

Better connected

FESTO



Everything from a single source – for the ideal combination

Variety is standard at Festo

Our range of tubing and fittings covers every conceivable task. Regardless of whether your selection is determined by standard requirements or extreme conditions such as heat, welding spatter, high pH values or resistance to hydrolysis – at Festo you'll always find the right tubing/fitting combination.

Our product finder helps you arrive at a tailored combination, and our modular tubing system offers more choice. More information is available on the following page.

Easy – from selection to installation

Your selection is simply transferred to the online shop. Purchasing is made convenient and reliable. Try it out and discover how our expertise can make your work easier and make you more productive.



Productivity

We have a very big goal: increasing your productivity. We achieve this goal through simplicity, reliability, efficiency and competency – qualities which you'll also find in our tubing and fittings range. Created by the engineers of productivity.

Simple – because we make selection, purchasing, delivery and assembly easier for you.

Reliable – because errors are practically ruled out with the product finder.

Efficient – because ordering from the online shop is very convenient and you get everything from a single source.

Competent – because Festo has a suitable tubing/fitting combination for every task.

Faster and easier: the product finder for the right tubing and fittings

How do I find the right tubing for my applications? And which fittings match the tubing? It's easy with Festo's integrated product finders in the electronic catalogue. We ask you all the necessary questions so you can make the right selection.

Here's how it works:

Start the product finder by clicking the blue icons in the product tree in the electronic catalogue. Select the technical features, step-by-step, on the left-hand side. A choice of suitable products that match those features will then automatically be displayed on the right-hand side. Plausibility checks ensure that only correct configurations are accepted.

The product finders for tubing and fittings are an essential part of the electronic catalogue and are not available as separate software.

Or:

Get started straightaway via the following links:

- www.festo.com/productfinder/tubing
- www.festo.com/productfinder/fittings



Customised tubing from the modular tubing system

Your wish is our command: if you want individualised tubing, our modular tubing system is just what you're looking for. The modular system allows you to:

- Specify individualised lengths and packaging units
- Order customised printing and labelling
- Select from 7 basic colours with others available on request.

The configurator additionally simplifies selection and ordering. Online ordering is already possible in many countries.



Well combined: tubing/fitting combinations for all applications!

The precise selection of the right tubing/fitting combination is above all dependent on the application. Applications often have a single feature that quickly defines the right selection. The overview below of our most

popular tubing/fitting combinations will help you to make the right choice quickly and reliably.

Tubing

Designation	Polyurethane (PU)					Polyethylene (PE)		Polyamide (PA)				PFA**	PTFE***
	PUN/ PUN-DUO	PUN-H/ PUN-H-DUO	PUN-CM	PUN-VO	PUN-VO-C	PEN	PLN	PAN	PAN-R	PAN-VO	PAN-MF	PFAN	PTFEN
Operating medium	Compressed air, vacuum	Compressed air, vacuum, water*	Compressed air, vacuum	Compressed air, vacuum, water*	Compressed air, vacuum, water*	Compressed air, vacuum, water*	Compressed air, vacuum, water*	Compressed air, vacuum	Compressed air, vacuum	Compressed air, vacuum, water*	Compressed air, vacuum	Compressed air, vacuum, water*	Compressed air
Temperature [°C]	-35 ... +60	-35 ... +60	-35 ... +60	-35 ... +60	-35 ... +60	-30 ... +60	-30 ... +80	-30 ... +80	-30 ... +80	-30 ... +90	-60 ... +100	-20 ... +150	-20 ... +150
Temperature-dependent operating pressure [MPa]	-0,095 ... +1	-0,095 ... +1	-0,095 ... +1	-0,095 ... +1	-0,095 ... +1	-0,095 ... +1	-0,095 ... +1,4	-0,095 ... +1,9	-0,095 ... +3,5	-0,095 ... +3,1	-0,095 ... +1,2	-0,095 ... +1,6	-0,095 ... +1,2
Resistant to chemicals	-	+	+	+	+	++	++	+	+	+	+	+++	+++
Food-grade****	-	+++ FDA- and EU-listed material	-	-	-	---	---	-	-	-	---	+++ FDA-listed material Regulation (EC) 1935/2004	+++ FDA-listed material
Resistant to hydrolysis	+	++	++	++	++	+++	+++	++	++	++	++	+++	+++
Fire test	-	-	-	UL 94 DIN 5510-2	UL 94 DIN 5510-2	-	-	-	-	UL 94	-	UL 94	UL 94
Halogen-free	+++	+++	+++	+++	+++	+++	+++	+++	+++	-	+++	-	-
Flexibility	+++	+++	++	++	++	++	+	++	+	++	+	+	+
Special feature	Wide choice of variants	Resistant to hydrolysis	Antistatic	Flame-retardant	Resistant to welding spatter	Suitable for use with energy chains	Weather resistant	High load bearing capacity	Suitable for pressure up to 3,5 MPa	Resistant to welding spatter	DIN 73378 Automotive approval	Highly resistant to chemicals	Highly resistant to chemicals

Fittings

Designation	Plastic				Metal				* Other media on request
	QS(M)	NPKA	NPQP	QS-VO	NPQM	NPOH	NPCK	NPQR	
Operating medium	Compressed air, vacuum, water*	Compressed air, vacuum, water*	Compressed air, vacuum	Compressed air, vacuum, water*	Compressed air, vacuum, water*	Compressed air, vacuum, water*	Compressed air, vacuum, water*	Compressed air, water	
Temperature [°C]	-10 ... +80	-10 ... +60	-20 ... +60	0 ... +60	-20 ... +70	0 ... +150	-20 ... +120	-20 ... +150	
Temperature-dependent operating pressure [MPa]	-0,095 ... +1,4	-0,095 ... +1	-0,095 ... +1	-0,095 ... +1	-0,095 ... +1,6	-0,095 ... +2	-0,095 ... +1,2	-0,095 ... +1,6	
Housing material	PBT and nickel-plated brass	POM and PA66	PP	PBT	Nickel-plated brass	Nickel-plated brass	Stainless steel	Stainless steel	
Thread	M, G and R thread	G thread	R thread	G and R thread	M and G thread	M and G thread	M and G thread	M and G thread	
Resistant to chemicals	+	++	+++	+	+	++	+++	+++	
Food-grade****	-	+++ FDA-listed material	+++ FDA-listed material	-	-	+++ FDA-listed material Regulation (EC) 1935/2004	+++ FDA-listed material	+++ FDA-listed material Regulation (EC) 1935/2004	
Corrosion resistance class (CRC)	1	4	4	1	1	3	4	4	
Special features	Wide choice of variants	Cleanroom-compatible, 100% polymer	Highly resistant to chemicals	Resistant to welding spatter	Robust	Resistant to high temperatures	Clean Design	High resistance to corrosion	

* Other media on request

** Perfluoroalkoxy alkane

*** Polytetrafluoroethylene

**** Suitable for use with food in accordance with supplementary material information/declaration of conformity

→ www.festo.com/supportportal

Our top combinations for you:

Standard

PEN	QS		60 °C -10 °C	1 MPa	Suitable for a wide range of tasks and attractively priced. Flexible thanks to high levels of resistance, easy to install thanks to optimised bending radii. High level of abrasion resistance in dynamic applications.
PUN	QS		60 °C -10 °C	1 MPa	Maximum flexibility in standard applications thanks to an extremely wide range of options for combining the different types.
PAN	QS		80 °C -10 °C	1,4 MPa	Meets all requirements, even for standard applications with increased pressure and temperature ranges.

High pressures

PAN-MF	NPQM		70 °C -20 °C	1,6 MPa	Meets DIN standard 73378: ideal for use in mobile pneumatics. Suitable for increased temperature ranges combined with high pressure ranges.
PAN-R	NPQH		80 °C 0 °C	2 MPa	Powerful in pressure ranges up to 2 MPa, for example in applications with the pressure booster DPA.

Resistant to chemicals, food-safe**** and hydrolysis-resistant

PLN	NPQP		60 °C -20 °C	1 MPa	Resistant to cleaning agents, FDA compliant and economical. Can be used instead of the combination with stainless steel fittings.
PUN-H	NPKA		60 °C -10 °C	1 MPa	Resistant to hydrolysis 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 thanks to the "one click principle".
PFAN	NPQH		150 °C 0 °C	1,6 MPa	For high temperatures up to 150°C. Food-safe****, FDA-compliant and resistant to cleaning agents.
PFAN	NPQR		150 °C -20 °C	1,6 MPa	Optimised design, fewer edges where dirt can collect – all at an attractive price. For high temperatures up to 150°C. Pressure range up to 1,6 MPa. Highest level of corrosion resistance (CRC 4).
PFAN	NPCK		120 °C -20 °C	1,2 MPa	Easy to clean thanks to the union nut's edge-free design. Maximum resistance to corrosion (CRC 4) and FDA-compliant. Suitable for a wide range of media.

Antistatic

PUN-CM	NPQM		60 °C -20 °C	1 MPa	Anti-static tubing plus solid metal fitting: maximum protection for electrical and electronic components.
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Flame-retardant

PUN-V0	NPQM		60 °C -20 °C	1 MPa	Its flame-retardant properties provide a high level of safety in areas where there is a risk of fire. The tubing has been tested to DIN 5510-2.
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Resistant to welding spatter

PUN-V0-C	NPQH		60 °C 0 °C	1 MPa	Ideal for applications involving welding spatter. Reliable thanks to a tubing wall thickness of 2 mm for all diameters.
PAN-V0	QS-V0		60 °C 0 °C	1 MPa	Safe even in the immediate vicinity of welding spatter thanks to the double-walled tubing with special fitting.

QS standard – Part 1 of 2 – Push-in fittings

In the tables below you will find the optimum polymer fittings for the applications shown opposite.

Select matching tubing from poster 8 "Plastic tubing" and you will always have the right tubing/fitting combination.



Standard: PEN/QS

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.



Wide range of variants: PUN/QS

Maximum flexibility in standard applications thanks to an extremely wide range of options for combining the different types.



Extended pressure range: PAN/QS

Meets all requirements, even for standard applications with increased pressure and temperature ranges.

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QS standard, mini

Push-in fitting



Push-in L-fitting



Push-in L-fitting



Type	D1	D2	PU	PN	Type	D1	D2	PU	PN	Type	D1	D2	PU	PN	Type	D1	D2	PU	PN	Type	D1	D2	PU	PN					
★ QSM... M3	2	10	133027		★ QSMLLV-I... M3	2	10	130830		★ QS... R1/8	4	10	153001		★ QS... R1/8	4	100	130674		★ QS... R1/8	6	10	153012		★ QSKL... M5	4	1	153294	
★ QSM... M3	3	10	153301		★ QSMLLV-I... M3	3	10	153330		★ QS... R1/8	4	100	130831		★ QS... R1/8	6	10	153013		★ QSKL... M5	6	1	153295						
QSM... M3	3	100	130775		★ QSMLLV-I... M5	3	100	130768		★ QS... R1/8	6	10	153002		★ QS... R1/8	6	10	153015		★ QSKL... R1/8	4	1	153419						
QSM... M3	4	10	153303		★ QSMLLV-I... M7	4	10	130832		★ QS... R1/8	6	100	130675		★ QS... R1/8	6	100	130710		★ QSKL... R1/8	6	1	153420						
QSM... M3	4	100	130776		★ QSMLLV-I... M7	4	10	130833		★ QS... R1/8	8	10	153004		★ QS... R1/8	8	10	153025		★ QSKL... R1/8	8	1	153422						
★ QSM... M5	2	10	133028		★ QSMLLV-I... M5	2	10	133031		★ QS... R1/8	8	50	130676		★ QS... R1/8	8	10	153016		★ QSKL... R1/4	6	1	153421						
★ QSM... M5	3	10	153302		★ QSMLLV-I... M5	3	10	153331		★ QS... R1/8	10	10	190643		★ QS... R1/8	10	10	153018		★ QSKL... R1/4	8	1	153423						
QSM... M5	3	100	130777		★ QSMLLV-I... M5	3	100	130770		★ QS... R1/4	4	10	190644		★ QS... R1/4	12	10	190649		★ QSKL... R1/4	10	1	153425						
★ QSM... M5	4	10	153304		★ QSMLLV-I... M5	4	10	153333		★ QS... R1/4	6	10	153003		★ QS... R1/4	8	10	153017		★ QSKL... R3/8	8	1	153424						
QSM... M5	4	100	130778		★ QSMLLV-I... M5	4	100	130771		★ QS... R1/4	6	100	130677		★ QS... R1/4	8	10	153019		★ QSKL... R3/8	10	1	153426						
★ QSM... M5	6	10	153306		★ QSMLLV-I... M5	6	100	130772		★ QS... R1/4	8	10	153005		★ QS... R1/4	12	10	153020		★ QSKL... R3/8	12	1	153427						
QSM... M5	6	100	130779		★ QSMLLV-I... M7	4	10	186352		★ QS... R1/4	8	50	130678		★ QS... R1/4	10	10	190648		★ QSKL... R1/2	12	1	153428						
★ QSM... M6	6	1	132600		★ QSMLLV-I... M5	3	10	130834		★ QS... R1/4	10	10	153007		★ QS... R1/4	12	1	153021		★ QSKL... G1/8	4	1	186294						
★ QSM... R1/8	4	10	153305		★ QSMLLV-I... M5	4	10	130835		★ QS... R1/4	10	50	130679		★ QS... R1/4	10	50	130714		★ QSKL... G1/8	6	1	186295						
QSM... R1/8	4	100	130755		★ QSMLLV-I... M7	4	10	186353		★ QS... R1/4	12	10	164980		★ QS... R1/4	8	10	190651		★ QSKL... G1/8	8	1	186297						
★ QSM... R1/8	6	10	153307		★ QSMLLV-I... M7	6	10	130836		★ QS... R1/4	12	20	130680		★ QS... R1/4	8	10	190652		★ QSKL... G1/4	6	1	186306						
QSM... R1/8	6	100	130756		★ QSMLLV-I... M7	4	10	130837		★ QS... R1/4	6	10	130774		★ QS... R1/4	10	10	153009		★ QSKL... G1/4	8	1	186308						
★ QSM... G1/8	4	10	186264		★ QSMLLV-I... M7	6	10	130838		★ QS... R1/4	6	100	130764		★ QS... R1/4	10	10	153029		★ QSKL... G1/8	6	1	186305						
QSM... G1/8	4	10	186265		★ QSMLLV-I... M7	4	10	130839		★ QS... R1/4	12	10	164980		★ QS... R1/4	8	10	190653		★ QSKL... G1/8	8	1	186307						
Push-in fitting with internal hex					Push-in long L-fitting with internal hex					Push-in fitting					Push-in fitting, self-sealing					Push-in L-fitting, self-sealing					Push-in L-fitting				
Push-in fitting with internal hex					Push-in long L-fitting with internal hex					Push-in fitting					Push-in fitting, self-sealing					Push-in L-fitting, self-sealing					Push-in L-fitting				
Push-in fitting with internal hex, round releasing ring					Push-in long L-fitting with internal hex					Push-in fitting					Push-in fitting, self-sealing					Push-in L-fitting, self-sealing					Push-in L-fitting				
Push-in fitting with internal hex, round releasing ring					Push-in long L-fitting with internal hex					Push-in fitting					Push-in fitting, self-sealing					Push-in L-fitting, self-sealing					Push-in L-fitting				
Push-in fitting with internal hex, round releasing ring					Push-in long L-fitting with internal hex					Push-in fitting					Push-in fitting, self-sealing					Push-in L-fitting, self-sealing					Push-in L-fitting				
Push-in fitting with internal hex, round releasing ring					Push-in long L-fitting with internal hex					Push-in fitting					Push-in fitting, self-sealing					Push-in L-fitting, self-sealing					Push-in L-fitting				
Push-in fitting with internal hex, round releasing ring					Push-in long L-fitting with internal hex					Push-in fitting					Push-in fitting, self-sealing					Push-in L-fitting, self-sealing					Push-in L-fitting				
Push-in fitting with internal hex, round releasing ring					Push-in long L-fitting with internal hex					Push-in fitting					Push-in fitting, self-sealing					Push-in L-fitting, self-sealing					Push-in L-fitting				
Push-in fitting with internal hex, round releasing ring					Push-in long L-fitting with internal hex					Push-in fitting					Push-in fitting, self-sealing					Push-in L-fitting, self-sealing					Push-in L-fitting				
Push-in fitting with internal hex, round releasing ring					Push-in long L-fitting with internal hex					Push-in fitting					Push-in fitting, self-sealing					Push-in L-fitting, self-sealing					Push-in L-fitting				
Push-in fitting with internal hex, round releasing ring					Push-in long L-fitting with internal hex					Push-in fitting					Push-in fitting, self-sealing					Push-in L-fitting, self-sealing					Push-in L-fitting				
Push-in fitting with internal hex, round releasing ring					Push-in long L-fitting with internal hex					Push-in fitting					Push-in fitting, self-sealing					Push-in L-fitting, self-sealing					Push-in L-fitting				
Push-in fitting with internal hex, round releasing ring					Push-in long L-fitting with internal hex					Push-in fitting					Push-in fitting, self-sealing					Push-in L-fitting, self-sealing					Push-in L-fitting				
Push-in fitting with internal hex, round releasing ring					Push-in long L-fitting with internal hex					Push-in fitting					Push-in fitting, self-sealing					Push-in L-fitting, self-se									

QS standard – Part 2 of 2 – Push-in fittings

In the tables below you will find the optimum polymer fittings for the applications shown opposite.

Select matching tubing from poster 8 "Plastic tubing" and you will always have the right tubing/fitting combination.



Standard: PEN/QS

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.



Wide range of variants: PUN/QS

Maximum flexibility in standard applications thanks to an extremely wide range of options for combining the different types.



Extended pressure range: PAN/QS

Meets all requirements, even for standard applications with increased pressure and temperature ranges.

QS standard

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**Rotary push-in L-fitting
360° rotatable**



Type	D1	D2	PU	PN
QSR...	M5	4	1	153526
QSR...	M5	6	1	153527
QSR...	R1/8	4	1	153401
QSR...	R1/8	6	1	153402
QSR...	R1/8	8	1	153404
QSR...	R1/8	10	1	153406
QSR...	R1/4	6	1	153403
QSR...	R1/4	8	1	153405
QSR...	R3/8	8	1	153406
QSR...	R3/8	10	1	153407
QSR...	R3/8	12	1	153408
QSR...	R3/8	14	1	153409
QSR...	R1/2	12	1	153409
QSR...	G1/8	4	1	186276
QSR...	G1/8	6	1	186277
QSR...	G1/8	8	1	186279
QSR...	G1/4	6	1	186278
QSR...	G1/4	8	1	186280
QSR...	G3/8	8	1	186281
QSR...	G3/8	10	1	186282
QSR...	R3/8	12	1	186283
QSR...	G1/2	12	1	186284
QSW...	G1/2	16	1	130605

**Push-in fitting
45° elbow**



Type	D1	D2	PU	PN
★ QSW...	R1/8	4	10	130596
★ QSW...	R1/8	6	10	130597
★ QSW...	R1/8	8	10	130598
★ QSW...	R1/4	6	10	130599
★ QSW...	R1/8	10	1	130600
★ QSW...	G1/4	10	10	130601
★ QSW...	R1/4	8	1	153403
★ QSW...	R3/8	10	10	130602
★ QSW...	R3/8	12	10	130603
★ QSW...	R3/8	10	1	153406
★ QSW...	R1/2	12	1	130604
★ QSW...	R3/8	12	1	153407
★ QSW...	G1/2	16	1	130605

Push-in T-fitting



Type	D1	D2	PU	PN
★ QST...	G1/8	4	10	186157
★ QST...	R1/8	4	100	130266
★ QST...	G1/8	6	10	186158
★ QST...	R1/8	6	100	130267
★ QST...	G1/8	8	10	186160
★ QST...	R1/8	8	50	130268
★ QST...	G1/4	6	10	186159
★ QST...	R1/4	6	100	130271
★ QST...	G1/4	8	10	186161
★ QST...	R1/4	8	50	130272
★ QST...	G1/4	10	10	186163
★ QST...	R1/4	10	50	130271
★ QST...	G1/4	12	10	132597
★ QST...	G3/8	8	10	186162
★ QST...	G3/8	8	50	130272
★ QST...	G3/8	10	10	186164
★ QST...	G3/8	10	20	132073
★ QST...	G3/8	12	10	186165
★ QST...	G3/8	12	20	132074
★ QST...	G3/8	16	1	186349
★ QST...	G1/2	12	1	186166
★ QST...	G1/2	16	1	186167

Push-in T-fitting



Type	D1	D2	PU	PN
★ QSTL...	R1/8	4	10	153117
★ QSTL...	R1/8	6	100	130284
★ QSTL...	R1/8	6	10	153118
★ QSTL...	R1/8	6	100	130285
★ QSTL...	R1/8	8	10	153120
★ QSTL...	R1/8	8	50	130286
★ QSTL...	R1/4	4	10	186159
★ QSTL...	R1/4	6	100	130287
★ QSTL...	R1/4	8	10	153119
★ QSTL...	R1/4	8	50	130288
★ QSTL...	R1/4	10	10	153121
★ QSTL...	R1/4	10	50	130289
★ QSTL...	R1/4	12	10	153122
★ QSTL...	R1/4	12	20	132073
★ QSTL...	R1/4	16	1	153127
★ QSTL...	R1/2	12	10	153124
★ QSTL...	R3/8	12	10	153125
★ QSTL...	R1/2	12	20	132075
★ QSTL...	R1/2	16	1	186169
★ QSTL...	R1/8	6	100	132076
★ QSTL...	R1/8	8	10	186171
★ QSTL...	R1/8	8	50	132077
★ QSTL...	R1/4	6	10	186170
★ QSTL...	R1/4	6	100	132078
★ QSTL...	R1/4	8	10	186172
★ QSTL...	R1/4	8	50	132079
★ QSTL...	R1/4	10	10	186174
★ QSTL...	R1/4	10	50	132080
★ QSTL...	R1/4	12	10	186173
★ QSTL...	R1/4	12	20	132075
★ QSTL...	R1/4	16	1	186176
★ QSTL...	R1/2	12	10	186177
★ QSTL...	R1/2	16	1	186178

Push-in Y-fitting



Type	D1	D2	PU	PN
★ QSY...	M5	4	10	190673
★ QSY...	M5	6	10	190674
★ QSY...	R1/8	4	10	153138
★ QSY...	R1/8	6	10	190675
★ QSY...	R1/8	8	10	153141
★ QSY...	R1/8	10	1	153143
★ QSY...	R1/2	12	1	153147
★ QSY...	R1/2	12	20	132079
★ QSY...	R1/2	16	1	186179
★ QSY...	R1/4	8	10	153144
★ QSY...	R1/4	8	50	132079
★ QSY...	R1/4	10	10	153145
★ QSY...	R1/4	10	50	132079
★ QSY...	R1/4	12	10	153146
★ QSY...	R1/4	12	20	132079
★ QSY...	R1/4	16	1	186179
★ QSY...	R1/8	6	10	186180
★ QSY...	R1/8	8	10	186182
★ QSY...	R1/8	10	1	186183
★ QSY...	R1/8	12	10	186185
★ QSY...	R1/8	16	1	186186
★ QSY...	R1/2	12	1	186187
★ QSY...	R1/2	16	1	186188

Push-in Y-fitting



Type	D1	D2	PU	PN

QS standard – Push-in connectors

In the tables below you will find the optimum polymer fittings for the applications shown opposite.

Select matching tubing from poster 8 "Plastic tubing" and you will always have the right tubing/fitting combination.



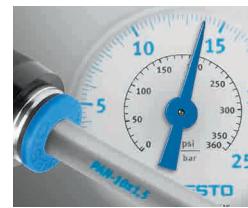
Standard: PEN/QS

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.



Wide range of variants: PUN/QS

Maximum flexibility in standard applications thanks to an extremely wide range of options for combining the different types.



Extended pressure range: PAN/QS

Meets all requirements, even for standard applications with increased pressure and temperature ranges.

FESTO

QS standard, mini

Push-in connector

Type	D1	D2	PU	PN
★ QSM... 3	2	10	133029	
★ QSM... 3	3	10	153323	
QSM... 3	3	100	130757	
★ QSM... 4	4	10	153324	
QSM... 4	4	100	130758	
★ QSM... 6	6	10	153325	
QSM... 6	6	100	130759	
reducing				
★ QSM... 4	3	10	153326	
QSM... 4	3	100	130760	
★ QSM... 6	4	10	153327	
QSM... 6	4	100	130761	

Push-in T-connector

Type	D1	D2	PU	PN
★ QSMT... 2	2	10	133034	
★ QSMT... 3	3	10	153365	
★ QSMT... 4	4	10	153366	
★ QSMT... 4	4	100	130782	
★ QSMT... 6	6	10	153367	
QS... 8	8	10	153033	
★ QSMT... 8	8	50	130688	
★ QSMT... 10	10	10	153034	
★ QSMT... 10	10	50	130689	
★ QSMT... 12	12	10	153035	
QS... 12	12	20	130690	
★ QSMT... 16	16	1	153036	
QS...H 6	4	10	153037	
QS...H 6	4	100	130691	
★ QSMT... 8	4	10	130606	
★ QSMT... 8	6	10	153038	
QS...H 8	6	50	130692	
★ QSMT... 10	6	10	130607	
★ QSMT... 10	8	10	153039	
QS... 10	8	50	130693	
★ QSMT... 12	8	10	130608	
★ QSMT... 12	10	10	153040	
QS...M 12	10	20	130694	

Push-in connector with push-in sleeve

Type	D1	D2	PU	PN
★ QSM-H 3	2	10	133035	
★ QSM-H 4	3	10	153328	
QSM-H 4	4	100	130762	
★ QSM-H 6	4	10	153329	
QSM-H 6	4	100	130763	

Push-in L-connector

Type	D1	D2	PU	PN
★ QSLML... 3	3	10	153343	
★ QSLML... 4	4	10	153344	
QSLML... 4	4	100	130766	
★ QSLML... 6	6	10	153345	
QSLML... 6	6	100	130767	
with push-in sleeve				
★ QSLML...H 3	3	10	153346	
★ QSLML...H 4	4	10	153347	
★ QSLML...H 6	6	10	153348	
reducing				
★ QSLML...H 4	3	10	153349	
★ QSLML...H 6	4	10	153350	

Push-in bulkhead connector

Type	D1	D2	PU	PN
★ QSMS... 3	3	10	153375	
★ QSMS... 4	4	10	153376	
QSMS... 4	4	100	130780	
★ QSMS... 6	6	10	153377	
QSMS... 6	6	100	130781	

QS standard

Push-in connector

Type	D1	D2	PU	PN
★ QS... 4	4	10	153031	
QS... 4	4	100	130686	
★ QS... 6	6	10	153032	
QS... 6	6	100	130687	
★ QS... 8	8	10	153033	
QS... 8	8	50	130688	
★ QS... 10	10	10	153034	
QS... 10	10	50	130689	
★ QS... 12	12	10	153035	
QS... 12	12	20	130690	
★ QS... 16	16	1	153036	
QS...H 6	4	10	153037	
QS...H 6	4	100	130691	
★ QS... 8	4	10	130606	
★ QS... 8	6	10	153038	
QS...H 8	6	50	130692	
★ QS... 10	6	10	130607	
QS... 10	8	10	153039	
QS... 10	8	50	130693	
★ QS... 12	8	10	130608	
★ QS... 12	10	10	153040	
QS...M 12	10	20	130694	

Push-in connector with push-in sleeve

Type	D1	D2	PU	PN
★ QSS...H 6	4	10	153041	
QS...H 6	4	100	130695	
★ QSS...H 8	8	4	10	130622
QS...H 8	6	10	153042	
★ QSS...H 8	8	6	50	130696
QS...H 8	8	10	130623	
★ QSS...H 10	10	8	10	130624
QS...H 10	10	50	130697	
★ QSS...H 12	12	6	10	132981
QS...H 12	12	20	130625	
★ QSS...H 16	16	1	153044	
QS...H 16	16	20	130698	

Push-in bulkhead connector

Type	D1	D2	PU	PN
★ QSS... 4	4	10	153157	
QSS... 4	4	100	130740	
★ QSL... 6	6	10	153071	
QSL... 6	6	100	130741	
★ QSL... 8	8	10	153072	
QSL... 8	8	50	130742	
★ QSL... 10	10	10	10	130743
QSL... 10	10	50	130744	
★ QSL... 12	12	10	10	153130
QSL... 12	12	20	130745	
★ QSL... 16	16	1	153133	
QSL... 16	16	20	130746	

Push-in L-connector

Type	D1	D2	PU	PN

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Metal push-in fittings/connectors

In the tables below you will find the optimum metal fittings for the following applications:

Select matching tubing from poster 8 "Plastic tubing" and you will always have the right tubing/fitting combination.



High pressures: PAN-MF/NPQM

Meets DIN standard 73378: ideal for use in mobile pneumatics. Suitable for increased temperature ranges combined with high pressure ranges.



Resistant to welding spatter: PAN-V0/QS-V0

Safe even in the immediate vicinity of welding spatter thanks to the double-walled tubing with special fitting

NPQM

Push-in fitting with internal hex



Type	D1	D2	PU	PN
NPQM-DK M5	4	20	558657	
NPQM-DK M5	6	20	558658	
NPQM-DK M7	4	20	558659	
NPQM-DK M7	6	20	558660	

Push-in fitting female thread



Type	D1	D2	PU	PN
NPQM-D G1/8	4	10	558674	
NPQM-D G1/8	6	10	558675	
NPQM-D G1/8	8	10	558676	
NPQM-D G1/4	6	10	558678	
NPQM-D G1/4	8	10	558679	
NPQM-D G1/4	10	10	558680	

Push-in T-fitting



Type	D1	D2	PU	PN
NPQM-T G1/8	4	10	558736	
NPQM-T G1/8	6	10	558737	
NPQM-T G1/8	8	10	558738	
NPQM-T G1/4	6	10	558739	
NPQM-T G1/4	8	10	558740	
NPQM-T G1/4	10	10	558741	
NPQM-T G3/8	8	10	558743	
NPQM-T G3/8	10	10	558744	
NPQM-T G3/8	12	10	558745	
NPQM-T G1/2	12	10	558747	

Push-in L-fitting



Type	D1	D2	PU	PN
NPQM-LK M5	3	10	558816	
NPQM-LK M5	4	10	558817	
NPQM-LK G1/8	4	10	558818	
NPQM-LK G1/8	6	10	558819	
NPQM-LK G1/8	8	10	558820	
NPQM-LK G1/4	6	10	558821	
NPQM-LK G1/4	8	10	558822	
NPQM-LK G1/4	10	10	558823	
NPQM-LK G3/8	10	10	558825	

Push-in L-connector with sleeve



Type	D1	D2	PU	PN
NPQM-LH M5	4	10	558827	
NPQM-LH M5	6	10	558828	
NPQM-LH G1/8	4	10	558829	
NPQM-LH G1/8	6	10	558830	
NPQM-LH G1/8	8	10	558831	
NPQM-LH G1/4	6	10	558832	
NPQM-LH G1/4	8	10	558833	
NPQM-LH G3/8	8	10	558834	
NPQM-LH G3/8	10	10	558835	

Push-in T-connector with sleeve



Type	D1	D2	PU	PN
NPQM-TL 4	4	10	558786	
NPQM-TL 6	6	10	558787	
NPQM-TL 8	8	10	558788	
NPQM-TL 10	10	10	558789	
NPQM-TL 8	8	10	558793	
NPQM-TL 10	10	10	558794	

Push-in Y-connector



Type	D1	D2	PU	PN
NPQM-Y 4	4	10	558798	
NPQM-Y 6	6	10	558799	
NPQM-Y 8	8	10	558800	
NPQM-Y 10	10	10	558801	
NPQM-Y 12	12	10	558802	
NPQM-Y 6	4	10	558803	
NPQM-Y 8	6	10	558804	
NPQM-Y 10	8	10	558805	

NPQM

Push-in fitting female thread



Type	D1	D2	PU	PN
NPQM-D G1/8	4	10	558674	
NPQM-D G1/8	6	10	558675	
NPQM-D G1/8	8	10	558676	
NPQM-D G1/4	6	10	558678	
NPQM-D G1/4	8	10	558679	
NPQM-D G1/4	10	10	558680	

Push-in fitting



Type	D1	D2	PU	PN
NPQM-D G1/8	4	10	558674	
NPQM-D G1/8	6	10	558675	
NPQM-D G1/8	8	10	558676	
NPQM-D G1/4	6	10	558678	
NPQM-D G1/4	8	10	558679	
NPQM-D G1/4	10	10	558680	

Push-in L-fitting



Type	D1	D2	PU	PN
NPQM-D G1/8	4	10	558674	
NPQM-D G1/8	6	10	558675	
NPQM-D G1/8	8	10	558676	
NPQM-D G1/4	6	10	558678	
NPQM-D G1/4	8	10	558679	
NPQM-D G1/4	10	10	558680	

Push-in L-fitting



Type	D1
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Polymer fittings

In the tables below you will find the optimum polymer fittings for the following applications:

Select matching tubing from poster 8 "Plastic tubing" and you will always have the right tubing/fitting combination.



**Resistant to chemicals:
PLN/NPQP**

Resistant to cleaning agents, FDA-listed material and economical. Can be used instead of the combination with stainless steel fittings.



**Resistant to hydrolysis:
PUN-H/NPKA**

Resistant to hydrolysis and suitable for water applications. Combination suitable for use in cleanrooms, FDA-listed material and corrosion resistant because it's 100% polymer. Very easy to install thanks to the "one click principle".

NPQP

Push-in fitting



Type	D1	D2	PU	PN
NPQP-D	R1/8	4	10	133041
NPQP-D	R1/8	6	10	133043
NPQP-D	R1/8	8	10	133045
NPQP-D	R1/4	4	10	133042
NPQP-D	R1/4	6	10	133044
NPQP-D	R1/4	8	10	133046
NPQP-D	R1/4	10	10	133047
NPQP-D	R3/8	10	10	133048
NPQP-D	R3/8	12	10	133049
NPQP-D	R1/2	12	1	133050
				133060

Push-in L-fitting



Type	D1	D2	PU	PN
NPQP-L	R1/8	4	10	133051
NPQP-L	R1/8	6	10	133053
NPQP-L	R1/8	8	10	133055
NPQP-L	R1/4	4	10	133052
NPQP-L	R1/4	6	10	133054
NPQP-L	R1/4	8	10	133056
NPQP-L	R1/4	10	10	133057
NPQP-L	R3/8	10	10	133058
NPQP-L	R3/8	12	10	133059
NPQP-L	R1/2	12	1	133070

Push-in L-fitting additional push-in connector



Type	D1	D2	PU	PN
NPQP-L	R1/8	4	10	133061
NPQP-L	R1/8	6	10	133063
NPQP-L	R1/8	8	10	133065
NPQP-L	R1/4	4	10	133062
NPQP-L	R1/4	6	10	133064
NPQP-L	R1/4	8	10	133066
NPQP-L	R1/4	10	10	133067
NPQP-L	R3/8	10	10	133068
NPQP-L	R3/8	12	10	133069
NPQP-L	R1/2	12	1	133070

Push-in T-fitting additional push-in connector



Type	D1	D2	PU	PN
NPQP-T	R1/8	4	10	133071
NPQP-T	R1/8	6	10	133073
NPQP-T	R1/8	8	10	133075
NPQP-T	R1/4	4	10	133076
NPQP-T	R1/4	6	10	133077
NPQP-T	R1/4	8	10	133078
NPQP-T	R1/4	10	10	133079
NPQP-T	R3/8	10	10	133088
NPQP-T	R3/8	12	10	133079
NPQP-T	R1/2	12	1	133080

Push-in Y-fitting



Type	D1	D2	PU	PN
NPQP-Y	R1/8	4	10	133081
NPQP-Y	R1/8	6	10	133083
NPQP-Y	R1/8	8	10	133085
NPQP-Y	R1/4	4	10	133082
NPQP-Y	R1/4	6	10	133084
NPQP-Y	R1/4	8	10	133086
NPQP-Y	R1/4	10	10	133087
NPQP-Y	R3/8	10	10	133088
NPQP-Y	R3/8	12	10	133089
NPQP-Y	R1/2	12	1	133090

NPKA

Click fitting with internal hex



Type	D1	D2	PU	PN
NPKA-D	G1/8	6	10	1243489

Click L-fitting



Type	D1	D2	PU	PN
NPKA-L	G1/8	6	10	1655429

Click T-fitting



Type	D1	D2	PU	PN
NPKA-T	6	6	10	1590710

Push-in connector



Type	D1	D2	PU	PN
NPQP-D	4	4	10	133091
NPQP-D	6	6	10	133092
NPQP-D	8	8	10	133093
NPQP-D	10	10	10	133094
NPQP-D	12	12	10	133095
reducing				
NPQP-D	6	4	10	133096
NPQP-D	8	6	10	133097
NPQP-D	10	8	10	133098
NPQP-D	12	10	10	133099

Push-in L-connector



Type	D1	D2	PU	PN
NPQP-L	4	4	10	133105
NPQP-L	6	6	10	133106
NPQP-L	8	8	10	133107
NPQP-L	10	10	10	133108
NPQP-L	12	12	10	133109

Push-in T-connector



Type	D1	D2	PU	PN
NPQP-T	4	4	10	133110
NPQP-T	6	6	10	133111
NPQP-T	8	8	10	133112
NPQP-T	10	10	10	133113
NPQP-T	12	12	10	133114
reducing				
NPQP-T	6	4	10	133115
NPQP-T	8	6	10	1

Metal and special fittings/connectors



Resistant to chemicals, food-grade***, resistant to hydrolysis, resistant to pressure, resistant to welding spatter

NPQH

Push-in fitting Male thread with external hex



Type	D1	D2	PU	PN
NPQH-D M5	4	10	578334	
NPQH-D M5	6	10	578335	
NPQH-D M7	4	10	578336	
NPQH-D M7	6	10	578337	
NPQH-D G1/8	4	10	578338	
NPQH-D G1/8	6	10	578339	
NPQH-D G1/8	8	10	578340	
NPQH-D G1/4	6	10	578341	
NPQH-D G1/4	8	10	578342	
NPQH-D G1/4	10	10	578343	
NPQH-D G1/4	12	10	578344	
NPQH-D G3/8	8	10	578345	
NPQH-D G3/8	10	10	578346	
NPQH-D G3/8	12	10	578347	
NPQH-D G3/8	14	10	578348	
NPQH-D G1/2	10	1	578349	
NPQH-D G1/2	12	1	578350	
NPQH-D G1/2	14	1	578351	

Push-in fitting Male thread with internal hex



Type	D1	D2	PU	PN
NPQH-DK M5	4	10	578370	
NPQH-DK M5	6	10	578371	
NPQH-DK M7	4	10	578372	
NPQH-DK M7	6	10	578373	
NPQH-DK G1/8	4	10	578374	
NPQH-DK G1/8	6	10	578375	
NPQH-DK G1/8	8	10	578376	
NPQH-DK G1/4	8	10	578377	
NPQH-DK G1/4	10	10	578378	
NPQH-DK G3/8	12	10	578379	

Push-in fitting with push-in sleeve



Type	D1	D2	PU	PN
NPQH-H M5	4	10	578358	
NPQH-H M5	6	10	578359	
NPQH-H G1/8	4	10	578360	
NPQH-H G1/8	6	10	578361	
NPQH-H G1/8	8	10	578362	
NPQH-H G1/4	6	10	578363	
NPQH-H G1/4	8	10	578364	
NPQH-H G1/4	10	10	578365	
NPQH-H G1/4	12	10	578366	
NPQH-H G3/8	10	10	578367	
NPQH-H G3/8	12	10	578368	
NPQH-H G1/2	12	1	578369	

Push-in long L-fitting Male thread with external hex



Type	D1	D2	PU	PN
NPQH-LL G1/8	4	10	578263	
NPQH-LL G1/8	6	10	578264	
NPQH-LL G1/8	8	10	578265	
NPQH-LL G1/4	6	10	578266	
NPQH-LL G1/4	8	10	578267	
NPQH-LL G1/4	10	10	578268	
NPQH-LL G1/4	12	10	578269	
NPQH-LL G3/8	10	10	578268	
NPQH-LL G3/8	12	10	578269	



Resistant to chemicals



Clean design

NPQR

Push-in fitting Male thread with internal hex



Type	D1	D2	PU	PN
NPQR-D M5	4	10	578270	
NPQR-D M5	6	10	578271	
NPQR-D M7	4	10	578278	
NPQR-D M7	6	10	578279	
NPQR-D G1/8	4	10	578280	
NPQR-D G1/8	6	10	578281	
NPQR-D G1/8	8	10	578282	
NPQR-D G1/4	6	10	578283	
NPQR-D G1/4	8	10	578284	
NPQR-D G1/4	10	10	578285	
NPQR-D G1/4	12	10	578286	
NPQR-D G1/4	14	10	578287	
NPQR-D G1/4	16	10	578288	
NPQR-D G1/4	18	10	578289	
NPQR-D G1/4	20	10	578290	
NPQR-D G1/4	22	10	578291	
NPQR-D G1/4	24	10	578292	
NPQR-D G1/4	26	10	578293	
NPQR-D G1/4	28	10	578294	
NPQR-D G1/4	30	10	578295	
NPQR-D G1/4	32	10	578296	
NPQR-D G1/4	34	10	578297	
NPQR-D G1/4	36	10	578298	

Push-in connector



Type	D1	D2	PU	PN
NPQR-L M5	4	10	578273	
NPQR-L M5	6	10	578274	
NPQR-L M7	4	10	578275	
NPQR-L M7	6	10	578276	
NPQR-L G1/8	4	10	578277	
NPQR-L G1/8	6	10	578278	
NPQR-L G1/8	8	10	578279	
NPQR-L G1/8	10	10	578280	
NPQR-L G1/8	12	10	578281	
NPQR-L G1/8	14	10	578282	
NPQR-L G1/8	16	10	578283	
NPQR-L G1/8	18	10	578284	
NPQR-L G1/8	20	10	578285	
NPQR-L G1/8	22	10	578286	
NPQR-L G1/8	24	10	578287	
NPQR-L G1/8	26	10	578288	
NPQR-L G1/8	28	10	578289	
NPQR-L G1/8	30	10	578290	
NPQR-L G1/8	32	10	578291	
NPQR-L G1/8	34	10	578292	
NPQR-L G1/8	36	10	578293	
NPQR-L G1/8	38	10	578294	
NPQR-L G1/8	40	10	578295	
NPQR-L G1/8	42	10	578296	
NPQR-L G1/8	44	10	578297	
NPQR-L G1/8	46	10	578298	
NPQR-L G1/8	48	10	578299	
NPQR-L G1/8	50	10	578300	
NPQR-L G1/8	52	10	578301	
NPQR-L G1/8	54	10	578302	
NPQR-L G1/8	56	10	578303	

Push-in Y-connector



| Type | D1 | D2 | PU | PN |
</tr
| --- | --- | --- | --- | --- |

Plastic tubing, standard O.D.

In the tables below you will find the appropriate tubing for optimum tubing/fitting combinations.

Plastic tubing

Standard



PUN	PU 3	PU 4	PU 6	PU 8	PU 10	PU 12	PU 14	PU 16
silver	50 152583	50 152584	50 152586	50 152587	50 152588	50 152589	50 570389	50 152590
silver	500 525738	500 525739	500 525740	500 525741	300 525742	200 525743	100 525744	
blue	50 159660	50 159662	50 159664	50 159666	50 159668	50 159670	50 570390	50 159672
blue	500 525745	500 525746	500 525747	400 525748	300 525749	200 525750	100 525751	
black	50 159661	50 159663	50 159665	50 159667	50 159669	50 159671	50 570391	50 159673
black	500 553936	500 553937	500 553938	400 553939	300 553940	200 553941		100 553942
yellow	50 178416	50 178417	50 178418	50 178419	50 178420	50 178421		50 178422
green	50 178423	50 178424	50 178425	50 178426	50 178427	50 178428		50 178429
red	50 178409	50 178410	50 178411	50 178412	50 178413	50 178414		50 178415

PUN-DUO	PU 4	PU 6	PU 8	PU 10
silver	50 152822	50 152823	50 152824	50 152825
blue/black	50 159674	50 159675	50 159676	50 159677

PEN	PU 4	PU 6	PU 8	PU 10	PU 12	PU 14	PU 16
nature	50 543246	50 543247	50 543248	50 543249	50 543250	50 570517	50 543251
silver	50 551462	50 551463	50 551464	50 551465	50 551466		50 551467
silver	500 551450	500 551451	400 551452	300 551453	200 551454	200	100 551455
blue	50 551456	50 551457	50 551458	50 551459	50 551460	50	50 551461
blue	500 551444	500 551445	400 551446	300 551447	200 551448	200	100 551449
black	50 543240	50 543241	50 543242	50 543243	50 543244	50 570516	50 543245
black	500 551438	500 551439	400 551440	300 551441	200 551442	200	100 551443
green	50 551468	50 551469	50 551470	50 551471	50 551772	50	50 551473
red	50 551474	50 551475	50 551776	50 551477	50 551478	50	50 551479
yellow	50 551480	50 551481	50 551482	50 551483	50 551484	50	50 551485

Food-grade****



PUN-H	PU 2	PU 3	PU 4	PU 6	PU 8	PU 10	PU 12	PU 14	PU 16
nature	50 133038	50 197375	50 ★ 197376	50 197377	50 197378	50 197379	50 197380	50 570388	50 197381
nature		500 558263	500 558264	500 558265	400 558266	300 558267	200 558268		100 558269
blue		50 ★ 197382	50 ★ 197383	50 ★ 197384	50 ★ 197385	50 ★ 197386	50 ★ 197387	50 ★ 570386	50 ★ 197388
blue		500 558256	500 558257	500 558258	400 558259	300 558260	200 558261		100 558262
translucent blue			50 ★ 8048671	50 ★ 8048681	50 ★ 8048691	50 ★ 8048701	50 ★ 8048711		
translucent blue			500 8048672	500 8048682	400 8048692	300 8048702	200 8048712		
black	50 ★ 133039	50 ★ 197389	50 ★ 197390	50 ★ 197391	50 ★ 197392	50 ★ 197393	50 ★ 197394	50 ★ 570387	50 ★ 197395
black		500 558249	500 558250	500 558251	400 558252	300 558253	200 558254		100 558255
translucent black			50 ★ 8048673	50 ★ 8048683	50 ★ 8048693	50 ★ 8048703	50 ★ 8048713		
translucent black			500 8048674	500 8048684	400 8048684	300 8048694	200 8048704		
silver		50 ★ 558277	50 ★ 558278	50 ★ 558279	50 ★ 558280	50 ★ 558281	50 ★ 558282		50 ★ 558283
silver		500 558270	500 558271	500 558272	400 558273	300 558274	200 558275		100 558276
red	50 133040	50 558284	50 558285	50 558286	50 558287	50 558288	50 558289		50 558290
translucent red			50 8048675	50 8048685	50 8048695	50 8048705	50 8048715		
translucent red			500 8048676	500 8048686	400 8048696	300 8048706	200 8048716		
green		50 558291	50 558292	50 558293	50 558294	50 558295	50 558296		50 558297
translucent green			50 8048677	50 8048687	50 8048697	50 8048707	50 8048717		
translucent green			500 8048678	500 8048688	400 8048689	300 8048698	200 8048708		
yellow		50 558298	50 558299	50 558300	50 558301	50 558302	50 558303		50 558304
translucent yellow			50 8048679	50 8048689	50 8048699	50 8048709	50 8048719		
translucent yellow			500 8048680	500 8048690	400 8048700	300 8048710	200 8048720		

PUN-H-DUO	PU 4	PU 6	PU 8	PU 10
blue/black	50 197396	50 197397	50 197398	50 197399

Resistant to chemicals



PLN	PU 4	PU 6	PU 8	PU 10	PU 12	PU 14	PU 16
nature	50 193403	50 193404	50 193405	50 193406	50 193407	50 570424	50 539064
nature	100 561726	100 561727					
black	50 195280	50 195281	50 195282	50 195283	50 195284	50 570423	50 539065
blue	50 558205	50 558206	50 558207	50 558208	50 558209		50 558210
silver	50 558211	50 558212	50 558213	50 558214	50 558215		50 558216
red	50 558217	50 558218	50 558219	50 558220	50 558221		50 558222

Resistant to chemicals and

Threaded fittings



Wide ranging ...



Sturdy ...

Threaded fittings NPFC

FESTO

Blanking plug



Type	D1	PU	PN
B M7	10	174309	
B G1/8	10	3568	
B G1/8	100	534213	
B G1/4	10	3569	
B G1/4	50	534214	
B G3/8	10	3570	
B G3/8	20	534215	
B G1/2	10	3571	
B G1/2	20	534216	
B G3/4	10	3572	
B G1	10	5763	

Reducing sleeve



Type	D1	D2	PU	PN
NPFC-R G1/8 M5	10	8069219		
NPFC-R G1/4 M5	10	8069220		
NPFC-R G3/8 M5	10	8069221		
NPFC-R G1/8 G1/4 M5	10	8030298		
NPFC-R G3/8 G1/4 M5	10	8030299		
NPFC-R G1/4 G1/8 M5	10	8069221		
NPFC-R G1/2 G1/8 M5	10	8069222		
NPFC-R G1/2 G1/4 M5	10	8069223		
NPFC-R G1/8 G1/2 M5	10	8069223		
NPFC-R G1/8 G3/8 M5	10	8069224		
NPFC-R G3/4 G1/2 M5	10	8030297		
NPFC-R G1/2 G1/2 M5	10	8069225		
NPFC-R G1/4 G1/4 M5	10	8069226		
NPFC-E G1/8 G1/8 M5	10	8030306		

Extension



Type	D1	D2	PU	PN
NPFC-E G1/8 G1/8 M5	10	8069218		
NPFC-E G1/4 G1/4 M5	10	8069219		
NPFC-E G3/8 G3/8 M5	10	8069220		
NPFC-E G1/8 G1/4 M5	10	8069221		
NPFC-E G3/8 G1/4 M5	10	8069222		
NPFC-E G1/4 G1/8 M5	10	8069223		
NPFC-E G1/2 G1/8 M5	10	8069224		
NPFC-E G1/8 G3/8 M5	10	8069225		
NPFC-E G3/4 G1/2 M5	10	8030297		
NPFC-E G1/2 G1/2 M5	10	8069226		
NPFC-E G1/4 G1/4 M5	10	8069227		

Double nipple



Type	D1	D2	PU	PN
NPFC-D M3	M3	10	8069210	
NPFC-D M5	M5	10	8069211	
NPFC-D M7	M7	10	8069212	
NPFC-D M9	M9	10	8069213	
NPFC-D M11	M11	10	8069214	
NPFC-D M13	M13	10	8069215	
NPFC-D M15	M15	10	8069216	
NPFC-D M17	M17	10	8069217	
NPFC-D M19	M19	10	8069218	
NPFC-D M21	M21	10	8069219	
NPFC-D M23	M23	10	8069220	
NPFC-D M25	M25	10	8069221	
NPFC-D M27	M27	10	8069222	
NPFC-D M29	M29	10	8069223	
NPFC-D M31	M31	10	8069224	
NPFC-D M33	M33	10	8069225	
NPFC-D M35	M35	10	8069226	
NPFC-D M37	M37	10	8069227	
NPFC-D M39	M39	10	8069228	
NPFC-D M41	M41	10	8069229	
NPFC-D M43	M43	10	8069230	
NPFC-D M45	M45	10	8069231	
NPFC-D M47	M47	10	8069232	
NPFC-D M49	M49	10	8069233	
NPFC-D M51	M51	10	8069234	
NPFC-D M53	M53	10	8069235	
NPFC-D M55	M55	10	8069236	
NPFC-D M57	M57	10	8069237	
NPFC-D M59	M59	10	8069238	
NPFC-D M61	M61	10	8069239	
NPFC-D M63	M63	10	8069240	
NPFC-D M65	M65	10	8069241	
NPFC-D M67	M67	10	8069242	
NPFC-D M69	M69	10	8069243	
NPFC-D M71	M71	10	8069244	
NPFC-D M73	M73	10	8069245	
NPFC-D M75	M75	10	8069246	
NPFC-D M77	M77	10	8069247	
NPFC-D M79	M79	10	8069248	
NPFC-D M81	M81	10	8069249	
NPFC-D M83	M83	10	8069250	
NPFC-D M85	M85	10	8069251	
NPFC-D M87	M87	10	8069252	
NPFC-D M89	M89	10	8069253	
NPFC-D M91	M91	10	8069254	
NPFC-D M93	M93	10	8069255	
NPFC-D M95	M95	10	8069256	
NPFC-D M97	M97	10	8069257	
NPFC-D M99	M99	10	8069258	
NPFC-D M101	M101	10	8069259	
NPFC-D M103	M103	10	8069260	
NPFC-D M105	M105	10	8069261	
NPFC-D M107	M107	10	8069262	
NPFC-D M109	M109	10	8069263	
NPFC-D M111	M111	10	8069264	
NPFC-D M113	M113	10	8069265	
NPFC-D M115	M115	10	8069266	
NPFC-D M117	M117	10	8069267	
NPFC-D M119	M119	10	8069268	
NPFC-D M121	M121	10	8069269	
NPFC-D M123	M123	10	8069270	
NPFC-D M125	M125	10	8069271	
NPFC-D M127	M127	10	8069272	
NPFC-D M129	M129	10	8069273	
NPFC-D M131	M131	10	8069274	
NPFC-D M133	M133	10	8069275	
NPFC-D M135	M135	10	8069276	
NPFC-D M137	M137	10	8069277	
NPFC-D M139	M139	10	8069278	
NPFC-D M141	M141	10	8069279	
NPFC-D M143	M143	10	8069280	
NPFC-D M145	M145	10	8069281	
NPFC-D M147	M147	10	8069282	
NPFC-D M149	M149	10	8069283	
NPFC-D M151	M151	10	8069284	
NPFC-D M153	M153	10	8069285	
NPFC-D M155	M155	10	8069286	
NPFC-D M157	M157	10	8069287	
NPFC-D M159	M159	10	8069288	
NPFC-D M161	M161	10	8069289	
NPFC-D M163	M163	10	8069290	
NPFC-D M165	M165	10	8069291	
NPFC-D M167	M167	10	8069292	
NPFC-D M169	M169	10	8069293	
NPFC-D M171	M171	10	8069294	
NPFC-D M173	M173	10	8069295	
NPFC-D M175	M175	10	8069296	
NPFC-D M177	M177	10	8069297	
NPFC-D M179	M179	10	8069298	
NPFC-D M181	M181	10	8069299	
NPFC-D M183	M183	10	8069300	
NPFC-D M185	M185	10	8069301	
NPFC-D M187	M187	10	8069302	
NPFC-D M189	M189	10	8069303	
NPFC-D M191	M191	10	8069304	
NPFC-D M193	M193	10	8069305	
NPFC-D M195	M195	10	8069	

Check valves, one-way flow control valves and flow control valves



Extensive selection



Reliable for all applications



Flow on demand

Check valves, one-way flow control valves and flow control valves

FESTO

One-way flow control valves



Type	D2	D1	PN
VFOE-LE	4	M5	8068723
(exhaust air)	6	M5	8068724
	4	G1/8	8068725
	6	G1/8	8068726
	8	G1/8	8068727
	6	G1/4	8068728
	8	G1/4	8068729
	10	G1/4	8068730
	8	G3/8	8068731
	10	G3/8	8068732
	12	G1/2	8068733
	4	R1/8	8068734
	6	R1/8	8068735
	8	R1/8	8068736
	6	R1/4	8068737
	8	R1/4	8068738
	10	R1/4	8068739
	8	R3/8	8068740
	10	R3/8	8068741
	12	R1/2	8068742
VFOE-LE	4	M5	8095432*
(exhaust air)	6	G1/8	8095433*
(bulk pack)	8	G1/4	8095434*
	10	G3/8	8095435**
	12	G1/2	8095436**
VFOE-LS	4	M5	8068743
(supply air)	6	M5	8068744
	4	M7	8068745
	6	M7	8068746
	4	G1/8	8068747
	6	G1/8	8068748
	8	G1/8	8068749
	4	R1/8	8068750
	6	R1/8	8068751
	8	R1/8	8068752

* Packaging unit 50

** Packaging unit 20

One-way flow control valves, series D



Type	D2	D1	PN
GRLA	M5	3	193137
(exhaust air)	M5	4	193138
	M5	6	193139
	G1/8	3	193142
	G1/8	8	578799
	G1/4	8	578800
	G1/4	10	578801

One-way flow control valves, series B



Type	D2	D1	PN
VFOH-LE	G1/8	4	578797
(exhaust air)	G1/8	6	578798
	G1/8	8	578799
	G1/4	8	578800
	G1/4	10	578801

Standard application, series B²⁾



Type	D2	D1	PN
VFOC	Push-in sleeve	4	559723
(supply air)	Push-in sleeve	6	559724

Special application
High corrosion resistance



Type	D2	D1	PN
CRGRLA	M5	M5	161403
	G1/8	G1/8	161404
	G1/4	G1/4	161405
	G3/8	G3/8	161406
	G1/2	G1/2	161407

Check valve
Pneumatically piloted



Type	D2	D1	PN
HGL	M5	M5	530029
	G1/8	G1/8	530030
	G1/4	G1/4	530031
	G3/8	G3/8	530032
	G1/2	G1/2	530033
	M5	4	530038
	G1/8	4	530039
	G1/8	6	530040
	G1/4	8	530041
	G1/4	10	530042
	G3/8	8	530043
	G3/8	10	530044
	G1/2	12	530045

In-line flow control valve
with QS push-in fitting



Type	D2	D1	PN
GRLA	M5	M5	151163
(exhaust air)	G1/8	G1/8	151169
	G1/4	G1/4	151175
	M5	3	193153
(supply air)	M5	4	193154
	M5	6	193155
	G1/8	3	193156
	G1/8	4	193157
	G1/8	6	193158
	G1/8	8	193159

Check valve
with additional function
pneumatically piloted



Type	D2	D1	PN
VBNF	G1/8	6	8001460
	G1/4	8	1927027

Standard in-line flow control valve
with female thread



Type	D1	PN
GR	3	193965
(exhaust air/ supply air)	4	193967
	4	193966
	6	193968
	6	193969
	8	193970
GRO	3	193971
(both ends)	4	193972
	5	193973

Check valve
with 2 additional functions
pneumatically piloted



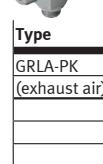
Type	D2	D1	PN
VFOF-LE-BAH	G1/8	6	8001459
(exhaust air)	G1/4	8	1927030



One-way flow control valves
with scale



Type	D2	D1	PN
GRLSA	G1/8	6	540661
(exhaust air)	G1/4	8	540662



Special application
Mini



Type	D2	D1	PN

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Technical data for flow control valves

Designation	Plastic			Metal				
	VFOE	GRLA-QS-(RS)-B	GRLA-(RS)-B	GRLA-PK-B	GRLA-QS-(RS)-D	VFOC	GRLA-F-QS-D	CRGRLA
Function	Exhaust air flow control	Yes	Yes	Yes	Yes	Yes	On request	Yes
	Supply air flow control	Yes	–	Yes	Yes	Yes	–	–
Actuation	With tool	–	–	Yes	Yes	Yes	Yes	Yes
	Without tool	Rotary knob with detent	Yes	Yes	–	Yes	–	–
Media	Compressed air	Compressed air, vacuum	Compressed air, vacuum	Compressed air, vacuum	Compressed air, vacuum	Compressed air, vacuum	Compressed air, vacuum	Compressed air, vacuum
Operating pressure [MPa]	0,02 ... 1	0,02 ... 1	0,03 ... 1	0,03 ... 1	0,02 ... 1	0,02 ... 1	0,02 ... 1	0,03 ... 1
Operating temperature [°C]	-10 ... +60	-10 ... +60	-10 ... +60	-10 ... +60	-10 ... +60	-10 ... +60	0 ... +150	-20 ... 80
Mounting position	Any	Any	Any	Any	Any	Any	Any	Any

+++ highly suitable ++ suitable + suitable to a limited extent – unsuitable

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