



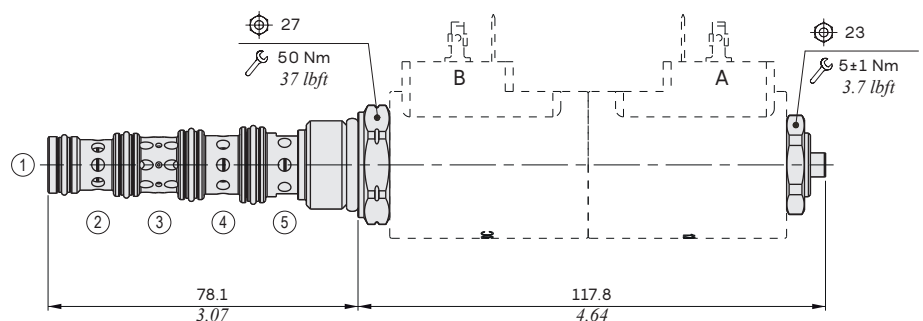
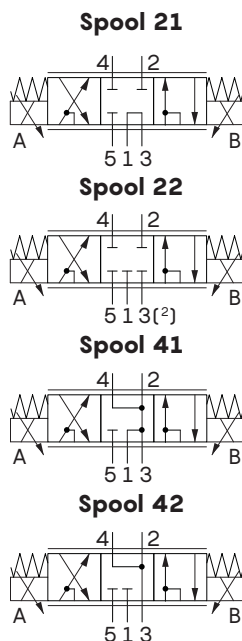
## EK10X type directional solenoid valves – 5 way / 3 positions

- Spool type
- Direct acting with proportional solenoid
- Different types of emergencies available
- Optimized linearity and hysteresis
- External zinc-plated and corrosion-proof components

Technical specifications and diagrams are measured with mineral oil of 46 cSt viscosity at 40°C (104°F) temperature.

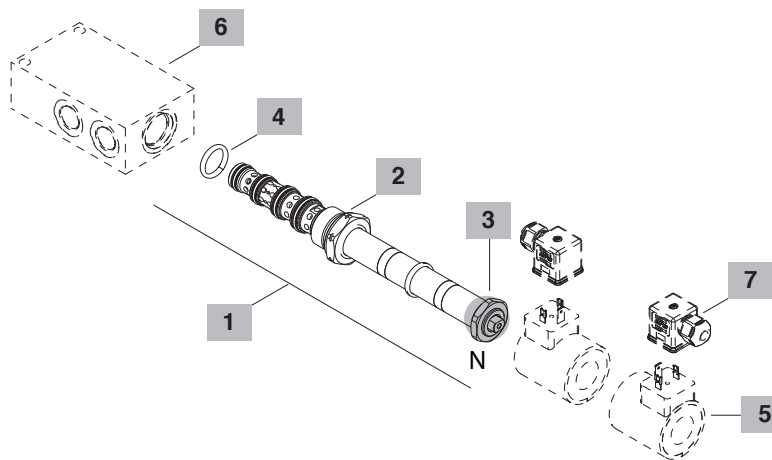
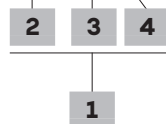
| EK10X                                      |                                                                        |                                                                          |
|--------------------------------------------|------------------------------------------------------------------------|--------------------------------------------------------------------------|
| Nominal flow                               |                                                                        | 23 l/min (6.1 US gpm)                                                    |
| Max. pressure                              |                                                                        | 250 bar (3600 psi)                                                       |
| Oil leakage                                | at 210 bar (3050 psi)                                                  | 200 cm <sup>3</sup> /min (12.2 in <sup>3</sup> /min)                     |
| Fluid                                      | mineral based or synthetic hydraulic fluid with lubricating properties |                                                                          |
| Viscosity                                  |                                                                        | 10-200 cSt                                                               |
| Max level of contamination                 |                                                                        | 18/16/13 ISO4406                                                         |
| Fluid temperature                          | with NBR seals+Polyurethane<br>with FPM seals                          | from -25°C (-13°F) to 90°C (194°F)<br>from -20°C (-4°F) to 110°C (230°F) |
| Environmental temp. for working conditions |                                                                        | from -20°C (-4°F) to 60°C (140°F)                                        |
| Cavity                                     |                                                                        | SAE 10/5                                                                 |
| Coil type*                                 |                                                                        | BC                                                                       |
| Nominal voltages                           |                                                                        | 12VDC - 24 VDC ± 10%                                                     |
| Power rating                               |                                                                        | 26 W (12VDC - 24VDC)                                                     |
| Weight                                     |                                                                        | 0.736 kg (1.62 lb)                                                       |

NOTE - For different conditions, please contact Walvoil Sales Dpt. - \*For coils further features see from page 201.



### Ordering codes and description composition

EK10X/21 0 N B



#### 1 Cartridges

| TYPE                   | CODE        | DESCRIPTION                 |
|------------------------|-------------|-----------------------------|
| <b>SAE cavity 10/5</b> |             |                             |
| <b>EK10X/210NB</b>     | OEK10002017 | Without emergency, spool 21 |
| <b>EK10X/220NB</b>     | OEK10002015 | Without emergency, spool 22 |
| <b>EK10X/410NB</b>     | OEK10002014 | Without emergency, spool 41 |
| <b>EK10X/420NB</b>     | OEK10002002 | Without emergency, spool 42 |

#### 2 Spool

| TYPE      | DESCRIPTION |
|-----------|-------------|
| <b>21</b> | Spool 21    |
| <b>22</b> | Spool 22    |
| <b>41</b> | Spool 41    |
| <b>42</b> | Spool 42    |

#### 3 Emergency

| TYPE     | DESCRIPTION       |
|----------|-------------------|
| <b>N</b> | Without emergency |

#### 4 Seals

| TYPE     | DESCRIPTION                                                    |
|----------|----------------------------------------------------------------|
| <b>B</b> | <b>NBR (Buna)+Polyurethane</b> o-ring seals, std configuration |
| <b>V</b> | <b>FPM (Viton)</b> o-ring seals, contact Sales Dept            |

#### 5 Coils

| TYPE           | CODE       | DESCRIPTION        |
|----------------|------------|--------------------|
| <b>BC12VDC</b> | 4SL8000120 | 12VDC-ISO4400 coil |

For complete coils list see page 201

#### 6 Valve body

| TYPE                | CODE       | DESCRIPTION                                         |
|---------------------|------------|-----------------------------------------------------|
| <b>SAE10/5-SAE6</b> | 3CC1050J11 | Aluminium body for cavity 10 valve, SAE6 std thread |

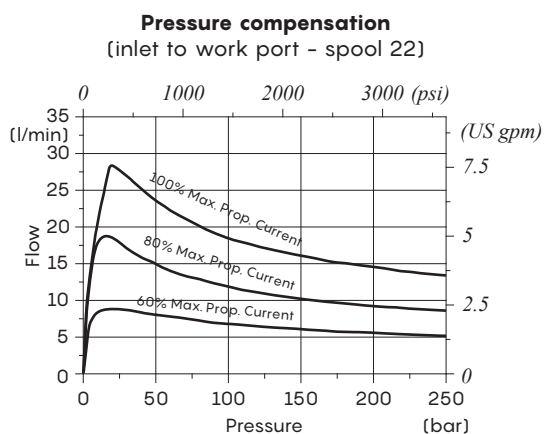
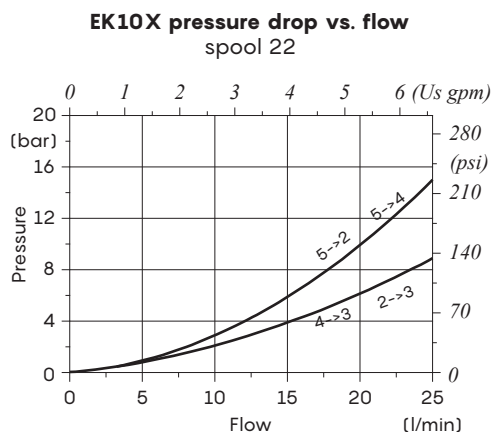
Note: aluminium body can stand up to 210 bar (3050 psi)  
For steel bodies or different threading see from page 214

#### 7 Connector

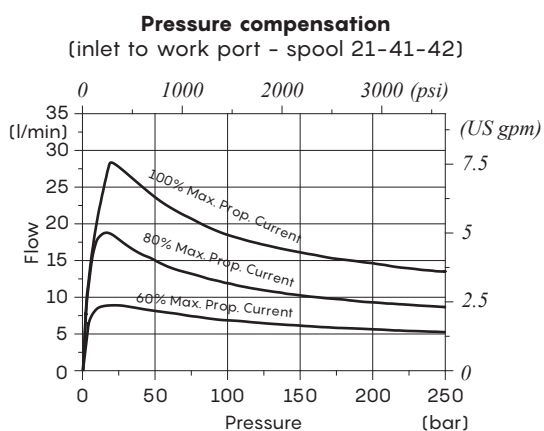
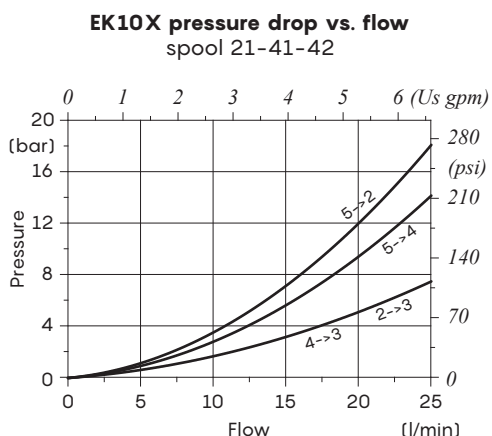
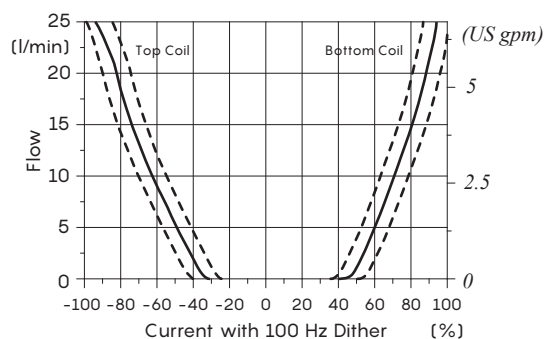
| TYPE           | CODE        | DESCRIPTION |
|----------------|-------------|-------------|
| <b>ISO4400</b> | 4CN1009995B | Connector   |

For complete connectors list see from page 201

**Rating diagrams**



**Flow vs. current**  
(with 10.5 bar/152 psi inline compensator- spool 22)



**Flow vs. current**  
(with 10.5 bar/152 psi inline compensator- spool 21-41-42)

