General Description
The DL081 Series Manual Valves are suited for emergency lowering applications and on-off flow applications.

Operation
The DL081 Series Valves are mechanically operated check valves. Hydraulic force on the poppet is balanced by having equal area between the poppet seat and valve stem, allowing the poppet to be manually pulled off its seat. When released, the bias spring will return the valve poppet to its closed position. Back pressure of more than 6.9 Bar (100 PSI) will prevent the bias spring from closing the poppet and must be avoided.

Features
- Compact size for reduced space requirements
- Low leakage design
- Flip lever, pull handle, or detented pin design

Specifications

<table>
<thead>
<tr>
<th></th>
<th>30 LPM (8 GPM)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal Flow</td>
<td></td>
</tr>
<tr>
<td>Maximum Inlet Pressure</td>
<td>210 Bar (3000 PSI)</td>
</tr>
<tr>
<td>Leakage</td>
<td>5 drops/min. (1/3 cc/min.) at 210 Bar (3000 PSI)</td>
</tr>
<tr>
<td>Max. Allowable Tankline Pressure</td>
<td>6.9 Bar (100 PSI)</td>
</tr>
<tr>
<td>Operating Temp. Range (Ambient)</td>
<td>-40°C to +93.3°C (Nitrile) (-40°F to +200°F) -31.7°C to +121.1°C (Fluorocarbon) (-25°F to +250°F)</td>
</tr>
<tr>
<td>Cartridge Material</td>
<td>Stem, stainless steel. All other parts hardened steel.</td>
</tr>
<tr>
<td>Body Material</td>
<td>Aluminum or Steel</td>
</tr>
<tr>
<td>Filtration</td>
<td>ISO code 16/13, SAE Class 4 or better</td>
</tr>
<tr>
<td>Mounting</td>
<td>No Restrictions</td>
</tr>
<tr>
<td>Cavity</td>
<td>Common Cavity No. C08-2</td>
</tr>
</tbody>
</table>

Performance Curve
Flow vs. Pressure Drop
(Through cartridge only)
**Dimensions**

*Inch equivalents for millimeter dimensions are shown in (**)
Directional Control Valves
Series DL081

Ordering Information

DL 08 1 —

Manual Lowering Check Valve

Size Style Actuator Type Seals Body Option

3/4-16UNF-2B

Body

Code Style

Omit Nitrile

V Fluorocarbon

Code Type

K Knob

T Stem

L Lever

P Lock Pin

Code Port Size & Material

Omit Cartridge Only

4P 1/4" NPTF (B08-2-4P) Steel

A4P 1/4" NPTF (B08-2-A4P) Aluminum

6P 3/8" NPTF (B08-2-6P) Steel

A6P 3/8" NPTF (B08-2-A6P) Aluminum

4T SAE-4 (B08-2-4T) Steel

A4T SAE-4 (B08-2-A4T) Aluminum

6T SAE-6 (B08-2-6T) Steel

A6T SAE-6 (B08-2-A6T) Aluminum

4B 1/4" BSPG (B08-2-4B) Steel

A4B 1/4" BSPG (B08-2-A4B) Aluminum

6B 3/8" BSPG (B08-2-6B) Steel

A6B 3/8" BSPG (B08-2-A6B) Aluminum

Shipping Weight

Cartridge Only .08 kg (.17 lbs.)

Cartridge in Body .19 kg (.42 lbs.)

SERVICE PARTS

Knob Option: 852525
(To convert DL081T to DL081K)

Nitrile Seal Kit: SK08-2
Fluorocarbon Seal Kit: SK08-2V