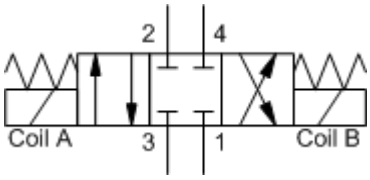
MODEL

DNUC

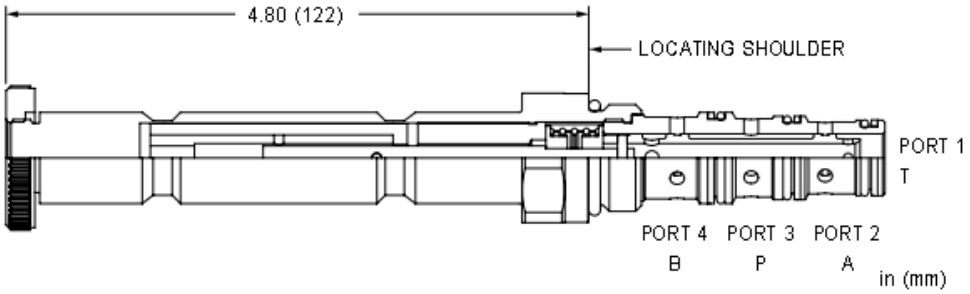
4-way, 3-position, solenoid-operated directional spool valve, 3600 psi (250 bar) - common cavity

CAPACITY: 7 gpm / CAVITY: SC-10-04

sunhydraulics.com/model/DNUC



C-Spool



This direct acting, solenoid-operated, 4-way, 3-position spool valve is spring centered to the neutral position. When coil A is energized, the flow is from port 3 (P) to port 2 (B) and from port 4 (A) to port 1 (T). When coil B is energized, the flow is from port 3 to port 4 and from port 2 to port 1.

TECHNICAL DATA

NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

Cavity	SC-10-04
Series	1C
Capacity	7 gpm
Maximum Operating Pressure	3600 psi
Typical Valve Leakage at 110 SUS (24cSt)	11 in^3/min.@3600 psi
Response Time - Typical	50 ms
Switching Frequency	15,000 max. cycles/hr
Solenoid Tube Diameter	.75 in.
Coil Nut Torque	3.5 - 3.9 lbf ft
Valve Hex Size	27 mm
Valve Installation Torque	28 - 32 lbf ft

OPTION SELECTION EXAMPLE: DNUCXCN

CONTROL (X)	SPOOL CONFIGURATION (C)	SEAL MATERIAL (N)	COIL
X No Manual Override	**C** Blocked Center	**N** Buna-N	No coil
T Manual Override	**H** Open Center		
	T Tandem Center		
	W A and B Bleed to T Center		

TECHNICAL FEATURES

- Maximum working pressure at Port 1 is 1000 psi (70 bar). Max working pressure on all other ports is 3600 psi (250 bar).
- This valve is direct actuated and requires no minimum hydraulic pressure for operation.
- Coil connector options offer ratings up to IP67. See individual coil product pages for details.
- The cartridge installation torque of 30 lbf ft (40 Nm) is required for best performance.
- The valve is available with a manual override option (T control). This hand-actuated lever option is also rated to a maximum of 1000 psi (70 bar) at Port 1 and can be actuated under pressure. Rotating the lever away from the manifold block will connect port 3 to port 4 and port 2 to port 1. Rotating the lever towards the manifold block will connect port 3 to port 2 and port 4 to port 1.
- The manual override option includes two mounting bolts which fasten the mechanism onto the valve via mounting holes on the manifold. For details on the mounting holes, refer to the product page of any Sun manifold configured with an SC-10-04 cavity (i.e. model code: JPA).
- This valve utilizes a wet armature design. This means that the working fluid surrounds the armature and is exposed to the heat generated by the coil. This can be a factor if the coil is energized for long periods of time. Some fluids, notably water/glycol mixtures, break down at these temperatures over time and form varnishes that will affect the function of the cartridge.
- Coils can be mounted on the tube in either direction.

PERFORMANCE CURVES