

Replaces: 05.98

**3/2- and 4/2-way directional poppet valves with solenoid actuation**  
**Type M-.SED 6**

Nominal size 6

Series 1X

Maximum operating pressure 350 bar

Maximum flow 25 L/min



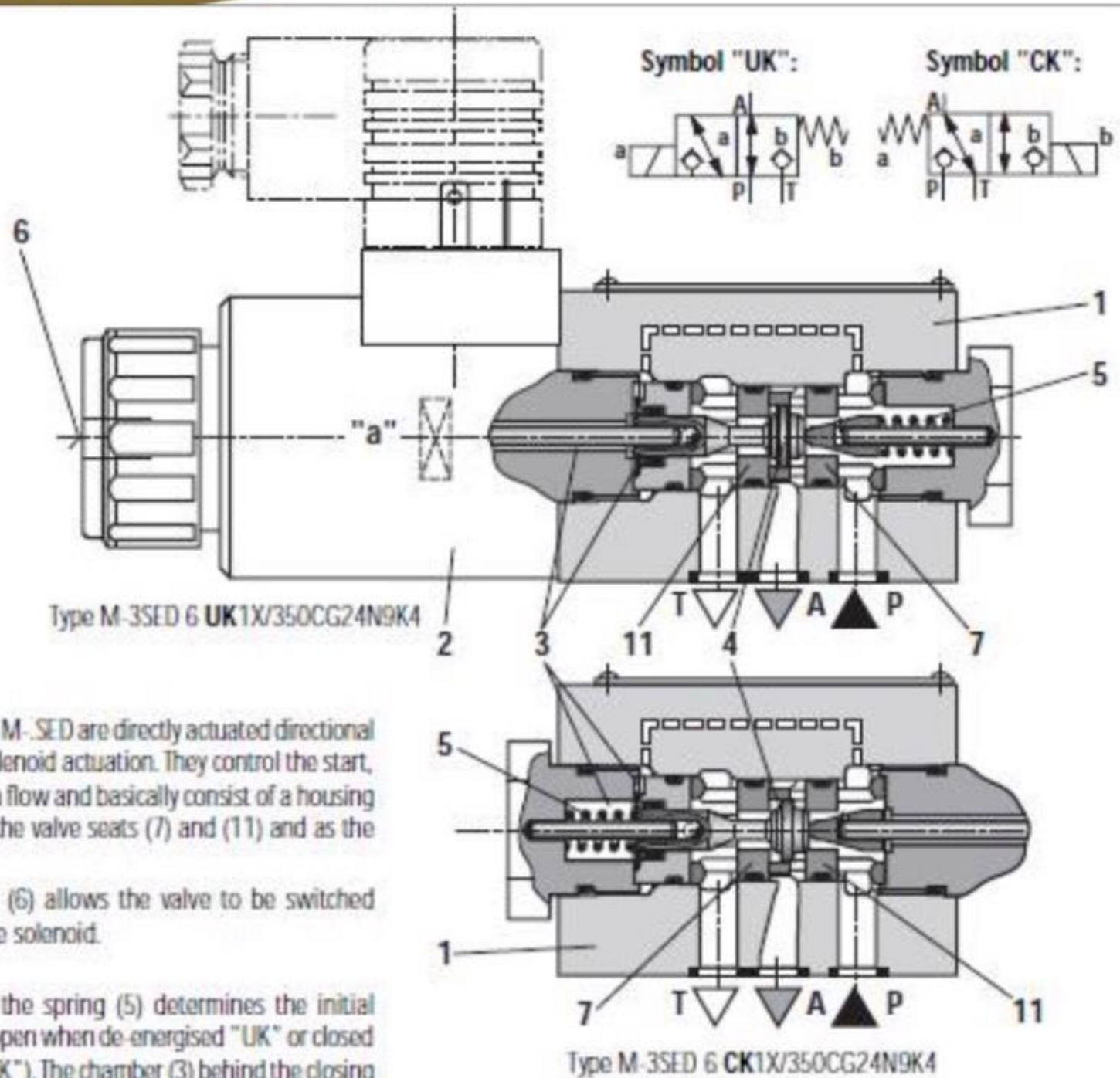
Type M-.SED 6<sup>UK</sup><sub>CK</sub> 1X/350CG24N9K4 with plug-in connector

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**Features**

- Direct operated directional poppet valve with solenoid actuation
- Porting pattern to DIN 24 340 form A, ISO 4401 and CETOP-RP 121 H subplates to catalogue sheet RE 45 052 (separate order)
- Closed port is leak-free
- Switching is ensured even when under pressure for long periods of time
- Wet pin DC solenoids with removable coil (AC voltage possible by means of rectifier)
- Solenoid coil can be rotated by 90°
- When changing coils, opening of the pressure-tight chamber is not required
- Individual electrical connection
- With protected manual override, optional



**General:**

Directional valves type M-SED are directly actuated directional poppet valves with solenoid actuation. They control the start, stop and direction of a flow and basically consist of a housing (1), the solenoid (2), the valve seats (7) and (11) and as the closing device (4).

The manual override (6) allows the valve to be switched without energising the solenoid.

**Basic function:**

The arrangement of the spring (5) determines the initial position of the valve (open when de-energised "UK" or closed when de-energised "CK"). The chamber (3) behind the closing element (4) is connected to port P and sealed off from port T. Hence the valve is pressure-balanced with respect to the operating forces (solenoid and spring).

Due to the special closing element (4) it is possible to apply the maximum operating pressure (350 bar) to ports P, A and T. The flow can also pass in both directions (see symbols)!

In the initial position the closing element (4) is pressed onto seat (11) by the spring (5), in the switched position it is pushed onto seat (7) by the solenoid (2). This results in leak-free closure.

**Throttle insert**

The use of a throttle insert is required, if due to the operating conditions, flows are to be expected during the switching procedure, which are higher than the stated maximum performance limits of the valve.

Example:

- Accumulator operation,
- Use as pilot valve with internal pilot oil supply.

**3/2-way directional poppet valve**

The throttle is inserted into port P of the poppet valve.

**4/2-way directional poppet valve**

(see page 4)

The throttle is inserted into port P of the plus-1 plate.



**Cartridge check valve**

The cartridge check valve allows free flow from P to A and provides leak-free closure from A to P. For examples, see page 12.

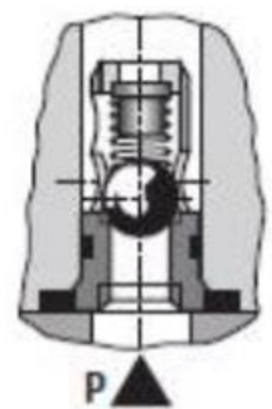
**3/2-way directional poppet valve**

The cartridge check valve is inserted into port P of the poppet valve.

**4/2-way directional poppet valve**

(see page 4)

The cartridge check valve is inserted into port P of the plus-1 plate.



## Ordering details

M-	SED	6	1X/350	C	K4/	*
3 actuator ports = 3						Further details in clear text
4 actuator ports = 4						
Poppet valve						No code = NBR seals
Nominal size 6 = 6						V = FKM seals (other seals on request)
Actuator ports	3	4				<b>Attention!</b> The compatibility of the seals and pressure fluid has to be taken into account!
<b>Symbols</b>						No code = without cartridge check valve, with throttle insert
	•	-				P = with cartridge check valve
	•	-				B12 = throttle - Ø1.2 mm
	-	•				B15 = throttle - Ø1.5 mm
	-	•				B18 = throttle - Ø1.8 mm
						B20 = throttle - Ø2.0 mm
						B22 = throttle - Ø2.2 mm
						<b>Electrical connection</b>
						K4 <sup>1)</sup> = individual connection; with component plug DIN 43 650-AM2, without plug-in connector
Series 10 to 19 = 1X (10 to 19: unchanged installation and connection dimensions)						N9 = with protected manual override
Operating pressure 350 bar = 350						No code = without manual override
Wet-pin solenoid (in oil immersed) with removable coil = C						G24 = 24 V DC
						G205 <sup>2)</sup> = 205 V DC

AC supply (permissible voltage tolerance ± 10%)	Nominal voltage of the DC solenoids when used with AC voltages	Order code
110 V - 50/60 Hz	96 V	G96
120 V - 60 Hz	110 V	G110
230 V - 50/60 Hz	205 V	G205

Preferred types and standard components are highlighted in the RPS (Rexroth Price list Standard).

<sup>1)</sup> Plug-in connectors have to be ordered separately (see below).

<sup>2)</sup> When connecting to an AC supply a DC solenoid **must** be used which is controlled via a rectifier (see table on the left).

For individual connections a large plug-in connector with integrated rectifier can be used (separate order, see below).

## Ordering details: plug-in connectors to DIN 43 650 A and ISO 4400 for component plug "K4"

For further plug-in connectors see RE 08 006					
		<b>Material no.</b>			
<b>Valve side</b>	<b>Colour</b>	Without circuitry	With indicator lamp 12 ... 240 V	With rectifier 12 ... 240 V	With indicator lamp and Z-diode protective circuit 24 V
a	grey	00074683	-	-	-
b	black	00074684	-	-	-
a/b	black	-	00057292	00313933	00310995