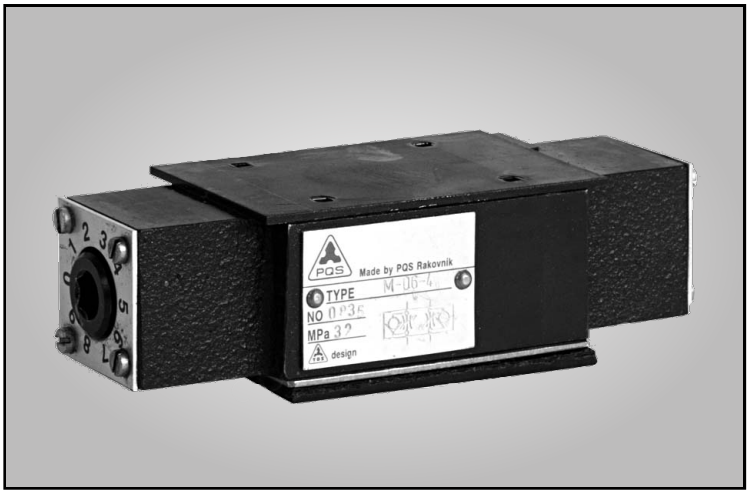
M 06-4, M 10-4



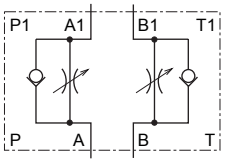
DOUBLE THROTTLE/CHECK VALVE

|KE 5002 | 11/14 |

D_n 06;10 | p_n 32 MPa | Q_n 32;63dm³/min

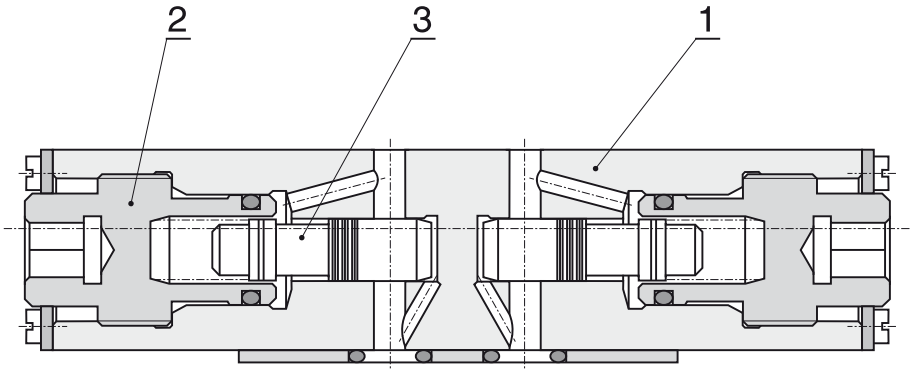
Double throttle/check valve is a hydraulic element used to independent flow control in two separate branches of hydraulic circuit.

Proven design| sandwich-plate design| installation dimmensios according to DIN 24 3540; ISO 4401; CETOP3,5



DESCRIPTION

The body **1** is the basic part of the double throttle/check valve. The body is of modular design. According to the type of sandwich plate there is one-way throttle valve **3** located into ports of main flow. This valve allows the flow control. The flow adjustment is carried out with adjusting screws **2** with internal hexagon. The valve is designed for both installation options: either throttled drain from the appliance to the tank and free supply channel to the appliance or throttled supply channel to the appliance and free drain from the appliance to the tank. If the connection surfaces of bottom and upper hydraulic element in vertical stacking assembly (between which the double throttle/check valve is installed) are not provided with grooves for "O"-rings the sealing is carried out by metal sealing sheet. An orientation of one-way throttle valve located in A, B ports matches to the symbol on the nameplate. The throttle valve M-06/10 has no compensation of the pressure drop.



ORDERING CODE

M – 06 – □ - 4

M DOUBLE THROTTLE/CHECK VALVE

NOMINAL SIZE

06 Dn = 06mm

10 Dn = 10mm

4 INNOVATION STAGE

INTERCONNECTION

A throttle valve located in port A

B throttle valve located in port B

no code throttle valve located in port A and B

Note: Sealing elements - dimensions in inches

INSTALLATION, SERVICE AND MAINTENANCE

The installation of the double throttle/check valve is carried out between two connecting surfaces respecting operation of the throttle valves in A and B ports. Sandwich-plate design allows the valve to be installed in vertical stacking assemblies. In such assemblies bolts M5 are common for all elements in assembly. The material class strength of bolts needs to be selected according to the pressure at which the circuit is operated (class strength 8.8 for pressure <16 MPa, 10.9 (or higher) for pressure >16 MPa. Valves can be installed in any working possition. The reliabilty of the valve is conditional upon use of prescribed working fluid, especially its parameters such as purity and temperature. It is required the contact surface of the valve must be clear and intact before installation. All rings must not be disshaped or damaged by any means. Flatness deviation and roughness of contact surfaces shall not exceed 0.01/100mm and Ra =1,6 μm.

DELIVERY

Double throttle/check valves M 06/10 are delivered assembled including one metal sealing sheet with "O"-rings, surface of the valve is phosphate coated. Spare parts and mounting bolts M5 are not included in the package, this must be ordered separatelly.

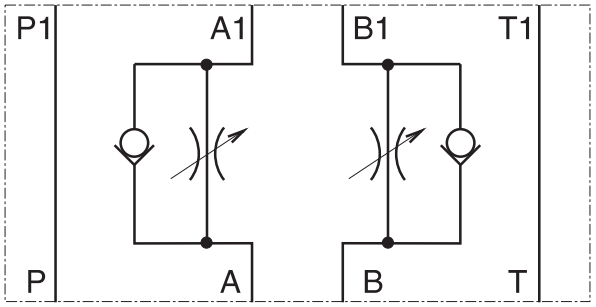
TECHNICAL DATA

Technical data	**Symbol**	**Unit**	**Dn 06**	**Dn 10**
Nominal size	D_n	mm	06	10
Nominal pressure	p_n	MPa	32	32
Maximal pressure	p_{max}	MPa	40	40
Nominal flow	Q_n	dm^3/min	32	63
Maximal flow	Q_{max}	dm^3/min	50	100
Oil viscosity range		m^2/s	$10 \cdot 10^{-6}$ to $400 \cdot 10^{-6}$	
Fluid filtration			a) class 9 by NAS 1638, 18/15 by ISO 4406 b) recomended f ltr s $\beta_{20} \geq 100$	
Fulid temperature range	t_{po}	°C	–20 to +80	
Enviroment temperature range	t_k	°C	–20 to +70	
Hydraulic medium		Hydraulic oils of power class (HL, HLP) according to DIN51524		
Weight	m	kg	1,8	

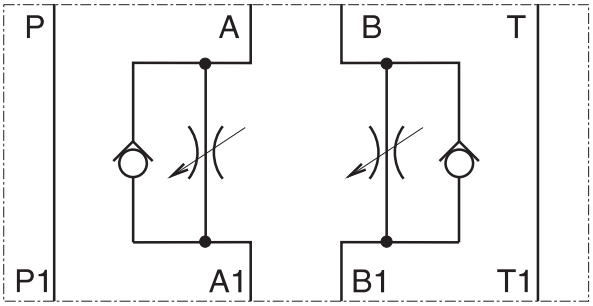
TYPES AND SYMBOLS

M 06-4

Basic mounting position

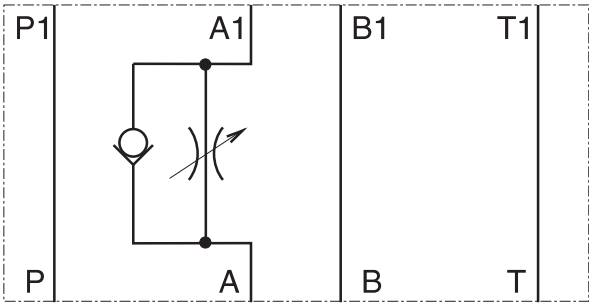


Reversed mounting position



M 06-4-A

Basic mounting position



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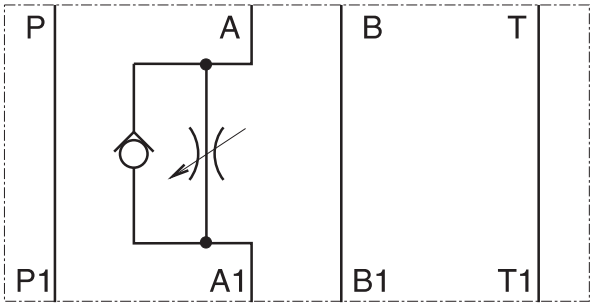
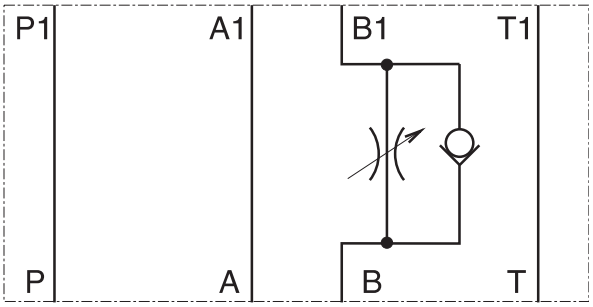


M 06-4-B

Basic mounting position



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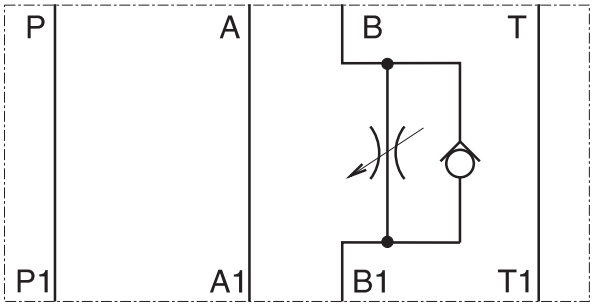
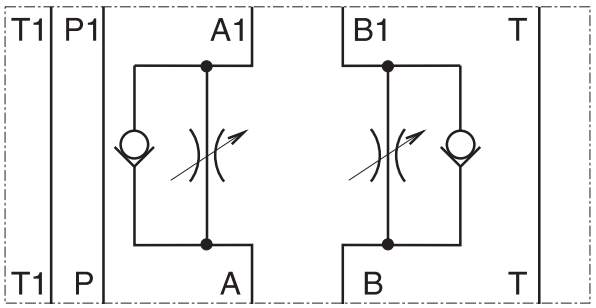
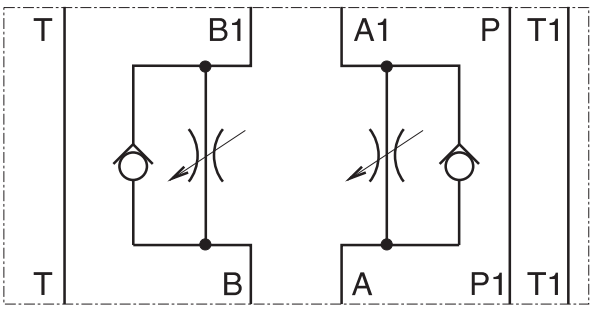


M 10-4

Basic mounting position

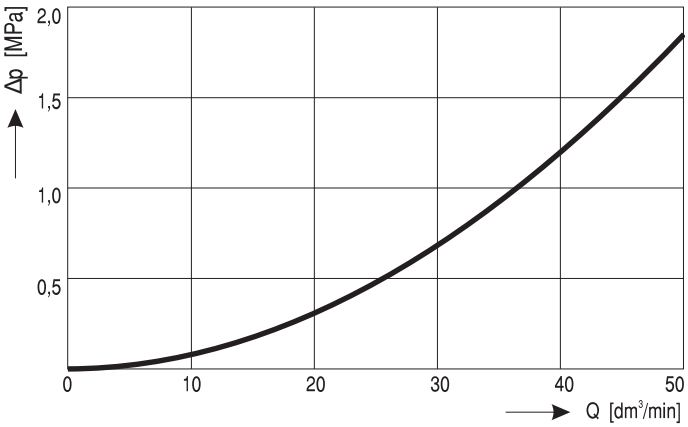


Reversed mounting postion

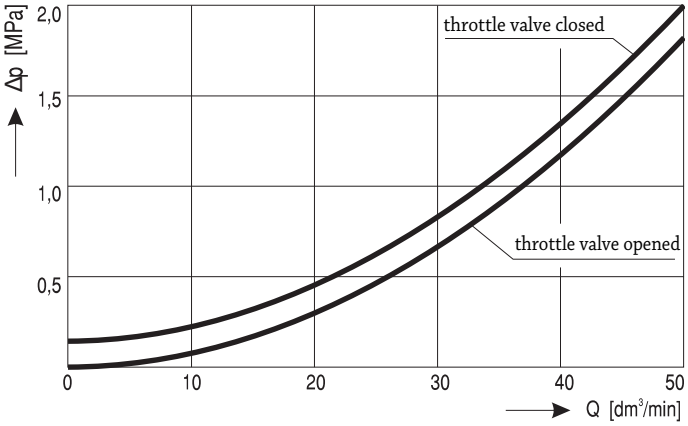


PRESSURE DROP Δp = f(Q)

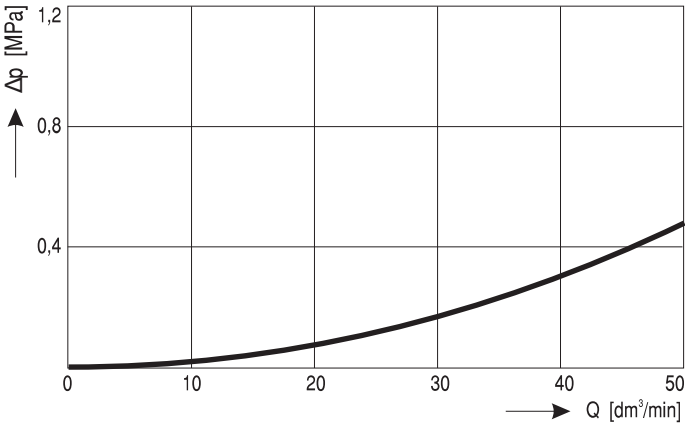
Characteristic of the throttle valve Δp = f(Q)
M-06-4
M-06-A-4
M-06-B-4



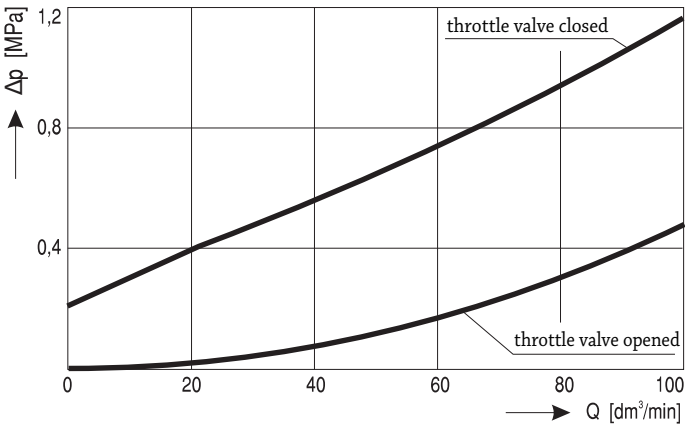
Characteristic of the check valve Δp = f(Q)
M 06-4
M 06-A-4
M 06-B-4



Characteristic of the throttle valve Δp = f(Q)
M 10-4

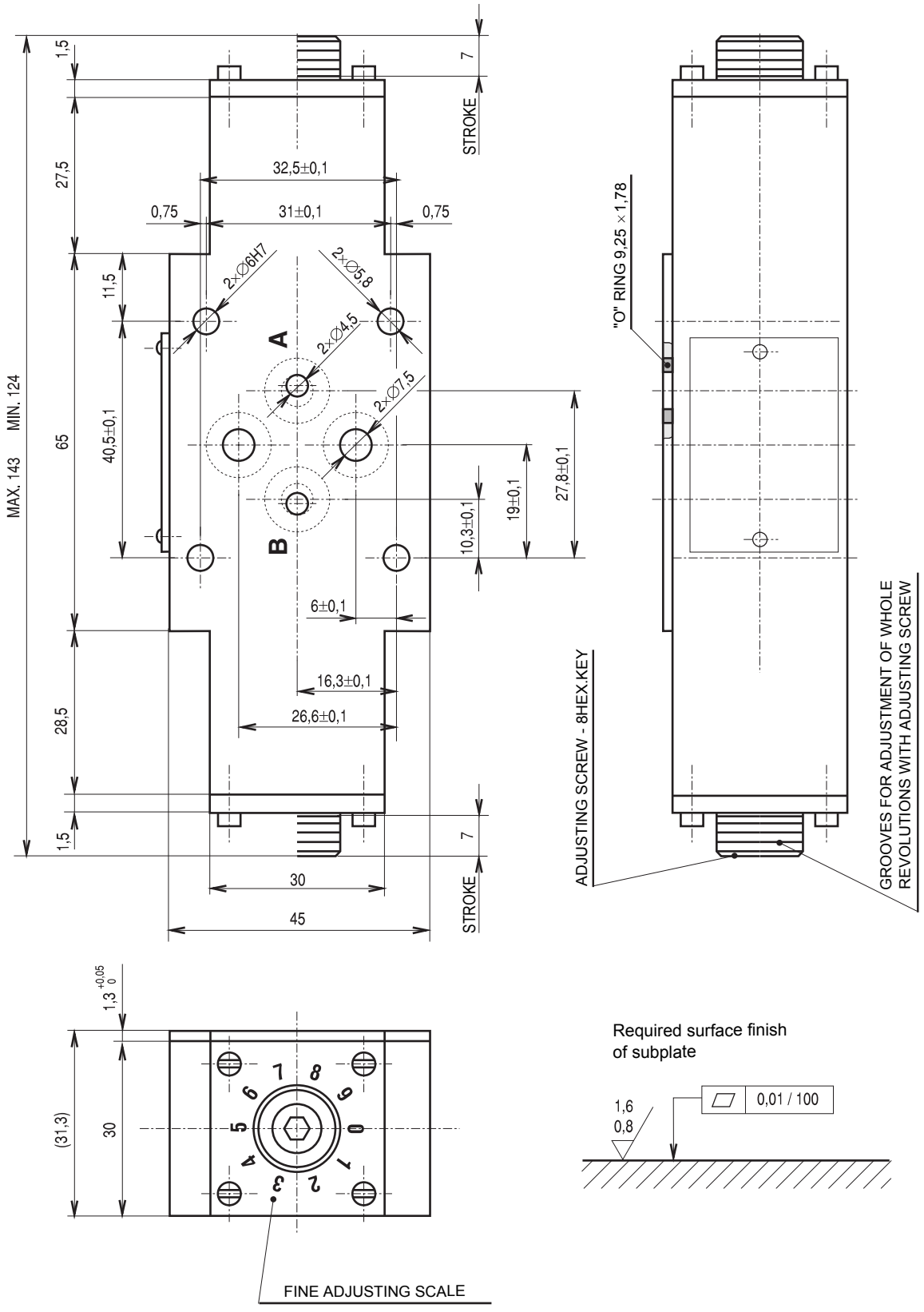


Characteristic of the check valve Δp = f(Q)
M 10-4



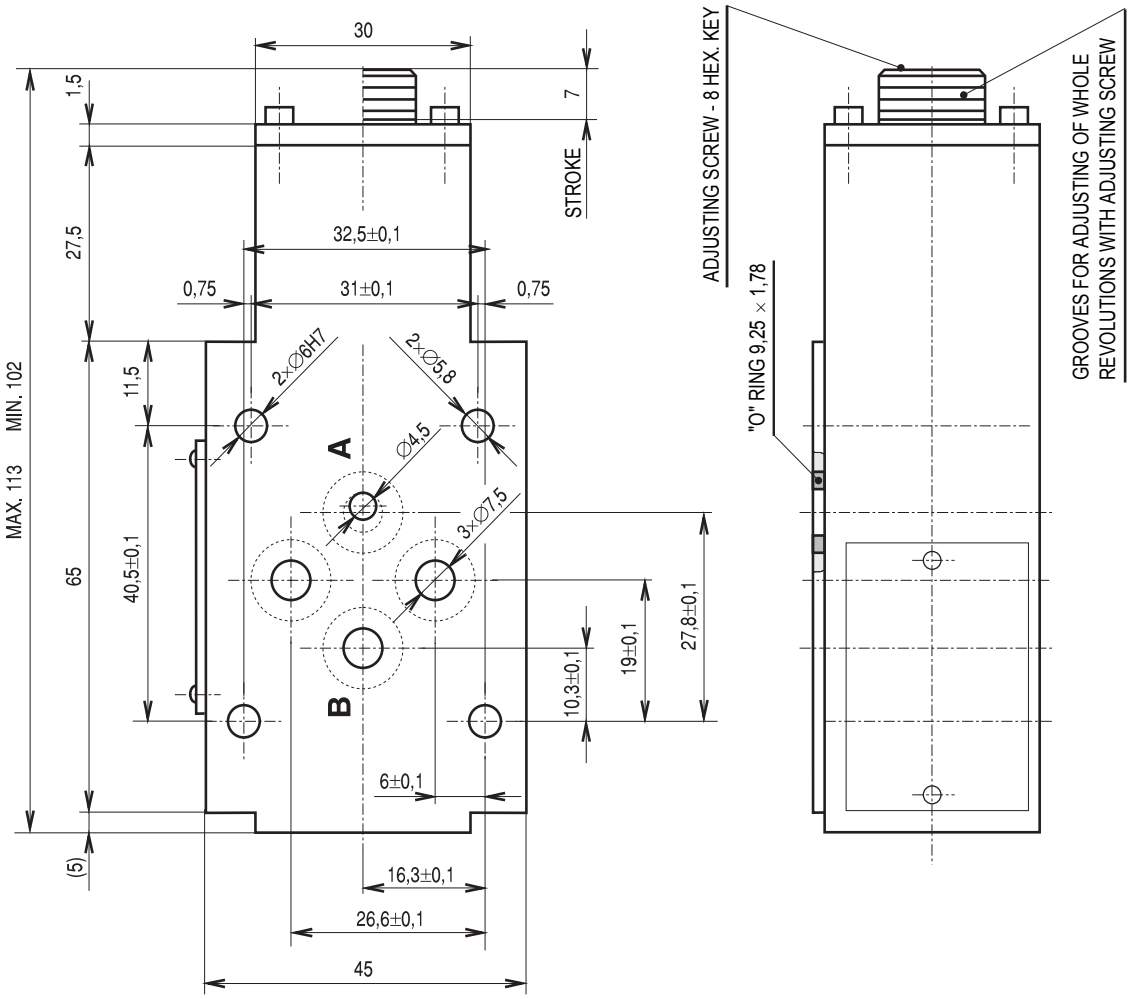
DIMENSIONS

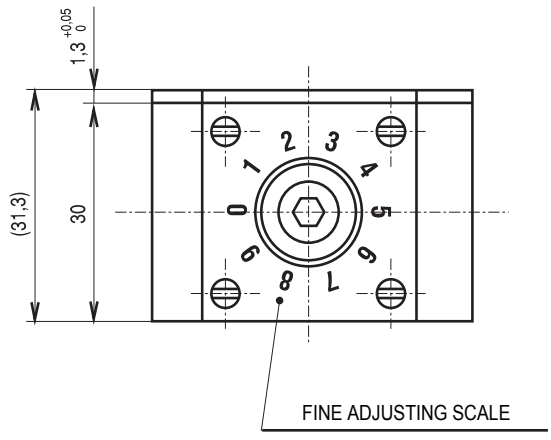
M 06-4

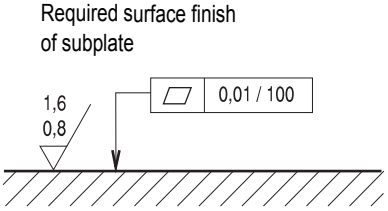


DIMENSIONS

M 06-A-4

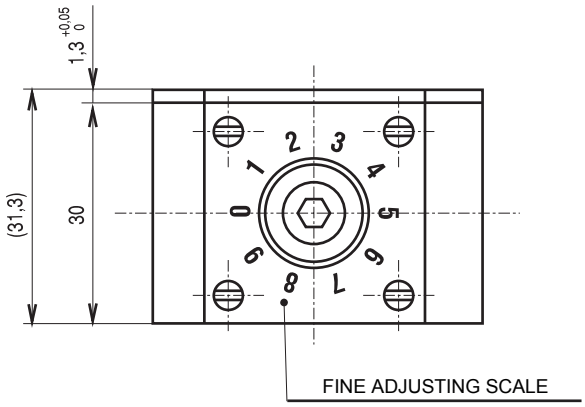


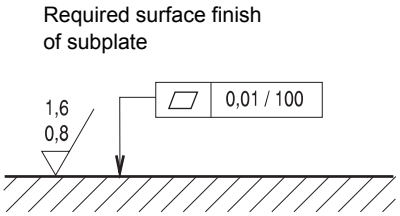


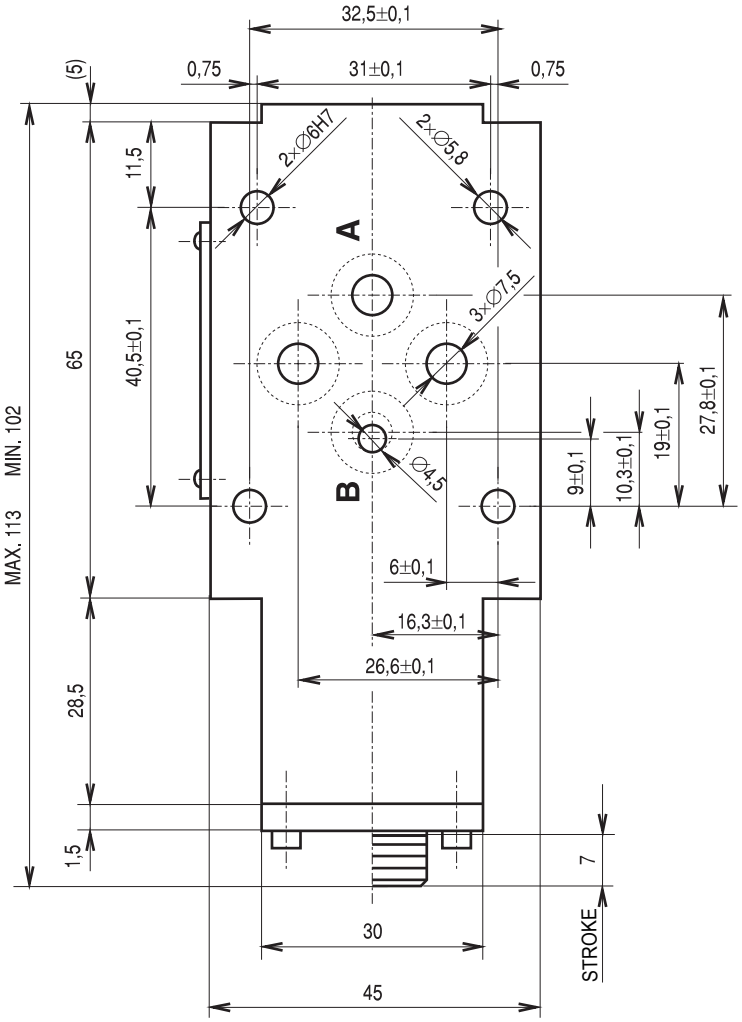


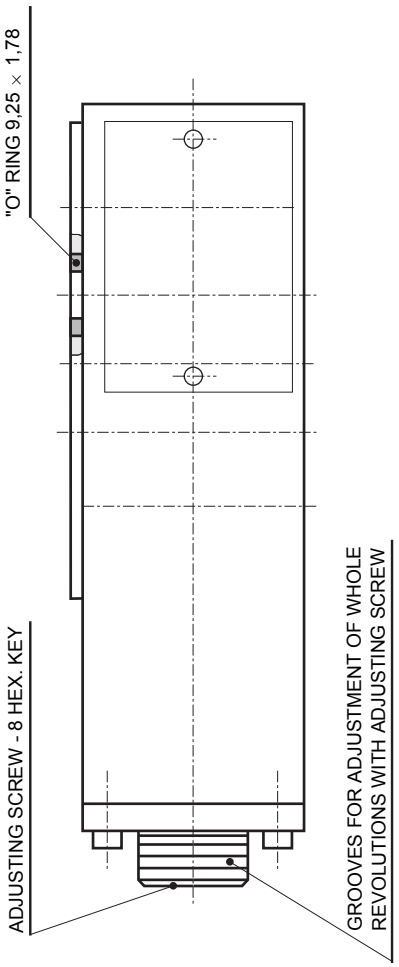
DIMENSIONS

M 06-B-4



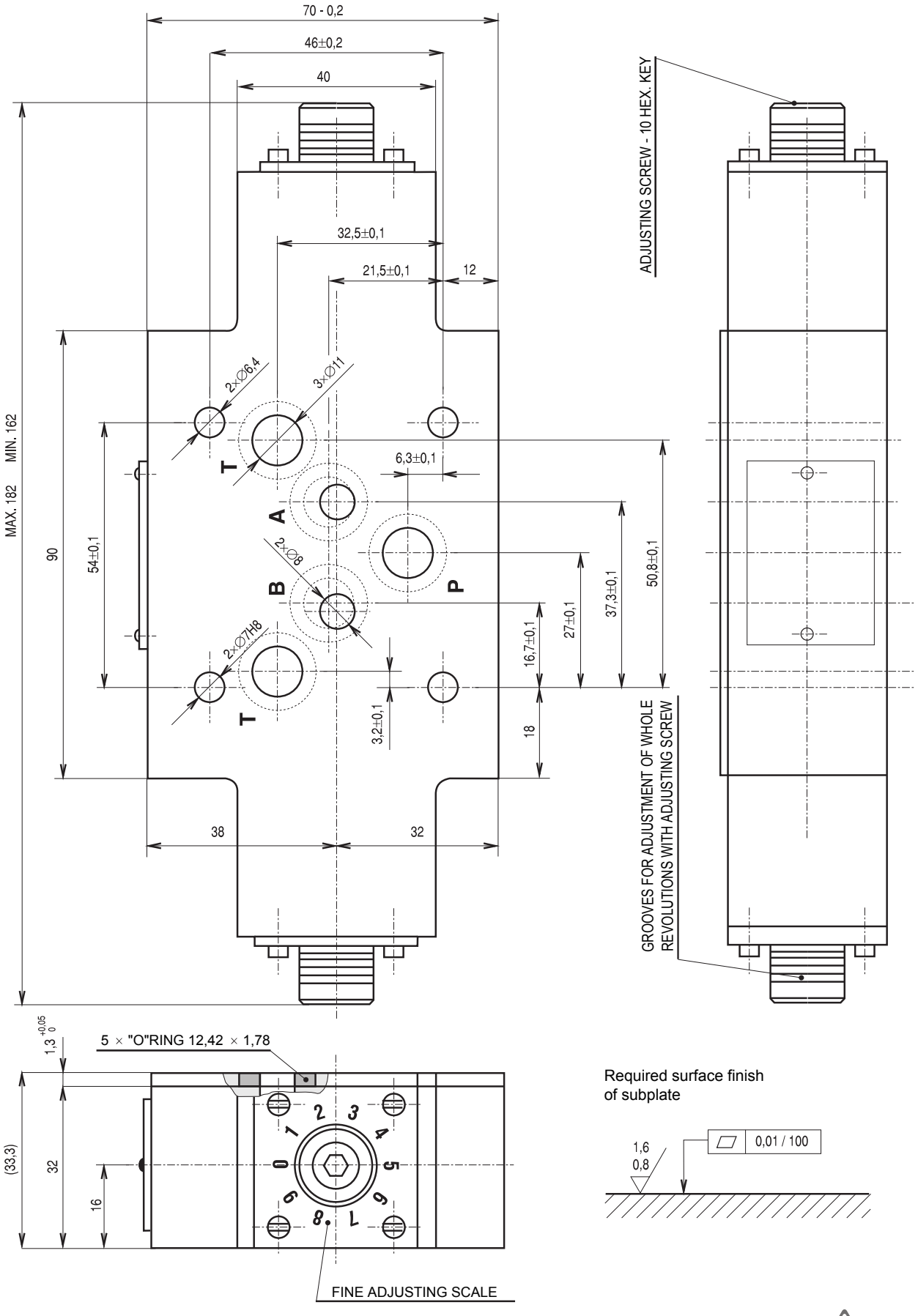






DIMENSIONS

M 10-4



Required surface finish of subplate

NOTES

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