

TUBE FITTINGS

삼원그린

서울시 구로구 구로3동 1129-60
TEL 02-859-3452 FAX 02-859-3460
1129-60, Guro 3-dong, Guro-gu, Seoul, Korea

www.sglok.com





ISO 9001 · ISO 14001 인증업체

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SG-Lok Instrumentation

TUBE FITTINGS



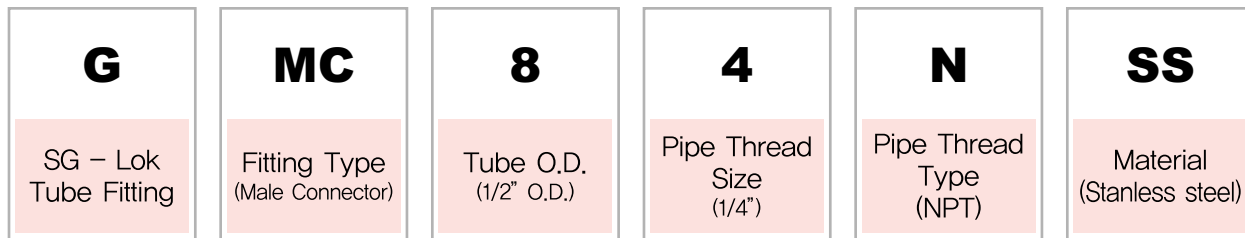
Tube Fittings

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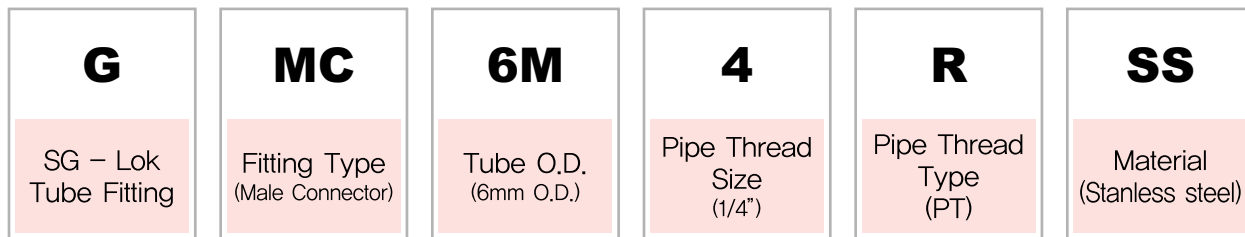
How to Order

- SG-Lok tube fittings parts numbers are constructed from symbols that identify the style and size of the fitting and material used.

FRACTIONAL TUBE NUMBERING SYSTEM



METRIC TUBE NUMBERING SYSTEM



- N : American National Standard Taper Pipe Threads (NPT:ANSI B1, 20,1)
- R : Taper Pipe Threads (PT:JIS B0203, ISO 7/1)
- G : Parallel Pipe Threads (PF:JIS B0202, ISO 228/1)
- SS : Stainless Steel
- BS : Brass
- CS : Carbon Steel
- MO : Monel
- IN : Inconel

SG-Lok Tube End Designator

Fractional Tube

Tube O.D.	1/16"	1/8"	3/16"	1/4"	5/16"	3/8"	1/2"	5/8"	3/4"	7/8"	1"	1-1/4"	1-1/2"	2"
Designation	1	2	3	4	5	6	8	10	12	14	16	20	24	32

Metric Tube

Tube O.D.	2mm	3mm	4mm	6mm	8mm	10mm	12mm	14mm	15mm	16mm	20mm	22mm	25mm	28mm	30mm	32mm	38mm
Designation	2M	3M	4M	6M	8M	10M	12M	14M	15M	16M	20M	22M	25M	28M	30M	32M	38M

Pipe Thread Designator

Nominal Size	1/16"	1/8"	1/4"	3/8"	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	Applicable Specifications
NPT	1N	2N	4N	6N	8N	12N	16N	20N	24N	32N	ANSI B1, 20, 1 (NPT)
ISO Tapered	1R	2R	4R	6R	8R	12R	16R	20R	24R	32R	JIS B0203(PT), DIN 2999, ISO 7/1, BS 21(BSPT)
ISO Parallel	1G	2G	4G	6G	8G	12G	16G	20G	24G	32G	JIS B0202(PF), DIN ISO 228/1, BS 2779(BSPP)
Unified Screw	1U	2U	4U	6U	8U	12U	16U	20U	24U	32U	American Standard Unified Screw Thread

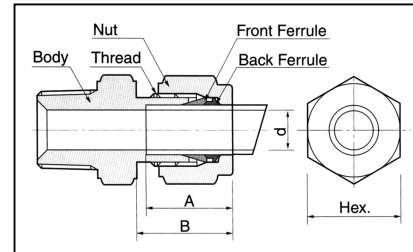
Tube Fittings

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Installation

◆ Desian introduction

Tube fittings are commonly used on instrumentation, process and control systems or any other application where a quality tube fitting is required



SG-Lok Fraction Tube End Dimensions Unit:mm

Size No.	Tube O.D.	Thread	A	B	d	Hex
2	1/8	5/16-20UN	12.70	15.24	2.28	11.11
3	3/16	3/8-20UN	13.70	16.00	3.04	12.70
4	1/4	7/16-20UNF	15.24	17.78	4.80	14.28
5	5/16	1/2-20UNF	16.25	18.54	6.35	15.87
6	3/8	9/16-20UNF	16.76	19.30	7.10	17.46
8	1/2	3/4-20UNEF	22.86	21.84	10.40	22.22
10	5/8	7/8-20UNEF	24.38	21.84	12.70	25.40
12	3/4	1-20UNEF	24.38	21.84	15.70	28.57
14	7/8	1-1/8-20UN	25.90	21.84	18.20	31.75
16	1	1-5/16-20UN	31.24	26.41	22.40	38.10

SG-Lok Metric Tube End Dimensions Unit:mm

Size No.	Tube O.D.	Thread	A	B	d	Hex
3M	3mm	5/16-20UN	12.9	15.3	2.4	11.11
4M	4mm	3/8-20UN	13.70	16.00	3.04	12.70
6M	6mm	7/16-20UNF	15.3	17.7	4.8	14.28
8M	8mm	1/2-20UNF	16.2	18.6	6.4	15.87
10M	10mm	5/8-20UNF	17.2	19.5	7.9	19.05
12M	12mm	3/4-20UNEF	22.8	22.0	9.5	22.22
15M	15mm	7/8-20UNEF	24.4	22.0	11.9	25.40
16M	16mm	7/8-20UNEF	24.4	22.0	12.7	25.40
18M	18mm	1-20UNEF	24.4	22.0	15.1	30.16
20M	20mm	1-1/8-20UN	26.0	22.0	15.9	31.75
22M	22mm	1-1/8-20UN	26.0	22.0	18.3	31.75
25M	25mm	1-5/16-20UN	31.3	26.5	21.8	38.10

◆ Assembly Instructions

SG-Lok tube fittings can be installed by using readily available wrenches.

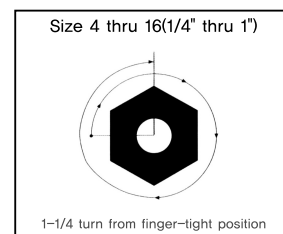
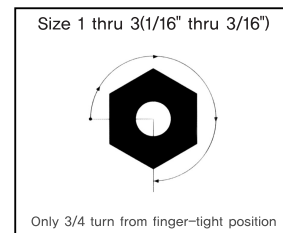
1. Insert the tubing into the SG-Lok fitting until the tubing sits on the shoulder of the body. Make sure the nut is finger-tight.
2. Form the finger-tight position, rotate the nut 3/4 for sizes between 1/16-inch and 3/16-inch ; and 1-1/4 turn for the sizes between 1/4-inch and 1-inch.



◆ Reassembly Instructions

SG-Lok tube fittings can be assembled and disassembled repeatedly. The following instructions should be carried out to reassemble a fitting.

1. Insert the tubing with the previously set ferreles into the SG-Lok fitting until the tubing sits on the shoulder of the body. Make sure the nut is finger-tight.
2. Using a wrench, from the finger-tight position, rotate the nut 3/4 for sizes between 1/16-inch and 3/16-inch ; and 1-1/4 turn for the sizes between 1/4-inch and 1-inch until sung, then tighten a little more.



Tube Fittings

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ALLOWABLE PRESSURE TABLES

Table 1 STAINLESS STEEL TUBING

Fully annealed high quality Type 304, 316, etc. Stainless Steel hydraulic tubing ASTM A-269 or A-213 or equivalent.

Tube O.D. (inch)	TUBE WALL THICKNESS (inches)												
	0.010	0.012	0.014	0.016	0.020	0.028	0.035	0.049	0.065	0.083	0.095	0.109	0.120
1/16	5500	6800	8100	9400	12000								
1/8						8500	10900						
3/16						5400	7000	10200					
1/4						4000	5100	7500	10200				
5/16							4000	5800	8000				
3/8							3300	4800	6500				
1/2							2400	3500	4700	6200			
5/8								2900	4000	5200	6000		
3/4								2400	3300	4200	4900	5800	
7/8								2000	2800	3600	4200	4800	
1									2400	3100	3600	4200	4700

ALLOWABLE STRESS = 20,000 psi between -20° F and 100° F (ANSI B31.3 code)

*working pressure(PSIG)

Safety Factor = 4 considering tensile strength to be 75,000 psi at room temperature.
Hardness Rb80 or less.

Table 2 COPPER TUBING

High quality soft annealed seamless copper tubing ASTM B-75 or equivalent.

Tube O.D. (inch)	TUBE WALL THICKNESS (inches)							
	0.028	0.035	0.049	0.065	0.083	0.095	0.109	0.120
1/8	2700	3400						
3/16	1800	2300	3400					
1/4	1300	1600	2500	3500				
5/16		1300	1900	2700				
3/8		1000	1600	2200				
1/2		800	1100	1600	2100			
5/8			900	1200	1600	1900		
3/4			700	1000	1300	1500	1800	
7/8			600	800	1100	1300	1500	
1			500	700	900	1100	1300	1500

ALLOWABLE STRESS = 6,500 psi between -20° F and 100° F (ANSI B31.3 code)

*working pressure(PSIG)

Safety Factor = 5 considering tensile strength to be 30,000 psi at room temperature.

Table 3 MONEL TUBING

Fully annealed quality seamless MONEL 400 hydraulic tubing ASTM B-165 or equivalent.

Tube O.D. (inch)	TUBE WALL THICKNESS (inches)							
	0.028	0.035	0.049	0.065	0.083	0.095	0.109	0.120
1/8	7900	10100						
1/4	3700	4800	7000	9500				
3/8		3100	4400	6100				
1/2		2300	3200	4400				
3/4			2200	3000	4000	4600		
1				2200	2900	3400	3900	4300

ALLOWABLE STRESS = 18,700 psi between -20° F and 100° F (ANSI B31.3 code)

*working pressure(PSIG)

Safety Factor = 4 considering tensile strength to be 70,000 psi at room temperature.
Hardness Rb75 maximum.

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Features

- SG-Lok flareless tube fittings have been specifically designed and manufactured for use on instrumentation, process and control systems, equipment employed in chemical, petroleum, nuclear power generation, and pulp and paper plants. The SG-Lok tube fitting has also found extensive application in other fields where a very high quality tube fitting is required.

Construction and Materials

- SG-Lok tube fittings are sequential phase controlled action, sealing and gripping device. Superior design, rigid manufacturing tolerances, and strict quality assurance programs produce an all-metal sealing and holding device which performs leak-free when properly installed.
- The SG-Lok flareless tube fittings consist of a body, a nut, front ferrule and back ferrule. Straight fittings are made of solid bar stock and shaped bodies (tees, elbows and crosses) are made from forgings, made from bar stock bought to special restricted requirement.

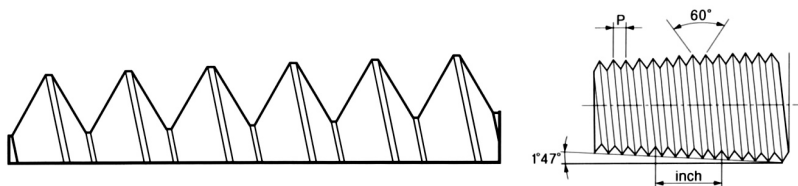
TYPICAL RAW MATERIAL SPECIFICATIONS			
BASIC FITTING MATERIAL	Bar Stock	Forging	Common Tubing Specification
STAINLESS STEEL (TYPE316)	ASTM A479, ASTM A276 ASME SA479	ASTM A182 F316 ASME SA182 F316	ASTM A213 ASME SA213 ASTM A249 ASTM A269 MIL T8504 MIL T8506 JIS G3459
	JIS G4303	JIS G3214	JIS G3459
BRASS	ASTM B16 Alloy360 ASTM B453 Alloy345 QQ-B626 Alloy360 JIS H3250 C3604	ASTM B124 Alloy377	ASTM B75 ASME SB75
	JIS G4051 S20C-S48C	JIS H3250 C3771	JIS H3300
CARBON STEEL	JIS G4051 S20C-S48C	JIS G4051 S20C-S48C	ASTM A161 ASTM A719 DIN 2391
MONEL 400TM	QQN281 Alloy405 QQN286 Alloy4500 ASTM B164	QQN281 Alloy400 ASTM B164	ASTM B165

Thread Information

- Threads of many kinds are used for different purposes in small piping components. The followings are the more common types of pipe threads.

1. NPT Tapered Pipe Threads

- NPT(National Pipe Tapered) is made to specifications outlined in ANSI B1. 2. This is the pipe thread used on the pipe end.



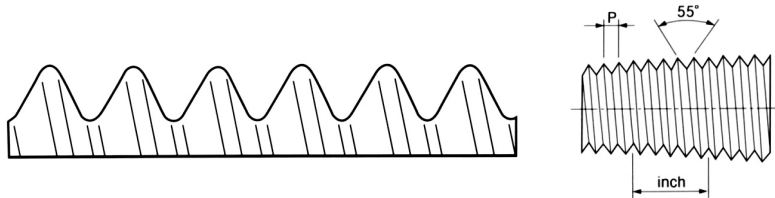
- 60° Thread Angle
- Taper Angle 1° 47'
- Truncation of root and crest are flat.
- Pitch measured in inches.

Tube Fittings

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2. ISO 7/1 Tapered Pipe Threads

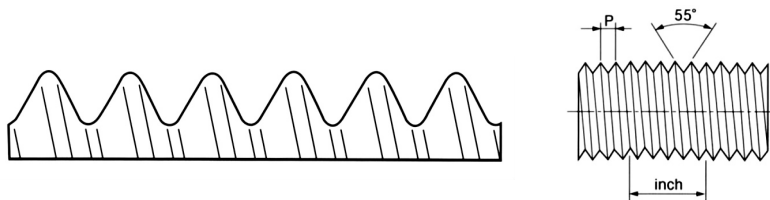
- International Organization for Standards(ISO 71/Tapered.(P.T)
ISO tapered threads are equivalent to DIN 2999, BSP TR, JIS B0203, R 1/8 and R 1/4 keg.
- In application ISO threads are used similar to NPT threads.
However, care should be used that ISO and NPT threads are not mixed. ISO threads have a 55° angle versus 60° for NPT. Thread pitch is usually measured in millimeters but may be expressed in inch. In many sizes the threads-per-inch are different and the root and crest configurations are different from NPT.



- 55° Thread Angle
- Taper Angle 1° 47'
- Truncation of root and crest are round.
- Pitch measured in millimeters.

3. ISO 228/1 Parallel Pipe Threads

- International Organization for Standards(ISO 228/1)paralle(PF)
ISO Parallel threads are equivalent to DIN ISO 228/1, BSP PL, JIS B0202, R 1/8 and R 1/4.
- These pipe threads are similar in configuration to 7/1 threads except there is no taper. Therefore do not work by thread interference like the tapered pipe threads of ISO 7/1 or NPT.
A gasket or O-Ring is normally used to seal into the parallel female threaded component.



- 55° Thread Angle
- Diameter measured in inches.
- Truncation of root and crest are round.
- Pitch measured in inches.

▶ Comparison Chart Pipe Threads










Nominal Size	Threads Per inch	Included Thread Angle	Pitch	Pipe O.D.
1/16"	NPT 27	60 °	0.037"	0.312"
	ISO 28	55 °	0.036"	0.312"
1/8"	NPT 27	60 °	0.037"	0.405"
	ISO 28	55 °	0.036"	0.398"
1/4"	NPT 18	60 °	0.0556"	0.540"
	ISO 19	55 °	0.053"	0.535"
3/8"	NPT 18	60 °	0.0556"	0.675"
	ISO 19	55 °	0.053"	0.672"
1/2"	NPT 14	60 °	0.0714"	0.840"
	ISO 14	55 °	0.071"	0.843"
3/4"	NPT 14	60 °	0.0714"	1.050"
	ISO 14	55 °	0.071"	1.060"
1"	NPT 11-1/2	60 °	0.087"	1.315"
	ISO 11	55 °	0.091"	1.331"
1-1/4"	NPT 11-1/2	60 °	0.087"	1.660"
	ISO 11	55 °	0.091"	1.669"
1-1/2"	NPT 11-1/2	60 °	0.087"	1.315"
	ISO 11	55 °	0.091"	1.331"
2"	NPT 11-1/2	60 °	0.087"	1.660"
	ISO 11	55 °	0.091"	1.669"

Tube Fittings







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Plug and Cap

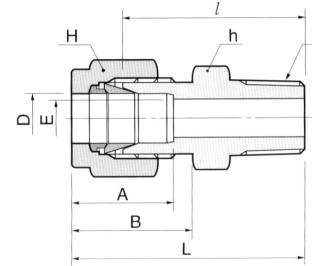
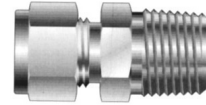
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Tube Fittings | Tube to Male Pipe

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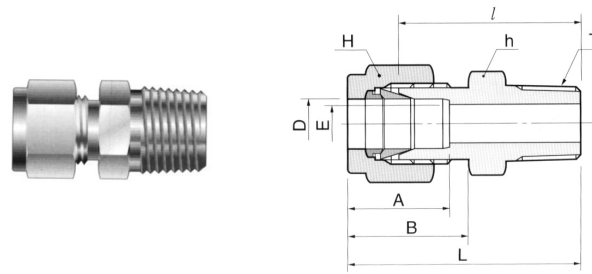
Connects fractional tube to female NPT thread

Part No.	Tube O.D.		T (NPT)	E Min.	Width across flat				A	B	φ	L
	D				h		H					
	in	mm			in	mm	in	mm				
GMC 1-1	1/16	1.59	1/16	1.27	5/16	7.93	5/16	7.93	8.63	10.92	20.00	23.83
GMC 1-2	1/16	1.59	1/8	1.27	7/16	11.11	5/16	7.93	8.63	10.92	22.35	26.23
GMC 1-4	1/16	1.59	1/4	1.27	9/16	14.28	5/16	7.93	8.63	10.92	27.17	30.98
GMC 2-1	1/8	3.17	1/16	2.28	7/16	11.11	7/16	11.11	12.70	15.24	23.11	29.71
GMC 2-2	1/8	3.17	1/8	2.28	7/16	11.11	7/16	11.11	12.70	15.24	23.87	30.48
GMC 2-4	1/8	3.17	1/4	2.28	9/16	14.28	7/16	11.11	12.70	15.24	28.95	35.56
GMC 2-6	1/8	3.17	3/8	2.28	11/16	17.46	7/16	11.11	12.70	15.24	29.21	35.81
GMC 2-8	1/8	3.17	1/2	2.28	7/8	22.22	7/16	11.11	12.70	15.24	35.56	42.16
GMC 3-2	3/16	4.76	1/8	3.04	7/16	11.11	1/2	12.70	13.71	16.00	24.63	31.24
GMC 3-4	3/16	4.76	1/4	3.04	9/16	14.28	1/2	12.70	13.71	16.00	29.71	36.32
GMC 4-1	1/4	6.35	1/16	4.82	1/2	12.70	9/16	14.28	15.24	17.78	25.40	32.76
GMC 4-2	1/4	6.35	1/8	4.82	1/2	12.70	9/16	14.28	15.24	17.78	25.40	32.76
GMC 4-4	1/4	6.35	1/4	4.82	9/16	14.28	9/16	14.28	15.24	17.78	30.48	37.84
GMC 4-6	1/4	6.35	3/8	4.82	11/16	17.46	9/16	14.28	15.24	17.78	30.98	38.35
GMC 4-8	1/4	6.35	1/2	4.82	7/8	22.22	9/16	14.28	15.24	17.78	37.33	44.70
GMC 4-12	1/4	6.35	3/4	4.82	1-1/16	26.98	9/16	14.28	15.24	17.78	38.86	46.22
GMC 5-2	5/16	7.93	1/8	4.82	9/16	14.28	5/8	15.87	16.25	18.54	26.67	34.03
GMC 5-4	5/16	7.93	1/4	6.35	9/16	14.28	5/8	15.87	16.25	18.54	31.24	38.60
GMC 5-6	5/16	7.93	3/8	6.35	11/16	17.46	5/8	15.87	16.25	18.54	31.75	39.11
GMC 5-8	5/16	7.93	1/2	6.35	7/8	22.22	5/8	15.87	16.25	18.54	38.11	45.60
GMC 6-2	3/8	9.52	1/8	4.28	5/8	15.87	11/16	17.46	16.75	19.30	27.94	35.30
GMC 6-4	3/8	9.52	1/4	7.11	5/8	15.87	11/16	17.46	16.75	19.30	32.51	39.87
GMC 6-6	3/8	9.52	3/8	7.11	11/16	17.46	11/16	17.46	16.75	19.30	32.51	39.87
GMC 6-8	3/8	9.52	1/2	7.11	7/8	22.22	11/16	17.46	16.75	19.30	38.86	46.22
GMC 6-12	3/8	9.52	3/4	7.11	1-1/16	26.98	11/16	17.46	16.75	19.30	40.38	47.75
GMC 8-2	1/2	12.70	1/8	4.82	13/16	20.64	7/8	22.22	22.86	21.84	28.70	38.86
GMC 8-4	1/2	12.70	1/4	7.11	13/16	20.64	7/8	22.22	22.86	21.84	33.27	43.43
GMC 8-6	1/2	12.70	3/8	9.65	13/16	20.64	7/8	22.22	22.86	21.84	33.27	43.43
GMC 8-8	1/2	12.70	1/2	10.41	7/8	22.22	7/8	22.22	22.86	21.84	38.86	49.02
GMC 8-12	1/2	12.70	3/4	10.41	1-1/16	26.98	7/8	22.22	22.86	21.84	40.38	50.54
GMC 8-16	1/2	12.70	1	10.41	1-3/8	34.92	7/8	22.22	22.86	21.84	46.99	57.15
GMC 10-6	5/8	15.87	3/8	9.65	15/16	23.81	1	25.40	24.38	21.84	34.03	44.19
GMC 10-8	5/8	15.87	1/2	11.93	15/16	23.81	1	25.40	24.38	21.84	38.86	49.02
GMC 10-12	5/8	15.87	3/4	12.70	1-1/16	26.98	1	25.40	24.38	21.84	40.38	50.54
GMC 12-8	3/4	19.05	1/2	11.93	1-1/16	26.98	1-1/8	28.58	24.38	21.84	40.38	50.54
GMC 12-12	3/4	19.05	3/4	15.74	1-1/16	26.98	1-1/8	28.58	24.38	21.84	40.38	50.54
GMC 12-16	3/4	19.05	1	15.74	1-3/8	34.92	1-1/8	28.58	24.38	21.84	46.99	57.15
GMC 14-12	7/8	22.22	3/4	15.74	1-3/16	30.16	1-1/4	31.75	25.90	21.84	40.38	50.54
GMC 14-16	7/8	22.22	1	18.28	1-3/8	34.92	1-1/4	31.75	25.90	21.84	46.99	57.15
GMC 16-8	1	25.40	1/2	11.93	1-3/8	34.92	1-1/2	38.10	31.24	26.41	45.21	57.40
GMC 16-12	1	25.40	3/4	15.74	1-3/8	34.92	1-1/2	38.10	31.24	26.41	45.21	57.40
GMC 16-16	1	25.40	1	22.35	1-3/8	34.92	1-1/2	38.10	31.24	26.41	50.03	62.23
GMC 20-16	1-1/4	31.75	1	22.35	1-3/4	44.45	1-7/8	47.63	41.14	38.86	55.11	77.21
GMC 20-20	1-1/4	31.75	1-1/4	27.68	1-3/4	44.45	1-7/8	47.63	41.14	38.86	55.11	77.21
GMC 20-24	1-1/4	31.75	1-1/2	27.68	1-3/4	44.45	1-7/8	47.63	41.14	38.86	60.54	82.64
GMC 24-20	1-1/2	38.10	1-1/4	27.68	2-1/8	53.98	2-1/4	57.15	50.03	45.21	59.42	86.60
GMC 24-24	1-1/2	38.10	1-1/2	34.03	2-1/8	53.98	2-1/4	57.15	50.03	45.21	61.72	88.90
GMC 24-32	1-1/2	38.10	2	34.03	2-3/4	69.85	2-1/4	57.15	50.03	45.21	62.42	99.75
GMC 32-8	2	50.80	1/2	11.93	2-3/4	69.85	3	76.20	67.56	62.73	68.40	105.73
GMC 32-20	2	50.80	1-1/4	45.97	2-3/4	69.85	3	76.20	67.56	62.73	71.40	108.73
GMC 32-24	2	50.80	1-1/2	45.97	2-3/4	69.85	3	76.20	67.56	62.73	75.50	112.83
GMC 32-32	2	50.80	2	45.97	2-3/4	69.85	3	76.20	67.56	62.73	76.20	113.53

Tube Fittings | Tube to Male Pipe

SAM WON GREEN

GMC
Male Connector



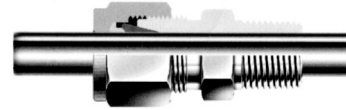
Connects metric tube to female ISO tapered thread

Part No.	Tube O.D. D	T (PT)	E Min	Width across flat		A	B	φ	L
				h	H				
GMC 2M-2R	2	1/8	1.7	11.11	11.11	12.9	15.3	23.9	30.5
GMC 3M-2R	3	1/8	2.4	11.11	11.11	12.9	15.3	23.1	29.7
GMC 3M-4R	3	1/4	2.4	14.28	11.11	12.9	15.3	29.0	35.6
GMC 4M-2R	4	1/8	2.4	11.11	12.70	13.7	16.1	24.6	31.2
GMC 4M-4R	4	1/4	2.4	14.28	12.70	13.7	16.1	29.7	36.3
GMC 6M-2R	6	1/8	4.8	12.70	14.28	15.3	17.7	25.4	32.8
GMC 6M-4R	6	1/4	4.8	14.28	14.28	15.3	17.7	30.2	37.6
GMC 6M-6R	6	3/8	4.8	17.46	14.28	15.3	17.7	31.0	38.4
GMC 6M-8R	6	1/2	4.8	22.22	14.28	15.3	17.7	37.3	44.0
GMC 8M-2R	8	1/8	4.8	14.28	15.87	16.2	18.6	26.7	34.2
GMC 8M-4R	8	1/4	6.4	14.28	15.87	16.2	18.6	31.2	38.7
GMC 8M-6R	8	3/8	6.4	17.46	15.87	16.2	18.6	31.8	39.2
GMC 8M-8R	8	1/2	6.4	22.22	15.87	16.2	18.6	37.3	44.8
GMC 10M-2R	10	1/8	4.8	17.46	19.05	17.2	19.5	28.7	36.3
GMC 10M-4R	10	1/4	7.1	17.46	19.05	17.2	19.5	33.3	40.9
GMC 10M-6R	10	3/8	7.9	17.46	19.05	17.2	19.5	33.3	40.9
GMC 10M-8R	10	1/2	7.9	22.22	19.05	17.2	19.5	38.1	45.7
GMC 12M-4R	12	1/4	7.1	20.63	22.22	22.8	22.0	33.3	43.4
GMC 12M-6R	12	3/8	9.5	20.63	22.22	22.8	22.0	33.3	43.4
GMC 12M-8R	12	1/2	9.5	22.22	22.22	22.8	22.0	38.1	48.2
GMC 12M-12R	12	3/4	9.5	26.98	22.22	22.8	22.0	38.9	49.0
GMC 15M-8R	15	1/2	11.9	23.81	25.40	24.4	22.0	38.9	49.0
GMC 16M-4R	16	1/4	7.1	23.81	25.40	24.4	22.0	34.0	44.1
GMC 16M-6R	16	3/8	9.5	23.81	25.40	24.4	22.0	34.0	44.1
GMC 16M-8R	16	1/2	11.9	23.81	25.40	24.4	22.0	38.9	49.0
GMC 16M-12R	16	3/4	12.7	26.98	25.40	24.4	22.0	38.9	49.0
GMC 18M-8R	18	1/2	11.9	26.98	30.16	24.4	22.0	40.4	50.5
GMC 18M-12R	18	3/4	15.1	26.98	30.16	24.4	22.0	40.4	50.5
GMC 20M-8R	20	1/2	11.9	30.16	31.75	26.0	22.0	42.2	52.3
GMC 20M-12R	20	3/4	15.9	30.16	31.75	26.0	22.0	42.2	52.3
GMC 22M-12R	22	3/4	15.9	30.16	31.75	26.0	22.0	42.2	52.3
GMC 22M-16R	22	1	18.3	34.92	31.75	26.0	22.0	47.8	57.9
GMC 25M-12R	25	3/4	15.9	34.92	38.10	31.3	26.5	45.2	57.5
GMC 25M-16R	25	1	21.8	34.92	38.10	31.3	26.5	50.0	62.3
GMC 28M-16R	28	1	21.8	41.27	46.04	36.6	36.6	51.6	72.4
GMC 28M-20R	28	1-1/4	21.8	46.04	46.04	36.6	36.6	52.3	73.1
GMC 30M-20R	30	1-1/4	26.0	46.04	49.21	39.6	39.2	55.6	77.2
GMC 32M-20R	32	1-1/4	28.6	46.04	49.21	42.0	41.6	56.6	79.6
GMC 38M-24R	38	1-1/2	33.7	55.56	60.32	49.4	47.9	64.0	91.6

Tube Fittings | Tube to Male Pipe

SAM WON GREEN

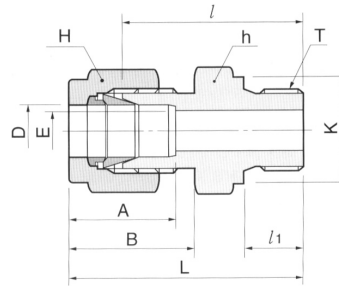
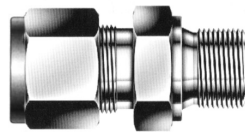
GTMC Thermocouple Male Connector



- Thermocouple or dip tubes are easily handled by SG-Lok Thermal Couple Male Connector. The root diameter of the pipe thread end of Male Connector Makes it impractical to bore through all male Connector. Suffix "T" Male Connector's identifier.

Note Male Connector whose the tube fitting end is larger than pipe thread end are not available at GTMC 10M-6R or N, GTMC 8-4R or N

GMC-G Male Connector for Bonded Seal



Connects fractional tube to IOS parallel thread

Part No.	Tube O.D.		T G(PF)	E Min.	Width across flat				A	B	ℓ	ℓ ₁	L	K
	D				h		H							
	in	mm			in	mm	in	mm						
GMC 2-2G	1/8	3.17	1/8	2.28	9/16	14.28	7/16	11.11	12.70	15.24	23.37	7.11	29.97	13.72
GMC 2-4G	1/8	3.17	1/4	2.28	3/4	19.05	7/16	11.11	12.70	15.24	28.70	11.18	35.31	18.03
GMC 2-6G	1/8	3.17	3/8	2.28	7/8	22.22	7/16	11.11	12.70	15.24	29.72	11.18	36.21	21.84
GMC 4-2G	1/4	6.35	1/8	2.28	9/16	14.28	9/16	14.28	15.24	17.78	24.89	7.11	32.26	13.72
GMC 4-4G	1/4	6.35	1/4	4.28	3/4	19.05	9/16	14.28	15.24	17.78	30.23	11.18	37.59	18.03
GMC 4-6G	1/4	6.35	3/8	4.28	7/8	22.22	9/16	14.28	15.24	17.78	31.50	11.18	38.86	21.84
GMC 4-8G	1/4	6.35	1/2	4.28	1-1/16	26.98	9/16	14.28	15.24	17.78	37.34	14.22	44.70	25.91
GMC 6-4G	3/8	9.53	1/4	4.28	3/4	19.05	11/16	17.46	16.76	19.30	31.75	11.18	39.12	18.03
GMC 6-6G	3/8	9.53	3/8	7.11	7/8	22.22	11/16	17.46	16.76	19.30	33.02	11.18	40.39	21.84
GMC 6-8G	3/8	9.53	1/2	7.11	1-1/16	26.98	11/16	17.46	16.76	19.30	38.86	14.22	46.23	25.91
GMC 8-4G	1/2	12.70	1/4	7.11	13/16	20.64	7/8	22.22	22.86	21.84	32.51	11.18	42.67	18.03
GMC 8-6G	1/2	12.70	3/8	9.65	7/8	22.22	7/8	22.22	22.86	21.84	33.02	11.18	43.18	21.84
GMC 8-8G	1/2	12.70	1/2	10.41	1-1/16	26.98	7/8	22.22	22.86	21.84	38.86	14.22	49.02	25.91
GMC 12-8G	3/4	19.05	1/2	11.93	1-1/16	26.98	1-1/8	28.58	24.38	21.84	38.86	14.22	49.02	25.91
GMC 12-12G	3/4	19.05	3/4	15.74	1-5/16	33.33	1-1/8	28.58	24.38	21.84	42.67	15.75	52.83	32.00
GMC 16-8G	1	25.40	1/2	11.93	1-3/8	34.92	1-1/2	38.10	31.24	26.41	43.69	14.22	52.88	25.91
GMC 16-16G	1	25.40	1	22.35	1-5/8	41.27	1-1/2	38.10	31.24	26.41	47.75	18.29	59.94	39.12
GMC 20-20G	1-1/4	31.75	1-1/4	27.68	2	50.80	1-7/8	47.63	41.14	38.86	51.16	20.00	73.26	49.00
GMC 24-24G	1-1/2	38.10	1-1/2	34.03	2-1/4	57.15	2-1/4	57.15	50.03	45.21	57.57	22.00	84.75	55.00

Tube Fittings | Tube to Male Pipe

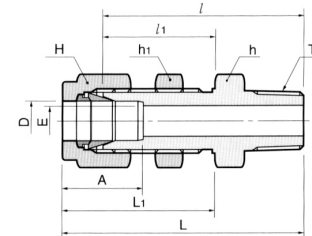
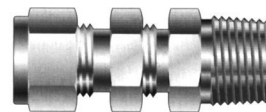
SAM WON GREEN

Connects metric tube to female ISO parallel thread

Part No.	Tube O.D. D(mm)	T G(PF)	E Min	Width across flat		A	B	ℓ	ℓ ₁	L	K
				h	H						
GMC 2M-2G	2	1/8	1.7	14.28	11.11	12.9	15.3	23.4	7.1	30.0	13.8
GMC 3M-2G	3	1/8	2.4	14.28	11.11	12.9	15.3	23.4	7.1	30.0	13.8
GMC 3M-4G	3	1/4	2.4	19.05	11.11	12.9	15.3	28.7	11.2	35.3	18.0
GMC 4M-2G	4	1/8	2.4	14.28	12.70	13.7	16.1	24.1	7.1	30.7	13.8
GMC 4M-4G	4	1/4	2.4	19.05	12.70	13.7	16.1	29.4	11.2	36.0	18.0
GMC 6M-2G	6	1/8	4.0	14.28	14.28	15.3	17.7	24.9	7.1	32.3	13.8,28
GMC 6M-4G	6	1/4	4.8	19.05	14.28	15.3	17.7	30.2	11.2	37.6	18.0
GMC 6M-6G	6	3/8	4.8	22.22	14.28	15.3	17.7	31.5	11.2	38.9	21.8
GMC 6M-8G	6	1/2	4.8	26.98	14.28	15.3	17.7	37.3	14.2	44.7	26.0
GMC 8M-2G	8	1/8	4.0	15.87	15.87	16.2	18.6	25.7	7.1	33.2	13.8
GMC 8M-4G	8	1/4	6.4	19.05	15.87	16.2	18.6	31.0	11.2	38.5	13.8
GMC 8M-6G	8	3/8	6.4	22.22	15.87	16.2	18.6	32.3	11.2	39.8	21.8
GMC 8M-8G	8	1/2	6.4	26.98	15.87	16.2	18.6	38.1	14.2	45.6	26.0
GMC 10M-4G	10	1/4	6.4	19.05	19.05	17.2	19.5	31.8	11.2	39.4	18.0
GMC 10M-6G	10	3/8	7.9	22.22	19.05	17.2	19.5	33.0	11.2	40.6	21.8
GMC 10M-8G	10	1/2	7.9	26.98	19.05	17.2	19.5	38.9	14.2	46.5	26.0
GMC 12M-4G	12	1/4	5.9	22.22	22.22	22.8	22.0	32.5	11.2	42.6	18.0
GMC 12M-6G	12	3/8	7.9	22.22	22.22	22.8	22.0	33.0	11.2	43.1	21.8
GMC 12M-8G	12	1/2	9.5	26.98	22.22	22.8	22.0	38.9	14.2	49.0	26.0
GMC 12M-12G	12	3/4	9.5	34.92	22.22	22.8	22.0	42.7	15.7	52.8	32.0
GMC 16M-6G	16	3/8	7.9	23.81	25.40	24.4	22.0	33.8	11.2	43.9	21.8
GMC 16M-8G	16	1/2	11.9	26.98	25.40	24.4	22.0	38.9	14.2	49.0	26.0
GMC 18M-8G	18	1/2	11.9	26.98	30.16	24.4	22.0	38.9	14.2	49.0	26.0
GMC 18M-12G	18	3/4	15.1	34.92	30.16	24.4	22.0	42.7	15.7	52.8	32.0
GMC 20M-8G	20	1/2	11.9	30.16	31.75	26.0	22.0	40.4	14.2	50.5	26.0
GMC 20M-12G	20	3/4	15.9	34.92	31.75	26.0	22.0	42.7	15.7	52.8	32.0
GMC 22M-12G	22	3/4	15.9	34.92	31.75	26.0	22.0	42.7	15.7	52.8	32.0
GMC 22M-16G	22	1	18.3	41.27	31.75	26.0	22.0	45.2	18.3	55.3	39.0
GMC 25M-12G	25	3/4	15.9	34.92	38.10	31.3	26.5	45.2	15.7	57.5	32.0
GMC 25M-16G	25	1	19.8	41.27	38.10	31.3	26.5	47.8	18.3	60.1	39.0
GMC 28M-16G	28	1	19.8	41.27	46.04	36.6	36.6	49.3	18.3	70.1	39.0
GMC 28M-20G	28	1-1/4	21.8	49.21	46.04	36.6	36.6	53.1	19.8	73.9	49.0
GMC 30M-20G	30	1-1/4	22.0	49.21	49.21	39.6	39.2	53.1	19.8	76.5	49.0
GMC 32M-20G	32	1-1/4	25.0	49.21	49.21	42.0	41.6	55.9	19.8	78.9	49.0
GMC 38M-24G	38	1-1/2	31.8	55.56	60.32	49.4	47.9	63.2	22.1	90.8	54.7

GBMC

Bulkhead Male Connector



Connects fractional tube to female NPT thread

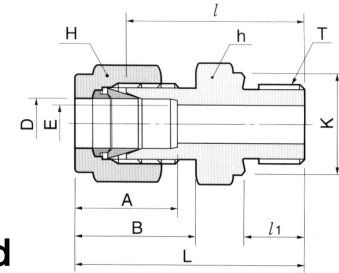
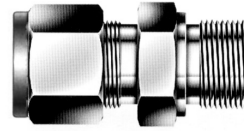
Part No.	Tube O.D. D		T (NPT)	E Min.	Width across flat				A	ℓ	ℓ ₁	L	L ₁	Panel Hole Drill size	Panel Max Thickness		
	in	mm			h	h ₁	H										
GBMC 2-2N	1/8	3.17	1/8	2.28	1/2	12.70	1/2	12.70	7/16	11.11	12.70	39.87	24.63	46.48	31.24	8.3	12.70
GBMC 4-2N	1/4	6.35	1/8	4.28	5/8	15.87	5/8	15.87	9.16	14.28	15.24	42.16	26.16	49.53	33.52	11.5	10.16
GBMC 4-4N	1/4	6.35	1/4	4.28	5/8	15.87	5/8	15.87	9.16	14.28	15.24	45.97	26.16	53.34	33.52	11.5	10.16
GBMC 6-4N	3/8	9.52	1/4	7.11	3/4	19.05	3/4	19.05	11/16	17.46	16.76	50.03	29.46	57.40	36.83	14.7	11.17
GBMC 6-6N	3/8	9.52	3/8	7.11	3/4	19.05	3/4	19.05	11/16	17.46	16.76	50.03	29.46	57.40	36.83	14.7	11.17
GBMC 6-8N	3/8	9.52	1/2	7.11	7/8	22.22	3/4	19.05	11/16	17.46	16.76	56.38	29.46	68.75	36.83	14.7	11.17
GBMC 8-6N	1/2	12.70	3/8	9.39	15/16	23.81	15/16	23.81	7/8	22.22	22.86	53.08	31.75	63.24	41.91	19.4	12.70
GBMC 8-8N	1/2	12.70	1/2	10.41	15/16	23.81	15/16	23.81	7/8	22.22	22.86	58.67	31.75	68.83	41.91	19.4	12.70
GBMC 12-12N	3/4	19.05	3/4	15.74	1-3/16	30.16	1-3/16	30.16	1-1/8	28.58	24.38	66.04	37.33	76.20	47.49	25.8	16.76
GBMC 16-16N	1	25.40	1	22.35	1-5/8	41.28	1-5/8	41.28	1-1/2	38.10	31.24	81.02	45.21	93.21	57.40	33.7	19.05
GBMC 20-20N	1-1/4	31.75	1-1/4	27.68	1-7/8	47.63	1-7/8	47.63	1-7/8	47.63	41.14	85.97	47.75	108.07	69.85	42.0	19.05
GBMC 24-24N	1-1/2	38.10	1-1/2	34.03	2-1/4	57.15	2-1/4	57.15	2-1/4	57.15	50.03	93.03	49.27	120.21	76.45	50.0	19.05
GBMC 32-32N	2	50.80	2	45.97	2-3/4	69.85	2-3/4	69.85	3	76.20	67.56	107.29	56.38	144.62	93.71	58.0	19.05

Tube Fittings | Tube to Male Pipe

SAM WON GREEN

GMC-M

Male Connector for Metal Gasket



Connects fractional tube to female ISO parallel thread

Part No.	Tube O.D. D		T M(PF)	E Min.	Width across flat				A	B	ℓ	ℓ1	L	K
	in	mm			h	H	in	mm						
GMC 2-2M	1/8	3.17	1/8	2.28	9/16	14.28	7/16	11.11	12.70	15.24	23.37	7.11	29.97	13.72
GMC 2-4M	1/8	3.17	1/4	2.28	3/4	19.05	7/16	11.11	12.70	15.24	28.70	11.18	35.31	18.03
GMC 2-6M	1/8	3.17	3/8	2.28	7/8	22.22	7/16	11.11	12.70	15.24	29.72	11.18	36.21	21.84
GMC 4-2M	1/4	6.35	1/8	2.28	9/16	14.28	9/16	14.28	15.24	17.78	24.89	7.11	32.26	13.72
GMC 4-4M	1/4	6.35	1/4	4.28	3/4	19.05	9/16	14.28	15.24	17.78	30.23	11.18	37.59	18.03
GMC 4-6M	1/4	6.35	3/8	4.28	7/8	22.22	9/16	14.28	15.24	17.78	31.50	11.18	38.86	21.84
GMC 4-8M	1/4	6.35	1/2	4.28	1-1/16	26.98	9/16	14.28	15.24	17.78	37.34	14.22	44.70	25.91
GMC 6-4M	3/8	9.53	1/4	4.28	3/4	19.05	11/16	17.46	16.76	19.30	31.75	11.18	39.12	18.03
GMC 6-6M	3/8	9.53	3/8	7.11	7/8	22.22	11/16	17.46	16.76	19.30	33.02	11.18	40.39	21.84
GMC 6-8M	3/8	9.53	1/2	7.11	1-1/16	26.98	11/16	17.46	16.76	19.30	38.86	14.22	46.23	25.91
GMC 8-4M	1/2	12.70	1/4	7.11	13/16	20.64	7/8	22.22	22.86	21.84	32.51	11.18	42.67	18.03
GMC 8-6M	1/2	12.70	3/8	9.65	7/8	22.22	7/8	22.22	22.86	21.84	33.02	11.18	43.18	21.84
GMC 8-8M	1/2	12.70	1/2	10.41	1-1/16	26.98	7/8	22.22	22.86	21.84	38.86	14.22	49.02	25.91
GMC 12-8M	3/4	19.05	1/2	11.93	1-1/16	26.98	1-1/8	28.58	24.38	21.84	38.86	14.22	49.02	25.91
GMC 12-12M	3/4	19.05	3/4	15.74	1-5/16	33.33	1-1/8	28.58	24.38	21.84	42.67	15.75	52.83	32.00
GMC 16-8M	1	25.40	1/2	11.93	1-3/8	34.92	1-1/2	38.10	31.24	26.41	43.69	14.22	55.88	25.91
GMC 16-16M	1	25.40	1	22.35	1-5/8	41.27	1-1/2	38.10	31.24	26.41	47.75	18.29	59.94	39.12
GMC 20-20M	1-1/4	31.75	1-1/4	27.68	2	50.80	1-7/8	47.63	41.14	38.86	51.16	20.00	73.26	49.00
GMC 24-24M	1-1/2	38.10	1-1/2	34.03	2-1/4	57.15	2-1/4	57.15	50.03	45.21	57.57	22.00	84.75	55.00

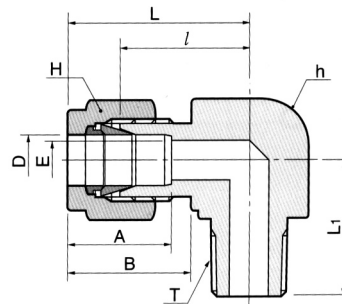
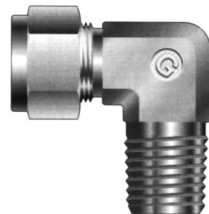
Connects metric tube to female ISO parallel thread

Part No.	Tube O.D. D(mm)	T M(PF)	E Min	Width across flat		A	B	ℓ	ℓ1	L	K
				h	H						
GMC 3M-2M	3	1/8	2.4	14.28	11.11	12.9	15.3	23.4	7.1	30.0	13.8
GMC 3M-4M	3	1/4	2.4	19.05	11.11	12.9	15.3	28.7	11.2	35.3	18.0
GMC 4M-2M	4	1/8	2.4	14.28	12.70	13.7	16.1	24.1	7.1	30.7	13.8
GMC 6M-2M	6	1/8	4.0	14.28	14.28	15.3	17.7	24.9	7.1	32.3	13.8
GMC 6M-4M	6	1/4	4.8	19.05	14.28	15.3	17.7	30.2	11.2	37.6	18.0
GMC 6M-6M	6	3/8	4.8	22.22	14.28	15.3	17.7	31.5	11.2	38.9	21.8
GMC 6M-8M	6	1/2	4.8	26.98	14.28	15.3	17.7	37.3	14.2	44.7	26.0
GMC 8M-2M	8	1/8	4.0	15.87	15.87	16.2	18.6	25.7	7.1	33.2	13.8
GMC 8M-4M	8	1/4	6.4	19.05	15.87	16.2	18.6	31.0	11.2	38.5	13.8
GMC 8M-6M	8	3/8	6.4	22.22	15.87	16.2	18.6	32.3	11.2	39.8	21.8
GMC 8M-8M	8	1/2	6.4	26.98	15.87	16.2	18.6	38.1	14.2	45.6	26.0
GMC 10M-4M	10	1/4	5.9	19.05	19.05	17.2	19.5	31.8	11.2	39.4	18.0
GMC 10M-6M	10	3/8	7.9	22.22	19.05	17.2	19.5	33.0	11.2	40.6	21.8
GMC 10M-8M	10	1/2	7.9	26.98	19.05	17.2	19.5	38.9	14.2	46.5	26.0
GMC 12M-4M	12	1/4	5.9	22.22	22.22	22.8	22.0	32.5	11.2	42.6	18.0
GMC 12M-6M	12	3/8	7.9	22.22	22.22	22.8	22.0	33.0	11.2	43.1	21.8
GMC 12M-8M	12	1/2	9.5	26.98	22.22	22.8	22.0	38.9	14.2	49.0	26.0
GMC 12M-12M	12	3/4	9.5	31.75	22.22	22.8	22.0	42.7	15.7	52.8	32.0
GMC 15M-8M	15	1/2	11.9	26.98	25.4	24.4	22.0	33.9	14.2	49.0	26.0
GMC 16M-6M	16	3/8	7.9	23.81	25.4	24.4	22.0	33.8	11.2	43.9	21.8
GMC 16M-8M	16	1/2	11.9	26.98	25.4	24.4	22.0	38.9	14.2	49.0	26.0
GMC 18M-8M	18	1/2	11.9	26.98	30.16	24.4	22.0	38.9	14.2	49.0	26.0
GMC 18M-12M	18	3/4	15.1	34.92	30.16	24.4	22.0	42.7	15.7	52.8	32.0
GMC 20M-8M	20	1/2	11.9	30.16	31.75	26.0	22.0	40.4	14.2	50.5	26.0
GMC 20M-12M	20	3/4	15.9	34.92	31.75	26.0	22.0	42.7	15.7	52.8	32.0
GMC 22M-12M	22	3/4	15.9	34.92	31.75	26.0	22.0	42.7	15.7	52.8	32.0
GMC 22M-16M	22	1	18.3	41.27	31.75	26.0	22.0	45.2	18.3	55.3	39.0
GMC 25M-12M	25	3/4	15.9	34.92	38.10	31.3	26.5	45.2	15.7	57.5	32.0
GMC 25M-16M	25	1	19.8	41.27	38.10	31.3	26.5	47.8	18.3	60.1	39.0
GMC 28M-16M	28	1	19.8	41.27	46.04	36.6	36.6	49.3	18.3	70.1	39.0
GMC 28M-20M	28	1-1/4	21.8	46.04	46.04	36.6	36.6	53.1	19.8	73.9	49.0
GMC 32M-20M	32	1-1/4	28.6	46.04	49.21	42.0	41.6	55.9	19.8	78.9	49.0
GMC 38M-24M	38	1-1/2	31.8	55.56	60.32	49.4	47.9	61.7	20.6	89.3	54.7

Tube Fittings | Tube to Male Pipe

SAM WON GREEN

GME Male Elbow



Connects fractional tube to female NPT thread

Part No.	Tube O.D.		T (NPT)	E Min.	Width across flat				A	B	ℓ	L	L1
	D				h		H						
	in	mm			in	mm	in	mm					
GME 1-1N	1/16	1.59	1/16	1.27	7/16	11.11	5/16	7.93	8.63	10.92	15.24	19.05	17.78
GME 1-2N	1/16	1.59	1/8	1.27	7/16	11.11	5/16	7.93	8.63	10.92	15.24	19.05	17.78
GME 2-2N	1/8	3.17	1/8	2.28	1/2	12.07	7/16	11.11	12.70	15.24	18.30	24.91	18.90
GME 2-4N	1/8	3.17	1/4	2.28	1/2	12.07	7/16	11.11	12.70	15.24	18.30	24.91	23.36
GME 3-2N	3/16	4.76	1/8	3.04	1/2	12.07	1/2	12.70	13.71	16.00	18.79	25.40	18.79
GME 3-4N	3/16	4.76	1/4	3.04	1/2	12.07	1/2	12.70	13.71	16.00	18.79	25.40	23.36
GME 4-1N	1/4	6.35	1/16	3.04	1/2	12.07	9/16	14.28	15.24	17.78	19.55	26.47	18.79
GME 4-2N	1/4	6.35	1/8	4.82	1/2	12.07	9/16	14.28	15.24	17.78	19.55	26.90	18.79
GME 4-4N	1/4	6.35	1/4	4.82	1/2	12.07	9/16	14.28	15.24	17.78	19.81	27.18	23.87
GME 4-6N	1/4	6.35	3/8	4.82	11/16	17.46	9/16	14.28	15.24	17.78	22.35	29.71	26.20
GME 4-8N	1/4	6.35	1/2	4.82	13/16	20.64	9/16	14.28	15.24	17.78	24.60	31.97	33.02
GME 5-2N	5/16	7.93	1/8	4.82	9/16	14.28	5/8	15.87	16.25	18.54	21.33	28.70	19.81
GME 5-4N	5/16	7.93	1/4	6.35	9/16	14.28	5/8	15.87	16.25	18.54	21.33	29.77	24.50
GME 5-6N	5/16	7.93	3/8	6.35	11/16	17.46	5/8	15.87	16.25	18.54	23.11	30.48	26.20
GME 6-2N	3/8	9.52	1/8	4.82	5/8	15.87	11/16	17.46	16.76	19.30	23.11	30.48	20.60
GME 6-4N	3/8	9.52	1/4	7.11	5/8	15.87	11/16	17.46	16.76	19.30	23.11	30.48	25.40
GME 6-6N	3/8	9.52	3/8	7.11	11/16	17.46	11/16	17.46	16.76	19.30	23.87	31.24	26.20
GME 6-8N	3/8	9.52	1/2	7.11	13/16	20.64	11/16	17.46	16.76	19.30	25.90	31.24	33.02
GME 6-12N	3/8	9.52	3/4	7.11	1-1/16	26.98	11/16	17.46	16.76	19.30	29.71	37.08	36.83
GME 8-4N	1/2	12.70	1/4	7.11	13/16	20.64	7/8	22.22	22.86	21.84	25.90	36.06	28.30
GME 8-6N	1/2	12.70	3/8	9.65	13/16	20.64	7/8	22.22	22.86	21.84	25.90	36.06	28.30
GME 8-8N	1/2	12.70	1/2	10.41	13/16	20.64	7/8	22.22	22.86	21.84	25.90	36.06	33.02
GME 8-12N	1/2	12.70	3/4	10.41	1-1/16	26.98	7/8	22.22	22.86	21.84	29.71	39.87	36.83
GME 10-6N	5/8	15.87	3/8	9.65	15/16	23.81	1	25.40	24.38	21.84	28.00	37.06	30.22
GME 10-8N	5/8	15.87	1/2	11.93	15/16	23.81	1	25.40	24.38	21.84	28.00	37.06	35.10
GME 10-12N	5/8	15.87	3/4	12.70	1-1/16	26.98	1	25.40	24.38	21.84	29.71	39.87	36.83
GME 12-8N	3/4	19.05	1/2	11.93	1-1/16	26.98	1-1/8	28.57	24.38	21.84	29.71	39.87	37.00
GME 12-12N	3/4	19.05	3/4	15.74	1-1/16	26.98	1-1/8	28.57	24.38	21.84	29.71	39.87	36.83
GME 14-12N	7/8	22.22	3/4	15.74	1-3/8	34.92	1-1/4	31.75	25.90	21.84	34.54	44.70	41.65
GME 16-12N	1	25.40	3/4	15.74	1-3/8	34.92	1-1/2	38.10	31.24	26.41	36.83	49.02	42.20
GME 16-16N	1	25.40	1	22.35	1-3/8	34.92	1-1/2	38.10	31.24	26.41	36.83	49.02	46.70
GME 20-20N	1-1/4	31.75	1-1/4	27.68	1-11/16	42.86	1-7/8	47.63	41.14	38.86	44.50	66.54	47.75
GME 24-24N	1-1/2	38.10	1-1/2	34.03	2	50.80	2-1/4	57.15	50.03	45.21	50.80	77.97	60.45
GME 32-32N	2	50.80	2	45.97	2-3/4	69.85	3	76.20	62.73	63.73	69.80	107.18	70.61

Tube Fittings | Tube to Male Pipe

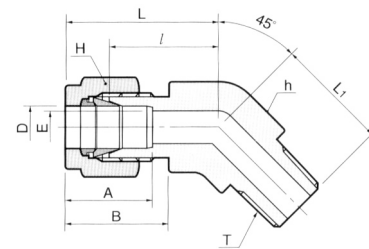
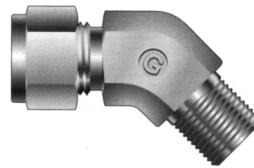
SAM WON GREEN

Connects metric tube to female ISO tapered thread

Part No.	Tube O.D. D(mm)	T (PT)	E Min	Width across flat		A	B	φ	L	L1
				h	H					
GME 3M-2R	3	1/8	2.4	12.70	11.11	12.9	15.3	17.0	23.6	17.8
GME 3M-4R	3	1/4	2.4	12.70	11.11	12.9	15.3	18.0	24.6	23.4
GME 4M-2R	4	1/8	2.4	12.70	12.70	13.7	16.1	18.8	25.4	18.8
GME 4M-4R	4	1/4	2.4	12.70	12.70	13.7	16.1	18.8	25.4	23.4
GME 6M-2R	6	1/8	4.8	12.70	14.28	15.3	17.7	19.6	27.0	18.8
GME 6M-4R	6	1/4	4.8	12.70	14.28	15.3	17.7	19.6	27.0	23.4
GME 6M-6R	6	3/8	4.8	17.46	14.28	15.3	17.7	22.4	29.8	26.2
GME 6M-8R	6	1/2	4.8	20.63	14.28	15.3	17.7	24.4	31.8	33.0
GME 8M-2R	8	1/8	4.8	14.28	15.87	16.2	18.6	21.3	28.8	19.8
GME 8M-4R	8	1/4	6.4	14.28	15.87	16.2	18.6	21.3	28.8	24.4
GME 8M-6R	8	3/8	6.4	17.46	15.87	16.2	18.6	23.1	30.6	26.2
GME 8M-8R	8	1/2	6.4	20.63	15.87	16.2	18.6	25.1	32.6	33.0
GME 10M-2R	10	1/8	4.8	17.46	19.05	17.2	19.5	23.9	31.5	23.6
GME 10M-4R	10	1/4	7.1	17.46	19.05	17.2	19.5	23.9	31.5	26.2
GME 10M-6R	10	3/8	7.9	17.46	19.05	17.2	19.5	23.9	31.5	26.2
GME 10M-8R	10	1/2	7.9	20.63	19.05	17.2	19.5	25.9	33.5	33.0
GME 12M-2R	12	1/8	4.8	20.63	22.22	22.8	22.0	25.9	36.0	23.6
GME 12M-4R	12	1/4	7.1	20.63	22.22	22.8	22.0	25.9	36.0	28.2
GME 12M-6R	12	3/8	9.5	20.63	22.22	22.8	22.0	25.9	36.0	28.2
GME 12M-8R	12	1/2	9.5	20.63	22.22	22.8	22.0	25.9	36.0	33.0
GME 12M-12R	12	3/4	9.5	26.98	22.22	22.8	22.0	29.7	39.8	36.8
GME 16M-6R	16	3/8	9.5	25.40	25.40	24.4	22.0	27.9	38.0	30.2
GME 16M-8R	16	1/2	11.9	25.40	25.40	24.4	22.0	27.9	38.0	35.1
GME 16M-12R	16	3/4	12.7	26.98	25.40	24.4	22.0	29.7	39.8	36.8
GME 18M-8R	18	1/2	11.9	26.98	30.16	24.4	22.0	29.7	39.8	36.8
GME 18M-12R	18	3/4	15.1	26.98	30.16	24.4	22.0	29.7	39.8	36.8
GME 20M-8R	20	1/2	11.9	31.75	31.75	26.0	22.0	34.5	44.6	41.7
GME 20M-12R	20	3/4	15.9	31.75	31.75	26.0	22.0	34.5	44.6	41.7
GME 22M-12R	22	3/4	15.9	34.92	31.75	26.0	22.0	34.5	44.6	41.7
GME 22M-16R	22	1	18.3	34.92	31.75	26.0	22.0	34.5	44.6	46.5
GME 25M-12R	25	3/4	15.9	34.92	38.10	31.3	26.5	36.8	49.1	41.7
GME 25M-16R	25	1	21.8	34.92	38.10	31.3	26.5	36.8	49.1	46.5

GME45D

45° Male Elbow



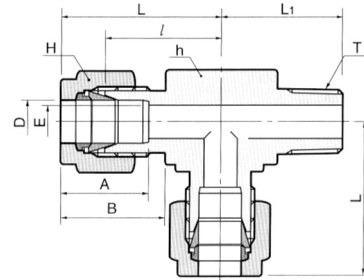
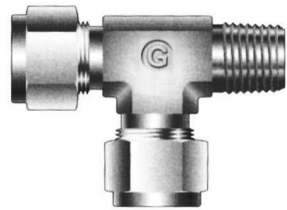
Connects fractional tube to female NPT thread

Part No.	Tube O.D. D		T (NPT)	E Min.	Width across flat				A	B	φ	L	L1
	in	mm			h		H						
					in	mm	in	mm					
GME45D 4-2N	1/4	6.35	1/8	4.82	1/2	12.70	9/16	14.28	15.24	17.78	17.27	24.63	16.51
GME45D 4-4N	1/4	6.35	1/4	4.82	1/2	12.70	9/16	14.28	15.24	17.78	17.27	24.63	21.08
GME45D 6-2N	3/8	9.52	1/8	4.82	5/8	15.87	11/16	17.46	16.76	19.30	20.57	27.94	18.28
GME45D 6-4N	3/8	9.52	1/4	7.11	5/8	15.87	11/16	17.46	16.76	19.30	20.57	27.94	22.86
GME45D 6-6N	3/8	9.52	3/8	7.11	13/16	20.63	11/16	17.46	16.76	19.30	21.84	29.21	24.13
GME45D 8-6N	1/2	12.70	3/8	9.65	13/16	20.63	7/8	22.22	22.86	21.84	21.84	32.00	24.13
GME45D 8-8N	1/2	12.70	1/2	10.41	13/16	20.63	7/8	22.22	22.86	21.84	21.84	32.00	28.95
GME45D 12-12N	3/4	19.05	3/4	15.74	1-1/8	28.57	1-1/8	28.57	24.38	21.84	23.87	34.03	30.98
GME45D 16-16N	1	25.40	1	22.35	1-3/8	34.92	1-1/2	38.10	31.24	26.41	28.19	40.38	37.84

Tube Fittings | Tube to Male Pipe

SAM WON GREEN

GMRT Male Run Tee



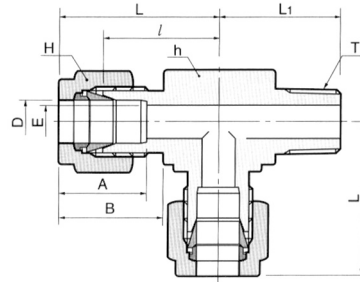
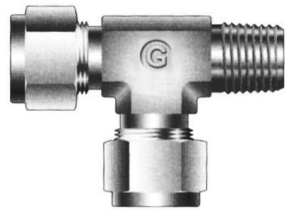
Connects fractional tube to female NPT thread

Part No.	Tube O.D. D		T (NPT)	E Min.	Width across flat				A	B	Ø	L	L1
	in	mm			h		H						
					in	mm	in	mm					
GMRT 1-1N	1/16	1.59	1/16	1.27	7/16	11.11	5/16	7.93	8.63	10.92	15.24	19.05	17.78
GMRT 1-2N	1/16	1.59	1/8	1.27	7/16	11.11	5/16	7.93	8.63	10.92	15.24	19.05	17.78
GMRT 2-2N	1/8	3.17	1/8	2.28	1/2	12.70	7/16	11.11	12.70	15.24	18.30	24.91	18.90
GMRT 2-4N	1/8	3.17	1/4	2.28	1/2	12.70	7/16	11.11	12.70	15.24	18.30	24.91	23.36
GMRT 3-2N	3/16	4.76	1/8	3.04	1/2	12.70	1/2	12.70	13.71	16.00	18.79	24.38	18.79
GMRT 3-4N	3/16	4.76	1/4	3.04	1/2	12.70	1/2	12.70	13.71	16.00	18.79	25.40	23.36
GMRT 4-1N	1/4	6.35	1/16	3.04	1/2	12.70	9/16	14.28	15.24	17.78	19.55	26.90	18.79
GMRT 4-2N	1/4	6.35	1/8	4.82	1/2	12.70	9/16	14.28	15.24	17.78	19.55	26.92	18.79
GMRT 4-4N	1/4	6.35	1/4	4.82	1/2	12.70	9/16	14.28	15.24	17.78	19.55	27.08	23.87
GMRT 4-6N	1/4	6.35	3/8	4.82	11/16	17.46	9/16	14.28	15.24	17.78	22.35	29.71	28.40
GMRT 4-8N	1/4	6.35	1/2	4.82	13/16	20.64	9/16	14.28	15.24	17.78	24.60	31.97	35.10
GMRT 5-2N	5/16	7.93	1/8	4.82	9/16	14.28	5/8	15.87	16.25	18.54	22.35	29.71	19.81
GMRT 5-4N	5/16	7.93	1/4	6.35	9/16	14.28	5/8	15.87	16.25	18.54	22.35	29.77	24.50
GMRT 5-6N	5/16	7.93	3/8	6.35	11/16	17.46	5/8	15.87	16.25	18.54	23.11	30.48	28.40
GMRT 6-4N	3/8	9.52	1/4	7.11	5/8	15.87	1/16	17.46	16.76	19.30	23.11	30.48	25.40
GMRT 6-6N	3/8	9.52	3/8	7.11	11/16	17.46	11/16	17.46	16.76	19.30	23.87	31.24	28.44
GMRT 6-8N	3/8	9.52	1/2	7.11	13/16	20.63	11/16	17.46	16.76	19.30	25.90	33.27	33.02
GMRT 6-12N	3/8	9.52	3/4	7.11	1-1/16	26.98	11/16	17.46	16.76	19.30	29.71	37.08	36.83
GMRT 8-4N	1/2	12.70	1/4	7.11	13/16	20.63	7/8	22.22	22.86	21.84	25.90	36.06	28.30
GMRT 8-6N	1/2	12.70	3/8	9.65	13/16	20.63	7/8	22.22	22.86	21.84	25.90	36.06	28.30
GMRT 8-8N	1/2	12.70	1/2	10.41	13/16	20.63	7/8	22.22	22.86	21.84	25.90	36.06	33.02
GMRT 8-12N	1/2	12.70	3/4	10.41	1-1/16	26.98	7/8	22.22	22.86	21.84	29.71	39.84	36.83
GMRT 10-6N	5/8	15.87	3/8	9.65	15/16	23.81	1	25.40	24.38	21.84	27.90	38.10	29.40
GMRT 10-8N	5/8	15.87	1/2	11.93	15/16	23.81	1	25.40	24.38	21.84	27.90	38.10	34.00
GMRT 10-12N	5/8	15.87	3/4	12.70	1-1/16	26.98	1	25.40	24.38	21.84	29.71	39.87	36.83
GMRT 12-8N	3/4	19.05	1/2	11.93	1-1/16	26.98	1-1/8	28.57	24.38	21.84	29.71	39.87	37.00
GMRT 12-12N	3/4	19.05	3/4	15.74	1-1/16	26.98	1-1/8	28.57	24.38	21.84	29.71	39.87	36.83
GMRT 14-12N	7/8	22.22	3/4	15.74	1-3/8	34.92	1-1/4	31.75	25.90	21.84	34.54	44.70	41.65
GMRT 16-12N	1	25.40	3/4	15.74	1-3/8	34.92	1-1/2	38.10	31.24	26.41	36.83	49.02	42.20
GMRT 16-16N	1	25.40	1	22.35	1-3/8	34.92	1-1/2	38.10	31.24	26.41	36.83	49.02	46.70
GMRT 20-20N	1-1/4	31.75	1-1/4	27.68	1-11/16	42.86	1-7/8	47.63	41.14	38.86	44.50	66.54	47.75
GMRT 24-24N	1-1/2	38.10	1-1/2	34.03	2	50.80	2-1/4	57.15	50.03	45.21	50.80	77.97	60.45
GMRT 32-32N	2	50.80	2	45.97	2-3/4	69.85	3	76.20	67.56	62.73	69.80	107.18	70.61

Tube Fittings | Tube to Male Pipe

SAM WON GREEN

GMRT Male Run Tee



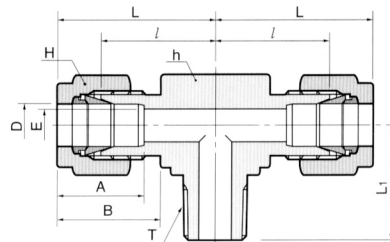
Connects metric tube to ISO tapered thread

Part No.	Tube O.D. D	T (PT)	E Min	Width across flat		A	B	φ	L	L1
				h	H					
GMRT 3M-2R	3	1/8	2.4	12.70	11.11	12.9	15.3	17.0	23.6	17.8
GMRT 3M-4R	3	1/4	2.4	12.70	11.11	12.9	15.3	18.0	24.6	23.4
GMRT 4M-2R	4	1/8	2.4	12.70	12.70	13.7	16.1	18.8	25.4	18.8
GMRT 4M-4R	4	1/4	2.4	12.70	12.70	13.7	16.1	18.8	25.4	23.4
GMRT 6M-2R	6	1/8	4.8	12.70	14.28	15.3	17.7	19.6	27.0	18.8
GMRT 6M-4R	6	1/4	4.8	14.28	14.28	15.3	17.7	19.6	27.0	23.4
GMRT 6M-6R	6	3/8	4.8	17.46	14.28	15.3	17.7	22.4	29.8	26.2
GMRT 6M-8R	6	1/2	4.8	20.63	14.28	15.3	17.7	24.4	31.8	33.0
GMRT 8M-2R	8	1/8	4.8	14.28	15.87	16.2	18.6	21.3	28.8	19.8
GMRT 8M-4R	8	1/4	6.4	14.28	15.87	16.2	18.6	21.3	28.8	24.4
GMRT 8M-6R	8	3/8	6.4	17.46	15.87	16.2	18.6	23.1	30.6	26.2
GMRT 8M-8R	8	1/2	6.4	20.63	15.87	16.2	18.6	25.1	32.6	33.0
GMRT 10M-2R	10	1/8	4.8	17.46	19.05	17.2	19.5	23.9	31.5	23.6
GMRT 10M-4R	10	1/4	7.1	17.46	19.05	17.2	19.5	23.9	31.5	26.2
GMRT 10M-6R	10	3/8	7.9	17.46	19.05	17.2	19.5	23.9	31.5	26.2
GMRT 10M-8R	10	1/2	7.9	20.63	19.05	17.2	19.5	25.9	33.5	33.0
GMRT 12M-2R	12	1/8	4.8	20.63	22.22	22.8	22.0	25.9	36.0	23.6
GMRT 12M-4R	12	1/4	7.1	20.63	22.22	22.8	22.0	25.9	36.0	28.2
GMRT 12M-6R	12	3/8	9.5	20.63	22.22	22.8	22.0	25.9	36.0	28.2
GMRT 12M-8R	12	1/2	9.5	20.63	22.22	22.8	22.0	25.9	36.0	33.0
GMRT 12M-12R	12	3/4	9.5	26.98	22.22	22.8	22.0	29.7	39.8	36.8
GMRT 16M-6R	16	3/8	9.5	25.40	25.40	24.4	22.0	27.9	38.0	30.2
GMRT 16M-8R	16	1/2	11.9	25.40	25.40	24.4	22.0	27.9	38.0	35.1
GMRT 16M-12R	16	3/4	12.7	26.98	25.40	24.4	22.0	29.7	39.8	36.8
GMRT 18M-8R	18	1/2	11.9	26.98	30.16	24.4	22.0	29.7	39.8	36.8
GMRT 18M-12R	18	3/4	15.1	26.98	30.16	24.4	22.0	29.7	39.8	36.8
GMRT 20M-8R	20	1/2	11.9	31.75	31.75	26.0	22.0	34.5	44.6	41.7
GMRT 20M-12R	20	3/4	15.9	31.75	31.75	26.0	22.0	34.5	44.6	41.7
GMRT 22M-12R	22	3/4	15.9	34.92	31.75	26.0	22.0	34.5	44.6	41.7
GMRT 22M-16R	22	1	18.3	34.92	31.75	26.0	22.0	34.5	44.6	46.5
GMRT 25M-12R	25	3/4	15.9	34.92	38.10	31.3	26.5	36.8	49.1	41.7
GMRT 25M-16R	25	1	21.8	34.92	38.10	31.3	26.5	36.8	49.1	46.5

Tube Fittings | Tube to Male Pipe

SAM WON GREEN

GMBT Male Branch Tee



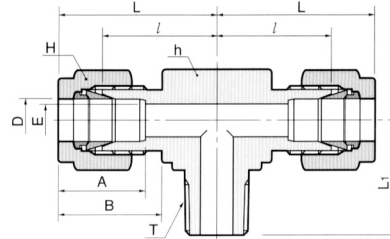
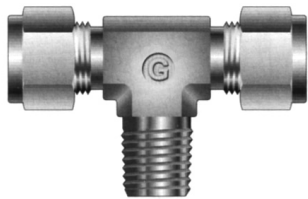
Connects fractional tube to female NPT thread

Part No.	Tube O.D. D		T (NPT)	E Min.	Width across flat				A	B	Ø	L	L1
	in	mm			h		H						
GMBT 1-1N	1/16	1.59	1/16	1.27	7/16	11.11	5/16	7.93	8.63	10.92	15.24	19.05	17.78
GMBT 1-2N	1/16	1.59	1/8	1.27	7/16	11.11	5/16	7.93	8.63	10.92	15.24	19.05	17.78
GMBT 2-2N	1/8	3.17	1/8	2.28	1/2	12.70	7/16	11.11	12.70	15.24	18.30	24.91	18.90
GMBT 2-4N	1/8	3.17	1/4	2.28	1/2	12.70	7/16	11.11	12.70	15.24	18.30	24.91	23.36
GMBT 3-2N	3/16	4.76	1/8	3.04	1/2	12.70	1/2	12.70	13.71	16.00	18.79	24.38	18.79
GMBT 3-4N	3/16	4.76	1/4	3.04	1/2	12.70	1/2	12.70	13.71	16.00	18.79	25.40	23.36
GMBT 4-1N	1/4	6.35	1/16	3.04	1/2	12.70	9/16	14.28	15.24	17.78	19.55	26.90	18.79
GMBT 4-2N	1/4	6.35	1/8	4.82	1/2	12.70	9/16	14.28	15.24	17.78	19.55	26.92	18.79
GMBT 4-4N	1/4	6.35	1/4	4.82	1/2	12.70	9/16	14.28	15.24	17.78	19.55	27.08	23.87
GMBT 4-6N	1/4	6.35	3/8	4.82	11/16	17.46	9/16	14.28	15.24	17.78	22.35	29.71	28.40
GMBT 4-8N	1/4	6.35	1/2	4.82	13/16	20.64	9/16	14.28	15.24	17.78	24.60	31.97	35.10
GMBT 5-2N	5/16	7.93	1/8	4.82	9/16	14.28	5/8	15.87	16.25	18.54	22.35	29.71	19.81
GMBT 5-4N	5/16	7.93	1/4	6.35	9/16	14.28	5/8	15.87	16.25	18.54	22.35	29.77	24.50
GMBT 5-6N	5/16	7.93	3/8	6.35	11/16	17.46	5/8	15.87	16.25	18.54	23.11	30.48	28.40
GMBT 6-4N	3/8	9.52	1/4	7.11	5/8	15.87	11/16	17.46	16.76	19.30	23.11	30.48	25.40
GMBT 6-6N	3/8	9.52	3/8	7.11	11/16	17.46	11/16	17.46	16.76	19.30	23.87	31.24	28.44
GMBT 6-8N	3/8	9.52	1/2	7.11	13/16	20.64	11/16	17.46	16.76	19.30	25.90	33.27	33.02
GMBT 6-12N	3/8	9.52	3/4	7.11	1-1/16	26.98	11/16	17.46	16.76	19.30	29.71	37.08	36.83
GMBT 8-4N	1/2	12.70	1/4	7.11	13/16	20.64	7/8	22.22	22.86	21.84	25.90	36.06	28.30
GMBT 8-6N	1/2	12.70	3/8	9.65	13/16	20.64	7/8	22.22	22.86	21.84	25.90	36.06	28.30
GMBT 8-8N	1/2	12.70	1/2	10.41	13/16	20.64	7/8	22.22	22.86	21.84	25.90	36.06	33.02
GMBT 8-12N	1/2	12.70	3/4	10.41	1-1/16	26.98	7/8	22.22	22.86	21.84	29.71	39.84	36.83
GMBT 10-6N	5/8	15.87	3/8	9.65	15/16	23.81	1	25.40	24.38	21.84	27.90	38.10	29.40
GMBT 10-8N	5/8	15.87	1/2	11.93	15/16	23.81	1	25.40	24.38	21.84	27.90	38.10	34.00
GMBT 10-12N	5/8	15.87	3/4	12.70	1-1/16	26.98	1	25.40	24.38	21.84	29.71	39.87	36.83
GMBT 12-8N	3/4	19.05	1/2	11.93	1-1/16	26.98	1-1/8	28.57	24.38	21.84	29.71	39.87	37.00
GMBT 12-12N	3/4	19.05	3/4	15.74	1-1/16	26.98	1-1/8	28.57	24.38	21.84	29.71	39.87	36.83
GMBT 14-12N	7/8	22.22	3/4	15.74	1-3/8	34.92	1-1/4	31.75	25.90	21.84	34.54	44.70	41.65
GMBT 16-12N	1	25.40	3/4	15.74	1-3/8	34.92	1-1/2	38.10	31.24	26.41	36.83	49.02	42.20
GMBT 16-16N	1	25.40	1	22.35	1-3/8	34.92	1-1/2	38.10	31.24	26.41	36.83	49.02	46.70
GMBT 20-20N	1-1/4	31.75	1-1/4	27.68	1-11/16	40.86	1-7/8	47.63	41.14	38.86	44.50	66.54	47.75
GMBT 24-24N	1-1/2	38.10	1-1/2	34.03	2	50.80	2-1/4	57.15	50.03	45.21	50.80	77.97	60.45
GMBT 32-32N	2	50.80	2	45.97	2-3/4	69.85	3	76.20	67.56	62.73	69.80	107.18	70.61

Tube Fittings | Tube to Male Pipe

SAM WON GREEN

GMBT Male Branch Tee



Connects metric tube to female ISO tapered thread

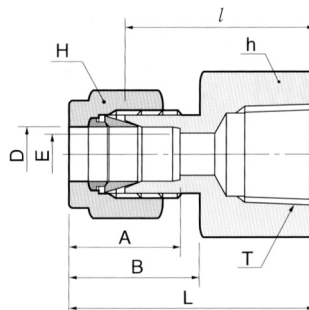
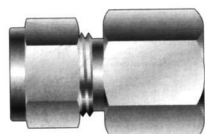
Part No.	Tube O.D. D(mm)	T (PT)	E Min	Width across flat		A	B	φ	L	L1
				h	H					
GMBT 3M-2R	3	1/8	2.4	12.70	11.11	12.9	15.3	17.0	23.6	17.8
GMBT 3M-4R	3	1/4	2.4	12.70	11.11	12.9	15.3	18.0	24.6	23.4
GMBT 4M-2R	4	1/8	2.4	12.70	12.70	13.7	16.1	18.8	25.4	18.8
GMBT 4M-4R	4	1/4	2.4	12.70	12.70	13.7	16.1	18.8	25.4	23.4
GMBT 6M-2R	6	1/8	4.8	12.70	14.28	15.3	17.7	19.6	27.0	18.8
GMBT 6M-4R	6	1/4	4.8	12.70	14.28	15.3	17.7	19.6	27.0	23.4
GMBT 6M-6R	6	3/8	4.8	17.46	14.28	15.3	17.7	22.4	29.8	26.2
GMBT 6M-8R	6	1/2	4.8	20.63	14.28	15.3	17.7	24.4	31.8	33.0
GMBT 8M-2R	8	1/8	4.8	14.28	15.87	16.2	18.6	21.3	28.8	19.8
GMBT 8M-4R	8	1/4	6.4	14.28	15.87	16.2	18.6	21.3	28.8	24.4
GMBT 8M-6R	8	3/8	6.4	17.46	15.87	16.2	18.6	23.1	30.6	26.2
GMBT 8M-8R	8	1/2	6.4	20.63	15.87	16.2	18.6	25.1	32.6	33.0
GMBT 10M-2R	10	1/8	4.8	17.46	19.05	17.2	19.5	23.9	31.5	23.6
GMBT 10M-4R	10	1/4	7.1	17.46	19.05	17.2	19.5	23.9	31.5	26.2
GMBT 10M-6R	10	3/8	7.9	17.46	19.05	17.2	19.5	23.9	31.5	26.2
GMBT 10M-8R	10	1/2	7.9	20.63	19.05	17.2	19.5	25.9	33.5	33.0
GMBT 12M-2R	12	1/8	4.8	20.63	22.22	22.8	22.0	25.9	36.0	23.6
GMBT 12M-4R	12	1/4	7.1	20.63	22.22	22.8	22.0	25.9	36.0	28.2
GMBT 12M-6R	12	3/8	9.5	20.63	22.22	22.8	22.0	25.9	36.0	28.2
GMBT 12M-8R	12	1/2	9.5	20.63	22.22	22.8	22.0	25.9	36.0	33.0
GMBT 12M-12R	12	3/4	9.5	26.98	22.22	22.8	22.0	29.7	39.8	36.8
GMBT 16M-6R	16	3/8	9.5	25.40	25.40	24.4	22.0	27.9	38.0	30.2
GMBT 16M-8R	16	1/2	11.9	25.40	25.40	24.4	22.0	27.9	38.0	35.1
GMBT 16M-12R	16	3/4	12.7	26.98	25.40	24.4	22.0	29.7	39.8	36.8
GMBT 18M-8R	18	1/2	11.9	26.98	30.16	24.4	22.0	29.7	39.8	36.8
GMBT 18M-12R	18	3/4	15.1	26.98	30.16	24.4	22.0	29.7	39.8	36.8
GMBT 20M-8R	20	1/2	11.9	31.75	31.75	26.0	22.0	34.5	44.6	41.7
GMBT 20M-12R	20	3/4	15.9	31.75	31.75	26.0	22.0	34.5	44.6	41.7
GMBT 22M-12R	22	3/4	15.9	34.92	31.75	26.0	22.0	34.5	44.6	41.7
GMBT 22M-16R	22	1	18.3	34.92	31.75	26.0	22.0	34.5	44.6	46.5
GMBT 25M-12R	25	3/4	15.9	34.92	38.10	31.3	26.5	36.8	49.1	41.7
GMBT 25M-16R	25	1	21.8	34.92	38.10	31.3	26.5	36.8	49.1	46.5

Tube Fittings | Tube to Female Pipe

SAM WON GREEN

GFC

Female Connector



Connects fractional tube to male NPT thread

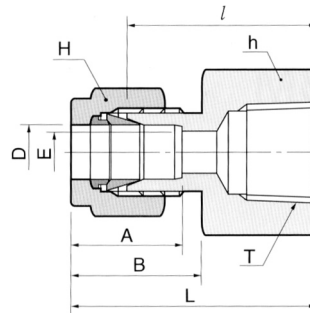
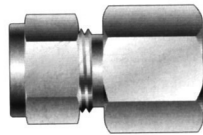
Part No.	Tube O.D.		T (NPT)	E Min.	Width across flat				A	B	ℓ	L
	D				h		H					
	in	mm			in	mm	in	mm				
GFC 1-1N	1/16	1.59	1/16	1.27	7/16	11.11	5/16	7.93	8.63	10.92	19.81	23.62
GFC 1-2N	1/16	1.59	1/8	1.27	9/16	14.28	5/16	7.93	8.63	10.92	20.57	24.38
GFC 2-2N	1/8	3.17	1/8	2.28	9/16	14.28	7/16	11.11	12.70	15.24	22.09	28.70
GFC 2-4N	1/8	3.17	1/4	2.28	3/4	19.05	7/16	11.11	12.70	15.24	26.92	33.52
GFC 3-2N	3/16	4.76	1/8	3.04	9/16	14.28	1/2	12.70	13.71	16.00	23.11	29.71
GFC 4-2N	1/4	6.35	1/8	4.82	9/16	14.28	9/16	14.28	15.24	17.78	23.87	31.24
GFC 4-4N	1/4	6.35	1/4	4.82	3/4	19.05	9/16	14.28	15.24	17.78	28.44	35.81
GFC 4-6N	1/4	6.35	3/8	4.82	7/8	22.22	9/16	14.28	15.24	17.78	30.22	37.59
GFC 4-8N	1/4	6.35	1/2	4.82	1-1/16	26.98	9/16	14.28	15.24	17.78	35.05	42.41
GFC 5-2N	5/16	7.93	1/8	6.35	9/16	14.28	5/8	15.87	16.25	18.54	24.63	32.00
GFC 5-4N	5/16	7.93	1/4	6.35	3/4	19.05	5/8	15.87	16.25	18.54	29.46	36.83
GFC 6-2N	3/8	9.52	1/8	7.11	5/8	15.87	11/16	17.46	16.76	19.30	25.40	32.76
GFC 6-4N	3/8	9.52	1/4	7.11	3/4	19.05	11/16	17.46	16.76	19.30	30.22	37.59
GFC 6-6N	3/8	9.52	3/8	7.11	7/8	22.22	11/16	17.46	16.76	19.30	31.75	39.11
GFC 6-8N	3/8	9.52	1/2	7.11	1-1/16	26.98	11/16	17.46	16.76	19.30	36.57	43.94
GFC 6-12N	3/8	9.52	3/4	7.11	1-5/16	33.33	11/16	17.46	16.76	19.30	40.38	47.75
GFC 8-4N	1/2	12.70	1/4	10.41	1-3/16	20.64	7/8	22.22	22.86	21.84	30.22	40.38
GFC 8-6N	1/2	12.70	3/8	10.41	7/8	22.22	7/8	22.22	22.86	21.84	31.75	41.91
GFC 8-8N	1/2	12.70	1/2	10.41	1-1/16	26.98	7/8	22.22	22.86	21.84	36.57	46.73
GFC 8-12N	1/2	12.70	3/4	10.41	1-5/16	33.33	7/8	22.22	22.86	21.84	38.10	48.26
GFC 10-6N	5/8	15.87	3/8	12.70	15/16	23.81	1	25.40	24.38	21.84	31.75	41.91
GFC 10-8N	5/8	15.87	1/2	12.70	1-1/16	26.98	1	25.40	24.38	21.84	36.57	46.73
GFC 10-12N	5/8	15.87	3/4	12.70	1-5/16	33.33	1	25.40	24.38	21.84	38.10	48.26
GFC 12-8N	3/4	19.05	1/2	15.74	1-1/16	26.98	1-1/8	28.57	24.38	21.84	36.57	46.73
GFC 12-12N	3/4	19.05	3/4	15.74	1-5/16	33.33	1-1/8	28.57	24.38	21.84	38.10	48.26
GFC 14-12N	7/8	22.22	3/4	18.28	1-5/16	33.33	1-1/4	31.75	25.90	21.84	39.62	49.78
GFC 16-12N	1	25.40	3/4	22.35	1-3/8	34.92	1-1/2	38.10	31.24	26.41	41.14	53.34
GFC 16-16N	1	25.40	1	22.35	1-5/8	41.27	1-1/2	38.10	31.24	26.41	50.03	62.23
GFC 20-20N	1-1/4	31.75	1-1/4	27.68	2-1/8	53.98	1-7/8	41.63	41.14	38.86	52.57	74.67
GFC 24-24N	1-1/2	38.10	1-1/2	34.03	2-3/8	60.33	2-1/4	57.15	50.03	45.21	56.13	83.31
GFC 32-32N	2	50.80	2	45.97	2-1/8	73.03	3	76.20	67.56	62.73	64.26	101.60

Tube Fittings | Tube to Female Pipe

SAM WON GREEN

GFC

Female Connector



Connects metric tube to male ISO tapered thread

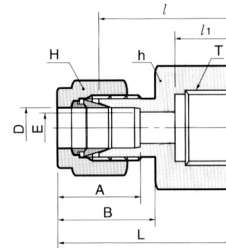
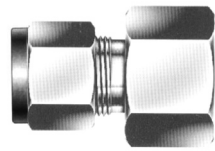
Part No.	Tube O.D. D(mm)	T (PT)	E Min	Width across flat		A	B	φ	L
				h	H				
GFC 3M-2R	3	1/8	2.4	14.28	11.11	12.9	15.3	22.1	28.7
GFC 3M-4R	3	1/4	2.4	19.05	11.11	12.9	15.3	26.9	33.5
GFC 4M-2R	4	1/8	2.4	14.28	12.70	13.7	16.1	23.1	29.7
GFC 6M-2R	6	1/8	4.8	14.28	14.28	15.3	17.7	23.9	31.3
GFC 6M-4R	6	1/4	4.8	19.05	14.28	15.3	17.7	28.4	35.8
GFC 6M-6R	6	3/8	4.8	22.22	14.28	15.3	17.7	29.5	36.9
GFC 6M-8R	6	1/2	4.8	26.98	14.28	15.3	17.7	35.1	42.5
GFC 8M-2R	8	1/8	6.4	14.28	15.87	16.2	18.6	24.6	32.1
GFC 8M-4R	8	1/4	6.4	19.05	15.87	16.2	18.6	29.5	37.0
GFC 8M-6R	8	3/8	6.4	22.22	15.87	16.2	18.6	30.2	37.7
GFC 8M-8R	8	1/2	6.4	26.98	15.87	16.2	18.6	35.8	43.3
GFC 10M-2R	10	1/8	7.9	17.46	19.05	17.2	19.5	25.4	33.0
GFC 10M-4R	10	1/4	7.9	19.05	19.05	17.2	19.5	30.2	37.8
GFC 10M-6R	10	3/8	7.9	22.22	19.05	17.2	19.5	31.0	38.6
GFC 10M-8R	10	1/2	7.9	26.98	19.05	17.2	19.5	36.6	44.2
GFC 12M-2R	12	1/8	8.3	22.22	22.22	22.8	22.0	28.4	38.5
GFC 12M-4R	12	1/4	9.5	22.22	22.22	22.8	22.0	30.2	40.3
GFC 12M-6R	12	3/8	9.5	22.22	22.22	22.8	22.0	31.0	41.1
GFC 12M-8R	12	1/2	9.5	26.98	22.22	22.8	22.0	36.6	46.7
GFC 12M-12R	12	3/4	9.5	33.33	22.22	22.8	22.0	38.9	49.0
GFC 15M-8R	15	1/2	11.9	26.98	25.40	24.4	22.0	36.6	46.7
GFC 16M-8R	16	1/2	12.7	26.98	25.40	24.4	22.0	36.8	46.9
GFC 20M-8R	20	1/2	15.9	30.16	31.75	26.0	22.0	37.8	47.9
GFC 20M-12R	20	3/4	15.9	34.92	31.75	26.0	22.0	39.6	49.7
GFC 22M-12R	22	3/4	18.3	34.92	31.75	26.0	22.0	39.6	49.7
GFC 22M-16R	22	1	18.3	41.27	31.75	26.0	22.0	47.8	57.9
GFC 25M-12R	25	3/4	21.8	34.92	38.10	31.3	26.5	41.1	53.4
GFC 25M-16R	25	1	21.8	41.27	38.10	31.3	26.5	50.0	62.3

Tube Fittings | Tube to Female Pipe

SAM WON GREEN

GGC

Gauge Connector



Connects fractional tube to ISO parallel thread (gauge)

Part No.	Tube O.D. D		T G(PF)	E Min.	Width across flat				A	B	ℓ	ℓ ₁	L
	in	mm			h		H						
					in	mm							
GGC 4-2G	1/4	6.35	1/8	4.82	9/16	14.28	9/16	14.28	15.24	17.78	26.30	12.00	33.55
GFC 4-4G	1/4	6.35	1/4	4.82	3/4	19.05	9/16	14.28	15.24	17.78	30.22	13.00	37.59
GFC 4-6G	1/4	6.35	3/8	4.82	15/16	23.81	9/16	14.28	15.24	17.78	30.22	14.22	37.59
GFC 4-8G	1/4	6.35	1/2	4.82	1-1/16	26.98	9/16	14.28	15.24	17.78	30.07	18.80	43.43
GFC 5-4G	5/16	7.93	1/4	5.58	3/4	19.05	5/8	15.87	16.25	18.54	30.98	13.00	38.35
GFC 5-8G	5/16	7.93	1/2	7.11	1-1/16	26.98	5/8	15.87	16.25	18.54	33.02	18.80	40.38
GFC 6-4G	3/8	9.52	1/4	5.58	3/4	19.05	11/16	17.46	16.76	19.30	31.75	12.95	39.12
GFC 6-6G	3/8	9.52	3/8	6.60	15/16	23.81	11/16	17.46	16.76	19.30	31.24	14.22	38.61
GFC 6-8G	3/8	9.52	1/2	7.11	1-1/16	26.98	11/16	17.46	16.76	19.30	34.54	18.80	41.91
GFC 8-4G	1/2	12.70	1/4	5.50	7/8	22.22	7/8	22.22	22.86	21.84	31.80	13.00	41.95
GFC 8-6G	1/2	12.70	3/8	6.60	15/16	23.81	7/8	22.22	22.86	21.84	34.29	14.24	44.45
GFC 8-8G	1/2	12.70	1/2	7.11	1-1/16	26.98	7/8	22.22	22.86	21.84	38.10	18.80	48.26

Connects metric tube to ISO parallel thread (gauge)

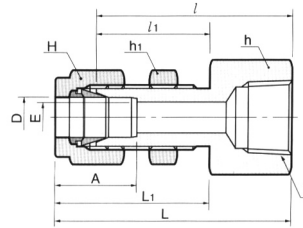
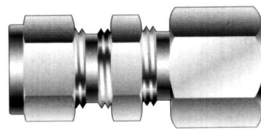
Part No.	Tube O.D. D(mm)	T G(PF)	E Min	Width across flat		A	B	ℓ	ℓ ₁	L
				h	H					
GFC 3M-4G	3	1/4	2.4	19.05	11.11	12.9	15.3	28.7	13.0	35.3
GFC 6M-4G	6	1/4	4.8	19.05	14.28	15.3	17.7	30.2	13.0	37.6
GFC 6M-6G	6	3/8	4.8	23.81	14.28	15.3	17.7	30.2	14.0	37.6
GFC 6M-8G	6	1/2	4.8	26.98	14.28	15.3	17.7	36.3	19.0	43.0
GFC 8M-4G	8	1/4	5.5	19.05	15.87	16.2	18.6	31.0	13.0	38.5
GFC 8M-6G	8	3/8	6.5	23.81	15.87	16.2	18.6	28.7	14.0	36.2
GFC 8M-8G	8	1/2	7.0	26.98	15.87	16.2	18.6	33.0	19.0	40.5
GFC 10M-4G	10	1/4	5.5	19.05	19.05	17.2	19.5	31.8	13.0	39.4
GFC 10M-6G	10	3/8	6.5	23.81	19.05	17.2	19.5	31.2	14.0	38.8
GFC 10M-8G	10	1/2	7.0	26.98	19.05	17.2	19.5	33.8	19.0	41.4
GFC 12M-4G	12	1/4	5.5	22.22	22.22	22.8	22.0	31.8	13.0	41.9
GFC 12M-6G	12	3/8	6.5	23.81	22.22	22.8	22.0	34.3	14.0	44.4
GFC 12M-8G	12	1/2	7.0	26.98	22.22	22.8	22.0	38.1	19.0	48.2
GFC 20M-8G	20	1/2	7.0	30.16	31.75	26.0	22.0	44.2	19.0	54.3
GFC 22M-8G	22	1/2	7.0	30.16	31.75	26.0	22.0	44.2	19.0	54.3

Tube Fittings | Tube to Female Pipe

SAM WON GREEN

GBFC

Bulkhead Female Connector



Connects fractional tube to male NPT thread

Part No.	Tube O.D. D		T (NPT)	E Min.	Width across flat			A	ℓ	ℓ ₁	L	L ₁	Panel Hole Drill size	Panel Max Thickness			
	in	mm			h	h ₁	H										
GBFC 2-2N	1/8	3.17	1/8	2.28	9/16	14.28	1/2	12.70	7/16	11.11	12.70	38.10	24.63	44.70	31.24	8.30	12.70
GBFC 4-2N	1/4	6.35	1/8	4.82	5/8	15.87	5/8	15.87	9/16	14.28	15.24	39.62	26.16	46.99	33.52	11.50	10.16
GBFC 4-4N	1/4	6.35	1/4	4.82	3/4	19.05	5/8	15.87	9/16	14.28	15.24	44.45	26.16	51.81	33.52	11.50	10.16
GBFC 6-4N	3/8	9.52	1/4	7.11	3/4	19.05	3/4	19.05	11/16	17.46	16.76	47.75	29.46	55.11	36.83	14.70	11.17
GBFC 6-6N	3/8	9.52	3/8	7.11	7/8	22.22	3/4	19.05	11/16	17.46	16.76	49.41	29.46	56.77	36.83	14.70	11.17
GBFC 8-6N	1/2	12.70	3/8	10.41	15/16	23.81	15/16	23.81	7/8	22.22	22.86	51.56	31.75	61.72	41.91	19.40	12.70
GBFC 8-8N	1/2	12.70	1/2	10.41	1-1/16	26.98	15/16	23.81	7/8	22.22	22.86	56.38	31.75	66.54	41.91	19.40	12.70
GBFC 12-12N	3/4	19.05	3/4	15.74	1-1/4	31.75	1-3/16	30.16	1-1/8	28.57	24.38	63.60	38.30	73.51	47.21	25.80	16.76
GBFC 16-16N	1	25.40	1	22.35	1-5/8	41.27	1-5/8	41.27	1-1/2	38.10	31.24	81.04	45.21	93.23	57.40	33.70	19.05
GBFC 20-20N	1-1/4	31.75	1-1/4	27.68	1-7/8	47.63	1-7/8	47.63	1-7/8	47.63	41.14	83.49	47.75	105.59	69.85	41.70	19.05
GBFC 24-24N	1-1/2	38.10	1-1/2	34.03	1-1/4	57.15	2-1/4	57.15	2-1/4	57.15	50.03	87.39	49.27	114.57	76.45	49.60	19.05
GBFC 32-32N	2	50.80	2	45.97	1-3/4	69.85	2-3/4	69.85	3	76.20	67.56	95.30	56.38	132.63	93.71	57.90	19.05

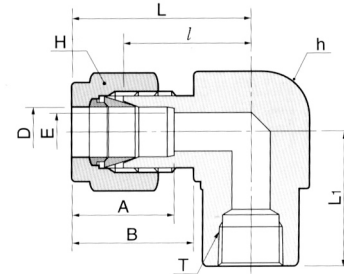
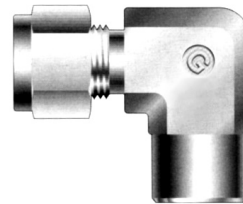
Connects metric tube to male ISO tapered thread

Part No.	Tube O.D. D(mm)	T (PT)	E Min.	Width across flat			A	ℓ	ℓ ₁	L	L ₁	Panel Hole Drill size	Panel Max Thickness
				h	h ₁	H							
GBFC 6M-2R	6	1/8	4.8	15.87	15.87	14.28	15.3	39.6	26.2	46.90	35.00	11.5	10.2
GBFC 6M-4R	6	1/4	4.8	19.05	15.87	14.28	15.3	44.4	26.2	51.80	33.60	11.5	10.2
GBFC 8M-4R	8	1/4	6.3	19.05	17.46	15.87	16.2	46.7	28.6	53.85	35.55	13.1	11.2
GBFC 12M-8R	12	1/2	9.5	26.98	23.81	22.22	22.8	56.4	31.8	66.50	41.90	19.5	12.7

Tube Fittings | Tube to Female Pipe

SAM WON GREEN

GFE Female Elbow



Connects fractional tube to male NPT thread

Part No.	Tube O.D.		T (NPT)	E Min.	Width across flat				A	B	ℓ	L	L1
	D				h		H						
	in	mm			in	mm	in	mm					
GFE 2-2N	1/8	3.17	1/8	2.28	1/2	12.70	7/16	11.11	12.70	15.24	18.03	24.63	19.05
GFE 2-4N	1/8	3.17	1/4	2.28	11/16	17.46	7/16	11.11	12.70	15.24	20.82	27.43	22.35
GFE 3-2N	3/16	4.76	1/8	3.04	1/2	12.70	1/2	12.70	13.71	16.00	18.79	25.40	19.05
GFE 4-2N	1/4	6.35	1/8	4.82	1/2	12.70	9/16	14.28	15.24	17.78	19.55	26.92	19.05
GFE 4-4N	1/4	6.35	1/4	4.82	11/16	17.46	9/16	14.28	15.24	17.78	22.35	29.71	22.35
GFE 4-6N	1/4	6.35	3/8	4.82	13/16	20.63	9/16	14.28	15.24	17.78	24.38	31.75	22.35
GFE 4-8N	1/4	6.35	1/2	4.82	1	25.40	9/16	14.28	15.24	17.78	27.17	34.54	28.44
GFE 5-2N	5/16	7.93	1/8	6.35	9/16	14.28	5/8	15.87	16.25	18.54	21.33	28.70	19.05
GFE 5-4N	5/16	7.93	1/4	6.35	11/16	17.46	5/8	15.87	16.25	18.54	23.11	30.48	22.35
GFE 6-2N	3/8	9.52	1/8	7.11	5/8	15.87	11/16	17.46	16.76	19.30	23.11	30.48	19.05
GFE 6-4N	3/8	9.52	1/4	7.11	11/16	17.46	11/16	17.46	16.76	19.30	23.87	31.24	22.35
GFE 6-6N	3/8	9.52	3/8	7.11	13/16	20.63	11/16	17.46	16.76	19.30	25.90	33.27	22.35
GFE 6-8N	3/8	9.52	1/2	7.11	1	25.40	11/16	17.46	16.76	19.30	28.70	36.06	28.44
GFE 8-4N	1/2	12.70	1/4	10.41	13/16	20.63	7/8	22.22	22.86	21.84	25.90	36.06	22.35
GFE 8-6N	1/2	12.70	3/8	10.41	13/16	20.63	7/8	22.22	22.86	21.84	25.90	36.06	22.35
GFE 8-8N	1/2	12.70	1/2	10.41	1	25.40	7/8	22.22	22.86	21.84	28.70	38.86	28.44
GFE 10-6N	5/8	15.87	3/8	12.70	15/16	23.81	1	25.40	24.38	21.84	27.94	38.10	22.35
GFE 10-8N	5/8	15.87	1/2	12.70	1	25.40	1	25.40	24.38	21.84	29.71	39.87	28.44
GFE 12-8N	3/4	19.05	1/2	15.74	1-1/16	26.98	1-1/8	28.57	24.38	21.84	29.71	39.87	28.44
GFE 12-12N	3/4	19.05	3/4	15.74	1-1/4	31.75	1-1/8	28.57	24.38	21.84	34.54	44.70	31.75
GFE 14-12N	7/8	22.22	3/4	18.28	1-1/4	31.75	1-1/4	31.75	25.90	21.84	34.54	44.70	31.75
GFE 16-12N	1	25.40	3/4	22.35	1-3/8	34.92	1-1/2	38.10	31.24	26.41	36.83	49.02	31.75
GFE 16-16N	1	25.40	1	22.35	1-11/16	42.86	1-1/2	38.10	31.24	26.41	41.40	50.29	38.10

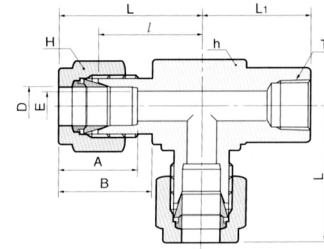
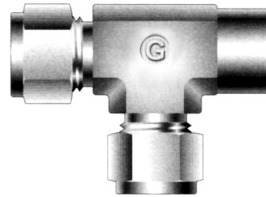
Connects metric tube to male ISO tapered thread

Part No.	Tube O.D. D(mm)	T (PT)	E Min	Width across flat		A	B	ℓ	L	L1
				h	H					
GFE 6M-2R	6	1/8	4.8	12.70	14.28	15.3	17.7	19.6	27.0	19.00
GFE 6M-4R	6	1/4	4.8	17.46	14.28	15.3	17.7	22.4	29.8	22.40
GFE 6M-6R	6	3/8	4.8	20.63	14.28	15.3	17.7	24.4	31.7	22.40
GFE 6M-8R	6	1/2	4.8	25.40	14.28	15.3	17.7	27.2	34.6	28.40
GFE 8M-2R	8	1/8	6.4	15.87	15.87	16.2	18.6	23.1	29.9	19.00
GFE 8M-4R	8	1/4	6.4	17.46	15.87	16.2	18.6	23.1	30.6	22.40
GFE 8M-8R	8	1/2	6.4	25.40	15.87	16.2	18.6	28.0	35.0	28.40
GFE 10M-2R	10	1/8	7.9	17.46	19.05	17.2	19.5	25.9	33.5	19.00
GFE 10M-4R	10	1/4	7.9	17.46	19.05	17.2	19.5	25.9	33.5	22.40
GFE 10M-6R	10	3/8	7.9	20.63	19.05	17.2	19.5	25.9	33.5	22.40
GFE 10M-8R	10	1/2	7.9	25.40	19.05	17.2	19.5	28.7	36.1	28.40
GFE 12M-4R	12	1/4	9.5	20.63	22.22	22.8	22.0	25.9	36.1	22.40
GFE 12M-6R	12	3/8	9.5	20.63	22.22	22.8	22.0	25.9	36.2	22.40
GFE 12M-8R	12	1/2	9.5	25.40	22.22	22.8	22.0	28.7	38.8	28.40
GFE 16M-8R	16	1/2	12.7	26.98	25.40	24.4	22.0	29.7	39.5	28.40

Tube Fittings | Tube to Female Pipe

SAM WON GREEN

GFRT Female Run Tee



Connects fractional tube to male NPT thread

Part No.	Tube O.D. D		T (NPT)	E Min.	Width across flat				A	B	ℓ	L	L1
	in	mm			h		H						
					in	mm	in	mm					
GFRT 2-2N	1/8	3.17	1/8	2.28	1/2	12.70	7/16	11.11	12.70	15.24	18.03	24.63	19.05
GFRT 2-4N	1/8	3.17	1/4	2.28	11/16	17.46	7/16	11.11	12.70	15.24	20.82	27.43	22.35
GFRT 3-2N	3/16	4.76	1/8	3.04	1/2	12.70	1/2	12.70	13.71	16.00	18.79	25.40	19.05
GFRT 4-2N	1/4	6.35	1/8	4.82	1/2	12.70	9/16	14.28	15.24	17.78	19.55	26.92	19.05
GFRT 4-4N	1/4	6.35	1/4	4.82	11/16	17.46	9/16	14.28	15.24	17.78	22.86	29.71	22.35
GFRT 4-6N	1/4	6.35	3/8	4.82	13/16	20.63	9/16	14.28	15.24	17.78	24.38	31.75	22.35
GFRT 4-8N	1/4	6.35	1/2	4.82	1	25.40	9/16	14.28	15.24	17.78	27.17	34.54	28.44
GFRT 5-2N	5/16	7.93	1/8	6.35	9/16	14.28	5/8	15.87	16.25	18.54	21.33	28.70	19.05
GFRT 5-4N	5/16	7.93	1/4	6.35	11/16	17.46	5/8	15.87	16.25	18.54	23.11	30.48	22.35
GFRT 6-2N	3/8	9.52	1/8	7.11	5/8	15.87	11/16	17.46	16.76	19.30	23.11	30.48	19.05
GFRT 6-4N	3/8	9.52	1/4	7.11	11/16	17.46	11/16	17.46	16.76	19.30	23.87	31.24	22.35
GFRT 6-6N	3/8	9.52	3/8	6.35	13/16	20.63	11/16	17.46	16.76	19.30	25.90	33.27	22.35
GFRT 6-8N	3/8	9.52	1/2	7.11	1	25.40	11/16	17.46	16.76	19.30	28.70	36.06	28.44
GFRT 8-4N	1/2	12.70	1/4	10.41	13/16	20.63	7/8	22.22	22.86	21.84	25.90	36.06	22.35
GFRT 8-6N	1/2	12.70	3/8	10.41	13/16	20.63	7/8	22.22	22.86	21.84	25.90	36.06	22.35
GFRT 8-8N	1/2	12.70	1/2	10.41	1	25.40	7/8	22.22	22.86	21.84	29.71	39.87	28.44
GFRT 10-6N	5/8	15.87	3/8	12.70	15/16	23.81	1	25.40	24.38	21.84	27.94	38.10	22.35
GFRT 10-8N	5/8	15.87	1/2	12.70	1	25.40	1	25.40	24.38	21.84	28.70	38.86	28.44
GFRT 12-8N	3/4	19.05	1/2	15.74	1-1/16	26.98	1-1/8	28.57	24.38	21.84	29.71	39.87	28.44
GFRT 12-12N	3/4	19.05	3/4	15.74	1-1/4	31.75	1-1/8	28.57	24.38	21.84	34.54	44.70	31.75
GFRT 14-12N	7/8	22.22	3/4	18.28	1-1/4	31.75	1-1/4	31.75	31.75	21.84	34.54	44.70	31.75
GFRT 16-12N	1	25.40	3/4	22.35	1-3/8	34.92	1-1/2	38.10	38.10	26.41	36.83	49.02	31.75
GFRT 16-16N	1	25.40	1	22.35	1-1/16	42.86	1-1/2	38.10	38.10	26.41	41.40	50.29	38.10

Connects metric tube to male ISO tapered thread

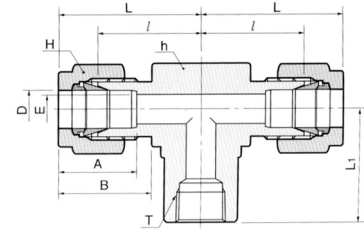
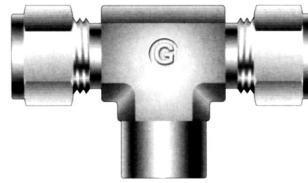
Part No.	Tube O.D. D(mm)	T (PT)	E Min	Width across flat		A	B	ℓ	L	L1
				h	H					
GFRT 6M-2R	6	1/8	4.8	12.70	14.28	15.3	17.7	19.6	27.0	19.00
GFRT 6M-4R	6	1/4	4.8	17.46	14.28	15.3	17.7	22.4	29.8	22.40
GFRT 6M-6R	6	1/8	4.8	20.63	14.28	15.3	17.7	24.4	31.7	22.40
GFRT 6M-8R	6	1/2	4.8	25.40	14.28	15.3	17.7	27.2	34.5	28.40
GFRT 8M-2R	8	1/8	6.4	15.87	15.87	16.2	18.6	22.4	29.9	19.00
GFRT 8M-4R	8	1/4	6.4	17.46	15.87	16.2	18.6	23.1	30.6	22.40
GFRT 8M-6R	8	3/8	6.4	20.63	15.87	16.2	18.6	25.2	32.4	22.40
GFRT 8M-8R	8	1/2	6.4	25.40	15.87	16.2	18.6	28.0	35.2	28.40
GFRT 10M-2R	10	1/8	7.9	20.63	19.05	17.2	19.5	22.4	31.5	19.00
GFRT 10M-4R	10	1/4	7.9	20.63	19.05	17.2	19.5	25.9	33.6	22.40
GFRT 10M-6R	10	3/8	7.9	20.63	19.05	17.2	19.5	25.9	33.6	22.40
GFRT 10M-8R	10	1/2	7.9	25.40	19.05	17.2	19.5	26.2	33.6	28.40
GFRT 12M-4R	12	1/4	9.5	20.63	22.22	22.8	22.0	25.9	36.0	22.40
GFRT 12M-6R	12	3/8	9.5	20.63	22.22	22.8	22.0	25.9	36.0	22.40
GFRT 12M-8R	12	1/2	9.5	25.40	22.22	22.8	22.0	29.7	40.0	28.40
GFRT 16M-8R	16	1/2	12	25.40	25.40	24.4	22.0	29.7	40.0	28.40

Tube Fittings | Tube to Female Pipe

SAM WON GREEN

GFBT

Female Branch Tee



Connects fractional tube to male NPT thread

Part No.	Tube O.D.		T (NPT)	E Min.	Width across flat				A	B	ℓ	L	L1
	D				h		H						
	in	mm			in	mm	in	mm					
GFBT 2-2N	1/8	3.17	1/8	2.28	1/2	12.70	7/16	11.11	12.70	15.24	18.03	24.38	19.05
GFBT 2-4N	1/8	3.17	1/4	2.28	11/16	17.46	7/16	11.11	12.70	15.24	20.82	27.43	22.35
GFBT 3-2N	3/16	4.76	1/8	3.04	1/2	12.70	1/2	12.70	13.71	16.00	18.79	25.40	19.05
GFBT 4-2N	1/4	6.35	1/8	4.82	1/2	12.70	9/16	14.28	15.24	17.78	19.55	26.92	19.05
GFBT 4-4N	1/4	6.35	1/4	4.82	11/16	17.46	9/16	14.28	15.24	17.78	22.35	29.71	22.35
GFBT 4-6N	1/4	6.35	3/8	4.82	13/16	20.63	9/16	14.28	15.24	17.78	24.38	31.75	22.35
GFBT 4-8N	1/4	6.35	1/2	4.82	1	25.40	9/16	14.28	15.24	17.78	27.17	34.54	28.44
GFBT 5-2N	5/16	7.93	1/8	6.35	9/16	14.28	5/8	15.87	16.25	18.54	21.33	28.70	19.05
GFBT 5-4N	5/16	7.93	1/4	6.35	11/16	17.46	5/8	15.87	16.25	18.54	23.11	30.48	22.35
GFBT 6-2N	3/8	9.52	1/8	7.11	5/8	15.78	11/16	17.46	16.76	19.30	23.11	30.48	19.05
GFBT 6-4N	3/8	9.52	1/4	7.11	11/16	17.46	11/16	17.46	16.76	19.30	23.87	31.24	22.35
GFBT 6-6N	3/8	9.52	3/8	6.35	13/16	20.63	11/16	17.46	16.76	19.30	25.90	33.27	22.35
GFBT 6-8N	3/8	9.52	1/2	7.11	1	25.40	11/16	17.46	16.76	19.30	28.70	36.06	28.44
GFBT 8-4N	1/2	12.70	1/4	10.41	13/16	20.63	7/8	22.22	22.86	21.84	25.90	36.06	22.35
GFBT 8-6N	1/2	12.70	3/8	10.41	13/16	20.63	7/8	22.22	22.86	21.84	25.90	36.06	22.35
GFBT 8-8N	1/2	12.70	1/2	10.41	1	25.40	7/8	22.22	22.86	21.84	29.71	39.87	28.44
GFBT 10-6N	5/8	15.87	3/8	12.70	15/16	23.81	1	25.40	24.38	21.84	27.94	38.10	22.35
GFBT 10-8N	5/8	15.87	1/2	12.70	1	25.40	1	25.40	24.38	21.84	28.70	38.86	28.44
GFBT 12-8N	3/4	19.05	1/2	15.74	1-1/16	26.98	1-1/8	28.57	24.38	21.84	29.71	39.87	28.44
GFBT 12-12N	3/4	19.05	3/4	15.74	1-1/4	31.75	1-1/8	28.57	24.38	21.84	34.54	44.70	31.75
GFBT 14-12N	7/8	22.22	3/4	18.28	1-1/4	31.75	1-1/4	31.75	25.90	21.84	34.54	44.70	31.75
GFBT 16-12N	1	25.40	3/4	22.35	1-3/8	34.92	1-1/2	38.10	31.24	26.41	36.83	49.02	31.75
GFBT 16-16N	1	25.40	1	22.35	1-11/16	42.86	1-1/2	38.10	31.24	26.41	41.40	53.59	38.10

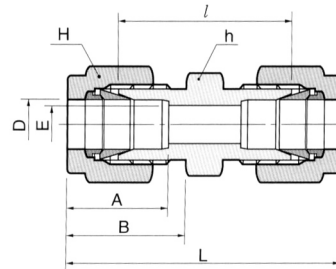
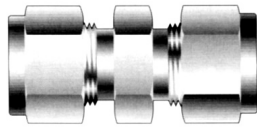
Connects metric tube to male ISO tapered thread

Part No.	Tube O.D. D(mm)	T (PT)	E Min	Width across flat		A	B	ℓ	L	L1
				h	H					
GFBT 6M-2R	6	1/8	4.8	12.70	14.28	15.3	17.7	19.6	27.0	19.00
GFBT 6M-4R	6	1/4	4.8	17.46	14.28	15.3	17.7	22.4	29.8	22.40
GFBT 6M-6R	6	3/8	4.8	20.63	14.28	15.3	17.7	24.4	31.7	22.40
GFBT 6M-8R	6	1/2	4.8	25.40	14.28	15.3	17.7	27.2	34.5	28.40
GFBT 8M-2R	8	1/8	6.4	15.87	15.87	16.2	18.6	22.4	29.9	19.00
GFBT 8M-4R	8	1/4	6.4	17.46	15.87	16.2	18.6	23.1	30.6	22.40
GFBT 8M-6R	8	3/8	6.4	20.63	15.87	16.2	18.6	25.2	32.4	22.40
GFBT 8M-8R	8	1/2	6.4	25.40	15.87	16.2	18.6	28.0	35.2	28.40
GFBT 10M-2R	10	1/8	7.9	17.46	19.05	17.2	19.5	23.9	31.5	19.00
GFBT 10M-4R	10	1/4	7.9	17.46	19.05	17.2	19.5	25.9	33.5	22.40
GFBT 10M-6R	10	3/8	7.9	20.63	19.05	17.2	19.5	25.9	33.5	22.40
GFBT 10M-8R	10	1/2	9.5	25.40	19.05	17.2	19.5	26.2	33.6	28.40
GFBT 12M-4R	12	1/4	9.5	20.63	22.22	22.8	22.0	25.9	36.0	22.40
GFBT 12M-6R	12	3/8	9.5	20.63	22.22	22.8	22.0	25.9	36.0	22.40
GFBT 12M-8R	12	1/2	9.5	25.40	22.22	22.8	22.0	29.7	40.0	28.40
GFBT 16M-8R	16	1/2	12.7	25.40	25.40	24.4	22.0	29.7	40.0	28.70

Tube Fittings | Tube to Tube Union

SAM WON GREEN

GU
Union



Connects fractional tube

Part No.	Tube O.D. D		E Min.	Width across flat				A	B	ℓ	L
	in	mm		h		H					
				in	mm	in	mm				
GU-1	1/16	1.59	1.27	5/16	7.93	5/16	7.93	8.63	10.92	17.50	25.15
GU-2	1/8	3.17	2.28	7/16	11.11	7/16	11.11	12.70	15.24	22.35	35.56
GU-3	3/16	4.76	3.04	7/16	11.11	1/2	12.70	13.71	16.00	24.13	37.33
GU-4	1/4	6.35	4.82	1/2	12.70	9/16	14.28	15.24	17.78	26.16	40.89
GU-5	5/16	7.93	6.35	9/16	14.28	5/8	15.87	16.25	18.54	28.19	42.92
GU-6	3/8	9.52	7.11	5/8	15.87	11/16	17.46	16.76	19.30	30.22	44.95
GU-8	1/2	12.70	10.41	13/16	20.63	7/8	22.22	22.86	21.84	30.98	51.30
GU-10	5/8	15.87	12.70	15/16	23.81	1	25.40	24.38	21.84	31.75	52.07
GU-12	3/4	19.05	15.74	1-1/16	26.98	1-1/8	28.58	24.38	21.84	31.27	53.59
GU-14	7/8	22.22	18.28	1-3/16	30.16	1-1/4	31.75	25.90	21.84	35.05	55.37
GU-16	1	25.40	22.35	1-3/8	34.92	1-1/2	38.10	31.24	26.41	40.38	64.77
GU-20	1-1/4	31.75	27.68	1-3/4	44.45	1-7/8	47.63	41.14	38.86	48.00	92.20
GU-24	1-1/2	38.10	34.03	2-1/8	53.97	2-1/4	57.15	50.03	45.21	53.60	107.95
GU-32	2	50.80	45.97	2-3/4	69.85	3	76.20	67.56	62.73	74.70	149.35

Connects metric tube

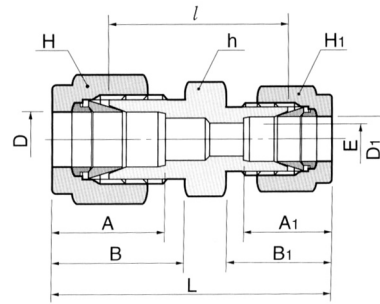
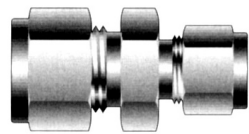
Part No.	Tube O.D. D(mm)	E Min	Width across flat		A	B	ℓ	L
			h	H				
GU-2M	2	1.7	11.11	11.11	12.9	15.3	22.1	35.6
GU-3M	3	2.4	11.11	11.11	12.9	15.3	22.1	35.3
GU-4M	4	2.4	11.11	12.70	13.7	16.1	24.1	37.3
GU-6M	6	4.8	14.28	14.28	15.3	17.7	26.2	41.0
GU-8M	8	6.4	15.87	15.87	16.2	18.6	28.2	43.2
GU-10M	10	7.9	17.46	19.05	17.2	19.5	31.0	46.2
GU-12M	12	9.5	20.63	22.22	22.8	22.0	31.0	51.2
GU-15M	15	11.9	23.81	25.40	24.4	22.0	31.8	52.0
GU-16M	16	12.7	23.81	25.40	24.4	22.0	31.8	52.0
GU-18M	18	15.1	26.98	30.16	24.4	22.0	33.3	53.5
GU-20M	20	15.9	30.16	31.75	26.0	22.0	34.8	55.0
GU-22M	22	18.3	30.16	31.75	26.0	22.0	34.8	55.0
GU-25M	25	21.8	34.92	38.10	31.3	26.5	40.4	65.0
GU-28M	28	21.8	41.27	46.04	36.6	36.6	43.4	85.0
GU-30M	30	26.0	46.04	49.21	39.6	39.2	49.5	92.7
GU-32M	32	28.6	46.04	49.21	42.0	41.6	51.3	97.3
GU-38M	38	33.7	55.56	60.32	49.4	47.9	58.4	113.6

Tube Fittings | Tube to Tube Union

SAM WON GREEN

GRU

Reducing Union



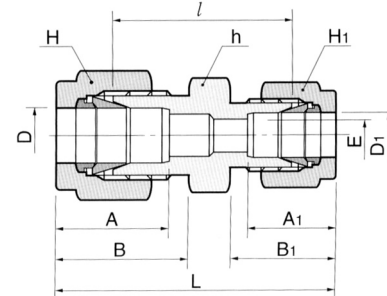
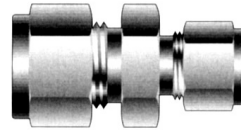
Connects fractional tube

Part No.	Tube O.D.				E Min.	Width across flat						A	A ₁	B	B ₁	ℓ	L
	D		D ₁			h		H		H ₁							
	in	mm	in	mm		in	mm	in	mm	in	mm						
GRU 2-1	1/8	3.17	1/16	1.59	1.27	7/16	11.11	7/16	11.11	5/16	7.93	12.70	8.63	15.24	10.92	20.60	30.91
GRU 3-1	3/16	4.76	1/16	1.59	1.27	7/16	11.11	1/2	12.70	5/16	7.93	13.71	8.63	16.00	10.92	21.84	32.25
GRU 3-2	3/16	4.76	1/8	3.17	2.28	7/16	11.11	1/2	12.70	7/16	11.11	13.71	12.70	16.00	15.24	23.36	36.57
GRU 4-1	1/4	6.35	1/16	1.59	1.27	1/2	12.70	9/16	14.28	5/16	7.93	15.24	8.63	17.78	10.92	23.11	34.29
GRU 4-2	1/4	6.35	1/8	3.17	2.28	1/2	12.70	9/16	14.28	7/16	11.11	15.24	12.70	17.78	15.24	24.63	38.60
GRU 4-3	1/4	6.35	3/16	4.76	3.04	1/2	12.70	9/16	14.28	1/2	12.70	15.24	13.71	17.78	16.00	25.40	39.37
GRU 5-2	5/16	7.93	1/8	3.17	2.28	9/16	14.28	5/8	15.87	7/16	11.11	16.25	12.70	18.54	15.24	25.90	39.87
GRU 5-4	5/16	7.93	1/4	6.35	4.82	9/16	14.28	5/8	15.87	9/16	14.28	16.25	15.24	18.54	17.78	27.43	42.16
GRU 6-1	3/8	9.52	1/16	1.59	1.27	5/8	15.87	11/16	17.46	5/16	7.93	16.76	8.63	19.30	10.92	25.40	36.57
GRU 6-2	3/8	9.52	1/8	3.17	2.28	5/8	15.87	11/16	17.46	7/16	11.11	16.76	12.70	19.30	15.24	26.92	40.89
GRU 6-4	3/8	9.52	1/4	6.35	4.82	5/8	15.87	11/16	17.46	9/16	14.28	16.76	15.24	19.30	17.78	28.44	43.18
GRU 6-5	3/8	9.52	5/16	7.93	6.35	5/8	15.87	11/16	17.46	5/8	15.87	16.76	16.25	19.30	18.54	29.46	44.19
GRU 8-2	1/2	12.70	1/8	3.17	2.28	13/16	20.63	7/8	22.22	7/16	11.11	22.86	12.70	21.84	15.24	28.44	45.21
GRU 8-4	1/2	12.70	1/4	6.35	4.82	13/16	20.63	7/8	22.22	9/16	14.28	22.86	15.24	21.84	17.78	29.46	46.99
GRU 8-6	1/2	12.70	3/8	9.52	7.11	13/16	20.63	7/8	22.22	11/16	17.46	22.86	16.76	21.84	19.30	30.98	48.51
GRU 10-6	5/8	15.87	3/8	9.52	7.11	15/16	23.81	1	25.40	11/16	17.46	24.38	16.76	21.84	19.30	31.75	49.27
GRU 10-8	5/8	15.87	1/2	12.70	10.41	15/16	23.81	1	25.40	7/8	22.22	24.38	22.86	21.84	21.84	31.75	52.07
GRU 12-4	3/4	19.05	1/4	6.35	4.82	1-1/16	26.97	1-1/8	28.57	9/16	14.28	24.38	15.24	21.84	17.78	31.75	49.27
GRU 12-6	3/4	19.05	3/8	9.52	7.11	1-1/16	26.97	1-1/8	28.57	11/16	17.46	24.38	16.76	21.84	19.30	33.27	50.80
GRU 12-8	3/4	19.05	1/2	12.70	10.41	1-1/16	26.97	1-1/8	28.57	7/8	22.22	24.38	22.86	21.84	21.84	33.27	53.59
GRU 12-10	3/4	19.05	5/8	15.87	12.70	1-1/16	26.97	1-1/8	28.57	1	25.40	24.38	24.38	21.84	21.84	33.27	53.59
GRU 16-8	1	25.40	1/2	12.70	10.41	1-3/8	34.92	1-1/2	38.10	7/8	22.22	31.24	22.86	26.41	21.84	40.89	63.24
GRU 16-12	1	25.40	3/4	19.05	15.74	1-3/8	34.92	1-1/2	38.10	1-1/8	28.57	31.24	24.38	26.41	21.84	40.89	62.73

Tube Fittings | Tube to Tube Union

SAM WON GREEN

GRU Reducing Union



Connects metric tube

Part No.	Tube O.D.		E Min	Width across flat			A	A1	B	B1	ℓ	L
	D(mm)	D1(mm)		h	H	H1						
GRU 3M-2M	3	2	1.7	12.70	11.11	11.11	12.9	12.9	15.3	15.3	22.1	35.3
GRU 6M-2M	6	2	1.7	14.28	14.28	11.11	15.3	12.9	17.7	15.3	24.6	38.6
GRU 6M-3M	6	3	2.4	14.28	14.28	11.11	15.3	12.9	17.7	15.3	24.6	38.6
GRU 6M-4M	6	4	2.4	14.28	14.28	12.70	15.3	13.7	17.7	16.1	25.4	39.4
GRU 8M-6M	8	6	4.8	15.87	15.87	14.28	16.2	15.3	18.6	17.7	27.4	42.3
GRU 10M-6M	10	6	4.8	17.46	19.05	14.28	17.2	15.3	19.5	17.7	29.5	44.5
GRU 10M-8M	10	8	6.4	17.46	19.05	15.87	17.2	16.2	19.5	18.6	30.0	45.1
GRU 12M-6M	12	6	4.8	22.22	22.22	14.28	22.8	15.3	22.0	17.7	29.5	47.0
GRU 12M-8M	12	8	6.4	22.22	22.22	15.87	22.8	16.2	22.0	18.6	30.2	47.8
GRU 12M-10M	12	10	7.9	22.22	22.22	19.05	22.8	17.2	22.0	19.5	31.0	48.7
GRU 16M-10M	16	10	7.9	23.81	25.40	19.05	24.4	17.2	22.0	19.5	31.8	49.5
GRU 16M-12M	16	12	9.5	23.81	25.40	22.22	24.4	22.8	22.0	22.0	31.8	52.0
GRU 18M-12M	18	12	9.5	26.98	30.16	22.22	24.4	22.8	22.0	22.0	33.3	53.5
GRU 25M-18M	25	18	15.1	34.92	38.10	30.16	31.3	24.4	26.5	22.0	38.6	61.0
GRU 25M-20M	25	20	15.9	34.92	38.10	31.75	31.3	26.0	26.5	22.0	39.9	62.3

Connects metric tube to facational tube

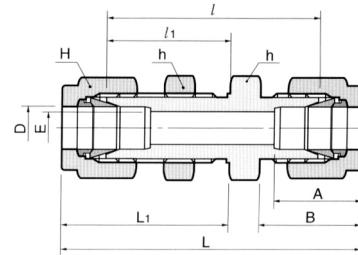
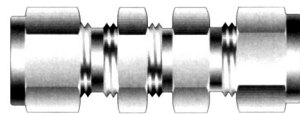
Part No.	Tube O.D.			E Min	Width across flat			A	A1	B	B1	ℓ	L
	D(mm)	D1			h	H	H1						
		in	mm										
GRU 3M-2	3	1/8	3.17	2.4	11.11	11.11	11.11	12.9	12.8	15.3	15.2	22.1	35.2
GRU 4M-2	4	1/8	3.17	2.4	11.11	12.70	11.11	13.7	12.8	16.1	15.2	23.4	36.5
GRU 4M-4	4	1/4	6.35	2.4	14.28	12.70	14.28	13.7	15.3	16.1	17.7	25.4	39.4
GRU 6M-2	6	1/8	3.17	2.4	14.28	14.28	11.11	15.3	12.8	17.7	15.2	24.6	38.5
GRU 6M-4	6	1/4	6.35	4.8	14.28	14.28	14.28	15.3	15.8	17.7	17.7	26.2	41.0
GRU 6M-5	6	5/16	7.93	4.8	14.28	14.28	15.87	15.3	16.2	17.7	18.6	27.4	42.3
GRU 8M-4	8	1/4	6.35	4.8	14.28	15.87	14.28	16.2	15.3	18.6	17.7	27.4	42.3
GRU 10M-2	10	1/8	3.17	2.4	17.46	19.05	11.11	17.2	12.8	19.5	15.2	27.4	41.8
GRU 10M-4	10	1/4	6.35	4.8	17.46	19.05	14.28	17.2	15.3	19.5	17.7	29.5	44.5
GRU 10M-5	10	5/16	7.93	6.4	17.46	19.05	15.87	17.2	16.2	19.5	18.6	30.3	45.1
GRU 10M-6	10	3/8	9.52	7.1	17.46	19.05	17.46	17.2	16.9	19.5	18.6	31.0	45.9
GRU 12M-5	12	5/16	7.93	6.4	20.63	22.22	15.87	22.8	16.2	22.0	18.6	30.2	47.8
GRU 12M-6	12	3/8	9.52	7.1	20.63	22.22	17.46	22.8	16.9	22.0	19.2	31.0	48.4
GRU 12M-8	12	1/2	12.70	9.5	20.63	22.22	22.22	22.8	22.8	22.0	22.0	31.0	51.2
GRU 15M-8	15	1/2	12.70	10.3	23.81	25.40	22.22	24.4	22.8	22.0	22.0	31.8	52.0
GRU 16M-10	16	5/8	15.87	12.7	23.81	25.40	25.40	24.4	24.4	22.0	22.0	31.8	52.0
GRU 18M-12	18	3/4	19.05	15.1	26.98	30.16	28.57	24.4	24.4	22.0	22.0	33.3	53.5
GRU 20M-12	20	3/4	19.05	15.9	30.16	31.75	28.57	26.0	24.4	22.0	22.0	34.8	54.9
GRU 20M-16	20	1	25.40	15.9	34.92	31.75	38.10	26.0	31.2	22.0	26.4	38.0	60.3
GRU 22M-16	22	1	25.40	18.3	34.92	31.75	38.10	26.0	31.2	22.0	26.4	38.2	60.3

Tube Fittings | Tube to Tube Union

SAM WON GREEN

GBU

Bulkhead Union



Connects fractional tube

Part No.	Tube O.D.		E Min.	Width across flat				A	B	ℓ	ℓ ₁	L	L ₁	Panel Hole Drill size	Panel Max Thickness
	in	mm		h	H	in	mm								
GBU-1	1/16	1.59	1.27	5/6	7.93	5/16	7.93	8.63	10.92	23.87	13.46	31.50	17.27	5.2	3.05
GBU-2	1/8	3.17	2.28	1/2	12.70	7/16	11.11	12.70	15.24	38.10	24.63	51.30	31.24	8.3	12.70
GBU-3	3/16	4.76	3.04	9/6	14.28	1/2	12.70	13.71	16.00	40.38	25.40	53.59	32.00	9.9	12.70
GBU-4	1/4	6.35	4.82	5/8	15.87	9/16	14.28	15.24	17.78	42.92	26.16	57.65	33.52	11.5	10.16
GBU-5	5/16	7.93	6.35	11/16	17.46	5/8	15.87	16.25	18.54	45.97	28.44	60.70	35.81	13.1	11.17
GBU-6	3/8	9.52	7.11	3/4	19.05	11/16	17.46	16.76	19.30	47.49	29.46	62.23	36.83	14.7	11.17
GBU-8	1/2	12.70	10.41	15/16	23.81	7/8	22.22	22.86	21.84	50.80	31.75	71.12	41.91	19.4	12.70
GBU-10	5/8	15.87	12.70	1-1/16	26.98	1	25.40	24.38	21.84	52.32	32.51	72.64	42.67	22.6	12.70
GBU-12	3/4	19.05	15.74	1-3/16	30.16	1-1/8	28.58	24.38	21.84	58.67	37.33	78.99	47.49	25.8	16.76
GBU-14	7/8	22.22	18.28	1-3/8	34.92	1-1/4	31.75	25.90	21.84	64.26	42.92	84.58	53.08	29.0	19.05
GBU-16	1	25.40	22.35	1-5/8	41.27	1-1/2	38.10	31.24	26.41	71.37	45.21	95.75	57.40	33.7	19.05
GBU-20	1-1/4	31.75	27.68	1-7/8	47.63	1-7/8	47.63	41.14	38.86	78.99	47.75	123.19	69.85	41.2	19.05
GBU-24	1-1/2	38.10	34.03	2-1/4	57.15	2-1/4	57.15	50.03	45.21	84.83	49.27	139.19	76.45	49.6	19.05
GBU-32	2	50.80	45.97	2-3/4	69.85	3	76.20	67.56	62.73	105.66	56.38	180.34	93.72	57.9	19.05

Connects metric tube to

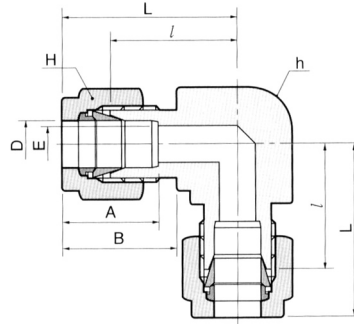
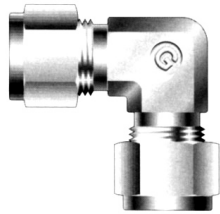
Part No.	Tube O.D. D	E Min	Width across flat		A	B	ℓ	ℓ ₁	L	L ₁	Panel Hole Drill size	Panel Max Thickness
			h	H								
GBU-3M	3	2.4	14.28	11.11	12.9	15.3	38.1	24.6	51.3	31.2	8.3	12.7
GBU-4M	4	2.4	14.28	12.70	13.7	16.1	40.4	25.4	53.6	32.0	9.9	12.7
GBU-6M	6	4.8	15.87	14.28	15.3	17.7	42.9	26.2	57.7	33.6	11.5	10.2
GBU-8M	8	6.4	17.46	15.87	16.2	18.6	46.0	28.6	61.0	36.1	13.1	11.2
GBU-10M	10	7.9	22.22	19.05	17.2	19.5	48.5	29.4	63.7	37.0	16.2	11.2
GBU-12M	12	9.5	23.81	22.22	22.8	22.0	50.8	31.8	71.0	41.9	19.5	12.7
GBU-15M	15	11.9	26.98	25.40	24.4	22.0	52.3	32.5	72.5	42.6	22.8	12.7
GBU-16M	16	12.7	26.98	25.40	24.4	22.0	52.3	32.5	72.5	42.6	22.8	12.7
GBU-18M	18	15.1	30.16	30.16	24.4	22.0	58.7	37.3	78.9	47.4	26.0	16.8
GBU-20M	20	15.9	34.92	31.75	26.0	22.0	64.3	42.9	84.5	53.0	29.0	17.0
GBU-22M	22	18.3	34.92	31.75	26.0	22.0	64.3	42.9	84.5	53.0	29.0	19.1
GBU-25M	25	21.8	41.27	38.10	31.3	26.5	71.4	45.2	95.9	57.5	33.7	19.1
GBU-30M	30	26.0	49.21	49.21	39.6	39.2	80.5	48.6	123.7	69.8	40.0	20.0
GBU-32M	32	28.6	49.21	49.21	42.0	41.6	82.3	49.2	128.3	72.5	42.5	20.0
GBU-38M	38	33.7	60.32	60.32	49.4	47.9	89.4	51.5	144.6	79.1	50.5	20.0

Tube Fittings | Tube to Tube Union

SAM WON GREEN

GUE

Union Elbow



Connects fractional tube

Part No.	Tube O.D. D		E Min.	Width across flat				A	B	ℓ	L
	in	mm		h		H					
				in	mm	in	mm				
GUE-1	1/16	1.59	1.27	3/8	9.52	5/16	7.93	8.63	10.92	14.00	17.88
GUE-2	1/8	3.17	2.28	3/8	9.52	7/16	11.11	12.70	15.24	15.74	22.35
GUE-3	3/16	4.76	3.04	1/2	12.70	1/2	12.70	13.71	16.00	17.78	24.38
GUE-4	1/4	6.35	4.82	1/2	12.70	9/16	14.28	15.24	17.78	19.55	26.92
GUE-5	5/16	7.93	6.35	9/16	14.28	5/8	15.87	16.25	18.54	21.33	28.70
GUE-6	3/8	9.52	7.11	5/8	15.87	11/16	17.46	16.76	19.30	23.11	30.48
GUE-8	1/2	12.70	10.41	13/16	20.63	7/8	22.22	22.86	21.84	25.90	36.06
GUE-10	5/8	15.87	12.70	15/16	23.81	1	25.40	24.38	21.84	28.70	38.80
GUE-12	3/4	19.05	15.74	1-1/16	26.98	1-1/8	28.57	24.38	21.84	29.71	39.87
GUE-14	7/8	22.22	18.28	1-1/4	31.75	1-1/4	31.75	25.90	21.84	34.54	44.70
GUE-16	1	25.40	22.35	1-3/8	34.92	1-1/2	38.10	31.24	26.41	36.83	49.02
GUE-20	1-1/4	31.75	27.68	1-11/16	42.86	1-7/8	47.63	41.14	38.86	44.50	66.54
GUE-24	1-1/2	38.10	34.03	2	50.80	2-1/4	57.15	50.03	45.21	50.80	77.97
GUE-32	2	50.80	45.97	2-3/4	69.85	3	76.20	67.56	62.73	69.80	107.18

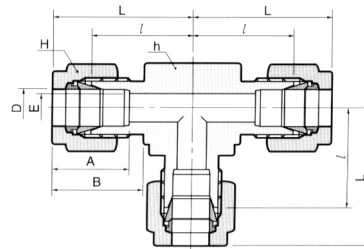
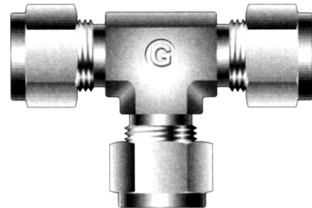
Connects metric tube

Part No.	Tube O.D. D(mm)	E Min	Width across flat		A	B	ℓ	L
			h	H				
GUE-2M	2	1.7	9.52	11.11	12.9	15.3	15.7	22.3
GUE-3M	3	2.4	9.52	11.11	12.9	15.3	15.7	22.3
GUE-4M	4	2.4	12.70	12.70	13.7	16.1	18.8	25.4
GUE-6M	6	4.8	12.70	14.28	15.3	17.7	19.6	27.0
GUE-8M	8	6.4	14.28	15.87	16.2	18.6	21.3	28.8
GUE-10M	10	7.9	17.46	19.05	17.2	19.5	23.9	31.5
GUE-12M	12	9.5	20.63	22.22	22.8	22.0	25.9	36.0
GUE-15M	15	11.9	25.40	25.40	24.4	22.0	28.7	38.8
GUE-16M	16	12.7	25.40	25.40	24.4	22.0	28.7	38.8
GUE-18M	18	15.1	26.98	30.16	24.4	22.0	29.7	39.8
GUE-20M	20	15.9	31.75	31.75	26.0	22.0	32.5	42.6
GUE-22M	22	18.3	31.75	31.75	26.0	22.0	32.5	42.6
GUE-25M	25	21.8	34.92	38.10	31.3	26.5	36.8	49.1
GUE-28M	28	21.8	41.27	46.04	36.6	36.6	43.2	64.0
GUE-30M	30	26.0	46.04	49.21	39.6	39.2	48.3	69.9
GUE-32M	32	28.6	46.04	49.21	42.0	41.6	49.3	72.3
GUE-38M	38	33.7	55.56	60.32	49.4	47.9	56.4	84.0

Tube Fittings | Tube to Tube Union

SAM WON GREEN

GUT Union Tee



Connects fractional tube

Part No.	Tube O.D. D		E Min.	Width across flat				A	B	ℓ	L
	in	mm		h		H					
				in	mm	in	mm				
GUT-1	1/16	1.59	1.27	3/8	9.52	5/16	7.93	8.63	10.92	14.00	17.88
GUT-2	1/8	3.17	2.28	3/8	9.52	7/16	11.11	12.70	15.24	15.74	22.35
GUT-3	3/16	4.76	3.04	1/2	12.70	1/2	12.70	13.71	16.00	17.78	24.38
GUT-4	1/4	6.35	4.82	1/2	12.70	9/16	14.28	15.24	17.78	19.55	26.92
GUT-5	5/16	7.93	6.35	9/16	14.28	5/8	15.87	16.25	18.54	21.33	28.70
GUT-6	3/8	9.52	7.11	5/8	15.87	11/16	17.46	16.76	19.30	23.11	30.48
GUT-8	1/2	12.70	10.41	13/16	20.63	7/8	22.22	22.86	21.84	25.90	36.06
GUT-10	5/8	15.87	12.70	15/16	23.81	1	25.40	24.38	21.84	28.70	38.80
GUT-12	3/4	19.05	15.74	1-1/16	26.98	1-1/8	28.57	24.38	21.84	29.71	39.87
GUT-14	7/8	22.22	18.28	1-1/4	31.75	1-1/4	31.75	25.90	21.84	34.54	44.70
GUT-16	1	25.40	22.35	1-3/8	34.92	1-1/2	38.10	31.24	26.41	36.83	49.02
GUT-20	1-1/4	31.75	27.68	1-11/16	42.86	1-7/8	47.63	41.14	38.86	44.50	66.54
GUT-24	1-1/2	38.10	34.03	2	50.80	2-1/4	57.15	50.03	45.21	50.80	77.97
GUT-32	2	50.80	45.97	2-3/4	69.85	3	76.20	67.56	62.73	69.80	107.18

Connects metric tube

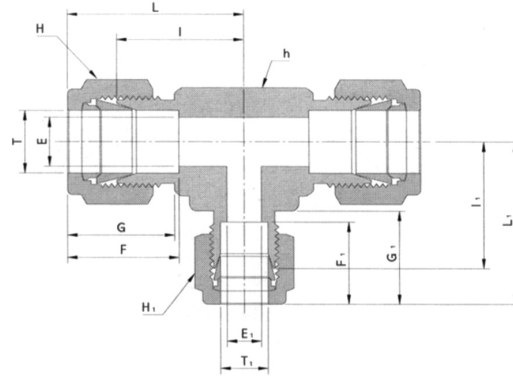
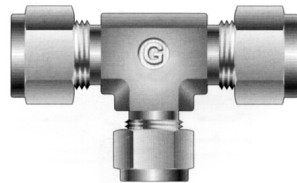
Part No.	Tube O.D. D(mm)	E Min	Width across flat		A	B	ℓ	L
			h	H				
GUT-2M	2	1.7	9.52	11.11	12.9	15.3	15.7	22.3
GUT-3M	3	2.4	9.52	11.11	12.9	15.3	15.7	22.3
GUT-4M	4	2.4	12.70	12.07	13.7	16.1	18.8	25.4
GUT-6M	6	4.8	12.70	14.28	15.3	17.7	19.6	27.0
GUT-8M	8	6.4	14.28	15.87	16.2	18.6	21.3	28.8
GUT-10M	10	7.9	17.46	19.05	17.2	19.5	23.9	31.5
GUT-12M	12	9.5	20.63	22.22	22.8	22.0	25.9	36.0
GUT-15M	15	11.9	25.40	25.04	24.4	22.0	28.7	38.8
GUT-16M	16	12.7	25.40	25.04	24.4	22.0	28.7	38.8
GUT-18M	18	15.1	26.98	30.16	24.4	22.0	29.7	39.8
GUT-20M	20	15.9	31.75	31.75	26.0	22.0	32.5	42.6
GUT-22M	22	18.3	31.75	31.75	26.0	22.0	32.5	42.6
GUT-25M	25	21.8	34.92	38.10	31.3	26.5	36.8	49.1
GUT-28M	28	21.8	41.27	46.04	36.6	36.6	43.2	64.0
GUT-30M	30	26.0	46.04	49.21	39.6	39.2	48.3	69.9
GUT-32M	32	28.6	46.04	49.21	42.0	41.6	49.3	72.3
GUT-38M	38	33.7	55.56	60.32	49.4	47.9	56.4	84.0

Tube Fittings | Tube to Tube Union

SAM WON GREEN

GRBT

Reducing Union Branch Tee

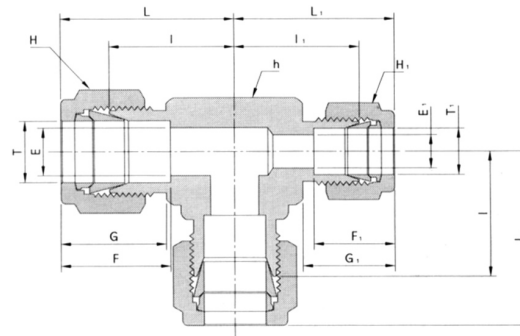
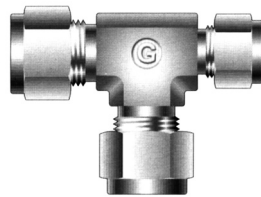


Connects fractional tube

Part No.	Tube O.D.Straight				E Min.	Width across flat						F	F1	G	G1	ℓ	ℓ1	L	L1
	T		T1			h		H		H1									
	in	mm	in	mm		in	mm	in	mm	in	mm								
GRBT 6-4	3/8	9.52	1/4	6.35	4.8	5/8	15.87	11/16	17.46	9/16	14.28	16.8	15.2	19.3	17.8	21.3	19.7	30.5	27.3
GRBT 8-4	1/2	12.70	1/4	6.35	4.8	13/16	20.63	13/16	20.63	9/16	14.28	22.9	15.2	21.8	17.8	25.9	24.3	36.1	31.9
GRBT 8-6	1/2	12.70	3/8	9.52	7.0	13/16	20.63	13/16	20.63	11/16	17.46	22.9	16.8	21.8	19.3	25.9	25.9	36.1	33.4
GRBT 10-6	5/8	15.87	3/8	9.52	7.0	1	25.40	1	25.40	11/16	17.46	24.4	16.8	21.8	19.3	28.7	28.7	38.9	36.2
GRBT 12-6	3/4	19.05	3/8	9.52	7.0	1-1/16	26.98	1-1/8	28.57	11/16	17.46	24.4	16.8	21.8	19.3	29.7	29.7	38.9	37.2
GRBT 12-8	3/4	19.05	1/2	12.70	10.0	1-1/16	26.98	1-1/8	28.57	7/8	22.22	24.4	22.9	21.8	21.8	29.7	29.7	38.9	39.7
GRBT 16-6	1	25.40	3/8	9.52	7.0	1-3/8	34.92	1-1/2	38.10	11/16	17.46	31.2	16.8	26.4	19.3	36.8	34.6	49.0	42.1
GRBT 16-8	1	25.40	1/2	12.70	10.0	1-3/8	34.92	1-1/2	38.10	7/8	22.22	31.2	22.9	26.4	21.8	36.8	34.6	49.0	44.6
GRBT 16-12	1	25.40	3/4	19.05	16.0	1-3/8	34.92	1-1/2	38.10	1-1/8	28.57	31.2	24.4	26.4	21.8	36.8	34.6	49.0	44.6

GRRT

Reducing Union Run Tee



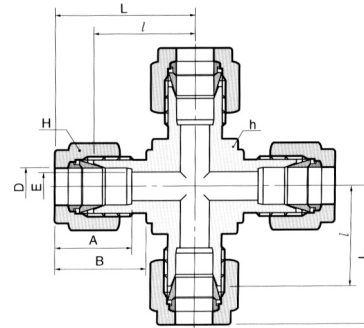
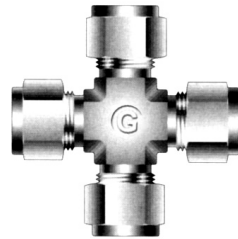
Connects fractional tube

Part No.	Tube O.D.Straight				E Min.	Width across flat						F	F1	G	G1	ℓ	ℓ1	L	L1
	T		T			h		H		H1									
	in	mm	in	mm		in	mm	in	mm	in	mm								
GRRT 6-4	3/8	9.52	1/4	6.35	4.8	5/8	15.87	11/16	17.46	9/16	14.28	16.8	15.2	19.3	17.8	21.3	19.7	30.5	27.3
GRRT 8-4	1/2	12.70	1/4	6.35	4.8	13/16	20.63	13/16	20.63	9/16	14.28	22.9	15.2	21.8	17.8	25.9	24.3	36.1	31.9
GRRT 8-6	1/2	12.70	3/8	9.52	7.0	13/16	20.63	13/16	20.63	11/16	17.46	22.9	16.8	21.8	19.3	25.9	25.9	36.1	33.4
GRRT 10-6	5/8	15.87	3/8	9.52	7.0	1	25.40	1	25.40	11/16	17.46	24.4	16.8	21.8	19.3	28.7	28.7	38.9	36.2
GRRT 12-6	3/4	19.05	3/8	9.52	7.0	1-1/16	26.98	1-1/8	28.57	11/16	17.46	24.4	16.8	21.8	19.3	29.7	29.7	38.9	37.2
GRRT 12-8	3/4	19.05	1/2	12.70	10.0	1-1/16	26.98	1-1/8	28.57	7/8	22.22	24.4	22.9	21.8	21.8	29.7	29.7	38.9	39.7
GRRT 16-6	1	25.40	3/8	9.52	7.0	1-3/8	34.92	1-1/2	38.10	11/16	17.46	31.2	16.8	26.4	19.3	36.8	34.6	49.0	42.1
GRRT 16-8	1	25.40	1/2	12.70	10.0	1-3/8	34.92	1-1/2	38.10	7/8	22.22	31.2	22.9	26.4	21.8	36.8	34.6	49.0	44.6
GRRT 16-12	1	25.40	3/4	19.05	16.0	1-3/8	34.92	1-1/2	38.10	1-1/8	28.57	31.2	24.4	26.4	21.8	36.8	34.6	49.0	44.6

Tube Fittings | Tube to Tube Union

SAM WON GREEN

GUC
Union Cross



Connects fractional tube

Part No.	Tube O.D.		E Min.	Width across flat				A	B	ℓ	L
	in	D mm		h		H					
				in	mm	in	mm				
GUC-1	1/16	1.59	1.27	3/8	9.52	5/16	7.93	8.63	10.92	14.00	17.88
GUC-2	1/8	3.17	2.28	3/8	9.52	7/16	11.11	12.70	15.24	15.74	22.35
GUC-3	3/16	4.76	3.04	1/2	12.70	1/2	12.70	13.71	16.00	17.78	24.38
GUC-4	1/4	6.35	4.82	1/2	12.70	9/16	14.28	15.24	17.78	19.55	26.92
GUC-5	5/16	7.93	6.35	9/16	14.28	5/8	15.87	16.25	18.54	21.33	28.70
GUC-6	3/8	9.52	7.11	5/8	15.87	11/16	17.46	16.76	19.30	23.11	30.48
GUC-8	1/2	12.70	10.41	13/16	20.63	7/8	22.22	22.86	21.84	25.90	36.06
GUC-10	5/8	15.87	12.70	15/16	23.81	1	25.40	24.38	21.84	28.70	38.80
GUC-12	3/4	19.05	15.74	1-1/16	26.98	1-1/8	28.57	24.38	21.84	29.71	39.87
GUC-14	7/8	22.22	18.28	1-1/4	31.75	1-1/4	31.75	25.90	21.84	34.54	44.70
GUC-16	1	25.40	22.35	1-3/8	34.92	1-1/2	38.10	31.24	26.41	36.83	49.02
GUC-20	1-1/4	31.75	27.68	1-11/16	42.86	1-7/8	47.63	41.14	38.86	44.50	77.97
GUC-24	1-1/2	38.10	34.03	2	50.80	2-1/4	57.15	50.03	45.21	50.80	77.98
GUC-32	2	50.80	45.97	2-3/4	69.85	3	76.20	67.56	62.73	69.80	107.18

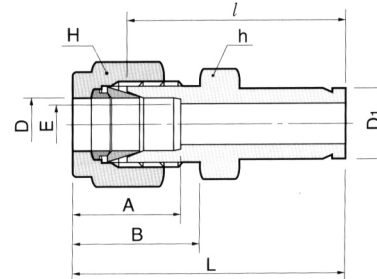
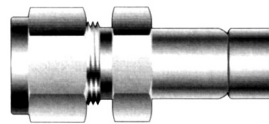
Connects metric tube

Part No.	Tube O.D. D(mm)	E Min	Width across flat		A	B	ℓ	L
			h	H				
GUC-3M	3	2.4	9.52	11.11	12.9	15.3	15.7	22.3
GUC-4M	4	2.4	12.70	12.70	13.7	16.1	18.8	25.4
GUC-6M	6	4.8	12.70	14.28	15.3	17.7	19.6	27.0
GUC-8M	8	6.4	14.28	15.87	16.2	18.6	21.3	28.8
GUC-10M	10	7.9	17.46	19.05	17.2	19.5	23.9	31.5
GUC-12M	12	9.5	20.63	22.22	22.8	22.0	25.9	36.0
GUC-15M	15	11.9	25.40	25.40	24.4	22.0	28.7	38.8
GUC-16M	16	12.7	25.40	25.40	24.4	22.0	28.7	38.8
GUC-18M	18	15.1	26.98	30.16	24.4	22.0	29.7	39.8
GUC-20M	20	15.9	31.75	31.75	26.0	22.0	32.5	42.6
GUC-22M	22	18.3	31.75	31.75	26.0	22.0	32.5	42.6
GUC-25M	25	21.8	34.92	38.10	31.3	26.5	36.8	49.1
GUC-28M	28	21.8	41.27	46.04	36.6	36.6	43.2	64.0
GUC-30M	30	26.0	46.04	49.21	39.6	39.2	48.3	69.9
GUC-32M	32	28.6	46.04	49.21	42.0	41.6	49.3	72.3
GUC-38M	38	33.7	55.56	60.32	49.4	47.9	56.4	84.0

Tube Fittings | Stub Tube Connector

SAM WON GREEN

GR
Reducer



Connects fractional tube to fractional SG-Lok port

Part No.	Tube O.D.				E Min.	Width across flat				A	B	ℓ	L
	D		D1			h		H					
	in	mm	in	mm		in	mm	in	mm				
GR 1-2	1/16	1.59	1/8	3.17	1.27	5/16	7.93	5/16	7.93	8.63	10.92	25.40	29.21
GR 1-4	1/16	1.59	1/4	6.35	1.27	5/16	7.93	5/16	7.93	8.63	10.92	27.68	31.49
GR 2-1	1/8	3.17	1/16	1.59	1.76	7/16	11.11	7/16	11.11	12.70	15.24	22.35	28.95
GR 2-2	1/8	3.17	1/8	3.17	2.03	7/16	11.11	7/16	11.11	12.70	15.24	26.92	33.52
GR 2-3	1/8	3.17	3/16	4.76	2.28	7/16	11.11	7/16	11.11	12.70	15.24	27.68	34.29
GR 2-4	1/8	3.17	1/4	6.35	2.28	7/16	11.11	7/16	11.11	12.70	15.24	29.46	36.06
GR 2-6	1/8	3.17	3/8	9.52	2.28	7/16	11.11	7/16	11.11	12.70	15.24	30.98	37.59
GR 2-8	1/8	3.17	1/2	12.70	2.28	9/16	14.28	7/16	11.11	12.70	15.24	37.59	44.19
GR 3-2	3/16	4.76	1/8	3.17	2.03	7/16	11.11	1/2	12.70	13.71	16.00	28.19	34.79
GR 3-4	3/16	4.76	1/4	6.35	3.04	7/16	11.11	1/2	12.70	13.71	16.00	30.48	37.08
GR 4-2	1/4	6.35	1/8	3.17	2.03	1/2	12.70	9/16	14.28	15.24	17.78	29.46	36.83
GR 4-3	1/4	6.35	3/16	4.76	3.04	1/2	12.70	9/16	14.28	15.24	17.78	30.22	37.59
GR 4-4	1/4	6.35	1/4	6.35	4.82	1/2	12.70	9/16	14.28	15.24	17.78	31.75	39.11
GR 4-5	1/4	6.35	5/16	7.93	4.82	1/2	12.70	9/16	14.28	15.24	17.78	32.51	39.87
GR 4-6	1/4	6.35	3/8	9.52	4.82	1/2	12.70	9/16	14.28	15.24	17.78	33.27	40.64
GR 4-8	1/4	6.35	1/2	12.70	4.82	9/16	14.28	9/16	14.28	15.24	17.78	38.86	46.22
GR 4-10	1/4	6.35	5/8	15.87	4.82	11/16	17.46	9/16	14.28	15.24	17.78	40.64	48.00
GR 4-12	1/4	6.35	3/4	19.05	4.82	13/16	20.63	9/16	14.28	15.24	17.78	40.38	47.75
GR 5-6	5/16	7.93	3/8	9.52	6.35	9/16	14.28	5/8	15.87	16.25	18.54	34.54	41.91
GR 5-8	5/16	7.93	1/2	12.70	6.35	9/16	14.28	5/8	15.87	16.25	18.54	40.13	47.49
GR 6-4	3/8	9.52	1/4	6.35	4.82	5/8	15.87	11/16	17.46	16.76	19.30	34.03	41.40
GR 6-6	3/8	9.52	3/8	9.52	7.11	5/8	15.87	11/16	17.46	16.76	19.30	35.81	43.18
GR 6-8	3/8	9.52	1/2	12.70	7.11	5/8	15.87	11/16	17.46	16.76	19.30	41.14	48.51
GR 6-10	3/8	9.52	5/8	15.87	7.11	11/16	17.46	11/16	17.46	16.76	19.30	42.92	50.29
GR 6-12	3/8	9.52	3/4	19.05	7.11	13/16	20.63	11/16	17.46	16.76	19.30	42.92	50.29
GR 8-4	1/2	12.70	1/4	6.35	4.82	13/16	20.63	7/8	22.22	22.86	21.84	34.79	44.95
GR 8-6	1/2	12.70	3/8	9.52	7.11	13/16	20.63	7/8	22.22	22.86	21.84	36.57	46.73
GR 8-8	1/2	12.70	1/2	12.70	9.90	13/16	20.63	7/8	22.22	22.86	21.84	42.16	52.32
GR 8-10	1/2	12.70	5/8	15.87	10.41	13/16	20.63	7/8	22.22	22.86	21.84	43.68	53.84
GR 8-12	1/2	12.70	3/4	19.05	10.41	16/16	20.63	7/8	22.22	22.86	21.84	43.68	53.84
GR 8-16	1/2	12.70	1	25.40	10.41	1-1/16	26.98	7/8	22.22	22.86	21.84	50.03	60.19
GR 10-12	5/8	15.87	3/4	19.05	12.70	15/16	23.81	1	25.40	24.38	21.84	44.45	54.61
GR 10-14	5/8	15.87	7/8	22.22	12.70	15/16	23.81	1	25.40	24.38	21.84	45.97	56.13
GR 10-16	5/8	15.87	1	25.40	12.70	1-1/16	26.98	1	25.40	24.38	21.84	50.80	60.96
GR 12-8	3/4	19.05	1/2	12.70	9.90	1-1/16	26.98	1-1/8	28.57	24.38	21.84	44.45	54.61
GR 12-16	3/4	19.05	1	25.40	15.74	1-1/16	26.98	1-1/8	28.57	24.38	21.84	52.32	62.48
GR 16-20	1	25.40	1-1/4	31.75	22.35	1-3/8	34.92	1-1/2	38.10	31.24	26.41	68.32	80.51
GR 16-24	1	25.40	1-1/2	38.10	22.35	1-5/8	41.27	1-1/2	38.10	31.24	26.41	76.96	89.15
GR 16-32	1	25.40	2	50.80	22.35	2-1/8	53.98	1-1/2	38.10	31.24	26.41	100.33	112.52
GR 20-24	1-1/4	31.75	1-1/2	38.10	27.68	1-7/8	47.63	2-1/4	57.15	41.14	38.86	82.04	104.14
GR 20-32	1-1/4	31.75	2	50.80	27.68	1-7/8	47.63	3	76.20	41.14	38.86	103.12	125.22
GR 24-32	1-1/2	38.10	2	50.80	34.03	2-1/4	57.15	3	76.20	50.03	45.21	104.14	131.31

Tube Fittings | Stub Tube Connector

SAM WON GREEN

Connects metric tube to fractional SG-Lok port

Part No.	Tube O.D.			E Min	Width across flat		A	B	ℓ	L
	D(mm)	D1			h	H				
		in	mm							
GR 2M-2	2	1/8	3.17	1.7	12.70	11.11	12.9	15.3	26.9	33.5
GR 3M-2	3	1/8	3.17	1.7	12.70	11.11	12.9	15.3	26.9	33.5
GR 3M-4	3	1/4	6.35	2.4	12.70	11.11	12.9	15.3	29.5	36.1
GR 4M-4	4	1/4	6.35	2.4	12.70	12.70	13.7	16.1	30.5	37.1
GR 6M-2	6	1/8	3.17	2.0	14.28	14.28	15.3	17.7	29.5	36.9
GR 6M-4	6	1/4	6.35	4.8	14.28	14.28	15.3	17.7	31.8	39.2
GR 6M-5	6	5/16	7.93	4.8	14.28	14.28	15.3	17.7	32.5	39.9
GR 6M-6	6	3/8	9.52	4.8	14.28	14.28	15.3	17.7	33.3	40.7
GR 6M-8	6	1/2	12.70	4.8	14.28	14.28	15.3	17.7	38.9	46.3
GR 8M-6	8	3/8	9.52	6.4	15.87	15.87	16.2	18.6	34.5	42.0
GR 8M-8	8	1/2	12.70	6.4	15.87	15.87	16.2	18.6	40.1	47.6
GR 10M-6	10	3/8	9.52	7.1	17.46	19.05	17.2	19.5	36.6	44.2
GR 10M-8	10	1/2	12.70	7.9	17.46	19.05	17.2	19.5	42.2	49.8
GR 12M-8	12	1/2	12.70	9.5	22.22	22.22	22.8	22.0	42.2	52.3
GR 12M-12	12	3/4	19.05	9.5	22.22	22.22	22.8	22.0	43.7	53.8
GR 18M-12	18	3/4	19.05	15.1	26.98	30.16	24.4	22.0	46.0	56.1
GR 18M-16	18	1	25.40	15.1	26.98	30.16	24.4	22.0	52.3	62.4
GR 25M-16	25	1	25.40	20.2	34.92	38.10	31.3	26.5	57.2	69.5

Connects metric tube to metric SG-Lok port

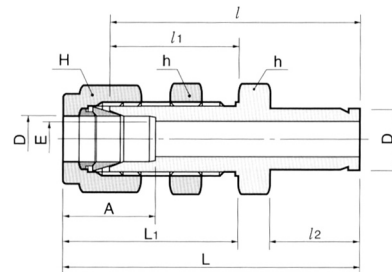
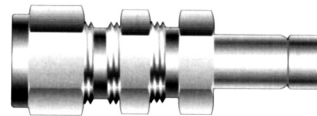
Part No.	Tube O.D.		E Min	Width across flat		A	B	ℓ	L
	D(mm)	D1(mm)		h	H				
GR 2M-3M	2	3	1.7	12.70	11.11	12.9	15.3	26.9	35.3
GR 3M-4M	3	4	2.4	12.70	11.11	12.9	15.3	28.4	35.0
GR 3M-6M	3	6	2.4	12.70	11.11	12.9	15.3	29.5	36.1
GR 3M-10M	3	10	2.4	12.70	11.11	12.9	15.3	31.8	38.4
GR 4M-6M	4	6	2.4	12.70	12.70	13.7	16.1	30.5	37.1
GR 6M-3M	6	3	1.8	14.28	14.28	15.3	17.7	29.5	36.9
GR 6M-8M	6	8	4.8	14.28	14.28	15.3	17.7	32.5	39.9
GR 6M-10M	6	10	4.8	14.28	14.28	15.3	17.7	33.3	40.7
GR 6M-12M	6	12	4.8	14.28	14.28	15.3	17.7	38.9	46.3
GR 8M-6M	8	6	4.6	15.87	15.87	16.2	18.6	32.8	40.3
GR 8M-10M	8	10	6.4	15.87	15.87	16.2	18.6	34.5	42.0
GR 8M-12M	8	12	6.4	15.87	15.87	16.2	18.6	40.1	47.6
GR 10M-6M	10	6	4.6	17.46	19.05	17.2	19.5	34.8	42.4
GR 10M-12M	10	12	7.9	17.46	19.05	17.2	19.5	42.2	49.8
GR 10M-15M	10	15	7.9	17.46	19.05	17.2	19.5	43.7	51.3
GR 10M-18M	10	18	7.9	19.05	19.05	17.2	19.5	43.7	51.3
GR 12M-6M	12	6	4.6	22.22	22.22	22.8	22.0	34.8	44.9
GR 12M-10M	12	10	7.7	22.22	22.22	22.8	22.0	36.6	46.7
GR 12M-16M	12	16	9.5	22.22	22.22	22.8	22.0	43.7	53.8
GR 12M-18M	12	18	9.5	22.22	22.22	22.8	22.0	43.7	53.8
GR 12M-20M	12	20	9.5	22.22	22.22	22.8	22.0	46.0	56.1
GR 12M-22M	12	22	9.5	23.81	22.22	22.8	22.0	46.0	56.1
GR 12M-25M	12	25	9.5	26.98	22.22	22.8	22.0	52.3	62.4
GR 16M-12M	16	12	9.1	23.81	25.40	24.4	22.0	42.9	53.0
GR 18M-12M	18	12	9.1	26.98	30.16	24.4	22.0	44.5	54.6
GR 18M-16M	18	16	12.7	26.98	30.16	24.4	22.0	46.0	56.1
GR 18M-20M	18	20	15.1	26.98	30.16	24.4	22.0	47.5	57.6
GR 18M-22M	18	22	15.1	26.98	30.16	24.4	22.0	47.5	57.6
GR 18M-25M	18	25	15.1	26.98	30.16	24.4	22.0	52.3	62.4
GR 20M-16M	20	16	12.7	30.16	31.75	26.0	22.0	47.8	57.9
GR 20M-18M	20	18	13.9	30.16	31.75	26.0	22.0	47.8	57.9
GR 20M-22M	20	22	15.8	30.16	31.75	26.0	22.0	49.3	59.4
GR 20M-25M	20	25	15.8	30.16	31.75	26.0	22.0	54.1	64.2
GR 22M-18M	22	18	13.9	30.16	31.75	26.0	22.0	47.8	57.9
GR 22M-20M	22	20	15.1	30.16	31.75	26.0	22.0	49.3	59.4
GR 22M-25M	22	25	18.3	30.16	31.75	26.0	22.0	54.1	64.2
GR 25M-18M	25	18	13.9	34.92	38.10	31.3	26.5	50.8	63.1
GR 25M-20M	25	20	15.1	34.92	38.10	31.3	26.5	52.3	64.6

Tube Fittings | Stub Tube Connector

SAM WON GREEN

GBA

Bulkhead Adapter



Connects fractional tube to fractional SG-Lok port

Part No.	Tube O.D. D		E Min.	Width across flat				A	ℓ	ℓ ₁	ℓ ₂	L	L ₁	Panel Hole Drill size	Panel Max Thickness
	in	mm		h	H	in	mm								
GBA 2-2	1/8	3.17	2.03	1/2	12.70	7/16	11.11	12.70	42.92	24.63	13.45	49.53	31.24	8.3	12.70
GBA 4-4	1/4	6.35	4.82	5/8	15.87	9/16	14.28	15.24	48.51	26.16	15.74	55.88	33.52	11.5	10.16
GBA 6-6	3/8	9.52	7.11	3/4	19.05	11/16	17.46	16.76	53.84	29.46	17.50	61.21	36.83	14.7	11.17
GBA 8-8	1/2	12.70	10.41	15/16	23.81	7/8	22.22	22.86	62.73	31.75	23.11	72.89	41.91	19.4	12.70
GBA 10-10	5/8	15.87	12.70	1-1/16	26.98	1	25.40	24.38	65.02	32.51	24.70	75.18	42.67	22.6	12.70
GBA 16-16	1	25.40	20.32	1-5/8	41.28	1-1/2	38.10	31.24	88.13	45.21	31.70	100.33	57.40	33.7	19.05
GBA 20-20	1-1/4	31.75	27.68	1-7/8	47.63	1-7/8	47.63	41.14	102.07	47.75	40.00	124.17	69.85	41.7	19.05
GBA 24-24	1-1/2	38.10	34.03	2-1/4	57.15	2-1/4	57.15	50.03	118.33	49.27	51.50	145.51	76.45	49.6	19.05
GBA 32-32	2	50.80	45.97	2-3/4	69.85	3	76.20	67.56	148.79	56.38	68.40	185.82	93.71	57.9	19.05

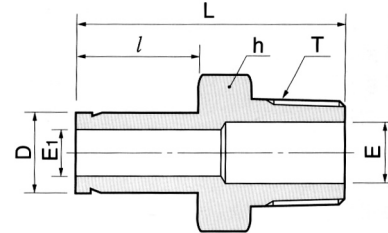
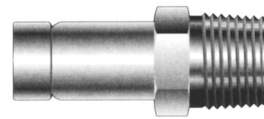
Connects metric tube to metric SG-Lok port

Part No.	Tube O.D. D	E Min	Width across flat		A	ℓ	ℓ ₁	ℓ ₂	L	L ₁	Panel Hole Drill size	Panel Max Thickness
			h	H								
GBA 3M-3M	3	2.0	12.70	11.11	12.9	43.0	24.6	13.5	49.7	31.2	8.3	12.7
GBA 6M-6M	6	4.8	15.87	14.28	15.3	48.5	26.2	15.9	55.9	33.6	11.5	10.2
GBA 8M-8M	8	6.4	17.46	15.87	16.2	53.1	28.6	16.7	59.1	36.1	13.1	11.2
GBA 12M-12M	12	9.5	23.81	22.22	22.8	62.7	31.8	23.0	72.9	41.9	19.4	12.7

Tube Fittings | Stub Tube Connector

SAM WON GREEN

GMA
Male Adapter



Connects fractional SG-Lok port to female NPT thread

Part No.	Tube O.D. D		T N(NPT)	E Min.	E1	Width across flat h		ℓ	L
	in	mm				in	mm		
	GMA 2-2N	1/8				3.17	1/8		
GMA 2-4N	1/8	3.17	1/4	7.0	1.77	9/16	14.28	13.45	34.80
GMA 3-2N	3/16	4.76	1/8	4.8	3.04	7/16	11.11	14.20	30.22
GMA 3-4N	3/16	4.76	1/4	7.0	3.04	9/16	14.28	14.20	35.56
GMA 4-2N	1/4	6.35	1/8	4.8	4.57	7/16	11.11	15.75	31.80
GMA 4-4N	1/4	6.35	1/4	7.0	4.57	9/16	14.28	15.75	37.08
GMA 4-6N	1/4	6.35	3/8	10.0	4.57	11/16	17.46	15.75	37.84
GMA 4-8N	1/4	6.35	1/2	12.0	4.57	7/8	22.22	15.75	43.43
GMA 5-2N	5/16	7.93	1/8	4.8	6.35	7/16	11.11	16.80	32.76
GMA 5-4N	5/16	7.93	1/4	7.0	6.35	9/16	14.28	16.80	38.10
GMA 6-2N	3/8	9.52	1/8	4.8	7.11	7/16	11.11	17.50	33.50
GMA 6-4N	3/8	9.52	1/4	7.0	7.11	9/16	14.28	17.50	38.90
GMA 6-6N	3/8	9.52	3/8	10.0	7.11	11/16	17.46	17.50	39.60
GMA 6-8N	3/8	9.52	1/2	12.0	7.11	7/8	22.22	17.50	45.20
GMA 8-4N	1/2	12.70	1/4	7.0	9.90	9/16	14.28	23.20	44.50
GMA 8-6N	1/2	12.70	3/8	10.0	9.90	11/16	17.46	23.20	45.20
GMA 8-8N	1/2	12.70	1/2	12.0	9.90	7/8	22.22	23.20	50.50
GMA 10-6N	5/8	15.87	3/8	10.0	12.70	11/16	17.46	24.70	47.40
GMA 10-8N	5/8	15.87	1/2	12.0	12.70	7/8	22.22	24.70	52.30
GMA 10-12N	5/8	15.87	3/4	18.0	12.70	1-1/16	26.98	24.70	52.30
GMA 12-8N	3/4	19.05	1/2	12.0	14.98	7/8	22.22	24.70	52.30
GMA 12-12N	3/4	19.05	3/4	18.0	14.98	1-1/16	26.98	24.70	52.30
GMA 12-16N	3/4	19.05	1	22.0	14.98	1-3/8	34.92	24.70	57.91
GMA 14-12N	7/8	22.22	3/4	18.0	17.27	1-1/16	26.98	26.70	54.30
GMA 16-12N	1	25.40	3/4	18.0	20.06	1-1/16	26.98	31.70	58.70
GMA 16-16N	1	25.40	1	22.0	20.06	1-3/8	34.92	31.70	66.00
GMA 20-20N	1-1/4	31.75	1-1/4	27.0	-	1-3/4	44.45	40.00	80.26
GMA 24-24N	1-1/2	38.10	1-1/2	33.0	-	2-1/8	53.98	51.50	94.48
GMA 32-32N	2	50.80	2	45.0	-	2-3/4	69.85	68.40	119.38

Connects metric SG-Lok port to female ISO tapered thread

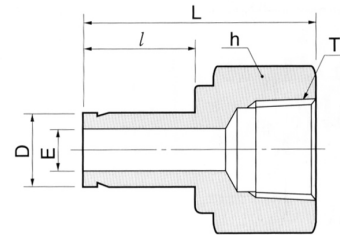
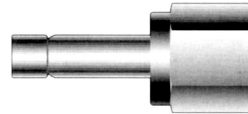
Part No.	Tube O.D. D(mm)	T R(PT)	E Min	E1 Min	Width across flat h	ℓ	L
GMA 3M-2R	3	1/8	4.0	1.8	12	13.15	29.4
GMA 6M-2R	6	1/8	4.8	4.6	12	15.75	32.8
GMA 6M-4R	6	1/4	4.8	4.6	14	15.75	38.1
GMA 8M-4R	8	1/4	6.4	6.3	14	16.50	39.1
GMA 10M-4R	10	1/4	8.0	7.7	14	17.50	39.9
GMA 10M-6R	10	3/8	8.0	7.7	17	17.50	40.6
GMA 10M-8R	10	1/2	12.0	707	22	17.50	45.2
GMA 12M-4R	12	1/4	7.0	9.1	14	23.50	46.5
GMA 12M-6R	12	3/8	9.0	9.1	17	23.50	46.5
GMA 12M-8R	12	1/2	12.0	9.1	22	23.50	51.8
GMA 18M-8R	18	1/2	12.0	13.9	22	24.90	53.2
GMA 18M-12R	18	3/4	16.0	13.9	27	24.90	53.2
GMA 28M-16R	28	1	22.0	-	35	31.70	74.7
GMA 28M-20R	28	1-1/4	24.0	-	46	31.70	76.2
GMA 32M-20R	32	1-1/4	27.0	-	46	40.00	81.0
GMA 38M-24R	38	1-1/2	33.0	-	55	51.50	92.2

Tube Fittings | Stub Tube Connector

SAM WON GREEN

GFA

Female Adapter



Connects fractional SG-Lok port to male NPT thread

Part No.	Tube O.D.		T N(NPT)	E Min.	Width across flat		ℓ	L
	D				h			
	in	mm			in	mm		
GFA 2-2N	1/8	3.17	1/8	1.8	9/16	14.28	13.45	31.50
GFA 2-4N	1/8	3.17	1/4	1.8	3/4	19.05	13.45	35.30
GFA 3-2N	3/16	4.76	1/8	3.0	9/16	14.28	14.20	32.00
GFA 3-4N	3/16	4.76	1/4	3.0	3/4	19.05	14.20	35.81
GFA 4-2N	1/4	6.35	1/8	4.8	9/16	14.28	15.75	33.02
GFA 4-4N	1/4	6.35	1/4	4.8	3/4	19.05	15.75	37.10
GFA 4-6N	1/4	6.35	3/8	4.8	7/8	22.22	15.75	39.37
GFA 4-8N	1/4	6.35	1/2	4.8	1-1/16	26.98	15.75	45.50
GFA 5-2N	5/16	7.93	1/8	6.4	9/16	14.28	16.80	34.29
GFA 5-4N	5/16	7.93	1/4	6.4	3/4	19.05	16.80	37.59
GFA 6-2N	3/8	9.52	1/8	7.0	9/16	14.28	17.50	34.29
GFA 6-4N	3/8	9.52	1/4	7.0	3/4	19.05	17.50	38.10
GFA 6-6N	3/8	9.52	3/8	7.0	7/8	22.22	17.50	40.38
GFA 6-8N	3/8	9.52	1/2	7.0	1-1/16	26.98	17.50	46.73
GFA 8-4N	1/2	12.70	1/4	10.0	3/4	19.05	23.20	43.43
GFA 8-6N	1/2	12.70	3/8	10.0	7/8	22.22	23.20	45.46
GFA 8-8N	1/2	12.70	1/2	10.0	1-1/16	26.98	23.20	51.80
GFA 10-6N	5/8	15.87	3/8	12.0	7/8	22.22	24.70	48.26
GFA 10-8N	5/8	15.87	1/2	12.0	1-1/16	26.98	24.70	53.84
GFA 10-12N	5/8	15.87	3/4	12.0	1-5/16	33.33	24.70	55.37
GFA 12-8N	3/4	19.05	1/2	15.0	1-1/16	26.98	24.70	52.83
GFA 12-12N	3/4	19.05	3/4	15.0	1-5/16	33.33	24.70	54.86
GFA 12-16N	3/4	19.05	1	15.0	1-5/8	41.27	24.70	58.42
GFA 14-12N	7/8	22.22	3/4	17.0	1-5/16	33.33	26.70	57.15
GFA 16-12N	1	25.40	3/4	20.0	1-5/16	33.33	31.70	60.70
GFA 16-16N	1	25.40	1	20.0	1-5/8	41.27	31.70	64.26
GFA 20-20N	1-1/4	31.75	1-1/4	27.0	2-1/8	53.98	40.00	77.72
GFA 24-24N	1-1/2	38.10	1-1/2	33.0	2-3/8	60.33	51.50	88.90
GFA 32-32N	2	50.80	2	45.0	2-7/8	73.03	68.40	107.44

Connects metric SG-Lok port to male ISO tapered thread

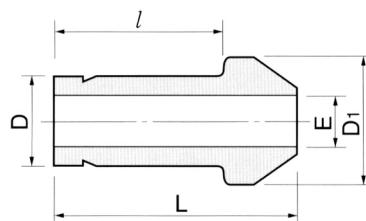
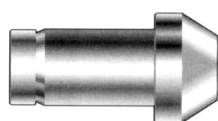
Part No.	Tube O.D. D(mm)	T R(PT)	E Min	Width across flat h	ℓ	L
GFA 3M-2R	3	1/8	1.8	14	13.15	31.15
GFA 6M-2R	6	1/8	4.8	14	15.75	32.50
GFA 8M-4R	8	1/4	4.8	19	15.75	37.10
GFA 8M-4R	8	1/4	6.4	19	16.50	37.60
GFA 10M-4R	10	1/4	6.4	19	17.50	38.10
GFA 10M-6R	10	3/8	8.0	22	17.50	40.10
GFA 10M-8R	10	1/2	8.0	27	17.50	46.50
GFA 12M-4R	12	1/4	9.0	19	23.50	43.70
GFA 12M-6R	12	3/8	9.0	22	23.50	46.00
GFA 12M-8R	12	1/2	9.0	27	23.50	52.30
GFA 18M-12R	18	3/4	14.0	32	24.90	54.80

Tube Fittings | Stub Tube Connector

SAM WON GREEN

GPC

Port Connector



Connects two fractional SG-Lok ports

Part No.	Tube O.D. D		E Min.	D1	ℓ	L
	in	mm				
GPC-1	1/16	1.59	1.0	3.30	10.66	13.72
GPC-2	1/8	3.17	1.8	6.09	15.75	22.35
GPC-4	1/4	6.35	4.8	9.39	18.79	24.64
GPC-5	5/16	7.93	6.4	10.92	20.06	25.90
GPC-6	3/8	9.52	7.0	12.70	20.32	26.16
GPC-8	1/2	12.70	10.0	15.74	25.90	35.81
GPC-12	3/4	19.05	15.0	22.09	27.68	37.33
GPC-16	1	25.40	20.0	28.44	34.54	48.00

Connects two metric SG-Lok ports

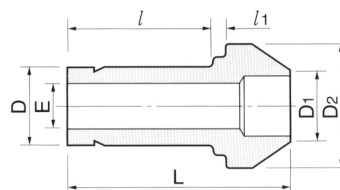
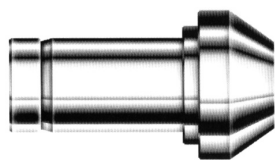
Part No.	Tube O.D. D(mm)	E Min	D1	ℓ	L
GPC-3M	3	2.0	6.0	15.70	22.20
GPC-4M	4	2.0	7.0	16.67	25.81
GPC-6M	6	4.8	9.0	18.70	24.60
GPC-8M	8	6.4	11.0	20.00	25.90
GPC-10M	10	8.0	13.1	20.20	26.10
GPC-12M	12	9.0	15.0	26.00	35.80
GPC-15M	15	12.0	19.0	27.78	37.40
GPC-16M	16	12.0	19.0	27.60	37.40
GPC-18M	18	14.0	21.0	27.91	37.40
GPC-20M	20	15.0	23.0	29.20	38.90
GPC-22M	22	18.0	25.0	29.30	39.20
GPC-25M	25	20.0	28.0	34.50	48.00
GPC-28M	28	24.0	34.3	48.30	63.50
GPC-32M	32	27.0	39.5	52.40	69.70
GPC-38M	38	33.0	47.1	61.40	81.90

Tube Fittings | Stub Tube Connector

SAM WON GREEN

GRPC

Reducing Port Connector



Connects two fractional SG-Lok ports

Part No.	Tube O.D.				E Min.	D2	ℓ	ℓ1	L
	D1		D						
	in	mm	in	mm					
GRPC 2-1	1/8	3.17	1/16	1.59	1.0	6.1	8.64	2.03	17.27
GRPC 4-2	1/4	6.35	1/8	3.17	2.3	9.4	13.45	3.30	22.60
GRPC 6-2	3/8	9.52	1/8	3.17	2.3	12.7	13.45	3.81	23.11
GRPC 6-4	3/8	9.52	1/4	6.35	4.8	12.7	15.75	3.30	24.89
GRPC 8-4	1/2	12.70	1/4	6.35	4.8	15.7	15.75	3.81	29.21
GRPC 8-6	1/2	12.70	3/8	9.52	7.0	15.7	17.67	3.30	30.48
GRPC 12-8	3/4	19.05	1/2	12.70	10.0	22.1	23.20	3.81	37.85
GRPC 16-8	1	25.40	1/2	12.70	10.0	28.4	24.47	4.82	42.67
GRPC 16-12	1	25.40	3/4	19.05	15.0	28.4	25.90	4.06	43.43

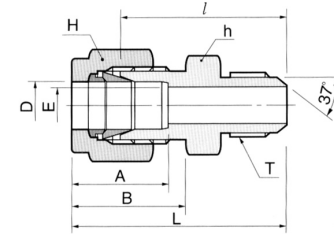
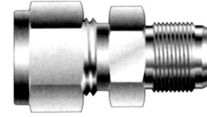
Connects two metric SG-Lok ports

Part No.	Tube O.D.		E Min	D2	ℓ	ℓ1	L
	D1(mm)	D(mm)					
GRPC 6M-3M	6	3	2.3	9.0	13.50	3.2	22.60
GRPC 8M-6M	8	6	4.8	11.0	15.70	3.1	24.70
GRPC 10M-6M	10	6	4.8	13.1	15.70	3.4	25.00
GRPC 10M-8M	10	8	6.4	13.1	16.80	3.1	26.00
GRPC 12M-6M	12	6	4.8	15.0	15.70	3.6	29.10
GRPC 12M-8M	12	8	6.4	15.0	16.80	3.4	29.80
GRPC 12M-10M	12	10	8.0	15.0	17.50	3.1	30.40
GRPC 16M-6M	16	6	4.8	19.0	15.75	3.6	30.40
GRPC 16M-12M	16	12	9.0	19.0	23.10	3.4	36.20
GRPC 28M-25M	28	25	20.0	34.4	33.00	8.2	56.50
GRPC 32M-25M	32	25	20.0	39.5	33.00	9.9	60.30
GRPC 38M-25M	38	25	20.0	47.1	33.00	12.3	65.80

Tube Fittings | Tube To An Tube

SAM WON GREEN

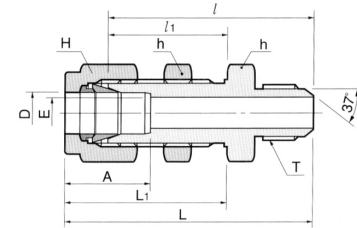
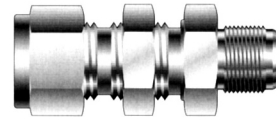
GAU AN Union



Connects fractional tube to AN flared tube

Part No.	Tube O.D. D		AN Tube Flare Size		Straight Thread T(U)	E Min	Width across flat				A	B	ℓ	L
	in	mm	in	mm			h		H					
							in	mm	in	mm				
GAU 1-2	1/16	1.59	1/8	3.17	5/16-24	1.27	7/16	11.11	5/16	7.93	8.63	10.92	23.36	27.17
GAU 2-2	1/8	3.17	1/8	3.17	5/16-24	1.52	7/16	11.11	7/16	11.11	12.70	15.24	24.89	31.49
GAU 2-4	1/8	3.17	1/4	6.35	7/16-20	2.28	1/2	12.70	7/16	11.11	12.70	15.24	28.44	35.05
GAU 4-4	1/4	6.35	1/4	6.35	7/16-20	4.31	1/2	12.70	9/16	14.28	15.24	17.78	30.22	37.59
GAU 5-5	5/16	7.93	5/16	7.93	1/2-20	5.84	9/16	14.28	5/8	15.87	16.25	18.54	30.98	38.35
GAU 6-4	3/8	9.52	1/4	6.35	7/16-20	4.31	5/8	15.87	11/16	17.46	16.76	19.30	32.25	39.62
GAU 6-6	3/8	9.52	3/8	9.52	9/16-18	7.11	5/8	15.87	11/16	17.46	16.76	19.30	32.25	39.62
GAU 8-8	1/2	12.70	1/2	12.70	3/4-16	9.90	13/16	20.63	7/8	22.22	22.86	21.84	35.81	45.97
GAU 12-12	3/4	19.05	3/4	19.05	1-1/16-12	15.49	1-1/8	28.57	1-1/8	28.57	24.38	21.84	43.18	53.24
GAU 16-16	1	25.40	1	25.40	1-5/16-12	21.33	1-3/8	34.92	1-1/2	38.10	31.24	26.41	49.27	61.46
GAU 20-20	1-1/4	31.75	1-1/4	31.75	1-5/8-12	27.68	1-3/4	44.45	1-7/8	47.63	41.14	38.86	55.46	77.56
GAU 24-24	1-1/2	38.10	1-1/2	38.10	1-7/8-12	34.03	2-1/8	59.97	2-1/4	57.15	50.03	45.21	63.07	90.25
GAU 32-32	2	50.80	2	50.80	2-1/2-12	45.97	2-3/4	69.85	3	76.20	67.56	62.73	83.24	120.57

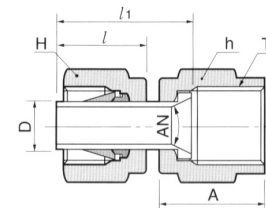
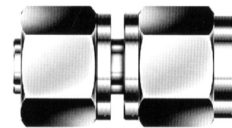
GABU AN Bulkhead Union



Connects fractional tube to AN flared tube

Part No.	Tube O.D. D		AN Tube Flare Size		Straight Thread T(U)	E Min	Width across flat				A	ℓ	ℓ ₁	L	L ₁	Panel Hole Drill size	Panel Max Thickness
	in	mm	in	mm			h		H								
							in	mm	in	mm							
GABU 2-2	1/8	3.17	1/8	3.17	5/16-24	1.77	1/2	12.70	7/16	11.11	13.71	40.85	24.63	47.45	31.23	8.33	12.70
GABU 4-4	1/4	6.35	1/4	6.35	7/16-20	4.31	5/8	15.87	9/16	14.28	15.24	46.48	26.16	53.84	33.52	11.50	10.16
GABU 6-6	3/8	9.52	3/8	9.52	9/16-18	7.11	3/4	19.05	11/16	17.46	16.76	49.78	29.46	57.15	36.83	14.68	11.17
GABU 8-8	1/2	12.70	1/2	12.70	3/4-16	9.90	5/16	23.81	7/8	22.22	22.86	55.62	31.75	65.78	41.91	19.44	12.70
GABU 12-12	3/4	19.05	3/4	19.05	1-1/16-12	15.49	1-3/16	30.16	1-1/8	28.57	24.38	68.83	37.33	78.99	47.49	25.79	16.76
GABU 16-16	1	25.40	1	25.40	1-5/16-12	21.33	1-5/8	41.27	1-1/2	38.10	31.24	80.26	45.21	92.45	57.40	33.73	19.05
GABU 20-20	1-1/4	31.75	1-1/4	31.75	1-5/8-12	27.68	1-7/8	47.63	1-7/8	47.63	41.14	86.37	47.75	108.47	69.85	41.67	19.05
GABU 24-24	1-1/2	38.10	1-1/2	38.10	1-7/8-12	34.03	2-1/4	57.15	2-1/4	57.15	50.03	94.33	49.27	121.51	76.45	49.61	19.05
GABU 32-32	2	50.80	2	50.80	2-1/2-12	45.97	2-3/4	69.85	3	76.20	67.56	114.29	56.38	151.62	93.71	116.27	19.05

GAA AN Adapter



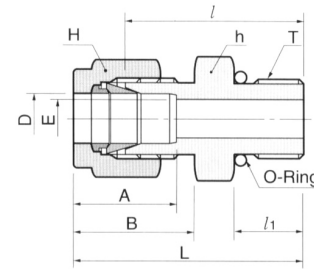
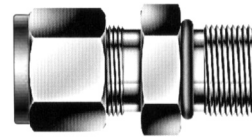
Connects fractional SG-Lok port to male AN

Part No.	Tube O.D. D		AN Tube Flare Size		Straight Thread T(U)	Width across flat				A	ℓ	ℓ ₁
	in	mm	in	mm		h		H				
						in	mm	in	mm			
GAA 2-2	1/8	3.17	1/8	3.17	5/16-24	3/8	9.52	7/16	11.11	13.71	13.46	18.54
GAA 2-4	1/8	3.17	1/4	6.35	7/16-20	9/16	14.28	7/16	11.11	15.74	13.46	19.05
GAA 4-4	1/4	6.35	1/4	6.35	7/16-20	9/16	14.28	9/16	14.28	15.74	15.74	21.33
GAA 6-6	3/8	9.52	3/8	9.52	9/16-18	11/16	17.46	11/16	17.46	18.28	17.52	24.89
GAA 8-8	1/2	12.70	1/2	12.70	3/4-16	7/8	22.22	7/8	22.22	21.59	23.11	31.75

Tube Fittings | Tube to SAE/MS O-Ring Seal SAM WON GREEN

GSMC

SAE Male Connector

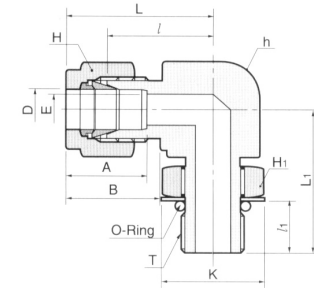


Connects fractional tube to SEA straight thread boss

Part No.	Tube O.D. D		Straight Thread T(U)	E Min.	Width across flat				A	B	ℓ	ℓ ₁	L	O-Ring Uniform Size Number
	in	mm			h	H	h	H						
GSMC 2-2U	1/8	3.17	5/16-24	2.28	7/16	11.11	7/16	11.11	12.70	15.24	23.37	7.62	29.97	-902
GSMC 4-4U	1/4	6.35	7/16-20	4.82	9/16	14.28	9/16	14.28	15.24	17.78	26.67	9.14	34.03	-904
GSMC 4-6U	1/4	6.35	9/16-18	4.82	11/16	17.46	9/16	14.28	15.24	17.78	28.19	9.90	35.56	-906
GSMC 4-8U	1/4	6.35	3/4-16	4.82	7/8	22.22	9/16	14.28	15.24	17.78	30.22	11.17	37.59	-908
GSMC 4-10U	1/4	6.35	7/8-14	4.82	1	25.40	9/16	14.28	15.24	17.78	33.27	12.70	40.64	-910
GSMC 5-5U	5/16	7.93	1/2-20	5.84	5/8	15.87	5/8	15.87	16.25	18.54	27.43	9.14	34.79	-905
GSMC 6-4U	3/8	9.52	7/16-20	5.08	5/8	15.87	11/16	17.46	16.76	19.30	28.19	9.14	35.56	-904
GSMC 6-6U	3/8	9.52	9/16-18	7.11	11/16	17.46	11/16	17.46	16.76	19.30	29.71	9.90	37.08	-906
GSMC 6-8U	3/8	9.52	3/4-16	7.11	7/8	22.22	11/16	17.46	16.76	19.30	31.75	11.17	39.11	-908
GSMC 6-10U	3/8	9.52	7/8-14	7.11	1	25.40	11/16	17.46	16.76	19.30	34.79	12.70	24.16	-910
GSMC 8-6U	1/2	12.70	9/16-18	7.11	13/16	20.63	7/8	22.22	22.86	21.84	28.95	9.90	39.11	-906
GSMC 8-8U	1/2	12.70	3/4-16	10.41	7/8	22.22	7/8	22.22	22.86	21.84	31.75	11.17	41.91	-908
GSMC 8-10U	1/2	12.70	7/8-14	10.41	1	25.40	7/8	22.22	22.86	21.84	34.79	12.70	44.95	-910
GSMC 8-12U	1/2	12.70	1-1/16-12	10.41	1-1/4	31.75	7/8	22.22	22.86	21.84	38.86	14.98	49.02	-912
GSMC 10-8U	5/8	15.87	3/4-16	10.66	15/16	23.81	1	25.40	24.38	21.84	31.75	11.17	41.91	-908
GSMC 10-10U	5/8	15.87	7/8-14	12.70	1	25.40	1	25.40	24.38	21.84	35.05	12.70	45.21	-910
GSMC 12-8U	3/4	19.05	3/4-16	10.56	1-1/16	26.98	1-1/8	28.57	24.38	21.84	35.81	11.17	45.97	-908
GSMC 12-12U	3/4	19.05	1-1/16-12	15.74	1-1/4	31.75	1-1/8	28.57	24.38	21.84	38.86	14.98	49.02	-912
GSMC 14-14U	7/8	22.22	1-3/16-12	18.28	1-3/8	34.92	1-1/4	31.57	25.90	21.84	38.86	14.98	49.02	-914
GSMC 16-12U	1	25.40	1-1/16-12	16.78	1-3/8	34.92	1-1/2	38.10	31.24	26.41	41.14	14.98	53.34	-912
GSMC 16-16U	1	25.40	1-5/16-12	22.35	1-1/2	38.10	1-1/2	38.10	31.24	26.41	42.16	14.98	54.35	-916
GSMC 20-20U	1-1/4	31.75	1-5/8-12	27.68	1-7/8	47.63	1-7/8	47.63	41.14	38.86	46.22	14.98	68.32	-920
GSMC 24-24U	1-1/2	38.10	1-7/8-12	34.03	2-1/8	53.98	2-1/4	57.15	50.03	45.21	50.54	14.98	77.72	-924
GSMC 32-32U	2	50.80	2-1/2-12	45.97	2-3/4	69.85	3	76.20	67.56	62.74	64.26	14.98	101.60	-932

GSME

Positionable SAE Male Elbow



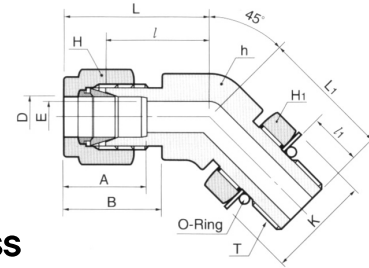
Connects fractional tube to SEA straight thread boss

Part No.	Tube O.D. D		Straight Thread T(U)	E Min.	Width across flat						A	B	ℓ	ℓ ₁	L	L ₁	K	O-Ring Uniform Size Number
	in	mm			h	H	H ₁	h	H	H ₁								
GSME 4-4U	1/4	6.35	7/16-20	4.82	1/2	12.70	9/16	14.28	9/16	14.28	15.24	17.78	21.08	9.90	28.44	28.44	16.51	-904
GSME 5-5U	5/16	7.93	1/2-20	5.84	9/16	14.28	5/8	15.87	5/8	15.87	16.25	18.54	22.86	9.90	30.22	29.46	18.28	-905
GSME 6-6U	3/8	9.52	9/16-18	7.11	5/8	15.87	11/16	17.46	11/16	17.46	16.76	19.30	24.63	11.17	32.00	32.25	20.06	-906
GSME 6-8U	3/8	9.52	3/4-16	7.11	13/16	20.63	11/16	17.46	7/8	22.22	16.76	19.30	27.43	12.70	34.79	37.84	25.65	-908
GSME 8-8U	1/2	12.70	3/4-16	10.41	13/16	20.63	7/8	22.22	7/8	22.22	22.86	21.84	27.43	12.70	37.59	37.84	25.65	-908
GSME 10-10U	5/8	15.87	7/8-14	12.70	1	25.40	1	25.40	1	25.40	24.38	21.84	29.46	14.22	39.62	43.43	29.46	-910
GSME 12-12U	3/4	19.05	1-1/16-12	15.74	1-1/16	26.98	1-1/8	28.57	1-1/4	31.75	24.38	21.84	31.24	16.76	41.40	48.76	36.57	-912
GSME 14-14U	7/8	22.22	1-3/16-12	18.28	1-1/4	31.75	1-1/4	31.75	1-3/8	34.92	25.90	21.84	33.02	16.76	43.18	50.54	40.38	-914
GSME 16-16U	1	25.40	1-5/16-12	22.35	1-3/8	34.92	1-1/2	38.10	1-1/2	38.10	31.24	26.41	38.35	16.76	50.54	53.59	43.94	-916
GSME 20-20U	1-1/4	31.75	1-5/8-12	27.68	1-11/16	42.76	1-7/8	47.63	1-7/8	47.63	41.14	38.86	45.72	16.76	67.81	58.16	54.86	-920
GSME 24-24U	1-1/2	38.10	1-7/8-12	34.03	2	50.80	2-1/4	57.15	2-1/8	53.98	50.30	45.21	50.80	16.76	77.97	60.45	62.23	-924
GSME 32-32U	2	50.80	2-1/2-12	45.97	2-3/4	69.85	3	76.20	2-3/4	69.85	67.56	62.73	69.85	16.76	107.18	71.62	80.26	-932

Tube Fittings | Tube to SAE/MS O-Ring Seal SAM WON GREEN

GSME45D

Positionable 45° SAE Male Elbow

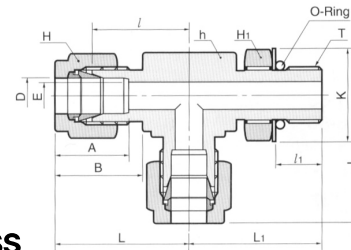


Connects fractional tube to SEA straight thread boss

Part No.	Tube O.D. D		Straight Thread T(U)	E Min.	Width across flat						A	B	ℓ	ℓ ₁	L	L ₁	K	O-Ring Uniform Size Number
	in	mm			h	mm	H	mm	H ₁	mm								
GSME45D 4-4U	1-4	6.35	7-16-20	4.82	1/2	12.70	9/16	14.28	9/16	14.28	15.24	17.78	18.28	9.90	25.65	25.65	16.51	-904
GSME45D 6-6U	3/8	9.52	9/16-18	7.11	5/8	15.87	11/16	17.46	11/16	17.46	16.76	19.30	20.57	11.17	27.94	28.19	20.06	-906
GSME45D 8-8U	1/2	12.70	3/4-16	10.41	13/16	20.63	7/8	22.22	7/8	22.22	22.86	21.84	21.84	12.70	32.00	32.25	25.65	-908
GSME45D 12-12U	3/4	19.05	1-1/16-12	15.74	1-1/8	28.57	1-1/8	28.57	1-1/4	31.75	24.38	21.84	29.71	16.76	39.87	47.24	36.57	-912
GSME45D 16-16U	1	25.40	1-5/16-12	22.35	1-3/8	34.92	1-1/2	38.10	1-1/2	38.10	31.24	26.41	35.30	16.76	47.49	50.54	43.94	-916

GSMRT

Positionable SAE Male Run Tee

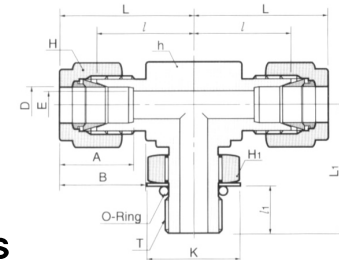


Connects fractional tube to SEA straight thread boss

Part No.	Tube O.D. D		Straight Thread T(U)	E Min.	Width across flat						A	B	ℓ	ℓ ₁	L	L ₁	K	O-Ring Uniform Size Number
	in	mm			h	mm	H	mm	H ₁	mm								
GSMRT 4-4U	1/4	6.35	7/16-20	4.82	1/2	12.70	9/16	14.28	9/16	14.28	15.24	17.78	21.08	9.90	28.44	28.44	16.51	-904
GSMRT 6-6U	3/8	9.52	9/16-18	7.11	5/8	15.87	11/16	17.46	11/16	17.46	16.76	19.30	24.63	11.17	32.00	32.25	20.06	-906
GSMRT 8-8U	1/2	12.70	3/4-16	10.41	13/16	20.63	7/8	22.22	7/8	22.22	22.86	21.84	27.43	12.70	37.59	37.84	25.65	-908
GSMRT 12-12U	3/4	19.05	1-1/16-12	15.74	1-1/8	28.57	1-1/8	28.57	1-1/4	31.75	24.38	21.84	31.24	16.76	41.40	48.76	36.57	-912
GSMRT 16-16U	1	25.40	1-5/16-12	22.35	1-3/8	34.92	1-1/2	38.10	1-1/2	38.10	31.24	26.41	38.35	16.76	50.54	50.54	43.94	-916
GSMRT 20-20U	1-1/4	31.75	1-5/8-12	27.68	1-11/16	42.86	1-7/8	47.63	1-7/8	47.63	41.14	38.86	45.72	16.76	67.81	58.61	54.86	-920
GSMRT 24-24U	1-1/2	30.10	1-7/8-12	34.03	2	50.80	2-1/4	57.15	2-1/8	53.98	50.03	45.21	50.80	16.76	77.97	60.45	62.23	-924
GSMRT 32-32U	2	50.80	2-1/2-12	45.97	2-3/4	69.85	3	76.20	2-3/4	69.85	67.56	62.73	69.85	16.76	107.18	71.62	80.26	-932

GSMBT

Positionable SAE Male Branch Tee



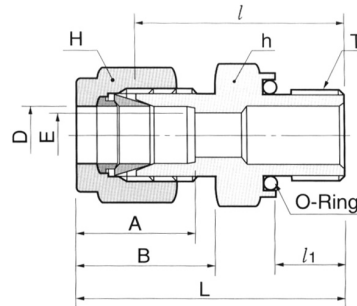
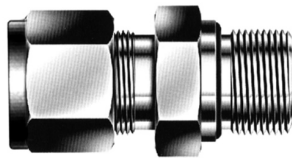
Connects fractional tube to SEA straight thread boss

Part No.	Tube O.D. D		Straight Thread T(U)	E Min.	Width across flat						A	B	ℓ	ℓ ₁	L	L ₁	K	O-Ring Uniform Size Number
	in	mm			h	mm	H	mm	H ₁	mm								
GSMBT 4-4U	1/4	6.35	7/16-20	4.82	1/2	12.70	9/16	14.28	9/16	14.28	15.24	17.78	21.08	9.90	28.44	28.44	16.51	-904
GSMBT 6-6U	3/8	9.52	9/16-18	7.11	5/8	15.87	11/16	17.46	11/16	17.46	16.76	19.30	24.63	11.17	32.00	32.25	20.06	-906
GSMBT 8-8U	1/2	12.70	3/4-16	10.41	13/16	20.64	7/8	22.22	7/8	22.22	22.86	21.84	27.43	12.70	37.59	37.84	25.65	-908
GSMBT 12-12U	3/4	19.05	1-1/16-12	15.74	1-1/16	26.98	1-1/8	28.57	1-1/4	31.75	24.38	21.84	31.24	16.76	41.40	48.76	36.57	-912
GSMBT 16-16U	1	25.40	1-5/16-12	22.35	1-3/8	34.92	1-1/2	38.10	1-1/2	38.10	31.24	26.41	38.35	16.76	50.54	53.59	43.94	-916
GSMBT 20-20U	1-1/4	31.75	1-5/8-12	27.68	1-11/16	42.86	1-7/8	47.63	1-7/8	47.63	41.14	38.86	45.72	16.76	67.81	58.61	54.86	-920
GSMBT 24-24U	1-1/2	30.10	1-7/8-12	34.03	2	50.80	2-1/4	57.15	2-1/8	53.98	50.03	45.21	50.80	16.76	77.97	60.45	62.23	-924
GSMBT 32-32U	2	50.80	2-1/2-12	45.97	2-3/4	69.85	3	76.20	2-3/4	69.85	67.56	62.73	69.85	16.76	107.18	71.62	80.26	-932

Tube Fittings | Tube to SAE/MS O-Ring Seal SAM WON GREEN

GMOS

O-Seal Straight Thread Connector

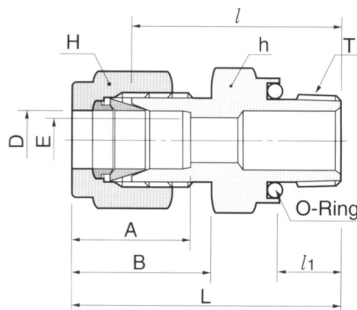
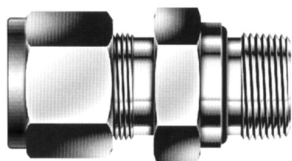


Connects fractional tube to female straight thread

Part No.	Tube O.D. D		Straight Thread T(U)	E Min.	Width across flat				A	B	ℓ	ℓ ₁	L	O-Ring Uniform Size Number
	in	mm			h	H								
GMOS 2-2U	1/8	3.17	5/16-20	2.28	9/16	14.28	7/16	11.11	12.70	15.24	26.16	8.63	32.76	-011
GMOS 3-3U	3/8	4.76	3/8-24	3.04	5/8	15.87	1/2	12.70	13.71	16.00	27.68	9.65	34.29	-012
GMOS 4-4U	1/4	6.35	7/16-20	4.82	3/4	19.05	9/16	14.28	15.24	17.78	30.98	10.41	38.35	-013
GMOS 5-5U	5/16	7.93	1/2-20	6.35	7/8	22.22	5/8	15.87	16.25	18.54	33.27	11.17	40.64	-112
GMOS 6-6U	3/8	9.52	9/16-18	7.11	15/16	23.81	11/16	17.46	16.76	19.30	35.05	11.93	42.41	-113
GMOS 8-8U	1/2	12.70	3/4-16	10.41	1-1/8	28.57	7/8	22.22	22.86	21.84	35.81	11.93	46.97	-116
GMOS 12-12U	3/4	19.05	1-1/16-12	15.74	1-1/2	38.10	1-1/8	28.57	24.38	21.84	42.16	14.22	52.32	-121
GMOS 16-16U	1	25.40	1-5/16-12	22.35	1-3/4	44.45	1-1/2	38.10	31.24	26.41	45.97	14.22	58.16	-125

GMOP

O-Seal Pipe Thread Connector



Connects fractional tube to female NPT thread

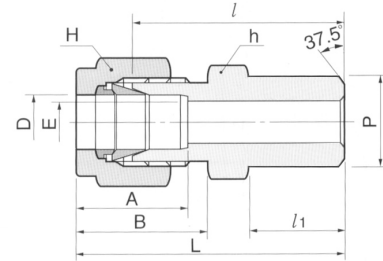
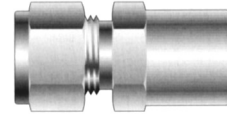
Part No.	Tube O.D. D		T N(NPT)	E Min.	Width across flat				A	B	ℓ	ℓ ₁	L	O-Ring Uniform Size Number
	in	mm			h	H								
GMOP 2-2N	1/8	3.17	1/8	2.28	3/4	19.05	7/16	11.11	12.70	15.24	26.16	7.11	32.76	-013
GMOP 4-2N	1/4	6.35	1/8	4.28	3/4	19.05	9/16	14.28	15.24	17.78	27.68	7.11	35.05	-013
GMOP 4-4N	1/4	6.35	1/4	4.82	15/16	23.81	9/16	14.28	15.24	17.78	30.98	9.65	38.35	-113
GMOP 6-4N	3/8	9.52	1/4	7.11	15/16	23.81	11/16	17.46	16.76	19.30	32.51	9.65	39.87	-113
GMOP 6-6N	3/8	9.52	3/8	7.11	1-1/8	28.57	11/16	17.46	16.76	19.30	34.03	10.41	41.40	-116
GMOP 6-8N	3/8	9.52	1/2	7.11	1-5/16	33.33	11/16	17.46	16.76	19.30	39.62	13.46	46.99	-118
GMOP 8-8N	1/2	12.70	1/2	10.41	1-5/16	33.33	7/8	22.22	22.86	21.84	39.62	13.46	49.78	-118

Tube Fittings | Tube to Weld Systems

SAM WON GREEN

GMPWC

Male Pipe Weld Connector



Connects fractional tube to pipe

Part No.	Tube O.D.		Male Pipe Size		E Min	Width across flat				A	B	ℓ	ℓ ₁	L
	D	mm	P	O.D.		h		H						
						in	mm	in	mm					
GMPWC 2-2P	1/8	3.17	1/8	10.29	2.28	7/16	11.11	7/16	11.11	12.70	15.24	23.87	9.65	31.24
GMPWC 3-2P	3/16	4.76	1/8	10.29	3.04	7/16	11.11	1/12	12.70	13.71	16.00	24.63	9.65	31.24
GMPWC 4-2P	1/4	6.35	1/8	10.29	4.82	1/2	12.70	9.16	14.28	15.24	17.78	25.40	9.65	32.76
GMPWC 4-4P	1/4	6.35	1/4	13.72	4.82	9/16	14.28	9/16	14.28	15.24	17.78	30.48	14.22	37.84
GMPWC 5-2P	5/16	7.93	1/8	10.29	5.08	9/16	14.28	5/8	15.87	16.25	18.54	26.67	9.65	34.03
GMPWC 5-4P	5/16	7.93	1/4	13.72	6.35	9/16	14.28	5/8	15.87	16.25	18.54	31.24	14.22	38.60
GMPWC 6-4P	3/8	9.52	1/4	13.72	7.11	5/8	15.87	11/16	17.46	16.76	19.30	32.51	14.22	39.87
GMPWC 6-6P	3/8	9.52	3/8	17.15	7.11	11/16	17.46	11/16	17.46	16.76	19.30	32.51	14.22	39.87
GMPWC 6-8P	3/8	9.52	1/2	21.34	7.11	7/8	22.22	11/16	17.46	16.76	19.30	38.86	11.05	43.23
GMPWC 8-6P	1/2	12.70	3/8	17.15	10.41	13/16	20.63	7/8	22.22	22.86	21.84	33.27	14.22	43.43
GMPWC 8-8P	1/2	12.70	1/2	21.34	10.41	7/8	22.22	7/8	22.22	22.86	21.84	38.86	19.05	49.02
GMPWC 8-12P	1/2	12.70	3/4	26.67	10.41	1-1/16	26.98	7/8	22.22	22.86	21.84	40.38	19.05	50.54
GMPWC 10-8P	5/8	15.87	1/2	21.34	12.70	15/16	23.81	1	25.40	24.38	21.84	38.86	19.05	49.02
GMPWC 12-12P	3/4	19.05	3/4	26.67	15.74	1-1/16	26.98	1-1/8	28.57	24.38	21.84	40.38	19.05	50.54
GMPWC 16-16P	1	25.40	1	33.40	22.35	1-3/8	34.92	1-1/2	38.10	31.24	26.41	50.03	23.87	62.23
GMPWC 20-20P	1-1/4	31.75	1-1/4	42.16	27.68	1-3/4	44.45	2	50.80	41.14	38.86	55.11	23.87	77.21
GMPWC 24-24P	1-1/2	38.10	1-1/2	48.26	34.03	2-1/8	53.98	2-1/4	57.15	50.03	45.21	61.72	26.16	88.90
GMPWC 32-32P	2	50.80	2	60.33	47.75	2-3/4	69.85	3	76.20	67.56	62.73	76.20	26.92	113.53

Connects metric tube to pipe

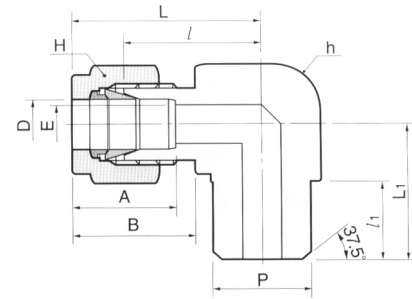
Part No.	Tube O.D. D(mm)	Male Pipe Size		E Min	Width across flat		A	B	ℓ	ℓ ₁	L
		P	O.D.		h	H					
GMPWC 3M-2P	3	1/8	10.29	2.4	12.70	11.11	12.9	15.3	23.1	9.7	29.7
GMPWC 4M-2P	4	1/8	10.29	2.4	12.70	12.70	13.7	16.1	24.1	9.7	30.7
GMPWC 6M-2P	6	1/8	10.29	4.8	14.28	14.28	15.3	17.7	25.4	9.7	32.8
GMPWC 6M-4P	6	1/4	13.72	4.8	14.28	14.28	15.3	17.7	30.2	14.2	37.6
GMPWC 8M-2P	8	1/8	10.29	5.1	15.87	15.87	16.2	18.6	26.7	9.7	34.2
GMPWC 8M-4P	8	1/4	13.72	6.4	15.87	15.87	16.2	18.6	31.2	14.2	38.7
GMPWC 8M-8P	8	1/2	21.34	6.4	22.22	15.87	16.2	18.6	37.3	19.0	44.8
GMPWC 10M-4P	10	1/4	13.72	7.1	17.46	19.05	17.2	19.5	33.3	14.2	40.9
GMPWC 10M-6P	10	3/8	17.15	7.9	17.46	19.05	17.2	19.5	32.5	14.2	40.1
GMPWC 10M-8P	10	1/2	21.34	7.9	22.22	19.05	17.2	19.5	38.1	19.0	45.7
GMPWC 12M-4P	12	1/4	13.72	7.1	22.22	22.22	22.8	22.0	33.3	14.2	43.4
GMPWC 12M-6P	12	3/8	17.15	9.5	22.22	22.22	22.8	22.0	33.3	14.2	43.4
GMPWC 12M-8P	12	3/8	21.34	9.5	22.22	22.22	22.8	22.0	38.1	19.0	48.2
GMPWC 14M-6P	14	3/8	17.15	10.3	23.81	25.04	24.4	22.0	34.0	14.2	44.1
GMPWC 15M-8P	15	1/2	21.34	11.9	23.81	25.04	24.4	22.0	38.9	19.0	49.0
GMPWC 16M-8P	16	1/2	21.34	12.7	23.81	25.04	24.4	22.0	38.9	19.0	49.0
GMPWC 18M-8P	18	1/2	21.34	13.5	26.98	30.16	24.4	22.0	40.4	19.0	50.5
GMPWC 32M-20P	32	1-1/4	42.16	28.6	46.04	49.21	42.0	41.6	56.6	23.9	79.6
GMPWC 38M-24P	38	1-1/2	48.26	33.7	55.56	60.32	49.4	47.9	64.0	26.2	91.6

Tube Fittings | Tube to Weld Systems

SAM WON GREEN

GMPWE

Male Pipe Weld Elbow

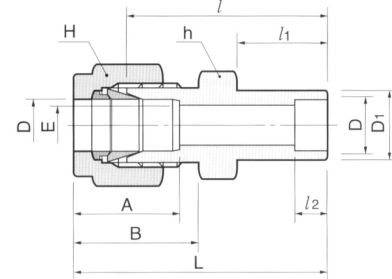
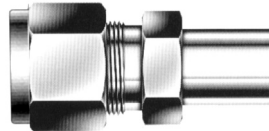


Connects fractional tube to pipe

Part No.	Tube O.D. D		Male Pipe Size P		E Min	Width across flat				A	B	ℓ	ℓ ₁	L	L ₁
	in	mm	Nom.	O.D.		h		H							
						in	mm	in	mm						
GMPWE 2-2P	1/8	3.17	1/8	10.29	4.82	1/2	12.70	9/16	14.28	15.24	17.78	19.55	9.65	26.92	18.79
GMPWE 4-4P	1/4	6.35	1/4	13.72	4.82	1/2	12.70	9/16	14.28	15.24	17.78	19.55	14.22	26.92	23.36
GMPWE 6-4P	3/8	9.52	1/4	13.72	7.11	5/8	15.87	11/16	17.46	16.76	19.30	23.11	14.22	30.48	25.40
GMPWE 8-8P	1/2	12.70	1/2	21.34	10.41	13/16	20.63	7/8	22.22	22.86	21.84	25.90	19.05	36.06	33.02
GMPWE 12-12P	3/4	19.05	3/4	26.67	15.74	1-1/16	26.98	1-1/8	28.57	24.38	21.84	29.71	19.05	39.87	36.83

GTSWC

Tube Socket Weld Connector

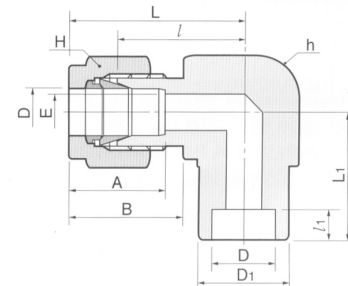


Connects fractional tubes

Part No.	Tube O.D. D		E Min	D ₁	Width across flat				A	B	ℓ	ℓ ₁	ℓ ₂	L
	in	mm			h		H							
					in	mm	in	mm						
GTSWC 2-2	1/8	3.17	2.28	7.87	7/16	11.11	7/16	11.11	12.70	15.24	22.35	8.63	6.35	28.95
GTSWC 4-4	1/4	6.35	4.82	11.17	1/2	12.70	9/16	14.28	15.24	17.78	26.16	10.41	7.87	33.52
GTSWC 6-6	3/8	9.52	7.11	15.74	5/8	15.87	11/16	17.46	16.76	19.30	30.22	11.93	9.65	37.59
GTSWC 8-8	1/2	12.70	10.41	19.05	13/16	20.63	7/8	22.22	22.86	21.84	30.98	11.93	12.70	41.14
GTSWC 12-12	3/4	19.05	15.74	26.67	1-1/16	26.98	1-1/8	28.57	24.38	21.84	33.27	11.93	14.22	43.43
GTSWC 16-16	1	25.40	22.35	33.27	1-3/8	34.92	1-1/2	38.10	31.24	26.41	40.38	14.22	19.05	52.57

GTSWE

Tube Socket Weld Elbow



Connects fractional tubes

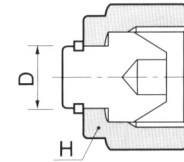
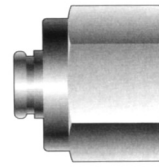
Part No.	Tube O.D. D		E Min	D ₁	Width across flat				A	B	ℓ	ℓ ₁	L	L ₁
	in	mm			h		H							
					in	mm	in	mm						
GTSWE 4-4	1/4	6.35	4.28	12.70	1/2	12.70	9/16	14.28	15.24	17.78	19.55	7.87	26.92	19.55
GTSWE 6-6	3/8	9.52	7.11	15.74	5/8	15.87	11/16	17.46	16.76	19.30	23.11	9.65	30.48	23.11
GTSWE 8-8	1/2	12.70	10.41	20.57	13/16	20.63	7/8	22.22	22.86	21.84	25.90	12.70	36.06	25.90
GTSWE 12-12	3/4	19.05	15.74	26.92	1-1/16	26.98	1-1/8	28.57	24.38	21.84	29.71	14.22	39.87	29.71
GTSWE 16-16	1	25.40	22.35	35.05	1-3/8	34.92	1-1/2	38.10	31.24	26.41	36.83	19.05	49.02	36.83

Tube Fittings | Plug and Cap

SAM WON GREEN

GP

Tube Plug



Connects factional tube

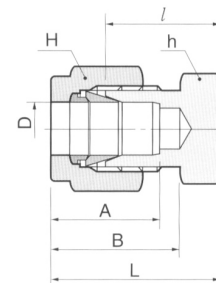
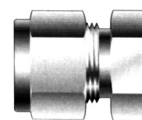
Part No.	Tube O.D. D		Width across flat H	
	in	mm	in	mm
GP-1	1/16	1.59	5/16	7.93
GP-2	1/8	3.17	7/16	11.11
GP-3	3/16	4.76	1/2	12.30
GP-4	1/4	6.35	9/16	14.28
GP-5	5/16	7.93	5/8	15.87
GP-6	3/8	9.52	11/16	17.46
GP-8	1/2	12.70	7/8	22.22
GP-10	5/8	15.87	1	25.40
GP-12	3/4	19.05	1-1/8	28.58
GP-14	7/8	22.22	1-1/4	31.75
GP-16	1	25.40	1-1/2	38.10
GP-20	1-1/4	31.75	1-7/8	47.63
GP-24	1-1/2	38.10	2-1/4	57.15
GP-32	2	50.80	3	76.20

Connects metric tube

Part No.	Tube O.D. D(mm)	Width across flat H
GP -2M	2	11.11
GP -3M	3	11.11
GP -4M	4	12.70
GP -6M	6	14.28
GP -8M	8	15.87
GP -10M	10	19.05
GP -12M	12	22.22
GP -15M	15	25.40
GP -16M	16	25.40
GP -18M	18	30.16
GP -20M	20	31.75
GP -22M	22	31.75
GP -25M	25	38.10
GP -28M	28	46.04
GP -30M	30	49.21
GP -32M	32	49.21
GP -38M	38	60.32

GC

Tube Cap



Connects factional tube

Part No.	Tube O.D. D		Width across flat				A	B	φ	L
	in	mm	h		H					
GC-1	1/16	1.59	5/16	7.93	5/16	7.93	8.63	10.92	11.20	14.18
GC-2	1/8	3.17	7/16	11.11	7/16	11.11	12.70	15.24	13.46	20.06
GC-3	3/16	4.76	7/16	11.11	1/2	12.70	13.71	16.00	14.73	21.33
GC-4	1/4	6.35	1/2	12.70	9/16	14.28	15.24	17.78	16.00	23.26
GC-5	5/16	7.93	9/16	14.28	5/8	15.87	16.25	18.54	17.01	24.38
GC-6	3/8	9.52	5/8	15.87	11/16	17.46	16.75	19.30	18.28	25.65
GC-8	1/2	12.70	13/16	20.63	7/8	22.22	22.86	21.84	19.05	29.21
GC-10	5/8	15.87	15/16	23.81	1	25.40	24.38	21.84	19.81	29.97
GC-12	3/4	19.05	1-1/16	26.98	1-1/8	28.57	24.38	21.84	21.33	31.49
GC-14	7/8	22.22	1-3/16	30.16	1-1/4	31.75	25.90	21.84	23.87	34.03
GC-16	1	25.40	1-3/8	34.92	1-1/2	38.10	31.24	26.41	26.16	38.35
GC-20	1-1/4	31.75	1-3/4	44.45	1-7/8	47.63	41.14	38.86	31.24	53.34
GC-24	1-1/2	38.10	2-1/8	53.98	2-1/4	57.15	50.15	45.21	37.33	64.51
GC-32	2	50.80	2-3/4	69.85	3	76.20	67.56	62.73	49.27	86.61

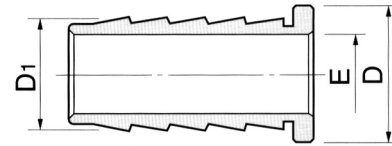
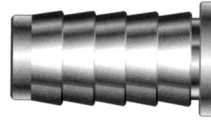
Connects metric tube

Part No.	Tube O.D. D(mm)	Width across flat		A	B	φ	L
		h	H				
GC-2M	2	11.11	11.11	12.9	15.3	13.5	20.1
GC-3M	3	11.11	11.11	12.9	15.3	13.5	20.1
GC-4M	4	11.11	12.70	13.7	16.1	14.7	21.3
GC-6M	6	14.28	14.28	15.3	17.7	15.7	23.1
GC-8M	8	15.87	15.87	16.2	18.6	17.0	24.5
GC-10M	10	17.46	19.05	17.2	19.5	19.0	26.6
GC-12M	12	22.22	22.22	22.8	22.0	19.0	29.1
GC-15M	15	23.81	25.40	24.4	22.0	19.8	29.9
GC-16M	16	23.81	25.40	24.4	22.0	19.8	29.9
GC-18M	18	26.98	30.16	24.4	22.0	21.3	31.4
GC-20M	20	30.16	31.75	26.0	22.0	23.9	34.0
GC-22M	22	30.16	31.75	26.0	22.0	23.9	34.0
GC-25M	25	34.92	38.10	31.3	26.5	26.2	38.5
GC-28M	28	41.27	46.04	36.6	36.6	27.7	48.5
GC-30M	30	46.04	49.21	39.6	39.2	31.8	53.4
GC-32M	32	46.04	49.21	36.6	36.6	27.7	48.5
GC-38M	38	55.56	60.32	49.4	47.9	37.8	65.4

Tube Fittings | Components

SAM WON GREEN

GI Tube Insert



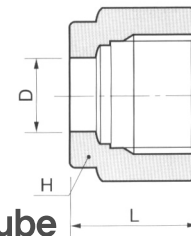
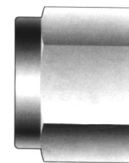
Connects factional tube

Part No.	Tube O.D.				E
	D		D1		
	in	mm	in	mm	
GI 3-2	3/16	4.76	1/8	3.17	2.2
GI 4-2	1/4	6.35	1/8	3.17	2.2
GI 4-3	1/4	6.35	3/16	4.76	3.5
GI 5-2	5/16	7.93	1/8	3.17	2.2
GI 5-3	5/16	7.93	3/16	4.76	3.0
GI 5-4	5/16	7.93	1/4	6.35	4.8
GI 6-3	3/8	9.52	3/16	4.76	3.0
GI 6-4	3/8	9.52	1/4	6.35	4.8
GI 8-4	1/2	12.70	1/4	6.35	4.8
GI 8-6	1/2	12.70	3/8	9.52	7.9
GI 10-6	5/8	15.87	3/8	9.52	7.9
GI 10-8	5/8	15.87	1/2	12.70	11.2
GI 12-8	3/4	19.05	1/2	12.70	11.2
GI 12-10	3/4	19.05	5/8	15.87	14.0
GI 16-12	1	25.40	3/4	19.05	17.5

Connects metric tube

Part No.	Tube O.D.		E
	D(mm)	D1(mm)	
GI 6M-4M	6	4	2.8
GI 8M-6M	8	6	4.4
GI 10M-8M	10	8	6.4
GI 12M-8M	12	8	6.4
GI 12M-10M	12	10	8.3

GN Nut



Connects factional tube

Part No.	Tube O.D.		Width across flat		L
	D		H		
	in	mm	in	mm	
GN-1	1/16	1.59	5/16	7.93	7.9
GN-2	1/8	3.17	7/16	11.11	11.9
GN-3	3/16	4.76	1/2	12.70	11.9
GN-4	1/4	6.35	9/16	14.28	12.7
GN-5	5/16	7.93	5/8	15.87	13.4
GN-6	3/8	9.52	11/16	17.46	14.2
GN-8	1/2	12.70	7/8	22.22	17.5
GN-10	5/8	15.87	1	25.40	17.5
GN-12	3/4	19.05	1-1/8	28.57	17.5
GN-14	7/8	22.22	1-1/4	31.75	17.5
GN-16	1	25.40	1-1/2	38.10	20.6
GN-20	1-1/4	31.75	1-7/8	47.63	31.7
GN-24	1-1/2	38.10	2-1/4	57.15	38.1
GN-32	2	50.80	3	76.20	52.3

Connects metric tube

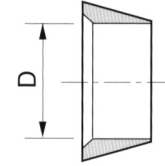
Part No.	Tube O.D.	Width across flat	L
	D(mm)	H	
GN-2M	2	11.11	11.9
GN-3M	3	11.11	11.9
GN-4M	4	12.70	11.9
GN-6M	6	14.28	12.7
GN-8M	8	15.87	13.4
GN-10M	10	19.05	15.1
GN-12M	12	22.22	17.5
GN-15M	15	25.40	17.5
GN-16M	16	25.40	17.5
GN-18M	18	30.16	17.5
GN-20M	20	31.75	17.5
GN-22M	22	31.75	17.5
GN-25M	25	38.10	20.6
GN-28M	28	46.04	30.6
GN-30M	30	49.21	33.7
GN-32M	32	49.21	34.4
GN-38M	38	60.32	40.6

Tube Fittings | Components

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GFF

Front Ferrule



Connects factional tube

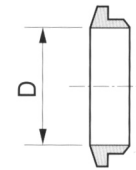
Part No.	Tube O.D. D	
	in	mm
GFF-1	1/16	1.59
GFF-2	1/8	3.17
GFF-3	3/16	4.76
GFF-4	1/4	6.35
GFF-5	5/16	7.93
GFF-6	3/8	9.52
GFF-8	1/2	12.70
GFF-10	5/8	15.87
GFF-12	3/4	19.05
GFF-14	7/8	22.22
GFF-16	1	25.40
GFF-20	1-1/4	31.75
GFF-24	1-1/2	38.10
GFF-32	2	50.80

Connects metric tube

Part No.	Tube O.D. D(mm)
GFF-2M	2
GFF-3M	3
GFF-4M	4
GFF-6M	6
GFF-8M	8
GFF-10M	10
GFF-12M	12
GFF-15M	15
GFF-16M	16
GFF-18M	18
GFF-20M	20
GFF-22M	22
GFF-25M	25
GFF-28M	28
GFF-30M	30
GFF-32M	32
GFF-38M	38

GBF

Back Ferrule



Connects factional tube

Part No.	Tube O.D. D	
	in	mm
GBF-1	1/16	1.59
GBF-2	1/8	3.17
GBF-3	3/16	4.76
GBF-4	1/4	6.35
GBF-5	5/16	7.93
GBF-6	3/8	9.52
GBF-8	1/2	12.70
GBF-10	5/8	15.87
GBF-12	3/4	19.05
GBF-14	7/8	22.22
GBF-16	1	25.40
GBF-20	1-1/4	31.75
GBF-24	1-1/2	38.10
GBF-32	2	50.80

Connects metric tube

Part No.	Tube O.D. D(mm)
GBF-2M	2
GBF-3M	3
GBF-4M	4
GBF-6M	6
GBF-8M	8
GBF-10M	10
GBF-12M	12
GBF-15M	15
GBF-16M	16
GBF-18M	18
GBF-20M	20
GBF-22M	22
GBF-25M	25
GBF-28M	28
GBF-30M	30
GBF-32M	32
GBF-38M	38