Miniature pressure reducing valves type ADC, AM etc.

The task of pressure-reducing valves is to maintain a largely constant outlet pressure despite a higher and changing inlet pressure. These valves are used when a secondary circuit has to be fed with a lower but constant pressure level by a main (primary) oil circuit with a higher and varying pressure level. The valves mentioned here are suitable for the supply of control circuits with low oil consumption. There is a design-related permanent leakage flow, which has to be led back to the tank in a de-pressurized line via port R. A reversal of the flow direction is possible up to approx. 30% of Q_{max}. A bypass check valve has to be provided for higher reversed flow. These pressure-reducing valves feature an 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 pilot circuits

Nomen-clature:	Pressure reducing valve
Design:	Screw-in valve Valve for pipe connection
Adjustment:	Fixed (non-adjustable)
$p_{max\ P}$: **$p_{max\ A}$:**	300 ... 400 bar 15 ... 100 bar
Q_{max}:	2 ... 10 lpm

Design and order coding example

ADC 1 - 25 - 1/4

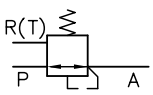
Design
- Cartridge valve
- Design with housing for direct pipe connection
- Version with housing for manifold mounting (type AM 11)

Pressure downstream Pressure at port A [bar]

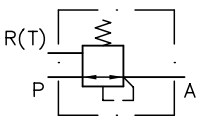
Basic type Type ADC, AM
Type ADM, ADME
- Type ADM 1 adjustable version available

Function

ADC, AM, ADM, ADME



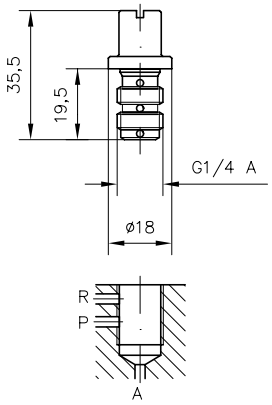
Screw-in valve



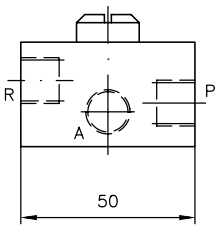
Pipe installation

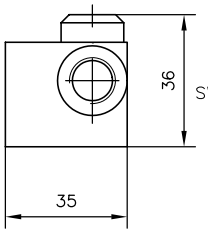
General parameters and dimensions

ADC 1-.25
Pressure reducing valve type ADC 1, screw-in valve, pressure at A approx. 25 bar

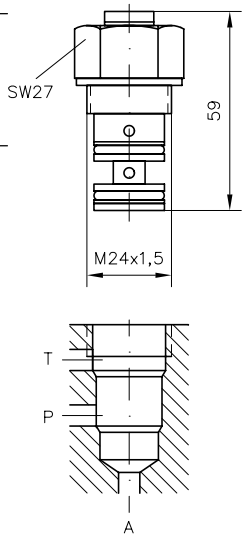


AM 1 - 20 -1/4
Pressure-reducing valve type AM 1, version for pipe connection (ports G 1/4 (BSPP)), pressure at A approx. 20 bar

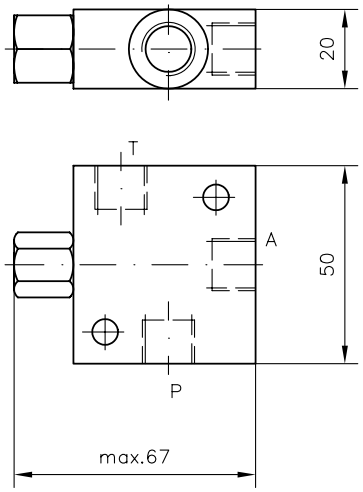




ADME 1-...



ADM 1-70
Pressure-reducing valve type ADM 1, version for pipe connection, pressure at A approx. 70 bar



	Q_{max} [lpm]	p_{max} [bar]	Outlet pressure [bar] at A	Ports (BSPP)[1]	m_{max} [kg]	
					Screw-in valve	Pipe installation
ADC 1	2	300	15, 25	G 1/4	0.03	0.32
AM 1	2	400	20, 30, 40, 100	G 1/4	0.03	0.3
ADM 1	8 ...10	300	15, 20, 30, 70	G 1/4	-	0.34
ADME	8	300	15, 20, 30	-	0.05	-

1) In version for pipe connection only

Associated technical data sheets:
- Miniature pressure-reducing valves type ADC etc.: D 7458
- Prop. pressure-reducing valves type PDM: D 7486, D 7584/1
- Miniature prop. pressure-reducing valves type PM, PMZ: D 7625

Similar products:
- Pressure-reducing valves type ADM, VDM: D 7120, D 5579
- Pressure-reducing valves type CDK: D 7745