

RSE 7-10

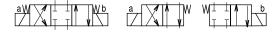
DIRECTIONAL CONTROL VALVES

|KE 2019 | 08/13 |

D_n 10 | p_{max} 35 MPa | Q_{max} 135 dm^3/min

Solenoid operated directional control valves of type RSE7-10 are used to control start, stop and direction of fluid in hydraulic systems.

Dn 10, NG 10 | Solenoid operated | Manual override | Installation dimensions according to: CETOP RP 121H (CETOP 5), ISO 4401, DIN 24340

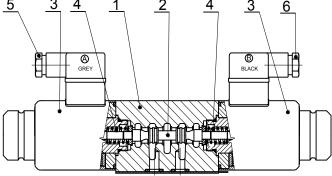




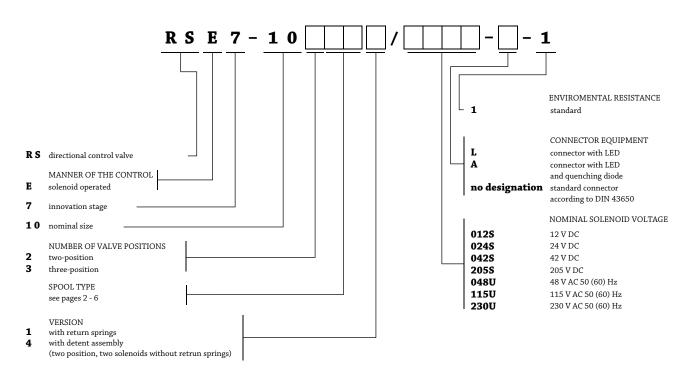
DESCRIPTION OF FUNCTION

Solenoid operated directional control valves RSE7-10 consist of cast iron valve housing **1** with control spool **2**, centering springs **4** and operating solenoids **3**. They are being manufactured as two- or three- position directional control valves. Two position directional control

valves consists of either one solenoid and one return spring or two solenoids without return spring. Three position directional control valves always consist of two solenoids with two return springs. DC solenoids are supplied through connectors A,B (**5,6**). For AC supply the solenoids are equipped with rectifiers integrated to the DIN connector socket as a part of the solenoids. The solenoid can be turned around its axis to any desired position. Solenoids are designed for manual override allowing the control spool to be repositioned in case of power supply failure or solenoids malfunction. The valve housing **1** is phosphate coated and the solenoids **3** are zinc coated.



ORDERING CODE





INSTALLATION, SERVICE AND MAINTENANCE

Directional control valves RSE7-10 are designed for panel installation. They are being mounted by four screws M6x70 with torque 14Nm and can be installed in any working position. The reliability of the valves is conditional upon use of prescribed working fluid, especially its parameters such as cleanness and temperature. Maximum voltage deviation is $\pm 10\%$ from solenoid rated voltage for both AC and DC power supply.

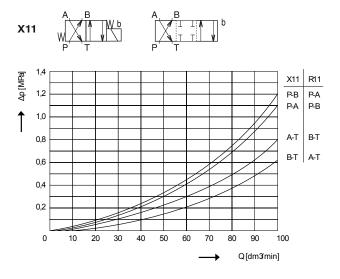
DELIVERY

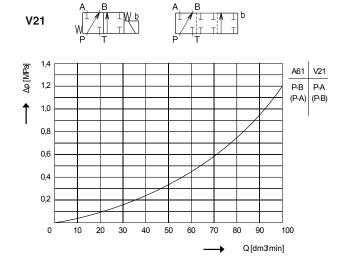
Solenoid operated directional control valves of type RSE7-10 are delivered assembled. Spare parts and mounting screws are not included in package. These must be ordered separetly.

TECHNICAL DATA

| Technical data | Symbol | Unit | Value |
|---|---|----------------------|---|
| Valve size | D _n | mm | 10 |
| Maximal flow | Q _{max} | dm ³ /min | see Operating Limits |
| Maximal operating pressure in ports P, A, B | p _{max,a} | MPa | 35 |
| Maximal operating pressure in port T | p _{max,t} | MPa | 21 |
| Pressure drop | Δр | MPa | see Pressure Drop curves |
| Viscosity range | V | m ² /s | $20 \cdot 10^{-6} \text{ up to } 400 \cdot 10^{-6}$ |
| Maximum degree of fluid contamination | class 9 according to NAS 1638, 18/15 according to ISO 4406 | | |
| Fluid temperature range | t _{po} | °C | -20 up to +80 |
| Ambient temperature range | t _k | °C | -20 up to +60 |
| Enclosure type to EN 60 529 | IP 65 | | |
| Hydraulic medium | Hydraulic oils of power class (HL,HLP) according to DIN 51524 | | |
| Weight - valve with 1 solenoid | m | kg | 3.9 |
| - valve with 2 solenoids | | | 5.4 |
| Service life | >10 ⁶ cycles | | |
| Installation dimensions | according to: DIN 24 340 / ISO 4401 / CETOP RP121-H | | |
| Duty cycle | | % | 100 |
| Mounting position | as desired | | |

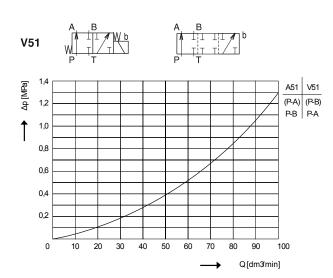
PRESSURE DROP $\Delta p = f(Q)$ TWO POSITION VALVES

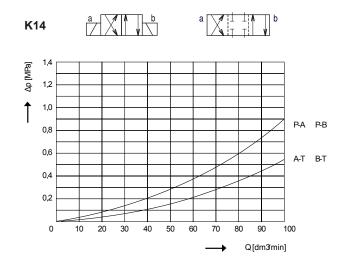




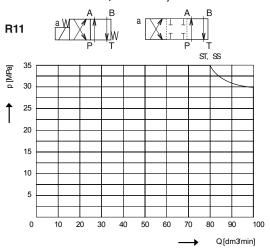
POS

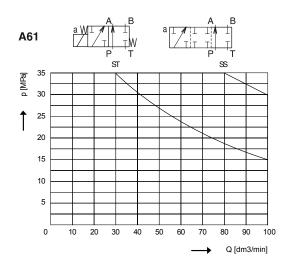
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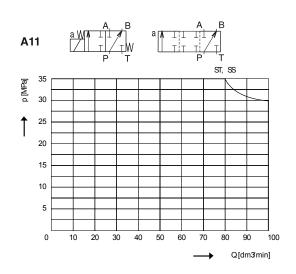


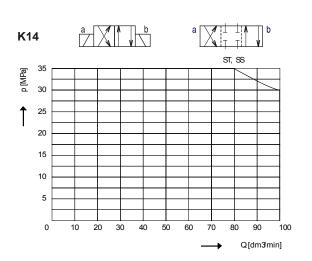


OPERATING LIMITS $Q_{max} = f(p)$ TWO POSITION VALVES





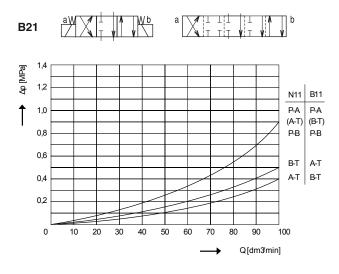


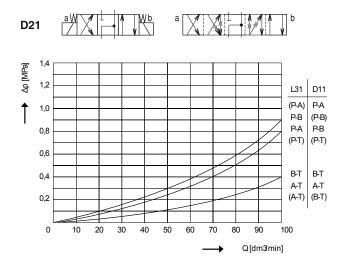


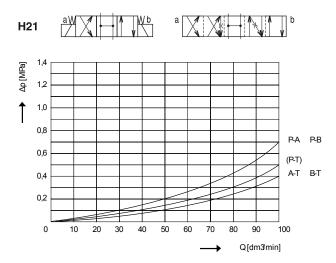


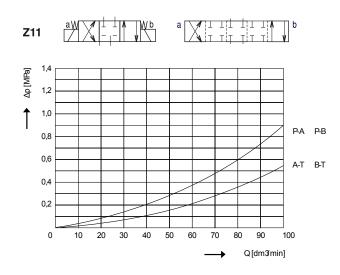


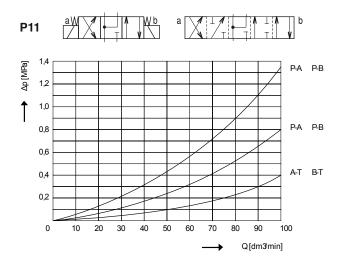
PRESSURE DROP $\Delta p = f(Q)$ THREE POSITION VALVES

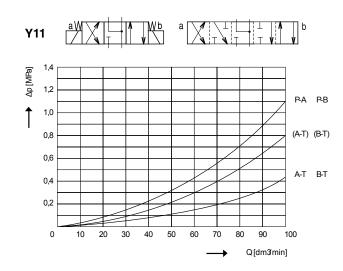






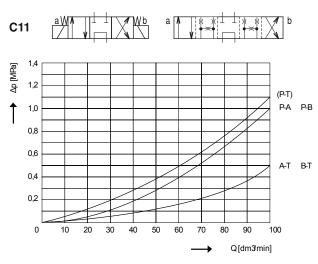




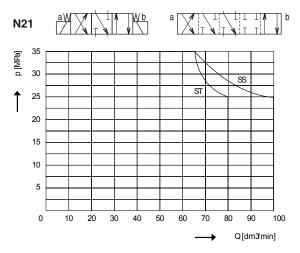


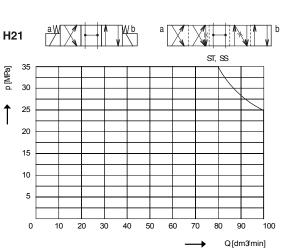
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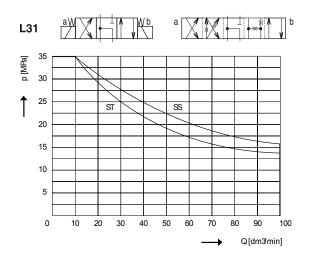


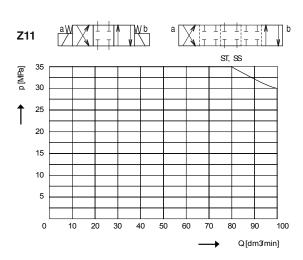


OPERATING LIMITS $Q_{max} = f(p)$ THREE POSITION VALVES



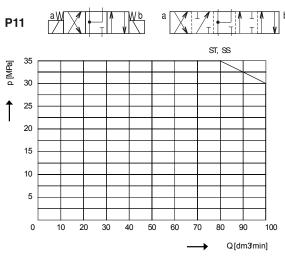


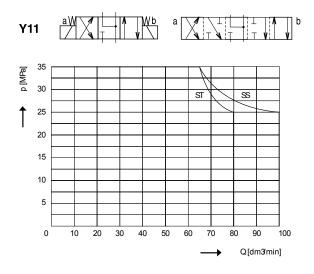


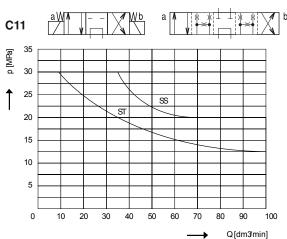


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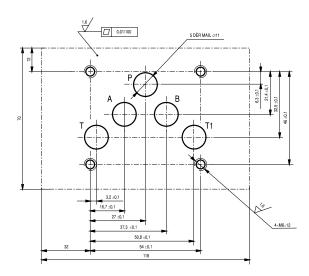








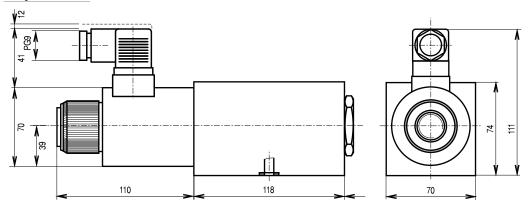
INSTALLATION DIMENSIONS

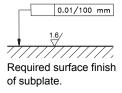




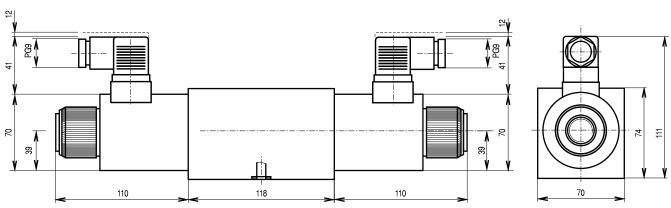
VALVE DIMENSIONS

Two position valves





Three position valves, Two position valves



SPARE PARTS

Seal kit

| Type | quantity | | | |
|-----------------|------------------------|------------------------|------------------|------------------------|
| Туре | | ing | | |
| Standard NBR 80 | 12.42 x 1.78 mm (5pcs) | 23.47 x 2.62 mm (2pcs) | 30 x 3 mm (2pcs) | 56.78 x 1.78 mm (2pcs) |

Bolt kit

| Dimensions and quantity | Torque |
|---------------------------|--------|
| M6x70 DIN 912-10.9 (4pcs) | 14 Nm |





NOTES

The data is subject to change. The manufacturer reserves the right to make changes and/or improvements without prior notice. It is understood that the information in this datasheet is being used at one's own risk.

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