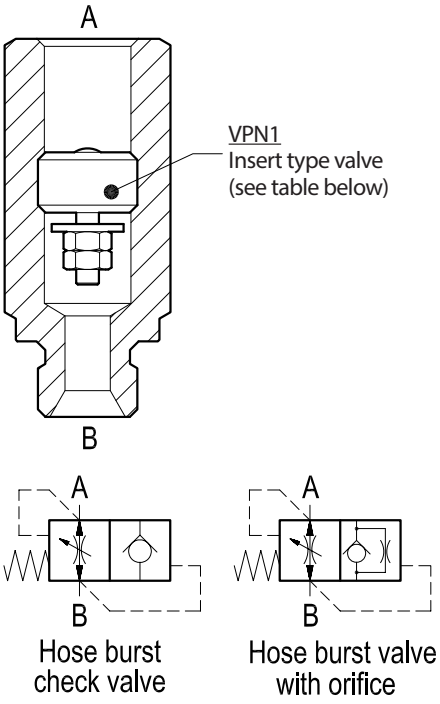
Hose burst insert type check valves

With male-female threaded sleeve

VPN-MF (G1/2 - G3/4) 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.

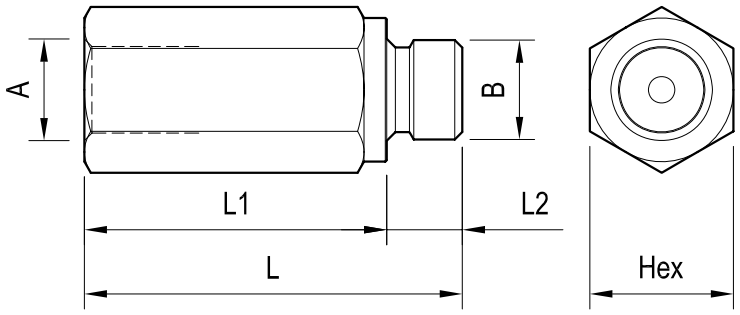
Technical data

VPN1 Code	Ports A-B	Pressure P max bar (psi)	Flow Q max l/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



Ports size / Dimensions

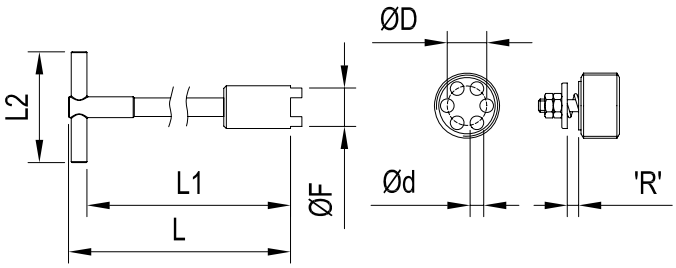
Y	Ports A-B	L mm (inches)	L1 mm (inches)	L2 mm (inches)	Hex mm (inches)	Sleeve code
03	G 1/2	70 (2.76)	56 (2.21)	14 (0.55)	27 (1.06)	OC.51.01.016
04	G 3/4	75 (2.95)	59 (2.32)	16 (0.63)	36 (1.42)	OC.51.01.017

Z	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)

Fitting tool dimension

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

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



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.

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.

Ordering code

OE.F4.01.02	Y	Z

With male-female threaded sleeve

Orifice diameter see table "Z"

Ports size / Dimensions see table "Y"

Type	Material number
OEF401020300	R931001639
OEF401020301	R932007194
OEF401020302	R932007195
OEF401020303	R932007196
OEF401020304	R932007197
OEF401020305	R932007198
OEF401020306	R932007199
OEF401020307	R932007200
OEF401020308	R932007201
OEF401020309	R932007202

Type	Material number
OEF401020310	R932007203
OEF401020311	R932007204
OEF401020400	R931001644
OEF401020401	R932007205
OEF401020402	R932007206
OEF401020403	R932007207
OEF401020404	R932007208
OEF401020405	R932007209
OEF401020406	R932007210
OEF401020407	R932007211

Type	Material number
OEF401020408	R932007212
OEF401020409	R932007213
OEF401020410	R932007214
OEF401020411	R932007215

Bosch Rexroth Oil Control S.p.A.
Fimma Division (Rge 2)
Via G. Bovio, 7 Z.I. Mancasale
42124 Reggio Emilia, Italy
Tel. +39 0522 517 277
Fax +39 0522 517 125
cartridges@oilcontrol.com
www.boschrexroth.com