

Pressure reducing valve

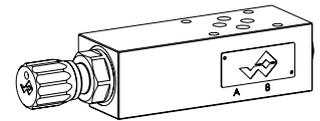
Flange- or Sandwich construction

- ◆ pilot operated
- ◆ $p_{\max} = 400 \text{ bar}$
- ◆ $p_{N \text{ red } \max} = 350 \text{ bar}$
- ◆ $Q_{\max} = 80 \text{ l/min}$

DESCRIPTION

Pilot operated pressure reducing valve in flange or sandwich construction. The valve reduces the input pressure to an adjustable output pressure. Through the integrated pressure relief function, exceeding the reduced pressure as a result of external forces is avoided. The pressure reducing valve controls the pressure in the consumer port. Through increasing the spring tension, the pressure in the consumer port rises. The valve operates practically independently of the input pressure. Pressure increase in the consumer port to above the adjusted value, e.g. through an active consumer, is avoided by discharging excess oil to the tank. A bypass non-return valve plate for the free flow from A to P can be ordered separately for the flange execution.

NG6
ISO 4401-03



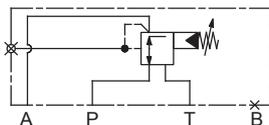
APPLICATION

Pressure reducing valves are used to maintain the pressure in a consumer constant independent of pressure fluctuations on the supply side. In the case of several consumers, the pressure of the specific consumers can be individually adjusted by the pressure reducing valve. The integrated pressure relief makes an additional pressure relief valve in the consumer line superfluous.

SYMBOL

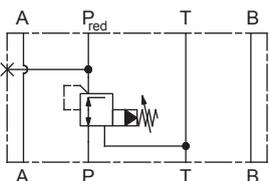
Flange execution

MV.FA06-P/A



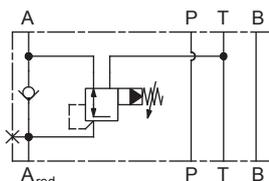
Sandwich execution

MV.SA06-P



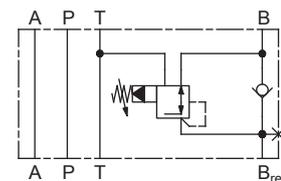
Sandwich execution

MV.SA06-A



Sandwich execution

MV.SA06-B



GENERAL SPECIFICATIONS

Designation	Pressure reducing valve
Construction	Pilot operated
Mounting	Flange- or Sandwich construction
Nominal size	NG6 according to ISO 4401-03
Actuation	Manually
Ambient temperature	-25...+70 °C (NBR) -20...+70 °C (FKM)
Weight	1,85 kg (Flange construction) 1,62 kg (Sandwich P) 2,00 kg (Sandwich A and B)
MTTFd	150 years

ACTUATION

Actuation	Adjustment spindle M8 x 1
Execution	S = blockable key adjustment D = blockable knob adjustment Optionally: K = lockable adjustment G = star handle adjustment → see Data sheet 2.0-50
Actuation angle	$\alpha_b = 1800^\circ$ (5 rotations)
Actuation stroke	$S_b = 5 \text{ mm}$

TYPE CODE

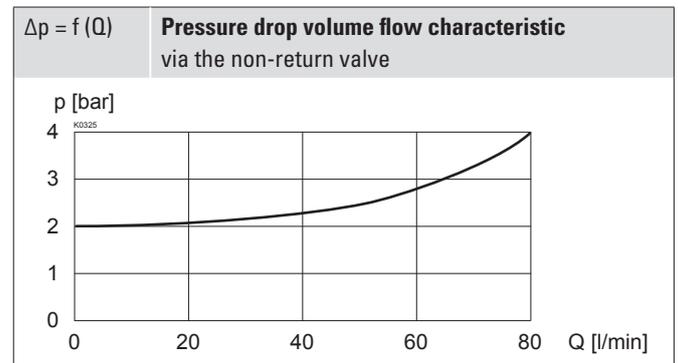
Pressure reducing valve		M	V	<input type="checkbox"/>	<input type="checkbox"/>	A06	-	<input type="checkbox"/>	-	<input type="checkbox"/>	-	<input type="checkbox"/>	#	<input type="checkbox"/>
Pilot operated														
Type of adjustment	Key	<input type="checkbox"/>												
	Control knob	<input type="checkbox"/>												
	Cover	<input type="checkbox"/>												
Flange construction	<input type="checkbox"/>													
Sandwich construction	<input type="checkbox"/>													
International standard interface ISO, NG6														
Type list / Function	flange construction P → A	<input type="checkbox"/>												
		<input type="checkbox"/>												
		<input type="checkbox"/>												
Nominal pressure range p_N	63 bar	<input type="checkbox"/>												
	160 bar	<input type="checkbox"/>												
	350 bar	<input type="checkbox"/>												
Sealing material	NBR	<input type="checkbox"/>												
	FKM (Viton)	<input type="checkbox"/>												
Design index (subject to change)														

2.2-640

HYDRAULIC SPECIFICATIONS

Working pressure	$p_{max} = 400 \text{ bar}$
Nominal pressure range	$p_{N \text{ red}} = 63 \text{ bar}, 160 \text{ bar}, 350 \text{ bar}$
Opening pressure	$p_o = 2 \text{ bar}$ over non-return valve
Volume flow range	$Q = 0 \dots 80 \text{ l/min}$
Fluid	Mineral oil, other fluid on request
Viscosity range	$12 \text{ mm}^2/\text{s} \dots 320 \text{ mm}^2/\text{s}$
Temperature range fluid	-25...+70 °C (NBR) -20...+70 °C (FKM)
Contamination efficiency	Class 18 / 16 / 13
Filtration	Required filtration grade $\beta_{10 \dots 16} \geq 75$, see data sheet 1.0-50

PERFORMANCE SPECIFICATIONS

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

Note!


Detailed performance specifications as well as further hydraulic specifications can be found on the data sheet of the pressure reducing cartridge installed.

Attention!


The performance data especially the „pressure-flowcharacteristic“, on the data sheets of the screw-in cartridges refer to the screw-in cartridges only. The additional pressure drop of the flange body respectively sandwich body must be taken into consideration.

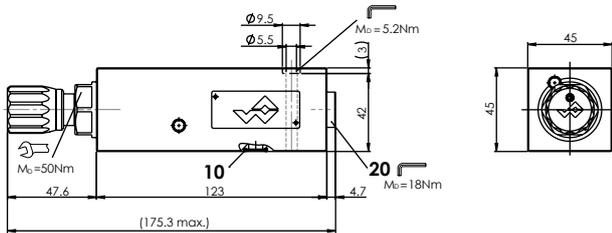
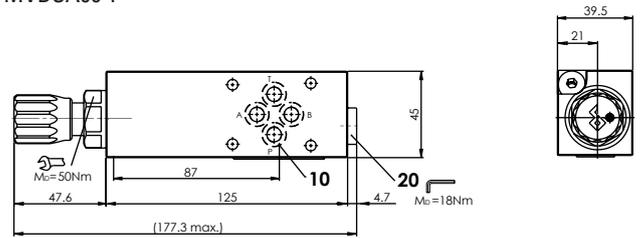
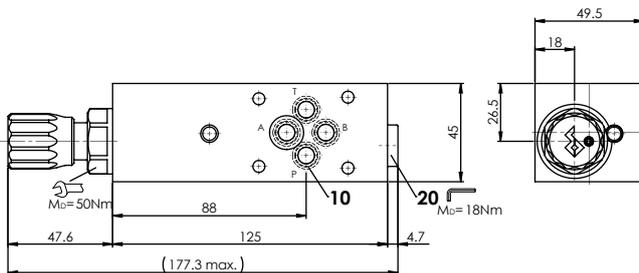
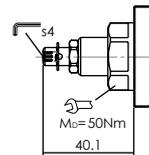
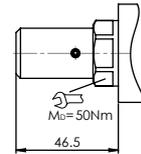
VALVES INSTALLED

The following screw-in cartridges are used in either the flange body or the sandwich body.

Article	Description	Data sheet no.
MV.PM22	Pilot operated pressure reducing cartridge	2.2-530

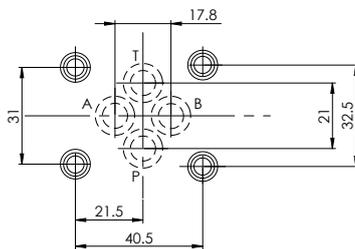
Attention! * Kann gegenüber dem Wert auf dem Datenblatt der Schraubpatrone abweichen.


DIMENSIONS

 Flange execution
 MV DFA06-P/A

 Sandwich execution
 MV DSA06-P

 Sandwich execution
 MV DSA06-A
 MV DSA06-B (cartridge on B-side)

 Type of adjustment
 MV SSA06

 Type of adjustment
 MV ASA06

Note!


* The exterior dimensions or the cartridges can be obtained from the corresponding data sheets.

HYDRAULIC CONNECTION



PARTS LIST

Position	Article	Description
20	238.2406	Screw plug VSTI G1/4"-ED
-	251.2410	Seal kit MV.SA06
-	251.2418	Seal kit MV.SA06 D1

Seal kit consisting of

10	O-Ring	ID 9,25 x 1,78
	251.2411	Seal kit MVSPM22
	251.2417	Seal kit MVSPM22 D1

ACCESSORIES

Adjustment types for screw-in cartridges	Data sheet 2.0-50
Threaded subplates	Data sheet 2.9-05
Multi-station subplates	Data sheet 2.9-45
Horizontal mounting blocks	Data sheet 2.9-85
Technical explanations	Data sheet 1.0-100
Filtration	Data sheet 1.0-50

INSTALLATION NOTES

Mounting type	Flange or sandwich mounting 4 fixing holes for socket head screws or studs M5
Mounting position	Any, preferably horizontal
Tightening torque	Fixing screws $M_0 = 5,2 \text{ Nm}$ (quality 8.8, zinc coated) Screw-in cartridge $M_0 = 60 \text{ Nm}$

SURFACE TREATMENT

- ◆ The flange body is painted with a two component paint
- ◆ The sandwich bodies are zinc-nickel coated

SEALING MATERIAL

NBR or FKM (Viton) as standard, choice in the type code

STANDARDS

Mounting interface	ISO 4401-03
Contamination efficiency	ISO 4406

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