



# Directional Control Valves Technical Information

## 4 Way, 2 Position Hydraulic Piloted DV15-P5-24-FD

### OPERATION

The DV15-P5-24-FD is a normally open, 5-ported piloted directional control valve, 2-position, 4-way, 15-size. It is shifted by applying pilot pressure to port 5. In the normal position, flow is allowed between ports 3 and 4, and ports 2 to port 1. During transition, flow is temporarily allowed between all four ports. When fully shifted flow is allowed ports 3 to 2, and ports 4 to port 1.



### APPLICATIONS

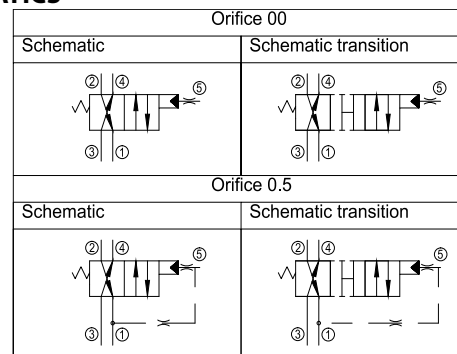
This valve is primarily used for reversing fan drive circuits where the open-transition design is important for smooth shifting and minimal pressure spikes during reversing. The valve can be piloted with many 2-way valves including solenoid, sequence, relief or manual valves with the internal pilot drain orifice option. Alternatively, it can also be piloted with a 2-position, 3-way solenoid valve using the internal pilot drain plug option.

### SPECIFICATIONS

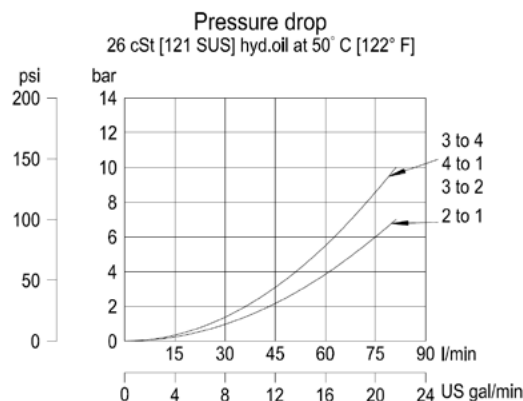
<b>Rated Pressure*</b>	230 bar [3335 psi]
<b>Rated Flow at 7 bar [100 psi]</b>	70 l/min [18.4 US gal/min]
<b>Maximum Rated Flow</b>	80 l/min [21.1 US gal/min]
<b>Minimum pilot pressure</b>	2 bar [29 psi]
<b>Weight</b>	0.44 kg [0.95 lbs]
<b>Cavity</b>	<b>NCS12/5</b>

\* Rated Pressure based on NFPA fatigue test standards (at 1 Million Cycles).

### SCHEMATICS



### PERFORMANCE CURVE



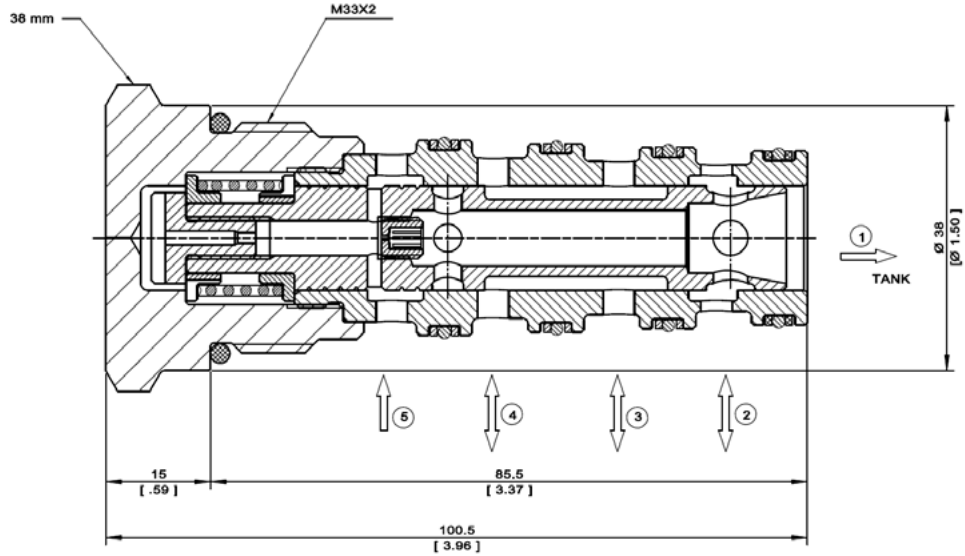


# Directional Control Valves Technical Information

## 4 Way, 2 Position Hydraulic Piloted DV15-P5-24-FD

### DIMENSIONS

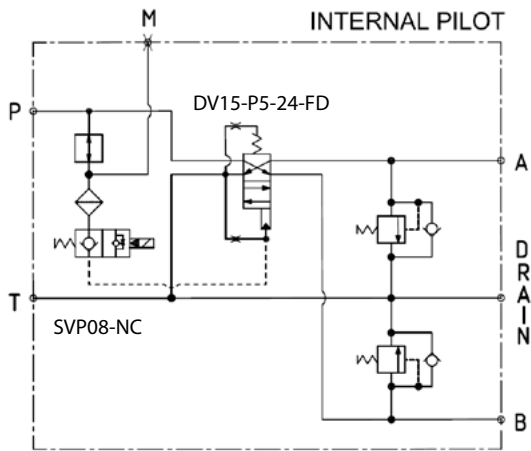
mm [in]



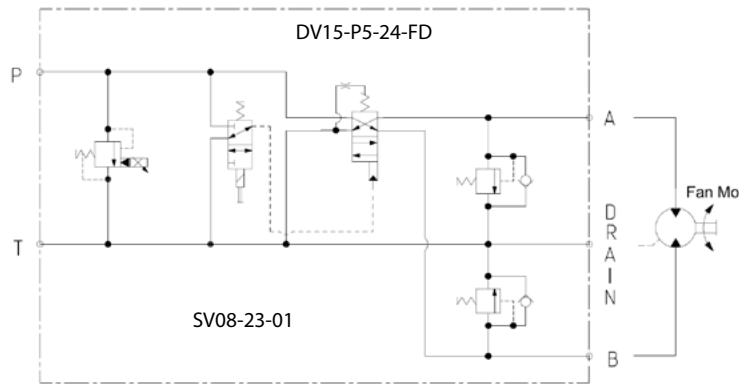
### EXAMPLE CIRCUITS

#### Reversing Fan Drive Circuits

Piloted with 2-way valve and internal pilot drain orifice option



Piloted with 3-way valve and internal pilot drain plug option



### ORDERING INFORMATION

**DV15 - P5 - 24 - FD - 0.5 - B - 2 - 12S**

DV15: Directional Control Valve, Hydraulically Piloted, 15 Size

P5: Piloted, Port 5

24: 2 Position, 4-way

FD: Schematic: Fan Drive

Code	Orifice/Plug for Pilot Drain
00	Plug
0.5	0.5 mm

Housing & Ports	Housing P/N
6B: 3/4 BSP [P5 - 3/8 BSP]	NCS12/5 - 6B/3B
12S: #12 SAE [P5 - #6 SAE]	NCS12/5 - 12S/6S

Pilot Shift Pressure  
2: 2 bar [29 psi]

Code	Seal Material
B	Buna
V	Viton