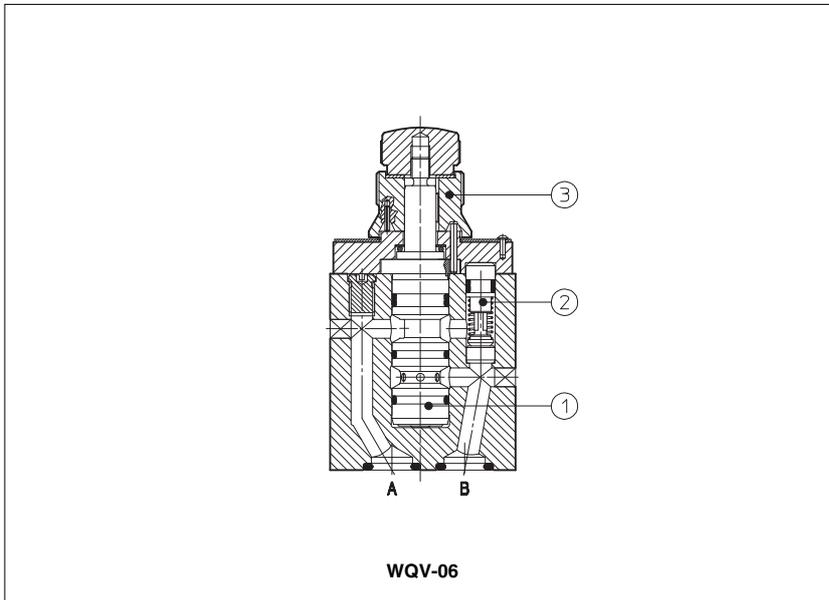


# Flow control valves type **WQV-06**

pressure compensated, two way, ISO 4401 size 06



WQV are flow control valves with pressure compensator ①: the controlled flow is independent to the pressure variations on A and B ports.

They are usually supplied with a built-in check valve ② to allow the free flow in the opposite direction.

The flow is regulated by turning a graduate micrometer knob ③. Clockwise rotation reduces the controlled flow.

ISO 4401 size 06.

Flow up to 6; 16 and 24 l/min.

Pressure up to 250 bar.

Valves designed to operate in hydraulic systems with hydraulic mineral oil or synthetic fluid having similar lubricating characteristics.

## 1 MODEL CODE

**WQV** - **06** / **6** / **K** \*\* /\*

Pressure compensated flow control valve

Size:  
**06**

Maximum adjustable flow rate:

**6** = 6 l/min  
**16** = 16 l/min  
**24** = 24 l/min

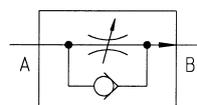
Synthetic fluids:  
**PE** = phosphate ester

Design number

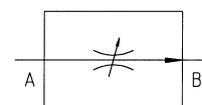
Options:  
**N** = without by-pass check valve

## 2 HYDRAULIC CHARACTERISTICS

Hydraulic symbols



**with check valve**



**without check valve**

Valve model	<b>WQV-06/6</b>	<b>WQV-06/16</b>	<b>WQV-06/24</b>
Max regulated flow [l/min]	6	16	24
Min regulated flow [cm <sup>3</sup> /min]		50	
Max flow B→A through check valve [l/min]		24	
Regulating Δp [bar]	3	6,5	8
Max flow on port A [l/min]		24	
Max pressure [bar]		250	

## 3 MAIN CHARACTERISTICS OF FLOW CONTROL VALVES TYPE WQV-06

Assembly position / location	Any position
Subplate surface finishing	Roughness index $\sqrt{0.4}$ , flatness ratio 0,01/100 (ISO 1101)
Ambient temperature	-20°C to +70°
Fluid	Hydraulic oil as per DIN 51524 ... 535; for other fluids see section I
Recommended viscosity	15 ÷ 100 mm <sup>2</sup> /s at 40°C (ISO VG 15 ÷ 100)
Fluid contamination class	ISO 19/16, achieved with in line filters at 25 μm value and β <sub>25</sub> ≥ 75 (recommended)
Fluid temperature	-20°C +60°C (standard seals) -20°C +80°C (/PE seals)

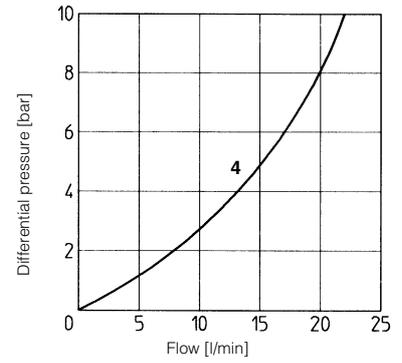
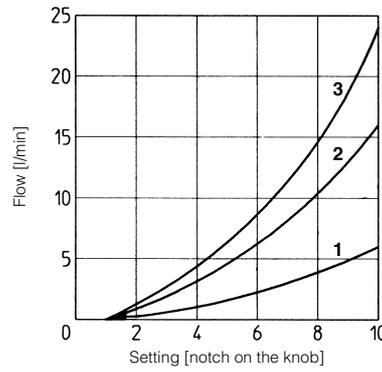
**4 DIAGRAMS** based on mineral oil ISO VG 46 at 50°C

**4.1 Regulation diagram**

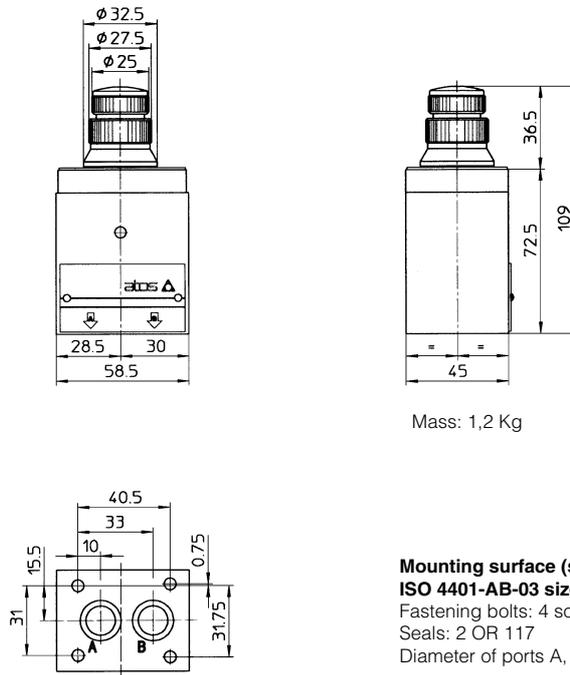
- 1 = WQV-06/6
- 2 = WQV-06/16
- 3 = WQV-06/24

**4.2 Q/Δp diagram through the check valve for free flow B→A**

- 4 = WQV-06/\*



**5 DIMENSIONS [mm]**



Mass: 1,2 Kg

**Mounting surface (see note 1)**

**ISO 4401-AB-03 size 06**

Fastening bolts: 4 socket head screws M5x60

Seals: 2 OR 117

Diameter of ports A, B:  $\varnothing = 7$  mm

**note 1:** the manifold interface has to be provided only of the A and B ports.  
The valve cannot be installed on manifolds with ISO 4401-AB-03 interface with P and T ports.