

Pilot-Operated Check/Blocking Valves Series VBO - VBU - BSP/METRIC

Unidirectional (Pilot-operated check) and bidirectional (blocking valve)
G1/8, G1/4, G3/8
Nominal diameters 5.5 - 8 - 11 mm

These valves have been designed in order to enable mounting directly on cylinders. The inner design of the blocking valves Series VBO and VBU allows a very high flow rate and reliable operation.



TECHNICAL SPECIFICATIONS

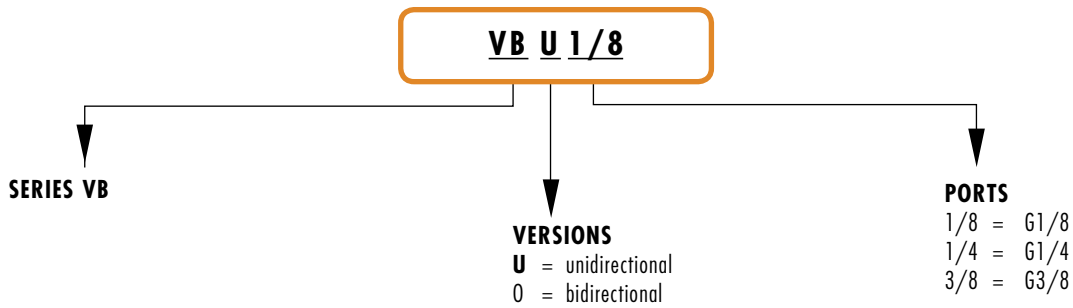
Construction	poppet type
Valve group	pilot-operated check and blocking valves
Materials	OT58 - Nickel-plated brass body Buna-N seals, PTFE Teflon® Thread Seal
Mounting	by male thread
Ports	G1/8 - G1/4 - G3/8
Position	in any position
Operating temperature	from 0 to 80°C (with dry air -20°C) [32°F - 175°F, dry air necessary down to -4° F]
Lubrication	not required, if necessary use oil compatible with Buna-N (3° — 10° E)

PNEUMATIC DATA

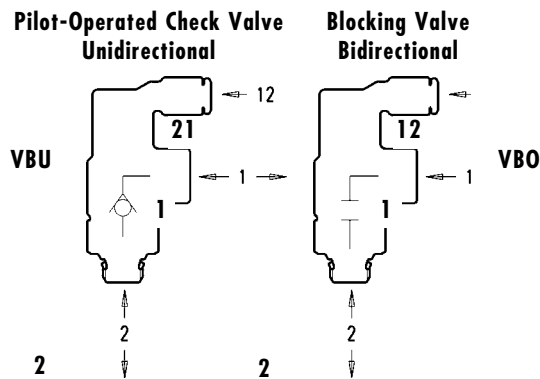
Operating pressure	VBU: 0.3 — 10 bar (4.35 — 145 psi), VBO: 0 — 10 bar (0 - 145 psi)
Nominal pressure	6 bar (87 psi)
Nominal flow	see graph
Nominal diam.	1/8" ø5.5 mm (.217") — 1/4" ø8 mm (.315") — 3/8" ø11 mm (.433")
Fluid	filtered air, without lubricant*

*in the event that lubricated air is used, it is recommended to use oil ISO VG32. Once applied, the lubrication should never be interrupted.

CODING OF PILOT OPERATED CHECK AND BLOCKING VALVES

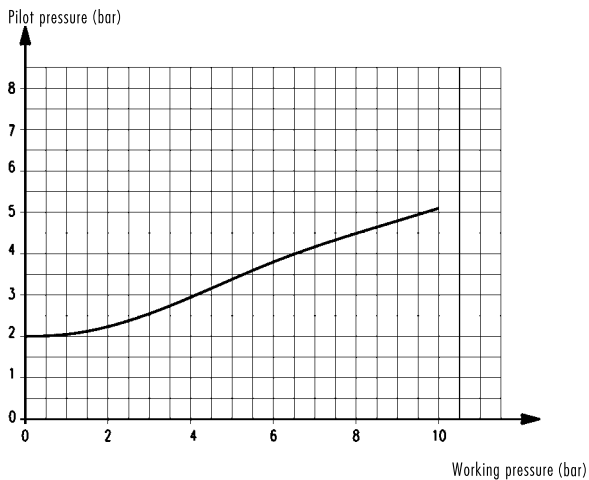


UNIDIRECTIONAL AND BIDIRECTIONAL VALVES



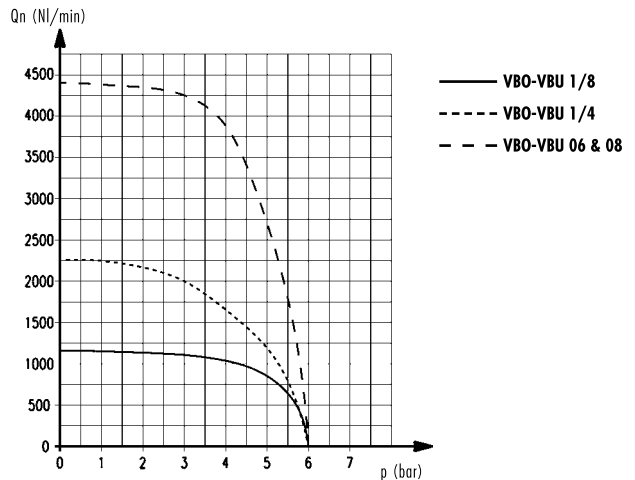
MINIMUM PRESSURE

The diagram below shows the relation between working pressure and pilot pressure required in order to operate the valve.
 The minimum opening pressure of the unidirectional valve is 0.3 bar (4.35 psi).

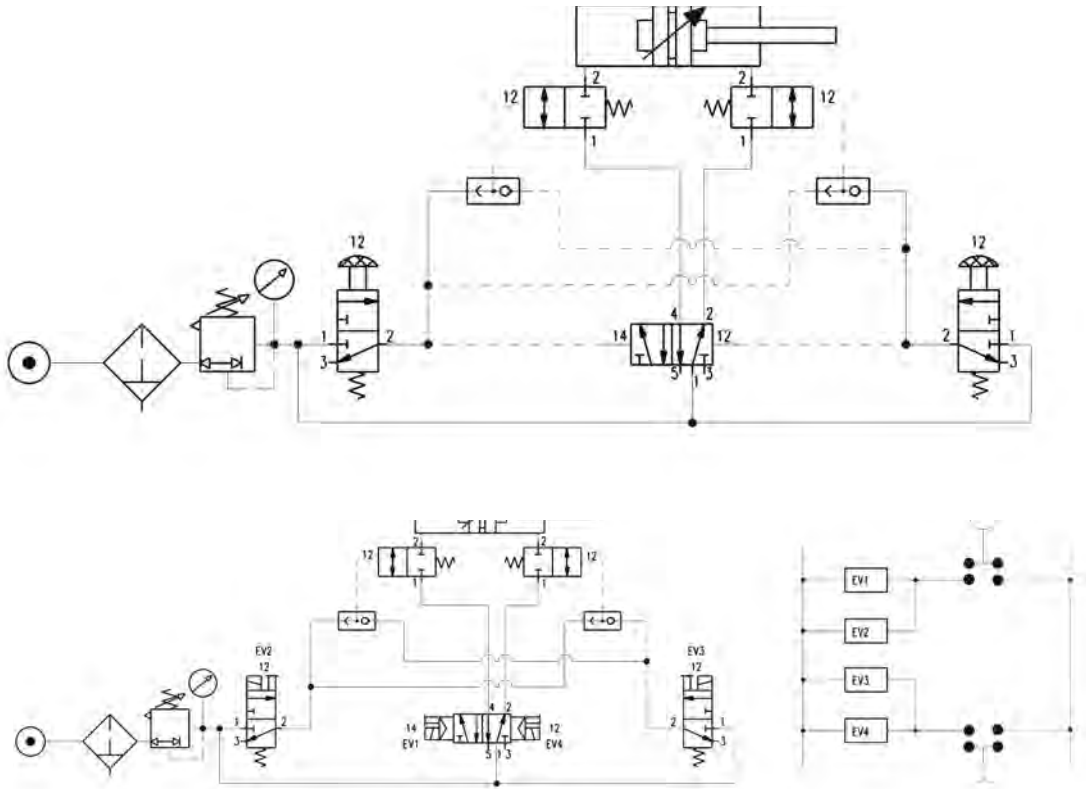


FLOW RATE

Flow Q (NI/min.)
N.B.: Q is determined with an inlet pressure of 6 bar (87 psi).



APPLICATION SCHEMES



Unidirectional Pilot-Operated Check Valve Mod. VBU and Bidirectional Blocking Valve Mod. VBO

DIMENSIONS (in inches)

Mod.	A	B	C	F	H	L	M	N	SW
VBU 1/8	G1/8	G1/8	.665	.787	.216	1.692	.964	1.181	.590
VBU 1/4	G1/4	G1/4	.807	.984	.275	1.968	1.267	1.318	.748
VBU 3/8	G3/8	G3/8	1.055	1.299	.314	2.637	1.574	1.555	.944

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