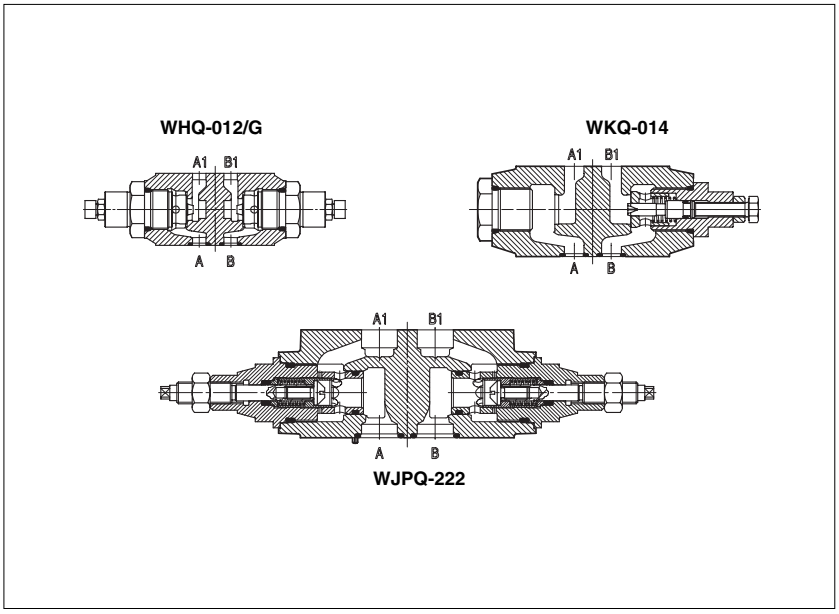
Modular valves type WHQ, WKQ, WJPQ

flow control ISO 4401 sizes 06, 10 and 16



WHQ, WKQ and WJPQ are flow throttling valves, not compensated, and with check valve to allow free flow in the opposite direction.

The flow adjustement is done by turning the setting screw in the normal model.

Optional versions with a graduate micrometer knob are available on request.

Clockwise rotation increases the throttling (passage reduced).

WHQ-0 = ISO 4401 size 06 interface: flow up to 25 l/min for /U option, up to 80 l/min for standard, pressure up to 350 bar

WKQ-0 = ISO 4401 size 10 interface: flow up to 160 l/min, pressure up to 315 bar.

WJPQ-2 = ISO 4401 size 16 interface: flow up to 200 l/min, pressure up to 350 bar.

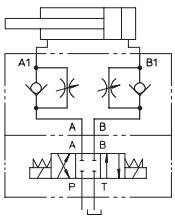
Valves designed to operate in hydraulic systems with hydraulic mineral oil or synthetic fluid having similar lubricating characteristics.

1 MODEL CODE

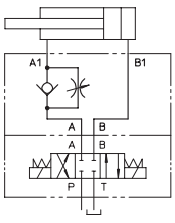
WHQ-0	13	**	/*
Modular flow control valve, size: **WHQ-0** = 06 **WKQ-0** = 10 **WJPQ-2** = 16	Configuration, see section 2 control of flow discharged from the actuator: **12** = double, acting on port A and B **13** = single, acting on port A **14** = single, acting on port B control of flow entering the actuator: **22** = double, acting on port A and B **23** = single, acting on port A **24** = single, acting on port B	Design number	Synthetic fluids: **PE** = phosphate ester

2 VALVE CONFIGURATION

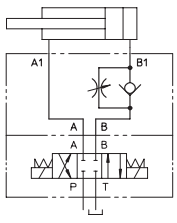
WHQ-012
WKQ-012
WJPQ-212



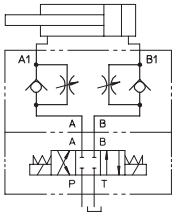
WHQ-013
WKQ-013
WJPQ-213



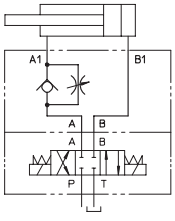
WHQ-014
WKQ-014
WJPQ-214



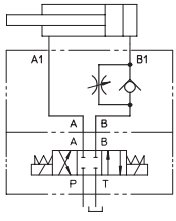
WHQ-022
WKQ-022
WJPQ-222



WHQ-023
WKQ-023
WJPQ-223



WHQ-024
WKQ-024
WJPQ-224

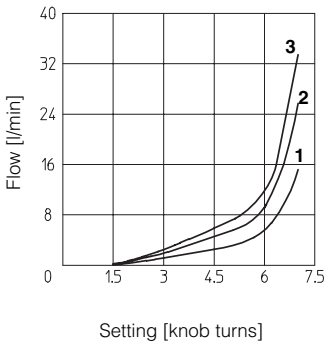


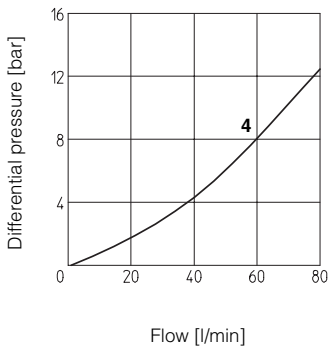
3 MAIN CHARACTERISTICS OF MODULAR FLOW CONTROL VALVES TYPE WHQ, WKQ, WJPQ

Assembly position	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 1
Recommended viscosity	15 ÷ 100 mm²/s at 40°C (ISO VG 15 ÷ 100)
Fluid contamination class	ISO 19/16, achieved with in line filters at 25 μm value and $\beta_{25} \geq 75$ (recommended)
Fluid temperature	-20°C +60°C (standard seals) -20°C +80°C (/PE seals)

4 DIAGRAMS OF WHQ-0 based on mineral oil ISO VG 46 at 50°C

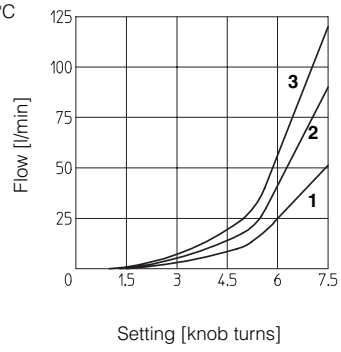
1 = Regulation diagram at Δp 10 bar
2 = Regulation diagram at Δp 30 bar
3 = Regulation diagram at Δp 50 bar
4 = Q/Δp diagram for free flow through the non-return valve

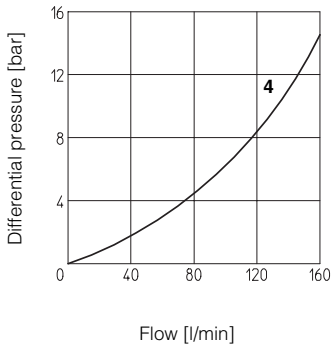




5 DIAGRAMS OF WKQ-0 based on mineral oil ISO VG 46 at 50°C

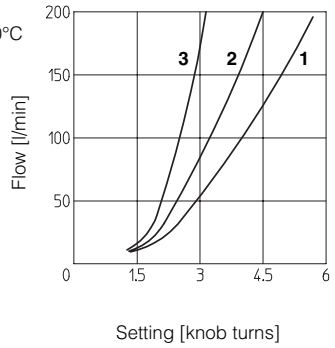
1 = Regulation diagram at Δp 10 bar
2 = Regulation diagram at Δp 30 bar
3 = Regulation diagram at Δp 50 bar
4 = Q/Δp diagram for free flow through the non-return valve

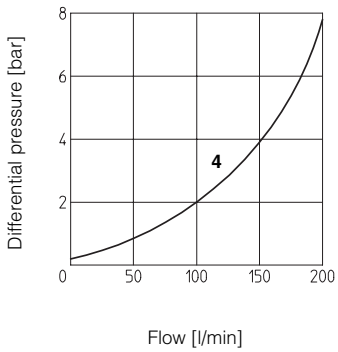




6 DIAGRAMS OF WJPQ-2 based on mineral oil ISO VG 46 at 50°C

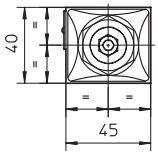
1 = Regulation diagram at Δp 10 bar
2 = Regulation diagram at Δp 30 bar
3 = Regulation diagram at Δp 50 bar
4 = Q/Δp diagram for free flow through the non-return valve

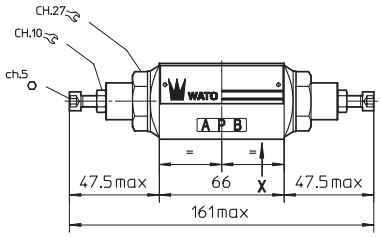




7 INSTALLATION DIMENSIONS OF WHQ-0 VALVES [mm]

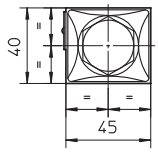
WHQ-012
WHQ-022

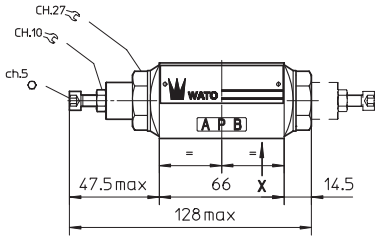




Mass: 1,1 Kg

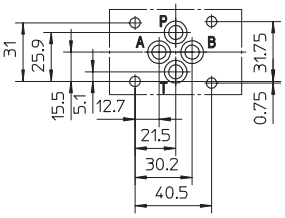
WHQ-013
WHQ-014
WHQ-023
WHQ-024





In version -014 and -024 the regulating element is on side of port B (dotted line) instead of side of port A.

Mass: 1,2 Kg

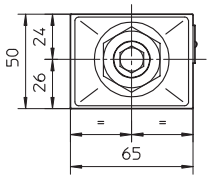


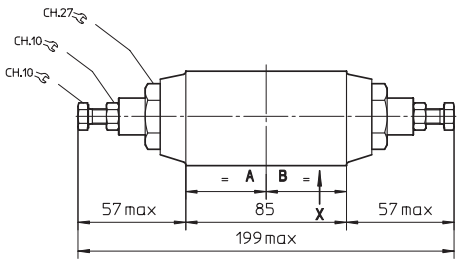
Mounting surface
ISO 4401-AB-03-4 size 06
Diameter of ports A, B, P, T: Ø = 7,5 mm (max)
Seals: 4 OR 108

Fastening bolts: n° 4 socket head screws M5. The lenght depends on number and type of modular elements associated.

8 INSTALLATION DIMENSIONS OF WKQ-0 VALVES [mm]

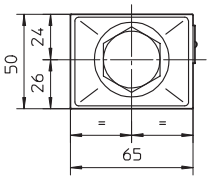
WKQ-012
WKQ-022

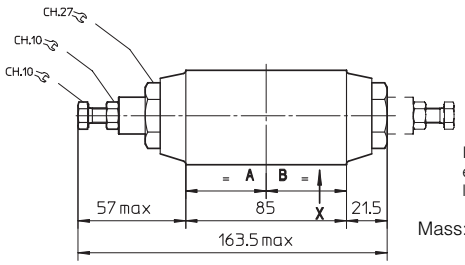




Mass: 2 Kg

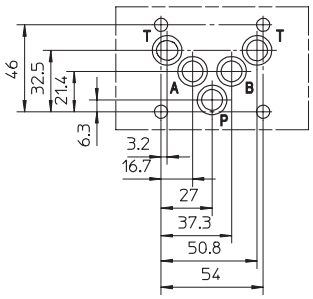
WKQ-013
WKQ-014
WKQ-023
WKQ-024





In version -014 and -024 the regulating element is on side of port B (dotted line) instead of side of port A.

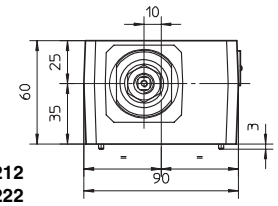
Mass: 2,2 Kg



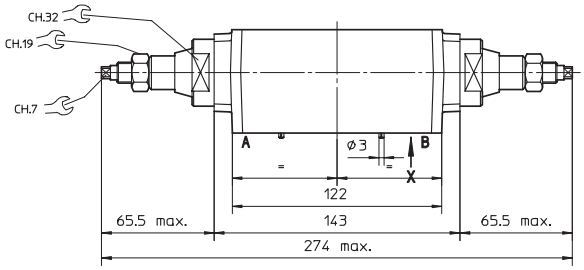
Mounting surface
ISO 4401-AC-05-4 size 10
Diameter of ports, A, B, P, T: Ø = 11,2 mm (max)
Seals: 5 OR 2050

Fastening bolts: n° 4 socket head screws M6. The lenght depends on number and type of modular elements associated.

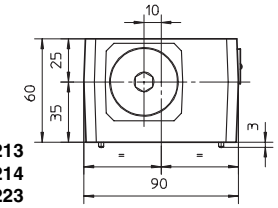
10 INSTALLATION DIMENSIONS OF WJPQ-2 VALVES [mm]



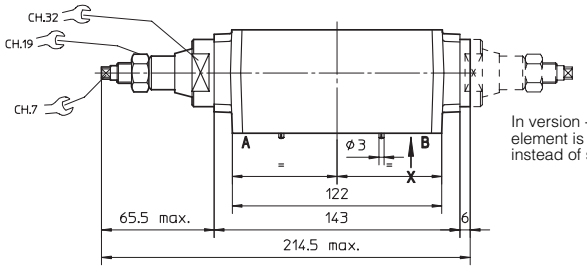
WJPQ-212
WJPQ-222



Mass: 4,6 Kg

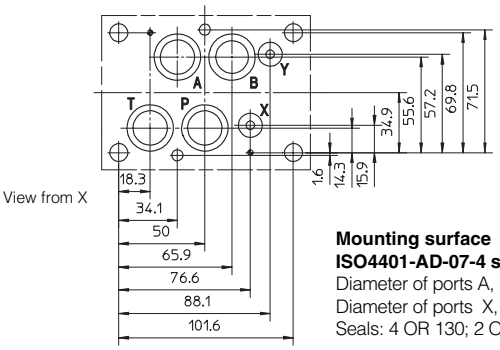


WJPQ-213
WJPQ-214
WJPQ-223
WJPQ-224



In version -214 and -224 the regulating element is on side of port B (dotted line) instead of side of port A.

Mass: 4,3 Kg



View from X

Mounting surface
ISO4401-AD-07-4 size 16
Diameter of ports A, B, P, T: Ø = 20 mm
Diameter of ports X, Y: Ø = 7 mm
Seals: 4 OR 130; 2 OR 109

Fastening bolts: n° 4 socket head screws M10 and n° 2 M6. The lenght depends on number and type of modular elements associated.