

- Mounting styles:**
  - for in-line mounting
  - straight valve cartridge
  - right angled valve cartridge
- Seven sizes**
- Poppet design**
- Leakfree closure in one direction**
- Three cracking pressures**



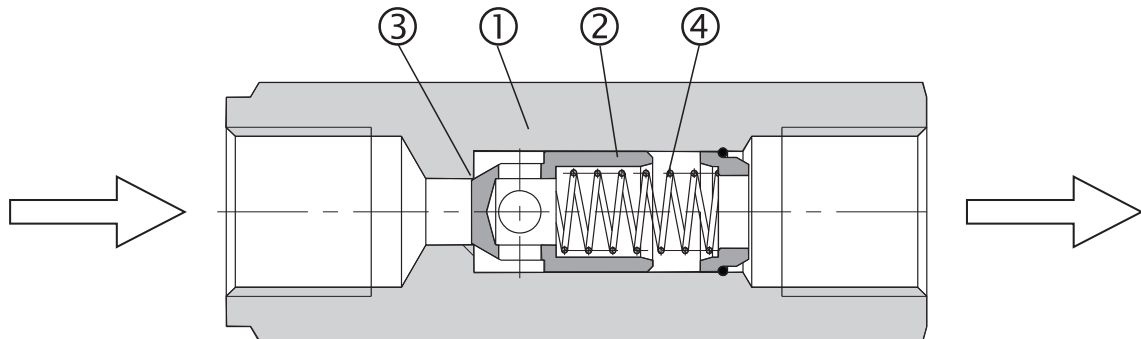
**Functional Description**

The check valve is used to allow flow in one direction and prevent flow in the other. The poppet design guarantees leakfree closure.

The seat (3) is created directly in the housing (1) and the poppet (2) is pushed onto the seat by the compression spring (4). Design without spring pushes the poppet (2) on to the seat by pressure of the fluid. The cracking

pressure depends on the spring selected and the pressurised poppet surface area. Three cracking pressures are available. The valve without cracking pressure is also available (without spring).

The basic surface treatment of the valve housing is zinc coated.



**Ordering Code**

		<b>VJ3</b> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/>		
<b>Check Valve</b>		<b>G1</b>	<b>Model</b>	
		<b>02*</b>	For in-line mounting with G threads	
		<b>03*</b>	Straight valve cartridge	
			Straight valve cartridge	
<b>Nominal size</b>			<b>Cracking pressure in bar</b>	
06	<b>06</b>	000	Without spring	
08	<b>08</b>	<b>005</b>	0,5	
10	<b>10</b>	015	1,5	
16	<b>16</b>	030	3,0	
20	<b>20</b>			
25	<b>25</b>			
30	<b>30</b>			

\*For sizes 06, 10, 16, 20 only

FOR PREFERRED TYPES SEE BOLD TYPING IN ORDERING CODE AND TABLE OF PREFERRED TYPES ON PAGE 4

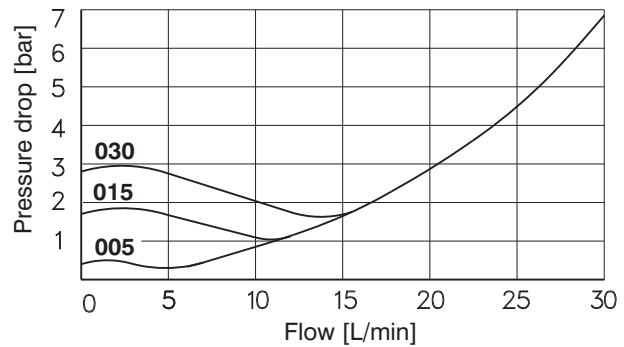
## Technical Data

Nominal size	mm	06	08	10	16	20	25	30
Maximum flow rate	L/min	30	40	60	160	250	300	400
Maximum pressure	bar	320						
Cracking pressure	bar	0,5		1,5		3,0		
Hydraulic fluid		Hydraulic oils of power classes (HL, HLP) to DIN 51524						
Fluid temperature range (NBR)	°C	-30 ... +100						
Viscosity range	mm <sup>2</sup> /s	20 ... 400						
Maximum degree of fluid contamination		Class 21/18/15 according to ISO 4406 (1999)						
Weight - model G1 - models 02, 03	kg	0,11 0,05	0,2 -	0,34 0,09	0,52 0,22	0,95 0,26	1,95 -	2,35 -
Mounting position		optional						

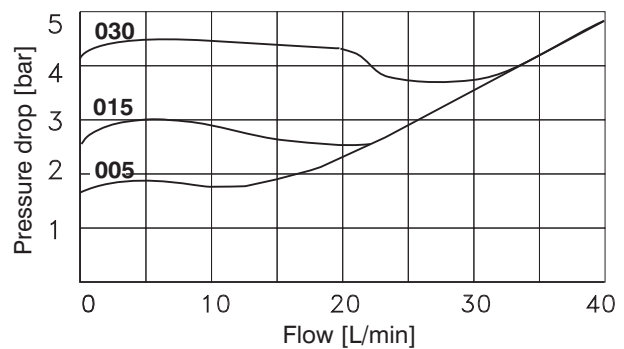
## Performance Curves

Measured at  $\nu = 32 \text{ mm}^2/\text{s}$ Pressure drop  $\Delta p$  related to flow rate.

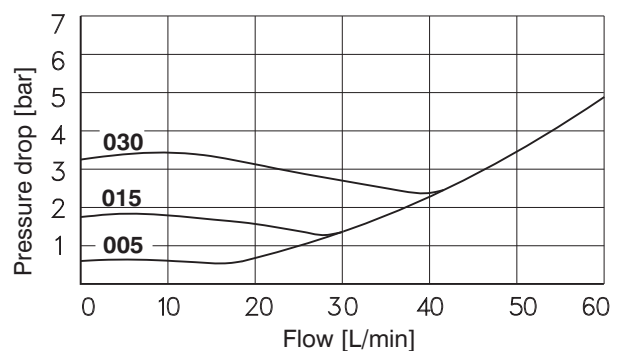
### Nominal size 06



### Nominal size 08



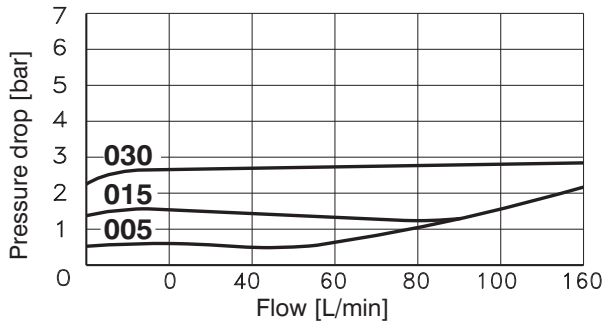
### Nominal size 10



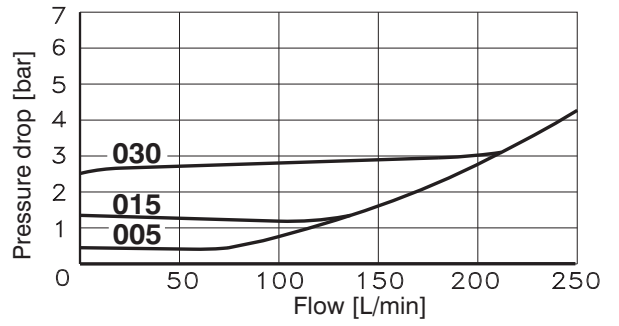
# Performance Curves

Measured at  $v = 32 \text{ mm}^2/\text{s}$

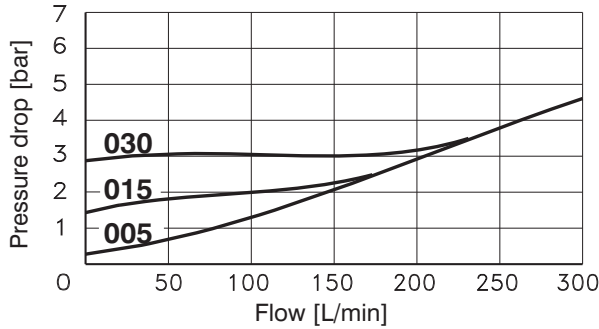
Nominal size 16



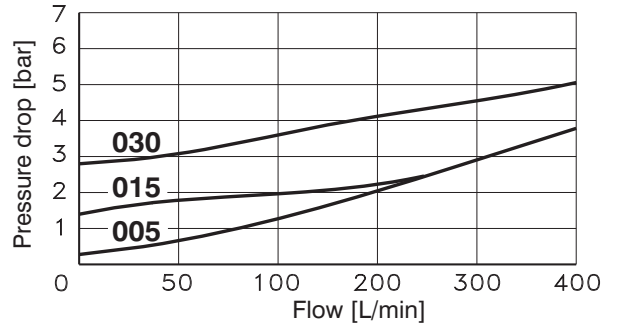
Nominal size 20



Nominal size 25



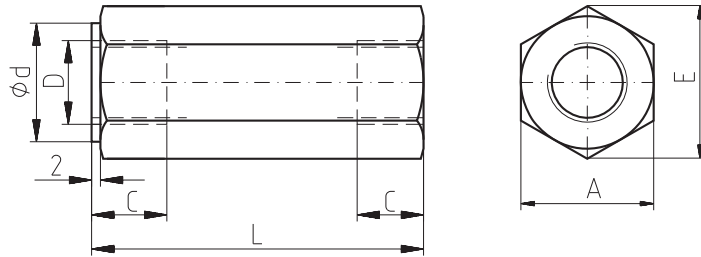
Nominal size 30



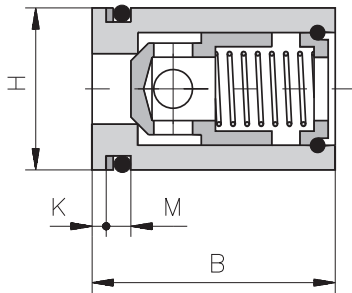
# Valve Dimensions

Dimensions in millimetres

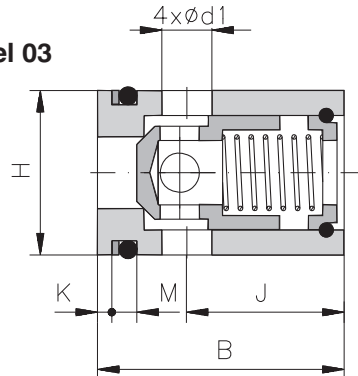
Model G1



Model 02



Model 03

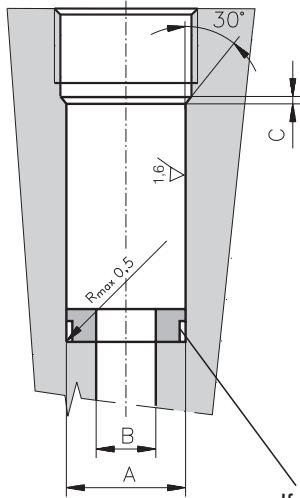
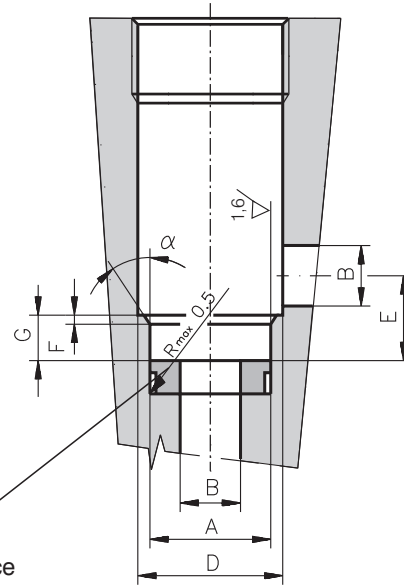


Size	A	B	C	D	$\varnothing d$	$\varnothing d1$
			G1	G1		
06	19	27 - 0,2	12	G 1/4	19	3,5
08	24	-	12	G 3/8	24	-
10	30	32 - 0,2	14	G 1/2	30	5,5
16	36	45 - 0,2	16	G 3/4	36	8,5
20	46	45 - 0,2	18	G 1	46	10,5
25	60	-	20	G1 1/4	60	-
30	65	-	22	G1 1/2	65	-
Size	E	H	J	K	L	M
06	22	$\varnothing 20 \text{ f8}$	18	1,6	58	4,4 +0,2
08	27,7	-	-	-	58	-
10	34,5	$\varnothing 25 \text{ f8}$	20	1,6	72	4,4 +0,2
16	41,5	$\varnothing 35 \text{ f8}$	27	2,2	85	5,3 +0,2
20	53,6	$\varnothing 40 \text{ f8}$	25	2,2	98	5,3 +0,2
25	69	-	-	-	120	-
30	75	-	-	-	132	-

**Cavity**

Dimensions in millimetres

(length according to distance ring)

**Model 02****Model 03**

If the hole cannot be reamed to the bottom, the use of a distance ring is recommended

Size	A	B	C	D*	E	F	G	$\alpha$
06	∅ 20 H8	∅ 6	2	∅ 26	10.5	1	7 - 0,3	20°
10	∅ 25 H8	∅ 10	2	∅ 32	14	1.5	8 + 0,2	30°
16	∅ 35 H8	∅ 16	2	∅ 44	22	2	13 + 0,2	30°
20	∅ 40 H8	∅ 20	2	∅ 48	25	2	14 + 0,2	30°

\* minimum diameter recommended

**Spare Parts**

Seal kit for Model 02 and Model 03

Size	O-Ring - NBR	Back-up ring	Order number
06	15,08 x 2,62	BBP 80 B 113 - N90 14,66 x 19,02 x 1,14	530-9000
10	20 x 2,65	M 8 - 116 19,43 x 23,79 x 1,14	530-9001
16	28 x 3,55	S 8 - 216 28,98 x 34,98 x 1,02	530-9002
20	-	32,92 x 3,53 BBP80B219-N90 33,88 x 34,98 x 1,02	530-9003

**Preferred Types of Valves**

Type	Ordering number
VJ3-06-005-G1	530-0237
VJ3-08-005-G1	530-0271
VJ3-10-005-G1	530-0240
VJ3-16-005-G1	530-0243
VJ3-20-005-G1	530-0246
VJ3-25-005-G1	530-0250
VJ3-30-005-G1	530-0260

**Caution!**

- The packing foil is recyclable.
- The technical information regarding the product presented in this catalogue is for descriptive purposes only. It should not be construed in any case as a guaranteed representation of the product properties in the sense of the law.

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