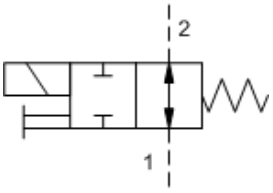
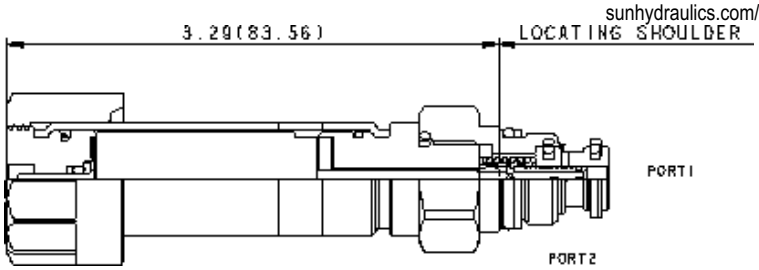
MODEL
DAALS

2-way, soft shift, solenoid-operated directional spool valve - pilot capacity
SERIES P / CAPACITY: .25 gpm / CAVITY: T-8A

sunhydraulics.com/model/DAALS



M-Control, H-Spool



This solenoid-operated 2-way, 2-position cartridge is a direct-acting, balanced spool valve with a soft shift feature. The soft shift feature greatly reduces system shock due to valve actuation. The valve is available in either a normally open or normally closed configuration.

This cartridge can be installed directly into a cavity in the end of many of Sun's pilot operated and ventable valves to provide integrated pilot control.

CONFIGURATION

H	Spool Configuration	Normally Open
N	Seal Material	Buna-N
(none)	Coil	No coil

TECHNICAL DATA

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

Cavity	T-8A
Series	P
Capacity	.25 gpm
Maximum Operating Pressure	5000 psi
Maximum Valve Leakage at 110 SUS (24 cSt)	10 drops/min.@5000 psi
Manual Override Force Requirement	10 lbs/1000 psi @ Port 1
Manual Override Stroke	.10 in.
Solenoid Tube Diameter	.75 in.
Valve Hex Size	7/8 in.
Valve Installation Torque	20 - 25 lbf ft
Seal kit - Cartridge	Buna: 990008007
Seal kit - Cartridge	Polyurethane: 990008002
Seal kit - Cartridge	Viton: 990008006
Model Weight	0.55 lb.

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.

CONFIGURATION OPTIONS

Model Code Example: DAALSHN

SPOOL CONFIGURATION (H)	SEAL MATERIAL (N)	COIL *
H Normally Open	**N** Buna-N	No coil
C Normally Closed	**E** EPDM	**212** DIN 43650-Form A, 12 VDC
	V Viton	**224** DIN 43650-Form A, 24 VDC
		912 Deutsch DT04-2P, 12 VDC
		924 Deutsch DT04-2P, 24 VDC

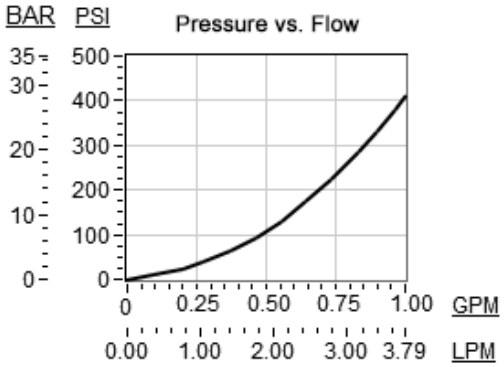
* Additional coil options are available

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TECHNICAL FEATURES

- The soft shift cartridge is interchangeable with the standard cartridge, however, the performance limits are lower.
- The soft shift feature can reduce shock due to valve actuation but should not be counted upon in applications where timing is critical. If you need accurate ramping or timing control, consider Sun's electro-proportional valves.
- The soft shift feature results in an increase in response time over Sun's standard solenoid. Response time is dependent on flow, pressure, coil voltage, oil viscosity and ambient temperature.
- For consistent soft shift performance, port 1 should be at a positive pressure.
- This valve includes a push-type manual override control. Other manual control options such as T or D, cannot be ordered with the soft shift control but can be installed easily in the field. See Twist/Lock Manual Override link above for details. Please note: Manual override functionality is not compatible with weatherized coils.
- The solenoid tube assembly is fatigue rated for 5000 psi (350 bar) service.
- 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.
- 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.
- 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.

PERFORMANCE CURVES



RELATED MODELS

- DAAL 2-way, solenoid-operated directional spool valve - pilot capacity

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