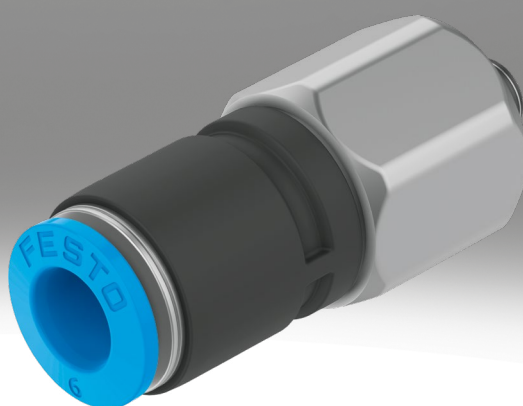


Push-in fitting, rotatable QSR

FESTO



Characteristics

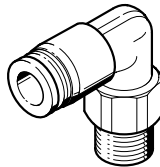
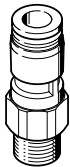
At a glance

Rotatable push-in fitting with swivel connection: rotates 360° at max. 500 rpm.

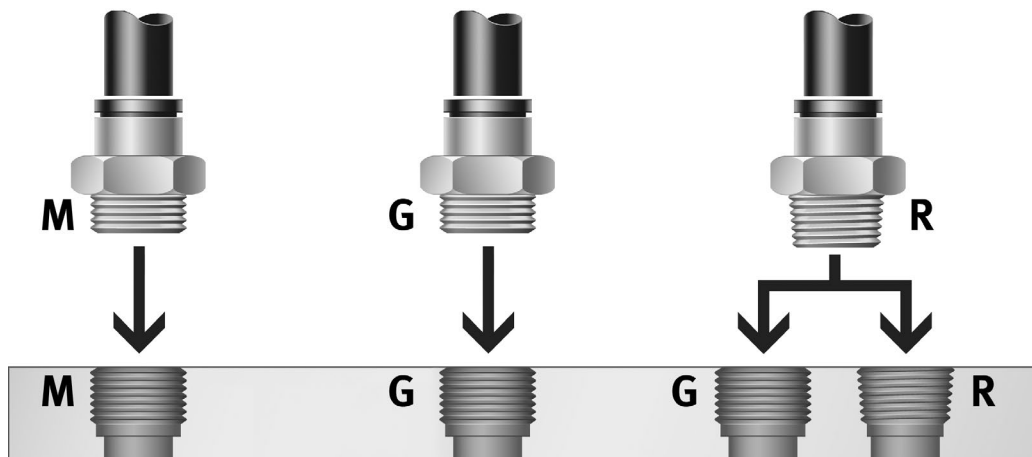
- Compact installation space
- Straight shape, L-shape

Series

[QSR]	Rotatable push-in fitting QSR	[QSRL]	Push-in fitting, rotatable, L-shape QSRL
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Pneumatic connection 1



Push-in fittings for different tube outside diameters can be combined with push-in fittings, push-in sleeves, metric male threads, male R and G threads.

Which fitting fits into which thread?

- Metric thread: Threads are comparable to G threads and are mounted in metric cylindrical threads. Tightness is ensured by a chambered O-ring.
- G thread to ISO 228-1: shorter thread, constant installation depth, replaceable sealing ring, seal on the front, reusable several times thanks to replaceable sealing ring.
- R thread to EN 10226-1 and ISO 7/1: self-locking thread, seal on the thread, no additional sealing surface required, smaller installation dimensions as no shoulder for sealing surface, can be reused up to 5 times. When combining a male R thread with a female G thread, leakage can occur if the female G thread is not manufactured properly or has an unfavourable limit tolerance. In this case, an additional seal is required, e.g. with sealing band. When combining a male R thread with a female G thread, leakage can occur if the female G thread is not manufactured properly or has an unfavourable limit tolerance. In this case, an additional seal is required, e.g. with sealing band.

Type code

001	Series	
QSR	Rotatable push-in fitting QSR	
QSRL	Push-in fitting, rotatable, L-shape QSRL	

002	Pneumatic connection 1	
1/8	Male thread R1/8	
1/4	Male thread R1/4	
3/8	Male thread R3/8	
1/2	Male thread R1/2	
G1/8	Male thread G1/8	
G1/4	Male thread G1/4	
G3/8	Male thread G3/8	
G1/2	Male thread G1/2	
M5	Male thread M5	

003	Pneumatic connection 2	
4	Push-in connector 4 mm	
6	Push-in connector 6 mm	
8	Push-in connector 8 mm	
10	Push-in connector 10 mm	
12	Push-in connector 12 mm	

Datasheet

General technical data

Pneumatic connection, port 2	For tubing outside diameter of 4 mm	For tubing outside diameter of 6 mm	For tubing outside diameter of 8 mm	For tubing outside diameter of 10 mm	For tubing outer diameter of 12 mm
Size	Standard				
Design	Push-pull principle				
Mounting position	optional				
Type of seal on screwed plug ¹⁾	Coating, Sealing ring				
Max. rotational speed	500 rpm		400 rpm	300 rpm	200 ... 250 rpm

1) Sealing ring (G thread), coating (R thread)

Nominal tightening torque

Pneumatic connection, port 1	Male thread M5	Male thread G1/8	Male thread G1/4	Male thread G3/8	Male thread G1/2	Male thread R1/8	Male thread R1/4	Male thread R3/8	Male thread R1/2
Nominal torque	1.2 Nm	5.4 Nm	9 Nm	15.5 Nm	26 Nm	7 Nm	9 Nm	15.5 Nm	26 Nm

Max. speed and radial torque

Pneumatic connection, port 2	For tubing outside diameter of 4 mm	For tubing outside diameter of 6 mm	For tubing outside diameter of 8 mm	For tubing outside diameter of 10 mm	For tubing outer diameter of 12 mm
Max. rotational speed ¹⁾	500 rpm		400 rpm	300 rpm	200 rpm
Max. radial torque	0.006 Nm	0.012 Nm	0.015 Nm	0.02 Nm	0.025 Nm

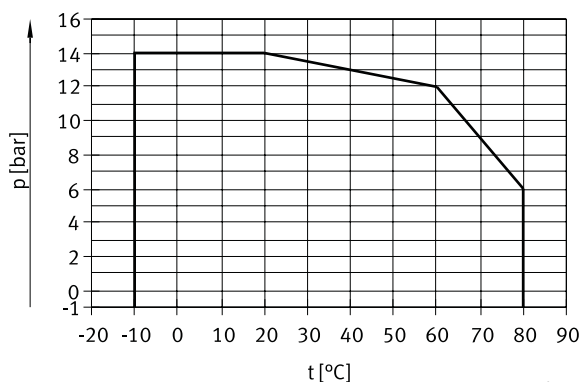
1) 250 1/min with tubing O.D. 12 mm and R thread

Operating and environmental conditions

Operating pressure complete temperature range	-0.95 ... 6 bar
Temperature-dependent operating pressure	-0.95 ... 14 bar
Operating medium	Compressed air to ISO 8573-1:2010 [7:-:-]
Note on operating and pilot medium	Lubricated operation possible
Ambient temperature	0 ... 60°C
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



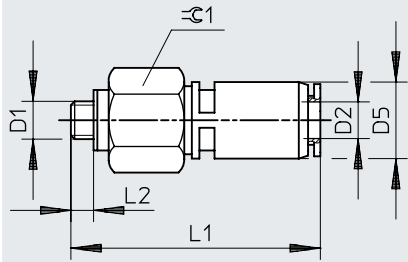
Datasheet

Materials

Material housing	PBT
Material release ring	POM
Material tubing seal	NBR
Material tubing clamp component	High-alloy stainless steel
Note on materials	RoHS-compliant
LABS (PWIS) conformity	VDMA24364-B1/B2-L

Dimensions

Dimensions – Push-in fitting, rotatable QSR, M thread [Download CAD data](#) www.festo.com

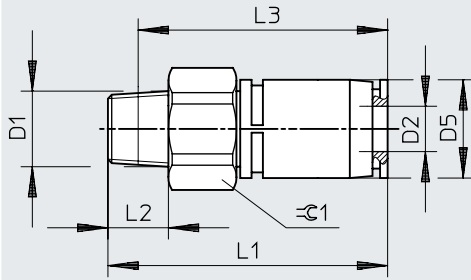


	D1	D2 ø	D5 ø	L1	L2	⌀
QSR-M5-4	M5	4	10	33,1	3,5	12
QSR-M5-6		6	12,5	36,7	3,5	14

Dimensions

Dimensions – Push-in fitting, rotatable QSR, R thread

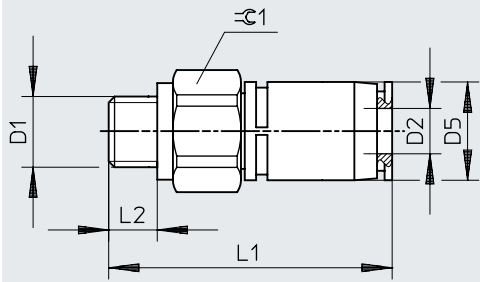
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	D1	D2 ø	D5 ø	L1	L2	L3	⌀1
QSR-1/8-4	R1/8	4	10	34,1	8	30,1	12
QSR-1/8-6		6	12,5	36,9	8	32,9	14
QSR-1/8-8		8	14,5	45,3	8	41,3	17
QSR-1/4-6	R1/4	6	12,5	38,9	11	32,8	14
QSR-1/4-8		8	14,5	44,3	11	38,3	17
QSR-3/8-8	R3/8	8	14,5	44,3	12	38	17
QSR-3/8-10		10	18	55,8	12	49,5	22
QSR-3/8-12		12	21	63,2	12	56,9	24
QSR-1/2-12	R1/2	12	21	63,2	15	55	24

Dimensions

Dimensions – Push-in fitting, rotatable QSR, G thread [Download CAD data](#) www.festo.com

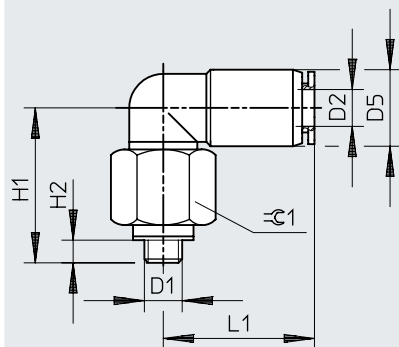


	D1	D2 ø	D5 ø	L1	L2	C
QSR-G1/8-4	G1/8	4	10	33,1	5,1	13
QSR-G1/8-6		6	12,5	35,9	5,1	14
QSR-G1/8-8		8	14,5	44,3	5,1	17
QSR-G1/4-6	G1/4	6	12,5	35,4	5,6	17
QSR-G1/4-8		8	14,5	40,8	5,6	17
QSR-G3/8-8	G3/8	8	14,5	41,3	6,6	19
QSR-G3/8-10		10	18	53,8	6,6	22
QSR-G3/8-12		12	21	60,2	6,6	23,8
QSR-G1/2-12	G1/2	12	21	58,2	7,6	23,8

Dimensions

Dimensions – Push-in L-fitting, rotatable QSRL, M thread

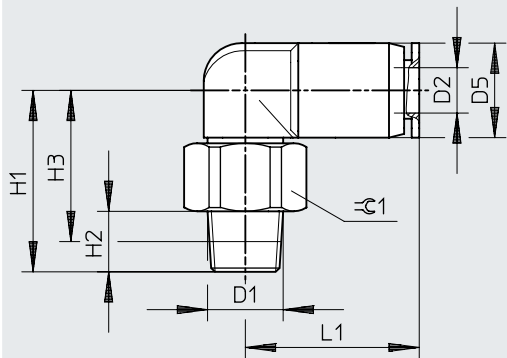
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	D1	D2 ø	D5 ø	H1	H2	L1	≡G
QSRL-M5-4	M5	4	10	21	3,5	19,7	12
QSRL-M5-6		6	12,5	23,8	3,5	22,8	14

Dimensions

Dimensions – Push-in L-fitting, rotatable QSRL, R thread Download CAD data www.festo.com

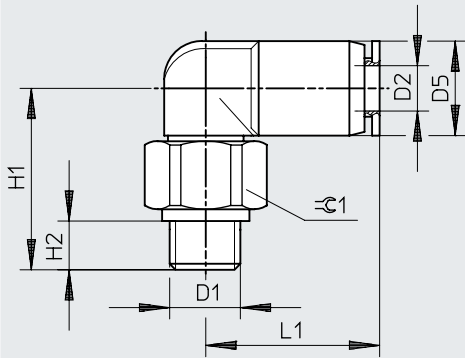


	D1	D2 ø	D5 ø	H1	H2	H3	L1	≡
QSRL-1/8-4	R1/8	4	10	23	8	18	20	12
QSRL-1/8-6		6	12,5	24	8	20	23	14
QSRL-1/8-8		8	14,5	31,5	8	27,5	26	17
QSRL-1/4-6	R1/4	6	12,5	26	11	20	23	14
QSRL-1/4-8		8	14,5	30,5	11	24,5	26	17
QSRL-3/8-8	R3/8	8	14,5	30,5	12	24	26	17
QSRL-3/8-10		10	17,5	36	12	29,5	30	22
QSRL-3/8-12		12	21	41,5	12	35	33	24
QSRL-1/2-12	R1/2	12	21	41,5	15	33,5	33	24

Dimensions

Dimensions – Push-in L-fitting, rotatable QSRL, G thread

Download CAD data www.festo.com



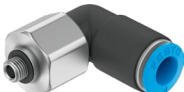
	D1	D2 Ø	D5 Ø	H1	H2	L1	≡G
QSRL-G1/8-4	G1/8	4	10	21	5,1	19,7	13
QSRL-G1/8-6		6	12,5	23	5,1	22,8	14
QSRL-G1/8-8		8	14,5	30,5	5,1	25,7	17
QSRL-G1/4-6	G1/4	6	12,5	22,5	5,6	22,8	17
QSRL-G1/4-8		8	14,5	27	5,6	25,7	17
QSRL-G3/8-8	G3/8	8	14,5	27,5	6,6	25,7	19
QSRL-G3/8-10		10	17,5	33,3	6,6	29,5	22
QSRL-G3/8-12		12	21	38,5	6,6	32,7	24
QSRL-G1/2-12	G1/2	12	21	36,5	7,6	32,7	24

Ordering data

Ordering data – Push-in fitting, self-sealing QSK/QSMK						
	Pneumatic connection, port 1	Pneumatic connection, port 2	Nominal size	Product weight	Part no.	Type
	Male thread M5	For tubing outside diameter of 4 mm	1.6 mm	13 g	153526	QSR-M5-4
		For tubing outside diameter of 6 mm		19 g	153527	QSR-M5-6
	Male thread G1/8	For tubing outside diameter of 4 mm	2.1 mm	15 g	186276	QSR-G1/8-4
		For tubing outside diameter of 6 mm	3.4 mm	17 g	186277	QSR-G1/8-6
		For tubing outside diameter of 8 mm	5 mm	33 g	186279	QSR-G1/8-8
	Male thread G1/4	For tubing outside diameter of 6 mm	3.4 mm	25 g	186278	QSR-G1/4-6
		For tubing outside diameter of 8 mm	5 mm	30 g	186280	QSR-G1/4-8
	Male thread G3/8	For tubing outside diameter of 8 mm		40 g	186281	QSR-G3/8-8
		For tubing outside diameter of 10 mm	6.7 mm	60 g	186282	QSR-G3/8-10
		For tubing outer diameter of 12 mm	8 mm	78 g	186283	QSR-G3/8-12
	Male thread G1/2				186284	QSR-G1/2-12
	Male thread R1/8	For tubing outside diameter of 4 mm	2.1 mm	14 g	153401	QSR-1/8-4
		For tubing outside diameter of 6 mm	3.4 mm	18 g	153402	QSR-1/8-6
		For tubing outside diameter of 8 mm	5 mm	34 g	153404	QSR-1/8-8
	Male thread R1/4	For tubing outside diameter of 6 mm	3.4 mm	23 g	153403	QSR-1/4-6
		For tubing outside diameter of 8 mm	5 mm	32 g	153405	QSR-1/4-8
	Male thread R3/8	For tubing outside diameter of 8 mm		39 g	153406	QSR-3/8-8
		For tubing outside diameter of 10 mm	6.7 mm	61 g	153407	QSR-3/8-10
		For tubing outer diameter of 12 mm	8 mm	82 g	153408	QSR-3/8-12
	Male thread R1/2			89 g	153409	QSR-1/2-12

Ordering data

Ordering data – Push-in L-fitting, rotatable QSRL

	Pneumatic connection, port 1	Pneumatic connection, port 2	Nominal size	Product weight	Part no.	Type
	Male thread M5	For tubing outside diameter of 4 mm	1.4 mm	13 g	153529	QSRL-M5-4
		For tubing outside diameter of 6 mm	1.6 mm	20 g	153530	QSRL-M5-6
	Male thread G1/8	For tubing outside diameter of 4 mm	1.9 mm	15 g	186285	QSRL-G1/8-4
		For tubing outside diameter of 6 mm	3.1 mm	18 g	186286	QSRL-G1/8-6
		For tubing outside diameter of 8 mm	4.6 mm	35 g	186288	QSRL-G1/8-8
	Male thread G1/4	For tubing outside diameter of 6 mm	3.1 mm	25 g	186287	QSRL-G1/4-6
		For tubing outside diameter of 8 mm	4.6 mm	31 g	186289	QSRL-G1/4-8
	Male thread G3/8	For tubing outside diameter of 8 mm		41 g	186290	QSRL-G3/8-8
		For tubing outside diameter of 10 mm	6.2 mm	59 g	186291	QSRL-G3/8-10
	Male thread G1/2	For tubing outer diameter of 12 mm	7.4 mm	81 g	186292	QSRL-G3/8-12
					186293	QSRL-G1/2-12
	Male thread R1/8	For tubing outside diameter of 4 mm	1.8 mm	15 g	153410	QSRL-1/8-4
		For tubing outside diameter of 6 mm	3.1 mm	19 g	153411	QSRL-1/8-6
		For tubing outside diameter of 8 mm	4.6 mm	33 g	153413	QSRL-1/8-8
	Male thread R1/4	For tubing outside diameter of 6 mm	3.1 mm	23 g	153412	QSRL-1/4-6
		For tubing outside diameter of 8 mm	4.6 mm	32 g	153414	QSRL-1/4-8
	Male thread R3/8	For tubing outside diameter of 8 mm		39 g	153415	QSRL-3/8-8
		For tubing outside diameter of 10 mm	6.2 mm	56 g	153416	QSRL-3/8-10
	Male thread R1/2	For tubing outer diameter of 12 mm	7.4 mm	84 g	153417	QSRL-3/8-12
				90 g	153418	QSRL-1/2-12