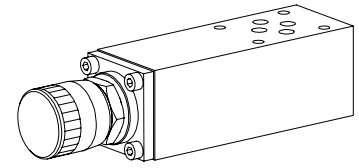


**2-way flow control valve
 Flange- and sandwich construction**

- $Q_{max} = 16 \text{ l/min}$
- $Q_{Nmax} = 16 \text{ l/min}$
- $p_{max} = 250 \text{ bar}$

NG6
 ISO 4401-03


DESCRIPTION

2-way flow control valve in flange and sandwich construction. Fitted with 2-way flow control slip-in cartridges. The valve is available in two different setting versions, turning knob and lockable type EWA. In its standard form, this control valve can be supplied with four nominal volume flow ranges. A bypass non-return valve plate for the flange valve -for free flow from B to A- can be ordered separately. In its sandwich versions in A, B and AB the bypass non-return valve is installed in the plate. The flange valve body is painted, the sandwich plates and the cartridge body are phosphatized. The aluminium turning knob is colorless anodized.

FUNCTION

The 2-way flow control valve is designed to keep to oil flow to any actuator constant irrespective of the load. By turning the knob of the variable restrictor the volume flow can be adjusted. If the pressure in the system changes the pressure compensator will change the diameter of the oil passage in order to keep the pressure drop over the restrictor constant.

APPLICATION

Sandwich type flow control valves are used where the supply volume flow has to be kept constant even when the load fluctuates. Depending on the application, a distinction is made between restricting the forward flow or the return flow. These sandwich valves are particularly suitable for machine tools and also all types of handling operations.

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TYPE CODE

	A	MR	6 / 2 -	-	#
International mounting interface ISO					
Flow control valve					
Flange					
Flow control from	A to B	<input type="checkbox"/> N			
Sandwich					
Flow control:	P	no remark	T	<input type="checkbox"/> T	
Meter-out flow control:	A	<input type="checkbox"/> A	B	<input type="checkbox"/> B	
	A and B	<input type="checkbox"/> AB			
Meter-in flow control:	A	<input type="checkbox"/> VA	B	<input type="checkbox"/> VB	
	A and B	<input type="checkbox"/> VAB			
Nominal size 6					
2-way function					
Nominal volume	$Q_N = 2,5 \text{ l/min}$	<input type="checkbox"/> 2,5			
	$Q_N = 6,3 \text{ l/min}$	<input type="checkbox"/> 6,3			
	$Q_N = 12,5 \text{ l/min}$	<input type="checkbox"/> 12,5			
	$Q_N = 16 \text{ l/min}$	<input type="checkbox"/> 16			
Additional marking for lock adjustment		<input type="checkbox"/> EWA			
Design-Index (Subject to change)					

GENERAL SPECIFICATIONS

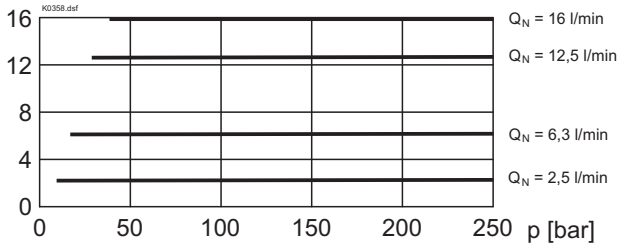
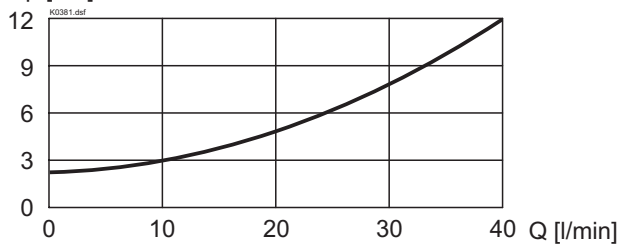
Description	2-way flow control valve
Nominal size	NG6 acc. to ISO 4401-03
Construction	Flange- or sandwich
Mounting	4 mounting holes for socket head screws M5 or double ended screws M5
Connections	Threaded connection plates, Multi-flange sub-plates, Longitudinal stacking system
Ambient temperature	-20...+50°C
Mounting position	any
Fastening torque	$M_D = 5,5 \text{ Nm}$ (quality 8.8)
Weight	depending on the type 1,7...3,1 kg

HYDRAULIC SPECIFICATIONS

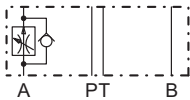
Fluid	Mineral oil, other fluid on request
Contamination efficiency	ISO 4406:1999, class 18/16/13 (Required filtration grade $\beta_{6...10} \geq 75$) refer to data sheet 1.0-50/2
Viscosity range	12 mm ² /s...320 mm ² /s
Fluid temperature	-20...+70°C
Peak pressure	$p_{max} = 250 \text{ bar}$
Pressure required to open the check valve	$p_o = 2,2 \text{ bar}$
Nominal volume flow rates	$Q_N = 2,5 \text{ l/min}$, $Q_N = 6,3 \text{ l/min}$ $Q_N = 12,5 \text{ l/min}$, $Q_N = 16 \text{ l/min}$
Min. volume flow	$Q_{min} = 0,02 \text{ l/min}$
Max. volume flow	$Q_{max} = 16 \text{ l/min}$
Control accuracy	$\leq 1\%$

For further hydraulic specifications refer to data sheet 2.5-582.

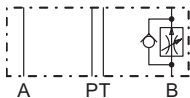
CHARACTERISTICS Oil viscosity $\nu = 30 \text{ mm}^2/\text{s}$
 $Q = f(p)$ Pressure drop/flow characteristics

 Q [l/min]

 $\Delta p = f(Q)$ Pressure loss/flow characteristics
 Δp [bar] over non-return valve

SYMBOLS / DIMENSIONS

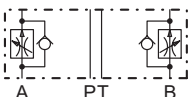
Meter-out flow control



AMRA6/2

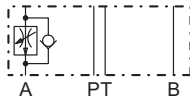


AMRB6/2

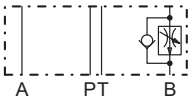


AMRAB6/2

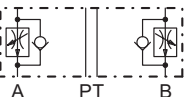
Meter-in flow control



AMRVA6/2

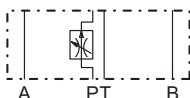


AMRVB6/2

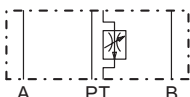


AMRVAB6/2

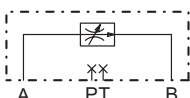
By turning around valves with meter-out function, meter-in function can be achieved.

 A turns into VB
 B turns into VA
 AB turns into VAB
 Valves for meter-in functions are supplied with a sealing plate and a intermediate plate.


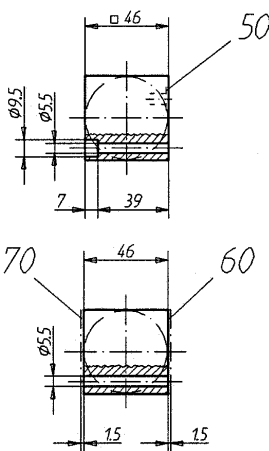
AMR6/2



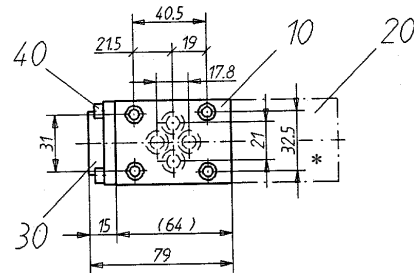
AMRT6/2



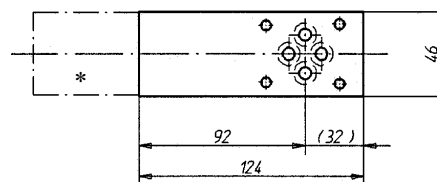
AMRN6/2



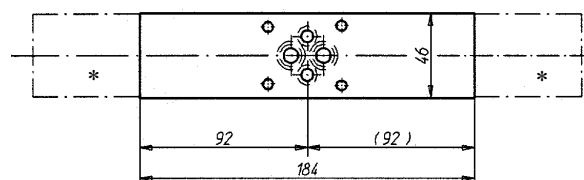
Flange type AMRN6/2



Sandwich types AMR, T, A, VA6/2


 On sandwich types AMRB, VB6/2
 cartridge is located on B-side

Sandwich types AMRAB, VAB6/2


 * The total length depends on the cartridge type,
 see data sheet 2.5-582

PARTS LISTS

Position	Article	Description
10	134.6200 134.6601 134.6602 134.6603 134.6604	Flange body Sandwich plate P, T Sandwich plate AB, VAB Sandwich plate B, VB Sandwich plate A, VA
20	633.0 . . .	Flow control cartridge MR602 Data sheet 2.5-582
30	58.2200	Cover
40	246.2112	Zyl. screw M5x12 DIN 912
50	160.2093	O-ring ID 9,25x1,78 Flange and Sandwich P, T
50	160.2076 160.2120	O-ring ID 7,65x1,78 für Sandwich A, B, AB, VA, VB, VAB O-ring ID 12,42x1,78 incl. RV
60	173.3700	Intermediate plate AZB6
70	173.3650	Sealing plate ADB6

ACCESSORIES

 Threaded connection plates and Multi-flange subplates Register 2.9
 Bypass non-return valve AMRP62
 Technical explanation see data sheet 1.0-100E