The D3FB directional control valve of the nominal size NG10 (CETOP5) provides variable flow rates. Due to a spool and sleeve combination with wire EDM window geometry and a special manufacturing adjustment, the valve achieves excellent repeatability from valve to valve and high precision. The D3FB is suited for standard applications particularly with regard to functions on identical machines, which need only to be adjusted once. In combination with the digital power amplifier PWD00A-400, the valve parameters can be saved, changed and duplicated.

Technical features
• Spool/sleeve design
• High repeatability from valve to valve
• Low hysteresis
• Manual override
• Fail-safe centre position
Catalogue HY11-2500/UK

Direct-Operated Proportional DC Valve
Series D3FB

Ordering Code

<table>
<thead>
<tr>
<th>Code</th>
<th>Spool type</th>
<th>Flow [l/min] at ∆p 5bar per metering edge</th>
</tr>
</thead>
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<td></td>
<td>60</td>
</tr>
<tr>
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<tr>
<td>B32M</td>
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<td>40 / 20</td>
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</table>

Bold letters = Short-term availability

Please order plugs separately.
See chapter 3 accessories.
Direct-Operated Proportional DC Valve
Series D3FB

### Technical Data

#### General
- **Design**: Direct-operated proportional DC valve
- **Actuation**: Proportional Solenoid
- **Size**: NG10 (CETOP 5)
- **Mounting interface**: DIN 24340 / ISO 4401 / CETOP RP121 / NFPA
- **Mounting position**: Any
- **Ambient temperature [°C]**: -20...+60
- **Weight [kg]**: 6.5
- **Vibration resistance [g]**: 25 acc. DIN IEC68, part 2-6

#### Hydraulic
- **Max. operating pressure [bar]**: Ports P, A, B, T max. 350
- **Fluid**: Hydraulic oil as per DIN 51524...535, other on request
- **Fluid temperature [°C]**: -20...+60
- **Viscosity permitted [mm²/s]**: 20...380
- **Viscosity recommended [mm²/s]**: 30...80
- **Filtration**: ISO 4406 (1999) 18/16/13 (acc. NAS 1683: 7)
- **Flow nominal at ∆p=5bar per control edge [l/min]**: 25 / 40 / 60
- **Leakage at 100 bar [ml/min]**: <100

#### Static / Dynamic
- **Hysteresis [%]**: <4

#### Electrical characteristics
- **Duty ratio [%]**: 100%
- **Protection class**: IP54
- **Solenoid**: Code M
- **Supply voltage [V]**: 9
- **Current consumption [A]**: 3.4
- **Power consumption [W]**: 31
- **Resistance [Ohm]**: 1.8
- **Coil insulation class**: F (155 °C)
- **Electrical connection**: 2+PE acc. EN 175301-801
- **Wiring min. [mm²]**: 3x1.5 (AWG 16) overall braid shield
- **Wiring length max. [m]**: 50

* Flow rate for different ∆p per control edge: \( Q_x = Q_{Nom.} \cdot \sqrt{\frac{\Delta p_x}{\Delta p_{Nom.}}} \)
Flow characteristics
at $\Delta p = 5$ bar per metering edge

Flow limit
100% command signal

Plug
Solenoid coil

1 = coil connection
2 = coil connection
PE = ground potential
Direct-Operated Proportional DC Valve
Series D3FB

Dimensions

D3FB*C

D3FB*K

Surface finish

Kit

Kit

NBR

BK385
4x M6x40
DIN 912 12.9
11 Nm
±15 %
SK-D3FB-N

Parker Hannifin GmbH & Co. KG
Hydraulic Controls Division
Kaarst, Germany