



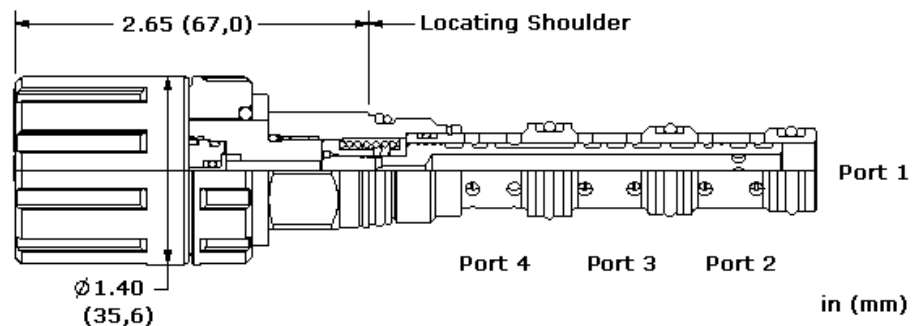
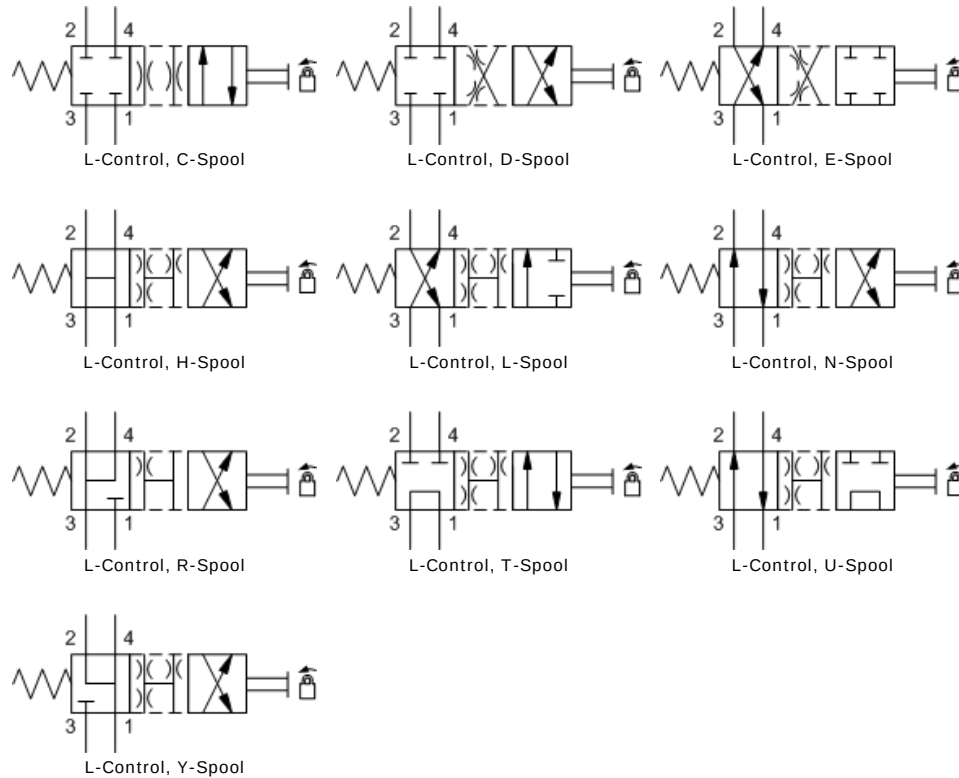
4-way, manually-operated, directional spool valve

Capacity:
10 gpm (40 L/min.)

Model:
DNM

Product Description

This manually operated, 2-position, 4-way directional cartridge is a direct-acting, balanced spool valve used to control the direction of flow in a hydraulic circuit. Manual operation is achieved via Sun's Twist/Lock manual override mechanism and is designed for intermittent (infrequent) use only.



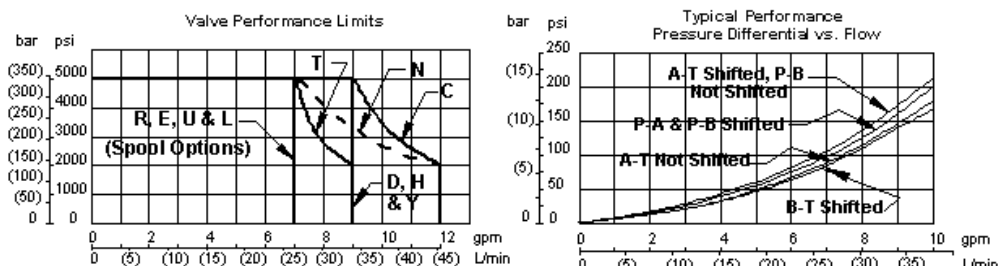
Technical Features

- This valve is designed for intermittent use such as a manual override. The manual control assembly has a mechanical life expectancy of about 10,000 cycles.
- The dual-operation control option "D" allows the operator to either shift the valve momentarily by twisting the knob clockwise or shift it into a mechanically detented position by twisting counter-clockwise.

- The momentary/twist control option "T" allows the operator to momentarily shift the valve by twisting the knob clockwise and releasing. Once released, the valve returns to its normal position.
- The detent/lock control option "L" allows the operator to shift the valve into a mechanically detented position by twisting the knob counter-clockwise. This detented position will be maintained until the operator twists the knob clockwise and allows the valve to return to its normal position.
- The control on this valve is meant to be operated by a person's hand. The control should not be modified, for instance fastening a lever to the knob. Under no circumstances should the control be operated by other mechanical devices.
- 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-31A	
Capacity	10 gpm	40 L/min.
Maximum Operating Pressure	5000 psi	350 bar
Maximum Valve Leakage at 110 SUS (24 cSt)	10 in ³ /min. @ 3000 psi	160 cc/min. @ 210 bar
Operating Torque	10 lbf in.	1,2 Nm
Series (from Cavity)	Series 1	
Valve Hex Size	7/8 in.	22,2 mm
Valve Installation Torque	30 - 35 lbf ft	40 - 50 Nm
Seal Kits - Cartridge	Buna: 990-431-007	
Seal Kits - Cartridge	Viton: 990-431-006	
Model Weight	0.77 lb.	0.35 kg.



Note: Performance limits are derived with 4-way operation and symmetrical flow. For valve applications where either asymmetrical flow or 3-way operation is present, these performance limits may be reduced.

DN DM - LNN

Control

Standard Options

- D Twist/Lock (Dual) Manual Override
- L Twist/Lock (Detent) Manual Override
- T Twist Manual Override

Spool Configuration

Preferred Options

- C Closed, Shift to Through
- D Closed, Shift to Cross
- E Cross, Shift to Closed
- H Open, Shift to Cross
- N Through, Shift to Cross
- Standard Options
- L Cross, Shift to P to A, B and T Blocked
- R Regen, Shift to Cross
- T Tandem, Shift to Through
- U Through, Shift to Tandem
- Y Motor, Shift to Cross

Seal Material

Standard Options

- N Buna-N
- V Viton