



# VJHM2-10; VJH2M2-10



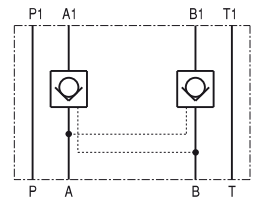
## PILOT OPERATED CHECK VALVES

| KT 5042 | 01/15 |

**D<sub>n</sub> 10 | p<sub>n</sub> 32 MPa | Q<sub>n</sub> 80 dm<sup>3</sup>/min**

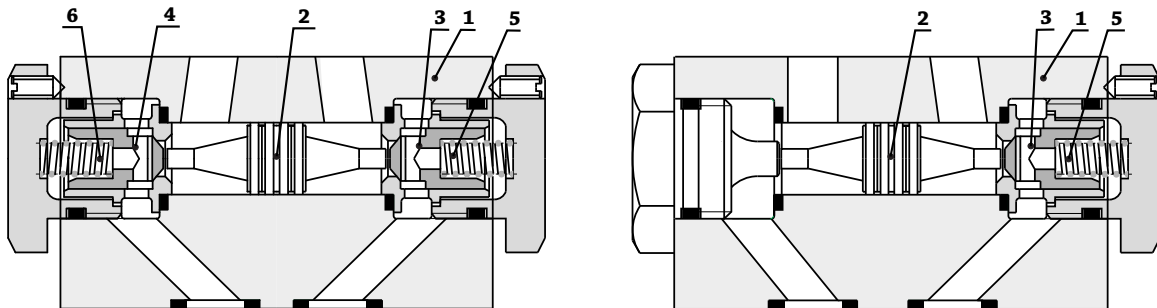
Pilot operated check valves VJH(2)M2 are designed to be used in hydraulic circuits in vertical stacking assemblies for leak free closure of one or two actuator ports during long idle periods

Installation dimensions according to DIN 24 340 | ISO 4401 | CETOP 5, sandwich plate design



## DESCRIPTION OF FUNCTION

Pilot operated check valves VJH(2)M2 are designed to be used in hydraulic circuits in vertical stacking assemblies for leak free closure of one or two actuator ports during long idle periods. The valve consists of the cast iron housing (1), the pilot piston (2) and one (VJHM2) or two (VJH2M2) check valves (3),(4). Fluid in the hydraulic circuit flows in A - A1 (B - B1) direction, the check valve (3),(4) opens and shifts the pilot piston (2) right (left) opening the interconnection B1 - B (A1 - A). When the pressure drop in hydraulic circuit occurs the spring (5),(6) push the poppets onto the seats and the circuit is closed. To ensure that the poppet valves seat properly, the actuator ports A and B of the directional control valve should be connected to the tank (Y).



## ORDERING CODE

**V J H**  **M 2 - 10 /**  **- 1**

**V J H** Pilot operated one way check valve

**no code** VALVE TYPE  
**2** simple  
double

**M** modular connection

**2** innovation stage

**1** Version  
CONNECTION

**A** A - A1  
**B** B - B1  
**C** A - A1; B - B1

SIZE  
**10** Dn 10

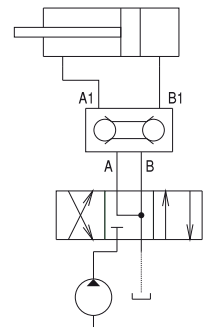




# VJHM2-10; VJH2M2-10

## INSTALLATION, SERVICE AND MAINTENANCE

Pilot operated check valves VJH(2)M2 can be mounted in vertical stacking assemblies in any working position respecting the valve orientation according to intended function. The fixing bolts M6 are common for whole branch of hydraulic circuit in vertical stacking assembly. Surface roughness and flatness deviation of the mounting surface shall not exceed  $Ra = 1,6 \mu m$  and  $0,01/100mm$ . It is required that the contact surfaces must be intact before installation. All "O"-rings must not be disshaped or damaged by any means. Reliability of the valve is conditional upon use of prescribed working fluid, especially its temperature and purity.



## DELIVERY

Pilot operated check valves VJH(2)M2 are delivered assembled including "O"-rings for the contact surface. Spare parts and mounting bolts are not included in the package these must be ordered separately.

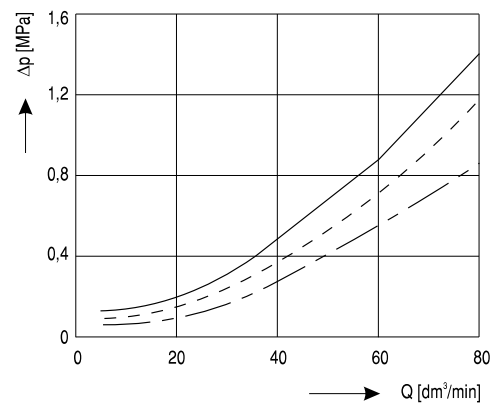
## TECHNICAL DATA

Technical data	Symbol	Unit	Value
Nominal size	Dn	mm	10
Nominal pressure	$p_n$	MPa	32
Nominal flow	$Q_n$	dm <sup>3</sup> /min	80
Pressure drop $p = f(Q)$	$p$	MPa	see diagram
Opening pressure in free flow direction	$p_o$	MPa	0,15
Area ratio $S_1/S_2$			1/2,78
Hydraulic fluid viscosity range		mm <sup>2</sup> /s	10 ... 400
Ambient temperature range	$t_A$	°C	-20 ... +70
Hydraulic fluid temperature range	$t_{PO}$	°C	-20 ... +80
Recommended hydraulic fluid	Hydraulic oils of power classes (HL, HLP) according to DIN 51524		
Maximum degree of fluid contamination	Class 21/18/15 according to ISO 4406 (1999)		
Weight	m	kg	2,7

## PRESSURE DROP

Measured with temperature =  $50 \pm 2^\circ C$   
 Oil: HL, HLP according to DIN 51524  
 presents mean values with tolerance of  $\pm 10\%$

(free channel)

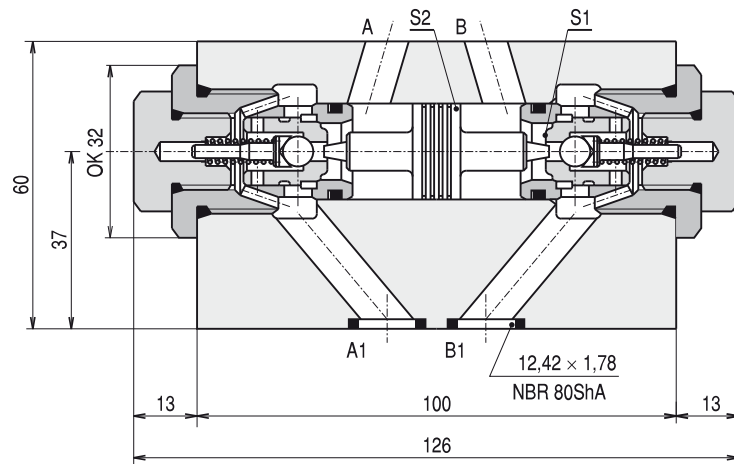




# VJHM2-10; VJH2M2-10

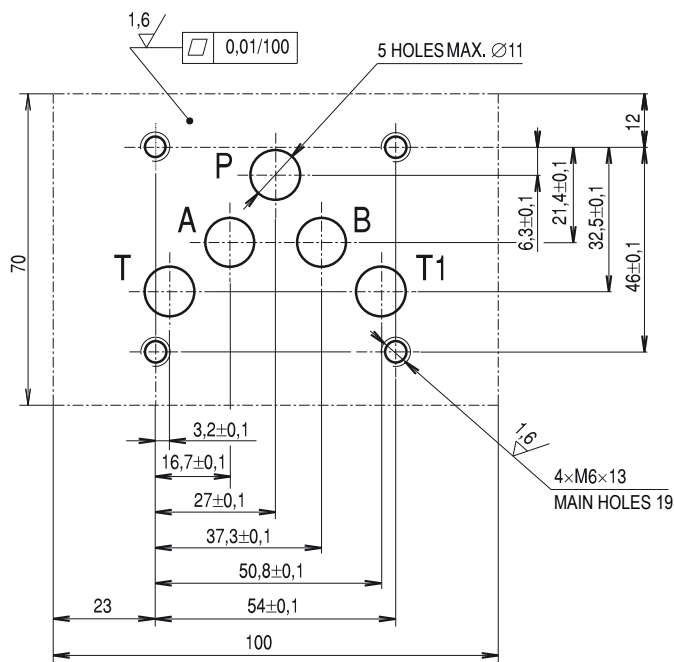
## DIMENSIONS

VJH2M2-10/C-1  
width 70mm



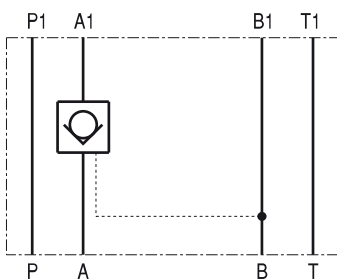
## INSTALLATION DIMENSIONS

(view towards panel)

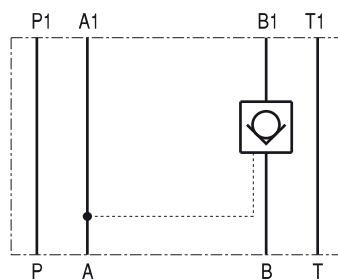


## SYMBOLS OF PILOT OPERATED CHECK VALVES

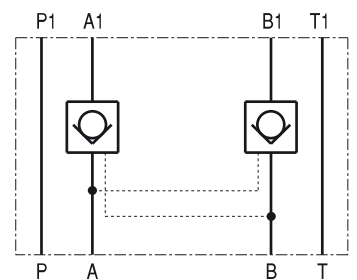
VJHM2-10/A-1



VJHM2-10/B-1



VJH2M2-10/C-1





# VJHM2-10; VJH2M2-10

## 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)

The data is subject to change. The manufacturer reserves the right to make changes and/or improvements without prior notice. It is understood that the information in this datasheet is being used at one's own risk.

