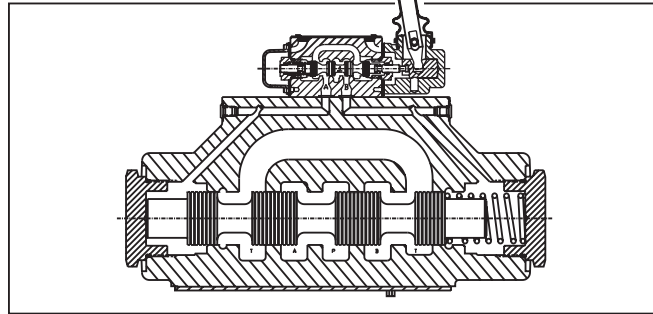
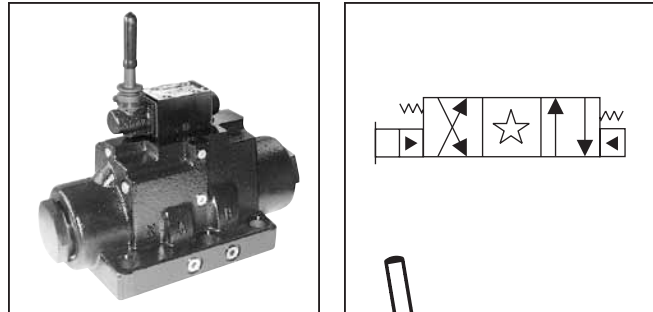


Parker D101VL Series Lever Operated Directional Control Valve Service Manual

A

General Description

Series D101VL directional control valves are 5-chamber, lever operated valves. They are available in 2 or 3-position styles. These valves are manifold or subplate mounted, and conform to NFPA's D10, CETOP 10 mounting pattern.



Specifications

Mounting Pattern	NFPA D10, CETOP 10, NG32
Max. Operating Pressure	207 Bar (3000 PSI)
Max. Tank Pressure	Internal Drain Model: 34 Bar (500 PSI) External Drain Model: 207 Bar (3000 PSI)
Max. Drain Pressure	34 Bar (500 PSI)
Maximum Flow	See Reference Chart
Pilot Pressure	Oil Min 6.9 Bar (100 PSI) Oil Max 207 Bar (300 PSI)
Response Time	Varies with pilot line size and length, pilot pressure, pilot valve shift time & flow capacity (GPM)

Features

- Low force required to shift spool.
- Hardened spools provide long life.
- Low pressure drop design.

Ordering Information

<div style="border: 1px solid black; padding: 2px; width: 30px; margin: 0 auto;">D</div> Directional Control Valve	<div style="border: 1px solid black; padding: 2px; width: 30px; margin: 0 auto;">101V</div> Basic Valve <div style="border: 1px solid black; padding: 2px; width: 60px; margin: 5px auto;">NFPA D10 CETOP 10</div>	<div style="border: 1px solid black; padding: 2px; width: 30px; margin: 0 auto;">L</div> Lever Operated Pilot	<div style="border: 1px solid black; padding: 2px; width: 30px; margin: 0 auto;"></div> Spool	<div style="border: 1px solid black; padding: 2px; width: 30px; margin: 0 auto;"></div> Style	<div style="border: 1px solid black; padding: 2px; width: 30px; margin: 0 auto;"></div> Pilot Supply and Drain	<div style="border: 1px solid black; padding: 2px; width: 30px; margin: 0 auto;"></div> Seal	<div style="border: 1px solid black; padding: 2px; width: 30px; margin: 0 auto;"></div> Valve Variations	<div style="border: 1px dashed black; padding: 2px; width: 30px; margin: 0 auto;"></div> Design Series NOTE: Not required when ordering.
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<table border="1"> <thead> <tr> <th>Code</th> <th>Symbol</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1</td> <td></td> </tr> <tr> <td style="text-align: center;">2</td> <td></td> </tr> <tr> <td style="text-align: center;">4</td> <td></td> </tr> <tr> <td style="text-align: center;">8*</td> <td></td> </tr> <tr> <td style="text-align: center;">9**</td> <td></td> </tr> <tr> <td style="text-align: center;">11</td> <td></td> </tr> </tbody> </table> <p>* 8 spool has closed crossover. ** 9 spool has open crossover.</p>	Code	Symbol	1		2		4		8*		9**		11		<table border="1"> <thead> <tr> <th>Code</th> <th>Type</th> </tr> </thead> <tbody> <tr> <td>N</td> <td>Nitrile</td> </tr> <tr> <td>V</td> <td>Fluorocarbon</td> </tr> </tbody> </table> <table border="1"> <thead> <tr> <th>Code</th> <th>Supply — Drain</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Int. pilot/Ext. drain</td> </tr> <tr> <td>2</td> <td>Ext. pilot/Ext. drain</td> </tr> <tr> <td>4#</td> <td>Int. pilot/Int. drain</td> </tr> <tr> <td>5</td> <td>Ext. pilot/Int. drain</td> </tr> </tbody> </table> <p># Not available with 2, 8 & 9 spools.</p>	Code	Type	N	Nitrile	V	Fluorocarbon	Code	Supply — Drain	1	Int. pilot/Ext. drain	2	Ext. pilot/Ext. drain	4#	Int. pilot/Int. drain	5	Ext. pilot/Int. drain	<table border="1"> <thead> <tr> <th>Code</th> <th>Description</th> <th>Symbol</th> </tr> </thead> <tbody> <tr> <td>B†</td> <td>Sgl. operator, 2 position, spring offset. P to A and B to T in offset position.</td> <td></td> </tr> <tr> <td>C</td> <td>Dbl. operator, 3 position, spring centered.</td> <td></td> </tr> <tr> <td>H†</td> <td>Sgl. operator, 2 position, spring offset. P to B and A to T in offset position.</td> <td></td> </tr> </tbody> </table> <p>† Available with 1, 2, 4 & 11 spools only.</p>	Code	Description	Symbol	B†	Sgl. operator, 2 position, spring offset. P to A and B to T in offset position.		C	Dbl. operator, 3 position, spring centered.		H†	Sgl. operator, 2 position, spring offset. P to B and A to T in offset position.		<table border="1"> <thead> <tr> <th>Code</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>7</td> <td>Pilot Choke – Meter Out</td> </tr> <tr> <td>8</td> <td>Stroke Adj. 'B' End</td> </tr> <tr> <td>9</td> <td>Stroke Adj. 'A' End</td> </tr> <tr> <td>60</td> <td>Pilot Choke – Meter In</td> </tr> <tr> <td>89</td> <td>Stroke Adj. 'A' & 'B' Ends</td> </tr> </tbody> </table>	Code	Description	7	Pilot Choke – Meter Out	8	Stroke Adj. 'B' End	9	Stroke Adj. 'A' End	60	Pilot Choke – Meter In	89	Stroke Adj. 'A' & 'B' Ends
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Valve schematic symbols are per NFPA/ANSI standards, providing flow P to A when energizing operator A. Note operators reverse sides on #8 and #9 spools. See installation information for details.

This condition varies with spool code.

Bold: Designates Tier I products and options.

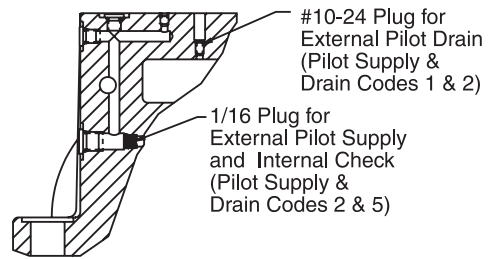
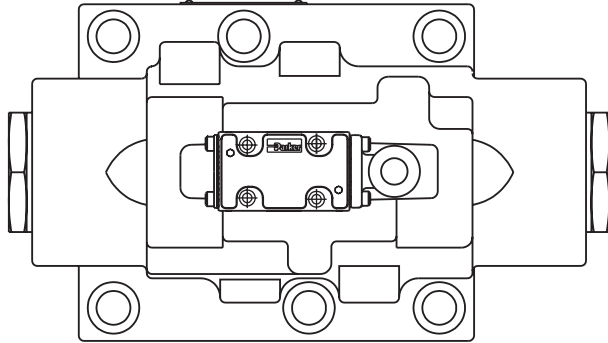
Non-Bold: Designates Tier II products and options.
These products will have longer lead times.

Valve Weight: 35.0 kg (77.2 lbs.)
Standard Bolt Kit: BK229
Metric Bolt Kit: BKM229

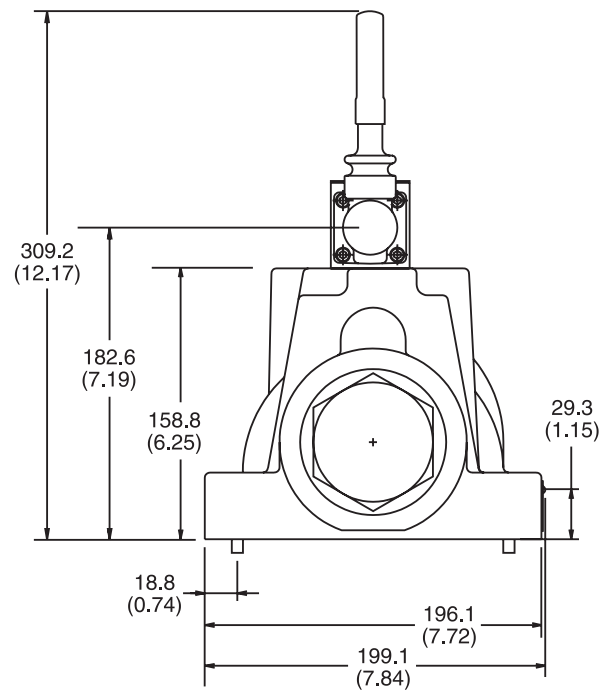
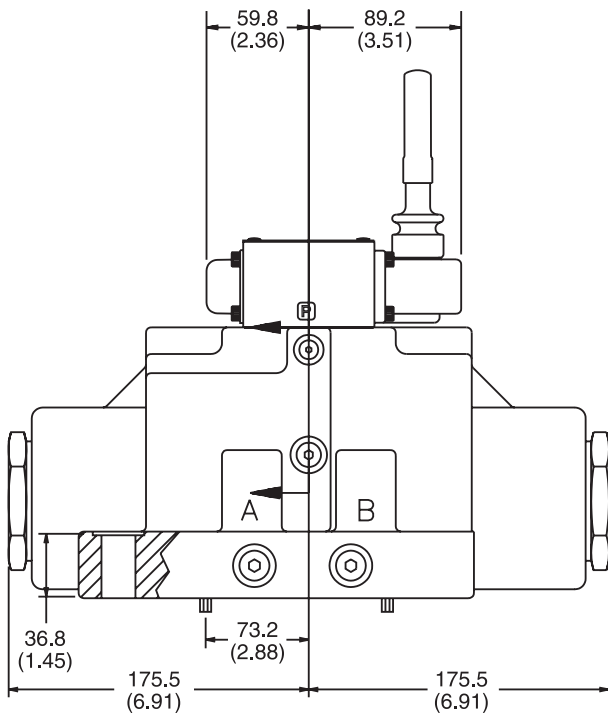
Inch equivalents for millimeter dimensions are shown in (**)

A

Lever Operated



Section A-A



Note: 36.83mm (1.45") from bottom of bolt hole counterbore to bottom of valve.