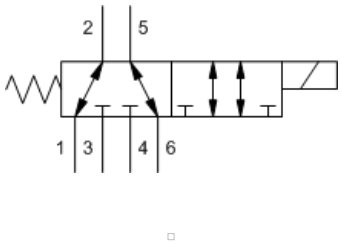
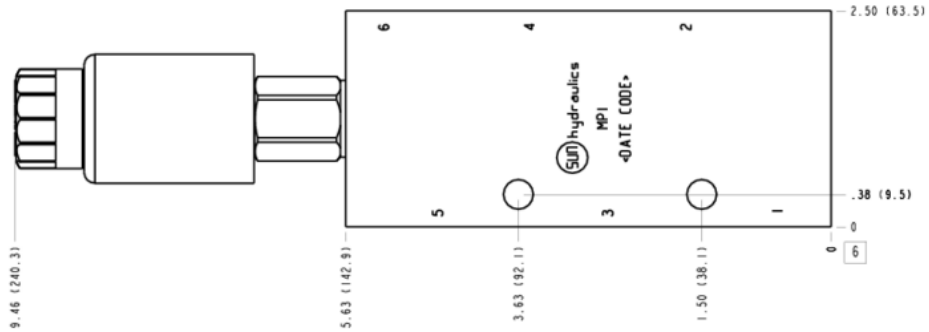
MODEL
DNDYXXN924-MPI

2-position, 6-way, solenoid-operated directional spool valve
CAPACITY: 20 L/min. | CAVITY: T-61A




## CARTRIDGE CONFIGURATION

| | | |
|---|---|---|
| **X** | Control | No Manual Override |
| **X** | Spool Configuration | - |
| **N** | Seal Material | Buna-N |
| **924** | Coil | Deutsch DT04-2P, 24 VDC |

## MANIFOLD CONFIGURATION

| | | |
|---|---|---|
| **(none)** | Modifier | 6061-T651 Aluminum, Buna-N |

## PORT HEADINGS AND SIZES

| Modifiers | Ports |
|---|---|
| MPI, /10, /11 | Ports 1, 2, 3, 4: SAE 6; Ports 5 & 6: SAE 6; |

## 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.

***Important:*** Carefully consider the maximum system pressure. The pressure rating of the manifold is dependent on the manifold material, with the port type/size a secondary consideration. Manifolds constructed of aluminum are not rated for pressures higher than 3000 psi (210 bar), regardless of the port type/size specified.

This solenoid-operated 6-way, 2-position cartridge is a direct-acting, balanced spool valve. The typical use for this valve is to select between two separate circuits. The de-energized condition connects P and T to the first circuit and when energized connects P and T to the second circuit.

## CARTRIDGE TECHNICAL DATA

| | |
|---|---|
| Cavity | T-61A |
| Series | 1 |
| Capacity | 20 L/min. |
| Maximum Operating Pressure | 350 bar |
| Maximum Valve Leakage at 110 SUS (24 cSt) | 80 cc/min.@210 bar |
| Manual Override Force Requirement | 33 N/100 bar @ Port 1 |
| Manual Override Stroke | 2,5 mm |
| Response Time - Typical | 50 ms |
| Switching Frequency | 15,000 max. cycles/hr |
| Solenoid Tube Diameter | 19 mm |
| Valve Hex Size | 22,2 mm |
| Valve Installation Torque | 41 - 47 Nm |
| Seal kit - Cartridge | Buna: 990-461-007 |
| Seal kit - Cartridge | EPDM: 990-461-014 |
| Seal kit - Cartridge | Viton: 990-461-006 |
| Seal and nut kit - Coil | Viton: 990-770-006 |
| Model Weight | 0.67 kg. |

## MANIFOLD TECHNICAL DATA

| | |
|---|---|
| Body Type | Line mount |
| Interface | None |
| Body Features | Ninety degree |
| Mounting Hole Diameter | 8.6 mm |
| Mounting Hole Depth | Through |
| Mounting Hole Quantity | 2 |
| Open Cavities | 1 |

| | |
|---|---|
| Cavity | T-61A |
| Port Size | SAE 6 |
| Model Weight | 0.62 kg. |

## CARTRIDGE TECHNICAL FEATURES

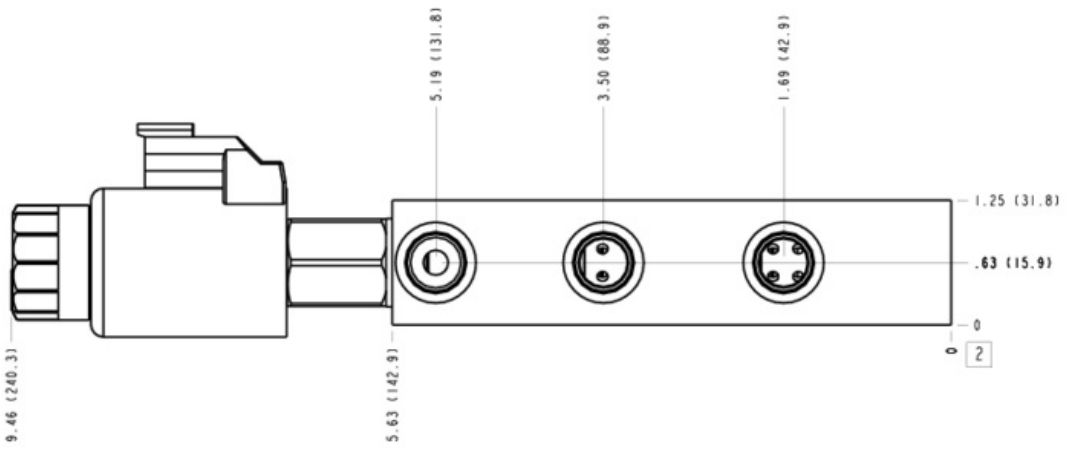
- The solenoid tube assembly is fatigue rated for 5000 psi (350 bar) service.
- This valve is direct actuated and requires no minimum hydraulic pressure for operation.
- This cartridge has several manual override choices, including no manual override. See the CONFIGURATION section. Please note: Manual override functionality is not compatible with weatherized coils.
- Cartridges configured with EPDM seals are for use in systems with phosphate ester fluids. Exposure to petroleum based fluids, greases and lubricants will damage the seals.
- On models equipped with the D or L control, the detent mechanism in the manual override is meant for temporary actuation. The D, L and T manual control assemblies have a mechanical life expectancy of approximately 7,000 cycles.
- 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.
- A wide variety of coil termination and voltage options are available, with and without surge protection. See the CONFIGURATION section.
- The solenoid's unique magnetic design results in a high efficiency solenoid, yielding high spool actuating force per Watt expended, leading to reliable valve shifting.
- Coils are interchangeable with other Sun Series 1 solenoid products and can be mounted on the tube in either direction.
- Coil connector options offer ratings up to IP69K. See individual coil product pages for details. Additional weatherized coils and kits are available for more complete environmental protection.
- 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.

## ASSEMBLY FACES

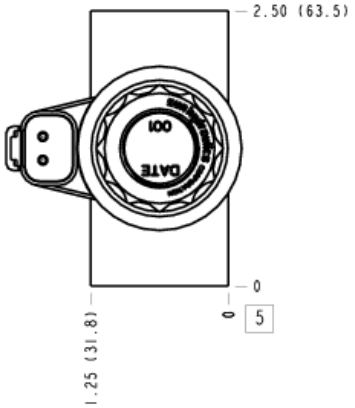
**FACE GRID**

| | | | |
|---|---|---|---|
| 1 | 2 | 3 | 4 |
| 5 | 6 | 7 | 8 |
| 9 | 10 | 11 | 12 |

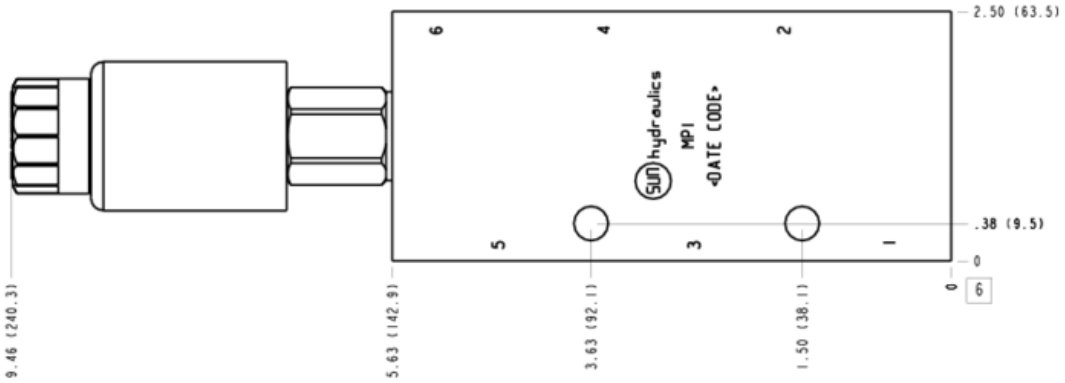
### Face 2



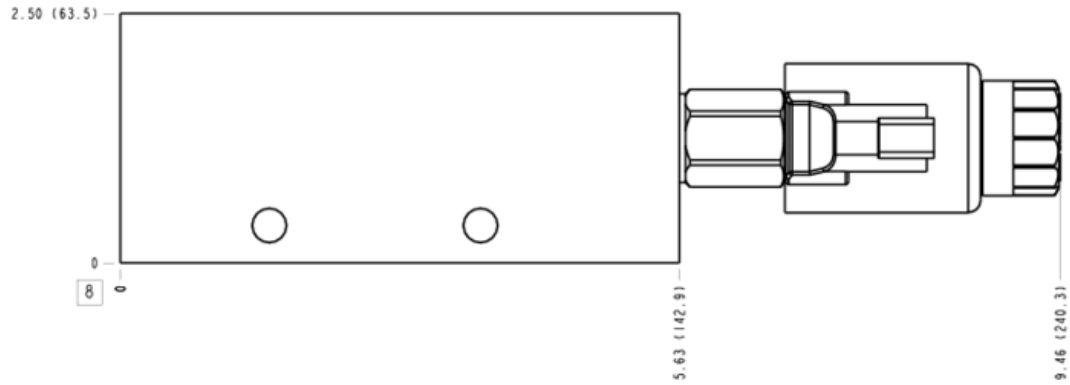

### Face 5



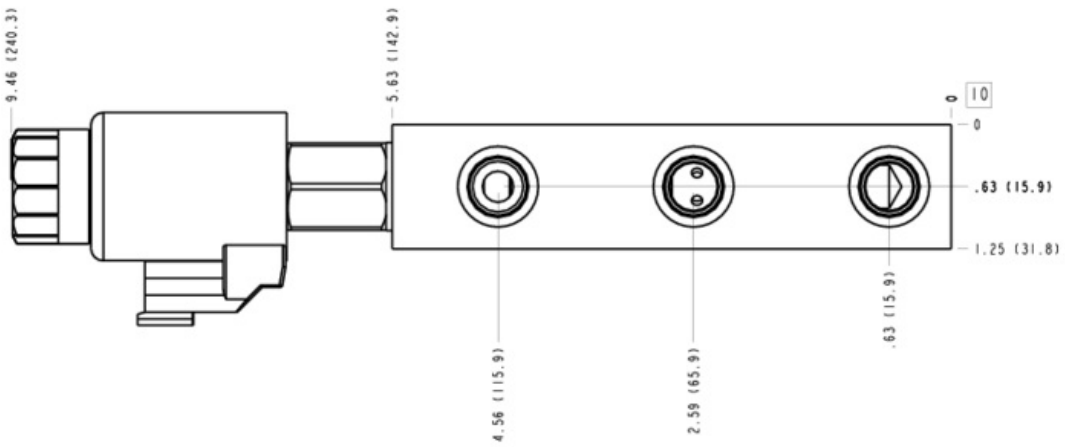

Face 6




Face 8




Face 10




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