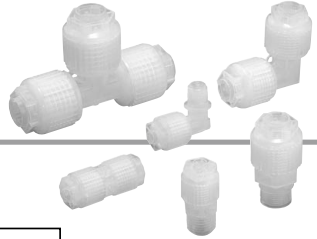


Fluoropolymer Fittings Hyper Fittings

RoHS

LQ1 Series



How to Order

Threaded connection

LQ1 H 11 [] - M [] - []

Fitting type

Symbol	Type
H	Connector
L	Elbow
R	Run tee
B	Branch tee

Thread type

Symbol	Type
Nil	R, Rc
N	NPT

Piping type

Symbol	Type
M	Male
F	Female

Packaging

Symbol	Packaging
Nil	Clean packaging equivalent to ISO Class 5
1	Standard packaging equivalent to ISO Class 7

Size combination

Symbol Class	No.	Applicable tubing size (mm)	Port size
1	1	4 x 3	1/8"
1	2	3 x 2	
2	1	6 x 4	
2	2	4 x 3	1/8"
2	C	3 x 2	
2	3	6 x 4	
2	4	4 x 3	1/4"
2	F	3 x 2	
3	1	10 x 8	
3	2	8 x 6	1/4"
3	3	6 x 4	
3	4	10 x 8	
3	5	8 x 6	3/8"
3	6	6 x 4	
3	7	4 x 3	
3	E	3 x 2	1/8"
3	9	10 x 8	
3	10	8 x 6	
4	1	12 x 10	3/8"
4	2	10 x 8	
4	3	12 x 10	
4	4	10 x 8	1/2"
4	5	8 x 6	
4	6	6 x 4	
4	F	3 x 2	1/4"
4	9	12 x 10	
5	1	19 x 16	
5	2	12 x 10	
5	3	19 x 16	
5	4	12 x 10	3/4"
5	5	10 x 8	
5	7	6 x 4	
5	8	19 x 16	1/4"
5	9	19 x 16	
5	1	25 x 22	
6	2	19 x 16	
6	3	25 x 22	
6	4	19 x 16	1"
6	5	12 x 10	
6	6	25 x 22	

Symbol Class	No.	Applicable tubing size (inch)	Port size
1	A	1/8" x 0.086"	1/8"
2	A	1/4" x 5/32"	
2	B	3/16" x 1/8"	1/8"
2	C	1/8" x 0.086"	
2	D	1/4" x 5/32"	1/4"
2	E	3/16" x 1/8"	
2	F	1/8" x 0.086"	
3	A	3/8" x 1/4"	1/4"
3	B	1/4" x 5/32"	
3	C	3/8" x 1/4"	3/8"
3	D	1/4" x 5/32"	
3	E	1/8" x 0.086"	
3	F	3/8" x 1/4"	1/8"
4	A	1/2" x 3/8"	
4	B	3/8" x 1/4"	
4	C	1/2" x 3/8"	1/2"
4	D	3/8" x 1/4"	
4	E	1/4" x 5/32"	
4	F	1/8" x 0.086"	1/4"
4	G	1/4" x 3/8"	
5	A	3/4" x 5/8"	1/2"
5	B	1/2" x 3/8"	
5	C	3/4" x 5/8"	3/4"
5	D	1/2" x 3/8"	
5	E	3/8" x 1/4"	
5	F	1/4" x 5/32"	1/4"
5	G	3/4" x 5/8"	
5	H	3/4" x 5/8"	3/8"
6	A	1" x 7/8"	
6	B	3/4" x 5/8"	
6	C	1" x 7/8"	1"
6	D	3/4" x 5/8"	
6	E	1/2" x 3/8"	
6	F	1" x 7/8"	1/2"

For different diameter (on B side)

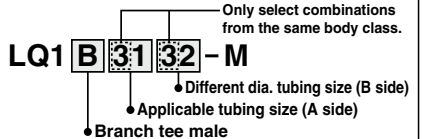
Symbol	Application
Nil	Same tubing size
Refer to the applicable tubing table.	Different diameter tubing can be selected within the same body class.

LQ1B		LQ1R	
Branch tee male	Branch tee female	Run tee male	Run tee female

The table of combination is the same as that for A side.
 Note 1) Only branch tees and run tees can take different diameters.
 Note 2) Use of different diameters is not available with size 1.

Different diameter tubing order example

Different diameter tubing (with plug-in reducer) can be selected within the same body class. (Example) Branch tee male
 Body class 3
 A side: $\phi 10 \times \phi 8$ B side: $\phi 8 \times \phi 6$
 Order as shown below.



Tubing in inches can be combined with that in mm in the same body size. Example) LQ1B313A-M

Branch tee male/Female (LQ1B) How to Order

As this product is bilaterally symmetric (A side and B side), depending on the combination, 2 identical part numbers may be listed in series. Be sure to list symbols in ascending alphabetical order.

LQ1B 31 32 - M

Listed in ascending numerical order

Example 1) Ascending numerical order Example 2) Ascending alphabetical order

Correct) LQ1B 31 32 -M Correct) LQ1B 37 3E -M

Incorrect) LQ1B 32 31 -M Incorrect) LQ1B 3E 37 -M

Note 1) Tubing of different sizes can only be used in combination if within the same body class. However, for class 1, tubing of different sizes cannot be used in combination.

Note 2) Combinations will differ depending on the type of each fitting. For the availability of combinations, refer to pages 877 to 884. These are produced upon receipt of order by part number.

Note 3) For details of the applicable tubing sizes, refer to page 945.

How to Order

Tubing connection

LQ1 E 11 [] - []

• Packaging

Symbol	Packaging
NII	Clean packaging equivalent to ISO Class 5
1	Standard packaging equivalent to ISO Class 7

Fitting type •

Symbol	Type
E	Union elbow
T	Union tee
P	Panel mount union
U	Union
F	Union flange

• Combination of different diameter (on B side)

Symbol Class	No.	Applicable tubing size (mm)
1	1	4 x 3
1	2	3 x 2
2	1	6 x 4
2	2	4 x 3
2	C	3 x 2
3	1	10 x 8
3	2	8 x 6
3	3	6 x 4
4	1	12 x 10
4	2	10 x 8
5	1	19 x 16
5	2	12 x 10
6	1	25 x 22
6	2	19 x 16





Symbol Class	No.	Applicable tubing size (inch)
1	A	1/8" x 0.086"
—	—	—
2	A	1/4" x 5/32"
2	B	3/16" x 1/8"
2	C	1/8" x 0.086"
3	A	3/8" x 1/4"
3	B	1/4" x 5/32"
4	A	1/2" x 3/8"
4	B	3/8" x 1/4"
5	A	3/4" x 5/8"
5	B	1/2" x 3/8"
6	A	1" x 7/8"
6	B	3/4" x 5/8"

Note 1) Tubing of different sizes can only be used in combination if within the same body class. However, use of different diameters is not available with size 1.

Note 2) For details of the applicable tubing sizes, refer to page 945.

Size combination •

Symbol Class	No.	Applicable tubing size (mm)	Symbol Class	No.	Applicable tubing size (inch)	Applicable flange
1	1	4 x 3	1	A	1/8" x 0.086"	—
1	2	3 x 2	—	—	—	—
2	1	6 x 4	2	A	1/4" x 5/32"	—
2	2	4 x 3	2	B	3/16" x 1/8"	—
2	C	3 x 2	2	C	1/8" x 0.086"	—
3	1	10 x 8	3	A	3/8" x 1/4"	—
3	2	8 x 6	3	B	1/4" x 5/32"	—
3	3	6 x 4	4	A	1/2" x 3/8"	15A
4	1	12 x 10	4	B	3/8" x 1/4"	15A
4	2	10 x 8	5	A	3/4" x 5/8"	20A
5	1	19 x 16	5	B	1/2" x 3/8"	20A
5	2	12 x 10	6	A	1" x 7/8"	25A
6	1	25 x 22	6	B	3/4" x 5/8"	25A
6	2	19 x 16	—	—	—	—

Symbol	Application
NII	Same tubing size
Refer to the applicable tubing table.	Different diameter tubing can be selected within the same body class.
Union elbow LQ1E 	Union tee LQ1T 
Panel mount union LQ1P 	Union LQ1U 

Note 1) Tubing of different sizes can only be used in combination if within the same body class. However, for class 1, tubing of different sizes cannot be used in combination.

Note 2) Sizes 1 to 3 are not available for the union flange.

Note 3) For Union flange, nut sizes 4 and 5 are as shown below.

LQ1F4□: LQ-4N□□

LQ1F5□: LQ-5N□□

Note 4) Combinations will differ depending on the type of each fitting. For the availability of combinations, refer to pages 885 to 888.

Note 5) For details of the applicable tubing sizes, refer to page 945.

Different diameter tubing order example

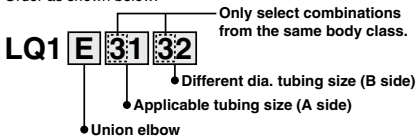
Different diameter tubing (with plug-in reducer) can be selected within the same body class.

(Example) Union elbow

Body class 3

A side: ø10 x ø8 B side: ø8 x ø6

Order as shown below.



Tubing in inches can be combined with that in mm in the same body size. Example) LQ1E313A

Union elbow (LQ1E)/Union (LQ1U) How to Order

As this product is bilaterally symmetric (A side and B side), depending on the combination, 2 identical part numbers may be listed in series. Be sure to list symbols in ascending alphanumeric order.

LQ1E 31 32

Listed in ascending numerical order

Example 1) Ascending numerical order

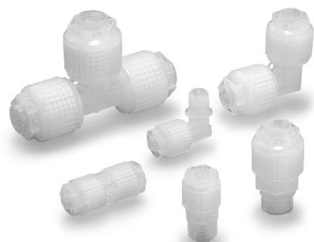
Correct) LQ1E 31 32

Incorrect) LQ1E 32 31

Example 2) Ascending alphanumeric order

Correct) LQ1E 31 3A

Incorrect) LQ1E 3A 31

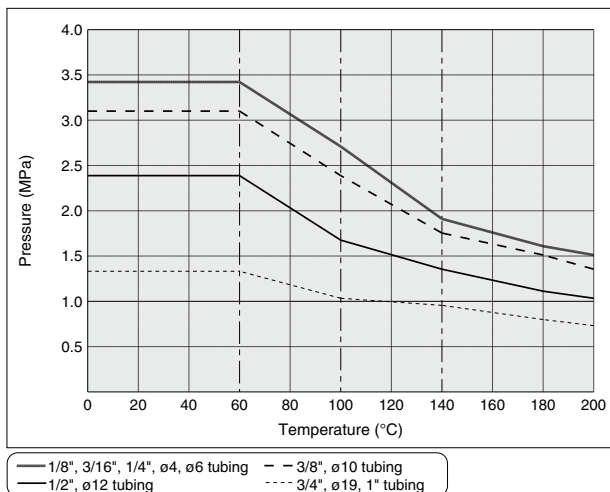


Specifications

Feature	Model	LQ1□10	LQ1□20	LQ1□30	LQ1□40	LQ1□50	LQ1□60
Material		NEW PFA ^{Note)}					
Maximum operating pressure (at 20°C)		1.0 MPa					
Proof pressure		Refer to the withstand pressure and heat resistance performance curves.					
Operating temperature		0 to 200°C					

Note) For products produced upon receipt of order, the fitting body is made of PTFE.

Withstand Pressure and Heat Resistance Performance

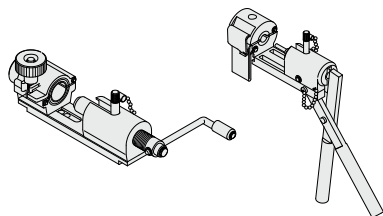


Piping

⚠ Caution

1. Connect tubing with special tools

Refer to the pamphlet "High-Purity Fluoropolymer Fittings Hyper Fitting/LQ1, 2 Series Work Procedure Instructions" (M-E05-1) for connecting tubing and special tools. (Downloadable from our web site.)



2. Tighten the nut until it touches the end surface of the body, and then tighten it an additional 1/8 turn. If the nut won't turn any further, then it means a sufficient tightening has occurred. Refer to the proper tightening torques shown below.

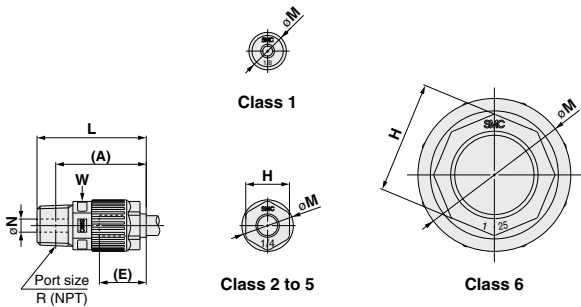
Tightening torque for piping

Body class	Torque (N·m)
2	0.3 to 0.4
3	0.8 to 1.0
4	1.0 to 1.2
5	2.5 to 3.0
6	5.5 to 6.0

Note) In the case of body class 1, the nut should be tightened manually.

Dimensions

Male Connector: LQ1H-M



(A) shows the reference dimension after connection.
(E) shows the approximate dimension of the inserted tubing from the end of the nut.
"W" is width across flats dimension.

Metric sizes

Model	Applicable tubing O.D.	Connection threads R/NPT	A	E	H	L	M	N	Min. port size	W
LQ1H11-M	ø4	1/8"	21	10	—	25	11.5	4	2.6	10
LQ1H12-M	ø3								1.8	
LQ1H21-M	ø6								3.6	
LQ1H22-M	ø4	1/8"	31.5					4.4	2.6	
LQ1H2C-M	ø3			15	14	35	16.5		1.8	14
LQ1H23-M	ø6								3.6	
LQ1H24-M	ø4	1/4"	29					6	2.6	
LQ1H2F-M	ø3								1.8	
LQ1H31-M	ø10								6	
LQ1H32-M	ø8	1/4"	36.5					6	5.5	
LQ1H33-M	ø6			20	17	42.5	23		3.6	
LQ1H34-M	ø10								7.4	
LQ1H35-M	ø8		36						5.5	19
LQ1H36-M	ø6	3/8"						10	3.6	
LQ1H37-M	ø4		31.5	15	14	37.6	16.5		2.6	
LQ1H3E-M	ø3								1.8	
LQ1H39-M	ø10							4.4	4.4	
LQ1H310-M	ø8	1/8"	34.5	20	17	38	23	4.4	4.4	
LQ1H41-M	ø12	3/8"	46					8	8	
LQ1H42-M	ø10			24	21	52	28		7.4	
LQ1H43-M	ø12		44						9.4	
LQ1H44-M	ø10								7.4	
LQ1H45-M	ø8	1/2"	39.5	20	17	47.5	23	10	5.5	23
LQ1H46-M	ø6								3.6	
LQ1H4F-M	ø3		34	15	14	42	16.5		1.8	
LQ1H49-M	ø12	1/4"	42	24	21	48	28	6	6	
LQ1H51-M	ø19	1/2"	55					10	10	
LQ1H52-M	ø12			29	26	62.5	39		9.4	
LQ1H53-M	ø19								15	
LQ1H54-M	ø12	3/4"	53.5					16	9.4	32
LQ1H55-M	ø10		43.5	20	17	52.5	23		7.4	
LQ1H57-M	ø6								3.6	
LQ1H58-M	ø19	1/4"	52	29	26	58	39	6	6	
LQ1H59-M	ø19	3/8"						8	8	
LQ1H61-M	ø25								16	
LQ1H62-M	ø19	3/4"	72		39.5	36	81	49	15	46
LQ1H63-M	ø25								21.2	
LQ1H64-M	ø19	1"	71					22.5	15	
LQ1H65-M	ø12		61	29	26	71	39		9.4	
LQ1H66-M	ø25	1/2"	69.5	39.5	36	77.5	49	10	10	

Inch sizes

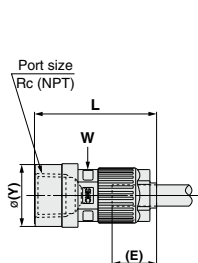
Model	Applicable tubing O.D.	Connection threads R/NPT	A	E	H	L	M	N	Min. port size	W
LQ1H1A-M	1/8"	1/8"	21	10	—	25	11.5	4	1.8	10
LQ1H2A-M	1/4"								3.6	
LQ1H2B-M	3/16"	1/8"	31.5					4.4	2.9	
LQ1H2C-M	1/8"			15	14	35	16.5		1.8	14
LQ1H2D-M	1/4"								3.6	
LQ1H2E-M	3/16"	1/4"	29					6	2.9	
LQ1H2F-M	1/8"								1.8	
LQ1H3A-M	3/8"	1/4"	36.5					6	5.8	
LQ1H3B-M	1/4"			20	17	42.5	23		3.6	
LQ1H3C-M	3/8"		36					10	5.8	19
LQ1H3D-M	1/4"	3/8"							3.6	
LQ1H3E-M	1/8"		31.5	15	14	37.6	16.5		1.8	
LQ1H3F-M	3/8"	1/8"	34.5	20	17	38	23	4.4	4.4	
LQ1H4A-M	1/2"	3/8"	46					8	8	
LQ1H4B-M	3/8"			24	21	52	28		5.8	
LQ1H4C-M	1/2"		44						9	
LQ1H4D-M	3/8"							10	5.8	23
LQ1H4E-M	1/4"	1/2"	39.5	20	17	47.5	23		3.6	
LQ1H4F-M	1/8"		34	15	14	42	16.5		1.8	
LQ1H4G-M	1/2"	1/4"	42	24	21	48	28	6	6	
LQ1H5A-M	3/4"	1/2"	55					10	10	
LQ1H5B-M	1/2"			29	26	62.5	39		9	
LQ1H5C-M	3/4"		53.5						15	
LQ1H5D-M	1/2"	3/4"						16	9	32
LQ1H5E-M	3/8"		43.5	20	17	52.5	23		5.8	
LQ1H5F-M	1/4"								3.6	
LQ1H5G-M	3/4"	1/4"	52	29	26	58	39		6	
LQ1H5H-M	1"	3/8"							8	
LQ1H6A-M	1"	3/4"	72					16	16	46
LQ1H6B-M	3/4"			39.5	36	81	49		15	
LQ1H6C-M	1"		71						21.2	
LQ1H6D-M	3/4"	1"						22.5	15	
LQ1H6E-M	1/2"		61	29	26	71	39		9	
LQ1H6F-M	1"	1/2"	69.5	39.5	36	77.5	49	10	10	

LVC
LVA
LVH
LVD
LVQ
LVP
LVW
LQ1
LQ3
LVN
LQHB
TL TIL
TLM TILM
TD TID
TH TIH

LQ1 Series

Dimensions

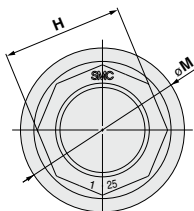
Female Connector: LQ1H-F



Class 1



Class 2 to 5



Class 6

(E) shows the reference of the inserted tubing from the end of the nut.

"W" is width across flats dimension.

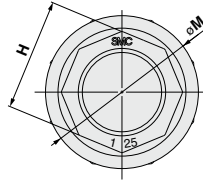
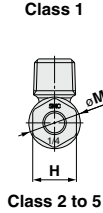
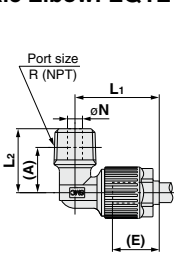
Metric sizes

Model	Applicable tubing O.D.	Connection threads Rc/NPT	E	H	L	M	Min. port size	W	Y
LQ1H11-F□	ø4		10	—	26.5	11.5	2.6		
LQ1H12-F□	ø3	1/8"					1.8	10	18.5
LQ1H21-F□	ø6						3.6		
LQ1H22-F□	ø4	1/8"			35		2.6		18.5
LQ1H2C-F□	ø3		15	14		16.5	1.8	14	
LQ1H23-F□	ø6						3.6		
LQ1H24-F□	ø4	1/4"			36.5		2.6		21.5
LQ1H2F-F□	ø3						1.8		
LQ1H31-F□	ø10						7.4		
LQ1H32-F□	ø8	1/4"					5.5		21.5
LQ1H33-F□	ø6						3.6		
LQ1H34-F□	ø10						7.4		
LQ1H35-F□	ø8	3/8"	20	17	42.5	23	5.5	19	25
LQ1H36-F□	ø6						3.6		
LQ1H39-F□	ø10						7.4		
LQ1H310-F□	ø8	1/8"					5.5		18.5
LQ1H41-F□	ø12	3/8"					9.4		
LQ1H42-F□	ø10		24	21	47.5	28	7.4		25
LQ1H43-F□	ø12				50		9.4	23	
LQ1H44-F□	ø10	1/2"					7.4		29.5
LQ1H45-F□	ø8						5.5		
LQ1H46-F□	ø6		20	17	45.5	23	3.6		
LQ1H49-F□	ø12	1/4"	29	26	56.5	39	9.4	32	21.5
LQ1H410-F□	ø12	1/8"	24	21	46.5	28	8.2	23	18.5
LQ1H51-F□	ø19						15		
LQ1H52-F□	ø12	1/2"			58.5		9.4		29.5
LQ1H53-F□	ø19						15		
LQ1H54-F□	ø12	3/4"	29	26	60	39	9.4	32	36
LQ1H58-F□	ø19	1/4"			56.5		10.7		21.5
LQ1H59-F□	ø19	3/8"			56		14		25
LQ1H61-F□	ø25						21.2		
LQ1H62-F□	ø19	3/4"			75	49	15		36
LQ1H63-F□	ø25		39.5	36			21.2		
LQ1H64-F□	ø19	1"			78.5		15		44.5

Inch sizes

Model	Applicable tubing O.D.	Connection threads Rc/NPT	E	H	L	M	Min. port size	W	Y
LQ1H1A-F□	1/8"	1/8"	10	—	26.5	11.5	1.8	10	18.5
LQ1H2A-F□	1/4"						3.6		
LQ1H2B-F□	3/16"	1/8"			35		2.9		18.5
LQ1H2C-F□	1/8"		15	14		16.5	1.8	14	
LQ1H2D-F□	1/4"						3.6		
LQ1H2E-F□	3/16"	1/4"			36.5		2.9		21.5
LQ1H2F-F□	1/8"						1.8		
LQ1H3A-F□	3/8"						5.8		
LQ1H3B-F□	1/4"	1/4"					3.6		21.5
LQ1H3C-F□	3/8"	3/8"	20	17	42.5	23	5.8	19	
LQ1H3D-F□	1/4"						3.6		25
LQ1H3F-F□	3/8"	1/8"					5.8		18.5
LQ1H4A-F□	1/2"						9		
LQ1H4B-F□	3/8"	3/8"	24	21	47.5	28	5.8	23	25
LQ1H4C-F□	1/2"	1/2"			50		9		29.5
LQ1H4D-F□	3/8"		24	21	46.5	28	8.2	23	18.5
LQ1H4E-F□	1/4"	1/2"	20	17	45.5	23	3.6		
LQ1H4G-F□	1/2"	1/4"	29	26	56.5	39	9	32	21.5
LQ1H4H-F□	1/2"	1/8"	24	21	46.5	28	8.2	23	18.5
LQ1H5A-F□	3/4"						15		
LQ1H5B-F□	1/2"	1/2"			58.5		9		29.5
LQ1H5C-F□	3/4"						15		
LQ1H5D-F□	1/2"	3/4"	29	26	60	39	9	32	36
LQ1H5G-F□	3/4"	1/4"			56.5		10.7		21.5
LQ1H5H-F□	3/4"	3/8"			56		14		25
LQ1H6A-F□	1"						21.2		
LQ1H6B-F□	3/4"	3/4"	39.5	36	75	49	15	46	36
LQ1H6C-F□	1"						21.2		
LQ1H6D-F□	3/4"	1"			78.5		15		44.5

Male Elbow: LQ1L-M



(A) shows the reference dimension after connection.
(E) shows the approximate dimension of the inserted tubing from the end of the nut.

Metric sizes

Model	Applicable tubing O.D.	Connection threads R/NPT	A	E	H	L ₁	L ₂	M	N	Min. port size
LQ1L11-M	ø4	1/8"	11.5	10	—	18	15	11.5	4	2.6
LQ1L12-M	ø3									1.8
LQ1L21-M	ø6									3.6
LQ1L22-M	ø4	1/8"							4.4	2.6
LQ1L2C-M	ø3									1.8
LQ1L23-M	ø6		14.5	15	14	27	20.5	16.5		3.6
LQ1L24-M	ø4								6	2.6
LQ1L2F-M	ø3	1/4"								1.8
LQ1L31-M	ø10									6
LQ1L32-M	ø8	1/4"							6	5.5
LQ1L33-M	ø6									3.6
LQ1L34-M	ø10		20	20	17	35	26.5	23		7.4
LQ1L35-M	ø8									5.5
LQ1L36-M	ø6								8	3.6
LQ1L37-M	ø4									2.6
LQ1L3E-M	ø3	3/8"								1.8
Note 2) LQ1L39-M	ø10									4
Note 2) LQ1L310-M	ø8	1/8"	20.6	20	17	36.6	24.1	23	4	4
LQ1L41-M	ø12	3/8"							8	8
LQ1L42-M	ø10		25	24	21	45	33	28		7.4
LQ1L43-M	ø12									9.4
LQ1L44-M	ø10									7.4
LQ1L45-M	ø8									5.5
LQ1L46-M	ø6	1/2"	24.1	20	17	38.5	32.1	23	10	3.6
* LQ1L47-M	ø4									2.6
* LQ1L4F-M	ø3		17.5	15	14	30	25.5	16.5		1.8
LQ1L49-M	ø12	1/4"	22.6	24	21	43	28.6	28	6	6
LQ1L51-M	ø19									10
LQ1L52-M	ø12	1/2"							10	9.4
LQ1L53-M	ø19		29	26	54	40	39			15
LQ1L54-M	ø12		30.5							9.4
LQ1L55-M	ø10								16	7.4
LQ1L56-M	ø8	3/4"	20	17	44	39.5	23			5.5
LQ1L57-M	ø6									3.6
* LQ1L59-M	ø19	3/8"	34	39.5	36	53	40	49	8	8
LQ1L61-M	ø25									16
LQ1L62-M	ø19	3/4"	35	39.5	36	68.5	46	49		15
LQ1L63-M	ø25									21.2
LQ1L64-M	ø19	1"							22.5	15
LQ1L65-M	ø12		37	29	26	60	47	39		9.4
* LQ1L67-M	ø25	3/8"	34	39.5	36	53	40	49	8	8

Note 1) Products marked "*" are produced upon receipt of order. (The body of the fitting is PTFE machined.)
Note 2) NPT is not available for the thread type.

Inch sizes

Model	Applicable tubing O.D.	Connection threads R/NPT	A	E	H	L ₁	L ₂	M	N	Min. port size
LQ1L1A-M	1/8"	1/8"	11.5	10	—	18	15	11.5	4	1.8
LQ1L2A-M	1/4"									3.6
LQ1L2B-M	3/16"	1/8"							4.4	2.9
LQ1L2C-M	1/8"		14.5	15	14	27	20.5	16.5		1.8
LQ1L2D-M	1/4"									3.6
LQ1L2E-M	3/16"	1/4"							6	2.9
LQ1L2F-M	1/8"									1.8
LQ1L3A-M	3/8"									5.8
LQ1L3B-M	1/4"	1/4"							6	3.6
LQ1L3C-M	3/8"		20	20	17	35	26.5	23		5.8
LQ1L3D-M	1/4"	3/8"							8	3.6
LQ1L3E-M	1/8"		21.1	15	14	31.6	27.1	16.5		1.8
Note 2) LQ1L3F-M	3/8"	1/8"	20.6	20	17	36.6	24.1	23	4	4
LQ1L4A-M	1/2"									8
LQ1L4B-M	3/8"	3/8"							8	5.8
LQ1L4C-M	1/2"		25	24	21	45	33	28		9
LQ1L4D-M	3/8"								10	5.8
LQ1L4E-M	1/4"	1/2"	24.1	20	17	38.5	32.1	23		3.6
* LQ1L4F-M	1/8"		17.5	15	14	30	25.5	16.5		1.8
LQ1L4G-M	1/2"	1/4"	22.6	24	21	43	28.6	28	6	9
LQ1L5A-M	3/4"									10
LQ1L5B-M	1/2"	1/2"								9
LQ1L5C-M	3/4"		29	26	54	40	39			15
LQ1L5D-M	1/2"	3/4"							16	9
LQ1L5E-M	3/8"		20	17	44	39.5	23			5.8
LQ1L5F-M	1/4"									3.6
* LQ1L5H-M	3/4"	3/8"	34	39.5	36	53	40	49	8	8
LQ1L6A-M	1"	3/4"							16	16
LQ1L6B-M	3/4"		35	39.5	36	68.5	46	49		15
LQ1L6C-M	1"									21.2
LQ1L6D-M	3/4"	1"							22.5	15
LQ1L6E-M	1/2"		37	29	26	60	47	39		9
* LQ1L6G-M	1"	3/8"	34	39.5	36	53	40	49	8	8

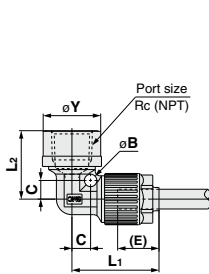
Note 1) Products marked "*" are produced upon receipt of order. (The body of the fitting is PTFE machined.)
Note 2) NPT is not available for the thread type.

LVC
LVA
LVH
LVD
LVQ
LVP
LVW
LQ1
LQ3
LVN
LQHB
TL TIL
TLM TILM
TD TID
TH TIH

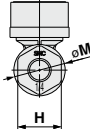
LQ1 Series

Dimensions

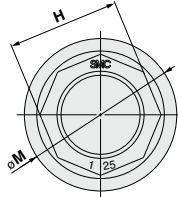
Female Elbow: LQ1L-F



Class 1



Class 2 to 5



Class 6

(E) shows the reference dimension of the inserted tubing from the end of the nut.

Metric sizes

Model	Applicable tubing O.D.	Connection threads Rc/NPT	B	C	E	H	L ₁	L ₂	M	Min. port size	Y
LQ1L11-F	ø4	1/8"	2	4	10	—	18.5	16	11.5	2.6	18.5
LQ1L12-F	ø3									1.8	
LQ1L21-F	ø6									3.6	
LQ1L22-F	ø4	1/8"						19.5		2.6	18.5
LQ1L2C-F	ø3		4	6	15	14	28		16.5	1.8	
LQ1L23-F	ø6									3.6	
LQ1L24-F	ø4	1/4"						22		2.6	21.5
LQ1L2F-F	ø3									1.8	
LQ1L31-F	ø10									7.4	
LQ1L32-F	ø8	1/4"						22		5.5	21.5
LQ1L33-F	ø6									3.6	
LQ1L34-F	ø10				20	17	36.5		23	7.4	
LQ1L35-F	ø8							24.5		5.5	
LQ1L36-F	ø6	3/8"	5	9						3.6	25
LQ1L3E-F	ø3				15	14	31.6	24.5	16.5	1.8	
Note) LQ1L39-F	ø10									7.4	
Note) LQ1L310-F	ø8	1/8"			20	17	36.6	21.8	23	5.5	18.5
LQ1L41-F	ø12	3/8"						25.5		9.4	25
LQ1L42-F	ø10									7.4	
LQ1L43-F	ø12									9.4	
LQ1L44-F	ø10	1/2"	6	9	24	21	43	30.5	28	7.4	29.5
LQ1L49-F	ø12	1/4"						23.8		9.4	21.5
LQ1L410-F	ø12	1/8"								8	18.5
LQ1L51-F	ø19									15	
LQ1L52-F	ø12	1/2"						35.5		9.4	29.5
LQ1L53-F	ø19									15	
LQ1L54-F	ø12	3/4"	7	14	29	26	54	37	39	9.4	36
LQ1L59-F	ø19	3/8"						30.5		14	25
LQ1L61-F	ø25									21.2	
LQ1L62-F	ø19	3/4"						42.5		15	36
LQ1L63-F	ø25									21.2	
LQ1L64-F	ø19	1"	8	18	39.5	36	69.5	46	49	15	44.5

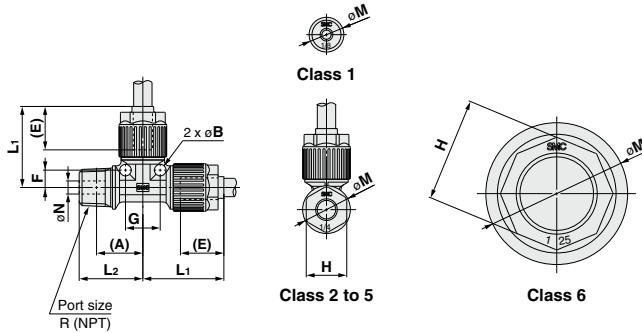
Note) NPT is not available for the thread type.

Inch sizes

Model	Applicable tubing O.D.	Connection threads Rc/NPT	B	C	E	H	L ₁	L ₂	M	Min. port size	Y
LQ1L1A-F	1/8"	1/8"	2	4	10	—	18.5	16	11.5	1.8	18.5
LQ1L2A-F	1/4"									3.6	
LQ1L2B-F	3/16"	1/8"						19.5		2.9	18.5
LQ1L2C-F	1/8"		4	6	15	14	28		16.5	1.8	
LQ1L2D-F	1/4"									3.6	
LQ1L2E-F	3/16"	1/4"						22		2.9	21.5
LQ1L2F-F	1/8"									1.8	
LQ1L3A-F	3/8"									5.8	
LQ1L3B-F	1/4"	1/4"						22		3.6	21.5
LQ1L3C-F	3/8"									5.8	
LQ1L3D-F	1/4"	3/8"	5	9				24.5		3.6	25
LQ1L3E-F	1/8"									1.8	
Note) LQ1L3F-F	3/8"	1/8"						31.6	16.5	5.8	18.5
LQ1L4A-F	1/2"							22		9	
LQ1L4B-F	3/8"	3/8"						25.5		5.8	25
LQ1L4C-F	1/2"									9	
LQ1L4D-F	3/8"	1/2"	6	9	24	21	43	30.5	28	5.8	29.5
LQ1L4G-F	1/2"	1/4"								9	21.5
LQ1L4H-F	1/2"	1/8"						23.8		8	18.5
LQ1L5A-F	3/4"									35.5	15
LQ1L5B-F	1/2"	1/2"								9	29.5
LQ1L5C-F	3/4"									15	
LQ1L5D-F	1/2"	3/4"	7	14	29	26	54	37	39	9	36
LQ1L5H-F	3/4"	3/8"								30.5	14
LQ1L6A-F	1"									42.5	21.2
LQ1L6B-F	3/4"	3/4"	8	18	39.5	36	69.5	46	49	15	36
LQ1L6C-F	1"									21.2	
LQ1L6D-F	3/4"	1"								15	44.5

Note) NPT is not available for the thread type.

Male Run Tee: LQ1R-M



(A) shows the reference dimension after connection.
(E) shows the approximate dimension of the inserted tubing from the end of the nut.

Metric sizes

Model	Applicable tubing O.D.	Connection threads R/NPT	A	B	E	F	G	H	L ₁	L ₂	M	N	Min. port size
LQ1R11-M	ø4	1/8"	12	2	10	4	8	—	18.5	15.5	11.5	3	2.6
LQ1R12-M	ø3	1/8"	12	2	10	4	8	—	18.5	15.5	11.5	2	1.8
LQ1R21-M	ø6	1/8"	12	2	10	4	8	—	18.5	15.5	11.5	3	2.6
LQ1R22-M	ø4	1/8"	12	2	10	4	8	—	18.5	15.5	11.5	2	1.8
LQ1R23-M	ø3	1/8"	12	2	10	4	8	—	18.5	15.5	11.5	2	1.8
LQ1R23-M	ø6	1/8"	16	4	15	6	12	14	28	—	16.5	4.4	3.6
LQ1R24-M	ø4	1/4"	16	4	15	6	12	14	28	—	16.5	4.4	2.6
LQ1R2F-M	ø3	1/4"	16	4	15	6	12	14	28	—	16.5	4.4	1.8
LQ1R31-M	ø10	1/4"	19	5	20	9	18	—	36.5	25	—	8	7.4
LQ1R32-M	ø8	1/4"	19	5	20	9	18	—	36.5	25	—	8	5.5
LQ1R33-M	ø6	1/4"	19	5	20	9	18	—	36.5	25	—	8	3.6
LQ1R34-M	ø10	3/8"	21	5	20	9	18	—	36.5	27	23	—	7.4
LQ1R35-M	ø8	3/8"	21	5	20	9	18	—	36.5	27	23	—	5.5
LQ1R36-M	ø6	3/8"	21	5	20	9	18	—	36.5	27	23	—	3.6
*LQ1R39-M	ø10	1/8"	17	—	—	—	—	—	34.5	20.5	—	4.4	4.4
*LQ1R310-M	ø8	1/8"	17	—	—	—	—	—	34.5	20.5	—	4.4	4.4
LQ1R41-M	ø12	3/8"	23	6	24	9	18	21	43	29	—	10	9.4
LQ1R42-M	ø10	3/8"	23	6	24	9	18	21	43	29	—	10	7.4
LQ1R43-M	ø12	1/2"	24.5	6	24	9	18	21	43	32	—	10	9.4
LQ1R44-M	ø10	1/2"	24.5	6	24	9	18	21	43	32	—	10	7.4
LQ1R49-M	ø12	1/4"	27.5	7	29	14	28	26	54	33.5	39	6	6
LQ1R51-M	ø19	1/2"	30.5	7	29	14	28	26	54	38	—	10	10
LQ1R52-M	ø12	1/2"	30.5	7	29	14	28	26	54	38	—	10	9.4
LQ1R53-M	ø19	3/4"	30	7	29	14	28	26	54	39	39	16	15
LQ1R54-M	ø12	3/4"	30	7	29	14	28	26	54	39	39	16	9.4
LQ1R58-M	ø19	1/4"	27.5	7	29	14	28	26	54	33.5	—	6	6
LQ1R59-M	ø19	3/8"	29	7	29	14	28	26	54	35	—	10	10
LQ1R61-M	ø25	3/4"	36	8	39.5	18	36	36	69.5	45	49	16	16
LQ1R62-M	ø19	3/4"	36	8	39.5	18	36	36	69.5	45	49	16	15
LQ1R63-M	ø25	1"	35	8	39.5	18	36	36	69.5	45	49	22.5	21.2
LQ1R64-M	ø19	1"	35	8	39.5	18	36	36	69.5	45	49	22.5	15

Note) Products marked "*" are produced upon receipt of order.
(The body of the fitting is PTFE machined.)

Inch sizes

Model	Applicable tubing O.D.	Connection threads R/NPT	A	B	E	F	G	H	L ₁	L ₂	M	N	Min. port size
LQ1R1A-M	1/8"	1/8"	12	2	10	4	8	—	18.5	15.5	11.5	2	1.8
LQ1R2A-M	1/4"	1/4"	12	2	10	4	8	—	18.5	15.5	11.5	2	3.6
LQ1R2B-M	3/16"	1/8"	12	2	10	4	8	—	18.5	15.5	11.5	2	2.9
LQ1R2C-M	1/8"	1/8"	16	4	15	6	12	14	28	—	16.5	4.4	1.8
LQ1R2D-M	1/4"	1/4"	16	4	15	6	12	14	28	—	16.5	4.4	3.6
LQ1R2E-M	3/16"	1/4"	16	4	15	6	12	14	28	—	16.5	4.4	2.9
LQ1R2F-M	1/8"	1/4"	16	4	15	6	12	14	28	—	16.5	4.4	1.8
LQ1R3A-M	3/8"	3/8"	19	5	20	9	18	—	36.5	25	—	8	5.8
LQ1R3B-M	1/4"	1/4"	19	5	20	9	18	—	36.5	25	—	8	3.6
LQ1R3C-M	3/8"	3/8"	21	5	20	9	18	—	36.5	27	23	—	5.8
LQ1R3D-M	1/4"	1/4"	21	5	20	9	18	—	36.5	27	23	—	3.6
*LQ1R3F-M	3/8"	1/8"	17	—	—	—	—	—	34.5	20.5	—	4.4	4.4
LQ1R4A-M	1/2"	3/8"	23	6	24	9	18	21	43	29	—	10	9
LQ1R4B-M	3/8"	3/8"	23	6	24	9	18	21	43	29	—	10	5.8
LQ1R4C-M	1/2"	1/2"	24.5	6	24	9	18	21	43	32	—	10	9
LQ1R4D-M	3/8"	1/2"	24.5	6	24	9	18	21	43	32	—	10	5.8
LQ1R4G-M	1/2"	1/4"	27.5	7	29	14	28	26	54	33.5	39	6	6
LQ1R5A-M	3/4"	1/2"	30.5	7	29	14	28	26	54	38	—	10	10
LQ1R5B-M	1/2"	1/2"	30.5	7	29	14	28	26	54	38	—	10	9
LQ1R5C-M	3/4"	3/4"	30	7	29	14	28	26	54	39	39	16	15
LQ1R5D-M	1/2"	3/4"	30	7	29	14	28	26	54	39	39	16	9
LQ1R5G-M	3/4"	1/4"	27.5	7	29	14	28	26	54	33.5	—	6	6
LQ1R5H-M	3/4"	3/8"	29	7	29	14	28	26	54	35	—	10	10
LQ1R6A-M	1"	3/4"	36	8	39.5	18	36	36	69.5	45	49	16	16
LQ1R6B-M	3/4"	3/4"	36	8	39.5	18	36	36	69.5	45	49	16	15
LQ1R6C-M	1"	1"	35	8	39.5	18	36	36	69.5	45	49	22.5	21.2
LQ1R6D-M	3/4"	1"	35	8	39.5	18	36	36	69.5	45	49	22.5	15

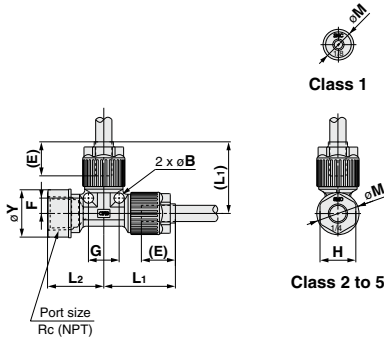
Note) Products marked "*" are produced upon receipt of order.
(The body of the fitting is PTFE machined.)

LVC
LVA
LVH
LVD
LVQ
LVP
LVW
LQ1
LQ3
LVN
LQHB
TL
TIL
TLM
TILM
TD
TID
TH
TIH

LQ1 Series

Dimensions

Female Run Tee: LQ1R-F



Metric sizes

Model	Applicable tubing O.D.	Connection threads Rc/NPT	B	E	F	G	H	L ₁	L ₂	M	Min. port size	Y
LQ1R11-F	ø4	1/8"	2	10	4	8	—	18.5	16	11.5	2.6	18.5
LQ1R12-F	ø3										1.8	
LQ1R21-F	ø6										3.6	
LQ1R22-F	ø4	1/8"							19.5		2.6	18.5
LQ1R2C-F	ø3										1.8	
LQ1R23-F	ø6		4	15	6	12	14	28		16.5	3.6	
LQ1R24-F	ø4	1/4"							22		2.6	21.5
LQ1R2F-F	ø3										1.8	
LQ1R31-F	ø10										7.4	
LQ1R32-F	ø8	1/4"							24		5.5	21.5
LQ1R33-F	ø6										3.6	
LQ1R34-F	ø10		5		9	18	17	36.5		23	7.4	
LQ1R35-F	ø8	3/8"							25.5		5.5	25
LQ1R36-F	ø6										3.6	
*LQ1R39-F	ø10	1/8"	—						34.5	19.7	7.4	18.5
*LQ1R310-F	ø8										5.5	
LQ1R41-F	ø12	3/8"							25		9.4	25
LQ1R42-F	ø10		6		9	18		43		28	7.4	
LQ1R43-F	ø12								31.5		9.4	29.5
LQ1R44-F	ø10	1/2"									7.4	
*LQ1R49-F	ø12	1/4"	—						41.5	21.2	9.4	21.5
LQ1R51-F	ø19	1/2"							35.5		15	29.5
LQ1R52-F	ø12										9.4	
LQ1R53-F	ø19	3/4"	7	29	14	28	26	54		39	15	36
LQ1R54-F	ø12								37		9.4	
LQ1R59-F	ø19	3/8"							30.5		14	25
LQ1R61-F	ø25	3/4"							42.5		21.2	36
LQ1R62-F	ø19										15	
LQ1R63-F	ø25	1"	8	39.5	18	36	36	69.5	49		21.2	44.5
LQ1R64-F	ø19								46		15	
LQ1R66-F	ø25	1/2"							41		17.8	29.5

Note) Products marked "*" are produced upon receipt of order.
(The body of the fitting is PTFE machined.)

Inch sizes

Model	Applicable tubing O.D.	Connection threads Rc/NPT	B	E	F	G	H	L ₁	L ₂	M	Min. port size	Y
LQ1R1A-F	1/8"	1/8"	2	10	4	8	—	18.5	16	11.5	1.8	18.5
LQ1R2A-F	1/4"										3.6	
LQ1R2B-F	3/16"	1/8"							19.5		2.9	18.5
LQ1R2C-F	1/8"		4	15	6	12	14	28		16.5	1.8	
LQ1R2D-F	1/4"										3.6	
LQ1R2E-F	3/16"	1/4"							22		2.9	21.5
LQ1R2F-F	1/8"										1.8	
LQ1R3A-F	3/8"	1/4"							24		5.8	21.5
LQ1R3B-F	1/4"										3.6	
LQ1R3C-F	3/8"		5		9	18		36.5		23	5.8	25
LQ1R3D-F	1/4"	3/8"							25.5		3.6	
*LQ1R3F-F	3/8"	1/8"	—						34.5	19.7	5.8	18.5
LQ1R4A-F	1/2"										9	25
LQ1R4B-F	3/8"								25		5.8	
LQ1R4C-F	1/2"		6	24	9	18	21	43		28	9	29.5
LQ1R4D-F	3/8"	1/2"							31.5		5.8	
*LQ1R4G-F	1/2"	1/4"	—						41.5	21.2	9	21.5
LQ1R5A-F	3/4"										15	29.5
LQ1R5B-F	1/2"								35.5		9	
LQ1R5C-F	3/4"		7	29	14	28	26	54		39	15	36
LQ1R5D-F	1/2"	3/4"							37		9	
LQ1R5H-F	3/4"	3/8"							30.5		14	25
LQ1R6A-F	1"								42.5		21.2	36
LQ1R6B-F	3/4"		8	39.5	18	36	36	69.5	49		15	44.5
LQ1R6C-F	1"								46		21.2	
LQ1R6D-F	3/4"	1"							46		15	44.5

Note) Products marked "*" are produced upon receipt of order.
(The body of the fitting is PTFE machined.)

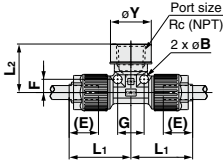
LQ1 Series

Dimensions

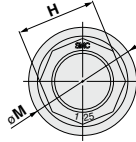
Female Branch Tee: LQ1B-F



Class 1



Class 2 to 5



Class 6

(E) shows the approximate dimension of the inserted tubing from the end of the nut.

Metric sizes

Model	Applicable tubing O.D.	Connection threads Rc/NPT	B	E	F	G	H	L ₁	L ₂	M	Min. port size	Y
LQ1B11-F	ø4	1/8"	2	10	4	8	—	18.5	16	11.5	2.6	18.5
LQ1B12-F	ø3										1.8	
LQ1B21-F	ø6										3.6	
LQ1B22-F	ø4	1/8"							19.5		2.6	18.5
LQ1B2C-F	ø3		4	15	6	12				16.5	3.6	
LQ1B23-F	ø6						14	28			3.6	
LQ1B24-F	ø4	1/4"							22		2.6	21.5
LQ1B2F-F	ø3										1.8	
LQ1B31-F	ø10										7.4	
LQ1B32-F	ø8	1/4"						23.7			5.5	21.5
LQ1B33-F	ø6										3.6	
LQ1B34-F	ø10		5		9	18		36.5		23	7.4	
LQ1B35-F	ø8	3/8"							25.5		5.5	25
LQ1B36-F	ø6										3.6	
* LQ1B39-F	ø10	1/8"	—		—	—		32.3	18.7		7.4	18.5
* LQ1B310-F	ø8										5.5	
LQ1B41-F	ø12	3/8"							25		9.4	25
LQ1B42-F	ø10		6	24	9	18	21	43		28	7.4	
LQ1B43-F	ø12								31.5		9.4	29.5
LQ1B44-F	ø10	1/2"									7.4	
* LQ1B49-F	ø12	1/4"	—	29	—	—	26	44.3	27.5	39	9.4	21.5
LQ1B51-F	ø19	1/2"							35.5		10	29.5
LQ1B52-F	ø12										9.4	
LQ1B53-F	ø19		7		14	28		54		37	15	36
LQ1B54-F	ø12	3/4"		29			26			39	9.4	
* LQ1B58-F	ø19	1/4"	—		—	—		44.3	27.5		10.9	21.5
* LQ1B59-F	ø19	3/8"	—		—	—		46	29.5		14.3	25
LQ1B61-F	ø25								42.5		16	36
LQ1B62-F	ø19	3/4"									15	
LQ1B63-F	ø25	1"	8	39.5	18	36	36	69.5		49	21.2	44.5
LQ1B64-F	ø19								46		15	
LQ1B66-F	ø25	1/2"								41	10	29.5

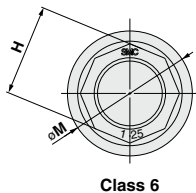
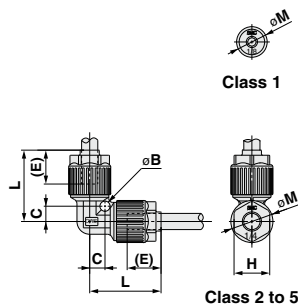
Note) Products marked "*" are produced upon receipt of order.
(The body of the fitting is PTFE machined.)

Inch sizes

Model	Applicable tubing O.D.	Connection threads Rc/NPT	B	E	F	G	H	L ₁	L ₂	M	Min. port size	Y
LQ1B1A-F	1/8"	1/8"	2	10	4	8	—	18.5	16	11.5	1.8	18.5
LQ1B2A-F	1/4"										3.6	
LQ1B2B-F	3/16"	1/8"							19.5		2.9	18.5
LQ1B2C-F	1/8"		4	15	6	12	14	28		16.5	1.8	
LQ1B2D-F	1/4"										3.6	
LQ1B2E-F	3/16"	1/4"							22		2.9	21.5
LQ1B2F-F	1/8"										1.8	
LQ1B3A-F	3/8"	1/4"						23.7			5.8	21.5
LQ1B3B-F	1/4"										3.6	
LQ1B3C-F	3/8"		5		9	18		36.5		23	5.8	25
LQ1B3D-F	1/4"	3/8"		20			17		25.5		3.6	
* LQ1B3F-F	3/8"	1/8"	—		—	—		32.3	18.7		5.8	18.5
LQ1B4A-F	1/2"										9	25
LQ1B4B-F	3/8"								25		5.8	
LQ1B4C-F	1/2"		6	24	9	18	21	43		28	9	
LQ1B4D-F	3/8"	1/2"							31.5		5.8	29.5
* LQ1B4G-F	1/2"	1/4"	—	29	—	—	26	44.3	27.5	39	9	21.5
LQ1B5A-F	3/4"								35.5		10	29.5
LQ1B5B-F	1/2"										9	
LQ1B5C-F	3/4"		7		14	28		54			15	36
LQ1B5D-F	1/2"	3/4"		29			26		37	39	9	
* LQ1B5G-F	3/4"	1/4"	—		—	—		44.3	27.5		10.9	21.5
* LQ1B5H-F	1"	3/8"	—		—	—		46	29.5		14.3	25
LQ1B6A-F	1"								42.5		16	36
LQ1B6B-F	3/4"										15	
LQ1B6C-F	1"								46	49	21.2	44.5
LQ1B6D-F	3/4"	1"	8	39.5	18	36	36	69.5		46	15	
LQ1B6F-F	1"	1/2"								41	10	29.5

Note) Products marked "*" are produced upon receipt of order.
(The body of the fitting is PTFE machined.)

Union Elbow: LQ1E



(E) shows the approximate dimension of the inserted tubing from the end of the nut.

Metric sizes

Model	Applicable tubing O.D.	B	C	E	H	L	M	Min. port size
LQ1E11	ø4	2	4	10	—	18.5	11.5	2.6
LQ1E12	ø3							1.8
LQ1E21□□	ø6	4	6	15	14	28	16.5	3.6
LQ1E22□□	ø4							2.6
LQ1E2C□□	ø3							1.8
LQ1E31□□	ø10	5	9	20	17	36.5	23	7.4
LQ1E32□□	ø8							5.5
LQ1E33□□	ø6							3.6
LQ1E41□□	ø12	6	9	24	21	43	28	9.4
LQ1E42□□	ø10							7.4
LQ1E51□□	ø19	7	14	29	26	54	39	15
LQ1E52□□	ø12							9.4
LQ1E61□□	ø25	8	18	39.5	36	69.5	49	21.2
LQ1E62□□	ø19							15

Inch sizes

Model	Applicable tubing O.D.	B	C	E	H	L	M	Min. port size
LQ1E1A	1/8"	2	4	10	—	18.5	11.5	1.8
LQ1E2A□□	1/4"							3.6
LQ1E2B□□	3/16"	4	6	15	14	28	16.5	2.9
LQ1E2C□□	1/8"							1.8
LQ1E3A□□	3/8"	5	9	20	17	36.5	23	5.8
LQ1E3B□□	1/4"							3.6
LQ1E4A□□	1/2"	6	9	24	21	43	28	9
LQ1E4B□□	3/8"							5.8
LQ1E5A□□	3/4"	7	14	29	26	54	39	15
LQ1E5B□□	1/2"							9
LQ1E6A□□	1"	8	18	39.5	36	69.5	49	21.2
LQ1E6B□□	3/4"							15

LVC

LVA

LVB

LVD

LVE

LVP

LWV

LQ1

LQ3

LVN

LQHB

TL

TIL

TLM

TILM

TD

TID

TH

TIH

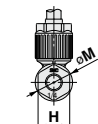
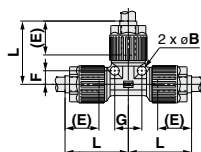
LQ1 Series

Dimensions

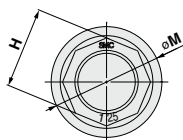
Union Tee: LQ1T



Class 1



Class 2 to 5



Class 6

(E) shows the approximate dimension of the inserted tubing from the end of the nut.

Metric sizes

Model	Applicable tubing O.D.	B	E	F	G	H	L	M	Min. port size
LQ1T11	ø4	2	10	4	8	—	18.5	11.5	2.6
LQ1T12	ø3								1.8
LQ1T21□□	ø6	4	15	6	12	14	28	16.5	3.6
LQ1T22□□	ø4								2.6
LQ1T2C□□	ø3								1.8
LQ1T31□□	ø10	5	20	9	18	17	36.5	23	7.4
LQ1T32□□	ø8								5.5
LQ1T33□□	ø6								3.6
LQ1T41□□	ø12	6	24	9	18	21	43	28	9.4
LQ1T42□□	ø10								7.4
LQ1T51□□	ø19	7	29	14	28	26	54	39	15
LQ1T52□□	ø12								9.4
LQ1T61□□	ø25	8	39.5	18	36	36	69.5	49	21.2
LQ1T62□□	ø19								15

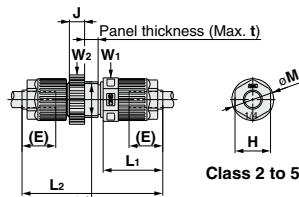
Inch sizes

Model	Applicable tubing O.D.	B	E	F	G	H	L	M	Min. port size
LQ1T1A	1/8"	2	10	4	8	—	18.5	11.5	1.8
LQ1T2A□□	1/4"								3.6
LQ1T2B□□	3/16"	4	15	6	12	14	28	16.5	2.9
LQ1T2C□□	1/8"								1.8
LQ1T3A□□	3/8"	5	20	9	18	17	36.5	23	5.8
LQ1T3B□□	1/4"								3.6
LQ1T4A□□	1/2"	6	24	9	18	21	43	28	9
LQ1T4B□□	3/8"								5.8
LQ1T5A□□	3/4"	7	29	14	28	26	54	39	15
LQ1T5B□□	1/2"								9
LQ1T6A□□	1"	8	39.5	18	36	36	69.5	49	21.2
LQ1T6B□□	3/4"								15

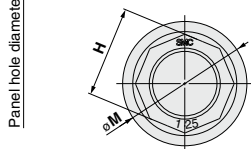
Panel Mount Union: LQ1P



Class 1



Class 2 to 5



Class 6

(E) shows the approximate dimension of the inserted tubing from the end of the nut.
"W" is width across flats dimension.

Metric sizes

Model	Applicable tubing O.D.	E	H	J	K	L ₁	L ₂	M	Min. port size	t	W ₁	W ₂
LQ1P11	ø4	10	—	6	10.5	17	44	11.5	2.6	8	11	13
LQ1P12	ø3								1.8			
LQ1P21□□	ø6	15	14	6	14.5	23.5	55.5	16.5	3.6	8	15	17
LQ1P22□□	ø4								2.6			
LQ1P2C□□	ø3	20	17	7	20.5	30	69	23	1.8	8	21	24
LQ1P31□□	ø10								7.4			
LQ1P32□□	ø8	24	21	7	24.5	35	78.5	28	3.6	8	26	28
LQ1P33□□	ø6								5.5			
LQ1P41□□	ø12	29	26	9	36.5	43.5	100	39	9.4	9	39	43
LQ1P42□□	ø10								7.4			
LQ1P51□□	ø19	39.5	36	10	48.5	58.5	133	49	15	10	51	55
LQ1P52□□	ø12								9.4			
LQ1P61□□	ø25	39.5	36	10	48.5	58.5	133	49	21.2	10	51	55
LQ1P62□□	ø19								15			

Inch sizes

Model	Applicable tubing O.D.	E	H	J	K	L ₁	L ₂	M	Min. port size	t	W ₁	W ₂
LQ1P1A	1/8"	10	—	6	10.5	17	44	11.5	1.8	8	11	13
LQ1P2A□□	1/4"								3.6			
LQ1P2B□□	3/16"	15	14	6	14.5	23.5	55.5	16.5	2.9	8	15	17
LQ1P2C□□	1/8"								1.8			
LQ1P3A□□	3/8"	20	17	7	20.5	30	69	23	5.8	8	21	24
LQ1P3B□□	1/4"								3.6			
LQ1P4A□□	1/2"	24	21	7	24.5	35	78.5	28	9	8	26	28
LQ1P4B□□	3/8"								5.8			
LQ1P5A□□	3/4"	29	26	9	36.5	43.5	100	39	15	9	39	43
LQ1P5B□□	1/2"								9			
LQ1P6A□□	1"	39.5	36	10	48.5	58.5	133	49	21.2	10	51	55
LQ1P6B□□	3/4"								15			

LVC

LVA

LVH

LVD

LVQ

LVP

LWV

LQ1

LQ3

LVN

LQHB

TL

TIL

TLM

TILM

TD

TID

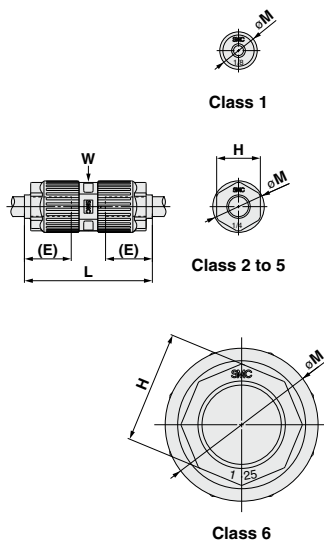
TH

TIH

LQ1 Series

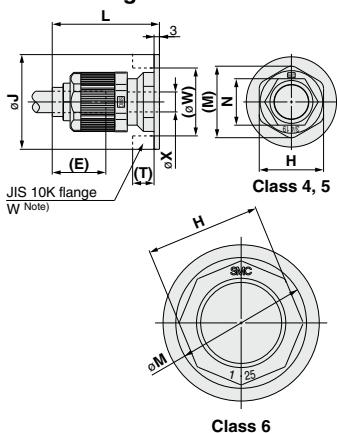
Dimensions

Union: LQ1U



(E) shows the approximate dimension of the inserted tubing from the end of the nut.
 "W" is width across flats dimension.

Union Flange: LQ1F



(E) shows the approximate dimension of the inserted tubing from the end of the nut.
 (W) is the bore size of the JIS flange required for mounting. This flange is sold separately.
 When ordering nuts as spare parts, size 4 and 5 are as shown below.

LQ1F4□: LQ-4N□□
 LQ1F5□: LQ-5N□□

Metric sizes

Model	Applicable tubing O.D.	E	H	L	M	Min. port size	W
LQ1U11	ø4	10	—	29	11.5	2.6	10
LQ1U12	ø3					1.8	
LQ1U21□□	ø6					3.6	
LQ1U22□□	ø4	15	14	41	16.5	2.6	14
LQ1U2C□□	ø3					1.8	
LQ1U31□□	ø10					7.4	
LQ1U32□□	ø8	20	17	54	23	5.5	19
LQ1U33□□	ø6					3.6	
LQ1U41□□	ø12					9.4	
LQ1U42□□	ø10	24	21	63	28	7.4	23
LQ1U51□□	ø19					15	
LQ1U52□□	ø12					9.4	
LQ1U61□□	ø25	39.5	36	102	49	21.2	46
LQ1U62□□	ø19					15	

Inch sizes

Model	Applicable tubing O.D.	E	H	L	M	Min. port size	W
LQ1U1A	1/8"	10	—	29	11.5	1.8	10
LQ1U2A□□	1/4"					3.6	
LQ1U2B□□	3/16"	15	14	41	16.5	2.9	14
LQ1U2C□□	1/8"					1.8	
LQ1U3A□□	3/8"					5.8	
LQ1U3B□□	1/4"	20	17	54	23	3.6	19
LQ1U4A□□	1/2"					9	
LQ1U4B□□	3/8"					5.8	
LQ1U5A□□	3/4"	29	26	77	39	15	32
LQ1U5B□□	1/2"					9	
LQ1U6A□□	1"					21.2	
LQ1U6B□□	3/4"	39.5	36	102	49	15	46

Metric sizes

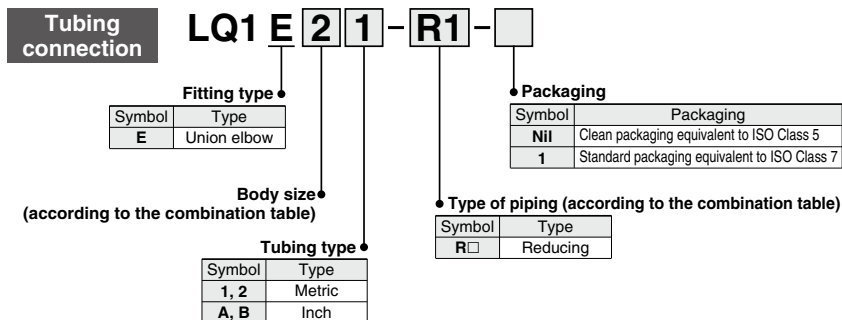
Model	Applicable tubing O.D.	E	H	J	L	N	M	W	(T)	X	Min. port size
LQ1F41	ø12	28	30	53	60	21	33.1	34	12	10	9.4
LQ1F42	ø10				58						7.4
LQ1F51	ø19	32	36	58	65.2	26	40	41	14	16	15
LQ1F52	ø12				63.2						9.4
LQ1F61	ø25				21.2						
LQ1F62	ø19	39.5	36	69	81.5	—	49	51	14	22.5	15

Inch sizes

Model	Applicable tubing O.D.	E	H	J	L	N	M	W	(T)	X	Min. port size
LQ1F4A	1/2"	28	30	53	60	21	33.1	34	12	10	9
LQ1F4B	3/8"				58						5.8
LQ1F5A	3/4"	32	36	58	65.2	26	40	41	14	16	15
LQ1F5B	1/2"				63.2						9
LQ1F6A	1"				21.2						
LQ1F6B	3/4"	39.5	36	69	81.5	—	49	51	14	22.5	15

Union Elbow Reducing

How to Order



Size combination (Metric)

Class	Model	A side	B side
		Applicable tubing size (mm)	
4	LQ1E41-R2	12 x 10	8 x 6
	* LQ1E41-R3		6 x 4
	* LQ1E41-R4		4 x 2
5	* LQ1E51-R2	19 x 16	10 x 8
	* LQ1E51-R3		8 x 6
	* LQ1E51-R4		6 x 4
	* LQ1E51-R5		4 x 3
6	* LQ1E61-R2	25 x 22	12 x 10
	* LQ1E61-R3		10 x 8
	* LQ1E61-R4		8 x 6
	* LQ1E61-R5		6 x 4

Note 1) Products marked "*" are produced upon receipt of order.
(The body of the fitting is PTFE machined.)

Note 2) For details of the applicable tubing sizes, refer to page 945.

Size combination (Inch)

Class	Model	A side	B side
		Applicable tubing size (inch)	
3	* LQ1E3A-R3	3/8" x 1/4"	1/8" x 0.086"
	LQ1E4A-R2		1/4" x 5/32"
4	* LQ1E4A-R3	1/2" x 3/8"	3/16" x 0.127"
	* LQ1E4A-R4		1/8" x 0.086"
5	* LQ1E5A-R2	3/4" x 5/8"	3/8" x 1/4"
	* LQ1E5A-R3		1/4" x 5/32"
	* LQ1E5A-R4		3/16" x 0.127"
6	* LQ1E6A-R2	1" x 7/8"	1/2" x 3/8"
	* LQ1E6A-R3		3/8" x 1/4"
	* LQ1E6A-R4		1/4" x 5/32"
	* LQ1E6A-R5		3/16" x 0.127"

Note 1) Products marked "*" are produced upon receipt of order.
(The body of the fitting is PTFE machined.)

Note 2) For details of the applicable tubing sizes, refer to page 945.

LVC

LVA

LVH

LVD

LVQ

LVP

LVW

LQ1

LQ3

LVN

LQHB

TL

TIL

TLM

TILM

TD

TID

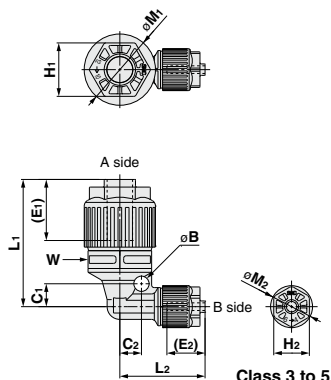
TH

TIH

LQ1 Series

Dimensions

Union Elbow Reducing: LQ1E-R



Class 6

Metric Size

Model	Applicable tubing O.D.		B	C ₁	C ₂	E ₁	E ₂	H ₁	H ₂	L ₁	L ₂	M ₁	M ₂	Min. port size	W
	A side	B side													
LQ1E41-R2	ø12	ø8	6	9	9		20		17	43	38.5		23	5.5	—
* LQ1E41-R3	ø12	ø6	—	—	—	24	15	21	14	35.5	31.5	28	16.5	3.6	25
* LQ1E41-R4	ø12	ø4	—	—	—									2.6	
* LQ1E51-R2	ø19	ø10	—	—	—	39.5	20	36	17	56.5	52.5	49	23	7.4	46
* LQ1E51-R3	ø19	ø8	—	—	—				54	47.5				5.5	
* LQ1E51-R4	ø19	ø6	—	—	—	39.5	15	36	14	51	42	39	16.5	3.6	32
* LQ1E51-R5	ø19	ø4	—	—	—									2.6	
* LQ1E61-R2	ø25	ø12	—	—	—		24		21	56.5	52.5		28	9.4	
* LQ1E61-R3	ø25	ø10	—	—	—	39.5	20	36	17	54	47.5	49	23	7.4	46
* LQ1E61-R4	ø25	ø8	—	—	—									5.5	
* LQ1E61-R5	ø25	ø6	—	—	—		15		15	51	42		16.5	3.6	

Note) Products marked "*" are produced upon receipt of order.
(The body of the fitting is PTFE machined.)

Inch Size

Model	Applicable tubing O.D.		B	C ₁	C ₂	E ₁	E ₂	H ₁	H ₂	L ₁	L ₂	M ₁	M ₂	Min. port size	W
	A side	B side													
* LQ1E3A-R3	3/8"	1/8"	—	—	—	24	15	21	14	35.5	31.5	28	16.5	1.8	—
LQ1E4A-R2	1/2"	1/4"	6	9	9		20		17	43	38.5		23	3.6	—
* LQ1E4A-R3	1/2"	3/16"	—	—	—	24	15	21	14	35.5	31.5	28	16.5	2.9	—
* LQ1E4A-R4	1/2"	1/8"	—	—	—									1.8	
* LQ1E5A-R2	3/4"	3/8"	—	—	—	39.5	20	36	17	54	47.5	49	23	5.8	46
* LQ1E5A-R3	3/4"	1/4"	—	—	—				15	51	42			3.6	
* LQ1E5A-R4	3/4"	3/16"	—	—	—	39.5	15	36	14	51	42	39	16.5	2.9	
* LQ1E6A-R2	1"	1/2"	—	—	—		24		21	56.5	52.5		28	9	
* LQ1E6A-R3	1"	3/8"	—	—	—	39.5	20	36	17	54	47.5	49	23	5.8	46
* LQ1E6A-R4	1"	1/4"	—	—	—									3.6	
* LQ1E6A-R5	1"	3/16"	—	—	—		15		14	51	42		16.5	2.9	

Note) Products marked "*" are produced upon receipt of order.
(The body of the fitting is PTFE machined.)