General Description

Series D3L directional control valves are high performance, 4-chamber, direct operated, lever controlled, 4-way valves. They are available in 2 or 3-position and conform to NFPA’s D05, CETOP 5 mounting patterns.

Features

- Spring return or detent styles available.
- High flow, low pressure drop design.
- Heavy duty handle design.

Specifications

<table>
<thead>
<tr>
<th>Mounting Pattern</th>
<th>NFPA D05, CETOP 5, NG 10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Pressure</td>
<td>Operating: 345 Bar (5000 PSI)</td>
</tr>
<tr>
<td></td>
<td>Tank Line: 34 Bar (500 PSI)</td>
</tr>
<tr>
<td>Maximum Flow</td>
<td>See Spool Reference Chart</td>
</tr>
<tr>
<td>Force Required to Shift Lever Operator</td>
<td>173 N (39 lbs.)</td>
</tr>
</tbody>
</table>

Dimensions

Inch equivalents for millimeter dimensions are shown in (**)

Lever Operated D3L

Note: 30.0mm (1.18") from bottom of bolt hole counterbore to bottom of valve.
Directional Control Valves
Series D3L

D 3
Directional Control Valve Basic Valve
Operator Type & Location Spool Style Seal Variations

NFPA D05 CETOP 5 NG10

Code Description
N Nitrile
V Fluorocarbon

Operator Location (A or B End) Operator Type For Valve Style

<table>
<thead>
<tr>
<th>Code</th>
<th>Operator Type</th>
<th>Code Symbol</th>
</tr>
</thead>
<tbody>
<tr>
<td>L</td>
<td>Lever (Standard)</td>
<td>B B B A B B</td>
</tr>
<tr>
<td>LB</td>
<td>Lever (Alternate)</td>
<td>A A A N/A A N/A A</td>
</tr>
</tbody>
</table>

Ordering Information

**Code Description**
- **E**: Two position, detent.
- **H**: Two position, spring offset.
- **K**: Two position, spring centered.
- **Omit Standard**: Monitor Switch

**Code Symbol**
- **1**: Two position, spring offset.
- **2**: Three position, spring centered.
- **4**: Two position, detent.
- **8**: Two position, spring centered.
- **9**: Two position, spring offset.

Valve schematic symbols are per NFPA/ANSI standards, providing flow P to A when energizing operator A. Note operators reverse sides for #8 and #9 spools. See installation information for details.

**Mounting Bolt Kits**

| UNC Bolt Kits for use with D3L Directional Control Valves & Sandwich Valves |
|---------------------------------|-----------------|-----------------|-----------------|
| Number of Sandwich Valves       | @ 2.00" (50mm) thickness |
| D3L Standard:                   | BK98            | BK141           | BK142           | BK143           |
|                                  | 1.62"           | 3.50"           | 5.50"           | 7.50"           |
| Metric:                         | BKM98           | BKM141          | BKM142          | BKM143          |
|                                  | 40mm            | 90mm            | 140mm           | 190mm           |

**NOTE:** All bolts are SAE grade 8, 1/4-20 UNC-2A thread, torque to 16 Nm (12 ft-lbs).

**Valve Weight:** 3.6 kg (8 lbs.)

**Seal Kit:**
- Nitrile: SKD3L
- Fluorocarbon: SKD3LV

**Bold:** Designates Tier I products and options.

**Non-Bold:** Designates Tier II products and options. These products will have longer lead times.