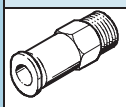
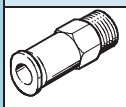
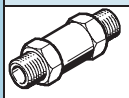
Non-return valves

FESTO

- Non-return valves
  with or without pneumatic pilot signal
- With push-in connector at one or both ends for pipe O.D.
  of 4 ... 12 mm
- With connecting thread at one or both ends,
  M5 ... R⅛ or M5 ... G¾
- Wide choice of variants

Non-return valves

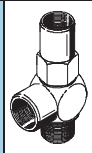
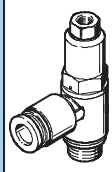
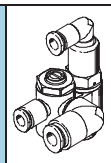
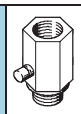
Product range overview

Function	Version	Type	Description	Port 1 Thread	Port 2 for tubing ∅ [mm] 4	6	8	10	12	Free of copper and PTFE	→ Page/Internet
Non-return valves	**QS push-in connector[1] at both ends**										
		H	–	–	■	■	■	■	■	■	6
	With connecting thread and QS push-in connector[1]										
	Flow direction: thread ⇢ push-in connector										
		HA	With thread and sealing ring and QS push-in connector	M5	■	–	–	–	–	–	6
			With PTFE-coated thread and QS push-in connector	R1/8	■	■	■	–	–	–	
				R1/4	–	■	■	–	–	–	
				R3/8	–	–	–	■	■	–	
				R1/2	–	–	–		■	–	
	Flow direction: push-in connector ⇢ thread										
		HB	With thread and sealing ring and QS push-in connector	M5	■	–	–	–	–	–	6
			With PTFE-coated thread and QS push-in connector	R1/8	■	■	■	–	–	–	
				R1/4	–	■	■	–	–	–	
				R3/8	–	–	–	■	■	–	
				R1/2	–	–	–		■	–	
	Connecting thread at both ends										
		H	With thread and sealing rings	M5[2]	–					–	9
				G1/8[3]						–	
				G1/4[4]						–	
				G3/8[4]						–	
				G1/2[4]						–	
				G3/4[4]						–	

1) For standard O.D. plastic tubing
2) 2 female thread
3) 1 male thread, 1 female thread
4) 2 male thread

Non-return valves

Product range overview

Function	Version	Type	Description	Port 1	Port 2					➔ Page/Internet
				Thread	for tubing ∅ [mm]					
					4	6	8	10	12	
Non-return valves, piloted		HGL-B	With thread and sealing ring	M5	–					12
				G1⁄8						
				G1⁄4						
				G3⁄8						
				G1⁄2						
		HGL-QS	With thread, sealing ring and QS push-in connector	M5	■	–	–	–	–	15
				G1⁄8	■	■	–	–	–	
				G1⁄4	–	–	■	■	–	
				G3⁄8	–	–	■	■	–	
				G1⁄2	–	–	–	–	■	
Functional combination with one-way flow control function and piloted non-return valve.		GRXA-HG	With thread, sealing ring and QS push-in connector	G1⁄8	■	■	–	–	–	17
				G1⁄4	–	■	■	–	–	
Manual override for exhaust air		HAB	With thread	G1⁄8	–					21
				G1⁄4						
				G3⁄8						
				G1⁄2						

Non-return valves

Type codes

Type codes – Non-return valves

HA – ⅛ – QS-6 – B

Type	
H	Non-return valve, with connecting thread or QS push-in connector at both ends
HA	Non-return valve with connecting thread and QS push-in connector
HB	Non-return valve with connecting thread and QS push-in connector

Screw-in and connecting thread	
M5	Thread M5
⅛-A/I	Thread G⅛, 1 male thread, 1 female thread
⅛	Thread G⅛ and/or R⅛
¼	Thread G¼ and/or R¼
⅜	Thread G⅜ and/or R⅜
½	Thread G½ and/or R½
¾	Thread G¾ and/or R¾

Push-in connector	
QS-4	4 mm
QS-6	6 mm
QS-8	8 mm
QS-10	10 mm
QS-12	12 mm

Generation	
	A series
B	B series

Non-return valves

Type codes

Type codes – Piloted non-return valves, threaded connection

HGL – ⅜ – B

Type	
HGL	Non-return valve, piloted

Screw-in and connecting thread	
M5	Metric thread M5
⅛	G⅛ thread
⅛÷⅛	G⅛ thread, pilot port G⅛
¼	G¼ thread
⅜	G⅜ thread
½	G½ thread

Generation	
B	B series

Type codes – Piloted non-return valves, QS connection

HGL – ⅜ – QS-8

Type	
HGL	Non-return valve, piloted

Screw-in and connecting thread	
M5	Metric thread M5
⅛	G⅛ thread
¼	G¼ thread
⅜	G⅜ thread
½	G½ thread

Push-in connector	
QS-4	4 mm
QS-6	6 mm
QS-8	8 mm
QS-10	10 mm
QS-12	12 mm

Type code – Functional combination with one-way flow control valve and piloted non-return valve

GRXA-HG – ¼ – QS-6

Type	
GRXA-HG	GRXA: One-way flow control valve HG: Non-return valve, piloted

Screw-in and connecting thread	
⅛	G⅛ thread
¼	G¼ thread

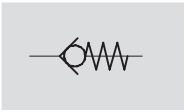
Push-in connector	
QS-4	4 mm
QS-6	6 mm
QS-8	8 mm

Non-return valves H-QS/HA/HB

Technical data

FESTO

Function



- Flow rate
  140 ... 1720 l/min

- Non-return valves without pneumatic pilot signal
- QS push-in connector at one or both ends

H-QS-...

General technical data		
Valve function		Non-return function
Type of mounting	QS push-in connector, both ends	In-line installation
	QS push-in connector, one end	Can be screwed in

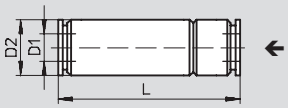
Operating and environmental conditions	
Operating medium	Filtered compressed air, lubricated or unlubricated.
Ambient temperature	0 ... +60 °C
Temperature of medium	0 ... +60 °C

Materials		
Housing	QS push-in connector, both ends	Aluminium, black anodized; Brass, nickel-plated
	QS push-in connector, one end	Brass, nickel-plated
Seals		Nitrile rubber
Material note		Free of copper and PTFE ➔ Ordering data

Technical data – QS push-in connector at both ends						
Tubing O.D.	[mm]	4	6	8	10	12
Nominal size	[mm]	3.2	5	7	8.5	11
Standard nominal flow rate	[l/min]	140	280	680	1,480	1,720
Weight	[g]	5	10	20	62	68
Operating pressure	[bar]	–1 ... +10				

Dimensions – QS push-in connector, both ends Download CAD data ➔ **www.festo.com**

H-QS-...



← Flow direction

Tubing O.D. D1	D2 ∅	L
4	9	34.8
6	12	38.8
8	15	54.9
10	25	73.4
12	25	78.6

Non-return valves H-QS/HA/HB

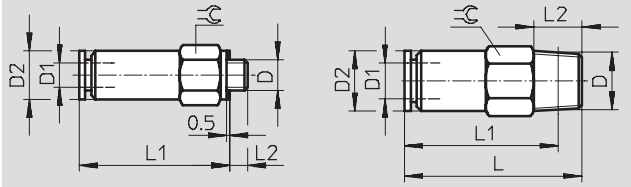
Technical data

Technical data – Connecting thread and QS push-in connector										
Connecting thread		M5	R⅛			R¼		R⅜		R½
Tubing O.D.	[mm]	4	4	6	8	6	8	10	12	12
Nominal size	[mm]	2.4	3.2	5	5	5	7	8.5	11	11
Standard nominal flow rate	[l/min]	150	140	310	330	300	670	1,740	1,880	2,230
Weight	[g]	7.2	9.5	9.5	20	20	22	46	49	68.5
Operating pressure	[bar]	–0.75 ... +10								

Dimensions – Connecting thread and QS push-in connector Download CAD data ➔ **www.festo.com**

HA-M5-QS-... HA-...-QS-...

HB-M5-QS-... HB-...-QS-...



Flow direction

← HA

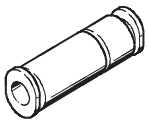
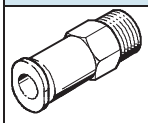
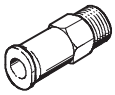
→ HB

Connecting thread D	Tubing O.D. D1	D2 ∅	L	L1	L2	⌭
M5	4	8	–	25.4	3	8
R⅛	4	9	24.5	20.5	8	10
	6	10	29.5	25.3	8	10
	8	13.5	35.5	31.5	8	14
R¼	6	12	29.3	23.3	11	14
	8	13.5	39.2	33.2	11	14
R⅜	10	25	61.7	55.4	12	24
	12	25	64.3	58	12	24
R½	12	28	70.8	62.6	15	27

Non-return valves H-QS/HA/HB

Technical data

FESTO

Ordering data					
	Description	Connecting thread	For tubing O.D. [mm]	Part No.	Type
Non-return valves with QS push-in connector for standard O.D. plastic tubing					
	QS push-in connector, both ends	–	4	**153 462**	**H-QS-4**[1]
			6	**153 463**	**H-QS-6**[1]
			8	**153 464**	**H-QS-8**[1]
			10	**153 465**	**H-QS-10**[1]
			12	**153 466**	**H-QS-12**[1]
Flow direction: thread ⇢ push-in connector					
	With metric thread and sealing ring and QS push-in connector	M5	4	**153 444**	**HA-M5-QS-4**
	With PTFE-coated pipe thread and QS push-in connector	R1/8	4	**153 446**	**HA-1/8-QS-4**
			6	**153 448**	**HA-1/8-QS-6**
			8	**153 452**	**HA-1/8-QS-8**
		R1/4	6	**153 450**	**HA-1/4-QS-6**
			8	**153 454**	**HA-1/4-QS-8**
		R3/8	10	**153 456**	**HA-3/8-QS-10**
			12	**153 458**	**HA-3/8-QS-12**
		R1/2	12	**153 460**	**HA-1/2-QS-12**
Flow direction: push-in connector ⇢ thread					
	With metric thread and sealing ring and QS push-in connector	M5	4	**153 445**	**HB-M5-QS-4**
	With PTFE-coated pipe thread and QS push-in connector	R1/8	4	**153 447**	**HB-1/8-QS-4**
			6	**153 449**	**HB-1/8-QS-6**
			8	**153 453**	**HB-1/8-QS-8**
		R1/4	6	**153 451**	**HB-1/4-QS-6**
			8	**153 455**	**HB-1/4-QS-8**
		R3/8	10	**153 457**	**HB-3/8-QS-10**
			12	**153 459**	**HB-3/8-QS-12**
		R1/2	12	**153 461**	**HB-1/2-QS-12**

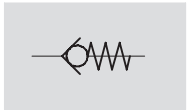
1) Free of copper and PTFE

Non-return valves H

Technical data

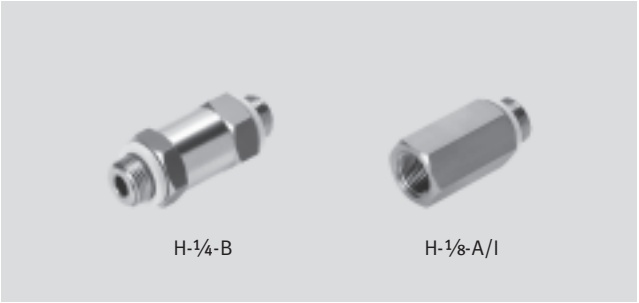
FESTO

Function



- Flow rate
  115 ... 5,900 l/min

- Non-return valves
- Connecting thread at both ends



General technical data							
Pneumatic connection		M5	G⅛	G¼	G⅜	G½	G¾
Valve function		Non-return function					
Type of mounting		Can be screwed in					
Max. tightening torque	[Nm]	–	–	11	20	40	60

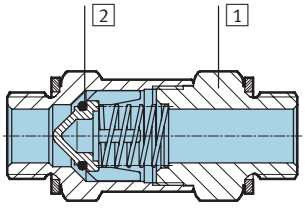
Note: This product conforms with the ISO 1179-1 standard and the ISO 228-1 standard.

Operating and environmental conditions							
Pneumatic connection		M5	G⅛	G¼	G⅜	G½	G¾
Operating medium		Filtered compressed air, lubricated or unlubricated					
Storage temperature	[°C]	–	–	–10 ... +60 °C			
Ambient temperature	[°C]	–10 ... +60 °C					
Temperature of medium	[°C]	–10 ... +60 °C					
Corrosion resistance class CRC		–	–	2[1)]			

1) Corrosion resistance class 2 according to Festo standard 940 070
Components requiring moderate corrosion resistance. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.

Materials

Sectional view



Non-return valve M5, G⅛	
1 Housing	Brass, nickel-plated
2 Seals	Nitrile rubber

Non-return valve G¼, G⅜, G½, G¾	
1 Housing	Wrought aluminium alloy, anodised
2 Seals	Nitrile rubber
–	Free of copper and PTFE

Non-return valves H

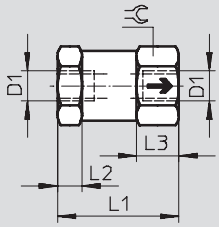
Technical data

Technical data – Connecting thread at both ends							
Connecting thread		M5	G⅛	G¼	G⅜	G½	G¾
Standard nominal flow rate	[l/min]	115	280	1,000	2,000	5,500	5,900
Weight	[g]	15	21	25.4	34	58.3	101
Operating pressure	[bar]	0.4 ... 8		0.4 ... 12			

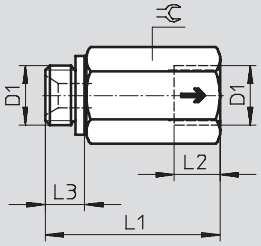
Dimensions – Connecting thread at both ends

Download CAD data ➔ **www.festo.com**

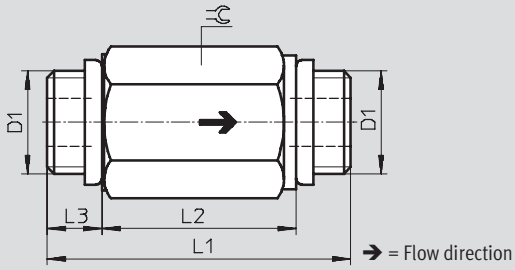
M5



G⅛



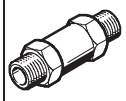
G¼ ... G¾



Connecting thread D1	L1	L2	L3	⌀
M5	20	4	7	11
G⅛	28.5	7.5	6.5	14
G¼	48	32	8	19
G⅜	50	32	9	22
G½	65	44	10.5	27
G¾	74	50	12	32

Note: This product conforms with the ISO 1179-1 standard and the ISO 228-1 standard.

Ordering data

	Description	Connecting thread	Part No.	Type
Non-return valves, with connecting thread at both ends				
	Metric thread at both ends and 2 sealing rings	M5[1]	**3 671**	**H-M5**
	With pipe thread at both ends and 2 sealing rings	G⅛[2]	**3 324**	**H-⅛-A/I**
		G¼[3]	**11 689**	**H-¼-B**
		G⅜[3]	**11 690**	**H-⅜-B**
		G½[3]	**11 691**	**H-½-B**
		G¾[3]	**11 692**	**H-¾-B**

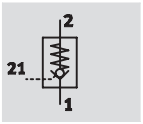
1) 2 female threads
2) 1 male thread, 1 female thread
3) 2 male threads

Non-return valves HGL-B, piloted

Technical data

FESTO

Function



- Flow rate
  130 ... 1,600 l/min

- Pneumatic piloted non-return valve

General technical data							
Pneumatic connection		M5	G1/8	G1/8	G1/4	G3/8	G1/2
Valve function		Piloted non-return function					
Type of mounting		Screw in via male thread					
Max. tightening torque	[Nm]	1.5	5.5	5.5	11	20	40
Actuation type		Pneumatic					
Pilot air connection 21		M5	M5	G1/8	G1/8	G1/4	G3/8
Standard nominal flow rate 1 → 2	[l/min]	130	300	300	550	1,100	1,600
Weight	[g]	21	20.8	26.2	41.2	62.9	129.4

Note: This product conforms with the ISO 1179-1 standard and the ISO 228-1 standard.

Operating and environmental conditions							
Pneumatic connection		M5	G1/8	G1/8	G1/4	G3/8	G1/2
Operating medium		Dried air, lubricated or unlubricated					
Operating pressure	[bar]	0.5 ... 10					
Pilot pressure	[bar]	2 ... 10				1 ... 10	
Storage temperature	[°C]	–10 ... +60					
Ambient temperature	[°C]	–10 ... +60					
Temperature of medium	[°C]	–10 ... +60					
Corrosion resistance class	CRC	2[1)]					

1) Corrosion resistance class 2 according to Festo standard 940 070
Components requiring moderate corrosion resistance. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.

- Note

In safety-relevant applications the HGL product family and all of its design variants must ONLY be used in combination with additional measures according to EN 954-1.

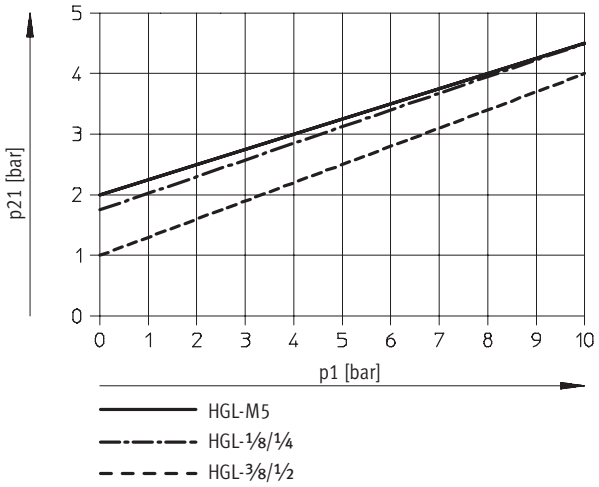
A supplementary risk analysis by the user/designer is essential.
The instructions and notices on the enclosed product leaflets must be observed.

Non-return valves HGL-B, piloted

Technical data

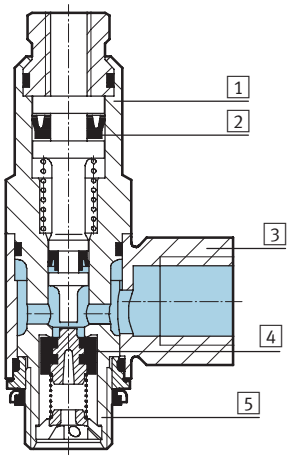
FESTO

Minimum pilot pressure as a function of operating pressure



Materials

Sectional view



Non-return valve, piloted		
1	Body	Wrought aluminium alloy, anodised
2	Seals	Nitrile rubber
3	Rotatable connection	Die-cast zinc
4	Non-return collar	Nitrile rubber
5	Hollow bolt	Wrought aluminium alloy, anodised
–		Free of copper and PTFE

Non-return valves HGL-B, piloted

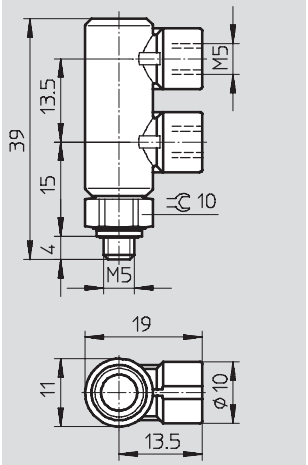
Technical data

FESTO

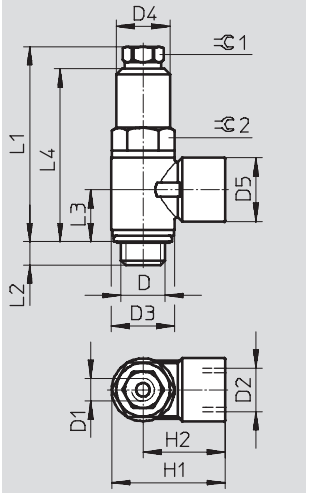
Dimensions

Download CAD data ➔ www.festo.com

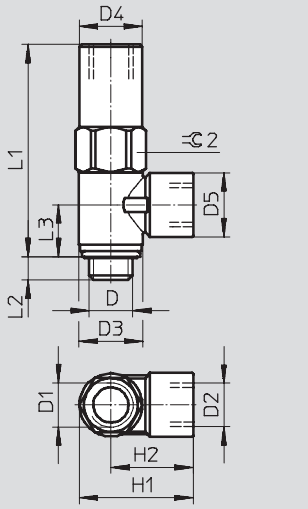
Type
HGL-M5-B



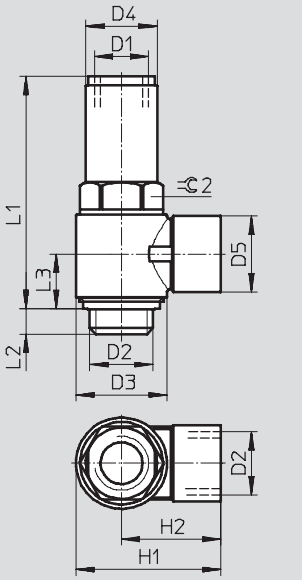
Type
HGL-⅛...,HGL-¼..., HGL-⅜...



Type
HGL-⅛-⅛-B



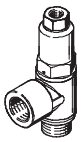
Type
HGL-½-B



Pneumatic connection D	D1	D2	D3 ∅	D4 ∅	D5 ∅	H1	H2	L1	L2	L3	L4	1	2
G⅛	M5	G⅛	14	11.8	14	25.1	18.1	42.6	5.4	11.2	37.8	8	12
G⅛	G⅛	G⅛	14	13.8	14	25.1	18.1	46.7	5.2	11.2	–	–	14
G¼	G⅛	G¼	18	16	17.5	34	25	50.8	6.5	13.5	44.6	12	16
G⅜	G¼	G⅜	23.8	18.8	20	39.3	27.4	56.3	7	15.1	49.6	15	19
G½	G⅜	G½	30	23.5	25	47.8	32.8	75.8	8.8	17.7	–	–	24

Note: This product conforms with the ISO 1179-1 standard and the ISO 228-1 standard.

Ordering data

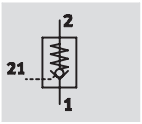
Non-return valve, piloted	Pneumatic connection	Pilot port	Part No.	Type
	M5	M5	**530 029**	**HGL-M5-B**
	G⅛	M5	**530 030**	**HGL-⅛-B**
	G⅛	G⅛	**543 253**	**HGL-⅛-⅛-B**
	G¼	G⅛	**530 031**	**HGL-¼-B**
	G⅜	G¼	**530 032**	**HGL-⅜-B**
	G½	G⅜	**530 033**	**HGL-½-B**

Non-return valves HGL-QS, piloted

Technical data

FESTO

Function



- Pneumatic piloted non-return valve

Flow rate
130 ... 1,600 l/min

General technical data						
Pneumatic connection 2		M5	G1⁄8	G1⁄4	G3⁄8	G1⁄2
Valve function		Piloted non-return function				
Type of mounting		Screw in via male thread				
Max. tightening torque	[Nm]	1.5	5.5	11	20	40
Actuation type		Pneumatic				
Pneumatic connection 1 for tubing O.D.	[mm]	4	4, 6	8, 10	8, 10	12
Pilot air connection 21		M5	M5	G1⁄8	G1⁄4	G3⁄8
Standard nominal flow rate 1 → 2	[l/min]	130	300	550	1,100	1,600
Weight	[g]	21	18.4/21.4	38.7/45	54.7/60.3	116.9

Note: This product conforms with the ISO 1179-1 standard and the ISO 228-1 standard.

Operating and environmental conditions						
Pneumatic connection		M5	G1⁄8	G1⁄4	G3⁄8	G1⁄2
Operating medium		Dried air, lubricated or unlubricated				
Operating pressure	[bar]	0.5 ... 10				
Pilot pressure	[bar]	2 ... 10			1 ... 10	
Storage temperature	[°C]	–10 ... +60				
Ambient temperature	[°C]	–10 ... +60				
Temperature of medium	[°C]	–10 ... +60				
Corrosion resistance class	CRC	2 [1)]				

1) Corrosion resistance class 2 according to Festo standard 940 070
Components requiring moderate corrosion resistance. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.

Note

In safety-relevant applications the HGL product family and all of its design variants must ONLY be used in combination with additional measures according to EN 954-1.

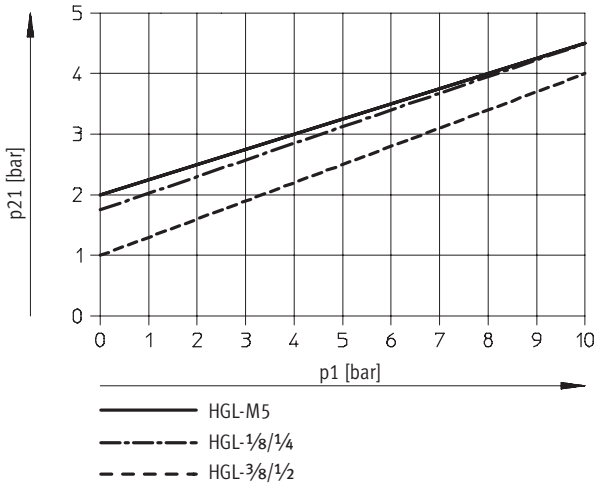
A supplementary risk analysis by the user/designer is essential.
The instructions and notices on the enclosed product leaflets must be observed.

Non-return valves HGL-QS, piloted

Technical data

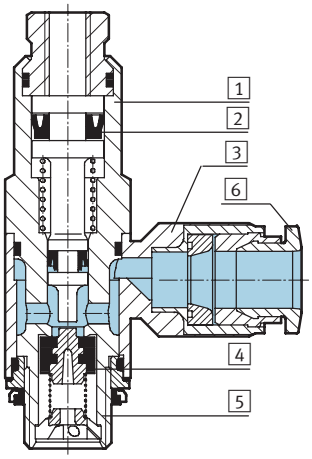
FESTO

Minimum pilot pressure as a function of operating pressure



Materials

Sectional view



Non-return valve, piloted	
1 Body	Wrought aluminium alloy, anodised
2 Seals	Nitrile rubber
3 Rotatable connection	Die-cast zinc
4 Non-return collar	Nitrile rubber
5 Hollow bolt	Wrought aluminium alloy, anodised
6 Release ring	Polyacetate
–	Free of copper and PTFE

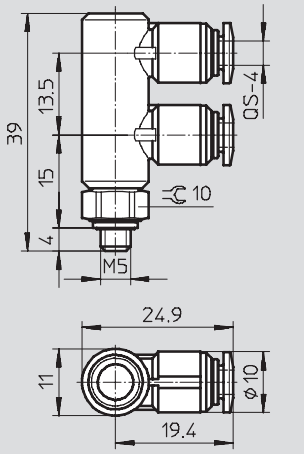
Non-return valves HGL-QS, piloted

Technical data

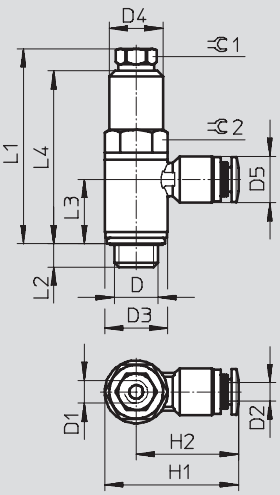
FESTO

Dimensions Download CAD data ➔ **www.festo.com**

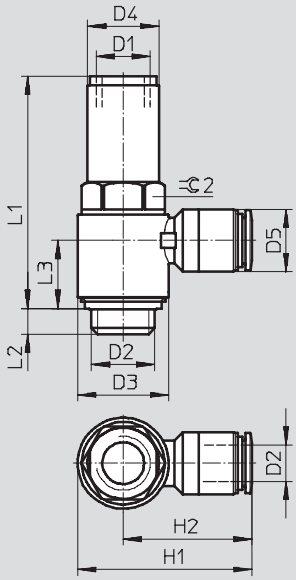
Type HGL-M5-QS4



Type HGL-⅛ ... , HGL-¼ ... , HGL-⅜ ...



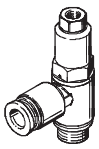
Type HGL-½-QS-12



Pneumatic connection D	D1	D2	D3 ∅	D4 ∅	D5 ∅	H1	H2	L1	L2	L3	L4	1	2
G⅛	M5	QS-4	13.8	11.8	10.2	29.4	22.5	42.6	5.4	13.9	37.8	8	12
		QS-6			12.5	32.6	25.7			13.2			
G¼	G⅛	QS-8	17.8	16	14.5	39.6	30.7	50.8	6.5	16.6	44.6	12	16
		QS-10			17.5	42	33.1			15.5			
G⅜	G¼	QS-8	22.4	18.8	14.5	44.1	32.9	56.3	7	18.2	49.6	15	19
		QS-10			17.5	46.7	35.5			18.2			
G½	G⅜	QS-12	27.8	23.5	20.5	55.3	41.4	75.8	8.8	22.4	–	–	24

Note: This product conforms with the ISO 1179-1 standard and the ISO 228-1 standard.

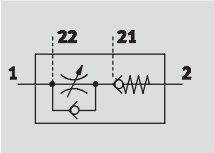
Ordering data

Non-return valve, piloted	Pneumatic connection	For tubing O.D. [mm]	Pilot port	Part No.	Type
	M5	4	M5	**530 038**	**HGL-M5-QS4**
	G⅛	4	M5	**530 039**	**HGL-⅛-QS-4**
	G⅛	6	M5	**530 040**	**HGL-⅛-QS-6**
	G¼	8	G⅛	**530 041**	**HGL-¼-QS-8**
	G¼	10	G⅛	**530 042**	**HGL-¼-QS-10**
	G⅜	8	G¼	**530 043**	**HGL-⅜-QS-8**
	G⅜	10	G¼	**530 044**	**HGL-⅜-QS-10**
	G½	12	G⅜	**530 045**	**HGL-½-QS-12**

Functional combination GRXA-HG

Technical data

Function



Functional combination with one-way flow control valve and piloted non-return valve

- Holding function and speed setting in one housing
- QS push-in fittings
- Adjustment via slotted head screw
- Additional pilot port 1 for interlinking with a second unit at port 21

General technical data			
Screw-in thread		G⅛	G¼
Valve function		One-way flow control function for exhaust air and additional piloted non-return valve	
Setting component		Slotted head screw	
QS push-in fittings for tubing O.D.	[mm]	4; 6	6; 8
Type of mounting		Screw in via male thread	
Assembly position		Any	
Max. tightening torque	[Nm]	5.5	11

Operating and environmental conditions			
Screw-in thread		G⅛	G¼
Operating medium / pilot medium		Dried air, lubricated or unlubricated, grade of filtration 40 µm	
Operating pressure	[bar]	0.5 ... 10	
Pilot pressure	[bar]	2 ... 10	
Storage temperature	[°C]	–10 ... +40	
Ambient temperature	[°C]	–10 ... +60	
Temperature of medium	[°C]	–10 ... +60	

Weights			
Screw-in thread / push-in fitting		G⅛	G¼
	[g]	27	58

Note

The GRXA-HG product family and all of its design variants must ONLY be used in safety-relevant applications in combination with additional measures detailed in EN 954-1.

A supplementary risk analysis by the user/designer is essential.
The instructions and notices on the enclosed product leaflets must be observed.

Functional combination

Technical data

Standard nominal flow rate qnN [l/min] at 6 bar ⇢ 5 bar				
Screw-in thread			G⅛	G¼
One-way flow control function for exhaust air and piloted non-return valve				
GRXA-HG	QS-4	D[1]	130	–
		R[2]	100 ... 140	–
		B[3]	100 ... 140	–
	QS-6	D	140	280
		R	115 ... 165	200 ... 260
		B	120 ... 160	180 ... 140
	QS-8	D	–	280
		R	–	200 ... 280
		B	–	190 ... 260

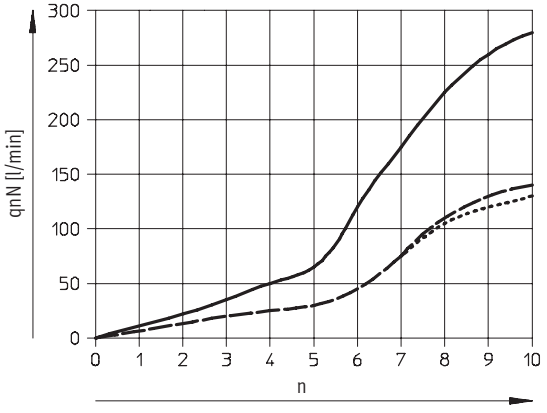
1) D: Flow control direction
2) R: Non-return direction
3) B: Non-return direction actuated

Standard flow rate qn [l/min] at 6 bar ⇢ 0 bar				
Screw-in thread			G⅛	G¼
One-way flow control function for exhaust air and piloted non-return valve				
GRXA-HG	QS-4	D[1]	210	–
		R[2]	230 ... 260	–
		B[3]	220 ... 250	–
	QS-6	D	280	430
		R	270 ... 300	430 ... 490
		B	260 ... 300	410 ... 470
	QS-8	D	–	470
		R	–	460 ... 520
		B	–	440 ... 500

1) D: Flow control direction
2) R: Non-return direction
3) B: Non-return direction actuated

Standard nominal flow rate qnN at 6 bar ⇢ 5 bar as a function of turns of the adjusting screw n

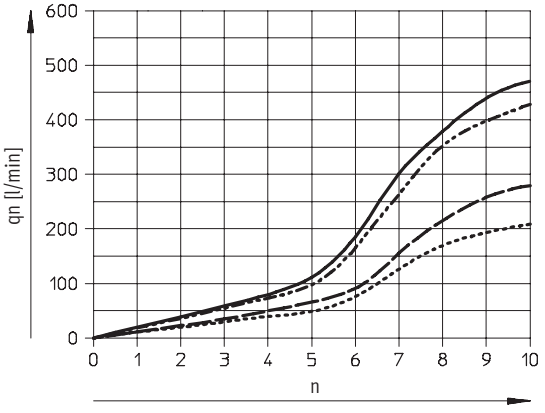
One-way flow control valve



GRXA-HG-¼-QS-8
GRXA-HG-¼-QS-6
GRXA-HG-⅛-QS-6
GRXA-HG-⅛-QS-4

Standard flow rate qn at 6 bar ⇢ 0 bar as a function of turns of the adjusting screw n

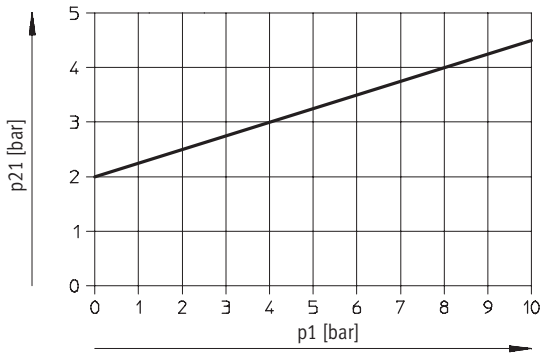
One-way flow control valve



GRXA-HG-¼-QS-8
GRXA-HG-¼-QS-6
GRXA-HG-⅛-QS-6
GRXA-HG-⅛-QS-4

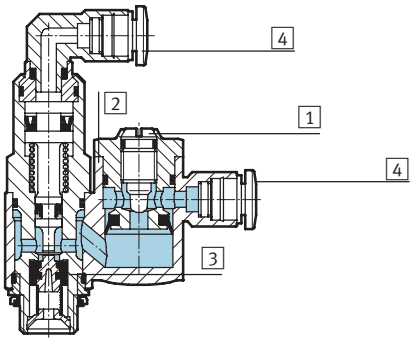
Minimum pilot pressure as a function of operating pressure

Non-return valve, piloted



Materials

Sectional view



Functional combination		
1	Adjusting screw	Brass
2	Rotatable connection	Die-cast zinc
3	Seal	Nitrile rubber
4	Release ring	Polyacetate

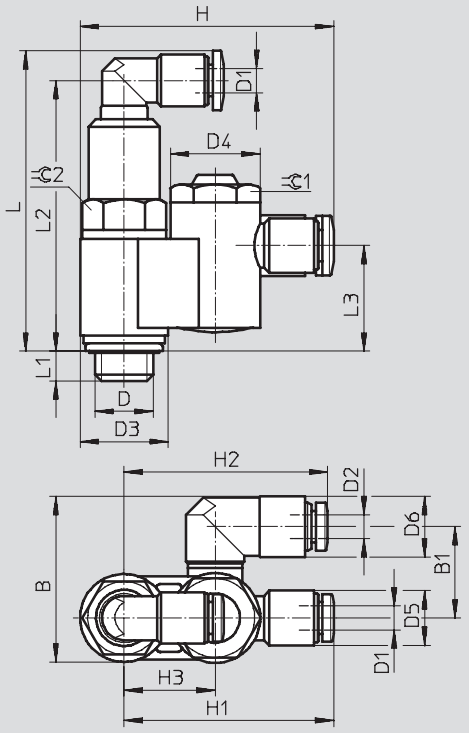
Functional combination

Technical data

FESTO

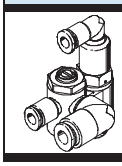
Dimensions Download CAD data ➔ **www.festo.com**

Rotatable connection, elbow outlet, slotted head screw



Pneumatic connection D	B	B1	D1 ∅	D2 ∅	D3	D4 ∅	D5 ∅	D6	H	H1	H2	H3	L	L1	L2	L3	⊂ 1	⊂ 2
G⅛	27.3	15	4	4	14.5	14.8	9	10	41.8	34.5	33.5	15	49.5	4.9	44.6	17.4	13	12
	30.8	17.3		6				12.5			34.5							
G¼	35.3	19.5	4	6	19	19	9	12.5	52.2	42.7	40.5	21	56.3	5.6	51.4	21.1	17	16
	39.5	21.5		8				17	58.2		48.7							

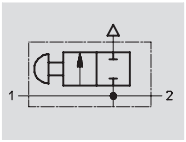
Ordering data

Design	Screw-in thread	For tubing Outside [mm]	Part No.	Type
	G⅛	4	**525 667**	**GRXA-HG-⅛-QS-4**
		6	**525 668**	**GRXA-HG-⅛-QS-6**
	G¼	6	**525 669**	**GRXA-HG-¼-QS-6**
		8	**525 670**	**GRXA-HG-¼-QS-8**

Non-return valves HGL, piloted

Technical data – Manual override HAB

Function



Flow rate
165 l/min

- The manual override module HAB can be used to manually exhaust air locked in the cylinder.

HAB-1/8

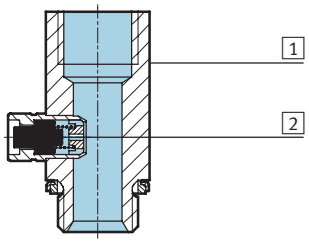
General technical data					
Pneumatic connection		G1/8	G1/4	G3/8	G1/2
Type of mounting		Can be screwed in			
Nominal size 1 › 2	[mm]	4.1	7	11	14
Exhaust flow rate	[l/min]	165			
Actuating force	[N]	16			
Tightening torque	[Nm]	4	11	40	50

Note: This product conforms with the ISO 1179-1 standard and the ISO 228-1 standard.

Operating and environmental conditions					
Pneumatic connection		G1/8	G1/4	G3/8	G1/2
Operating medium		Filtered compressed air, lubricated or unlubricated			
Operating pressure range	[bar]	0 ... 10			
Temperature range	[°C]	–20 ... +80			

Materials

Sectional view

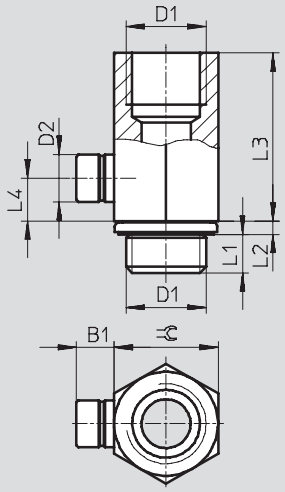


Manual override	
1 Housing	Aluminium
2 Seals	Nitrile rubber

Non-return valves HGL, piloted

Technical data – Manual override HAB

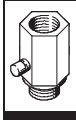
Dimensions Download CAD data ➔ **www.festo.com**



Pneumatic connection D1	B1	D2 ∅	L1	L2	L3	L4	⫷
G1/8	6.2	7.6	4.7	1.8	19.1	5	13
G1/4	6.2	7.6	6.3	2.2	27.5	7	17
G3/8	6.2	7.6	7.5	3	27.3	7	22
G1/2	6.2	7.6	10.9	2.6	32	7	24

Note: This product conforms with the ISO 1179-1 standard and the ISO 228-1 standard.

Ordering data

Manual override	Pneumatic connection	Part No.	Type
	G1/8	**184 585**	**HAB-1/8**
	G1/4	**184 586**	**HAB-1/4**
	G3/8	**184 587**	**HAB-3/8**
	G1/2	**184 588**	**HAB-1/2**