

Push-in fittings QS, standard

FESTO



Festo Core Range
Solves the majority of your automation tasks

With the Festo Core Range, we have selected the most important products and functions from our broad product catalogue, and added the quickest delivery.

Worldwide: Quickest delivery – wherever, whenever
Simply good: Expected high Festo quality
Fast: Easy and fast to select

The Core Range offers you the best value for your automation tasks.

Just look
for the
star!

Key features

Application



Choosing the right fitting is effortless. With a system that includes well over 1000 types of standard and function fittings, Festo offers the right solution for every connection.

Overview of tubing/fitting combinations			
Applications	Fitting	Tubing	Description
Standard	QS(M)	PUN-H	Maximum flexibility in standard applications thanks to an extremely wide range of options for combining the different types.
	QS(M)	PEN	Suitable for a wide range of tasks and attractively priced. Flexible thanks to highly resistant materials, easy to install thanks to optimised bending radii. High level of abrasion resistance in dynamic applications.
	QS(M)	PAN	Meets all requirements, even for standard applications with increased pressure and temperature ranges.
High pressures	NPQM	PAN-MF	Meets DIN standard 73378: ideal for use in mobile pneumatics. Suitable for increased temperature ranges combined with high pressure ranges.
	NPQH	PAN-R	Powerful in pressure ranges up to 20 bar, for example in applications with the pressure booster DPA.
Resistant to chemicals, food-safe and hydrolysis-resistant	NPQP	PLN	Resistant to cleaning agents, FDA-compliant and economical. Can be used instead of the combination with stainless steel fittings.
	NPKA	PUN-H	Hydrolysis-resistant and suitable for water applications. Combination suitable for use in cleanrooms, FDA-compliant and corrosion-resistant because it's 100% polymer. Very easy to install with the "one click principle".
	NPQH	PFAN/PTFEN	For high temperatures up to 150°C. Food-safe, FDA-compliant and resistant to cleaning agents.
	NPCK	PFAN/PTFEN	Easy to clean thanks to the union nut's edge-free design. Maximum corrosion resistance (CRC 4) and FDA-compliant. Suitable for a wide range of media.
	CRQS	PFAN/PTFEN	Maximum corrosion resistance (CRC 4) and maximum resistance to aggressive acids and alkalis.
Resistant to chemicals and hydrolysis	NPQR	PFAN/PTFEN	Optimised design, fewer edges where dirt can collect – all at an attractive price. For high temperatures up to 150°C. Pressure range up to 16 bar. Maximum corrosion resistance (CRC 4).
Antistatic	NPQM	PUN-CM	Antistatic tubing plus solid metal fitting: maximum protection for electric and electronic components.
Flame-retardant	NPQM	PUN-V0	Very safe in areas where there is a risk of fire with its flame-retardant properties. The tubing has been tested to DIN 5510-2.
Resistant to welding spatter	NPQH	PUN-V0-C	Ideal for applications involving welding spatter. Reliable thanks to a tubing wall thickness of 2 mm for all diameters.
	QS-V0	PAN-V0	Safe even in the close vicinity of welding spatter with the double-walled tubing with special fitting.

Key features

Push-in fittings – product range

QSM, mini

Datasheets → Internet: qsm



Miniature push-in fittings for maximum component density in confined spaces. For pneumatic applications with a temperature range up to 80°C and a pressure range up to 14 bar. Tubing O.D. of 2, 3, 4 and 6 mm with connecting threads M3, M5, M6, M7, R1/8 and G1/8.

QS, standard

Datasheets → Internet: qs



Wide selection of push-in fittings for pneumatic applications with a temperature range up to 80°C and a pressure range up to 14 bar. Tubing O.D. 4, 6, 8, 10, 12, 16 and 22 mm with connecting threads R1/8 ... R1/2 and G1/8 ... G3/4.

CRQS, stainless steel

Datasheets → Internet: crqs



Stainless steel push-in fitting. Maximum corrosion resistance CRC 4 and chemical resistance with approval for use in the food and packaging industry. For pneumatic applications with a temperature range up to 120°C and a pressure range up to 10 bar. Tubing O.D. 4, 6, 8, 10, 12 and 16 mm with connecting threads M5 and R1/8 ... R1/2.

QS-V0, resistant to welding spatter

Datasheets → Internet: qs-v0



Flame-retardant push-in fitting for use in all areas where there is a risk of fire, for example welding systems in the automotive industry, and in the construction industry. For pneumatic applications with a temperature range up to 60°C and a pressure range up to 10 bar. Tubing O.D. 4, 6, 8, 10 and 12 mm with connecting thread R1/8 ... R1/2 and G1/8 ... G1/2.

NPQH

Datasheets → Internet: npqh



All-metal push-in fitting made of chemically nickel-plated brass. High corrosion resistance CRC 3 and chemical resistance. For pneumatic applications with a temperature range up to 150°C and a pressure range up to 20 bar. Tubing O.D. 4, 6, 8, 10, 12 and 14 mm with connecting threads M5, M7 and G1/8 ... G1/2.

NPQM

Datasheets → Internet: npqm



Attractively priced metal push-in fitting for pneumatic applications with a temperature range up to 70°C and a pressure range up to 16 bar. Tubing O.D. 3, 4, 6, 8, 10, 12 and 14 mm with connecting threads M5, M7 and G1/8 ... G1/2.

NPQP

Datasheets → Internet: npqp



Polypropylene fitting for use in applications with extreme media influences. For pneumatic applications with a temperature range up to 60°C and a pressure range up to 10 bar. Tubing O.D. 4, 6, 8, 10 and 12 mm with connecting threads R1/8 ... R1/2.

NPQR, stainless steel

Datasheets → Internet: npqr



Stainless steel push-in fitting. Maximum corrosion resistance CRC 4 and chemical resistance. For pneumatic applications with a temperature range up to 150°C and a pressure range up to 16 bar. Tubing O.D. of 4, 6, 8, 10 and 12 mm with connecting threads M5, M7 and G1/8 ... G1/2.

Key features

Functional push-in fittings – product range

QSK,
push-in fitting, self-sealing

Datasheets → Internet: qsk



Push-in fitting that blocks the air flow after the tubing is disconnected. For pneumatic applications with a temperature range up to 60°C and a pressure range up to 14 bar.

Tubing O.D. 4, 6, 8, 10 and 12 mm with connecting threads M5, R1/8 ... R1/2 and G1/8 ... G1/2.

QSR,
push-in fitting, rotatable

Datasheets → Internet: qsr



Push-in fitting with swivel joint, rotatable 360°. The ball bearing enables rotating movements in the application up to max. 500 rpm. For pneumatic applications with a temperature range up to 60°C and a pressure range up to 14 bar.

Tubing O.D. 4, 6, 8, 10 and 12 mm with connecting threads M5, R1/8 ... R1/2 and G1/8 ... G1/2.

Quick connectors – product range

NPCK

Datasheets → Internet: npck



Stainless steel fitting for use in areas subject to intensive cleaning. Maximum level of corrosion resistance CRC 4. For pneumatic applications with a temperature range up to 120°C and a pressure range up to 12 bar. Tubing O.D. of 4, 6, 8 and 10 mm with connecting threads M5 and G1/8 ... G3/8.

Click fittings – product range

NPKA

Datasheets → Internet: npka



Plastic fitting for easy installation with one hand. Hydrolysis-resistant, FDA-compliant and easy to clean. For pneumatic applications with a temperature range up to 60°C and a pressure range up to 10 bar. Tubing O.D. of 6 mm with connecting thread G1/8.

Simply "plug and work"

The stainless steel retaining claw holds the tubing securely without damaging its surface. Vibration and pressure surges are absorbed.

Reliably connected

A nitrile rubber sealing ring guarantees a perfect seal between standard OD tubing and the body of the fitting. The standard tubing combined with the Festo push-in connector is suitable for compressed air and vacuum.

The captive seal

All brass parts of Festo's push-in fittings have nickel-plated surfaces and are thus highly resistant to corrosion. The tapered ISO R threads have a self-sealing PTFE coating, which allows the fitting to be re-used up to five times without the need for additional sealing components.

Rotatable

It can be rotated once it has been fitted.

Key features

Which fitting fits which thread?

Metric thread

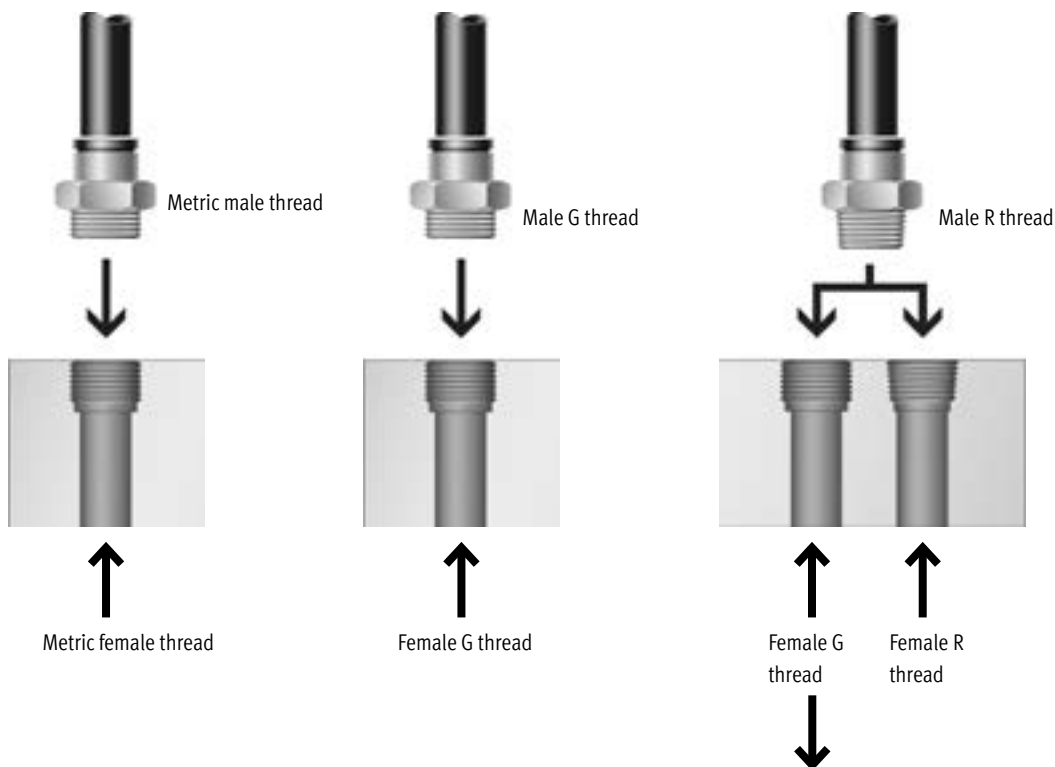
- These threads are comparable with G threads and are fitted as cylindrical metric threads
- Sealing is guaranteed as the O-ring sits in a groove that seals against the tube.


G thread to ISO 228-1


- Shorter thread
- Constant installation depth
- Replaceable sealing ring
- Sealing on the front
- Can be re-used a number of times thanks to replaceable sealing ring.

R thread to EN 10226-1 and ISO 7/1

- Self-sealing thread
- Sealing via coated threads
- No additional sealing surface required
- Smaller installation dimensions since there is no need for an offset for the sealing surface
- Can be reused up to 5 times.



 **Note**
 If male R threads are combined with female G threads, leakage can occur if the female G thread was not manufactured cleanly or if it is not within permissible tolerances. In this case additional sealing, e.g. using a sealing band, is required.

 **Note**

All R threads are coated with a sealing material. This coating replaces the conventional sealing ring. Simply screw in the R thread by hand and tighten it by turning it 1 or 2 times using an open-ended spanner. The fitting can be re-installed up to five times.

When screwing in R threads several times, you must make sure that the abraded particles from the sealing material coating cannot enter the compressed air system.

Key features

Fitting/removing the tubing

Fitting

The prerequisite for ensuring that the inside seal is securely held and protected against damage is that the tube is cut into straight lengths and deburred.

- 1) Insert tubing as far as the stop.
It is important to ensure that the tubing is inserted into the inner seal. Depending on the tolerance between the tubing and the seal, the contact of the tubing with the seal may be wrongly interpreted as the stop.
- 2) Check that the tubing connection is secure by pulling gently on the tube.

Removal

- 1) The tubing can be detached easily by pressing and holding down the release ring. Carefully remove the tubing from the fitting.
- 2) Before re-using the tubing, remove the damaged part by cutting it off.

Technical data

General technical data	
Design	Push-pull principle
Mounting position	Any
Type of seal on screwed trunnion	Sealing ring for M/G thread
	Coating for R thread
Nominal tightening torque [Nm]	1.33 ±20% for M5 male thread
	7 ±20% with G1/8 male thread
	9 ±20% with G1/4 male thread
	15.5 ±20% with G3/8 male thread
	26 ±20% with G1/2 male thread
	20 ±20% with G3/4 male thread
Tubing insertion depth ¹⁾ [mm]	15 with tubing O.D. 4 mm (12 with QSW)
	17 with tubing O.D. 6 mm (12 with QSW)
	18 with tubing O.D. 8 mm
	20.5 with tubing O.D. 10 mm
	23.5 with tubing O.D. 12 mm
	24.5 with tubing O.D. 16 mm
	28 with tubing O.D. 22 mm

1) The indicated tubing insertion depths are reference values and may vary slightly depending on the type.



Note

When using push-in fittings with internal hex, ensure that the Allen key is not inserted too far into the fitting when tightening it, to prevent the risk of damage to components behind the fitting.

Operating and environmental conditions		
Type	Except QS-G3/4-22	QS-G3/4-22
Operating pressure for entire temperature range [bar]	-0.95 ... +6	-0.95 ... +14
Temperature-dependent operating pressure [bar]	-0.95 ... +14 → graph	-0.95 ... +14
Operating medium	Compressed air to ISO 8573-1:2010 [7:-:-]	
	Water as per manufacturer's declaration ¹⁾²⁾	
Note on the operating/pilot medium	Lubricated operation possible	
Ambient temperature [°C]	-10 ... +80	-20 ... +80
Corrosion resistance class CRC ³⁾	1	
Maritime classification	See certificate ¹⁾	-

1) Additional information: www.festo.com/catalogue/qs → Support/Downloads.

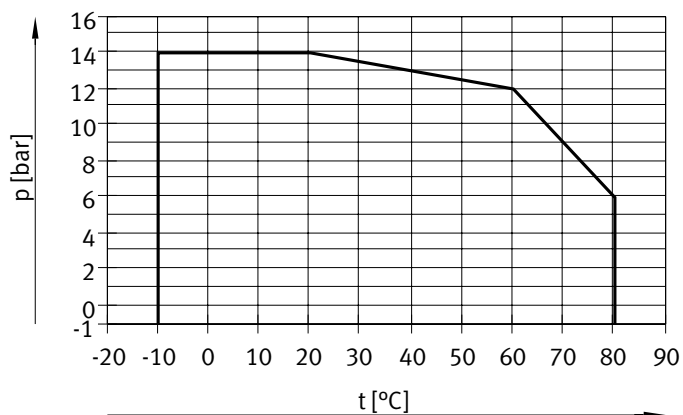
2) The sealing ring supplied must be replaced with a sealing ring OL on push-in fittings with a G thread → Internet: ol

3) Corrosion resistance class CRC 1 to Festo standard FN 940070

Low corrosion stress. Dry internal application or transport and storage protection. Also applies to parts behind covers, in the non-visible interior area, or parts which are covered in the application (e.g. drive trunnions).

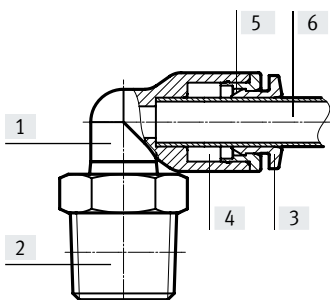
Technical data

Operating pressure p as a function of temperature t (except QS-G3/4-22)



Materials

Sectional view



Type	QS, standard
[1] Housing	Nickel-plated brass, PBT, anodised aluminium
[2] Screwed trunnion	Nickel-plated brass
[3] Releasing ring	POM (colour: blue)
[4] Tubing seal	NBR
[5] Tube clamping segment	High-alloy stainless steel
[6] Plastic tubing, standard O.D.	PUN-H, PEN, PAN
[-] Nut (QSS/QSSF)	Nickel-plated brass
[-] Hollow bolt (QSLV/QSTF/QSYLV)	Nickel-plated brass
Note on materials	RoHS-compliant









Possible push-in fitting/tubing combinations

Thread	Tubing O.D. [mm]						
	4	6	8	10	12	16	22
M5	++	+	-	-	-	-	-
R1/8	+	++	+	+	-	-	-
R1/4	+	+	++	+	+	-	-
R3/8	-	+	+	++	+	+	-
R1/2	-	-	-	+	++	+	-
G1/8	+	++	+	+	-	-	-
G1/4	+	+	++	+	+	-	-
G3/8	-	+	+	++	+	+	-
G1/2	-	-	-	-	++	+	-
G3/4	-	-	-	-	-	-	++

+ Possible thread/tubing O.D. combinations


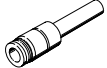
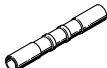
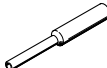
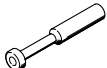


++ Optimum thread/tubing O.D. combination (for the flow rate)

Product range overview

Design	Design	Type	Connection D1				Connection D2				→ Page
			M thread	R thread	G thread	Tubing O.D.	Push-in sleeve ∅	Tubing O.D.	Push-in sleeve ∅		
Straight shape	Push-in fitting – Male thread with external hex										
		QS	-		R1/8	G1/8	-	-	4, 6, 8, 10 ¹⁾	-	14
					R1/4	G1/4			4 ¹⁾ , 6, 8, 10, 12		
					R3/8	G3/8			6 ¹⁾ , 8, 10, 12, 16		
					R1/2	G1/2			10 ¹⁾ , 12, 16		
					-	G3/4			22		
											16
	Push-in fitting – Male thread with internal hex										
		QS-...-I	-		R1/8	G1/8	-	-	4, 6, 8, 10	-	17
					R1/4	G1/4			6, 8, 10, 12 ¹⁾		
R3/8					G3/8	8, 10, 12					
R1/2					G1/2	10 ¹⁾ , 12					
Push-in fitting – Female thread with external hex											
	QSF	-	-	G1/8	-	-	-	4, 6, 8	-	19	
				G1/4				4, 6, 8, 10, 12			
				G3/8				6, 8, 10, 12			
				G1/2				12, 16			
Push-in connector											
	QS	-	-	-	4	-	-	4	-	20	
					6			6			
					8			8			
					10			10			
					12			12			
					16			16			
	QS Reducing	-	-	-	6	-	-	4	-	20	
					8			4, 6			
					10			6, 8			
					12			8, 10			
Push-in bulkhead connector											
	QSS	-	-	-	4	-	-	-	-	21	
					6						
					8						
					10						
					12						
Push-in bulkhead connector with fixed collar											
	QSS-...-F	-	-	-	4	-	-	-	-	21	
					6						
					8						
					10						
					12						
Bulkhead push-in fitting with female thread											
	QSSF	-	-	G1/8	-	-	-	4, 6, 8	-	22	
				G1/4				4, 6, 8, 10			
				G3/8				6, 8, 10, 12			
				G1/2				12, 16			

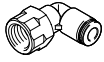






1) Only in conjunction with R thread

Product range overview

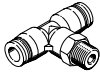


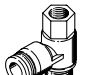
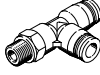

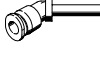

Design	Design	Type	Connection D1				Connection D2			→ Page
			M thread	R thread	G thread	Tubing O.D.	Push-in sleeve ø	Tubing O.D.	Push-in sleeve ø	
Straight shape	Push-in cap									
		QSC	-	-	-	4	-	-	-	23
						6				
						8				
						10				
						12				
	Push-in connector with push-in sleeve									
		QS-...H	-	-	-	-	6	4	-	24
							8	4, 6		
							10	6, 8		
						12	6, 8, 10			
Push-in sleeve										
	QSH	-	-	-	-	4	-	-	25	
						6				
						8				
						10				
						12				
	QSH Reducing	-	-	-	-	6	-	4	25	
						8		4, 6		
						10		6, 8		
						12		8, 10		
						16		12		
Blanking plug										
	QSC-...H	-	-	-	-	4	-	-	26	
						6				
						8				
						10				
						12				
L-shape	Push-in L-fitting – Male thread with external hex, rotatable									
		QSL	-	R1/8	G1/8	-	-	4, 6, 8, 10 ¹⁾	-	27
				R1/4	G1/4			4 ¹⁾ , 6, 8, 10, 12		
				R3/8	G3/8			6 ¹⁾ , 8, 10, 12, 16		
				R1/2	G1/2			10 ¹⁾ , 12, 16 ²⁾		
	Push-in L-fitting, long – male thread with external hex, rotatable									
		QSL	-	R1/8	G1/8	-	-	4, 6, 8	-	29
				R1/4	G1/4			4 ¹⁾ , 6, 8, 10, 12 ²⁾		
				R3/8	G3/8			6 ¹⁾ , 8, 10, 12		
				R1/2	G1/2			10 ¹⁾ , 12, 16 ²⁾		

1) Only in conjunction with R thread
 2) Only in conjunction with G thread

Product range overview

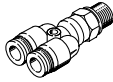







Design	Design	Type	Connection D1				Connection D2			→ Page
			M thread	R thread	G thread	Tubing O.D.	Push-in sleeve ∅	Tubing O.D.	Push-in sleeve ∅	
L-shape	Push-in L-fitting – Female thread with external hex, rotatable									
		QSLF	–	–	G1/8	–	–	4, 6, 8	–	31
				G1/4			6, 8, 10			
				G3/8			8, 10			
	Push-in L-fitting – Male thread with internal hex, rotatable									
		QSLV-...-I	–	R1/8	G1/8	–	–	6, 8	–	32
				R1/4	G1/4			6, 8, 10		
				R3/8	G3/8			8, 10, 12		
				R1/2	G1/2			12		
	Push-in L-fitting – Male thread with external hex, rotatable									
		QSLV	M5	–	–	–	–	6	–	33
			–	R1/8	G1/8	–	–	4, 6, 8	–	
				R1/4	G1/4			6, 8, 10		
				R3/8	G3/8			8, 10, 12		
				R1/2	G1/2			12, 16		
Push-in L-connector										
	QSL	–	–	–	4	–	–	–	35	
					6					
					8					
					10					
					12					
					16					
Push-in L-connector with push-in sleeve										
	QSL-...H	–	–	–	–	4	4	–	36	
						6	6			
						8	8			
						10	10			
						12	12			
	QSL-...H Reducing	–	–	–	–	6	4	–	36	
						8	6			
						10	8			
						12	10			
	QSL-...HL Long push-in sleeve	–	–	–	–	4	4	–	36	
						6	6			
						8	8			
						10	10			
						12	12			

Product range overview

Design	Design	Type	Connection D1				Connection D2			→ Page	
			M thread	R thread	G thread	Tubing O.D.	Push-in sleeve ø	Tubing O.D.	Push-in sleeve ø		
T-shape	Push-in T-fitting – Male thread with external hex, rotatable										
		QST	-	R1/8	G1/8	-	-	4, 6, 8, 10 ¹⁾	-	37	
				R1/4	G1/4			4 ¹⁾ , 6, 8, 10, 12			
				R3/8	G3/8			6 ¹⁾ , 8, 10, 12, 16			
				R1/2	G1/2			10 ¹⁾ , 12, 16			
	Push-in T-connector										
		QST	-	-	-	-	4	-	4	-	39
							6		6		
							8		8		
							10		10		
							12		12		
		QST Reducing	-	-	-	-	6	-	4	-	39
							8		4, 6		
							10		6, 8		
							12		8, 10		
16							12				
Push-in T-fitting – Male and female thread with external hex, rotatable											
	QSTF	-	R1/8	G1/8	-	-	4, 6, 8	-	40		
			R1/4	G1/4			6, 8, 10				
			R3/8	G3/8			8, 10, 12				
			R1/2	G1/2			12				
Push-in T-fitting – Male thread with external hex, rotatable											
	QSTL	-	R1/8	G1/8	-	-	4, 6, 8	-	41		
			R1/4	G1/4			6, 8, 10				
			R3/8	G3/8			8, 10, 12				
			R1/2	G1/2			12, 16				
Angled 45°	Push-in fitting – Male thread with external hex, rotatable										
		QSW	-	R1/8	-	-	-	4, 6, 8	-	43	
				R1/4				6, 8, 10			
				R3/8				10, 12			
				R1/2				12, 16			
	Push-in connector with push-in sleeve										
		QSW-...HL	-	-	-	-	-	4	4	-	44
								6	6		
								8	8		
								10	10		
12								12			
X shape	Push-in X-connector										
		QSX	-	-	-	-	8	-	-	44	
							10				
12											

1) Only in conjunction with R thread

Product range overview

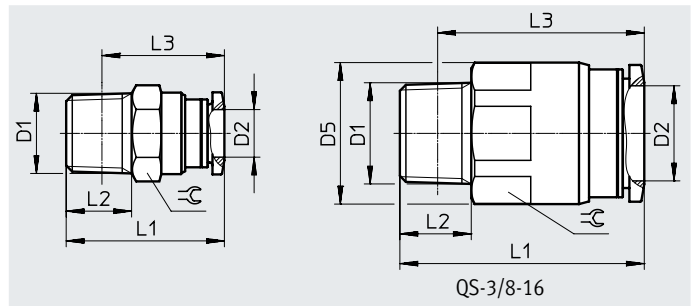
Design	Design	Type	Connection D1				Connection D2			→ Page	
			M thread	R thread	G thread	Tubing O.D.	Push-in sleeve ∅	Tubing O.D.	Push-in sleeve ∅		
Y shape	Push-in Y-fitting – Male thread with external hex, rotatable										
		QSY	M5	–	–	–	–	–	4, 6	–	45
				R1/8	G1/8	4, 6, 8					
				R1/4	G1/4	4 ¹⁾ , 6, 8, 10					
				R3/8	G3/8	8, 10, 12					
				R1/2	G1/2	10 ¹⁾ , 12					
	Push-in Y-connector										
		QSY	–	–	–	–	4	–	4	–	47
									6		
									8		
									10		
									12		
									16		
		QSY Reducing	–	–	–	–	6	–	4	–	47
									8		
10											
12											
16											
12											
Push-in Y-connector with push-in sleeve											
	QSY-...H(-B)	–	–	–	–	–	–	4	–	48	
								6			
								8			
								10			
								12			
	QSY-...H(-B) Reducing	–	–	–	–	–	–	6	–	48	
								8			
								10			
								12			
								10			
Push-in Y-fitting – Male thread with external hex, rotatable											
	QSYL	–	R1/8	G1/8	–	–	–	4, 6, 8	–	49	
			R1/4	G1/4				6, 8, 10			
			R3/8	G3/8				8, 10, 12			
			R1/2	G1/2				12			
			Push-in Y-fitting – Male thread with external hex, rotatable								
	QSYLV	–	R1/8	G1/8	–	–	–	6	–	50	
			R1/4	G1/4				8			
			R3/8	G3/8				10			
			R1/2	G1/2				12			
			Releasing tool	Quick-out releasing tool for push-in connections							
	QSO								51		

1) Only in conjunction with R thread

Datasheet

Push-in fitting QS

Male thread with external hex



Dimensions and ordering data

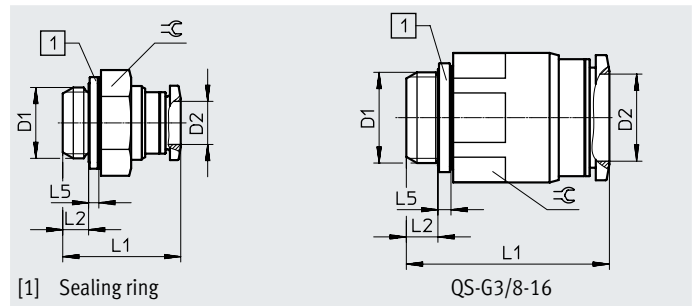
Pneumatic connection		Nominal width [mm]	Dimensions [mm]					Weight/ piece [g]	Part no.	Type	PS ¹⁾
Male thread D1	For tubing O.D. D2		D5	L1	L2	L3	⌀				
R thread											
R1/8	4	3	–	21	8	17	10	7.4	★ 153001	QS-1/8-4	10
									130674	QS-1/8-4-100	100
	6	5	–	22.3	8	18.3	12	8.2	★ 153002	QS-1/8-6	10
									130675	QS-1/8-6-100	100
	8	6	–	27.9	8	23.9	14	14	★ 153004	QS-1/8-8	10
									130676	QS-1/8-8-50	50
	10	6	–	30.3	8	26.3	17	21	★ 190643	QS-1/8-10	10
R1/4	4	3	–	22.5	11	16.5	14	16	★ 190644	QS-1/4-4	10
									★ 153003	QS-1/4-6	10
									130677	QS-1/4-6-100	100
	6	5	–	23.7	11	17.6	14	15	★ 153005	QS-1/4-8	10
									130678	QS-1/4-8-50	50
	8	7	–	26.6	11	20.6	14	14	★ 153007	QS-1/4-10	10
									130679	QS-1/4-10-50	50
	10	8.5	–	29.8	11	23.8	17	19	★ 164980	QS-1/4-12	10
									130680	QS-1/4-12-20	20
R3/8	6	5	–	24.5	12	18.1	17	28	★ 190645	QS-3/8-6	10
									★ 153006	QS-3/8-8	10
									130681	QS-3/8-8-50	50
	8	7	–	25.5	12	19.2	17	25	★ 153008	QS-3/8-10	10
									130682	QS-3/8-10-50	50
	10	9	–	29.3	12	23	17	24	★ 153009	QS-3/8-12	10
								130683	QS-3/8-12-20	20	
	12	11	–	31.9	12	25.6	21	30	★ 153010	QS-3/8-16	1
									164957	QS-3/8-16	1
	16	11	23.8	41.1	12	34.8	22	50	★ 190646	QS-1/2-10	1
R1/2	10	9	–	30.4	15	22.2	21	46	★ 153010	QS-1/2-10-50	50
									133189	QS-1/2-10-50	50
	12	11	–	33.9	15	25.7	21	44	★ 153010	QS-1/2-12	1
									130684	QS-1/2-12-20	20
	16	13	–	41.3	15	33.1	24	63	153011	QS-1/2-16	1
								130685	QS-1/2-16-20	20	

1) Pack size

Datasheet

Push-in fitting QS

Male thread with external hex

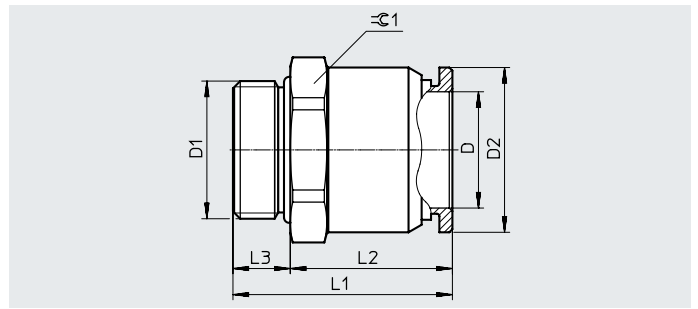


Pneumatic connection		Nominal width [mm]	Dimensions [mm]				Weight/ piece [g]	Part no.	Type	PS ¹⁾	
Male thread D1	For tubing O.D. D2		L1	L2	L5	⌀					
G thread with sealing ring											
G1/8	4	3	19.5	4.2	1.9	13	9.1	★ 186095	QS-G1/8-4	10	
								132036	QS-G1/8-4-100	100	
	6	5	20.6	4.2	1.9	13	8.3	★ 186096	QS-G1/8-6	10	
								132037	QS-G1/8-6-100	100	
G1/8	8	6	25.8	4.2	1.9	14	13	★ 186098	QS-G1/8-8	10	
								132038	QS-G1/8-8-50	50	
	G1/4	6	5	21.2	4.8	1.9	17	17	★ 186097	QS-G1/4-6	10
									132039	QS-G1/4-6-100	100
8		7	21.9	4.8	1.9	17	15	★ 186099	QS-G1/4-8	10	
								132040	QS-G1/4-8-50	50	
G1/4	10	8.5	28.9	4.8	1.9	17	21	★ 186101	QS-G1/4-10	10	
								132041	QS-G1/4-10-50	50	
	12	8.5	34.1	4.8	1.9	21	39	★ 186350	QS-G1/4-12	10	
								132042	QS-G1/4-12-20	20	
G3/8	8	7	21.7	5.8	2.4	19	22	★ 186100	QS-G3/8-8	10	
								132043	QS-G3/8-8-50	50	
	10	9	25.4	5.8	2.4	19	22	★ 186102	QS-G3/8-10	10	
								132044	QS-G3/8-10-50	50	
G3/8	12	11	31.5	5.8	2.4	21	33	★ 186103	QS-G3/8-12	10	
								132045	QS-G3/8-12-20	20	
	16	11	37.3	5.8	2.4	22	45	186347	QS-G3/8-16	1	
	G1/2	12	11	28	6.8	2.4	24	39	★ 186104	QS-G1/2-12	1
								132046	QS-G1/2-12-20	20	
16		13	35.3	6.8	2.4	24	51	186105	QS-G1/2-16	1	
								132047	QS-G1/2-16-20	20	

1) Pack size

Datasheet

Push-in fitting QS G3/4-22
Male thread with external hex



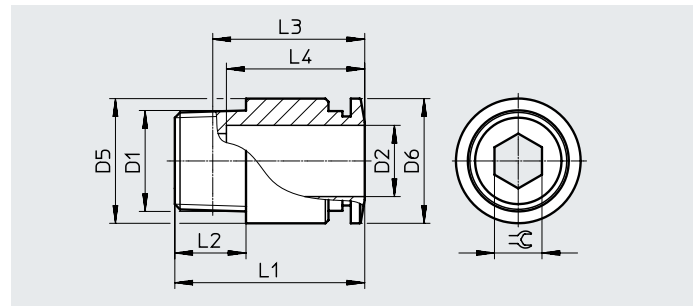
Dimensions and ordering data

Pneumatic connection		Nominal width [mm]	Dimensions [mm]					≈G 1	Weight/ piece [g]	Part no.	Type	PS ¹⁾
Male thread	For tubing O.D.		D2 ∅	L1	L2	L3						
D1	D											
G thread with sealing ring												
G3/4	22	20	31.6	42.1	31.1	11	32	93.2	8040613	QS-G3/4-22	1	

1) Pack size

Datasheet

Push-in fitting QS-...-I
Male thread with internal hex



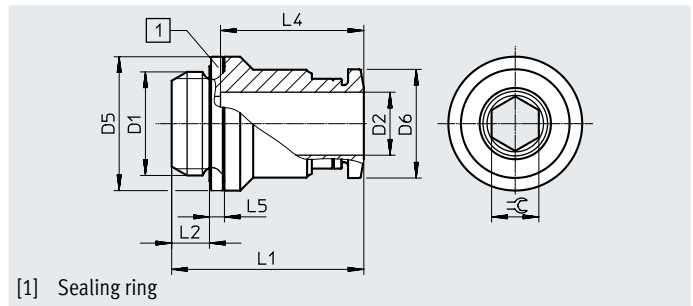
Dimensions and ordering data														
Pneumatic connection		Nominal width [mm]	Dimensions [mm]								Weight/ piece [g]	Part no.	Type	PS ¹⁾
Male thread	For tubing O.D.		D5 ø	D6 ø	L1	L2	L3	L4	L5	⌀				
D1	D2													
R thread														
R1/8	4	2.6	9.7	9.9	20	8	16	14.9	-	2.5	6.6	★ 153012	QS-1/8-4-I	10
												133191	QS-1/8-4-I-100	100
	6	4.2	11.8	11.8	22.1	8	18.1	17	-	4	7.6	★ 153013	QS-1/8-6-I	10
												133186	QS-1/8-6-I-100	100
	8	5.3	13.7	13.8	25.9	8	21.9	18.2	-	5	8.8	★ 153015	QS-1/8-8-I	10
											133187	QS-1/8-8-I-50	50	
R1/4	10	5.3	17.5	16.8	30.3	8	26.3	20.7	-	5	17	★ 190647	QS-1/8-10-I	10
	6	4.2	13.7	11.8	21.3	11	15.2	17	-	4	13	★ 153014	QS-1/4-6-I	10
												133193	QS-1/4-6-I-100	100
	8	6.3	13.7	13.8	25.1	11	19.1	18.2	-	6	13	★ 153016	QS-1/4-8-I	10
												133190	QS-1/4-8-I-50	50
	10	6.3	17.5	16.8	29.8	11	23.8	20.7	-	6	20	★ 153018	QS-1/4-10-I	10
											133188	QS-1/4-10-I-50	50	
R3/8	12	6.3	20.8	19.8	35.9	11	29.9	23.3	-	6	29	★ 190649	QS-1/4-12-I	10
	8	6.3	16.8	13.8	22.2	12	15.9	18.2	-	6	19	★ 153017	QS-3/8-8-I	10
	10	6.3	17.5	16.8	29.3	12	23	20.7	-	6	26	★ 153019	QS-3/8-10-I	10
R1/2	12	8.4	20.8	19.8	31.9	12	25.6	23.3	-	8	31	★ 153020	QS-3/8-12-I	10
	10	6.3	20.8	16.8	30.3	15	22.1	20.7	-	6	45	★ 190648	QS-1/2-10-I	1
	12	8.4	20.8	19.8	33.9	15	25.7	23.3	-	8	45	★ 153021	QS-1/2-12-I	1

1) Pack size

Datasheet

Push-in fitting QS-...-I

Male thread with internal hex



Dimensions and ordering data

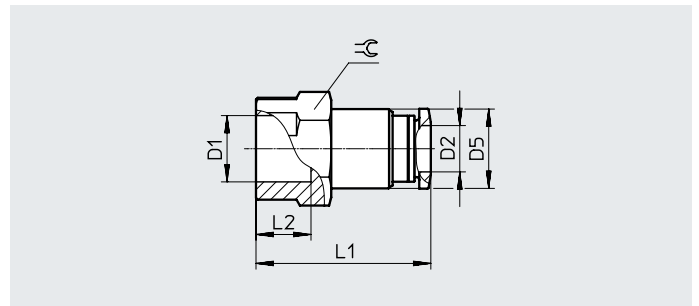
Pneumatic connection		Nominal width [mm]	Dimensions [mm]								Weight/ piece [g]	Part no.	Type	PS ¹⁾	
Male thread	For tubing O.D.		D5 ∅	D6 ∅	L1	L2	L3	L4	L5	≈G					
D1	D2														
G thread with sealing ring															
G1/8	4	2.6	13	9.9	19.5	4.2	-	14.9	1.9	2.5	7.7	★ 186106	QS-G1/8-4-I	10	
												133008	QS-G1/8-4-I-100	100	
	6	4.2	13	11.8	21.6	4.2	-	17	1.9	4	8.3	★ 186107	QS-G1/8-6-I	10	
													133009	QS-G1/8-6-I-100	100
	8	5.3	13.7	13.8	25.8	4.2	-	18.2	1.9	5	12	★ 186109	QS-G1/8-8-I	10	
													133010	QS-G1/8-8-I-100	100
	10	5.3	17	16.8	28.3	4.2	-	20.7	1.9	5	19	★ 132999	QS-G1/8-10-I	10	
												133000	QS-G1/8-10-I-100	100	
G1/4	6	4.2	17	11.8	20.2	4.8	-	17	1.9	4	13	★ 186108	QS-G1/4-6-I	10	
	8	6.3	17	13.8	24.4	4.8	-	18.2	1.9	6	14	★ 186110	QS-G1/4-8-I	10	
	10	7.3	17	16.8	28.9	4.8	-	20.7	1.9	7	20	★ 186112	QS-G1/4-10-I	10	
G3/8	8	6.3	19	13.8	23.9	5.8	-	18.2	2.4	6	20	★ 186111	QS-G3/8-8-I	10	
	10	7.3	19	16.8	26.4	5.8	-	20.7	2.4	7	22	★ 186113	QS-G3/8-10-I	10	
	12	8.4	20.8	19.8	31.5	5.8	-	23.3	2.4	8	34	★ 186114	QS-G3/8-12-I	10	
G1/2	12	8.4	24	19.8	28	6.8	-	23.3	2.4	8	33	★ 186115	QS-G1/2-12-I	1	

1) Pack size

Datasheet

Push-in fitting QSF

Female thread with external hex

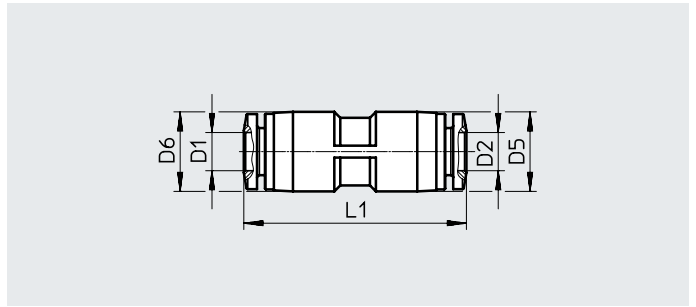


Dimensions and ordering data										
Pneumatic connection		Nominal width [mm]	Dimensions [mm]				Weight/ piece [g]	Part no.	Type	PS ¹⁾
Female thread	For tubing O.D.		D5 ø	L1	L2	⌀				
D1	D2									
G thread										
G1/8	4	3	9.7	23.9	7	14	13	★ 153022	QSF-1/8-4-B	10
								130709	QSF-1/8-4-B-100	100
	6	5	11.8	26	7	14	15	★ 153023	QSF-1/8-6-B	10
								130710	QSF-1/8-6-B-100	100
	8	7	13.7	27.2	7	14	16	★ 153025	QSF-1/8-8-B	10
								130711	QSF-1/8-8-B-50	50
G1/4	4	3	9.7	26.9	9.5	17	21	★ 190650	QSF-1/4-4-B	10
								153024	QSF-1/4-6-B	10
	6	5	11.8	29	9.5	17	23	130712	QSF-1/4-6-B-100	100
	8	7	13.7	30.2	9.5	17	24	★ 153026	QSF-1/4-8-B	10
								130713	QSF-1/4-8-B-50	50
	10	9	17.5	32.7	9.5	17	30	★ 153028	QSF-1/4-10-B	10
							130714	QSF-1/4-10-B-50	50	
G3/8	12	11	20.8	34.8	9.5	21	44	★ 190651	QSF-1/4-12-B	10
	6	5	11.8	30.5	11	21	30	★ 190652	QSF-3/8-6-B	10
								★ 153027	QSF-3/8-8-B	10
								130715	QSF-3/8-8-B-50	50
								★ 153029	QSF-3/8-10-B	10
								130716	QSF-3/8-10-B-50	50
12	11	20.8	36.8	11	21	46	★ 153030	QSF-3/8-12-B	10	
							130717	QSF-3/8-12-B-20	20	
G1/2	12	11	20.8	40.1	14	24	56	★ 190653	QSF-1/2-12-B	1
	16	15	25	41.6	14	25	69	190654	QSF-1/2-16-B	1

1) Pack size

Datasheet

Push-in connector QS



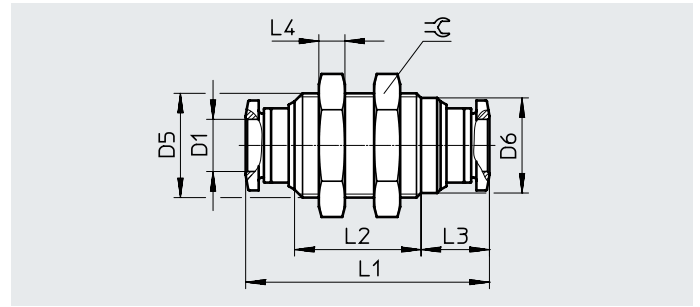
Dimensions and ordering data

Pneumatic connection		Nominal width [mm]	Dimensions [mm]			Weight/ piece [g]	Part no.	Type	PS ¹⁾
For tubing O.D. D1	For tubing O.D. D2		D5 ∅	D6	L1				
4	4	2.6	10	-	30.8	5	★ 153031	QS-4	10
							130686	QS-4-100	100
6	6	4	12.5	-	34.9	6.5	★ 153032	QS-6	10
							130687	QS-6-100	100
8	8	5	14.5	-	37.8	9.5	★ 153033	QS-8	10
							130688	QS-8-50	50
10	10	6.7	17.5	-	41.4	16	★ 153034	QS-10	10
							130689	QS-10-50	50
12	12	8.7	21	-	47.8	22	★ 153035	QS-12	10
							130690	QS-12-20	20
16	16	13.7	25	-	50	25	153036	QS-16	1
							133195	QS-16-20	20
Reducing									
6	4	2.6	12.5	12.5	34.4	6.4	★ 153037	QS-6-4	10
							130691	QS-6-4-100	100
8	4	2.3	10.7	14.5	36.6	7.2	★ 130606	QS-8-4	10
	6	4	14.5	14.5	37.9	8.8	★ 153038	QS-8-6	10
10	6	3.7	13	17.5	39.8	12	★ 130607	QS-10-6	10
							★ 153039	QS-10-8	10
12	8	5	17.5	17.5	41.1	14	130693	QS-10-8-50	50
							★ 130608	QS-12-8	10
12	10	6.7	21	21	47.6	21	★ 153040	QS-12-10	10
	130694	QS-12-10-20	20						

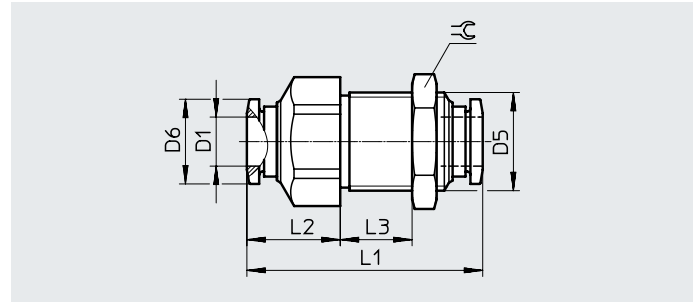
1) Pack size

Datasheet

Push-in bulkhead connector QSS



Push-in bulkhead connector QSS-...-F With fixed collar



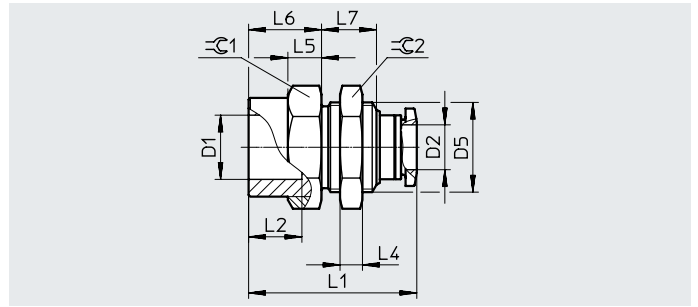
Dimensions and ordering data												
Pneumatic connection	Nominal width	Dimensions [mm]							Weight/ piece	Part no.	Type	PS ¹⁾
For tubing O.D.		D5	D6 ∅	L1	L2	L3	L4	☞				
D1	[mm]								[g]			
4	3	M12x1	10.8	30.8	14.8	9.5	4	14	11	★ 153157	QSS-4	10
										130788	QSS-4-100	100
6	5	M14x1	12.5	34.9	19	9.5	4	17	16	★ 153158	QSS-6	10
										130789	QSS-6-100	100
8	7	M16x1	14.6	37.4	19.4	10.5	4	19	19	★ 153159	QSS-8	10
										130790	QSS-8-50	50
10	9	M20x1	18.5	42.4	21.6	11.9	5	24	35	★ 153160	QSS-10	10
										130791	QSS-10-50	50
12	11	M22x1	20.4	47.6	24.2	13.2	6	27	52	★ 153161	QSS-12	10
										130792	QSS-12-20	20
With fixed collar												
4	2.6	M12x1	9.9	33	13	Max. 10	–	14	–	193950	QSS-4-F	10
6	4	M14x1	11.8	34.9	14.4	Max. 10	–	17	–	193951	QSS-6-F	10
8	5.5	M16x1	13.8	38.4	15.2	Max. 13	–	19	40	★ 130642	QSS-8-F	10
10	6.5	M20x1	16.8	47.1	20.3	Max. 15	–	24	86	★ 130643	QSS-10-F	10
12	7.5	M22x1	19.8	48.5	18.9	Max. 17.5	–	27	105	★ 130644	QSS-12-F	10

1) Pack size

Datasheet

Bulkhead push-in fitting QSSF

Via female thread



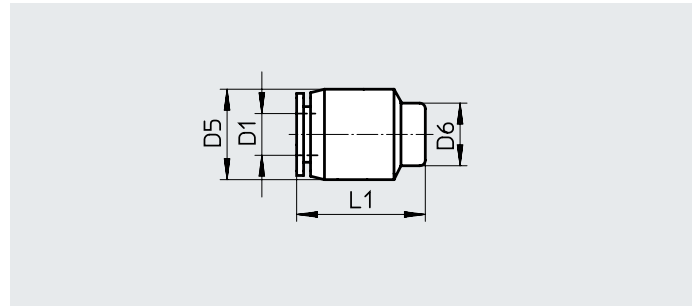
Dimensions and ordering data

Pneumatic connection		Nominal width [mm]	Dimensions [mm]									Weight/ piece [g]	Part no.	Type	PS ¹⁾
Female thread	For tubing O.D.		D5 ∅	L1	L2	L4	L5	L6	L7	≈G1	≈G2				
D1	D2														
G1/8	4	3	M12x1	24.2	7	4	5	9	9	14	14	17	153162	QSSF-1/8-4-B	10
	6	5	M14x1	26.4	7	4	6	10	10.2	17	17	25	153163	QSSF-1/8-6-B	10
	8	7	M16x1	27	7	4	6	10	9.8	19	19	30	153165	QSSF-1/8-8-B	10
G1/4	4	3	M12x1	27.5	9.5	4	6	12.3	9	17	14	24	190655	QSSF-1/4-4-B	10
	6	5	M14x1	28.7	9.5	4	6	12.3	10.2	17	17	27	153164	QSSF-1/4-6-B	10
	8	7	M16x1	30	9.5	4	6	13	9.8	19	19	34	153166	QSSF-1/4-8-B	10
	10	9	M20x1	32.7	9.5	5	7	13	11.1	24	24	57	153168	QSSF-1/4-10-B	10
G3/8	6	5	M14x1	30.9	11	4	6.5	14.5	10.2	21	17	36	190656	QSSF-3/8-6-B	10
	8	7	M16x1	31.5	11	4	6.5	14.5	9.8	21	19	38	153167	QSSF-3/8-8-B	10
	10	9	M20x1	34.2	11	5	7	14.5	11.1	24	24	57	153169	QSSF-3/8-10-B	10
	12	11	M22x1	36.8	11	6	7	14.5	12.4	24	27	66	153170	QSSF-3/8-12-B	10
G1/2	12	11	M22x1	40.1	14	6	7	17.8	12.4	24	27	70	153171	QSSF-1/2-12-B	1
	16	15	M27x1.5	42.6	14	9	8.5	17.3	15.4	29	32	116	190657	QSSF-1/2-16-B	1

1) Pack size

Datasheet

Push-in cap QSC



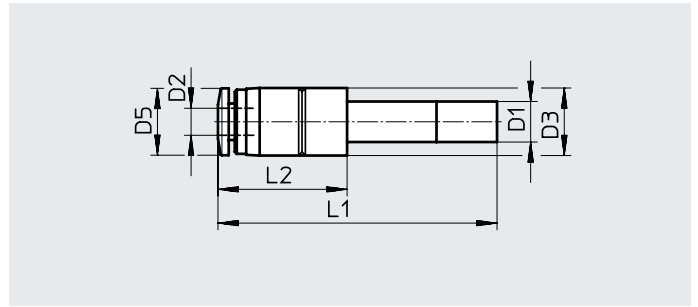
Dimensions and ordering data							
Pneumatic connection	Dimensions [mm]			Weight/ piece	Part no.	Type	PS ¹⁾
For tubing O.D.	D5 ∅	D6 ∅	L1	[g]			
D1							
4	10	7	16.5	2.5	★ 153262	QSC-4	10
					130704	QSC-4-100	100
6	13	9	18.5	3.5	★ 153263	QSC-6	10
					130705	QSC-6-100	100
8	15	11	20	5	★ 153264	QSC-8	10
					130706	QSC-8-50	50
10	18	13	22.5	8	★ 153265	QSC-10	10
					130707	QSC-10-50	50
12	21.5	16	23	11.5	★ 153266	QSC-12	10
					130708	QSC-12-20	20

1) Pack size

Datasheet

Push-in connector QS-...H

With push-in sleeve



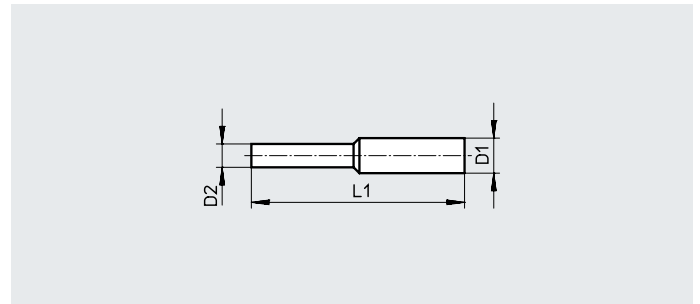
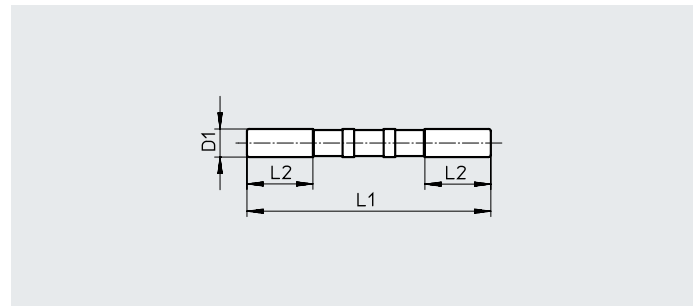
Dimensions and ordering data

Pneumatic connection		Nominal width [mm]	Dimensions [mm]				Weight/ piece [g]	Part no.	Type	PS ¹⁾
Push-in sleeve D1	For tubing O.D. D2		D3 ∅	D5 ∅	L1	L2				
QS-6	4	2.5	10	9.9	37.7	15.2	2.9	★ 153041	QS-6H-4	10
								130695	QS-6H-4-100	100
QS-8	4	2.4	12.5	9.9	40.2	16.7	3.8	★ 130622	QS-8H-4	10
	6	3.8	12.5	11.8	40.8	17.3	4	★ 153042	QS-8H-6	10
QS-10	6	3.8	12.5	11.8	43.8	18.8	4.5	★ 130623	QS-10H-6	10
								★ 153043	QS-10H-8	10
								130697	QS-10H-8-50	50
QS-12	6	3.8	14.5	11.8	48.8	19.8	6	★ 132981	QS-12H-6	10
								★ 130624	QS-12H-8	10
								★ 153044	QS-12H-10	10
	10	6.3	17.5	16.8	50	21	9.6	130698	QS-12H-10-20	20

1) Pack size

Datasheet

Push-in sleeve QSH



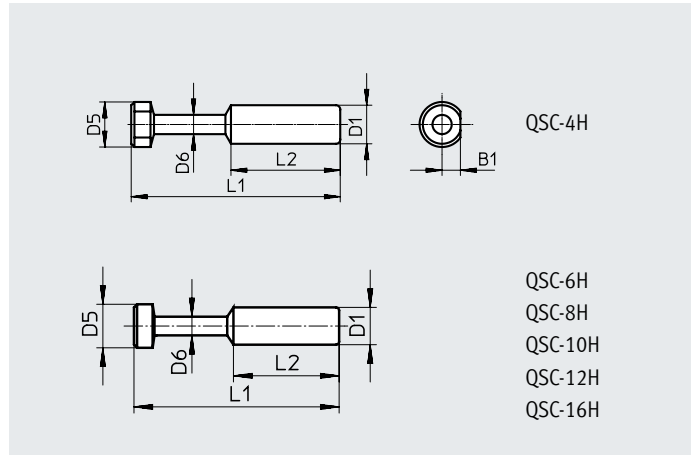
Reducing

Pneumatic connection		Nominal width [mm]	Dimensions [mm]		Weight/ piece [g]	Part no.	Type	PS ¹⁾
Push-in sleeve D1	Push-in sleeve D2		L1	L2				
QS-4	-	2.5	34.8	11.3	0.5	153251	QSH-4	10
						130723	QSH-4-100	100
QS-6	-	4	38.2	11.3	0.5	153252	QSH-6	10
						130724	QSH-6-100	100
QS-8	-	6	41.4	12.1	1	153253	QSH-8	10
						130725	QSH-8-50	50
QS-10	-	7.5	46.2	13	1.5	153254	QSH-10	10
						130726	QSH-10-50	50
QS-12	-	9	52.8	17.5	3	153255	QSH-12	10
						130727	QSH-12-20	20
QS-16	-	11	55.6	18	4	153256	QSH-16	1
Reducing								
QS-6	QS-4	2.3	36.7	-	0.5	153257	QSH-6-4	10
						130718	QSH-6-4-100	100
QS-8	QS-4	2.3	41.1	-	0.9	130625	QSH-8-4	10
						153258	QSH-8-6	10
							130719	QSH-8-6-50
QS-10	QS-6	3.8	43.7	-	1.4	130626	QSH-10-6	10
						153259	QSH-10-8	10
							130720	QSH-10-8-50
QS-12	QS-8	4.9	47.5	-	2.1	130627	QSH-12-8	10
						153260	QSH-12-10	10
							130721	QSH-12-10-20
QS-16	QS-12	7.8	54.4	-	4.2	153261	QSH-16-12	1
						130722	QSH-16-12-20	20

1) Pack size

Datasheet

Blanking plug QSC-...H



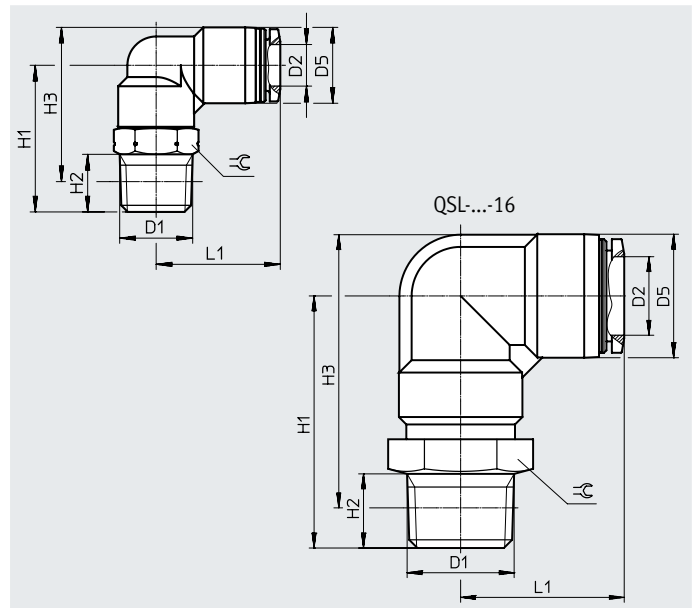
Dimensions and ordering data									
Pneumatic connection	Dimensions [mm]					Weight/ piece	Part no.	Type	PS ¹⁾
Push-in sleeve	B1	D5 ∅	D6 ∅	L1	L2				
D1						[g]			
QS-4	2.1	5	3	28	15	0.5	★ 153267	QSC-4H	10
							130699	QSC-4H-100	100
QS-6	–	7	3	33	17	0.5	★ 153268	QSC-6H	10
							130700	QSC-6H-100	100
QS-8	–	9	4	37	18	1	★ 153269	QSC-8H	10
							130701	QSC-8H-50	50
QS-10	–	11	5	42	20.5	2	★ 153270	QSC-10H	10
							130702	QSC-10H-50	50
QS-12	–	13	6	44	23	2.5	★ 153271	QSC-12H	10
							130703	QSC-12H-20	20
QS-16	–	17	8	46	24	4	153272	QSC-16H	1

1) Pack size

Datasheet

Push-in L-fitting QSL

Male thread with external hex, rotatable



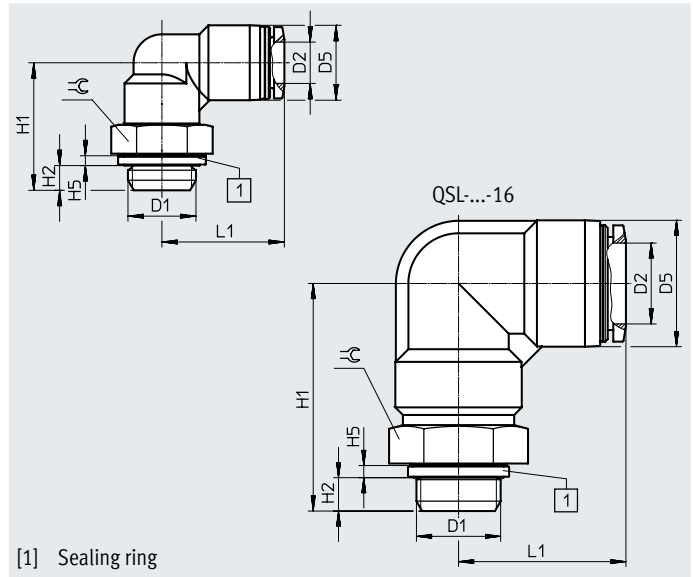
Dimensions and ordering data												
Pneumatic connection		Nominal width [mm]	Dimensions [mm]						Weight/ piece [g]	Part no.	Type	PS ¹⁾
Male thread	For tubing O.D.		D5 ∅	H1	H2	H3	L1	⊕				
D1	D2											
R thread												
R1/8	4	2.8	10	22	8	23	18.7	10	10	★ 153045	QSL-1/8-4	10
										130728	QSL-1/8-4-100	100
	6	4.2	12.5	22.5	8	24.8	20.3	10	11	★ 153046	QSL-1/8-6	10
										130729	QSL-1/8-6-100	100
	8	6	14.5	24	8	27.3	22.7	12	14	★ 153048	QSL-1/8-8	10
										130730	QSL-1/8-8-50	50
	10	6	17.5	25	8	29.8	25.5	12	18	★ 190658	QSL-1/8-10	10
R1/4	4	2.8	10	29	11	28	20.7	14	18	★ 190659	QSL-1/4-4	10
										153047	QSL-1/4-6	10
	6	4.3	12.5	28	11	28.2	21.8	14	19	★ 130731	QSL-1/4-6-100	100
										153049	QSL-1/4-8	10
	8	6.7	14.5	28	11	29.2	23.7	14	20	★ 130732	QSL-1/4-8-50	50
	10	8	17.5	28.5	11	31.2	26	14	23	★ 153051	QSL-1/4-10	10
										130733	QSL-1/4-10-50	50
	12	8	21	29.8	11	34.2	29	14	27	★ 164981	QSL-1/4-12	10
										130734	QSL-1/4-12-20	20
R3/8	6	4.3	12.5	31.5	12	31.4	23.8	17	30	★ 190660	QSL-3/8-6	10
										153050	QSL-3/8-8	10
	8	6.7	14.5	31	12	31.9	24.7	17	31	★ 130735	QSL-3/8-8-50	50
										153052	QSL-3/8-10	10
	10	8.3	17.5	32	12	34.4	27	17	34	★ 130736	QSL-3/8-10-20	20
									153053	QSL-3/8-12	10	
	12	10	21	32.5	12	36.7	29.7	17	38	★ 130737	QSL-3/8-12-20	20
	16	11	25	47	11	53.2	33.1	22	74	★ 164958	QSL-3/8-16	1
R1/2	10	8.3	17.5	36	15	36.6	27.5	21	57	★ 190661	QSL-1/2-10	1
										133192	QSL-1/2-10-50	50
	12	10.3	21	36.5	15	38.8	30.7	21	61	★ 153054	QSL-1/2-12	1
										130738	QSL-1/2-12-20	20
	16	13	25	51	15	55.3	33.1	22	79	★ 153055	QSL-1/2-16	1
										130739	QSL-1/2-16-20	20

1) Pack size

Datasheet

Push-in L-fitting QSL

Male thread with external hex, rotatable



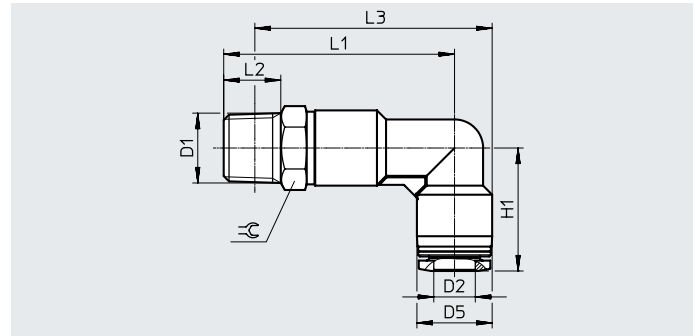
Dimensions and ordering data

Pneumatic connection		Nominal width [mm]	Dimensions [mm]						Weight/ piece [g]	Part no.	Type	PS ¹⁾
Male thread	For tubing O.D.		D5 ∅	H1	H2	H5	L1	⌀				
D1	D2											
G thread with sealing ring												
G1/8	4	2.8	10	21.1	4.2	1.9	18.7	13	13	★ 186116	QSL-G1/8-4	10
										132048	QSL-G1/8-4-100	100
	6	4.2	12.5	21.6	4.2	1.9	20.3	13	14	★ 186117	QSL-G1/8-6	10
										132049	QSL-G1/8-6-100	100
	8	6	14.5	22.1	4.2	1.9	22.7	13	15	★ 186119	QSL-G1/8-8	10
										132050	QSL-G1/8-8-50	50
G1/4	6	4.3	12.5	24.7	4.8	1.9	21.8	17	21	★ 186118	QSL-G1/4-6	10
										132051	QSL-G1/4-6-100	100
	8	6.7	14.5	24.7	4.8	1.9	23.7	17	23	★ 186120	QSL-G1/4-8	10
										132052	QSL-G1/4-8-50	50
	10	8	17.5	25.2	4.8	1.9	26	17	26	★ 186122	QSL-G1/4-10	10
										132053	QSL-G1/4-10-50	50
	12	8	21	26.5	4.8	1.9	29	17	29	★ 186351	QSL-G1/4-12	10
										132054	QSL-G1/4-12-20	20
G3/8	8	6.7	14.5	27.2	5.8	2.4	24.7	19	30	★ 186121	QSL-G3/8-8	10
										132055	QSL-G3/8-8-50	50
	10	8.3	17.5	28.2	5.8	2.4	27	19	33	★ 186123	QSL-G3/8-10	10
										132056	QSL-G3/8-10-20	20
	12	10	21	28.7	5.8	2.4	29.7	19	37	★ 186124	QSL-G3/8-12	10
									132057	QSL-G3/8-12-20	20	
	16	11	25	44.2	5.8	2.4	33.1	24	77	186348	QSL-G3/8-16	1
G1/2	12	10.3	21	32.2	6.8	2.4	30.7	24	67	★ 186125	QSL-G1/2-12	1
										132058	QSL-G1/2-12-20	20
	16	13	25	45.2	6.8	2.4	33.1	24	75	186126	QSL-G1/2-16	1
										132059	QSL-G1/2-16-20	20

1) Pack size

Datasheet

Push-in L-fitting, long QSLL
Male thread with external hex, rotatable



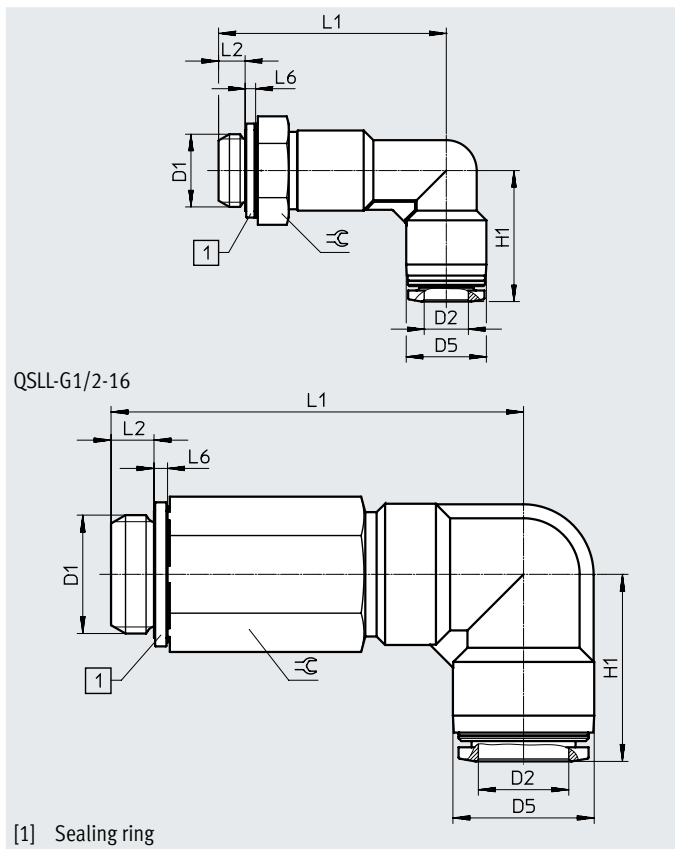
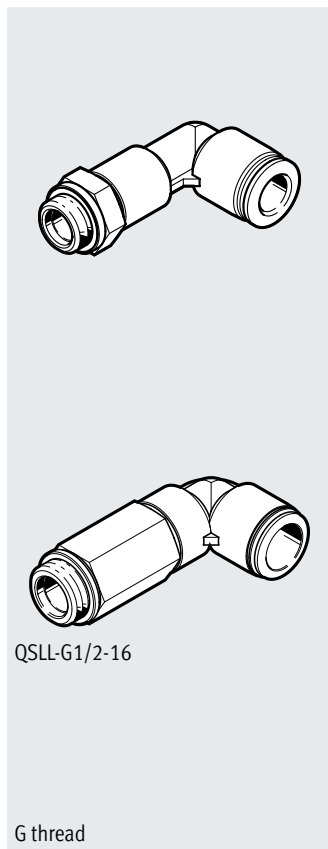
Dimensions and ordering data

Pneumatic connection		Nominal width	Dimensions [mm]						Weight/ piece	Part no.	Type	PS ¹⁾
Male thread	For tubing O.D.		D5 ∅	H1	L1	L2	L3	⊕				
D1	D2	[mm]							[g]			
R thread												
R1/8	4	2.8	10	18.7	34	8	35	10	11	★ 153076	QSLL-1/8-4	10
	6	4.3	12.5	20.3	37	8	39.3	10	13	★ 153077	QSLL-1/8-6	10
	8	6	14.5	22.7	40.5	8	43.8	12	16	★ 153079	QSLL-1/8-8	10
R1/4	4	2.8	10	20.7	41	11	40	14	19	★ 190662	QSLL-1/4-4	10
	6	4.3	12.5	21.8	42.5	11	42.7	14	20	★ 153078	QSLL-1/4-6	10
	8	6.7	14.5	23.7	44.5	11	45.7	14	22	★ 153080	QSLL-1/4-8	10
	10	8	17.5	26	48	11	50.7	14	26	★ 153082	QSLL-1/4-10	10
R3/8	6	4.3	12.5	23.8	46	12	45.9	17	33	★ 190663	QSLL-3/8-6	10
	8	6.7	14.5	24.7	47.5	12	48.4	17	35	★ 153081	QSLL-3/8-8	10
	10	8.3	17.5	27	51.5	12	53.9	17	38	★ 153083	QSLL-3/8-10	10
	12	10	21	29.7	55.5	12	59.7	17	42	★ 153084	QSLL-3/8-12	10
R1/2	10	8.3	17.5	27	55.5	15	56.1	21	63	★ 190664	QSLL-1/2-10	1
	12	10.3	21	29.7	59.5	15	61.8	21	68	★ 153085	QSLL-1/2-12	1

1) Pack size

Datasheet

Push-in L-fitting, long QSL
Male thread with external hex, rotatable



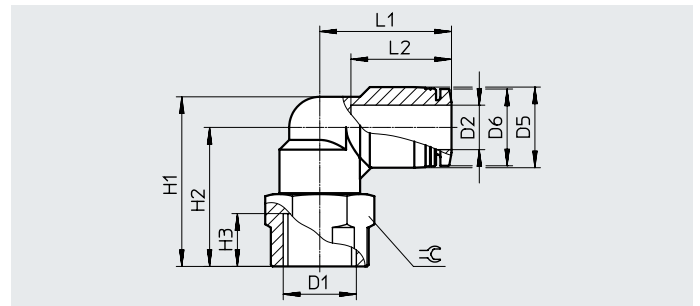
Dimensions and ordering data												
Pneumatic connection		Nominal width [mm]	Dimensions [mm]						Weight/ piece [g]	Part no.	Type	PS ¹⁾
Male thread	For tubing O.D.		D5 ø	H1	L1	L2	L6	⌀				
D1	D2											
G thread with sealing ring												
G1/8	4	2.8	10	18.7	33.1	4.2	1.9	13	14	186127	QSL-G1/8-4	10
	6	4.3	12.5	20.3	36.1	4.2	1.9	13	15	133015	QSL-G1/8-4-100	100
										186128	QSL-G1/8-6	10
	8	6	14.5	22.7	38.6	4.2	1.9	13	17	133016	QSL-G1/8-6-100	100
										186130	QSL-G1/8-8	10
										133017	QSL-G1/8-8-100	100
G1/4	6	4.3	12.5	21.8	39.2	4.8	1.9	17	25	186129	QSL-G1/4-6	10
	8	6.7	14.5	23.7	41.2	4.8	1.9	17	27	186131	QSL-G1/4-8	10
	10	8	17.5	26	44.7	4.8	1.9	17	31	186133	QSL-G1/4-10	10
	12	8	21	29	49.5	4.8	1.9	17	35	132596	QSL-G1/4-12	1
G3/8	8	6.7	14.5	24.7	43.7	5.8	2.4	19	34	186132	QSL-G3/8-8	10
	10	8.3	17.5	27	47.7	5.8	2.4	19	37	186134	QSL-G3/8-10	10
	12	10	21	29.7	51.7	5.8	2.4	19	41	186135	QSL-G3/8-12	10
G1/2	12	10.3	21	29.7	55.2	6.8	2.4	24	75	186136	QSL-G1/2-12	1
	16	13	25	33.1	72.2	6.8	2.4	24	158	190665	QSL-G1/2-16	1

1) Pack size

Datasheet

Push-in L-fitting QSLF

Female thread with external hex, rotatable



Dimensions and ordering data														
Pneumatic connection		Nominal width	Dimensions [mm]								Weight/ piece	Part no.	Type	PS ¹⁾
Female thread	For tubing O.D.		D5 ∅	D6 ∅	H1	H2	H3	L1	L2	⌀				
D1	D2	[mm]									[g]			
G thread														
G1/8	4	2.8	10	9.9	25	20	7	18.7	14.9	14	14	★ 153273	QSLF-1/8-4-B	10
	6	4.2	12.5	11.8	26.8	20.5	7	20.3	17	14	15	★ 153274	QSLF-1/8-6-B	10
	8	6	14.5	13.8	28.3	21	7	22.7	18.1	14	16	★ 153276	QSLF-1/8-8-B	10
G1/4	6	4.3	12.5	11.8	31.3	25	9.5	21.8	17	17	22	★ 153275	QSLF-1/4-6-B	10
	8	6.7	14.5	13.8	32.3	25	9.5	23.7	18.1	17	24	★ 153277	QSLF-1/4-8-B	10
	10	8	17.5	16.8	34.3	25.5	9.5	26	20.2	17	27	★ 153279	QSLF-1/4-10-B	10
G3/8	8	6.7	14.5	13.8	34.8	27.5	11	24.7	18.1	21	33	★ 153278	QSLF-3/8-8-B	10
	10	8.3	17.5	16.8	37.3	28.5	11	27	20.2	21	36	★ 153280	QSLF-3/8-10-B	10

1) Pack size

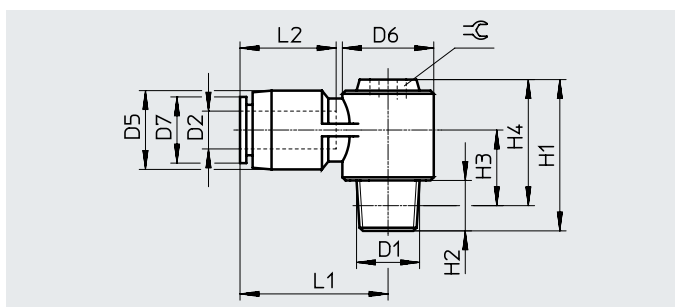
Datasheet

Push-in L-fitting QSLV...-I

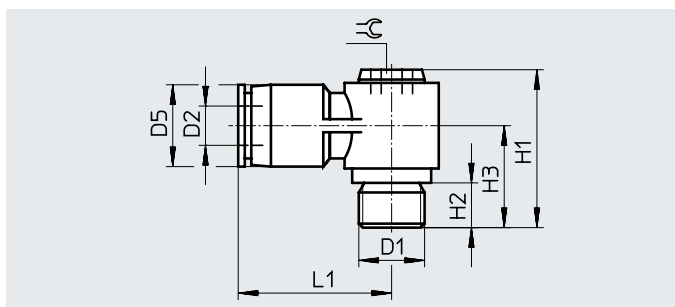
Male thread with internal hexagon, rotatable



R thread



G thread



Dimensions and ordering data

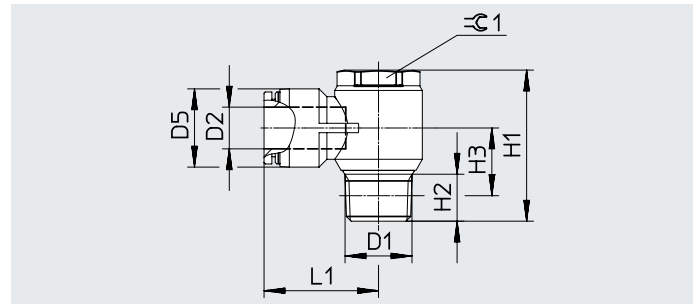
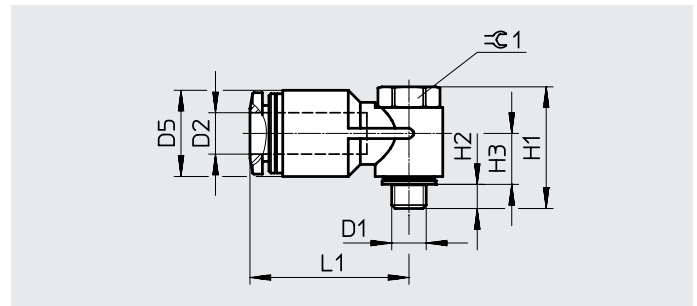
Pneumatic connection		Nominal width [mm]	Dimensions [mm]										Weight/ piece [g]	Part no.	Type	PS ¹⁾	
Male thread	For tubing O.D.		D5 ø	D6 ø	D7 ø	H1	H2	H3	H4	L1	L2	⊕					
D1	D2																
R thread																	
R1/8	6	3	13	14.3	11.8	24	8	11.5	20	23.7	17	5	15	153097	QSLV-1/8-6-I	10	
	8	4.2	14	17.9	13.8	27	8	12	23	26.7	18.1	8	22	153099	QSLV-1/8-8-I	10	
R1/4	6	3.1	13	14.3	11.8	27	11	12.5	21	23.7	17	5	22	153098	QSLV-1/4-6-I	10	
	8	4	14	17.9	13.8	30	11	13	24	26.7	18.1	8	28	153100	QSLV-1/4-8-I	10	
	10	5.4	18	21.3	16.8	34	11	15	28	30.7	20.7	10	40	153102	QSLV-1/4-10-I	10	
R3/8	8	4.2	14	17.9	13.8	31	12	13.7	24.7	26.7	18.1	8	37	153101	QSLV-3/8-8-I	10	
	10	5.4	18	21.3	16.8	35	12	15.7	28.7	30.7	20.7	10	49	153103	QSLV-3/8-10-I	10	
	12	6.9	21	26.3	19.8	39	12	17.7	32.7	36.4	23.4	12	68	153104	QSLV-3/8-12-I	10	
R1/2	12	6.4	21	26.3	19.8	42	15	18.8	33.8	36.4	23.4	12	85	153105	QSLV-1/2-12-I	1	
G thread																	
G1/8	6	3	13	-	-	23	5.1	14.5	-	23.7	-	5	15	186148	QSLV-G1/8-6-I	10	
	8	4.2	14	-	-	26	5.1	15	-	26.7	-	8	22	186150	QSLV-G1/8-8-I	10	
G1/4	6	3.1	13	-	-	23.5	5.6	15	-	23.7	-	5	19	186149	QSLV-G1/4-6-I	10	
	8	4	14	-	-	26.5	5.6	15.5	-	26.7	-	8	25	186151	QSLV-G1/4-8-I	10	
	10	5.4	18	-	-	30.5	5.6	17.5	-	30.7	-	10	38	186153	QSLV-G1/4-10-I	10	
G3/8	8	4.2	14	-	-	28	6.6	17	-	26.7	-	8	33	186152	QSLV-G3/8-8-I	10	
	10	5.4	18	-	-	32	6.6	19	-	30.7	-	10	45	186154	QSLV-G3/8-10-I	10	
	12	6.9	21	-	-	36	6.6	21	-	36.4	-	12	65	186155	QSLV-G3/8-12-I	10	
G1/2	12	6.4	21	-	-	37	7.6	22	-	36.4	-	12	75	186156	QSLV-G1/2-12-I	1	

1) Pack size

Datasheet

Push-in L-fitting QSLV

Male thread with external hex, rotatable



Dimensions and ordering data

Pneumatic connection		Nominal width [mm]	Dimensions [mm]						Weight/ piece [g]	Part no.	Type	PS ¹⁾
Male thread	For tubing O.D.		D5 ø	H1	H2	H3	L1	⌀ 1				
D1	D2											
Metric thread with sealing ring												
M5	6	1.8	12.5	17.2	3	7.4	23.1	8	8.3	★ 190666	QSLV-M5-6	10
R thread												
R1/8	4	2.8	10	27	8	12	22.2	14	21	★ 153086	QSLV-1/8-4	10
										130749	QSLV-1/8-4-100	100
	6	4.6	12.5	27	8	12	24.2	14	22	★ 153087	QSLV-1/8-6	10
										130750	QSLV-1/8-6-100	100
R1/8	8	5.5	14.5	27	8	12.3	26.2	14	23	★ 153089	QSLV-1/8-8	10
										130751	QSLV-1/8-8-50	50
R1/4	6	4.3	12.5	31.5	11	13.5	26.8	17	36	★ 153088	QSLV-1/4-6	10
										130752	QSLV-1/4-6-100	100
	8	6	14.5	31.5	11	13.5	28.2	17	38	★ 153090	QSLV-1/4-8	10
										130753	QSLV-1/4-8-50	50
	10	7.1	17.5	31.5	11	15	30.5	17	41	★ 153092	QSLV-1/4-10	10
									130754	QSLV-1/4-10-50	50	
R3/8	8	6	14.5	36	12	15.7	30.2	21	60	★ 153091	QSLV-3/8-8	10
	10	8	18	36	12	15.7	32.5	21	63	★ 153093	QSLV-3/8-10	10
	12	9.3	21	36	12	17.2	35.2	21	66	★ 153094	QSLV-3/8-12	10
R1/2	12	10	21	40.2	13	16.5	38.2	24	97	★ 153095	QSLV-1/2-12	1
	16	13	25	48.3	15	21.6	36.6	24	105	153096	QSLV-1/2-16	1

1) Pack size

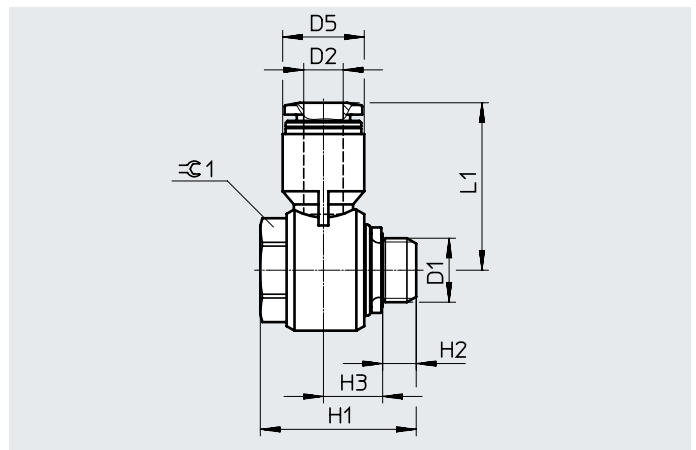
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Push-in L-fitting QSLV

Male thread with external hex, rotatable



G thread

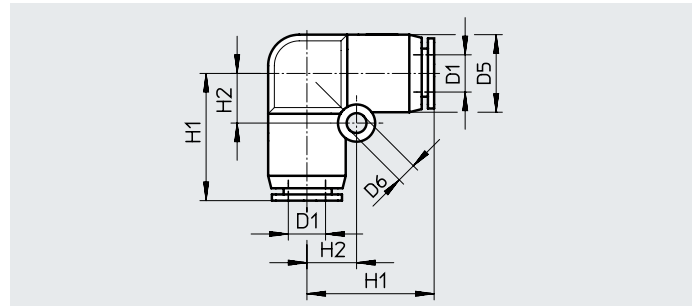


Dimensions and ordering data												
Pneumatic connection		Nominal width [mm]	Dimensions [mm]						Weight/piece [g]	Part no.	Type	PS ¹⁾
Male thread	For tubing O.D.		D5 ∅	H1	H2	H3	L1	⌀ 1				
D1	D2											
G thread with sealing ring												
G1/8	4	3	10	23.7	5.1	8.7	23.4	14	22	★ 186137	QSLV-G1/8-4	10
										132060	QSLV-G1/8-4-100	100
	6	4	12.4	23.7	5.1	9	25.5	14	23	★ 186138	QSLV-G1/8-6	10
										132061	QSLV-G1/8-6-100	100
G1/4	8	5.6	14.4	23.7	5.1	10	28.4	14	25	★ 186140	QSLV-G1/8-8	10
										132062	QSLV-G1/8-8-50	50
	6	5	14.5	28.6	5.6	10.4	29	19	44	★ 186139	QSLV-G1/4-6	10
										132063	QSLV-G1/4-6-100	100
G1/4	8	6	14.5	28.6	5.6	10.4	28.9	19	45	★ 186141	QSLV-G1/4-8	10
										132064	QSLV-G1/4-8-50	50
	10	7	17.6	28.6	5.6	11.7	31.2	19	48	★ 186143	QSLV-G1/4-10	10
										132065	QSLV-G1/4-10-50	50
G3/8	8	6	14.4	33.1	6.6	12.6	31	24	71	★ 186142	QSLV-G3/8-8	10
	10	8	17.6	33.1	6.6	12.6	33.6	24	74	★ 186144	QSLV-G3/8-10	10
	12	8.7	21	33.1	6.6	14.3	36.4	24	77	★ 186145	QSLV-G3/8-12	10
G1/2	12	8.7	21	34	7.6	14.3	37.9	27	99	★ 186146	QSLV-G1/2-12	1
	16	13	25	43.1	7.6	17.2	38.1	27	115	186147	QSLV-G1/2-16	1

1) Pack size

Datasheet

Push-in L-connector QSL



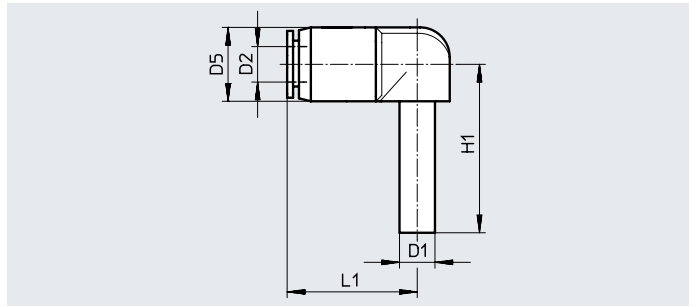
Dimensions and ordering data									
Pneumatic connection	Nominal width	Dimensions [mm]				Weight/ piece	Part no.	Type	PS ¹⁾
For tubing O.D.		D5 ∅	D6 ∅	H1	H2				
D1	[mm]					[g]			
4	2.3	10	3.2	16.9	6.5	5.1	★ 153070	QSL-4	10
							130740	QSL-4-100	100
6	3.6	12.5	3.2	20.1	8	7.3	★ 153071	QSL-6	10
							130741	QSL-6-100	100
8	4.6	15	4.2	22.4	10	11	★ 153072	QSL-8	10
							130742	QSL-8-50	50
10	6.2	17.5	4.2	26.2	12	17	★ 153073	QSL-10	10
							130743	QSL-10-50	50
12	7.7	21	4.2	29.4	14	25	★ 153074	QSL-12	10
							130744	QSL-12-20	20
16	10.8	25	4.2	33.1	12	31	★ 153075	QSL-16	1
							133194	QSL-16-20	20

1) Pack size

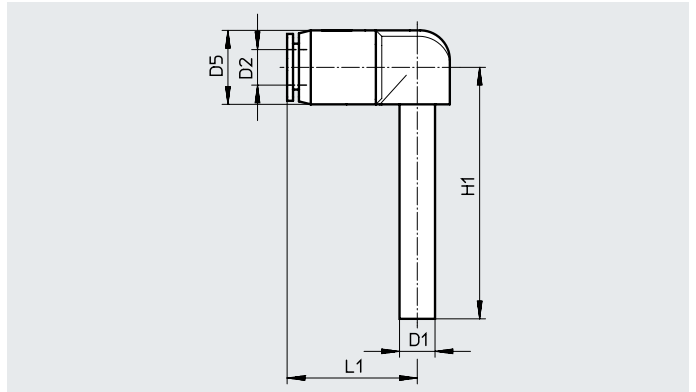
Datasheet

Push-in L-connector QSL-...H

With push-in sleeve



Long push-in sleeve



Dimensions and ordering data

Pneumatic connection		Nominal width [mm]	Dimensions [mm]			Weight/ piece [g]	Part no.	Type	PS ¹⁾
Push-in sleeve D1	For tubing O.D. D2		D5 ∅	H1	L1				
QS-4	4	2	10	25	16.8	2.7	★ 153056	QSL-4H	10
							130745	QSL-4H-100	100
QS-6	6	3.2	12.5	28.5	19.8	3.9	★ 153057	QSL-6H	10
							130746	QSL-6H-100	100
QS-8	8	4.7	14.5	30.7	21.8	5.7	★ 153058	QSL-8H	10
							130747	QSL-8H-50	50
QS-10	10	5.7	17.5	33.7	24.9	9.6	★ 153059	QSL-10H	10
							130748	QSL-10H-50	50
QS-12	12	6.8	21	39	28.9	15	★ 153060	QSL-12H	10
Reducing									
QS-6	4	2.4	12.5	28.5	17.7	3.6	★ 153061	QSL-6H-4	10
QS-8	6	3.5	14.5	30.7	21.9	5.2	★ 153062	QSL-8H-6	10
QS-10	8	4.9	17.5	33.7	24.6	8	★ 153063	QSL-10H-8	10
QS-12	10	6.1	21	39	28.7	14	★ 153064	QSL-12H-10	10
Long push-in sleeve									
QS-4	4	2	10	36	16.8	2.8	★ 153065	QSL-4HL	10
QS-6	6	3.1	12.5	42	19.8	4.2	★ 153066	QSL-6HL	10
QS-8	8	4.5	14.5	46.7	21.8	6.2	★ 153067	QSL-8HL	10
QS-10	10	5.6	17.5	51.7	24.9	11	★ 153068	QSL-10HL	10
QS-12	12	6.7	21	59.5	28.95	16	★ 153069	QSL-12HL	10

1) Pack size

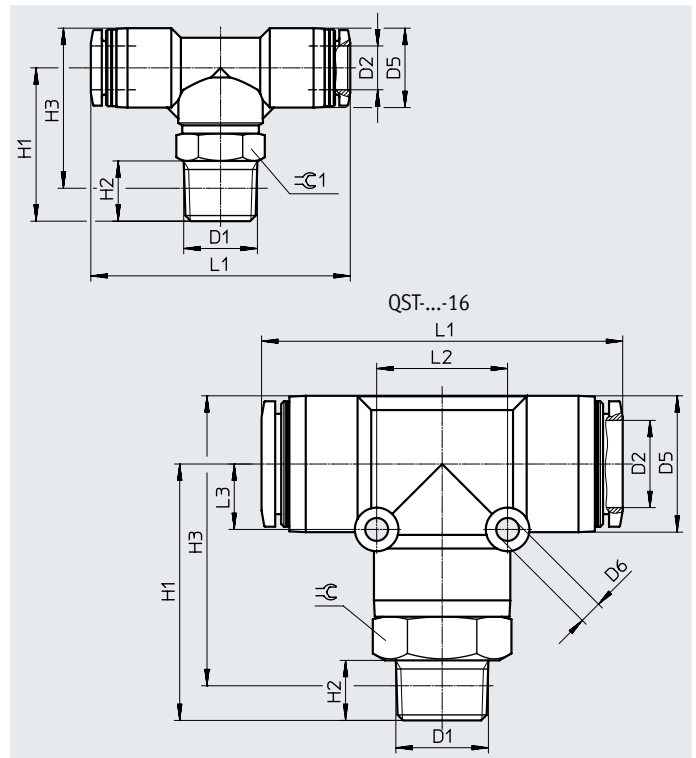
Datasheet

Push-in T-fitting QST

Male thread with external hex, rotatable

No. of supply lines: 1

No. of outlets: 2



Dimensions and ordering data															
Pneumatic connection		Nominal width	Dimensions [mm]									Weight/ piece	Part no.	Type	PS ¹⁾
Male thread	For tubing O.D.		D5	D6	H1	H2	H3	L1	L2	L3	⌀				
D1	D2	[mm]	∅	∅								[g]			
R thread															
R1/8	4	2.8	10	-	22	8	23	37.4	-	-	10	13	★ 153106	QST-1/8-4	10
													130793	QST-1/8-4-100	100
	6	4.2	12.5	-	22.5	8	24.8	40.5	-	-	10	14	★ 153107	QST-1/8-6	10
													130794	QST-1/8-6-100	100
	8	6	14.5	-	24	8	27.3	45.4	-	-	12	19	★ 153109	QST-1/8-8	10
													130795	QST-1/8-8-50	50
	10	6	17.5	-	25	8	29.8	51	-	-	12	25	★ 190667	QST-1/8-10	10
R1/4	4	2.8	10	-	29	11	28	41.4	-	-	14	20	★ 190668	QST-1/4-4	10
													★ 153108	QST-1/4-6	10
	6	4.3	12.5	-	28	11	28.2	43.5	-	-	14	22	★ 130796	QST-1/4-6-100	100
	8	6.7	14.5	-	28	11	29.2	47.4	-	-	14	25	★ 153110	QST-1/4-8	10
													★ 130797	QST-1/4-8-50	50
	10	8	17.5	-	28.5	11	31.2	52	-	-	14	31	★ 153112	QST-1/4-10	10
													★ 130798	QST-1/4-10-50	50
	12	8	21	-	29.8	11	34.2	57.9	-	-	14	38	★ 190669	QST-1/4-12	10
R3/8	6	4.3	12.5	-	31.5	12	31.4	47.5	-	-	17	33	★ 190670	QST-3/8-6	10
													★ 153111	QST-3/8-8	10
	8	6.7	14.5	-	31	12	31.9	49.4	-	-	17	35	★ 130799	QST-3/8-8-50	50
	10	8.3	17.5	-	32	12	34.4	54	-	-	17	42	★ 153113	QST-3/8-10	10
													★ 130800	QST-3/8-10-20	20
	12	10	21	-	32.5	12	36.7	59.4	-	-	17	48	★ 153114	QST-3/8-12	10
													★ 130801	QST-3/8-12-20	20
	16	11	25	4.2	47	11	53.2	66.2	24	12	22	89	★ 164959	QST-3/8-16	1
R1/2	10	8.3	17.5	-	36	15	36.6	55	-	-	21	65	★ 190672	QST-1/2-10	1
	12	10.3	21	-	36.5	15	38.8	61.4	-	-	21	72	★ 153115	QST-1/2-12	1
	16	13	25	4.2	51	15	55.3	66.2	24	12	22	93	★ 153116	QST-1/2-16	1

1) Pack size

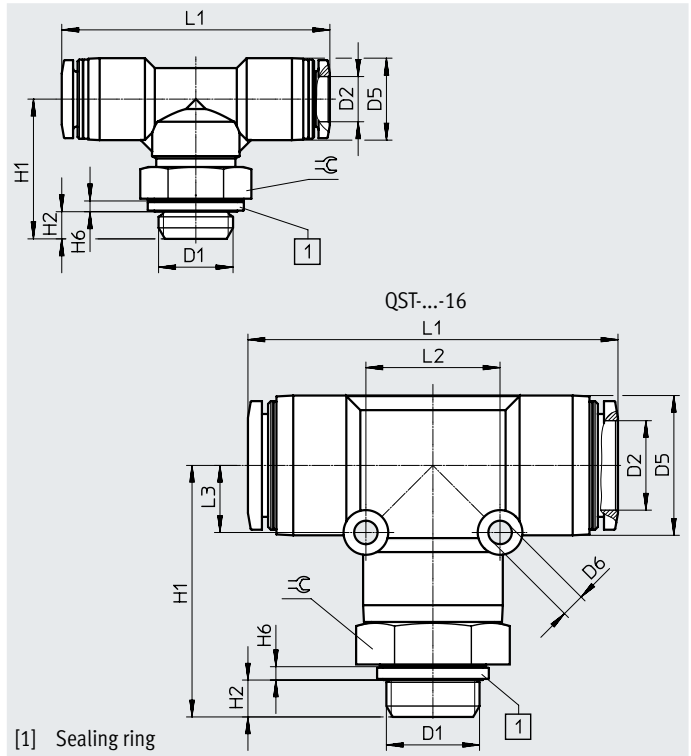
Datasheet

Push-in T-fitting QST

Male thread with external hex, rotatable

No. of supply lines: 1

No. of outlets: 2



Dimensions and ordering data

Pneumatic connection		Nominal width	Dimensions [mm]									Weight/ piece	Part no.	Type	PS ¹⁾	
Male thread	For tubing O.D.		D5	D6	H1	H2	H6	L1	L2	L3	⌀					
D1	D2	[mm]	∅	∅								[g]				
G thread with sealing ring																
G1/8	4	2.8	10	-	21.1	4.2	1.9	37.4	-	-	13	15	186157	QST-G1/8-4	10	
													132066	QST-G1/8-4-100	100	
	6	4.2	12.5	-	21.6	4.2	1.9	40.5	-	-	13	17	186158	QST-G1/8-6	10	
														132067	QST-G1/8-6-100	100
	8	6	14.5	-	22.1	4.2	1.9	45.4	-	-	13	19	186160	QST-G1/8-8	10	
														132068	QST-G1/8-8-50	50
G1/4	6	4.3	12.5	-	24.7	4.8	1.9	43.5	-	-	17	24	186159	QST-G1/4-6	10	
													132069	QST-G1/4-6-100	100	
	8	6.7	14.5	-	24.7	4.8	1.9	47.4	-	-	17	27	186161	QST-G1/4-8	10	
														132070	QST-G1/4-8-50	50
	10	8	17.5	-	25.2	4.8	1.9	52	-	-	17	33	186163	QST-G1/4-10	10	
														132071	QST-G1/4-10-50	50
G3/8	12	8	21	-	26.5	4.8	1.9	57.9	-	-	17	43	132597	QST-G1/4-12	1	
	8	6.7	14.5	-	27.2	5.8	2.4	49.4	-	-	19	34	186162	QST-G3/8-8	10	
													132072	QST-G3/8-8-50	50	
	10	8.3	17.5	-	28.2	5.8	2.4	54	-	-	19	41	186164	QST-G3/8-10	10	
													132073	QST-G3/8-10-20	20	
	12	10	21	-	28.7	5.8	2.4	59.4	-	-	19	47	186165	QST-G3/8-12	10	
													132074	QST-G3/8-12-20	20	
G1/2	16	11	25	4.2	44.2	5.8	2.4	66.2	24	12	24	97	186349	QST-G3/8-16	1	
	12	10.3	21	-	32.2	6.8	2.4	61.4	-	-	24	78	186166	QST-G1/2-12	1	
	16	13	25	4.2	45.2	6.8	2.4	66.2	24	12	24	95	186167	QST-G1/2-16	1	

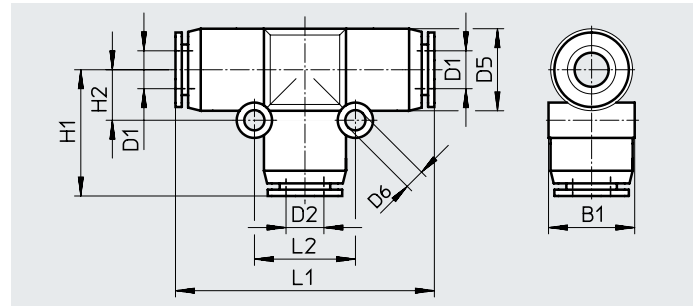
1) Pack size

Datasheet

Push-in T-connector QST

No. of supply lines: 1

No. of outlets: 2



Dimensions and ordering data

Pneumatic connection		Nominal width [mm]	Dimensions [mm]							Weight/ piece [g]	Part no.	Type	PS ¹⁾
For tubing O.D. D1	For tubing O.D. D2		D5 ∅	D6 ∅	B1	H1	H2	L1	L2				
4	4	2.6	10	3.2	10.4	17.2	6.5	34.4	13	7.5	★ 153128	QST-4	10
											130802	QST-4-100	100
6	6	4	13	3.2	13.5	20.1	8	40.2	16	11	★ 153129	QST-6	10
											130803	QST-6-100	100
8	8	5	15	3.2	15.6	22.2	9	44.4	18	16	★ 153130	QST-8	10
											130804	QST-8-50	50
10	10	6.7	17.5	4.2	18.2	25.2	12	50.4	24	25	★ 153131	QST-10	10
											130805	QST-10-50	50
12	12	8.7	21	4.2	21.7	28.4	14	56.8	28	36	★ 153132	QST-12	10
											130806	QST-12-20	20
16	16	10.7	25	4.2	25.6	33.1	12	66.2	24	44	★ 153133	QST-16	1
Reducing													
6	4	2.3	13	3.2	13	19.5	8	40.1	16	11	★ 153134	QST-6-4	10
											130820	QST-6-4-100	100
8	4	2.3	14.5	3.2	15.1	21.7	9	44.4	18	14	★ 130613	QST-8-4	10
											★ 153135	QST-8-6	10
	6	3.5	14.5	3.2	15.1	22.3	9	44.4	18	14	★ 130821	QST-8-6-50	50
10	6	3.7	17.5	4.2	18.2	25	12	50.4	24	22	★ 130614	QST-10-6	10
											★ 153136	QST-10-8	10
	8	4.9	17.5	4.2	18.2	24.9	12	50.4	24	23	130822	QST-10-8-50	50
12	8	5.1	21	4.2	21.7	27.7	14	56.8	28	32	★ 130615	QST-12-8	10
											★ 153137	QST-12-10	10
	10	6.1	21	4.2	21.7	28	14	56.8	28	34	130823	QST-12-10-20	20
16	12	7.6	25	4.2	25.7	33.2	12	66.2	24	45	★ 130616	QST-16-12	1

1) Pack size

Datasheet

Push-in T-fitting QSTF

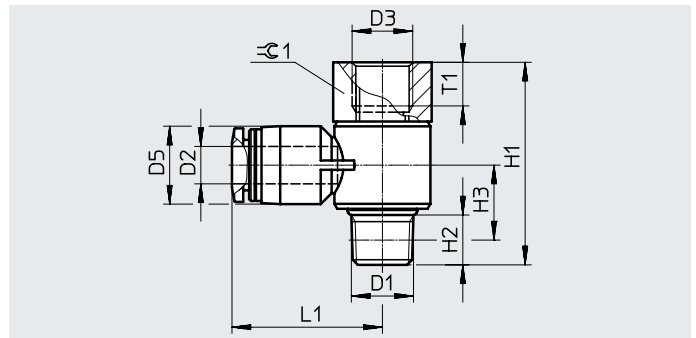
Male and female thread with external hex, rotatable

No. of supply lines: 1

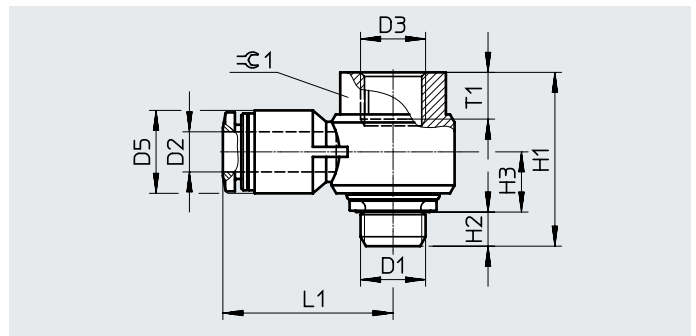
No. of outlets: 2



R thread



G thread



Dimensions and ordering data

Pneumatic connection		Nominal width	Dimensions [mm]								Weight/ piece	Part no.	Type	PS ¹⁾
Male thread	For tubing O.D.		D3	D5 ∅	H1	H2	H3	L1	T1	∠ 1				
D1	D2	[mm]									[g]			
R thread														
R1/8	4	2.8	G1/8	10	32.5	8	12	22.2	7	14	22	153182	QSTF-1/8-4-B	1
	6	4.6	G1/8	12.5	32.5	8	12	24.2	7	14	23	153183	QSTF-1/8-6-B	1
	8	5.5	G1/8	14.5	32.5	8	12.3	26.2	7	14	25	153185	QSTF-1/8-8-B	1
R1/4	6	4.3	G1/4	12.5	38.5	11	13.5	26.8	9.5	17	37	153184	QSTF-1/4-6-B	1
	8	6	G1/4	14.5	38.5	11	13.5	28.2	9.5	17	38	153186	QSTF-1/4-8-B	1
	10	7.1	G1/4	17.5	38.5	11	15	30.5	9.5	17	41	153188	QSTF-1/4-10-B	1
R3/8	8	6	G3/8	14.5	44.5	12	15.7	30.2	11	21	61	153187	QSTF-3/8-8-B	1
	10	8	G3/8	18	44.5	12	15.7	32.5	11	21	64	153189	QSTF-3/8-10-B	1
	12	9.3	G3/8	21	44.5	12	17.2	35.2	11	21	67	153190	QSTF-3/8-12-B	1
R1/2	12	10	G1/2	21	52.2	13	16.5	38.2	14	24	100	153191	QSTF-1/2-12-B	1
G thread with sealing ring														
G1/8	4	3	G1/8	10	26	5.1	8.7	23.4	7	14	20	186199	QSTF-G1/8-4	1
	6	4	G1/8	12.4	26	5.1	9	25.5	7	14	21	186200	QSTF-G1/8-6	1
	8	5.6	G1/8	14.4	26	5.1	10	28.4	7	14	23	186202	QSTF-G1/8-8	1
G1/4	6	5	G1/4	14.5	33.2	5.6	10.4	29	9.5	19	43	186201	QSTF-G1/4-6	1
	8	6	G1/4	14.5	33.2	5.6	10.4	28.9	9.5	19	44	186203	QSTF-G1/4-8	1
	10	7	G1/4	17.6	33.2	5.6	11.7	31.2	9.5	19	47	186205	QSTF-G1/4-10	1
G3/8	8	6	G3/8	14.4	38.1	6.6	12.6	31	11	24	71	186204	QSTF-G3/8-8	1
	10	8	G3/8	17.6	38.1	6.6	12.6	33.6	11	24	74	186206	QSTF-G3/8-10	1
	12	8.7	G3/8	21	38.1	6.6	14.3	36.4	11	24	77	186207	QSTF-G3/8-12	1
G1/2	12	8.7	G1/2	21	42.8	7.6	14.3	37.9	14	27	99	186208	QSTF-G1/2-12	1

1) Pack size

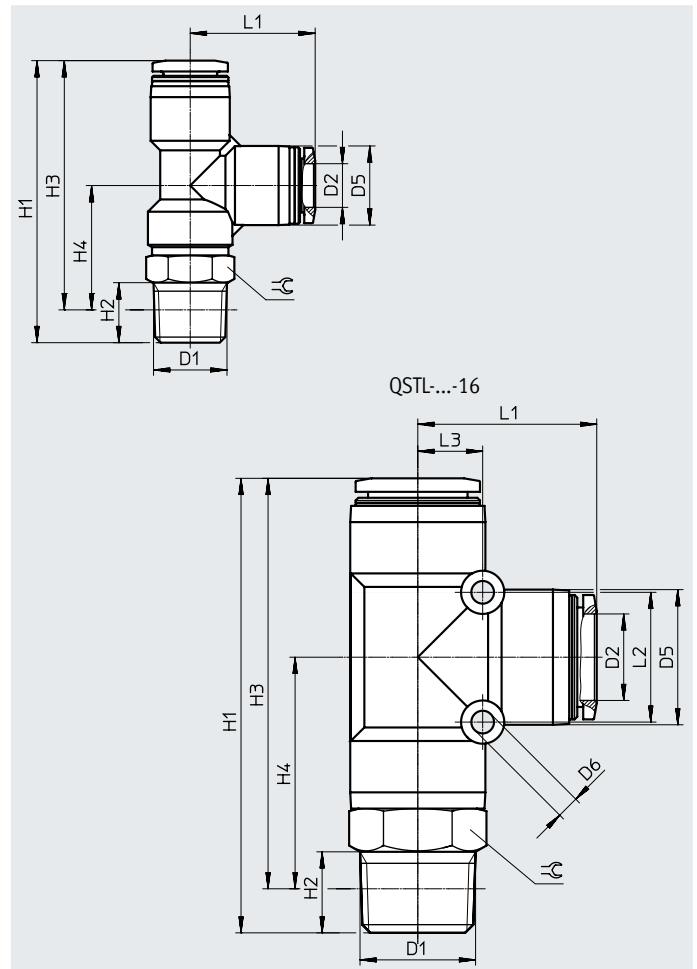
Datasheet

Push-in T-fitting QSTL

Male thread with external hex, rotatable

No. of supply lines: 1

No. of outlets: 2



Pneumatic connection		Nominal width [mm]	Dimensions [mm]										Weight/ piece [g]	Part no.	Type	PS ¹⁾
Male thread	For tubing O.D.		D5 ø	D6 ø	H1	H2	H3	H4	L1	L2	L3	≅				
D1	D2															
R thread																
R1/8	4	2.8	10	-	40.2	8	36.2	19	17.2	-	-	10	13	★ 153117	QSTL-1/8-4	10
														130824	QSTL-1/8-4-100	100
	6	4.3	12.5	-	43.3	8	39.3	18.8	20.5	-	-	10	14	★ 153118	QSTL-1/8-6	10
														130825	QSTL-1/8-6-100	100
R1/4	8	6	14.5	-	46.9	8	42.9	20	22.9	-	-	12	19	★ 153120	QSTL-1/8-8	10
														130826	QSTL-1/8-8-50	50
	6	4.3	12.5	-	48.8	11	42.7	22.2	20.5	-	-	14	22	★ 153119	QSTL-1/4-6	10
														130827	QSTL-1/4-6-100	100
R3/8	8	6.7	14.5	-	51.7	11	45.7	22.8	22.9	-	-	14	25	★ 153121	QSTL-1/4-8	10
														130828	QSTL-1/4-8-50	50
	10	8	17.5	-	54.7	11	48.7	22.5	26.2	-	-	14	31	★ 153123	QSTL-1/4-10	10
														130829	QSTL-1/4-10-50	50
R1/2	8	6.7	14.5	-	55.4	12	49.1	26.2	22.9	-	-	17	35	★ 153122	QSTL-3/8-8	10
	10	8.3	17.5	-	58.2	12	51.9	25.7	26.2	-	-	17	42	★ 153124	QSTL-3/8-10	10
	12	10	21	-	63.5	12	57.2	26.7	30.5	-	-	17	48	★ 153125	QSTL-3/8-12	10
R1/2	12	10.3	21	-	67.5	15	59.3	28.8	30.7	-	-	21	72	★ 153126	QSTL-1/2-12	1
	16	13	25	4.2	84.1	15	75.9	42.8	33.1	24	12	22	93	153127	QSTL-1/2-16	1

1) Pack size

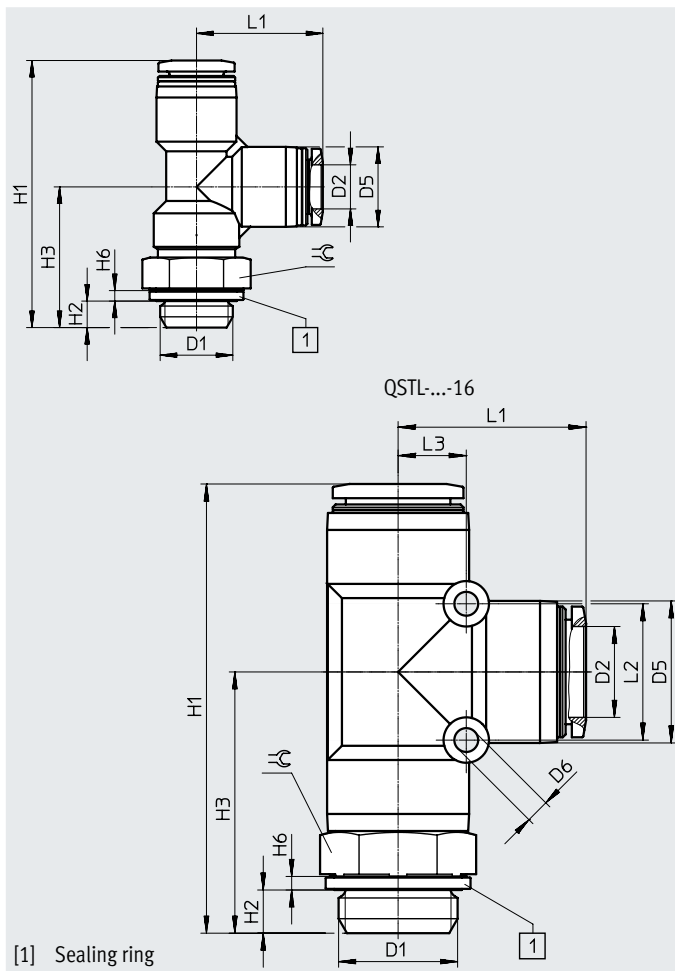
Datasheet

Push-in T-fitting QSTL

Male thread with external hex, rotatable

No. of supply lines: 1

No. of outlets: 2



Dimensions and ordering data														Part no.	Type	PS ¹⁾
Pneumatic connection		Nominal width [mm]	Dimensions [mm]										Weight/ piece [g]			
Male thread	For tubing O.D.		D5 ∅	D6 ∅	H1	H2	H3	H6	L1	L2	L3	⌀		D1	D2	D5
D1	D2															
G thread with sealing ring																
G1/8	4	2.8	10	-	39.3	4.2	22.1	1.9	17.2	-	-	13	15	186168	QSTL-G1/8-4	10
														132075	QSTL-G1/8-4-100	100
	6	4.3	12.5	-	42.4	4.2	21.9	1.9	20.5	-	-	13	17	186169	QSTL-G1/8-6	10
														132076	QSTL-G1/8-6-100	100
	8	6	14.5	-	45	4.2	22.1	1.9	22.9	-	-	13	19	186171	QSTL-G1/8-8	10
													132077	QSTL-G1/8-8-50	50	
G1/4	6	4.3	12.5	-	45.5	4.8	25	1.9	20.5	-	-	17	24	186170	QSTL-G1/4-6	10
													132078	QSTL-G1/4-6-100	100	
	8	6.7	14.5	-	48.4	4.8	25.5	1.9	22.9	-	-	17	27	186172	QSTL-G1/4-8	10
													132079	QSTL-G1/4-8-50	50	
	10	8	17.5	-	51.4	4.8	25.2	1.9	26.2	-	-	17	33	186174	QSTL-G1/4-10	10
												132080	QSTL-G1/4-10-50	50		
G3/8	8	6.7	14.5	-	51.6	5.8	28.7	2.4	22.9	-	-	19	34	186173	QSTL-G3/8-8	10
	10	8.3	17.5	-	54.4	5.8	28.2	2.4	26.2	-	-	19	41	186175	QSTL-G3/8-10	10
	12	10	21	-	59.7	5.8	29.2	2.4	30.5	-	-	19	48	186176	QSTL-G3/8-12	10
G1/2	12	10.3	21	-	63.2	6.8	32.7	2.4	30.7	-	-	24	78	186177	QSTL-G1/2-12	1
	16	13	25	4.2	78.3	6.8	45.2	2.4	33.1	24	12	24	89	186178	QSTL-G1/2-16	1

1) Pack size

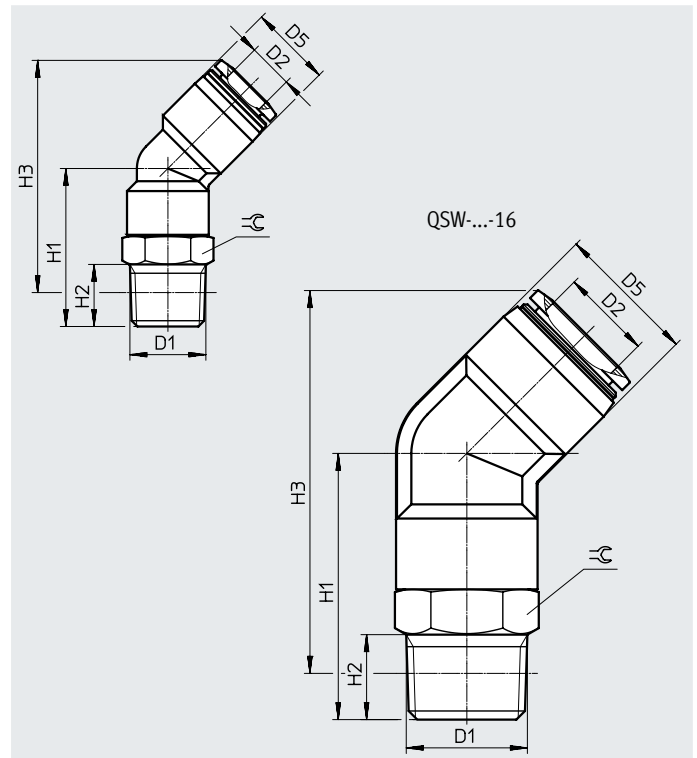
Datasheet

Push-in fitting QSW


Male thread with external hex, rotatable



R thread



Dimensions and ordering data

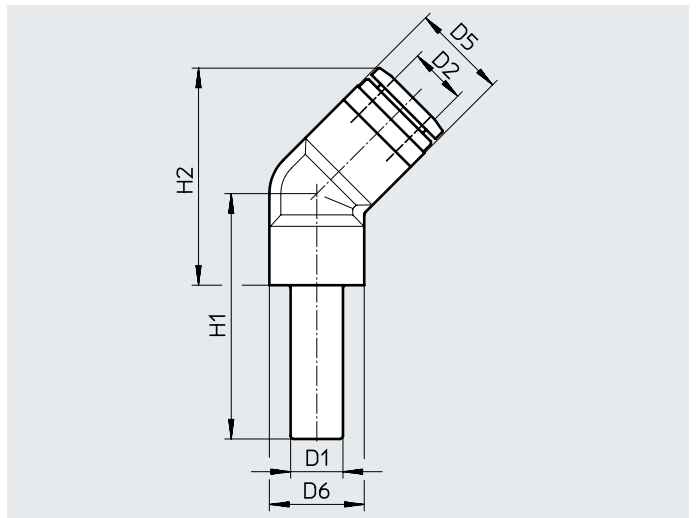
Pneumatic connection		Nominal width [mm]	Dimensions [mm]					Weight/ piece [g]	Part no.	Type	PS ¹⁾
Male thread	For tubing O.D.		D5 \varnothing	H1	H2	H3					
D1	D2										
R thread											
R1/8	4	2.5	8	14.8	8	23	10	6.1	130596	QSW-1/8-4	10
	6	3.3	10.5	16.4	8	25.3	10	6.8	130597	QSW-1/8-6	10
	8	6	14.5	24	8	39.2	12	14	130598	QSW-1/8-8	10
R1/4	6	3.3	10.5	21.4	11	28.2	14	17.9	130599	QSW-1/4-6	10
	8	6.7	14.5	28	11	41.2	14	20	130600	QSW-1/4-8	10
	10	8	17.5	28.5	11	44.9	14	23	130601	QSW-1/4-10	10
R3/8	10	8.3	17.5	33	12	49.1	17	35	130602	QSW-3/8-10	10
	12	9.5	21	32.5	12	53.2	17	38	130603	QSW-3/8-12	10
R1/2	12	10.3	21	36.5	15	55.4	21	61	130604	QSW-1/2-12	1
	16	13	25	47	15	67.6	22	78	130605	QSW-1/2-16	1

1) Pack size

Datasheet

Push-in connector QSW-...HL

With push-in sleeve



Dimensions and ordering data

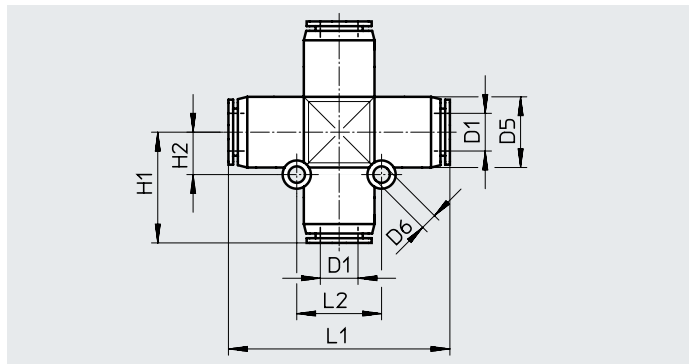
Pneumatic connection		Nominal width [mm]	Dimensions [mm]				Weight/ piece [g]	Part no.	Type	PS ¹⁾
Push-in sleeve D1	For tubing O.D. D2		D5	D6	H1	H2				
QS-4	4	2	8	8	21.8	15	1.4	130617	QSW-4HL	10
QS-6	6	2.7	10.5	8	24.6	17.3	2.1	130618	QSW-6HL	10
QS-8	8	5	14.5	10	28.5	25.7	5.8	130619	QSW-8HL	10
QS-10	10	6.3	17.5	11	31.5	30.5	9.5	130620	QSW-10HL	10
QS-12	12	6.9	21	14	35.5	36.3	14.5	130621	QSW-12HL	10

1) Pack size

Push-in X-connector QSX

No. of supply lines: 1

No. of outlets: 3



Dimensions and ordering data

Pneumatic connection		Nominal width [mm]	Dimensions [mm]					Weight/ piece [g]	Part no.	Type	PS ¹⁾	
For tubing O.D. D1			D5 ∅	D6 ∅	H1	H2	L1					L2
8		4.7	15	3.5	23.5	9	47	18	20	153285	QSX-8	10
10		6.1	17.5	4.5	27.5	11	55	22	32	153286	QSX-10	10
12		7.5	21	4.5	31	12	62	24	46	153287	QSX-12	10

1) Pack size

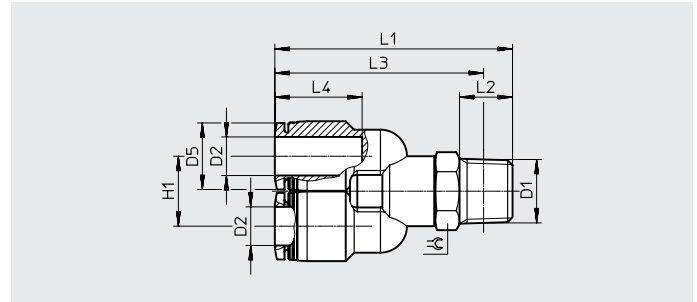
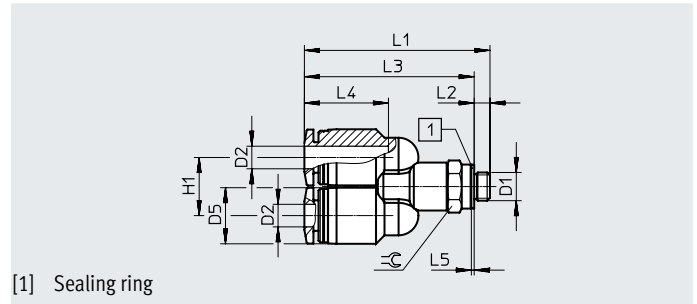
Datasheet

Push-in Y-fitting QSY

Male thread with external hex, rotatable

No. of supply lines: 1

No. of outlets: 2



Pneumatic connection		Nominal width [mm]	Dimensions [mm]								Weight/ piece [g]	Part no.	Type	PS ¹⁾	
Male thread	For tubing O.D.		D5 ø	H1	L1	L2	L3	L4	L5	⌀					
D1	D2														
Metric thread with sealing ring															
M5x0.8	4	2.4	10	10.3	32.9	2.8	30.1	14.9	0.5	8	8	★ 190673	QSY-M5-4	10	
	6	2.4	12.5	12.5	38.3	2.8	35.5	17	0.5	10	13	★ 190674	QSY-M5-6	10	
R thread															
R1/8	4	3.1	10	10.3	38.4	8	34.4	14.9	-	10	13	★ 153138	QSY-1/8-4	10	
	6	4.2	12.5	12.5	41.3	8	37.3	17	-	10	15	★ 153139	QSY-1/8-6	10	
	8	5.9	14.5	14.5	46.1	8	42.1	18.1	-	12	20	★ 153141	QSY-1/8-8	10	
R1/4	4	3.3	10	10.3	43.4	11	37.4	14.9	-	14	20	★ 190675	QSY-1/4-4	10	
	6	4.8	12.5	12.5	48.3	11	42.2	17	-	14	22	★ 153140	QSY-1/4-6	10	
	8	6.2	14.5	14.5	49.3	11	43.3	18.1	-	14	25	★ 153142	QSY-1/4-8	10	
	10	7.2	17.5	17.5	53.6	11	47.6	20.2	-	14	32	★ 153144	QSY-1/4-10	10	
R3/8	8	6.6	14.5	14.5	52.5	12	46.2	18.1	-	17	36	★ 153143	QSY-3/8-8	10	
	10	7.4	17.5	17.5	56.7	12	50.4	20.2	-	17	43	★ 153145	QSY-3/8-10	10	
	12	8.4	21	21	60.6	12	54.3	23.4	-	17	51	★ 153146	QSY-3/8-12	10	
R1/2	10	7.8	17.5	17.5	60.2	15	52	20.2	-	21	66	133196	QSY-1/2-10	10	
	12	8.3	21	21	64.7	15	56.5	23.4	-	21	74	★ 153147	QSY-1/2-12	1	

1) Pack size

Datasheet

Push-in Y-fitting QSY

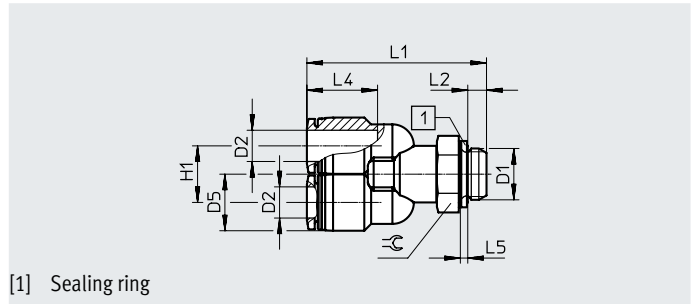
Male thread with external hex, rotatable

No. of supply lines: 1

No. of outlets: 2



G thread



[1] Sealing ring

Dimensions and ordering data

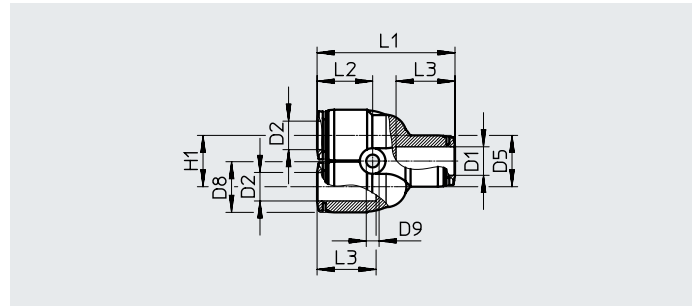
Pneumatic connection		Nominal width	Dimensions [mm]							Weight/ piece	Part no.	Type	PS ¹⁾
Male thread	For tubing O.D.		D5 ∅	H1	L1	L2	L4	L5	⊕				
D1	D2	[mm]							[g]				
G thread with sealing ring													
G1/8	4	3.1	10	10.3	37.5	4.2	14.9	1.9	13	15	186179	QSY-G1/8-4	10
	6	4.2	12.5	12.5	40.4	4.2	17	1.9	13	17	186180	QSY-G1/8-6	10
	8	5.9	14.5	14.5	44.2	4.2	18.1	1.9	13	20	186182	QSY-G1/8-8	10
G1/4	6	4.8	12.5	12.5	45	4.8	17	1.9	17	25	186181	QSY-G1/4-6	10
	8	6.2	14.5	14.5	46	4.8	18.1	1.9	17	28	186183	QSY-G1/4-8	10
	10	7.2	17.5	17.5	50.3	4.8	20.2	1.9	17	35	186185	QSY-G1/4-10	10
G3/8	8	6.6	14.5	14.5	48.7	5.8	18.1	2.4	19	35	186184	QSY-G3/8-8	10
	10	7.4	17.5	17.5	52.9	5.8	20.2	2.4	19	42	186186	QSY-G3/8-10	10
	12	8.4	21	21	56.8	5.8	23.4	2.4	19	50	186187	QSY-G3/8-12	10
G1/2	12	8.3	21	21	60.4	6.8	23.4	2.4	24	80	186188	QSY-G1/2-12	1

1) Pack size

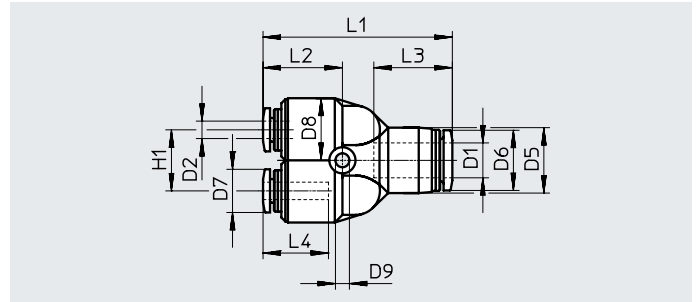
Datasheet

Push-in Y-connector QSY

No. of supply lines: 1
No. of outlets: 2



2 reducing outlets



Reducing

Dimensions and ordering data

Pneumatic connection		Nominal width [mm]	Dimensions [mm]										Weight/ piece [g]	Part no.	Type	PS ¹⁾
For tubing O.D. D1	For tubing O.D. D2		D5 ø	D6 ø	D7 ø	D8 ø	D9 ø	H1	L1	L2	L3	L4				
4	4	2.3	10	-	-	10	3.2	11	32.8	14.1	14.9	-	7.6	★ 153148	QSY-4	10
														130807	QSY-4-100	100
6	6	3.6	13	-	-	12.5	3.4	12	37.7	15.8	17	-	11	★ 153149	QSY-6	10
														130808	QSY-6-100	100
8	8	4.6	15	-	-	14.5	3.4	14	42.4	17.2	18.1	-	16	★ 153150	QSY-8	10
														130809	QSY-8-50	50
10	10	5.9	17.5	-	-	17.5	4.2	18	48.4	19.5	20.7	-	26	★ 153151	QSY-10	10
														130810	QSY-10-20	20
12	12	7	21	-	-	21	4.2	20	54.9	22.3	23.4	-	37	★ 153152	QSY-12	10
														130811	QSY-12-20	20
16	16	8.5	25	-	-	25	4.5	24	62.2	22.1	24.1	-	45	★ 130609	QSY-16	1
Reducing																
6	4	2.3	13	11.8	9.9	12.5	3.4	12	37.2	15.2	17	14.9	11	★ 153153	QSY-6-4	10
														130812	QSY-6-4-100	100
8	4	1.7	14.5	13.8	9.9	12.5	3.4	14	41.9	16.7	18.1	14.9	13	★ 130610	QSY-8-4	10
	6	3.2	14.5	13.8	11.8	12.5	3.4	14	42.5	17.3	18.1	17	13	★ 153154	QSY-8-6	10
															130813	QSY-8-6-50
10	6	3.3	17.5	16.8	11.8	14.5	4.5	18	48.2	19.3	20.2	17	19	★ 130611	QSY-10-6	10
	8	4.5	17.5	16.8	13.8	14.5	4.5	18	48.1	19.2	20.2	18.1	20	★ 153155	QSY-10-8	10
														130814	QSY-10-8-20	20
12	8	4.5	21	19.8	13.8	17.5	4.5	20	54.3	21.7	23.4	18.1	27	★ 130612	QSY-12-8	10
	10	5.8	21	19.8	16.8	17.5	4.5	20	54.6	22	23.4	20.2	30	★ 153156	QSY-12-10	10
														130815	QSY-12-10-20	20
16	12	7	25	23	19.8	25	4.5	24	62.3	22.2	24.1	23.4	48	★ 190708	QSY-16-12	1

1) Pack size

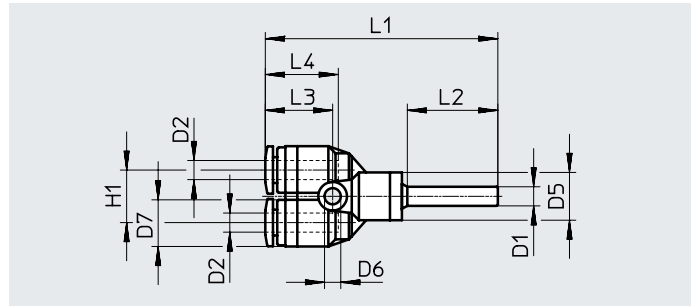
Datasheet

Push-in Y-connector QSY-...H

With push-in sleeve

No. of supply lines: 1

No. of outlets: 2



Dimensions and ordering data

Pneumatic connection		Nominal width	Dimensions [mm]							Weight/ piece	Part no.	Type	PS ¹⁾	
Push-in sleeve	For tubing O.D.		D5 ∅	D6 ∅	D7 ∅	H1	L1	L2	L3					L4
D1	D2	[mm]								[g]				
QS-4	4	1.6	10	3.2	10	11	48.7	19	14.1	14.9	6.5	130628	QSY-4H	10
Reducing														
QS-6	4	2.3	10	3.2	10	11	50.9	22	14.1	14.9	6.8	130633	QSY-6H-4	10

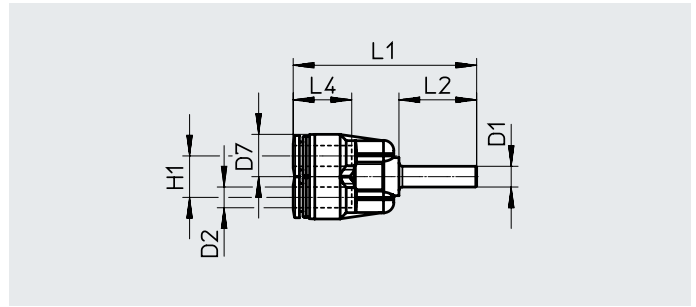
1) Pack size

Push-in Y-connector QSY-...H-B

With push-in sleeve

No. of supply lines: 1

No. of outlets: 2



Dimensions and ordering data

Pneumatic connection		Nominal width	Dimensions [mm]					Weight/ piece	Part no.	Type	PS ¹⁾
Push-in sleeve	For tubing O.D.		D7 ∅	H1	L1	L2	L4				
D1	D2	[mm]						[g]			
QS-6	6	3.1	12.5	12	53.2	22.5	17	8.5	133145	QSY-6H-B	10
QS-8	8	4.6	14.5	14	56.1	23.5	18.1	13	133146	QSY-8H-B	10
QS-10	10	5.9	17.5	18	63.2	25	20.2	21	133148	QSY-10H-B	10
QS-12	12	7.3	21	20	71.3	29	23.4	31	133150	QSY-12H-B	10
Reducing											
QS-8	6	3.6	12.5	12	54.2	23.5	17	8.8	133147	QSY-8H-6-B	10
QS-10	8	4.6	14.5	14	57.6	25	18.1	13	133149	QSY-10H-8-B	10
QS-12	10	5.9	17.5	18	67.2	29	20.2	22	133151	QSY-12H-10-B	10

1) Pack size

Datasheet

Push-in Y-fitting QSYL

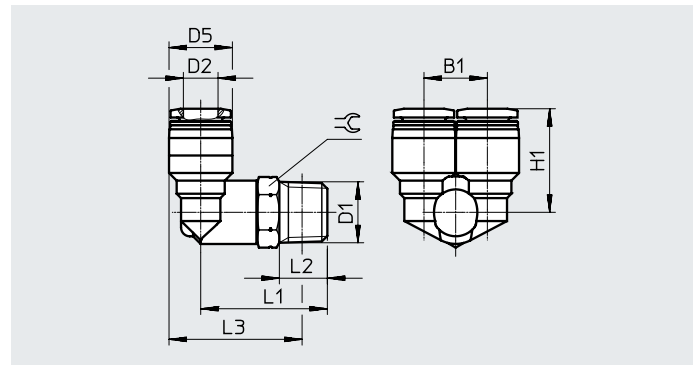
Male thread with external hex, rotatable

No. of supply lines: 1

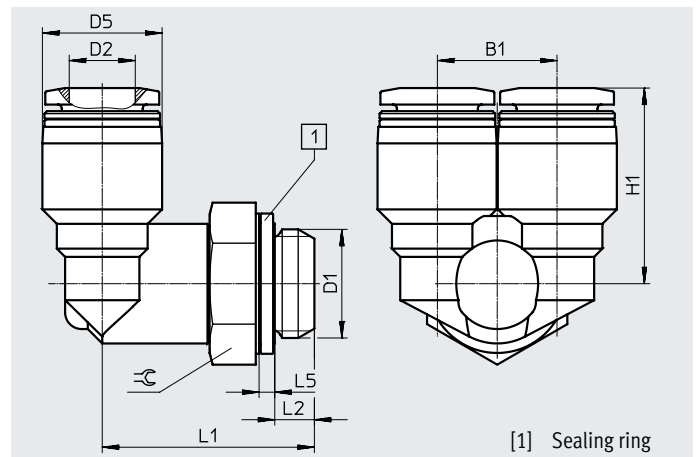
No. of outlets: 2



R thread



G thread



[1] Sealing ring

Dimensions and ordering data													Part no.	Type	PS ¹⁾
Pneumatic connection		Nominal width [mm]	Dimensions [mm]								Weight/ piece [g]				
Male thread	For tubing O.D.		B1	D5 ∅	H1	L1	L2	L3	L5	⊖					
D1	D2														
R thread															
R1/8	4	3.9	10.3	10	18.2	23	8	24	-	10	13	★ 153172	QSYL-1/8-4	1	
	6	4.2	12.5	12.5	19.8	23.5	8	25.8	-	10	15	★ 153173	QSYL-1/8-6	1	
	8	5.7	14.5	14.5	22.7	25	8	28.3	-	12	20	★ 153175	QSYL-1/8-8	1	
R1/4	6	5.3	12.5	12.5	21.8	29	11	29.2	-	14	22	★ 153174	QSYL-1/4-6	1	
	8	7.3	14.5	14.5	23.7	29	11	30.2	-	14	25	★ 153176	QSYL-1/4-8	1	
	10	8	17.5	17.5	26	29.5	11	32.2	-	14	32	★ 153178	QSYL-1/4-10	1	
R3/8	8	7.3	14.5	14.5	24.7	32	12	32.9	-	17	37	★ 153177	QSYL-3/8-8	1	
	10	9.2	17.5	17.5	27	32.5	12	34.9	-	17	43	★ 153179	QSYL-3/8-10	1	
	12	9.7	21	21	29.2	33.5	12	37.7	-	17	51	★ 153180	QSYL-3/8-12	1	
R1/2	12	10.6	21	21	30.2	38	15	40.3	-	21	74	★ 153181	QSYL-1/2-12	1	
G thread with sealing ring															
G1/8	4	3.9	10.3	10	18.2	22.1	4.2	-	1.9	13	16	186189	QSYL-G1/8-4	1	
	6	4.2	12.5	12.5	19.8	22.6	4.2	-	1.9	13	18	186190	QSYL-G1/8-6	1	
	8	5.7	14.5	14.5	22.7	23.1	4.2	-	1.9	13	20	186192	QSYL-G1/8-8	1	
G1/4	6	5.3	12.5	12.5	21.8	25.7	4.8	-	1.9	17	26	186191	QSYL-G1/4-6	1	
	8	7.3	14.5	14.5	23.7	25.7	4.8	-	1.9	17	29	186193	QSYL-G1/4-8	1	
	10	8	17.5	17.5	26	26.2	4.8	-	1.9	17	36	186195	QSYL-G1/4-10	1	
G3/8	8	7.3	14.5	14.5	24.7	28.2	5.8	-	2.4	19	38	186194	QSYL-G3/8-8	1	
	10	9.2	17.5	17.5	27	28.7	5.8	-	2.4	19	45	186196	QSYL-G3/8-10	1	
	12	9.7	21	21	29.2	29.7	5.8	-	2.4	19	52	186197	QSYL-G3/8-12	1	
G1/2	12	10.6	21	21	30.2	33.7	6.8	-	2.4	24	80	186198	QSYL-G1/2-12	1	

1) Pack size

Datasheet

Push-in Y-fitting QSYLV

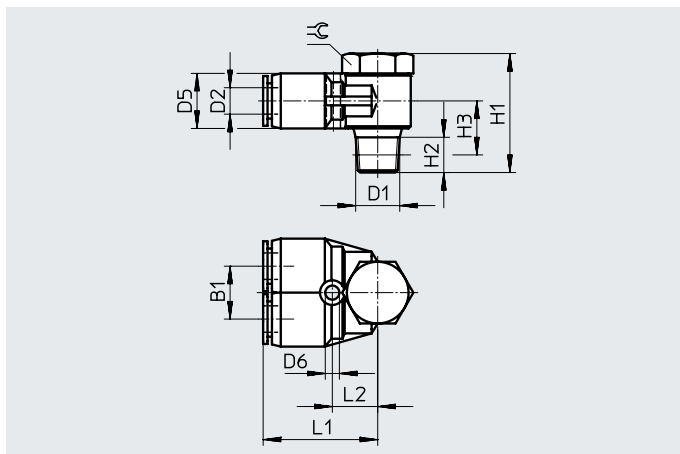
Male thread with external hex, rotatable

No. of supply lines: 1

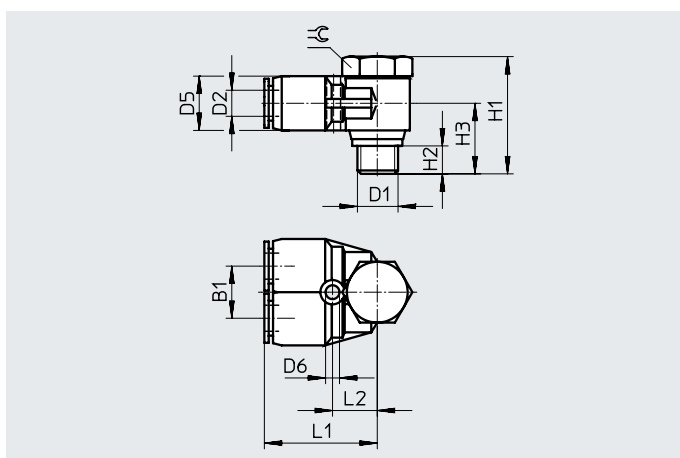
No. of outlets: 2



R thread



G thread



Dimensions and ordering data

Pneumatic connection		Nominal width	Dimensions [mm]										Weight/ piece	Part no.	Type	PS ¹⁾
Male thread	For tubing O.D.		B1	D5 ∅	D6 ∅	H1	H2	H3	L1	L2	≈					
D1	D2	[mm]										[g]				
R thread																
R1/8	6	3.3	12	12.5	3.2	27	8	11	26	10.5	14	24.5	153192	QSYLV-1/8-6	1	
R1/4	8	4.4	14	14.5	3.2	31.5	11	12.5	29	12.5	17	41.5	153193	QSYLV-1/4-8	1	
R3/8	10	5.7	17	17.5	4.2	36	12	14.5	33.5	15	21	69.5	153194	QSYLV-3/8-10	1	
R1/2	12	7.1	20	21	4.2	40	15	17.5	37.5	17	24	102	153195	QSYLV-1/2-12	1	
G thread with sealing ring																
G1/8	6	3.5	12	12.4	3.2	26.2	5.1	15.2	27.5	12	17	31	186209	QSYLV-G1/8-6	1	
G1/4	8	4.7	14	14.4	3.2	28.4	5.6	16.4	30.9	14	19	48	186210	QSYLV-G1/4-8	1	
G3/8	10	5.2	17	17.6	4.2	33.4	6.6	19.4	34	15.5	21	73	186211	QSYLV-G3/8-10	1	
G1/2	12	7	20	21	4.2	37.4	7.6	21.9	38.9	18.5	27	123	186212	QSYLV-G1/2-12	1	

1) Pack size

Accessories

Releasing tool QSO

Releasing tool for disconnecting tubing from the plug-in connection in locations that are difficult to access.



Dimensions and ordering data

For tubing O.D.

	Weight/ piece [g]	Part no.	Type
4, 6, 8, 10	13	158419	QSO