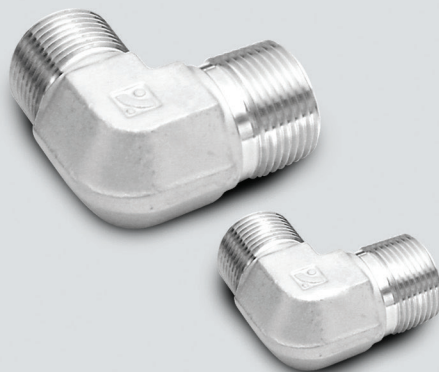


# Instrumentation Thread Fittings



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 <p><b>ICN</b> Close Nipple</p> <p>4P</p>	 <p><b>IRHB</b> Reducing Hex Bushing</p> <p>6P</p>	 <p><b>IRSE</b> Reducing Street Elbow</p> <p>8P</p>
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 <p><b>IRA</b> Reducing Adapter</p> <p>6P</p>	 <p><b>IPC</b> Pipe Cap</p> <p>7P</p>	 <p><b>IMT</b> Male Tee</p> <p>9P</p>
 <p><b>IFE</b> Female Elbow</p> <p>7P</p>	 <p><b>ISE</b> Street Elbow</p> <p>8P</p>	 <p><b>IFC</b> 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

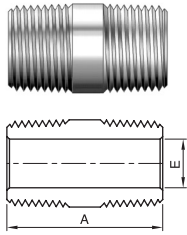
To ensure a leak-tight seal, Superlok recommends the use of a pipe thread sealant on all NPT, ISO Tapered threads. The most effective sealing method is Teflon tape. Tape should be used only on male tapered pipe threads.

**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



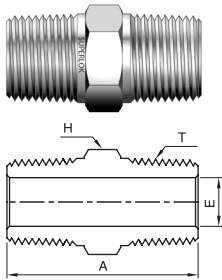
#### Male NPT Threads

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

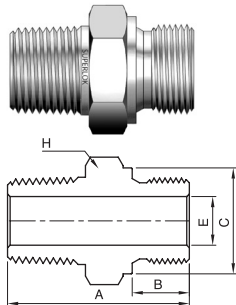


#### Male NPT Threads

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.

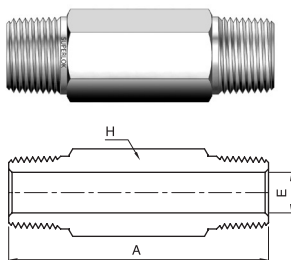
#### Male NPT to Male ISO Parallel Pipe Threads



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

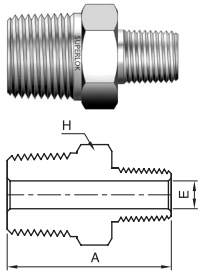
Part Number	NPT Pipe Size	Dimension			Pressure Ratings, psig(bar)	
		A	E	H	SS316, Steel	Brass
IHLN - 2N	1/8	*	4.8	11.1	10000(689)	5000(344)
IHLN - 4N	1/4	*	7.1	14.2	8000(551)	4000(275)
IHLN - 6N	3/8	*	9.6	17.4	7800(537)	3900(268)
IHLN - 8N	1/2	*	11.9	22.2	7700(530)	3800(261)
IHLN - 12N	3/4	*	15.7	26.9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



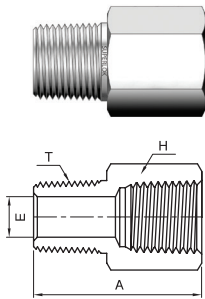
### Male NPT Threads

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

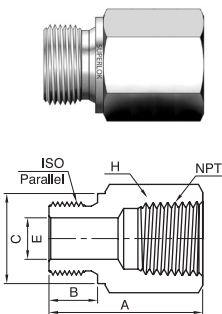
## Adapter



### 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.



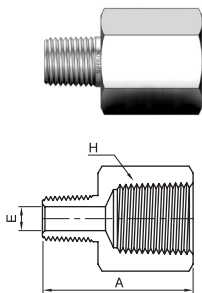
### Male ISO Parallel Pipe Threads to Female NPT

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



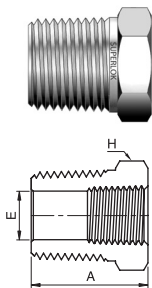
### Male to Female NPT Threads

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



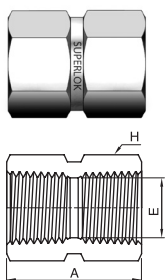
### Male to Female NPT Threads

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



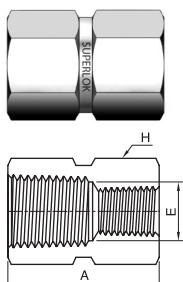
### Female NPT Threads

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



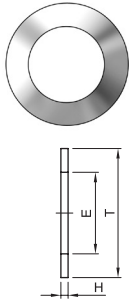
### Female NPT Threads

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

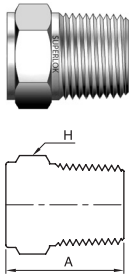


### ISO Parallel Copper Gaskets

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



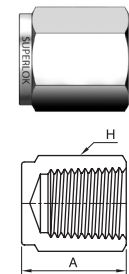
### Male NPT Threads

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



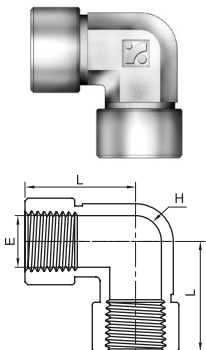
### Female NPT Threads

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)

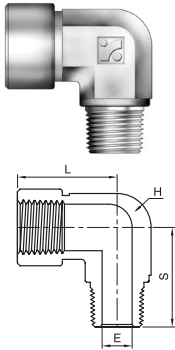
※ ISO Tapered Threads are available upon request.

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



## ISE

### Street Elbow



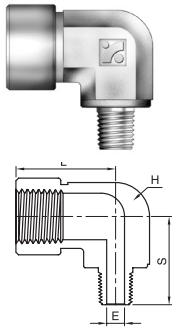
#### Female to Male NPT Threads

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



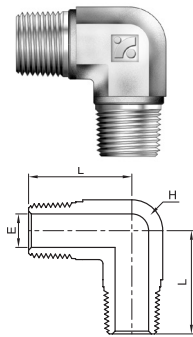
#### Female to Male NPT Threads

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		
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



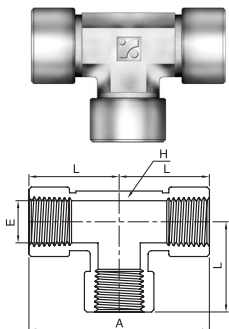
#### Male NPT Threads

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

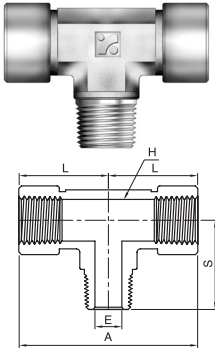
Part Number	Pipe Size	Dimension				Pressure Ratings, psig(bar)	
		A	E	L	H	SS316, Steel	Brass
IFT - 2N	1/8	48.0	8.6	24.0	12.7	6200(427)	3100(213)
IFT - 4N	1/4	58.0	11.4	29.0	17.5	7200(496)	3600(248)
IFT - 6N	3/8	69.0	15.0	34.5	20.6	5600(385)	2800(192)
IFT - 8N	1/2	74.0	18.5	37.0	25.4		
IFT - 12N	3/4	93.0	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



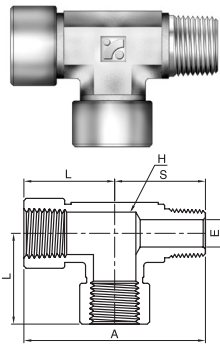
#### Male and Female NPT Threads

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



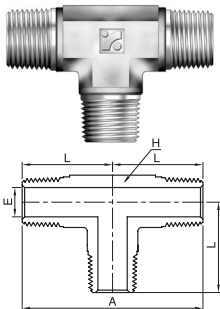
#### Male and Female NPT Threads

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



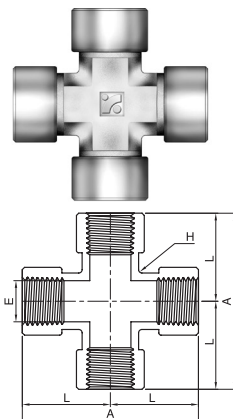
#### Male NPT Threads

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.



 **SUPERLOK USA**

**Instrumentation Thread Fittings**