# *New Product Announcement!*

sun hydraulics®
A HELIOS COMPANY

3-way, 2-position
Direct-acting
Balanced spool
Solenoid-operated
Directional valve
3600 psi (250 bar)
Sun Common

Model: DMTA

For detailed specifications visit www.sunhydraulics.com


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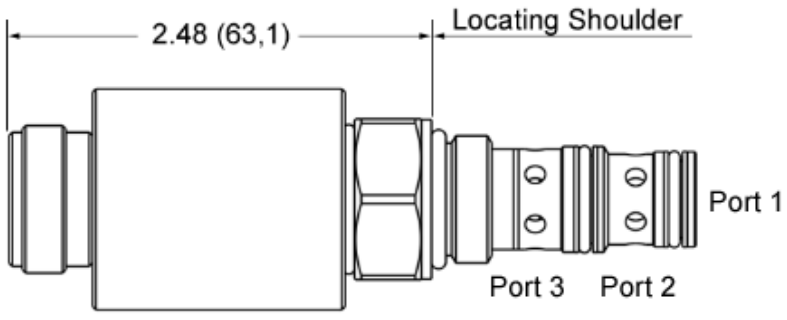
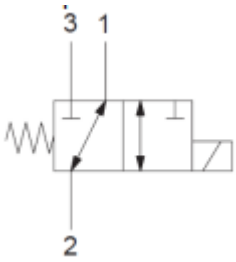
## Cartridge Dimensional Drawing

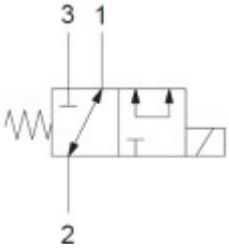



in (mm)

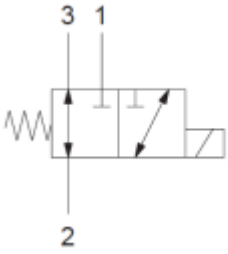
## Functional symbol



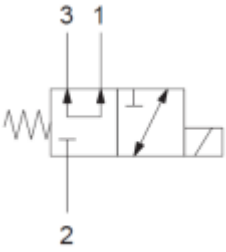

A – Normally 1 to 2, Shift to 2 to 3




H – Normally 1 to 2, Shift to 1 to 3




N – Normally 2 to 3, Shift to 1 to 2




P – Normally 1 to 3, Shift to 1 to 2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## Technical Data

This solenoid-operated, 3-way, 2-position cartridge is a direct-acting, balanced spool directional valve.

- Flow capacity may vary per spool type and inlet port. Refer to the performance limits for more information.
- The solenoid tube assembly is fatigue rated for 3600 psi (250 bar).
- The valve is available with a manual push-type, with detent, override option (L control). This option is also fatigue rated for 3600 psi (250 bar).
- All ports rated to max operating pressure of 3600 PSI.
- 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.
- Coils can be mounted on the tube in either direction.
- The cartridge installation torque of 22 lbf-ft (30 Nm) is required for best performance.
- Proper installation of the metal coil nut is important for best performance.


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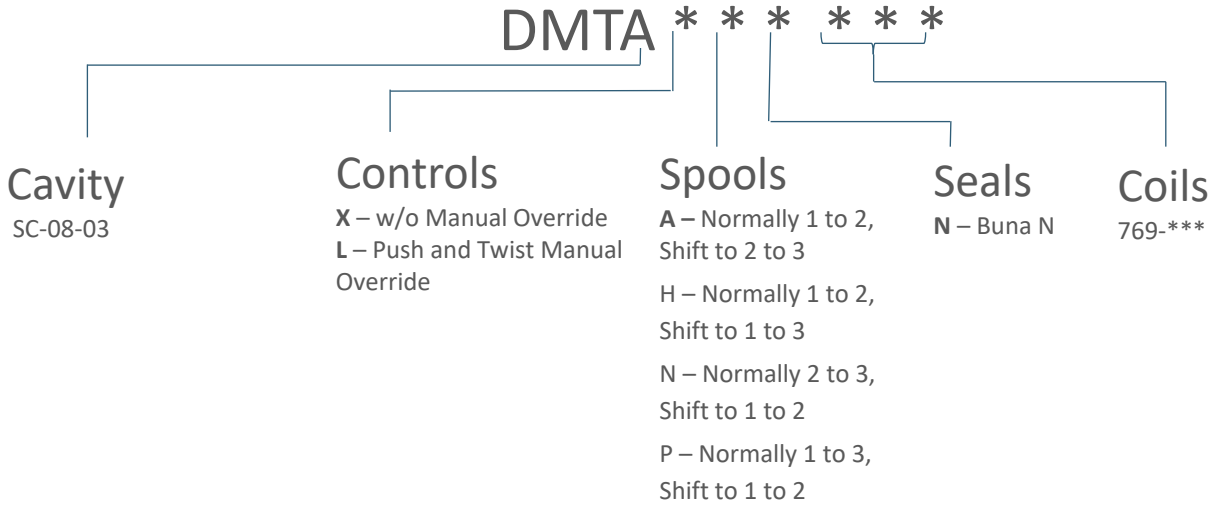
## Technical Data

| | | |
|---|---|---|
| Cavity | SC-08-03 | |
| Series | Series 0C | |
| Maximum Flow Rate/Capacity | 4 gpm | 15 L/min |
| Maximum Operating Pressure | 3600 psi | 250 bar |
| Typical Valve Leakage at 110 SUS (24cSt) | 4.9 $in^3$/min (80 mL/min) @ 3600 psi (250 bar) | |
| Response Time - Typical | 50 ms | |
| Solenoid Tube Diameter | .51 in. | 13 mm |
| Valve Hex Size | 24 mm | |
| Valve Installation Torque | 21 – 23 lbf ft | 28 - 31Nm |
| Model Weight (without coil) | 0.42 lb. | 0,19 Kg |

## Model Code Options





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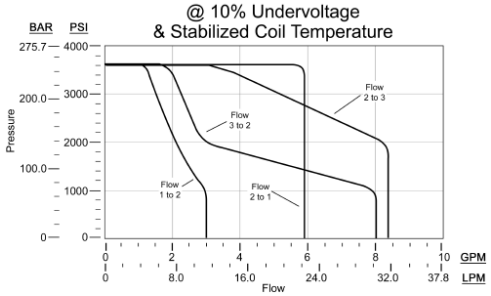
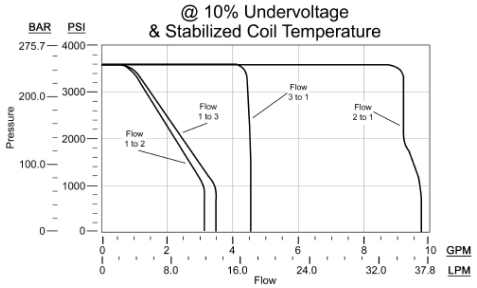
## Performance Curves

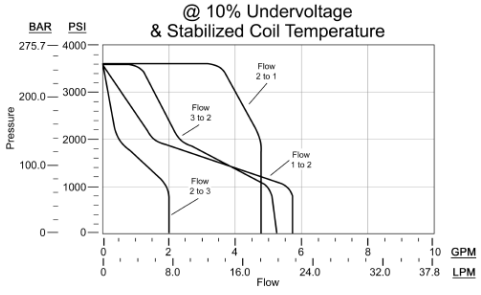
**DMTA-*A***
Valve Performance Limits
@ 10% Undervoltage
& Stabilized Coil Temperature



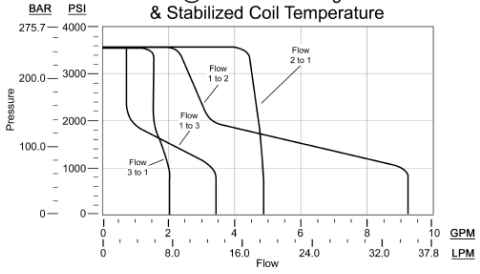

**DMTA-*H***
Valve Performance Limits
@ 10% Undervoltage
& Stabilized Coil Temperature



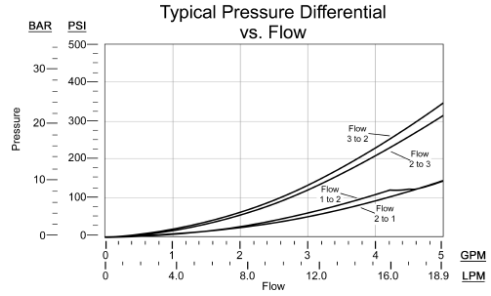

**DMTA-*N***
Valve Performance Limits
@ 10% Undervoltage
& Stabilized Coil Temperature



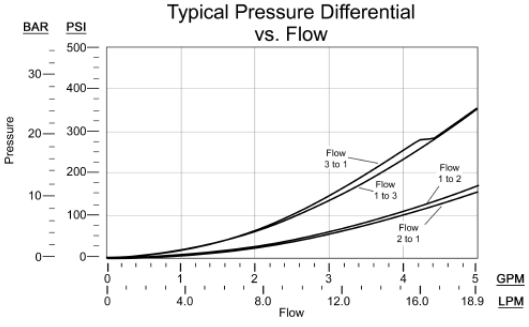

**DMTA-*P***
Valve Performance Limits
@ 10% Undervoltage
& Stabilized Coil Temperature




**DMTA-*A***
Typical Pressure Differential
vs. Flow




**DMTA-*H***
Typical Pressure Differential
vs. Flow

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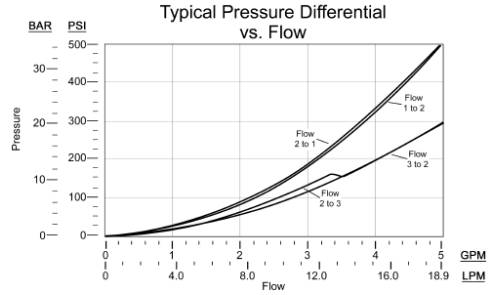


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Typical Pressure Differential
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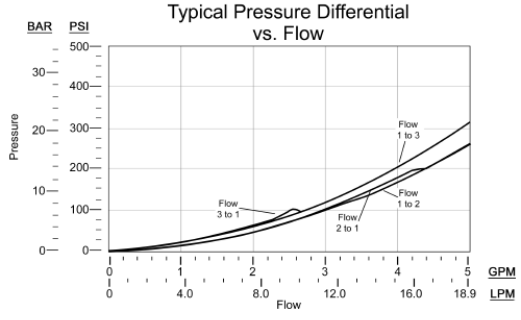



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## Coil Options

| Voltage | Sun Model Code | Resistance 20°C (OHMS) ±10% | With Diode |
|---|---|---|---|
| 12 VDC | 769-212 | 7 | No |
| 24 VDC | 769-224 | 28 | No |
| 12 VDC | 769-912D | 7 | Yes |
| 24 VDC | 769-924D | 28 | Yes |

## Coil Performance Data

| | |
|---|---|
| Temp | -4 – 215 F |
| Power Consumption (cold) – at rated voltage | 20.5W |
| Weight | 0.62 lb (0.28 kg) |
| Duty Cycle | 100% |
| TVS Diode | Included in Deutsch DT04-2P Version |
| Operating Voltage Range | +/- 10% |
| Maximum Ambient Temperature | 104 F |

100% duty cycle DC coils available in both DIN and Deutsch connectors.
Deutsch coils contain a diode. DIN coils do not have a diode.


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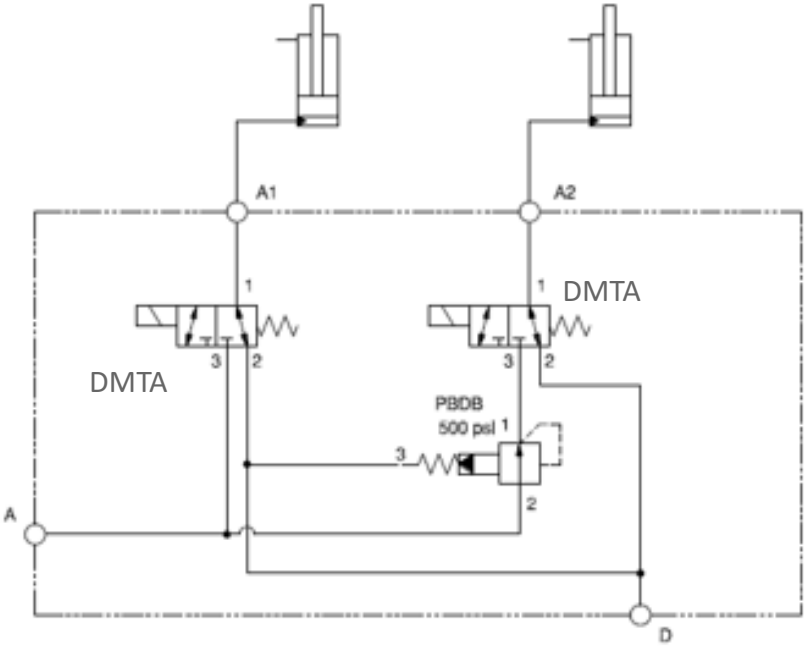
# DMTA




The DMTA is an excellent pilot control valves. It can be used to pilot small actuators or to pilot larger valves. In this mining truck application, the DMTA is used to pilot a high pressure lift cylinder at 3000 psi. The DMTA can also be used to opens the water nozzle for spraying the mine site for dust suppression.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A HELIOS COMPANY

# delivering
# innovative fluid power solutions
# that enhance our world


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