

Non-return valves VBNF

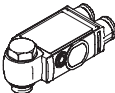
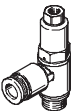
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Non-return valves VBNF

Product range overview and type codes

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Product range overview						
Function	Version	Type	Valve function	Pneumatic connection		➔ Page/Internet
				1 (valve)	2 (drive)	
Non-return valves	Flat design					
		VBNF	Piloted non-return function	QS-6	G1/8	3
	Compact design					
		H-QS	–	QS-4, QS-6, QS-8, QS-10, QS-12	QS-4, QS-6, QS-8, QS-10, QS-12	h-qs
		HA	–	M5, R1/8, R1/4, R3/8, R1/2	QS-4, QS-6, QS-8, QS-10, QS-12	ha
		HB	–	QS-4, QS-6, QS-8, QS-10, QS-12	M5, R1/8, R1/4, R3/8, R1/2	hb
		H	–	M5, G1/8, G1/4, G3/8, G1/2, G3/4	M5, G1/8, G1/4, G3/8, G1/2, G3/4	h
		HGL	Piloted non-return function	M5, G1/8, G1/4, G3/8, G1/2	M5, G1/8, G1/4, G3/8, G1/2	hgl
		HGL-QS	Piloted non-return function	M5, G1/8, G1/4, G3/8, G1/2	QS-4, QS-6, QS-8, QS-10, QS-12	hgl

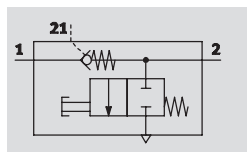
Type codes

		VBNF	–	L	BA	–	G18	–	Q6
Type									
VBNF	Non-return valve, flat design								
Design									
L	L-shaped outlet								
Additional function									
BA	Piloted non-return function, manual exhaust function								
Pneumatic connection 2 (drive)									
G18	Thread G1/8								
Pneumatic connection 1 (valve)									
Q6	Push-in connector QS-6								

Non-return valves VBNF

Technical data

Piloted non-return function



Flow rate
200 l/min

Temperature range
-10 ... +60 °C

 Operating pressure
0.5 ... 10 bar



As long as a pilot signal is applied to the non-return valve, compressed air flows to and from the drive. If no pilot signal is applied, the valve shuts off

the exhaust air from the drive and the drive motion is stopped. The valve can thus be used for short-duration positioning and braking functions.

- Integrated manual override for exhausting an air volume trapped in the drive
- Pre-assembled sealing ring at pneumatic connection 2 (drive)

- Can be rotated through 360° in assembled state (continuous rotation of the connection must, however, be avoided)

General technical data			
Pneumatic connection 1 (valve)		QS-6	
Pneumatic connection 2 (drive)		G1/8	
Pilot air connection 21		QS-6	
Valve function		Piloted non-return function	
Type of mounting		Screw-in	
Mounting position		Any	
Switching time	On	[ms]	5
	Off	[ms]	9

Flow rate characteristic values	
Standard nominal flow rate q _N [l/min] at 6 bar → 5 bar	
q _N	200
Standard flow rate q _N [l/min] at 6 bar → 0 bar	
q _N	350

Operating and environmental conditions		
Operating pressure	[bar]	0.5 ... 10
Pilot pressure	[bar]	2 ... 10
Operating/pilot medium		Filtered compressed air, lubricated or unlubricated, grade of filtration 40 µm
Ambient temperature	[°C]	-10 ... +60
Temperature of medium	[°C]	-10 ... +60
Storage temperature	[°C]	-10 ... +60
Corrosion resistance class CRC ¹⁾		1

1) Corrosion resistance class 1 according to Festo standard 940 070

Components subject to low corrosion stress. Transport and storage protection. Parts that do not have primarily decorative surface requirements, e.g. in internal areas that are not visible or behind covers.

Materials	
Housing, release ring	POM
Hollow bolt	Anodised wrought aluminium alloy
Seals	NBR
Note on materials	RoHS-compliant

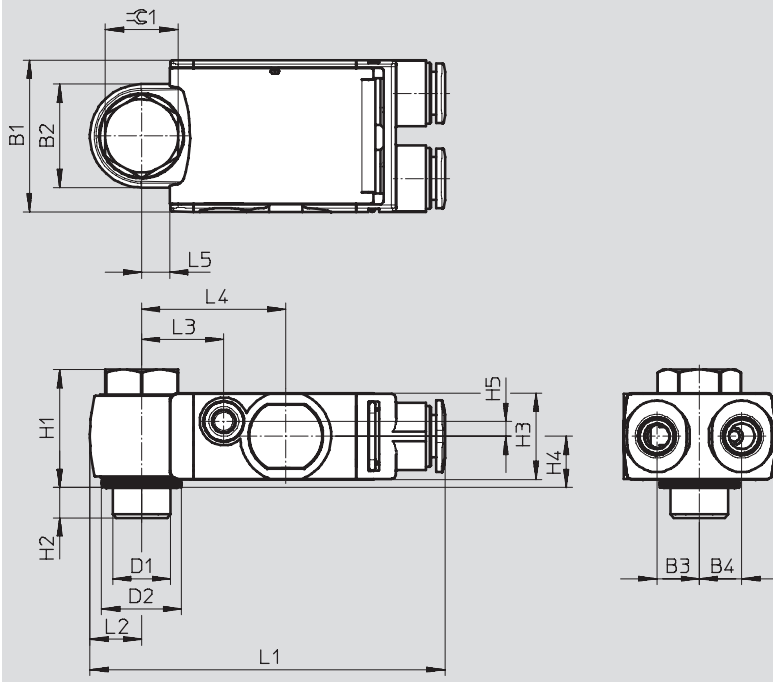
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Technical data

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Dimensions

Download CAD Data → www.festo.com/us/cad

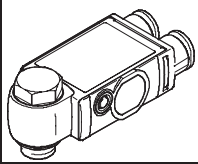


Note

Max. tightening torque: 5.0 Nm

B1	B2	B3	B4	D1	D2	H1	H2	H3	H4	H5	L1	L2	L3	L4	L5	⌀
25	17.1	7	7	G $\frac{1}{8}$	13.2	19.4	5	14.2	8.5	2.5	58.5	8.5	13.6	23.8	4.7	12

Ordering data

Version	Valve function	Pneumatic connection		Weight [g]	Part No.	Type
		1 (valve)	2 (drive)			
	Piloted non-return function	QS-6	G $\frac{1}{8}$	27	547885	VBNF-LBA-G18-Q6

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