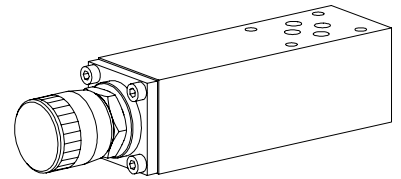


**3-way flow control valve
 Flange- and sandwich construction**

- $Q_{max} = 22 \text{ l/min}$
- $Q_{Nmax} = 20 \text{ l/min}$
- $p_{max} = 250 \text{ bar}$

NG6
 ISO 4401-03


DESCRIPTION

3-way flow control valve in flange- and sandwich construction NG6 with interface acc. to ISO 4401-03. Fitted with 3-way flow control slip-in cartridges acc. to Wandfluh standard (see data sheet 2.5-583). The valve is available in two different setting versions: turning knob and lock-able type EWA. In its standard form, this regulating valve can be supplied with one nominal volume flow range. The flange valve body is painted, the sandwich plates and the cartridge body are phosphatized. The aluminium turning knob is colorless anodized.

FUNCTION

The 3-way flow control valve is designed to keep the oil flow to any actuator constant irrespective of the load. Surplus volume flow will be diverted to the tank line thus saving energy and preventing an overheating of the hydraulic system. 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

Flow control valves in flange- and sandwich construction are suitable for precise feed control systems where the supply volume flow has to be kept constant even when the load fluctuates.

CONTENT

GENERAL SPECIFICATIONS	1
HYDRAULIC SPECIFICATIONS	1
CHARACTERISTICS	2
SYMBOLS/ DIMENSIONS	2
PARTS LIST	2
ACCESSORIES	2

TYPE CODE

International mounting interface ISO	A	MR	<input type="checkbox"/>	6 / 3	-	20	-	<input type="checkbox"/>	#	<input type="checkbox"/>
Flow control valve										
Flange construction	<input checked="" type="checkbox"/>	N								
Sandwich construction in P	no remark									
Nominal size 6										
3-way function										
Nominal volume	$Q_N = 20 \text{ l/min}$									
Additional marking for lock adjustment	<input checked="" type="checkbox"/> EWA									
Design-Index (Subject to change)										

GENERAL SPECIFICATIONS

Description	3-way flow control valve
Nominal size	NG6 according to ISO 4401-03
Construction	Flange- or sandwich construction
Mounting	4 mounting holes for socket head screws M5 or studs M5
Connections	Threaded connection plates, Multi-flange subplates, Longitudinal stacking system
Ambient temperature	-20...+50° C
Mounting position	any
Fastening torque	$M_0 = 5,5 \text{ Nm}$ (quality 8.8)
Weight: AMRN6/3	$m = 1,5 \text{ kg}$
AMR6/3	$m = 2,5 \text{ kg}$

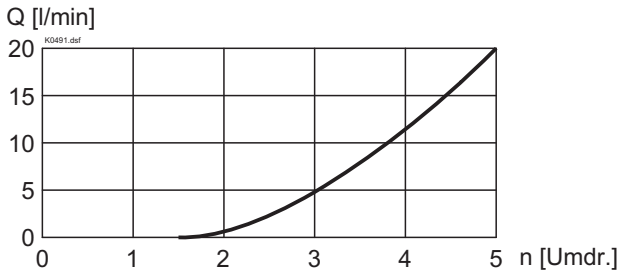
HYDRAULIC SPECIFICATIONS

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	$p_{max} = 250 \text{ bar}$
Nominal volume flow rate	$Q_N = 20 \text{ l/min}$
Min. volume flow	$Q_{min} = 0,02 \text{ l/min}$
Max. volume flow	$Q_{max} = 22 \text{ l/min}$
Control accuracy	$\leq 1\%$

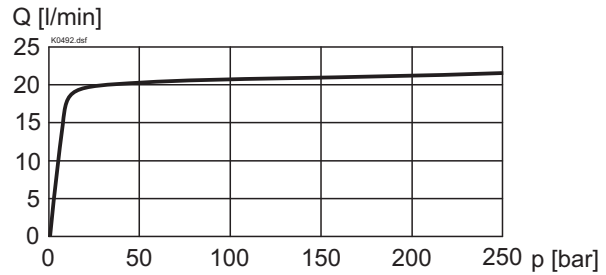
For further hydraulic specifications refer to data sheet 2.5-583.

CHARACTERISTICS Oil viscosity $\nu = 30 \text{ mm}^2/\text{s}$

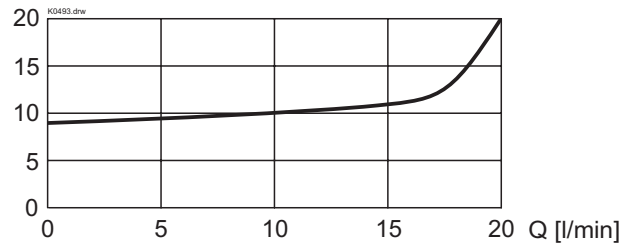
$Q = f(n)$ Volume flow adjustment characteristics



$Q = f(p)$ Volume flow pressure characteristic

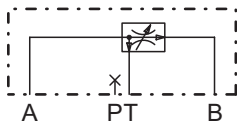


$\Delta p = f(Q)$ Pressure drop volume flow characteristic over pressure compensator

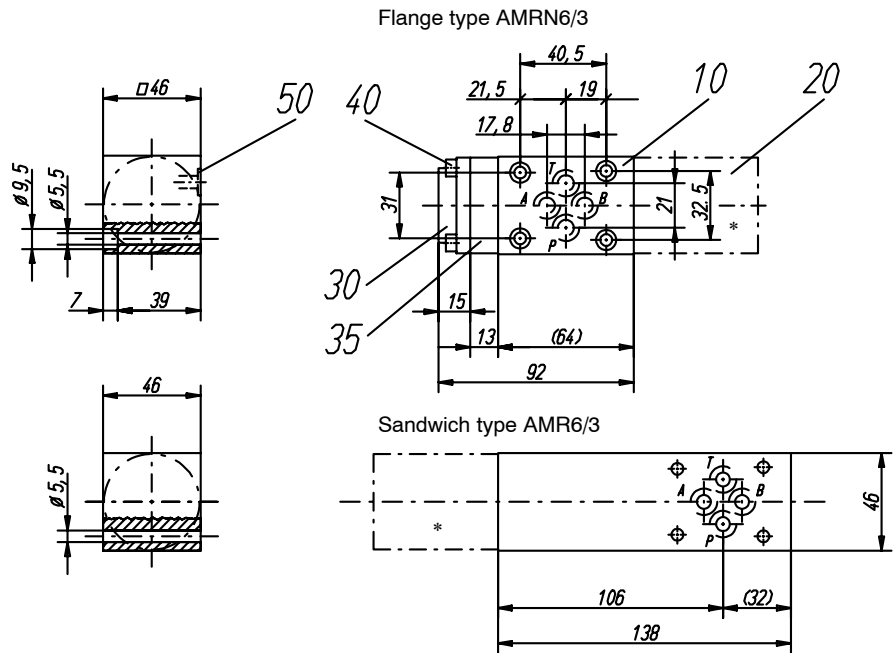
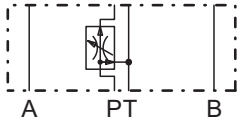


SYMBOLS / DIMENSIONS

AMRN6/3



AMR6/3



* The total lengths depend on the cartridge type, see data sheet 2.5-583.

PARTS LIST

Position	Article	Description
10	134.6201 134.6621	Flange body Sandwich plate P
20	633.0 . . .	Flow control cartridge MR603 to data sheet 2.5-583
30	058.2200	Cover
40	246.2125	Socket head cap screw M5x25 DIN 912
50	160.2093	O-ring ID 9,25x1,78

ACCESSORIES

Threaded connection plates and multi-flange subplates Register 2.9

Technical explanation see data sheet 1.0-100E