Instrumentation Thread Fittings

Ordering Information

Example :	**I H N** - **8 N** - **8 R** - **B**
	1 2 3 2 3 4

1. Fitting Type
Please refer to Instrumentation Thread Fitting Index on page 220.

3. Pipe Thread Type
□ **N** = NPT (ASME B1.20.1, SAE AS71051)
□ **G** = ISO/BSP Parallel (ISO 228/1, JIS B 0202)
□ **R** = ISO/BSP Tapered (ISO 7/1, JIS B 0203)

2. 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

※ For special sizes and configurations, please consult BMT (SUPERLOK) sales representative.

4. Material
The mumbers in parentheses indicate the maximum temperature rating.
□ **(Blank)** = 316 Stainless Steel [1000℉(537℃)]
□ **B** = Brass [400℉(204℃)]
□ **C** = Carbon Steel [375℉(190℃)]

Installation Instructions

To ensure a leak-tight seal, BMT 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.

Gasket, O-Ring Materials

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

Pressure Ratings

Size Designator	NPT Size	316 Stainless Steel				Brass				Carbon Steel			
		Male		Female		Male		Female		Male		Female	
		psig	bar	psig	bar	psig	bar	psig	bar	psig	bar	psig	bar
1	1/16	11000	757	6700	461	5500	378	3300	227	11000	757	6700	461
2	1/8	10000	689	6500	447	5000	344	3200	220	10000	689	6500	447
4	1/4	8000	551	6600	454	4000	275	3300	227	8000	551	6600	454
6	3/8	7800	537	5300	365	3900	268	2600	179	7800	537	5300	365
8	1/2	7700	530	4900	337	3800	261	2400	165	7700	530	4900	337
12	3/4	7300	502	4600	316	3600	248	2300	158	7300	502	4600	316
16	1	5300	365	4400	303	2600	179	2200	151	5300	365	4400	303
20	1 1/4	6000	413	5000	344	3000	206	2500	172	6000	413	5000	344
24	1 1/2	5000	344	4600	316	2500	172	2300	158	5000	344	4600	316
32	2	3900	268	3900	268	1900	130	1900	130	3900	268	3900	268

• Pressure ratings are based on ASME B31.3 (Process Piping) with allowable stress 20,000 psi for 316 stainless steel, 10,000 psi for brass, and 20,000 psi for carbon steel.
• To determine pressure ratings in accordance with B31.1: multiply by 0.94 for 316 stainless steel and by 0.75 for carbon steel. For Brass, the ratings remain the same.
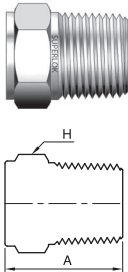• To determine kPa, multiply by 6.89

844-200-MAKO (6256)
sales@mako-products.net

MAKO PRODUCTS

IPG
ISO Parallel Gasket
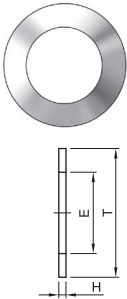
ISO Parallel Copper Gaskets

Part No.	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 No.	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

IPC
Pipe Cap
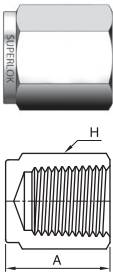
Female NPT Threads

Part No.	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

IFE
Female Elbow
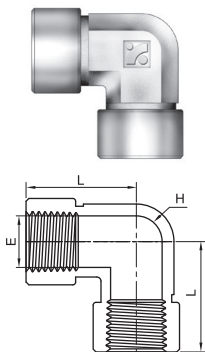
Female NPT Threads

Part No.	Pipe Size	Dimension		
		E	L	H
IFE - 2N	1/8	8.6	24.0	12.7
IFE - 4N	1/4	11.4	29.0	17.5
IFE - 6N	3/8	15.0	34.5	20.6
IFE - 8N	1/2	18.5	37.0	25.4
IFE - 12N	3/4	23.9	46.5	31.8
IFE - 16N	1	29.7	48.8	42.9

- Dimensions and Drawings are for reference only and are subject to change without prior notice.
- Unless otherwise specified, all dimensions are in millimeters.
- Sizes, pressure classes, and end connections not listed are available upon request.