

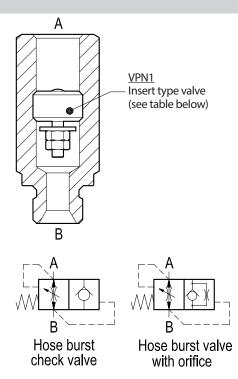
RE 18316-87/10.09

1/2

Hose burst insert type check valves With male-female threaded sleeve



VPN-MF (G1/4 - G3/8)



OE.F4.01.02-Y-Z

Description This valve is composed by a sleeve with an inserted "Hose Burst" steel made cartridge type VPN1 (refer to RE 18329-85). Flow is always allowed to pass from A to B according to the Δp curves included in the Performance diagrams. The reverse flow "B" to "A", or reaction flow, is unrestricted up to the pre-set value, above which the pressure drop across the floating disc will push the disc against the valve body, and will determine immediate closing of the line in a checked, leak free mode. The valve will remain closed (checked) from B to A until pressure is removed from the B, or until the A port pressure equalizes the B pressure. To help re-setting, or shorten the time for the disc to go back to the open position, the inserted cartridge can be supplied with the Extra Orifice "F" on request. The orifice diameter has to be specified when ordering (refer to table "Z"). Precision machining and hardening processes allow virtually leak free performance in the checked condition.

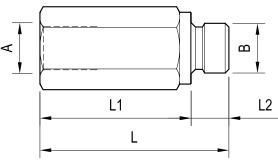
Technical data

VPN1 Code	Ports A-B	Pressure P max bar (psi)	Flow Q max I/min (gpm)	Weight kg (lbs)
0T.F4.01.03.09	G 1/4	315 (4500)	4-25 (1-7)	0.01 (0.02)
0T.F4.01.03.02	G 3/8	315 (4500)	6-50 (2-13)	0.03 (0.07)

Steel body, zinc plated

Special, Metric, UNF: sizes available on request.

Dimensions





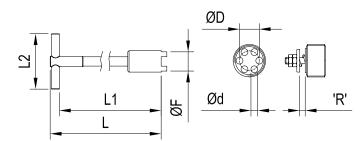
Ports size / Dimensions

	Y Ports A-B	L	L1	L2	Hex		
Y		mm	mm	mm	mm	Sleeve code	
		(inches)	(inches)	(inches)	(inches)		
00	$ 09 (_11/4) $	50	40	10	19	OC.51.01.014	
09		9 6 1/4	(1.97)	(1.58)	(0.39)	(0.75)	OC.51.01.014
0.2	02 G 3/8	55	43	12	22	0000101010	
02		(2.17)	(1.69)	(0.47)	(0.87)	OC.51.01.015	

Fitting tool dimension

	VPN1 code thread	ØF	L	L1	L2	ØD	Ød	Inst. torque	Tool code	
es)	0T.F4.01.03.09 G 1/4	11.3 (0.45)	120 (4.72)	110 (4.33)	60 (2.36)	8.5 (0.34)	2.4 (0.10)	2 Nm (1.5)ft-lb	AVA18	
9)	0T.F4.01.03.02 G 3/8	15 (0.59)	120 (4.72)	108 (4.25)	80 (3.15)	10.5 (0.41)	3.5 (0.14)	3 Nm (2)ft-lb	AVA18-01	
17)	'R'= GAP corresponding to the maximum desired free flow.									

Ζ	ORIFICE DIAMETER mm (inches)							
00	no orifice	06	1 (0.039)					
01	0.5 (0.019)	07	1.2 (0.047)					
02	0.6 (0.023)	08	1.3 (0.051)					
03	0.7 (0.027)	09	1.5 (0.059)					
04	0.8 (0.031)	10	1.9 (0.074)					
05	0.9 (0.035)	11	2 (0.078)					



NOTE

The complete valve here shown is supplied with the Gap "R" Factory adjusted at 0.5 mm, corresponding to: Approx. (10 - 14) l/min, for size G 1/4, and Approx. (16 - 20) l/min, for size G 3/8, depending from oil viscosity.

For special settings consult us.

Important: the pre-set R gap corresponds to the theoretical shut-off flow: please make sure that the selected shut-off flow is at least 50% higher than the actual Maximum Working Flow, in order to prevent inadvertent valve shutting with cold oil.

Applications
In a variety of cas

In a variety of cases when oil flow must be immediately stopped in case of failure of an hose in order to prevent the load from falling freely. The smallest size G 1/4 is often employed in pressure pick-up lines from cylinders.

Ordering code

	OE.F4	4.01.02	Y	Z] with cold oil.
With male-female				(Drifice diameter see table "Z"
threaded sleeve		F	Ports size	e / Dimensions see table "Y"	

Туре	Material number	Type	Material number	Type	Material number
OEF401020200	R931001646	OEF401020210	R932007192	OEF401020908	R932007179
OEF401020201	R932007183	OEF401020211	R932007193	OEF401020909	R932007180
OEF401020202	R932007184	OEF401020900	R931001641	OEF401020910	R932007181
OEF401020203	R932007185	OEF401020901	R932007173	OEF401020911	R932007182
OEF401020204	R932007186	OEF401020902	R932007174		
OEF401020205	R932007187	OEF401020903	R932007175		
OEF401020206	R932007188	OEF401020904	R932007176		
OEF401020207	R932007189	OEF401020905	R932007177		
OEF401020208	R932007190	OEF401020906	R932007217		
OEF401020209	R932007191	OEF401020907	R932007178		

Bosch Rexroth Oil Control S.p.A. Fimma Division (Rge 2) Via G. Bovio, 7 Z.l. Mancasale 42124 Reggio Emilia, Italy Tel. +39 0522 517 277 Fax +39 0522 517 125 cartridges@oilcontrol.com www.boschrexroth.com © This document, as well as the data, specifications and other information set forth in it, are the exclusive property of Bosch Rexroth Oil Control S.p.a.. It may not be reproduced or given to third parties without its consent.

The data specified above only serve to describe the product. No statements concerning a certain condition or suitability for a certain application can be derived from our information. The information given does not release the user from the obligation of own judgment and verification. It must be remembered that our products are subject to a natural process of wear and aging.

Subject to change.