

Pilot-Operated Check/Blocking Valves

Series VBO - VBU (Nickel Plated) - NPTF/INCH

NEW

Unidirectional (pilot-operated check valve)
and bidirectional (blocking valve) 1/8", 1/4", 3/8", 1/2" NPTF
Nominal diameters 5.5 - 8 - 11 mm

These valves have been designed to mount directly into the cylinder ports. The inner design of the blocking valves Series VBO and VBU allows a very high flow rate and reliable operation.



TECHNICAL SPECIFICATIONS

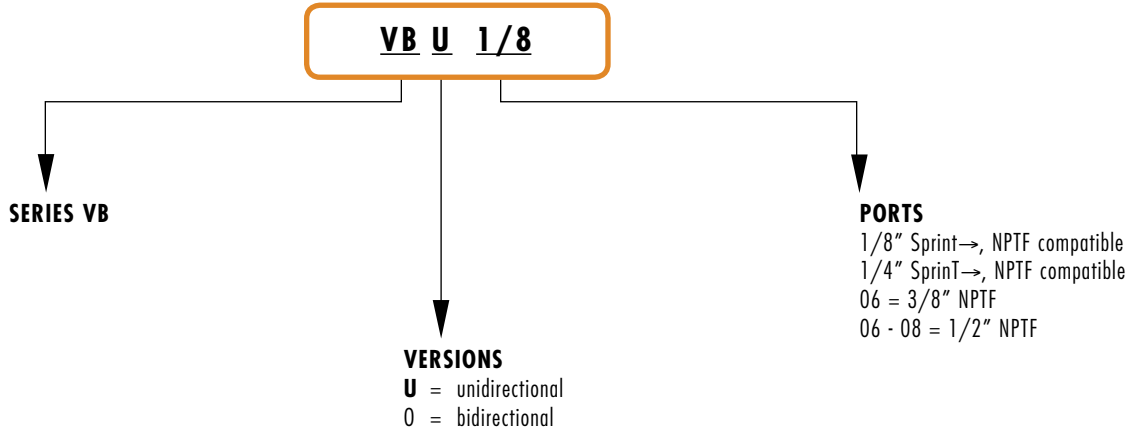
Construction	poppet type
Valve group	pilot-operated check and blocking valves
Materials	OTS8 Nickel-Plated Brass Body - Buna-N seals
Mounting	by male thread
Ports	1/8" - 1/4" - 3/8" - 1/2" NPTF
Position	in any position
Operating temperature	from 0 to 80°C (with dry air -20°C) [32°F - 175°F (dry air necessary down to - 4° F)]
Lubrication	not required, if necessary use oil compatible with Buna-N (3° — 10° E)

PNEUMATIC DATA

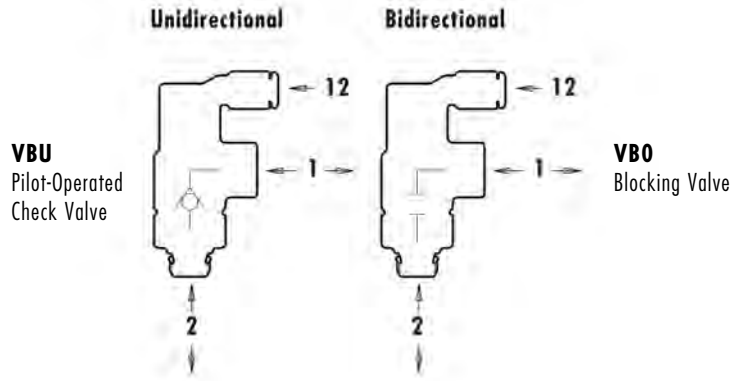
Operating pressure	VBU: 0.3 — 10 bar (4.35 — 145 psi), VBO: 0 — 10 bar (0 - 145 psi)
Nominal pressure	6 bar (87 psi)
Nominal flow	see graph
Nominal diam.	1/8" ø5.5 mm (.217") — 1/4" ø8 mm (.315") — 3/8" ø11 mm (.433")
Fluid	filtered air, without lubricant*

*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 UNIDIRECTIONAL AND BIDIRECTIONAL VALVES

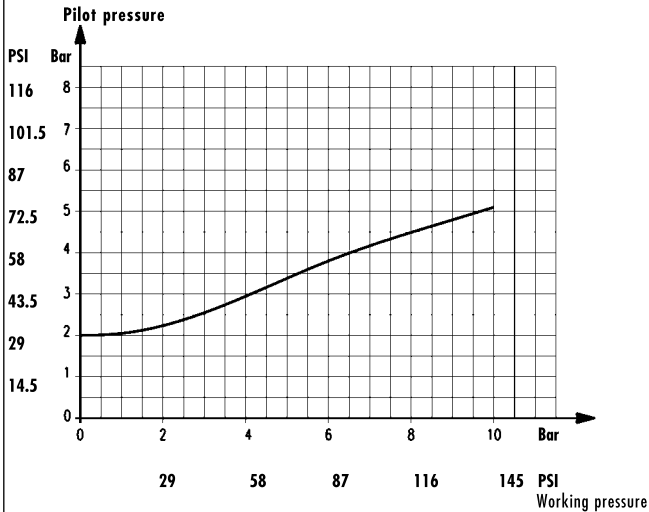


UNIDIRECTIONAL AND BIDIRECTIONAL BLOCKING VALVES



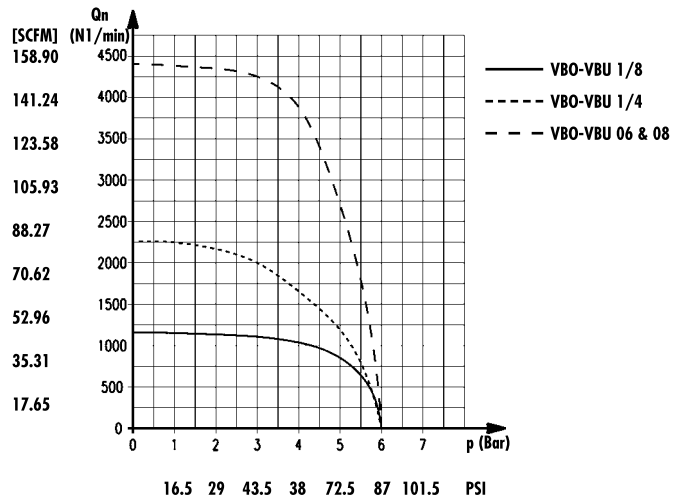
PILOT PRESSURE

The diagram below shows the relation between working pressure and pilot pressure required in order to operate the valve.
 The opening pressure of the unidirectional valve is 0,3 bar (4.35 psi).

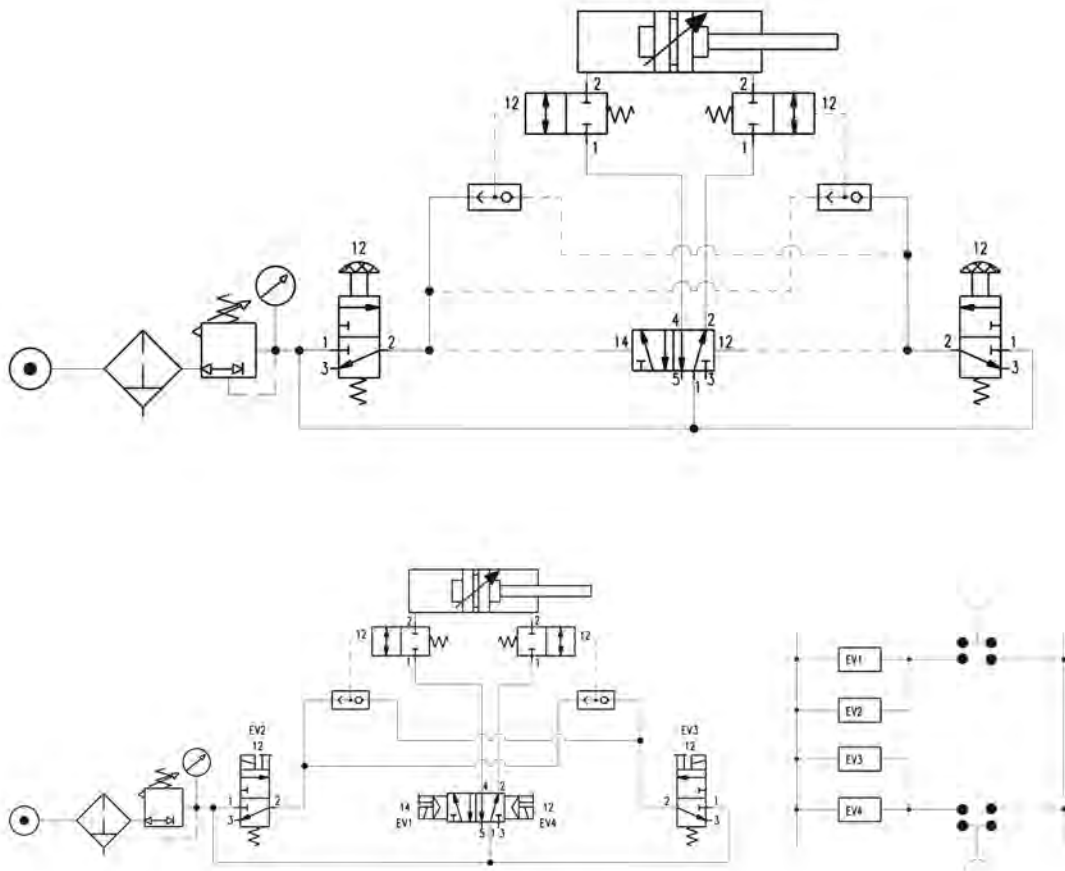


FLOW RATE

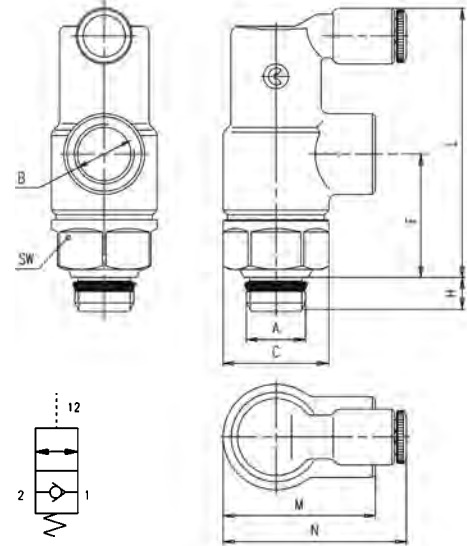
Flow Q (NI/min.) [SCFM]
N.B.: Q is determined with an inlet pressure of 6 bar (87 psi).



APPLICATION SCHEMES



Unidirectional blocking valve Mod. VBU and bidirectional blocking valve Mod. VBO



DIMENSIONS (in inches)

Mod.	A NPTF	B NPTF	C	F	H	L	M	N	SW
VBU 1/8	1/8"	1/8"	.665	.787	.216	1.692	.964	1.181	.590
VBU 1/4	1/4"	1/4"	.807	.984	.275	1.968	1.267	1.318	.748
VBU 06	3/8"	3/8"	1.055	1.299	.314	2.637	1.574	1.555	.944
VBU 06-08	1/2"	3/8"	1.055	1.299	.334	2.667	1.574	1.555	.944

DIMENSIONS (in inches)

Mod.	A NPTF	B NPTF	C	F	H	L	M	N	SW
VBO 1/8	1/8"	1/8"	.665	.787	.216	1.692	.964	1.181	.590
VBO 1/4	1/4"	1/4"	.807	.984	.275	1.968	1.267	1.318	.748
VBO 06	3/8"	3/8"	1.055	1.299	.314	2.637	1.574	1.555	.944
VBO 06-08	1/2"	3/8"	1.055	1.299	.334	2.667	1.574	1.555	.944

