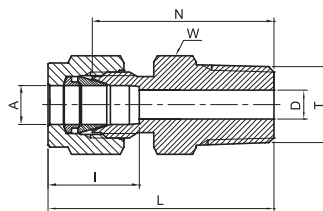


MALE CONNECTOR

TMC



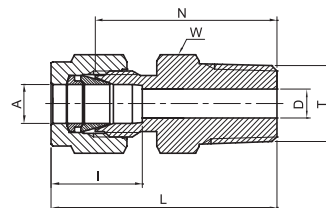
TUBE (METRIC) MALE NPT THREAD							
Part Number	A	T	D	W	N	L	I
	Tube O.D.	NPT		Hex. flat			
	mm	in	mm	mm	mm	mm	mm
TMC - 3M - 2N	3	1/8	2.4	12	23.9	30.5	12.9
TMC - 3M - 4N	3	1/4	2.4	14	29.0	35.6	12.9
TMC - 4M - 2N	4	1/8	2.4	14	24.6	31.2	13.7
TMC - 4M - 4N	4	1/4	2.4	14	29.7	36.3	13.7
TMC - 6M - 2N	6	1/8	4.8	14	25.4	32.8	15.3
TMC - 6M - 4N	6	1/4	4.8	14	30.5	37.9	15.3
TMC - 6M - 6N	6	3/8	4.8	18	31.0	38.4	15.3
TMC - 6M - 8N	6	1/2	4.8	22	37.3	44.7	15.3
TMC - 8M - 2N	8	1/8	4.8	15	26.7	34.2	16.2
TMC - 8M - 4N	8	1/4	6.4	15	31.2	38.7	16.2
TMC - 8M - 6N	8	3/8	6.4	18	31.8	39.3	16.2
TMC - 8M - 8N	8	1/2	6.4	22	38.1	45.6	16.2
TMC - 10M - 2N	10	1/8	4.8	18	28.7	36.3	17.2
TMC - 10M - 4N	10	1/4	7.9	18	33.3	40.9	17.2
TMC - 10M - 6N	10	3/8	7.9	18	33.3	40.9	17.2
TMC - 10M - 8N	10	1/2	7.9	22	38.9	46.5	17.2
TMC - 10M - 12N	10	3/4	7.9	27	40.4	48.0	17.2
TMC - 12M - 2N	12	1/8	4.8	22	28.7	38.3	22.8
TMC - 12M - 4N	12	1/4	7.1	22	33.3	43.4	22.8
TMC - 12M - 6N	12	3/8	9.5	22	33.3	43.4	22.8
TMC - 12M - 8N	12	1/2	9.5	22	38.9	49.0	22.8
TMC - 12M - 12N	12	3/4	9.5	27	40.4	50.5	22.8
TMC - 14M - 4N	14	1/4	7.1	24	34.0	44.1	24.4
TMC - 14M - 6N	14	3/8	9.5	24	34.0	44.1	24.4
TMC - 14M - 8N	14	1/2	11.1	24	38.9	49.0	24.4
TMC - 15M - 8N	15	1/2	11.9	24	38.9	49.0	24.4
TMC - 16M - 6N	16	3/8	9.5	24	34.0	44.1	24.4
TMC - 16M - 8N	16	1/2	11.9	24	38.9	49.0	24.4
TMC - 16M - 12N	16	3/4	12.7	27	40.4	50.5	24.4
TMC - 18M - 8N	18	1/2	11.9	27	40.4	50.5	24.4
TMC - 18M - 12N	18	3/4	15.1	27	40.4	50.5	24.4
TMC - 20M - 8N	20	1/2	11.9	30	42.2	52.3	26.0
TMC - 20M - 12N	20	3/4	15.9	30	42.2	52.3	26.0
TMC - 22M - 12N	22	3/4	15.9	30	42.2	52.3	26.0
TMC - 22M - 16N	22	1	18.3	35	47.0	57.1	26.0
TMC - 25M - 8N	25	1/2	11.9	35	45.2	57.5	31.3
TMC - 25M - 12N	25	3/4	15.9	35	45.2	57.5	31.3
TMC - 25M - 16N	25	1	21.8	35	50	62.3	31.3
TMC - 28M - 16N	28	1	21.8	41	51.6	72.4	36.6
TMC - 28M - 20N	28	1-1/4	21.8	46	52.3	73.1	36.6
TMC - 32M - 20N	32	1-1/4	28.6	46	56.6	79.6	42.0
TMC - 32M - 24N	38	1-1/2	33.7	50	58.1	91.6	49.4

For inches, see next page

"D" - Dimension is minimum opening - dimensions are for reference only, and are subject to change without notice.

MALE CONNECTOR

TMC



TUBE (INCH) MALE NPT THREAD

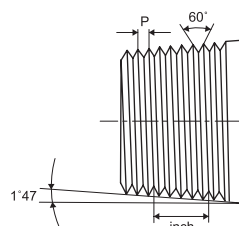
Part Number	A Tube O.D.		T NPT	D		W Hex. flat		N		L		I	
	in	mm	in	in	mm	in	mm	in	mm	in	mm	in	mm
TMC - 1 - 1N	1/16	1.58	1/16	0.05	1.27	5/16	7.9	0.79	20	0.94	23.83	0.34	8.6
TMC - 1 - 2N	1/16	1.58	1/8	0.05	1.27	7/16	11.1	0.88	22.35	1.03	26.10	0.34	8.6
TMC - 1 - 4N	1/16	1.58	1/4	0.05	1.27	9/16	14.3	1.07	27.17	1.22	30.98	0.34	8.6
TMC - 2 - 1N	1/8	3.17	1/16	0.09	2.28	7/16	11.1	0.91	23.11	1.17	29.71	0.50	12.7
TMC - 2 - 2N	1/8	3.17	1/8	0.09	2.28	7/16	11.1	0.94	23.90	1.20	30.48	0.50	12.7
TMC - 2 - 4N	1/8	3.17	1/4	0.09	2.28	9/16	14.3	1.14	28.95	1.40	35.56	0.50	12.7
TMC - 2 - 6N	1/8	3.17	3/8	0.09	2.28	11/16	17.5	1.15	29.21	1.41	35.81	0.50	12.7
TMC - 2 - 8N	1/8	3.17	1/2	0.09	2.28	7/8	22.2	1.40	35.56	1.66	42.16	0.50	12.7
TMC - 3 - 2N	3/16	4.76	1/8	0.12	3.04	7/16	11.1	0.97	24.63	1.23	31.24	0.54	13.7
TMC - 3 - 4N	3/16	4.76	1/4	0.12	3.04	9/16	14.3	1.17	29.72	1.43	36.32	0.54	13.7
TMC - 4 - 1N	1/4	6.35	1/16	0.19	4.82	1/2	12.7	1.00	25.4	1.29	32.76	0.60	15.3
TMC - 4 - 2N	1/4	6.35	1/8	0.19	4.82	1/2	12.7	1.00	25.40	1.29	32.76	0.60	15.3
TMC - 4 - 4N	1/4	6.35	1/4	0.19	4.82	9/16	14.3	1.20	30.50	1.49	37.85	0.60	15.3
TMC - 4 - 6N	1/4	6.35	3/8	0.19	4.82	11/16	17.5	1.22	31.00	1.51	38.35	0.60	15.3
TMC - 4 - 8N	1/4	6.35	1/2	0.19	4.82	7/8	22.2	1.47	37.34	1.76	44.70	0.60	15.3
TMC - 4 - 12N	1/4	6.35	3/4	0.19	4.82	1-1/16	27	1.53	38.86	1.82	46.22	0.60	15.3
TMC - 5 - 2N	5/16	7.93	1/8	0.19	4.82	9/16	14.3	1.05	26.67	1.34	34.03	0.64	16.2
TMC - 5 - 4N	5/16	7.93	1/4	0.25	6.35	9/16	14.3	1.23	31.24	1.52	38.60	0.64	16.2
TMC - 5 - 6N	5/17	7.93	3/8	0.25	6.35	11/16	17.5	1.25	31.75	1.54	39.11	0.64	16.2
TMC - 6 - 2N	3/8	9.52	1/8	0.19	4.82	5/8	15.9	1.10	27.90	1.39	35.30	0.66	16.9
TMC - 6 - 4N	3/8	9.52	1/4	0.28	7.11	5/8	15.9	1.28	32.51	1.57	39.87	0.66	16.9
TMC - 6 - 6N	3/8	9.52	3/8	0.28	7.11	11/16	17.5	1.28	32.51	1.57	39.87	0.66	16.9
TMC - 6 - 8N	3/8	9.52	1/2	0.28	7.11	7/8	22.2	1.52	38.90	1.82	46.23	0.66	16.9
TMC - 6 - 12N	3/8	9.52	3/4	0.28	7.11	1-1/16	27.0	1.59	40.38	1.88	47.75	0.66	16.9
TMC - 8 - 2N	1/2	12.70	1/8	0.19	4.82	13/16	20.6	1.13	28.70	1.53	38.86	0.90	22.9
TMC - 8 - 4N	1/2	12.70	1/4	0.28	7.11	13/16	20.6	1.31	33.27	1.71	43.43	0.90	22.9
TMC - 8 - 6N	1/2	12.70	3/8	0.38	9.65	13/16	20.6	1.31	33.27	1.71	43.43	0.90	22.9
TMC - 8 - 8N	1/2	12.70	1/2	0.41	10.41	7/8	22.2	1.53	38.90	1.93	49.02	0.90	22.9
TMC - 8 - 12N	1/2	12.70	3/4	0.41	10.41	1-1/16	27.0	1.59	40.38	1.99	50.54	0.90	22.9
TMC - 8 - 16N	1/2	12.70	1	0.41	10.41	1-3/8	34.9	1.85	47.00	2.25	57.15	0.90	22.9
TMC - 10 - 6N	5/8	15.87	3/8	0.38	9.65	15/16	23.8	1.34	34.03	1.74	44.19	0.96	24.4
TMC - 10 - 8N	5/8	15.87	1/2	0.47	11.90	15/16	23.8	1.53	38.86	1.93	49.02	0.96	24.4
TMC - 10 - 12N	5/8	15.87	3/4	0.50	12.70	1-1/16	27.0	1.59	40.38	1.99	50.54	0.96	24.4
TMC - 12 - 8N	3/4	19.05	1/2	0.50	12.70	1-1/16	27.0	1.59	40.38	1.99	50.54	0.96	24.5
TMC - 12 - 12N	3/4	19.05	3/4	0.62	15.74	1-1/16	27.0	1.59	40.38	1.99	50.54	0.96	24.5
TMC - 12 - 16N	3/4	19.05	1	0.62	15.74	1-3/8	34.9	1.85	47.00	2.25	57.15	0.96	24.5
TMC - 14 - 12N	7/8	22.22	3/4	0.72	18.28	1-3/16	30.2	1.59	40.38	1.99	50.54	1.02	25.9
TMC - 14 - 16N	7/8	22.22	1	0.72	18.28	1-3/8	34.9	1.85	46.99	2.25	57.15	1.02	25.9
TMC - 16 - 8N	1	25.4	1/2	0.47	11.90	1-3/8	34.9	1.78	45.21	2.26	57.4	1.23	31.2
TMC - 16 - 12N	1	25.40	3/4	0.72	18.28	1-3/8	34.9	1.78	45.21	2.26	57.40	1.23	31.2
TMC - 16 - 16N	1	25.40	1	0.88	22.30	1-3/8	34.9	1.97	50.03	2.45	62.23	1.23	31.2
TMC - 20 - 16N	1-1/4	31.75	1	0.86	21.80	1-3/4	44.5	2.17	55.12	3.04	77.22	1.62	41.2
TMC - 20 - 20N	1-1/4	31.75	1-1/4	1.09	27.70	1-3/4	44.5	2.17	55.12	3.04	77.22	1.62	41.2
TMC - 24 - 24N	1-1/2	38.10	1-1/2	1.34	34.00	2-1/8	54.0	2.43	61.72	3.50	88.90	1.97	50.0
TMC - 32 - 32N	2	50.80	2	1.81	45.97	2-3/4	69.9	3.00	76.20	4.47	113.54	2.66	67.6

Reference Specifications :

- 60° thread angle
- Pitch measured in inches
- Truncation of root and crest are flat
- Taper angel 1° 47'

American Standard Pipe Thread NPT.

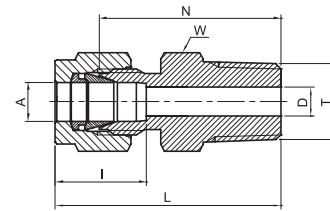
NPT (National Pipe Tapered) is made to specifications outlined in ANSI B1.20.1.



"D" - Dimension is minimum opening - dimensions are for reference only, and are subject to change without notice.

MALE CONNECTOR

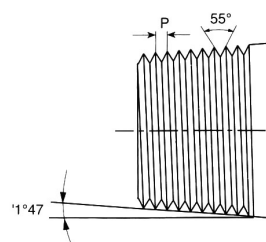
TMC



TUBE (METRIC) ISO TAPERED THREAD							
Part Number	A Tube O.D.	T ISO	D	W Hex. flat	N	L	I
	mm	in	mm	mm	mm	mm	mm
TMC - 2M - 2P	2	R 1/8	1.7	12	23.9	30.5	12.9
TMC - 3M - 2P	3	R 1/8	2.4	12	23.9	30.5	12.9
TMC - 3M - 4P	3	R 1/4	2.4	14	29.0	35.6	12.9
TMC - 4M - 2P	4	R 1/8	2.4	12	24.6	31.2	13.7
TMC - 4M - 4P	4	R 1/4	2.4	14	29.7	36.3	13.7
TMC - 6M - 2P	6	R 1/8	4.8	14	25.4	32.8	15.3
TMC - 6M - 4P	6	R 1/4	4.8	14	30.5	37.9	15.3
TMC - 6M - 6P	6	R 3/8	4.8	18	31.0	38.4	15.3
TMC - 6M - 8P	6	R 1/2	4.8	22	37.3	44.7	15.3
TMC - 8M - 2P	8	R 1/8	4.8	15	26.7	34.2	16.2
TMC - 8M - 4P	8	R 1/4	6.4	15	31.2	38.7	16.2
TMC - 8M - 6P	8	R 3/8	6.4	18	31.8	39.2	16.2
TMC - 8M - 8P	8	R 1/2	6.4	22	38.1	45.6	16.2
TMC - 10M - 2P	10	R 1/8	4.8	18	28.7	36.3	17.2
TMC - 10M - 4P	10	R 1/4	7.9	18	33.3	40.9	17.2
TMC - 10M - 6P	10	R 3/8	7.9	18	33.3	40.9	17.2
TMC - 10M - 8P	10	R 1/2	7.9	22	38.9	46.5	17.2
TMC - 12M - 4P	12	R 1/4	7.1	22	33.3	43.4	22.8
TMC - 12M - 6P	12	R 3/8	9.5	22	33.3	43.4	22.8
TMC - 12M - 8P	12	R 1/2	9.5	22	38.9	49.0	22.8
TMC - 12M - 12P	12	R 3/4	9.5	27	40.4	50.5	22.8
TMC - 15M - 8P	15	R 1/2	11.9	24	38.9	49.0	24.4
TMC - 16M - 4P	16	R 1/4	7.1	24	34.0	44.1	24.4
TMC - 16M - 6P	16	R 3/8	9.5	24	34.0	44.1	24.4
TMC - 16M - 8P	16	R 1/2	11.9	24	38.9	49.0	24.4
TMC - 16M - 12P	16	R 3/4	12.7	27	40.4	50.5	24.4
TMC - 18M - 8P	18	R 1/2	11.9	27	40.4	50.5	24.4
TMC - 18M - 12P	18	R 3/4	15.1	27	40.4	50.5	24.4
TMC - 20M - 8P	20	R 1/2	11.9	30	42.2	52.3	26.0
TMC - 20M - 12P	20	R 3/4	15.9	30	42.2	52.3	26.0
TMC - 22M - 12P	22	R 3/4	15.9	30	42.2	52.3	26.0
TMC - 22M - 16P	22	R 1	18.3	35	47.0	57.1	26.0
TMC - 25M - 12P	25	R 3/4	15.9	35	45.2	57.5	31.3
TMC - 25M - 16P	25	R 1	21.8	35	50.0	62.3	31.3
TMC - 28M - 16P	28	R 1	21.8	41	51.6	72.4	36.6
TMC - 28M - 20P	28	R 1-1/4	21.8	46	52.3	73.1	36.6
TMC - 32M - 20P	32	R 1-1/4	28.6	46	56.6	79.6	42.0
TMC - 32M - 24P	38	R 1-1/2	33.7	50	58.1	91.6	49.4

Reference Specifications :

- DIN - ISO 2999 •55° Thread angle
- BS - 21 •Truncation of root and crest are round
- JIS - B0203 •Taper angle 1° 47'

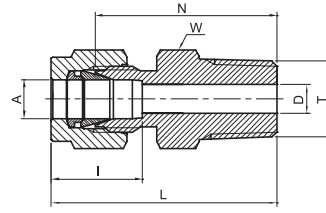


For inches, see next page

"D" - Dimension is minimum opening - dimensions are for reference only, and are subject to change without notice.

MALE CONNECTOR

TMC



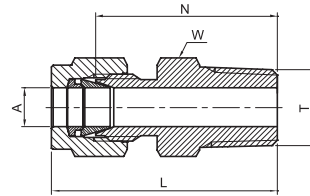
TUBE (INCH) ISO TAPERED THREAD													
Part Number	A Tube O.D.		T ISO	D		W Hex. flat		N		L		I	
	in	mm		in	in	mm	in	mm	in	mm	in	mm	in
TMC - 2 - 2P	1/8	3.17	R 1/8	0.09	2.28	7/16	11.1	0.94	23.90	1.20	30.48	0.50	12.7
TMC - 2 - 4P	1/8	3.17	R 1/4	0.09	2.28	9/16	14.3	1.14	28.95	1.40	35.56	0.50	12.7
TMC - 4 - 2P	1/4	6.35	R 1/8	0.19	4.82	1/2	12.7	1.00	25.40	1.29	32.76	0.60	15.3
TMC - 4 - 4P	1/4	6.35	R 1/4	0.19	4.82	9/16	14.3	1.20	30.50	1.49	37.85	0.60	15.3
TMC - 4 - 6P	1/4	6.35	R 3/8	0.19	4.82	11/16	17.5	1.21	30.78	1.51	38.35	0.60	15.3
TMC - 4 - 8P	1/4	6.35	R 1/2	0.19	4.82	7/8	22.2	1.47	37.34	1.76	44.70	0.60	15.3
TMC - 5 - 2P	5/16	7.93	R 1/8	0.19	4.82	9/16	14.3	1.05	26.67	1.34	34.03	0.64	16.2
TMC - 5 - 4P	5/16	7.93	R 1/4	0.25	6.35	9/16	14.3	1.23	31.24	1.52	38.60	0.64	16.2
TMC - 6 - 2P	3/8	9.52	R 1/8	0.19	4.82	5/8	15.9	1.10	27.90	1.39	35.30	0.66	16.9
TMC - 6 - 4P	3/8	9.52	R 1/4	0.28	7.11	5/8	15.9	1.28	32.51	1.57	39.87	0.66	16.9
TMC - 6 - 6P	3/8	9.52	R 3/8	0.28	7.11	11/16	17.5	1.28	32.51	1.57	39.87	0.66	16.9
TMC - 6 - 8P	3/8	9.52	R 1/2	0.28	7.11	7/8	22.2	1.53	38.90	1.82	46.23	0.66	16.9
TMC - 8 - 4P	1/2	12.70	R 1/4	0.28	7.11	13/16	20.6	1.31	33.27	1.71	43.43	0.90	22.9
TMC - 8 - 6P	1/2	12.70	R 3/8	0.38	9.65	13/16	20.6	1.31	33.27	1.71	43.43	0.90	22.9
TMC - 8 - 8P	1/2	12.70	R 1/2	0.41	10.41	7/8	22.2	1.53	38.90	1.93	49.02	0.90	22.9
TMC - 8 - 12P	1/2	12.70	R 3/4	0.41	10.41	1-1/16	27.0	1.59	40.38	1.99	50.54	0.90	22.9
TMC - 12 - 12P	3/4	19.05	R 3/4	0.62	15.74	1-1/16	27.0	1.59	40.38	1.99	50.54	0.96	24.5
TMC - 16 - 16P	1	25.40	R 1	0.88	22.35	1-3/8	34.9	1.97	50.03	2.45	62.23	1.23	31.2
TMC - 20 - 16P	1-1/4	31.75	R 1	0.86	21.80	1-3/4	44.5	2.17	55.12	3.04	77.22	1.62	41.2
TMC - 20 - 20P	1-1/4	31.75	R 1-1/4	1.09	27.70	1-3/4	44.5	2.17	55.12	3.04	77.22	1.62	41.2
TMC - 24 - 24P	1-1/2	38.10	R 1-1/2	1.34	34.00	2-1/8	54.0	2.43	61.72	3.50	88.90	1.97	50.0
TMC - 32 - 32P	2	50.80	R 2	1.81	45.97	2-3/4	69.9	3.00	76.20	4.47	113.54	2.66	67.6

"D" - Dimension is minimum opening - dimensions are for reference only, and are subject to change without notice.

MALE CONNECTOR

TMC

THERMOCOUPLE
CONNECTOR



TUBE (INCH) MALE NPT THREAD										
Part Number	A Tube O.D.		T NPT	W Hex. flat		N		L		
	in	mm		in	in	mm	in	mm	in	mm
TMC - 1 - 2NTC	1/16	1.58	1/8	7/16	11.1	0.88	22.35	1.03	26.10	
TMC - 2 - 2NTC	1/8	3.17	1/8	7/16	11.1	0.94	23.90	1.20	30.48	
TMC - 2 - 4NTC	1/8	3.17	1/4	9/16	14.3	1.14	28.95	1.40	35.56	
TMC - 3 - 2NTC	3/16	4.76	1/8	7/16	11.1	0.97	24.53	1.23	36.24	
TMC - 3 - 4NTC	3/16	4.76	1/4	9/16	14.3	1.17	29.72	1.43	36.32	
TMC - 4 - 2NTC	1/4	6.35	1/8	1/2	12.7	1.00	25.40	1.29	32.76	
TMC - 4 - 4NTC	1/4	6.35	1/4	9/16	14.3	1.20	30.50	1.49	37.85	
TMC - 4 - 6NTC	1/4	6.35	3/8	11/16	17.5	1.22	31.00	1.51	38.35	
TMC - 4 - 8NTC	1/4	6.35	1/2	7/8	22.2	1.47	37.34	1.76	44.70	
TMC - 5 - 4NTC	5/16	7.93	4/1	9/16	14.3	1.23	31.24	1.52	38.60	
TMC - 6 - 4NTC	3/8	9.52	4/1	5/8	15.9	1.28	32.51	1.57	39.87	
TMC - 6 - 6NTC	3/8	9.52	3/8	11/16	17.5	1.28	32.51	1.57	39.87	
TMC - 6 - 8NTC	3/8	9.52	1/2	7/8	22.2	1.52	38.90	1.82	46.23	
TMC - 6 - 12NTC	3/8	9.52	3/4	1-1/16	27.0	1.59	40.38	1.88	47.75	
TMC - 8 - 8NTC	1/2	12.70	1/2	7/8	22.2	1.53	38.90	1.93	49.02	
TMC - 8 - 12NTC	1/2	12.70	3/4	1-1/16	27.0	1.59	40.38	1.99	50.54	
TMC - 10 - 12NTC	5/8	15.87	3/4	1-1/16	27.0	1.59	40.38	1.99	50.54	
TMC - 12 - 12NTC	3/4	19.05	3/4	1-1/16	27.0	1.59	40.38	1.99	50.54	
TMC - 16 - 16NTC	1	25.40	1	1-3/8	34.9	1.97	50.03	2.45	62.23	

Bored-Through Fittings for Thermocouples, Dip Tubes, and Heat Exchanger Tees