT



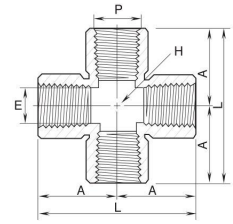
Part Number	P-NPT inch	L mm	S mm	E mm	H-Flat mm	Pressure psi(bar) SS316
DRT2N	1/8	24.1	19.6	4.8	12.7	6200(427)
DRT4N	1/4	29.0	26.5	7.1	17.5	7200(496)
DRT6N	3/8	34.5	28.2	9.6	20.6	5600(385)
DTR8N	1/2	37.0	35.3	11.9	25.4	5600(385)
DRT12N	3/4	46.5	39.6	15.7	31.8	5100(351)
DRT16N	1	48.8	49.2	22.3	42.9	5300(427)

Part Number	P-NPT inch	L mm	S mm	E mm	H-Flat mm	Pressure psi(bar) SS316
DBT2N	1/8	24.1	19.6	4.8	12.7	6200(427)
DBT4N	1/4	29.0	26.5	7.1	17.5	7200(496)
DBT6N	3/8	34.5	28.2	9.6	20.6	5600(385)
DBT8N	1/2	37.0	35.3	11.9	25.4	5600(385)
DBT12N	3/4	46.5	39.6	15.7	31.8	5100(351)
DBT16N	1	48.8	49.2	22.3	42.9	5300(427)

DMT Male Tee
Male NPT three ends



DCF Female Cross
Female NPT Four ends



Part Number	P-NPT inch	S mm	E mm	H-Flat mm	Pressure psi(bar) SS316	Part Number	P-NPT inch	L mm	E mm	H-Flat mm	Pressure psi(bar) SS316
DMT2N	1/8	19.05	4.8	12.7	10000(689)	DCF2N	1/8	48.2	8.6	12.7	6200(427)
DMT4N	1/4	24.5	7.1	12.7	8000(551)	DCF4N	1/4	58.0	11.4	17.5	7200(496)
DMT6N	3/8	26.9	9.6	17.5	7800(537)	DCF6N	3/8	69.0	15.0	20.6	5600(385)
DMT8N	1/2	33.2	11.9	20.6	7800(530)	DCF8N	1/2	74.0	18.5	25.4	5600(385)
DMT12N	3/4	35.3	15.7	25.4	7300(502)	DCF12N	3/4	93.0	23.9	31.8	5100(351)
DMT16N	1	44.5	22.3	31.8	5300(365)	DCF16N	1	97.6	29.7	42.9	5300(365)