

OMEGA SERIES LIMIT SWITCH WITH DEVICENET PROTOCOL



PRODUCT OVERVIEW

The newest advance in our OMEGA limit switch package incorporates DeviceNet protocol. The OMEGA DeviceNet Control Unit combines the limit switches, a visual indicator, an integral solenoid valve and a DeviceNet card into one compact enclosure that mounts to all NAMUR actuators. This creates a state-of-the-art integrated valve controller with predictive/preventative maintenance diagnostics including odometers and stroke timers.

GENERAL PRODUCT FEATURES

- **WEATHERPROOF DESIGN**

The OMEGA series enclosure is rated to IP67 and NEMA 4/4X, which is ideal for corrosive environments. The housing is made from a die cast aluminum and epoxy coated inside and out. The shaft and trim are stainless steel, and the pneumatic manifold (including threaded areas) is hard-coated anodized aluminum.

- **INTEGRAL SOLENOID**

The OMEGA series integral single and double 5-way solenoid valves dramatically reduce automation assembly time. Factory pre-wiring ensures reliable start-ups and long-term reliability.

- **PNEUMATIC MANIFOLD**

The OMEGA's pneumatic connections are 1/4". Speed controllers and silencers are available, as are optional air pressure gauges for monitoring system pressure.

- **VALVE POSITION INDICATOR**

The switch comes with a highly-visible, two-color 3D indicator for local/visual indication. Optional flat top indicators are available where space is a concern.

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- **HIGH RESOLUTION SPLINED CAMS**

Easy-set cams are splined, spring loaded and independently adjustable. This design offers tool free calibration and positive vibration resistant engagement.

- **SWITCH OPTIONS**

The OMEGA series is available with a wide range of switch options, including electro-mechanical, inductive proximity, NAMUR, NPN, PNP and hermetically sealed proximity dry contacts. Feedback options include ASI digital communication and 4-20mA feedback.

DEVICENET FEATURES

- **ODVA REGISTERED BOARD**

Ensures interoperability and seamless integration with other registered devices.

- **4 IN, 2 OUT BOARD**

Provides (4) inputs for limit switch feedback and (2) outputs for control of the integral single or dual-coil solenoid valve.

- **INTEGRATED COMMUNICATION WATCHDOG TAG**

Monitors the digital signal and ensures that the outputs are turned off when the digital signal is lost, ensuring that the actuator fails upon the loss of DeviceNet communication.

- **PREDICTIVE/PREVENTATIVE MAINTENANCE**

Provides user with real-time valve-actuator diagnostics, including:

open and closed stroke timers: reports stroke speeds with user-defined min./max. settings with alarm capabilities

accumulative odometer: reports total number of stroke of the device

maintenance odometer: provides notification when user-defined setting is exceeded

coil continuity monitoring: this diagnostic feature reports on the health of the solenoid coil over the network

- **SHORT-CIRCUIT PROTECTION**

Protects all inputs and outputs, eliminating the need for a separate short circuit protection

- **LED'S FOR IMMEDIATE STATUS INDICATION**

power and DeviceNet signal LED's: provides status of 24VDC power and network communication

input and output LED's: report status of the feedback switches and solenoid coils

bi-color diagnostics LED's: provides notification when user-defined settings for stroke speeds or maintenance odometer is exceeded or when coil continuity is interrupted. These alarms also are transmitted over the bus.

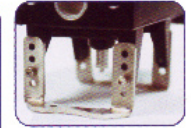
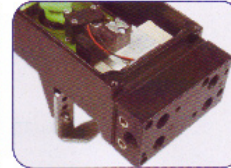
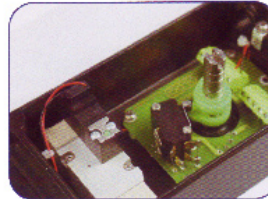
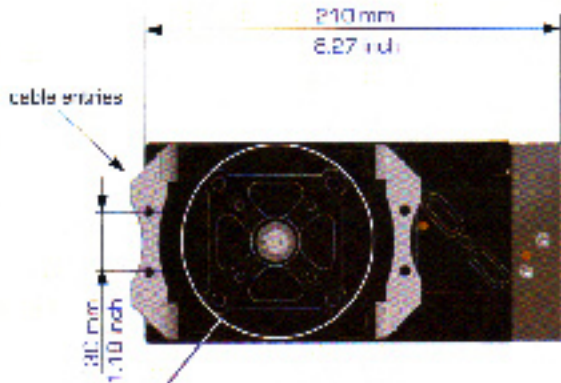
MATERIALS AND RATINGS

Body and Cover	Epoxy coated aluminum
Indicator dome	UV resistant/VO polycarbonate
Pneumatic plate	Anodized aluminum
Seals	NBR
Shaft	2-piece stainless steel
Fasteners	stainless steel
Ambient temp*	+20° F to +120° F
Air supply	filtered compressed air
Operating pressure	40PSI minimum, 120PSI maximum

*NOTE: temperature range might vary due to switch type.

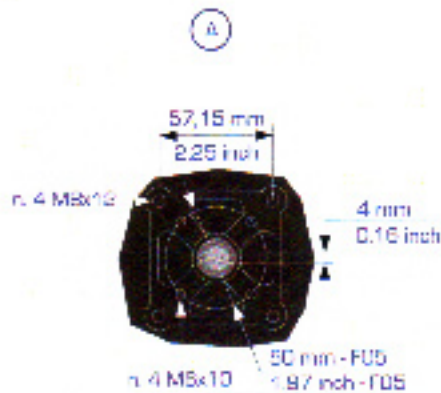
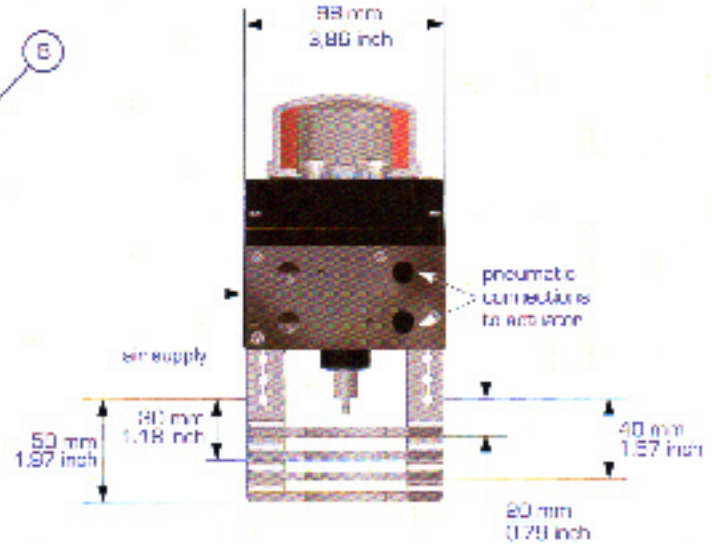
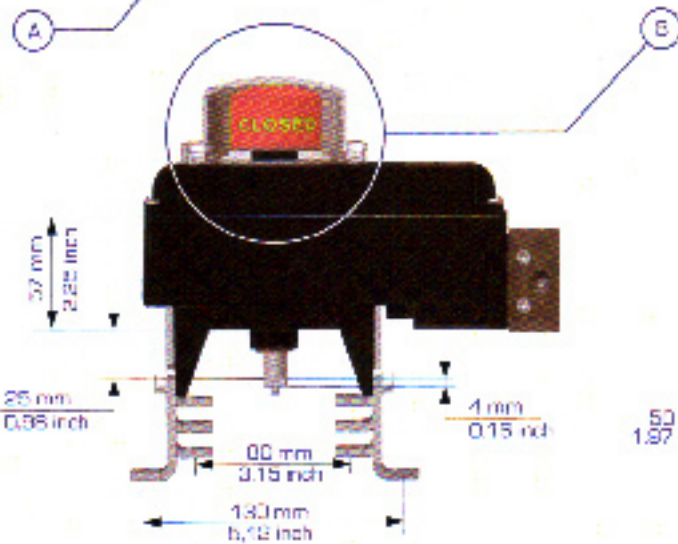
OMEGA SERIES LIMIT SWITCH WITH INTEGRATED SOLENOID

(DIMENSION mm - inch)

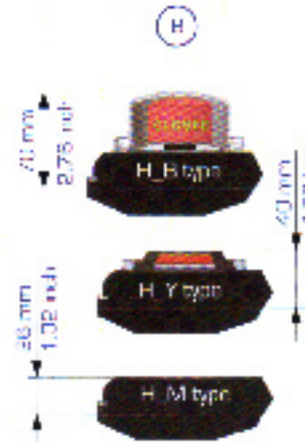


Adjustable mounting legs

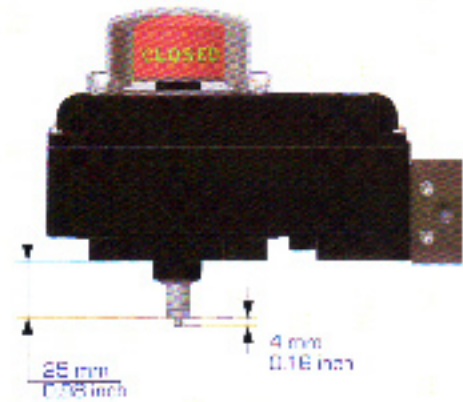
Integrated solenoid



ISO Nema9 bezels



Cover options



Unit without integrated mounting bracket