



# VJM 3-06, VJM 3-10

## ONE WAY CHECK VALVE

KE 5045 | 01/15

**Dn 06; 10 | P<sub>n</sub> 32MPa | Q<sub>n</sub> 32; 63 dm<sup>3</sup>/min**

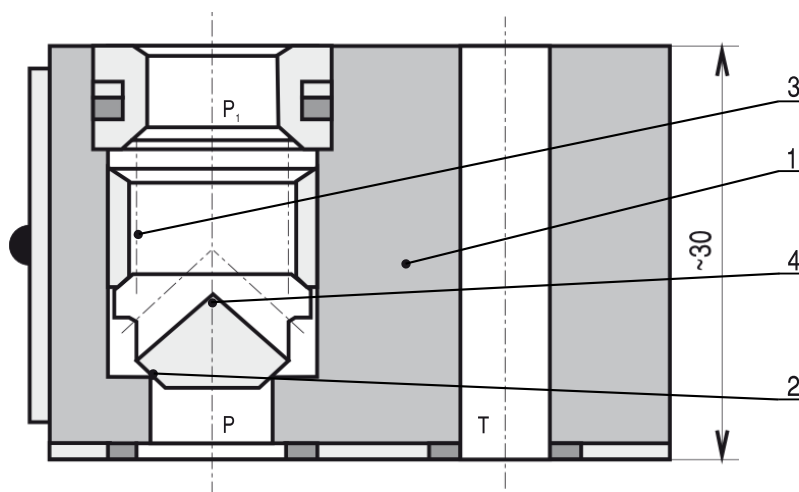
One-way check valves VJM3 are used for leakproof closure of flow in one direction while in the opposite direction allow free flow especially in hydraulic circuits where the back-pressure is expected

Proven design | Installation dimensions according to DIN 24340, ISO 4401, CETOP 3,5 | Suitable for vertical stacking assemblies

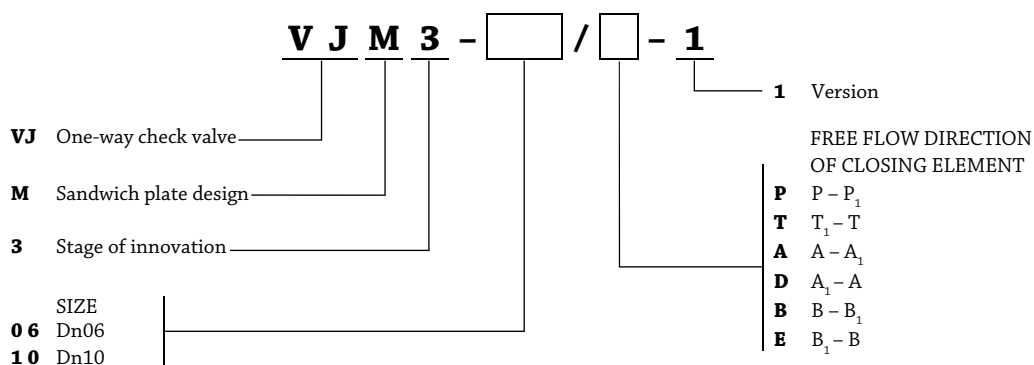


### DESCRIPTION OF FUNCTION

One-way check valves VJM3 consist of the valve housing **1** with one seat and the closing element. The seat can be manufactured to any desired valve channel to which the closing element is intended to be installed. The closing element consists of the cone **4** and the cone spring **3** pushing the cone to the seat **2**. Free flow and leak-free direction of the channel to which the closing element is installed depends on the orientation of the closing element. Other channels provides free-flow in both directions.



### ORDERING CODE





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## DELIVERY

One-way check valves are delivered assembled including O-rings. Spare parts and mounting bolts are not included in the package, these must be ordered separately.

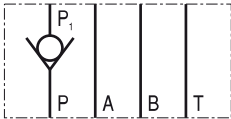
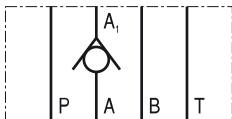

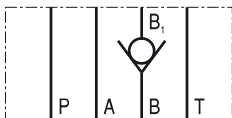
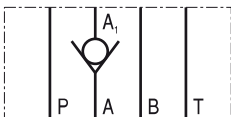
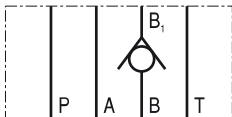
## INSTALLATION, SERVICE AND MAINTENANCE

One-way check valves are designed to be installed in hydraulic circuits in vertical stacking assemblies, where the mounting bolts are common for whole assembly. The orientation of the valve in the assembly must respect desired function of the valve. Flatness deviation and surface roughness of the mounting surface shall not exceed 0,01/100mm and  $R_a=1,6 \mu\text{m}$ . It is required that the contact surfaces must be clear and intact before installation. All o-ring must not be disshaped or damaged by any means. The reliability of the valve is conditional upon use of pressured working fluid especially its parameters such as temperature and purity.

## TECHNICAL DATA

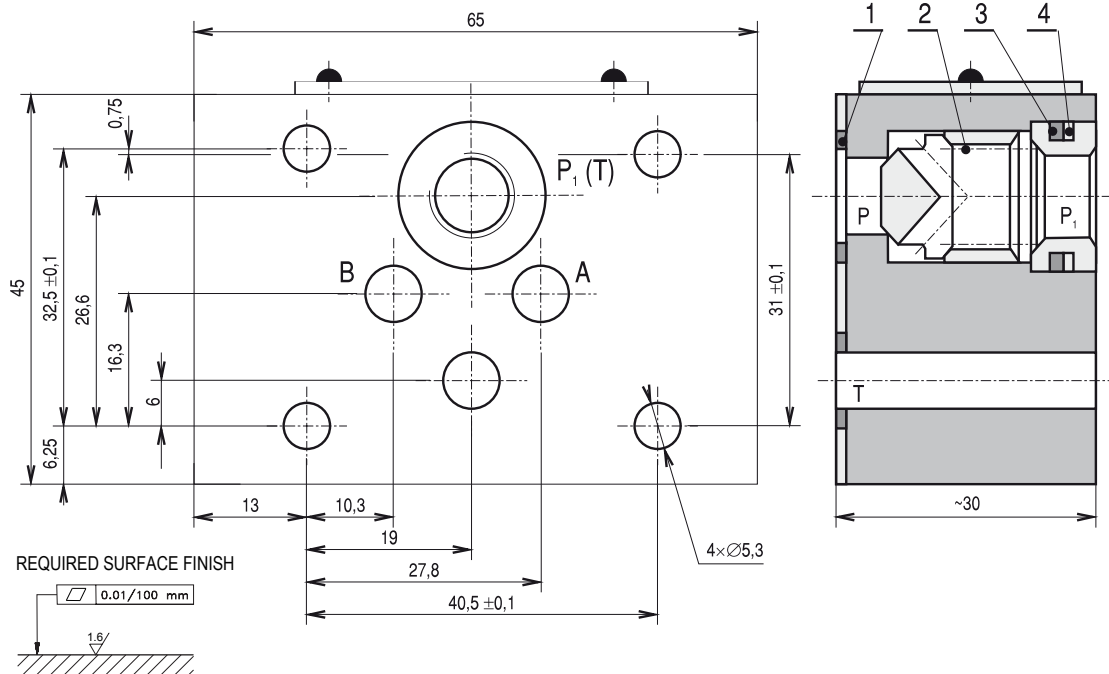
Technical data	Symbol	Unit	Dn 06	Dn 10
Nominal size	Dn	mm	6	10
Nominal pressure	$p_n$	MPa	32	32
Maximal pressure	$p_{max}$	MPa	40	40
Nominal flow	$Q_n$	$\text{dm}^3/\text{min}$	32	63
Opening pressure	$p_o$	MPa	0,05	0,05
Temperature range of working fluid	$t_{po}$	$^{\circ}\text{C}$	-20 to +80	
Ambient temperature range	$t_k$	$^{\circ}\text{C}$	-20 to +70	
Maximum degree of fluid contamination			Class 21/18/15 according to ISO 4406 (1999)	
Working fluid viscosity range	$\nu$	$\text{mm}^2/\text{s}$	10·10-6 až 400·10-6	
Flow characteristics $p = f(Q)$			see flow characteristics	
Recommended hydraulic fluid			Hydraulic oils of power classes (HL, HLP) according to DIN 51524	
Weight	m	kg	0,55	1,4

## TYPES AND SYMBOLS

Type	Symbol	Type	Symbol
VJM3 - 06 / P - 1 VJM3 - 10 / P - 1		VJM3 - 06 / D - 1	
VJM3 - 06 / T - 1 VJM3 - 10 / T - 1		VJM3 - 06 / B - 1	
VJM3 - 06 / A - 1		VJM3 - 06 / E - 1	

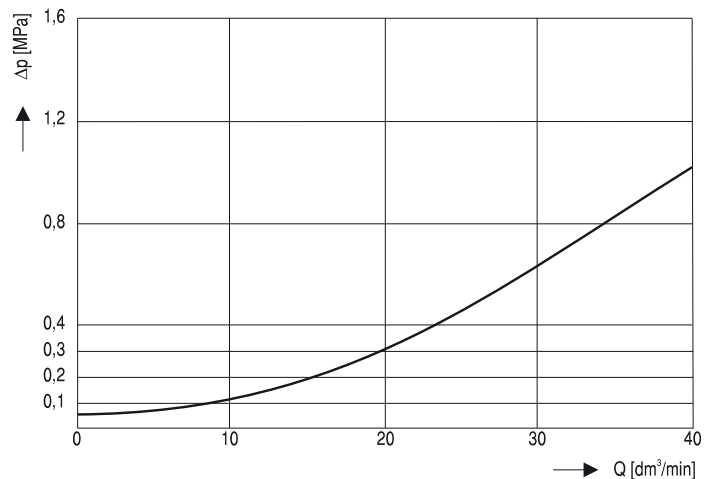
## DIMENSIONS AND INSTALLATION DIMENSIONS

### ONE-WAY CHECK VALVE VJM 3-06/P-1



1	O-ring 9,25 x 1,78	NBR 80 ShA, ISO	4 pcs
2	Spring 0,5 x 8,56 x 13,5	no. 438656	1 pc
3	O-ring 10,82 x 1,78	NBR 80 ShA, ISO	1 pc
4	Back-up ring	BG 1300114	1 pc

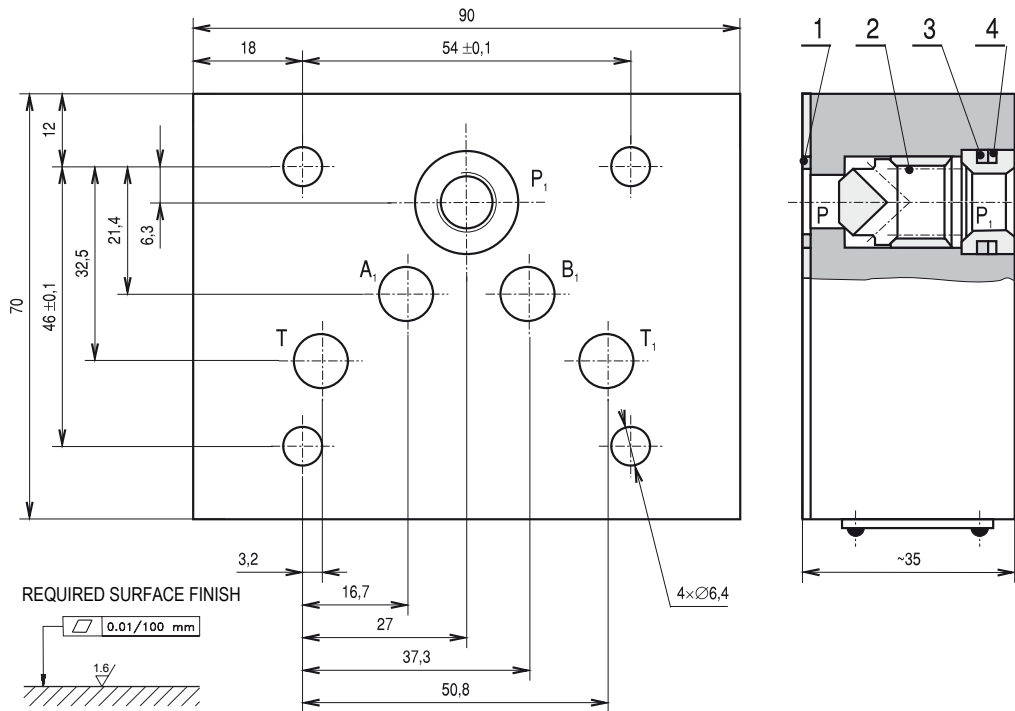
### PRESSURE DROP CHARACTERISTICS OF VJM3-06 $\Delta p = f(Q)$



Pressure drop characteristics of VJM3-06  $\Delta p = f(Q)$  presents mean values with tolerance of  $\pm 10\%$

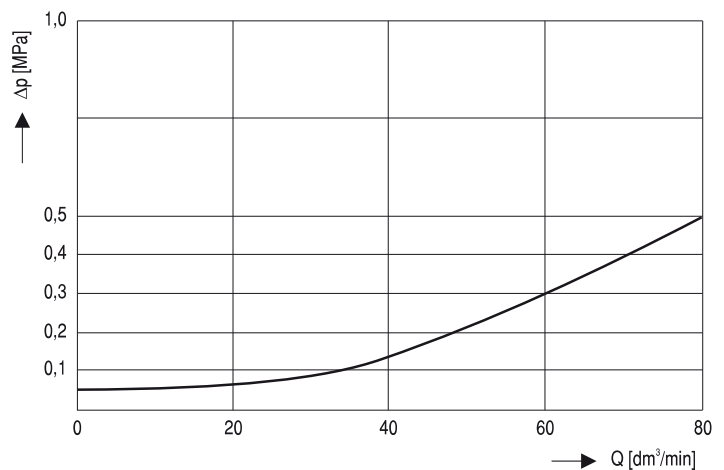
## DIMENSIONS AND INSTALLATION DIMENSIONS

### ONE-WAY CHECK VALVE VJM 3-10/P-1



1	O-ring 12,42 x 1,78	NBR 80 ShA, ISO	5 pcs
2	Spring 0,8 x 13 x 28,2 x 9,5	no. 438655	1 pc
3	O-ring 15,6 x 1,78	NBR 80 ShA, ISO	1 pc
4	Back-up ring	BG 1300154	1 pc

### PRESSURE DROP CHARACTERISTICS OF VJM3-10 $\Delta p = f(Q)$



Pressure drop characteristics of VJM3-10  $\Delta p = f(Q)$  presents mean values with tolerance of  $\pm 10\%$



## NOTES

Consultancy service is provided by: **PQS Technology, Ltd.**

Sales department: tel.: +420 313 526 236

Technical support: tel.: +420 313 526 378

Fax: +420 313 513 091

**[www.pqstechnology.co.uk](http://www.pqstechnology.co.uk)**

e-mail: [export@pqstechnology.co.uk](mailto:export@pqstechnology.co.uk)

e-mail: [info@pqstechnology.co.uk](mailto:info@pqstechnology.co.uk)

