

RE 26 099/02.03

Replaces: 11.02

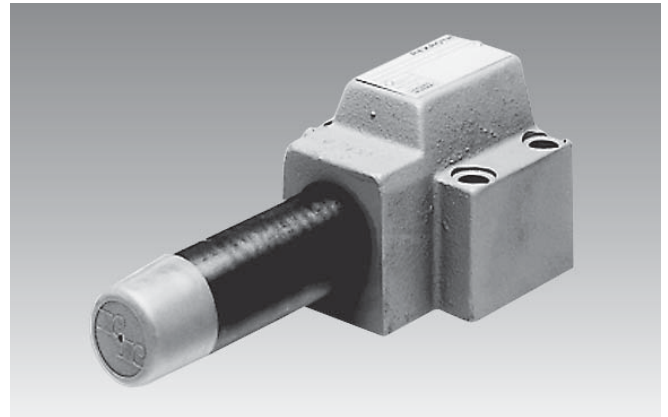
**Pressure sequence valve, direct operated,
Type DZ 10 DP**

Nominal size 10

Series 4X

Maximum operating pressure 210 bar

Maximum flow 80 L/min



K 4786/11

Type DZ 10 DP2-4X/...M..

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Features

- For subplate mounting
- Porting pattern to DIN 24 340 form D, ISO 5781 and CETOP–RP 121 H
- For subplates see catalogue sheet RE 45 062 (separate order)
- 4 pressure stages
- 4 adjustment elements:
 - Rotary knob
 - Set screw with hexagon and protective cap
 - Lockable rotary knob with scale
 - Rotary knob with scale
- With pressure gauge connection
- Check valve, optional



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Ordering details

DZ 10 DP		-4X /				*	Further details in clear text
Direct operated pressure sequence valve NS 10							No code = NBR seals
Adjustment element							V = FKM seals
Rotary knob = 1							(other seals on request)
Set screw with hexagon and protective cap = 2							⚠ Attention!
Lockable rotary knob with scale ¹⁾ = 3							The compatibility of the seals and pressure fluid has to be taken into account!
Rotary knob with scale = 7							
Series 40 to 49 = 4X							No code = With check valve
(40 to 49: unchanged installation and connection dimensions)							M = Without check valve
Max. sequence pressure 25 bar = 25							No code = Internal pilot oil supply, internal leakage oil drain
Max. sequence pressure 75 bar = 75							X = External pilot oil supply, internal leakage oil drain
Max. sequence pressure 150 bar = 150							Y = Internal pilot oil supply, external leakage oil drain
Max. sequence pressure 210 bar = 210							XY = External pilot oil supply, external leakage oil drain

¹⁾ H-key with Material No. **R900008158** is included within the scope of supply.

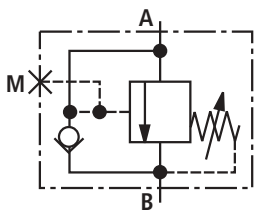
Preferred types (readily available)

Type	Material number
DZ 10 DP2-4X/25Y	R900503449
DZ 10 DP2-4X/25YM	R900512374
DZ 10 DP2-4X/75Y	R900503202
DZ 10 DP2-4X/75YM	R900500987
DZ 10 DP2-4X/150Y	R900503242
DZ 10 DP2-4X/150YM	R900505068
DZ 10 DP2-4X/210Y	R900599686
DZ 10 DP2-4X/210YM	R900517588

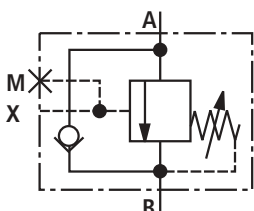
Further preferred types and standard components are shown in the EPS (standard price list).

Symbols

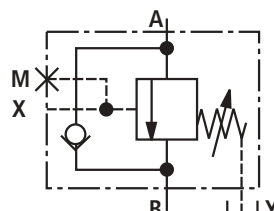
Version "--"



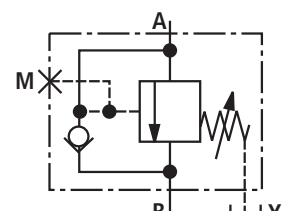
Version "X"



Version "XY"



Version "Y"



Function, section

The valve type DZ 10 DP is a direct operated pressure sequence valve. It is used for the pressure dependent connection of a second system.

The setting of the sequence pressure is via the adjustment element (1).

The compression spring (2) holds the control spool (3) in its initial position, the valve is closed. The pressure in port A is applied to the piston area of the control spool (3) via the control line (4) at the opposite side to the spring (2).

When the pressure reaches the set value of the spring (2), then the control spool (3) moves and the connection from A to B is opened. The system connected to port B is connected without a pressure decrease occurring in port A.

The control signal originates internally via the control line (4) from port A or externally via port X.

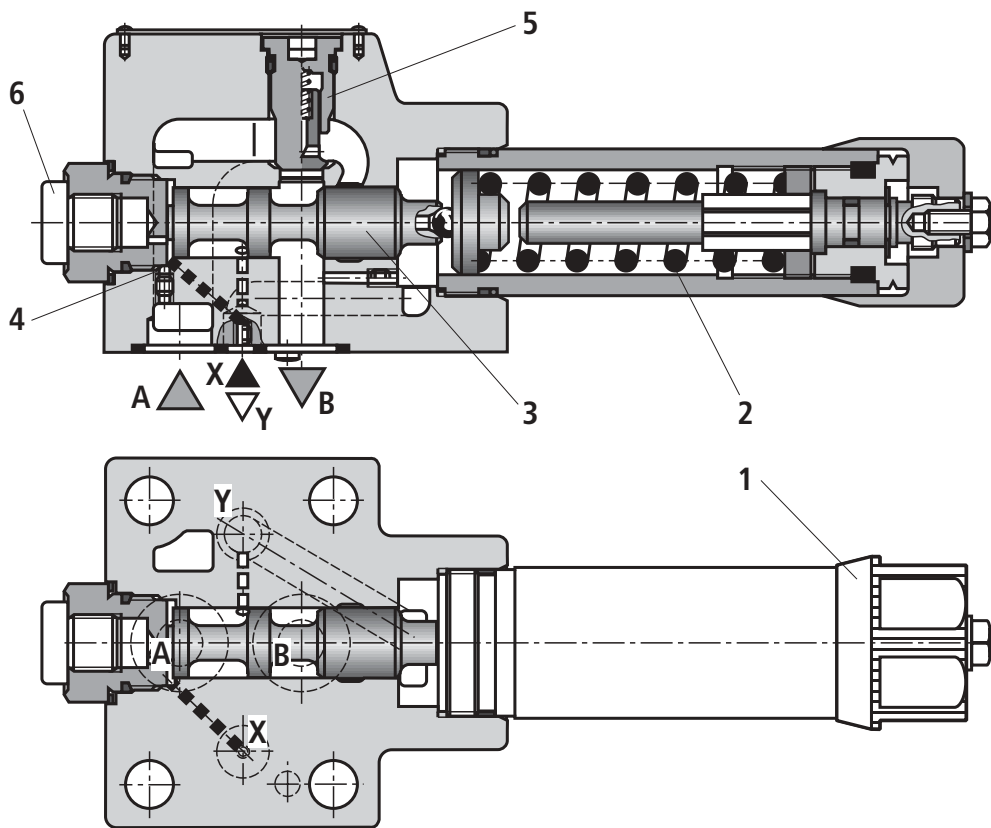
Depending on the use of the valve the leakage oil drain is externally via port Y or internally via B.

⚠ Attention!

With **internal** leakage oil drain the **set** opening pressure **increases** by the pressure present in port "B".

For the free return flow of the pressure fluid from port B to port A a check valve (5) may be optionally be installed.

A pressure gauge port (6) enables the monitoring of the sequence pressure set at the valve.



Type DZ 10 DP1-4X/...XY..

Technical data (for applications outside these parameters, please consult us!)

General

Installation		Optional
Ambient temperature range	°C	– 30 to + 80 (NBR seals) – 20 to + 80 (FKM seals)
Weight	kg	Approx. 1.2

Hydraulic

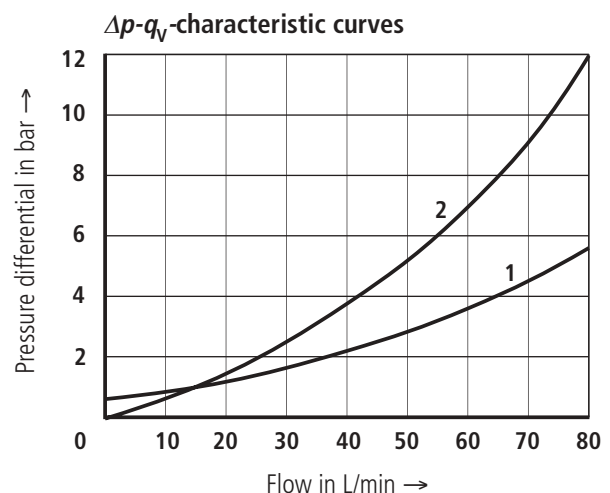
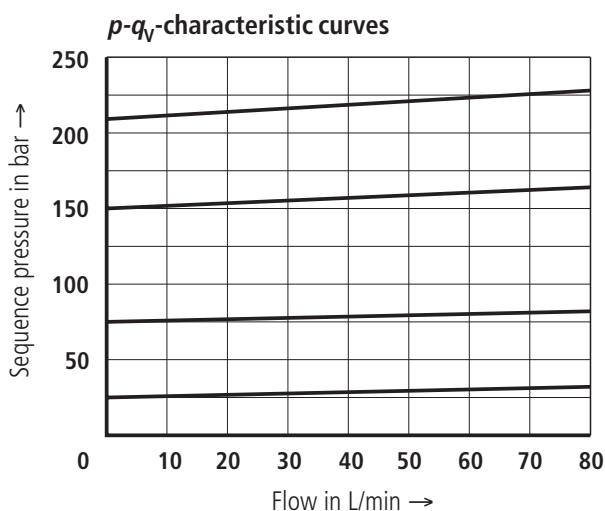
Maximum operating pressure	Ports P, A, X	bar	Up to 210
	Port Y	bar	Up to 160
Maximum sequence pressure (adjustable)	Port B	bar	Up to 25; up to 75; up to 150; up to 210
Maximum flow		L/min	Up to 80
Pressure fluid			Mineral oil (HL, HLP) to DIN 51 524 ¹⁾ ; Fast bio-degradable pressure fluids to VDMA 24 568 (also see RE 90 221); HETG (rape seed oil) ¹⁾ ; HEPG (polyglycols) ²⁾ ; HEES (synthetic ester) ²⁾ ; other pressure fluids on request
Pressure fluid temperature range		°C	– 30 to +80 (with NBR seals) – 20 to +80 (with FKM seals)
Viscosity range		mm ² /s	10 to 800
Cleanliness class to ISO codes			Maximum permissible degree of contamination of the pressure fluid is to ISO 4406 (C) class 20/18/15 ³⁾

¹⁾ Suitable for NBR **and** FKM seals

²⁾ **Only** suitable for FKM seals

³⁾ The cleanliness class stated for the components must be adhered too in hydraulic systems. Effective filtration prevents faults from occurring and at the same time increases the component service life.
For the selection of filters see catalogue sheets RE 50 070, RE 50 076 and RE 50 081.

Characteristic curves (measured with HLP46, $\vartheta_{oil} = 40 \text{ °C} \pm 5 \text{ °C}$)

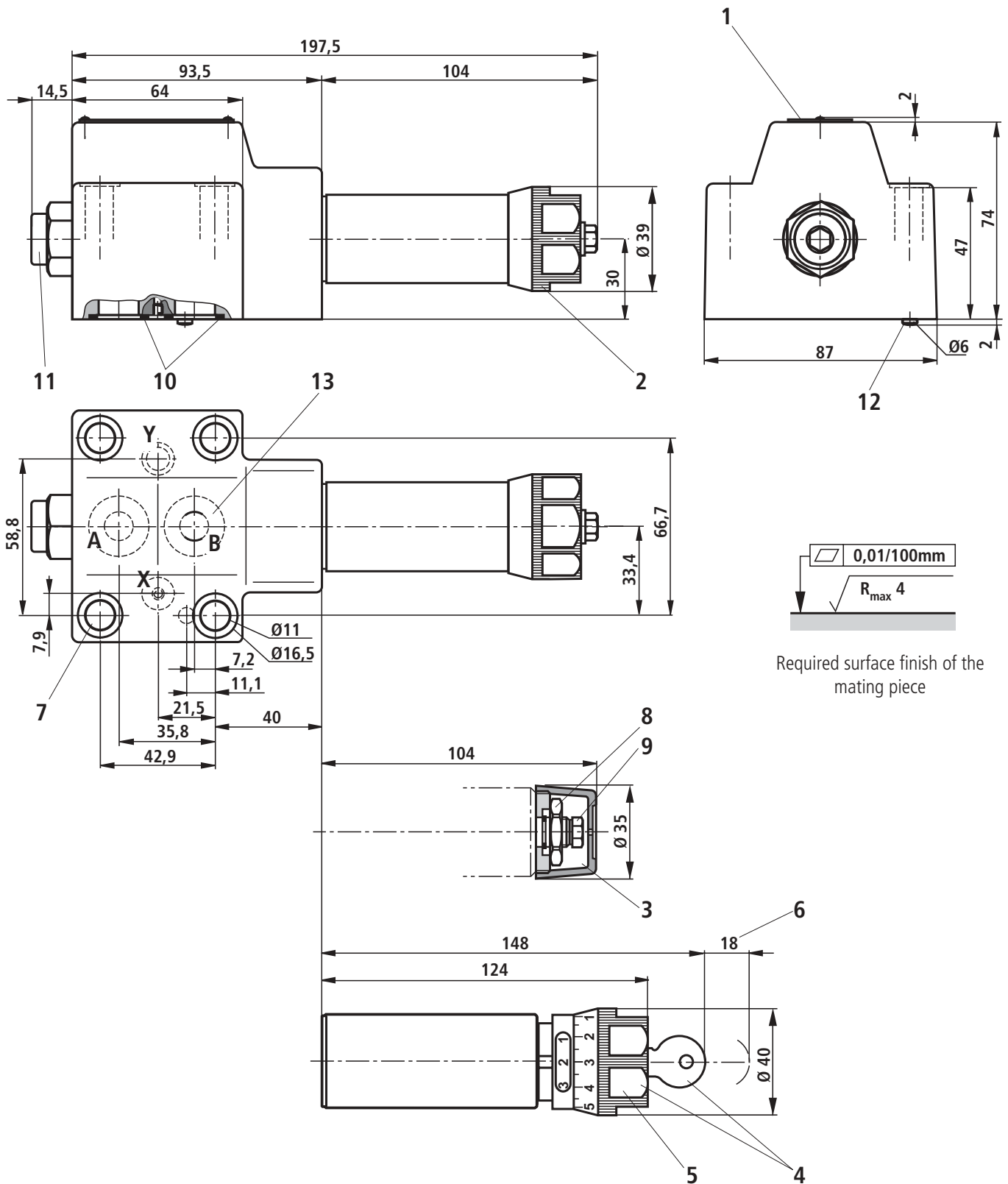


1 Δp - q_V -characteristic curve via check valve, flow from B to A

2 Δp - q_V -characteristic curve, flow from A to B

The characteristic curves are valid for the output pressure = zero over the entire flow range!

Unit dimensions (dimensions in mm)



- | | | |
|---|--|---|
| <p>1 Name plate</p> <p>2 Adjustment element "1"</p> <p>3 Adjustment element "2"</p> <p>4 Adjustment element "3"</p> <p>5 Adjustment element "7"</p> <p>6 Space required to remove the key</p> <p>7 Valve fixing holes</p> | <p>8 Locknut 24A/F</p> <p>9 Hexagon 10A/F</p> <p>10 Identical seal rings for ports A and B
Identical seal rings for ports X and Y</p> <p>11 Pressure gauge connection G 1/4;
12 deep; internal hexagon 6A/F</p> <p>12 Locating pin</p> | <p>13 Porting pattern to DIN 24 340, form D, ISO 5781 and CETOP-RP 121 H,
Subplates:
G 460/01 (G 3/8)
G 461/01 (G 1/2)
to catalogue sheet RE 45 062 and
Valve fixing screws
M10 x 60 DIN 912 - 10.9;
Tightening torque $M_A = 75 \text{ Nm}$
must be ordered separately.</p> |
|---|--|---|

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