

Miniature pressure reducing valves type ADC, AM etc.

The task of pressure reducing valves in a hydraulic circuit is to maintain a rather constant outlet pressure despite a higher and changing inlet pressure. These valves are usually used when a secondary circuit has to be fed with a lower but constant pressure level by a main (primary) circuit with a higher and varying pressure level. These valves are intended for the supply of control circuits with low flow requirements.

There is a design related permanent leakage flow, which has to be led back to the tank via a de-pressurized line. A reversal of the direction of flow is possible up to approx. 30% of Q_{max} . A by-pass 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.



Nomenclature:	Pressure reducing valve
Design:	Screw-in valve Valve for pipe connection
Adjustability:	Fixed (non-adjustable)
$p_{max P}$:	300 ... 400 bar
$p_{max A}$:	15 ... 70 bar
Q_{max} :	2 ... 10 lpm

Basic types and general parameters

Basic type	ADC 1	AM 1	ADM 1 ¹⁾	ADME 1	Symbol	
Flow	2	2	8 ... 10	8	Screw-in valve	Pipe installation
Q_{max} (lpm)						
Max. inlet pressure	300	400	300	300		
p_{max} (bar) at P						
Outlet pressure (bar) at A	15	20	15	15		
	25	30	20	20		
		40	30	30		
		60	70			
Tapped ports (BSPP) ²⁾	G 1/4	G 1/4	G 1/4	-		

¹⁾ Only in version for pipe connection
²⁾ Version for pipe connection

Additional versions

- Type AM 1 also available as manifold mounting valve
- Type ADM 1 also available with manual adjustment

Order examples

ADC 1 - 25

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

ADM 1 - 70

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

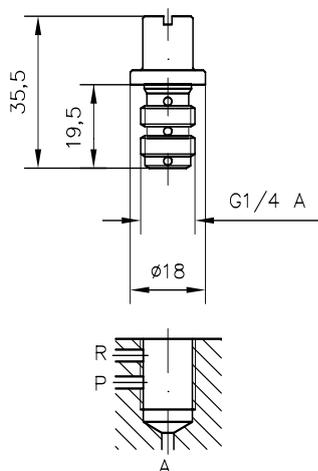
AM 1 - 20 - 1/4

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

Dimensions

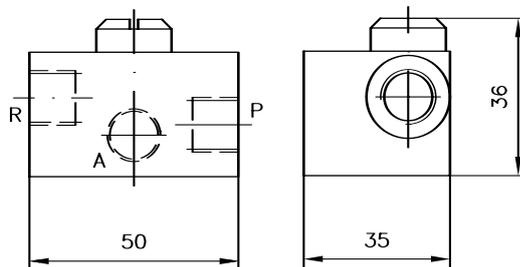
Type ADC 1-...

(see order example)

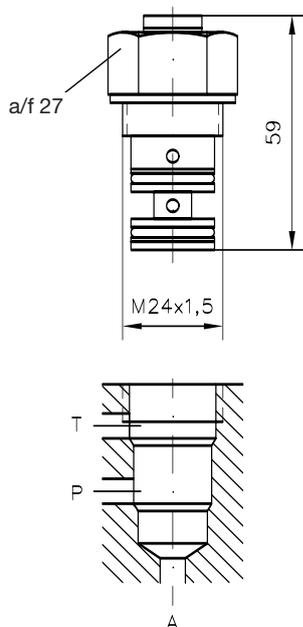


Type AM 1 - ...-1/4

(see order example)

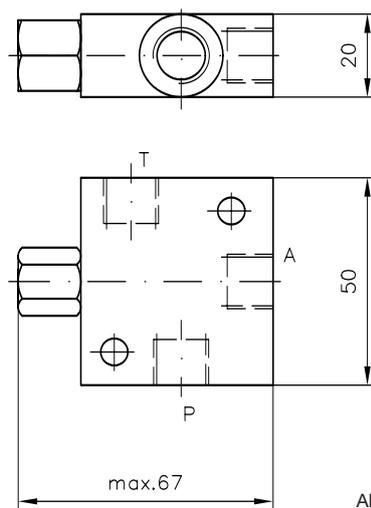


Type ADME 1



Type ADM 1-...

(see order example)



All dimensions in mm, subject to change without notice!

Basic type

m (kg)

	Screw-in valve	Design for pipe connection
ADC 1	0.03	0.32
AM 1	0.03	0.3
ADM 1	-	0.34
ADME 1	0.05	-

Additional information

- Miniature pressure reducing valves type ADC etc. D 7458
 - Pressure reducing valves type ADM D 7120
 - type VDM D 5579
 - type CDK D 7745
 - Prop. pressure reducing valves type PDM D 7584/1, D 7486
 - Miniature prop. pressure reducing valves type PM, PMZ D 7625
 - See also section "Devices for special applications" (Screw-in valves and installation kits)
- For page and section of the devices additionally listed, see type index