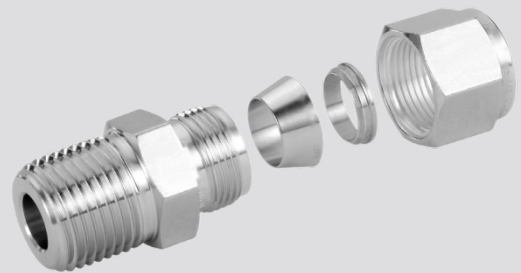
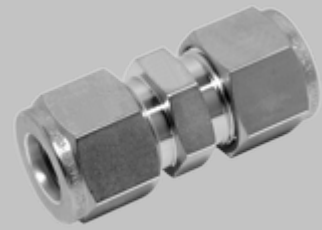


SANYOU

Tube Fittings

Catalog No. : SY-200-24TF



■ size from 1/16" thru
2" (2mm thru 50mm)

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Design and Manufacture

SANYOU tube fittings have been designed and manufactured with great care to meet the specifications required for a wide range of applications in chemical, petro-chemical, oil refineries, power generation, shipbuilding, pulp and papers, micro-electronics, etc. Each SANYOU tube fittings consists of four parts: body, front ferrule, back ferrule, and nut.

The two-ferrule design, front and back, compensates for any tolerances in tube O. D., wall thickness, material hardness and always ensures outstanding leak-tight connections.



Torque and Distortion during Installation

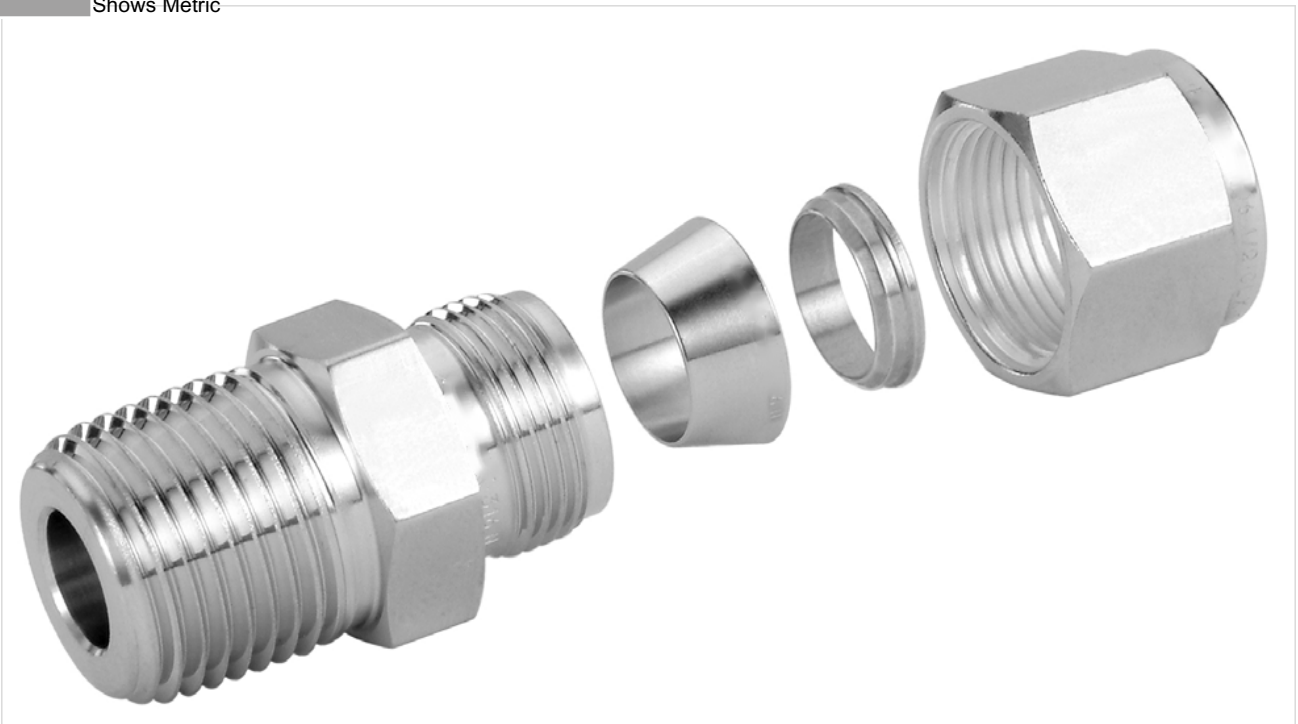
When the nut is tightened, the back and front ferrules move axially. This axial movement does not allow any torque transfer from the fitting to the tubing, and the mechanical properties of tubing are maintained.

During makeup, the back ferrule moves in such a controlled manner that the tubing is not overstressed and the tubing L. D. is not excessively reduced, resulting in safe operation under high pressure or vibration. The front ferrule does not force the body to expand, which allows the nut to be back off easily for disassembly and allows multiple remakes.

Easy Reference

Heads of tables are differentiated with color ;

-  Shows Fractional
-  Shows Metric



All dimensions are in millimeters unless otherwise specified. Dimensions are for reference only, subject to change.

Materials

Material	Bar Stock	Forging
Stainless Steel Type 316	ASTM A479, ASME SA479	ASTM A182, ASME SA182
BRASS	JIS C3604BD ^① , ASTM B16 Alloy 360	JIS C3771BE ^① , ASTM B283 Alloy377
Carbon Steel ^①	JIS S20C ^① , ASTMA108	JIS S20C ^① , ASTM A576
Alloy20	ASTM B473	ASTM B462
Alloy 400	ASTM B164, ASME SB164	ASTM B564, ASME SB564
Alloy 600 ^②	ASTM B166, ASME SB166	ASTM B564, ASME SB564
Alloy 625 ^②	ASTM B446	ASTM B564, ASME SB564
Alloy825	ASTM B425	ASTM B564, ASME SB564
6MO	ASTM A479	ASTM A182
Alloy C-276 ^②	ASTM B574	ASTM B564
Super Duplex Stainless Steel ^③	ASTM A479	ASTM A182
Titanium (Grade 4)	ASTM B348	ASTM B381
PTFE	ASTM D1710	ASTM D3294

^① Carbon Steel SANYOU tube fittings are supplied with 316 stainless steel back ferrule.

^② Alloy 600,625 &C-276 SANYOU tube fittings are supplied with alloy 825 back ferrule

^③ See the UNS S32750 Super Duplex SANYOU tube fittings catalog, H-200TF-SD.

^④ Manufacturer's standard materials.

Pressure Ratings

SANYOU tube fittings are rated to the maximum working pressure of tubing recommended for using with SANYOU tube fittings.

The maximum working pressure of tubings are listed in **MAWP Table** on the following pages.

Note: Material strength and allowable working pressure decrease as the temperature increases.

Temperature Ratings

The following temperature ratings are applicable.

- 316 Stainless Steel : -425°F to 1200°F (-245°C to 649°C)
- Brass : -65°F to 400°F (-54°C to 204°C)
- Monel : -325°F to 800°F (-198°C to 427°C)
- Carbon Steel : -20°F to 800°F (-29°C to 427°C)

Tubing

Variety of tubing materials and wide range of wall thickness can be used with SANYOU tube fittings. However, it is essential to specify, select, and handle the tubing with care in order to ensure reliable, safe, leak tight installation using SANYOU tube fittings.

Some general rules are shown below.

1. The tubing material must be compatible with process fluid
2. Temperature, pressure, vibration and shock conditions must be considered when selecting the wall thickness. Further, extremely thick wall may not be properly deformed and extremely thin wall may be collapsed by ferrule action
3. The metal tubing must be softer than the fitting materials. In general, metal tubing should be fully annealed to work properly with SANYOU tube fittings.
4. For leak tight installation, the tubing surface finish must be smooth and free from weld seam, scratches and draw marks.
5. The tubing with high tolerance in ovality or O. D. may not fit in the fitting or may cause improper performance.
6. Best performance is achieved when the tubing ends are squarely cut and deburred properly.

The followings are the recommended tubing specifications for best performance with SANYOU tube fittings.

Stainless Steel Tubing

Fully annealed seamless type 304/304L,316/316L to ASTM A269 or equivalent with hardness Rockwell Rb90 or less.

Copper Tubing

Seamless soft annealed temper O60 with hardness 60 max. (Rockwell hardness,15T) to ASTM B75, or seamless water tubing type K or type L annealed temper O60 with hardness 50 max. in coils or annealed temper O50 with hardness 55 max. (Rockwell hardness, F) in straight lengths to ASTM B88, or equivalent.

Monel Tubing

Fully annealed seamless Alloy 400 to ASTM B165 or equivalent with hardness Rb75 max.

Gas Service

Gases have very small molecules and can escape through minute leak paths due to surface imperfections. These imperfections can be coined out when heavy wall tubing is used as it resists the ferrule action more than thin wall does. The minimum wall thickness for gas service is shown below.

Fractional Tubing

Tubing OD	Nominal Min. Wall Thickness	Tubing OD	Nominal Min. Wall Thickness
1/8"	.028"	3/4"	.065"
3/16"	.028"	7/8"	.083"
1/4"	.028"	1"	.083"
5/16"	.035"	1 1/4"	.109"
3/8"	.035"	1 1/2"	.134"
1/2"	.049"	2"	.180"
5/8"	.065"		

Metric Tubing

Tubing OD	Nominal Min. Wall Thickness	Tubing OD	Nominal Min. Wall Thickness
3mm	0.8mm	18mm	1.5mm
6mm	0.8mm	20mm	1.8mm
8mm	1.0mm	22mm	2.0mm
10mm	1.0mm	25mm	2.2mm
12mm	1.0mm	28mm	2.8mm
14mm	1.2mm	32mm	3.0mm
16mm	1.5mm	38mm	3.5mm

Temperature Derating

The working pressure varies depending upon the temperature. The working pressure at various temperatures can be obtained by multiplying the working pressure at ambient temperature (-20°F to 100°F or -29°C to 37°C) by the temperature derating factor in the table shown below.

Temperature(°F)	316SS	304SS	Copper	Monel 400
100	1.00	1.00	1.00	1.00
200	1.00	1.00	0.80	0.88
300	1.00	1.00	0.78	0.82
400	0.96	0.94	0.50	0.79
500	0.90	0.88	-	0.79
600	0.85	0.82	-	0.79
700	0.82	0.80	-	0.76
800	0.79	0.76	-	0.76
900	0.78	0.73	-	-
1000	0.76	0.69	-	-
1100	0.62	0.49	-	-
1200	0.37	0.30	-	-

Example

To obtain the working pressure of 316SS 3/8" O. D. x0.035" wall tube at 1,200°F

- Working pressure of the above tubing at ambient temperature:3,300 psig
- Temperature derating factor at 1,200°F:0.37
- Working pressure at 1,200°F:1,221 psig (from 3,300 psig multiplied by 0.37)

Tube Bends near Fitting

For leak tight installation, tube bends must not be too close to the fitting. the following is the recommended minimum straight length of tube measured from the tube end to the bend.

Tube OD	1/8"	1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
Min. Length	23/32"	13/16"	15/16"	1 3/16"	1 1/4"	1 1/2"	2"	2 13/32"	3 1/4"

Also, the bending radius should not be too short of bending radius may affect the working pressure and may cause insufficient flow. Minimum bending radius is usually recommended by the tube bender manufacturer.

Tube Selection and Handling

SANYOU tube fittings perform best when good quality tubing is used. Tubing should be considered a fitting component. Tubing selection by relying only on ASTM or other equivalent specifications is not enough. Here are some points to be considered.

1. Materials and manufacturing method
2. Material hardness
3. Surface finish
4. Outside diameter and its tolerance
5. Wall thickness and its tolerance
6. Ovality
7. Concentricity
8. Packing and transportation

Always try to use good quality tubing for best performance.

Tubings must be handled with great care in transportation and in storage. To avoid damage to the tubing surface. Copper tubings must not be crushed or lose its circularity. If necessary, the tubing must be covered and tubing ends must be plugged to be kept from dirt.

Maximum Allowable Working Pressure (MAWP) Table

■ Working pressure calculated in accordance with ASME B31.3, Chemical Plant and Petroleum Refinery Piping Code, 2014 Edition

Table 5. Stainless Steel Tubing

Fully annealed 304 or 316 high quality seamless stainless steel tube to ASTM A269 or equivalent. Hardness: HRB90 (Hv200) or less

Stainless Steel Tube Inch Size																		
Tube OD (Inches)	Tube Wall Thickness in 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	0.134	0.156	0.188		
1/16"	5,600	6,800	8,200	9,600	12,600													
1/8"						8,500	11,200											
3/16"						5,400	7,000	10,400										
1/4"						4,000	5,100	7,500	10,400									
5/16"							4,000	5,800	8,000									
3/8"								3,300	4,800	6,500								
1/2"								2,600	3,700	5,100	6,700							
5/8"									2,900	4,000	5,200	6,000						
3/4"									2,400	3,300	4,200	4,900	5,800					
7/8"										2,000	2,800	3,600	4,200	4,800				
1"											2,400	3,100	3,600	4,200	4,700			
1 1/4"												2,500	2,800	3,300	3,600	4,100	4,900	
1 1/2"													2,300	2,700	3,000	3,400	4,000	4,900
2"														2,000	2,200	2,500	2,900	3,600

Stainless Steel Tube Metric Size															
Tube OD (mm)	Tube Wall Thickness in Millimeters														
	0.8	1	1.2	1.5	1.8	2	2.2	2.5	2.8	3	3.5	4	4.5	5	
2	1180														
3	720	950													
4	520	670	840												
6	330	430	520	680											
8		310	380	490											
10		240	300	380	470	530									
12		200	240	310	380	430									
14		180	220	280	340	390	430								
15		170	200	260	320	360	400								
16			190	240	300	330	370	430							
18			170	210	260	290	330	380							
20			150	190	230	260	290	330	380						
22			140	170	210	240	260	300	340						
25				150	180	200	230	260	300	320					
28					180	200	230	260	280	330					
30						170	190	210	240	260	310				
32							160	170	200	230	240	290	330		
38								140	170	190	200	240	280	310	
50											150	180	210	230	260

- Unless otherwise specified, allowable working pressure is calculated from ASTM A269 tubing and an S value of 20,000psi (137,800kPa) for ASTM A213 tubing at 28°C~37°C (-20° F~100° F) as specified in ASME B31.3 and ASME B31.1 respectively.
- Based on minimum wall thickness and maximum O. D. allowable by ASTM A269
- For welded tubing, the following derating rate to be applied for weld integrity. (ASME B31.3-2014 Edition, Table A-1B)
 - for double welded tubing: 0.85
 - for single welded tubing : 0.80
- To determine bar, multiply psig by 0.0689 and to determine kPa by 6.89

Note:

1. All calculations are based on maximum outside diameter and minimum wall thickness without allowance for corrosion and erosion.
2. Care should be taken for temperature rating if tubing is coated or plated
3. Figures shown are not for design purpose but for reference only and the accuracy of information here is not liability of our

Table 6. Copper Tubing

High quality soft annealed seamless copper tube to ASTM B-75 or equivalent.
Hardness: Rockwell 15T 60 or less

Fractional Copper Tubing										
Tube OD (Inches)	Tube Wall Thickness in Inches									
	0.010	0.012	0.028	0.035	0.049	0.065	0.083	0.095	0.109	0.120
1/16"	1,652	2,124	6,742	9,871						
1/8"			2,804	3,787						
3/16"			1,810	2,343	3,615					
1/4"			1,321	1,696	2,565	3,639				
5/16"				1,329	1,988	2,782				
3/8"				1,093	1,623	2,251				
1/2"				806	1,187	1,630	2,160			
5/8"					935	1,277	1,681	1,970		
3/4"					748	1,017	1,332	1,555	1,823	
7/8"					639	867	1,133	1,320	1,544	
1"					559	756	986	1,147	1,339	1,479

Metric Copper Tubing										
Tube OD (mm)	Tube Wall Thickness in Millimeters									
	0.8	1.0	1.2	1.5	1.8	2.0	2.2	2.5	2.8	3.0
3	239	326								
4	175	228	291							
6	111	142	178	237	299					
8	81	103	128	168	210					
10	64	81	100	131	162	184				
12	53	67	82	107	131	149				
14		57	70	90	111	125	139	162		
15		53	65	84	102	116	129	150		
16		49	61	78	96	108	120	139		
18		43	53	68	83	94	104	121	138	150
20		39	47	61	75	84	93	107	123	133
22		35	43	55	67	76	84	97	110	120
25		31	38	48	59	66	73	84	96	104

- An S value of 6000 psi (41,300kPa) for ASTM B75 tubing and ASTM B88 tubing at -28°C ~ 37°C (-20° F ~ 100° F) as specified in ASME B31.3 and B31.1 are used to calculate an allowable working pressure.
- Based on minimum wall thickness and maximum O. D. allowable by ASTM B75
- To determine bar, multiply psig by 0.0689 and to determine kPa by 6.89.

Table 7. Monel 400 Tubing

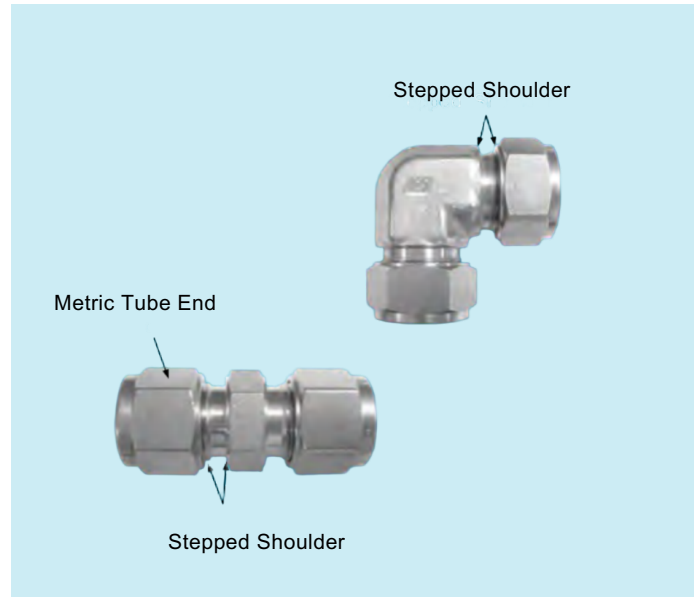
Fully annealed seamless Monel 400 to ASTM B165 or equivalent
Hardness: Rb75 or less

Monel 400 Fractional Tubing										
Tube OD (Inches)	Tube Wall Thickness in Inches									
	0.010	0.012	0.028	0.035	0.049	0.065	0.083	0.095	0.109	0.120
1/8"			7,900	10,100						
1/4"			3,700	4,800	7,000	9,500				
3/8"	For gas service, applying tube wall thickness only			3,100	4,400	6,100				
1/2"	on outside of shade boundary			2,300	3,200	4,400				
3/4"					2,200	3,000	4,000	4,600		
1"						2,200	2,900	3,400	3,900	4,300

All dimensions are in millimeters unless otherwise specified. Dimensions are for reference only, subject to change.

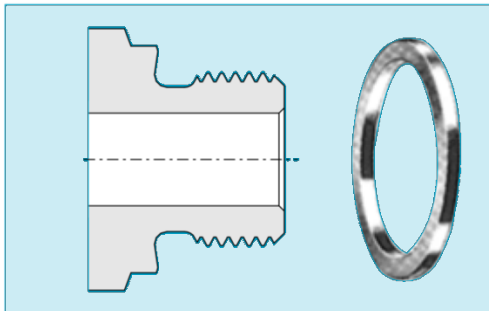
Identification of SANYOU Metric Tube Fittings from Fractional

These two are similar in appearance. To avoid any confusion and for ready identification, the stepped shoulders are machined on the body and on the hex nut of metric size tube fittings as shown. The metric tube nut must not be used on fractional body, and vice versa



ISO Parallel and Tapered Pipe Thread

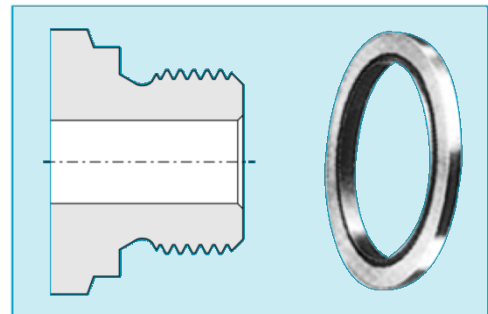
International Standards Organization(ISO)standardized the nomenclature of some international pipe threads. ISO 228/1 is a parallel thread and ISO 7/1 is a tapered thread. With 228/1 parallel thread, the seal is usually made by metal-to-metal contact against the female port or with a gasket. Shown below are two different seals. There are several different descriptions as listed below.



ISO Parallel with
Metal Gasket Seal

A metal(usually copper)gasket performs the sealing between the reverse bevel of the fitting and the surface surrounding the female threads.

- REFERENCE SPECIFICATIONS:
1. BS 2779(BSPP)
 2. DIN-ISO 228/1
 3. JIS B0202
 4. ISO 228/1

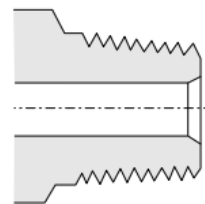


ISO Parallel with
Bonded Washer Seal

No reverse angle is used. Instead, a self centering taper is used at hex to center a composite washer (usually metal and elastomer) to seal the surface surrounding the female thread.

ISO 7/1 tapered thread looks similar to NPT thread. However, ISO 7/1 has 55° thread angle while NPT has 60° , and ISO 7/1 pitch is measured in millimeters while NPT pitch is measured in inches. There are several different descriptions as listed on the right.

- REFERENCE SPECIFICATIONS:
1. BS 21 (BSPT)
 2. DIN-2999
 3. JIS B0203
 4. ISO 7/1



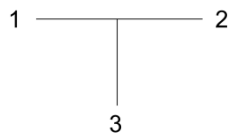
ISO Tapered
(Thread Sealant Required)

SANYOU Tube Fittings

SANYOU tube fittings part numbers are easily understandable and basically composed of 3 groups as shown below.

Designator Group	First ①①	Second ②	Third ③
Example 1	SYCTA	-8	-BRAS
Example 2	SYCMC4	-4N	-S316
Exam 1	Union Tee	1/2" OD	Brass
Exam 2	Male Connector With 1/4" OD	1/4 NPT	316 Stainless steel

- The first group in example 1 or former part of first group in example 2① designates the fitting type.
- The second group in example 1② designates either SANYOU tube end size of unions, union tees, crosses, etc. Where all SANYOU tube end sizes are the same or size of plugs, caps, nuts, etc. where only single end exists.
- The latter part of first group in example 2① designates the SANYOU tube end size and the second group ② designates pipe thread/size, or SANYOU tube end size, or tube size of fittings other than the fittings applicable to example 1.
- The third group designates the fitting material.
- In tees shown below, "2" is referred to as run and "3" is referred to as branch.



Material Designator			
Material	SS 316	Brass	Monel
Designator	S316	BRAS	MONE

Identifier	Description	Identifier	Description
SYCUA	Union	SYCFTC	Flange Lapped Tube Connector
SYCUR	Reducing Union		
SYCLA	Union Elbow	SYCIF	Flange Connector
SYCTA	Union Tee	SYCFU	37° Flared Union
SYCTR	Reducing Tee	SYCBFU	37° Flared Bulkhead Union
SYCXA	Union Cross	SYCFA	37° Flared Adapter
SYCBU	Bulkhead Union	SYCFFSU	37° Flared Swivel Union
SYCMC	Male Connector	SYCSC	SAE Male Connector
SYCMCT	Thermocouple Male Connector	SYCSLA	Positionable Male Elbow
		SYCSRT	Positionable Male Run Tee
SYCMC-G	Male Connector For Bonded Seal	SYCSBT	Positionable Male Branch Tee
SYCOM	Male Connector For Metal Seal	SYCSLB	Positionable 45° Male Elbow
SYCBMC	Bulkhead Male Connector	SYCOS	0-Seal Straight Thread Connector
SYCLMA	Male Elbow		
SYCLMB	45° Male Elbow	SYCOP	0-Seal Pipe Thread Connector
SYCRTM	Male Run Tee	SYCWC	Male Pipe Weld Connector
SYCBTM	Male Branch Tee	SYCLW	Male Pipe Weld
SYCFC	Female Connector	SYCSWC	Tube Socket Weld Connector
SYCGC	Gauge Connector	SYCLSW	Tube Socket Weld Elbow
SYCBFC	Bulkhead Female Connector	SYCBUW	Weld Union
SYCLF	Female Elbow	SYCHBUW	Weld Half Union
SYCRTF	Female Run Tee	SYCPA	Plug
SYCBTF	Female Branch	SYCCA	Cap
SYCR	Reducer	SYCDF	Dielectric Fitting
SYCBR	Bulkhead Reducer	SYCSFC	Sanitary Flange Fitting
SYCAL	Adjustable Elbow	SYCN	Nut
SYCRTA	Adjustable Run Tee	SYCFF	Front Ferrule
SYCBTA	Adjustable Branch Tee	SYCFB	Back Ferrule
SYCAM	Male Adapter	SYCFS	Ferrule Set
SYCAM-G	Male Adapter	SYCNFS	Nut Ferrule Set
SYCAM-U	SAE/MS Male Adapter		
SYCAMOS	0-Seal Straight Thread Male Adapter		
SYCAMF	37° Flared Adapter		
SYCAPW	Female Adapter		
SYCAF	Weld Adapter		
SYCPC	Port Connector		
SYCPR	Reducing Port Connector		

Fractional Tube	OD	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"
	Designator	1	2	3	4	5	6	8	10	12	14	16	20	24	32
Metric Tube	OD	2mm	3mm	4mm	6mm	8mm	10mm	12mm	16mm	20mm	22mm	25mm	28mm	32mm	38mm
	Designator	2M	3M	4M	6M	8M	10M	12M	16M	20M	22M	25M	28M	32M	38M





Nom. Size	1/8"	1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	Applicable Specifications
ISO Tapered	2R	4R	6R	8R	12R	16R	20R	24R	32R	JIS B0203, DIN2999, ISO7/1, BS 21(BSPT)
NPT	2N	4N	6N	8N	12N	16N	20N	24N	32N	ASME B1.20.1 (NPT)
ISO Parallel	2G	4G	6G	8G	12G	16G	20G	24G	32G	JIS B0202, DIN ISO 228/1, BS 2779(BSPP)

All dimensions are in millimeters unless otherwise specified. Dimensions are for reference only, subject to change.

Tube to Tube







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O-Seal Straight
Thread Male
Adapter

SYCAMOS



44

37 ° Flared
Adapter

SYCAMF



44

Weld Adapter

SYSAPW



44

Female Adapter

SYCAF



45

Port Connector

SYCPC



46

Reducing
Port Connector

SYCPR



46

Tube to Swivel

Swivel
Reducing
Adapter

SYCSRA



47

Swivel Elbow

SYCSL



49

Swivel Branch
Tee

SYCBST



50

Swivel Run
Tee

SYCRST



50

Flange Connector

Flange
Lapped Tube
Connector

SYCFTC



51

Flange
Connector

SYCIE



52

Tube to 37° Flared Tube

37° Flared Union

SYCFU



53

37° Flared
Bulkhead Union

SYCBFU



53

37° Flared
Adapter

SYCFA



53

37° Flared
Swivel Union

SYCFFSU



54

Tube to SAE/MS O-Ring

SAE/MS Male
Connector

SYCSC



56

Positionable
Male Elbow

SYCSLA



57

Positionable
Male Elbow

SYCSLA



57

Positionable
Male Run Tee

SYCSRST



58

Positionable
Male Branch
Tee

SYCSBT



58

O-Seal
Straight
Thread
Connector

SYCOS



59

O-Seal Pipe
Thread
Connector

SYCOP



59

Tube to Weld End

Male Pipe Weld
Connector

SYCWC



61

Male Pipe Weld
Elbow

SYCLW



62

Tube Socket
Weld
Connector

SYCSWC



62

Tube Socket
Weld Elbow

SYCLSW



62

Weld Union

SYCBUW



63

Weld Half Union

SYCHBUW



64

Plug and Cap

Plug

SYCPA



64

Cap

SYCCA



64

Spare Parts

Spare Parts

SYNU



66

Front Ferrule

SYCFF



66

Back Ferrule

SYCFB



66

Ferrule Set

SYCFS



67

Nut Ferrule Set

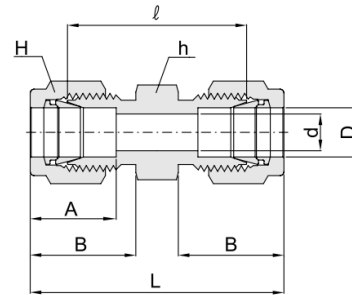
SYCNFS



67

Union

SYCUA



h

Connects Fractional Tubes

Part No.	Tube OD D		d Min.	Width across flat (in.)		A	B	ℓ	L
	in.	mm		h	H				
SYCUA-1	1/16	1.58	1.27	5/16	5/16	8.63	10.92	17.50	25.15
SYCUA-2	1/8	3.17	2.28	7/16	7/16	12.70	15.24	22.35	35.56
SYCUA-3	3/16	4.76	3.04	7/16	1/2	13.71	16.00	24.13	37.33
SYCUA-4	1/4	6.35	4.82	1/2	9/16	15.24	17.78	26.16	40.89
SYCUA-5	5/16	7.93	6.35	9/16	5/8	16.25	18.54	28.19	42.92
SYCUA-6	3/8	9.52	7.11	5/8	11/16	16.76	19.30	30.22	44.95
SYCUA-8	1/2	12.70	10.41	13/16	7/8	22.86	21.84	30.98	51.30
SYCUA-10	5/8	15.87	12.70	15/16	1	24.38	21.84	31.75	52.07
SYCUA-12	3/4	19.05	15.74	1-1/16	1-1/8	24.38	21.84	33.27	53.59
SYCUA-14	7/8	22.22	18.28	1-3/16	1-1/4	25.90	21.84	35.05	55.37
SYCUA-16	1	25.40	22.35	1-3/8	1-1/2	31.24	26.41	40.38	64.77
SYCUA-20	1 1/4	31.75	27.68	1-3/4	1-7/8	41.14	38.86	48.00	92.20
SYCUA-24	1 1/2	38.10	34.03	2-1/8	2-1/4	50.03	45.21	53.60	107.95
SYCUA-32	2	50.80	45.97	2-3/4	3	67.56	62.73	74.70	149.35

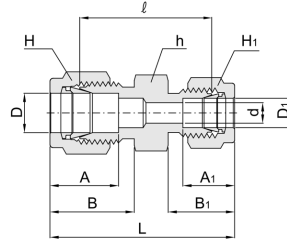
Connects Metric Tubes

Part No.	Tube OD D	d Min.	Width across flat		A	B	ℓ	L
			h	H				
SYCUA-2M	2	1.7	7/16 in.	12	12.9	15.3	22.4	35.6
SYCUA-3M	3	2.4	7/16 in.	12	12.9	15.3	22.1	35.3
SYCUA-4M	4	2.4	7/16 in.	12	13.7	16.1	24.1	37.3
SYCUA-6M	6	4.8	1/2 in.	14	15.3	17.7	26.2	41.0
SYCUA-8M	8	6.3	14	16	16.2	18.6	28.2	43.2
SYCUA-10M	10	8.0	17	19	17.2	19.5	31.0	46.2
SYCUA-12M	12	9.5	13/16 in.	22	22.8	22.0	31.0	51.2
SYCUA-15M	15	12.0	24	25	24.4	22.0	31.8	52.0
SYCUA-16M	16	12.7	24	25	24.4	22.0	31.8	52.0
SYCUA-18M	18	15.0	27	30	24.4	22.0	33.3	53.5
SYCUA-20M	20	16.0	30	32	26.0	22.0	34.8	55.0
SYCUA-22M	22	18.3	30	32	26.0	22.0	34.8	55.0
SYCUA-25M	25	21.8	35	38	31.3	26.5	40.4	65.0
SYCUA-28M	28	21.8	41	46	36.6	36.6	43.4	85.0
SYCUA-32M	32	28.6	46	50	42.0	41.6	51.3	97.3
SYCUA-38M	38	33.7	55	60	49.4	47.9	58.4	113.6
SYCUA-42M	42	36.0	55	65	55.1	53.6	64.0	126.2
SYCUA-50M	50	45.0	70	3 in.	65.0	61.0	71.7	146.0

All dimensions are in millimeters unless otherwise specified. Dimensions are for reference only, subject to change.

Reducing Union

SYCUR



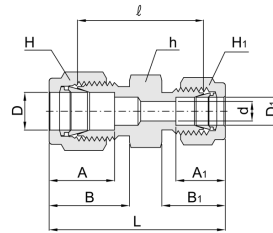
Connects Fractional Tubes

Part No.	Tube OD				d Min.	Width across flat(in.)			A	A ₁	B	B ₁	ℓ	L
	D		D ₁			h	H	H ₁						
	in.	mm	in.	mm										
SYCUR 2-1	1/8	3.17	1/16	1.58	1.27	7/16	7/16	5/16	12.70	8.63	15.24	10.92	20.60	30.91
SYCUR 3-1	3/16	4.76	1/16	1.58	1.27	7/16	1/2	5/16	13.71	8.63	16.00	10.92	21.84	32.25
SYCUR 3-2	3/16	4.76	1/8	3.17	2.28	7/16	1/2	7/16	13.71	12.70	16.00	15.24	23.36	36.57
SYCUR 4-1	1/4	6.35	1/16	1.58	1.27	1/2	9/16	5/16	15.24	8.63	17.78	10.92	23.11	34.29
SYCUR 4-2	1/4	6.35	1/8	3.17	2.28	1/2	9/16	7/16	15.24	12.70	17.78	15.24	24.63	38.60
SYCUR 4-3	1/4	6.35	3/16	4.76	3.04	1/2	9/16	1/2	15.24	13.71	17.78	16.00	25.40	39.37
SYCUR 5-2	5/16	7.93	1/8	3.17	2.28	9/16	5/8	7/16	16.25	12.70	18.54	15.24	25.90	39.87
SYCUR 5-4	5/16	7.93	1/4	6.35	4.82	9/16	5/8	9/16	16.25	15.24	18.54	17.78	27.43	42.16
SYCUR 6-1	3/8	9.52	1/16	1.58	1.27	5/8	11/16	5/16	16.76	8.63	19.30	10.92	25.40	36.57
SYCUR 6-2	3/8	9.52	1/8	3.17	2.28	5/8	11/16	7/16	16.76	12.70	19.30	15.24	26.92	40.89
SYCUR 6-4	3/8	9.52	1/4	6.35	4.82	5/8	11/16	9/16	16.76	15.24	19.30	17.78	28.44	43.18
SYCUR 6-5	3/8	9.52	5/16	7.93	6.35	5/8	11/16	5/8	16.76	16.25	19.30	18.54	29.46	44.19
SYCUR 8-2	1/2	12.70	1/8	3.17	2.28	13/16	7/8	7/16	22.86	12.70	21.84	15.24	28.44	45.21
SYCUR 8-4	1/2	12.70	1/4	6.35	4.82	13/16	7/8	9/16	22.86	15.24	21.84	17.78	29.46	46.99
SYCUR 8-6	1/2	12.70	3/8	9.52	7.11	13/16	7/8	11/16	22.86	16.76	21.84	19.30	30.98	48.51
SYCUR 10-6	5/8	15.87	3/8	9.52	7.11	15/16	1	11/16	24.38	16.76	21.84	19.30	31.75	49.27
SYCUR 10-8	5/8	15.87	1/2	12.70	10.41	15/16	1	7/8	24.38	22.86	21.84	21.84	31.75	52.07
SYCUR 12-4	3/4	19.05	1/4	6.35	4.82	1-1/16	1-1/8	9/16	24.38	15.24	21.84	17.78	31.75	49.27
SYCUR 12-6	3/4	19.05	3/8	9.52	7.11	1-1/16	1-1/8	11/16	24.38	16.76	21.84	19.30	33.27	50.80
SYCUR 12-8	3/4	19.05	1/2	12.70	10.41	1-1/16	1-1/8	7/8	24.38	22.86	21.84	21.84	33.27	53.59
SYCUR 12-10	3/4	19.05	5/8	15.87	12.70	1-1/16	1-1/8	1	24.38	24.38	21.84	21.84	33.27	53.59
SYCUR 16-8	1	25.40	1/2	12.70	10.41	1-3/8	1-1/2	7/8	31.24	22.86	26.41	21.84	40.89	63.24
SYCUR 16-12	1	25.40	3/4	19.05	15.74	1-3/8	1-1/2	1-1/8	31.24	24.38	26.41	21.84	40.38	62.73

Connects Metric Tubes

Part No.	Tube OD		d Min.	Width across flat			A	A ₁	B	B ₁	ℓ	L
	D	D ₁		h	H	H ₁						
SYCUR 3M-2M	3	2	1.7	7/16 in.	12	12	12.9	12.9	15.3	15.3	22.1	35.3
SYCUR 6M -2M	6	2	1.7	7/16 in.	14	12	15.3	12.9	17.7	15.3	24.6	38.6
SYCUR 6M-3M	6	3	2.4	1/2 in.	14	12	15.3	12.9	17.7	15.3	24.6	38.6
SYCUR 6M-4M	6	4	2.4	1/2 in.	14	12	15.3	13.7	17.7	16.1	25.4	39.4
SYCUR 8M-6M	8	6	4.8	14	16	14	16.2	15.3	18.6	17.7	27.4	42.3
SYCUR 10M-6M	10	6	4.8	17	19	14	17.2	15.3	19.5	17.7	29.5	44.5
SYCUR 10M-8M	10	8	6.3	17	19	16	17.2	16.2	19.5	18.6	30.0	45.1
SYCUR12M-6M	12	6	4.8	13/16 in.	22	14	22.8	15.3	22.0	17.7	29.5	47.0
SYCUR 12M-8M	12	8	6.3	13/16 in.	22	16	22.8	16.2	22.0	18.6	30.2	47.8
SYCUR 12M-10M	12	10	8.0	13/16 in.	22	19	22.8	17.2	22.0	19.5	31.0	48.7
SYCUR 16M-10M	16	10	8.0	24	25	19	24.4	17.2	22.0	19.5	31.8	49.5
SYCUR 16M-12M	16	12	9.5	24	25	22	24.4	22.8	22.0	22.0	31.8	52.0
SYCUR 18M-12M	18	12	9.5	27	30	22	24.4	22.8	22.0	22.0	33.3	53.5
SYCUR 25M-18M	25	18	15.0	35	38	30	31.3	24.4	26.5	22.0	38.6	61.0
SYCUR 25M-20M	25	20	16.0	35	38	32	31.3	26.0	26.5	22.0	39.9	62.3

Reducing Union SYCUR

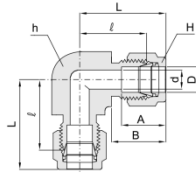


Connects Metric Tube to Fractional Tube

Part No.	Tube OD		d Min.	Width across flat			A	A ₁	B	B ₁	ℓ	L	
	D	D ₁		h	H	H ₁ (in.)							
		in.											mm
SYCUR 3M-2	3	1/8	3.17	2.3	7/16 in.	12	7/16	12.9	12.8	15.3	15.2	22.1	35.2
SYCUR 4M-2	4	1/8	3.17	2.3	7/16 in.	12	7/16	13.7	12.8	16.1	15.2	23.4	36.5
SYCUR 4M-4	4	1/4	6.35	2.4	7/16 in.	12	9/16	13.7	15.3	16.1	17.7	25.4	39.4
SYCUR 6M -2	6	1/8	3.17	2.3	1/2 in.	14	7/16	15.3	12.8	17.7	15.2	24.6	38.5
SYCUR 6M-4	6	1/4	6.35	4.8	1/2 in.	14	9/16	15.3	15.3	17.7	17.7	26.2	41.0
SYCUR 6M -5	6	5/16	7.93	4.8	14	14	5/8	15.3	16.2	17.7	18.6	27.4	42.3
SYCUR 8M-4	8	1/4	6.35	4.8	15	16	9/16	16.2	15.3	18.6	17.7	27.4	42.3
SYCUR 10M -2	10	1/8	3.17	2.3	17	19	7/16	17.2	12.8	19.5	15.2	27.7	41.8
SYCUR 10M-4	10	1/4	6.35	4.8	17	19	9/16	17.2	15.3	19.5	17.7	29.5	44.5
SYCUR 10M -5	10	5/16	7.93	6.3	17	19	5/8	17.2	16.2	19.5	18.6	30.3	45.1
SYCUR 10M-6	10	3/8	9.52	7.1	17	19	11/16	17.2	16.9	19.5	19.2	31.0	45.9
SYCUR 12M-5	12	5/16	7.93	6.3	13/16 in.	22	5/8	22.8	16.2	22.0	18.6	30.3	47.8
SYCUR 12M-6	12	3/8	9.52	7.1	13/16 in.	22	11/16	22.8	16.9	22.0	19.2	31.0	48.4
SYCUR 12M -8	12	1/2	12.70	9.5	13/16 in.	22	7/8	22.8	22.8	22.0	22.0	31.0	51.2
SYCUR 15M-8	15	1/2	12.70	10.4	24	25	7/8	24.4	22.8	22.0	22.0	31.8	52.0
SYCUR 16M-10	16	5/8	15.87	12.7	24	25	1	24.4	24.4	22.0	22.0	31.8	52.0
SYCUR 18M-12	18	3/4	19.05	15.0	27	30	1-1/2	24.4	24.4	22.0	22.0	33.3	53.5
SYCUR 20M-12	20	3/4	19.05	15.7	30	32	1-1/8	26.0	24.4	22.0	22.0	34.8	54.9
SYCUR 20M-16	20	1	25.40	16.0	35	32	1-1/2	26.0	31.2	22.0	26.4	38.0	60.3
SYCUR 22M-16	22	1	25.40	18.3	35	32	1-1/2	26.0	31.2	22.0	26.4	38.2	60.3

All dimensions are in millimeters unless otherwise specified. Dimensions are for reference only, subject to change.

Union Elbow
SYCLA



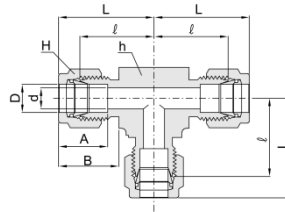
Connects Fractional Tubes

Part No.	Tube OD D		d Min.	Width across flat (in.)		A	B	r	L
	in.	mm		h	H				
SYCLA- 1	1/16	1.58	1.27	3/8	5/16	8.63	10.92	14.00	17.88
SYCLA- 2	1/8	3.17	2.28	3/8	7/16	12.70	15.24	15.74	22.35
SYCLA- 3	3/16	4.76	3.04	1/2	1/2	13.71	16.00	17.78	24.38
SYCLA-4	1/4	6.35	4.82	1/2	9/16	15.24	17.78	19.55	26.92
SYCLA-5	5/16	7.93	6.35	9/16	5/8	16.25	18.54	21.33	28.70
SYCLA-6	3/8	9.52	7.11	5/8	11/16	16.76	19.30	23.11	30.48
SYCLA-8	1/2	12.70	10.41	13/16	7/8	22.86	21.84	25.90	36.06
SYCLA-10	5/8	15.87	12.70	15/16	1	24.38	21.84	28.70	38.80
SYCLA-12	3/4	19.05	15.74	1-1/16	1-1/8	24.38	21.84	29.71	39.87
SYCLA-14	7/8	22.22	18.28	1-3/16	1-1/4	25.90	21.84	34.54	44.70
SYCLA-16	1	25.40	22.35	1-3/8	1-1/2	31.24	26.41	36.83	49.02
SYCLA-20	1-1/4	31.75	27.68	1-11/16	1-7/8	41.14	38.86	44.50	66.54
SYCLA-24	1-1/2	38.10	34.03	2	2-1/4	50.03	45.21	50.80	77.97
SYCLA-32	2	50.80	45.97	2-3/4	3	67.56	62.73	69.80	107.18

Connects Metric Tubes

Part No.	Tube OD D	d Min.	Width across flat		A	B	r	L
			h (in.)	H				
SYCLA-2M	2	1.7	3/8	12	12.9	15.3	15.7	22.3
SYCLA-3M	3	2.4	3/8	12	12.9	15.3	15.7	22.3
SYCLA-4M	4	2.4	1/2	12	13.7	16.4	18.8	25.4
SYCLA-6M	6	4.8	1/2	14	15.3	17.7	19.6	27.0
SYCLA-8M	8	6.3	9/16	16	16.2	18.6	21.3	28.8
SYCLA-10M	10	8.0	11/16	19	17.2	19.5	23.9	31.5
SYCLA-12M	12	9.5	13/16	22	22.8	22.0	25.9	36.0
SYCLA-15M	15	12.0	15/16	25	24.4	22.0	28.7	38.8
SYCLA-16M	16	12.7	15/16	25	24.4	22.0	28.7	38.8
SYCLA-18M	18	15.0	1-1/16	30	24.4	22.0	29.7	39.8
SYCLA-20M	20	16.0	30mm	32	26.0	22.0	32.5	42.6
SYCLA-22M	22	18.3	30mm	32	26.0	22.0	32.5	42.6
SYCLA-25M	25	21.8	1-3/8	38	31.3	26.5	36.8	49.1
SYCLA-28M	28	21.8	41mm	46	36.6	36.6	43.2	64.0
SYCLA-32M	32	28.6	46mm	50	42.0	41.6	49.3	72.3
SYCLA-38M	38	33.7	55mm	60	49.4	47.9	56.4	84.0
SYCLA-42M	42	36.0	55mm	65	55.1	53.6	58.0	89.1
SYCLA-50M	50	45.2	70mm	3 in.	65.0	61.0	69.0	106.0

Union Tee SYCTA



Connects Fractional Tubes

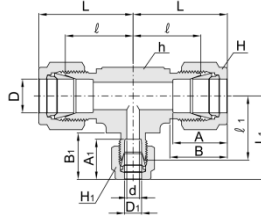
Part No.	Tube OD D		d Min.	Width across flat (in.)		A	B	∠	L
	in.	mm		h	H				
SYCTA-1	1/16	1.58	1.27	3/8	5/16	8.63	10.92	14.00	17.88
SYCTA-2	1/8	3.17	2.28	3/8	7/16	12.70	15.24	15.74	22.35
SYCTA-3	3/16	4.76	3.04	1/2	1/2	13.71	16.00	17.78	24.38
SYCTA-4	1/4	6.35	4.82	1/2	9/16	15.24	17.78	19.55	26.92
SYCTA-5	5/16	7.93	6.35	9/16	5/8	16.25	18.54	21.33	28.70
SYCTA-6	3/8	9.52	7.11	5/8	11/16	16.76	19.30	23.11	30.48
SYCTA-8	1/2	12.70	10.41	13/16	7/8	22.86	21.84	25.90	36.06
SYCTA-10	5/8	15.87	12.70	15/16	1	24.38	21.84	28.70	38.80
SYCTA-12	3/4	19.05	15.74	1-1/16	1-1/8	24.38	21.84	29.71	39.87
SYCTA-14	7/8	22.22	18.28	1-3/16	1-1/4	25.90	21.84	34.54	44.70
SYCTA-16	1	25.40	22.35	1-3/8	1-1/2	31.24	26.41	36.83	49.02
SYCTA-20	1-1/4	31.75	27.68	1-11/16	1-7/8	41.14	38.86	44.50	66.54
SYCTA-24	1-1/2	38.10	34.03	2	2-1/4	50.03	45.21	50.80	77.97
SYCTA-32	2	50.80	45.97	2-3/4	3	67.56	62.73	69.80	107.18

Connects Metric Tubes

Part No.	Tube OD D	d Min.	Width across flat		A	B	∠	L
			h (in.)	H				
SYCTA-2M	2	1.7	3/8	12	12.9	15.3	15.7	22.3
SYCTA-3M	3	2.4	3/8	12	12.9	15.3	15.7	22.3
SYCTA-4M	4	2.4	1/2	12	13.7	16.1	18.8	25.4
SYCTA-6M	6	4.8	1/2	14	15.3	17.7	19.6	27.0
SYCTA-8M	8	6.3	9/16	16	16.2	18.6	21.3	28.8
SYCTA-10M	10	8.0	11/16	19	17.2	19.5	23.9	31.5
SYCTA-12M	12	9.5	13/16	22	22.8	22.0	25.9	36.0
SYCTA-15M	15	12.0	15/16	25	24.4	22.0	28.7	38.8
SYCTA-16M	16	12.7	15/16	25	24.4	22.0	28.7	38.8
SYCTA-18M	18	15.0	1-1/16	30	24.4	22.0	29.7	39.8
SYCTA-20M	20	16.0	30mm	32	26.0	22.0	34.5	42.6
SYCTA-22M	22	18.3	30mm	32	26.0	22.0	34.5	42.6
SYCTA-25M	25	21.8	1-3/8	38	31.3	26.5	36.8	49.1
SYCTA-28M	28	21.8	41mm	46	36.6	36.6	43.2	64.0
SYCTA-32M	32	28.6	46mm	50	42.0	41.6	49.3	72.3
SYCTA-38M	38	33.7	55mm	60	49.4	47.9	56.4	84.0
SYCTA-42M	42	36.0	55mm	65	55.1	53.6	58.0	89.1
SYCTA-50M	50	45.2	70mm	3 in.	65.0	61.0	69.0	106.0

All dimensions are in millimeters unless otherwise specified. Dimensions are for reference only, subject to change.

Reducing Tee
SYCTR



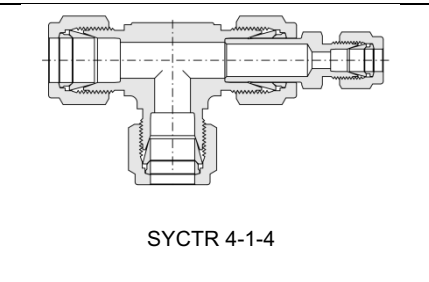
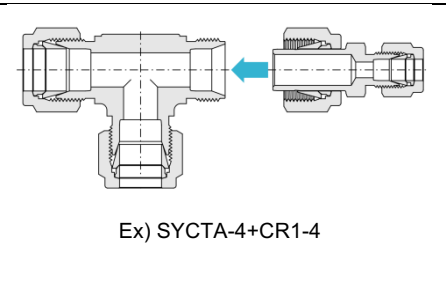
Connects Fractional Tubes

Part No.	Tube OD				d Min.	Width across flat (in.)			A	A ₁	B	B ₁	α	α ₁	L	L ₁
	D		D ₁			h	H	H ₁								
	in.	mm	in.	mm												
SYCTR 6-4	3/8	9.52	1/4	6.35	4.82	5/8	11/16	9/16	16.76	15.24	19.30	17.78	23.11	21.60	30.48	28.97
SYCTR 8-4	1/2	12.70	1/4	6.35	4.82	13/16	7/8	9/16	22.86	15.24	21.84	17.78	25.90	24.40	36.06	31.77
SYCTR 8-6	1/2	12.70	3/8	9.52	7.11	13/16	7/8	11/16	22.86	16.76	21.84	19.30	25.90	25.90	36.06	33.27
SYCTR10-6	5/8	15.87	3/8	9.52	7.11	15/16	15/16	11/16	24.38	16.76	21.84	19.30	28.70	28.70	38.80	36.07
SYCTR12-6	3/4	19.05	3/8	9.52	7.11	1-1/16	1-1/16	11/16	24.38	16.76	21.84	19.30	29.71	29.71	39.87	37.08
SYCTR12-8	3/4	19.05	1/2	12.70	10.41	1-1/16	1-1/16	7/8	24.38	22.86	21.84	21.84	29.71	29.71	39.87	39.87
SYCTR16-6	1	25.40	3/8	9.52	7.11	1-3/8	1-1/2	11/16	31.24	16.76	26.41	19.30	36.83	34.50	49.02	41.87
SYCTR16-8	1	25.40	1/2	12.70	10.41	1-3/8	1-1/2	7/8	31.24	22.86	26.41	21.84	36.83	34.50	49.02	44.66
SYCTR16-12	1	25.40	3/4	19.05	15.74	1-3/8	1-1/2	1-1/16	31.24	24.38	26.41	21.84	36.83	34.50	49.02	44.66
SYCTR20-16	1 1/4	31.75	1	25.40	22.35	1-11/16	1-7/8	1-1/2	41.14	31.24	38.86	26.41	44.50	41.80	66.54	53.99
SYCTR24-16	1 1/2	38.10	1	25.40	22.35	2	2-1/4	1-1/2	50.03	31.24	45.21	26.41	50.80	47.00	77.97	59.19
SYCTR32-16	2	50.80	1	25.40	22.35	2-3/4	3	1-1/2	67.56	31.24	62.73	26.41	69.80	58.60	107.18	70.79

Connects Metric Tubes

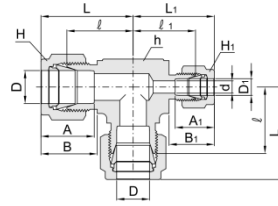
Part No.	Tube OD		d Min.	Width across flat			A	A ₁	B	B ₁	α	α ₁	L	L ₁
	D	D ₁		h(in.)	H	H ₁								
SYCTR 3M-6M	3	6	2.4	1/2	12	14	12.9	15.3	15.3	17.7	18.0	19.6	24.6	27.0
SYCTR 8M-6M	8	6	4.8	9/16	16	14	16.2	15.3	18.6	17.7	21.3	20.5	28.8	27.9
SYCTR10M-6M	10	6	4.8	11/16	19	14	17.2	15.3	19.5	17.7	23.9	22.3	31.5	29.7
SYCTR12M-6M	12	6	4.8	13/16	22	14	22.8	15.3	22.0	17.7	25.9	24.5	36.0	31.9
SYCTR15M-12M	15	12	9.5	15/16	25	22	24.4	22.8	22.0	22.0	28.7	28.7	38.8	38.8
SYCTR16M-12M	16	12	9.5	15/16	25	22	24.4	22.8	22.0	22.0	28.7	28.7	38.8	38.8
SYCTR18M-12M	18	12	9.5	1-1/16	30	22	24.4	22.8	22.0	22.0	29.7	29.7	39.8	39.8
SYCTR22M-12M	22	12	9.5	30mm	32	22	26.0	22.8	22.0	22.0	34.5	34.5	42.6	44.6
SYCTR25M-12M	25	12	9.5	1-3/8	38	22	31.3	22.8	26.5	22.0	36.8	34.3	49.1	44.4

SYCTR Special Product (SYCTA+CR)
 For Special Products, we recommend the combination product as shown in the figure.
 Consult sales representative for technical details and information, and please contact local agency if you have any problem.



SANYOU Tube Fittings

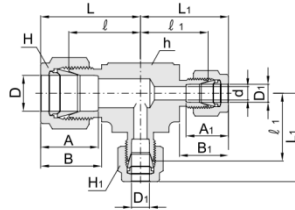
Reducing Tee SYCTR



Connects Fractional Tubes

Part No.	Tube OD				d Min.	Width across flat (in.)			A	A ₁	B	B ₁	∠	∠	L	L ₁
	D		D ₁			h	H	H ₁								
	in.	mm	in.	mm												
SYCTR 6-4-6	3/8	9.52	1/4	6.35	4.82	5/8	11/16	9/16	16.76	15.24	19.30	17.78	23.11	21.60	30.48	28.97

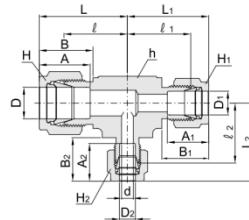
Reducing Tee SYCTR



Connects Fractional Tubes

Part No.	Tube OD				d Min.	Width across flat (in.)			A	A ₁	B	B ₁	∠	∠	L	L ₁
	D		D ₁			h	H	H ₁								
	in.	mm	in.	mm												
SYCTR 8-6-6	1/2	12.70	3/8	9.52	7.11	13/16	7/8	11/16	22.86	16.76	21.84	19.30	25.90	25.90	36.06	33.27
SYCTR10-6-6	5/8	15.87	3/8	9.52	7.11	15/16	15/16	11/16	24.38	16.76	21.84	19.30	28.70	28.70	38.80	36.07
SYCTR12-6-6	3/4	19.05	3/8	9.52	7.11	1-1/16	1-1/16	11/16	24.38	16.76	21.84	19.30	29.71	29.71	39.87	37.08

Reducing Tee SYCTR

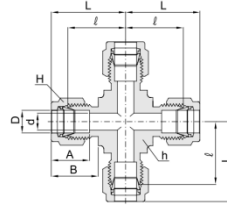


Connects Fractional Tubes

Part No.	Tube OD						d Min.	Width across flat (in.)				A	A ₁	A ₂	B	B ₁	B ₂	∠	∠	∠	L	L ₁	L ₂
	D		D ₁		D ₂			h	H	H ₁	H ₂												
	in.	mm	in.	mm	in.	mm																	
SYCTR10-8-6	5/8	15.87	1/2	12.70	3/8	9.52	7.11	15/16	15/16	7/8	11/16	24.38	22.86	16.76	21.84	21.84	19.30	28.70	28.70	28.70	38.80	38.80	36.07
SYCTR12-8-6	3/4	19.05	1/2	12.70	3/8	9.52	7.11	1-1/16	1-1/16	7/8	11/16	24.38	22.86	16.76	21.84	21.84	19.30	39.87	39.87	39.87	39.87	39.87	37.08
SYCTR16-12-6	1	25.40	3/4	19.05	3/8	9.52	7.11	1-3/8	1-1/2	1-1/16	11/16	31.24	24.38	16.76	26.41	21.84	19.30	36.83	34.50	34.50	49.02	44.66	41.87

All dimensions are in millimeters unless otherwise specified. Dimensions are for reference only, subject to change.

Union Cross
SYCXA



Connects Fractional Tubes

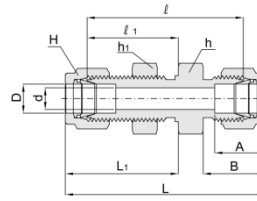
Part No.	Tube OD D		d Min.	Width across flat (in.)		A	B	ℓ	L
	in.	mm		h	H				
SYCXA-1	1/16	1.58	1.27	3/8	5/16	8.63	10.92	14.00	17.88
SYCXA-2	1/8	3.17	2.28	3/8	7/16	12.70	15.24	15.74	22.35
SYCXA-3	3/16	4.76	3.04	1/2	1/2	13.71	16.00	17.78	24.38
SYCXA-4	1/4	6.35	4.82	1/2	9/16	15.24	17.78	19.55	26.92
SYCXA-5	5/16	7.93	6.35	1/2	5/8	16.25	18.54	21.33	28.70
SYCXA-6	3/8	9.52	7.11	5/8	11/16	16.76	19.30	23.11	30.48
SYCXA-8	1/2	12.70	10.41	13/16	7/8	22.86	21.84	25.90	36.06
SYCXA-10	5/8	15.87	12.70	13/16	1	24.38	21.84	28.70	38.80
SYCXA-12	3/4	19.05	15.74	1	1-1/8	24.38	21.84	29.71	39.87
SYCXA-14	7/8	22.22	18.28	1-3/16	1-1/4	25.90	21.84	34.54	44.70
SYCXA-16	1	25.40	22.35	1-3/8	1-1/2	31.24	26.41	36.83	49.02

Connects Metric Tubes

Part No.	Tube OD D	d Min.	Width across flat		A	B	ℓ	L
			h (in.)	H				
SYCXA-3M	3	2.4	3/8	12	12.9	15.3	15.7	22.3
SYCXA-6M	6	4.8	1/2	14	15.3	17.7	19.6	27.0
SYCXA-8M	8	6.3	9/16	16	16.2	18.6	21.3	28.8
SYCXA-10M	10	8.0	11/16	19	17.2	19.5	23.9	31.5
SYCXA-12M	12	9.5	13/16	22	22.8	22.0	25.9	36.0
SYCXA-16M	16	12.7	15/16	25	24.4	22.0	28.7	38.8
SYCXA-18M	18	15.0	1-1/16	30	24.4	22.0	28.2	39.8
SYCXA-20M	20	16.0	30mm	32	26.0	22.0	34.5	42.6
SYCXA-25M	25	21.8	1-3/8	38	31.3	22.0	36.8	49.1

SANYOU Tube Fittings

Bulkhead Union SYCBU



Connects Fractional Tubes

Part No.	Tube OD D		d Min.	Width across flat(in.)		A	B	ℓ	A ₁	L	L ₁	Panel Hole Drill Size	Panel Max Thickness
	in	mm		h, h ₁	H								
SYCBU-1	1/16	1.58	1.27	5/16	5/16	8.63	10.92	23.87	13.46	31.50	17.27	5.16	3.05
SYCBU-2	1/8	3.17	2.28	1/2	7/16	12.70	15.24	38.10	24.63	51.30	31.24	8.33	12.70
SYCBU-3	3/16	4.76	3.04	9/16	1/2	13.71	16.00	40.38	25.40	53.59	32.00	9.92	12.70
SYCBU-4	1/4	6.35	4.82	5/8	9/16	15.24	17.78	42.92	26.16	57.65	33.52	11.50	10.16
SYCBU-5	5/16	7.93	6.35	11/16	5/8	16.25	18.54	45.97	28.44	60.70	35.81	13.09	11.17
SYCBU-6	3/8	9.52	7.11	3/4	11/16	16.76	19.30	47.49	29.46	62.23	36.83	14.68	11.17
SYCBU-8	1/2	12.70	10.41	15/16	7/8	22.86	21.84	50.80	31.75	71.12	41.91	19.44	12.70
SYCBU-10	5/8	15.87	12.70	1-1/16	1	24.38	21.84	52.32	32.51	72.64	42.67	22.62	12.70
SYCBU-12	3/4	19.05	15.74	1-3/16	1-1/8	24.38	21.84	58.67	37.33	78.99	47.49	25.79	16.76
SYCBU-14	7/8	22.22	18.28	1-3/8	1-1/4	25.90	21.84	64.26	42.92	84.58	53.08	28.97	19.05
SYCBU-16	1	25.40	22.35	1-5/8	1-1/2	31.24	26.41	71.37	45.21	95.75	57.40	33.73	19.05
SYCBU-20	1-1/4	31.75	27.68	1-7/8	1-7/8	41.14	38.86	78.99	47.75	123.19	69.85	41.67	19.05
SYCBU-24	1-1/2	38.10	34.03	2-1/4	2-1/4	50.03	45.21	84.83	49.27	139.19	76.45	49.61	19.05
SYCBU-32	2	50.80	45.97	2-3/4	3	67.56	62.73	105.66	56.38	180.34	93.72	67.07	19.05

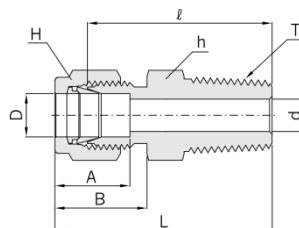
Connects Metric Tubes

Part No.	Tube OD D	d Min.	Width across flat			A	B	ℓ	A ₁	L	L ₁	Panel Hole Drill Size	Panel Max. Thickness
			h	h ₁ *(in.)	H								
SYCBU-3M	3	2.4	14	1/2	12	12.9	15.3	38.1	24.6	51.3	31.2	8.3	12.7
SYCBU-4M	4	2.4	14	3/16	12	13.7	16.1	40.4	25.4	53.6	32.0	9.9	12.7
SYCBU-6M	6	4.8	15	5/8	14	15.3	17.7	42.9	26.2	57.7	33.6	11.5	10.2
SYCBU-8M	8	6.3	17	11/16	16	16.2	18.6	46.0	28.6	61.0	36.1	13.1	11.2
SYCBU-10M	10	8.0	22	22mm	19	17.2	19.5	48.5	29.4	63.7	37.0	16.2	11.2
SYCBU-12M	12	9.5	24	15/16	22	22.8	22.0	50.8	31.8	71.0	41.9	19.5	12.7
SYCBU-15M	15	12.0	27	1-1/16	25	24.4	22.0	52.3	32.5	72.5	42.6	22.8	12.7
SYCBU-16M	16	12.7	27	1-1/16	25	24.4	22.0	52.3	32.5	72.5	42.6	22.8	12.7
SYCBU-18M	18	15.0	30	30mm	30	24.4	22.0	58.7	37.3	78.9	47.4	26.0	16.8
SYCBU-20M	20	16.0	35	1-3/8	32	26.0	22.0	64.3	42.9	84.5	53.0	29.0	17.0
SYCBU-22M	22	18.3	35	1-3/8	32	26.0	22.0	64.3	42.9	84.5	53.0	29.0	19.1
SYCBU-25M	25	21.8	41	1-5/8	38	31.3	26.5	71.4	45.2	95.9	57.5	33.7	19.1
SYCBU-32M	32	28.6	50	50mm	50	42.0	41.6	82.3	49.5	128.3	72.5	42.5	19.0
SYCBU-38M	38	33.7	60	60mm	60	49.4	47.9	89.4	51.5	144.6	79.1	50.5	19.0

*h₁ : Applicable to metric Tube bulkhead hexagon only.

All dimensions are in millimeters unless otherwise specified. Dimensions are for reference only, subject to change.

Male Connector
SYCMC - N



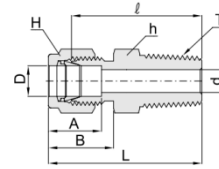
Connects Fractional Tube To Female NPT Thread

Part No.	Tube OD D		T* NPT Size	d* Min.	Width across flat (in.)		A	B	C	L
	in.	mm			h	H				
SYCMC 1-1N	1/16	1.58	1/16	1.27	5/16	5/16	8.63	10.92	20.00	23.83
SYCMC 1-2N	1/16	1.58	1/8	1.27	7/16	7/16	8.63	10.92	22.35	26.23
SYCMC 1-4N	1/16	1.58	1/4	1.27	9/16	5/16	8.63	10.92	27.17	30.98
SYCMC 2-1N	1/8	3.17	1/16	2.28	7/16	7/16	12.70	15.24	23.11	29.71
SYCMC 2-2N	1/8	3.17	1/8	2.28	7/16	7/16	12.70	15.24	23.87	30.48
SYCMC 2-4N	1/8	3.17	1/4	2.28	9/16	7/16	12.70	15.24	28.95	35.56
SYCMC 2-6N	1/8	3.17	3/8	2.28	11/16	7/16	12.70	15.24	29.21	35.81
SYCMC 2-8N	1/8	3.17	1/2	2.28	7/8	7/16	12.70	15.24	35.56	42.16
SYCMC 3-2N	3/16	4.76	1/8	3.04	7/16	1/2	13.71	16.00	24.63	31.24
SYCMC 3-4N	3/16	4.76	1/4	3.04	9/16	1/2	13.71	16.00	29.71	36.32
SYCMC 4-1N	1/4	6.35	1/16	4.82	1/2	9/16	15.24	17.78	25.40	32.76
SYCMC 4-2N	1/4	6.35	1/8	4.82	1/2	9/16	15.24	17.78	25.40	32.76
SYCMC 4-4N	1/4	6.35	1/4	4.82	9/16	9/16	15.24	17.78	30.48	37.84
SYCMC 4-6N	1/4	6.35	3/8	4.82	11/16	9/16	15.24	17.78	30.98	38.35
SYCMC 4-8N	1/4	6.35	1/2	4.82	7/8	9/16	15.24	17.78	37.33	44.70
SYCMC 4-12N	1/4	6.35	3/4	4.82	1-1/16	9/16	15.24	17.78	38.86	46.22
SYCMC 5-2N	5/16	7.93	1/8	4.82	9/16	5/8	16.25	18.54	26.67	34.03
SYCMC 5-4N	5/16	7.93	1/4	6.35	9/16	5/8	16.25	18.54	31.24	38.60
SYCMC 5-6N	5/16	7.93	3/8	6.35	11/16	5/8	16.25	18.54	31.75	39.11
SYCMC 6-2N	3/8	9.52	1/8	4.82	5/8	11/16	16.76	19.30	27.94	35.30
SYCMC 6-4N	3/8	9.52	1/4	7.00	5/8	11/16	16.76	19.30	32.51	39.87
SYCMC 6-6N	3/8	9.52	3/8	7.11	11/16	11/16	16.76	19.30	32.51	39.87
SYCMC 6-8N	3/8	9.52	1/2	7.11	7/8	11/16	16.76	19.30	38.86	46.22
SYCMC 6-12N	3/8	9.52	3/4	7.11	1-1/16	11/16	16.76	19.30	40.38	47.75
SYCMC 8-2N	1/2	12.70	1/8	4.82	13/16	7/8	22.86	21.84	28.70	38.86
SYCMC 8-4N	1/2	12.70	1/4	7.00	13/16	7/8	22.86	21.84	33.27	43.43
SYCMC 8-6N	1/2	12.70	3/8	9.50	13/16	7/8	22.86	21.84	33.27	43.43
SYCMC 8-8N	1/2	12.70	1/2	10.41	7/8	7/8	22.86	21.84	38.86	49.02
SYCMC 8-12N	1/2	12.70	3/4	10.41	1-1/16	7/8	22.86	21.84	40.38	50.54
SYCMC 8-16N	1/2	12.70	1	10.41	1-3/8	7/8	22.86	21.84	46.99	57.15
SYCMC 10-6N	5/8	15.87	3/8	9.50	15/16	1	24.38	21.84	34.03	44.19
SYCMC 10-8N	5/8	15.87	1/2	12.00	15/16	1	24.38	21.84	38.86	49.02
SYCMC 10-12N	5/8	15.87	3/4	12.70	1-1/16	1	24.38	21.84	40.38	50.54
SYCMC 12-8N	3/4	19.05	1/2	12.00	1-1/16	1-1/8	24.38	21.84	40.38	50.54
SYCMC 12-12N	3/4	19.05	3/4	15.74	1-1/16	1-1/8	24.38	21.84	40.38	50.54
SYCMC 12-16N	3/4	19.05	1	15.74	1-3/8	1-1/8	24.38	21.84	46.99	57.15
SYCMC 14-12N	7/8	22.22	3/4	15.74	1-3/16	1-1/4	25.90	21.84	40.38	50.54
SYCMC 14-16N	7/8	22.22	1	18.28	1-3/8	1-1/4	25.90	21.84	46.99	57.15
SYCMC 16-8N	1	25.40	1/2	12.00	1-3/8	1-1/2	31.24	26.41	45.21	57.40
SYCMC 16-12N	1	25.40	3/4	15.74	1-3/8	1-1/2	31.24	26.41	45.21	57.40
SYCMC 16-16N	1	25.40	1	22.35	1-3/8	1-1/2	31.24	26.41	50.03	62.23
SYCMC 20-16N	1-1/4	31.75	1	22.35	1-3/4	1-7/8	41.14	38.86	55.11	77.21
SYCMC 20-20N	1-1/4	31.75	1-1/4	27.68	1-3/4	1-7/8	41.14	38.86	55.11	77.21
SYCMC 24-24N	1-1/2	38.10	1-1/2	34.03	2-1/8	2-1/4	50.03	45.21	61.72	88.90
SYCMC 32-32N	2	50.80	2	45.97	2-3/4	3	67.56	62.73	76.20	113.53

*ISO Tapered Threads are available upon request.

+The d dimension is the minimum nominal opening. These fittings may have a larger opening at the pipe/straight thread end.

Male Connector
SYCMC -R



Connects Metric Tube To Female ISO Tapered Thread

Part No.	Tube OD D	T* ISO Thread Size	d+ Min	Width across flat		A	B	∠	L
				h	H				
SYCMC 2M-2R	2	1/8	1.7	7/16 in.	12	12.9	15.3	23.9	30.5
SYCMC 3M-2R	3	1/8	2.4	7/16 in.	12	12.9	15.3	23.9	30.5
SYCMC 3M-4R	3	1/4	2.4	14	12	12.9	15.3	29.0	35.6
SYCMC 4M-2R	4	1/8	2.4	7/16 in.	12	13.7	16.1	24.6	31.2
SYCMC 4M-4R	4	1/4	2.4	14	12	13.7	16.1	29.7	36.3
SYCMC 6M-2R	6	1/8	4.8	1/2 in.	14	15.3	17.7	25.4	32.8
SYCMC 6M-4R	6	1/4	4.8	14	14	15.3	17.7	30.5	37.9
SYCMC 6M-6R	6	3/8	4.8	17	14	15.3	17.7	31.0	38.4
SYCMC 6M-8R	6	1/2	4.8	22	14	15.3	17.7	37.3	44.7
SYCMC 8M-2R	8	1/8	4.8	14	16	16.2	18.6	26.7	34.2
SYCMC 8M-4R	8	1/4	6.3	14	16	16.2	18.6	31.2	38.7
SYCMC 8M-6R	8	3/8	6.3	17	16	16.2	18.6	31.8	39.2
SYCMC 8M-8R	8	1/2	6.3	22	16	16.2	18.6	38.1	45.6
SYCMC 10M-2R	10	1/8	4.8	17	19	17.2	19.5	28.7	36.3
SYCMC 10M-4R	10	1/4	7.0	17	19	17.2	19.5	33.3	40.9
SYCMC 10M-6R	10	3/8	8.0	17	19	17.2	19.5	33.3	40.9
SYCMC 10M-8R	10	1/2	8.0	22	19	17.2	19.5	38.9	46.5
SYCMC 12M-4R	12	1/4	7.0	13/16 in.	22	22.8	22.0	33.3	43.4
SYCMC 12M-6R	12	3/8	9.5	13/16 in.	22	22.8	22.0	33.3	43.4
SYCMC 12M-8R	12	1/2	9.5	22	22	22.8	22.0	38.9	49.0
SYCMC 12M-12R	12	3/4	9.5	27	22	22.8	22.0	40.4	50.5
SYCMC 15M-8R	15	1/2	12.0	24	25	24.4	22.0	38.9	49.0
SYCMC 16M- 4R	16	1/4	7.0	24	25	24.4	22.0	34.0	44.1
SYCMC 16M-6R	16	3/8	9.5	24	25	24.4	22.0	34.0	44.1
SYCMC 16M-8R	16	1/2	12.0	24	25	24.4	22.0	38.9	49.0
SYCMC 16M-12R	16	3/4	12.7	27	25	24.4	22.0	40.4	49.0
SYCMC 18M-8R	18	1/2	12.0	27	30	24.4	22.0	40.4	50.5
SYCMC 18M-12R	18	3/4	15.0	27	30	24.4	22.0	40.4	50.5
SYCMC 20M-8R	20	1/2	12.0	30	32	26.0	22.0	42.2	52.3
SYCMC 20M-12R	20	3/4	15.7	30	32	26.0	22.0	42.2	52.3
SYCMC 22M-12R	22	3/4	15.7	30	32	26.0	22.0	42.2	52.3
SYCMC 22M-16R	22	1	18.3	35	32	26.0	22.0	47.0	57.0
SYCMC 25M-12R	25	3/4	15.7	35	38	31.3	26.5	45.2	57.5
SYCMC25M-16R	25	1	21.8	35	38	31.3	26.5	50.0	62.3
SYCMC 28M-16R	28	1	21.8	41	46	36.6	36.6	51.6	72.4
SYCMC 28M-20R	28	1-1/4	21.8	46	46	36.6	36.6	52.3	73.1
SYCMC 32M-20R	32	1-1/4	28.0	46	50	42.0	41.6	56.6	79.6
SYCMC 32M-24R	38	1-1/2	28.6	50	50	49.4	47.9	58.1	91.6

*NPT Threads are available upon request.

+The d dimension is the minimum nominal opening. These fittings may have a larger opening at the pipe/straight thread end.

Thermocouple Male Connector

SYCMCT



Bore-through male connectors handle thermocouples or dip tubes with ease.

For correct part number, just add "T" as a suffix to SYCMC, the male connector designer

Example: SYCMCT 12M-8R-S316 12mm tube O. D. x1/2" ISO tapered stainless Steel316

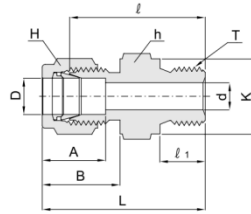
SYCMCT 8-8N-S316 1/2" tube O. D. x1/2" NPT stainless steel 316

Note: There are some limitations in size available as it is impractical to bore through all male connectors.

For availability, contact your local distributor.

All dimensions are in millimeters unless otherwise specified. Dimensions are for reference only, subject to change.

Male Connector
SYCMC -G



Connects Metric Tube To Female ISO Parallel Thread

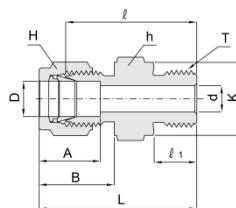
Part No.	Tube OD D	T ISO Thread Size	d ⁺ Min.	Width across flat		A	B	∠	A	L	K
				h	H						
SYCMC 2M-2G	2	1/8	1.7	14	12	12.9	15.3	24.3	8.0	30.9	13.8
SYCMC 3M- 2G	3	1/8	2.4	14	12	12.9	15.3	24.3	8.0	30.9	13.8
SYCMC 3M- 4G	3	1/4	2.4	19	12	12.9	15.3	29.5	12.0	36.1	18.0
SYCMC 4M-2G	4	1/8	2.4	14	12	13.7	16.1	25.0	8.0	31.6	13.8
SYCMC 6M-2G	6	1/8	4.0	14	14	15.3	17.7	25.8	8.0	33.2	13.8
SYCMC 6M-4G	6	1/4	4.8	19	14	15.3	17.7	31.0	12.0	38.4	18.0
SYCMC 6M-6G	6	3/8	4.8	22	14	15.3	17.7	32.3	12.0	39.7	21.8
SYCMC 6M-8G	6	1/2	4.8	27	14	15.3	17.7	35.8	14.0	43.2	26.0
SYCMC 8M-2G	8	1/8	4.0	14	16	16.2	18.6	26.6	8.0	34.1	13.8
SYCMC 8M- 4G	8	1/4	5.0	19	16	16.2	18.6	31.8	12.0	39.3	13.8
SYCMC 8M- 6G	8	3/8	6.3	22	16	16.2	18.6	33.1	12.0	40.6	21.8
SYCMC 8M- 8G	8	1/2	6.3	27	16	16.2	18.6	36.7	14.0	44.3	26.0
SYCMC 10M-4G	10	1/4	5.0	19	19	17.2	19.5	32.6	12.0	40.2	18.0
SYCMC 10M-6G	10	3/8	8.0	22	19	17.2	19.5	33.8	12.0	41.4	21.8
SYCMC 10M-8G	10	1/2	8.0	27	19	17.2	19.5	37.4	14.0	45.0	26.0
SYCMC 12M-4G	12	1/4	5.0	13/16 in.	22	22.8	22.0	33.3	12.0	43.4	18.0
SYCMC 12M-6G	12	3/8	8.0	22	22	22.8	22.0	33.8	12.0	43.9	21.8
SYCMC 12M-8G	12	1/2	9.5	27	22	22.8	22.0	37.4	14.0	47.5	26.0
SYCMC 12M-12G	12	3/4	9.5	35	22	22.8	22.0	43.0	16.0	53.1	32.0
SYCMC 16M- 6G	16	3/8	8.0	24	25	24.4	22.0	34.6	12.0	44.7	21.8
SYCMC 16M- 8G	16	1/2	12.0	27	25	24.4	22.0	37.4	14.0	47.5	26.0
SYCMC 18M-8G	18	1/2	12.0	27	30	24.4	22.0	38.7	14.0	48.8	26.0
SYCMC 18M-12G	18	3/4	15.0	35	30	24.4	22.0	43.0	16.0	53.1	32.0
SYCMC 20M-8G	20	1/2	12.0	30	32	26.0	22.0	40.4	14.0	50.5	26.0
SYCMC 20M-12G	20	3/4	15.7	35	32	26.0	22.0	43.0	16.0	53.1	32.0
SYCMC 22M-12G	22	3/4	15.7	35	32	26.0	22.0	43.0	16.0	53.1	32.0
SYCMC 22M-16G	22	1	18.3	41	32	26.0	22.0	44.9	18.0	55.0	39.0
SYCMC 25M-12G	25	3/4	16.0	35	38	31.3	26.5	45.5	16.0	57.8	32.0
SYCMC 25M-16G	25	1	20.0	41	38	31.3	26.5	47.5	18.0	59.8	39.0
SYCMC 28M-16G	28	1	20.0	41	46	36.6	36.6	49.0	18.0	69.8	39.0
SYCMC 28M-20G	28	1-1/4	21.8	50	46	36.6	36.6	53.3	20.0	74.1	49.0
SYCMC 32M-20G	32	1-1/4	25.0	50	50	42.0	41.6	56.1	20.0	79.1	49.0
SYCMC 38M-24G	38	1-1/2	32.0	55	60	49.4	47.9	63.1	22.0	90.7	54.7

For leak tight installation, see ISO Parallel and Tapered Pipe Thread on page 7.

+The d dimension is the minimum nominal opening. These fittings may have a larger opening at the pipe/straight thread end.

Male Connector

SYCOM



Connects Metric Tube To Female ISO Parallel Thread

Part No.	Tube OD D	T ISO Thread Size	d* Min.	Width across flat		A	B	∠	A	L	K
				h	H						
SYCOM 3M-2G	3	1/8	2.4	14	12	12.9	15.3	24.3	8.0	30.9	13.8
SYCOM 3M- 4G	3	1/4	2.4	19	12	12.9	15.3	29.5	12.0	36.1	18.0
SYCOM 4M-2G	4	1/8	2.4	14	12	13.7	16.1	25.0	8.0	31.6	13.8
SYCOM 6M- 2G	6	1/8	4.0	14	14	15.3	17.7	25.8	8.0	33.2	13.8
SYCOM 6M- 4G	6	1/4	4.8	19	14	15.3	17.7	31.0	12.0	38.4	18.0
SYCOM 6M- 6G	6	3/8	4.8	22	14	15.3	17.7	32.3	12.0	39.7	21.8
SYCOM 6M- 8G	6	1/2	4.8	27	14	15.3	17.7	35.8	14.0	43.2	26.0
SYCOM 8M- 2G	8	1/8	4.0	14	16	16.2	18.6	26.6	8.0	34.1	13.8
SYCOM 8M- 4G	8	1/4	5.0	19	16	16.2	18.6	31.8	12.0	39.3	18.0
SYCOM 8M-6G	8	3/8	6.3	22	16	16.2	18.6	33.1	12.0	40.6	21.8
SYCOM 8M-8G	8	1/2	6.3	27	16	16.2	18.6	36.7	14.0	44.3	26.0
SYCOM 10M- 4G	10	1/4	5.0	19	19	17.2	19.5	32.6	12.0	40.2	18.0
SYCOM 10M- 6G	10	3/8	8.0	22	19	17.2	19.5	33.8	12.0	41.4	21.8
SYCOM 10M- 8G	10	1/2	8.0	27	19	17.2	19.5	37.4	14.0	45.0	26.0
SYCOM 12M- 4G	12	1/4	5.0	13/16 in.	22	22.8	22.0	33.3	12.0	43.4	18.0
SYCOM 12M-6G	12	3/8	8.0	22	22	22.8	22.0	33.8	12.0	43.9	21.8
SYCOM 12M-8G	12	1/2	9.5	27	22	22.8	22.0	37.4	14.0	47.5	26.0
SYCOM 12M-12G	12	3/4	9.5	35	22	22.8	22.0	43.0	16.0	53.1	32.0
SYCOM 15M- 8G	15	1/2	11.9	27	25	24.4	22.0	37.4	16.0	47.5	26.0
SYCOM 16M- 6G	16	3/8	8.0	24	25	24.4	22.0	34.6	12.0	44.7	21.8
SYCOM 16M- 8G	16	1/2	12.0	27	25	24.4	22.0	37.4	14.0	47.5	26.0
SYCOM 18M-8G	18	1/2	12.0	27	30	24.4	22.0	38.7	14.0	48.8	26.0
SYCOM 18M-12G	18	3/4	15.0	35	30	24.4	22.0	43.0	16.0	53.1	32.0
SYCOM 20M-8G	20	1/2	12.0	30	32	26.0	22.0	40.4	14.0	50.5	26.0
SYCOM 20M-12G	20	3/4	15.9	35	32	26.0	22.0	43.0	16.0	53.1	32.0
SYCOM 22M-12G	22	3/4	15.7	35	32	26.0	22.0	43.0	16.0	53.1	32.0
SYCOM 22M-16G	22	1	18.3	41	32	26.0	22.0	44.9	18.0	55.0	39.0
SYCOM 25M-12G	25	3/4	16.0	35	38	31.3	26.5	45.5	16.0	57.8	32.0
SYCOM 25M-16G	25	1	20.0	41	38	31.3	26.5	47.5	18.0	59.8	39.0
SYCOM 28M-16G	28	1	20.0	41	46	36.6	36.6	49.0	18.0	69.8	39.0
SYCOM 28M-20G	28	1-1/4	21.8	50	46	36.6	36.6	53.3	20.0	74.1	49.0
SYCOM 32M-20G	32	1-1/4	25.0	50	50	42.0	41.6	56.1	20.0	79.1	49.0
SYCOM 38M-24G	38	1-1/2	32.0	55	60	49.4	47.9	63.1	22.0	90.7	54.7

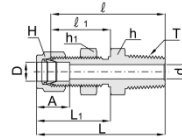
For leak tight installation, see ISO Parallel and Tapered Pipe Thread on page 7.

+The d dimension is the minimum nominal opening. These fittings may have a larger opening at the pipe/straight thread end.

All dimensions are in millimeters unless otherwise specified. Dimensions are for reference only, subject to change.

Bulkhead Male Connector

SYCBMC



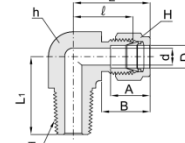
Connects Fractional Tube to Female NPT Thread

Part No.	Tube OD D		T* NPT Size	d* Min.	Width across flat(in.)			A	∠	∠	L	L ₁	Panel Hole Drill Size	Panel Max. Thickness
	in.	mm			h	h ₁	H							
SYCBMC 2-2N	1/8	3.17	1/8	2.28	1/2	1/2	7/16	12.70	39.87	24.63	46.48	31.24	8.33	12.20
SYCBMC 4-2N	1/4	6.35	1/8	4.82	5/8	5/8	9/16	15.24	42.16	26.16	49.53	33.52	11.50	10.16
SYCBMC 4-4N	1/4	6.35	1/4	4.82	5/8	5/8	9/16	15.24	45.97	26.16	53.34	33.52	11.50	10.16
SYCBMC 6-4N	3/8	9.52	1/4	7.11	3/4	3/4	11/16	16.76	50.03	29.46	57.40	36.83	14.68	11.17
SYCBMC 6-6N	3/8	9.52	3/8	7.11	3/4	3/4	11/16	16.76	50.03	29.46	57.40	36.83	14.68	11.17
SYCBMC 6-8N	3/8	9.52	1/2	7.11	7/8	3/4	11/16	16.76	56.38	29.46	63.75	36.83	14.68	11.17
SYCBMC 8-6N	1/2	12.70	3/8	9.39	15/16	15/16	7/8	22.86	53.08	31.75	63.24	41.91	19.44	12.70
SYCBMC 8-8N	1/2	12.70	1/2	10.41	15/16	15/16	7/8	22.86	58.67	31.75	68.83	41.91	19.44	12.70
SYCBMC12-12N	3/4	19.05	3/4	15.74	1-3/16	1-3/16	1-1/8	24.38	66.04	37.33	76.20	47.49	25.76	16.76
SYCBMC16-16N	1	25.40	1	22.35	1-5/8	1-5/8	1-1/2	31.24	81.02	45.21	93.21	57.40	33.73	19.05

+The d dimension is the minimum nominal opening. These fittings may have a larger opening at the pipe/straight thread end.

Male Elbow

SYCLMA



Connects Fractional Tube to Female NPT Thread

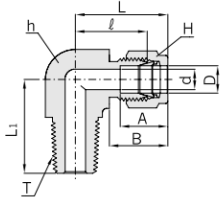
Part No.	Tube OD D		T* NPT Size	d* Min.	Width across flat(in.)		A	B	∠	L	L ₁
	in.	mm			h	H					
SYCLMA 1-1N	1/16	1.58	1/16	1.27	7/16	5/16	8.63	10.92	15.24	19.05	17.78
SYCLMA 1-2N	1/16	1.58	1/8	1.27	7/16	5/16	8.63	10.92	15.24	19.05	17.78
SYCLMA 2-2N	1/8	3.17	1/8	2.28	7/16	7/16	12.70	15.24	17.02	23.62	17.78
SYCLMA 2-4N	1/8	3.17	1/4	2.28	1/2	7/16	12.70	15.24	18.03	24.64	22.80
SYCLMA 3-2N	3/16	4.76	1/8	3.04	1/2	1/2	13.71	16.00	18.79	25.40	18.79
SYCLMA 3-4N	3/16	4.76	1/4	3.04	1/2	1/2	13.71	16.00	18.79	25.40	23.36
SYCLMA 4-1N	1/4	6.35	1/16	3.04	1/2	9/16	15.24	17.78	19.60	26.47	19.10
SYCLMA 4-2N	1/4	6.35	1/8	4.82	1/2	9/16	15.24	17.78	19.60	26.47	19.10
SYCLMA 4-4N	1/4	6.35	1/4	4.82	1/2	9/16	15.24	17.78	19.60	27.18	23.87
SYCLMA 4-6N	1/4	6.35	3/8	4.82	11/16	9/16	15.24	17.78	22.35	29.71	28.40
SYCLMA 4-8N	1/4	6.35	1/2	4.82	13/16	9/16	15.24	17.78	24.60	31.97	33.00
SYCLMA 5-2N	5/16	7.93	1/8	4.82	9/16	5/8	16.25	18.54	21.33	28.70	19.81
SYCLMA 5-4N	5/16	7.93	1/4	6.35	9/16	5/8	16.25	18.54	21.33	28.70	24.40
SYCLMA 5-6N	5/16	7.93	3/8	6.35	11/16	5/8	16.25	18.54	23.11	30.48	28.40
SYCLMA 6-2N	3/8	9.52	1/8	4.82	5/8	11/16	16.76	19.30	23.11	30.48	20.60
SYCLMA 6-4N	3/8	9.52	1/4	7.00	5/8	11/16	16.76	19.30	23.11	30.48	25.40
SYCLMA 6-6N	3/8	9.52	3/8	7.11	11/16	11/16	16.76	19.30	25.91	33.27	26.20
SYCLMA 6-8N	3/8	9.52	1/2	7.11	13/16	11/16	16.76	19.30	25.91	33.27	33.02
SYCLMA 6-12N	3/8	9.52	3/4	7.11	1-1/16	11/16	16.76	19.30	29.71	37.08	36.83
SYCLMA 8-4N	1/2	12.70	1/4	7.00	13/16	7/8	22.86	21.84	25.90	36.06	28.30
SYCLMA 8-6N	1/2	12.70	3/8	9.50	13/16	7/8	22.86	21.84	25.90	36.06	28.30
SYCLMA 8-8N	1/2	12.70	1/2	10.41	13/16	7/8	22.86	21.84	25.90	36.06	33.02
SYCLMA 8-12N	1/2	12.70	3/4	10.41	1-1/16	7/8	22.86	21.84	29.71	39.87	36.83
SYCLMA10-6N	5/8	15.87	3/8	9.65	15/16	1	24.38	21.84	27.90	37.06	30.20
SYCLMA10-8N	5/8	15.87	1/2	12.00	15/16	1	24.38	21.84	27.90	37.06	35.00
SYCLMA10-12N	5/8	15.87	3/4	12.70	1-1/16	1	24.38	21.84	29.71	39.87	36.83
SYCLMA12-8N	3/4	19.05	1/2	12.00	1-1/16	1-1/8	24.38	21.84	29.71	39.87	36.83
SYCLMA12-12N	3/4	19.05	3/4	15.74	1-1/16	1-1/8	24.38	21.84	29.71	39.87	36.83
SYCLMA14-12N	7/8	22.22	3/4	15.74	1-3/16	1-1/4	25.90	21.84	34.54	44.70	41.65
SYCLMA16-12N	1	25.40	3/4	15.74	1-3/8	1-1/2	31.24	26.41	36.83	49.02	42.20
SYCLMA16-16N	1	25.40	1	22.35	1-3/8	1-1/2	31.24	26.41	36.83	49.02	46.50
SYCLMA20-20N	1-1/4	31.75	1-1/4	27.68	1-11/16	1-7/8	41.14	38.86	44.45	66.54	47.75
SYCLMA24-24N	1-1/2	38.10	1-1/2	34.03	2	2-1/4	50.03	45.21	50.80	77.97	60.45
SYCLMA32-32N	2	50.80	2	45.97	2-3/4	3	67.56	62.73	69.80	107.18	70.61

*ISO Tapered Threads are available upon request.

+The d dimension is the minimum nominal opening. These fittings may have a larger opening at the pipe/straight thread end.

Male Elbow

SYCLMA



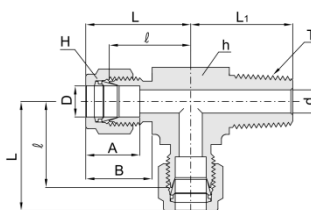
Connects Metric Tube to Female ISO Tapered Thread

Part No.	Tube OD D	T* ISO Thread Size	d* Min.	Width across flat		A	B	C	L	L ₁
				h(in.)	H					
SYCLMA 3M-2R	3	1/8	2.4	1/2	12	12.9	15.3	17.0	23.6	17.8
SYCLMA 3M-4R	3	1/4	2.4	1/2	12	12.9	15.3	18.0	24.6	23.4
SYCLMA 4M-2R	4	1/8	2.4	1/2	12	13.7	16.1	18.8	25.4	18.8
SYCLMA 4M-4R	4	1/4	2.4	1/2	12	13.7	16.1	18.8	25.4	23.4
SYCLMA 6M-2R	6	1/8	4.8	1/2	14	15.3	17.7	19.6	27.0	18.8
SYCLMA 6M-4R	6	1/4	4.8	1/2	14	15.3	17.7	19.6	27.0	23.4
SYCLMA 6M-6R	6	3/8	4.8	11/16	14	15.3	17.7	22.4	29.8	26.2
SYCLMA 6M-8R	6	1/2	4.8	13/16	14	15.3	17.7	24.4	31.8	33.0
SYCLMA 8M-2R	8	1/8	4.8	9/16	16	16.2	18.6	21.3	28.8	19.8
SYCLMA 8M-4R	8	1/4	4.8	9/16	16	16.2	18.6	21.3	28.8	24.4
SYCLMA 8M-6R	8	3/8	6.3	11/16	16	16.2	18.6	23.1	30.6	26.2
SYCLMA 8M-8R	8	1/2	6.3	13/16	16	16.2	18.6	25.1	32.6	33.0
SYCLMA10M-2R	10	1/8	4.8	11/16	19	17.2	19.5	23.9	31.5	23.6
SYCLMA10M-4R	10	1/4	7.0	11/16	19	17.2	19.5	23.9	31.5	26.2
SYCLMA10M-6R	10	3/8	8.0	11/16	19	17.2	19.5	23.9	31.5	26.2
SYCLMA10M-8R	10	1/2	8.0	13/16	19	17.2	19.5	25.9	33.5	33.0
SYCLMA12M-2R	12	1/8	4.8	13/16	22	22.8	22.0	25.9	36.0	23.6
SYCLMA12M-4R	12	1/4	7.0	13/16	22	22.8	22.0	25.9	36.0	28.2
SYCLMA12M-6R	12	3/8	9.5	13/16	22	22.8	22.0	25.9	36.0	28.2
SYCLMA12M-8R	12	1/2	9.5	13/16	22	22.8	22.0	25.9	36.0	33.0
SYCLMA12M-12R	12	3/4	9.5	1-1/16	22	22.8	22.0	29.7	39.8	36.8
SYCLMA16M-6R	16	3/8	9.5	15/16	25	24.4	22.0	27.9	38.0	30.2
SYCLMA16M-8R	16	1/2	12.0	15/16	25	24.4	22.0	27.9	38.0	35.1
SYCLMA16M-12R	16	3/4	12.7	1-1/16	25	24.4	22.0	29.7	39.8	36.8
SYCLMA18M-8R	18	1/2	12.0	1-1/16	30	24.4	22.0	29.7	39.8	36.8
SYCLMA18M-12R	18	3/4	15.0	1-1/16	30	24.4	22.0	29.7	39.8	36.8
SYCLMA20M-8R	20	1/2	12.0	30mm	32	26.0	22.0	34.5	44.6	41.7
SYCLMA20M-12R	20	3/4	15.7	30mm	32	26.0	22.0	34.5	44.6	41.7
SYCLMA22M-12R	22	3/4	15.7	30mm	32	26.0	22.0	34.5	44.6	41.7
SYCLMA22M-16R	22	1	18.3	1-3/8	32	26.0	22.0	34.5	44.6	46.5
SYCLMA25M-12R	25	3/4	15.7	1-3/8	38	31.3	26.5	36.8	49.1	41.7
SYCLMA25M-16R	25	1	21.8	1-3/8	38	31.3	26.5	36.8	49.1	46.5

*NPT Threads are available upon request.

+The d dimension is the minimum nominal opening. These fittings may have a larger opening at the pipe/straight thread end.

Male Run Tee
SYCRTM



Connects Fractional Tube to Female NPT Thread

Part No.	Tube OD D		T* NPT Size	d* Min.	Width across flat(in.)		A	B	∠	L	L ₁
	in.	mm			h	H					
SYCRTM 2-2N	1/8	3.17	1/8	2.28	1/2	7/16	12.70	15.24	17.00	24.91	17.80
SYCRTM 2-4N	1/8	3.17	1/4	2.28	1/2	7/16	12.70	15.24	18.03	24.91	23.36
SYCRTM 3-2N	3/16	4.76	1/8	3.04	1/2	1/2	13.71	16.00	17.78	24.38	17.78
SYCRTM 4-2N	1/4	6.35	1/8	4.82	1/2	9/16	15.24	17.78	19.55	26.92	18.79
SYCRTM 4-4N	1/4	6.35	1/4	4.82	1/2	9/16	15.24	17.78	19.55	26.92	23.87
SYCRTM 5-2N	5/16	7.93	1/8	4.82	9/16	5/8	16.25	18.54	22.35	29.71	20.82
SYCRTM 6-4N	3/8	9.52	1/4	7.00	5/8	11/16	16.75	19.30	23.11	30.48	25.40
SYCRTM 6-6N	3/8	9.52	3/8	7.11	11/16	11/16	16.76	19.30	23.87	31.24	26.20
SYCRTM 8-6N	1/2	12.70	3/8	9.50	13/16	7/8	22.86	21.84	25.90	36.06	28.19
SYCRTM 8-8N	1/2	12.70	1/2	10.41	13/16	7/8	22.86	21.84	25.90	36.06	33.02
SYCRTM10-8N	5/8	15.87	1/2	12.00	15/16	1	24.38	21.84	27.94	38.10	35.05
SYCRTM12-12N	3/4	19.05	3/4	15.74	1-1/16	1-1/8	24.38	21.84	29.71	39.87	36.83

*ISO Tapered Threads are available upon request

+The d dimension is the minimum nominal opening. These fittings may have a larger opening at the pipe/straight thread end.

Connects Metric Tube to Female ISO Tapered Thread

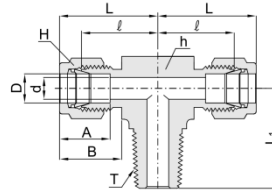
Part No.	Tube OD D	T* ISO Thread Size	d* Min.	Width across flat		A	B	∠	L	L ₁
				h	H					
SYCRTM 3M-2R	3	1/8	2.4	1/2	12	12.9	15.3	17.0	23.6	17.8
SYCRTM 3M-4R	3	1/4	2.4	1/2	12	12.9	15.3	18.0	24.6	23.4
SYCRTM 4M-2R	4	1/8	2.4	1/2	12	13.7	16.1	18.8	25.4	18.8
SYCRTM 6M-2R	6	1/8	4.8	1/2	14	15.3	17.7	19.6	27.0	18.8
SYCRTM 6M-4R	6	1/4	4.8	1/2	14	15.3	17.7	19.6	27.0	23.4
SYCRTM 8M-2R	8	1/8	4.8	9/16	16	16.2	18.6	21.3	28.8	19.8
SYCRTM 8M-4R	8	1/4	6.3	9/19	16	16.2	18.6	21.3	28.8	24.4
SYCRTM 10M- 4R	10	1/4	7.0	11/16	19	17.2	19.5	23.9	31.5	28.2
SYCRTM 10M-6R	10	3/8	7.9	11/16	19	17.2	19.5	23.9	31.5	28.2
SYCRTM 12M-4R	12	1/4	7.0	13/16	22	22.8	22.0	25.9	36.0	28.2
SYCRTM 12M-6R	12	3/8	9.5	13/16	22	22.8	22.0	25.9	36.0	28.2
SYCRTM 12M-8R	12	1/2	9.5	13/16	22	22.8	22.0	25.9	36.0	33.0
SYCRTM 16M-6R	16	3/8	9.5	15/16	25	24.4	22.0	27.9	38.0	30.2
SYCRTM 16M-8R	16	1/2	12.0	15/16	25	24.4	22.0	27.9	38.0	35.1
SYCRTM 20M-12R	20	3/4	15.7	30mm	32	26.0	22.0	34.5	44.6	41.7

*NPT Threads are available upon request

+The d dimension is the minimum nominal opening. These fittings may have a larger opening at the pipe/straight thread end.

Male Branch Tee

SYCBTM



Connects Fractional Tube to Female NPT Thread

Part No.	Tube OD D		T* NPT Size	d* Min.	Width across flat(in.)		A	B	∠	L	L ₁
	in.	mm			h	H					
SYCBTM 2-2N	1/8	3.17	1/8	2.28	1/2	7/16	12.70	15.24	17.00	24.91	17.80
SYCBTM 2-4N	1/8	3.17	1/4	2.28	1/2	7/16	12.70	15.24	18.03	24.91	23.26
SYCBTM 3-2N	3/16	4.76	1/8	3.04	1/2	1/2	13.71	16.00	17.78	24.38	17.78
SYCBTM 4- 2N	1/4	6.35	1/8	4.82	1/2	9/16	15.24	17.78	19.55	26.92	18.79
SYCBTM 4- 4N	1/4	6.35	1/4	4.82	1/2	9/16	15.24	17.78	19.55	26.92	23.87
SYCBTM 5- 2N	5/16	7.93	1/8	4.82	9/16	5/8	16.25	18.54	22.35	29.71	20.82
SYCBTM 6- 4N	3/8	9.52	1/4	7.00	5/8	11/16	16.76	19.30	23.11	30.48	25.40
SYCBTM 6- 6N	3/8	9.52	3/8	7.11	11/16	11/16	16.76	19.30	23.87	31.24	26.20
SYCBTM 8-6N	1/2	12.70	3/8	10.41	13/16	7/8	22.86	21.84	25.90	36.06	28.19
SYCBTM 8-8N	1/2	12.70	1/2	10.41	13/16	7/8	22.86	21.84	25.90	36.06	33.02
SYCBTM 10-8N	5/8	15.87	1/2	12.00	15/16	1	24.38	21.84	27.94	38.10	35.05
SYCBTM 12-12N	3/4	19.05	3/4	15.74	1-1/16	1-1/8	24.38	21.84	29.71	39.87	36.83

*ISO Tapered Threads are available upon request.

+The d dimension is the minimum nominal opening. These fittings may have a larger opening at the pipe/straight thread end.

Connects Metric Tube to Female ISO Tapered Thread

Part No.	Tube OD D	T* ISO Thread Size	d* Min.	Width across flat		A	B	∠	L	L ₁
				h	H					
SYCBTM 3M-2R	3	1/8	2.4	1/2	12	12.9	15.3	17.0	23.6	17.8
SYCBTM 3M-4R	3	1/4	2.4	1/2	12	12.9	15.3	18.0	24.6	23.4
SYCBTM 4M-2R	4	1/8	2.4	1/2	12	13.7	16.1	18.8	25.4	18.8
SYCBTM 6M-2R	6	1/8	4.8	1/2	14	15.3	17.7	19.6	27.0	18.8
SYCBTM 6M- 4R	6	1/4	4.8	1/2	14	15.3	17.7	19.6	27.0	23.4
SYCBTM 8M- 2R	8	1/8	4.8	9/16	16	16.2	18.6	21.3	28.8	19.8
SYCBTM 8M-4R	8	1/4	6.3	9/16	16	16.2	18.6	21.3	28.8	24.4
SYCBTM 10M-4R	10	1/4	7.0	11/16	19	17.2	19.5	23.9	31.5	28.2
SYCBTM 10M-6R	10	3/8	7.9	11/16	19	17.2	19.5	23.9	31.5	28.2
SYCBTM 12M-4R	12	1/4	7.0	13/16	22	22.8	22.0	25.9	36.0	28.2
SYCBTM 12M-6R	12	3/8	9.0	13/16	22	22.8	22.0	25.9	36.0	28.2
SYCBTM 12M- 8R	12	1/2	9.5	13/16	22	22.8	22.0	25.9	36.0	33.0
SYCBTM 16M- 6R	16	3/8	9.5	15/16	25	24.4	22.0	27.9	38.0	30.2
SYCBTM 16M-8R	16	1/2	12.0	1	25	24.4	22.0	27.9	38.0	35.1
SYCBTM 20M-12R	20	3/4	15.7	30mm	32	26.0	22.0	34.5	44.6	41.7

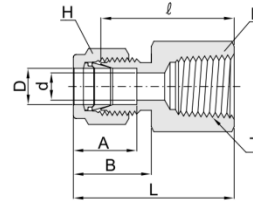
*NPT Threads are available upon request.

+The d dimension is the minimum nominal opening. These fittings may have a larger opening at the pipe/straight thread end.

All dimensions are in millimeters unless otherwise specified. Dimensions are for reference only, subject to change.

Female Connector

SYCFC



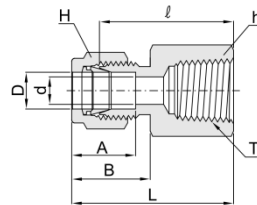
Connects Fractional Tube to Male NPT Thread

Part No.	Tube OD D		T* NPT Size	d Min.	Width across flat (in.)		A	B	/	L
	in.	mm			h	H				
SYCFC 1-1N	1/16	1.58	1/16	1.27	7/16	5/16	8.63	10.92	19.81	23.62
SYCFC 1-2N	1/16	1.58	1/8	1.27	9/16	5/16	8.63	10.92	20.57	24.38
SYCFC 2-2N	1/8	3.17	1/8	2.28	9/16	7/16	12.70	15.24	22.09	28.70
SYCFC 2-4N	1/8	3.17	1/4	2.28	3/4	7/16	12.70	15.24	26.92	33.52
SYCFC 3-2N	3/16	4.76	1/8	3.04	9/16	1/2	13.71	16.00	23.11	29.71
SYCFC 4-2N	1/4	6.35	1/8	4.82	9/16	9/16	15.24	17.78	23.87	31.24
SYCFC 4-4N	1/4	6.35	1/4	4.82	3/4	9/16	15.24	17.78	28.44	35.81
SYCFC 4-6N	1/4	6.35	3/8	4.82	7/8	9/16	15.24	17.78	30.22	37.59
SYCFC 4-8N	1/4	6.35	1/2	4.82	1-1/16	9/16	15.24	17.78	35.05	42.41
SYCFC 5-2N	5/16	7.93	1/8	6.35	9/16	5/8	16.25	18.54	24.63	32.00
SYCFC 5-4N	5/16	7.93	1/4	6.35	3/4	5/8	16.25	18.54	29.46	36.83
SYCFC 6-2N	3/8	9.52	1/8	7.11	5/8	11/16	16.76	19.30	25.40	32.76
SYCFC 6-4N	3/8	9.52	1/4	7.11	3/4	11/16	16.76	19.30	30.22	37.59
SYCFC 6-6N	3/8	9.52	3/8	7.11	7/8	11/16	16.76	19.30	31.75	39.11
SYCFC 6-8N	3/8	9.52	1/2	7.11	1-1/16	11/16	16.76	19.30	36.57	43.94
SYCFC 6-12N	3/8	9.52	3/4	7.11	1-5/16	11/16	16.76	19.30	40.38	47.75
SYCFC 8-4N	1/2	12.70	1/4	10.41	13/16	7/8	22.86	21.84	30.22	40.38
SYCFC 8-6N	1/2	12.70	3/8	10.41	7/8	7/8	22.86	21.84	31.75	41.91
SYCFC 8-8N	1/2	12.70	1/2	10.41	1-1/16	7/8	22.86	21.84	36.57	46.73
SYCFC 8-12N	1/2	12.70	3/4	10.41	1-5/16	7/8	22.86	21.84	38.10	48.26
SYCFC 10-6N	5/8	15.87	3/8	12.70	15/16	1	24.38	21.84	31.75	41.91
SYCFC 10-8N	5/8	15.87	1/2	12.70	1-1/16	1	24.38	21.84	36.57	46.73
SYCFC 10-12N	5/8	15.87	3/4	12.70	1-5/16	1	24.38	21.84	38.10	48.26
SYCFC 12-8N	3/4	19.05	1/2	15.74	1-1/16	1-1/8	24.38	21.84	36.57	46.73
SYCFC 12-12N	3/4	19.05	3/4	15.74	1-5/16	1-1/8	24.38	21.84	38.10	48.26
SYCFC 14-12N	7/8	22.22	3/4	18.28	1-5/16	1-1/4	25.90	21.84	39.62	49.78
SYCFC 16-12N	1	25.40	3/4	22.35	1-3/8	1-1/2	31.24	26.41	41.14	53.34
SYCFC 16-16N	1	25.40	1	22.35	1-5/8	1-1/2	31.24	26.41	50.03	62.23
SYCFC 20-20N	1-1/4	31.75	1-1/4	27.68	2-1/8	1-7/8	41.14	38.86	52.57	74.67
SYCFC 24-24N	1-1/2	38.10	1-1/2	34.03	2-3/8	2-1/4	50.03	45.21	56.13	83.31
SYCFC 32-32N	2	50.80	2	45.97	2-7/8	3	67.56	62.73	64.26	101.60

*ISO Tapered Threads are available upon request.

Female Connector

SYCFC



Connects Metric Tube to Male ISO Tapered Thread

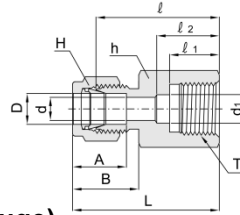
Part No.	Tube OD D	T* ISO Thread Size	d Min	Width across flat		A	B	∠	L
				h	H				
SYCFC 3M-2R	3	1/8	2.4	14	12	12.9	15.3	22.1	28.7
SYCFC 3M-4R	3	1/4	2.4	19	12	12.9	15.3	26.9	33.5
SYCFC 4M-2R	4	1/8	2.4	14	12	13.7	16.1	23.1	29.7
SYCFC 6M-2R	6	1/8	4.8	14	14	15.3	17.7	23.9	31.3
SYCFC 6M- 4R	6	1/4	4.8	19	14	15.3	17.7	28.4	35.8
SYCFC 6M-6R	6	3/8	4.8	22	14	15.3	17.7	29.5	36.9
SYCFC 6M-8R	6	1/2	4.8	27	14	15.3	17.7	35.1	42.5
SYCFC 8M-2R	8	1/8	6.3	14	16	16.2	18.6	24.6	32.1
SYCFC 8M-4R	8	1/4	6.3	19	16	16.2	18.6	29.5	37.0
SYCFC 8M-6R	8	3/8	6.3	22	16	16.2	18.6	30.2	37.7
SYCFC 8M- 8R	8	1/2	6.3	27	16	16.2	18.6	35.8	43.3
SYCFC 10M-2R	10	1/8	8.0	17	19	17.2	19.5	25.4	33.0
SYCFC 10M- 4R	10	1/4	8.0	19	19	17.2	19.5	30.2	37.8
SYCFC 10M-6R	10	3/8	8.0	22	19	17.2	19.5	31.0	38.6
SYCFC 10M-8R	10	1/2	8.0	27	19	17.2	19.5	36.6	44.2
SYCFC 12M-2R	12	1/8	9.5	22	22	22.8	22.0	28.4	38.5
SYCFC 12M-4R	12	1/4	9.5	22	22	22.8	22.0	30.2	40.3
SYCFC 12M- 6R	12	3/8	9.5	22	22	22.8	22.0	31.0	41.1
SYCFC 12M-8R	12	1/2	9.5	27	22	22.8	22.0	36.6	46.7
SYCFC 12M-12R	12	3/4	9.5	35	22	22.8	22.0	38.9	49.0
SYCFC 15M-8R	15	1/2	12.0	27	25	24.4	22.0	36.6	46.7
SYCFC 16M-8R	16	1/2	12.7	27	25	24.4	22.0	36.8	46.9
SYCFC 20M-8R	20	1/2	16.0	30	32	26.0	22.0	37.8	47.9
SYCFC 20M-12R	20	3/4	16.0	35	32	26.0	22.0	39.6	49.7
SYCFC 22M-12R	22	3/4	18.3	35	32	26.0	22.0	39.6	49.7
SYCFC 22M-16R	22	1	18.3	41	32	26.0	22.0	47.8	57.9
SYCFC 25M-12R	25	3/4	21.8	35	38	31.3	26.5	41.1	53.4
SYCFC25M-16R	25	1	21.8	41	38	31.3	26.5	50.0	62.3

*NPT Threads are available upon request.

All dimensions are in millimeters unless otherwise specified. Dimensions are for reference only, subject to change.

Gauge Connector

SYCGC



Connects Fractional Tube to ISO Parallel Thread (Gauge)

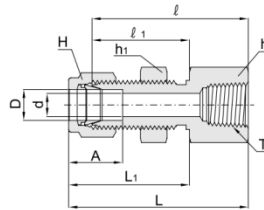
Part No.	Tube OD D		T* ISO Thread Size	d Min.	d ₁	Width across flat (in.)		A	B	ℓ	ℓ ₁	ℓ ₂	L
	in.	mm				h	H ₁						
SYCGC4-2G	1/4	6.35	1/8	4.82	-	9/16	9/16	15.24	17.78	24.30	10.00	-	31.55
SYCGC4-4G	1/4	6.35	1/4	4.82	5.58	3/4	9/16	15.24	17.78	30.22	13.00	17.0	37.59
SYCGC4-6G	1/4	6.35	3/8	4.82	6.50	15/16	9/16	15.24	17.78	30.22	14.10	17.0	37.59
SYCGC4-8G	1/4	6.35	1/2	4.82	6.50	11/16	9/16	15.24	17.78	36.07	18.80	23.0	43.43
SYCGC 5-4G	5/16	7.93	1/4	5.58	-	3/4	5/8	16.25	18.54	30.98	13.00	-	38.35
SYCGC5-8G	5/16	7.93	1/2	6.30	-	1-1/16	5/8	16.25	18.54	33.02	19.00	-	40.38
SYCGC6-4G	3/8	9.52	1/4	5.58	-	3/4	11/16	16.76	19.30	31.75	12.95	-	39.12
SYCGC6-6G	3/8	9.52	3/8	6.50	-	15/16	11/16	16.76	19.30	31.24	14.00	-	38.61
SYCGC6-8G	3/8	9.52	1/2	7.11	-	1-1/16	11/16	16.76	19.30	34.54	18.80	-	41.91
SYCGC8-4G	1/2	12.70	1/4	5.50	-	13/16	7/8	22.86	21.84	31.80	12.90	-	41.95
SYCGC8-6G	1/2	12.70	3/8	6.50	-	15/16	7/8	22.86	21.84	34.29	14.24	-	44.45
SYCGC 8-8G	1/2	12.70	1/2	7.11	-	1-1/16	7/8	22.86	21.84	38.10	18.80	-	48.26

Connects Metric Tube to ISO Parallel Thread (Gauge)

Part No.	Tube OD D	T ISO Thread Size	d Min	d ₁	Width across flat		A	B	ℓ	ℓ ₁	ℓ ₂	L
					h	H						
SYCGC 3M-4G	3	1/4	2.4	5.5	19	12	12.9	15.3	28.7	12.9	17	35.3
SYCGC 6M-4G	6	1/4	4.8	5.5	19	14	15.3	17.7	30.2	12.9	17	37.6
SYCGC 6M-6G	6	3/8	4.8	6.5	24	14	15.3	17.7	30.2	14.0	17	37.6
SYCGC 6M-8G	6	1/2	4.8	7.0	27	14	15.3	17.7	36.3	18.8	23	43.0
SYCGC 8M-4G	8	1/4	5.5	-	19	16	16.2	18.6	31.0	12.9	-	38.5
SYCGC 8M-6G	8	3/8	6.3	-	24	16	16.2	18.6	28.7	14.0	-	36.2
SYCGC 8M-8G	8	1/2	6.3	-	27	16	16.2	18.6	33.5	18.8	-	41.0
SYCGC 10M-4G	10	1/4	5.5	-	19	19	17.2	19.5	31.8	12.9	-	39.4
SYCGC 10M-6G	10	3/8	6.5	-	24	19	17.2	19.5	31.2	14.0	-	38.8
SYCGC 10M-8G	10	1/2	7.0	-	27	19	17.2	19.5	34.5	18.8	-	41.4
SYCGC 12M-4G	12	1/4	5.5	-	22	22	22.8	22.0	31.8	12.9	-	41.9
SYCGC 12M-6G	12	3/8	6.5	-	24	22	22.8	22.0	34.3	14.0	-	44.4
SYCGC 12M-8G	12	1/2	7.0	-	27	22	22.8	22.0	38.1	18.8	-	48.2
SYCGC 20M-8G	20	1/2	7.0	-	30	32	26.0	22.0	44.2	18.8	-	54.3
SYCGC 22M-8G	22	1/2	7.0	-	30	32	26.0	22.0	44.2	18.8	-	54.3

Bulkhead Female Connector

SYCBFC



Connects Fractional Tube to Male NPT Thread

Part No.	Tube OD D		T* NPT Size	d Min.	Width across flat(in.)			A	∠	A	L	L ₁	Panel Hole Drill Size	Panel Max Thickness
	in	mm			h	h ₁	H							
SYCBFC 2-2N	1/8	3.17	1/8	2.28	9/16	1/2	7/16	12.70	38.10	24.63	44.70	31.24	8.38	12.70
SYCBFC 4-2N	1/4	6.35	1/8	4.82	5/8	5/8	9/16	15.24	39.62	26.16	46.99	33.52	11.50	10.16
SYCBFC 4-4N	1/4	6.35	1/4	4.82	3/4	5/8	9/16	15.24	44.45	26.16	51.81	33.52	11.50	10.16
SYCBFC 6-4N	3/8	9.52	1/4	7.00	3/4	3/4	11/16	16.76	47.75	29.46	55.11	36.83	14.68	11.17
SYCBFC 8-6N	1/2	12.70	3/8	10.41	15/16	15/16	7/8	22.86	51.56	31.75	61.72	41.91	19.44	12.70
SYCBFC 8-8N	1/2	12.70	1/2	10.41	1-1/16	15/16	7/8	22.86	56.38	31.75	66.54	41.91	19.44	12.70
SYCBFC12-12N	3/4	19.05	3/4	15.74	1-5/16	1-3/16	1-1/8	24.38	63.60	38.30	73.51	47.21	25.79	16.76

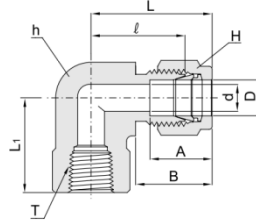
Connects Metric Tube to Male NPT Thread

Part No.	Tube OD D	T* NPT Size	d Min.	Width across flat			A	∠	A	L	L ₁	Panel Hole Drill Size	Panel Max. Thickness
				h	h ₁ *(in.) ⁺	H							
SYCBFC 6M-2N	6	1/8	4.8	16	5/8	14	15.3	39.6	26.2	46.90	35.00	11.5	10.2
SYCBFC 6M-4N	6	1/4	4.8	19	5/8	14	15.3	44.4	26.2	51.80	33.60	11.5	10.2
SYCBFC 8M-4N	8	1/4	6.3	19	11/16	16	16.2	46.7	28.6	53.85	35.55	13.1	11.2
SYCBFC 12M-8N	12	1/2	9.5	27	15/16	22	22.8	56.4	31.8	66.50	41.90	19.5	12.7

*ISO Tapered Threads are available upon request.

+ h₁: Applicable to metric Tube bulkhead hexagon only.

Female Elbow
SYCLF



Connects Fractional Tube to Male NPT Thread

Part No.	Tube OD D		T* NPT Size	d Min.	Width across flat(in.)		A	B	∠	L	L ₁
	in.	mm			h	H					
SYCLF 2-2N	1/8	3.17	1/8	2.28	9/16	7/16	12.70	15.24	18.03	24.63	19.05
SYCLF 2-4N	1/8	3.17	1/4	2.28	11/16	7/16	12.70	15.24	20.82	27.43	22.35
SYCLF 3-2N	3/16	4.76	1/8	3.04	9/16	1/2	13.71	16.00	18.79	25.40	19.05
SYCLF 4-2N	1/4	6.35	1/8	4.82	9/16	9/16	15.24	17.78	19.55	26.92	19.05
SYCLF 4-4N	1/4	6.35	1/4	4.82	11/16	9/16	15.24	17.78	22.35	29.71	22.35
SYCLF 4-6N	1/4	6.35	3/8	4.82	13/16	9/16	15.24	17.78	24.38	31.75	22.35
SYCLF 4-8N	1/4	6.35	1/2	4.82	1	9/16	15.24	17.78	27.17	34.54	28.44
SYCLF 5-2N	5/16	7.93	1/8	6.35	9/16	5/8	16.25	18.54	21.33	28.70	19.05
SYCLF 5-4N	5/16	7.93	1/4	6.35	11/16	5/8	16.25	18.54	23.11	30.48	22.35
SYCLF 6-2N	3/8	9.52	1/8	7.11	5/8	11/16	16.76	19.30	23.11	30.48	19.05
SYCLF 6-4N	3/8	9.52	1/4	7.11	11/16	11/16	16.76	19.30	23.87	31.24	22.35
SYCLF 6-6N	3/8	9.52	3/8	7.11	13/16	11/16	16.76	19.30	25.90	33.27	22.35
SYCLF 6-8N	3/8	9.52	1/2	7.11	1	11/16	16.76	19.30	28.70	36.06	28.44
SYCLF 8-4N	1/2	12.70	1/4	10.41	13/16	7/8	22.86	21.84	25.90	36.06	22.35
SYCLF 8-6N	1/2	12.70	3/8	10.41	13/16	7/8	22.86	21.84	25.90	36.06	22.35
SYCLF 8-8N	1/2	12.70	1/2	10.41	1	7/8	22.86	21.84	28.70	38.86	28.44
SYCLF 10-6N	5/8	15.87	3/8	12.70	15/16	1	24.38	21.84	27.94	38.10	22.35
SYCLF 10-8N	5/8	15.87	1/2	12.70	1	1	24.38	21.84	29.71	39.87	28.44
SYCLF 12-8N	3/4	19.05	1/2	15.74	1-1/16	1-1/8	24.38	21.84	29.71	39.87	28.44
SYCLF 12-12N	3/4	19.05	3/4	15.74	1-3/8	1-1/8	24.38	21.84	34.54	44.70	31.75
SYCLF 14-12N	7/8	22.22	3/4	18.28	1-3/8	1-1/4	25.90	21.84	34.54	44.70	31.75
SYCLF 16-12N	1	25.40	3/4	22.35	1-3/8	1-1/2	31.24	26.41	36.83	49.02	31.75
SYCLF 16-16N	1	25.40	1	22.35	1-11/16	1-1/2	31.24	26.41	41.40	53.59	38.10

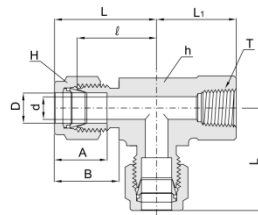
Connects Metric Tube to Male NPT Thread

Part No.	Tube OD D	T* NPT Size	d Min	Width across flat		A	B	∠	L	L ₁
				h(in.)	H					
SYCLF 6M-2N	6	1/8	4.8	14mm	14	15.3	17.7	19.6	27.0	19.00
SYCLF 6M-4N	6	1/4	4.8	11/16	14	15.3	17.7	22.4	29.8	22.40
SYCLF 6M-6N	6	3/8	4.8	13/16	14	15.3	17.7	24.4	31.7	22.40
SYCLF 6M-8N	6	1/2	4.8	1	14	15.3	17.7	27.2	34.6	28.40
SYCLF 8M-4N	8	1/4	6.3	11/16	16	16.2	18.6	23.1	30.6	22.40
SYCLF 8M-8N	8	1/2	6.3	1	16	16.2	18.6	28.0	35.2	28.40
SYCLF10M-2N	10	1/8	8.0	11/16	19	17.2	19.5	23.9	31.5	19.00
SYCLF10M-4N	10	1/4	8.0	11/16	19	17.2	19.5	23.9	32.6	22.40
SYCLF10M-6N	10	3/8	8.0	13/16	19	17.2	19.5	25.9	33.5	22.40
SYCLF10M-8N	10	1/2	8.0	1	19	17.2	19.5	28.7	36.1	28.40
SYCLF12M-4N	12	1/4	9.5	13/16	22	22.8	22.0	25.9	36.0	22.40
SYCLF12M-6N	12	3/8	9.5	13/16	22	22.8	22.0	25.9	36.0	22.40
SYCLF12M-8N	12	1/2	9.5	1	22	22.8	22.0	28.7	38.8	28.40
SYCLF16M-8N	16	1/2	12.7	1-1/16	25	24.4	22.0	29.7	39.5	28.40

*ISO Tapered Threads are available upon request.

Female Run Tee

SYCRTF



Connects Fractional Tube to Male NPT Thread

Part No.	Tube OD D		T* NPT Size	d Min.	Width across flat(in.)		A	B	∠	L	L ₁
	in.	mm			h	H					
SYCRTF 2-2N	1/8	3.17	1/8	2.28	9/16	7/16	12.70	15.24	18.03	24.63	19.05
SYCRTF 4-2N	1/4	6.35	1/8	4.82	9/16	9/16	15.24	17.78	19.55	26.92	19.05
SYCRTF 4-4N	1/4	6.35	1/4	4.82	11/16	9/16	15.24	17.78	22.35	29.71	22.35
SYCRTF 6-4N	3/8	9.52	1/4	7.11	11/16	11/16	16.76	19.30	23.87	31.24	22.35
SYCRTF 8-6N	1/2	12.70	3/8	10.41	13/16	7/8	22.86	21.84	25.90	36.06	22.35
SYCRTF 8-8N	1/2	12.70	1/2	10.41	1	7/8	22.86	21.84	28.70	38.86	28.44
SYCRTF12-12N	3/4	19.05	3/4	15.74	1-3/8	1-1/8	24.38	21.84	34.54	44.70	31.75
SYCRTF16-12N	1	25.40	3/4	22.35	1-3/8	1-1/2	31.24	26.41	36.83	49.02	31.75
SYCRTF16-16N	1	25.40	1	22.35	1-11/16	1-1/2	31.24	26.41	41.40	53.59	38.10

Connects Metric Tube to Male NPT Thread

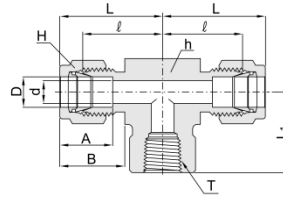
Part No.	Tube OD D	T* NPT Size	d Min.	Width across flat		A	B	∠	L	L ₁
				h(in.)	H					
SYCRTF 6M-2N	6	1/8	4.8	14mm	14	15.3	17.7	19.6	27.0	19.0
SYCRTF 6M-4N	6	1/4	4.8	11/16	14	15.3	17.7	22.4	29.8	22.4
SYCRTF 6M-8N	6	1/2	4.8	1	14	15.3	17.7	27.2	34.5	28.4
SYCRTF 8M-2N	8	1/8	6.3	5/8	16	16.2	18.6	22.4	29.9	19.0
SYCRTF 8M-4N	8	1/4	6.3	11/16	16	16.2	18.6	23.1	30.6	22.4
SYCRTF 8M-6N	8	3/8	6.3	13/16	16	16.2	18.6	25.2	32.4	22.4
SYCRTF 8M-8N	8	1/2	6.3	1	16	16.2	18.6	28.0	35.2	28.4
SYCRTF 10M-4N	10	1/4	8.0	11/16	19	17.2	19.5	23.9	32.6	22.4
SYCRTF 12M-4N	12	1/4	9.5	13/16	22	22.8	22.0	25.9	36.0	22.4
SYCRTF 12M-6N	12	3/8	9.5	13/16	22	22.8	22.0	25.9	36.0	22.4
SYCRTF 12M-8N	12	1/2	9.5	1	22	22.8	22.0	28.7	38.8	28.4
SYCRTF 16M-8N	16	1/2	12.7	1	25	24.4	22.0	29.7	39.5	28.4

*ISO Tapered Threads are available upon request.

All dimensions are in millimeters unless otherwise specified. Dimensions are for reference only, subject to change.

Female Branch Tee.

SYCBTF



Connects Fractional Tube to Male NPT Thread

Part No.	Tube OD D		T* NPT Size	d Min.	Width across flat(in.)		A	B	∠	L	L ₁
	in.	mm			h	H					
SYCBTF 2-2N	1/8	3.17	1/8	2.28	9/16	7/16	12.70	15.24	18.03	24.38	19.05
SYCBTF 4-2N	1/4	6.35	1/8	4.82	9/16	9/16	15.24	17.78	19.55	26.92	19.05
SYCBTF 4-4N	1/4	6.35	1/4	4.82	11/16	9/16	15.24	17.78	22.35	29.71	22.35
SYCBTF 6-4N	3/8	9.52	1/4	7.11	11/16	11/16	16.76	19.30	23.87	31.24	22.35
SYCBTF 8-4N	1/2	12.70	1/4	10.41	13/16	7/8	22.86	21.84	25.90	36.06	22.35
SYCBTF 8-6N	1/2	12.70	3/8	10.41	13/16	7/8	22.86	21.84	25.90	36.06	22.35
SYCBTF 8-8N	1/2	12.70	1/2	10.41	1	7/8	22.86	21.84	28.70	38.86	28.44
SYCBTF10-8N	5/8	15.87	1/2	12.70	1	1	24.38	21.84	28.70	38.86	28.44
SYCBTF12-12N	3/4	19.05	3/4	15.74	1-3/8	1-1/8	24.38	21.84	34.54	44.70	31.75
SYCBTF16-12N	1	25.40	3/4	22.35	1-3/8	1-1/2	31.24	26.41	36.83	49.02	31.75
SYCBTF16-16N	1	25.40	1	22.35	1-11/16	1-1/2	31.24	26.41	41.40	53.59	38.10

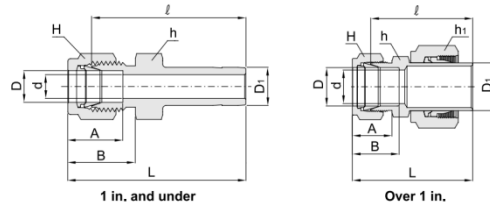
Connects Metric Tube to Male NPT Thread

Part No.	Tube OD D	T* NPT Size	d Min.	Width across flat		A	B	∠	L	L ₁
				h(in.)	H					
SYCBTF 6M-2N	6	1/8	4.8	14mm	14	15.3	17.7	19.6	27.0	19.0
SYCBTF 6M-4N	6	1/4	4.8	11/16	14	15.3	17.7	22.4	29.8	22.4
SYCBTF 6M-6N	6	3/8	4.8	13/16	14	15.3	17.7	24.4	31.7	22.4
SYCBTF 6M-8N	6	1/2	4.8	1	14	15.3	17.7	27.2	34.5	28.4
SYCBTF 8M-2N	8	1/8	6.3	5/8	16	16.2	18.6	23.1	29.9	19.0
SYCBTF 8M-4N	8	1/4	6.3	11/16	16	16.2	18.6	23.1	30.6	22.4
SYCBTF 8M-6N	8	3/8	6.3	13/16	16	16.2	18.6	25.2	32.4	22.4
SYCBTF 8M-8N	8	1/2	6.3	1	16	16.2	18.6	28.0	35.2	28.4
SYCBTF10M-4N	10	1/4	8.0	11/16	19	17.2	19.5	23.9	32.6	22.4
SYCBTF10M-6N	10	3/8	8.0	13/16	19	17.2	19.5	25.9	33.3	22.4
SYCBTF10M-8N	10	1/2	8.0	1	19	17.2	19.5	28.7	36.1	22.4
SYCBTF12M-4N	12	1/4	9.5	13/16	22	22.8	22.0	25.9	36.0	22.4
SYCBTF12M-6N	12	3/8	9.5	13/16	22	22.8	22.0	25.9	36.0	22.4
SYCBTF12M-8N	12	1/2	9.5	1	22	22.8	22.0	28.7	38.8	28.4
SYCBTF16M-8N	16	1/2	12.7	1	25	24.4	22.0	28.7	38.8	28.4

*ISO Tapered threads are available upon request.

SANYOU Tube Fittings

Reducer
SYCR



***Connects Fractional Tube to Fractional SANYOU Port**

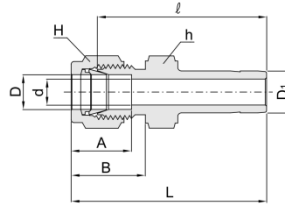
Part No.	Tube OD				d Min.	Width across flat (in.)			A	B	r	L
	D		D ₁			h	h ₁	H				
	in.	mm	in.	mm								
SYCR 1-2	1/16	1.58	1/8	3.17	1.27	5/16	-	5/16	8.63	10.92	25.40	29.21
SYCR 1-4	1/16	1.58	1/4	6.35	1.27	5/16	-	5/16	8.63	10.92	27.68	31.49
SYCR 2-1	1/8	3.17	1/16	1.58	0.76	7/16	-	7/16	12.70	15.24	22.35	28.95
SYCR 2-2	1/8	3.17	1/8	3.17	2.03	7/16	-	7/16	12.70	15.24	26.92	33.52
SYCR 2-3	1/8	3.17	3/16	4.76	2.28	7/16	-	7/16	12.70	15.24	27.68	34.29
SYCR 2-4	1/8	3.17	1/4	6.35	2.28	7/16	-	7/16	12.70	15.24	29.46	36.06
SYCR 2-6	1/8	3.17	3/8	9.52	2.28	7/16	-	7/16	12.70	15.24	30.98	37.59
SYCR 2-8	1/8	3.17	1/2	12.70	2.28	9/16	-	7/16	12.70	15.24	37.59	44.19
SYCR 3-2	3/16	4.76	1/8	3.17	1.70	7/16	-	1/2	13.71	16.00	28.19	34.79
SYCR 3-4	3/16	4.76	1/4	6.35	3.04	7/16	-	1/2	13.71	16.00	30.48	37.08
SYCR 4-2	1/4	6.35	1/8	3.17	2.03	1/2	-	9/16	15.24	17.78	29.46	36.83
SYCR 4-3	1/4	6.35	3/16	4.76	3.04	1/2	-	9/16	15.24	17.78	30.22	37.59
SYCR 4-4	1/4	6.35	1/4	6.35	4.32	1/2	-	9/16	15.24	17.78	31.75	39.11
SYCR 4-5	1/4	6.35	5/16	7.93	4.82	1/2	-	9/16	15.24	17.78	32.51	39.87
SYCR 4-6	1/4	6.35	3/8	9.52	4.82	1/2	-	9/16	15.24	17.78	33.27	40.64
SYCR 4-8	1/4	6.65	1/2	12.70	4.82	9/16	-	9/16	15.24	17.78	38.86	46.22
SYCR 4-10	1/4	6.35	5/8	15.87	4.82	11/16	-	9/16	15.24	17.78	40.64	48.00
SYCR 4-12	1/4	6.35	3/4	19.05	4.82	13/16	-	9/16	15.24	17.78	40.38	47.75
SYCR 5-6	5/16	7.93	3/8	9.52	6.35	9/16	-	5/8	16.25	18.54	34.54	41.91
SYCR 5-8	5/16	7.93	1/2	12.70	6.35	9/16	-	5/8	16.25	18.54	40.13	47.49
SYCR 6-4	3/8	9.52	1/4	6.32	4.32	5/8	-	11/16	16.76	19.30	34.03	41.40
SYCR 6-6	3/8	9.52	3/8	9.52	6.86	5/8	-	11/16	16.76	19.30	35.81	43.18
SYCR 6-8	3/8	9.52	1/2	12.70	7.11	5/8	-	11/16	16.76	19.30	41.14	48.51
SYCR 6-10	3/8	9.52	5/8	15.87	7.11	11/16	-	11/16	16.76	19.30	42.92	50.29
SYCR 6-12	3/8	9.52	3/4	19.05	7.11	13/16	-	11/16	16.76	19.30	42.92	50.29
SYCR 8-4	1/2	12.70	1/4	6.35	4.32	13/16	-	7/8	22.86	21.84	34.79	44.95
SYCR 8-6	1/2	12.70	3/8	9.52	6.86	13/16	-	7/8	22.86	21.84	36.57	46.73
SYCR 8-8	1/2	12.70	1/2	12.70	9.40	13/16	-	7/8	22.86	21.84	42.16	52.32
SYCR 8-10	1/2	12.70	5/8	15.87	10.41	13/16	-	7/8	22.86	21.84	43.68	53.84
SYCR 8-12	1/2	12.70	3/4	19.05	10.41	13/16	-	7/8	22.86	21.84	43.68	53.84
SYCR 8-16	1/2	12.70	1	25.40	10.41	1-1/16	-	7/8	22.86	21.84	50.03	60.19
SYCR10-12	5/8	15.87	3/4	19.05	12.70	15/16	-	1	24.38	21.84	44.45	54.61
SYCR10-14	5/8	15.87	7/8	22.22	12.70	15/16	-	1	24.38	21.84	45.97	56.13
SYCR10-16	5/8	15.87	1	25.40	12.70	1-1/16	-	1	24.38	21.84	50.80	60.96
SYCR12-8	3/4	19.05	1/2	12.70	9.40	1-1/16	-	1-1/8	24.38	21.84	44.45	54.61
SYCR12-16	3/4	19.05	1	25.40	15.74	1-1/16	-	1-1/8	24.38	21.84	52.32	62.48
SYCR16-20 ^①	1	25.40	1-1/4	31.75	22.35	1-3/8	1-7/8	1-1/2	31.24	26.41	68.32	80.51
SYCR16-24 ^①	1	25.40	1-1/2	38.10	22.35	1-5/8	2-1/4	1-1/2	31.24	26.41	76.96	89.15
SYCR16-32 ^①	1	25.40	2	50.80	22.35	2-1/8	3	1-1/2	31.24	26.41	100.33	112.52
SYCR20-24 ^①	1-1/4	31.75	1-1/2	38.10	27.68	1-3/4	2-1/4	1-7/8	41.14	38.86	82.04	104.14
SYCR20-32 ^①	1-1/4	31.75	2	50.80	27.68	2-1/8	3	1-7/8	41.14	38.86	103.12	125.22
SYCR24-32 ^①	1-1/2	38.10	2	50.80	34.03	2-1/4	3	2-1/4	50.03	45.21	104.14	131.31

*Connects fractional tube to metric SANYOU port are available upon request.

① Furnished with nut and preswaged ferrules.

All dimensions are in millimeters unless otherwise specified. Dimensions are for reference only, subject to change.

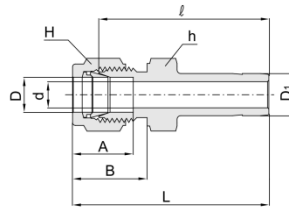
Reducer
SYCR



Connects Metric Tube to Metric SANYOU Port

Part No.	Tube OD		d Min.	Width across flat		A	B	ℓ	L
	D	D ₁		h	H				
SYCR 2M-3M	2	3	1.7	7/16 in.	12	12.9	15.3	26.9	33.5
SYCR 3M-4M	3	4	2.2	7/16 in.	12	12.9	15.3	28.4	35.0
SYCR 3M-6M	3	6	2.4	7/16 in.	12	12.9	15.3	29.5	36.1
SYCR 3M-10M	3	10	2.4	7/16 in.	12	12.9	15.3	31.8	38.4
SYCR 4M-6M	4	6	2.4	7/16 in.	12	13.7	16.1	30.5	37.1
SYCR 6M-3M	6	3	1.9	1/2 in.	14	15.3	17.7	29.5	36.9
SYCR 6M- 8M	6	8	4.8	1/2 in.	14	15.3	17.7	32.5	39.9
SYCR 6M-10M	6	10	4.8	1/2 in.	14	15.3	17.7	33.3	40.7
SYCR 6M-12M	6	12	4.8	1/2 in.	14	15.3	17.7	38.9	46.3
SYCR 8M-6M	8	6	4.1	14	16	16.2	18.6	32.8	40.3
SYCR 8M-10M	8	10	6.3	14	16	16.2	18.6	34.5	42.0
SYCR 8M-12M	8	12	6.3	14	16	16.2	18.6	40.1	47.6
SYCR10M-6M	10	6	4.1	17	19	17.2	19.5	34.8	42.4
SYCR10M-12M	10	12	8.0	17	19	17.2	19.5	42.2	49.8
SYCR10M-15M	10	15	8.0	17	19	17.2	19.5	43.7	51.3
SYCR10M-18M	10	18	8.0	22	19	17.2	19.5	43.7	51.3
SYCR12M-6M	12	6	4.1	13/16 in.	22	22.8	22.0	34.8	44.9
SYCR12M-10M	12	10	7.1	13/16 in.	22	22.8	22.0	36.6	46.7
SYCR12M-16M	12	16	9.5	13/16 in.	22	22.8	22.0	43.7	53.8
SYCR12M-18M	12	18	9.5	13/16 in.	22	22.8	22.0	43.7	53.8
SYCR12M-20M	12	20	9.5	13/16 in.	22	22.8	22.0	46.0	56.1
SYCR12M-22M	12	22	9.5	24	22	22.8	22.0	46.0	56.1
SYCR12M-25M	12	25	9.5	27	22	22.8	22.0	52.3	62.4
SYCR16M-12M	16	12	8.8	24	25	24.4	22.0	42.9	53.0
SYCR18M-12M	18	12	8.8	27	30	24.4	22.0	44.5	54.6
SYCR18M-16M	18	16	12.0	27	30	24.4	22.0	46.0	56.1
SYCR18M-20M	18	20	15.1	27	30	24.4	22.0	47.5	57.6
SYCR18M-22M	18	22	15.1	27	30	24.4	22.0	47.5	57.6
SYCR18M-25M	18	25	15.1	27	30	24.4	22.0	52.3	62.4
SYCR20M-16M	20	16	12.0	30	32	26.0	22.0	47.8	57.9
SYCR20M-18M	20	18	13.9	30	32	26.0	22.0	47.8	57.9
SYCR20M-22M	20	22	16.0	30	32	26.0	22.0	49.3	59.4
SYCR20M-25M	20	25	16.0	30	32	26.0	22.0	54.1	64.2
SYCR22M-18M	22	18	13.9	30	32	26.0	22.0	47.8	57.9
SYCR22M-20M	22	20	15.5	30	32	26.0	22.0	49.3	59.4
SYCR22M-25M	22	25	18.3	30	32	26.0	22.0	54.1	64.2
SYCR25M-18M	25	18	13.9	35	38	31.3	26.5	50.8	63.1
SYCR25M-20M	25	20	15.5	35	38	31.3	26.5	52.3	64.6

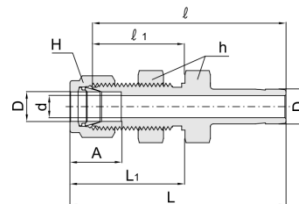
Reducer
SYCR



Connects Metric Tube to Fractional SANYOU Port

Part No.	Tube OD			d Min.	Width across flat		A	B	ℓ	L
	D	D ₁			h	H				
		in.	mm							
SYCR 2M-2	2	1/8	3.17	1.7	7/16 in.	12	12.9	15.3	26.9	33.5
SYCR 3M-2	3	1/8	3.17	2.0	7/16 in.	12	12.9	15.3	26.9	33.5
SYCR 3M-4	3	1/4	6.35	2.4	7/16 in.	12	12.9	15.3	29.5	36.1
SYCR 4M-4	4	1/4	6.35	2.4	7/16 in.	12	13.7	16.1	30.5	37.1
SYCR 6M- 2	6	1/8	3.17	2.0	1/2 in.	14	15.3	17.7	29.5	36.9
SYCR 6M- 4	6	1/4	6.35	4.3	1/2 in.	14	15.3	17.7	31.8	39.2
SYCR 6M-5	6	5/16	7.93	4.8	1/2 in.	14	15.3	17.7	32.5	39.9
SYCR 6M-6	6	3/8	9.52	4.8	1/2 in.	14	15.3	17.7	33.3	40.7
SYCR 6M-8	6	1/2	12.70	4.8	14	14	15.3	17.7	38.9	46.3
SYCR 8M-6	8	3/8	9.52	6.3	14	16	16.2	18.6	34.5	42.0
SYCR 8M-8	8	1/2	12.70	6.3	14	16	16.2	18.6	40.1	47.6
SYCR 10M- 6	10	3/8	9.52	6.9	17	19	17.2	19.5	36.6	44.2
SYCR 10M-8	10	1/2	12.70	8.0	17	19	17.2	19.5	42.2	49.8
SYCR 12M-8	12	1/2	12.70	9.4	13/16 in.	22	22.8	22.0	42.2	52.3
SYCR 12M-12	12	3/4	19.05	9.4	13/16 in.	22	22.8	22.0	43.7	53.8
SYCR 18M-12	18	3/4	19.05	14.7	27	30	24.4	22.0	46.0	56.1
SYCR 18M-16	18	1	25.40	15.1	27	30	24.4	22.0	52.3	62.4
SYCR 25M-16	25	1	25.40	20.0	35	38	31.3	26.5	57.2	69.5

Bulkhead Reducer
SYCBR



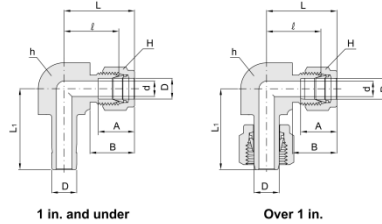
Connects Fractional Tube to Fractional SANYOU Port

Part No.	Tube OD D		d Min.	Width across flat(in.)		A	ℓ	A	L	L ₁	Panel Hole Drill Size	Panel Max Thickness
	in.	mm		h	H							
SYCBR 2-2	1/8	3.17	2.03	1/2	7/16	12.70	42.92	24.63	49.53	31.24	8.33	12.70
SYCBR 4-4	1/4	6.35	4.32	5/8	9/16	15.24	48.51	26.16	55.88	33.52	11.50	10.16
SYCBR 6-6	3/8	9.52	6.86	3/4	11/16	16.76	53.84	29.46	61.21	36.83	14.68	11.17
SYCBR 8-8	1/2	12.70	9.40	15/16	7/8	22.86	62.73	31.75	72.89	41.91	19.44	12.70
SYCBR10-10	5/8	15.87	11.94	1-1/16	1	24.38	65.02	32.51	75.18	42.67	22.62	12.70
SYCBR16-16	1	25.40	20.32	1-5/8	1-1/2	31.24	88.13	45.21	100.33	57.40	33.73	19.05

All dimensions are in millimeters unless otherwise specified. Dimensions are for reference only, subject to change.

Adjustable Elbow

SYCAL



Connects Fractional Tube to Fractional SANYOU Port

Part No.	Tube OD D		d Min.	Width across flat(in.)		A	B	∠	L	L ₁
	in.	mm		h	H					
SYCAL-1	1/16	1.58	0.76	3/8	5/16	8.63	10.92	14.00	22.30	16.00
SYCAL-2	1/8	3.17	2.03	3/8	7/16	12.70	15.24	15.74	22.30	20.59
SYCAL-3	3/16	4.76	3.04	1/2	1/2	13.71	16.00	17.78	25.40	22.48
SYCAL-4	1/4	6.35	4.32	1/2	9/16	15.24	17.78	19.55	27.00	25.00
SYCAL-5	5/16	7.93	5.59	9/16	5/8	16.25	18.54	21.33	28.80	27.08
SYCAL-6	3/8	9.52	6.86	5/8	11/16	16.76	19.30	23.11	31.50	28.80
SYCAL-8	1/2	12.70	9.40	13/16	7/8	22.86	21.84	25.90	36.00	37.30
SYCAL-10	5/8	15.87	11.94	15/16	1	24.38	21.84	28.70	38.80	41.75
SYCAL-12	3/4	19.05	14.73	1-1/16	1-1/8	24.38	21.84	29.71	38.80	42.60
SYCAL-14	7/8	22.22	18.28	1-3/16	1-1/4	25.90	21.84	34.54	39.80	49.39
SYCAL-16	1	25.40	20.32	1-3/8	1-1/2	31.24	26.41	36.83	49.02	55.60

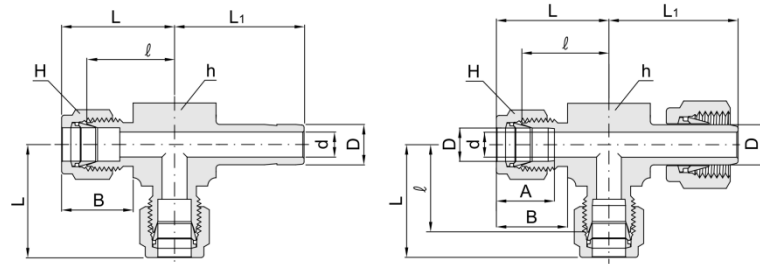
Connects Metric Tube to Metric SANYOU Port

Part No.	Tube OD D	d Min	Width across flat		A	B	∠	L	L ₁
			h(in.)	H					
SYCAL-3M	3	1.9	3/8	12	12.9	15.3	15.7	22.3	20.5
SYCAL-4M	4	2.2	1/2	12	13.7	16.4	18.8	25.4	23.5
SYCAL-6M	6	4.1	1/2	14	15.3	17.7	19.6	27.0	25.0
SYCAL-8M	8	5.6	9/16	16	16.2	18.6	21.3	28.8	27.2
SYCAL-10M	10	7.1	11/16	19	17.2	19.5	23.9	31.5	29.5
SYCAL-12M	12	8.8	13/16	22	22.8	22.0	25.9	36.0	36.0
SYCAL-15M	15	11.2	15/16	25	24.4	22.0	28.7	38.8	41.6
SYCAL-16M	16	12.0	15/16	25	24.4	22.0	28.7	38.8	41.8
SYCAL-18M	18	13.9	1-1/16	30	24.4	22.0	29.7	39.8	42.6
SYCAL-20M	20	15.5	30mm	32	26.0	22.0	32.5	42.6	47.2
SYCAL-22M	22	16.1	30mm	32	26.0	22.0	32.5	42.6	47.2
SYCAL-25M	25	20.3	1-3/8	38	31.3	26.5	36.8	49.1	55.6
SYCAL-28M ^①	28	22.5	41mm	46	36.6	36.6	43.2	64.0	65.0

① Furnished with nut and preswaged ferrules.

Adjustable Run Tee

SYCRTA



1 in. and under

Over 1 in.

Connects Fractional Tube To Fractional SANYOU Port

Part No.	Tube OD D		d Min.	Width across flat(in.)		B	ℓ	L	L ₁
	in.	mm		h	H				
SYCRTA-1	1/16	1.58	0.76	3/8	5/16	10.92	14.00	22.30	16.00
SYCRTA-2	1/8	3.17	2.03	3/8	7/16	15.24	15.74	22.30	20.59
SYCRTA-3	3/16	4.76	3.04	1/2	1/2	16.00	17.78	25.40	22.48
SYCRTA-4	1/4	6.35	4.32	1/2	9/16	17.78	19.55	27.00	25.00
SYCRTA-5	5/16	7.93	5.59	9/16	5/8	18.54	21.33	28.80	27.08
SYCRTA-6	3/8	9.52	6.86	5/8	11/16	19.30	23.11	31.50	28.80
SYCRTA-8	1/2	12.70	9.40	13/16	7/8	21.84	25.90	36.00	37.30
SYCRTA-10	5/8	15.87	11.94	15/16	1	21.84	28.70	38.80	41.75
SYCRTA-12	3/4	19.05	14.73	1-1/16	1-1/8	21.84	29.71	38.80	42.60
SYCRTA-14	7/8	22.22	18.28	1-3/16	1-1/4	21.84	34.54	39.80	49.39
SYCRTA-16	1	25.40	20.32	1-3/8	1-1/2	26.41	36.80	49.02	55.60

Connects Metric Tube to Metric SANYOU Port

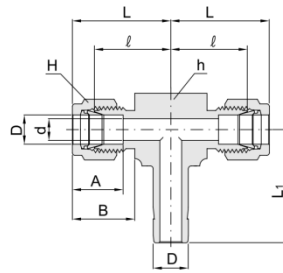
Part No.	Tube OD D	d Min.	Width across flat		B	ℓ	L	L ₁
			h(in.)	H				
SYCRTA-3M	3	1.9	3/8	12	15.3	15.7	22.3	20.5
SYCRTA-4M	4	2.2	1/2	12	16.4	18.8	25.4	23.0
SYCRTA-6M	6	4.1	1/2	14	17.7	19.6	27.0	25.1
SYCRTA-8M	8	5.6	9/16	16	18.6	21.3	28.8	27.2
SYCRTA-10M	10	7.1	11/16	19	19.5	23.9	31.5	29.5
SYCRTA-12M	12	8.8	13/16	22	22.0	25.9	36.0	37.6
SYCRTA-15M	15	11.2	1-1/16	25	22.0	28.7	38.8	41.6
SYCRTA-16M	16	12.0	1-1/16	25	22.0	28.7	38.8	41.8
SYCRTA-18M	18	13.9	1-1/16	30	22.0	29.7	39.8	42.6
SYCRTA-20M	20	15.5	30mm	32	22.0	32.5	42.6	67.1
SYCRTA-22M	22	16.1	30mm	32	22.0	32.5	42.6	47.2
SYCRTA-25M	25	19.9	1-3/8	38	26.5	36.8	49.1	55.6
SYCRTA-28M ^①	28	22.5	41mm	46	36.6	43.2	64.0	65.0

① Furnished with nut and preswaged ferrules.

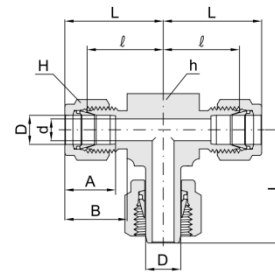
All dimensions are in millimeters unless otherwise specified. Dimensions are for reference only, subject to change.

Adjustable Branch Tee

SYCBTA



1 in. and under



Over 1 in.

Connects Fractional Tube to Fractional SANYOU Port

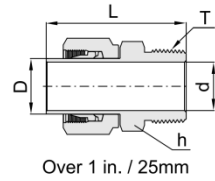
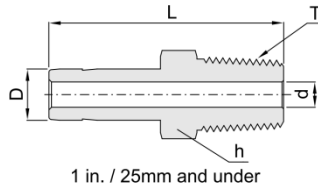
Part No.	Tube OD D		d Min.	Width across flat(in.)		A	B	∠	L	L ₁
	in.	mm		h	H					
SYCBTA-1	1/16	1.58	0.76	3/8	5/16	8.63	10.92	14.00	22.30	16.00
SYCBTA-2	1/8	3.17	2.03	3/8	7/16	12.70	15.24	15.74	22.30	20.59
SYCBTA-3	3/16	4.76	3.04	1/2	1/2	13.71	16.00	17.78	25.40	22.48
SYCBTA-4	1/4	6.35	4.32	1/2	9/16	15.24	17.78	19.55	27.00	25.00
SYCBTA-5	5/16	7.93	5.59	9/16	5/8	16.25	18.54	21.33	28.80	27.08
SYCBTA-6	3/8	9.52	6.86	5/8	11/16	16.76	19.30	23.11	31.50	28.80
SYCBTA-8	1/2	12.70	9.40	13/16	7/8	22.86	21.84	25.90	36.00	37.30
SYCBTA-10	5/8	15.87	11.94	15/16	1	24.38	21.84	28.70	38.80	41.75
SYCBTA-12	3/4	19.05	14.73	1-1/16	1-1/8	24.38	21.84	29.71	38.80	42.60
SYCBTA-14	7/8	22.22	18.28	1-3/16	1-1/4	25.90	21.84	34.54	39.80	49.39
SYCBTA-16	1	25.40	20.32	1-3/8	1-1/2	31.24	26.41	36.83	49.02	55.60

Connects Metric Tube to Metric SANYOU Port

Part No.	Tube OD D	d Min.	Width across flat		A	B	∠	L	L ₁
			h(in.)	H					
SYCBTA-3M	3	1.9	3/8	12	12.9	15.3	15.7	22.3	20.5
SYCBTA-4M	4	2.2	1/2	12	13.7	16.4	18.8	25.4	23.0
SYCBTA-6M	6	4.1	1/2	14	15.3	17.7	19.6	27.0	25.0
SYCBTA-8M	8	5.6	9/16	16	16.2	18.6	21.3	28.8	27.2
SYCBTA-10M	10	7.1	11/16	19	17.2	19.5	23.9	31.5	29.5
SYCBTA-12M	12	8.8	13/16	22	22.8	22.0	25.9	36.0	37.3
SYCBTA-15M	15	11.2	1-1/16	25	24.4	22.0	28.7	38.8	41.6
SYCBTA-16M	16	12.0	1-1/16	25	24.4	22.0	28.7	38.8	41.8
SYCBTA-18M	18	13.9	1-1/16	30	24.4	22.0	29.7	39.8	42.6
SYCBTA-20M	20	15.5	30mm	32	26.0	22.0	32.5	42.6	67.1
SYCBTA-22M	22	16.1	30mm	32	26.0	22.0	32.5	42.6	47.2
SYCBTA-25M	25	19.9	1-3/8	38	31.3	26.5	36.8	49.1	55.6
SYCBTA-28M ^①	28	22.5	41mm	46	36.6	36.6	43.2	64.0	65.0

① Furnished with nut and preswaged ferrules.

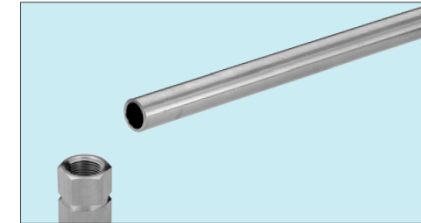
Male Adapter SYCAM



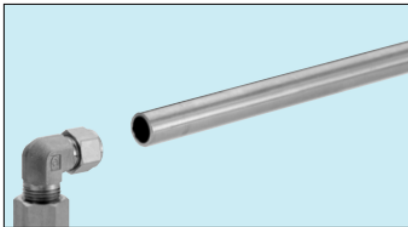
SANYOU Adapter eliminates difficult alignment problems.

Connects Fractional SANYOU Port to Female NPT Thread

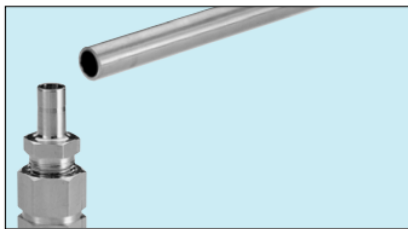
Part No.	Tube OD D		T* NPT Size	d+ Min.	Width across flat h (in.)	L
	in.	mm				
SYCAM 2-2N	1/8	3.17	1/8	2.03	7/16	29.50
SYCAM 2-4N	1/8	3.17	1/4	2.03	9/16	34.80
SYCAM 3-2N	3/16	4.76	1/8	3.04	7/16	30.22
SYCAM 3-4N	3/16	4.76	1/4	3.04	9/16	35.56
SYCAM 4-2N	1/4	6.35	1/8	4.32	7/16	31.80
SYCAM 4-4N	1/4	6.35	1/4	4.32	9/16	37.08
SYCAM 4-6N	1/4	6.35	3/8	4.32	11/16	37.84
SYCAM 4-8N	1/4	6.35	1/2	4.32	7/8	43.43
SYCAM 5-2N	5/16	7.93	1/8	4.57	7/16	32.76
SYCAM 5-4N	5/16	7.93	1/4	5.59	9/16	38.10
SYCAM 6-2N	3/8	9.52	1/8	4.83	7/16	33.50
SYCAM 6-4N	3/8	9.52	1/4	6.86	9/16	38.90
SYCAM 6-6N	3/8	9.52	3/8	6.86	11/16	39.60
SYCAM 6-8N	3/8	9.52	1/2	6.86	7/8	45.20
SYCAM 8-4N	1/2	12.70	1/4	7.00	9/16	44.50
SYCAM 8-6N	1/2	12.70	3/8	9.40	11/16	45.20
SYCAM 8-8N	1/2	12.70	1/2	9.40	7/8	50.80
SYCAM10-6N	5/8	15.87	3/8	9.50	11/16	47.40
SYCAM10-8N	5/8	15.87	1/2	11.94	7/8	52.30
SYCAM10-12N	5/8	15.87	3/4	12.70	1-1/16	52.30
SYCAM12-8N	3/4	19.05	1/2	11.94	7/8	52.30
SYCAM12-12N	3/4	19.05	3/4	14.73	1-1/16	52.30
SYCAM12-16N	3/4	19.05	1	14.73	1-3/8	57.91
SYCAM14-12N	7/8	22.22	3/4	15.75	1-1/16	54.80
SYCAM16-12N	1	25.40	3/4	15.76	1-1/16	58.70
SYCAM16-16N	1	25.40	1	20.32	1-3/8	66.00
SYCAM20-20N①	1-1/4	31.75	1-1/4	25.91	1-3/4	80.26
SYCAM24-24N①	1-1/2	38.10	1-1/2	31.75	2-1/8	94.48
SYCAM32-32N①	2	50.80	2	43.69	2-9/16	119.38



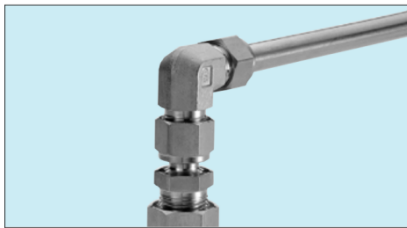
1. It is required to install tubing to a female port in a certain direction as shown.



2. With pipe connection tight, the male elbow is directed to wrong direction.



3. To avoid this, simply tighten the pipe thread of male adapter into female port.



4. Connect union elbow to male adapter by tightening the SANYOU nut while keeping the elbow in the desired direction, Then install the tubing into the other end of elbow.

*ISO Tapered Threads are available upon request.

+The d dimension is the minimum nominal opening. These fittings may have a larger opening at the pipe/straight thread end.

① Furnished with nut and preswaged ferrules.

Connects Metric SANYOU Port to Female ISO Taperad Thread

Part No.	Tube OD D	T* NPT Size	d+ Min	Width across flat h	L
SYCAM 6M-2R	6	1/8	4.1	12	32.8
SYCAM 6M-4R	6	1/4	4.1	14	38.1
SYCAM 8M-4R	8	1/4	5.6	14	39.1
SYCAM10M-4R	10	1/4	7.1	14	39.9
SYCAM10M-6R	10	3/8	7.1	17	40.6
SYCAM10M-8R	10	1/2	7.1	22	45.2
SYCAM12M-4R	12	1/4	7.1	14	46.5
SYCAM12M-6R	12	3/8	8.8	17	46.2
SYCAM12M-8R	12	1/2	8.8	22	52.0
SYCAM18M-8R	18	1/2	11.9	22	53.2
SYCAM18M-12R	18	3/4	13.9	27	53.2
SYCAM28M-16R①	28	1	22.2	35	74.7
SYCAM28M-20R①	28	1-1/4	22.4	46	76.2
SYCAM32M-20R①	32	1-1/4	26.5	46	81.0
SYCAM38M-24R①	38	1-1/2	31.8	55	92.2

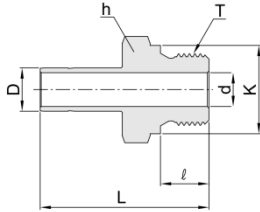
*ISO Tapered Threads are available upon request.

t The d dimensions the minimum nominal opening. These fittings may have a larger opening at the pipe/straight thread end

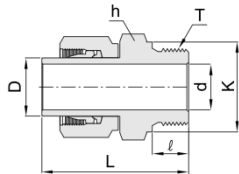
① Furnished with nut and preswaged ferrules.

Male Adapter

SYCAM-G



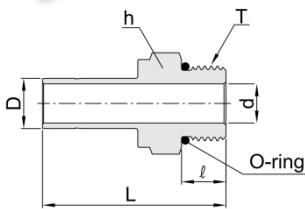
1 in. / 25mm and under.



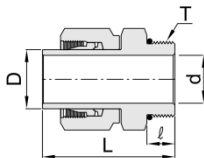
Over 1 in. / 25mm

SAE/MS Male Adapter

SYCAM-U



1 in. / 25mm and under.



Over 1 in. / 25mm

Connectors Fractional SANYOU Port to Female ISO Parallel Thread

Part No.	Tube OD D		T ISO Thread Size	d* Min.	Width across flat h (in.)	∠	L	K
	in.	mm						
SYCAM 2-2G	1/8	3.17	1/8	2.03	9/16	7.11	31.75	13.72
SYCAM 2-4G	1/8	3.17	1/4	2.03	3/4	11.17	36.32	17.78
SYCAM 4-2G	1/4	6.35	1/8	4.06	9/16	7.11	34.29	13.72
SYCAM 4-4G	1/4	6.35	1/4	4.32	3/4	11.17	38.86	17.78
SYCAM 6-4G	3/8	9.52	1/4	5.84	3/4	11.17	40.39	17.78
SYCAM 6-6G	3/8	9.52	3/8	6.86	7/8	11.17	41.15	21.59
SYCAM 8-4G	1/2	12.70	1/4	5.84	3/4	11.17	46.99	17.78
SYCAM 8-6G	1/2	12.70	3/8	7.88	7/8	11.17	47.75	21.59
SYCAM 8-8G	1/2	12.70	1/2	9.40	1-1/16	14.22	49.78	25.91
SYCAM 12-12G	3/4	19.05	3/4	14.73	1-5/16	15.75	55.88	31.75
SYCAM 16-16G	1	25.40	1	19.80	1-5/8	18.29	65.79	38.86

+The d dimension is the minimum nominal opening. These fittings may have a larger opening at the pipe/straight thread end.

Connectors Metric SANYOU Port to Female ISO Parallel Thread

Part No.	Tube OD D	T ISO Thread Size	d* Min	Width across flat h	∠	L	K
SYCAM 6M-2G	6	1/8	4.0	14	7.1	34.3	13.7
SYCAM 6M-4G	6	1/4	4.1	19	11.2	38.9	17.9
SYCAM 8M-4G	8	1/4	5.6	19	11.2	39.6	17.9
SYCAM 10M-4G	10	1/4	5.9	19	11.2	40.4	17.9
SYCAM 10M-6G	10	3/8	7.1	22	11.2	41.1	21.7
SYCAM 10M-8G	10	1/2	7.1	27	14.2	43.2	25.9
SYCAM 12M-4G	12	1/4	5.9	19	11.2	47.0	17.9
SYCAM 12M-6G	12	3/8	7.9	22	11.2	47.8	21.7
SYCAM 12M-8G	12	1/2	8.8	27	14.2	49.8	25.9
SYCAM 18M-8G	18	1/2	11.9	27	14.2	51.3	25.9
SYCAM 18M-12G	18	3/4	13.9	35	15.7	55.9	31.9
SYCAM 28M-16G①	28	1	19.8	41	18.3	71.9	39.0
SYCAM 28M-20G①	28	1-1/4	22.5	50	19.8	75.4	49.0
SYCAM30M-20G①	30	1-1/4	24.3	50	19.8	79.8	49.0
SYCAM 32M-20G①	32	1-1/4	26.5	50	19.8	80.8	49.0
SYCAM 38M-24G①	38	1-1/2	31.6	55	22.1	91.9	54.7

+The d dimension is the minimum nominal opening. These fittings may have a larger opening at the pipe/straight thread end

① Furnished with nut and preswaged ferrules.

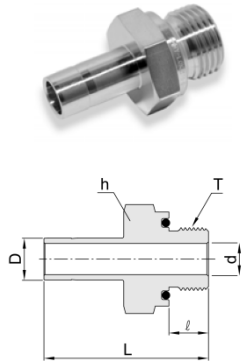
Connectors Fractional SANYOU Port to SAE/MS Straight Thread Boss

Part No.	Tube OD D		T SAE/MS Straight Thread Size	d* min.	Width across flat h (in)	∠	L	O-ring Uniform Size Number
	in	mm						
SYCAM 2-2U	1/8	3.17	5/16-24	2.03	7/16	7.62	30.48	-902
SYCAM 4-4U	1/4	6.35	7/16-20	4.32	9/16	9.14	35.31	-904
SYCAM 6-4U	3/8	9.52	7/16-20	5.08	9/16	9.14	37.08	-904
SYCAM 6-6U	3/8	9.52	9/16-18	6.86	11/16	9.90	38.61	-906
SYCAM 6-8U	3/8	9.52	3/4-16	6.86	7/8	11.17	40.64	-908
SYCAM 8-6U	1/2	12.7	9/16-18	7.11	11/16	9.90	44.19	-906
SYCAM 8-8U	1/2	12.7	3/4-16	9.40	7/8	11.17	46.23	-908
SYCAM 10-10U	5/8	15.87	7/8-14	11.94	1	12.70	49.27	-910
SYCAM 12-12U	3/4	19.05	1-1/16-12	14.73	1-1/4	14.98	53.34	-912
SYCAM 16-16U	1	25.40	1-5/16-12	20.32	1-1/2	14.98	61.21	-916
SYCAM 20-20U①	1-1/4	31.75	1-5/8-12	25.91	1-7/8	14.98	71.37	-920
SYCAM 24-24U①	1-1/2	38.10	1-7/8-12	31.75	2-1/8	14.98	83.31	-924
SYCAM 32-32U①	2	50.80	2-1/2-12	43.69	2-3/4	14.98	107.44	-932

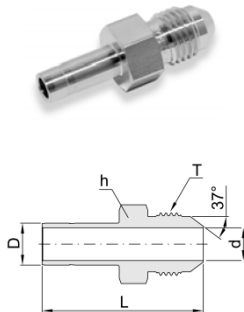
+ The d dimension is the minimum nominal opening. These fittings may have a larger opening at the pipe/straight thread end.

① Furnished with nut and preswaged ferrules.

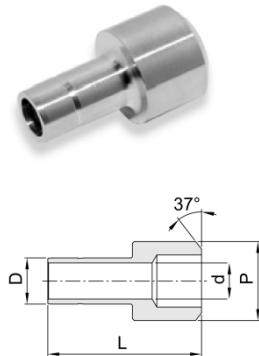
O-Seal Straight Thread Male Adapter
SYCAMOS



37° Flared Adapter
SYCAMF



Weld Adapter
SYSAPW



Connectors Fractional SANYOU Port to O-Seal Female Straight Thread

Part No.	Tube OD D		Straight Thread T(U)	d min.	Width across flat	/	L	O-ring Uniform Size Number
	in	mm			h			
SYCAMOS 2-2U	1/8	3.17	5/16-24	2.03	9/16	8.63	32.51	-011
SYCAMOS 3-3U	1/8	3.17	3/8-24	3.05	5/8	9.65	35.05	-013
SYCAMOS 4-4U	1/4	6.35	7/16-20	4.32	3/4	10.41	39.11	-013
SYCAMOS 5-5U	5/16	7.93	1/2-20	5.59	7/8	11.18	41.65	-112
SYCAMOS 6-6U	3/8	9.52	9/16-18	6.86	15/16	11.94	43.18	-113
SYCAMOS 8-8U	1/2	12.70	3/4-16	9.40	1-1/8	11.94	49.53	-116

Connectors Fractional SANYOU Port to 37° Flared Tube

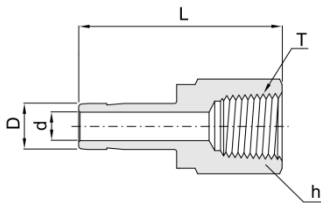
Part No.	Tube OD D		AN Tube OD D		Straight Thread T(U)	d Min.	Width across flat	L
	in	mm	in	mm			h	
SYCAMF 4-4	1/4	6.35	1/4	6.35	7/16-20	4.32	1/2	37.08
SYCAMF 6-4	3/8	9.52	1/4	6.35	7/16-20	4.32	1/2	38.86
SYCAMF 6-6	3/8	9.52	3/8	9.52	9/16-18	6.86	5/8	39.62
SYCAMF 8-8	1/2	12.70	1/2	12.70	3/4-16	9.40	13/16	48.51
SYCAMF 12-12	3/4	19.05	3/4	19.05	1-1/16-12	14.73	1-1/8	56.13
SYCAMF 16-16	1	25.40	1	25.40	1-5/16-12	20.32	1-3/8	65.53

Connectors Fractional SANYOU Port to Pipe

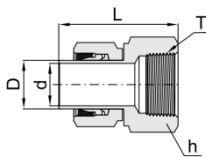
Part No.	Tube OD D		Male Pipe Size P		d Min.	L
	in	mm	Nom.	mm		
SYSAPW 4T-4P	1/4	6.35	1/4	13.70	4.32	28.96
SYSAPW 6T-8P	3/8	9.52	1/2	21.30	6.86	37.08
SYSAPW 8T-8P	1/2	12.70	1/2	21.30	9.40	42.16
SYSAPW 8T-12P	1/2	12.70	3/4	26.67	9.40	42.67
SYSAPW12T-12P	3/4	19.05	3/4	26.67	14.73	47.50

All dimensions are in millimeters unless otherwise specified. Dimensions are for reference only, subject to change.

Female Adapter
SYCAF



1 in. / 25mm and under.



Over 1 in. / 25mm

Connects Fractional SANYOU Port to Male NPT Thread

Part No.	Tube OD D		T* NPT Size	d Min.	Width across flat h (in.)	L
	in	mm				
SYCAF 2-2N	1/8	3.17	1/8	2.03	9/16	31.50
SYCAF 2-4N	1/8	3.17	1/4	2.03	3/4	35.30
SYCAF 3-2N	3/16	4.76	1/8	3.04	9/16	32.00
SYCAF 3-4N	3/16	4.76	1/4	3.04	3/4	35.81
SYCAF 4-2N	1/4	6.35	1/8	4.32	9/16	33.02
SYCAF 4-4N	1/4	6.35	1/4	4.32	3/4	37.10
SYCAF 4-6N	1/4	6.35	3/8	4.32	7/8	39.37
SYCAF 4-8N	1/4	6.35	1/2	4.32	1-1/16	45.50
SYCAF 5-2N	5/16	7.93	1/8	5.59	9/16	34.29
SYCAF 5-4N	5/16	7.93	1/4	5.59	3/4	37.59
SYCAF 6-2N	3/8	9.52	1/8	6.86	9/16	34.29
SYCAF 6-4N	3/8	9.52	1/4	6.86	3/4	38.10
SYCAF 6-6N	3/8	9.52	3/8	6.86	7/8	40.38
SYCAF 6-8N	3/8	9.52	1/2	6.86	1-1/16	46.73
SYCAF 8-4N	1/2	12.70	1/4	9.40	3/4	43.43
SYCAF 8-6N	1/2	12.70	3/8	9.40	7/8	45.46
SYCAF 8-8N	1/2	12.70	1/2	9.40	1-1/16	51.80
SYCAF10-6N	5/8	15.87	3/8	11.94	7/8	48.26
SYCAF10-8N	5/8	15.87	1/2	11.94	1-1/16	53.00
SYCAF10-12N	5/8	15.87	3/4	11.94	1-5/16	55.37
SYCAF12-8N	3/4	19.05	1/2	14.73	1-1/16	52.83
SYCAF12-12N	3/4	19.05	3/4	14.73	1-5/16	54.86
SYCAF12-16N	3/4	19.05	1	14.73	1-5/8	58.42
SYCAF14-12N	7/8	22.22	3/4	18.20	1-5/16	57.15
SYCAF16-12N	1	25.40	3/4	20.32	1-5/16	60.70
SYCAF16-16N	1	25.40	1	20.32	1-5/8	64.26
SYCAF20-20N ^①	1-1/4	31.75	1-1/4	25.91	2-1/8	77.72
SYCAF24-24N ^①	1-1/2	38.10	1-1/2	31.75	2-3/8	88.90
SYCAF32-32N ^①	2	50.80	2	43.69	2-7/8	107.44

*ISO Tapered Threads are available upon request.

① Furnished with nut and preswaged ferrules.

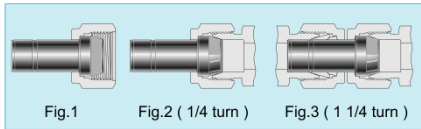
Connects Metric SANYOU Port to Male ISO Tapered Thread

Part No.	Tube OD D	T* NPT Size	d Min	Width across flat h	L
SYCAF 3M-2R	3	1/8	1.9	14	31.15
SYCAF 6M-2R	6	1/8	4.1	14	32.50
SYCAF 6M-4R	6	1/4	4.1	19	37.10
SYCAF 8M- 4R	8	1/4	5.6	19	37.60
SYCAF10M- 4R	10	1/4	7.1	19	38.10
SYCAF10M-6R	10	3/8	7.1	22	40.10
SYCAF10M-8R	10	1/2	7.1	27	46.50
SYCAF12M-4R	12	1/4	8.8	19	43.70
SYCAF12M-6R	12	3/8	8.8	22	46.00
SYCAF12M-8R	12	1/2	8.8	27	52.30
SYCAF18M-12R	18	3/4	13.9	35	54.80

*NPT Threads are available upon request.

Installation Instruction

Port Connectors



Machined Ferrule End & Plug

While holding fitting body steady, tighten the port connector 1/4 turn from the finger-tight position

For 1/16", 1/8", and 3/16". ; 2mm 3mm and 4mm tube fittings, tighten the port connector 1/8 turn.

For over 1 in. and over 25mm tube fittings, tighten the port connector one quarter turn.

Reassembly

You may disassemble and reassemble SANYOU port connectors many times. Make subsequent connections by slightly tightening with a wrench after snugging the nut by hand.

Tube adapter End

1. Insert the tube adapter into the SANYOU tube fittings until tubing end is firmly seated on the body shoulder and make sure the nut is hand tight. (Fig.3)

2. Mark the nut at 9 o'clock position for identification of starting point.

3. Tighten the nut 1 1/4turns*with a wrench keeping the fitting body steady with a back-up wrench, when the nut is tightened 1 1/4 turns, the mark at 9 o'clock position before tightening will be at 12o'clock position.

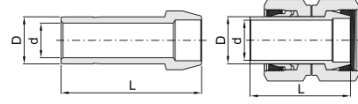
Note*: Only 3/4 turn from finger tight is required for 1/16", 1/8", 3/16" 2mm, 3mm, and 4mm sizes.

Reassembly

See SANYOU tube fittings reassembly, page71

Port Connector

SYCPC



1 in. / 25mm and under.

Over 1 in. / 25mm

Connects Two Fractional SANYOU Ports

Part No.	Tube OD D		d Min.	L
	in	mm		
SYCPC-1	1/16	1.58	0.76	13.72
SYCPC-2	1/8	3.17	2.03	22.35
SYCPC-4	1/4	6.35	4.32	24.89
SYCPC-5	5/16	7.93	5.59	25.91
SYCPC-6	3/8	9.52	6.86	26.67
SYCPC-8	1/2	12.70	9.40	36.32
SYCPC-12	3/4	19.05	14.73	37.85
SYCPC-16	1	25.40	20.32	49.28

Connects Two Metric SANYOU Ports

Part No.	Tube OD D	d Min.	L
SYCPC-3M	3	1.9	22.20
SYCPC-4M	4	2.2	23.21
SYCPC-6M	6	4.1	25.00
SYCPC-8M	8	5.6	26.00
SYCPC-10M	10	7.1	27.10
SYCPC-12M	12	8.8	36.20
SYCPC-15M	15	11.2	37.80
SYCPC-16M	16	12.0	37.80
SYCPC-18M	18	13.9	37.80
SYCPC-20M	20	15.5	39.40
SYCPC-22M	22	16.1	38.97
SYCPC-25M	25	19.9	49.30
SYCPC-28M①	28	22.5	63.50
SYCPC-32M①	32	26.5	69.70
SYCPC-38M①	38	31.6	81.90

①Furnished with nut and preswaged ferrules.

Connects Two Fractional SANYOU Ports

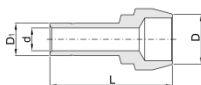
Part No.	Tube OD D		Reduced OD D ₁		d Min.	L
	in	mm	in	mm		
SYCPR 2-1	1/8	3.17	1/16	1.58	0.76	18.30
SYCPR 4-1	1/4	6.35	1/16	1.58	0.76	19.05
SYCPR 4-2	1/4	6.35	1/8	3.17	2.03	22.86
SYCPR 6-2	3/8	9.52	1/8	3.17	2.03	23.37
SYCPR 6-4	3/8	9.52	1/4	6.35	4.32	25.40
SYCPR 8-4	1/2	12.70	1/4	6.35	4.32	29.72
SYCPR 8-6	1/2	12.70	3/8	9.52	6.86	30.73
SYCPR 12-8	3/4	19.05	1/2	12.70	9.40	37.85
SYCPR 16-8	1	25.40	1/2	12.70	9.40	42.93
SYCPR 16-12	1	25.40	3/4	19.05	14.73	43.69

Connects Two Metric SANYOU Ports

Part No.	Tube OD D	Reduced OD D ₁	d Min.	L
SYCPR 6M-3M	6	3	1.9	22.90
SYCPR 8M-6M	8	6	4.1	25.40
SYCPR 10M -6M	10	6	4.1	25.80
SYCPR 10M-8M	10	8	5.6	26.30
SYCPR 12M-6M	12	6	4.1	29.60
SYCPR 12M-8M	12	8	5.6	30.10
SYCPR 12M-10M	12	10	7.1	30.60
SYCPR 16M-6M	16	6	4.1	29.37
SYCPR 16M-12M	16	12	8.8	37.50
SYCPR 28M-25M	28	25	19.9	56.50
SYCPR 32M-25M	32	25	19.9	60.30
SYCPR 38M-25M	38	25	19.9	65.80

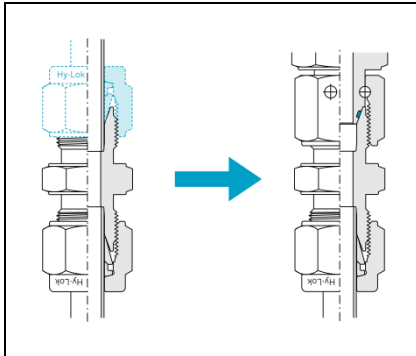
Reducing Port Connector

SYCPR



All dimensions are in millimeters unless otherwise specified. Dimensions are for reference only, subject to change.

Features & Application



1. Features

Assembly is easy and usability is superb than SANYOU Reducer Type tube fitting (CR) assuring the superior sealing by operating O-Ring. Also O-Ring is connected to Body nipple machined by 40° cone Ends and form O-Ring Seal by facing with Body 40° Taper. So Body Nipple should be assembled by this kinds of fact. It should be easy for storage and handling.

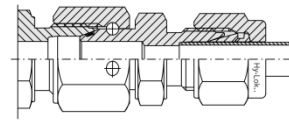
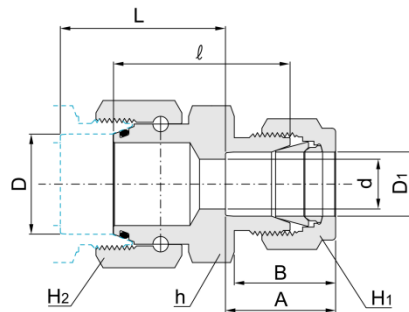
2. Application

If the place where we assemble is quite narrow, its assembly could be easy and It should not only be applied for Metric and Imperial (Inch) Size but also apply a different type of shape (Union, Elbow, Tee).

Since it has a superb sealing feature, It should be satisfied with various customer by applying different territory which need safety like a Gas Line.

Swivel Reducing Adapter

SYCSRA



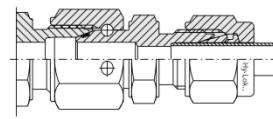
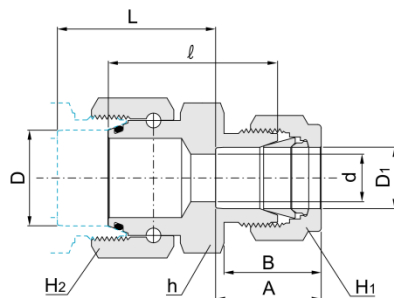
Application

Connects Fractional Tubes

Part No.	Tube OD		Tube OD		d Min.	Width across flat (in.)			A	B	ℓ	L
	D	D ₁	D ₁	D ₁		h	H ₁	H ₂				
SYCSRA 4-1	1/4	6.36	1/16	1.58	1.27	7/16	5/16	9/16	8.63	10.92	23.2	23.15
SYCSRA 4-2	1/4	6.35	1/8	3.17	2.30	7/16	7/16	9/16	12.70	15.24	24.7	23.15
SYCSRA 4-3	1/4	9.52	3/16	4.76	3.00	7/16	1/2	9/16	13.71	16.00	25.6	23.25
SYCSRA 4-4	1/4	6.35	1/4	6.35	4.82	1/2	9/16	9/16	15.24	17.78	26.7	23.50
SYCSRA 4-6	1/4	6.35	3/8	9.52	4.82	5/8	11/16	9/16	16.76	19.30	29.2	24.45
SYCSRA 4-8	1/4	6.35	1/2	12.70	4.82	13/16	7/8	9/16	22.86	21.84	29.9	22.00
SYCSRA 6-2	3/8	6.35	1/8	3.17	2.30	1/2	7/16	11/16	12.70	15.24	25.1	25.02
SYCSRA 6-4	3/8	9.52	1/4	6.35	4.82	1/2	9/16	11/16	15.24	17.78	26.7	24.97
SYCSRA 6-8	3/8	9.52	1/2	12.70	7.11	13/16	7/8	11/16	22.86	21.84	29.9	23.47
SYCSRA 8-2	1/2	12.70	1/8	3.17	2.30	11/16	7/16	7/8	12.70	15.24	29.5	31.58
SYCSRA 8-4	1/2	12.70	1/4	6.35	4.82	11/16	9/16	7/8	15.24	17.78	31.1	31.53
SYCSRA 8-6	1/2	12.70	3/8	9.52	7.11	11/16	11/16	7/8	16.76	19.30	32.7	31.58
SYCSRA 8-8	1/2	12.70	1/2	12.70	10.41	13/16	7/8	7/8	22.86	21.84	33.4	29.13
SYCSRA 8-12	1/2	12.70	3/4	19.05	10.41	1-1/16	1-1/8	7/8	24.38	21.84	35.9	30.03
SYCSRA 10-6	5/8	15.87	3/8	9.52	7.11	13/16	11/16	1	16.76	19.30	33.5	33.94
SYCSRA10-8	5/8	15.87	1/2	12.70	10.41	13/16	7/8	1	22.86	21.84	33.5	30.79
SYCSRA 12-4	3/4	19.05	1/4	6.35	4.82	15/16	9/16	1-1/8	15.24	17.78	32.8	34.90
SYCSRA12-6	3/4	19.05	3/8	9.52	7.11	15/16	11/16	1-1/8	16.76	19.30	34.4	34.95
SYCSRA12-8	3/4	19.05	1/2	12.70	10.41	15/16	7/8	1-1/8	22.86	21.84	34.4	31.80
SYCSRA12-10	3/4	19.05	5/8	15.87	12.70	15/16	1	1-1/8	24.38	21.84	34.5	30.30
SYCSRA12-16	3/4	19.05	1	25.40	15.74	1-3/8	1-1/2	1-1/8	31.24	26.41	40.7	31.75
SYCSRA14-10	7/8	22.22	5/8	15.87	12.70	1-1/8	1	1-1/4	24.38	21.84	37.3	34.75
SYCSRA 16-8	1	25.40	1/2	12.70	10.41	1-1/4	7/8	1-1/2	22.86	21.84	40.8	40.66
SYCSRA 16-10	1	25.40	5/8	15.87	12.70	1-1/4	1	1-1/2	24.38	21.84	40.9	39.16
SYCSRA 16-12	1	25.40	3/4	19.05	15.74	1-1/4	1-1/8	1-1/2	24.38	21.84	40.9	39.16

Swivel Reducing Adapter

SYCSRA



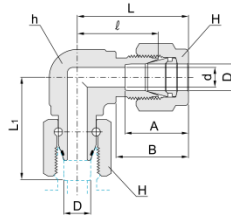
Application

Connects Metric Tubes

Part No.	Tube OD		d Min.	Width across flat			A	B	∠	L
	D	D ₁		h	H ₁	H ₂				
SYCSRA 6M-3M	6	3	2.4	12	12	14	12.9	15.3	24.7	23.09
SYCSRA 6M-4M	6	4	2.4	12	12	14	13.7	16.1	25.5	23.14
SYCSRA 6M-8M	6	8	4.8	14	16	14	16.2	18.6	27.5	23.54
SYCSRA 6M-10M	6	10	4.8	17	19	14	17.2	19.5	29.3	24.59
SYCSRA 6M-12M	6	12	4.8	22	22	14	22.8	22.0	30.1	22.19
SYCSRA 8M-6M	8	6	4.8	12	14	16	15.3	17.7	26.3	23.96
SYCSRA 8M-12M	8	12	6.3	22	22	16	22.8	22.0	30.1	23.06
SYCSRA10M-6M	10	6	4.8	16	14	19	15.3	17.7	28.6	26.86
SYCSRA10M-8M	10	8	6.3	16	16	19	16.2	18.6	29.4	26.91
SYCSRA10M-12M	10	12	7.9	22	22	19	22.8	22.0	31.0	24.56
SYCSRA12M-6M	12	6	4.8	19	14	22	15.3	17.7	31.4	31.83
SYCSRA12M-8M	12	8	6.3	19	16	22	16.2	18.6	32.4	32.08
SYCSRA12M-10M	12	10	8.0	19	19	22	17.2	19.5	33.2	32.13
SYCSRA12M-16M	12	16	9.5	24	25	22	24.4	22.0	34.4	28.53
SYCSRA12M-18M	12	18	9.5	27	30	22	24.4	22.0	35.9	30.03
SYCSRA15M-10M	15	10	7.9	22	19	25	17.2	19.5	33.7	34.16
SYCSRA15M-12M	15	12	9.5	22	22	25	22.8	22.0	33.7	30.96
SYCSRA16M-10M	16	10	7.9	22	19	25	17.2	19.5	33.7	34.19
SYCSRA16M-12M	16	12	9.5	22	22	25	22.8	22.0	33.7	30.99
SYCSRA16M-18M	16	18	12.7	27	30	25	24.4	22.0	36.0	31.69
SYCSRA16M-20M	16	20	12.7	30	32	25	26.0	22.0	37.5	33.19
SYCSRA18M-10M	18	10	7.9	24	19	30	17.2	19.5	34.5	35.03
SYCSRA18M-12M	18	12	9.5	24	22	30	22.8	22.0	34.4	31.78
SYCSRA18M-20M	18	20	15.0	30	32	30	26.0	22.0	37.5	31.63
SYCSRA18M-22M	18	22	15.0	30	32	30	26.0	22.0	37.5	31.63
SYCSRA18M-25M	18	25	15.0	35	38	30	31.3	26.5	40.6	31.48
SYCSRA20M-12M	20	12	9.5	27	22	32	22.8	22.0	36.4	35.31
SYCSRA20M-18M	20	18	15.0	27	30	32	24.4	22.0	36.4	33.66
SYCSRA20M-22M	20	22	16.0	30	32	32	26.0	22.0	37.9	33.56
SYCSRA20M-25M	20	25	16.0	35	38	32	31.3	26.5	41.0	33.41
SYCSRA22M-12M	22	12	9.5	27	22	32	22.8	22.0	36.4	35.36
SYCSRA22M-18M	22	18	15.1	27	30	32	24.4	22.0	36.4	33.71
SYCSRA22M-20M	22	20	15.9	30	32	32	26.0	22.0	37.9	33.61
SYCSRA25M-12M	25	12	9.5	32	22	38	22.8	22.0	41.1	41.69
SYCSRA25M-18M	25	18	15.1	32	30	38	24.4	22.0	40.9	39.89
SYCSRA25M-20M	25	20	15.9	32	32	38	26.0	22.0	41.1	38.49
SYCSRA25M-22M	25	22	18.3	32	32	38	26.0	22.0	41.1	38.49

All dimensions are in millimeters unless otherwise specified. Dimensions are for reference only, subject to change.

Swivel Elbow
SYCSL



Connects Fractional Tubes

Part No.	Tube OD D		d Min.	Width across flat(in.)		A	B	ℓ	L	L ₁
				h	H					
SYCSL-4	1/4	6.35	4.82	1/2	9/16	15.24	17.78	19.55	26.92	25.08
SYCSL-6	3/8	9.52	7.11	5/8	11/16	16.76	19.30	23.11	30.48	28.48
SYCSL-8	1/2	12.70	10.41	13/16	7/8	22.86	21.84	25.90	36.06	36.91
SYCSL-10	5/8	15.87	12.70	15/16	1	24.38	21.84	28.70	38.80	41.34
SYCSL-12	3/4	19.05	15.74	1-1/16	1-1/8	24.38	21.84	29.71	39.87	42.45
SYCSL-14	7/8	22.22	18.28	1-3/16	1-1/4	25.90	21.84	34.54	44.70	49.30
SYCSL-16	1	25.40	22.35	1-3/8	1-1/2	31.24	26.41	36.83	49.02	53.11

Connects Metric Tubes

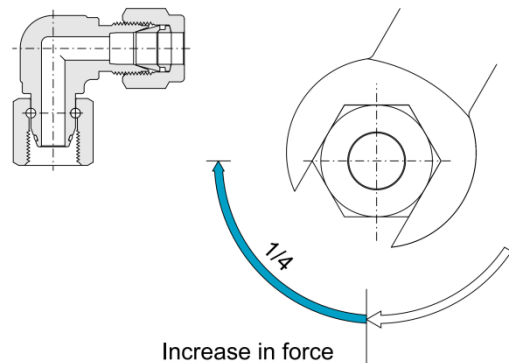
Part No.	Tube OD D	d Min.	Width across flat		A	B	ℓ	L	L ₁
			h (in.)	H					
SYCSL-6M	6	4.8	1/2	14	15.3	17.7	19.6	27.0	25.07
SYCSL-8M	8	6.3	9/16	16	16.2	18.6	21.3	28.8	26.81
SYCSL-10M	10	8.0	11/16	19	17.2	19.5	23.9	31.5	30.11
SYCSL-12M	12	9.5	13/16	22	22.8	22.0	25.9	36.0	36.91
SYCSL-15M	15	12.0	15/16	25	24.4	22.0	28.7	38.8	41.31
SYCSL-16M	16	12.7	15/16	25	24.4	22.0	28.7	38.8	41.34
SYCSL-18M	18	15.0	1-1/16	30	24.4	22.0	29.7	39.8	42.38
SYCSL-20M	20	16.0	30mm	32	26.0	22.0	32.5	42.6	47.11
SYCSL-22M	22	18.3	30mm	32	26.0	22.0	32.5	42.6	49.16
SYCSL-25M	25	21.8	1-3/8	38	31.3	26.5	36.8	49.1	53.79

Assembly instruction for swivel fitting with O-Ring

1. Oil O-ring
Tighten the nut 1/4 turn with a wrench beyond application of increased effort is required.
Hold fitting body firmly by means of wrench
2. In difficult mounting situation on large tube sizes, final assembly must be completed in vice with the fitting body.

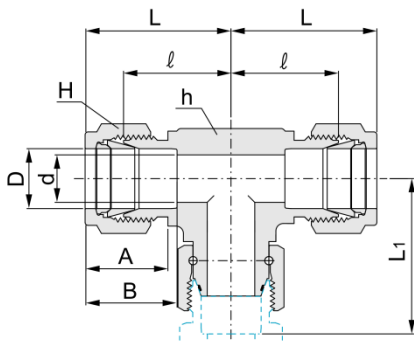
Caution!

1. Any deviating of tightening turns reduces the nominal pressure and the service life of the fitting, and may cause leakages or slip of the fitting.
2. Do not use the SANYOU gap inspection gauge with swivel ends.



Swivel Branch Tee

SYCBST



Connects Fractional Tubes

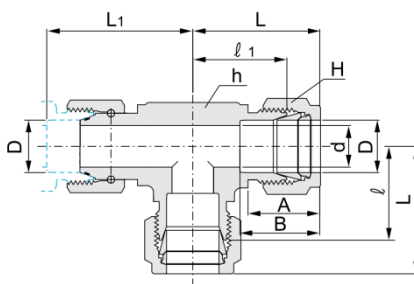
Part No.	Tube OD D	d Min.	Width across flat (in.)		A	B	∠	L	L ₁	
			h	H						
SYCBST-4	1/4	6.35	4.82	1/2	9/16	15.24	17.78	19.55	26.92	25.08
SYCBST-6	3/8	9.52	7.11	5/8	11/16	16.76	19.30	23.11	30.48	28.48
SYCBST-8	1/2	12.70	10.41	13/16	7/8	22.86	21.84	25.90	36.06	36.91
SYCBST-10	5/8	15.87	12.70	15/16	1	24.38	21.84	28.70	38.80	41.34
SYCBST-12	3/4	19.05	15.74	1-1/16	1-1/8	24.38	21.84	29.71	39.87	42.45
SYCBST-14	7/8	22.22	18.28	1-3/16	1-1/4	25.90	21.84	34.54	44.70	49.30
SYCBST-16	1	25.40	22.35	1-3/8	1-1/2	31.24	26.41	36.83	49.02	53.11

Connects Metric Tubes

Part No.	Tube OD D	d Min.	Width across flat		A	B	∠	L	L ₁
			h (in.)	H					
SYCBST-6M	6	4.8	1/2	14	15.3	17.7	19.6	27.0	25.07
SYCBST-8M	8	6.3	9/16	16	16.2	18.6	21.3	28.8	26.81
SYCBST-10M	10	8.0	11/16	19	17.2	19.5	23.9	31.5	30.11
SYCBST-12M	12	9.5	13/16	22	22.8	22.0	25.9	36.0	36.91
SYCBST-15M	15	12.0	15/16	25	24.4	22.0	28.7	38.8	41.31
SYCBST-16M	16	12.7	15/16	25	24.4	22.0	28.7	38.8	41.34
SYCBST-18M	18	15.0	1-1/16	30	24.4	22.0	29.7	39.8	42.38
SYCBST-20M	20	16.0	30mm	32	26.0	22.0	32.5	42.6	47.11
SYCBST-22M	22	18.3	30mm	32	26.0	22.0	32.5	42.6	49.16
SYCBST-25M	25	21.8	1-3/8	38	31.3	26.5	36.8	49.1	53.79

Swivel Run Tee

SYCRST



Connects Fractional Tubes

Part No.	Tube OD D	d Min.	Width across flat (in.)		A	B	∠	L	L ₁	
			h	H						
SYCRST-4	1/4	6.35	4.82	1/2	9/16	15.24	17.78	19.55	26.92	25.08
SYCRST-6	3/8	9.52	7.11	5/8	11/16	16.76	19.30	23.11	30.48	28.48
SYCRST-8	1/2	12.70	10.41	13/16	7/8	22.86	21.84	25.90	36.06	36.91
SYCRST-10	5/8	15.87	12.70	15/16	1	24.38	21.84	28.70	38.80	41.34
SYCRST-12	3/4	19.05	15.74	1-1/16	1-1/8	24.38	21.84	29.71	39.87	42.45
SYCRST-14	7/8	22.22	18.28	1-3/16	1-1/4	25.90	21.84	34.54	44.70	49.30
SYCRST-16	1	25.40	22.35	1-3/8	1-1/2	31.24	26.41	36.83	49.02	53.11

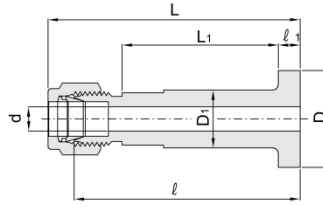
Connects Metric Tubes

Part No.	Tube OD D	d Min.	Width across flat		A	B	∠	L	L ₁
			h (in.)	H					
SYCRST-6M	6	4.8	1/2	14	15.3	17.7	19.6	27.0	25.07
SYCRST-8M	8	6.3	9/16	16	16.2	18.6	21.3	28.8	26.81
SYCRST-10M	10	8.0	11/16	19	17.2	19.5	23.9	31.5	30.11
SYCRST-12M	12	9.5	13/16	22	22.8	22.0	25.9	36.0	36.91
SYCRST-15M	15	12.0	15/16	25	24.4	22.0	28.7	38.8	41.31
SYCRST-16M	16	12.7	15/16	25	24.4	22.0	28.7	38.8	41.34
SYCRST-18M	18	15.0	1-1/16	30	24.4	22.0	29.7	39.8	42.38
SYCRST-20M	20	16.0	30mm	32	26.0	22.0	32.5	42.6	47.11
SYCRST-22M	22	18.3	30mm	32	26.0	22.0	32.5	42.6	49.16
SYCRST-25M	25	21.8	1-3/8	38	31.3	26.5	36.8	49.1	53.79

All dimensions are in millimeters unless otherwise specified. Dimensions are for reference only, subject to change.

Lapped Flange Connector

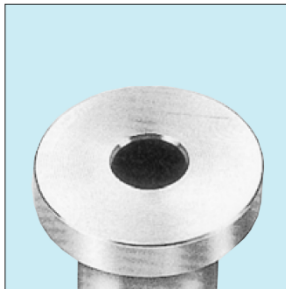
SYCFTC



SANYOU Lapped flange connector provides safe and easy connections between process lines and instruments. It provides SANYOU tube connection ends by a lap joint pipe flange to ANSIB 16.5 or BS 1560. Both "smooth" and "serrated" surface finishes are available. For identification of serrated surface finish, groove is provided.

Part No.	Tube Size	Flange Seal	Dimensions							Flange Surface Finish (Ra)
			ℓ	ℓ_1	L	L ₁	D	D ₁	d min	
SYCFTC4-SM	1/4	SM	74.9	6.5	80.77	56.5	34.5	21.1	4.8	3.2-6.3 Micrometer
SYCFTC4-SE	1/4	SE	74.9	6.5	80.77	56.5	34.5	21.1	4.8	6.3-12.5 Micrometer
SYCFTC6-SM	3/8	SM	74.9	6.5	82.30	56.5	34.5	21.1	7.1	3.2-6.3 Micrometer
SYCFTC6-SE	3/8	SE	74.9	6.5	82.30	56.5	34.5	21.1	7.1	6.3-12.5 Micrometer
SYCFTC8-SM	1/2	SM	74.9	6.5	85.09	56.5	34.5	21.1	10.4	3.2-6.3 Micrometer
SYCFTC8-SE	1/2	SE	74.9	6.5	85.09	56.5	34.5	21.1	10.4	6.3-12.5 Micrometer

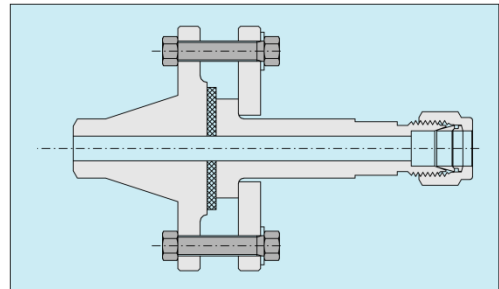
Surface Finish



Smooth (SM)



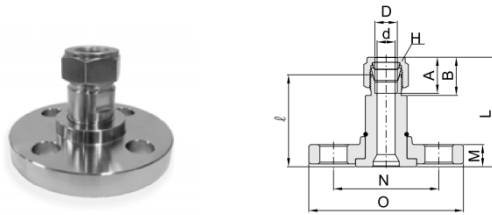
Serrated (SE)



Lapped flange connector installed with gasket between seal faces

Flange Connector

SYCIF



Connects Fractional Tubes

Part No.	Tube OD D		ASME Flange NPS	ASME class	d min	Width across flat H (in.)	A	B	M	N	L	O	
	in	mm											
SYCIF08ARA08T-2	1/2	12.70	1/2	150	10.41	7/8	22.86	21.84	15.7	60.5	52.7	62.72	88.9
SYCIF08ARB08T-2	1/2	12.70	1/2	300	10.41	7/8	22.86	21.84	22.4	66.5	62.2	72.22	95.3
SYCIF08ARA12T-2	3/4	19.05	1/2	150	15.74	1-1/8	24.38	21.84	15.7	60.5	62.2	72.22	88.9
SYCIF08ARB12T-2	3/4	19.05	1/2	300	15.00	1-1/8	24.38	21.84	22.4	66.5	62.2	72.22	95.3
SYCIF12ARA12T-2	3/4	19.05	3/4	150	15.74	1-1/8	24.38	21.84	15.7	69.9	53.0	62.99	98.6
SYCIF12ARB12T-2	3/4	19.05	3/4	300	15.74	1-1/8	24.38	21.84	25.4	82.6	62.2	72.22	117.3
SYCIF12ARC12T-2	3/4	19.05	3/4	600	15.74	1-1/8	24.38	21.84	25.4	82.6	67.5	77.72	117.3
SYCIF16ARA12T-2	3/4	19.05	1	150	15.74	1-1/8	24.38	21.84	17.5	79.2	54.3	64.29	108.0
SYCIF16ARB12T-2	3/4	19.05	1	300	15.74	1-1/8	24.38	21.84	26.9	88.9	63.8	73.82	124.0
SYCIF12ARA16T-2	1	25.40	3/4	150	20.00	1-1/2	31.24	26.41	15.7	69.9	54.9	67.06	98.6
SYCIF16ARA16T-2	1	25.40	1	150	22.35	1-1/2	31.24	26.41	17.5	79.2	56.5	68.76	108.0
SYCIF16ARB16T-2	1	25.40	1	300	22.35	1-1/2	31.24	26.41	26.9	88.9	66.0	78.26	124.0
SYCIF16ARC16T-2	1	25.40	1	600	22.35	1-1/2	31.24	26.41	26.9	88.9	73.5	85.76	124.0
SYCIF24ARB16T-2	1	25.40	1-1/2	300	22.35	1-1/2	31.24	26.41	30.2	114.3	73.0	85.26	155.4

Pressure-Temperature Ratings

Ratings are taken from ASME B16.5-2003, Table 2-2.2 and Table F2-2.2

Pressure ratings for fittings with a flange end connection and another end connection are determined by the connection with the lower pressure rating.

Working Pressure by classes, bar

Temperature °C	ASME class						
	150	300	400	600	900	1500	2500
-29 to 38	19.0	49.6	66.2	99.3	148.9	248.2	413.7
50	18.4	48.1	64.2	96.2	144.3	240.6	400.9
100	16.2	42.2	56.3	84.4	126.6	211.0	351.6
150	14.8	38.5	51.3	77.0	115.5	192.5	320.8
200	13.7	35.7	47.6	71.3	107.0	178.3	297.2
250	12.1	33.4	44.5	66.8	100.1	166.9	278.1
300	10.2	31.6	42.2	63.2	94.9	158.1	263.5
325	9.3	30.9	41.2	61.8	92.7	154.4	257.4
350	8.4	30.3	40.4	60.7	91.0	151.6	252.7
375	7.4	29.9	39.8	59.8	89.6	149.4	249.0
400	6.5	29.4	39.3	58.9	88.3	147.2	245.3
425	5.5	29.1	38.9	58.3	87.4	145.7	242.9
450	4.6	28.8	38.5	57.7	86.5	144.2	240.4
475	3.7	28.7	38.2	57.3	86.0	143.4	238.9
500	2.8	28.2	37.6	56.5	84.7	140.9	235.0
538	1.4	25.2	33.4	50.0	75.2	125.5	208.9

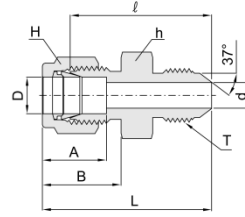
Working Pressure by classes, psig

Temperature °F	ASME class						
	150	300	400	600	900	1500	2500
-20 to 100	275	720	960	1440	2160	3600	6000
200	235	620	825	1240	1860	3095	5160
300	215	560	745	1120	1680	2795	4660
400	195	515	685	1025	1540	2570	4280
500	170	480	635	955	1435	2390	3980
600	140	450	600	900	1355	2255	3760
650	125	440	590	885	1325	2210	3680
700	110	435	580	870	1305	2170	3620
750	95	425	570	855	1280	2135	3560
800	80	420	565	845	1265	2110	3520
850	65	420	555	835	1255	2090	3480
900	50	415	555	830	1245	2075	3460
950	35	385	515	775	1160	1930	3220
1000	20	365	485	725	1090	1820	3030

All dimensions are in millimeters unless otherwise specified. Dimensions are for reference only, subject to change.

37° Flared Union

SYCFU

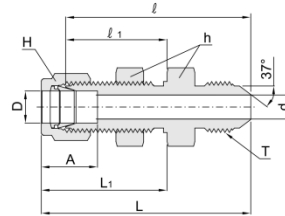


Connects Fractional Tube to 37° Flared Tube

Part No.	Tube OD D		37° Flared Tube OD		Straight Thread T(U)	d Min.	Width across flat (in.)		A	B	∠	L
	in.	mm	In.	mm			h	H				
SYCFU 1-2	1/16	1.58	1/8	3.17	5/16-24	1.27	7/16	5/16	8.63	10.92	23.36	27.17
SYCFU 2-2	1/8	3.17	1/8	3.17	5/16-24	1.52	7/16	7/16	12.70	15.24	24.89	31.49
SYCFU 2-4	1/8	3.17	1/4	6.35	7/16-20	2.28	1/2	7/16	12.70	15.24	28.44	35.05
SYCFU 4-4	1/4	6.35	1/4	6.35	7/16-20	4.31	1/2	9/16	15.24	17.78	30.22	37.59
SYCFU 5-5	5/16	7.93	5/16	7.93	1/2-20	5.84	9/16	5/8	16.25	18.54	30.98	38.35
SYCFU 6-4	3/8	9.52	1/4	6.35	7/16-20	4.31	5/8	11/16	16.76	19.30	32.25	39.62
SYCFU 6-6	3/8	9.52	3/8	9.52	9/16-18	7.11	5/8	11/16	16.76	19.30	32.25	39.62
SYCFU 8-8	1/2	12.70	1/2	12.70	3/4-16	9.90	13/16	7/8	22.86	21.84	35.81	45.97
SYCFU12-12	3/4	19.05	3/4	19.05	1-1/16-12	15.49	1-1/8	1-1/8	24.38	21.84	43.18	53.34
SYCFU16-16	1	25.40	1	25.40	1-5/16-12	21.33	1-3/8	1-1/2	31.24	26.41	49.27	61.46

37° Flared Bulkhead Union

SYCBFU

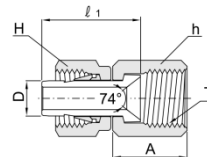


Connects Fractional Tube to 37° Flared Tube

Part No.	Tube OD D		37° Flared Tube OD		Straight Thread T(U)	d Min.	Width across flat (in.)		A	B	∠	L	L ₁	Panel Hole Drill Size	Panel Max. Thickness
	in	mm	in.	mm			h	H							
SYCBFU 4-4	1/4	6.35	1/4	6.35	7/16-20	4.31	5/8	9/16	15.24	46.48	26.16	53.84	33.52	11.50	10.16
SYCBFU 6-6	3/8	9.52	3/8	9.52	9/16-18	7.11	3/4	11/16	16.76	49.78	29.46	57.15	36.83	14.68	11.17
SYCBFU 8-8	1/2	12.70	1/2	12.70	3/4-16	9.90	15/16	7/8	22.86	55.62	31.75	65.78	41.91	19.44	12.70
SYCBFU12-12	3/4	19.05	3/4	19.05	1-1/16-12	15.49	1-3/16	1-1/8	24.38	68.83	37.33	78.99	47.49	25.79	16.76
SYCBFU16-16	1	25.40	1	25.40	1-5/16-12	21.33	1-5/8	1-1/2	31.24	80.26	45.21	92.45	57.40	33.73	19.05

37° Flared Adapter

SYCFA



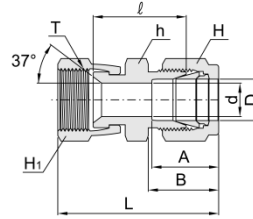
Connects Fractional SANYOU Port to Male AN

Part No.	Tube OD D		37° Flared Tube OD		Straight Thread T(U)	Width across flat(in.)		A	∠
	in	mm	in	mm		h	H		
SYCFA 2-2	1/8	3.17	1/8	3.17	5/16-24	3/8	7/16	13.71	18.54
SYCFA 2-4	1/8	3.17	1/4	6.35	7/16-20	9/16	7/16	15.50	19.05
SYCFA 4-4	1/4	6.35	1/4	6.35	7/16-20	9/16	9/16	15.50	21.33
SYCFA 6-6	3/8	9.52	3/8	9.52	9/16-18	11/16	11/16	18.28	24.89
SYCFA 8-8	1/2	12.70	1/2	12.70	3/4 -16	7/8	7/8	21.59	33.00

*From Air Force and Navy Standard for 37 degree flared fittings (SAE J514)

37° Flared Swivel Union

SYCFFSU

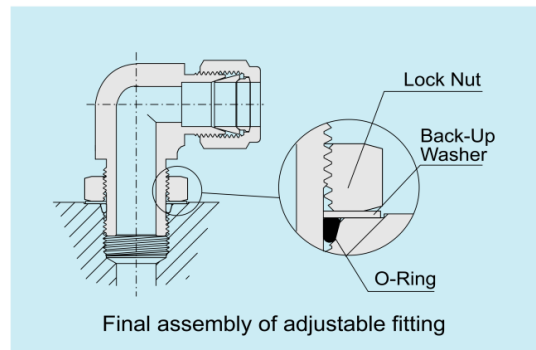


Connects Fractional Tubes

Part No.	Tube OD D		37° Flared Tube OD		Straight Thread T(U)	d min.	Width across flat(in.)			A	B	C	L
	in.	mm	in.	mm			h	H	H ₁				
SYCFFSU 4-4	1/4	6.35	1/4	6.35	7/16-20	4.40	1/2	9/16	9/16	15.24	17.78	23.80	31.17
SYCFFSU 6-6	3/8	9.52	3/8	9.52	9/16-18	7.10	5/8	11/16	11/16	16.76	19.30	27.30	34.67
SYCFFSU 8-8	1/2	12.70	1/2	12.70	3/4-16	10.41	13/16	7/8	7/8	22.86	21.84	29.00	39.16
SYCFFSU10-10	5/8	15.87	5/8	15.87	7/8-14	12.30	15/16	1	1	24.38	21.84	31.00	41.16
SYCFFSU12-12	3/4	19.05	3/4	19.05	1-1/16-12	15.74	1-1/8	1-1/8	1-1/4	24.38	21.84	33.30	43.46
SYCFFSU16-16	1	25.40	1	25.40	1-5/16-12	22.35	1-3/8	1-1/2	1-1/2	31.24	26.41	39.10	51.29

Adjustable SAE/MS Straight Thread Fittings

These adjustable or positionable fittings are useful in that the direction of SANYOU tube fittings end can be oriented into desired direction with ease. they can be installed on tanks or vessels without welding or brazing. Viton O-ring is standard, and other materials are available upon request

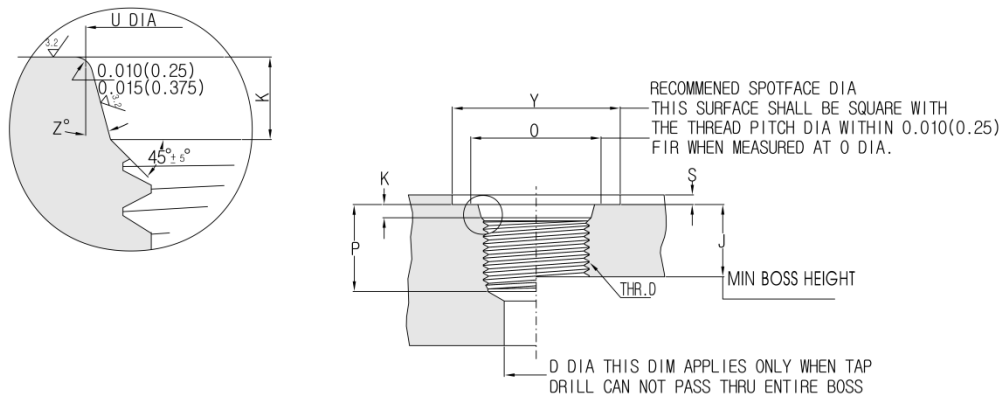


Installation Instructions

<p>1. Lubricate O-ring with lubricant compatible with system and O-ring material and place it over the groove close to metal back-up washer.</p> <p>Fig.1 Lock Nut Backed Off</p>	<p>2. Screw fitting into the SAE straight thread boss until the washer contacts the face of the boss.</p> <p>Fig.2 Fitting Installed Hight</p>	<p>3. Position the fitting by backing it out no more than one turn.</p> <p>Fig.3 Fitting Backed Off for Alignment (1 Turn Maximum)</p>	<p>4. Hold the fitting in position and tighten the locknut until the washer contacts the face of the boss.</p> <p>Fig.4 Fitting Lock Nut Tightened to Appropriate Torque</p>
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All dimensions are in millimeters unless otherwise specified. Dimensions are for reference only, subject to change.

SAE /MS Internal Straight Thread Boss



Data for SAE /MS Straight thread Boss

(reprinted from 'Hydraulic Tube Fittings-SAE J1926/1 Port Dimensions of SAE Standard.')

Nom Tube OD	Thread Size	D Min.	J Min.	K	O Min.	P Min.	U	Y	S Max	Z
1/8	5/16-24	1.6	10.0	1.9	11	12.0	9.1	17	1.6	12°
3/16	3/8-24	3.2	10.0	1.9	13	12.0	10.7	19	1.6	12°
1/4	7/16-20	4.4	11.5	2.4	15	14.0	12.4	21	1.6	12°
5/16	1/2-20	6.0	11.5	2.4	16	14.0	14.0	23	1.6	12°
3/8	9/16-18	7.5	12.7	2.5	18	15.5	15.6	25	1.6	12°
1/2	3/4-16	10.0	14.3	2.5	22	17.5	20.6	30	2.4	15°
5/8	7/8-14	12.5	16.7	2.5	26	20.0	23.9	34	2.4	15°
3/4	1-1/16-12	16.0	19.0	3.3	32	23.0	29.2	41	2.4	15°
7/8	1-3/16-12	18.0	19.0	3.3	35	23.0	32.3	45	2.4	15°
1	1-5/16-12	21.0	19.0	3.3	38	23.0	35.5	49	3.2	15°
1-1/4	1-5/8-12	27.0	19.0	3.3	48	23.0	43.5	58	3.2	15°
1-1/2	1-7/8-12	33.0	19.0	3.3	54	23.0	49.8	65	3.2	15°
2	2-1/2-12	70.0	19.0	3.3	70	23.0	65.7	88	3.2	15°

- Diameter U shall be concentric with thread pitch diameter within 0.13 full indicator reading(FIR), and shall be free from longitudinal and spiral tool marks. Angular tool marks up to 2.5 Micro meter max. shall be permissible
- Maximum recommended spotface depth to permit sufficient wrench grip for proper tightening of the fitting or locknut
- If face of boss is on a machined surface, dimensions Y and S need not apply as long as R 0.25/0.375 is maintained to avoid damage to the O-Ring during installation.
- Tap drill depths given require use of a bottoming taps to produce the specified full thread lengths. Where standard taps are used, the tap drill depths must be increased accordingly.
- Figures are for reference only, as any boss can be used for a tubing size depending upon other design criteria.

O-Ring Dimensions for SAE /MS Bosses

Standard O-Ring is Viton other materials are available upon request.

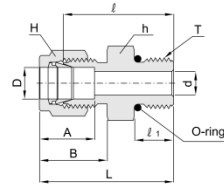
Part Size	Nominal Tube OD	Uniform Size Number	Dimension	
			I. D. in	Cross Section in
2	1/8	902	.239	.064
3	3/16	903	.301	.064
4	1/4	904	.351	.072
5	5/16	905	.414	.072
6	3/8	906	.468	.078
8	1/2	908	.644	.087
10	5/8	910	.755	.097

Part Size	Nominal Tube OD	Uniform Size Number	Dimension	
			I. D. in	Cross Section in
12	3/4	912	.924	.116
14	7/8	914	1.048	.116
16	1	916	1.171	.116
20	1-1/4	920	1.475	.118
24	1-1/2	924	1.720	.118
32	2	932	2.337	.118

SANYOU Tube Fittings

SAE/MS Male Connector

SYCSC



Connects Fractional Tube to SAE /MS Straight Thread Boss

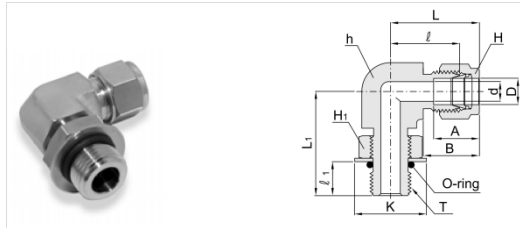
Part No.	Tube OD D		Straight Thread T(U)	d ⁺ Min.	Width across flat (in.)		A	B	∠	α	L	O-Ring Uniform Size Number
	in.	mm			h	H						
SYCSC 2-2U	1/8	3.17	5/16-24	2.28	7/16	7/16	12.70	15.24	23.36	7.62	29.97	-902
SYCSC 2-4U	1/8	3.17	7/16-20	2.28	9/16	7/16	12.70	15.24	24.89	9.14	31.49	-904
SYCSC 4-4U	1/4	6.35	7/16-20	4.82	9/16	9/16	15.24	17.78	26.67	9.14	34.03	-904
SYCSC 4-6U	1/4	6.35	9/16-18	4.82	11/16	9/16	15.24	17.78	28.19	9.90	35.56	-906
SYCSC 4-8U	1/4	6.35	3/4-16	4.82	7/8	9/16	15.24	17.78	30.22	11.17	37.59	-908
SYCSC 4-10U	1/4	6.35	7/8-14	4.82	1	9/16	15.24	17.78	33.27	12.70	40.64	-910
SYCSC 5-5U	5/16	7.93	1/2-20	5.84	5/8	5/8	16.25	18.54	27.43	9.14	34.79	-905
SYCSC 6-4U	3/8	9.52	7/16-20	5.08	5/8	11/16	16.76	19.30	28.19	9.14	35.56	-904
SYCSC 6-6U	3/8	9.52	9/16-18	7.11	11/16	11/16	16.76	19.30	29.71	9.90	37.08	-906
SYCSC 6-8U	3/8	9.52	3/4-16	7.11	7/8	11/16	16.76	19.30	31.75	11.17	39.11	-908
SYCSC 6-10U	3/8	9.52	7/8-14	7.11	1	11/16	16.76	19.30	34.79	12.70	42.16	-910
SYCSC 8-6U	1/2	12.70	9/16-18	7.11	13/16	7/8	22.86	21.84	28.95	9.90	39.11	-906
SYCSC 8-8U	1/2	12.70	3/4-16	10.41	7/8	7/8	22.86	21.84	31.75	11.17	41.91	-908
SYCSC 8-10U	1/2	12.70	7/8-14	10.41	1	7/8	22.86	21.84	34.79	12.70	44.95	-910
SYCSC 8-12U	1/2	12.70	1-1/16-12	10.41	1-1/4	7/8	22.86	21.84	38.86	14.98	49.02	-912
SYCSC10-8U	5/8	15.87	3/4-16	10.66	15/16	1	24.38	21.84	31.75	11.17	41.91	-908
SYCSC10-10U	5/8	15.87	7/8-14	12.70	1	1	24.38	21.84	35.05	12.70	45.21	-910
SYCSC12-8U	3/4	19.05	3/4-16	10.66	1-1/16	1-1/8	24.38	21.84	35.81	11.17	45.97	-908
SYCSC12-12U	3/4	19.05	1-1/16-12	15.74	1-1/4	1-1/8	24.38	21.84	38.86	14.98	49.02	-912
SYCSC14-14U	7/8	22.22	1-3/16-12	18.28	1-3/8	1-1/4	25.90	21.84	38.86	14.98	49.02	-914
SYCSC16-12U	1	25.40	1-1/16-12	16.76	1-3/8	1-1/2	31.24	26.41	41.14	14.98	53.34	-912
SYCSC16-16U	1	25.40	1-5/16-12	22.35	1-1/2	1-1/2	31.24	26.41	42.16	14.98	54.35	-916
SYCSC20-20U	1-1/4	31.75	1-5/8-12	27.68	1-7/8	1-7/8	41.14	38.86	46.22	14.98	68.32	-920
SYCSC24-24U	1-1/2	38.10	1-7/8-12	34.03	2-1/8	2-1/4	50.03	45.21	50.54	14.98	77.72	-924
SYCSC32-32U	2	50.80	2-1/2-12	45.97	2-3/4	3	67.56	62.73	64.26	14.98	101.60	-932

*The d dimension is the minimum nominal opening these fittings may have a larger opening at the pipe/straight thread end.

All dimensions are in millimeters unless otherwise specified. Dimensions are for reference only, subject to change.

Positionable Male Elbow

SYCSLA



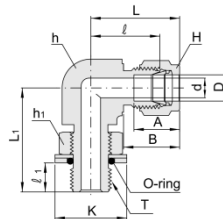
Connects Fractional Tube to SAE/MS Straight Thread Boss

Part No.	Tube OD D		Straight Thread T(U)	d* Min.	Width across flat (in.)			A	B	∠	∠	L	L ₁	K	O-Ring Uniform Size Number
	in.	mm			h	H	H ₁								
SYCSLA 4-4U	1/4	6.35	7/16-20	4.82	1/2	9/16	9/16	15.24	17.78	21.08	9.90	28.44	28.44	16.51	-904
SYCSLA 4-6U	1/4	6.35	9/16-18	4.82	5/8	9/16	11/16	15.24	17.78	23.11	11.17	30.48	32.25	20.06	-906
SYCSLA 5-5U	5/16	7.93	1/2 -20	5.84	9/16	5/8	5/8	16.25	18.54	22.86	9.90	30.22	29.46	18.28	-905
SYCSLA 6-6U	3/8	9.52	9/16-18	7.11	5/8	11/16	11/16	16.76	19.30	24.63	11.17	32.00	32.25	20.06	-906
SYCSLA 6-8U	3/8	9.52	3/4 -16	7.11	13/16	11/16	7/8	16.76	19.30	27.43	12.70	34.79	37.84	25.65	-908
SYCSLA 8-8U	1/2	12.70	3/4 -16	10.41	13/16	7/8	7/8	22.86	21.84	27.43	12.70	37.59	37.84	25.65	-908
SYCSLA10-10U	5/8	15.87	7/8 -14	12.70	1	1	1	24.38	21.84	29.46	14.22	39.62	43.43	29.46	-910
SYCSLA12-12U	3/4	19.05	1-1/16-12	15.74	1-1/16	1-1/8	1-1/4	24.38	21.84	31.24	16.76	41.40	48.76	36.57	-912
SYCSLA14-14U	7/8	22.22	1-3/16-12	18.28	1-1/4	1-1/4	1-3/8	25.90	21.84	33.02	16.76	43.18	50.54	40.38	-914
SYCSLA16-16U	1	25.40	1-5/16-12	22.35	1-3/8	1-1/2	1-1/2	31.24	26.41	38.35	16.76	50.54	53.59	43.94	-916
SYCSLA20-20U	1-1/4	31.75	1-5/8-12	27.68	1-11/16	1-7/8	1-7/8	41.14	38.86	45.72	16.76	67.81	58.16	54.86	-920
SYCSLA24-24U	1-1/2	38.10	1-7/8-12	34.03	2	2-1/4	2-1/8	50.03	45.21	50.80	16.76	77.97	60.45	62.23	-924
SYCSLA32-32U	2	50.80	2-1/2 -12	45.97	2-3/4	3	2-3/4	67.56	62.73	69.85	16.76	107.18	71.62	80.26	-932

+ The d dimension is the minimum nominal opening. These fittings may have a larger opening at the pipe/straight thread end.

Positionable

SYCSLA



Connects Metric Tube to Female ISO Parallel Thread

Part No.	Tube OD D	T ISO Thread Size	d* min	Width across flat			A	B	∠	∠	L	L ₁	K	O-ring Uniform Size Number
				h (in.)	h ₁ (in.)	H								
SYCSLA 6M-2G	6	1/8	4.0	1/2	9/16	14	15.3	17.7	19.6	8.1	27.0	26.4	15.0	-002*
SYCSLA 6M-4G	6	1/4	4.8	5/8	3/4	14	15.3	17.7	21.6	9.1	29.0	32.3	20.2	-111
SYCSLA 8M-2G	8	1/8	4.0	9/16	9/16	16	16.2	18.6	21.3	8.1	28.8	27.4	15.0	-002*
SYCSLA 8M-4G	8	1/4	5.9	5/8	3/4	16	16.2	18.6	22.4	9.1	29.9	32.2	20.2	-111
SYCSLA10M-4G	10	1/4	5.9	13/16	3/4	19	17.2	19.5	25.9	9.1	33.5	35.0	20.2	-111
SYCSLA10M-6G	10	3/8	7.9	13/16	7/8	19	17.2	19.5	25.9	9.4	33.5	37.1	23.5	-113
SYCSLA12M-4G	12	1/4	5.9	13/16	3/4	22	22.8	22.0	25.9	9.1	36.0	35.0	20.2	-111
SYCSLA12M-6G	12	3/8	7.9	13/16	7/8	22	22.8	22.0	25.9	9.4	36.0	37.1	23.5	-113
SYCSLA12M-8G	12	1/2	9.5	15/16	1-1/16	22	22.8	22.0	27.9	13.0	38.0	43.4	34.5	-1298*
SYCSLA12M-12G	12	3/4	9.5	1-1/16	1-3/8	22	22.8	22.0	29.7	13.0	39.8	48.8	43.5	-119

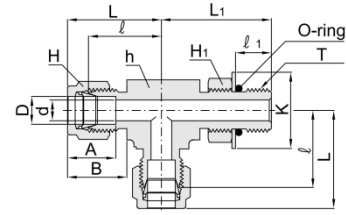
** Not a uniform o-ring size

+The d dimension is the minimum nominal opening. These fittings may have a larger opening at the pipe/straight thread end.

SANYOU Tube Fittings

Positionable Male Run Tee

SYCSRT



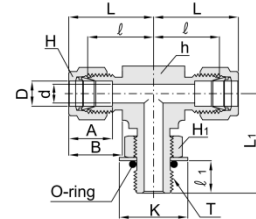
Connects Fractional Tube to SAE /MS Straight Thread Boss

Part No.	Tube OD D		T SAE/MS Straight Thread Size	d ⁺ Min.	Width across flat (in.)			A	B	C	C ₁	L	L ₁	K	O-Ring Uniform Size Number
	in.	mm			h	H	H ₁								
SYCSRT 4-4U	1/4	6.35	7/16-20	4.82	1/2	9/16	9/16	15.24	17.78	21.08	9.90	28.44	28.44	16.51	-904
SYCSRT 6-6U	3/8	9.52	9/16-18	7.11	5/8	11/16	11/16	16.76	19.03	24.63	11.17	32.00	32.25	20.06	-906
SYCSRT 8-8U	1/2	12.70	3/4-16	10.41	13/16	7/8	7/8	22.86	21.84	27.43	12.70	37.59	37.84	25.65	-908
SYCSRT12-12U	3/4	19.05	1-1/16-12	15.74	1-1/16	1-1/8	1-1/4	24.38	21.84	31.24	16.76	41.40	45.50	36.57	-912
SYCSRT16-16U	1	25.40	1-5/16-12	22.35	1-3/8	1-1/2	1-1/2	31.24	26.41	38.35	16.76	50.54	53.59	43.94	-916
SYCSRT20-20U	1-1/4	31.75	1-5/8-12	27.68	1-11/16	1-7/8	1-7/8	41.14	38.86	45.72	16.76	67.81	58.16	54.86	-920
SYCSRT24-24U	1-1/2	38.10	1-7/8-12	34.03	2	2-1/4	2-1/8	50.03	45.21	50.80	16.76	77.97	60.45	62.23	-924
SYCSRT32-32U	2	50.80	2-1/2-12	45.97	2-3/4	3	2-3/4	67.56	62.73	69.85	16.76	107.18	71.62	80.26	-932

+ The d dimension is the minimum nominal opening. These fittings may have a larger opening at the pipe/straight thread end.

Positionable Male Branch Tee

SYCSBT



Connects Fractional Tube to SAE/MS Straight Thread Boss

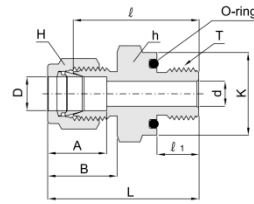
Part No.	Tube OD D		T SAE/MS Straight Thread Size	d ⁺ Min.	Width across flat (in.)			A	B	C	C ₁	L	L ₁	K	O-Ring Uniform Size Number
	in.	mm			h	H	H ₁								
SYCSBT 4-4U	1/4	6.35	7/16-20	4.82	1/2	9/16	9/16	15.24	17.78	21.08	9.90	28.44	28.44	16.51	-904
SYCSBT 6-6U	3/8	9.52	9/16-18	7.11	5/8	11/16	11/16	16.76	19.30	24.63	11.17	32.00	32.25	20.06	-906
SYCSBT 8-8U	1/2	12.70	3/4-16	10.41	1	7/8	7/8	22.86	21.84	27.43	12.70	37.59	37.84	25.65	-908
SYCSBT12-12U	3/4	19.05	1-1/16-12	15.74	1-1/16	1-1/8	1-1/4	24.38	21.84	31.24	16.76	41.40	48.76	36.57	-912
SYCSBT16-16U	1	25.40	1-5/16-12	22.35	1-3/8	1-1/2	1-1/2	31.24	26.41	38.35	16.76	50.54	53.59	43.94	-916
SYCSBT20-20U	1-1/4	31.75	1-5/8-12	27.68	1-11/16	1-7/8	1-7/8	41.14	38.86	45.72	16.76	67.81	58.16	54.86	-920
SYCSBT24-24U	1-1/2	38.10	1-7/8-12	34.03	2	2-1/4	2-1/8	50.03	45.21	50.80	16.76	77.97	60.45	62.03	-924
SYCSBT32-32U	2	50.80	2-1/2-12	45.97	2-3/4	3	2-3/4	67.56	62.73	69.85	16.76	107.18	71.62	80.26	-932

+ The d dimension is the minimum nominal opening. These fittings may have a larger opening at the pipe/straight thread end.

All dimensions are in millimeters unless otherwise specified. Dimensions are for reference only, subject to change.

O-Seal Straight Thread Connector

SYCOS



Connects Fractional Tube to Female Straight Thread.

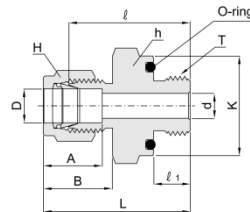
Part No.	Tube OD D		T SAE/MS Straight Thread Size	d* Min.	Width across flat (in.)		A	B	L	K	O-Ring Uniform Size Number		
	in.	mm			h	H							
SYCOS 2-2U	1/8	3.17	5/16-24	2.28	9/16	7/16	12.70	15.24	26.16	8.63	32.76	13.97	-011
SYCOS 3-3U	3/16	4.76	3/8-24	3.04	5/8	1/2	13.71	16.00	27.68	9.65	34.29	15.75	-012
SYCOS 4-4U	1/4	6.35	7/16-20	4.82	3/4	9/16	15.24	17.78	30.98	10.41	38.35	18.80	-111
SYCOS 5-5U	5/16	7.93	1/2-20	6.35	7/8	5/8	16.25	18.54	33.27	11.17	40.64	21.84	-112
SYCOS 6-6U	3/8	9.52	9/16-18	7.11	15/16	11/16	16.76	19.30	35.05	11.93	42.41	23.62	-113
SYCOS 8-8U	1/2	12.70	3/4-16	10.41	1-1/8	7/8	22.86	21.84	35.81	11.93	45.97	28.45	-116
SYCOS12-12U	3/4	19.05	1-1/16-12	15.74	1-1/2	1-1/8	24.38	21.84	42.16	14.22	52.32	37.85	-215
SYCOS16-16U	1	25.40	1-5/16-12	22.35	1-3/4	1-1/2	31.24	26.41	45.97	14.22	58.16	44.20	-219

*ISO Paralled Threads are available upon request.

+The d dimension is the minimum nominal opening. These fittings may have a larger opening at the pipe/straight thread end.

O-Seal Pipe Thread Connector

SYCOP



Connects Fractional Tube to Female NPT Thread.

Part No.	Tube OD D		T* NPT Size	d* Min.	Width across flat (in.)		A	B	L	K	O-Ring Uniform Size Number		
	in.	mm			h	H							
SYCOP2-2	1/8	3.17	1/8	2.28	3/4	7/16	12.70	15.24	26.16	7.11	32.76	18.80	-111
SYCOP4-2	1/4	6.35	1/8	4.82	3/4	9/16	15.24	17.78	27.68	7.11	35.05	18.80	-111
SYCOP4-4	1/4	6.35	1/4	4.82	15/16	9/16	15.24	17.78	30.98	9.65	38.35	23.62	-113
SYCOP6-4	3/8	9.52	1/4	7.11	15/16	11/16	16.76	19.30	32.51	9.65	39.87	23.62	-113
SYCOP6-6	3/8	9.52	3/8	7.11	1-1/8	11/16	16.76	19.30	34.03	10.41	41.40	28.45	-116
SYCOP6-8	3/8	9.52	1/2	7.11	1-5/16	11/16	16.76	19.30	39.62	13.46	46.99	33.02	-212
SYCOP8-8	1/2	12.70	1/2	10.41	1-5/16	7/8	22.86	21.84	39.62	13.46	49.78	33.02	-212

+The d dimension is the minimum nominal opening. These fittings may have a larger opening at the pipe/straight thread end.

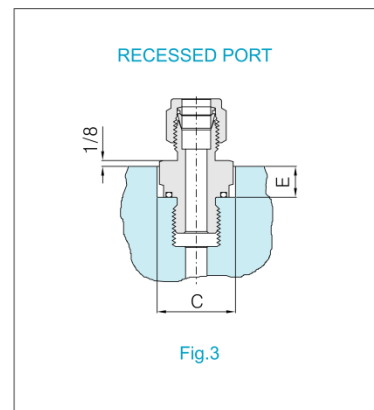
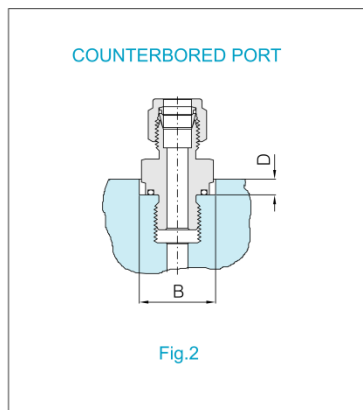
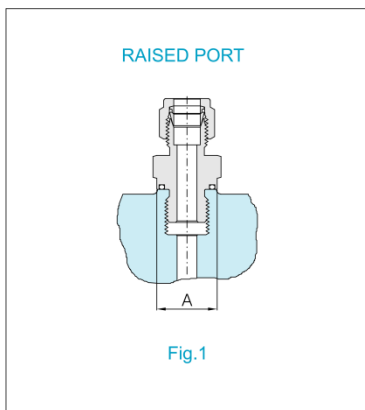
O-Seal Connectors

SANYOU O-seal Fittings can be directly installed into existing pipe thread or straight thread port.
 Due to short thread length, thread interference which is common on tapered thread does not occur and the leak tight seal is made by O-ring.
 The standard Viton O-ring is fully contained in a precision groove, The groove provides antiextrusion of O-ring at high pressure and controlled squeeze for vacuum tight sealing. To provide a leak tight installation, smooth flat surface perpendicular to the axis of the threads is required.

Installation Instructions

1. Hand tighten the O-Seal fittings in the port until O-ring compresses on the port.
 2. Snug the fitting with wrench.
- Note: When installing or disconnecting tubing to or from YK- Lok tube end, make sure that the fitting body is always held by back-up wrench, By doing this, the fitting does not turn and the proper seal is maintained.

The illustrations and table below show required mounting dimensions for O-seal connectors.



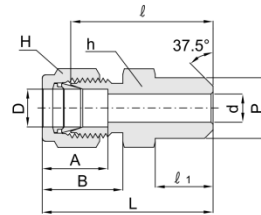
Mounting Dimensions

Port No.	Straight Thread	Pipe Thread	A Min.	B Min.	C Min.	D Min.	E Min.
SYCOS 2-2	5/16-24	-	12.7	15.0	16.8	2.3	5.6
SYCOP 2- 2	-	1/8 NPT	17.5	19.8	22.4	4.1	7.1
SYCOS 3-3	3/8-24	-	14.2	16.8	19.1	2.3	5.6
SYCOS 4-4	7/16-20	-	17.5	19.8	22.4	4.1	7.1
SYCOP 4-2	-	1/8 NPT	17.5	19.8	22.4	4.1	7.1
SYCOP 4-4	-	1/4 NPT	22.1	24.6	27.7	4.1	7.9
SYCOS 5-5	1/2-20	-	19.1	23.1	26.2	4.1	7.9
SYCOS 6-6	9/16-18	-	20.6	24.6	27.7	4.1	7.9
SYCOP 6-6	-	1/8 NPT	25.4	29.5	33.3	4.1	8.6
SYCOP 6-8	-	1/2 NPT	31.0	34.0	38.9	5.6	11.2
SYCOS 8-8	3/4-16	-	25.4	29.5	33.3	4.1	8.6
SYCOP 8-8	-	1/2 NPT	31.0	34.0	38.9	5.6	11.2
SYCOS12-12	1-1/16-12	-	35.8	38.9	44.5	5.6	12.7
SYCOS16-16	1-5/16-12	-	42.9	45.2	51.6	5.6	14.2

All dimensions are in millimeters unless otherwise specified. Dimensions are for reference only, subject to change.

Male Pipe Weld Connector

SYCWC



Connects Fractional Tube to Pipe

Part No.	Tube OD D		Male Pipe Size P		d+ Min.	Width across flat (in.)		A	B	ℓ	A	L
	in.	mm	Nom.	O. D.		h	H					
SYCWC 2-2P	1/8	3.17	1/8	10.30	2.28	7/16	7/16	12.70	15.24	23.87	9.65	31.24
SYCWC 3-2P	3/16	4.76	1/8	10.30	3.04	7/16	1/2	13.71	16.00	24.63	9.65	31.24
SYCWC 4-2P	1/4	6.35	1/8	10.30	4.82	1/2	9/16	15.24	17.78	25.40	9.65	32.76
SYCWC 4-4P	1/4	6.35	1/4	13.70	4.82	9/16	9/16	15.24	17.78	30.48	14.22	37.84
SYCWC 5-2P	5/16	7.93	1/8	10.30	5.08	9/16	5/8	16.25	18.54	26.67	9.65	34.03
SYCWC 5-4P	5/16	7.93	1/4	13.70	6.35	9/16	5/8	16.25	18.54	31.24	14.22	38.60
SYCWC 6-4P	3/8	9.52	1/4	13.70	7.11	5/8	11/16	16.76	19.30	32.51	14.22	39.87
SYCWC 6-6P	3/8	9.52	3/8	17.10	7.11	11/16	11/16	16.76	19.30	32.51	14.22	39.87
SYCWC 6-8P	3/8	9.52	1/2	21.30	7.11	7/8	11/16	16.76	19.30	38.86	19.05	46.23
SYCWC 6-12P	3/8	9.52	3/4	26.67	7.11	1-1/16	11/16	16.76	19.30	40.38	19.05	47.75
SYCWC 8-6P	1/2	12.70	3/8	17.10	10.41	13/16	7/8	22.86	21.84	33.27	14.22	43.43
SYCWC 8-8P	1/2	12.70	1/2	21.30	10.41	7/8	7/8	22.86	21.84	38.86	19.05	49.02
SYCWC 8-12P	1/2	12.70	3/4	26.67	10.41	1-1/16	7/8	22.86	21.84	40.38	19.05	50.54
SYCWC 10-8P	5/8	15.87	1/2	21.30	12.70	15/16	1	24.38	21.84	38.86	19.05	49.02
SYCWC 12-12P	3/4	19.05	3/4	26.67	15.74	1-1/16	1-1/8	24.38	21.84	40.38	19.05	50.54
SYCWC 16-16P	1	25.40	1	33.40	22.35	1-3/8	1-1/2	31.24	26.41	50.03	23.87	62.23
SYCWC 20-20P	1-1/4	31.75	1-1/4	42.16	27.68	1-3/4	1-7/8	41.14	38.86	55.11	23.87	77.21
SYCWC 24-24P	1-1/2	38.10	1-1/2	48.26	34.03	2-1/8	2-1/4	50.03	45.21	61.72	26.16	88.90
SYCWC 32-32P	2	50.80	2	60.32	45.97	2-3/4	3	67.56	62.73	76.20	26.92	113.53

Connects Metric Tube to Pipe

Part No.	Tube OD D	Male Pipe Size P		d Min.	Width across flat		A	B	ℓ	A	L
		Nom.	O. D.		h	H					
SYCWC 3M-2P	3	1/8	10.3	2.4	12	12	12.9	15.3	23.9	9.7	29.7
SYCWC 4M-2P	4	1/8	10.3	2.4	12	12	13.7	16.1	24.6	9.7	30.7
SYCWC 6M-2P	6	1/8	10.3	4.8	14	14	15.3	17.7	25.4	9.7	32.8
SYCWC 6M-4P	6	1/4	13.7	4.8	14	14	15.3	17.7	30.2	14.2	37.6
SYCWC 8M-2P	8	1/8	10.3	5.1	14	16	16.2	18.6	26.7	9.7	34.2
SYCWC 8M-4P	8	1/4	13.7	6.3	14	16	16.2	18.6	31.2	14.2	38.7
SYCWC 8M-8P	8	1/2	21.3	6.3	22	16	16.2	18.6	38.1	19.1	44.8
SYCWC 10M-4P	10	1/4	13.7	7.1	17	19	17.2	19.5	33.3	14.2	40.9
SYCWC 10M-6P	10	3/8	17.1	8.0	19	19	17.2	19.5	33.3	14.2	40.1
SYCWC 10M-8P	10	1/2	21.3	8.0	22	19	17.2	19.5	38.1	19.1	45.7
SYCWC 12M-4P	12	1/4	13.7	7.1	22	22	22.8	22.0	33.3	14.2	43.4
SYCWC 12M-6P	12	3/8	17.1	9.5	22	22	22.8	22.0	33.3	14.2	43.4
SYCWC 12M-8P	12	1/2	21.3	9.5	22	22	22.8	22.0	38.1	19.1	48.2
SYCWC 14M-6P	14	3/8	17.1	10.3	24	25	24.4	22.0	34.0	14.2	44.1
SYCWC 15M-8P	15	1/2	21.3	12.0	24	25	24.4	22.0	38.9	19.0	49.0
SYCWC 16M-8P	16	1/2	21.3	12.7	24	25	24.4	22.0	38.9	19.0	49.0
SYCWC 18M-8P	18	1/2	21.3	13.5	27	30	24.4	22.0	40.4	19.0	50.5
SYCWC 32M-20P	32	1-1/4	42.2	28.6	46	50	42.0	41.6	56.6	23.9	79.6
SYCWC 38M-24P	38	1-1/2	48.3	33.7	55	60	49.4	47.9	64.0	26.2	91.6

+ The d dimension is the minimum nominal opening. These fittings may have a larger opening at the weld end. Wall thickness at the weld end is based on schedule 80 pipe.

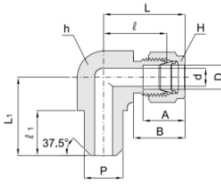
Welding Precautions

- If you weld the fully assembled fittings, the assembly can be distorted and the lubricant on the nut can be removed, which is not desirable.
- To avoid this, remove nut and ferrules from the body and cover thread and seat area with another nut or a plug in order to protect them from weld splatter. (Just finger tighten for easy removal)
- Provide a proper heat sink for heat dissipation.
- After welding, replace the nut and ferrules.

SANYOU Tube Fittings

Male Pipe Weld Elbow

SYCLW

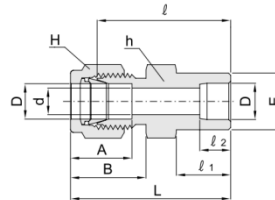


Connects Fractional Tube to Pipe

Part No.	Tube OD D		Pipe Weld Size P		d Min.	Width across flat (in.)		A	B	∠	A	L	L ₁
	in.	mm	Nom.	O. D.		h	H						
SYCLW 2-2P	1/8	3.17	1/8	10.30	2.30	1/2	7/16	15.24	17.78	18.30	9.65	24.91	18.79
SYCLW 4-4P	1/4	6.35	1/4	13.70	4.82	1/2	9/16	15.24	17.78	19.55	11.70	26.92	23.36
SYCLW 6-4P	3/8	9.52	1/4	13.70	7.11	5/8	11/16	16.76	19.30	23.11	11.70	30.48	25.40
SYCLW 8-8P	1/2	12.70	1/2	21.30	10.41	13/16	7/8	22.86	21.84	25.90	17.00	36.06	33.02
SYCLW12-12P	3/4	19.05	3/4	26.67	15.74	1-1/16	1-1/8	24.38	21.84	29.71	19.05	39.87	36.83

Tube Socket Weld Connector

SYCSWC

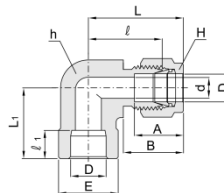


Connects Fractional Tubes

Part No.	Tube OD D		d Min.	E	Width across flat (in.)		A	B	∠	A	∠	L
	in.	mm			h	H						
SYCSWC 2-2	1/8	3.17	2.28	7.87	7/16	7/16	12.70	15.24	22.35	8.63	6.35	28.95
SYCSWC 4-4	1/4	6.35	4.82	11.17	1/2	9/16	15.24	17.78	26.16	10.41	7.87	33.52
SYCSWC 6-6	3/8	9.52	7.11	15.74	5/8	11/16	16.76	19.30	30.22	11.93	9.65	37.59
SYCSWC 8-8	1/2	12.70	10.41	19.05	13/16	7/8	22.86	21.84	30.98	11.93	12.70	41.14
SYCSWC12-12	3/4	19.05	15.74	26.67	1-1/16	1-1/8	24.38	21.84	33.27	11.93	14.22	43.43
SYCSWC16-16	1	25.40	22.35	33.27	1-3/8	1-1/2	31.24	26.41	40.38	14.22	19.05	52.57

Tube Socket Weld Elbow

SYCLSW



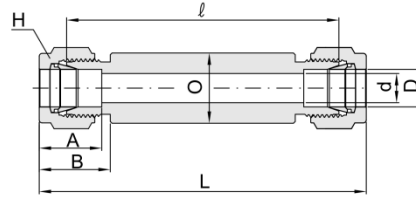
Connects Fractional Tubes

Part No.	Tube OD D		d Min.	E	Width across flat (in.)		A	B	∠	A	L	L ₁
	in.	mm			h	H						
SYCLSW 4-4	1/4	6.35	4.82	12.70	1/2	9/16	15.24	17.78	19.55	7.87	26.92	19.55
SYCLSW 6-6	3/8	9.52	7.11	15.74	5/8	11/16	16.76	19.30	23.11	9.65	30.48	23.11
SYCLSW 8-8	1/2	12.70	10.41	20.57	13/16	7/8	22.86	21.84	25.90	12.70	36.06	25.90
SYCLSW12-12	3/4	19.05	15.74	26.92	1-1/16	1-1/8	24.38	21.84	29.71	14.22	39.87	29.71
SYCLSW16-16	1	25.40	22.35	35.05	1-3/8	1-1/2	31.24	26.41	36.83	19.05	49.02	36.83

All dimensions are in millimeters unless otherwise specified. Dimensions are for reference only, subject to change.

Weld Union

SYCBUW



Connects Fractional Tubes

Part No.	Tube OD D		d min	Width across flat H (in.)	A	B	ℓ	L	O
	in.	mm							
SYCBUW-1	1/16	1.58	1.27	5/16	8.63	10.92	64.2	71.84	10.00
SYCBUW-2	1/8	3.17	2.28	7/16	12.70	15.24	67.2	80.48	12.00
SYCBUW-3	3/16	4.76	3.04	1/2	13.71	16.00	69.0	82.00	12.00
SYCBUW-4	1/4	6.35	4.82	9/16	15.24	17.78	70.8	85.96	14.00
SYCBUW-5	5/16	7.93	6.35	5/8	16.25	18.54	73.7	87.08	16.00
SYCBUW-6	3/8	9.52	7.11	11/16	16.76	19.30	73.7	88.60	19.00
SYCBUW-8	1/2	12.70	10.41	7/8	22.86	21.84	73.7	93.68	23.00
SYCBUW-10	5/8	15.87	12.70	1	24.38	21.84	73.7	93.68	25.00
SYCBUW-12	3/4	19.05	15.74	1-1/8	24.38	21.84	73.7	93.68	28.00
SYCBUW-14	7/8	22.22	18.28	1-1/4	25.90	21.84	73.7	93.68	32.00
SYCBUW-16	1	25.40	22.35	1-1/2	31.24	26.41	78.5	102.82	35.00
SYCBUW-20	1-1/4	31.75	27.68	1-7/8	41.14	38.86	83.9	127.72	50.00
SYCBUW-24	1-1/2	38.10	34.03	2-1/4	50.03	45.21	86.1	140.42	55.00
SYCBUW-32	2	50.80	45.97	3	67.56	62.73	100.9	175.46	80.00

Connects Metric Tubes

Part No.	Tube OD D	d min	Width across flat H	A	B	ℓ	L	O
SYCBUW-2M	2	1.7	12	12.9	15.3	67.3	80.3	12.0
SYCBUW-3M	3	2.4	12	12.9	15.3	67.3	80.3	12.0
SYCBUW-4M	4	2.4	12	13.7	16.1	69.0	82.2	12.0
SYCBUW-6M	6	4.8	14	15.3	17.7	70.5	85.5	12.0
SYCBUW-8M	8	6.3	16	16.2	18.6	72.1	87.2	16.0
SYCBUW-10M	10	8.0	19	17.2	19.5	73.7	89.0	19.0
SYCBUW-12M	12	9.5	22	22.8	22.0	73.6	93.9	23.0
SYCBUW-15M	15	12.0	25	24.4	22.0	73.7	94.0	25.0
SYCBUW-16M	16	12.7	25	24.4	22.0	73.7	94.0	28.0
SYCBUW-18M	18	15.0	30	24.4	22.0	73.7	94.0	28.0
SYCBUW-20M	20	16.0	32	26.0	22.0	73.7	94.0	32.0
SYCBUW-22M	22	18.3	32	26.0	22.0	73.7	94.0	32.0
SYCBUW-25M	25	21.8	38	31.3	26.5	78.6	102.5	38.0
SYCBUW-28M	28	21.8	46	36.6	36.6	81.7	122.2	45.0
SYCBUW-32M	32	28.6	50	42.0	41.6	87.1	133.2	50.0
SYCBUW-38M	38	33.7	60	49.4	47.9	90.9	145.8	60.0

* Specified length to be shown as last designator in part number

Example: SYCBUW-8L100

Thermocouple Weld Union

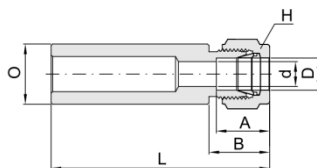
SYCBUWT

Bore Through weld union handle thermocouple or dip tubes with ease. For correct part number, just add "T" as a suffix to SYCBUW, the weld union designator

Example: SYCBUWT-8-S316 1/2" tube stainless steel 316

Weld Half Union

SYCHBUW



Connects Fractional Tubes

Part No.	Tube OD D		d min	Width across flat H (in.)	A	B	L	O
	in.	mm						
SYCHBUW-1	1/16	1.58	1.27	5/16	8.63	10.92	60.92	10.00
SYCHBUW-2	1/8	3.17	2.28	7/16	12.70	15.24	65.24	12.00
SYCHBUW-3	3/16	4.76	3.04	1/2	13.71	16.00	76.00	12.00
SYCHBUW-4	1/4	6.35	4.82	9/16	15.24	17.78	67.78	14.00
SYCHBUW-5	5/16	7.93	6.35	5/8	16.25	18.54	68.54	16.00
SYCHBUW-6	3/8	9.52	7.11	11/16	16.76	19.30	69.30	19.00
SYCHBUW-8	1/2	12.70	10.41	7/8	22.86	21.84	71.84	23.00
SYCHBUW-10	5/8	15.87	12.70	1	24.38	21.84	71.84	25.00
SYCHBUW-12	3/4	19.05	15.74	1-1/8	24.38	21.84	71.84	28.00
SYCHBUW-14	7/8	22.22	18.28	1-1/4	25.90	21.84	71.84	32.00
SYCHBUW-16	1	25.40	22.35	1-1/2	31.24	26.41	76.41	35.00
SYCHBUW-20	1-1/4	31.75	27.68	1-7/8	41.14	38.86	88.86	50.00
SYCHBUW-24	1-1/2	38.10	34.03	2-1/4	50.03	45.21	95.21	55.00
SYCHBUW-32	2	50.80	45.97	3	67.56	62.73	112.73	80.00

Connects Metric Tubes

Part No.	Tube OD D	d min	Width across flat H	A	B	L	O
SYCHBUW-2M	2	1.7	12	12.9	15.3	65.3	12.0
SYCHBUW-3M	3	2.4	12	12.9	15.3	65.3	12.0
SYCHBUW-4M	4	2.4	12	13.7	16.1	66.1	12.0
SYCHBUW-6M	6	4.8	14	15.3	17.7	67.7	12.0
SYCHBUW-8M	8	6.3	16	16.2	18.6	68.6	16.0
SYCHBUW-10M	10	8.0	19	17.2	19.5	69.5	19.0
SYCHBUW-12M	12	9.5	22	22.8	22.0	72.0	23.0
SYCHBUW-15M	15	11.9	25	24.4	22.0	72.0	25.0
SYCHBUW-16M	16	12.7	25	24.4	22.0	72.0	28.0
SYCHBUW-18M	18	15.0	30	24.4	22.0	72.0	28.0
SYCHBUW-20M	20	16.0	32	26.0	22.0	72.0	32.0
SYCHBUW-22M	22	18.3	32	26.0	22.0	72.0	32.0
SYCHBUW-25M	25	21.8	38	31.3	26.5	76.5	38.0
SYCHBUW-28M	28	21.8	46	36.6	36.6	86.6	45.0
SYCHBUW-32M	32	28.6	50	42.0	41.6	91.6	50.0
SYCHBUW-38M	38	33.7	60	49.4	47.9	97.9	60.0

* Specified length to be shown as last designator in part number

Example: SYCHBUW-4L100

Thermocouple Weld Half Union

SYCHBUWT

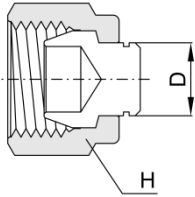
Bore Through weld union handle thermocouple or dip tubes with ease. For correct part number, just add "T" as suffix to SYCHBUW, the weld half union designator.

Example: SYCHBUWT-8-S316 1/2" tube stainless steel 316

All dimensions are in millimeters unless otherwise specified. Dimensions are for reference only, subject to change.

Plug for SANYOU Port

SYCPA



Installation Instruction

With wrench, 1/4 turn from finger-tight position. (1/8 turn for 1/8", 3/16" and 2mm, 3mm, 4mm size plug, 1/2 turn for over 1" and 25mm)

Connects Fractional SANYOU Port

Part No.	Tube OD D		Width across flat H (in.)
	in.	mm	
SYCPA-1	1/16	1.58	5/16
SYCPA-2	1/8	3.17	7/16
SYCPA-3	3/16	4.76	1/2
SYCPA-4	1/4	6.35	9/16
SYCPA-5	5/16	7.93	5/8
SYCPA-6	3/8	9.52	11/16
SYCPA-8	1/2	12.70	7/8
SYCPA-10	5/8	15.87	1
SYCPA-12	3/4	19.05	1-1/8
SYCPA-14	7/8	22.22	1-1/4
SYCPA-16	1	25.40	1-1/2
SYCPA-20	1-1/4	31.75	1-7/8
SYCPA-24	1-1/2	38.10	2-1/4
SYCPA-32	2	50.80	3

Plugs unused port of metric SANYOU fittings.

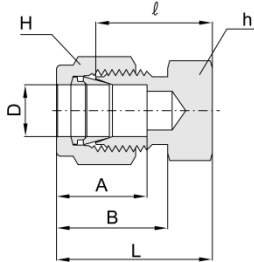
Connects Metric SANYOU Port

Part No.	Tube OD D	Width across flat H	Part No.	Tube OD D	Width across flat H
SYCPA-2M	2	12	SYCPA-16M	16	25
SYCPA-3M	3	12	SYCPA-18M	18	30
SYCPA-4M	4	12	SYCPA-20M	20	32
SYCPA-6M	6	14	SYCPA-22M	22	32
SYCPA-8M	8	16	SYCPA-25M	25	38
SYCPA-10M	10	19	SYCPA-28M	28	46
SYCPA-12M	12	22	SYCPA-32M	32	50
SYCPA-15M	15	25	SYCPA-38M	38	60

Plugs unused port of fractional SANYOU fittings.

Cap for Tube End

SYCCA



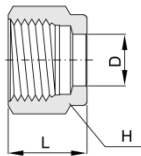
Connects Fractional Tube End

Part No.	Tube OD D		Width across flat (in.)		A	B	L	L
	in.	mm	h	H				
SYCCA-1	1/16	1.58	5/16	5/16	8.63	10.92	11.20	14.18
SYCCA-2	1/8	3.17	7/16	7/16	12.70	15.24	13.46	20.06
SYCCA-3	3/16	4.76	7/16	1/2	13.71	16.00	14.73	21.33
SYCCA-4	1/4	6.35	1/2	9/16	15.24	17.78	16.00	23.26
SYCCA-5	5/16	7.93	9/16	5/8	16.25	18.54	17.01	24.38
SYCCA-6	3/8	9.52	5/8	11/16	16.76	19.30	18.28	25.65
SYCCA-8	1/2	12.70	13/16	7/8	22.86	21.84	19.05	29.21
SYCCA-10	5/8	15.87	15/16	1	24.38	21.84	19.81	29.97
SYCCA-12	3/4	19.05	1-1/16	1-1/8	24.38	21.84	21.33	31.49
SYCCA-14	7/8	22.22	1-3/16	1-1/4	25.90	21.84	23.87	34.03
SYCCA-16	1	25.40	1-3/8	1-1/2	31.24	26.41	26.16	38.35
SYCCA-20	1-1/4	31.75	1-3/4	1-7/8	41.14	38.86	31.24	53.34
SYCCA-24	1-1/2	38.10	2-1/8	2-1/4	50.03	45.21	37.33	64.51
SYCCA-32	2	50.80	2-3/4	3	67.56	62.73	49.27	86.61

Connects Metric Tube End

Part No.	Tube OD D	Width across flat		A	B	L	L
		h	H				
SYCCA-2M	2	7/16 in.	12	12.9	15.3	13.5	20.1
SYCCA-3M	3	7/16 in.	12	12.9	15.3	13.5	20.1
SYCCA-4M	4	7/16 in.	12	13.7	16.1	14.7	21.3
SYCCA-6M	6	14	14	15.3	17.7	15.7	23.1
SYCCA-8M	8	14	16	16.2	18.6	17.0	24.5
SYCCA-10M	10	17	19	17.2	19.5	19.0	26.6
SYCCA-12M	12	13/16 in.	22	22.8	22.0	19.0	29.1
SYCCA-15M	15	24	25	24.4	22.0	19.8	29.9
SYCCA-16M	16	24	25	24.4	22.0	19.8	29.9
SYCCA-18M	18	27	30	24.4	22.0	21.3	31.4
SYCCA-20M	20	30	32	26.0	22.0	23.9	34.0
SYCCA-22M	22	30	32	26.0	22.0	23.9	34.0
SYCCA-25M	25	35	38	31.3	26.5	26.2	38.5
SYCCA-28M	28	41	46	36.6	36.6	27.7	48.5
SYCCA-32M	32	46	50	42.0	41.6	32.8	55.8
SYCCA-38M	38	55	60	49.4	47.9	37.8	65.4

Nut
SYCN



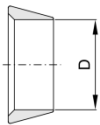
Fractional

Part No.	Tube OD D		Width across flat H (in.)	L
	in.	mm		
SYCN-1	1/16	1.58	5/16	7.90
SYCN-2	1/8	3.17	7/16	11.93
SYCN-3	3/16	4.76	1/2	11.93
SYCN-4	1/4	6.35	9/16	12.70
SYCN-5	5/16	7.93	5/8	13.46
SYCN-6	3/8	9.52	11/16	14.22
SYCN-8	1/2	12.70	7/8	17.52
SYCN-10	5/8	15.87	1	17.52
SYCN-12	3/4	19.05	1-1/8	17.52
SYCN-14	7/8	22.22	1-1/4	17.52
SYCN-16	1	25.40	1-1/2	20.57
SYCN-20	1-1/4	31.75	1-7/8	31.75
SYCN-24	1-1/2	38.10	2-1/4	38.10
SYCN-32	2	50.80	3	52.32

Metric

Part No.	Tube OD D	Width across flat H	L
SYCN-2M	2	12	11.9
SYCN-3M	3	12	11.9
SYCN-4M	4	12	11.9
SYCN-6M	6	14	12.7
SYCN-8M	8	16	13.5
SYCN-10M	10	19	15.1
SYCN-12M	12	22	17.4
SYCN-15M	15	25	17.4
SYCN-16M	16	25	17.4
SYCN-18M	18	30	17.4
SYCN-20M	20	32	17.4
SYCN-22M	22	32	17.4
SYCN-25M	25	38	20.6
SYCN-28M	28	46	30.6
SYCN-32M	32	50	34.4
SYCN-38M	38	60	40.6
SYCN-42M	42	65	44.7
SYCN-50M	50	3 in.	54.8

Front Ferrule
SYCFF



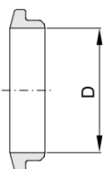
Fractional

Part No.	Tube OD D	
	in.	mm
SYCFF-1	1/16	1.58
SYCFF-2	1/8	3.17
SYCFF-3	3/16	4.76
SYCFF-4	1/4	6.35
SYCFF-5	5/16	7.93
SYCFF-6	3/8	9.52
SYCFF-8	1/2	12.70
SYCFF-10	5/8	15.87
SYCFF-12	3/4	19.05
SYCFF-14	7/8	22.22
SYCFF-16	1	25.40
SYCFF-20*	1-1/4	31.75
SYCFF-24*	1-1/2	38.10
SYCFF-32*	2	50.80

Metric

Part No.	Tube OD D
SYCFF-2M	2
SYCFF-3M	3
SYCFF-4M	4
SYCFF-6M	6
SYCFF-8M	8
SYCFF-10M	10
SYCFF-12M	12
SYCFF-15M	15
SYCFF-16M	16
SYCFF-18M	18
SYCFF-20M	20
SYCFF-22M	22
SYCFF-25M	25
SYCFF-28M*	28
SYCFF-32M*	32
SYCFF-38M*	38
SYCFF-42M*	42
SYCFF-50M*	50

Back Ferrule
SYCFB



Fractional

Part No.	Tube OD D	
	in.	mm
SYCFB-1	1/16	1.58
SYCFB-2	1/8	3.17
SYCFB-3	3/16	4.76
SYCFB-4	1/4	6.35
SYCFB-5	5/16	7.93
SYCFB-6	3/8	9.52
SYCFB-8	1/2	12.70
SYCFB-10	5/8	15.87
SYCFB-12	3/4	19.05
SYCFB-14	7/8	22.22
SYCFB-16	1	25.40
SYCFB-20*	1-1/4	31.75
SYCFB-24*	1-1/2	38.10
SYCFB-32*	2	50.80

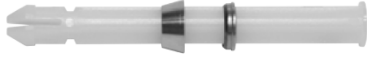
Metric

Part No.	Tube OD D
SYCFB-2M	2
SYCFB-3M	3
SYCFB-4M	4
SYCFB-6M	6
SYCFB-8M	8
SYCFB-10M	10
SYCFB-12M	12
SYCFB-15M	15
SYCFB-16M	16
SYCFB-18M	18
SYCFB-20M	20
SYCFB-22M	22
SYCFB-25M	25
SYCFB-28M*	28
SYCFB-32M*	32
SYCFB-38M*	38
SYCFB-42M*	42
SYCFB-50M*	50

Note: "*"Over 1", and 25mm stainless steel fittings use stainless steel ferrules with a PFA coating.

All dimensions are in millimeters unless otherwise specified. Dimensions are for reference only, subject to change.

Ferrule Set
SYCFS



Nut Ferrule Set
SYCNFS



Fractional

Metric

Part No.	Tube OD D		Part No.	Tube OD
	in.	mm		
SYCFS-1	1/16	1.58	SYCFS-2M	2
SYCFS-2	1/8	3.17	SYCFS-3M	3
SYCFS-3	3/16	4.76	SYCFS-4M	4
SYCFS-4	1/4	6.35	SYCFS-6M	6
SYCFS-5	5/16	7.93	SYCFS-8M	8
SYCFS-6	3/8	9.52	SYCFS-10M	10
SYCFS-8	1/2	12.70	SYCFS-12M	12
SYCFS-10	5/8	15.87	SYCFS-15M	15
SYCFS-12	3/4	19.05	SYCFS-16M	16
SYCFS-14	7/8	22.22	SYCFS-18M	18
SYCFS-16	1	25.40	SYCFS-20M	20
			SYCNFS-22M	22
			SYCNFS-25M	25

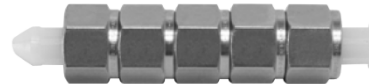
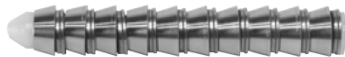
■ SANYOU ferrule set is composed of one back ferrule and One front ferrule.

Fractional

Metric

Part No.	Tube OD D		Part No.	Tube OD
	in.	mm		
SYCNFS-1	1/16	1.58	SYCNFS-2M	2
SYCNFS-2	1/8	3.17	SYCNFS-3M	3
SYCNFS-3	3/16	4.76	SYCNFS-4M	4
SYCNFS-4	1/4	6.35	SYCNFS-6M	6
SYCNFS-5	5/16	7.93	SYCNFS-8M	8
SYCNFS-6	3/8	9.52	SYCNFS-10M	10
SYCNFS-8	1/2	12.70	SYCNFS-12M	12
SYCNFS-10	5/8	15.87	SYCNFS-15M	15
SYCNFS-12	3/4	19.05	SYCNFS-16M	16
SYCNFS-14	7/8	22.22	SYCNFS-18M	18
SYCNFS-16	1	25.40	SYCNFS-20M	20
			SYCNFS-22M	22
			SYCNFS-25M	25

■ SANYOU nut ferrule set is composed of one nut, one back ferrule and one front ferrule.



Fractional

Metric

Part No.	Tube OD D		Part No.	Tube OD
	in.	mm		
SYCFS-1-SET	1/16	1.58	SYCFS-2M-SET	2
SYCFS-2-SET	1/8	3.17	SYCFS-3M-SET	3
SYCFS-3-SET	3/16	4.76	SYCFS-4M-SET	4
SYCFS-4-SET	1/4	6.35	SYCFS-6M-SET	6
SYCFS-5-SET	5/16	7.93	SYCFS-8M-SET	8
SYCFS-6-SET	3/8	9.52	SYCFS-10M-SET	10
SYCFS-8-SET	1/2	12.70	SYCFS-12M-SET	12
SYCFS-10-SET	5/8	15.87	SYCFS-15M-SET	15
SYCFS-12-SET	3/4	19.05	SYCFS-16M-SET	16
SYCFS-14-SET	7/8	22.22	SYCFS-18M-SET	18
SYCFS-16-SET	1	25.40	SYCFS-20M-SET	20
			SYCNFS-22M-SET	22
			SYCNFS-25M-SET	25

■ One ferrule bar is assembled with 10 ferrule sets or 5 nut ferrule sets.

Fractional

Metric

Part No.	Tube OD D		Part No.	Tube OD
	in.	mm		
SYCNFS-1-SET	1/16	1.58	SYCNFS-2M-SET	2
SYCNFS-2-SET	1/8	3.17	SYCNFS-3M-SET	3
SYCNFS-3-SET	3/16	4.76	SYCNFS-4M-SET	4
SYCNFS-4-SET	1/4	6.35	SYCNFS-6M-SET	6
SYCNFS-5-SET	5/16	7.93	SYCNFS-8M-SET	8
SYCNFS-6-SET	3/8	9.52	SYCNFS-10M-SET	10
SYCNFS-8-SET	1/2	12.70	SYCNFS-12M-SET	12
SYCNFS-10-SET	5/8	15.87	SYCNFS-15M-SET	15
SYCNFS-12-SET	3/4	19.05	SYCNFS-16M-SET	16
SYCNFS-14-SET	7/8	22.22	SYCNFS-18M-SET	18
SYCNFS-16-SET	1	25.40	SYCNFS-20M-SET	20
			SYCNFS-22M-SET	22
			SYCNFS-25M-SET	25

DOs

- DO use SANYOU tube fittings for best performance.
- DO send us tubing for testing if the wall thickness is thinner or heavier than recommended.
- DO deburr tubing properly prior to installation.
- DO use correct tube cutter to avoid excessive deformation.
- DO ensure tubing is firmly seated on the shoulder of fitting body.
- DO tighten nut according to the installation instructions.
- DO use SURE RING where SANYOU needs be installed in close corners or in awkward places.
- DO ensure components are clean and free from dirt prior to installation or remake.

DON'Ts

- DON'T mix metric and fractional size of fitting or tubing.
- DON'T mix components of different materials.
- DON'T force tubing into fitting if it does not fit easily. Check tubing.
- DON'T turn fitting body, turn nut while holding body with back-up wrench.
- DON'T over tighten. It will not improve seal integrity and may cause material fatigue and remake difficult.
- DON'T bleed system pressure by loosening the nut.

SAFETY in FITTING SELECTION

For proper, safe, trouble-free installation, operation and maintenance of fluid systems, material compatibility, pressure/temperature ratings, and application details must be considered in the selection of fittings. Improper selection or intermixing components of other manufactures may cause personal injury or property losses. It is the responsibility of system designer and user to select and use the products for their specific applications