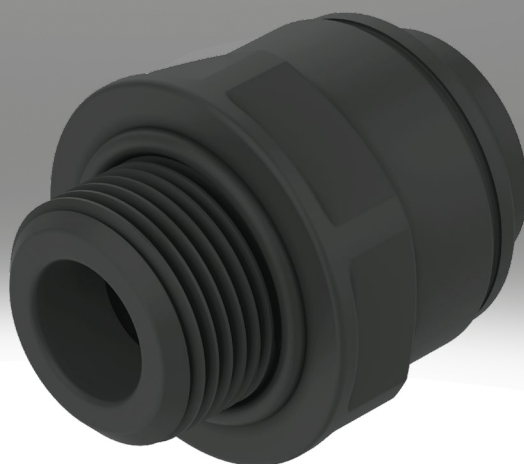


Push-in fitting CQ

FESTO



Characteristics

At a glance



Push-in fittings, push-in connectors, push-in sleeves, blanking plugs made from polyamide.
The piping/tubing is fitted on the outside. This ensures that the nominal width is not reduced.

- For pipes PQ-PA, PQ-AL and tubing PAN and PUN
- Operating media: compressed air, vacuum, liquid media
- POM
- Straight design, L-shaped, T-shaped
- Tubing/pipes are quick and easy to install, mount and dismount without the need for tools
- Quick release of the connection, can be loosened and fastened multiple times
- Cylindrical screw-in thread according to ISO 22 8/1, sealed with mounted O-ring, for size 28 with PVC flat sealing ring
- No additional thread-sealing material required.
- Lower weight than steel pipe and cast fittings

The release tool CQO is available for sizes 12 to 22 for frequent disassembly or for push-in fittings that are difficult to access.

Type code

001	Series	
CQH	Push-in sleeve	
CQT	Push-in T-connector	
CQ	Push-in fitting	
CQC	Blanking plug	
CQL	Push-in L-connector	

002	Pneumatic connection 1	
3/8	Male thread G3/8	
1/2	Male thread G1/2	
3/4	Male thread G3/4	
1	Male thread G1	
12	For pipe/tubing O.D. 12 mm	
15	For pipe/tubing O.D. 15 mm	
15H	Push-in sleeve 15 mm	
18	For pipe/tubing O.D. 18 mm	
18H	Push-in sleeve 18 mm	
22	For pipe/tubing O.D. 22 mm	
22H	Push-in sleeve 22 mm	
28	For pipe/tubing O.D. 28 mm	
28H	Push-in sleeve 28 mm	

003	Pneumatic connection 2	
12	For tubing O.D. 12 mm	
12H	Push-in sleeve 12 mm	
15	For tubing O.D. 15 mm	
15H	Push-in sleeve 15 mm	
18	For tubing O.D. 18 mm	
18H	Push-in sleeve 18 mm	
22	For tubing O.D. 22 mm	
22H	Push-in sleeve 22 mm	
28	For tubing O.D. 28 mm	
28H	Push-in sleeve 28 mm	

Datasheet

General technical data

Design	Push-pull principle
Mounting position	optional
Type of seal on screwed plug	Sealing ring
Size of pack	1

Nominal tightening torque

Pneumatic connection, port 1	Male thread G3/8	Male thread G1/2	Male thread G3/4	Male thread G1
Nominal torque	2.5 Nm		3 Nm	62.5 Nm
Tolerance for nominal tightening torque	± 10%		± 20%	

Operating and environmental conditions

Operating pressure complete temperature range	-0.95 ... 7 bar
Temperature-dependent operating pressure ¹⁾	-0.95 ... 15 bar
Operating medium	Compressed air to ISO 8573-1:2010 [7:-:-]
Note on operating and pilot medium	Lubricated operation possible (in which case lubricated operation will always be required)
Ambient temperature	-25 ... 70°C
Corrosion resistance class CRC ⁴⁾	2 - Moderate corrosion stress
Suitable for use with food ⁵⁾	See supplementary material information

1) Size 28: -0.95... 10 bar

4) More information www.festo.com/catalogue/cq → Support/Downloads.

5) More information www.festo.com/catalogue/cq → Support/Downloads.

Materials

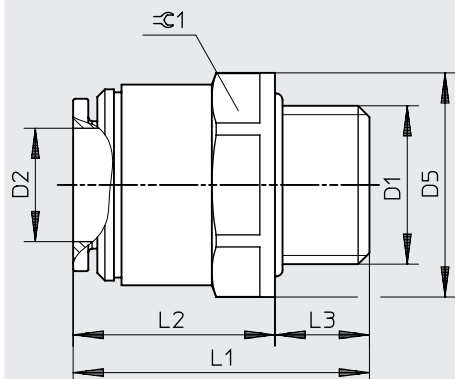
Material housing ¹⁾	POM
Material release ring	POM
Material tubing clamp component	High-alloy stainless steel
Note on materials	RoHS-compliant
LABS (PWIS) conformity	VDMA24364 zone III

1) Push-in fitting CQ-1-28H/Fluid separator CQA-28: Brass

Dimensions

Dimensions – Push-in fitting CQ-...-12/15 with sealing ring

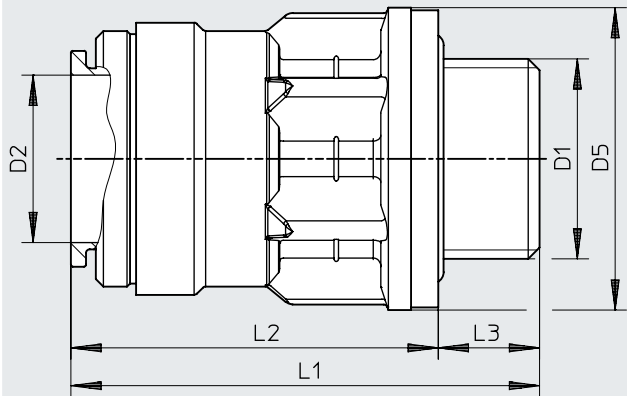
Download CAD data www.festo.com



	D1	D2 ø	D5 ø ±0,5	L1	L2 ±0,5	L3	⌀ 1
CQ-3/8-12	G3/8	12	26,4	30,6	21,3	9,3	24
CQ-1/2-12	G1/2	12	29,8	34	21,5	12,5	27
CQ-1/2-15		15	29,7	38	25,5	12,5	27

Dimensions

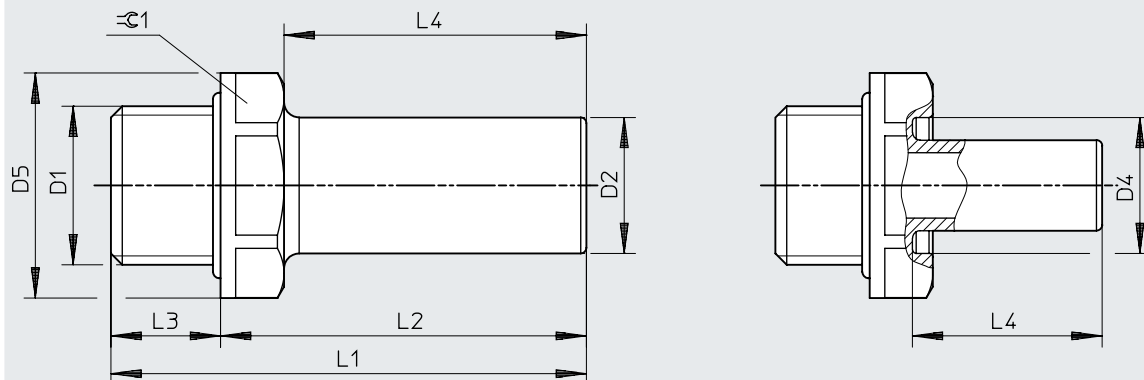
Dimensions – Push-in fitting CQ-...-18/22 with sealing ring [Download CAD data](http://www.festo.com) www.festo.com



	D1	D2 ø	D5 ø ±0,5	L1	L2 ±0,5	L3
CQ-1/2-18	G1/2	18	34	54,8	42,3	12,5
CQ-3/4-22	G3/4	22	40	60,7	47,3	13,4

Dimensions

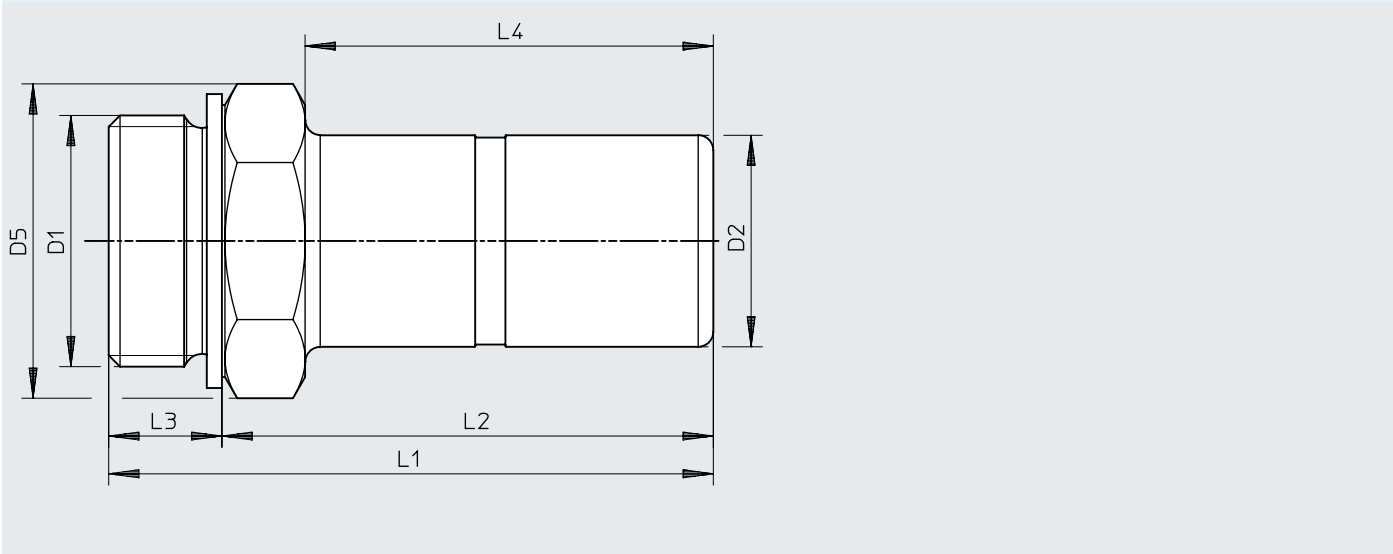
Dimensions – Push-in fitting CQ- ...H with push-in sleeve and sealing ring

Download CAD data www.festo.comCQ-3/8-12H
CQ-1/2-12H

	D1	D2 ø	D4 ø	D5 ø ±0,5	L1	L2 ±0,5	L3	L4	≈ 1
CQ-3/8-12H	G3/8	12	18	26,4	39,8	30,5	9,3	25,1	24
CQ-3/8-15H		15	–	24	54,4	43,1	11,3	35	22
CQ-1/2-12H	G1/2	12	18	29,8	43,3	30,8	12,5	25,1	27
CQ-1/2-15H		15	–	29,8	57,9	43,4	14,5	35	27
CQ-1/2-18H		18	–	29,8	62,9	48,4	14,5	40	27
CQ-1/2-22H		22	–	29,8	64,9	50,4	14,5	42	27
CQ-3/4-22H	G3/4	22	–	40	69	52	17	42	37

Dimensions

Dimensions – Push-in fitting CQ- ...-28H Download CAD data www.festo.com

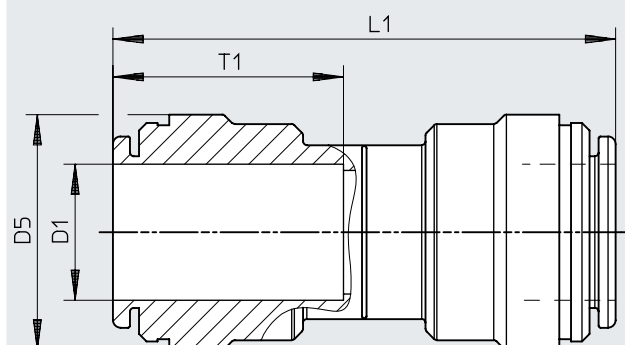


	D1	D2 ø	D5 ø ±0,5	L1	L2 ±0,5	L3	L4	±0,1
CQ-1-28H	G1	28	41,6	80	65	15	54	36

Dimensions

Dimensions – Push-in connector CQ-12/15/18/22

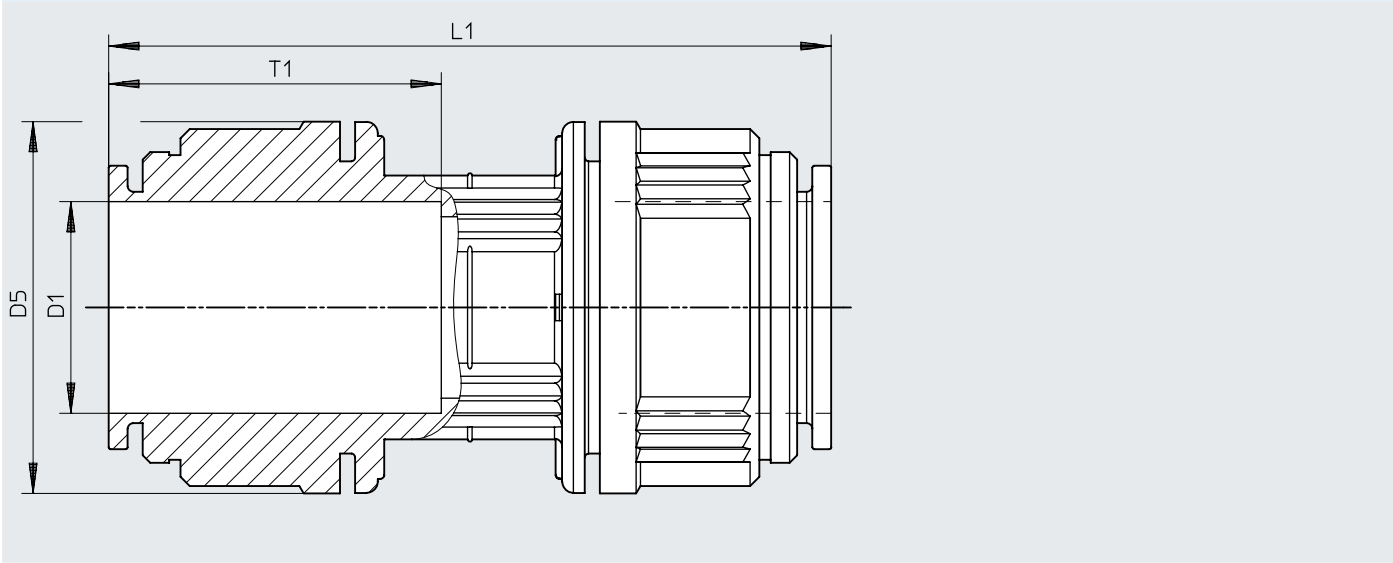
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	D1 Ø	D5 Ø ±0,5	L1	T1 ±1
CQ-12	12	23	54,4 ±0,5	25
CQ-15	15	26,8	57,8 ±0,5	27,5
CQ-18	18	31,1	64,1 ±0,5	30,5
CQ-22	22	35,5	69,1 ±0,5	33

Dimensions

Dimensions – Push-in connector CQ-28 Download CAD data www.festo.com

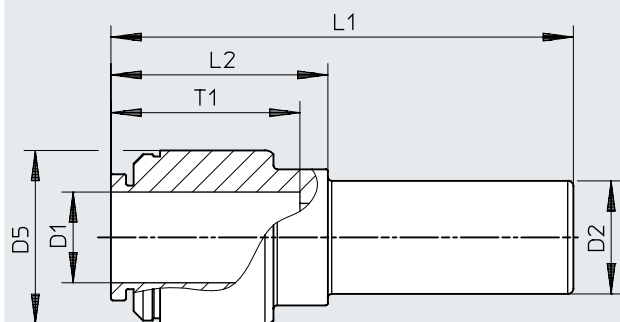


	D1 Ø	D5 Ø ±0,5	L1	T1 ±1
CQ-28	28	49,5	91 _{±1}	44

Dimensions

Dimensions – Push-in connector CQ-...H-12

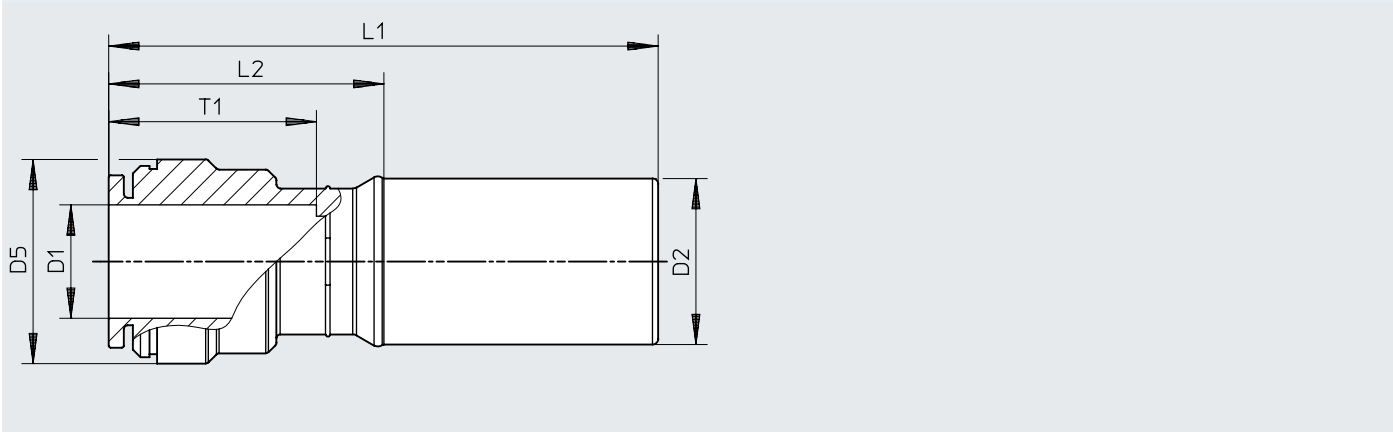
Download CAD data www.festo.com



	D1 ø	D2 ø	D5 ø ±0,5	L1	L2	T1 ±1
CQ-15H-12	12	15	23,1	60,2 _{±0,5}	27,7	25

Dimensions

Dimensions – Push-in connector CQ-...H-15 [Download CAD data](#) www.festo.com

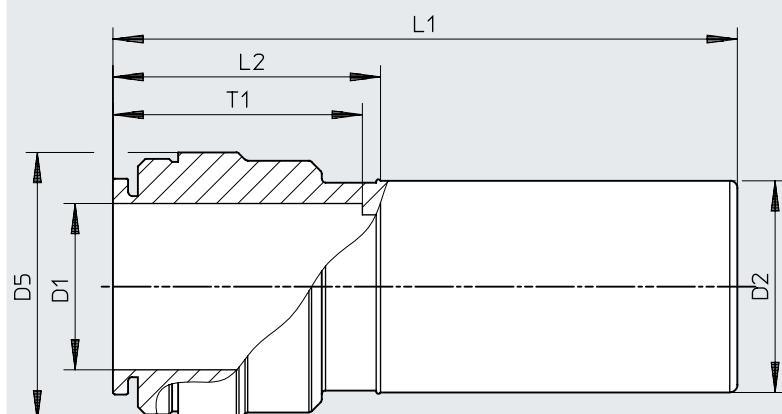


	D1 ø	D2 ø	D5 ø ±0,5	L1	L2	T1 ±1
CQ-18H-15	15	18	26,8	70,5 ±0,5	34,4	27,5
CQ-22H-15	15	22	26,8	71,5 ±0,5	35	27,5

Dimensions

Dimensions – Push-in connector CQ-...H-18/22

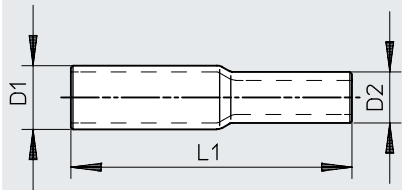
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	D1 ø	D2 ø	D5 ø ±0,5	L1	L2	T1 ±1
CQ-22H-18	18	22	31,1	70,7 ±0,5	34,6	30,5
CQ-28H-22	22	28	35,5	81,8 ±1	34,6	33

Dimensions

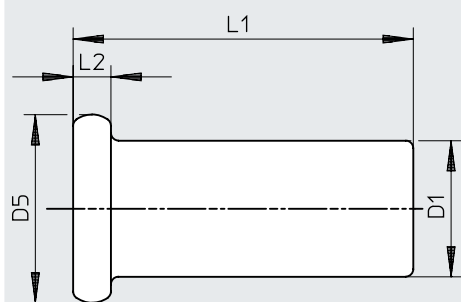
Dimensions – Push-in sleeve CQH- ...-QS for connecting CQ to QS [Download CAD data](#) www.festo.com



	D1 ø	D2 ø	L1
CQH-15-QS-12	15	12	66,5
CQH-18-QS-16	18	16	71,5
CQH-22-QS-16	22	16	80

Dimensions

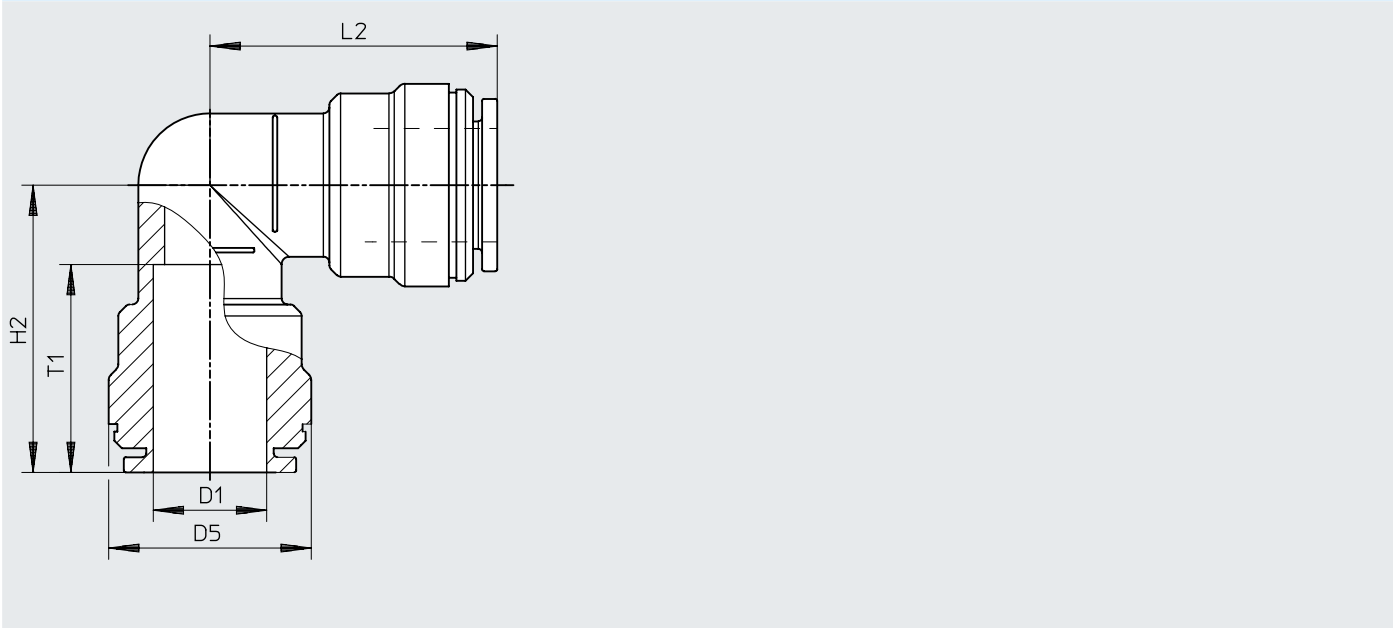
Dimensions – Blanking plug CQC-...H

[Download CAD data](#) www.festo.com


	D1 ø	D5 ø	L1	L2
CQC-12H	12 ±0,15	21,6	38,8 ±0,5	4,7
CQC-15H	15 ±0,15	25	45 ±0,3	5
CQC-18H	18 ±0,15	30	41,5 ±0,3	4
CQC-22H	22 ±0,15	32	45 ±0,3	4,7
CQC-28H	28 ±0,15	40	56	4

Dimensions

Dimensions – Push-in L-connector CQL-12/15/18/22 [Download CAD data](#) www.festo.com

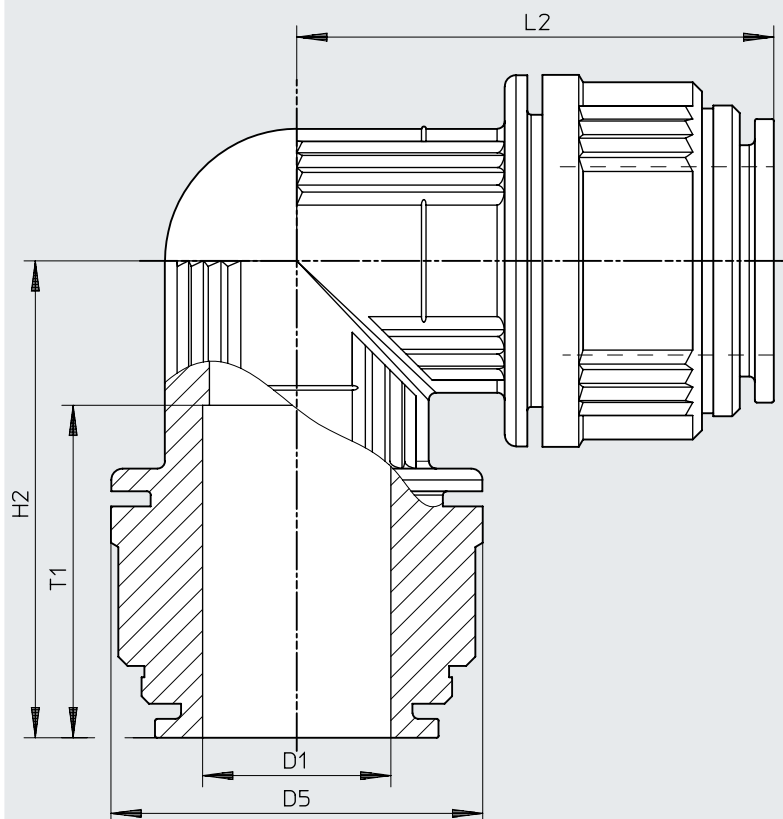


	D1 ø	D5 ø	H2	L2	T1 ±1
CQL-12	12	23,1	32,2 ±0,5	32,2 ±0,5	25
CQL-15	15	26,8	37,2 ±0,5	37,2 ±0,5	27,5
CQL-18	18	31,1	44,1 ±0,5	44,1 ±0,5	30,5
CQL-22	22	35,5	48,3 ±0,5	48,3 ±0,5	33

Dimensions

Dimensions – Push-in L-connector CQL-28

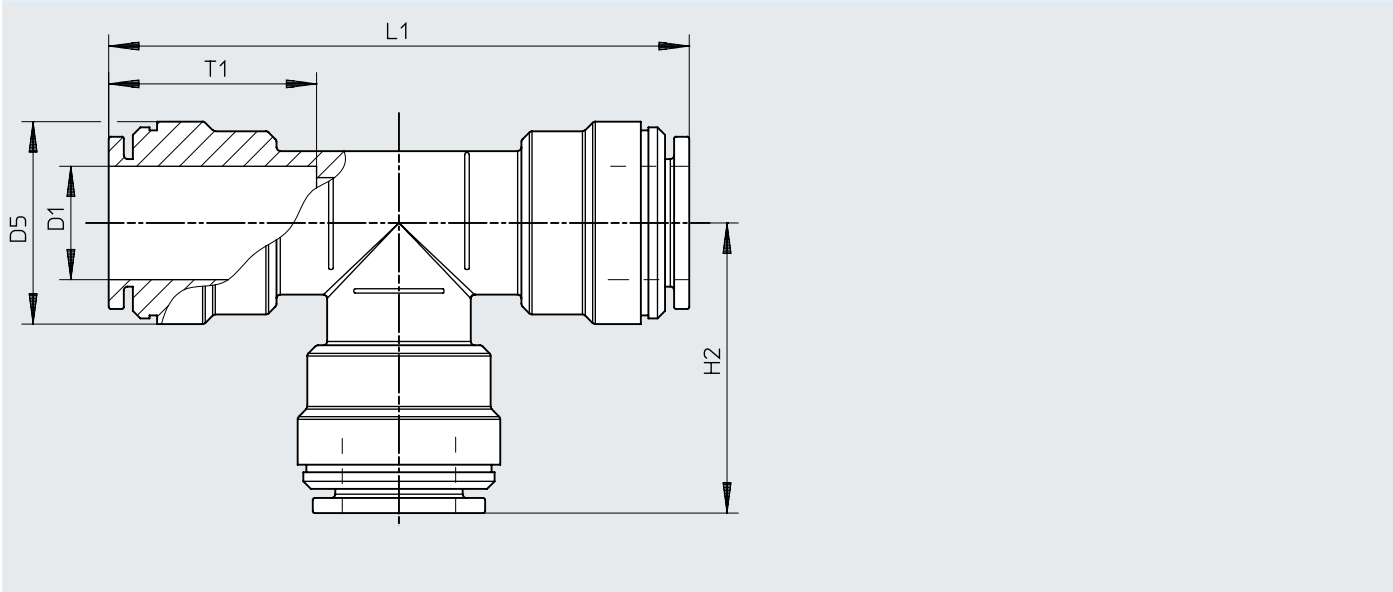
Download CAD data www.festo.com



	D1 Ø	D5 Ø	H2	L2	T1
					±1
CQL-28	28	49,2	61,4 ± 1	61,4 ± 1	44

Dimensions

Dimensions – Push-in T-connector CQT-12/15/18/22 [Download CAD data](#) www.festo.com

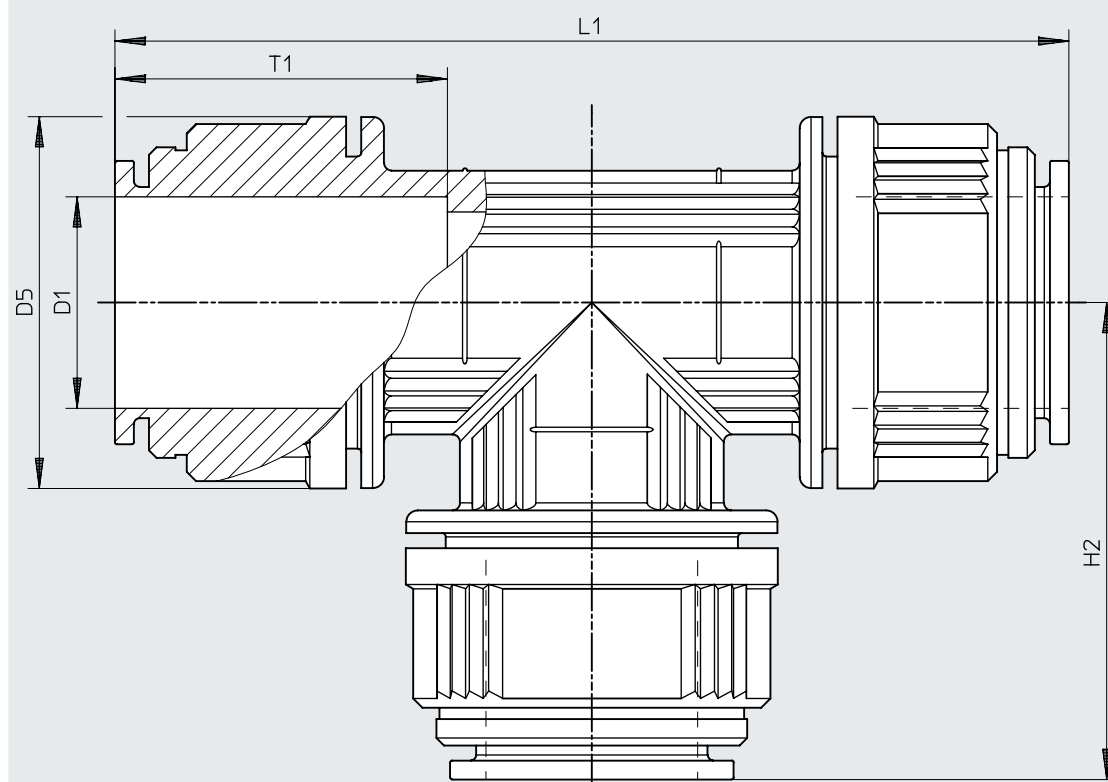


	D1 ø	D5 ø	H2	L1	T1 ±1
CQT-12	12	23	32,2 ±0,5	64,4 ±0,5	25
CQT-15	15	26,8	37,2 ±0,5	74,4 ±0,5	27,5
CQT-18	18	31,1	44,1 ±0,5	88,2 ±0,5	30,5
CQT-22	22	35,5	48,3 ±0,5	96,6 ±0,5	33

Dimensions

Dimensions – Push-in T-connector CQT-28

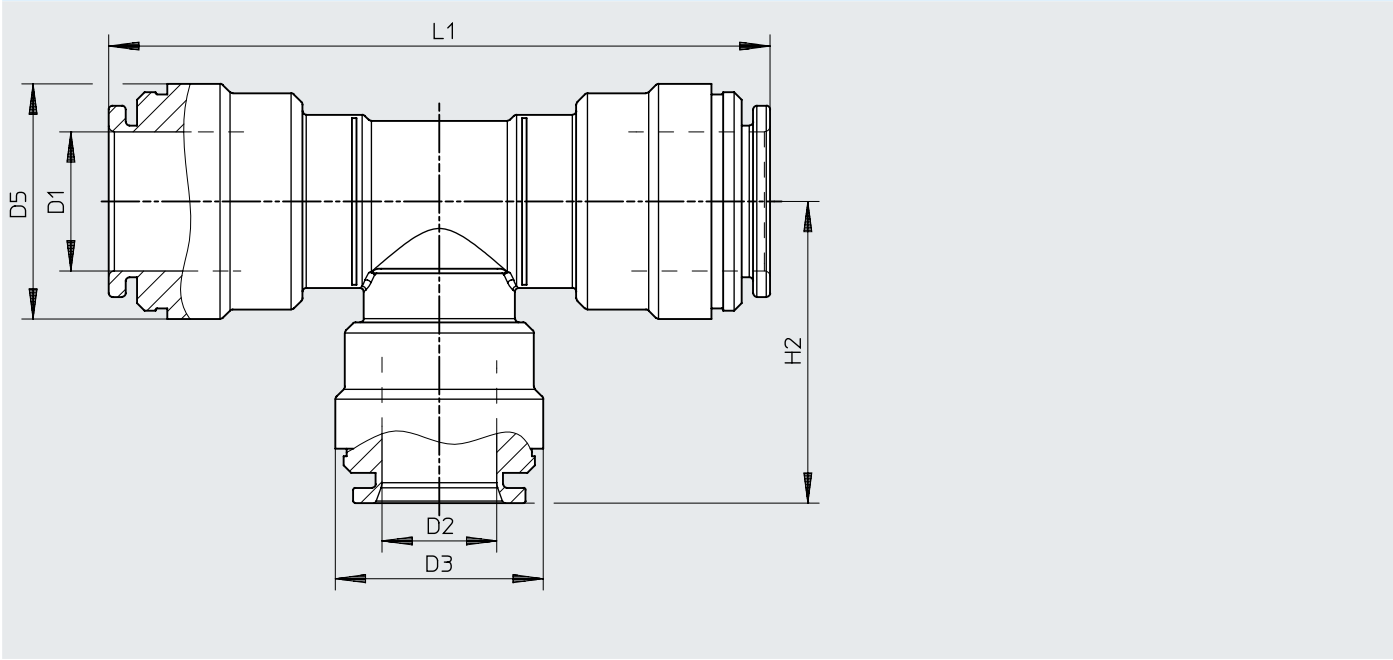
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	D1 Ø	D5 Ø	H2	L1	T1
					±1
CQT-28	28	49,2	61,4 _{±1}	121 _{±1}	44

Dimensions

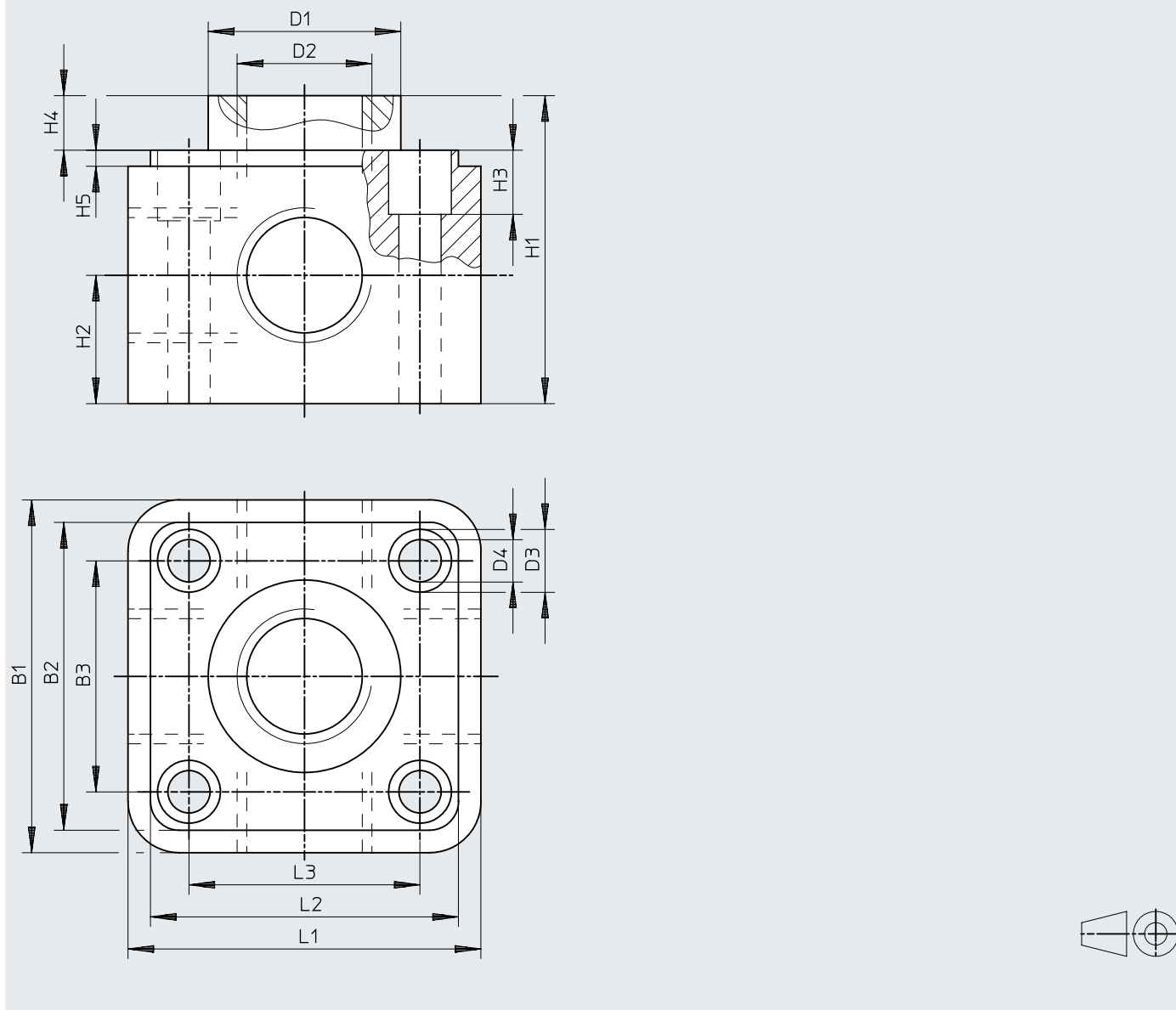
Dimensions – Push-in T-connector CQT, reducing Download CAD data www.festo.com



	D1 ø	D2 ø	D3 ø	D5 ø	H2	L1
CQT-18-15	18	15	27,5	31,1	37,9 ±0,5	84,5 ±0,5
CQT-22-15	22	15	28,5	35,6	41,6 ±0,5	89,6 ±0,5

Dimensions

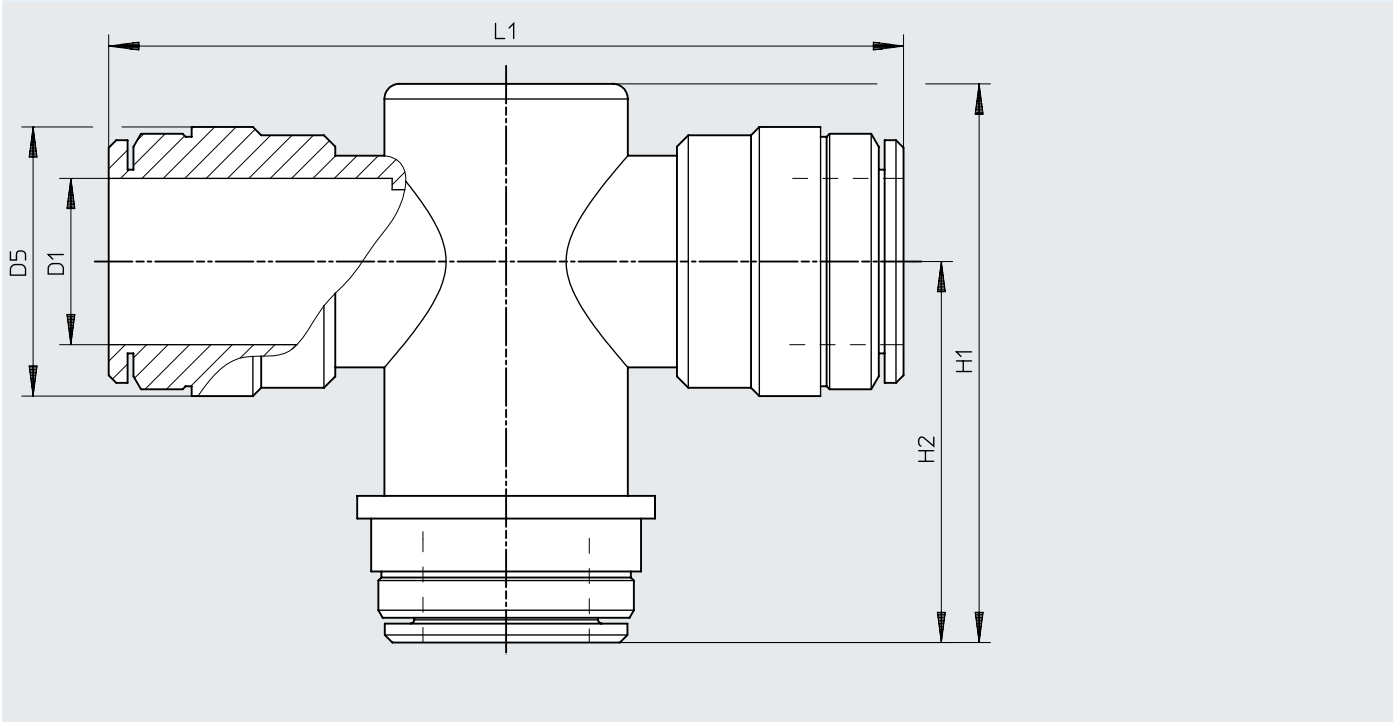
Dimensions – Distributor CQD with 3 blanking plugs

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	B1	B2	B3	D1 ø	D2	D3	D4	H1	H2	H3	H4	H5	L1	L2	L3
CQD-12/15/18/22	55	48	35	30	G1/2	9,8	6,5	48	19,7	10	8,5	2,5	55	48	35

Dimensions

Dimensions – Fluid separator CQA-22 Download CAD data www.festo.com

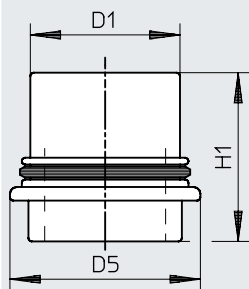


	D1 ø	D5 ø	H1 ±0,5	H2 ±0,5	L1 ±0,5
CQA-22	22	35,6	71,8	48,3	97,8

Dimensions

Dimensions – Fluid separator CQA-28

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	D1 Ø	D5	H1
CQA-28	22	28	24,8

Ordering data

Push-in fitting CQ with sealing ring						
	Pneumatic connection, port 1	Pneumatic connection, port 2	Nominal size	Product weight	Part no.	Type
	Male thread G3/8	For pipe/tubing outside diameter of 12 mm	8.65 mm	8 g	177682	CQ-3/8-12
	Male thread G1/2	For pipe/tubing outside diameter of 12 mm		12 g	177683	CQ-1/2-12
		For pipe/tubing outside diameter of 15 mm	12 mm	14 g	177684	CQ-1/2-15
		For pipe/tubing outer diameter of 18 mm	12.7 mm	24 g	177685	CQ-1/2-18
	Male thread G3/4	For pipe/tubing outside diameter of 22 mm	17 mm	36 g	177686	CQ-3/4-22

Push-in fitting CQ-...H with push-in sleeve and sealing ring						
	Pneumatic connection, port 1	Pneumatic connection, port 2	Nominal size	Product weight	Part no.	Type
	Male thread G3/8	Push-in sleeve CQ-12	8.65 mm	4 g	177705	CQ-3/8-12H
		Push-in sleeve CQ-15	9.4 mm	10 g	177707	CQ-3/8-15H
	Male thread G1/2	Push-in sleeve CQ-12	8.65 mm	8 g	177706	CQ-1/2-12H
		Push-in sleeve CQ-15	10 mm	14 g	177708	CQ-1/2-15H
		Push-in sleeve CQ-18	12.7 mm	18 g	177709	CQ-1/2-18H
		Push-in sleeve CQ-22	12.15 mm		177710	CQ-1/2-22H
	Male thread G3/4	Push-in sleeve CQ-22	17 mm	28 g	177711	CQ-3/4-22H
		Push-in sleeve CQ-28	23 mm	200 g	194589	CQ-1-28H

Push-in connector CQ						
	Pneumatic connection, port 1	Pneumatic connection, port 2	Nominal size	Product weight	Part no.	Type
	For pipe/tubing outside diameter of 12 mm	For pipe/tubing outside diameter of 12 mm	8.65 mm	16 g	177695	CQ-12
	For pipe/tubing O.D. 15 mm	For pipe/tubing outside diameter of 15 mm	12 mm	18 g	177696	CQ-15
	For pipe/tubing outside diameter of 18 mm	For pipe/tubing outer diameter of 18 mm	16 mm	26 g	177697	CQ-18
	For pipe/tubing O.D. 22 mm	For pipe/tubing outside diameter of 22 mm	19.2 mm	36 g	177698	CQ-22
	For pipe/tubing outside diameter of 28 mm	For pipe/tubing outside diameter of 28 mm	24.9 mm	90 g	194586	CQ-28

Push-in fitting CQ-...H with push-in sleeve						
	Pneumatic connection, port 1	Pneumatic connection, port 2	Nominal size	Product weight	Part no.	Type
	Push-in sleeve CQ-15	For pipe/tubing outside diameter of 12 mm	9.15 mm	12 g	177701	CQ-15H-12

Ordering data

Push-in fitting CQ-...H with push-in sleeve						
	Pneumatic connection, port 1	Pneumatic connection, port 2	Nominal size	Product weight	Part no.	Type
	Push-in sleeve CQ-18	For pipe/tubing outside diameter of 15 mm	12.15 mm	16 g	177702	CQ-18H-15
	Push-in sleeve CQ-22				177703	CQ-22H-15
	Push-in sleeve CQ-28	For pipe/tubing outer diameter of 18 mm	17.3 mm	22 g	177704	CQ-22H-18
		For pipe/tubing outside diameter of 22 mm	19.2 mm	34 g	196231	CQ-28H-22

Push-in sleeve CQH-...-QS for connecting CQ to QS						
	Pneumatic connection, port 1	Pneumatic connection, port 2	Nominal size	Product weight	Part no.	Type
	Push-in sleeve CQ-15	Push-in sleeve QS-12	8 mm	4 g	177721	CQH-15-QS-12
	Push-in sleeve CQ-18	Push-in sleeve QS-16	11 mm	8 g	177722	CQH-18-QS-16
	Push-in sleeve CQ-22			10 g	177723	CQH-22-QS-16

Blanking plug CQC-...H					
	Pneumatic connection, port 1	Pneumatic connection, port 2	Product weight	Part no.	Type
	Push-in sleeve CQ-12	Push-in sleeve CQ-12	4 g	177712	CQC-12H
	Push-in sleeve CQ-15	Push-in sleeve CQ-15	6 g	177713	CQC-15H
	Push-in sleeve CQ-18	Push-in sleeve CQ-18	8 g	177714	CQC-18H
	Push-in sleeve CQ-22	Push-in sleeve CQ-22	10 g	177715	CQC-22H
	Push-in sleeve CQ-28	Push-in sleeve CQ-28	22 g	194590	CQC-28H

Push-in L-connector CQL						
	Pneumatic connection, port 1	Pneumatic connection, port 2	Nominal size	Product weight	Part no.	Type
	For pipe/tubing outside diameter of 12 mm	For pipe/tubing outside diameter of 12 mm	8.65 mm	16 g	177691	CQL-12
	For pipe/tubing O.D. 15 mm	For pipe/tubing outside diameter of 15 mm	12 mm	20 g	177692	CQL-15
	For pipe/tubing outside diameter of 18 mm	For pipe/tubing outer diameter of 18 mm	16 mm	32 g	177693	CQL-18
	For pipe/tubing O.D. 22 mm	For pipe/tubing outside diameter of 22 mm	19.2 mm	46 g	177694	CQL-22
	For pipe/tubing outside diameter of 28 mm	For pipe/tubing outside diameter of 28 mm	24.9 mm	106 g	194587	CQL-28

Push-in T-connector CQT						
	Pneumatic connection, port 1	Pneumatic connection, port 2	Nominal size	Product weight	Part no.	Type
	For pipe/tubing outside diameter of 12 mm	For pipe/tubing outside diameter of 12 mm	8.65 mm	26 g	177687	CQT-12

Ordering data

Push-in T-connector CQT						
	Pneumatic connection, port 1	Pneumatic connection, port 2	Nominal size	Product weight	Part no.	Type
	For pipe/tubing O.D. 15 mm	For pipe/tubing outside diameter of 15 mm	12 mm	30 g	177688	CQT-15
	For pipe/tubing outside diameter of 18 mm	For pipe/tubing outer diameter of 18 mm	16 mm	46 g	177689	CQT-18
	For pipe/tubing O.D. 22 mm	For pipe/tubing outside diameter of 22 mm	19.2 mm	66 g	177690	CQT-22
	For pipe/tubing outside diameter of 28 mm	For pipe/tubing outside diameter of 28 mm	24.9 mm	152 g	194588	CQT-28

Push-in T-connector CQT, reducing						
	Pneumatic connection, port 1	Pneumatic connection, port 2	Nominal size	Product weight	Part no.	Type
	For pipe/tubing outside diameter of 18 mm	For pipe/tubing outside diameter of 15 mm	12 mm	42 g	177699	CQT-18-15
	For pipe/tubing O.D. 22 mm		12.15 mm	56 g	177700	CQT-22-15

Accessories

Distributor CQD						
	Pneumatic connection, port 1	Pneumatic connection, port 2	Size of pack	Product weight	Part no.	Type
	Female thread G1/2	Female thread G1/2	1		177717	CQD-12/15/18/22

Fluid separator CQA-22						
	Pneumatic connection, port 1	Pneumatic connection, port 2	Size of pack	Product weight	Part no.	Type
	For pipe/tubing O.D. 22 mm	For pipe/tubing outside diameter of 22 mm	1	76 g	177716	CQA-22

Fluid separator CQA-28						
	Pneumatic connection, port 1	Pneumatic connection, port 2	Size of pack	Product weight	Part no.	Type
	Push-in sleeve CQ-28	Push-in sleeve CQ-28	1	18 g	196984	CQA-28

Safety clip CQ0					
	Pneumatic connection, port 1	Size of pack	Product weight	Part no.	Type
	For pipe/tubing O.D. 15 mm	1	2 g	175725	CQ0-15
	For pipe/tubing O.D. 22 mm		4 g	175726	CQ0-22