OMEGA (CONTROL UNIT)

GENERAL PURPOSE

The SOLDO OMEGA series combines a compact enclosure with limit switches, visual indication and integral solenoids for position' indication plus valve actuator control.

The OMEGA's wide variety of switches and solenoid options make it the ideal low cost solution for use in water proof applications. Namur proximity switch options and EEx ia solenoid valve also make the OMEGA series suitable for use in intrinsically safe applications.

(WEATHER PROOF)

The OMEGA series is weatherproof IP67 and Nema 4, 4X and ideal for hostile, corrosive environments. The housing is die cast aluminum and epoxy powder coated inside and outside and the shaft and trim are stainless steel. The pneumatic manifold including threaded areas is hard-coat anodized aluminum.

[INTEGRAL SOLENOID VALVE]

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

(PNEUMATIC MANIFOLD)

The OMEGA's pneumatic connections are ¼ inch NPT. Optional breathers, speed controls and Namur adapters for actuator air line connections reduce assembly time. Optional air pressure gauges enable monitoring air system pressures during setup and normal operation. OMEGA is also available with pneumatic connections according to VDI/VDE 3847.

(VALVE POSITION INDICATOR)

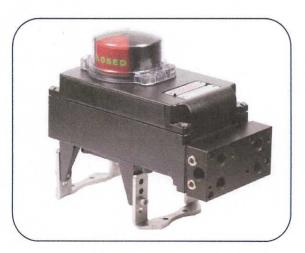
OMEGA's large two-color 3D indicator can be clearly viewed from overhead and from all sides. The Omega is also available with a flat indicator and a blank cover for limited space installations.

(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 variety of switches and feedback choices including: electromechanical, inductive proximity, Namur, NPN, PNP and hermetic sealed proximity dry contact switches; ASi digital communication and 4-20 mA position transmitter.



[INTEGRAL NAMUR MOUNTING BRACKET]

The OMEGA series features a unique bracketless mounting system for actuators conforming to ISO Namur standards. Extendable stainless steel mounting legs enable quick foolproof installation and adjustability for shaft lengths from 20mm to 50mm.

(TWIN SHAFTS)

The Omega series features unique Twin-Shaft construction with separate shaft sections in the limit switch housing and the cover. Keyed shaft ends align and interlock inside the enclosure during cover installation. Twin-Shafts provide two key benefits; headroom requirement is reduced from 50 mm [2 inch] to less than 12 mm [1/2 inch] and the visual indicator assembly remains closed and sealed during cover removal and reinstallation.

CONTROLINK

OMEGA (CONTROL UNIT)

(ORDERING GUIDE) HU B 01 2 0 1 | E | A | pneumatic connections 1/4" NPT without gauges 1/4" NPT with three gauges 12 VDC - 2,3W 24 VDC - 2.3W solenoid coil voltage 3 4 24 VAC - 2,8VA 5 110 VAC - 2,8VA 230 VAC - 2,8VA 1 single coil 2 position 5 way solenoid type double coil 2 position 5 way double coil 3 position 5 way blocked closed mounting pattern integral mounting kit B ISO FO5 bottom cable entry E two 1/2" npt two 1/2" npt plus one 3/4" npt color 0 black PTFE coated O standard PCB (9 poles) terminal strip blue PCB (6 poles) cage clamp blue [6 poles] switch quantity 1 to 4 according switch type switch type see switch option table 3D indicator NOTES Three-way 3D indicator (L port) Double coil 2 position 5 way centers closed suitable for dribble 3 position indicator & cover Three-way 3D indicator (T port) T Three-way 3D indicator [T port, blocked center] Flat indicator M Blank cover



OMEGA (CONTROL UNIT)

GENERALPURPOSE

(SWITCH OPTION)

SWITCH TYPE		RATING *	MAX QTY INSTALLED
01	electromech SPDT silver plated contacts	5A@250VAC, 0.5A@24VDC, resistive/inductive	4
03	electromech SPDT gold plated contacts	O.1A@12OVAC resistive	4
05	electromech DPDT silver plated contacts	5A@250VAC, 1/4HP@125VAC, resistive/inductive	2
10	praximity SPST	0.25A@120VAC, 0.7A@42VAC, resistive	4
13	proximity SPST, Bifurcated	1.5A@120VAC, 0.55A@24VDC, resistve/inductive	4
14	proximity SPDT (standard)	0.25A@120VAC, 0.416A@48VDC, resistive	4
16	proximity DPDT	0.25A@120VAC, 0.416A@48VDC, resistive	2
70	proximity NAMUR P+F NJ2-V3-N	2 wire, NAMUR output, 15mA max, not emplified	4
71	proximity NO P+F NBB2-V3-US	2 wire, 5 to 200mA, 20 to 140 volts (AC or DC)	4
73	proximity NO PNP P+F NBB3-V3-E2	3 wire, PNP, 5 to 100mA @ 30VDC, Amplified	4
AS	AS-interface	two inputs plus one 100mA output	1
DA	electromech two DPDT plus two SPDT	3 position control + position feedback for double acting actuator [1]	1
DB	electromech two DPDT plus two SPDT	3 position control + position feedback for spring return actuator [1]	1
DC	electromech SPDT	3 position control, no position indication for double acting actuator [1]	1
DD	electromech SPDT	3 position control, no position indication for spring return actuator [1]	1
MA	transmitter plus two mechanical SPDT switches	4-20mA output, 9-30VDC [1]	1
MX	transmitter only	4-20mA output, 9-30VDC	1

NOTES: Terminal strip options depend on switch type.

* Resistive loads when not specified.

Same switch rating as type 01

(RATINGS)

Ambient temperature range (1) : General purpose execution -5°C +50°C Intrinsically safe execution -20°C +60°C

Air Supply : filtered, lubricated or non lubricated compressed air (also dried to a dew point of -20°C)

Operating pressure :min. 37 osi - max 120 psi Electrical :according to switch option

Consult "B02003-3-E" bulletin for switch rating

⁽¹⁾Temp. range may vary due to switch type.

(MATERIALS)

Body and cover : epoxy coated aluminium

Indicator dome : UV resistant and VO polycarbonate

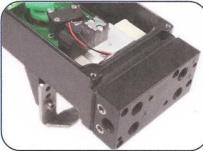
Pneumatic connection plate : anodized aluminium

Seals : NBR

Shaft : stainless steel Fasteners : stainless steel



Solenoid valve and limit switches



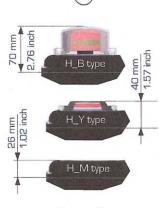
Pneumatic manifold



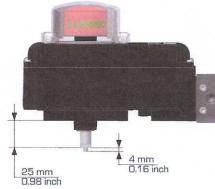
Universal mounting kit



ISO Namur details



Cover options



Unit without integrated mounting bracket