

Miniature proportional pressure reducing valves type PM

These proportional pressure reducing valves are used for circuits, where other devices i.e. directional spool valves should be controlled with a low flow and varying pressure. The pressure on the secondary side (port A) can be adjusted, independently from the pressure on the primary side, according to an electrical signal. The reduced pressure at port A will change proportional to alternation of the electrical input signal. There is a design related permanent leakage flow apparent at R, which has to be led back to the tank via a depressurized line. These pressure reducing valves feature a override compensation i.e. acting like a pressure limiting valve, if the pressure on the secondary side exceeds the set pressure e.g. due to external forces.

Features and benefits:

- Compact design
- Numerous configurations

Intended applications:

- For control oil supply in piloting circuits



Nomenclature:	Prop. pressure reducing valve
Design:	Assembly kit Individual valve Manifold mounting
Adjustment:	Electro-proportional
p_{max} P:	40 bar
p_{max} A:	19 bar
Q_{max}:	approx.. 2 lpm

Design and order coding example

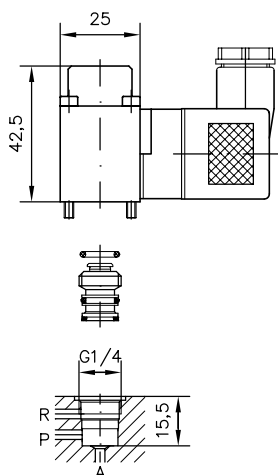
PM 1	- 11	B 0,6	- G24	
				Nominal voltage of proportional solenoid Controls via prop. amplifier or PLVC Type PMZ also available in ATEX-compliant version
				Additional elements ■ Orifice for oscillation damping in A and B ■ Return pressure stop in R
				Prop. adjustable nominal pressure difference [bar]
Basic type	Type PM Type PMZ			
	■ Assembly kit (type PM 1, PMZ 01, PMZ 11)			
	■ For manifold mounting (type PM 11, PM 12)			
	■ Version in valve bank (type PMZ) with up to 10 prop. pressure-reducing valve sections			

Function

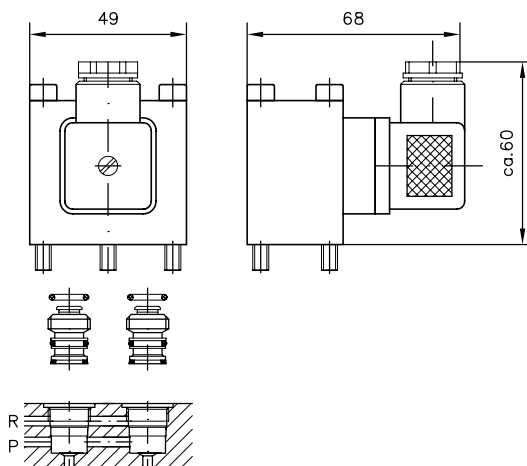


General parameters and dimensions

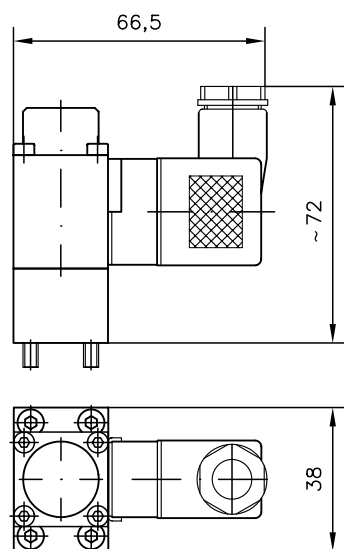
PM 1



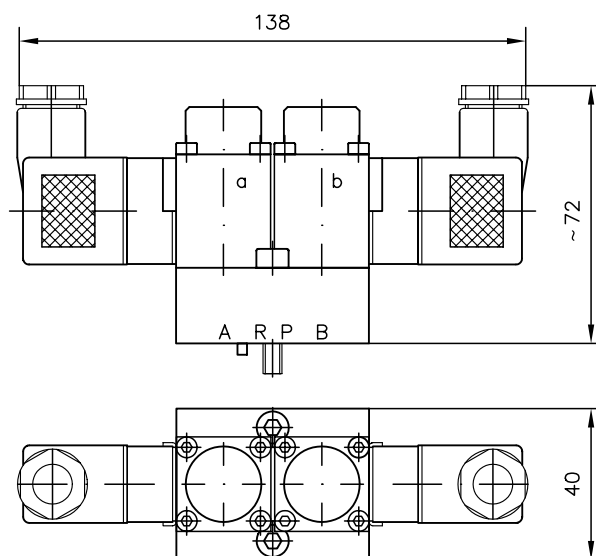
PMZ 1



PM 11



PM 12



	Design		Pressure range (prop. adjustable nom. pressure difference $\Delta p = p_A - p_R$) [bar]
PM 1	Assembly kit	Individual valve	0... 9
PMZ 1, PMZ 01		Twin valve	0... 4.5 and 0... 11.5
PM 11	Valve for manifold mounting	Individual valve	0... 5.5 and 0... 14
PM 12		Twin valve	0... 7.5 and 0... 19

Associated technical data sheets:

- Miniature prop. pressure reducing valves type PM, PMZ: [D 7625](#)

Similar products:

- Prop. pressure reducing valves type PDM: [D 7486](#), [D 7584/1](#)

Prop. amplifier:

- Type EV1M (module): [D 7831/1](#)
- Type EV1G (module): [D 7837](#)

- Type EV1D (module): [D 7831 D](#)

- Type EV22K (card version): [D 7817/1](#)

Additional electrical components:

- Programmable logical valve control type PLVC:
[D 7845-41](#), [D 7845 M](#)