Push-in fittings QSM, mini

★	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	The Core Range offers you the best value for your automation tasks.
Simply good:	Expected high Festo quality	
Fast:	Easy and fast to select	

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.

Summary of tubing/fitting combinations

Applications	Fitting	Tubing	Description
Standard	QS	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	PUN	Maximum flexibility in standard applications thanks to an extremely wide range of options for combining the different types.
	QS	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.
	NPQR	PUN-H-SF	Use in areas with higher pressure ranges and humidity. Tubing PUN-H-SF is resistant to kinking and hydrolysis and is suitable for water applications.
Resistant to chemicals and hydrolysis	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".
	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).
	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, food-safe	NPQR	PUN-H-F/PFAN	Food-safe to Regulation (EC) No. 1935/2004 and FDA-listed materials. Can be used in the food and packaging industry in combination with PUN-H-F and PFAN.
	NPQH	PFAN/PTFEN	For high temperatures up to 150 °C. Food-safe to Regulation (EC) No. 1935/2004, FDA-listed materials and resistant to cleaning agents.
Antistatic	NPQM	PUN-CM	Antistatic tubing plus solid metal fitting for maximum protection for electrical and electronic components.
Flame-retardant	NPQM	PUN-V0	Very safe in areas where there is a risk of fire thanks to flame-retardant properties. The tubing has been tested to DIN 5510-2.
Resistant to welding spatter	NPQH	PUN-V0-C	Ideal for applications with welding spatter. Reliable thanks to a tubing wall thickness of 2 mm for all diameters.
	QS-V0	PAN-V0	Safe even in the immediate vicinity of welding spatter thanks to double-walled tubing with special fitting.
Battery manufacturing	NPQE-F1A[1)]	PUN-H	Suitable in battery production areas.

1) F1A = Free of copper, zinc and nickel

Key features

Push-in fittings – Product range

QSM, mini — Datasheets → Internet: sqm

Compact 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. of 4, 6, 8, 10, 12, 16 and 22 mm with connecting threads from R1/8 ... R1/2 and G1/8 ... G3/4.

CRQS, stainless steel — Datasheets → Internet: crqs

Stainless steel push-in fitting. Maximum corrosion resistance CRC4 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. of 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. of 4, 6, 8, 10 and 12 mm with connecting threads 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 CRC3 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. of 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. of 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. of 4, 6, 8, 10 and 12 mm with connecting threads from 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. of 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 by 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. of 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 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. 4, 6, 8 and 10 mm with connecting thread M5 and G1/8 ... G3/8.

Click fittings – Product range

NPKA
Datasheets ➔ Internet: npka

Polymer 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 the standard O.D. 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 the push-in fittings from Festo are nickel-plated and 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.

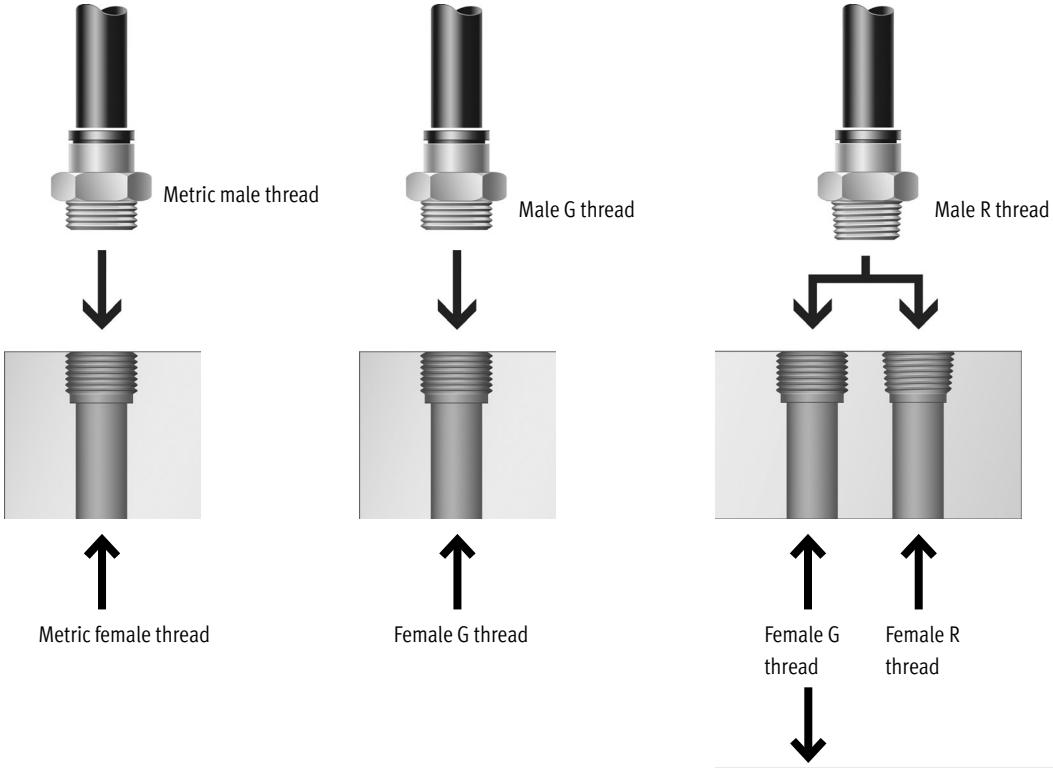
Key features

Which fitting fits which thread?

Metric thread
- Threads are comparable with G threads and are fitted as cylindrical metric thread
- 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 at 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 get into the compressed air system.

Key features

Tube mounting/removal

Assembly

The prerequisite for ensuring that the inner 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 the screwed trunnion		Sealing ring for M/G thread
		Coating for R thread
Nominal tightening torque	[Nm]	0.48 ±55% for M3 male thread
		1.2 ±20% for M5 male thread
		2.2 ±20% for M7 male thread
		5.4 ±20% with G1/8 male thread
Tubing insertion depth[1]	[mm]	8.4 for tubing O.D. 2 mm
		9.5 for tubing O.D. 3 mm
		11.5 for tubing O.D. 4 mm
		12 for tubing O.D. 6 mm

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

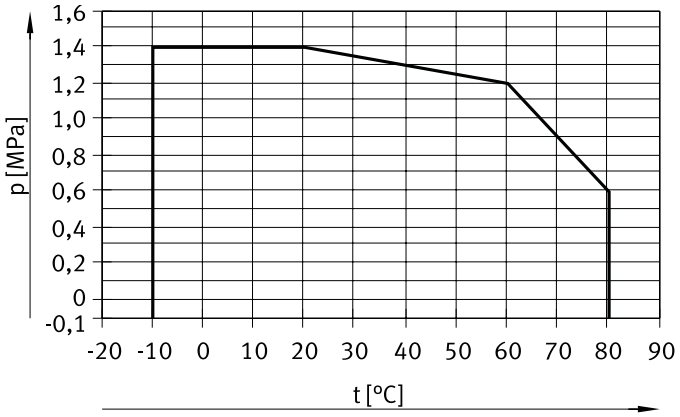
Note

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		
Operating pressure for full temperature range	[MPa]	–0.095 ... +0.6
	[bar]	–0.95 ... +6
	[psi]	–13.775 ... +87
Temperature-dependent operating pressure	[MPa]	–0.095 ... +1.4 → graph
	[bar]	–0.95 ... +14
	[psi]	–13.775 ... +203
Operating medium		Compressed air to ISO 8573-1:2010 [7:–:–]
Note on the operating/pilot medium		Lubricated operation possible
Ambient temperature	[°C]	–10 ... +80
Corrosion resistance class CRC[1]		1 - Low corrosion stress

1) More information: www.festo.com/x/topic/crc

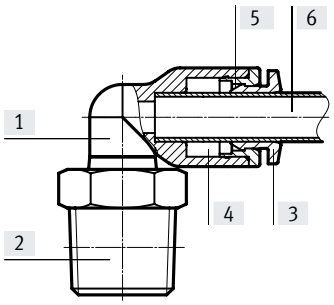
Operating pressure p as a function of temperature t



Technical data

Materials

Sectional view



Type		QSM, mini
[1]	Housing	Nickel-plated brass, PBT, anodised aluminium QSM-M3-3/4: Nickel-plated steel
[2]	Screwed trunnion	Nickel-plated brass M3: Nickel-plated steel
[3]	Release 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 (QSMS)	Nickel-plated brass
[–]	Hollow bolt (QSMLV/QSMLLV)	Nickel-plated brass
Note on materials		RoHS-compliant
LABS (PWIS) conformity		VDMA24364-B1/B2-L

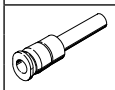
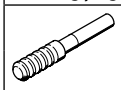
Possible push-in fitting/tubing combinations

Thread	Tubing O.D. [mm]			
	2	3	4	6
M3	+	++	+	–
M5	+	+	++	+
M6	–	–	–	+
M7	–	–	+	++
M8	–	–	–	++
R1/8	–	–	+	++
G1/8	–	–	+	++

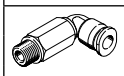
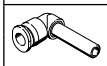
\+ Possible thread/tubing O.D. combinations

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

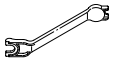
Product range overview

Design	Version	Type	Connection D1					Connection D2	→ Page/Internet
			M thread	R thread	G thread	Tubing O.D.	Push-in sleeve ⌀	Tubing O.D.	
Straight shape	**Push-in fitting – Male thread with external hex**								
		**QSM**	M3	–	–	–	–	2, 3, 4	12
			M5					2, 3, 4, 6	
			M6					6	
		**QSM**	–	R1/8	G1/8	–	–	4, 6	12
	Push-in fitting – Male thread with internal hex								
		**QSM-...-I**	M3	–	–	–	–	2, 3, 4	13
			M5					3, 4, 6	
			M7	R1/8	G1/8			4, 6	
	Push-in fitting – Male thread with internal hex, round release ring								
		**QSM-...-I-R**	M3	–	–	–	–	3, 4	14
			M5					3, 4, 6	
			M7					6	
	Push-in fitting – Female thread with external hex								
		**QSMF**	M3	–	–	–	–	3, 4	15
			M5					3, 4	
	Push-in fitting – Male thread with internal hex								
		**QSMP**	M6x0.75	–	–	–	–	4	15
			M8x0.75					6	
			M8x1.25					6	
	Push-in connector								
		**QSM**	–	–	–	3	–	3	16
						4		4	
						6		6	
		**QSM** Reducing	–	–	–	3	–	2	16
						4		3	
						6		4	
	Push-in bulkhead connector								
		**QSMS**	–	–	–	3	–	–	16
						4			
						6			
	Push-in cap								
		**QSMC**	–	–	–	3	–	–	17
	Push-in connector with push-in sleeve								
		**QSM-...H**	–	–	–	–	3	2	17
							4	3	
							6	4	
	Blanking plug								
		**QSMC-...H**	–	–	–	–	2	–	17
							3		

Product range overview

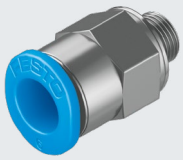
Design	Version	Type	Connection D1					Connection D2	→ Page/Internet
			M thread	R thread	G thread	Tubing O.D.	Push-in sleeve ⌀	Tubing O.D.	
L-shape	**Push-in L-fitting – Male thread with external hex, rotatable**								
		**QSML**	M3	–	–	–	–	2, 3, 4	18
			M5					2, 3, 4, 6	
			M7	R1/8	G1/8			4, 6	
	Push-in L-fitting, long – Male thread with external hex, rotatable								
		**QSMLL**	M3	–	–	–	–	2, 3, 4	19
			M5					2, 3, 4, 6	
			M7	R1/8	G1/8			4, 6	
	Push-in L-fitting – Male thread with internal hex, rotatable								
		**QSMLV-...-I**	M5	–	–	–	–	3, 4	20
			M7					4, 6	
	Push-in L-fitting, long – Male thread with internal hex, rotatable								
		**QSMLLV-...-I**	M5	–	–	–	–	3, 4	20
			M7					4, 6	
	Push-in L-connector								
		**QSML**	–	–	–	3	–	–	21
						4			
						6			
	Push-in L-connector with push-in sleeve								
		**QSML-...H**	–	–	–	–	3	3	21
							4	4	
							6	6	
		**QSML-...H** Reducing	–	–	–	–	4	3	21
							6	4	
T-shape	**Push-in T-fitting – Male thread with external hex, rotatable**								
		**QSMT**	M3	–	–	–	–	3, 4	22
			M5					3, 4, 6	
			–	R1/8	G1/8			4, 6	
		**QSMTL**	M3	–	–	–	–	3, 4	23
			M5					3, 4, 6	
			–	R1/8	G1/8			4, 6	
	Push-in T-connector								
		**QSMT**	–	–	–	2	–	2	24
						3		3	
						4		4	
						6		6	
		**QSMT** Reducing	–	–	–	4	–	3	24
						6		4	
X-shape	**Push-in X-connector**								
		**QSMX**	–	–	–	3	–	–	25
						4			
						6			

Product range overview

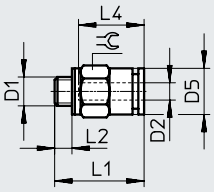
Design	Version	Type	Connection D1					Connection D2	→ Page/Internet
			M thread	R thread	G thread	Tubing O.D.	Push-in sleeve ⌀	Tubing O.D.	
Y-shape	**Push-in Y-connector**								
		**QSMY**	–	–	–	2	–	2	25
						3		3	
						4		4	
						6		6	
		**QSMY** Reducing	–	–	–	4	–	3	25
						6		4	
Release tool	**Quick-out release tool for push-in connections**								
		**QSO**							**26**

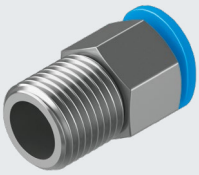
Datasheet

Push-in fitting QSM
Male thread with external hex

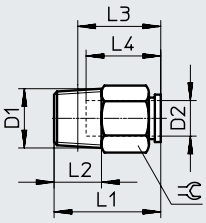


M thread

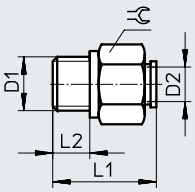




R thread



G thread



Dimensions and ordering data

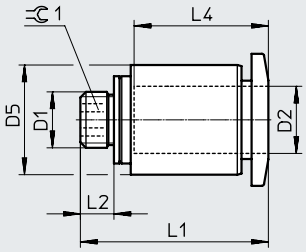
Pneumatic connection		Nominal width	Dimensions [mm]						Weight/ piece	Part no.	Type	Pcs.[1]
Male thread D1	For tubing O.D. D2	[mm]	D5	L1	L2	L3	L4	⫰	[g]			
Metric thread with sealing ring												
M3	2	0.9	4.8	12.1	2.5	–	8.4	5	1	**133027**	**QSM-M3-2**	**10**
	3		7	13.3	2.5	–	9.6	5.5	1.1	**153301**	**QSM-M3-3**	**10**
										130775	**QSM-M3-3-100**	**100**
	4	1.1	9.8	15.7	2.5	–	11.5	8	2.4	★ **153303**	**QSM-M3-4**	**10**
										130776	**QSM-M3-4-100**	**100**
M5	2	1.1	4.8	11.8	3	–	8.4	7	2.2	**133028**	**QSM-M5-2**	**10**
	3	2	9.8	16.2	3	–	11.5	8	3.4	**153302**	**QSM-M5-3**	**10**
										130777	**QSM-M5-3-100**	**100**
	4	2.2	9.8	16.2	3	–	11.5	8	3.2	★ **153304**	**QSM-M5-4**	**10**
										130778	**QSM-M5-4-100**	**100**
	6	2.1	11.8	17.3	3	–	12	10	4.5	★ **153306**	**QSM-M5-6**	**10**
										130779	**QSM-M5-6-100**	**100**
M6	6	2.8	11.8	18	3.9	–	11.7	10	4.8	★ **132600**	**QSM-M6-6**	**10**
R thread												
R1/8	4	2.9	–	16	8	12	11.5	10	6	★ **153305**	**QSM-1/8-4**	**10**
										130755	**QSM-1/8-4-100**	**100**
	6	4.5	–	18	8	14	12	10	6	★ **153307**	**QSM-1/8-6**	**10**
										130756	**QSM-1/8-6-100**	**100**
G thread with sealing ring												
G1/8	4	2.9	–	16.4	5.1	–	–	13	9.4	★ **186264**	**QSM-G1/8-4**	**10**
	6	2.8	–	18.4	5.1	–	–	13	11	★ **186265**	**QSM-G1/8-6**	**10**

1) Pack size

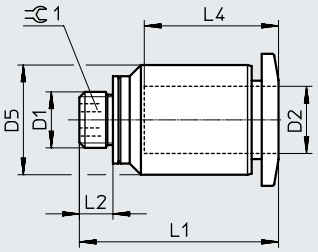
Datasheet

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

M thread

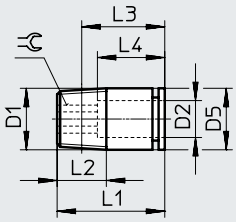


QSM-M3-2-I, QSM-M5-3-I, QSM-M5-4-I, QSM-M7-4-I, QSM-M7-6-I

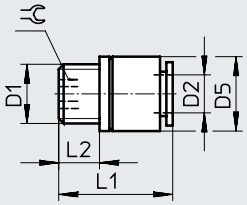


QSM-M3-3-I, QSM-M3-4-I, QSM-M5-6-I

R thread



G thread



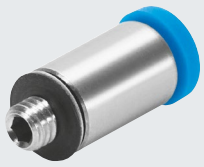
Dimensions and ordering data

Pneumatic connection		Nominal width	Dimensions [mm]						Weight/ piece	Part no.	Type	Pcs.[1]
Male thread	For tubing O.D.		D5 Ø	L1	L2	L3	L4	⊂				
D1	D2	[mm]							[g]			
Metric thread with sealing ring												
M3	2	1.1	5	12.1	2.5	–	8.4	1.3	0.8	**133026**	**QSM-M3-2-I**	**10**
	3	1.6	8	15.7	2.5	–	11.5	1.5	2.3	**153312**	**QSM-M3-3-I**	**10**
	4	1.5	8	15.7	2.5	–	11.5	1.5	2.2	★ **153314**	**QSM-M3-4-I**	**10**
M5	3	1.9	8	16.2	3	–	11.5	2	3.2	**153313**	**QSM-M5-3-I**	**10**
	4	2.5	8	16.2	3	–	11.5	2.5	3	★ **153315**	**QSM-M5-4-I**	**10**
	6	2.6	9.8	17.8	3	–	12	2.5	4.4	★ **153317**	**QSM-M5-6-I**	**10**
M7	4	3.1	9.8	18.9	5.5	–	11.5	3	6	★ **153319**	**QSM-M7-4-I**	**10**
										133006	**QSM-M7-4-I-100**	**100**
	6	4.1	9.8	20.9	5.5	–	12	4	6.4	★ **153321**	**QSM-M7-6-I**	**10**
R thread												
R1/8	4	3.1	10	16.4	8	12.4	11.5	3	6.2	★ **153316**	**QSM-1/8-4-I**	**10**
	6	4.1	10	18.2	8	14.2	12.5	4	5.6	★ **153318**	**QSM-1/8-6-I**	**10**
G thread with sealing ring												
G1/8	4	3.1	13	16.4	5.1	–	–	3	8.9	★ **186266**	**QSM-G1/8-4-I**	**10**
	6	4.1	13	18.4	5.1	–	–	4	9.5	★ **186267**	**QSM-G1/8-6-I**	**10**

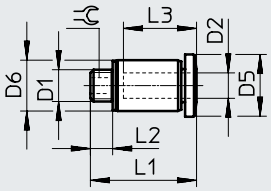
1) Pack size

Datasheet

Push-in fitting QSM-...-I-R
Male thread with internal hex
Round release ring



M thread



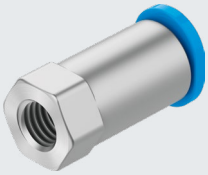
Dimensions and ordering data

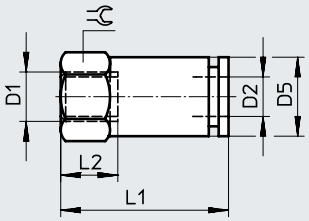
Pneumatic connection		Nominal width	Dimensions [mm]						Weight/ piece	Part no.	Type	Pcs.[1]
Male thread	For tubing O.D.		D5 ø	D6 ø	L1	L2	L3	⌀				
D1	D2	[mm]							[g]			
Metric thread with sealing ring, round release ring												
M3	3	1.6	6	5.5	13.3	2.5	9.6	1.5	2.3	**133001**	**QSM-M3-3-I-R**	**10**
										132914	**QSM-M3-3-I-R-100**	**100**
	4	1.5	7.8	8	15.7	2.5	11.5	1.5	2.2	**133002**	**QSM-M3-4-I-R**	**10**
										132915	**QSM-M3-4-I-R-100**	**100**
M5	3	1.9	7.8	8	16.2	3	11.5	2	3.2	**133003**	**QSM-M5-3-I-R**	**10**
										132916	**QSM-M5-3-I-R-100**	**100**
	4	2.5	7.8	8	16.2	3	11.5	2.5	3	**133004**	**QSM-M5-4-I-R**	**10**
										132917	**QSM-M5-4-I-R-100**	**100**
	6	2.6	9.8	9.8	17.8	3	12	2.5	4.4	**133005**	**QSM-M5-6-I-R**	**10**
										132918	**QSM-M5-6-I-R-100**	**100**
M7	6	4.1	9.8	9.8	20.9	5.5	12	4	6.4	**133007**	**QSM-M7-6-I-R**	**10**
										132919	**QSM-M7-6-I-R-100**	**100**

1) Pack size

Datasheet

Push-in fitting QSMF
Female thread with external hex



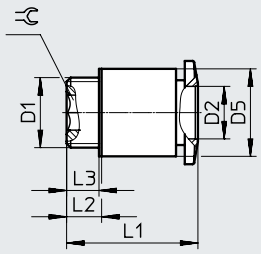


Dimensions and ordering data

Pneumatic connection		Nominal width	Dimensions [mm]				Weight/ piece	Part no.	Type	Pcs.[1]
Female thread	For tubing O.D.		D5 ⌀	L1	L2	⌀				
D1	D2	[mm]					[g]			
Metric thread										
M3	3	1.3	5.5	13.9	4.4	5.5	1.6	**153308**	**QSMF-M3-3**	**10**
	4	2.1	8	16	4.5	8	4.1	**153310**	**QSMF-M3-4**	**10**
M5	3	1.9	8	15.5	4.5	8	4.3	**153309**	**QSMF-M5-3**	**10**
	4	1.8	8	18.2	4.5	8	4.5	**153311**	**QSMF-M5-4**	**10**

1) Pack size

Push-in fitting QSMP
Male thread with internal hex



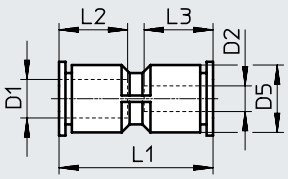
Dimensions and ordering data

Pneumatic connection		Nominal width	Dimensions [mm]					Weight/ piece	Part no.	Type	Pcs.[1]
Male thread	For tubing O.D.		D5 ⌀	L1	L2	L3	⌀				
D1	D2	[mm]						[g]			
Metric thread with sealing ring											
M6x0.75	4	2.5	8	14.6	3.5	3	2.5	2.7	**153320**	**QSMP-M6X0.75-4**	**10**
M8x0.75	6	4	10	15.1	4	3.4	4	3.7	**153322**	**QSMP-M8X0.75-6**	**10**
M8x1.25	6	4	10	19.1	7	6.4	4	4.7	**154434**	**QSMP-M8X1.25-6**	**10**

1) Pack size

Datasheet

Push-in connector QSM

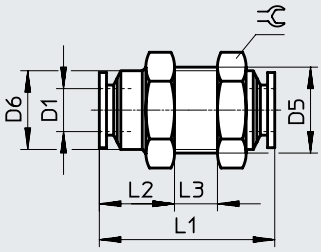


Dimensions and ordering data

Pneumatic connection		Nominal width	Dimensions [mm]				Weight/ piece	Part no.	Type	Pcs.[1]
For tubing O.D. D1	For tubing O.D. D2	[mm]	D5 ø	L1	L2	L3	[g]			
3	3	1.9	6	20	9.5	9.5	1.5	**153323**	**QSM-3**	**10**
								130757	**QSM-3-100**	**100**
4	4	2.6	8	23.5	11.5	11.5	2	★ **153324**	**QSM-4**	**10**
								130758	**QSM-4-100**	**100**
6	6	3.7	10.5	25	12	12	4	★ **153325**	**QSM-6**	**10**
								130759	**QSM-6-100**	**100**
Reducing										
3	2	1.1	6	19.1	9.3	8.4	1	**133029**	**QSM-3-2**	**10**
4	3	1.7	8	23.9	11.6	11.6	2.1	★ **153326**	**QSM-4-3**	**10**
								130760	**QSM-4-3-100**	**100**
6	4	2.7	10.4	24.9	11.6	11.6	3	★ **153327**	**QSM-6-4**	**10**
								130761	**QSM-6-4-100**	**100**

1) Pack size

Push-in bulkhead connector QSMS



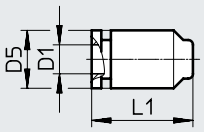
Dimensions and ordering data

Pneumatic connection	Nominal width	Dimensions [mm]						Weight/ piece	Part no.	Type	Pcs.[1]
For tubing O.D. D1	[mm]	D5	D6 ø	L1	L2	L3 max.	⫷	[g]			
3	1.7	M8x0.75	7	19.5	7	7.5	10	3	**153375**	**QSMS-3**	**10**
4	2.2	M10x1	9	24	9.5	7.5	12	6	★ **153376**	**QSMS-4**	**10**
									130780	**QSMS-4-100**	**100**
6	3.7	M12x1	11	25	11	6	14	9	★ **153377**	**QSMS-6**	**10**
									130781	**QSMS-6-100**	**100**

1) Pack size

Datasheet

Push-in cap QSMC



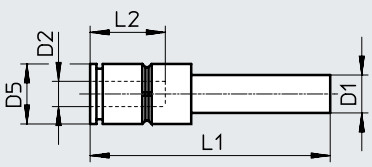
Ordering data

Pneumatic connection	Dimensions [mm]		Weight/ piece	Part no.	Type	Pcs.[1]
For tubing O.D. D1	D5 ø	L1	[g]			
3	6	10.5	0.5	**153381**	**QSMC-3**	**10**

1) Pack size

Push-in connector QSM-...H

With push-in sleeve

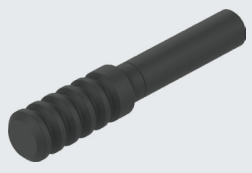


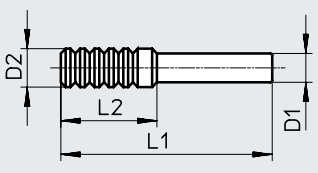
Dimensions and ordering data

Pneumatic connection		Nominal width	Dimensions [mm]			Weight/ piece	Part no.	Type	Pcs.[1]
Push-in sleeve D1	For tubing O.D. D2	[mm]	D5 ø	L1	L2	[g]			
QS-3	2	1.1	6	26.3	8.4	0.6	**133035**	**QSM-3H-2**	**10**
QS-4	3	1.7	6	27	9.5	0.8	★ **153328**	**QSM-4H-3**	**10**
							130762	**QSM-4H-3-100**	**100**
QS-6	4	2.6	9	32.6	11.6	2.4	★ **153329**	**QSM-6H-4**	**10**
							130763	**QSM-6H-4-100**	**100**

1) Pack size

Blanking plug QSMC-...H





Dimensions and ordering data

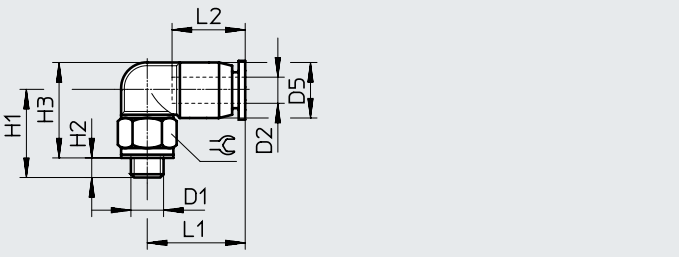
Pneumatic connection	Dimensions [mm]			Weight/ piece	Part no.	Type	Pcs.[1]
Push-in sleeve D1	D2 ø	L1	L2	[g]			
QS-2	3	20	10.2	0.1	**133036**	**QSMC-2H**	**10**
QS-3	4	22	10.2	0.2	**153382**	**QSMC-3H**	**10**

1) Pack size

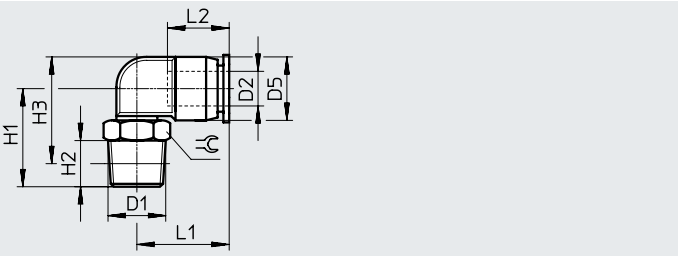
Datasheet

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

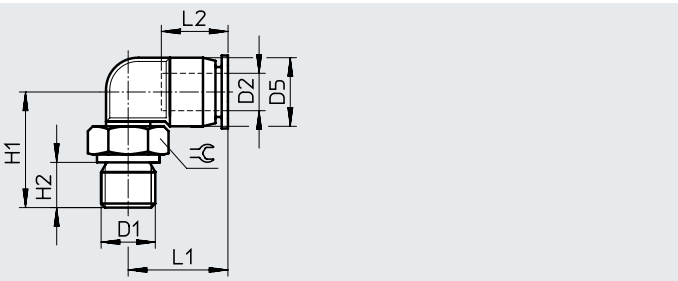

M thread




R thread




G thread



Dimensions and ordering data

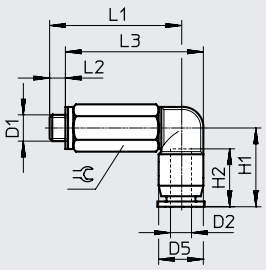
Pneumatic connection		Nominal width	Dimensions [mm]							Weight/ piece	Part no.	Type	Pcs.[1]
Male thread D1	For tubing O.D. D2	[mm]	D5 ø	H1	H2	H3	L1	L2	⫧	[g]			
Metric thread with sealing ring													
M3	2	0.8	6	12	2.5	12.5	10.3	8.4	5.5	1.4	133030	QSML-M3-2	10
	3		6	12	2.5	12.5	11	9.5	5.5	1.4	153330	QSML-M3-3	10
											130768	QSML-M3-3-100	100
	4	1.3	8	14	2.5	15.5	15.7	11.6	8	3	★ 153332	QSML-M3-4	10
											130769	QSML-M3-4-100	100
M5	2	0.9	6	13.5	3	13.5	10.3	8.4	8	2.7	133031	QSML-M5-2	10
	3	1.5	6	13.5	3	13.5	11	9.5	8	2.8	153331	QSML-M5-3	10
											130770	QSML-M5-3-100	100
	4	1.7	8	13.5	3	14.5	15.7	11.6	8	3.4	★ 153333	QSML-M5-4	10
											130771	QSML-M5-4-100	100
	6	2.1	10.5	14.5	3	16.8	16.3	11.9	8	4.1	★ 153335	QSML-M5-6	10
											130772	QSML-M5-6-100	100
M7	4	2	8	17	5.5	15.5	15.7	11.6	10	5.6	★ 186352	QSML-M7-4	10
											130773	QSML-M7-4-100	100
	6	2.4	10.5	19	5.5	18.8	16.3	11.9	10	6.2	★ 186353	QSML-M7-6	10
											130774	QSML-M7-6-100	100
R thread													
R1/8	4	2.5	8.5	16	8	16.3	16	11.5	10	6	★ 153334	QSML-1/8-4	10
											130764	QSML-1/8-4-100	100
	6	3.3	11	17	8	18.5	16.5	12	10	7	★ 153336	QSML-1/8-6	10
											130765	QSML-1/8-6-100	100
G thread with sealing ring													
G1/8	4	2.5	8	16.5	5.1	–	15.7	11.6	13	9	★ 186268	QSML-G1/8-4	10
											132897	QSML-G1/8-4-100	100
	6	3.3	10.5	17.5	5.1	–	16.3	11.9	13	9.7	★ 186269	QSML-G1/8-6	10

1) Pack size

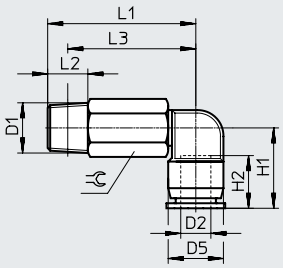
Datasheet

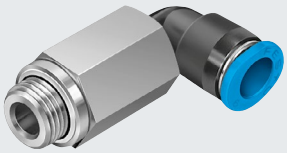
Push-in L-fitting, long QSMLL
Male thread with external hex, rotatable

M thread

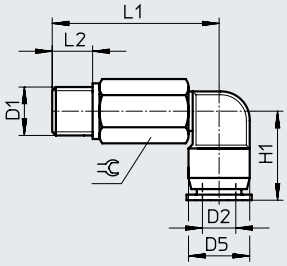


R thread





G thread



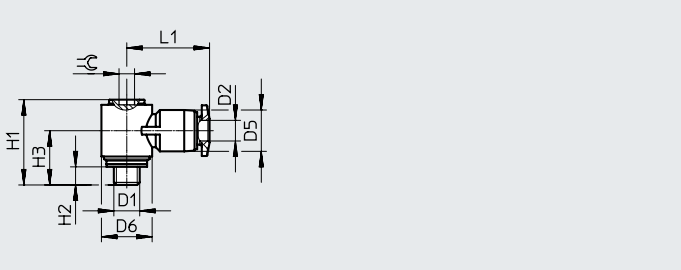
Dimensions and ordering data

Pneumatic connection		Nominal width	Dimensions [mm]							Weight/ piece	Part no.	Type	Pcs.[1]
Male thread	For tubing O.D.		D5 ø	H1	H2	L1	L2	L3	⊂				
D1	D2	[mm]								[g]			
Metric thread with sealing ring													
M3	2	0.8	6	10.3	8.4	19	2.5	19.5	5.5	2.7	**133032**	**QSMLL-M3-2**	**10**
	3	0.9	6	11	9.5	19	2.5	19.5	5.5	2.8	**153337**	**QSMLL-M3-3**	**10**
											133011	**QSMLL-M3-3-100**	**100**
	4	1.1	8	15.7	11.6	23	2.5	24.5	8	6.8	**153338**	**QSMLL-M3-4**	**10**
M5	2	0.9	6	10.3	8.4	25	3	25	8	7.6	**133033**	**QSMLL-M5-2**	**10**
	3	1.5	6	11	9.5	25	3	25	8	7.7	**130838**	**QSMLL-M5-3**	**10**
											133012	**QSMLL-M5-3-100**	**100**
	4	2	8	15.7	11.6	25	3	26	8	8.3	**153339**	**QSMLL-M5-4**	**10**
											133013	**QSMLL-M5-4-100**	**100**
	6	2	10.5	16.3	11.9	26	3	28.3	8	9	**153341**	**QSMLL-M5-6**	**10**
M7	4	2	8	15.7	11.6	29.5	5.5	28	10	14	**186354**	**QSMLL-M7-4**	**10**
											133014	**QSMLL-M7-4-100**	**100**
	6	2.4	10.5	16.3	11.9	31.5	5.5	31.3	10	14	**186355**	**QSMLL-M7-6**	**10**
R thread													
R1/8	4	2.3	8.5	15.5	11.5	28.5	8	22	10	13	**153340**	**QSMLL-1/8-4**	**10**
	6	3.1	11	16.5	12	29.5	8	25.5	10	14	**153342**	**QSMLL-1/8-6**	**10**
G thread with sealing ring													
G1/8	4	2.3	8	15.7	–	29	5.1	–	13	23	**186270**	**QSMLL-G1/8-4**	**10**
	6	3.1	10.5	16.3	–	30	5.1	–	13	23	**186271**	**QSMLL-G1/8-6**	**10**

1) Pack size

Datasheet

Push-in L-fitting QSMLV-...-I
Male thread with internal hex, rotatable

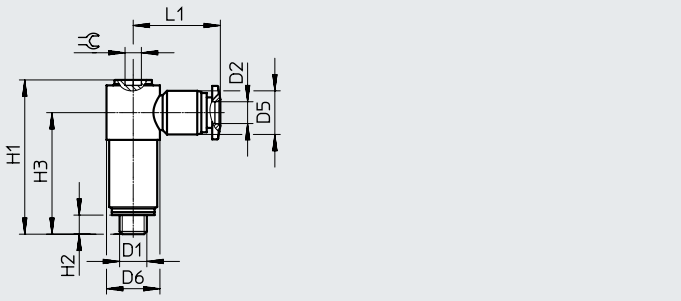


Dimensions and ordering data

Pneumatic connection		Nominal width	Dimensions [mm]							Weight/ piece	Part no.	Type	Pcs.[1]
Male thread	For tubing O.D.		D5 ø	D6 ø	H1	H2	H3	L1	⊂				
D1	D2	[mm]								[g]			
Metric thread with sealing ring													
M5	3	1.7	8	9.8	16.5	3.5	10.5	16	3	5.1	**130830**	**QSMLV-M5-3-I**	**10**
	4	1.8	8	9.8	16.5	3.5	10.5	16	3	5	**130831**	**QSMLV-M5-4-I**	**10**
M7	4	1.9	8	9.8	18.5	5.5	13.2	16	3	7.4	**130832**	**QSMLV-M7-4-I**	**10**
	6	1.8	10.5	9.8	18.5	5.5	12.5	17.8	3	6.2	**130833**	**QSMLV-M7-6-I**	**10**

1) Pack size

Push-in L-fitting, long QSMLLV-...-I
Male thread with internal hex, rotatable



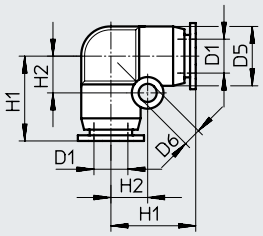
Dimensions and ordering data

Pneumatic connection		Nominal width	Dimensions [mm]							Weight/ piece	Part no.	Type	Pcs.[1]
Male thread	For tubing O.D.		D5 ø	D6 ø	H1	H2	H3	L1	⊂				
D1	D2	[mm]								[g]			
Metric thread with sealing ring													
M5	3	1.6	8	9.8	28.3	3.5	23	16	3	13	**130834**	**QSMLLV-M5-3-I**	**10**
	4	1.8	8	9.8	28.3	3.5	23	16	3	13	**130835**	**QSMLLV-M5-4-I**	**10**
M7	4	1.9	8	9.8	30.3	5.5	25	16	3	14	**130836**	**QSMLLV-M7-4-I**	**10**
	6	1.9	10.5	9.8	30.3	5.5	24.3	17.8	3	12.4	**130837**	**QSMLLV-M7-6-I**	**10**

1) Pack size

Datasheet

Push-in L-connector QSML



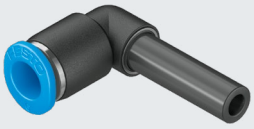
Dimensions and ordering data

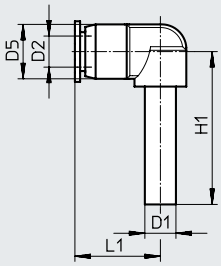
Pneumatic connection		Nominal width	Dimensions [mm]				Weight/ piece	Part no.	Type	Pcs.[1]
For tubing O.D.			D5 ⌀	D6 ⌀	H1	H2				
D1		[mm]					[g]			
3		1.7	6	3.2	11	4.5	1.5	153343	QSML-3	10
4		2.5	8	3.2	13.5	5.5	2	★ 153344	QSML-4	10
								130766	QSML-4-100	100
6		3.4	10.5	3.2	15.5	6.5	4	★ 153345	QSML-6	10
								130767	QSML-6-100	100

1) Pack size

Push-in L-connector QSML-...H

With push-in sleeve





Dimensions and ordering data

Pneumatic connection		Nominal width	Dimensions [mm]			Weight/ piece	Part no.	Type	Pcs.[1]
Push-in sleeve	For tubing O.D.		D5 ⌀	H1	L1				
D1	D2	[mm]				[g]			
QS-3	3	1.2	9	24	14.7	1.7	153346	QSML-3H	10
QS-4	4	1.9	9	25	14.7	1.7	★ 153347	QSML-4H	10
QS-6	6	3.2	10.5	26.5	17.3	2.4	★ 153348	QSML-6H	10
Reducing									
QS-4	3	1.7	9	25	14.7	1.7	★ 153349	QSML-4H-3	10
QS-6	4	1.9	9	26	14.7	1.9	★ 153350	QSML-6H-4	10

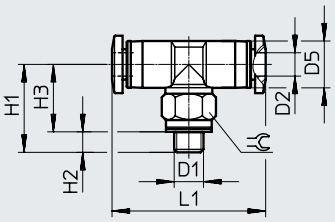
1) Pack size

Datasheet

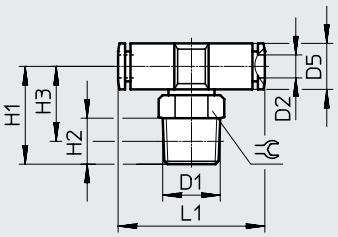
Push-in T-fitting QSMT
Male thread with external hex, rotatable

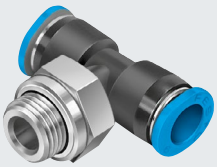
No. of supply lines: 1
No. of outlets: 2

M thread

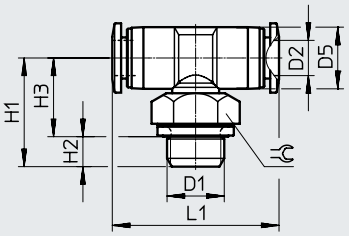


R thread





G thread



Dimensions and ordering data

Pneumatic connection		Nominal width	Dimensions [mm]						Weight/ piece	Part no.	Type	Pcs.[1]
Male thread	For tubing O.D.		D5 ø	H1	H2	H3	L1	⫰				
D1	D2	[mm]							[g]			
Metric thread with sealing ring												
M3	3	0.9	6	12.8	3.3	9.5	22	5.5	2	**153351**	**QSMT-M3-3**	**10**
	4	1.3	8	15.8	3.3	12.5	26.2	8	4	**153353**	**QSMT-M3-4**	**10**
M5	3	1.6	6	14	3.5	10.5	22	8	3.3	**153352**	**QSMT-M5-3**	**10**
	4	2.2	8	15	3.5	11.5	26.2	8	4.4	**153354**	**QSMT-M5-4**	**10**
										130784	**QSMT-M5-4-100**	**100**
	6	2.1	10.5	16	3.5	12.5	28.4	8	5.6	**153356**	**QSMT-M5-6**	**10**
										130785	**QSMT-M5-6-100**	**100**
R thread												
R1/8	4	2.4	8.5	17	8	13	27	10	7	**153355**	**QSMT-1/8-4**	**10**
	6	3.3	11	18	8	14	30	10	8	**153357**	**QSMT-1/8-6**	**10**
G thread with sealing ring												
G1/8	4	2.4	8	17.5	5.1	12.4	26.2	13	10	**186272**	**QSMT-G1/8-4**	**10**
	6	3.3	10.5	18.5	5.1	13.4	28.4	13	12	**186273**	**QSMT-G1/8-6**	**10**

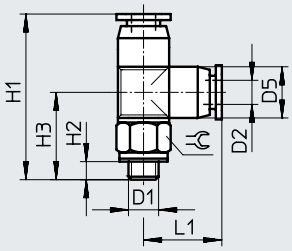
1) Pack size

Datasheet

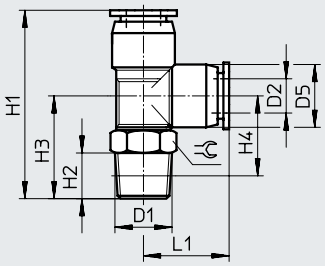
Push-in T-fitting QSMTL
Male thread with external hex, rotatable

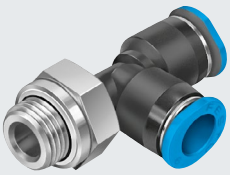
No. of supply lines: 1
No. of outlets: 2

M thread

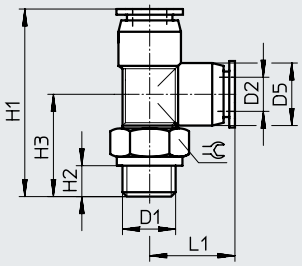


R thread





G thread



Dimensions and ordering data

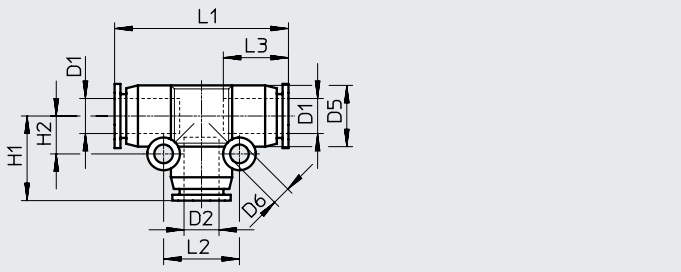
Pneumatic connection		Nominal width	Dimensions [mm]							Weight/ piece	Part no.	Type	Pcs.[1]
Male thread	For tubing O.D.		D5 ⌀	H1	H2	H3	H4	L1	⌀				
D1	D2	[mm]								[g]			
Metric thread with sealing ring													
M3	3	0.9	6	23.8	3.3	12.8	–	11	5.5	2	**153358**	**QSMTL-M3-3**	**10**
	4	1.1	8	29.5	3.3	15.8	–	13.7	8	4	**153360**	**QSMTL-M3-4**	**10**
M5	3	1.7	6	25	3.5	14	–	11	8	3.3	**153359**	**QSMTL-M5-3**	**10**
	4	1.6	8	28.7	3.5	15	–	13.7	8	4.4	**153361**	**QSMTL-M5-4**	**10**
	6	1.7	10.5	31.3	3.5	16	–	15.3	8	5.7	**153363**	**QSMTL-M5-6**	**10**
R thread													
R1/8	4	2.4	8.5	30	8	17	13	13	10	7	**153362**	**QSMTL-1/8-4**	**10**
	6	3.3	10.5	33	8	18	14	15	10	8.5	**153364**	**QSMTL-1/8-6**	**10**
G thread with sealing ring													
G1/8	4	2.4	8	31.2	5.1	17.5	–	13.7	13	10	**186274**	**QSMTL-G1/8-4**	**10**
	6	3.3	10.5	33.8	5.1	18.5	–	15.3	13	12	**186275**	**QSMTL-G1/8-6**	**10**

1) Pack size

Datasheet

Push-in T-connector QSMT

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



Dimensions and ordering data

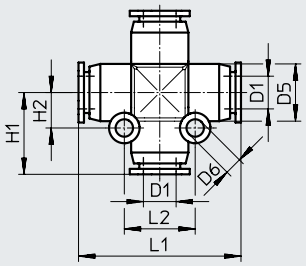
Pneumatic connection		Nominal width	Dimensions [mm]							Weight/ piece	Part no.	Type	Pcs.[1]
For tubing O.D. D1	For tubing O.D. D2	[mm]	D5 ⌀	D6 ⌀	H1	H2	L1	L2	L3	[g]			
2	2	0.9	6	3.2	10.3	4.5	20.5	9	8.4	1.6	**133034**	**QSMT-2**	**10**
3	3	1.6	6	3.2	11	4.5	22	9	9.5	1.7	**153365**	**QSMT-3**	**10**
4	4	2.4	8	3.2	13.7	5.6	27.3	11.2	11.6	3.3	★ **153366**	**QSMT-4**	**10**
											130782	**QSMT-4-100**	**100**
6	6	3.4	10.5	3.2	15.3	6.6	30.5	13.2	11.9	5.3	★ **153367**	**QSMT-6**	**10**
											130783	**QSMT-6-100**	**100**
Reducing													
4	3	1.7	8	3.2	13	5.5	27	11	11.5	3.5	★ **153368**	**QSMT-4-3**	**10**
6	4	2.6	10.5	3.2	15	6.5	30	13	12	4	★ **153369**	**QSMT-6-4**	**10**

1) Pack size

Datasheet

Push-in X-connector QSMX

No. of supply lines: 1
No. of outlets: 3



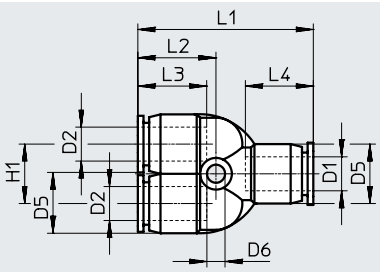
Dimensions and ordering data

Pneumatic connection	Nominal width	Dimensions [mm]						Weight/ piece	Part no.	Type	Pcs.[1]
For tubing O.D. D1	[mm]	D5 ø	D6 ø	H1	H2	L1	L2	[g]			
3	1.7	8	3.2	13.5	5.5	27	11	4	**153378**	**QSMX-3**	**10**
4	2.5	8	3.2	13.5	5.5	27	11	4	**153379**	**QSMX-4**	**10**
6	3.3	10.5	3.2	15.5	6.5	31	13	5	**153380**	**QSMX-6**	**10**

1) Pack size

Push-in Y-connector QSMY

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



Dimensions and ordering data

Pneumatic connection		Nominal width	Dimensions [mm]							Weight/ piece	Part no.	Type	Pcs.[1]
For tubing O.D. D1	For tubing O.D. D2	[mm]	D5 ø	D6 ø	H1	L1	L2	L3	L4	[g]			
2	2	0.9	6	3.2	6.5	19.5	11.8	8.4	8.4	1.7	**133037**	**QSMY-2**	**10**
3	3	1.6	8	3.2	8	28.8	13.2	11.6	11.6	3.7	**153370**	**QSMY-3**	**10**
4	4	1.7	8	3.2	8	28.8	13.2	11.6	11.6	3.5	★ **153371**	**QSMY-4**	**10**
											130786	**QSMY-4-100**	**100**
6	6	2.9	10.5	3.2	10.5	31.6	14.3	11.9	11.9	5.5	★ **153372**	**QSMY-6**	**10**
											130787	**QSMY-6-100**	**100**
Reducing													
4	3	1.6	8	3.2	8	28.8	13.2	11.6	11.6	3.6	★ **153373**	**QSMY-4-3**	**10**
6	4	2.3	10.5	3.2	10.5	31.5	14.2	11.6	11.9	5.3	★ **153374**	**QSMY-6-4**	**10**

1) Pack size

Accessories

Release tool QSO
Release 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**