

RE 18316-86/10.09

1/2

Hose burst insert type check valves With female threaded sleeve

VPN-FF (G1/2 - G3/4)



check valve



OE.F4.01.01-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.F4.01.03.03	G 1/2	315 (4500)	16-80 (4-21)	0.04 (0.09)
0T.F4.01.03.04	G 3/4	315 (4500)	25-150 (7-40)	0.07 (0.15)

Steel body, zinc plated

Special, Metric, UNF: sizes available on request.



Dimensions

Ζ

00

01

02

03

04

05

no orifice

0.5 (0.019)

0.6 (0.023)

0.7 (0.027)

0.8 (0.031)

0.9 (0.035)



ORIFICE DIAMETER mm (inches)

06

07

08

09

10

11

1 (0.039)

1.2 (0.047)

1.3 (0.051)

1.5 (0.059)

1.9 (0.074)

2 (0.078)



Ports size /	/ Dimensions
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Y	Ports A-B	L mm (inches)	Hex mm (inches)	Sleeve code
03	G 1/2	60 (2.36)	27 (1.06)	OC.51.02.011
04	G 3/4	72 (2.84)	32 (1.26)	OC.51.02.017

Fitting tool dimension

VPN1 code thread	ØF	L	L1	L2	ØD	Ød	Inst. torque	Tool code
0T.F4.01.03.03	18.8	120	108	80	13	4.5	4 Nm	AVA18-02
G 1/2	(0.74)	(4.72)	(4.25)	(3.15)	(0.51)	(0.18)	(3)ft-lb	
0T.F4.01.03.04	24	120	108	80	16	6	10 Nm	AVA18-03
G 3/4	(0.95)	(4.72)	(4.25)	(3.15)	(0.63)	(0.24)	(7)ft-lb	

'R'= GAP corresponding to the maximum desired free flow.



Applications

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.

NOTE

The complete valve here shown is supplied with the Gap "R" Factory adjusted at 0.7 mm, corresponding to: Approx. (32–37) l/min, for size G 1/2, and Approx. (53–58) l/min, for size G 3/4, 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.

Ordering code



	Orifice diameter see table "Z"
Ports s	size / Dimensions see table "Y"

Туре	Material number	Туре	Material number	Туре	Material number
OEF401010300	R931001656	OEF401010310	R932007246	OEF401010408	R932007255
OEF401010301	R932007237	OEF401010311	R932007247	OEF401010409	R932007256
OEF401010302	R932007238	OEF401010400	R931001664	OEF401010410	R932007257
OEF401010303	R932007239	OEF401010401	R932007248	OEF401010411	R932007258
OEF401010304	R932007240	OEF401010402	R932007249		
OEF401010305	R932007241	OEF401010403	R932007250		
OEF401010306	R932007242	OEF401010404	R932007251		
OEF401010307	R932007243	OEF401010405	R932007252		
OEF401010308	R932007244	OEF401010406	R932007253		
OEF401010309	R932007245	OEF401010407	R932007254		

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Subject to change.