Control Products Inc.

Switches For Military Vehicles



CPI manufactures high-endurance waterproof and thermal switches plus indestructible hydraulic position sensors for one purpose – to bring precision, efficiency, reliability and safety to your equipment, in the most demanding applications.



Sealed switches

Originally designed to MS39058, CPI's sealed switches are completely submersible. Ideal for use in the engine compartment and in harsh exterior locations – even under the chassis.



Thermal Switches

Setpoint capability of -17°C to 100°C, CPI offers unmatched precision and the most rapid response time available in a thermal switch.



El Series Limit Switches* E1161a bracket (top) E1294 bracket (bottom)



J4 & D1 Series
Plunger Switches**
D1040 (top)
J4401-514 (bottom)



Plugstat M Series
M1 Model
w/ screw terminals



AD, X, and M Series snap-action to bimetal designs

Specifications - Sealed Switches

- Electrical rating: E1s: (28VDC/120VAC): 5 amps resistive, 3 amps inductive. Higher ratings available on special order.
- J4s: 28VDC, 5 amps inductive
- Endurance: 100,000 to 5 million cycles (depending on configuration
- Operating temperature range: -53°C to 105°C, depending on item; (J4 Series: -45°C to 150°C)
- Environmental resistance: Excellent resistance to both high and low temperatures, acids, alkalies, salt spray, sand, dust and fungus.

Specifications - Thermal Switches

Electrical rating

SnapStats: (28VDC/120VAC) 5 amps resistive, 3 amps inductive. Gold contacts available special order.

PlugStats (bimetal): (28VDC/115VAC) 2 amps resistive, 1/2 amp inductive

Rod & Tube: (28VDC/115VAC) 1.5 amps resistive, 1/2 amp inductive

• Setpoint temperature ranges:

Snapstats: -17°C to 150°C / PlugStats: -17°C to 340°C / R&T: -17°C to 950°C

^{*} E1 limit switches are assemblies of E1 Series brackets and B Series momentary switches.

^{**} J4 Series come in plated steel, brass, and stainless steel versions.





Waterproof Switches

- E1002-501 (USATAC 12339494) / engine kickdown HMMWV
 Commercially available B2 Series switch within a customized mounting bracket design to fit the operating requirements of the application. Customer specified MS connectors are provided with the switch to make a completely waterproof product.
- D1011-501 (USATAC 11669772) / cold-start ether injection -M939 5-ton truck

B2 Series waterproof switch within plunger bracket

- E2038 (USATAC 11669094) / brake light switch -M939 5-ton truck
- K1013-501 (USATAC 11669679) / 2- to 6-wheel drive shifter -M939 5-ton trucks
- B2 momentary within custom molded housing
- E1344-501 (Oshkosh) / idle validation LVSR & HEMTT
- D1021-538 (Oshkosh) / spare tire hoist on/off FHTV PLS
- E1117-525 (Oshkosh) / dumpster stow position limit for roll-off
- K1111-501 (Oshkosh) / fuel door detection switch HEMTT fuel truck
- J4401-514 (BAE-Sealy/USATAC 12505576) / cab tilt position -LTAS

J4 switch and specialized adaptor with long plunger and scraper seal

- J4001 / J4002 (General Dynamics) / seat switch, operator prescence - Pandur
- Ordinance & MIL-STD P/Ns:

A2001 (Ord #7389132) • A2004 (MS-39058-1)

• A2005 (MS-39058-2) • A2006 (MS-39058-3)



Thermal Switches

 AD105-503 (USATAC 12338599) / engine HOT thermal switch -HMMWV

Standard AD threaded switch with waterproof MS plug connectors and wire markers.

 M1002-538 (Textron MLS) / view screen anti-freeze protection -ASV

Standard M1 Series thermal switch with added screw terminals for easy, non-solder connection

 M2003-502 (Honeywell) / lube oil overheat switch in gas turbine engine - M-1 Abrams Tank

Off-the-shelf M2 Series with gold contacts

- M2146-503, -504 (BAE Leicester) / cooling system, water anti-freeze switch for startup - Terrier
 M2 switches with commercially available BSPP thread mounting adaptor
- AD053-508 (Supacat) / coolant system, caution and warning indication - HMT 400

Dual-temperatures to indicate two system conditions to operator

