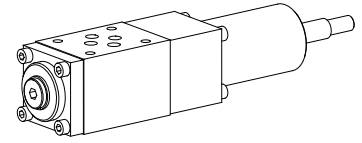


**Pressure reducing valve
 Flange- and sandwich construction**

- Q_{max} = 30 l/min
- p_{max} = 315 bar
- $p_{N red max}$ = 200 bar

NG6
 ISO 4401-03

DESCRIPTION

Flange or sandwich type directly operated 3-way pressure reducing valve. The valve reduces the inlet pressure to a preset output pressure. The integrated pressure relief function prevents the reduced pressure from being exceeded as a result of external forces. Two types of setting and five pressure stages are available. A pressure gauge connection is provided in the reduced connection. A by-pass non-return valve plate for the flange valve for free flow from A to P (B port not drilled) can be ordered separately. In the sandwiches with control in A or B line by-pass check valves are integrated. The flange valve body is painted, the other parts are phosphated.

FUNCTION

The spool is held in the home position by the spring. The connection to the consumer is fully open. The reduced pressure can be adjusted at the adjustment spindle, irrespective of the inlet pressure. If the reduced pressure increases, it displaces the valve towards the spring. The volume flow at the valve inlet is then throttled, controlling the reduced pressure. If forces acting on the consumer allow the reduced pressure to be increased above the set value, the spool is displaced until the valve inlet closes and the tank port opens. The pressure increase is then limited to a low value, controlled by the spring.

APPLICATION

Pressure reducing valves are used for keeping the pressure constant in a consumer, irrespective of pressure fluctuations on the supply side. If several consumers are used, the reduced pressure can be set individually with the aid of one pressure control valve for each consumer. Generally speaking, pressure control valves are used for reducing a hydraulic pressure to a lower level. The integrated pressure relief function obviates the need for any additional pressure relief valve in the reduced pipe. Directly operated pressure reducing valves also keep the reduced pressure stable, even under very difficult operating conditions.

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TYPE CODE

		A	DRV	d	<input type="checkbox"/>	6	<input type="checkbox"/>	/	<input type="checkbox"/>	#	<input type="checkbox"/>
International mounting interface ISO											
Pressure reducing valve											
Direct operated											
Flange	<input type="checkbox"/>	N									
Sandwich pressure red in P	<input type="checkbox"/>	no remark									
Sandwich pressure red in A	<input type="checkbox"/>	A									
Sandwich pressure red in B	<input type="checkbox"/>	B									
Nominal size 6											
Setting versions:	Key	no remark									
	Knob	<input type="checkbox"/>	D								
	Cover	<input type="checkbox"/>	H								
Standard nominal pressure ranges:	$p_{N red} = 31,5$ bar	<input type="checkbox"/>	31,5								
	$p_{N red} = 63$ bar	<input type="checkbox"/>	63								
	$p_{N red} = 125$ bar	<input type="checkbox"/>	125								
	$p_{N red} = 160$ bar	<input type="checkbox"/>	160								
	$p_{N red} = 200$ bar	<input type="checkbox"/>	200								
Design-Index (Subject to change)											

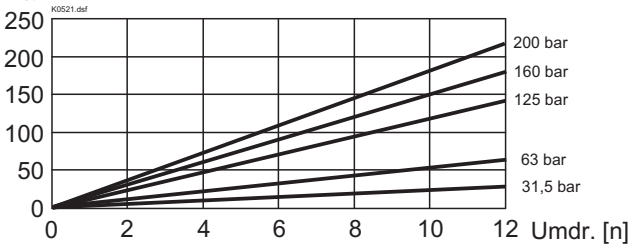
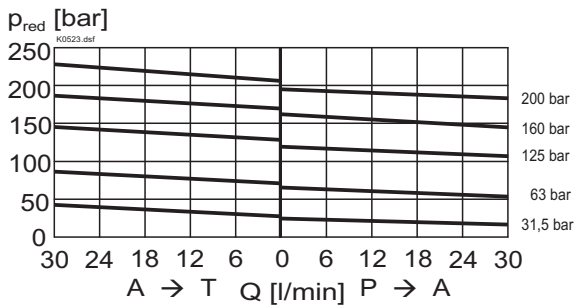
GENERAL SPECIFICATIONS

Description	Direct operated pressure control valve
Nominal size	NG6 acc. to ISO 4401-03
Construction	Flange- or sandwich
Mounting	4 mounting holes for zyl. screws M5 or double ended screws M5
Connection	Threaded connection plates Multi-flange subplates Longitudinal stacking system
Ambient temperature	-20 ... +50 °C
Mounting position	any
Fastening torque	$M_D = 5,5$ Nm (Quality 8.8)
Weight	$m = 2,0$ kg

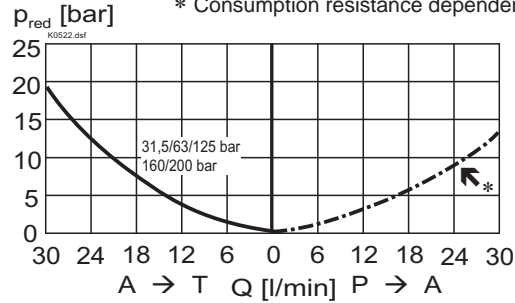
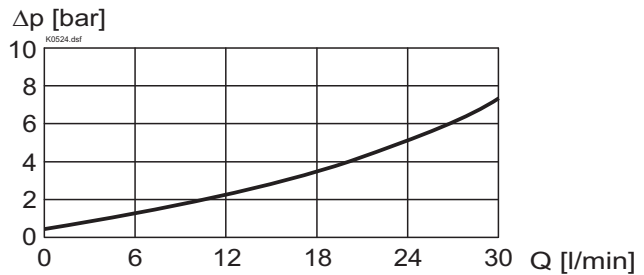
HYDRAULIC SPECIFICATIONS

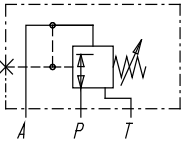
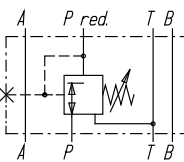
Fluid	Mineral oil, other fluid on request
Contamination efficiency	ISO 4406:1999, class 18/16/13 (Required filtration grade $\beta_{6...10} \geq 75$) refer to data sheet 1.0-50/2
Viscosity range	12 mm ² /s...320 mm ² /s
Fluid temperature	-20...+70 °C
Peak pressure	$p_{max} = 315$ bar
Tank load in connection T	$p_{T max} = 50$ bar
Nominal pressure	$p_{N red} = 31,5$ bar, $p_{N red} = 63$ bar $p_{N red} = 125$ bar, $p_{N red} = 160$ bar $p_{N red} = 200$ bar
Opening pressure to non-return valve	$p_o = 0,2$ bar
Volume flow	$Q = 0...30$ l/min

CHARACTERISTICS oil viscosity $\nu = 30 \text{ mm}^2/\text{s}$
 $p_{red} = f(\alpha)$ Pressure adjustment characteristics

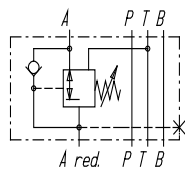
 $p_{red} [\text{bar}]$ $Q = 0 \text{ l/min}$ (static)

 $p_{red} = f(Q)$ Pressure volume flow characteristics

 $p_{min} = f(Q)$ Minimal pressure loss/flow characteristics

* Consumption resistance dependent on system

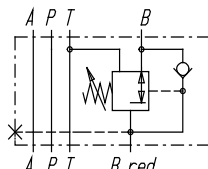

 $\Delta p = f(Q)$ Pressure loss/flow characteristics over RV

TYPES / DIMENSIONS

 Flange construction
 ADRVdN6

 Sandwich construction
 ADRVd6


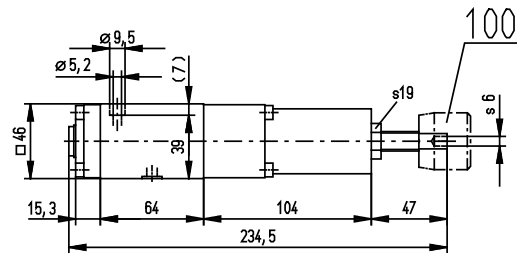
ADRVdA6



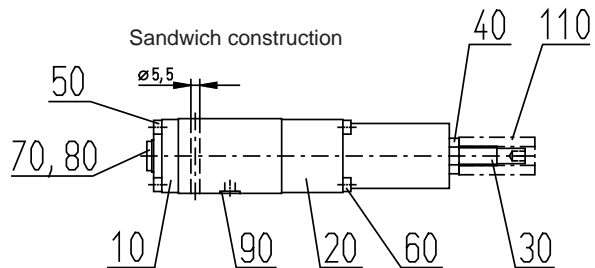
ADRVdB6



Flange construction



Sandwich construction


PARTS LIST

Position	Article	Description
10	58.4701	Lid
20	86.2800	Housing
30	80.3119	Adjustment screw
40	153.1601	Hexagonal nut 0,5D M12
50	246.2116	Cylinder screw M5x16 DIN912
60	246.2145	Cylinder screw M5x45 DIN912
70	238.2204	Plug G1/4" DIN908
80	49.2132	Seal ring ID 13,7x20x1,5
90	160.2093	O-ring ID 9,25x1,78
100	114.1202	Knob
110	154.7100	Cap nut

Technical explanation see data sheet 1.0-100



Spindle not secured against unscrewing

For sandwich red. pressure in B the adjusting parts are on A-side

ACCESSORIES

Threaded connection plate and multi-flange subplates

Reg. 2.9

Bypass non-return valve ADRVp6