



<http://www.Q-Lok.co.kr>

LOCAL DISTRIBUTOR :



UCT KOREA CO., LTD.

SKn Techno Park, 1107 Mega 11th Floor 124, Sagimakgol-ro
Jungwon-gu, Seongnam-si, Gyeonggi-do, 13207, Korea
Tel : +82-31-776-2005 Fax : +82-31-776-2006
E-mail : uctkorea@uctkorea.co.kr

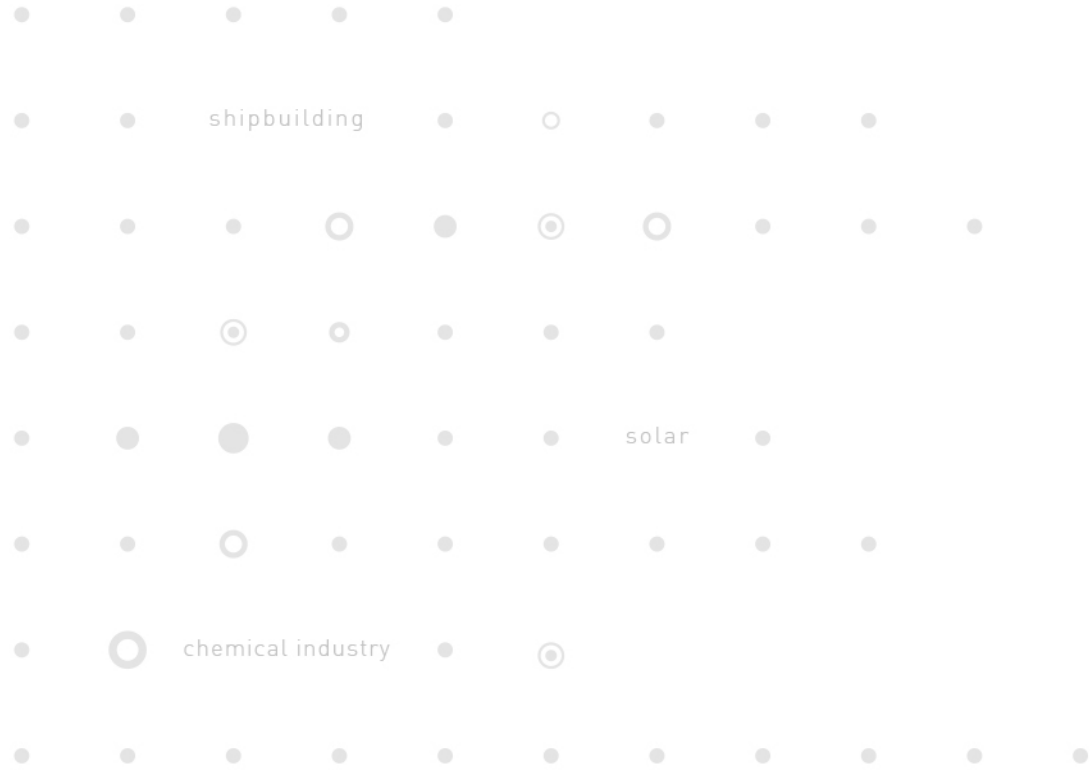
QL-013-EJ-15R2

UCT KOREA CO., LTD.

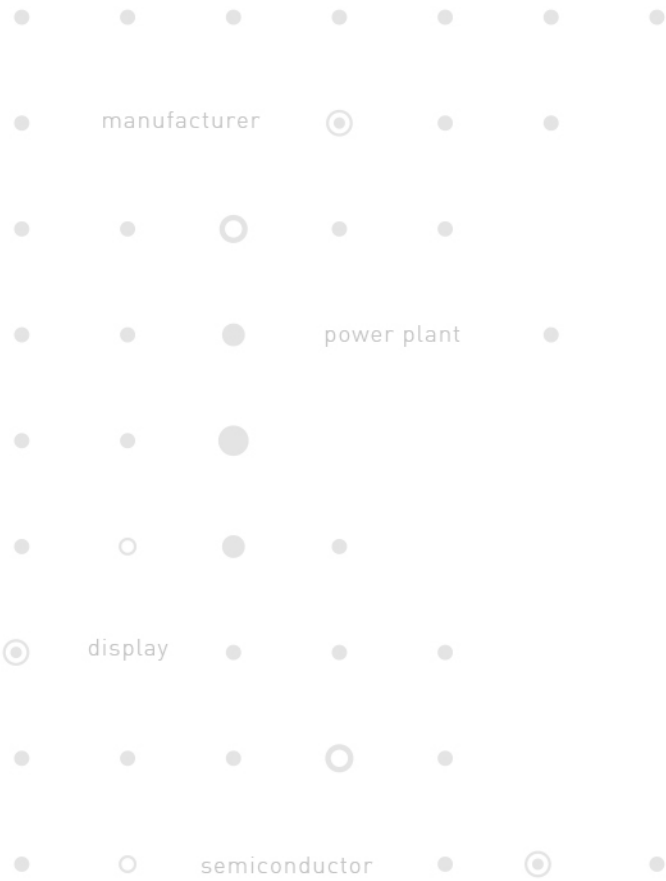
Q-Lok[®]

TUBE FITTING TECHNICAL INFORMATION





Q-Lok[®]

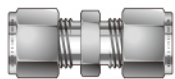
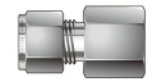
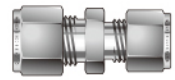
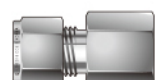
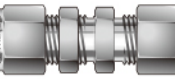

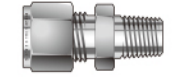











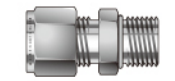
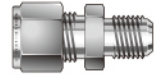

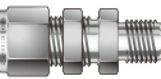


CONTENTS

04	· Index
06	· Technical Information
06	· Tubing Considerations
07	· Materials
08	· Hardness
09	· Pressure Ratings
13	· Temperature Ratings
13	· Tube Fittings
16	· Pipe Fittings
18	· Ordering
20	· Fitting Description
20	· Tube O.D.
20	· Pipe Threads
20	· Material Designator
21	· Products Information
22	· Straight
44	· Adapter
48	· 90° Elbow
54	· 45° Elbow
55	· Tee
63	· Hose connector
65	· etc.

INDEX

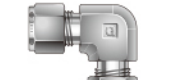
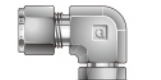




【 STRAIGHT 】

UNION ユニオン QL-U		22	FEMALE CONNECTOR メスコネクタ QL-FC		34
REDUCING UNION 異径ユニオン QL-RU		23	FEMALE GAUGE CONNECTOR メスゲージコネクタ QL-FGC		36
BULKHEAD UNION バルクヘッド ユニオン QL-BU		25	BULKHEAD FEMALE CONNECTOR バルクヘッド メスコネクタ QL-BFC		37
MALE CONNECTOR オスコネクタ QL-MC		26	REDUCER レducer QL-R		38
BULKHEAD MALE CONNECTOR バルクヘッド オスコネクタ QL-BMC		29	BULKHEAD REDUCER バルクヘッド レducer QL-BR		40
THERMOCOUPLE CONNECTOR サーモカップル コネクタ QL-MCT		29	PORT CONNECTOR ポートコネクタ QL-PC		41
MALE CONNECTOR FOR BONDED WASHER SEAL オスコネクタ BONDED WASHER SEAL用 QL-MCW		30	REDUCING PORT CONNECTOR 異径ポートコネクタ QL-RPC		41
MALE CONNECTOR FOR METAL GASKET オスコネクタ メタルガスケット用 QL-MCM		31	MALE PIPE WELDING CONNECTOR オスパイプ溶接コネクタ QL-MPWC		42
SAE/MS MALE CONNECTOR オスコネクタ SAE/MS 平行ねじ QL-MCO		32	AN UNION ANユニオン QL-AU		43
SAE/MS O-SEAL MALE CONNECTOR オスコネクタ 平行ねじ (Oリングシール) QL-MCOI		33	BULKHEAD AN UNION バルクヘッド ANユニオン QL-BAU		43
O-SEAL MALE CONNECTOR オスコネクタ NPTねじ (Oリングシール) QL-MCOI-(N)		33	AN ADAPTER ANアダプター QL-AA		43

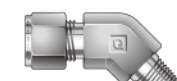

【 ADAPTER 】

MALE ADAPTER オスアダプター QL-MA		44	FEMALE ADAPTER メスアダプター QL-FA		46
----------------------------------	---	----	------------------------------------	---	----












【 90° ELBOW 】

UNION ELBOW ユニオン エルボ QL-UE		48	SAE/MS MALE ELBOW FOR POSITIONABLE オスエルボ SAE/MS 平行ねじ FOR POSITIONABLE QL-MEO		52
MALE ELBOW オスエルボ QL-ME		49	MALE PIPE WELDING ELBOW オスパイプ溶接エルボ QL-MPWE		53
FEMALE ELBOW メスエルボ QL-FE		51	TUBE SOCKET WELDING ELBOW チューブソケット 溶接エルボ QL-TSWE		53





【 45° ELBOW 】

45° MALE ELBOW 45° オスエルボ QL-45ME		54	SAE 45° MALE ELBOW FOR POSITIONABLE 45° オスエルボ SAE/MS 平行ねじ FOR POSITIONABLE QL-45MEO		54
--	---	----	--	---	----




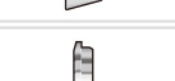




【 TEE 】

UNION TEE ユニオン ティー QL-UT		55	FEMALE RUN TEE メスランティ QL-FRT		59
REDUCING UNION BRANCH TEE 異径ユニオン ブランチティ QL-RUBT		56	FEMALE BRANCH TEE メスブランチティ QL-FBT		60
REDUCING UNION RUN TEE 異径ユニオン ランティ QL-RURT		56	SAE/MS MALE RUN TEE FOR POSITIONABLE オスランティ SAE/MS 平行ねじ FOR POSITIONABLE QL-MRTO		61
REDUCING UNION SPECIAL TEE 異径ユニオン スペシャルティ QL-RUST		56	SAE/MS O-SEAL MALE BRANCH TEE FOR POSITIONABLE オスブランチティ SAE/MS 平行ねじ FOR POSITIONABLE QL-MBTO		61
MALE RUN TEE オスランティ QL-MRT		57	UNION CROSS ユニオン クロス QL-UC		62
MALE BRANCH TEE オスブランチティ QL-MBT		58			

【 HOSE CONNECTOR 】

HOSE LOK CONNECTOR ホース ロックコネクタ QL-HLC		63	HOSE MALE CONNECTOR ホース オスコネクタ QL-HMC		64
HOSE TUBE ADAPTER ホース チューブアダプター QL-HTA		63	HOSE UNION ホース ユニオン QL-HU		64

【 ETC 】

PLUG プラグ QL-P		65	FRONT FERRULE フロント フェルル QL-FF		68
CAP キャップ QL-C		65	BACK FERRULE バック フェルル QL-BF		68
TUBE INSERT チューブインサート QL-IS		66	FERRULE SET フェルル セット QL-FS		69
NUT ナット QL-N		67	BULKHEAD RETAINER バルクヘッド リテーナー QL-BHR		69



The Best, The First!

The products are applied in a variety of industries, including semiconductor, LCD and general industries that require a particular piping system. We are sure we manufacture products that can satisfy customers through strict quality management and rapid response to customer needs.

Q-Lokの製品は半導体、液晶などの電子機器産業から石油化学や製薬まで、産業全般の様々なアプリケーションでご使用いただけるよう設計、製造されています。

高品質のQ-Lokチューブ継手は、高い信頼性を要求される工程や製造システムの配管としてご使用いただいております。徹底した品質管理は勿論のこと、迅速な対応でお客様にご満足いただけるよう取り組んでおります。

【 Tubing Considerations 】

01. Please choose the appropriate material and manufacturing process.
チューブは、適切な材質や製造方法のものを選択してください。
02. Please select the appropriate size and thickness for the pressure and flow rate.
ご使用環境（圧力、流量など）に合った配管径と肉厚を選択して下さい。
03. The selected tube should be absolutely straight and concentric.
チューブの継手接続部は、曲がりやつぶれがない物を選定してください。
04. Tubing has an allowable ovality tolerance double the O.D tolerance.
チューブの真円度は、外径公差の2倍まで許容されます。
05. Each material of the tube has a proper hardness.
材質・製造方法により硬度が異なります (表参照)。継手材質に適したものを御使用ください。
06. The scratches on the surface of tube are not allowed.
チューブの表面に傷がないことを確認して下さい。
07. The dust and any contaminants on the surface of tubes are not allowed.
チューブの表面に異物がないことを確認して下さい。



【 Installation Instructions 】

01. The metallic tube should be softer than fitting at all times and fully annealed. If the fitting is the same material as the metallic tube, you should use fully heat-treated fitting.
チューブの硬度は、継手より軟質であることを確認して下さい。同じ硬度のチューブを御使用いただく場合は、熱処理された継手を使用する必要があります。
02. The end of the tube should be protected by another soft material such as plastic cap. The protection cap which causes contamination and damage to the tube is not allowed to be used.
チューブの先端部分は、保護キャップ等で保護し、配管の損傷や、内部の汚染を防止してください。
03. Contact between the tube and rough surfaces (cement, gravel, coaster) should be avoided.
チューブの直置きを避け、継手の接続部が傷つかないように保管してください。
04. The correct cutting method and proper cutter should be used for tube cutting.
チューブの切断時は、適切な治具を使用し切断してください。
05. The metal chips or burrs caused by tube cutting should be removed and wipe the tube clean before using the tube.
チューブを使用する前、切断部位の汚れを取り除いてください。
06. The improper works and tube handling can cause system leakage.
不適切な継手と官の取り扱いにより、配管システムが漏えいする原因になる可能性があります。
07. Please contact sales representative if the product will be used for corrosive fluid application.
Q-Lok シリーズを腐食性流体で使用する場合は営業担当にご相談ください。

Material

The Q-Lok products with various materials are used in all piping systems of a number of industries including petrochemical, steel, power generation, shipbuilding, pharmaceutical, semiconductor, LCD, and solar cell plants.

Q-Lokは、配管システムのご要望にお応えする為、さまざまな製品材質をご用意しており、石油化学産業、製鉄所、発電所、造船所、製薬所、半導体工場、液晶工場、太陽電池及び各種開発装置など、あらゆる産業の配管システムに採用されております。詳細は下記の表をご覧ください。

	Material / 材質	Bar Stock / バーストック	Forging / 鍛造
Main Products 標準品	Stainless Steel 316	ASTM A276-316	ASTM A182-F316
Etc オプション	Brass	ASTM B16, ASTM B453	ASTM B283
	Carbon Steel	ASTM A108	ASTM A576
	Alloy C276	ASTM B574	ASTM B564
	Alloy 400	ASTM B164	ASTM B564

※Please contact us for the material selection of your system.
※特殊材質は別途にお問い合わせ下さい。

Technical Information



Hardness

In general, the tubing should be softer material than the fitting, and should be a product that has been processed by being fully annealed.

一般的にチューブ継手に適したチューブの硬度は、継手の材質の硬度よりも低いものを選んで下さい。十分な加熱・冷却処理を経た製品であることを確認して下さい。

Materials	Hardness
Carbon Steel	Max. Rb 72 or less
Copper Tubing	Max. Rb 60 or less
Stainless Steel Tubing	Max. Rb 80 or less
Alloy 20 Tubing	Max. Rb 95 or less
Alloy 400 Tubing	Max. Rb 75 or less
Alloy 625 Tubing	Max. Rb 95 or less
Alloy 825 Tubing	Max. Rb 95 or less
Alloy C276 Tubing	Max. Rb 100 or less
Super Duplex Tubing	Max. Rb 32HRC or less

※ Common requirement: no scratches, graffiti and dusts on the surface of tubing.
※ 傷、マーキング、ほこり、汚れなどがない場合の硬度



Pressure Ratings

High pressure usually refers to more than 500psig (34bar). In a piping system with a pressure of more than 500psig, there is an increased risk of leakage. When using high pressure equipment, we recommend that you refer to the working pressure table of tubing. The working pressure table of tubing is a table that indicates the maximum pressure for each material and size.

500psig (34MPa) 以上の圧力で使用する場合は、漏洩や配管が破裂する等の危険性があります。高圧設備で配管を選定する場合、管の圧力表をご参照ください。

管の圧力表は、各材質ごとに、管の肉厚と外径に対応した、最大圧力を示します。

【 Fractional Seamless Stainless Steel Tubing 】

OD In.	Wall Thickness(in.) / 肉厚														
	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	6,800	8,100	9,400	12,000											
1/8					8,500	10,900									
3/16					5,400	7,000	10,200								
1/4					4,000	5,100	7,500	10,200							
5/16						4,000	5,800	8,000							
3/8						3,300	4,800	6,500	8,600						
1/2						2,400	3,500	4,700	6,200						
5/8							2,900	4,000	5,200	6,000					
3/4							2,400	3,300	4,200	4,900	5,800	6,400			
7/8							2,000	2,800	3,600	4,200	4,800	5,400	6,100		
1								2,400	3,100	3,600	4,200	4,700	5,300		
1 1/4									2,400	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

【 Metric Seamless Stainless Steel Tubing 】

OD mm	Wall Thickness(mm) / 肉厚												
	0.8	1.0	1.2	1.5	1.8	2.0	2.2	2.5	2.8	3.0	3.5	4.0	4.5
3	710												
6	330	420	520	670									
8		310	380	490	Working Pressure in Bar								
10		240	300	380									
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						
18			170	210	260	290	320	370					
20			150	190	230	260	290	330	380				
22			130	170	210	230	260	300	340				
25					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

※ Conversion Factor : 1bar = 14.7 psig

Technical Information

Q-Lok®



【 Fractional Seamless Copper Tubing 】

OD In.	Wall Thickness(in.) / 肉厚									
	0.010	0.012	0.028	0.035	0.049	0.065	0.083	0.095	0.109	0.120
1/8			2,700	3,600						
3/16			1,800	2,300	3,400					
1/4			1,300	1,600	2,500	3,500		Working Pressure in psig		
5/16				1,300	1,900	2,700				
3/8				1,000	1,600	2,200				
1/2				800	1,100	1,600	2,100			
5/8					900	1,200	1,600	1,900		
3/4					700	1,000	1,300	1,500	1,800	
7/8					600	800	1,100	1,300	1,500	
1					500	700	900	1,100	1,300	1,500

【 Metric Seamless Copper Tubing 】

OD mm	Wall Thickness(in.) / 肉厚										
	0.7	0.8	1.0	1.2	1.5	1.6	1.8	2.0	2.2	2.5	3.0
3	225	260									
4	165	191	244	295							
6		122	157	192	245	263		Working Pressure in Bar			
8		89	114	140	179	193					
10		70	89	109	140	150	172	193			
12		58	73	89	114	123	140	158			
14			62	76	96	103	118	133	148	171	209
16			54	66	83	89	102	114	127	147	180
18			48	58	74	79	90	101	112	129	159
22			39	47	59	64	72	81	90	103	126
25			34	41	52	56	63	71	78	90	110

【 Fractional Seamless Carbon Steel Tubing 】

OD In.	Wall Thickness(in.) / 肉厚												
	0.028	0.035	0.049	0.065	0.083	0.095	0.109	0.120	0.134	0.148	0.165	0.180	0.220
1/8	8,000	10,200											
3/16	5,100	6,600	9,600										
1/4	3,700	3,700	7,000	9,600	Working Pressure in psig								
5/16		3,800	5,500	7,600									
3/8		3,100	4,500	6,200									
1/2		2,300	3,300	4,500	5,900								
5/8		1,800	2,600	3,500	4,600	5,300							
3/4			2,100	2,900	3,700	4,300	5,100						
7/8			1,800	2,400	3,200	3,700	4,300						
1			1,500	2,100	2,700	3,200	3,700	4,100					
1 1/4				1,600	2,100	2,500	2,900	3,200	3,600	4,000	4,600	5,000	
1 1/2					1,800	2,000	2,400	2,600	3,000	3,300	3,700	4,100	5,100
2						1,500	1,700	1,900	2,200	2,400	2,700	3,000	3,700

※Conversion Factor : 1bar = 14.7 psig

【 Metric Seamless Carbon Steel Tubing 】

OD In.	Wall Thickness(mm) / 肉厚												
	0.8	1.0	1.2	1.5	1.8	2.0	2.2	2.5	2.8	3.0	3.5	4.0	4.5
3	670	830											
6	310	400	490	630									
8		290	360	460					Working Pressure in Bar				
10		230	280	360									
12		190	230	290	360	410	450						
14		160	190	250	300	340	380						
15		150	180	230	280	320	350						
16			170	210	260	290	330	380					
18			150	190	230	260	290	330					
20			130	170	200	230	250	290	330				
22			120	150	180	210	230	260	300				
25					160	180	200	230	260	280			
28						160	180	200	230	250	290		
30						150	160	190	210	230	270		
32						140	150	170	200	210	250	290	
38							130	140	160	180	210	240	280

【 Fractional Seamless Alloy 400 Tubing 】

OD mm	Wall Thickness(in.) / 肉厚							
	0.028	0.035	0.049	0.065	0.083	0.095	0.109	0.120
1/8	7,900	10,200						
1/4	3,700	4,800	7,000	9,600		Working Pressure in psig		
3/8		3,100	4,400	6,100				
1/2		2,300	3,300	4,400				
3/4			2,200	3,000	4,000	4,600		
1				2,200	2,900	3,400	3,900	4,300

【 Fractional Seamless Alloy C276 Tubing 】

OD In.	Wall Thickness(in.) / 肉厚					
	0.02	0.028	0.035	0.049	0.065	0.083
1/8	12,500	18,200	23,100	Working Pressure in psig		
3/16	8,000	11,600	14,900			
1/4		8,400	10,800	15,700	21,400	
5/16			8,400	12,200	16,800	
3/8			6,900	10,000	13,700	
1/2			4,200	6,000	8,200	10,700

【 Fractional Seamless Alloy 825 Tubing 】

OD In.	Wall Thickness(in.) / 肉厚					
	0.02	0.028	0.035	0.049	0.065	0.083
1/8	7,500	11,000	14,000	Working Pressure in psig		
3/16	4,800	7,000	9,000			
1/4		5,100	6,500	9,500	13,000	
5/16			5,100	7,400	10,100	
3/8			4,100	6,000	8,300	
1/2			3,000	4,400	6,000	7,900

Technical Information

Q-Lok®



【 Fractional Seamless Alloy 625 Tubing 】

OD In.	Wall Thickness(in.) / 肉厚					
	0.02	0.028	0.035	0.049	0.065	0.083
1/8	12,500	18,200	23,100	Working Pressure in psig		
3/16	8,000	11,600	14,900	21,500		
1/4		8,400	10,800	15,700	21,400	
5/16			8,400	12,200	16,800	
3/8			6,900	10,000	13,700	
1/2			4,200	6,000	8,200	10,700

【 Fractional Seamless Alloy 20 Tubing 】

OD In.	Wall Thickness(in.) / 肉厚					
	0.02	0.028	0.035	0.049	0.065	0.083
1/8	8,400	12,200	15,400			
3/16	5,300	7,700	9,900	14,400		
1/4		5,600	7,200	10,500	14,300	
5/16			5,600	8,200	11,200	
3/8			4,600	6,600	9,100	
1/2			2,800	4,000	5,400	7,200

【 Factors used to Determine Tubing Pressure Ratings at Elevated Temperatures 】

Temp °F °C		Stainless		C.steel A179	Copper B75	825 B423	C276 B622	625 B444	20 B729	400 B165	Super Duplex A789
		304	316								
100	38	1	1	1	1	1	1	1	1	1	1
200	93	1	1	0.96	0.8	0.92	1	1	0.9	0.88	0.9
300	149	1	1	0.9	0.78	0.87	1	1	0.86	0.79	0.85
400	204	0.94	0.97	0.86	0.5	0.83	1	1	0.83	0.79	0.82
500	260	0.88	0.9	0.82	0.13	0.79	0.98	0.97	0.79	0.79	0.81
600	316	0.82	0.85	0.77		0.76	0.93	0.95	0.77	0.79	0.8
700	371	0.8	0.82	0.73		0.74	0.87	0.93	0.76	0.79	
800	427	0.76	0.8	0.59		0.73	0.84	0.93	0.73	0.76	
900	482	0.73	0.78			0.73	0.81	0.93			
1000	538	0.69	0.77			0.71	0.79	0.93			
1200	649	0.3	0.37				0.35	0.33			

【 Fractional Seamless Super Duplex Tubing 】

OD In.	Wall Thickness(in.) / 肉厚					
	0.028	0.035	0.049	0.065	0.083	0.095
1/4	7,700	9,900	15,000			
3/8		6,400	9,200	12,700		
1/2		5,000	7,200	10,000	12,900	
5/8			5,700	7,700	10,100	
3/4			4,700	6,300	8,200	10,000

Temperature Ratings

For the high temperature system, you should be careful of the working temperature of the material. The temperature of the system will affect the working of the piping material. In addition, you should also take care to avoid burns due to engineer carelessness.

高温プロセスの配管システムでは、材質による使用温度の制約に注意する必要があります。システムの温度は、配管材の使用圧力に影響を与えます。また、不注意による火傷にも注意して下さい。

【 Temperature Ratings of Materials 】

Materials	°F	°C
Stainless Steel 304L	800	427
Stainless Steel 316	1200	649
Alloy B2	800	427
Alloy C-276	1000	537
Alloy 600	1200	649
Alloy 400	800	427
Nickel	600	316
Tantalum	2000	1093
Titanium	600	316
Steel	375	190
Alloy 20	1200	649
Aluminum	400	204
Brass	400	204

Tube Fittings

01 Tube Fittings (Double Ferrule Compression Type)

Q-Lok's Tube Fitting is composed of body, nut and two ferrules (front ferrule and back ferrule)

Q-LOKの継手はボディ、ナット、2つのフェルール（フロントフェルール、バックフェルール）で構成されております。

【 Assembly 】

01. Please remove any defective factor such as any contaminants or scratches that may affect the leak-tight seal.

継手とチューブの封止に影響を与える要因（打痕・傷・異物等）を除去します。

02. Please ensure that it makes good contact with the tube to the jaws shoulder of the inside of the fitting.

If it does not tighten smoothly, there may be a problem with the fitting, so please do not tighten the nut forcibly.

チューブを継手の底付まで突き当てます。容易に突き当たらない場合、

チューブが継手に異常がありますので、無理に接続をしないで下さい。



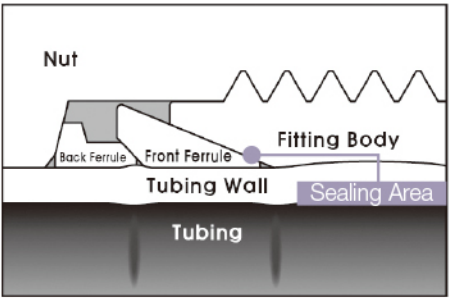
Technical Information

Q-Lok®



03. Please tighten the nut firmly by hand. (Finger Tighten Position)
- ※ For high pressure application more than 500psig (34bar).
Please tighten the nut using a wrench until it does not disassemble by hand. (Snug Position)
- 手締めでナットが回らなくなるまで締め付けます。(Finger Tighten Position)
- ※ 高圧 (500psig (34Mpa) 以上) の場合、手締め後、チューブがつぶれない程度に軽く、スパナでナットが回らなくなるまで締め付けます。(Snug Position)
04. While holding the fitting body steady with a backup wrench, tighten the nut 1-1/4 turns.
- スパナを用いてナットを1-1/4回転締め付けます。この時、継手ボディを固定し、ナットのみを回転させてください。
- The entire assembly process is as follows.
継手内部で次のとおり一連の動作が行われ、封止が行われます。
 - The nut moves forward, driving the back ferrule forward.
ナットが前進しながらバックフェルールを前方に移動させる。
 - The back ferrule drives the front ferrule forward.
バックフェルールがフロントフェルールを前方に移動させる。
 - The front ferrule is forced downward by the camming mouth of the fitting body.
フロントフェルールがボディの内側のテーパ面に強く押し付けられる。
 - The front ferrule takes up the tolerance between its inside diameter and the outside diameter of the tube.
フロントフェルールがボディに押されテーパに沿って、チューブ表面に強く押し付けられる。
 - As the front ferrule moves forward and downward, its trailing edge is lifted by the back ferrule to the sealing position with the camming body bevel.
フロントフェルールと接触したチューブに変形が起こり、1次シールが形成される。
 - As greater resistance is encountered because the tubing is deformed and a wider area of the body bevel and front ferrule are in contact, the back ferrule is driven downward to form a second hold or grip on the tubing.
バックフェールの先端がチューブ表面側に曲がり、チューブを変形させ2次シールを形成する。

05. Fittings can be disconnected and re-tightened repeatedly.
- 継手は、取り外し後の再取り付けが可能です。
- During disassembly, please mark the original position of the nut.
取り外しの際、元のナット位置を記入しておく。
 - Re-insert the tubing, and turn the nut by hand.
チューブを再挿入してナットを手で回す。
 - Rotate about 1/16 turn beyond the original position of the nut with a wrench.
スパナで元のナットの位置より約1/16回転させる。



- At 1-1/4 turns of wrench pull-up, the nut has moved forward. Within this movement the sequence of sealing and holding has been accomplished.
ナットが、1-1/4回転する間に、2つのフェルールが機能的に働き、機械的な変形を伴うシール面を形成します。
- ※ 1/16", 1/8" & 3/16" (2, 3, 4mm) Fitting : 3/4 turn from finger-tight.
※ 1/16", 1/8" & 3/16" (2, 3, 4mm) 継手 : 指締め後3/4回転締め付けます。

02 Pipe Fittings

【 Assembly 】

01. Please eliminate any defective factors like contaminants or scratches that may affect the leak-tight seal of each connector.
各継手のネジ山に異物や傷など封止に影響を与える可能性がある要因は除去して下さい。
02. Please spread anaerobic pipe thread sealant on the male thread. In case of using Teflon tape, please warp the thread 1-1/2 turn on the male thread. Make sure tape does not overhang the first thread.
※ The general sealants on the market can have a defective effect (leakage, particles) on the pipe system.
We suggest to use the sealant recommended by Q-Lok.
雄ネジに嫌気性配管シール剤を塗布してください。シールテープを使用する場合、雄ネジの最初1山を除いて、1-1/2回転テープを巻いてください。
※ 市販のシール剤の場合、配管システムに悪影響（漏れ、パーティクル）を与える可能性があります。
03. Please tighten the nut firmly by hand. (Finger Tighten Position) To prevent over-tightening, mark the original position.
手締めでナットが回らなくなるまで締め付けます。(Finger Tighten Position)、過度の締め付けを防ぐため、ナットの位置に印を付けて下さい。
04. Please tighten firmly with a wrench.
スパナでしっかりと締め付けて下さい。

Pipe Fittings

【 THREAD TYPE & HEX. SIZE for Fractional 】

O.D Size (inch)	Q-Lok Thread	Hex. Size (mm)
1/8	5/16-20	11.10
3/16	3/8-20	12.70
1/4	7/16-20	14.20
5/16	1/2-20	15.80
3/8	9/16-20	17.40
1/2	3/4-20	22.20
5/8	7/8-20	25.40
3/4	1-20	28.60
7/8	1-1/8-20	31.80
1	1-5/16-20	38.10

【 THREAD TYPE & HEX. SIZE for Metric 】

O.D Size (inch)	Q-Lok Thread	Hex. Size (mm)
3	5/16-20	12.0
4	3/8-20	12.0
6	7/16-20	14.0
8	1/2-20	16.0
10	5/8-20	19.0
12	3/4-20	22.0
15	7/8-20	25.0
16	7/8-20	25.0
18	1-20	30.0
20	1-1/8-20	32.0
22	1-1/8-20	32.0
25	1-5/16-20	38.0

Technical Information

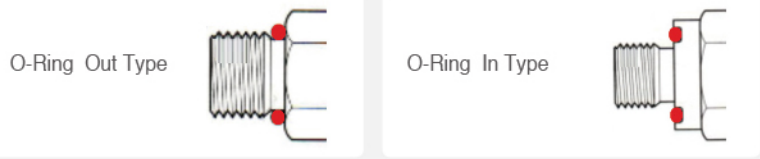
Q-Lok®



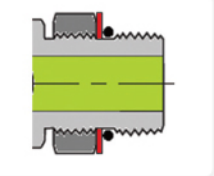
TYPE	STANDARD	Thread Figure	Sealing
Tapered Pipe Thread テーパネジ	National Pipe Thread(NPT)	ASME B1.20.1 SAE AS 71051	The crests, roots, and flanks are always in full contact, but these lead to galling, if a "Dry seal" joint is made without lubrication, or sealing compound. The most type of pipe threads sealant is always required.
	Pipe Thread(PT)	ISO 7/1 BS EN 10226-1(BSPT) DIN 2999(Male Thread Only) JIS B0203(PT)	
Parallel, Straight Thread 平行ネジ	Parallel Pipe Thread(PF)*1	ISO 228/1 BS 2779(BSPP) JIS B0202(PF) DIN 3852 -Form A -Form B SAE J475, SAE J1926	A Gasket or O-ring is normally Used to seal for the parallel female threaded component. めネジ面に O-ringや ガスケットが圧着されて 密閉
	Straight Thread(SAE)*2	ASME B1.1(UNF) ISO R725 SAE J475 SAE J514 ASME B1.20.1 SAE As71051 SAE J514	

*2 : Position of the O-ring is divided as follows. (SAE thread type)

SAEネジタイプ継手の場合Oリングの位置が次のように分けられます。



※ If you fear for the leakage caused by the deformation of O-ring by tightening the nut, please use a washer instead of O-ring.
Positional Typeの継手のようにナットの締め付けによってO-ringの破損が懸念される場合、ワッシャーを利用して下さい。



*1 : The following are methods of PF threads sealing.
PFネジタイプ継手の接続方法は、次のように分けられます。

A self-centering taper is used at the hex which centers a composite washer to seal to the surface surrounding the female thread.
メールコネクタのボディ溝とめネジの斜面の間にガスケットが圧着
Bonded Gasket (Resin and Carbon Steel)

A metal gasket performs the sealing function between the reverse bevel of the fitting and the surface surrounding female thread.
メールコネクタのボディ溝とめネジの斜面の間にガスケットが圧着
Metal Gasket (Copper)

The gasket is placed onto the bottom of the female thread and the end of the male threads and strongly seals the whole thread.
メールコネクタの斜面とめネジ内部溝の間にガスケットが圧着
Metal Gasket (Copper)



Technical Information

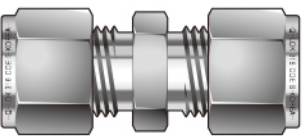
Q-Lok®



ORDERING

01 ORDERING

【 Tube To Tube 】



QL-U-4M-□

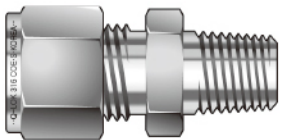
Q-Lok Union 4mm Stainless Steel 316
Q-Lok ユニオン 4mm Stainless Steel 316

QL - U - 4M - □

- ① : Q-Lok Tube Fitting
- ② : Union ▶ Fitting Type
- ③ : 4mm ▶ Tube O.D
- ④ : Material ▶ Stainless Steel is not marked.

- ① : Q-Lok Tube Fitting
- ② : ユニオン ▶ Fitting Type
- ③ : 4mm ▶ Tube O.D
- ④ : Material ▶ Stainless Steel 素材の場合は省略

【 Tube To Pipe End 】



QL-MC-4-4R-□

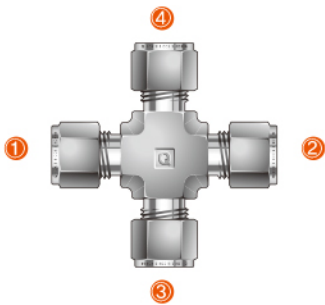
Q-Lok Male Connector 1/4" Stainless Steel 316
Q-Lok Male Connector 1/4インチ Stainless Steel 316

QL - MC - 4 - 4 R - □

- ① : Q-Lok Tube Fitting
- ② : Male Connector ▶ Fitting Type
- ③ : 1/4" ▶ Tube O.D.
- ④ : 1/4" ▶ Pipe Thread Size
- ⑤ : PT Thread ▶ Thread Type (NPT : N, PT : R)
- ⑥ : Material ▶ Stainless Steel is not marked.

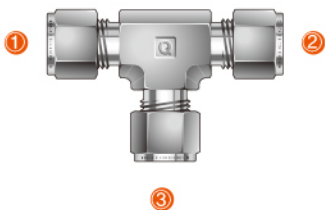
- ① : Q-Lok Tube Fitting
- ② : メールコネクタ ▶ Fitting Type
- ③ : 1/4インチ ▶ Tube O.D.
- ④ : 1/4インチ ▶ Pipe Thread Size
- ⑤ : PT Thread ▶ Thread Type (NPT : N, PT : R)
- ⑥ : Material ▶ Stainless Steel 素材の場合は省略

【 Tee And Cross 】



Ex) QL-UC-4-6-8-4 ▶ Port 1 : 1/4", Port 2 : 3/8", Port 3 : 1/2", Port 4 : 1/4"

Ex) QL-UC-4-6-8-4 ▶ 1番ポートサイズ : 1/4インチ, 2番ポートサイズ : 3/8インチ
3番ポートサイズ : 1/2インチ, 4番ポートサイズ : 1/4インチ



Ex) QL-RUST-4-8-6 ▶ Port 1 : 1/4", Port 2 : 1/2", Port 3 : 3/8"
QL-RURT-4-8 ▶ Port 1 : 1/4", Port 2 : 1/2", Port 3 : 1/4"
QL-RUBT-4-6 ▶ Port 1 : 1/4", Port 2 : 1/4", Port 3 : 3/8"

Ex) QL-RUST-4-8-6 ▶ 1番ポートサイズ : 1/4インチ, 2番ポートサイズ : 1/2インチ
3番ポートサイズ : 3/8インチ
QL-RURT-4-8 ▶ 1番ポートサイズ : 1/4インチ, 2番ポートサイズ : 1/2インチ
3番ポートサイズ : 1/4インチ
QL-RUBT-4-6 ▶ 1番ポートサイズ : 1/4インチ, 2番ポートサイズ : 1/4インチ
3番ポートサイズ : 3/8インチ



Tube O.D.

Inch O.D.	1/16	1/8	3/16	1/4	5/16	3/8	1/2	5/8	3/4	7/8	1	1-1/4	1-1/2	2
Identifier	1	2	3	4	5	6	8	10	12	14	16	20	24	32
Metric O.D.	2mm	3mm	4mm	6mm	8mm	10mm	12mm	16mm	20mm	22mm	25mm	28mm	32mm	38mm
Identifier	2M	3M	4M	6M	8M	10M	12M	16M	20M	22M	25M	28M	32M	38M

Pipe Threads

Nom. Size	1/8"	1/4"	3/8"	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"
Identifier	2	4	6	8	12	16	20	24	32

Material Designator

Material	SS 316	SS 316L	SS 304	C.Steel	Brass	Alloy400
Identifier	(省略)	L	4	C	B	M

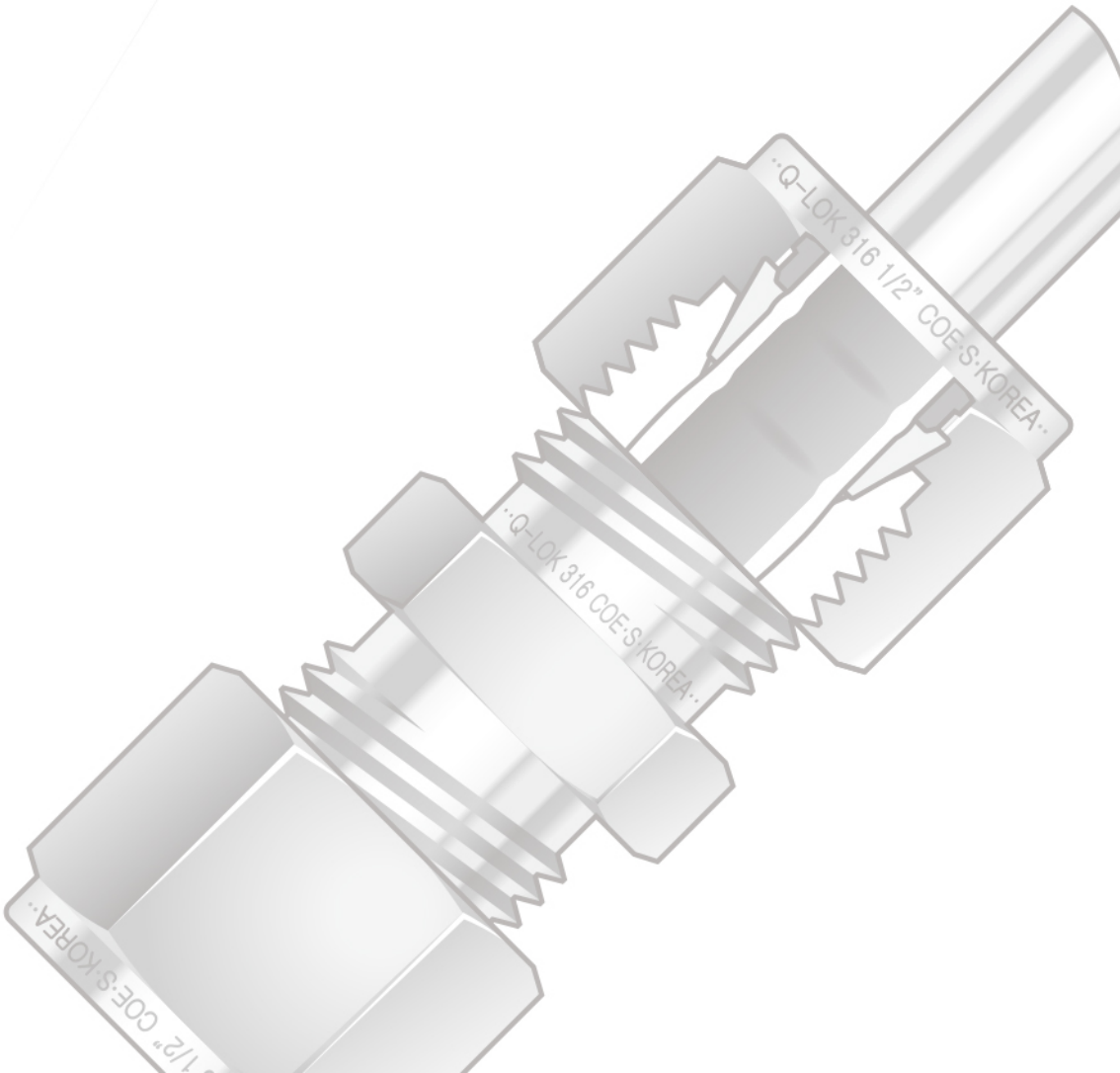
Technical Information

Products
Information

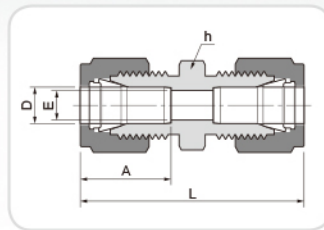
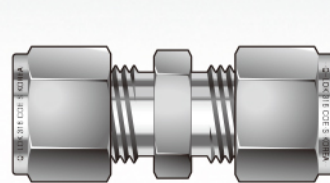
Fitting Description

Identifier	Description	Identifier	Description
QL-U	Union ユニオン	QL-FA	Female Adapter メスアダプター
QL-UE	Union Elbow ユニオン エルボ	QL-PC	Port Connector ポートコネクタ
QL-RU	Reducing Union 異径ユニオン	QL-RPC	Reducing Port Connector 異径ポートコネクタ
QL-BRU	Bulkhead Reducing Union バルクヘッド 異径ユニオン	QL-M(F)CVC	Face Seal Male(Female) Connector フェースシール オス(メス) コネクタ
QL-RUE	Reducing Union Elbow 異径ユニオン エルボ	QL-AU	AN Union ANユニオン
QL-UT	Union Tee ユニオン ティー	QL-BAU	Bulkhead AN Union バルクヘッド ANユニオン
QL-RURT	Reducing Union Run Tee 異径ユニオン ランティー	QL-AA	AN Adapter ANアダプター
QL-RUBT	Reducing Union Branch Tee 異径ユニオン ブランチティー	QL-MCO	SAE/MS Male Connector オスコネクタ SAE/MS 平行ねじ
QL-RUST	Reducing Union Special Tee 異径ユニオン スペシャルティー	QL-MEO	SAE/MS Male Elbow for Positionable オスエルボ SAE/MS 平行ねじ for Positionable
QL-UC	Union Cross ユニオン クロス	QL-45MEO	SAE 45°Male Elbow for Positionable 45° オスエルボ SAE/MS 平行ねじ for Positionable
QL-BU	Bulkhead Union バルクヘッド ユニオン	QL-MRTO	SAE/MS Male Run Tee for Positionable オスランティー SAE/MS 平行ねじ for Positionable
QL-MC	Male Connector オスコネクタ	QL-MBTO	SAE/MS O-SEAL Male Branch Tee for Positionable オスブランチティーSAE/MS 平行ねじ for Positionable
QL-MCW	Male Connector for Bonded Washer Seal オスコネクタ Bonded Washer Seal用	QL-MCOI	SAE/MS O-SEAL Male Connector オスコネクタ 平行ねじ(Oリングシール)
QL-MCM	Male Connector for Metal Gasket オスコネクタ メタルガスケット用	QL-MCOI-(N)	O-SEAL Male Connector オスコネクタ NPT ねじ(Oリングシール)
QL-BMC	Bulkhead Male Connector バルクヘッド オスコネクタ	QL-MPWC	Male Pipe Welding Connector オスパイプ溶接コネクタ
QL-MCT	Thermocouple Connector サーモカップル コネクタ	QL-MPWE	Male Pipe Welding Elbow オスパイプ溶接エルボ
QL-45ME	45°Male Elbow 45° オスエルボ	QL-TSWE	Tube Socket Welding Elbow チューブソケット 溶接エルボ
QL-ME	Male Elbow オスエルボ	QL-HLC	Hose Lok Connector ホース ロックコネクタ
QL-MRT	Male Run Tee オスランティー	QL-HTA	Hose Tube Adapter ホース チューブアダプター
QL-MBT	Male Branch Tee オスブランチティー	QL-HMC	Hose Male Connector ホース オスコネクタ
QL-FC	Female Connector メスコネクタ	QL-HU	Hose Union ホース ユニオン
QL-FGC	Female Gauge Connector メスゲージコネクタ	QL-P	Plug プラグ
QL-BFC	Bulkhead Female Connector バルクヘッド メスコネクタ	QL-C	Cap キャップ
QL-FE	Female Elbow メスエルボ	QL-IS	Tube Insert チューブインサート
QL-FRT	Female Run Tee メスランティー	QL-N	Nut ナット
QL-FBT	Female Branch Tee メスブランチティー	QL-FF	Front Ferrule フロント フェルール
QL-R	Reducer レデューサー	QL-BF	Back Ferrule バック フェルール
QL-BR	Bulkhead Reducer バルクヘッド レデューサー	QL-FS	Ferrule Set フェルール セット
QL-MA	Male Adapter オスアダプター	QL-BHR	Bulkhead Retainer バルクヘッド リテーナー

Q-Lok®



UNION ユニオン QL-U



Connector Fractional Tube

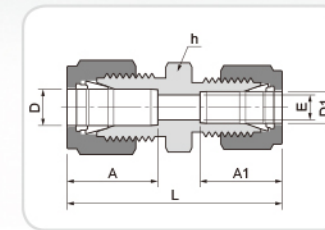
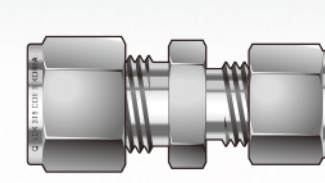
Part Number	Dimensions					
	D		L	h		Min. E
	inch	mm	mm	inch	mm	mm
QL-U-1	1/16	1.58	25.15	5/16	7.93	8.63
QL-U-2	1/8	3.17	36.1	7/16	11.11	13.04
QL-U-3	3/16	4.76	37.89	7/16	11.11	14.05
QL-U-4	1/4	6.35	41.49	1/2	12.7	15.59
QL-U-5	5/16	7.93	43.12	9/16	14.28	16.42
QL-U-6	3/8	9.52	45.83	5/8	15.88	17.26
QL-U-8	1/2	12.7	52.12	13/16	20.64	23.32
QL-U-10	5/8	15.87	52.63	15/16	23.81	24.7
QL-U-12	3/4	19.05	53.82	1 1/6	26.98	24.53
QL-U-14	7/8	22.22	55.37	1 3/16	30.16	25.9
QL-U-16	1	25.4	65.27	1 3/8	34.92	31.55
QL-U-20	1 1/4	31.75	92.2	1 3/4	44.45	41.14
QL-U-24	1 1/2	38.1	107.95	2 1/8	53.97	50.03
QL-U-32	2	50.8	149.35	2 3/4	69.85	67.56

Connector Metric Tube

Part Number	Dimensions				
	D	L	h	A	Min. E
	mm				
QL-U-2M	2	35.6	12	12.9	1.7
QL-U-3M	3	35.3	12	12.9	2.4
QL-U-4M	4	38.03	12	14.07	2.4
QL-U-6M	6	41.64	14	15.73	4.8
QL-U-8M	8	43.12	15	16.22	6.4
QL-U-10M	10	46.24	18	17.28	7.9
QL-U-12M	12	51.22	22	22.92	9.5
QL-U-14M	14	52.24	24	24.48	11.1
QL-U-15M	15	52.1	24	24.41	11.9
QL-U-16M	16	52.07	24	24.39	12.7
QL-U-18M	18	54.01	27	24.61	15.1
QL-U-20M	20	55.33	30	26.22	15.9
QL-U-22M	22	55.5	30	26.59	18.5
QL-U-25M	25	64.37	35	31.04	21.8
QL-U-28M	28	85	41	36.6	21.8
QL-U-32M	32	97.3	46	42	28.6
QL-U-38M	38	113.6	55	49.4	33.7

Dimensions are reference only, subject to change without prior notice.
The E dimension is the minimum nominal opening. These fittings may have a larger opening at the pipe/straight thread end.

REDUCING UNION 異径ユニオン QL-RU



Connector Fractional Tube

Part Number	Dimensions								
	D		D1		L	h		A	Min. E
	inch	mm	inch	mm	mm	inch	mm	mm	mm
QL-RU-2-1	1/8	3.17	1/16	1.58	30.91	7/16	11.11	13.04	8.63
QL-RU-3-2	3/16	4.76	1/8	3.17	37.13	7/16	11.11	14.05	13.04
QL-RU-4-1	1/4	6.35	1/16	1.58	34.29	1/2	12.7	15.59	8.63
QL-RU-4-2	1/4	6.35	1/8	3.17	39.18	1/2	12.7	15.59	13.04
QL-RU-4-3	1/4	6.35	3/16	4.76	39.94	1/2	12.7	15.59	14.05
QL-RU-5-2	5/16	7.93	1/8	3.17	39.87	9/16	14.28	16.42	13.04
QL-RU-5-4	5/16	7.93	1/4	6.35	42.16	9/16	14.28	16.42	15.59
QL-RU-6-2	3/8	9.52	1/8	3.17	41.61	5/8	15.88	17.26	13.04
QL-RU-6-4	3/8	9.52	1/4	6.35	43.92	5/8	15.88	17.26	15.59
QL-RU-6-5	3/8	9.52	5/16	7.93	44.73	5/8	15.88	17.26	16.42
QL-RU-8-2	1/2	12.7	1/8	3.17	45.89	13/16	20.64	23.32	13.04
QL-RU-8-4	1/2	12.7	1/4	6.35	47.69	13/16	20.64	23.32	15.59
QL-RU-8-6	1/2	12.7	3/8	9.52	49.35	13/16	20.64	23.32	17.26
QL-RU-10-6	5/8	15.87	3/8	9.52	49.99	15/16	23.81	24.7	17.26
QL-RU-10-8	5/8	15.87	1/2	12.7	52.75	15/16	23.81	24.7	23.32
QL-RU-12-4	3/4	19.05	1/4	6.35	49.69	1 1/6	26.98	24.53	15.59
QL-RU-12-6	3/4	19.05	3/8	9.52	51.34	1 1/6	26.98	24.53	17.26
QL-RU-12-8	3/4	19.05	1/2	12.7	54.11	1 1/6	26.98	24.53	23.32
QL-RU-12-10	3/4	19.05	5/8	15.87	54.11	1 1/6	26.98	24.53	24.7
QL-RU-16-8	1	25.4	1/2	12.7	63.9	1 3/8	34.92	31.55	23.32
QL-RU-16-12	1	25.4	3/4	19.05	63.1	1 3/8	34.92	31.55	24.53

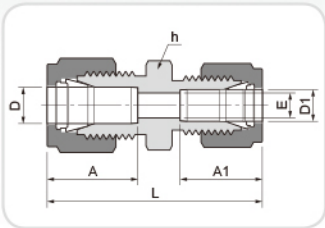
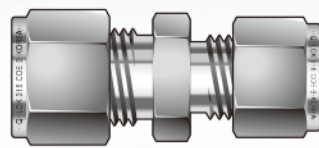
Connector Metric Tube

Part Number	Dimensions						
	D	D1	L	h	A	A1	Min. E
	mm						
QL-RU-3M-2M	3	2	35.3	12	12.9	12.9	1.7
QL-RU-6M-3M	6	3	38.6	14	15.73	12.9	2.4
QL-RU-6M-4M	6	4	39.4	14	15.73	14.07	2.4
QL-RU-8M-6M	8	6	42.58	15	16.22	15.73	4.8
QL-RU-10M-6M	10	6	44.79	18	17.28	15.73	4.8
QL-RU-10M-8M	10	8	45.28	18	17.28	16.22	6.4
QL-RU-12M-6M	12	6	47	22	22.92	15.73	4.8
QL-RU-12M-8M	12	8	48.64	22	22.92	16.22	6.4
QL-RU-12M-10M	12	10	48.9	22	22.92	17.28	7.9
QL-RU-16M-10M	16	10	49.56	24	24.39	17.28	7.9
QL-RU-16M-12M	16	12	52.04	24	24.39	22.92	9.5
QL-RU-18M-12M	18	12	53.5	27	24.61	22.92	9.5
QL-RU-25M-18M	25	18	61	35	31.04	24.61	15.1
QL-RU-25M-20M	25	20	62.3	35	31.04	26.22	15.9

Dimensions are reference only, subject to change without prior notice.
The E dimension is the minimum nominal opening. These fittings may have a larger opening at the pipe/straight thread end.

REDUCING UNION
異径ユニオン

QL-RU

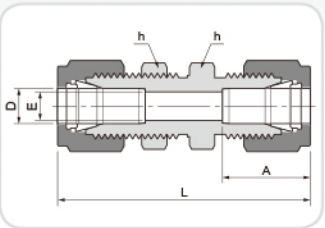
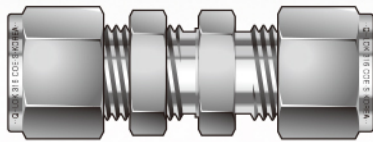


Connector Metric Tube to Fractional Tube

Part Number	Dimensions							
	D		D1	L	h	A	A1	Min. E
	inch	mm	mm					
QL-RU-2-3M	1/8	3.17	3	35.2	12	13.04	12.9	2.28
QL-RU-2-4M	1/8	3.17	4	36.5	12	13.04	14.07	2.28
QL-RU-2-6M	1/8	3.17	6	38.5	14	13.04	15.73	2.28
QL-RU-2-10M	1/8	3.17	10	41.8	18	13.04	17.28	2.28
QL-RU-4-4M	1/4	6.35	4	39.4	14	15.59	14.07	2.28
QL-RU-4-6M	1/4	6.35	6	41.48	14	15.59	15.73	4.8
QL-RU-4-8M	1/4	6.35	8	42.58	15	15.59	16.22	4.8
QL-RU-4-10M	1/4	6.35	10	44.5	18	15.59	17.28	4.8
QL-RU-5-6M	5/16	7.93	6	42.3	14	16.42	15.73	4.8
QL-RU-5-10M	5/16	7.93	10	45.1	18	16.42	17.28	6.4
QL-RU-6-6M	3/8	9.52	6	43.43	16	17.26	15.73	4.8
QL-RU-6-10M	3/8	9.52	10	45.65	18	17.26	17.28	7.11
QL-RU-6-12M	3/8	9.52	12	49.12	22	17.26	22.92	7.11
QL-RU-8-10M	1/2	12.7	10	49.38	22	23.32	17.28	7.9
QL-RU-8-12M	1/2	12.7	12	51.88	22	23.32	22.92	9.5
QL-RU-8-14M	1/2	12.7	14	51.86	24	23.32	24.48	10.41
QL-RU-8-15M	1/2	12.7	15	52	24	23.32	24.41	10.41
QL-RU-10-16M	5/8	15.87	16	52	24	24.7	24.39	12.7
QL-RU-12-18M	3/4	19.05	18	53.5	27	24.53	24.61	15.1
QL-RU-12-20M	3/4	19.05	20	54.9	30	24.53	26.22	15.9
QL-RU-16-20M	1	25.4	20	60.3	34.9	31.55	26.22	15.9
QL-RU-16-22M	1	25.4	22	60.3	34.9	31.55	26.59	15.9

BULKHEAD UNION
バルクヘッドユニオン

QL-BU



Connector Fractional Tube

Part Number	Dimensions						
	D		L	h		A	Min. E
	inch	mm	mm	inch	mm	mm	
QL-BU-1	1/16	1.58	31.5	5/16	7.93	8.63	1.27
QL-BU-2	1/8	3.17	51.98	1/2	12.7	13.04	2.28
QL-BU-3	3/16	4.76	53.59	9/16	14.28	14.05	3.05
QL-BU-4	1/4	6.35	58.25	5/8	15.88	15.59	4.83
QL-BU-5	5/16	7.93	61.03	11/16	17.46	16.42	6.35
QL-BU-6	3/8	9.52	63.12	3/4	19.05	17.26	7.11
QL-BU-8	1/2	12.7	71.92	15/16	23.81	23.32	10.41
QL-BU-10	5/8	15.87	73.21	1 1/16	26.98	24.7	12.7
QL-BU-12	3/4	19.05	79.33	1 3/16	30.16	24.53	15.75
QL-BU-14	7/8	22.22	84.58	1 3/8	34.92	25.9	18.28
QL-BU-16	1	25.4	96.4	1 5/8	41.28	31.55	22.35
QL-BU-20	1 1/4	31.75	123.19	1 7/8	47.62	41.14	27.68
QL-BU-24	1 1/2	38.1	139.19	2 1/4	57.15	50.03	34.03
QL-BU-32	2	50.8	180.34	2 3/4	69.85	67.56	45.97

Connector Metric Tube

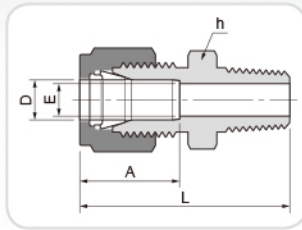
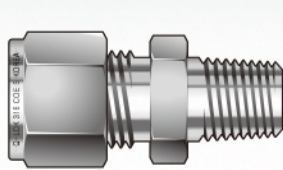
Part Number	Dimensions				
	D	L	h	A	Min. E
	mm				
QL-BU-3M	3	51.3	14	12.9	2.4
QL-BU-4M	4	53.6	14	14.07	2.4
QL-BU-6M	6	58.54	16	15.73	4.8
QL-BU-8M	8	60.92	18	16.22	6.4
QL-BU-10M	10	63.74	22	17.28	7.9
QL-BU-12M	12	71.22	24	22.92	9.5
QL-BU-15M	15	72.6	27	24.41	11.9
QL-BU-16M	16	72.58	27	24.39	12.7
QL-BU-18M	18	79.42	30	24.61	15.1
QL-BU-20M	20	84.96	35	26.22	15.9
QL-BU-22M	22	85.12	35	26.59	18.5
QL-BU-25M	25	95.9	41	31.04	21.8
QL-BU-32M	32	128.3	50	42	28.6
QL-BU-38M	38	144.6	60	49.4	33.7

Dimensions are reference only, subject to change without prior notice.
The E dimension is the minimum nominal opening. These fittings may have a larger opening at the pipe/straight thread end.

Dimensions are reference only, subject to change without prior notice.
The E dimension is the minimum nominal opening. These fittings may have a larger opening at the pipe/straight thread end.

MALE CONNECTOR
オスコネクタ

QL-MC

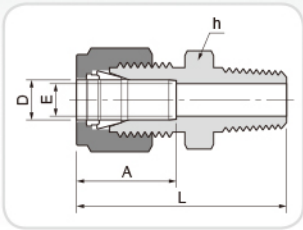
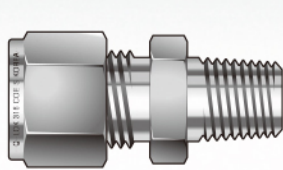


Connector Fractional Tube to Female NPT/PT Thread

Part Number	Dimensions							
	D		NPT Thread	L	h		A	Min. E
	inch	mm	inch	mm	inch	mm	mm	
QL-MC-1-1	1/16	1.58	1/16	23.83	5/16	7.93	8.63	1.27
QL-MC-1-2	1/16	1.58	1/8	26.23	7/16	11.11	8.63	1.27
QL-MC-1-4	1/16	1.58	1/4	30.98	9/16	14.28	8.63	1.27
QL-MC-2-1	1/8	3.17	1/16	29.71	7/16	11.11	13.04	2.28
QL-MC-2-2	1/8	3.17	1/8	30.7	9/16	11.11	13.04	2.28
QL-MC-2-4	1/8	3.17	1/4	35.78	9/16	14.28	13.04	2.28
QL-MC-2-6	1/8	3.17	3/8	36.15	11/16	17.46	13.04	2.28
QL-MC-2-8	1/8	3.17	1/2	41.94	7/8	22.22	13.04	2.28
QL-MC-3-2	3/16	4.76	1/8	31.46	7/16	11.11	14.05	3.05
QL-MC-3-4	3/16	4.76	1/4	36.54	9/16	14.28	14.05	3.05
QL-MC-4-2	1/4	6.35	1/8	33	1/2	12.7	15.59	4.83
QL-MC-4-4	1/4	6.35	1/4	38.08	9/16	14.28	15.59	4.83
QL-MC-4-6	1/4	6.35	3/8	38.69	11/16	17.46	15.59	4.83
QL-MC-4-8	1/4	6.35	1/2	44.94	7/8	22.22	15.59	4.83
QL-MC-4-12	1/4	6.35	3/4	46.46	1 1/16	26.98	15.59	4.83
QL-MC-5-2	5/16	7.93	1/8	33.09	9/16	14.28	16.42	4.83
QL-MC-5-4	5/16	7.93	1/4	38.65	9/16	14.28	16.42	6.35
QL-MC-5-6	5/16	7.93	3/8	39.16	11/16	17.46	16.42	6.35
QL-MC-6-2	3/8	9.52	1/8	35.68	5/8	15.88	17.26	4.83
QL-MC-6-4	3/8	9.52	1/4	40.36	5/8	15.88	17.26	7.11
QL-MC-6-6	3/8	9.52	3/8	40.26	11/16	17.46	17.26	7.11
QL-MC-6-8	3/8	9.52	1/2	46.7	7/8	22.22	17.26	7.11
QL-MC-6-12	3/8	9.52	3/4	48.13	1 1/16	26.98	17.26	7.11
QL-MC-6-16	3/8	9.52	1	55.5	1 3/8	34.92	17.26	7.11
QL-MC-8-2	1/2	12.7	1/8	39.3	13/16	20.64	23.32	4.83
QL-MC-8-4	1/2	12.7	1/4	43.87	13/16	20.64	23.32	7.11
QL-MC-8-6	1/2	12.7	3/8	43.87	13/16	20.64	23.32	9.65
QL-MC-8-8	1/2	12.7	1/2	49.46	7/8	22.22	23.32	10.41
QL-MC-8-12	1/2	12.7	3/4	50.89	1 1/16	26.98	23.32	10.41
QL-MC-8-16	1/2	12.7	1	57.49	1 3/8	34.92	23.32	10.41
QL-MC-10-6	5/8	15.87	3/8	44.42	15/16	23.81	24.7	9.65
QL-MC-10-8	5/8	15.87	1/2	49.24	15/16	23.81	24.7	11.93
QL-MC-10-12	5/8	15.87	3/4	50.77	1 1/16	26.98	24.7	12.7
QL-MC-12-6	3/4	19.05	3/8	45.83	1 1/16	26.98	24.53	9.65
QL-MC-12-8	3/4	19.05	1/2	50.6	1 1/16	26.98	24.53	11.93
QL-MC-12-12	3/4	19.05	3/4	50.7	1 1/16	26.98	24.53	15.75

MALE CONNECTOR
オスコネクタ

QL-MC



Connector Fractional Tube to Female NPT/PT Thread

Part Number	Dimensions							
	D		NPT Thread	L	h		A	Min. E
	inch	mm	inch	mm	inch	mm	mm	
QL-MC-12-16	3/4	19.05	1	57.2	1 3/8	34.92	24.53	15.75
QL-MC-14-12	7/8	22.22	3/4	50.54	1 3/16	30.16	25.9	15.75
QL-MC-14-16	7/8	22.22	1	57.15	1 3/8	34.92	25.9	18.28
QL-MC-16-8	1	25.4	1/2	57.59	1 3/8	34.92	31.55	11.93
QL-MC-16-12	1	25.4	3/4	57.59	1 3/8	34.92	31.55	15.75
QL-MC-16-16	1	25.4	1	62.42	1 3/8	34.92	31.55	22.32
QL-MC-20-16	1 1/4	31.75	1	62.23	1 3/4	44.45	44.45	22.35
QL-MC-20-20	1 1/4	31.75	1 1/4	77.21	1 3/4	44.45	44.45	27.68
QL-MC-24-20	1 1/2	38.1	1 1/4	88.9	2 1/8	53.97	53.97	34.03
QL-MC-32-32	2	50.8	2	113.53	2 3/4	69.85	69.85	45.97

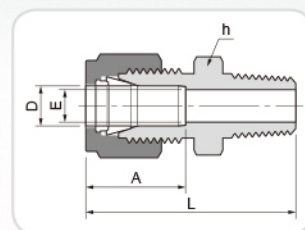
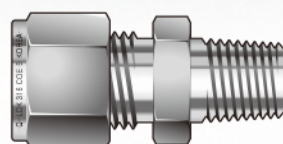
Dimensions are reference only, subject to change without prior notice.
The E dimension is the minimum nominal opening. These fittings may have a larger opening at the pipe/straight thread end.

Dimensions are reference only, subject to change without prior notice.
The E dimension is the minimum nominal opening. These fittings may have a larger opening at the pipe/straight thread end.

MALE CONNECTOR

オスコネクタ

QL-MC



Connector Metric Tube to Female NPT/PT Thread

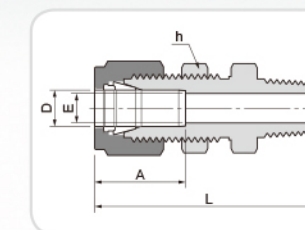
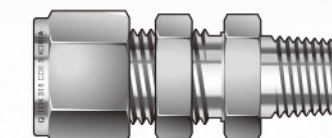
Part Number	Dimensions					
	D	PT Thread	L	h	A	Min. E
	mm	inch	mm			
QL-MC-2M-2	2	1/8	30.5	12	12.9	1.7
QL-MC-3M-2	3	1/8	30.5	12	12.9	2.4
QL-MC-3M-4	3	1/4	35.6	14	12.9	2.4
QL-MC-4M-2	4	1/8	31.49	12	14.07	2.4
QL-MC-4M-4	4	1/4	36.31	14	14.07	2.4
QL-MC-6M-2	6	1/8	33.06	14	15.73	4.8
QL-MC-6M-4	6	1/4	37.86	14	15.73	4.8
QL-MC-6M-6	6	3/8	38.76	18	15.73	4.8
QL-MC-6M-8	6	1/2	44.36	22	15.73	4.8
QL-MC-8M-2	8	1/8	34.1	15	16.22	4.8
QL-MC-8M-4	8	1/4	38.7	15	16.22	6.4
QL-MC-8M-6	8	3/8	39.3	18	16.22	6.4
QL-MC-8M-8	8	1/2	44.8	22	16.22	6.4
QL-MC-10M-2	10	1/8	36.29	18	17.28	4.8
QL-MC-10M-4	10	1/4	40.86	18	17.28	7.1
QL-MC-10M-6	10	3/8	40.96	18	17.28	7.9
QL-MC-10M-8	10	1/2	45.78	22	17.28	7.9
QL-MC-10M-12	10	3/4	48.56	27	17.28	7.9
QL-MC-12M-2	12	1/8	38.78	22	22.92	4.8
QL-MC-12M-4	12	1/4	43.35	22	22.92	7.1
QL-MC-12M-6	12	3/8	43.45	22	22.92	9.5
QL-MC-12M-8	12	1/2	48.27	22	22.92	9.5
QL-MC-12M-12	12	3/4	50.95	27	22.92	9.5
QL-MC-15M-8	15	1/2	48.99	24	24.41	11.9
QL-MC-16M-4	16	1/4	44.08	24	24.39	7.1
QL-MC-16M-6	16	3/8	44.08	24	24.39	9.5
QL-MC-16M-8	16	1/2	48.98	24	24.39	11.9
QL-MC-16M-12	16	3/4	48.98	27	24.39	12.7
QL-MC-18M-8	18	1/2	50.7	27	24.61	11.9
QL-MC-18M-12	18	3/4	50.7	27	24.61	15.1
QL-MC-20M-8	20	1/2	52.41	30	26.22	15.1
QL-MC-20M-12	20	3/4	52.41	30	26.22	15.9
QL-MC-22M-12	22	3/4	52.41	30	26.59	15.9
QL-MC-22M-16	22	1	57	35	26.59	18.5
QL-MC-25M-12	25	3/4	57.5	35	31.04	15.9
QL-MC-25M-16	25	1	62.3	35	31.04	21.8
QL-MC-28M-16	28	1	72.4	41	36.6	21.8
QL-MC-28M-20	28	1 1/4	73.1	46	36.6	21.8
QL-MC-32M-20	32	1 1/4	79.6	46	42	28.6
QL-MC-32M-24	32	1 1/2	91.6	55	42	33.7

Dimensions are reference only, subject to change without prior notice.
The E dimension is the minimum nominal opening. These fittings may have a larger opening at the pipe/straight thread end.

BULKHEAD MALE CONNECTOR

バルクヘッド オスコネクタ

QL-BMC



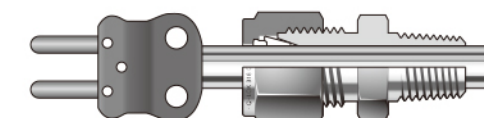
Connector Fractional Tube to Female NPT/PT Thread

Part Number	Dimensions									
	D		NPT Thread	h		L	Max. Panel Thickness	Panel Hole Drill Size	A	Min. E
	inch	mm	inch	inch	mm	mm				
QL-BMC-2-2	1/8	3.17	1/8	1/2	12.7	46.81	12.2	8.33	13.04	2.28
QL-BMC-4-2	1/4	6.35	1/8	5/8	15.88	51.01	10.16	11.5	15.59	4.83
QL-BMC-4-4	1/4	6.35	1/4	5/8	15.88	55.58	10.16	11.5	15.59	4.83
QL-BMC-4-6	1/4	6.35	3/8	11/16	17.46	55.58	10.16	11.5	15.59	4.83
QL-BMC-6-4	3/8	9.52	1/4	3/4	19.05	57.78	11.17	14.68	17.26	7.11
QL-BMC-6-6	3/8	9.52	3/8	3/4	19.05	59.06	11.17	14.68	17.26	7.11
QL-BMC-6-8	3/8	9.52	1/2	7/8	22.22	66.42	11.17	14.68	17.26	7.11
QL-BMC-8-6	1/2	12.7	3/8	15/16	23.81	63.63	12.7	19.44	23.32	9.39
QL-BMC-8-8	1/2	12.7	1/2	15/16	23.81	69.18	12.7	19.44	23.32	10.41
QL-BMC-12-12	3/4	19.05	3/4	1 3/16	30.16	76.36	16.76	25.76	24.53	15.75
QL-BMC-16-16	1	25.4	1	1 5/8	41.28	93.53	19.05	33.73	31.55	22.35

THERMOCOUPLE CONNECTOR

サーモカップル コネクタ

QL-MCT



Thermocouple Connector : Bore Through Type

Q-Lok bored-through accommodate thermocouples or dip tubes, and can be used to create a heat exchanger. Most male connectors are available as a bored-through fitting.

Q-Lok ボアスルータイプは、熱電対または浸漬管に適しており、熱交換器などの用途にも使われます。ほとんどのメールコネクタが、ボアスルー継手として使用できます。

To order bored-through fittings, add T to the ordering number.

ボアスルー継手を注文する際は、型式に"T"を追加して下さい。

※ Example: Thermocouple Connector QL-MCT-4-4N

* Bore through fittings do not have the same pressure ratings as regular Q-Lok Tube Fittings.

*ボアスルー継手はQ-ロックチューブ継手と同様の圧力定格がありません。

* In some cases it is impossible to bore-thru because the tube bore is greater than the root diameters of the pipe threads.

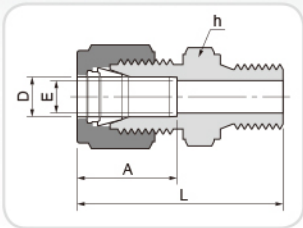
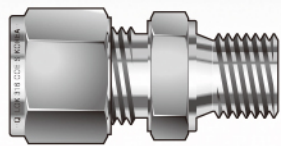
*チューブボアが管継手ネジの谷径よりも 大きい為、ボアスルーが不可能な場合もあります。

Dimensions are reference only, subject to change without prior notice.
The E dimension is the minimum nominal opening. These fittings may have a larger opening at the pipe/straight thread end.

MALE CONNECTOR
FOR BONDED WASHER SEAL

オスコネクタ Bonded Washer Seal用

QL-MCW



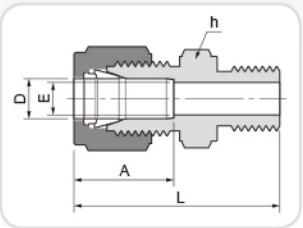
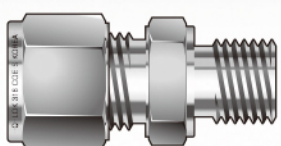
Connector Metric Tube to Female Parallel Thread

Part Number	Dimensions					
	D	Paralle Thread (PF)	L	h	A	Min. E
	mm	inch	mm			
QL-MCW-3M-2	3	1/8	30	14	12.9	2.4
QL-MCW-3M-4	3	1/4	35.3	19	12.9	2.4
QL-MCW-4M-2	4	1/8	30.96	14	14.07	2.4
QL-MCW-6M-2	6	1/8	32.73	14	15.73	4
QL-MCW-6M-4	6	1/4	38.03	19	15.73	4.8
QL-MCW-6M-6	6	3/8	39.33	22	15.73	4.8
QL-MCW-6M-8	6	1/2	45.13	27	15.73	4.8
QL-MCW-8M-2	8	1/8	33.22	15	16.22	4
QL-MCW-8M-4	8	1/4	38.52	19	16.22	6.4
QL-MCW-8M-6	8	3/8	39.82	22	16.22	6.4
QL-MCW-8M-8	8	1/2	45.62	27	16.22	6.4
QL-MCW-10M-4	10	1/4	39.48	19	17.28	6.4
QL-MCW-10M-6	10	3/8	40.68	22	17.28	7.9
QL-MCW-10M-8	10	1/2	46.58	27	17.28	7.9
QL-MCW-12M-4	12	1/4	42.67	22	22.92	5.9
QL-MCW-12M-6	12	3/8	43.17	22	22.92	7.9
QL-MCW-12M-8	12	1/2	49.07	27	22.92	9.5
QL-MCW-12M-12	12	3/4	52.87	35	22.92	9.5
QL-MCW-16M-6	16	3/8	43.99	24	24.39	7.9
QL-MCW-16M-8	16	1/2	49.09	27	24.39	11.9
QL-MCW-18M-8	18	1/2	49.31	27	24.61	11.9
QL-MCW-18M-12	18	3/4	53.11	35	24.61	15.1
QL-MCW-20M-8	20	1/2	50.72	30	26.22	11.9
QL-MCW-20M-12	20	3/4	53.02	35	26.22	15.9
QL-MCW-22M-12	22	3/4	53.11	35	26.59	15.9
QL-MCW-22M-16	22	1	55.61	41	26.59	18.3
QL-MCW-25M-12	25	3/4	57.24	35	31.04	15.9
QL-MCW-25M-16	25	1	59.84	41	31.04	19.8
QL-MCW-28M-16	28	1	70.1	41	36.6	19.8
QL-MCW-28M-20	28	1 1/4	73.9	50	36.6	21.8
QL-MCW-32M-20	32	1 1/4	78.9	50	42	25
QL-MCW-38M-24	38	1 1/2	90.8	55	49.4	31.8

MALE CONNECTOR
FOR METAL GASKET

オスコネクタ メタルガスケット用

QL-MCM



Connector Metric Tube to Female Parallel Thread

Part Number	Dimensions					
	D	Paralle Thread (PF)	L	h	A	Min. E
	mm	inch	mm			
QL-MCM-3M-2	3	1/8	30	14	12.9	2.4
QL-MCM-3M-4	3	1/4	35.3	19	12.9	2.4
QL-MCM-4M-2	4	1/8	30.96	14	14.07	2.4
QL-MCM-6M-2	6	1/8	32.73	14	15.73	4
QL-MCM-6M-4	6	1/4	38.03	19	15.73	4.8
QL-MCM-6M-6	6	3/8	39.33	22	15.73	4.8
QL-MCM-6M-8	6	1/2	45.13	27	15.73	4.8
QL-MCM-8M-2	8	1/8	33.22	15	16.22	4
QL-MCM-8M-4	8	1/4	38.52	19	16.22	6.4
QL-MCM-8M-6	8	3/8	39.82	22	16.22	6.4
QL-MCM-8M-8	8	1/2	45.62	27	16.22	6.4
QL-MCM-10M-4	10	1/4	39.48	19	17.28	6.4
QL-MCM-10M-6	10	3/8	40.68	22	17.28	7.9
QL-MCM-10M-8	10	1/2	46.58	27	17.28	7.9
QL-MCM-12M-4	12	1/4	42.67	22	22.92	5.9
QL-MCM-12M-6	12	3/8	43.17	22	22.92	7.9
QL-MCM-12M-8	12	1/2	49.07	27	22.92	9.5
QL-MCM-12M-12	12	3/4	52.87	35	22.92	9.5
QL-MCM-15M-8	15	1/2	49.11	27	24.41	11.9
QL-MCM-16M-6	16	3/8	43.99	24	24.39	7.9
QL-MCM-16M-8	16	1/2	49.09	27	24.39	11.9
QL-MCM-18M-8	18	1/2	49.31	27	24.61	11.9
QL-MCM-18M-12	18	3/4	53.11	35	24.61	15.1
QL-MCM-20M-8	20	1/2	50.72	30	26.22	11.9
QL-MCM-20M-12	20	3/4	53.02	35	26.22	15.9
QL-MCM-22M-12	22	3/4	53.11	35	26.59	15.9
QL-MCM-22M-16	22	1	55.61	41	26.59	18.3
QL-MCM-25M-12	25	3/4	57.24	35	31.04	15.9
QL-MCM-25M-16	25	1	59.84	41	31.04	19.8
QL-MCM-28M-16	28	1	70.1	41	36.6	19.8
QL-MCM-28M-20	28	1 1/4	73.9	50	36.6	21.8
QL-MCM-32M-20	32	1 1/4	78.9	50	42	25
QL-MCM-38M-24	38	1 1/2	90.8	55	49.4	31.8

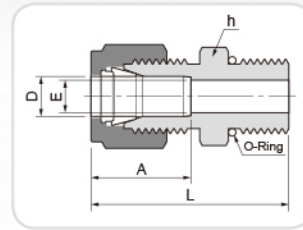
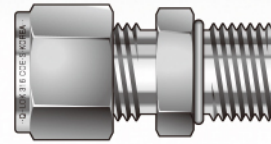
Dimensions are reference only, subject to change without prior notice.
The E dimension is the minimum nominal opening. These fittings may have a larger opening at the pipe/straight thread end.

Dimensions are reference only, subject to change without prior notice.
The E dimension is the minimum nominal opening. These fittings may have a larger opening at the pipe/straight thread end.

SAE/MS MALE CONNECTOR

オスコネクタ SAE/MS 平行ねじ

QL-MCO



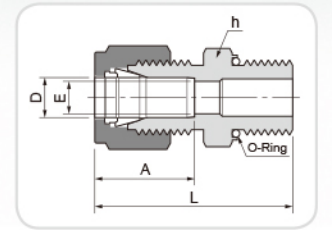
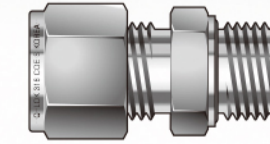
Connector Fractional Tube to SAE/MS Straight Thread

Part Number	Dimensions							
	D		Straight Thread (U)	L	h		A	Min. E
	inch	mm			inch	mm		
QL-MCO-2-2U	1/8	3.17	5/16-24	30.17	7/16	11.11	13.04	2.28
QL-MCO-2-4U	1/8	3.17	7/16-20	31.8	9/16	14.28	13.04	2.28
QL-MCO-4-4U	1/4	6.35	7/16-20	34.42	9/16	14.28	15.59	4.83
QL-MCO-4-6U	1/4	6.35	9/16-18	35.91	11/16	17.46	15.59	4.83
QL-MCO-4-8U	1/4	6.35	3/4-16	37.94	7/8	22.22	15.59	4.83
QL-MCO-4-10U	1/4	6.35	7/8-14	40.99	1	25.4	15.59	4.83
QL-MCO-5-5U	5/16	7.93	1/2-20	34.96	5/8	15.88	16.42	6.35
QL-MCO-6-4U	3/8	9.52	7/16-20	36.05	5/8	15.88	17.26	7.11
QL-MCO-6-6U	3/8	9.52	9/16-18	37.57	11/16	17.46	17.26	7.11
QL-MCO-6-8U	3/8	9.52	3/4-16	39.61	7/8	22.22	17.26	7.11
QL-MCO-6-10U	3/8	9.52	7/8-14	42.65	1	25.4	17.26	7.11
QL-MCO-8-6U	1/2	12.7	9/16-18	39.57	13/16	20.64	23.32	10.41
QL-MCO-8-8U	1/2	12.7	3/4-16	42.37	7/8	22.22	23.32	10.41
QL-MCO-8-10U	1/2	12.7	7/8-14	45.41	1	25.4	23.32	10.41
QL-MCO-8-12U	1/2	12.7	1 1/16-12	49.48	1 1/4	31.75	23.32	10.41
QL-MCO-10-8U	5/8	15.87	3/4-16	42.2	15/16	23.81	24.7	12.7
QL-MCO-10-10U	5/8	15.87	7/8-14	45.5	1	25.4	24.7	12.7
QL-MCO-12-8U	3/4	19.05	3/4-16	46.11	1 1/16	26.98	24.53	15.75
QL-MCO-12-12U	3/4	19.05	1 1/16-12	49.16	1 1/4	31.75	24.53	15.75
QL-MCO-14-14U	7/8	22.22	1 3/16-12	49.02	1 3/8	34.92	25.9	18.28
QL-MCO-16-12U	1	25.4	1 1/16-12	53.64	1 3/8	34.92	31.55	22.35
QL-MCO-16-16U	1	25.4	1 5/16-12	54.66	1 1/2	38.1	31.55	22.35
QL-MCO-20-20U	1 1/4	31.75	1 5/8-12	68.26	1 7/8	47.62	41.14	27.68
QL-MCO-24-24U	1 1/2	38.1	1 7/8-12	77.71	2 1/8	53.97	50.03	34.03
QL-MCO-32-32U	2	50.8	2 1/2-12	101.64	2 3/4	69.85	67.56	45.97

SAE/MS O-SEAL MALE CONNECTOR

オスコネクタ 平行ねじ(オリングシール)

QL-MCOI



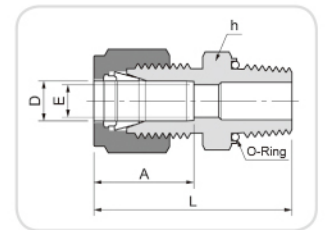
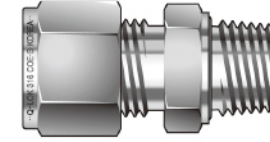
Connector Fractional Tube to SAE/MS Straight Thread

Part Number	Dimensions							
	D		Straight Thread (U)	L	h		A	Min. E
	inch	mm			inch	mm		
QL-MCOI-2-2U	1/8	3.17	5/16-24	33.07	9/16	14.28	13.04	2.28
QL-MCOI-3-3U	3/16	4.76	3/8-24	34.62	5/8	15.88	14.05	3.05
QL-MCOI-4-4U	1/4	6.35	7/16-20	38.7	3/4	19.05	15.59	4.83
QL-MCOI-5-5U	5/16	7.93	1/2-20	40.8	7/8	22.22	16.42	6.35
QL-MCOI-6-6U	3/8	9.52	9/16-18	42.91	15/16	23.81	17.26	7.11
QL-MCOI-8-8U	1/2	12.7	3/4-16	46.43	1 1/8	28.57	23.32	10.41
QL-MCOI-12-12U	3/4	19.05	1 1/16-12	52.46	1 1/2	38.1	24.53	15.75
QL-MCOI-16-16U	1	25.4	1 5/16-12	58.47	1 3/4	44.45	31.55	22.35

O-SEAL MALE CONNECTOR

オスコネクタ NPT ねじ(オリングシール)

QL-MCOI

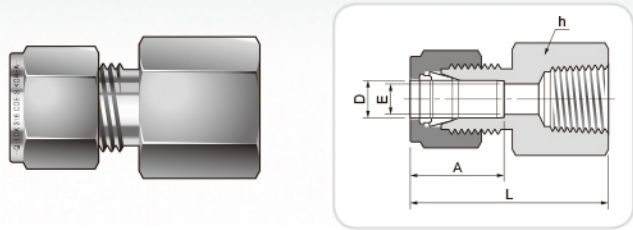


Connector Fractional Tube to NPT Thread

Part Number	Dimensions							
	D		NPT Thread	L	h		A	Min. E
	inch	mm	inch	mm	inch	mm	mm	
QL-MCOI-2-2	1/8	3.17	1/8	33.07	3/4	19.05	13.04	2.28
QL-MCOI-4-2	1/4	6.35	1/8	35.4	3/4	19.05	15.59	4.83
QL-MCOI-4-4	1/4	6.35	1/4	38.7	15/16	23.81	15.59	4.83
QL-MCOI-6-4	3/8	9.52	1/4	40.37	15/16	23.81	17.26	7.11
QL-MCOI-6-6	3/8	9.52	3/8	41.89	1 1/8	28.57	17.26	7.11
QL-MCOI-6-8	3/8	9.52	1/2	47.48	1 5/16	33.33	17.26	7.11
QL-MCOI-8-8	1/2	12.7	1/2	50.24	1 5/16	33.33	23.32	10.41

FEMALE CONNECTOR
メスコネクタ

QL-FC

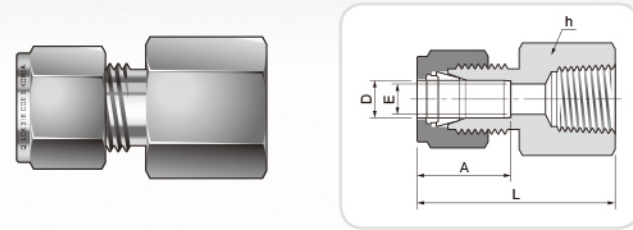


Connector Fractional Tube to Male NPT/PT Thread

Part Number	Dimensions							
	D		NPT Thread	L	h		A	Min. E
	inch	mm	inch	mm	inch	mm	mm	
QL-FC-1-1	1/16	1.58	1/16	23.62	7/16	11.11	8.63	1.27
QL-FC-1-2	1/16	1.58	1/8	24.38	9/16	14.28	8.63	1.27
QL-FC-2-2	1/8	3.17	1/8	28.92	9/16	14.28	13.04	2.28
QL-FC-2-4	1/8	3.17	1/4	33.75	3/4	19.05	13.04	2.28
QL-FC-3-2	3/16	4.76	1/8	29.94	9/16	14.28	14.05	3.05
QL-FC-4-2	1/4	6.35	1/8	31.48	9/16	14.28	15.59	4.83
QL-FC-4-4	1/4	6.35	1/4	36.05	3/4	19.05	15.59	4.83
QL-FC-4-6	1/4	6.35	3/8	37.83	7/8	22.22	15.59	4.83
QL-FC-4-8	1/4	6.35	1/2	42.67	1 1/16	26.98	15.59	4.83
QL-FC-5-2	5/16	7.93	1/8	32	9/16	14.28	16.42	6.35
QL-FC-5-4	5/16	7.93	1/4	36.87	3/4	19.05	16.42	6.35
QL-FC-6-2	3/8	9.52	1/8	33.16	5/8	15.88	17.26	7.11
QL-FC-6-4	3/8	9.52	1/4	37.97	3/4	19.05	17.26	7.11
QL-FC-6-6	3/8	9.52	3/8	39.5	7/8	22.22	17.26	7.11
QL-FC-6-8	3/8	9.52	1/2	44.42	1 1/16	26.98	17.26	7.11
QL-FC-6-12	3/8	9.52	3/4	48.33	1 5/16	33.33	17.26	7.11
QL-FC-8-4	1/2	12.7	1/4	40.73	13/16	20.64	23.32	10.41
QL-FC-8-6	1/2	12.7	3/8	42.26	7/8	22.22	23.32	10.41
QL-FC-8-8	1/2	12.7	1/2	47.08	1 1/16	26.98	23.32	10.41
QL-FC-8-12	1/2	12.7	3/4	48.62	1 5/16	33.33	23.32	10.41
QL-FC-10-6	5/8	15.87	3/8	42.15	15/16	23.8	24.7	12.7
QL-FC-10-8	5/8	15.87	1/2	46.96	1 1/16	26.98	24.7	12.7
QL-FC-10-12	5/8	15.87	3/4	48.26	1 5/16	33.33	24.7	12.7
QL-FC-12-6	3/4	19.05	3/8	43.5	1 1/16	26.98	24.53	15.75
QL-FC-12-8	3/4	19.05	1/2	46.79	1 1/16	26.98	24.53	15.75
QL-FC-12-12	3/4	19.05	3/4	48.33	1 5/16	33.33	24.53	15.75
QL-FC-14-12	7/8	22.22	3/4	49.78	1 5/16	33.33	25.9	18.28
QL-FC-16-12	1	25.4	3/4	53.53	1 3/8	34.92	31.55	22.35
QL-FC-16-16	1	25.4	1	62.42	1 5/8	41.27	31.55	22.35
QL-FC-20-20	1 1/4	31.75	1 1/4	74.67	2 1/8	53.97	41.14	27.68
QL-FC-24-24	1 1/2	38.1	1 1/4	83.31	2 3/8	60.32	50.03	34.03
QL-FC-32-32	2	50.80	2	101.6	2 7/8	70.03	67.56	45.97

FEMALE CONNECTOR
メスコネクタ

QL-FC



Connector Metric Tube to Male NPT/PT Thread

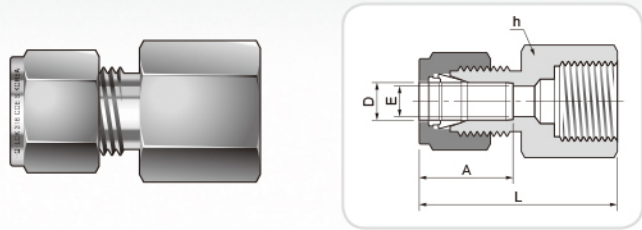
Part Number	Dimensions					
	D	PT Thread (R)	L	h	A	Min. E
	mm	inch	mm			
QL-FC-3M-2	3	1/8	28.7	14	12.9	2.4
QL-FC-3M-4	3	1/4	33.5	19	12.9	2.4
QL-FC-4M-2	4	1/8	29.7	14	14.07	2.4
QL-FC-6M-2	6	1/8	31.56	14	15.73	4.8
QL-FC-6M-4	6	1/4	36.16	19	15.73	4.8
QL-FC-6M-6	6	3/8	37.26	22	15.73	4.8
QL-FC-6M-8	6	1/2	42.86	27	15.73	4.8
QL-FC-8M-2	8	1/8	32.1	15	16.22	6.4
QL-FC-8M-4	8	1/4	37	19	16.22	6.4
QL-FC-8M-6	8	3/8	37.6	22	16.22	6.4
QL-FC-8M-8	8	1/2	43.2	27	16.22	6.4
QL-FC-10M-4	10	1/4	38.56	19	17.28	7.9
QL-FC-10M-8	10	1/2	44.16	27	17.28	7.9
QL-FC-12M-2	12	1/8	38.5	22	22.92	8.3
QL-FC-12M-4	12	1/4	40.25	22	22.92	9.5
QL-FC-12M-6	12	3/8	41.05	22	22.92	9.5
QL-FC-12M-8	12	1/2	46.65	27	22.92	9.5
QL-FC-12M-12	12	3/4	49.97	35	22.92	9.5
QL-FC-15M-8	15	1/2	46.69	27	24.41	11.9
QL-FC-16M-8	16	1/2	46.68	27	24.39	12.7
QL-FC-20M-8	20	1/2	48.01	30	26.22	15.9
QL-FC-20M-12	20	3/4	49.7	35	26.22	15.9
QL-FC-22M-12	22	3/4	49.7	35	26.59	18.5
QL-FC-22M-16	22	1	57.9	41	26.59	18.5
QL-FC-25M-12	25	3/4	53.4	35	31.04	21.8
QL-FC-25M-16	25	1	62.3	41	31.04	21.8

Dimensions are reference only, subject to change without prior notice.
The E dimension is the minimum nominal opening. These fittings may have a larger opening at the pipe/straight thread end.

Dimensions are reference only, subject to change without prior notice.
The E dimension is the minimum nominal opening. These fittings may have a larger opening at the pipe/straight thread end.

FEMALE GAUGE
CONNECTOR
メスゲージコネクタ

QL-FGC



Connector Fractional Tube to Male Parallel Thread

Part Number	Dimensions							
	D		Parallel Thread (PF)	L	h		A	Min. E
	inch	mm	inch	mm	inch	mm	mm	
QL-FGC-2-4G	1/8	3.17	1/4	35.39	3/4	19.05	13.04	2.28
QL-FGC-4-2G	1/4	6.35	1/8	33.55	9/16	14.28	15.59	4.83
QL-FGC-4-4G	1/4	6.35	1/4	37.94	3/4	19.05	15.59	4.83
QL-FGC-4-6G	1/4	6.35	3/8	37.94	15/16	24.81	15.59	4.83
QL-FGC-4-8G	1/4	6.35	1/2	43.43	1 1/16	26.98	15.59	4.83
QL-FGC-5-4G	5/16	7.93	1/4	38.35	3/4	19.05	16.42	6.35
QL-FGC-5-8G	5/16	7.93	1/8	40.38	1 1/16	26.98	16.42	6.35
QL-FGC-6-4G	3/8	9.52	1/4	39.12	3/4	19.05	17.26	7.11
QL-FGC-6-6G	3/8	9.52	3/8	38.61	15/16	24.81	17.26	7.11
QL-FGC-6-8G	3/8	9.52	1/2	41.91	1 1/16	26.98	17.26	7.11
QL-FGC-8-4G	1/2	12.7	1/4	41.95	7/8	22.22	23.32	10.41
QL-FGC-8-6G	1/2	12.7	3/8	44.45	15/16	24.81	23.32	10.41
QL-FGC-8-8G	1/2	12.7	1/2	48.26	1 1/16	26.98	23.32	10.41

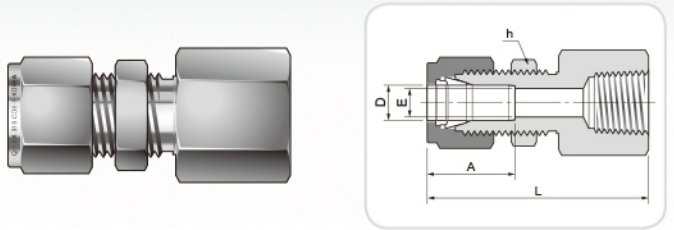
Connector Metric Tube to Male Parallel Thread

Part Number	Dimensions					
	D	Parallel Thread (PF)	L	h	A	Min. E
	mm	inch	mm			
QL-FGC-3M-4G	3	1/4	35.3	19	12.9	2.4
QL-FGC-6M-4G	6	1/4	37.6	19	15.73	4.8
QL-FGC-6M-6G	6	3/8	37.6	24	15.73	4.8
QL-FGC-6M-8G	6	1/2	43	27	15.73	4.8
QL-FGC-8M-4G	8	1/4	38.5	19	16.22	6.4
QL-FGC-8M-6G	8	3/8	36.2	24	16.22	6.4
QL-FGC-8M-8G	8	1/2	40.5	27	16.22	6.4
QL-FGC-10M-4G	10	1/4	39.4	19	17.28	7.9
QL-FGC-10M-6G	10	3/8	38.8	24	17.28	7.9
QL-FGC-10M-8G	10	1/2	41.4	27	17.28	7.9
QL-FGC-12M-4G	12	1/4	41.9	22	22.92	9.5
QL-FGC-12M-6G	12	3/8	44.4	24	22.92	9.5
QL-FGC-12M-8G	12	1/2	48.2	27	22.92	9.5
QL-FGC-20M-8G	20	1/2	54.3	30	26.22	15.9
QL-FGC-22M-8G	22	1/2	54.3	30	26.59	18.5

Dimensions are reference only, subject to change without prior notice.
The E dimension is the minimum nominal opening. These fittings may have a larger opening at the pipe/straight thread end.

BULKHEAD FEMALE
CONNECTOR
バルクヘッド メスコネクタ

QL-BFC



Connector Fractional Tube to Male NPT/PT Thread

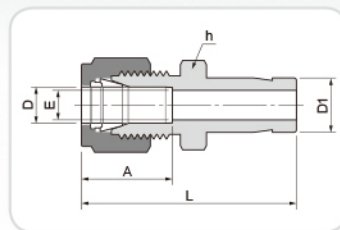
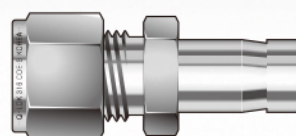
Part Number	Dimensions							
	D		NPT Thread	L	h		A	Min. E
	inch	mm	inch	mm	inch	mm	mm	
QL-BFC-2-2	1/8	3.17	1/8	44.7	9/16	14.28	13.04	2.28
QL-BFC-4-2	1/4	6.35	1/8	47.34	5/8	15.88	15.59	4.83
QL-BFC-4-4	1/4	6.35	1/4	52.17	3/4	19.05	15.59	4.83
QL-BFC-6-4	3/8	9.52	1/4	55.61	3/4	19.05	17.26	7.11
QL-BFC-6-6	3/8	9.52	3/8	56.92	7/8	22.22	17.26	7.11
QL-BFC-6-8	3/8	9.52	1/2	56.92	1 1/16	26.98	17.26	7.11
QL-BFC-8-6	1/2	12.7	3/8	62.17	15/16	23.81	23.32	10.41
QL-BFC-8-8	1/2	12.7	1/2	67	1 1/16	26.98	23.32	10.41
QL-BFC-12-12	3/4	19.05	3/4	73.93	1 1/4	31.75	24.53	15.75

Connector Metric Tube to Male NPT/PT Thread

Part Number	Dimensions					
	D	NPT Thread	L	h	A	Min. E
	mm	inch	mm			
QL-BFC-6M-2	6	1/8	47.31	16	15.73	4.8
QL-BFC-6M-4	6	1/4	51.81	19	15.73	4.8
QL-BFC-8M-4	8	1/4	55	19	16.22	6.4
QL-BFC-12M-8	12	1/2	66.5	27	22.92	9.5

Dimensions are reference only, subject to change without prior notice.
The E dimension is the minimum nominal opening. These fittings may have a larger opening at the pipe/straight thread end.

REDUCER レデューサー QL-R

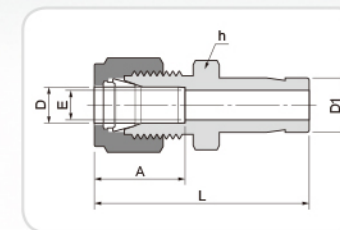
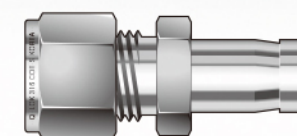


Connector Fractional Tube to Fractional Q-Lok Port

Part Number	Dimensions							
	D		D1		L	h		A
	inch	mm	inch	mm	mm	inch	mm	mm
QL-R-1-2	1/16	1.58	1/8	3.17	29.21	5/16	7.93	8.63
QL-R-1-4	1/16	1.58	1/4	6.35	31.49	5/16	7.93	8.63
QL-R-2-1	1/8	3.17	1/16	1.58	28.95	7/16	11.11	13.04
QL-R-2-2	1/8	3.17	1/8	3.17	33.86	7/16	11.11	13.04
QL-R-2-3	1/8	3.17	3/16	4.76	34.29	7/16	11.11	13.04
QL-R-2-4	1/8	3.17	1/4	6.35	36.4	7/16	11.11	13.04
QL-R-2-6	1/8	3.17	3/8	9.52	37.92	7/16	11.11	13.04
QL-R-2-8	1/8	3.17	1/2	12.7	44.53	9/16	14.28	13.04
QL-R-3-2	3/16	4.76	1/8	3.17	34.79	7/16	11.11	14.05
QL-R-3-4	3/16	4.76	1/4	6.35	37.08	7/16	11.11	14.05
QL-R-4-2	1/4	6.35	1/8	3.17	36.68	1/2	12.7	15.59
QL-R-4-3	1/4	6.35	3/16	4.76	37.59	1/2	12.7	15.59
QL-R-4-4	1/4	6.35	1/4	6.35	39.47	1/2	12.7	15.59
QL-R-4-5	1/4	6.35	5/16	7.93	39.87	1/2	12.7	15.59
QL-R-4-6	1/4	6.35	3/8	9.52	41	1/2	12.7	15.59
QL-R-4-8	1/4	6.35	1/2	12.7	46.58	9/16	14.28	15.59
QL-R-4-10	1/4	6.35	5/8	15.87	48	11/16	17.46	15.59
QL-R-4-12	1/4	6.35	3/4	19.05	49.27	13/16	20.64	15.59
QL-R-4-16	1/4	6.35	1	25.4	56.13	1 1/16	26.98	15.59
QL-R-5-6	5/16	7.93	3/8	9.52	41.91	9/16	14.28	16.42
QL-R-5-8	5/16	7.93	1/2	12.7	47.49	9/16	14.28	16.42
QL-R-6-4	3/8	9.52	1/4	6.35	43.65	5/8	15.88	17.26
QL-R-6-6	3/8	9.52	3/8	9.52	43.67	5/8	15.88	17.26
QL-R-6-8	3/8	9.52	1/2	12.7	48.6	5/8	15.88	17.26
QL-R-6-10	3/8	9.52	5/8	15.87	50.35	11/16	17.46	17.26
QL-R-6-12	3/8	9.52	3/4	19.05	50.35	13/16	20.64	17.26
QL-R-6-16	3/8	9.52	1	25.4	58.4	1 1/16	26.98	17.26
QL-R-8-4	1/2	12.7	1/4	6.35	45.42	13/16	20.64	23.32
QL-R-8-6	1/2	12.7	3/8	9.52	47.2	13/16	20.64	23.32
QL-R-8-8	1/2	12.7	1/2	12.7	53.01	13/16	20.64	23.32
QL-R-8-10	1/2	12.7	5/8	15.87	53.84	13/16	20.64	23.32
QL-R-8-12	1/2	12.7	3/4	19.05	54.33	13/16	20.64	23.32
QL-R-8-16	1/2	12.7	1	25.4	60.19	1 1/16	26.98	23.32
QL-R-10-12	5/8	15.87	3/4	19.05	54.61	15/16	23.81	24.7
QL-R-10-14	5/8	15.87	7/8	22.22	56.13	15/16	23.81	24.7
QL-R-10-16	5/8	15.87	1	25.4	60.58	1 1/16	26.98	24.7
QL-R-12-6	3/4	19.05	3/8	9.52	47.58	1 1/16	26.98	24.53
QL-R-12-8	3/4	19.05	1/2	12.7	54.78	1 1/16	26.98	24.53
QL-R-12-16	3/4	19.05	1	25.4	62.65	1 1/16	26.98	24.53
QL-R-16-20	1	25.4	1 1/4	31.75	80.51	1 3/8	34.92	31.55
QL-R-16-24	1	25.4	1 1/2	38.1	89.15	1 5/8	41.28	31.55
QL-R-16-32	1	25.4	2	50.8	112.52	2 1/8	53.97	31.55
QL-R-20-24	1 1/4	31.75	1 1/2	38.1	104.12	1 7/8	47.62	41.14
QL-R-20-32	1 1/4	31.75	2	50.8	125.22	1 7/8	47.62	41.14
QL-R-24-32	1 1/2	38.1	2	50.8	131.31	2 1/4	57.15	50.03

Dimensions are reference only, subject to change without prior notice.
The E dimension is the minimum nominal opening. These fittings may have a larger opening at the pipe/straight thread end.

REDUCER レデューサー QL-R



Connector Metric Tube to Metric Q-Lok Port

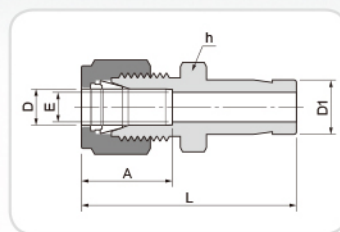
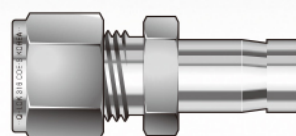
Part Number	Dimensions					
	D	D1	L	h	A	Min. E
	mm					
QL-R-2M-3M	2	3	33.5	12	12.9	1.7
QL-R-3M-4M	3	4	35	12	12.9	2.4
QL-R-3M-6M	3	6	36.1	12	12.9	2.4
QL-R-3M-10M	3	10	38.4	12	12.9	2.4
QL-R-4M-6M	4	6	37.1	12	14.07	2.4
QL-R-6M-3M	6	3	36.9	14	15.73	1.8
QL-R-6M-8M	6	8	39.9	14	15.73	4.8
QL-R-6M-10M	6	10	40.7	14	15.73	4.8
QL-R-6M-12M	6	12	46.3	14	15.73	4.8
QL-R-8M-6M	8	6	40.3	15	16.22	4.6
QL-R-8M-10M	8	10	42	15	16.22	6.4
QL-R-8M-12M	8	12	47.6	15	16.22	6.4
QL-R-10M-6M	10	6	42.4	18	17.28	4.6
QL-R-10M-12M	10	12	49.8	18	17.28	7.9
QL-R-10M-15M	10	15	51.3	18	17.28	7.9
QL-R-10M-18M	10	18	51.3	19	17.28	7.9
QL-R-12M-6M	12	6	44.9	22	22.92	4.6
QL-R-12M-10M	12	10	46.7	22	22.92	7.7
QL-R-12M-16M	12	16	53.8	22	22.92	9.5
QL-R-12M-18M	12	18	53.8	22	22.92	9.5
QL-R-12M-20M	12	20	56.1	22	22.92	9.5
QL-R-12M-22M	12	22	56.1	24	22.92	9.5
QL-R-12M-25M	12	25	62.4	27	22.92	9.5
QL-R-16M-12M	16	12	53	24	24.39	9.1
QL-R-18M-12M	18	12	54.6	27	24.61	9.1
QL-R-18M-16M	18	16	56.1	27	24.61	12.7
QL-R-18M-20M	18	20	57.6	27	24.61	15.1
QL-R-18M-22M	18	22	57.6	27	24.61	15.1
QL-R-18M-25M	18	25	62.4	27	24.61	15.1
QL-R-20M-16M	20	16	57.9	30	26.22	12.7
QL-R-20M-18M	20	18	59.4	30	26.22	13.9
QL-R-20M-22M	20	22	59.4	30	26.22	15.8
QL-R-20M-25M	20	25	64.2	30	26.22	15.8
QL-R-22M-18M	22	18	57.9	30	26.59	13.9
QL-R-22M-20M	22	20	59.4	30	26.59	15.1
QL-R-22M-25M	22	25	64.2	30	26.59	18.3
QL-R-25M-18M	25	18	63.1	35	31.04	13.9
QL-R-25M-20M	25	20	64.6	35	31.04	15.1

Dimensions are reference only, subject to change without prior notice.
The E dimension is the minimum nominal opening. These fittings may have a larger opening at the pipe/straight thread end.

REDUCER

レデューサー

QL-R



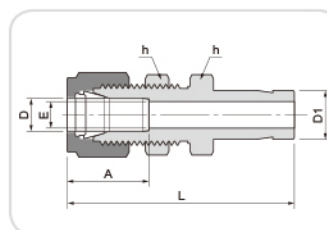
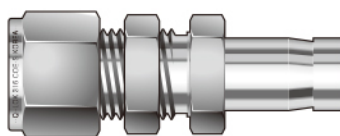
Connector Metric Tube to Fractional Q-Lok Port

Part Number	Dimensions					
	D		D1		L	Min. E
	mm	inch	mm	mm		
QL-R-2M-2	2	1/8	3.17	33.5	12	1.7
QL-R-3M-2	3	1/8	3.17	33.5	12	2
QL-R-3M-4	3	1/4	6.35	36.1	12	2.4
QL-R-4M-4	4	1/4	6.35	37.1	12	2.4
QL-R-6M-2	6	1/8	3.17	36.9	14	2
QL-R-6M-4	6	1/4	6.35	40.08	14	4.8
QL-R-6M-5	6	5/16	7.93	39.9	14	4.8
QL-R-6M-6	6	3/8	9.52	40.7	14	4.8
QL-R-6M-8	6	1/2	12.7	46.3	14	4.8
QL-R-8M-6	8	3/8	9.52	42.2	15	6.4
QL-R-8M-8	8	1/2	12.7	47.6	15	6.4
QL-R-10M-6	10	3/8	9.52	44.17	18	7.1
QL-R-10M-8	10	1/2	12.7	49.8	18	7.9
QL-R-12M-8	12	1/2	12.7	52.3	22	9.5
QL-R-12M-12	12	3/4	19.05	53.8	22	9.5
QL-R-18M-12	18	3/4	19.05	56.1	27	15.1
QL-R-18M-16	18	1	25.4	62.4	27	15.1
QL-R-25M-16	25	1	25.4	69.5	35	21.8

BULKHEAD REDUCER

バルクヘッド レデューサー

QL-BR



Connector Fractional Tube to Fractional Q-Lok Port

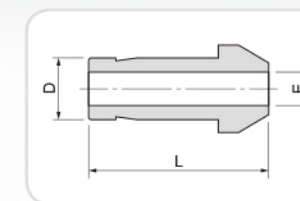
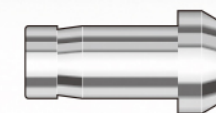
Part Number	Dimensions							
	D		D1		h		L	Min. E
	inch	mm	inch	mm	inch	mm		
QL-BR-2-2	1/8	3.17	1/8	3.17	1/2	12.7	49.53	2.03
QL-BR-4-4	1/4	6.35	1/4	6.35	5/8	15.88	55.88	4.83
QL-BR-6-6	3/8	9.52	3/8	9.52	3/4	19.05	61.7	7.11
QL-BR-8-8	1/2	12.7	1/2	12.7	15/16	23.81	72.89	9.4
QL-BR-10-10	5/8	15.87	5/8	15.87	1 1/16	26.98	75.18	12.7
QL-BR-16-16	1	25.4	1	25.4	1 5/8	41.28	100.63	20.32

Dimensions are reference only, subject to change without prior notice.
The E dimension is the minimum nominal opening. These fittings may have a larger opening at the pipe/straight thread end.

PORT CONNECTOR

ポートコネクタ

QL-PC



Connector Fractional Q-Lok Port

Part Number	Dimensions			
	D		L	Min. E
	inch	mm		
QL-PC-1	1/16	1.58	13.72	1
QL-PC-2	1/8	3.17	22.35	2
QL-PC-4	1/4	6.35	24.72	4.83
QL-PC-5	5/16	7.93	25.91	5.6
QL-PC-6	3/8	9.52	26.16	7.11
QL-PC-8	1/2	12.7	36.1	9.9
QL-PC-12	3/4	19.05	37.33	14.98
QL-PC-16	1	25.4	45.65	20.06

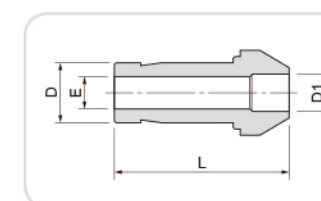
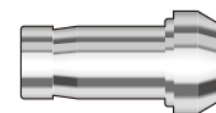
Connector Metric Q-Lok Port

Part Number	Dimensions		
	D	L	Min. E
	mm		
QL-PC-3M	3	22.2	1.8
QL-PC-4M	4	23.21	2.2
QL-PC-6M	6	24.6	4.4
QL-PC-8M	8	26	5.6
QL-PC-10M	10	27.1	7.1
QL-PC-12M	12	36.2	8.8
QL-PC-15M	15	37.8	11.2
QL-PC-16M	16	37.8	12
QL-PC-18M	18	37.8	13.9
QL-PC-20M	20	39.4	15.5
QL-PC-22M	22	38.97	17.9
QL-PC-25M	25	49.3	19.9
QL-PC-28M	28	63.5	22.5
QL-PC-32M	32	69.7	26.5
QL-PC-38M	38	81.9	31.6

REDUCING PORT CONNECTOR

異径ポートコネクタ

QL-RPC



Connector Fractional Q-Lok Port

Part Number	Dimensions					
	D1		D		L	Min. E
	inch	mm	inch	mm		
QL-RPC-2-1	1/8	3.17	1/16	1.58	18.3	0.8
QL-RPC-4-1	1/4	6.35	1/16	1.58	19.05	0.8
QL-RPC-4-2	1/4	6.35	1/8	3.17	22.86	2.3
QL-RPC-6-2	3/8	9.52	1/8	3.17	23.37	2.3
QL-RPC-6-4	3/8	9.52	1/4	6.35	25.4	4.3
QL-RPC-8-4	1/2	12.7	1/4	6.35	29.72	4.3
QL-RPC-8-6	1/2	12.7	3/8	9.52	30.73	6.8
QL-RPC-12-8	3/4	19.05	1/2	12.7	37.85	9.4
QL-RPC-16-8	1	25.4	1/2	12.7	42.93	9.4
QL-RPC-16-12	1	25.4	3/4	19.05	43.96	14.73

Connector Metric Q-Lok Port

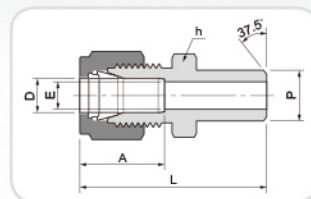
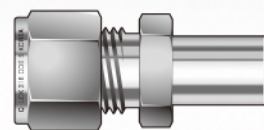
Part Number	Dimensions			
	D1	D	L	Min. E
	mm			
QL-RPC-6M-3M	6	3	22.9	1.9
QL-RPC-8M-6M	8	6	25.4	4.1
QL-RPC-10M-6M	10	6	25.8	4.1
QL-RPC-10M-8M	10	8	26.3	5.6
QL-RPC-12M-6M	12	6	29.6	4.1
QL-RPC-12M-8M	12	8	30.1	5.6
QL-RPC-12M-10M	12	10	30.6	7.1
QL-RPC-16M-6M	16	6	29.37	4.1
QL-RPC-16M-12M	16	12	37.5	8.8
QL-RPC-28M-25M	28	25	56.5	19.8
QL-RPC-32M-25M	32	25	60.3	19.8
QL-RPC-38M-25M	38	25	65.8	19.8

Dimensions are reference only, subject to change without prior notice.
The E dimension is the minimum nominal opening. These fittings may have a larger opening at the pipe/straight thread end.

MALE PIPE WELDING CONNECTOR

オスパイプ溶接コネクタ

QL-MPWC



Connector Fractional Tube to Pipe

Part Number	Dimensions							
	D		P		L	h		Min. E
	inch	mm	inch	mm	mm	inch	mm	mm
QL-MPWC-2-2P	1/8	3.17	1/8	10.3	30.82	7/16	11.11	13.04
QL-MPWC-3-2P	3/16	4.76	1/8	10.3	31.58	7/16	11.11	14.05
QL-MPWC-4-2P	1/4	6.35	1/8	10.3	33.57	1/2	12.7	15.59
QL-MPWC-4-4P	1/4	6.35	1/4	13.7	38.2	9/16	14.28	15.59
QL-MPWC-5-2P	5/16	7.93	1/8	10.3	34.03	9/16	14.28	16.42
QL-MPWC-5-4P	5/16	7.93	1/4	13.7	38.6	9/16	14.28	16.42
QL-MPWC-6-4P	3/8	9.52	1/4	13.7	40.37	5/8	15.88	17.26
QL-MPWC-6-6P	3/8	9.52	3/8	17.1	40.37	11/16	17.46	17.26
QL-MPWC-6-8P	3/8	9.52	1/2	21.3	46.72	7/8	22.22	17.26
QL-MPWC-6-12P	3/8	9.52	3/4	26.67	48.76	1 1/16	26.98	17.26
QL-MPWC-8-6P	1/2	12.7	3/8	17.1	44.73	13/16	20.64	23.32
QL-MPWC-8-8P	1/2	12.7	1/2	21.3	49.48	7/8	22.22	23.32
QL-MPWC-8-12P	1/2	12.7	3/4	26.67	53.3	1 1/16	26.98	23.32
QL-MPWC-10-8P	5/8	15.87	1/2	21.3	49.36	15/16	23.81	24.7
QL-MPWC-12-12P	3/4	19.05	3/4	26.67	50.71	1 1/16	26.98	24.53
QL-MPWC-16-16P	1	25.4	1	33.4	62.54	1 3/8	34.92	31.55
QL-MPWC-20-20P	1 1/4	31.75	1 1/4	42.16	77.21	1 3/4	44.45	41.14
QL-MPWC-24-24P	1 1/2	38.1	1 1/2	48.26	88.95	2 1/8	53.97	50.03
QL-MPWC-32-32P	2	50.8	2	60.32	113.53	2 3/4	69.9	67.56

Connector Metric Tube to Pipe

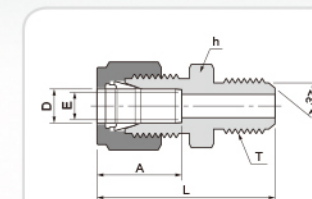
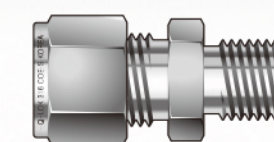
Part Number	Dimensions						
	D	P		L	h	A	Min.E
	mm	inch	mm	mm			
QL-MPWC-3M-2P	3	1/8	10.3	29.7	12	12.9	2.4
QL-MPWC-4M-2P	4	1/8	10.3	30.7	12	14.07	2.4
QL-MPWC-6M-2P	6	1/8	10.3	33.37	14	15.73	4.8
QL-MPWC-6M-4P	6	1/4	13.7	38.2	14	15.73	4.8
QL-MPWC-8M-2P	8	1/8	10.3	33.86	15	16.22	5.1
QL-MPWC-8M-4P	8	1/4	13.7	38.7	15	16.22	6.4
QL-MPWC-8M-8P	8	1/2	21.3	44.8	22	16.22	6.4
QL-MPWC-10M-4P	10	1/4	13.7	40.9	18	17.28	7.1
QL-MPWC-10M-6P	10	3/8	17.1	40.9	18	17.28	7.9
QL-MPWC-10M-8P	10	1/2	21.3	46.72	22	17.28	7.9
QL-MPWC-12M-4P	12	1/4	13.7	43.97	22	22.92	7.1
QL-MPWC-12M-6P	12	3/8	17.1	43.97	22	22.92	9.5
QL-MPWC-12M-8P	12	1/2	21.3	49.25	22	22.92	9.5
QL-MPWC-14M-6P	14	3/8	17.1	44.28	24	24.48	10.3
QL-MPWC-15M-8P	15	1/2	21.3	49	24	24.41	11.9
QL-MPWC-16M-8P	16	1/2	21.3	49	24	24.39	12.7
QL-MPWC-18M-8P	18	1/2	21.3	50.5	27	24.61	13.5
QL-MPWC-32M-20P	32	1 1/4	42.2	79.6	46	42	28.6
QL-MPWC-38M-24P	38	1 1/2	48.3	91.6	55	49.4	33.7

Dimensions are reference only, subject to change without prior notice.
The E dimension is the minimum nominal opening. These fittings may have a larger opening at the pipe/straight thread end.

AN UNION

ANユニオン

QL-AU



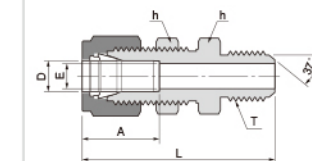
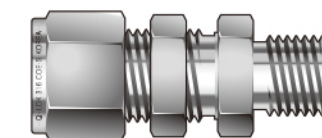
Connector Fractional Tube to AN Flared Tube

Part Number	Dimensions							
	D		AN Tube Flare Size		T	L	h	Min. E
	inch	mm	inch	mm	mm	mm	inch	mm
QL-AU-4-4	1/4	6.35	1/4	6.35	7/16-20	37.94	1/2	12.7
QL-AU-6-6	3/8	9.52	3/8	9.52	9/16-18	40.11	5/8	15.88
QL-AU-8-8	1/2	12.7	1/2	12.7	3/4-16	46.42	13/16	20.64

BULKHEAD AN UNION

バルクヘッド ANユニオン

QL-BAU



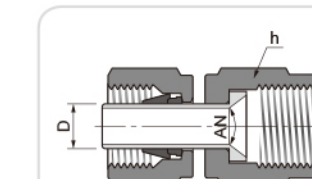
Connector Fractional Tube to AN Flared Tube

Part Number	Dimensions									
	D		AN Tube Flare Size		T	L	h	A	Max. Panel Thickness	Min. E
	inch	mm	inch	mm	mm	mm	inch	mm	mm	mm
QL-BAU-4-4	1/4	6.35	1/4	6.35	7/16-20	53.84	5/8	15.88	15.59	10.16
QL-BAU-6-6	3/8	9.52	3/8	9.52	9/16-18	57.15	3/4	19.05	17.26	11.17
QL-BAU-8-8	1/2	12.7	1/2	12.7	3/4-16	65.78	15/16	23.81	23.32	12.7

AN ADAPTER

ANアダプター

QL-AA

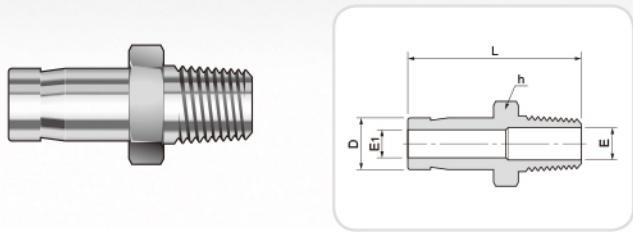


Connector Fractional Q-Lok Port to Male AN

Part Number	Dimensions						
	D		AN Tube Flare Size		Straight T Size	h	
	inch	mm	inch	mm	inch	inch	mm
QL-AA-4-4	1/4	6.35	1/4	6.35	7/16 - 20	9/16	14.28
QL-AA-6-6	3/8	9.52	3/8	9.52	9/16 - 18	11/16	17.46
QL-AA-8-8	1/2	12.7	1/2	12.7	3/4 - 16	7/8	22.22

Dimensions are reference only, subject to change without prior notice.
The E dimension is the minimum nominal opening. These fittings may have a larger opening at the pipe/straight thread end.

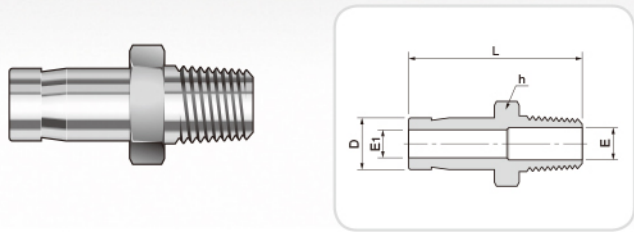
MALE ADAPTER
オスアダプター
QL-MA



Connector Fractional Q-Lok Port to Female NPT/PT Thread

Part Number	Dimensions						
	D		NPT Thread	L	h		Min. E
	inch	mm	inch	mm	inch	mm	mm
QL-MA-2-2	1/8	3.17	1/8	29.5	7/16	11.11	4.57
QL-MA-2-4	1/8	3.17	1/4	33.27	9/16	14.28	7.11
QL-MA-3-2	3/16	4.76	1/8	30.22	7/16	11.11	4.57
QL-MA-3-4	3/16	4.76	1/4	35.56	9/16	14.28	7.11
QL-MA-4-2	1/4	6.35	1/8	31.09	7/16	11.11	4.83
QL-MA-4-4	1/4	6.35	1/4	37.08	9/16	14.28	7.11
QL-MA-4-6	1/4	6.35	3/8	37.83	11/16	17.46	10.41
QL-MA-4-8	1/4	6.35	1/2	43.43	7/8	22.22	12.7
QL-MA-4-12	1/4	6.35	3/4	43.43	1 1/16	26.98	18.28
QL-MA-5-2	5/16	7.93	1/8	32.76	7/16	11.11	4.57
QL-MA-5-4	5/16	7.93	1/4	38.1	9/16	14.28	7.11
QL-MA-6-2	3/8	9.52	1/8	33.5	7/16	11.11	4.83
QL-MA-6-4	3/8	9.52	1/4	38.9	9/16	14.28	7.11
QL-MA-6-6	3/8	9.52	3/8	39.6	11/16	17.46	10.41
QL-MA-6-8	3/8	9.52	1/2	45.2	7/8	22.22	12.7
QL-MA-8-4	1/2	12.7	1/4	44.5	9/16	14.28	7.11
QL-MA-8-6	1/2	12.7	3/8	45.2	11/16	17.46	10.41
QL-MA-8-8	1/2	12.7	1/2	50.5	7/8	22.22	12.7
QL-MA-8-12	1/2	12.7	3/4	50.5	1 1/16	26.98	12.7
QL-MA-10-6	5/8	15.87	3/8	46.95	11/16	17.46	10.41
QL-MA-10-8	5/8	15.87	1/2	52.3	7/8	22.22	12.7
QL-MA-10-12	5/8	15.87	3/4	52.3	1 1/16	26.98	18.28
QL-MA-12-8	3/4	19.05	1/2	52.32	7/8	22.22	12.7
QL-MA-12-12	3/4	19.05	3/4	52.32	1 1/16	26.98	18.28
QL-MA-12-16	3/4	19.05	1	57.91	1 3/8	34.92	22.35
QL-MA-14-12	7/8	22.22	3/4	54.3	1 1/16	26.98	18.28
QL-MA-16-12	1	25.4	3/4	58.87	1 1/16	26.98	18.28
QL-MA-16-16	1	25.4	1	65.17	1 3/8	34.92	22.35
QL-MA-20-20	1 1/4	31.75	1 1/4	80.26	1 3/4	44.45	27.68
QL-MA-24-24	1 1/2	38.1	1 1/2	94.48	2 1/8	53.97	33.27
QL-MA-32-32	2	50.8	2	119.38	2 3/4	69.85	44.45

MALE ADAPTER
オスアダプター
QL-MA



Connector Metric Q-Lok Port to Female NPT/PT Thread

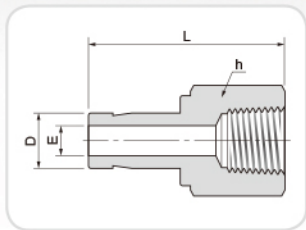
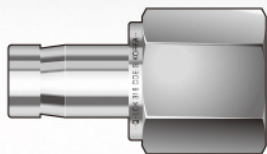
Part Number	Dimensions					
	D	PT Thread (R)	L	h	E1	Min. E
	mm	inch	mm			
QL-MA-2M-2	2	1/8	29.4	12	1.8	4
QL-MA-6M-2	6	1/8	32.8	12	4.6	4.6
QL-MA-6M-4	6	1/4	38.1	14	4.6	4.6
QL-MA-8M-4	8	1/4	39.1	14	6.3	6.3
QL-MA-10M-4	10	1/4	39.9	14	7.7	7.7
QL-MA-10M-6	10	3/8	40.6	18	7.7	7.7
QL-MA-10M-8	10	1/2	45.2	22	7.7	11.9
QL-MA-12M-4	12	1/4	46.5	14	9.1	7.1
QL-MA-12M-6	12	3/8	46.2	18	9.1	9.1
QL-MA-12M-8	12	1/2	50.38	22	9.1	11.9
QL-MA-18M-8	18	1/2	53.2	22	13.9	11.9
QL-MA-18M-12	18	3/4	53.2	27	13.9	15.9
QL-MA-28M-16	28	1	74.7	35	22.2	22.2
QL-MA-28M-20	28	1 1/4	76.2	46	22.4	23.8
QL-MA-32M-20	32	1 1/4	81	46	26.5	27.4
QL-MA-38M-24	38	1 1/2	92.2	55	31.8	33.3

Dimensions are reference only, subject to change without prior notice.
The E dimension is the minimum nominal opening. These fittings may have a larger opening at the pipe/straight thread end.

Dimensions are reference only, subject to change without prior notice.
The E dimension is the minimum nominal opening. These fittings may have a larger opening at the pipe/straight thread end.

FEMALE ADAPTER
メスアダプター

QL-FA

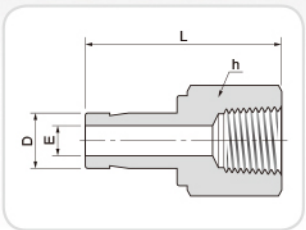
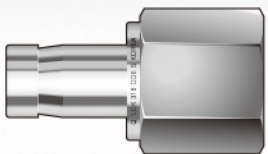


Connector Fractional Q-Lok Port to Male NPT/PT Thread

Part Number	Dimensions						
	D		NPT Thread	L	h		Min. E
	inch	mm	inch	mm	inch	mm	mm
QL-FA-2-2	1/8	3.17	1/8	31.5	9/16	14.28	2.03
QL-FA-2-4	1/8	3.17	1/4	35.3	3/4	19.05	2.03
QL-FA-3-2	3/16	4.76	1/8	32	9/16	14.28	3.04
QL-FA-3-4	3/16	4.76	1/4	35.81	3/4	19.05	3.04
QL-FA-4-2	1/4	6.35	1/8	33.54	9/16	14.28	4.83
QL-FA-4-4	1/4	6.35	1/4	36.32	3/4	19.05	4.83
QL-FA-4-6	1/4	6.35	3/8	39.62	7/8	22.22	4.83
QL-FA-4-8	1/4	6.35	1/2	45.21	1 1/16	26.98	4.83
QL-FA-5-2	5/16	7.93	1/8	34.29	9/16	14.28	6.35
QL-FA-5-4	5/16	7.93	1/4	37.59	3/4	19.05	6.35
QL-FA-6-2	3/8	9.52	1/8	35.62	9/16	14.28	7.11
QL-FA-6-4	3/8	9.52	1/4	38.05	3/4	19.05	7.11
QL-FA-6-6	3/8	9.52	3/8	40.81	7/8	22.22	7.11
QL-FA-6-8	3/8	9.52	1/2	46.73	1 1/16	26.98	7.11
QL-FA-8-4	1/2	12.7	1/4	43.43	3/4	19.05	9.4
QL-FA-8-6	1/2	12.7	3/8	46.73	7/8	22.22	9.4
QL-FA-8-8	1/2	12.7	1/2	52.31	1 1/16	26.98	9.4
QL-FA-10-6	5/8	15.87	3/8	48.26	7/8	22.22	12.7
QL-FA-10-8	5/8	15.87	1/2	53.84	1 1/16	26.98	12.7
QL-FA-10-12	5/8	15.87	3/4	55.37	1 5/16	33.33	12.7
QL-FA-12-8	3/4	19.05	1/2	53.85	1 1/16	26.98	14.98
QL-FA-12-12	3/4	19.05	3/4	54.27	1 5/16	33.33	14.98
QL-FA-12-16	3/4	19.05	1	58.42	1 5/8	41.28	14.98
QL-FA-14-12	7/8	22.22	3/4	57.15	1 5/16	33.33	17.27
QL-FA-16-12	1	25.4	3/4	60.7	1 5/16	33.33	20.06
QL-FA-16-16	1	25.4	1	64.26	1 5/8	41.28	20.06
QL-FA-20-20	1 1/4	31.75	1 1/4	77.72	2 1/8	53.97	27.68
QL-FA-24-24	1 1/2	38.1	1 1/2	88.9	2 3/8	60.32	33.27
QL-FA-32-32	2	50.8	2	107.44	2 7/8	73.03	44.45

FEMALE ADAPTER
メスアダプター

QL-FA



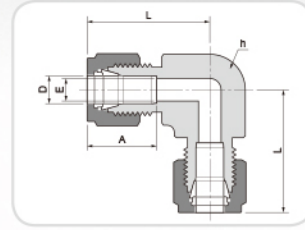
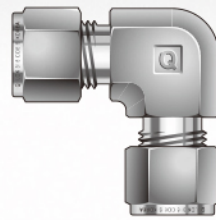
Connector Metric Q-Lok Port to Male NPT/PT Thread

Part Number	Dimensions				
	D	PT Thread (R)	L	h	Min. E
	mm	inch	inch	mm	
QL-FA-3M-2	3	1/8	31.15	14	1.8
QL-FA-6M-2	6	1/8	32.5	14	4.6
QL-FA-6M-4	6	1/4	37.1	19	4.6
QL-FA-8M-4	8	1/4	37.6	19	6.3
QL-FA-10M-4	10	1/4	39.7	19	7.7
QL-FA-10M-6	10	3/8	40.1	22	7.7
QL-FA-10M-8	10	1/2	46.5	27	7.7
QL-FA-12M-4	12	1/4	45.2	19	9.1
QL-FA-12M-6	12	3/8	46	22	9.1
QL-FA-12M-8	12	1/2	52.32	27	9.1
QL-FA-18M-12	18	3/4	54.8	35	13.9

Dimensions are reference only, subject to change without prior notice.
The E dimension is the minimum nominal opening. These fittings may have a larger opening at the pipe/straight thread end.

Dimensions are reference only, subject to change without prior notice.
The E dimension is the minimum nominal opening. These fittings may have a larger opening at the pipe/straight thread end.

UNION ELBOW ユニオン エルボ QL-UE



Connector Fractional Tube

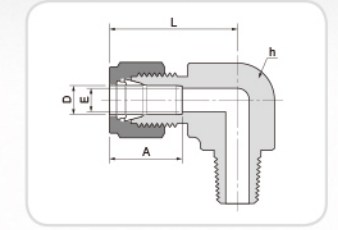
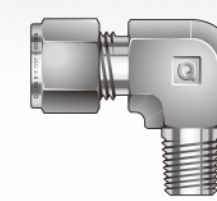
Part Number	Dimensions						
	D		L	h		A	Min. E
	inch	mm	mm	inch	mm	mm	
QL-UE-1	1/16	1.58	17.88	3/8	9.52	8.63	1.27
QL-UE-2	1/8	3.17	22.57	3/8	9.52	13.04	2.28
QL-UE-3	3/16	4.76	25.94	1/2	12.7	14.05	3.05
QL-UE-4	1/4	6.35	27.16	1/2	12.7	15.59	4.83
QL-UE-5	5/16	7.93	28.75	9/16	14.28	16.42	6.35
QL-UE-6	3/8	9.52	30.86	5/8	15.88	17.26	7.11
QL-UE-8	1/2	12.7	36.42	13/16	20.64	23.32	10.41
QL-UE-10	5/8	15.87	38.32	15/16	23.81	24.7	12.7
QL-UE-12	3/4	19.05	39.9	1 1/16	26.98	24.53	15.75
QL-UE-14	7/8	22.22	44.7	1 3/8	34.92	25.9	18.28
QL-UE-16	1	25.4	49.21	1 3/8	34.92	31.55	22.35
QL-UE-20	1 1/4	31.75	66.54	1 11/16	42.86	41.14	27.68
QL-UE-24	1 1/2	38.1	77.97	2	50.8	50.3	34.03
QL-UE-32	2	50.8	107.18	2 3/4	69.85	67.56	45.97

Connector Metric Tube

Part Number	Dimensions				
	D	L	h	A	Min. E
	mm				
QL-UE-2M	2	22.3	9.5	12.9	1.7
QL-UE-3M	3	22.3	9.5	12.9	2.4
QL-UE-4M	4	24.44	12.7	14.07	2.4
QL-UE-6M	6	27.26	12.7	15.73	4.8
QL-UE-8M	8	28.7	15.9	16.22	6.4
QL-UE-10M	10	31.28	17.5	17.28	7.9
QL-UE-12M	12	35.95	20.6	22.92	9.5
QL-UE-15M	15	38.79	23.8	24.41	11.9
QL-UE-16M	16	38.77	23.8	24.39	12.7
QL-UE-18M	18	39.9	27	24.61	15.1
QL-UE-20M	20	44.82	34.9	26.22	15.9
QL-UE-22M	22	44.91	34.9	26.59	18.5
QL-UE-25M	25	48.84	34.9	31.04	21.8
QL-UE-28M	28	64	41	36.6	21.8
QL-UE-32M	32	72.3	46	42	28.6
QL-UE-38M	38	84	55	49.4	33.7

Dimensions are reference only, subject to change without prior notice.
The E dimension is the minimum nominal opening. These fittings may have a larger opening at the pipe/straight thread end.

MALE ELBOW オスエルボ QL-ME

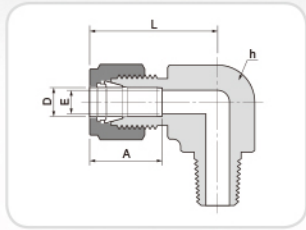
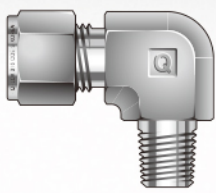


Connector Fractional Tube to Female NPT/PT Thread

Part Number	Dimensions								
	D		NPT Thread	L	L1	h		A	Min. E
	inch	mm	inch	mm		inch	mm	mm	
QL-ME-1-1	1/16	1.58	1/16	19.05	17.78	7/16	11.11	8.63	1.27
QL-ME-1-2	1/16	1.58	1/8	19.05	17.78	7/16	11.11	8.63	1.27
QL-ME-2-2	1/8	3.17	1/8	25.94	19.05	1/2	12.7	13.04	2.28
QL-ME-2-4	1/8	3.17	1/4	25.94	23.25	1/2	12.7	13.04	2.28
QL-ME-2-6	1/8	3.17	3/8	27.4	26.05	11/16	17.46	13.04	2.28
QL-ME-3-2	3/16	4.76	1/8	25.94	19.05	1/2	12.7	14.05	3.05
QL-ME-3-4	3/16	4.76	1/4	25.94	23.25	1/2	12.7	14.05	3.05
QL-ME-4-1	1/4	6.35	1/16	26.9	19.05	1/2	12.7	15.59	3.05
QL-ME-4-2	1/4	6.35	1/8	27.16	19.05	1/2	12.7	15.59	4.83
QL-ME-4-4	1/4	6.35	1/4	27.16	23.25	1/2	12.7	15.59	4.83
QL-ME-4-6	1/4	6.35	3/8	29.95	26.05	11/16	17.46	15.59	4.83
QL-ME-4-8	1/4	6.35	1/2	31.99	32.9	11/16	20.64	15.59	4.83
QL-ME-5-2	5/16	7.93	1/8	28.75	19.7	5/8	14.28	16.42	6.35
QL-ME-5-4	5/16	7.93	1/4	28.75	24.26	5/8	14.28	16.42	6.35
QL-ME-5-6	5/16	7.93	3/8	30.54	26.05	11/16	17.46	16.42	6.35
QL-ME-6-2	3/8	9.52	1/8	30.87	20.71	5/8	15.88	17.26	4.83
QL-ME-6-4	3/8	9.52	1/4	30.87	25.3	5/8	15.88	17.26	7.11
QL-ME-6-6	3/8	9.52	3/8	31.62	26.05	11/16	17.46	17.26	7.11
QL-ME-6-8	3/8	9.52	1/2	33.65	32.9	13/16	20.64	17.26	7.11
QL-ME-6-12	3/8	9.52	3/4	37.46	36.71	1 1/16	26.98	17.26	7.11
QL-ME-8-4	1/2	12.7	1/4	36.42	27.6	13/16	20.64	23.32	7.11
QL-ME-8-6	1/2	12.7	3/8	36.42	27.6	13/16	20.64	23.32	9.6
QL-ME-8-8	1/2	12.7	1/2	36.42	32.9	13/16	20.64	23.32	10.41
QL-ME-8-12	1/2	12.7	3/4	40.22	36.71	1 1/16	26.98	23.32	10.41
QL-ME-10-6	5/8	15.87	3/8	38.32	30.11	15/16	23.81	24.7	9.45
QL-ME-10-8	5/8	15.87	1/2	38.32	34.94	15/16	23.81	24.7	11.91
QL-ME-10-12	5/8	15.87	3/4	39.87	36.83	1 1/16	26.98	24.7	12.7
QL-ME-12-6	3/4	19.05	3/8	39.9	32.14	1 1/16	26.98	24.53	9.45
QL-ME-12-8	3/4	19.05	1/2	39.9	36.71	1 1/16	26.98	24.53	11.91
QL-ME-12-12	3/4	19.05	3/4	39.9	36.71	1 1/16	26.98	24.53	15.75
QL-ME-14-12	7/8	22.22	3/4	44	41.65	1 3/16	30	25.9	15.75
QL-ME-16-8	1	25.4	1/2	49.21	41.54	1 3/8	34.92	31.55	11.91
QL-ME-16-12	1	25.4	3/4	49.21	41.54	1 3/8	34.92	31.55	15.75
QL-ME-16-16	1	25.4	1	49.21	48.36	1 3/8	34.92	31.55	22.35
QL-ME-20-20	1 1/4	31.75	1 1/4	66.54	47.75	1 11/16	42.86	41.14	27.68
QL-ME-24-24	1 1/2	38.1	1 1/2	77.97	60.45	2	50.8	50.3	34.03
QL-ME-32-32	2	50.8	2	107.18	70.61	2 3/4	69.85	67.56	45.97

Dimensions are reference only, subject to change without prior notice.
The E dimension is the minimum nominal opening. These fittings may have a larger opening at the pipe/straight thread end.

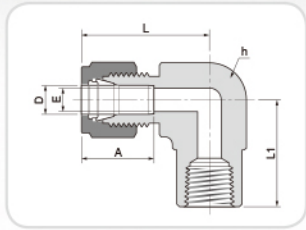
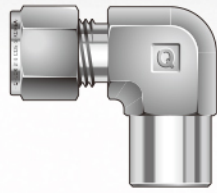
MALE ELBOW
オスエルボ
QL-ME



Connector Metric Tube to Female NPT/PT Thread

Part Number	Dimensions						
	D	PT Thread (R)	L	L1	h	A	Min. E
	mm	inch	mm				
QL-ME-3M-2	3	1/8	25.96	19.05	12.7	12.9	2.4
QL-ME-3M-4	3	1/4	25.96	23.25	12.7	12.9	2.4
QL-ME-4M-2	4	1/8	25.96	19.05	12.7	14.07	2.4
QL-ME-4M-4	4	1/4	25.96	23.25	12.7	14.07	2.4
QL-ME-6M-2	6	1/8	27.26	19.05	12.7	15.73	4.8
QL-ME-6M-4	6	1/4	27.26	23.28	12.7	15.73	4.8
QL-ME-6M-6	6	3/8	30.06	26.08	17.5	15.73	4.8
QL-ME-6M-8	6	1/2	32.06	32.88	20.6	15.73	4.8
QL-ME-8M-2	8	1/8	28.7	19.8	14.3	16.22	4.8
QL-ME-8M-4	8	1/4	28.7	24.28	14.3	16.22	6.4
QL-ME-8M-6	8	3/8	30.52	26.04	17.5	16.22	6.4
QL-ME-8M-8	8	1/2	32.5	32.88	20.6	16.22	6.4
QL-ME-10M-2	10	1/8	31.28	21.6	17.5	17.28	4.8
QL-ME-10M-4	10	1/4	31.28	25.42	17.5	17.28	7.1
QL-ME-10M-6	10	3/8	31.28	25.42	17.5	17.28	7.9
QL-ME-10M-8	10	1/2	33.46	32.88	20.6	17.28	7.9
QL-ME-12M-2	12	1/8	35.95	23.48	20.6	22.92	4.8
QL-ME-12M-4	12	1/4	35.95	28.08	20.6	22.92	7.1
QL-ME-12M-6	12	3/8	35.95	28.08	20.6	22.92	9.5
QL-ME-12M-8	12	1/2	35.95	32.88	20.6	22.92	9.5
QL-ME-12M-12	12	3/4	39.75	36.88	27	22.92	9.5
QL-ME-16M-6	16	3/8	38.77	30.4	23.8	24.39	12.7
QL-ME-16M-8	16	1/2	38.77	35.23	23.8	24.39	12.7
QL-ME-16M-12	16	3/4	39.8	36.68	27	24.39	12.7
QL-ME-18M-8	18	1/2	39.99	36.68	27	24.61	15.7
QL-ME-18M-12	18	3/4	39.99	36.68	27	24.61	15.1
QL-ME-20M-8	20	1/2	44.82	41.15	34.9	26.22	11.9
QL-ME-20M-12	20	3/4	44.82	41.15	34.9	26.22	15.9
QL-ME-22M-12	22	3/4	44.91	41.15	34.9	26.59	15.9
QL-ME-22M-16	22	1	44.91	45.98	34.9	26.59	18.3
QL-ME-25M-12	25	3/4	48.84	41.15	34.9	31.04	21.8
QL-ME-25M-16	25	1	48.84	45.98	34.9	31.04	21.8

FEMALE ELBOW
メスエルボ
QL-FE



Connector Fractional Tube to Male NPT/PT Thread

Part Number	Dimensions								
	D		NPT Thread	L	L1	h		A	Min. E
	inch	mm	inch	mm		inch	mm	mm	
QL-FE-2-2	1/8	3.17	1/8	25.94	19.05	1/2	12.7	13.04	2.28
QL-FE-2-4	1/8	3.17	1/4	27.43	22.35	11/16	17.46	13.04	2.28
QL-FE-3-2	3/16	4.76	1/8	25.94	19.05	1/2	12.7	14.05	3.05
QL-FE-4-2	1/4	6.35	1/8	27.27	19.05	1/2	12.7	15.59	4.83
QL-FE-4-4	1/4	6.35	1/4	30.07	22.35	11/16	17.46	15.59	4.83
QL-FE-4-6	1/4	6.35	3/8	32.1	22.35	13/16	20.64	15.59	4.83
QL-FE-4-8	1/4	6.35	1/2	34.89	28.44	1	25.4	15.59	4.83
QL-FE-5-2	5/16	7.93	1/8	28.75	19.05	5/8	15.88	16.42	6.35
QL-FE-5-4	5/16	7.93	1/4	30.48	22.35	11/16	17.46	16.42	6.35
QL-FE-6-2	3/8	9.52	1/8	30.86	19.05	5/8	15.88	17.26	7.11
QL-FE-6-4	3/8	9.52	1/4	31.73	22.35	11/16	17.46	17.26	7.11
QL-FE-6-6	3/8	9.52	3/8	33.76	22.35	13/16	20.64	17.26	7.11
QL-FE-6-8	3/8	9.52	1/2	36.56	28.44	1	25.4	17.26	7.11
QL-FE-8-4	1/2	12.7	1/4	36.56	22.35	13/16	20.64	23.32	10.41
QL-FE-8-6	1/2	12.7	3/8	36.56	22.35	13/16	20.64	23.32	10.41
QL-FE-8-8	1/2	12.7	1/2	39.32	28.44	1	25.4	23.32	10.41
QL-FE-10-6	5/8	15.87	3/8	38.32	22.35	15/16	23.81	24.7	12.7
QL-FE-10-8	5/8	15.87	1/2	40.21	28.44	1	25.4	24.7	12.7
QL-FE-12-8	3/4	19.05	1/2	40.02	28.44	1 1/16	26.98	24.53	15.75
QL-FE-12-12	3/4	19.05	3/4	44.87	31.75	1 3/8	34.92	24.53	15.75
QL-FE-14-12	7/8	22.22	3/4	44.87	31.75	1 3/8	34.92	25.9	18.28
QL-FE-16-12	1	25.4	3/4	49.21	31.75	1 3/8	34.92	31.55	15.75
QL-FE-16-16	1	25.4	1	53.9	38.1	1 11/16	42.86	31.55	22.35

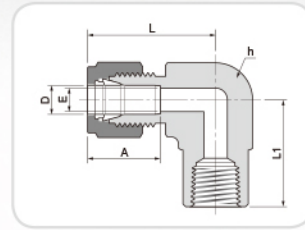
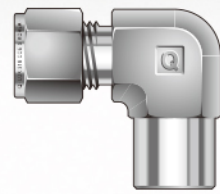
Dimensions are reference only, subject to change without prior notice.
The E dimension is the minimum nominal opening. These fittings may have a larger opening at the pipe/straight thread end.

Dimensions are reference only, subject to change without prior notice.
The E dimension is the minimum nominal opening. These fittings may have a larger opening at the pipe/straight thread end.

FEMALE ELBOW

メスエルボ

QL-FE



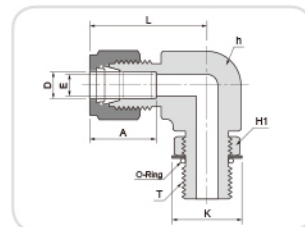
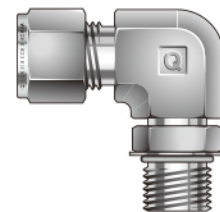
Connector Metric Tube to Male NPT/PT Thread

Part Number	Dimensions						
	D	NPT Thread	L	L1	h	A	Min. E
	mm	inch			mm		
QL-FE-6M-2	6	1/8	27.26	19.05	12.7	15.73	4.8
QL-FE-6M-4	6	1/4	29.8	22.35	17.5	15.73	4.8
QL-FE-6M-6	6	3/8	31.7	22.35	20.6	15.73	4.8
QL-FE-6M-8	6	1/2	34.6	28.44	17.5	15.73	4.8
QL-FE-8M-4	8	1/4	30.6	22.35	17.5	16.22	6.4
QL-FE-8M-8	8	1/2	35.2	28.44	25.4	16.22	6.4
QL-FE-10M-2	10	1/8	31.28	22.3	17.5	17.28	7.9
QL-FE-10M-4	10	1/4	31.28	22.35	17.5	17.28	7.9
QL-FE-10M-6	10	3/8	33.46	22.35	20.6	17.28	7.9
QL-FE-10M-8	10	1/2	36.05	28.44	25.4	17.28	7.9
QL-FE-12M-4	12	1/4	35.95	22.35	20.6	22.92	9.5
QL-FE-12M-6	12	3/8	35.95	22.35	20.6	22.92	9.5
QL-FE-12M-8	12	1/2	38.55	28.44	25.4	22.92	9.5
QL-FE-16M-8	16	1/2	39.5	28.44	27	24.39	12.7

SAE/MS MALE ELBOW FOR POSITIONABLE

オスエルボ SAE/MS 平行ねじ
For Positionable

QL-MEO



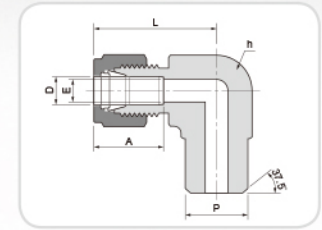
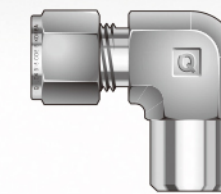
Connector Fractional Tube to SAE / MS Straight Thread

Part Number	Dimensions									
	D		Straight Thread (U)	L	h		A	h1	K	Min. E
	inch	mm	inch	mm	inch	mm	mm	inch	mm	
QL-MEO-4-4U	1/4	6.35	7/16-20	28.8	1/2	12.7	15.59	9/16	16.54	4.82
QL-MEO-4-6U	1/4	6.35	9/16-18	30.83	5/8	15.88	15.59	11/16	20.06	4.82
QL-MEO-5-5U	5/16	7.93	1/2-20	30.39	9/16	15.88	16.42	5/8	18.28	5.84
QL-MEO-6-6U	3/8	9.52	9/16-18	32.49	5/8	15.88	17.26	11/16	20.06	7.11
QL-MEO-6-8U	3/8	9.52	3/4-16	35.29	13/16	20.64	17.26	7/8	25.65	7.11
QL-MEO-8-8U	1/2	12.7	3/4-16	38.05	13/16	20.64	23.32	7/8	25.65	10.41
QL-MEO-10-10U	5/8	15.87	7/8-14	39.91	1	25.4	24.7	1	29.46	12.7
QL-MEO-12-12U	3/4	19.05	1 1/16-12	41.54	1 1/16	26.98	24.53	1 1/4	36.57	15.74
QL-MEO-14-14U	7/8	22.22	1 3/16-12	43.18	1 1/4	31.75	25.9	1 3/8	40.38	18.28
QL-MEO-16-16U	1	25.4	1 5/16-12	50.85	1 3/8	34.92	31.55	1 1/2	43.94	22.35
QL-MEO-20-20U	1 1/4	31.75	1 5/8-12	67.76	1 11/16	42.86	41.14	1 7/8	54.86	27.68
QL-MEO-24-24U	1 1/2	38.1	1 7/8-12	77.97	2	50.8	50.03	2 1/8	62.23	34.03
QL-MEO-32-32U	2	50.8	2 1/2-12	107.23	2 3/4	69.85	67.56	2 3/4	80.26	45.97

MALE PIPE WELDING ELBOW

オスパイプ溶接エルボ

QL-MPWE



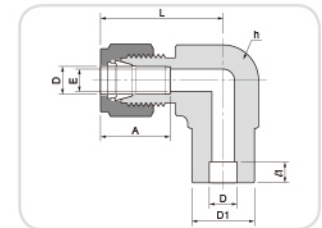
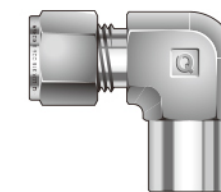
Connector Fractional Tube to Pipe

Part Number	Dimensions									
	D		P		L	L1	h		A	Min. E
	inch	mm	inch	mm	mm		inch	mm	mm	
QL-MPWE-2-2P	1/8	3.17	1/8	10.3	25.94	19	1/2	12.7	13.04	4.83
QL-MPWE-4-2P	1/4	6.35	1/4	10.3	27.16	23.31	1/2	12.7	15.59	4.83
QL-MPWE-4-4P	1/4	6.35	1/4	13.7	27.16	23.31	1/2	12.7	15.59	4.83
QL-MPWE-6-4P	3/8	9.52	1/4	13.7	30.87	25.4	5/8	15.88	17.26	7.11
QL-MPWE-6-6P	3/8	9.52	3/8	17.1	31.73	26.16	11/16	17.46	17.26	7.11
QL-MPWE-8-8P	1/2	12.7	1/2	21.3	36.42	33.17	13/16	20.64	23.32	10.41
QL-MPWE-12-12P	3/4	19.05	3/4	26.67	40.05	36.83	1 1/16	26.98	24.53	15.75

TUBE SOCKET WELDING ELBOW

チューブソケット 溶接エルボ

QL-TSWE



Connector Fractional Tube to Pipe

Part Number	Dimensions									
	D		D1	L	L1	h		I1	A	Min. E
	inch	mm	mm			inch	mm	mm		
QL-TSWE-4-4	1/4	6.35	12.7	27.16	19.6	1/2	12.7	7.87	15.59	4.83
QL-TSWE-6-6	3/8	9.52	15.74	30.86	23.1	5/8	15.88	9.65	17.26	7.11
QL-TSWE-8-8	1/2	12.7	20.57	36.42	25.9	13/16	20.64	12.7	23.32	10.41
QL-TSWE-12-12	3/4	19.05	26.92	39.9	29.7	1 1/16	26.98	14.22	24.53	15.75
QL-TSWE-16-16	1	25.4	35.05	49.21	36.8	1 3/8	34.92	19.05	31.55	22.35

Dimensions are reference only, subject to change without prior notice.

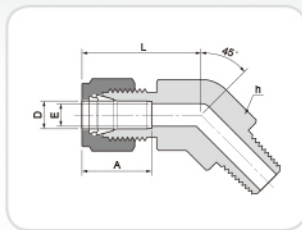
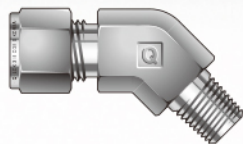
The E dimension is the minimum nominal opening. These fittings may have a larger opening at the pipe/straight thread end.

Dimensions are reference only, subject to change without prior notice.

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

45° MALE ELBOW
45° オスエルボ

QL-45ME



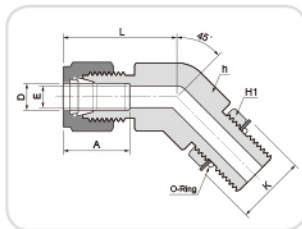
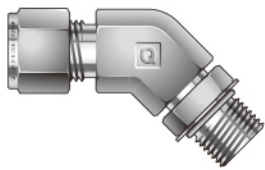
Connector Fractional Tube to Female NPT/PT Thread

Part Number	Dimensions						
	D		NPT Thread	L	h		Min. E
	inch	mm	inch	mm	inch	mm	mm
QL-45ME-4-2	1/4	6.35	1/8	24.23	1/2	12.7	15.59
QL-45ME-4-4	1/4	6.35	1/4	24.99	1/2	12.7	15.59
QL-45ME-6-2	3/8	9.52	1/8	26.14	5/8	15.88	17.26
QL-45ME-6-4	3/8	9.52	1/4	28.43	5/8	15.88	17.26
QL-45ME-6-6	3/8	9.52	3/8	29.7	13/16	20.64	17.26
QL-45ME-8-6	1/2	12.7	3/8	32.46	13/16	20.64	23.32
QL-45ME-8-8	1/2	12.7	1/2	32.46	13/16	20.64	23.32
QL-45ME-12-12	3/4	19.05	3/4	34.64	1 1/16	26.98	24.53
QL-45ME-16-16	1	25.4	1	42.73	1 3/8	34.92	31.55

SAE 45° MALE ELBOW
FOR POSITIONABLE

45° オスエルボ SAE/MS 平行ねじ
For Positionable

QL-45MEO

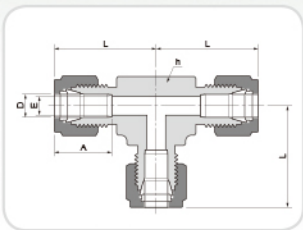
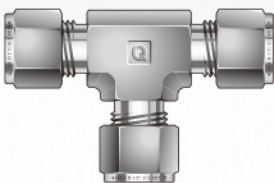


Connector Fractional Tube to SAE / MS Straight Thread

Part Number	Dimensions									
	D		Straight Thread (U)	L	h		A	H1		Min. E
	inch	mm	inch	mm	inch	mm	mm	inch	mm	mm
QL-45MEO-4-4U	1/4	6.35	7/16-20	26	1/2	12.7	15.59	9/16	14.28	16.51
QL-45MEO-6-6U	3/8	9.52	9/16-18	28.43	5/8	15.88	17.26	11/16	17.46	20.06
QL-45MEO-8-8U	1/2	12.7	3/4-16	32.46	13/16	20.64	23.32	7/8	22.22	25.65
QL-45MEO-12-12U	3/4	19.05	1 1/16-12	40.01	1 1/8	26.98	24.53	1 1/4	31.8	36.57
QL-45MEO-16-16U	1	25.4	1 5/16-12	47.8	1 3/8	34.92	31.55	1 1/2	38.1	43.94

UNION TEE
ユニオンティー

QL-UT



Connector Fractional Tube

Part Number	Dimensions						
	D		L	h		A	Min. E
	inch	mm	mm	inch	mm	mm	mm
QL-UT-1	1/16	1.58	17.88	3/8	9.52	8.63	1.27
QL-UT-2	1/8	3.17	22.63	7/16	11.11	13.04	2.28
QL-UT-3	3/16	4.76	25.94	1/2	12.7	14.05	3.05
QL-UT-4	1/4	6.35	27.16	1/2	12.7	15.59	4.83
QL-UT-5	5/16	7.93	28.75	9/16	14.28	16.42	6.35
QL-UT-6	3/8	9.52	30.86	5/8	15.88	17.26	7.11
QL-UT-8	1/2	12.7	36.42	13/16	20.64	23.32	10.41
QL-UT-10	5/8	15.87	38.32	15/16	23.81	24.7	12.7
QL-UT-12	3/4	19.05	39.9	1 1/16	26.98	24.53	15.75
QL-UT-14	7/8	22.22	44.7	1 3/8	34.92	25.9	18.28
QL-UT-16	1	25.4	49.21	1 3/8	34.92	31.55	22.35
QL-UT-20	1 1/4	31.75	66.54	1 11/16	42.86	41.14	27.68
QL-UT-24	1 1/2	38.1	77.97	2	50.8	50.03	34.03
QL-UT-32	2	50.8	107.18	2 3/4	69.85	67.56	45.97

Connector Metric Tube

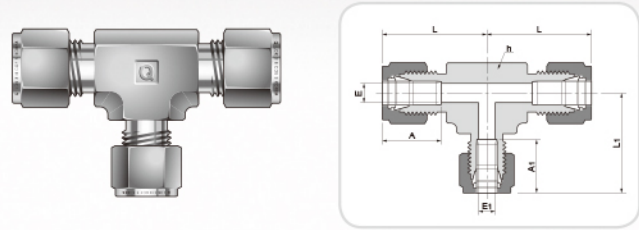
Part Number	Dimensions				
	D	L	h	A	Min. E
	mm				
QL-UT-2M	2	22.3	9.5 (9.52)	12.9	1.7
QL-UT-3M	3	22.3	9.5 (9.52)	12.9	2.4
QL-UT-4M	4	25.96	12.7	14.07	2.4
QL-UT-6M	6	27.26	12.7	15.73	4.8
QL-UT-8M	8	28.7	14.3	16.22	6.4
QL-UT-10M	10	31.28	17.5	17.28	7.9
QL-UT-12M	12	35.95	20.6	22.92	9.5
QL-UT-15M	15	38.79	23.8	24.41	11.9
QL-UT-16M	16	38.77	23.8	24.39	12.7
QL-UT-18M	18	39.99	27	24.61	15.1
QL-UT-20M	20	44.82	34.9	26.22	15.9
QL-UT-22M	22	44.91	34.9	26.59	18.5
QL-UT-25M	25	48.84	34.9	31.04	21.8
QL-UT-28M	28	64	41	36.6	21.8
QL-UT-32M	32	72.3	46	42	28.6
QL-UT-38M	38	84	55	49.4	33.7

Dimensions are reference only, subject to change without prior notice.
The E dimension is the minimum nominal opening. These fittings may have a larger opening at the pipe/straight thread end.

Dimensions are reference only, subject to change without prior notice.
The E dimension is the minimum nominal opening. These fittings may have a larger opening at the pipe/straight thread end.

REDUCING UNION
BRANCH TEE
異径ユニオン ブランチティー

QL-RUBT



Connector Fractional Tube

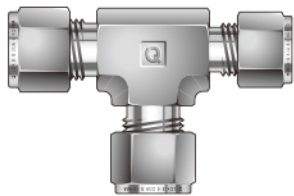
Part Number	Dimensions											
	D		D1		L	L1	h		A	A1	Min. E	Min. E1
	inch	mm	inch	mm	mm		inch	mm	mm			
QL-RUBT-4-2	1/4	6.35	1/8	3.17	27.16	24.61	1/2	12.7	15.59	13.04	4.83	2.28
QL-RUBT-6-2	3/8	9.52	1/8	3.17	30.86	26.77	5/8	15.88	17.26	13.04	7.11	2.28
QL-RUBT-6-4	3/8	9.52	1/4	6.35	30.86	29.32	5/8	15.88	17.26	15.59	7.11	4.83
QL-RUBT-6-8	3/8	9.52	1/2	12.7	33.71	36.42	13/16	20.64	17.26	23.32	7.11	10.41
QL-RUBT-8-4	1/2	12.7	1/4	6.35	36.42	32.55	13/16	20.64	23.32	15.59	10.41	4.83
QL-RUBT-8-6	1/2	12.7	3/8	9.52	36.42	33.71	13/16	20.64	23.32	17.26	10.41	7.11
QL-RUBT-10-4	5/8	15.87	1/4	6.35	38.32	34.3	15/16	23.81	24.7	15.59	12.7	4.83
QL-RUBT-10-6	5/8	15.87	3/8	9.52	38.32	35.96	15/16	23.81	24.7	17.26	12	7.11
QL-RUBT-12-4	3/4	19.05	1/4	6.35	39.9	36.04	1 1/16	26.98	24.53	15.59	15.75	4.83
QL-RUBT-12-6	3/4	19.05	3/8	9.52	39.9	37.71	1 1/16	26.98	24.53	17.26	15.75	7.11
QL-RUBT-12-8	3/4	19.05	1/2	12.7	39.9	40.28	1 1/16	26.98	24.53	23.32	15.75	10.41
QL-RUBT-16-4	1	25.4	1/4	6.35	49.21	42.21	1 3/8	34.92	31.55	15.59	22.35	4.83
QL-RUBT-16-6	1	25.4	3/8	9.52	49.21	42.35	1 3/8	34.92	31.55	17.26	22.35	7.11
QL-RUBT-16-8	1	25.4	1/2	12.7	49.21	45.11	1 3/8	34.92	31.55	23.32	22.35	10.41
QL-RUBT-16-12	1	25.4	3/4	19.05	49.21	44.8	1 3/8	34.92	31.55	24.53	22.35	15.75

Connector Metric Tube

Part Number	Dimensions								
	D	D1	L	L1	h	A	A1	Min. E	Min. E1
	mm								
QL-RUBT-6M-12M	6	12	32.07	35.95	20.6	15.73	22.92	4.8	9.5
QL-RUBT-10M-6M	10	6	35.95	32.07	17.5	17.5	15.73	7.9	4.8
QL-RUBT-12M-6M	12	8	27.18	32.07	20.6	20.6	15.73	9.5	4.8

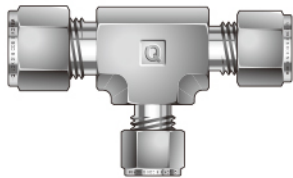
REDUCING UNION RUN TEE
異径ユニオン ランティー

QL-RURT



REDUCING UNION SPECIAL TEE
異径ユニオン スペシャルティー

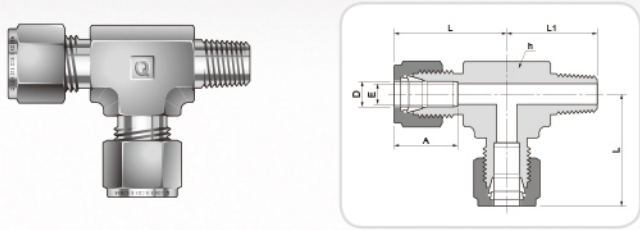
QL-RUST



Dimensions are reference only, subject to change without prior notice.
The E dimension is the minimum nominal opening. These fittings may have a larger opening at the pipe/straight thread end.

MALE RUN TEE
オスランティー

QL-MRT



Connector Fractional Tube to Female NPT/PT Thread

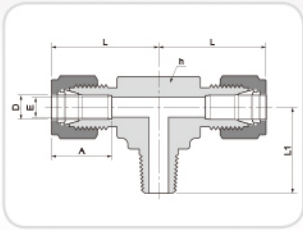
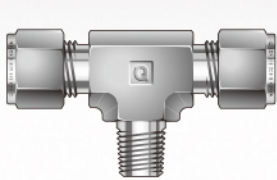
Part Number	Dimensions								
	D		NPT Thread	L	L1	h		A	Min. E
	inch	mm	inch	mm		inch	mm	mm	
QL-MRT-2-2	1/8	3.17	1/8	25.94	19.05	1/2	12.7	13.04	2.28
QL-MRT-2-4	1/8	3.17	1/4	25.94	23.25	1/2	12.7	13.04	2.28
QL-MRT-3-2	3/16	4.76	1/8	25.94	19.05	1/2	12.7	14.05	3.05
QL-MRT-4-2	1/4	6.35	1/8	27.16	19.05	1/2	12.7	15.59	4.83
QL-MRT-4-4	1/4	6.35	1/4	27.16	23.25	1/2	12.7	15.59	4.83
QL-MRT-5-2	5/16	7.93	1/8	29.71	20.82	9/16	14.28	16.42	4.83
QL-MRT-6-4	3/8	9.52	1/4	30.86	25.28	5/8	15.88	17.26	7.11
QL-MRT-6-6	3/8	9.52	3/8	33.71	28.08	11/16	17.46	17.26	7.11
QL-MRT-8-4	1/2	12.7	1/4	36.47	28.13	13/16	20.64	23.32	7.11
QL-MRT-8-6	1/2	12.7	3/8	36.47	28.13	13/16	20.64	23.32	10.41
QL-MRT-8-8	1/2	12.7	1/2	36.47	32.96	13/16	20.64	23.32	10.41
QL-MRT-10-8	5/8	15.87	1/2	38.32	36.01	15/16	23.81	24.7	11.93
QL-MRT-12-12	3/4	19.05	3/4	39.9	36.83	1 1/16	26.98	24.53	15.75

Connector Metric Tube to Female NPT/PT Thread

Part Number	Dimensions						
	D	PT Thread (R)	L	L1	h	A	Min. E
	mm	inch	mm	mm	mm	mm	mm
QL-MRT-3M-2	3	1/8	25.96	19.05	12.7	12.9	2.4
QL-MRT-3M-4	3	1/4	25.96	23.25	12.7	12.9	2.4
QL-MRT-4M-2	4	1/8	25.4	19.05	12.7	14.07	2.4
QL-MRT-6M-2	6	1/8	27.26	19.05	12.7	15.73	4.8
QL-MRT-6M-4	6	1/4	27.26	23.28	12.7	15.73	4.8
QL-MRT-8M-2	8	1/8	28.7	19.8	14.3	16.22	4.8
QL-MRT-8M-4	8	1/4	28.7	24.28	14.3	16.22	6.4
QL-MRT-10M-4	10	1/4	31.28	28.08	17.5	17.28	7.9
QL-MRT-10M-6	10	3/8	31.28	28.08	17.5	17.28	7.9
QL-MRT-12M-4	12	1/4	35.95	28.08	20.6	22.92	7.1
QL-MRT-12M-6	12	3/8	35.95	28.08	20.6	22.92	9.5
QL-MRT-12M-8	12	1/2	35.95	33	20.6	22.92	9.5
QL-MRT-16M-6	16	3/8	38.77	30.4	23.8	24.39	9.5
QL-MRT-16M-8	16	1/2	38.77	35.23	23.8	24.39	11.9
QL-MRT-20M-12	20	3/4	44.82	41.15	34.9	26.22	15.9

Dimensions are reference only, subject to change without prior notice.
The E dimension is the minimum nominal opening. These fittings may have a larger opening at the pipe/straight thread end.

MALE BRANCH TEE
オスブランチティー
QL-MBT



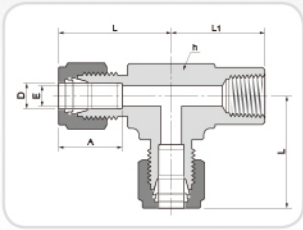
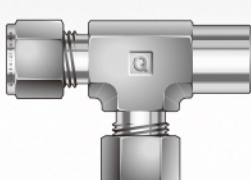
Connector Fractional Tube to Female NPT/PT Thread

Part Number	Dimensions								
	D		NPT Thread	L	L1	h		A	Min. E
	inch	mm	inch	mm		inch	mm	mm	
QL-MBT-2-2	1/8	3.17	1/8	25.94	19.05	1/2	12.7	13.04	2.28
QL-MBT-2-4	1/8	3.17	1/4	25.94	23.25	1/2	12.7	13.04	2.28
QL-MBT-3-2	3/16	4.76	1/8	25.94	19.05	1/2	12.7	14.05	3.05
QL-MBT-4-2	1/4	6.35	1/8	27.22	19.05	1/2	12.7	15.59	4.83
QL-MBT-4-4	1/4	6.35	1/4	27.22	23.25	1/2	12.7	15.59	4.83
QL-MBT-5-2	5/16	7.93	1/8	29.71	20.82	9/16	14.28	16.42	4.83
QL-MBT-6-4	3/8	9.52	1/4	31.26	25	5/8	15.88	17.26	7.11
QL-MBT-6-6	3/8	9.52	3/8	33.71	28.08	11/16	17.46	17.26	7.11
QL-MBT-8-6	1/2	12.7	3/8	36.47	28.13	13/16	20.64	23.32	10.41
QL-MBT-8-8	1/2	12.7	1/2	36.47	32.95	13/16	20.64	23.32	10.41
QL-MBT-10-8	5/8	15.87	1/2	39.14	35.71	15/16	23.81	24.7	11.93
QL-MBT-12-12	3/4	19.05	3/4	39.93	36.83	1 1/16	26.98	24.53	15.75

Connector Metric Tube to Female NPT/PT Thread

Part Number	Dimensions						
	D	PT Thread (R)	L	L1	h	A	Min. E
	mm	inch			mm		
QL-MBT-3M-2	3	1/8	25.96	19.05	12.7	12.9	2.4
QL-MBT-3M-4	3	1/4	25.96	23.25	12.7	12.9	2.4
QL-MBT-4M-2	4	1/8	25.96	19.05	12.7	14.07	2.4
QL-MBT-6M-2	6	1/8	27.26	19.05	12.7	15.73	2.4
QL-MBT-6M-4	6	1/4	27.26	23.25	12.7	15.73	4.8
QL-MBT-8M-2	8	1/8	28.7	19.8	14.3	16.22	4.8
QL-MBT-8M-4	8	1/4	28.7	24.28	15.9	16.22	6.4
QL-MBT-10M-4	10	1/4	31.28	25.42	17.5	17.28	7.9
QL-MBT-10M-6	10	3/8	31.28	25.42	17.5	17.28	7.9
QL-MBT-12M-4	12	1/4	35.95	28.08	20.6	22.92	7.1
QL-MBT-12M-6	12	3/8	35.95	28.08	20.6	22.92	9.5
QL-MBT-12M-8	12	1/2	35.95	33	20.6	22.92	9.5
QL-MBT-16M-6	16	3/8	38.77	30.4	23.8	24.39	9.5
QL-MBT-16M-8	16	1/2	38.77	35.23	23.8	24.39	11.9
QL-MBT-20M-12	20	3/4	44.82	41.15	34.9	26.22	15.9

FEMALE RUN TEE
メスランティー
QL-FRT



Connector Fractional Tube to Male NPT/PT Thread

Part Number	Dimensions								
	D		NPT Thread	L	L1	h		A	Min. E
	inch	mm	inch	mm		inch	mm	mm	
QL-FRT-2-2	1/8	3.17	1/8	25.94	19.05	1/2	12.7	13.04	2.28
QL-FRT-4-2	1/4	6.35	1/8	27.27	19.05	1/2	12.7	15.59	4.83
QL-FRT-4-4	1/4	6.35	1/4	32.71	22.35	11/16	17.46	15.59	4.83
QL-FRT-6-2	3/8	9.52	1/8	30.86	22.35	5/8	15.88	17.26	7.11
QL-FRT-6-4	3/8	9.52	1/4	33.71	22.35	11/16	17.46	17.26	7.11
QL-FRT-6-6	3/8	9.52	3/8	33.76	22.35	13/16	20.64	17.26	7.11
QL-FRT-8-4	1/2	12.7	1/4	36.52	22.35	13/16	20.64	23.32	10.41
QL-FRT-8-6	1/2	12.7	3/8	36.52	22.35	13/16	20.64	23.32	10.41
QL-FRT-8-8	1/2	12.7	1/2	39.87	28.44	1	25.4	23.32	10.41
QL-FRT-12-12	3/4	19.05	3/4	44.7	31.75	1 3/8	34.92	15.43	15.75
QL-FRT-16-12	1	25.4	3/4	49.27	31.75	1 3/8	34.92	31.55	22.35
QL-FRT-16-16	1	25.4	1	53.59	38.1	1 11/16	42.88	31.55	22.35

Connector Metric Tube to Male NPT/PT Thread

Part Number	Dimensions						
	D	NPT Thread	L	L1	h	A	Min. E
	mm	inch			mm		
QL-FRT-6M-2	6	1/8	27	19.05	12.7	15.73	4.8
QL-FRT-6M-4	6	1/4	29.8	22.4	17.5	15.73	4.8
QL-FRT-6M-8	6	1/2	34.5	28.44	25.4	15.73	4.8
QL-FRT-8M-2	8	1/8	29.9	19.05	15.9	16.22	6.4
QL-FRT-8M-4	8	1/4	30.62	22.35	17.5	16.22	6.4
QL-FRT-8M-6	8	3/8	32.4	22.35	20.6	16.22	6.4
QL-FRT-8M-8	8	1/2	35.2	28.44	25.4	16.22	6.4
QL-FRT-10M-4	10	1/4	33.5	22.35	20.6	17.28	7.9
QL-FRT-12M-4	12	1/4	36	22.35	20.6	22.92	9.5
QL-FRT-12M-6	12	3/8	36	22.35	20.6	22.92	9.5
QL-FRT-12M-8	12	1/2	38.8	28.44	25.4	22.92	9.5
QL-FRT-16M-8	16	1/2	39.5	28.7	25.4	24.39	12.7

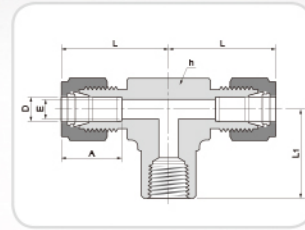
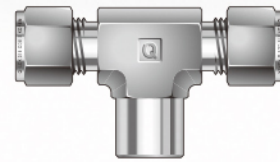
Dimensions are reference only, subject to change without prior notice.
The E dimension is the minimum nominal opening. These fittings may have a larger opening at the pipe/straight thread end.

Dimensions are reference only, subject to change without prior notice.
The E dimension is the minimum nominal opening. These fittings may have a larger opening at the pipe/straight thread end.

FEMALE BRANCH TEE

メスブランチティー

QL-FBT



Connector Fractional Tube to Male NPT/PT Thread

Part Number	Dimensions								
	D		NPT Thread	L	L1	h		A	Min. E
	inch	mm	inch	mm		inch	mm	mm	
QL-FBT-2-2	1/8	3.17	1/8	25.94	19.05	1/2	12.7	13.04	2.28
QL-FBT-4-2	1/4	6.35	1/8	27.27	19.0	1/2	12.7	15.59	4.83
QL-FBT-4-4	1/4	6.35	1/4	32.71	22.35	11/16	17.46	15.59	4.83
QL-FBT-6-2	3/8	9.52	1/8	30.86	19.5	11/16	15.88	17.26	7.11
QL-FBT-6-4	3/8	9.52	1/4	33.71	22.35	11/16	17.46	17.26	7.11
QL-FBT-6-6	3/8	9.52	3/8	33.76	22.35	13/16	20.64	17.26	7.11
QL-FBT-8-4	1/2	12.7	1/4	36.42	22.35	13/16	20.64	23.32	10.41
QL-FBT-8-6	1/2	12.7	3/8	36.42	22.35	13/16	20.64	23.32	10.41
QL-FBT-8-8	1/2	12.7	1/2	39.87	28.44	1	25.4	23.32	10.41
QL-FBT-10-8	5/8	15.87	1/2	40.21	28.44	1	25.4	24.7	12.7
QL-FBT-12-12	3/4	19.05	3/4	44.7	31.75	1 3/8	34.92	24.53	15.75
QL-FBT-16-12	1	25.4	3/4	49.21	31.75	1 3/8	34.92	31.55	22.35
QL-FBT-16-16	1	25.4	1	53.59	38.1	1 11/16	42.68	31.55	22.35

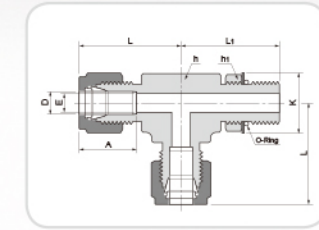
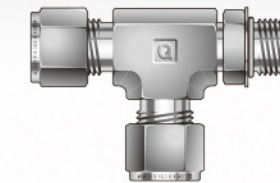
Connector Metric Tube to Male NPT/PT Thread

Part Number	Dimensions						
	D	PT Thread (R)	L	L1	h	A	Min. E
	mm	inch	mm	mm	mm	mm	
QL-FBT-6M-2	6	1/8	27	19.05	12.7	15.73	4.8
QL-FBT-6M-4	6	1/4	30.18	22.4	17.5	15.73	4.8
QL-FBT-6M-6	6	3/8	31.7	22.4	20.6	15.73	4.8
QL-FBT-6M-8	6	1/2	34.5	28.44	25.4	15.73	4.8
QL-FBT-8M-2	8	1/8	29.9	19.05	15.9	16.22	6.4
QL-FBT-8M-4	8	1/4	30.62	22.35	17.5	16.22	6.4
QL-FBT-8M-6	8	3/8	32.4	22.35	20.6	16.22	6.4
QL-FBT-8M-8	8	1/2	35.2	28.44	25.4	16.22	6.4
QL-FBT-10M-4	10	1/4	33.5	22.35	20.6	17.28	7.9
QL-FBT-12M-4	12	1/4	36	22.35	20.6	22.92	9.5
QL-FBT-12M-6	12	3/8	36	22.35	20.6	22.92	9.5
QL-FBT-12M-8	12	1/2	38.8	28.44	25.4	22.92	9.5
QL-FBT-16M-8	16	1/2	39.5	28.7	25.4	24.39	12.7

SAE/MS MALE RUN TEE FOR POSITIONABLE

オスランティー SAE/MS 平行ねじ
For Positionable

QL-MRTO



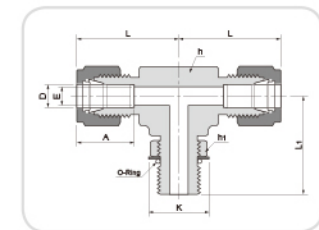
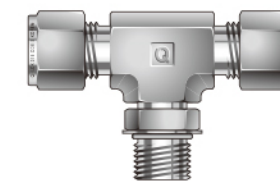
Connector Fractional Tube to SAE / MS Straight Thread

Part Number	Dimensions											
	D		Straight Thread (U)	L	L1	h		h1		A	K	Min. L
	inch	mm	inch	mm		inch	mm	inch	mm	mm		
QL-MRTO-4-4U	1/4	6.35	7/16-20	28.8	28.44	1/2	12.7	9/16	14.28	15.59	16.51	4.83
QL-MRTO-6-6U	3/8	9.52	9/16-18	32.49	32.25	5/8	15.88	11/16	17.46	17.26	20.06	7.11
QL-MRTO-8-8U	1/2	12.7	3/4-16	38.05	37.84	13/16	20.64	7/8	22.22	23.32	25.65	10.41
QL-MRTO-12-12U	3/4	19.05	1 1/16-12	41.54	48.76	1 1/16	26.98	1 1/4	28.57	24.33	36.57	15.75
QL-MRTO-16-16U	1	25.4	1 5/16-12	50.85	50.54	1 3/8	34.92	1 1/2	38.1	31.55	43.94	22.35
QL-MRTO-20-20U	1 1/4	31.75	1 5/8-12	67.76	58.16	1 11/16	42.86	1 7/8	47.62	41.14	54.86	27.68
QL-MRTO-24-24U	1 1/2	38.1	1 7/8-12	77.97	60.45	2	50.8	2 1/8	53.97	50.03	62.23	34.03
QL-MRTO-32-32U	2	50.8	2 1/2-12	107.23	71.62	2 3/4	69.85	2 3/4	69.85	67.56	80.26	45.97

SAE/MS O-SEAL MALE BRANCH TEE FOR POSITIONABLE

オスブランチティー SAE/MS 平行ねじ
For Positionable

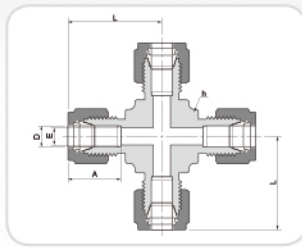
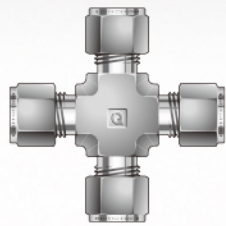
QL-MBTO



Connector Fractional Tube to SAE / MS Straight Thread

Part Number	Dimensions											
	D		Straight Thread (U)	L	L1	h		h1		A	K	Min. E
	inch	mm	inch	mm		inch	mm	inch	mm	mm		
QL-MBTO-4-4U	1/4	6.35	7/16-20	28.8	28.44	1/2	12.7	9/16	14.28	15.59	16.51	4.83
QL-MBTO-6-6U	3/8	9.52	9/16-18	32.49	32.25	5/8	15.88	11/16	17.46	17.26	20.06	7.11
QL-MBTO-8-8U	1/2	12.7	3/4-16	38.05	37.84	13/16	20.63	7/8	22.22	23.32	25.65	10.41
QL-MBTO-12-12U	3/4	19.05	1 1/16-12	41.54	48.6	1 1/16	26.98	1 1/4	28.57	24.33	36.57	15.75
QL-MBTO-16-16U	1	25.4	1 5/16-12	50.85	50.54	1 3/8	34.92	1 1/2	38.1	31.55	43.94	22.35
QL-MBTO-20-20U	1 1/4	31.75	1 5/8-12	67.76	58.16	1 11/16	42.86	1 7/8	47.62	41.14	54.86	27.68
QL-MBTO-24-24U	1 1/2	38.1	1 7/8-12	77.97	60.45	2	50.8	2 1/8	53.97	50.03	62.23	34.03
QL-MBTO-32-32U	2	50.8	2 1/2-12	107.23	71.62	2 3/4	69.85	2 3/4	69.85	67.56	80.26	45.97

UNION CROSS
ユニオン クロス
QL-UC



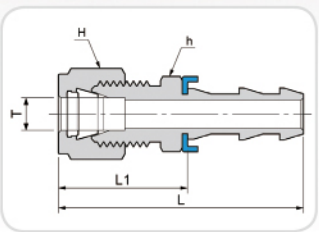
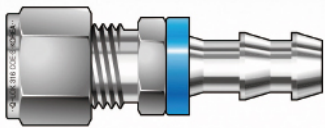
Connector Fractional Tube

Part Number	Dimensions						
	D		L	h		A	Min. E
	inch	mm	mm	inch	mm	mm	
QL-UC-1	1/16	1.58	17.88	5/16	9.52	8.63	1.27
QL-UC-2	1/8	3.17	22.63	7/16	11.11	13.04	2.28
QL-UC-3	3/16	4.76	25.94	7/16	12.7	14.05	3.05
QL-UC-4	1/4	6.35	27.22	1/2	12.7	15.59	4.83
QL-UC-5	5/16	7.93	28.75	9/16	14.28	16.42	6.35
QL-UC-6	3/8	9.52	30.86	5/8	15.88	17.26	7.11
QL-UC-8	1/2	12.7	36.42	13/16	20.64	23.32	10.41
QL-UC-10	5/8	15.87	38.32	15/16	23.81	24.7	12.7
QL-UC-12	3/4	19.05	39.9	1 1/16	26.98	24.53	15.75
QL-UC-14	7/8	22.22	44.7	1 3/16	34.92	25.9	18.28
QL-UC-16	1	25.4	49.21	1 3/8	34.92	31.55	22.35

Connector Metric Tube

Part Number	Dimensions				
	D	L	h	A	Min. E
	mm				
QL-UC-3M	3	22.3	9.5	12.9	2.4
QL-UC-6M	6	27.26	12.7	15.73	4.8
QL-UC-8M	8	28.7	15.9	16.22	6.4
QL-UC-10M	10	31.28	20.6	17.28	7.9
QL-UC-12M	12	35.95	20.6	22.92	9.5
QL-UC-16M	16	38.77	23.8	24.39	12.7
QL-UC-18M	18	39.99	27	24.61	15.1
QL-UC-20M	20	44.82	34.9	26.22	15.9
QL-UC-25M	25	48.84	34.9	31.04	21.8

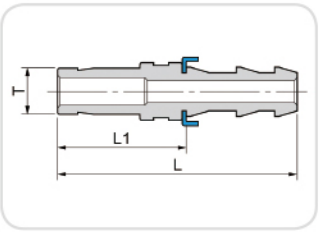
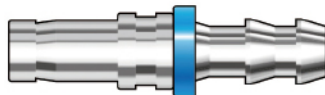
HOSE LOK CONNECTOR
ホース ロックコネクタ
QL-HLC



Connector Fractional Tube to Fractional Hose

Part Number	Dimensions						
	Hose Size	T	L	L1	h		H
	inch		mm		inch	mm	inch
QL-HLC-4-4	1/4	1/4	44.43	24.73	9/16	14.28	9/16
QL-HLC-6-6	3/8	3/8	49.53	27.44	11/16	17.46	11/16
QL-HLC-8-8	1/2	1/2	57.92	32.21	7/8	22.22	7/8
QL-HLC-12-12	3/4	3/4	75.75	33.58	1 1/6	29.98	1 1/8
QL-HLC-16-16	1	1	82.9	40.15	1 3/8	34.92	1 1/2

HOSE TUBE ADAPTER
ホース チューブアダプター
QL-HTA



Connector Fractional Q-Lok Port to Fractional Hose

Part Number	Dimensions			
	Hose Size	T	L	L1
	inch		mm	
QL-HTA-4-4	1/4	1/4	49	29.3
QL-HTA-4-6	1/4	3/8	49.19	29.49
QL-HTA-6-4	3/8	1/4	49.85	27.76
QL-HTA-6-6	3/8	3/8	51.6	29.51
QL-HTA-6-8	3/8	1/2	57.3	35.21
QL-HTA-8-8	1/2	1/2	62.7	35.99
QL-HTA-12-12	3/4	3/4	79.8	37.63
QL-HTA-12-16	3/4	1	89.07	46.9
QL-HTA-16-16	1	1	89.45	46.7

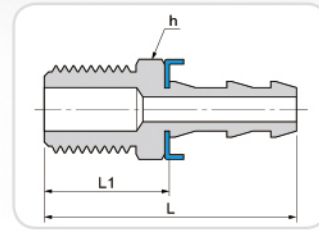
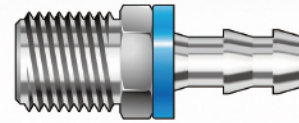
Dimensions are reference only, subject to change without prior notice.
The E dimension is the minimum nominal opening. These fittings may have a larger opening at the pipe/straight thread end.

Dimensions are reference only, subject to change without prior notice.
The E dimension is the minimum nominal opening. These fittings may have a larger opening at the pipe/straight thread end.

HOSE MALE CONNECTOR

ホース オスコネクタ

QL-HMC



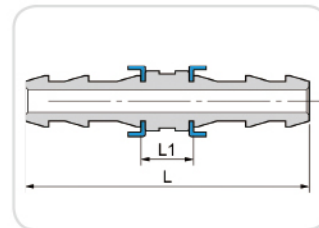
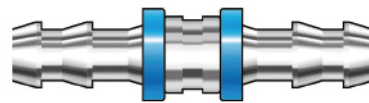
Connector Female NPT/PT Thread to Fractional Hose

Part Number	Dimensions				
	Hose Size	NPT Thread	L	L1	h
	inch		mm		
QL-HMC-4-4	1/4	1/4	41.03	22.97	14.28
QL-HMC-6-4	3/8	1/4	43.95	21.35	14.28
QL-HMC-6-6	3/8	3/8	43.95	23.61	17.46
QL-HMC-8-8	1/2	1/2	55.6	28.89	22.22
QL-HMC-12-12	3/4	3/4	72.66	30.49	26.98
QL-HMC16-16	1	1	80.05	37.3	34.92

HOSE UNION

ホース ユニオン

QL-HU



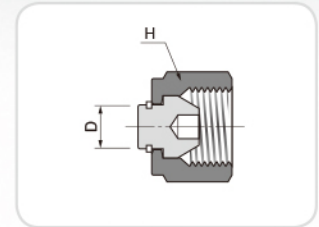
Connector Fractional Hose to Fractional Hose

Part Number	Dimensions		
	Hose Size	L	L1
	inch	mm	
QL-HU-4	1/4	54.33	14.93
QL-HU-6	3/8	57.59	13.41
QL-HU-8	1/2	67.61	14.19
QL-HU-12	3/4	99.07	14.73
QL-HU-16	1	102.1	16.6

PLUG

プラグ

QL-P



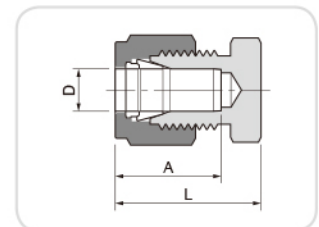
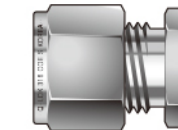
Part Number	Dimensions			
	D		H	
	inch	mm	inch	mm
QL-P-2	1/8	3.17	7/16	11.11
QL-P-3	3/16	4.76	1/2	12.7
QL-P-4	1/4	6.35	9/16	14.28
QL-P-5	5/16	7.93	5/8	15.88
QL-P-6	3/8	9.52	11/16	17.46
QL-P-8	1/2	12.7	7/8	22.22
QL-P-10	5/8	15.87	1	25.4
QL-P-12	3/4	19.05	1 1/8	28.57
QL-P-14	7/8	22.22	1 1/4	31.75
QL-P-16	1	25.4	1 1/2	38.1
QL-P-20	1 1/4	31.75	1 7/8	47.62
QL-P-24	1 1/2	38.1	2 1/4	57.15
QL-P-32	2	50.8	3	76.2

Part Number	Dimensions	
	D	H
	mm	
QL-P-2M	2	12
QL-P-3M	3	12
QL-P-4M	4	12
QL-P-6M	6	14
QL-P-8M	8	16
QL-P-10M	10	19
QL-P-12M	12	22
QL-P-15M	15	25
QL-P-16M	16	25
QL-P-18M	18	25
QL-P-20M	20	30
QL-P-22M	22	32
QL-P-25M	25	38
QL-P-28M	28	46
QL-P-32M	32	50

CAP

キャップ

QL-C



Part Number	Dimensions			
	D		L	A
	inch	mm	mm	
QL-C-1	1/16	1.58	14.18	8.63
QL-C-2	1/8	3.17	20.37	13.04
QL-C-3	3/16	4.76	21.56	14.05
QL-C-4	1/4	6.35	23.61	15.59
QL-C-5	5/16	7.93	24.43	16.42
QL-C-6	3/8	9.52	26.03	17.26
QL-C-8	1/2	12.7	29.56	23.32
QL-C-10	5/8	15.87	30.14	24.7
QL-C-12	3/4	19.05	31.52	24.53
QL-C-14	7/8	22.22	34.03	25.9
QL-C-16	1	25.4	38.66	31.55
QL-C-20	1 1/4	31.75	53.34	41.14
QL-C-24	1 1/2	38.1	64.51	50.03
QL-C-32	2	50.8	86.61	86.61

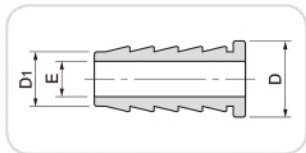
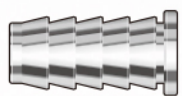
Part Number	Dimensions		
	D	L	A
	mm		
QL-C-2M	2	20.1	12.9
QL-C-3M	3	20.1	12.9
QL-C-4M	4	21.56	14.07
QL-C-6M	6	23.36	15.73
QL-C-8M	8	24.4	16.22
QL-C-10M	10	26.56	17.28
QL-C-12M	12	29.05	22.92
QL-C-15M	15	29.89	24.41
QL-C-16M	16	29.99	24.39
QL-C-18M	18	31.59	24.61
QL-C-20M	20	33.88	26.22
QL-C-22M	22	34.32	26.59
QL-C-25M	25	38.24	31.04
QL-C-28M	28	48.5	36.6
QL-C-32M	32	55.8	42
QL-C-38M	38	65.4	49.4

Dimensions are reference only, subject to change without prior notice.
The E dimension is the minimum nominal opening. These fittings may have a larger opening at the pipe/straight thread end.

Dimensions are reference only, subject to change without prior notice.
The E dimension is the minimum nominal opening. These fittings may have a larger opening at the pipe/straight thread end.

TUBE INSERT
チューブインサート

QL-IS

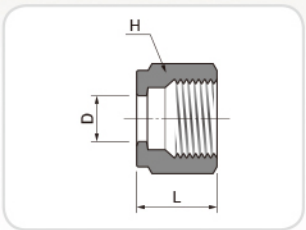


Part Number	Dimensions				
	D		D1		E
	inch	mm	inch	mm	
QL-IS-3-2	3/16	4.76	1/8	3.17	2.28
QL-IS-4-2	1/4	6.35	1/8	3.17	2.28
QL-IS-4-3	1/4	6.35	3/16	4.76	3.55
QL-IS-5-2	5/16	7.93	1/8	3.17	2.28
QL-IS-5-3	5/16	7.93	3/16	4.76	3.04
QL-IS-5-4	5/16	7.93	1/4	6.35	4.82
QL-IS-6-3	3/8	9.52	3/16	4.76	3.04
QL-IS-6-4	3/8	9.52	1/4	6.35	4.83
QL-IS-8-4	1/2	12.7	1/4	6.35	4.83
QL-IS-8-6	1/2	12.7	3/8	9.52	7.87
QL-IS-10-6	5/8	15.87	3/8	9.52	7.87
QL-IS-10-8	5/8	15.87	1/2	12.7	11.17
QL-IS-12-8	3/4	19.05	1/2	12.7	11.17
QL-IS-12-10	3/4	19.05	5/8	15.87	14.22
QL-IS-16-12	1	25.4	3/4	19.05	17.52

Part Number	Dimensions	
	D	D1
	mm	
QL-IS-6M-4M	6	4
QL-IS-8M-6M	8	6
QL-IS-10M-8M	10	8
QL-IS-12M-8M	12	8
QL-IS-12M-10M	12	10

NUT
ナット

QL-N



Part Number	Dimensions				
	D		L	H	
	inch	mm		inch	mm
QL-N-1	1/16	1.58	7.87	5/16	7.94
QL-N-2	1/8	3.17	11.92	7/16	11.11
QL-N-3	3/16	4.76	11.92	1/2	12.7
QL-N-4	1/4	6.35	12.7	9/16	14.28
QL-N-5	5/16	7.93	13.41	5/8	15.88
QL-N-6	3/8	9.52	14.22	11/16	17.46
QL-N-8	1/2	12.7	17.4	7/8	22.22
QL-N-10	5/8	15.87	17.4	1	25.4
QL-N-12	3/4	19.05	17.4	1 1/8	28.58
QL-N-14	7/8	22.22	17.52	1 1/4	31.75
QL-N-16	1	25.4	20.6	1 1/2	38.1
QL-N-20	1 1/4	31.78	31.75	1 7/8	47.62
QL-N-24	1 1/2	38.48	38	2 1/4	57.15
QL-N-32	2	50.8	52	3	76.2

Part Number	Dimensions		
	D	L	H
	mm		
QL-N-2M	2	11.94	12
QL-N-3M	3	11.94	12
QL-N-4M	4	11.94	12
QL-N-6M	6	12.7	14
QL-N-8M	8	13.41	16
QL-N-10M	10	15.1	19
QL-N-12M	12	17.4	22
QL-N-14M	14	17.4	25
QL-N-15M	15	17.4	25
QL-N-16M	16	17.4	25
QL-N-18M	18	17.4	30
QL-N-20M	20	17.4	32
QL-N-22M	22	17.44	32
QL-N-25M	25	20.6	38
QL-N-28M	28	30.6	46
QL-N-32M	32	34.4	50
QL-N-38M	38	40.6	60

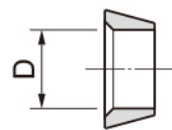
Dimensions are reference only, subject to change without prior notice.
The E dimension is the minimum nominal opening. These fittings may have a larger opening at the pipe/straight thread end.

Dimensions are reference only, subject to change without prior notice.
The E dimension is the minimum nominal opening. These fittings may have a larger opening at the pipe/straight thread end.

FRONT FERRULE

フロント フェルール

QL-FF



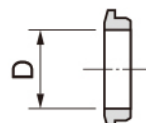
Part Number	Dimensions	
	D	
	inch	mm
QL-FF-1	1/16	1.58
QL-FF-2	1/8	3.17
QL-FF-3	3/16	4.76
QL-FF-4	1/4	6.35
QL-FF-5	5/16	7.93
QL-FF-6	3/8	9.52
QL-FF-8	1/2	12.7
QL-FF-10	5/8	15.87
QL-FF-12	3/4	19.05
QL-FF-14	7/8	22.22
QL-FF-16	1	25.4
QL-FF-20	1 1/4	31.75
QL-FF-24	1 1/2	38.1
QL-FF-32	2	50.8

Part Number	Dimensions	
	D	
	mm	
QL-FF-2M	2	
QL-FF-3M	3	
QL-FF-4M	4	
QL-FF-6M	6	
QL-FF-8M	8	
QL-FF-10M	10	
QL-FF-12M	12	
QL-FF-15M	15	
QL-FF-16M	16	
QL-FF-18M	18	
QL-FF-20M	20	
QL-FF-22M	22	
QL-FF-25M	25	
QL-FF-28M	28	
QL-FF-32M	32	
QL-FF-38M	38	

BACK FERRULE

バック フェルール

QL-BF



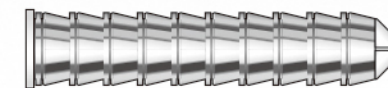
Part Number	Dimensions	
	D	
	inch	mm
QL-BF-1	1/16	1.58
QL-BF-2	1/8	3.17
QL-BF-3	3/16	4.76
QL-BF-4	1/4	6.35
QL-BF-5	5/16	7.93
QL-BF-6	3/8	9.52
QL-BF-8	1/2	12.7
QL-BF-10	5/8	15.87
QL-BF-12	3/4	19.05
QL-BF-14	7/8	22.22
QL-BF-16	1	25.4
QL-BF-20	1 1/4	31.75
QL-BF-24	1 1/2	38.1
QL-BF-32	2	50.8

Part Number	Dimensions	
	D	
	mm	
QL-BF-2M	2	
QL-BF-3M	3	
QL-BF-4M	4	
QL-BF-6M	6	
QL-BF-8M	8	
QL-BF-10M	10	
QL-BF-12M	12	
QL-BF-15M	15	
QL-BF-16M	16	
QL-BF-18M	18	
QL-BF-20M	20	
QL-BF-22M	22	
QL-BF-25M	25	
QL-BF-28M	28	
QL-BF-32M	32	
QL-BF-38M	38	

FERRULE SET

フェルール セット

QL-FS



Part Number	Dimensions	
	D	
	inch	mm
QL-FS-1	1/16	1.58
QL-FS-2	1/8	3.17
QL-FS-3	3/16	4.76
QL-FS-4	1/4	6.35
QL-FS-5	5/16	7.93
QL-FS-6	3/8	9.52
QL-FS-8	1/2	12.7
QL-FS-10	5/8	15.87
QL-FS-12	3/4	19.05
QL-FS-14	7/8	22.22
QL-FS-16	1	25.4

Part Number	Dimensions	
	D	
	mm	
QL-FS-2M	2	
QL-FS-3M	3	
QL-FS-4M	4	
QL-FS-6M	6	
QL-FS-8M	8	
QL-FS-10M	10	
QL-FS-12M	12	
QL-FS-15M	15	
QL-FS-16M	16	
QL-FS-18M	18	
QL-FS-20M	20	
QL-FS-22M	22	
QL-FS-25M	25	

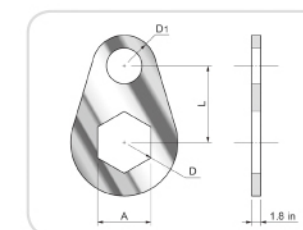
※ 1Set = Front Ferrule 1EA + Back Ferrule 1EA

※ 1Bar = Front Ferrule 10EA + Back Ferrule 10EA

BULKHEAD RETAINER

バルクヘッド リテーナー

QL-BHR



Part Number	Dimensions				
	Fitting Size	D	D1	L	A
	inch				
QL-BHR-2	1/8	13/32	7/32	1/2	1/2
QL-BHR-4	1/4	1/2	9/32	5/8	5/8
QL-BHR-6	3/8	5/8	11/32	3/4	3/4
QL-BHR-8	1/2	3/4	13/32	15/16	15/16
QL-BHR-12	3/4	29/32	15/32	1 1/16	1 3/16
QL-BHR-16	1	1 5/32	9/16	19/32	1 5/8

Dimensions are reference only, subject to change without prior notice.

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

Dimensions are reference only, subject to change without prior notice.

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