

## Check valve hydraulically pilot-operated manifold-mounted **VP-RP6**

### DESCRIPTION

The hydraulic, pilot-operated check valve VP-RP6 is a direct-acting, spring-loaded poppet valve in manifold design. The valve allows flow from A to B. In the opposite direction, the poppet is pressed onto the seat and blocks flow. If a sufficiently high control pressure is applied at port P, the poppet is lifted from the valve seat and oil flows from B to A. The necessary pilot pressure at port P is dependent on the pressures across ports A and B.

### TECHNICAL CHARACTERISTICS

- External surfaces corrosion-proof thanks to zinc-plating (valve) and phosphatisation (casing)
- Hardened and ground internal valve components to ensure minimal wear and extended service life
- Low pressure drop due to CFD-optimised flow path
- Spring return in the pilot stage for safe valve operation
- Quick response
- Leakage-free design
- Optional pilot control with O-ring seal available
- Interface to DIN 24340 Form A6 and ISO 4401-03-02-0-05 and CETOP 3



up to 60 l/min  
up to 350 bar

### CONTENTS

Description	1
Characteristic	1
Model code	2
Piston type / symbol	2
Section view	2
Technical Data	3
Characteristics	3
Unit dimensions, interface	3
Dimensions	4
Material overview	4

## MODEL CODE

VP-RE 6 15 - S01 /V

### Description

Check valve, hydraulically pilot-operated

### Nominal size (NG)

6

### Cracking pressure

15 = 1 bar

### Version (specified by manufacturer)

S01 = standard

### Sealing material

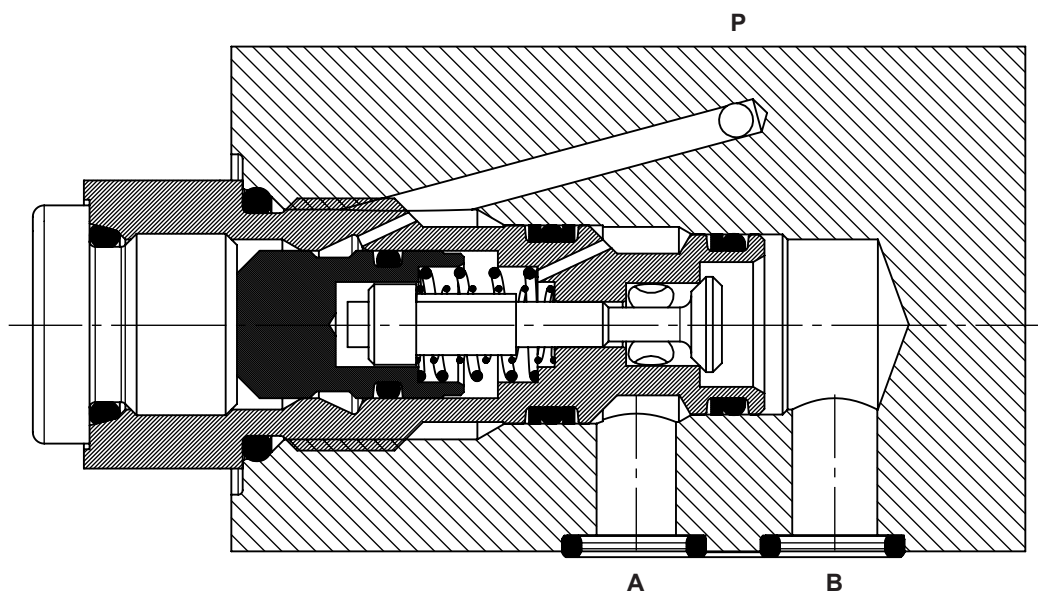
V = FKM (standard)

N = NBR

## SPOOL TYPE / SYMBOL

Type	Basic symbol
VP-RP6	

## SECTION VIEW



## TECHNICAL DATA<sup>1</sup>

### General specifications

MTTF <sub>D</sub>	150–1200 years, assessment according to DIN EN ISO 13849-1:2016; Table C.1, Confirmation of ISO 13849-2:2013; Tables C.1 and C.2	
Ambient temperature	-20 °C to max. +50 °C	
Installation position	No orientation restrictions	
Weight	1.0 kg	
Material	Valve casing:	Steel, phosphated
	Valve body:	Steel, zinc-plated
	Type label:	Adhesive sticker

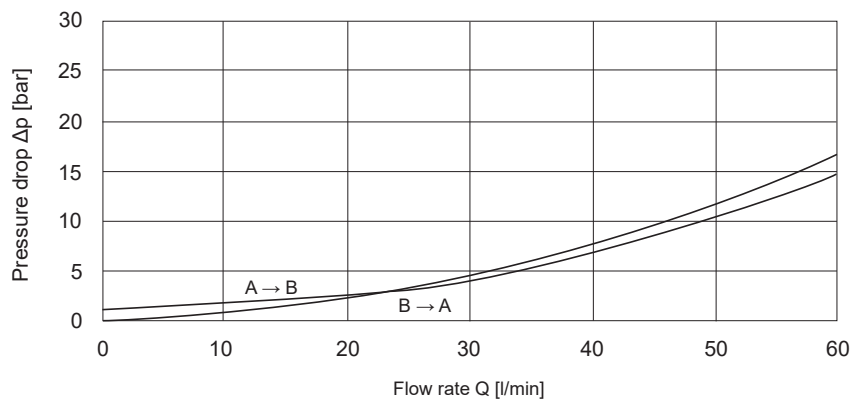
### Hydraulic specifications

Operating pressure	max. 350 °C
Flow rate	max. 60 l/min
Internal leakage	0.1 cm <sup>3</sup> /min at operating pressure
Pilot ratio	3 : 1
Cracking pressure	1 bar
Pressure fluid	Hydraulic oil to DIN 51524 Part 1 and 2
Temperature range of operating fluid	-20 °C to +80 °C
Viscosity range	min. 7.4 mm <sup>2</sup> /s – max. 400 mm <sup>2</sup> /s
Filtration	Permitted operating fluid contamination level according to ISO 4406 Class 21/19/16 or better

<sup>1</sup> See "Conditions and Instructions for Valves" in brochure 53.000.

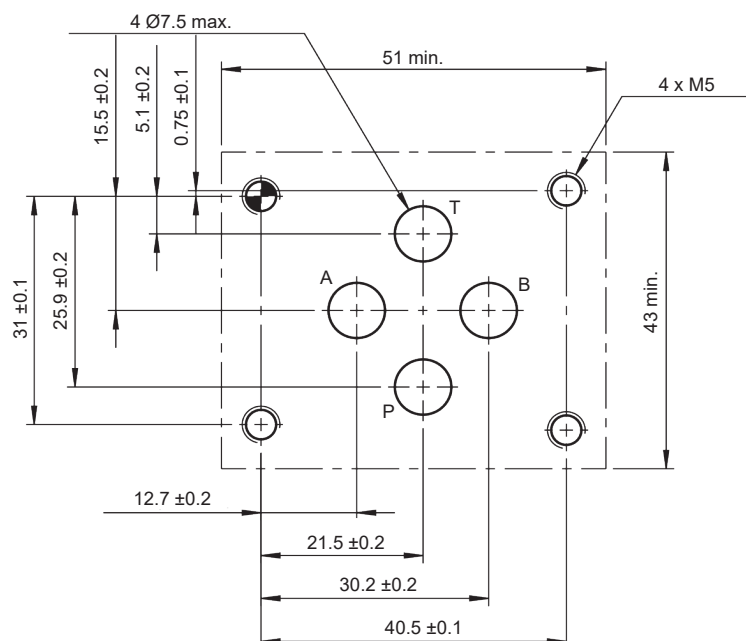
## SAMPLE CHARACTERISTICS

**Δp/Q characteristics** measured at  $v = 33 \text{ mm}^2/\text{s}$  and  $T_{\text{oil}} = 46 \text{ °C}$



## DIMENSIONS

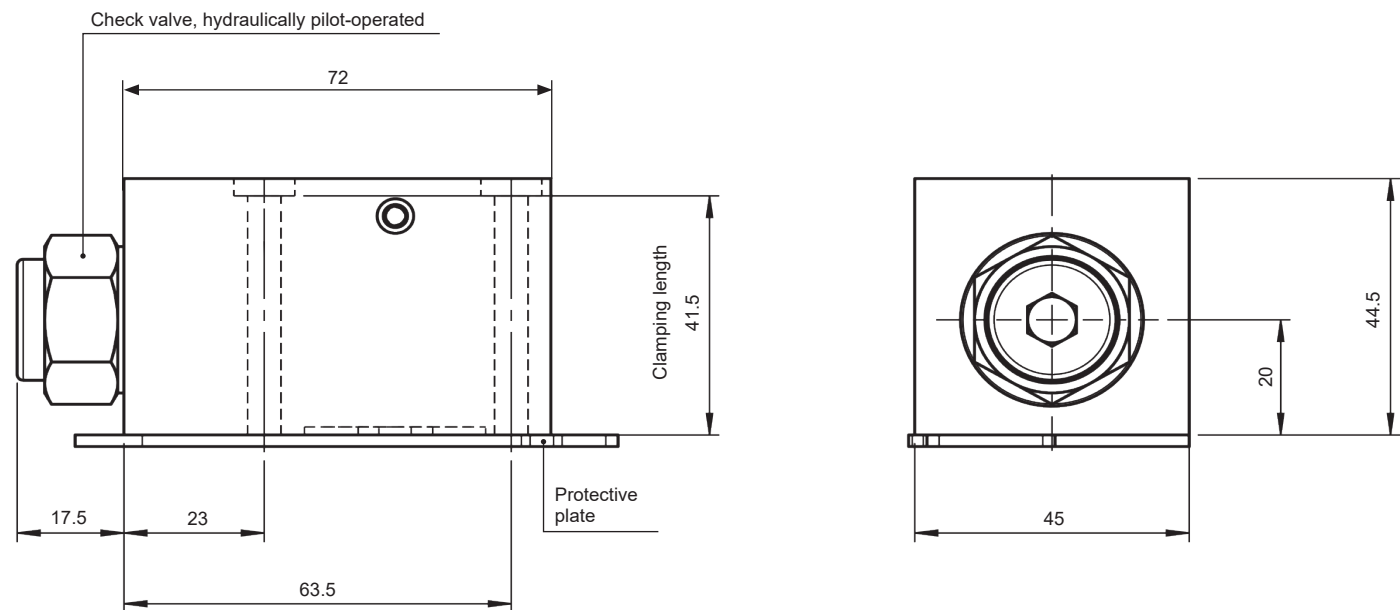
Interface fixing plate to ISO 24340 form A6



Tightening torque, fastening screws: 5<sup>+0.5</sup> Nm

Millimetres  
Subject to technical modifications.

DIMENSIONS



Fastening screws: (not included in scope of delivery)  
4 pcs. int. hex. M5x50 10.9  
Tightening torque: 5<sup>+0.5</sup> Nm  
Tightening torque tool in acc. with DIN EN ISO 6789, tool type II class A or B

Millimetres  
Subject to technical modifications.

MATERIAL OVERVIEW

Standard models

Designation	Part no.
VP-RP6 15 S01/N	3497270
VP-RP6 15 S01/V	3604932

Other versions on request.

Spare parts

Designation	Material	Code	Part no.
Seal kit with 4x O-ring 9.25 x 1.78 mm	NBR		3492432
Seal kit with 4x O-ring 9.25 x 1.78 mm	FKM		3120269
Check valve, hydraulically pilot-operated	NBR seal ring	RP10A-01-C-N-15-3	561206
Check valve, hydraulically pilot-operated	FKM seal ring	RP10A-01-C-N-15-3	3010161

NOTE

The information in this brochure relates to the operating conditions and applications described.  
For applications not described, please contact the relevant technical department.  
Subject to technical modifications.  
Documents are only valid if they have been obtained via the website and are up-to-date.

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