# 3-way, pilot operated, directional valve with internal drain to port 3 (1 blocked, 2 to 3 open)

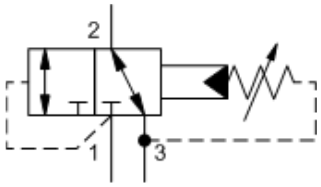
Capacity:
**15 gpm (60 L/min.)**

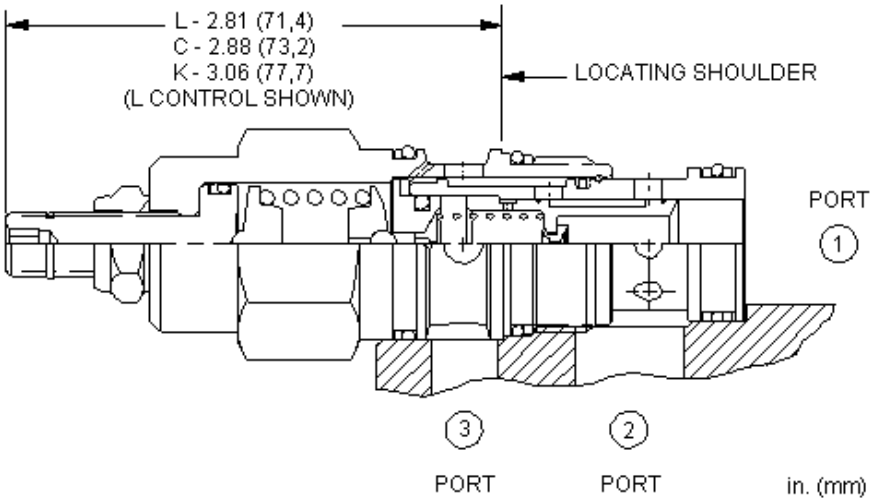
Functional Group:
**Products : Cartridges : Directional; DP**, DR**, DV** : 3 Way - 3 Port - 1 Blocked, 2 to 3 Open : Pilot Operated**

Model:
**DPCC**

**Product Description**

Pilot-operated, 3-way directional cartridges (1 blocked, 2 to 3 open) are switching devices typically used in moderate flow circuits. They can be used by themselves or to actuate larger pilot-operated directional cartridges or logic cartridges. The valve shifts when the pressure differential between port 1 and port 3 exceeds the setting.



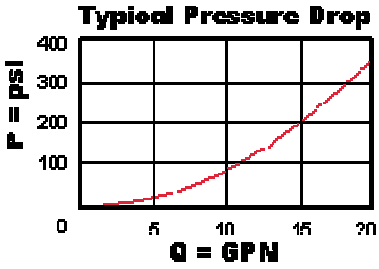



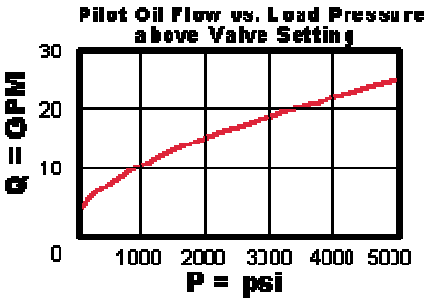

**Technical Features**

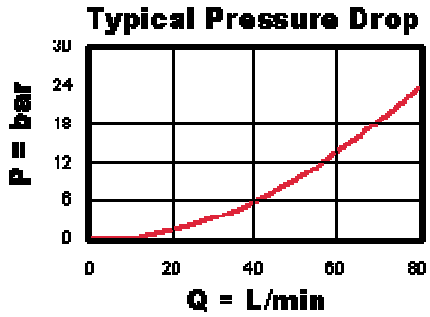
- Pressure at port 3 is directly additive to the setting of the valve. Because of this, port 3 may not be useable as a work port in your circuit. If this is a consideration, the 4 port version of this valve may be a solution.
- Direct-acting and pilot-operated versions of these valves are interchangeable. They fit the same cavities and have the same flow paths.
- Port 3 can be blocked to prevent the valve from shifting.
- This valve is not bistable; it is capable of modulating between the two positions shown.
- Maximum pressure at port 3 should be limited to 3000 psi (210 bar). This is due to fatigue strength limits not hydraulic operating limits.
- When pilot pressure exceeds the valve setting, pilot flow may be a consideration. See performance curves for pilot consumption vs. load pressure above the valve setting. If this is a problem, the direct acting version of this valve would be a solution.
- Incorporates the Sun floating style construction to minimize the possibility of internal parts binding due to excessive installation torque and/or cavity/cartridge machining variations.

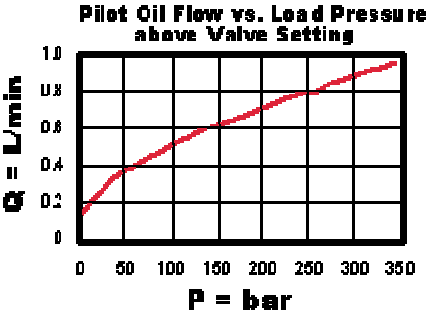
**Technical Data**

| | U.S. Units | Metric Units |
|---|---|---|
| Cavity | T-2A | |
| Capacity | 15 gpm | 60 L/min. |
| Control Pilot Flow | 10 - 15 in³/min. | 0,16 - 0,25 L/min. |
| Factory Pressure Settings Established at | 4 gpm | 15 L/min. |
| Maximum Operating Pressure | 5000 psi | 350 bar |
| Maximum Valve Leakage at 110 SUS (24 cSt) | 1 in³/min.@1000 psi | 15 cc/min.@70 bar |
| Series (from Cavity) | Series 2 | |
| Adjustment - Number of Clockwise Turns to Increase Setting | 5 | |
| Valve Hex Size | 1 1/8 in. | 28,6 mm |
| Valve Installation Torque | 45 - 50 lbf ft | 60 - 70 Nm |
| Adjustment Screw Internal Hex Size | 5/32 in. | 4 mm |
| Adjustment Locknut/Cap Hex Size | 9/16 in. | 15 mm |
| Adjustment Nut Torque | 80 - 90 lbf in. | 9 - 10 Nm |
| Seal Kits - Cartridge | Buna: 990-202-007 | |
| Seal Kits - Cartridge | Viton: 990-202-006 | |
| Model Weight | 0.60 lb. | 0.27 kg. |




# DPCC-LAN

### Control

**Standard Options**

**C*** Tamper Resistant - Factory Set

**K** Handknob

**L** Standard Screw Adjustment

### Adjustment Range

**Standard Options**

**A** 100 - 3000 psi (7 - 210 bar), 1000 psi (70 bar) Standard Setting

**B** 50 - 1500 psi (3,5 - 105 bar), 1000 psi (70 bar) Standard Setting

**D** 25 - 800 psi (1,7 - 55 bar), 400 psi (28 bar) Standard Setting

**E** 25 - 400 psi (1,7 - 28 bar), 200 psi (14 bar) Standard Setting

**H** 35 - 3000 psi , 1000 psi (70 bar) Standard Setting

**W** 100 - 4500 psi (7 - 315 bar), 1000 psi (70 bar) Standard Setting

### Seal Material

**Standard Options**

**N** Buna-N

**V** Viton

### Material/Coating Modifier

**Preferred Options**

**No modifier** (standard material with no special coating)

**Special Options**

**/AP** Stainless Steel, Passivated

Control: C

Control: L

***Our corrosion resistant product line is growing! If you are interested in a corrosion resistant option for this model, please contact Sun.***

***Additional Options***

### Control

**O** Handknob with Panel Mount

### Adjustment Range

**C** 150 - 6000 psi (10,5 - 420 bar), 1000 psi (70 bar) Standard Setting

**N** 60 - 800 psi (4 - 55 bar), 400 psi (28 bar) Standard Setting

### Seal Material

When the modifier is /AP, the control must be C or L

* Special Setting required, specify at time of order
Customer specified setting stamped on hex.

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