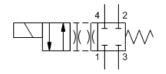


MODEL DNDB Value Series, 4-way, 2-position, solenoid-operated directional spool valve - 3600 psi (250 bar) CAPACITY: 28 L/min. | CAVITY: T-31A



## **CONFIGURATION**

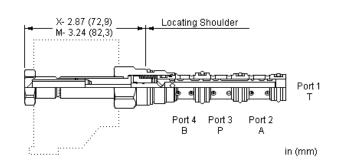
X Control No Manual Override
C Spool Configuration Closed, Shift to Through

N Seal Material Buna-N (none) Coil No coil

## NOTES

Please verify cartridge clearance requirements when choosing a Sun manifold. Different valve controls and coils require different clearances.

An additional 2.00 inches (50,8 mm) beyond the valve extension is needed for coil installation and removal.



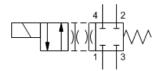
This solenoid-operated 4-way, 2-position cartridge is a direct-acting, balanced spool directional valve.

### **TECHNICAL DATA**

Cavity	T-31A	
Series	1	
Capacity	28 L/min.	
Maximum Operating Pressure	250 bar	
Response Time - Typical	50 ms	
Maximum Valve Leakage at 110 SUS (24 cSt)	160 cc/min.@210 bar	
Switching Frequency	15000 cycles/hr	
Manual Override Force Requirement	66 N/100 bar @ Port 1	
Manual Override Stroke	2,5 mm	
Solenoid Tube Diameter	12,7 mm	
Valve Hex Size	22,2 mm	
Valve Installation Torque	41 - 47 Nm	
Seal kit - Cartridge	Buna: 990-431-007	
Seal kit - Cartridge	Viton: 990-431-006	
Model Weight	0.20 kg.	

# SYMBOLS

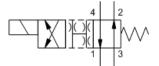
X-Control, C-Spool



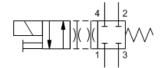
M-Control, N-Spool



X-Control, N-Spool



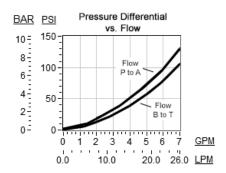
M-Control, C-Spool

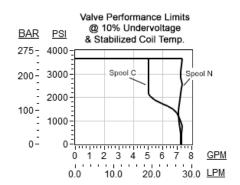


### **TECHNICAL FEATURES**

- This valve is direct actuated and requires no minimum hydraulic pressure for operation.
- The solenoid tube assembly is fatigue rated for 3600 psi (250 bar) service.
- Port 3 is the preferred inlet for this valve.
- 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.
- 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.

### **PERFORMANCE CURVES**





## **CONFIGURATION OPTIONS**

	CONTROL		
Standard Options	М	Manual Override (Standard)	
	X	No Manual Override	
	SPOOL CONFIGURATION		
Standard Options	С	Closed, Shift to Through	
	N	Through, Shift to Cross	
	SEAL MATERIAL		
Standard Options	N	Buna-N	
	V	Viton	
	COIL		
		No coil	
Standard Options	212N	DIN 43650 3 pin (Hirschman), 12 VDC, no transient voltage suppression (TVS) diodes	
	224N	DIN 43650 3 pin (Hirschman), 24 VDC, no transient voltage suppression (TVS) diodes	
	712N	Twin Lead, 12 VDC, no transient voltage suppression (TVS) diodes	
	724N	Twin Lead, 24 VDC, no transient voltage suppression (TVS) diodes	
	912N	Deutsch DT04-2P, 12 VDC, no transient voltage suppression (TVS) diodes	
	924N	Deutsch DT04-2P, 24 VDC, no transient voltage suppression (TVS) diodes	
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