Mechanical Directional Control.
Pilot to Shift Valve, 3 Way, Open Transition - Size 16.

Up to 240 bar - 150 lpm

Operation
In neutral the D-SOPTS allows flow between ports (3) and (4), port (2) is blocked. With application of a remote pilot signal at (5), the valve's spool shifts to allow flow between ports (2) and (3), while port (4) is blocked. During transition ports (2), (3), and (4) are open. The vented spring chamber allows the valve to be fully pressurized at ports (2), (3), and (4) without affecting required pilot pressure. Pressure at (1) will affect required pilot pressure. A typical application for this valve is a high flow priority flow control with bypass flow available for a secondary function.

Features
• Hardened parts for long life.
• Industry common cavity

A rate limiting orifice less than 1.5 mm diameter is recommended at port 5.

Performance
32 cSc / 38°C.

Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nom. Flow (lpm)</td>
<td>150</td>
</tr>
<tr>
<td>Max. Pressure (bar)</td>
<td>210</td>
</tr>
<tr>
<td>Internal Leakage (32 cSt)</td>
<td>164 cc/min</td>
</tr>
<tr>
<td>Hydraulic Oil</td>
<td>General purpose hydraulic fluid</td>
</tr>
<tr>
<td>Viscosity Range</td>
<td>3 to 640 cSt</td>
</tr>
<tr>
<td>Filtration</td>
<td>ISO 18/16/13</td>
</tr>
<tr>
<td>Operating Temp.</td>
<td>-40 to 120°C</td>
</tr>
<tr>
<td>Cartridge Torque</td>
<td>122 Nm</td>
</tr>
<tr>
<td>Cavity</td>
<td>SO16-5S (see cavity data page CAV-SO16-5S)</td>
</tr>
<tr>
<td>Spare Seal Kit (Viton)</td>
<td>SK-DSOVHBBB</td>
</tr>
<tr>
<td>Weight - Valve only</td>
<td>0.50 kg</td>
</tr>
<tr>
<td>Weight - Valve + Body</td>
<td>2.14 kg (alum) 5.23 kg (steel)</td>
</tr>
</tbody>
</table>
Mechanical Directional Control.
Pilot to Shift Valve, 3 Way, Open Transition - Size 16.

Dimensions

[mm]

Ordering Code

D-SOPTS

Options
00 - Nitrile
V0 - Viton

Spring bias pressure
0070 - 5 bar (70 PSI)
0150 - 10 bar (150 PSI)

Port size (BSP)
C - 1/2"
D - 3/4"
E - 1"

Port 1
1/4" BSP

Options - See page B-DSO

No. of ports
5 - 5 ports

Body material
A - Aluminium
S - Steel

Related Fluid Power Ltd.  T: 0044 (0)1334 655600  F: 0044 (0)1334 650006  E: sales@relatedfluidpower.com  www.relatedfluidpower.com