

Instrumentation Thread Fittings



INDEX

 <p>ICN Close Nipple</p> <p>4P</p>	 <p>IRHB Reducing Hex Bushing</p> <p>6P</p>	 <p>IRSE Reducing Street Elbow</p> <p>8P</p>
 <p>IHN Hex Nipple</p> <p>4P</p>	 <p>IHC Hex Coupling</p> <p>6P</p>	 <p>IME Male Elbow</p> <p>8P</p>
 <p>IHLN Hex Long Nipple</p> <p>4P</p>	 <p>IHRC Hex Reducing Coupling</p> <p>6P</p>	 <p>IFT Female Tee</p> <p>8P</p>
 <p>IHRN Hex Reducing Nipple</p> <p>5P</p>	 <p>IPG ISO Parallel Gasket</p> <p>7P</p>	 <p>IBT Branch Tee</p> <p>9P</p>
 <p>IA Adapter</p> <p>5P</p>	 <p>IPP Pipe Plug</p> <p>7P</p>	 <p>IRT Run Tee</p> <p>9P</p>
 <p>IRA Reducing Adapter</p> <p>6P</p>	 <p>IPC Pipe Cap</p> <p>7P</p>	 <p>IMT Male Tee</p> <p>9P</p>
 <p>IFE Female Elbow</p> <p>7P</p>	 <p>ISE Street Elbow</p> <p>8P</p>	 <p>IFC Female Cross</p> <p>9P</p>

Ordering Information

Example : **I** **HN** - **8N** - **8R** - **B**

1
2
3 4
3 4
5

1. Instrumentation Thread Fittings
4. Pipe Thread Type

2. Fitting Type
5. Material

3. Pipe Thread Size

Material Standards & Temperature Rating

Material	Identify	Max. Temperature °F(°C)
316 Stainless Steel	Nil	1000(537)
Brass	B	400(204)
Carbon Steel	C	375(190)

Thread Specifications

Thread Type	Identify	Specification
NPT	N	ASME B1.20.1, SAE AS71051
ISO/BSP (Parallel)	G	ISO 228/1, JIS B 0202
ISO/BSP (Tapered)	R	ISO 7/1, JIS B 0203

Pipe Thread Size

Size (inch)	1/8	1/4	3/8	1/2	3/4	1
ISO Tapered	2R	4R	6R	8R	12R	16R
NPT	2N	4N	6N	8N	12N	16N
ISO Parallel	2G	4G	6G	8G	12G	16G

Gasket, O-Ring Materials

Component	Material	Temperature range °F(°C)
O-ring	Buna N	-25°C to 110°C (-13°F to 230°F)
	Fluorocarbon	-28°C to 204°C (-20°F to 400°F)
Copper gasket	Copper	-196°C to 204°C (-325°F to 400°F)

Installation Instructions

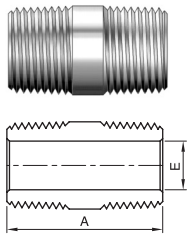
To ensure a leak-tight seal, Superlok recommends the use of a pipe thread sealant on all NPT, ISO Tapered threads. The most effective sealing method is Teflon tape. Tape should be used only on male tapered pipe threads.

Do not use tape on flared, coned or tube fitting ends!

Clean both male and female tapered threads. Wrap tape in the direction of the male tapered thread spiral.

ICN

Close Nipple



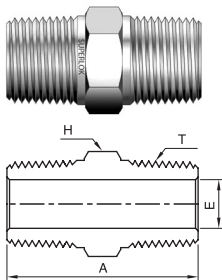
Male NPT Threads

Part Number	NPT Pipe Size	Dimension		Pressure Ratings, psig(bar)	
		A	E	SS316, Steel	Brass
ICN - 2N	1/8	19.1	4.8	10000(689)	5000(344)
ICN - 4N	1/4	28.4	7.1	8000(551)	4000(275)
ICN - 6N	3/8	28.4	9.6	7800(537)	3900(268)
ICN - 8N	1/2	38.1	11.9	7700(530)	3800(261)
ICN - 12N	3/4	38.1	15.7	7300(502)	3600(248)
ICN - 16N	1	47.8	22.4	5300(365)	2600(179)

※ ISO Tapered Threads are available upon request.

IHN

Hex Nipple

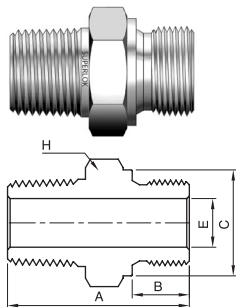


Male NPT Threads

Part Number	NPT Pipe Size	Dimension			Pressure Ratings, psig(bar)	
		A	E	H	SS316, Steel	Brass
IHN - 2N	1/8	25.6	4.8	11.1	10000(689)	5000(344)
IHN - 4N	1/4	35.6	7.1	14.2	8000(551)	4000(275)
IHN - 6N	3/8	36.3	9.6	17.4	7800(537)	3900(268)
IHN - 8N	1/2	46.7	11.9	22.2	7700(530)	3800(261)
IHN - 12N	3/4	46.7	15.7	26.9	7300(502)	3600(248)
IHN - 16N	1	58.9	22.4	34.9	5300(365)	2600(179)

※ ISO Tapered Threads are available upon request.

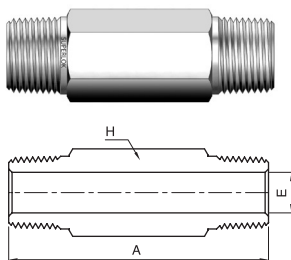
Male NPT to Male ISO Parallel Pipe Threads



Part Number	NPT Pipe Size	ISO/BSP Pipe Size (ISO 228)	Dimension					Pressure Ratings, psig(bar)	
			A	B	C	E	H	SS316, Steel	Brass
IHN - 2N - 2G	1/8	1/8	27.7	7.1	13.7	4.1	14.2	11400(785)	5700(392)
IHN - 4N - 4G	1/4	1/4	36.8	11.2	18.0	5.8	19.1	10300(709)	5100(351)
IHN - 6N - 6G	3/8	3/8	37.6	11.2	21.6	7.9	22.2	7600(523)	3800(261)
IHN - 8N - 8G	1/2	1/2	44.4	14.2	25.9	11.9	26.9		
IHN - 12N - 12G	3/4	3/4	49.0	15.7	32.0	15.7	33.3	7300(502)	3600(248)
IHN - 16N - 16G	1	1	56.6	18.3	38.9	19.8	41.2	7400(509)	3700(254)

IHLN

Hex Long Nipple



Male NPT Threads

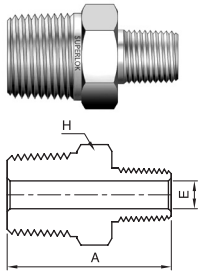
Part Number	NPT Pipe Size	Dimension			Pressure Ratings, psig(bar)	
		A	E	H	SS316, Steel	Brass
IHLN - 2N	1/8	*	4.8	11.1	10000(689)	5000(344)
IHLN - 4N	1/4	*	7.1	14.2	8000(551)	4000(275)
IHLN - 6N	3/8	*	9.6	17.4	7800(537)	3900(268)
IHLN - 8N	1/2	*	11.9	22.2	7700(530)	3800(261)
IHLN - 12N	3/4	*	15.7	26.9	7300(502)	3600(248)
IHLN - 16N	1	*	22.4	34.9	5300(365)	2600(179)

※ NOTE : The length of Nipple "A" is defined by user
Part Number Example : IHLN - 8N - 100L (length "A" : 100mm)

※ ISO Tapered Threads are available upon request.

IHRN

Hex Reducing Nipple



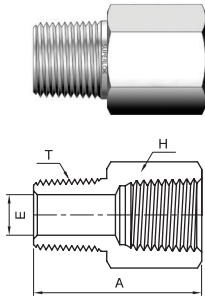
Male NPT Threads

Part Number	NPT Pipe Size	Reduced Pipe Size	Dimension			Pressure Ratings, psig(bar)	
			A	E	H	SS316, Steel	Brass
IHRN - 2N - 1N	1/8	1/16	25.6	3.0	11.1	11000(757)	5500(378)
IHRN - 4N - 2N	1/4	1/8	31.0	4.8	14.2	10000(689)	5000(344)
IHRN - 6N - 2N	3/8	1/8	31.8	4.8	17.4		
IHRN - 6N - 4N	3/8	1/4	36.3	7.1	17.4	8000(551)	4000(275)
IHRN - 8N - 2N	1/2	1/8	37.3	4.8	22.2	7700(530)	3800(261)
IHRN - 8N - 4N	1/2	1/4	41.9	7.1	22.2	8000(551)	4000(275)
IHRN - 8N - 6N	1/2	3/8	41.9	9.6	22.2	7800(537)	3900(268)
IHRN-12N - 4N	3/4	1/4	41.9	7.1	26.9	8000(551)	4000(275)
IHRN-12N - 8N	3/4	1/2	46.7	11.9	26.9	7700(530)	3800(261)
IHRN-16N - 4N	1	1/4	49.3	7.1	34.9	5300(365)	2600(179)
IHRN-16N - 8N	1	1/2	54.1	11.9	34.9	7700(530)	3800(261)
IHRN-16N -12N	1	3/4	54.1	15.7	34.9	7300(502)	3600(248)

※ ISO Tapered Threads are available upon request.

IA

Adapter

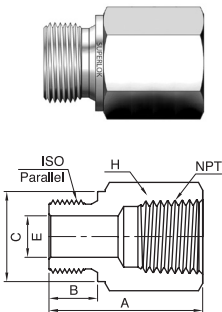


Male to Female NPT Threads

Part Number	NPT Pipe Size	Dimension			Pressure Ratings, psig(bar)	
		A	E	H	SS316, Steel	Brass
IA - 2N	1/8	27.9	4.8	14.2	6500(447)	3200(220)
IA - 4N	1/4	35.6	7.1	19.1	6600(454)	3300(227)
IA - 6N	3/8	38.4	9.6	22.2	5300(365)	2600(179)
IA - 8N	1/2	49.3	11.9	26.9	4900(337)	2400(165)
IA - 12N	3/4	51.3	15.7	33.3	4600(316)	2300(158)
IA - 16N	1	57.9	22.4	41.2	4400(303)	2200(151)

※ ISO Tapered Threads are available upon request.

Male ISO Parallel Pipe Threads to Female NPT

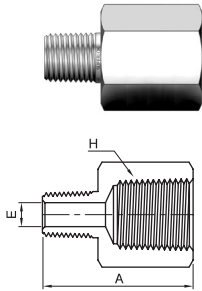


Part Number	ISO/BSP Pipe Size (ISO 228)	NPT Pipe Size	Dimension					Pressure Ratings, psig(bar)	
			A	B	C	E	H	SS316, Steel	Brass
IA - 2G - 2N	1/8	1/8	25.1	7.1	13.7	4.1	14.2	6500(447)	3200(220)
IA - 4G - 4N	1/4	1/4	33.5	11.2	18.0	5.8	19.1	6600(454)	3300(227)
IA - 6G - 6N	3/8	3/8	35.8	11.2	21.6	7.9	22.2	5300(365)	2600(179)
IA - 8G - 8N	1/2	1/2	44.2	14.2	25.9	11.9	26.9	4900(337)	2400(165)
IA - 12G - 12N	3/4	3/4	48.0	15.7	32.0	15.7	33.3	4600(316)	2300(158)
IA - 16G - 16N	1	1	53.3	18.3	38.9	19.8	41.2	4400(303)	2200(151)

• All dimensions in millimeters unless specified as "inch". Dimension are for reference only, subject to change.

IRA

Reducing Adapter



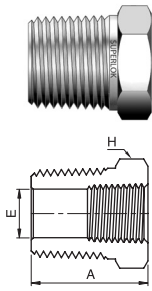
Male to Female NPT Threads

Part Number	Male Pipe Size	Female Pipe Size	Dimension			Pressure Ratings, psig(bar)	
			A	E	H	SS316, Steel	Brass
IRA - 2N - 4N	1/8	1/4	32.0	4.8	19.1	6600(454)	3300(227)
IRA - 2N - 6N	1/8	3/8	33.8	4.8	22.2	5300(365)	2600(179)
IRA - 4N - 6N	1/4	3/8	38.1	7.1	22.2		
IRA - 2N - 8N	1/8	1/2	40.1	4.8	26.9	4900(337)	2400(165)
IRA - 4N - 8N	1/4	1/2	44.7	7.1	26.9		
IRA - 6N - 8N	3/8	1/2	44.4	9.6	26.9		
IRA - 4N - 12N	1/4	3/4	47.0	7.1	33.3	4600(316)	2300(158)
IRA - 6N - 12N	3/8	3/4	46.2	9.6	33.3		
IRA - 8N - 12N	1/2	3/4	51.3	11.9	33.3		
IRA - 4N - 16N	1/4	1	49.8	7.1	41.2	4400(303)	2200(151)
IRA - 8N - 16N	1/2	1	54.9	11.9	41.2		
IRA - 12N - 16N	3/4	1	55.1	15.7	41.2		

※ ISO Tapered Threads are available upon request.

IRHB

Reducing Hex Bushing



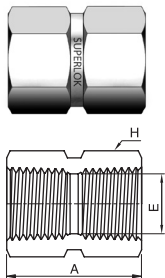
Male to Female NPT Threads

Part Number	Male Pipe Size	Female Pipe Size	Dimension			Pressure Ratings, psig(bar)	
			A	E	H	SS316, Steel	Brass
IRHB - 4N - 2N	1/4	1/8	26.9	7.1	14.2	6500(447)	3300(227)
IRHB - 6N - 2N	3/8	1/8	21.8	8.6	17.4	9200(633)	4700(323)
IRHB - 6N - 4N	3/8	1/4	30.2	9.6	19.1	6600(454)	3300(227)
IRHB - 8N - 2N	1/2	1/8	27.4	8.6	22.2	12200(840)	6200(427)
IRHB - 8N - 4N	1/2	1/4	27.4	11.4	22.2	8300(571)	4400(303)
IRHB - 8N - 6N	1/2	3/8	35.8	11.9	22.2	5300(365)	2600(179)
IRHB - 12N - 4N	3/4	1/4	27.4	11.4	26.9	12000(826)	6000(413)
IRHB - 12N - 6N	3/4	3/8	27.4	15.0	26.9	8200(564)	4300(296)
IRHB - 12N - 8N	3/4	1/2	41.4	15.7	26.9	4900(337)	2400(165)
IRHB - 16N - 4N	1	1/4	34.8	11.4	34.9	14500(999)	7400(509)
IRHB - 16N - 6N	1	3/8	34.8	15.0	34.9	11600(799)	5900(406)
IRHB - 16N - 8N	1	1/2	34.8	18.5	34.9	8600(592)	4300(296)
IRHB - 16N - 12N	1	3/4	47.0	22.4	34.9	5300(365)	2600(179)

※ ISO Tapered Threads are available upon request.

IHC

Hex Coupling



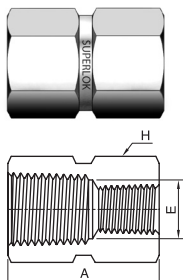
Female NPT Threads

Part Number	Pipe Size	Dimension			Pressure Ratings, psig(bar)	
		A	E	H	SS316, Steel	Brass
IHC - 2N	1/8	20.6	8.6	14.2	6500(447)	3200(220)
IHC - 4N	1/4	30.2	11.4	19.1	6600(454)	3300(227)
IHC - 6N	3/8	33.3	15.0	22.2	5300(365)	2600(179)
IHC - 8N	1/2	39.6	18.5	26.9	4900(337)	2400(165)
IHC - 12N	3/4	41.1	23.9	33.3	4600(316)	2300(158)
IHC - 16N	1	50.8	29.7	41.2	4400(303)	2200(151)

※ ISO Tapered Threads are available upon request.

IHRC

Hex Reducing Coupling



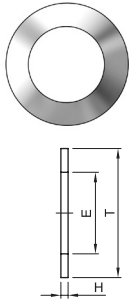
Female NPT Threads

Part Number	Pipe Size	Reduced Pipe Size	Dimension			Pressure Ratings, psig(bar)	
			A	E	H	SS316, Steel	Brass
IHRC - 4N - 2N	1/4	1/8	31.0	8.6	19.1	6600(454)	3300(227)
IHRC - 6N - 4N	3/8	1/4	35.1	11.4	22.2	5300(365)	2600(179)
IHRC - 8N - 2N	1/2	1/8	39.6	8.6	26.9	4900(337)	2400(165)
IHRC - 8N - 4N	1/2	1/4	44.4	11.4	26.9		
IHRC - 8N - 6N	1/2	3/8	45.2	15.0	26.9		
IHRC - 12N - 4N	3/4	1/4	46.0	11.4	33.3	4600(316)	2300(158)
IHRC - 12N - 8N	3/4	1/2	52.3	18.5	33.3		
IHRC - 16N - 8N	1	1/2	55.6	18.5	41.2	4400(303)	2200(151)
IHRC - 16N - 12N	1	3/4	57.2	23.9	41.2		

※ ISO Tapered Threads are available upon request.

IPG

ISO Parallel Gasket

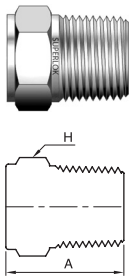


ISO Parallel Copper Gaskets

Part Number	Pipe Size	Dimension		
		E	H	T
IPG - 2	1/8	10.2	2.0	16.0
IPG - 4	1/4	13.4	2.0	19.5
IPG - 6	3/8	17.0	2.0	24.0
IPG - 8	1/2	21.2	2.0	29.0
IPG - 12	3/4	27.2	2.0	34.5
IPG - 16	1	34.0	2.0	42.0

IPP

Pipe Plug



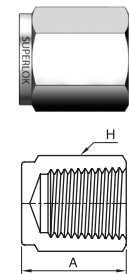
Male NPT Threads

Part Number	Pipe Size	Dimension	
		A	H
IPP - 2N	1/8	19.1	11.1
IPP - 4N	1/4	24.4	14.2
IPP - 6N	3/8	25.1	17.4
IPP - 8N	1/2	30.7	22.2
IPP - 12N	3/4	30.7	26.9
IPP - 16N	1	38.1	34.9

※ ISO Tapered Threads are available upon request.

IPC

Pipe Cap



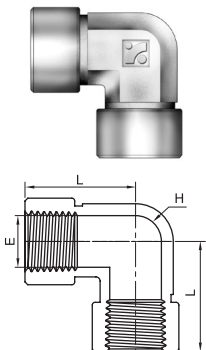
Female NPT Threads

Part Number	Pipe Size	Dimension	
		A	H
IPC - 2N	1/8	19.1	14.2
IPC - 4N	1/4	23.1	19.1
IPC - 6N	3/8	26.2	22.2
IPC - 8N	1/2	34.0	26.9
IPC - 12N	3/4	36.6	33.3
IPC - 16N	1	41.1	41.2

※ ISO Tapered Threads are available upon request.

IFE

Female Elbow



Female NPT Threads

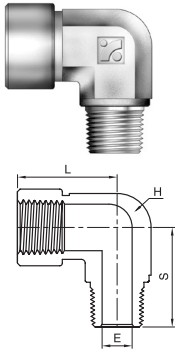
Part Number	Pipe Size	Dimension			Pressure Ratings, psig(bar)	
		E	L	H	SS316, Steel	Brass
IFE - 2N	1/8	8.6	24.0	12.7	6200(427)	3100(213)
IFE - 4N	1/4	11.4	29.0	17.5	7200(496)	3600(248)
IFE - 6N	3/8	15.0	34.5	20.6	5600(385)	2800(192)
IFE - 8N	1/2	18.5	37.0	25.4		
IFE - 12N	3/4	23.9	46.5	31.8	5100(351)	2500(172)
IFE - 16N	1	29.7	48.8	42.9	6400(440)	3200(220)

※ ISO Tapered Threads are available upon request.

• All dimensions in millimeters unless specified as "inch". Dimension are for reference only, subject to change.

ISE

Street Elbow



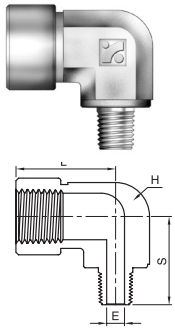
Female to Male NPT Threads

Part Number	Pipe Size	Dimension				Pressure Ratings, psig(bar)	
		E	L	S	H	SS316, Steel	Brass
ISE - 2N	1/8	4.8	24.1	19.6	12.7	6200(427)	3100(213)
ISE - 4N	1/4	7.1	29.0	26.5	17.5	7200(496)	3600(248)
ISE - 6N	3/8	9.6	34.5	28.2	20.6	5600(385)	2800(192)
ISE - 8N	1/2	11.9	37.0	35.3	25.4		
ISE - 12N	3/4	15.7	46.5	39.6	31.8	5100(351)	2500(172)
ISE - 16N	1	22.4	48.8	49.2	42.9	5300(365)	2600(179)

※ ISO Tapered Threads are available upon request.

IRSE

Reducing Street Elbow



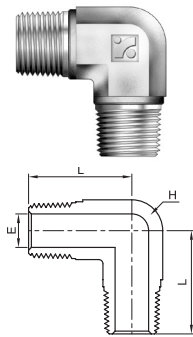
Female to Male NPT Threads

Part Number	Female Pipe Size	Male Pipe Size	Dimension				Pressure Ratings, psig(bar)	
			E	L	S	H	SS316, Steel	Brass
IRSE - 2N - 1N	1/8	1/16	3.0	26.4	22.1	12.7	6200(427)	3100(213)
IRSE - 4N - 2N	1/4	1/8	4.8	29.0	22.4	17.5	7200(496)	3600(248)
IRSE - 6N - 4N	3/8	1/4	7.1	34.5	28.2	20.6	5600(385)	2800(192)
IRSE - 8N - 4N	1/2	1/4	7.1	37.0	30.5	25.4		
IRSE - 8N - 6N	1/2	3/8	9.6	37.0	30.5	25.4	5100(351)	2500(172)
IRSE - 12N - 8N	3/4	1/2	11.9	46.5	39.6	31.8	5100(351)	2500(172)
IRSE - 16N - 8N	1	1/2	11.9	48.8	46.5	42.9	5300(365)	2600(179)

※ ISO Tapered Threads are available upon request.

IME

Male Elbow



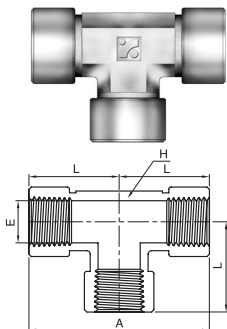
Male NPT Threads

Part Number	Pipe Size	Dimension			Pressure Ratings, psig(bar)	
		E	L	H	SS316, Steel	Brass
IME - 2N	1/8	4.8	19.1	12.7	10000(689)	5000(344)
IME - 4N	1/4	7.1	24.5	12.7	8000(551)	4000(275)
IME - 6N	3/8	9.6	26.9	17.5	7800(537)	3900(268)
IME - 8N	1/2	11.9	33.2	20.6	7700(530)	3800(261)
IME - 12N	3/4	15.7	35.3	25.4	7300(502)	3600(248)
IME - 16N	1	22.4	44.5	31.8	5300(365)	2600(179)

※ ISO Tapered Threads are available upon request.

IFT

Female Tee

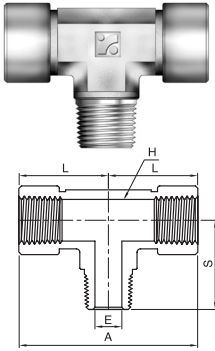


Female NPT Threads

Part Number	Pipe Size	Dimension				Pressure Ratings, psig(bar)	
		A	E	L	H	SS316, Steel	Brass
IFT - 2N	1/8	48.0	8.6	24.0	12.7	6200(427)	3100(213)
IFT - 4N	1/4	58.0	11.4	29.0	17.5	7200(496)	3600(248)
IFT - 6N	3/8	69.0	15.0	34.5	20.6	5600(385)	2800(192)
IFT - 8N	1/2	74.0	18.5	37.0	25.4		
IFT - 12N	3/4	93.0	23.9	46.5	31.8	5100(351)	2500(172)
IFT - 16N	1	97.0	29.7	48.5	42.9	6400(440)	3200(220)

※ ISO Tapered Threads are available upon request.

IBT
Branch Tee

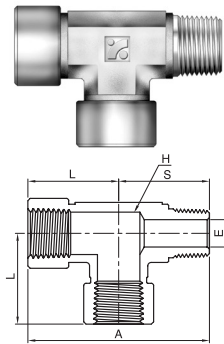


Male and Female NPT Threads

Part Number	Pipe Size	Dimension					Pressure Ratings, psig(bar)	
		A	E	L	S	H	SS316, Steel	Brass
IBT - 2N	1/8	48.0	4.8	24.0	19.6	12.7	6200(427)	3100(213)
IBT - 4N	1/4	58.0	7.1	29.0	26.5	17.5	7200(496)	3600(248)
IBT - 6N	3/8	69.0	9.6	34.5	28.2	20.6	5600(385)	2800(192)
IBT - 8N	1/2	74.0	11.9	37.0	35.3	25.4		
IBT - 12N	3/4	93.0	15.7	46.5	39.6	31.8	5100(351)	2500(172)
IBT - 16N	1	97.0	22.4	48.5	49.2	42.9	6400(440)	3200(220)

※ ISO Tapered Threads are available upon request.

IRT
Run Tee

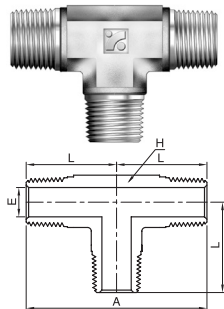


Male and Female NPT Threads

Part Number	Pipe Size	Dimension					Pressure Ratings, psig(bar)	
		A	E	L	S	H	SS316, Steel	Brass
IRT - 2N	1/8	43.6	4.8	24.0	19.6	12.7	6200(427)	3100(213)
IRT - 4N	1/4	56.2	7.1	29.0	26.5	17.5	7200(496)	3600(248)
IRT - 6N	3/8	62.7	9.6	34.5	28.2	20.6	5600(385)	2800(192)
IRT - 8N	1/2	72.3	11.9	37.0	35.3	25.4		
IRT - 12N	3/4	86.1	15.7	46.5	39.6	31.8	5100(351)	2500(172)
IRT - 16N	1	97.7	22.4	48.5	49.2	42.9	6400(440)	3200(220)

※ ISO Tapered Threads are available upon request.

IMT
Male Tee

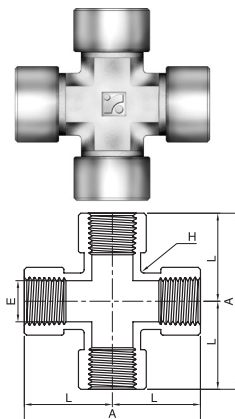


Male NPT Threads

Part Number	Pipe Size	Dimension				Pressure Ratings, psig(bar)	
		A	E	L	H	SS316, Steel	Brass
IMT - 2N	1/8	38.2	4.8	19.1	12.7	10000(689)	5000(344)
IMT - 4N	1/4	49.0	7.1	24.5	12.7	8000(551)	4000(275)
IMT - 6N	3/8	53.8	9.6	26.9	17.5	7800(537)	3900(268)
IMT - 8N	1/2	66.4	11.9	33.2	20.6	7700(530)	3800(261)
IMT - 12N	3/4	70.6	15.7	35.3	25.4	7300(502)	3600(248)
IMT - 16N	1	89.0	22.4	44.5	31.8	5300(365)	2600(179)

※ ISO Tapered Threads are available upon request.

IFC
Female Cross



Female NPT Threads

Part Number	Pipe Size	Dimension				Pressure Ratings, psig(bar)	
		A	E	L	H	SS316, Steel	Brass
IFC - 2N	1/8	48.0	8.6	24.0	12.7	6200(427)	3100(213)
IFC - 4N	1/4	58.0	11.4	29.0	17.5	7200(496)	3600(248)
IFC - 6N	3/8	69.0	15.0	34.5	20.6	5600(385)	2800(192)
IFC - 8N	1/2	74.0	18.5	37.0	25.4		
IFC - 12N	3/4	93.0	23.9	46.5	31.8	5100(351)	2500(172)
IFC - 16N	1	97.0	29.7	48.5	42.9	6400(440)	3200(220)

※ ISO Tapered Threads are available upon request.

• All dimensions in millimeters unless specified as "inch". Dimension are for reference only, subject to change.