# **FESTO**



# 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	g 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	Anti-static tubing plus solid metal fitting: 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-VO-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 immediate vicinity of welding spatter thanks to double-walled tubing with special fitting.
Battery production	NPQE-F1A <sup>1)</sup>	PUN-H	Suitable in battery production areas.

<sup>1)</sup> F1A = Free of copper, zinc and nickel

# Push-in fittings – Product range QSM, mini series



Datasheets → Internet: qsm

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 series



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 thread 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 thread 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 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 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 thread 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 thread 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 thread R1/8 ... R1/2.

#### NPQR, stainless steel



Datasheets → Internet: npqr

Stainless steel push-in fitting. Maximum corrosion resistance CRC4 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 thread M5, M7 and  $G1/8 \dots G1/2$ .

### Functional push-in fittings – Product range

QSK,

push-in fitting, self-sealing

Datasheets → Internet: qsk



Datasheets → Internet: qsr



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

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



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 thread M5, R1/8 ... R1/2 and G1/8 ... G1/2.

# Quick connectors – Product range

NPCK

Datasheets → Internet: npck

Click fittings – Product range NPKA

Datasheets → Internet: npka



Stainless steel fitting for use in areas subject to intensive cleaning. Maximum corrosion resistance CRC4. 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.



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.

#### CRQS, the stainless steel fitting

# Highest process reliability in every case

Maximum corrosion resistance and resilience:

The CRQS remains tightly sealed, even under the most demanding requirements in terms of temperature, pressure and resistance.

#### Unlimited use in the food industry

The push-in fitting CRQS can be used in combination with the food-safe plastic tubing PFAN in all areas of the food & packaging industry, e.g. in areas where the use of stainless steel is stipulated. Used together, they easily resist all cleaning agents and lubricants.

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

#### Rotatable



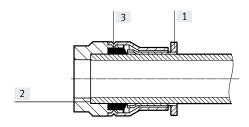
It can be rotated once it has been fit-

#### Mounting/dismounting the tubing

Mounting

The prerequisite for ensuring that the inner seal [3] is securely held and protected against damage is that the tube is cut into straight lengths and deburred.

- 1) Pull out releasing ring [1].
- 2) Insert tubing as far as the stop [2]. It is important to ensure that the tubing is inserted into the inner seal [3]. Depending on the tolerance between the tubing and the seal, the contact of the tubing with the seal may be incorrectly interpreted as the stop.
- 3) Check that the tubing connection is secure by pulling gently on the tube.



#### Dismounting

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

# Which fitting fits which thread? Metric thread

- 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.
- Sealing is guaranteed as the O-ring sits in a groove that seals against the tube.

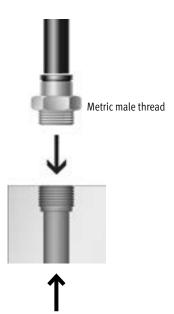
# R thread to EN 10226-1 and ISO 7/1

- Self-sealing thread
- 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.

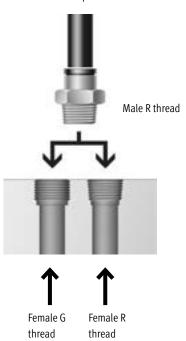


## Note

A suitable sealing agent is required to seal the push-in fitting CRQS with R-thread.



Metric female thread



# Technical data

#### General technical data

Size	Standard
Design	Push-pull principle
Mounting position	Any
Type of seal on screwed trunnion	Sealing ring (metric thread only)
Usable lines	PFAN

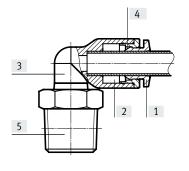
## Operating and environmental conditions

	•					
Operating pressure for full	[MPa]	-0.095 +1				
temperature range	[bar]	-0.95 +10				
	[psi]	-13.775 +145				
Note on operating pressure		Water: max. 0.6 MPa at max. 50°C				
Operating medium		Compressed air to ISO 8573-1:2010 [7::-]				
		Water (liquid, ice-free)				
Note on the operating/		Lubricated operation possible				
pilot medium						
Ambient temperature	[°C]	-15 +120				
Corrosion resistance class CRC <sup>1)</sup>		4 - Particularly high corrosion stress				
Food-safe		See supplementary material information <sup>2)</sup>				

- 1) More information www.festo.com/x/topic/crc
- 2) More information: www.festo.com/catalogue/crqs → Support/Downloads.

#### Materials

### Sectional view



Push-i	in fitting CRQS	ush-in fitting CRQS						
[1]	Releasing ring	High-alloy stainless steel						
[2]	Tubing seal	FPM						
[3]	Housing	High-alloy stainless steel						
[4]	Tube clamping segment	High-alloy stainless steel						
[5]	Threaded coupling	High-alloy stainless steel						
-	Thrust ring	High-alloy stainless steel						
-	Screwed trunnion	High-alloy stainless steel						
	(push-in fittings only)							
-	Thread seal	FPM						
	(push-in fittings M5 only)	High-alloy stainless steel						
-	Nut	High-alloy stainless steel						
	(push-in bulkhead connector CRQSS only)							
Note o	n materials	RoHS-compliant						
LABS (	PWIS) conformity	VDMA24364-B1/B2-L						

## Technical data

### **Tubing insertion depth**



Tubing O.D. [mm]		4	6	8	10	12	16
Tubing insertion depth	[mm]	18	19.5	21.5	25.5	27	32

#### Recommended tightening torque





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.

Connecting thread	Nominal tightening torque [Nm]
M thread	
M5	1.33 ±20%



A suitable sealing material is required to seal the R-thread. 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 reinstalled 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.

Possible push-in fitting/tubing combinations									
Thread	Tubing O.D. [mm]								
	4	6	8	10	12	16			
M5	++	+	_	-	-	-			
R1/8	+	++	+	-	-	=			
R1/4	-	+	++	+	-	=			
R3/8	_	-	-	++	+	=			
R1/2	_	-	-	-	++	+			

<sup>+</sup> Possible thread/tubing O.D. combinations

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

# Product range overview

Design	Version	Туре	Connection D1		Connection D2	→ Page							
			M thread	R thread	Tubing O.D.	Tubing O.D.							
Straight shape	Push-in fitting -	Male thread with	internal/external hex	<del>.</del>	·	·	<u> </u>						
g	~	CRQS	M5x0.8	-	_	4, 6	11						
			_	R1/8		4, 6, 8							
				R1/4		6, 8, 10							
				R3/8		10, 12							
				R1/2		12, 16							
	Push-in connector												
	Pusii-iii coiiiiect	CRQS			4	4	13						
		CKQS	_	_	6	6							
					8	8							
					10	10							
					12	12							
					16	16							
		CDOC					12						
		CRQS Reducing	-	-	6	4	13						
					8	6							
					10	8							
					12	10							
					16	12							
Bulkhead	Push-in bulkhea		1				12						
		CRQSS	-	-	4	4	13						
						6	6						
					8	8							
					10	10							
					12	12							
					16	16							
	B 1 1 1 500												
-shape	Push-in L-fitting		thread with external he				147						
		CRQSL	M5x0.8	- P4 /0		4,6	14						
		'	-	R1/8		4, 6, 8							
				R1/4		6, 8, 10							
				R3/8		10, 12							
				R1/2		12, 16							
	Push-in L-conne	ctor											
		CRQSL	_	_	4	-	15						
					6								
					8								
					10								
					12								
					16								
		_			120								

# Product range overview

Design	Version	Туре	Connection D1		Connection D2	→ Page						
			M thread	R thread	Tubing O.D.	Tubing O.D.						
T-shape	Push-in T-fitting, rotatable – Male thread with external hex											
		CRQST	M5x0.8	-	-	4, 6	16					
			-	R1/8		6,8						
				R1/4		8, 10						
Push-in T-connec			R3/8		10, 12							
				R1/2		12, 16						
	Push-in T-connector											
		CRQST	_	-	4	-	17					
					6							
					8							
					10							
					12							
					16							
Y-shape	Push-in Y-conne	ctor										
		CRQSY	_	-	4	_	17					
					6							
					8							
					10							
					12							
					16							

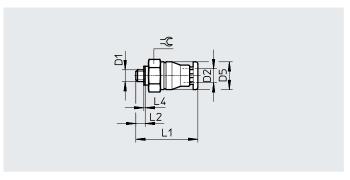
→Internet: www.festo.com/catalogue/...

## Push-in fitting CRQS

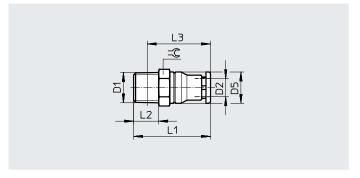
Male thread with external hex

Design: Straight shape









Dimensions ar	nd ordering data											
Pneumatic con	nection	Nominal	Dimensions	s [mm]					Weight/	Part no.	Туре	PU <sup>1)</sup>
Male thread	For tubing O.D.	width	D5	L1	L2	L3	L4	=©	piece			
			Ø									
D1	D2	[mm]							[g]			
Metric thread	with sealing ring											
M5x0.8	4	2	9.8	24.4	3	-	0.5	10	6	162860	CRQS-M5-4	1
	6	2	11.8	25.6	3	-	0.5	12	8.4	162861	CRQS-M5-6	1
R thread								-				
R1/8	4	2.5	9.8	27.4	8	23.4	_	10	8.7	132643	CRQS-1/8-4	1
	6	4.1	11.8	27.6	8	23.7	-	12	9.9	162862	CRQS-1/8-6	1
	8	5.1	13.8	30.9	8	27	-	14	12	162863	CRQS-1/8-8	1
R1/4	6	4.2	11.8	31.6	11	25.6	-	14	18	132644	CRQS-1/4-6	1
	8	5.8	13.8	33.9	11	27.9	-	14	18	162864	CRQS-1/4-8	1
	10	5.9	16.8	36	11	30	-	17	22	162865	CRQS-1/4-10	1
R3/8	10	6	16.8	38	12	31.7	-	17	29	162866	CRQS-3/8-10	1
	12	7.6	19.8	39.9	12	33.6	-	21	37	162867	CRQS-3/8-12	1
R1/2	12	8.1	19.8	42.9	15	34.7	-	22	55	162868	CRQS-1/2-12	1
	16	10.1	23.7	49.7	15	41.6	-	24	59	162869	CRQS-1/2-16	1

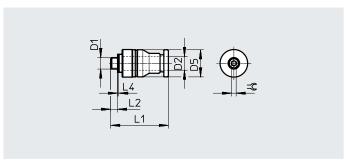
<sup>1)</sup> Packaging unit.

# Datasheet

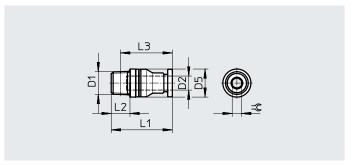
**Push-in fitting CRQS-...-I**Male thread with internal hex

Design: Straight shape









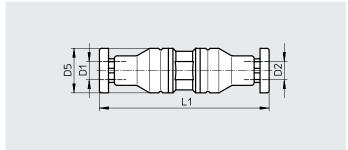
Dimensions a	nd ordering data											
Pneumatic con	nection	Nominal	Dimension	s [mm]					Weight/	Part no.	Туре	PU <sup>1)</sup>
Male thread	For tubing O.D.	width	D5	L1	L2	L3	L4	=©	piece			
			Ø									
D1	D2	[mm]							[g]			
Metric thread	with sealing ring											
M5	4	2	10	22.9	3	_	0.5	2	5	132328	CRQS-M5-4-I	1
	6	2	12	25.1	3	-	0.5	2	7.7	132329	CRQS-M5-6-I	1
R thread												
R1/8	6	4.1	12	26.1	8	22.2	-	4	8.4	132330	CRQS-1/8-6-I	1
	8	5.1	14	30.4	8	26.5	-	5	12	132331	CRQS-1/8-8-I	1
R1/4	8	5.8	14	31.4	11	25.4	-	6	15	132332	CRQS-1/4-8-I	1
	10	5.9	17	36	11	30	-	6	21	132333	CRQS-1/4-10-I	1
R3/8	10	6	17	34	12	27.7	-	6	24	132334	CRQS-3/8-10-I	1
	12	7.6	20	36.4	12	30.1	-	8	28	132335	CRQS-3/8-12-I	1
R1/2	12	8.1	22	39.4	15	31.2	-	8	45	132336	CRQS-1/2-12-I	1
	16	10.1	24	46.7	15	38.6	_	12	47	132337	CRQS-1/2-16-I	1

<sup>1)</sup> Packaging unit.

#### **Push-in connector CRQS**

Design: Straight shape





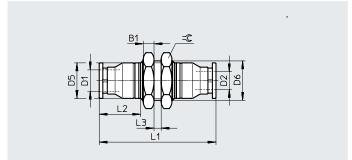
Dimensions and	ordering data							
Pneumatic conne	ection	Nominal	Dimensions [mm]		Weight/	Part no.	Туре	PU <sup>1)</sup>
For tubing O.D.	For tubing O.D.	width	D5 Ø	L1	piece			
D1	D2	[mm]			[g]			
4	4	2.4	9.8	37.7	9.1	130645	CRQS-4	1
6	6	3.7	11.8	40.3	14	130646	CRQS-6	1
8	8	5.8	13.8	44.9	18	130647	CRQS-8	1
10	10	6.6	16.8	52	29	130648	CRQS-10	1
12	12	7.9	19.8	55.8	44	130649	CRQS-12	1
16	16	10.5	23.7	66.5	63	130650	CRQS-16	1
Reducing								
6	4	2.4	12	38.8	11	130651	CRQS-6-4	1
8	6	3.7	14	42.4	15	130652	CRQS-8-6	1
10	8	5.8	17	48.5	22	130653	CRQS-10-8	1
12	10	6.6	20	53.9	35	130654	CRQS-12-10	1
16	12	7.9	24	61.1	50	130655	CRQS-16-12	1

<sup>1)</sup> Packaging unit.

### Push-in bulkhead connector CRQSS

Design: Bulkhead





Dimensions and	ordering data												
Pneumatic conne	Pneumatic connection   Nominal   Dimensions [mm]						Weight/piece	Part no.	Туре	PU <sup>1)</sup>			
For tubing O.D.	For tubing O.D.	width	B1	D5	D6	L1	L2	L3	=©	]			
				Ø	Ø			max.					
D1	D2	[mm]								[g]			
4	4	2.4	4	9.8	M12x1	43.7	15.4	4	14	19	164210	CRQSS-4	1
6	6	3.7	4	11.8	M14x1	46.3	15.6	6	17	27	164211	CRQSS-6	1
8	8	5.7	4	13.8	M16x1	50.9	17.9	6	19	35	164213	CRQSS-8	1
10	10	6.7	5	16.8	M20x1	57	20	6	24	60	164215	CRQSS-10	1
12	12	7.9	6	19.8	M22x1	62.8	21.9	6	27	87	164217	CRQSS-12	1
16	16	10.4	6	23.7	M27x1.5	72.6	26.7	6	32	118	164219	CRQSS-16	1

<sup>1)</sup> Packaging unit.

## Push-in L-fitting CRQSL

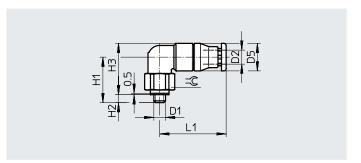
Rotatable

Male thread with external hex

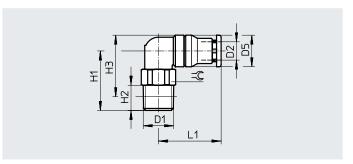
Design:

L-shape









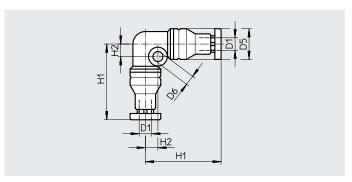
Dimensions an	nd ordering data												
Pneumatic connection		Nominal	Dimensio	ons [mm]				Weight/piece	Part no.	Туре	PU <sup>1)</sup>		
Male thread	For tubing O.D.	width	D5	H1	H2	H3	H4	L1	<b>=</b> ©				
			Ø										
D1	D2	[mm]								[g]			
Metric thread v	with sealing ring												
M5x0.8	4	2	9.8	17	3	18.9	0.5	22.4	10	12	162870	CRQSL-M5-4	1
	6	2	11.8	19	3	21.9	0.5	23.6	12	18	162871	CRQSL-M5-6	1
R thread			-										
R1/8	4	2.2	9.8	19	8	19.9	-	22.4	10	14	132598	CRQSL-1/8-4	1
	6	3.9	11.8	20.5	8	22.4	-	23.6	12	19	162872	CRQSL-1/8-6	1
	8	5.2	13.8	23	8	25.9	-	26.4	14	26	162873	CRQSL-1/8-8	1
R1/4	6	3.6	11.8	23	11	22.9	-	23.6	14	26	132599	CRQSL-1/4-6	1
	8	5.1	13.8	25	11	25.9	-	26.4	14	30	162874	CRQSL-1/4-8	1
	10	6	16.8	28.5	11	30.9	-	30.5	17	42	162875	CRQSL-1/4-10	1
R3/8	10	6	16.8	28.5	12	30.6	-	30.5	17	49	162876	CRQSL-3/8-10	1
	12	8.1	19.8	30	12	33.6	-	33.4	21	65	162877	CRQSL-3/8-12	1
R1/2	12	7.9	19.8	34	15	35.7	-	33.4	22	85	162878	CRQSL-1/2-12	1
	16	9.4	23.7	36	15	39.7	-	40.7	24	99	162879	CRQSL-1/2-16	1

<sup>1)</sup> Packaging unit.

#### Push-in L-connector CRQSL

Design: L-shape





Dimensions and ordering dat	a								
Pneumatic connection	Nominal	Dimensions [mm]				Weight/	Part no.	Туре	PU <sup>1)</sup>
For tubing O.D.	width	D5	D6	H1	H2	piece			
		Ø	Ø						
D1	[mm]					[g]			
4	2.1	9.8	3.2	24.4	4	13	130662	CRQSL-4	1
6	3.5	11.8	3.2	26.6	5	20	130663	CRQSL-6	1
8	5.1	13.8	3.2	29.9	6	27	130664	CRQSL-8	1
10	6.1	16.8	4.2	35	7	42	130665	CRQSL-10	1
12	7.8	19.8	4.2	37.9	8	62	130666	CRQSL-12	1
16	9.4	23.7	4.2	45.2	9.5	91	130667	CRQSL-16	1

<sup>1)</sup> Packaging unit.

# Datasheet

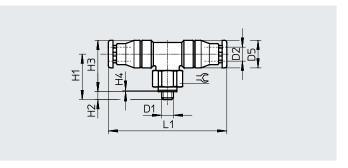
## Push-in T-fitting CRQST

Rotatable

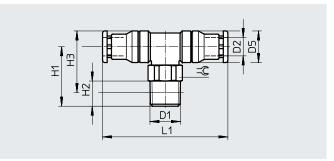
Male thread with external hex

Design: T-shape









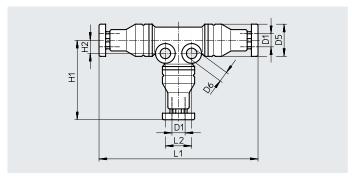
Dimensions ar	id ordering data												
Pneumatic connection		Nominal	al Dimensions [mm]								Part no.	Туре	PU <sup>1)</sup>
Male thread	For tubing O.D.	width	D5 Ø	H1	H2	H3	H4	L1	=©				
D1	D2	[mm]								[g]			
Metric thread	with sealing ring												
M5x0.8	4	2	9.8	17	3	18.9	0.5	44.4	10	17	164200	CRQST-M5-4	1
	6	2	11.8	19	3	21.9	0.5	47.3	12	24	164201	CRQST-M5-6	1
R thread													
R1/8	6	3.7	11.8	20.5	8	22.4	_	47.3	12	25	164202	CRQST-1/8-6	1
	8	5	13.8	23	8	25.9	-	52.5	14	33	164203	CRQST-1/8-8	1
R1/4	8	5	13.8	25	11	25.9	-	52.5	14	38	164204	CRQST-1/4-8	1
	10	5.9	16.8	28.5	11	30.9	-	61	17	56	164205	CRQST-1/4-10	1
R3/8	10	5.9	16.8	28.5	12	30.6	-	61	17	62	164206	CRQST-3/8-10	1
	12	8.1	19.8	30	12	33.6	-	66.6	21	85	164207	CRQST-3/8-12	1
R1/2	12	8.1	19.8	34	15	35.7	-	66.6	22	105	164208	CRQST-1/2-12	1
	16	9.5	23.7	36	15	39.7	-	81.4	24	128	164209	CRQST-1/2-16	1

<sup>1)</sup> Packaging unit.

#### Push-in T-connector CRQST

Design: T-shape





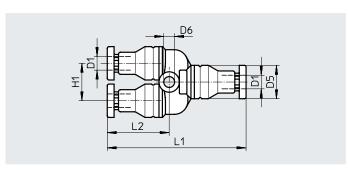
Dimensions and ordering data											
Pneumatic connection	Nominal	Dimensions	Dimensions [mm]						Part no.	Туре	PU <sup>1)</sup>
For tubing O.D.	width	D5	D6	H1	H2	L1	L2	piece			
		Ø	Ø								
D1	[mm]							[g]			
4	2.1	9.8	3.2	24.4	4	48.4	8	18	130668	CRQST-4	1
6	3.5	11.8	3.2	26.6	5	53.3	10	27	130669	CRQST-6	1
8	5	13.8	3.2	29.9	6	59.5	12	37	130670	CRQST-8	1
10	6.1	16.8	4.2	35	7	69.9	14	59	130671	CRQST-10	1
12	8	19.8	4.2	37.9	8	75.6	16	87	130672	CRQST-12	1
16	9.7	23.7	4.2	45.2	9.5	90.4	19	126	130673	CRQST-16	1

<sup>1)</sup> Packaging unit.

### Push-in Y-connector CRQSY

Design: Y-shape





Dimensions and ordering data	imensions and ordering data													
Pneumatic connection	Nominal	Dimensions [	mm]				Weight/piece	Part no.	Туре	PU <sup>1)</sup>				
For tubing O.D.	width	D5	D6	H1	L1	L2								
		Ø	Ø											
D1	[mm]						[g]							
4	2	9.8	3.2	11	41.1	18.4	15	130656	CRQSY-4	1				
6	3.3	11.8	3.2	13	44.3	18.6	24	130657	CRQSY-6	1				
8	4.9	13.8	3.2	15	51.4	20.9	34	130658	CRQSY-8	1				
10	5.6	16.8	4.3	18	58.5	23.5	52	130659	CRQSY-10	1				
12	7	19.8	4.3	21	64.8	25.4	80	130660	CRQSY-12	1				
16	8.2	23.7	4.3	25	78.5	30.2	121	130661	CRQSY-16	1				

<sup>1)</sup> Packaging unit