NEW DELTROL fluid products

DPFC-100-2NC
Proportional Flow Control Cartridge

DPFR-100-2NC
Proportional Flow Regulator Valve

Distributed by NORMAN EQUIPMENT COMPANY 800-323-2710
DESCRIPTION
A cartridge valve designed as a normally closed, spool-type, proportional valve for use with a compensating element to provide an electrically variable pressure compensated flow control.

OPERATION
As electrical current is applied to the coil the spool will gradually shift from closed to open as current increases to 2 amps maximum. Flow will pass from Port 3 to Port 2 up to 300 psi differential. Port 1 is plugged.

The valve can also function as a differential control for load sense applications.

The valve functions with industry common controllers which provide PWM current input to 2 amps @ 12 VDC.

Operation of Manual Override:
To operate, push button in to activate. To return to normal function, release button.

HOW TO ORDER

**DPFC - 100 - 2 NC - ***** - * - *** - *****

- **Solenoid Valve:** Cavity/Seal
- **Flow Path:** Normally Closed
- **Flow Range Max:**
  - 300 = 3 GPM
  - 700 = 7 GPM
  - 1400 = 14 GPM
- **Seal Compound:**
  - N = Buna N
  - V = Viton
- **Body Porting:**
  - 6T = SAE 6
  - 8T = SAE 8
  - Used for Cartridge Only
- **Coil Connection:**
  - H = Hirschmann
  - B = Double Spade
- **Voltage:**
  - D = DC
  - 1 = 12 Volt
  - 2 = 24 Volt
**DPFR-100-2NC**
Proportional Flow Regulator Valve, Normally Closed

**USASI/ISO**

**DESCRIPTION**
A normally closed, spool-type, proportional flow regulator utilizing a DPFC-100-2NC cartridge flow control along with a DDPS-100 compensating element to provide an electrically variable pressure compensated flow control.

**OPERATION**
The DPFR-100 will maintain constant flow within specified accuracies from Port 1 to Port 2 regardless of load pressure. Regulated flow will increase with an increase in supply current to the solenoid valve.

The valve functions with industry common controllers which provide PWM current input to 2 amps @ 12 VDC.

Operation of Manual Override:
To operate, push button in to activate. To return to normal function, release button.

**SPECIFICATIONS**

**Coil Specifications:**
- **12 Volt System**
  - Resistance: 4.0 ohms @ 20°C
  - Threshold Current: 300 ± 70 mA
  - Max Control Current: 1500 ± 200 mA

- **24 Volt System**
  - Resistance: 16.0 ohms @ 20°C
  - Threshold Current: 150 ± 35 mA
  - Max Control Current: 750 ± 1000 mA

**Operating Pressure:** 3000 psi (207 Bar)

**Flow:** See Performance Characteristic Graph

**Internal Leakage:** (per land) 10 in³/min (164 cc/min) max at 3000 psi (207 Bar)

**Temperature:** -30°F to +250°F (-35°C to +120°C)

**Coil Rating:** Continuous from 85% to 110% of rated voltage

**Recommended Filtration:** ISO 16/12

**Fluids:** Mineral-based fluids

**Cavity/Cavity Tool:** 100-3

**HOW TO ORDER**

<table>
<thead>
<tr>
<th>DPFR-100-2NC</th>
<th>Flow Path</th>
<th>Flow Range Max</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>300 = 3 GPM</td>
<td>700 = 7 GPM</td>
</tr>
<tr>
<td></td>
<td>1400 = 14 GPM</td>
<td></td>
</tr>
</tbody>
</table>

| SEAL COMPOUND | N = Buna N | V = Viton |

| SEAL COMPENSATOR SPRING | 75 psi (5.2 Bar) | 100 psi (6.9 Bar) | 150 psi (10.3 Bar) |

<table>
<thead>
<tr>
<th>BODY PORTING</th>
<th>6T = SAE 6</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>8T = SAE 8</td>
</tr>
</tbody>
</table>

| COIL CONNECTION | H = Hirschmann |
|                | F = Double Spade |

<table>
<thead>
<tr>
<th>VOLTAGE</th>
<th>1 = 12 Volt</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2 = 24 Volt</td>
</tr>
</tbody>
</table>

| COMPRESSOR PUMP | D = DC |

**PRESSURE DROP vs. FLOW**

**FLOW vs. CURRENT**

12 VDC coil, 100 Hz Dither, PWM Controller
Please visit us at

www.deltrolfluid.com

for information on these other Deltrol product lines:

• High Performance Hydraulic Cartridge Valves
• Hydraulic Integrated Circuit Manifolds
• In-Line Flow Control, Needle, Check and Accessory Valves
• Custom Solutions for Your Fluid Power and Fluid Control Demands

Or Contact Us and Request a Free Catalog.

Distributed by
NORMAN EQUIPMENT COMPANY
800-323-2710