

Pressure relief pilot operated poppet type and anti-cavitation valve with pressure sequencing Special cavity, FB

VBB1-16



Description

Flow is blocked from 1 to 2 until pr the selected valve setting, lifting poppet from its seat. This action main-stage poppet (low-leakage, s shift and provide relief flow through is additive to the relief setting of th

The anti-cavitation function makes caused, for example, by leakage when pressure valves respond or in the case of leading loads. If the pressure at main port 1 is lower than the one at main port 2, the spool will be lifted out of its seat. Hydraulic fluid flows from main port 2 to main port 1. Pressure sequencing function occurs by connecting pilot oil pressure to the external port 3 Pst for increasing the preload of the main spring and the maximum set system pressure.

Pressurization at the external port 3 has an effect on the pressure at the main port 1 at a ratio of 21:1.

	Max. pressure admitted port 2 (T)	
	Max pilot pressure port 3 Pst	
	Arithmetic gera ratio	
	Max. flow	
rassura incrassas ta maat	Max. internal leakage ¹⁾	
ressure increases to meet the conical, pilot-stage n exhausts oil above the seat type), allowing it to	Fluid temperature range	
	Installation torque ²⁾	
	Weight	
h 2 to tank. Pressure at 2 he valve.	Special cavity	
up for lacking oil volumes	Lines bodies and standa assemblies	

VBB1.SFB

Technical data

port 1 (P)

Max. operating pressure

0		
Max. flow	100 l/min (63 gpm)	
Max. internal leakage ¹⁾	15 drops/min.	
Fluid temperature range	-20 to 120 °C (-4 to 248 °F) (Viton)	
Installation torque ²⁾	90 Nm (66,4 ft-lbs)	
Weight	0.315 kg (0.69 lbs)	
Special cavity	FB (see data sheet 18325-75)	
Lines bodies and standard assemblies	Please refer to section "Hydraulic integrated circuit" or consult factory	
Seal kit (Viton) ³⁾	Code: RG16R2040520100	
	material no: R931002593	
Fluids	Mineral-based or synthetics with lubricating properties at viscosities of 10 to 380 mm²/s (cSt)	
Recommended degree of fluid contamination	Nominal value max. 10µm (NAS 9) / ISO 4406 20/18/15	
Installation position	No restrictions	
MTTFD	150 years see RE 18350-51	
Other Technical Data	See data sheet 18350-50	
Without surface protection	In case of need of surface protection, please consult factory.	

420 bar (6000 psi)

50 bar (725 psi)

30 bar (435 psi)

21:1

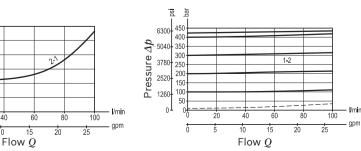
1) At 80% of pressure setting.

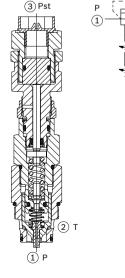
2) Torque value valid for installation in cast iron and steel manifolds. In case of different body materials, please consult factory.

³⁾ Only external seals for 10 valves.

Characteristic curve

<u>s</u> 84 Pressure Δp 63 42 21 0 0 l/mir 100 20 40 60 80 gpm **†** 20 25 15

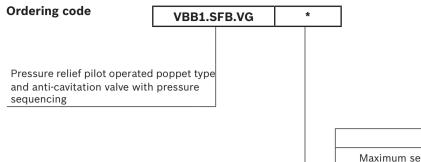






RE 18319-13

Edition: 11.2023 Replaces: 07.2023



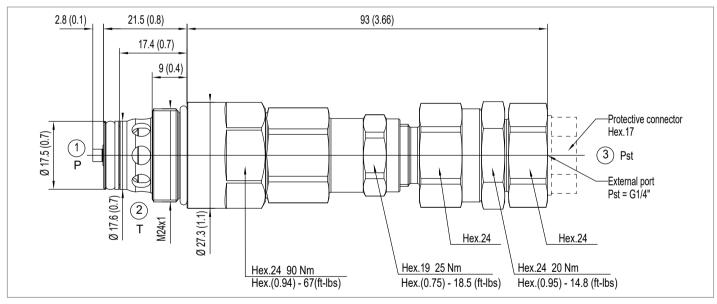
	SPRINGS		O-RING
	Maximum set pressure bar (psi)	Pressure increase bar/turn (psi/turn)	Material
000	420 (6090)	272 (3945)	Viton (FKM)

* Valves are delivered set at pressure setting <25 bar and with adjustment device not tighten. Fine setting to be done by customer. For case of request of factory set valve, please consult factory.

Preferred types

Туре	Material number	Туре	Material number
VBB1.SFB.VG.000	R930077184		
VBB1.5FB.VG.000	R930077184		

Dimensions



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