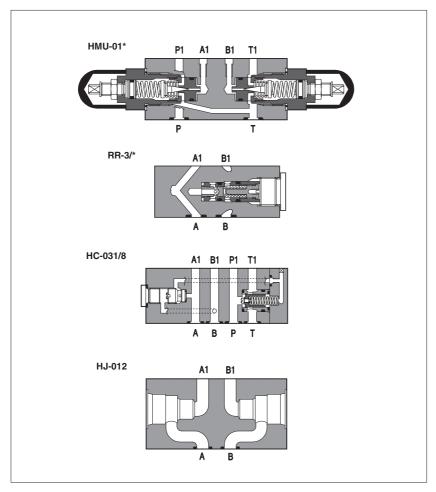


Modular valves HMU, RR-3/*, HC-031 and plates type HJ-012

pressure relief, pressure reducing, pressure compensator, modular plate for cartridge valves



HMU-01 are pressure relief valves in modular execution with ISO4401 size 06 mounting surface, specific for fine pressure control at low flow.

They are mainly used for piloting lines and as pilot stage for AGAM and ARAM pressure relief valves.

RR-3/* are 2 way pressure reducing valves in modular execution with ISO4401size 06 mounting surface, specific for piloting lines.

The reduced pressure has a fixed setting correspondent to the load value of the regulation spring.

The standard setting is 30 bar, available optional settings 7, 14, 24 bar

They are mainly used on DPZO proportional valves to ensure a stable reduced pressure to the pilot valve.

HC-031/8 is a 3 way pressure compensator in modular execution with ISO4401, size 06 mounting surface.

When assembled with directional proportional valves, it provides a constant pressure drop = 8 bar (fixed setting) across the lines P-A or P-B

In this way the flow controlled by the proportional valve is independent to the load variations at the user ports.

They are mainly used in sky lift for the basket levelling control.

HJ-012 is a modular plate with ISO4401size 06 mounting surface, predisposed for the installation on A and B lines of cartridge valves type JO-DL-4-2 (see KT, tab. E115)

In modular combination with directional valves they are used to intercept the A and B user lines and thus prevent the undesired movement of the actuator.

Seals material

PE = FKM

MODEL CODE of HMU pressure relief valve

HMU 011 Modular pressure relief valve Configuration, see section 2 011 = single; acting on port P, dicharge to port T

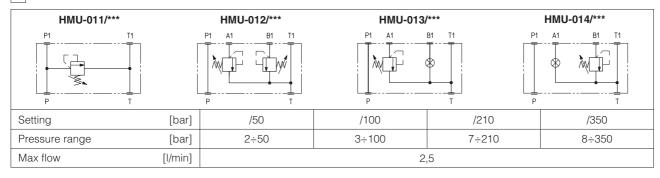
012 = double, acting on ports A and B, discharge to port T

013 = single, acting on port A, discharge to port T 014 = single, acting on port B, discharge to port T

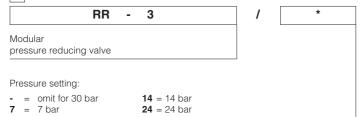
210 **/V** Series number Options: N = setting adjustment by handwheel instead of a grub screw protected by cap

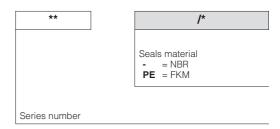
Pressure range $50 = 2 \div 50 \text{ bar}$ $100 = 3 \div 100 \text{ bar}$ 210 = 10÷210 bar $350 = 15 \div 350 \text{ bar}$

HYDRAULIC CHARACTERISTICS of HMU pressure relief valve

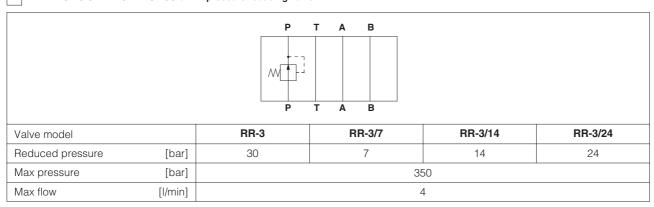


3 MODEL CODE of RR pressure reducing valve

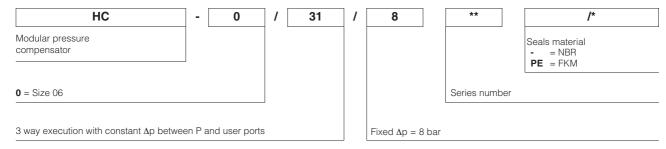




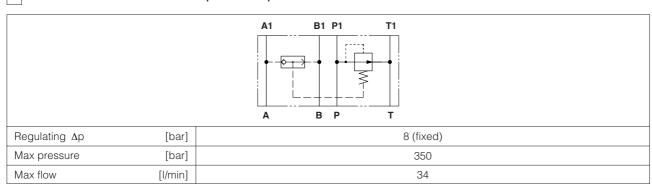
4 HYDRAULIC CHARACTERISTICS of RR pressure reducing valve



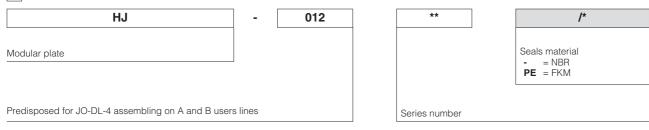
5 MODEL CODE of HC modular pressure compensator



6 HYDRAULIC CHARACTERISTICS of HC pressure compensator

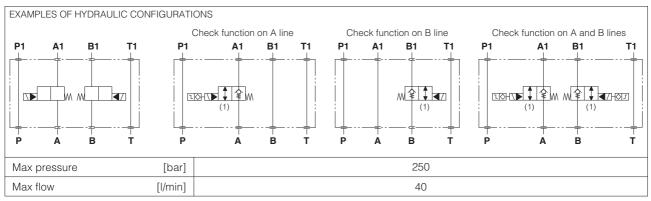


7 MODEL CODE of HJ modular plate



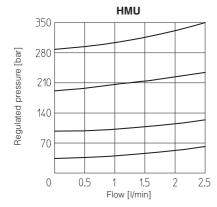
Y-207504 = model code of threaded plug

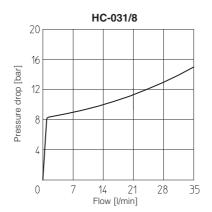
8 HYDRAULIC CHARACTERISTICS of HJ modular plate



(1) Poppet type, screw-in cartridge valves type JO-DL-4-2* to be ordered separately, see KT table E115

9 DIAGRAMS (based on mineral oil ISO VG 46 at 50°C)





10 MAIN CHARACTERISTICS

Assembly position / location	Any position		
Subplate surface finishing	Roughness index Ra 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 4401 class 21/19/16 NAS 1638 class 10 (filters at 25 μm value with β25 ≥ 75 recommended)		
Fluid temperature	-20°C +60°C (standard seals) -20°C +80°C (/PE seals)		

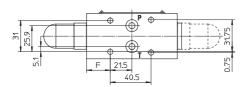
11 DIMENSIONS of HMU pressure relief valve

ISO 4401: 2005

Mounting surface: 4401-03-02-0-05 (see section 15)

Ports P,T: $\emptyset = 7.5 \text{ mm (max)}$

Seals: 2 OR 108





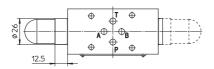


Option /V





For version HMU-014/*** the regulating element is at side of port B (instead of A)



VALVE	Α	В	С	D	E
HMU-011	42,5	71	-	-	-
HMU-012	42,5	90	42,5	-	-
HMU-013	42,5	90	-	4,5	-
HMU-014	-	90	42,5	-	4,5

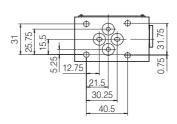
12 DIMENSIONS of RR-3 pressure reducing valve

ISO 4401: 2005

Mounting surface: 4401-03-02-0-05 (see section 15)

Ports A, B, P, T: \emptyset = 7.5 mm (max)

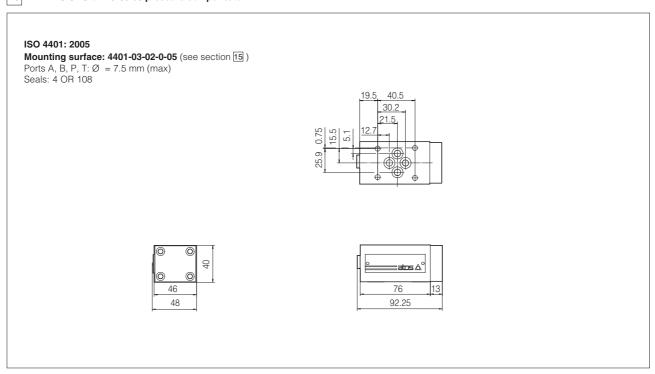
Seals: 4 OR 108



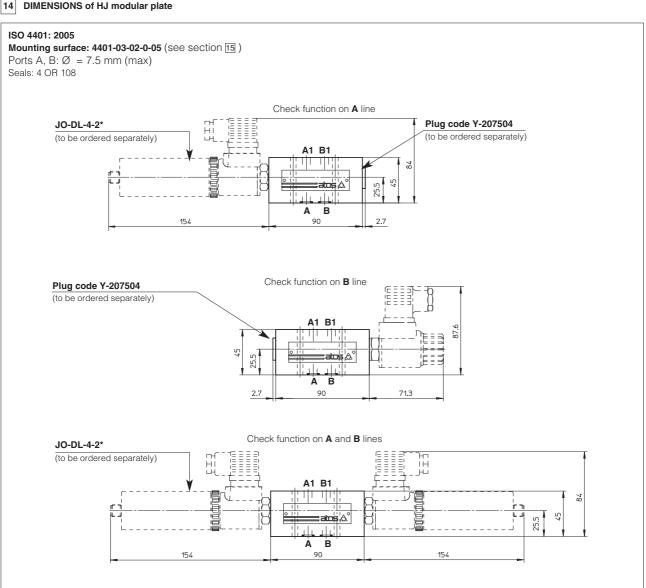




13 DIMENSIONS of HC-031/8 pressure compensator



14 DIMENSIONS of HJ modular plate



15 MOUNTING SURFACE dimensions [mm]

ISO 4401: 2005

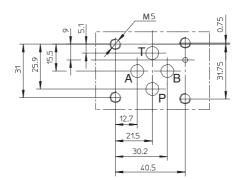
Mounting surface: 4401-03-02-0-05

Fastening bolts:

4 socket head screws M5 class 12.9 Tightening torque = 8 Nm

Seals: OR 108

Ports P,A,B,T: $\emptyset = 7.5 \text{ mm (max)}.$



P = PRESSURE PORTA, B = USE PORTT = TANK PORT

ISO 4401: 2005

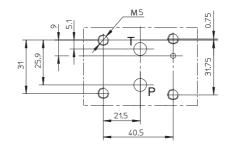
Mounting surface: 4401-03-02-0-05 without ports A and B

Fastening bolts:

4 socket head screws M5 class 12.9 Tightening torque = 8 Nm

Seals: OR 108

Ports P,T: $\emptyset = 7.5 \text{ mm (max)}$.



P = PRESSURE PORT

T = TANK PORT