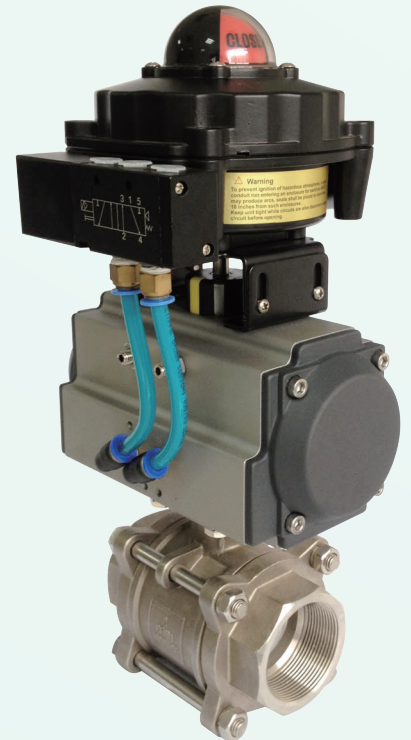
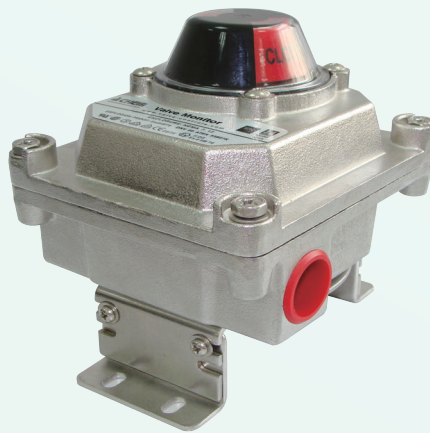




AIR-CON LIMIT SWITCH BOX

www.flotite.com

Limit Switch Box

ALS200

Description

The ALS200 series Limit Switch is a rotary position indication device. This product was designed to integrate valve and NAMUR rotary pneumatic actuator with a variety of mounting options. The visual indicator on the top of the device can also clearly display the valve position for local detection.



NEMA 4,4X IP67

Features

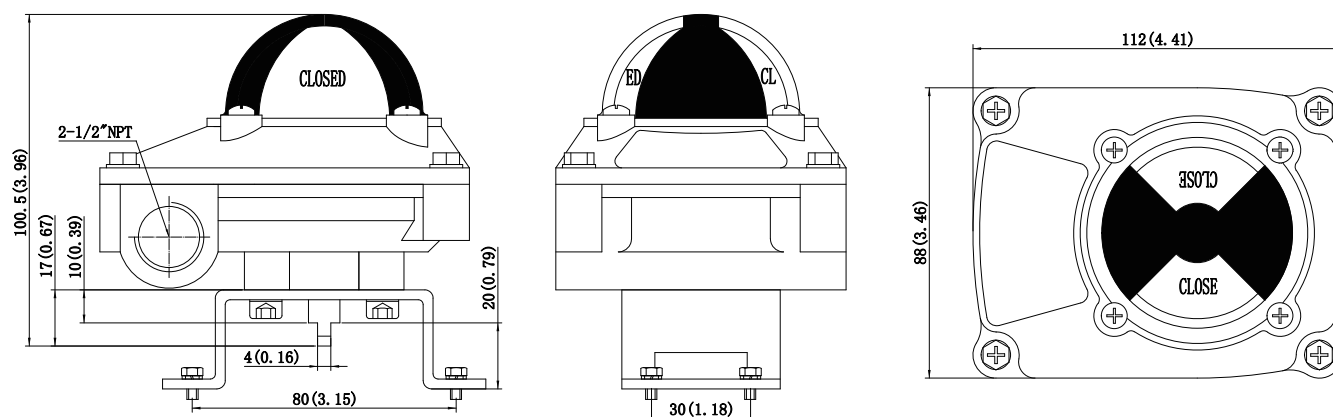
- ▶ Easy mounting, NAMUR and ISO5211 adjustable bracket same for 30x80-130mm, H20-30mm. standard is stainless steel.
- ▶ Higher level weather proof(IP67)
- ▶ Small switch box to make the installation more flexible considering the environment limit.
- ▶ Dual cable entries, 2x1/2"NPT (Standard) to satisfy customer's different requirements.
- ▶ Captive cover screws, No need t worry about loosening the screws while the cover is open.



Technical Data

Enclosure	Die-casting aluminum; O-ring sealed	Conduit Entries	Two 1/2" NPT
Coating	Dichromate conversion with polyester powder coating	Terminal Strip Contacts	8
O-rings	Buna N	Ambient Temperature	-15°F ~ 185°F
Fasteners	Stainless steel	Mounting Bracket	Also MB-3.4:30x80~130;H:20~30 (Stainless Steel)
Shaft	Stainless steel Namur		

Drawing and Dimensions



Popular Switch and Sensor

► Mechanical Switches

Electrical Ratings

Conventional Voltage:

M2 2SPDT 5A 125-250VAC

Special Voltage:

M2 2SPDT 16A 125-250VAC

Ambient Temperature -15°F ~ 185°F



Electrical Ratings

ML2 Low Temp.

2SPDT 16A 125-250VAC

Ambient Temperature -40°F ~ 185°F



Electrical Ratings

MG2 Gold contacts

2SPDT 0.1A 24-48VDC

0.5A 125-250VAC

Ambient Temperature -15°F ~ 250°F



► Analog Output

Fanalog output 4-20mA transmitter(0°-90°)



M5+4~20mA Output



Proximity Sensor (PP22)

► Open/Closed Path Indicators

Y90 – 90° Yellow Open, Red Closed

G90 – 90° Green Open, Red Closed

P90 – Yellow Base Red Bar



► Proximity Sensor (Inductive)

Electrical Ratings

PP22 2-p+f Inductive

sensors (2 wire)

NCB2-V3-N0 8VDC, <=1mA

Ambient Temperature -15°F ~ 185°F



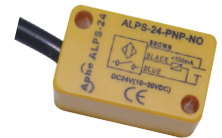
Electrical Ratings

PA22/3 2- ALPS Inductive

sensors (2 or 3 wire)

10-30VDC, <=100mA

Ambient Temperature -15°F ~ 170°F



► Proximity Sensor (Magnet)

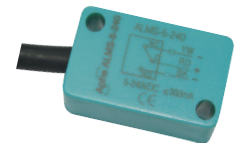
Electrical Ratings

QA22/3 2- ALMS Magnet

sensors (3 wire)

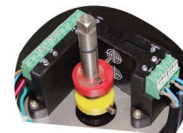
5-240VAC/DC, <=300mA

Ambient Temperature -15°F ~ 170°F

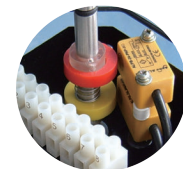


► AS-i Communication Card

AS2 AS-Interface 20-28VDC, <=41mA



AS-i Sensors



Proximity Sensor (PA23)

Limit Switch Box

ALS300

► Description

The ALS300 Limit Switch is a rotary position indication device. This product was designed to integrate valve and NAMUR rotary pneumatic actuator with a variety of mounting options. The visual indicator on the top of the device can also clearly display the valve position for local detection. Every detail of its construction has been optimized to outperform.

► Features

- Compact and Beautiful Design, Polyester powder coated aluminum die-casting housing.
- Higher level weather proof.
- Dual cable entries, 2x1/2"NPT (Standard) to satisfy customer's different requirement.
- "Quick-Set" Cam, spring loaded splined cam. no need to adjust again after initial setting and easy setting without tool.
- Easy mounting, NAMUR and ISO5211 adjustable bracket same for 30x80-130mm H:20-30mm.



NEMA 4,4X

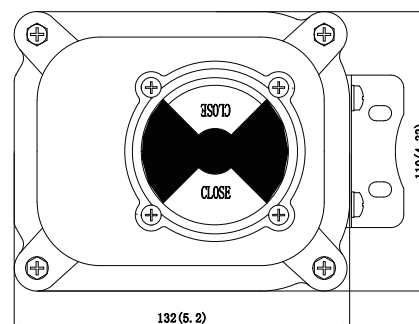
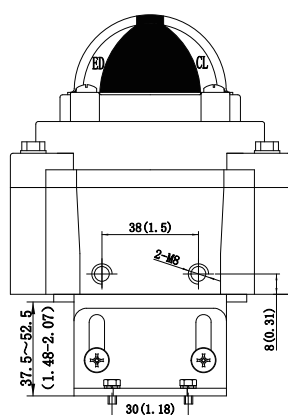
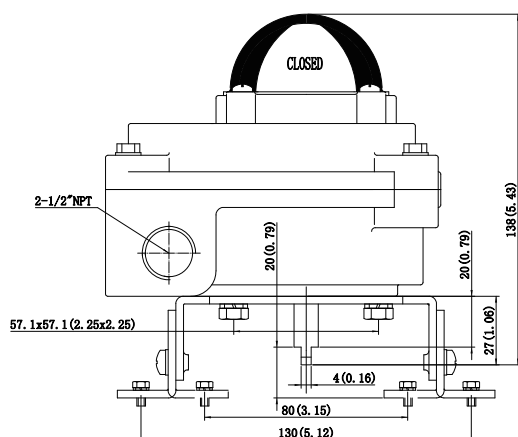
IP67



► Technical Data

Enclosure	Die-casting aluminum; O-ring sealed	Conduit Entries	Two 1/2" NPT
Coating	Dichromate conversion with polyester powder coating	Terminal Strip Contacts	8
O-rings	Buna N	Ambient Temperature	-15°F ~ 185°F
Fasteners	Stainless steel	Mounting Bracket	Also MB-3.4:30x80~130;H:20~30 (Stainless Steel)
Shaft	Stainless steel Namur		

► Drawing and Dimension



Limit Switch Box

ALS400

Description

The ALS400 series flame proof limit switch is a rotary position indication device for HAZARDOUS areas(Ex d IIC T6). This kind of limit switch box is designed to provide the most visible and reliable valve position indication in explosion-proof environments. With a wide variety of switches and sensors available to match your application.

Features

- ▶ Certified for use in all hazardous areas(Class I, Div.1&2, Groups A,B,C and D, Ex d IIB T6, Ex d IIC T6)
- ▶ Multiview visual Position Indicator, Secure waterproof, multi-angles visual valve positions involving top and side view.
- ▶ Materials of construction selected to excel in high vibration, corrosive, and dirty environments, either indoors or outdoors.
- ▶ "Flat cover" version is available without an indicator for areas with tight space requirements.
- ▶ Dual cable entries, 2x3/4" NPT (Standard) and 1/2"NPT (Optional) to satisfy customer's different requirements.

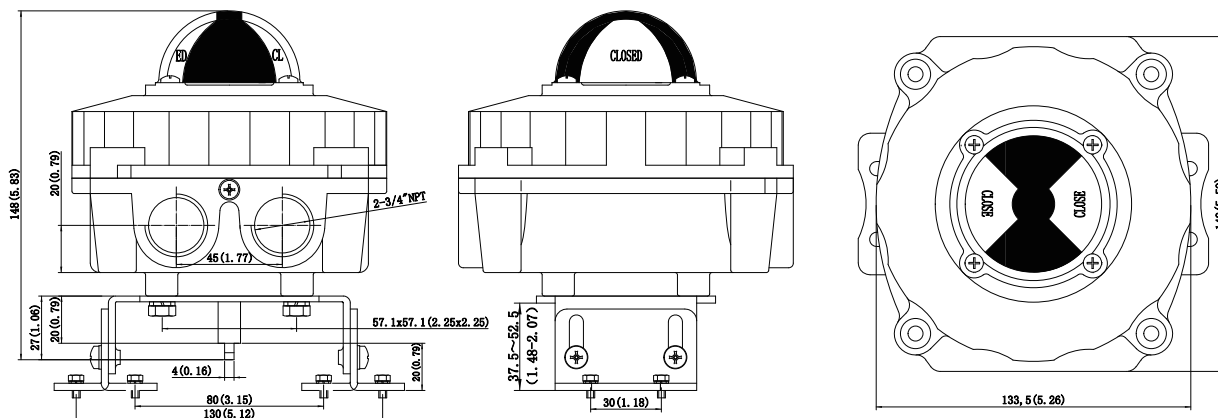


Ex II 2 G Ex d IIC T6 Gb

Technical Data

Enclosure	Die-casting aluminum; O-ring sealed	Conduit Entries	Two 3/4" NPT
Coating	Dichromate conversion with polyester powder coating		Two 1/2" NPT (Optional)
O-rings	Buna N	Terminal Strip Contacts	8
Environment	NEMA 4,4X,7,8 IP66	Area Classification	ATEX,NEPSI:Ex d IIC T6,CSA Canada:Ex d IIC T6 Gb,CSA US:Class 1 Zone 1 AEx d IIC T6 Gb
Fasteners	Stainless steel	Ambient Temperature	-5°F ~ 120°F
Shaft	Stainless steel Namur	Mounting Bracket	Also MB-3.4:30x80~130;H:20~30 (Carbon Steel)

Drawing and Dimension



Limit Switch Box

ALS500

Description

The ALS500 series flame proof valve monitor is a rotary position indication device for HAZARDOUS area(Ex d IIB T6). This kind of limit switch box has a wide variety of switches and sensors usage.

Features

- Moniteur's patented Engineered Loc-Ring Cam and Shaft Retention System provides unsurpassed sensing accuracy over the multi-million cycle life of the physical platform.
- Materials of construction selected to excel in high vibration, corrosive, and dirty environments, either indoors or outdoors.
- Dual cable entries, 2x3/4" NPT (Standard) and 1/2" NPT (Optional) to satisfy customer's different requirement.
- "Flat cover" version is available without an indicator for areas with tight space requirements.
- Certified for use in all hazardous areas(Class I, Div.1&2, Groups A,B,C and D, Ex d IIB T6)

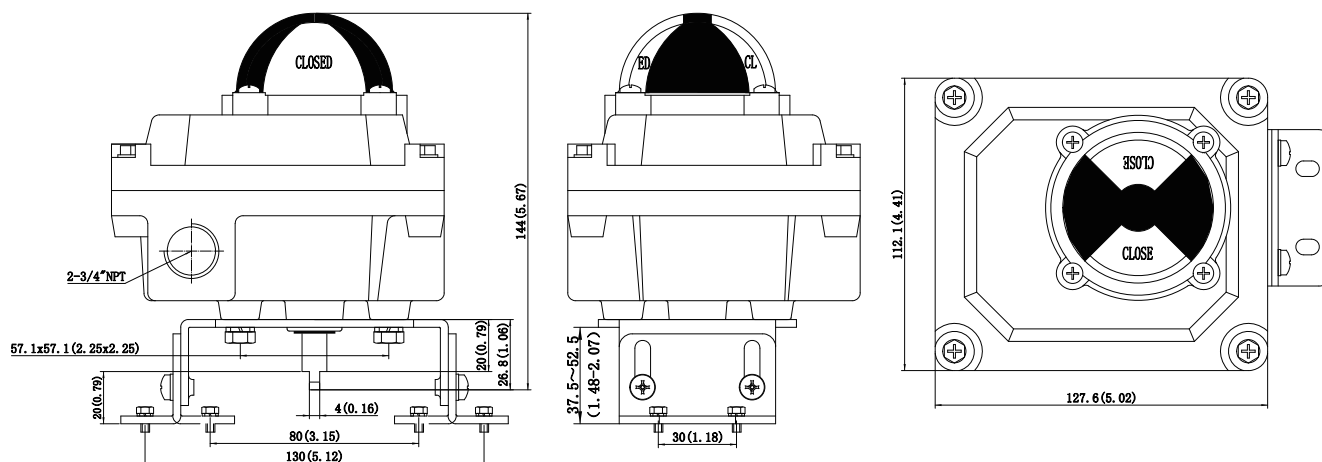


II 2 G Ex db IIB T4 Gb
II 2 G Ex db IIB T6 Gb

Technical Data

Enclosure	Die-casting aluminum; O-ring sealed	Conduit Entries	Two 3/4" NPT
Coating	Dichromate conversion with polyester powder coating		Two 1/2" NPT (Optional)
O-rings	Buna N	Terminal Strip Contacts	8
Environment	NEMA 4,4X, IP66	Area Classification	Ex db IIB T6 Gb
Fasteners	Stainless steel	Ambient Temperature	-5 °F ~ 120 °F
Shaft	Stainless steel Namur	Mounting Bracket	Also MB-3.4:30x80~130;H:20~30 (Carbon Steel)

Drawing and Dimensions



Limit Switch Box

ALS600

Description

The ALS600 series stainless steel flameproof valve monitor is a rotary position indication device for CORROSIVE and HAZARDOUS (Ex d IIB T6) areas. This kind of limit switch box has a wide variety of switches and sensors available to match your application for different usage.

Features

- Resistance to corrosion of chemicals and salty fog.
 - Dual cable entries, 2x3/4"NPT (Standard) and 1/2"NPT (Optional) to satisfy customer's different requirement.
 - "Flat cover" version is available without an indicator for areas with tight space requirements.
- Certified for use in all hazardous areas(Class I, Div. 1&2, Groups A,B,C and D, Ex d IIB T6)
- Multiview visual Position Indicator, Secure waterproof, multi-angles visual valve positions involving top and side view.

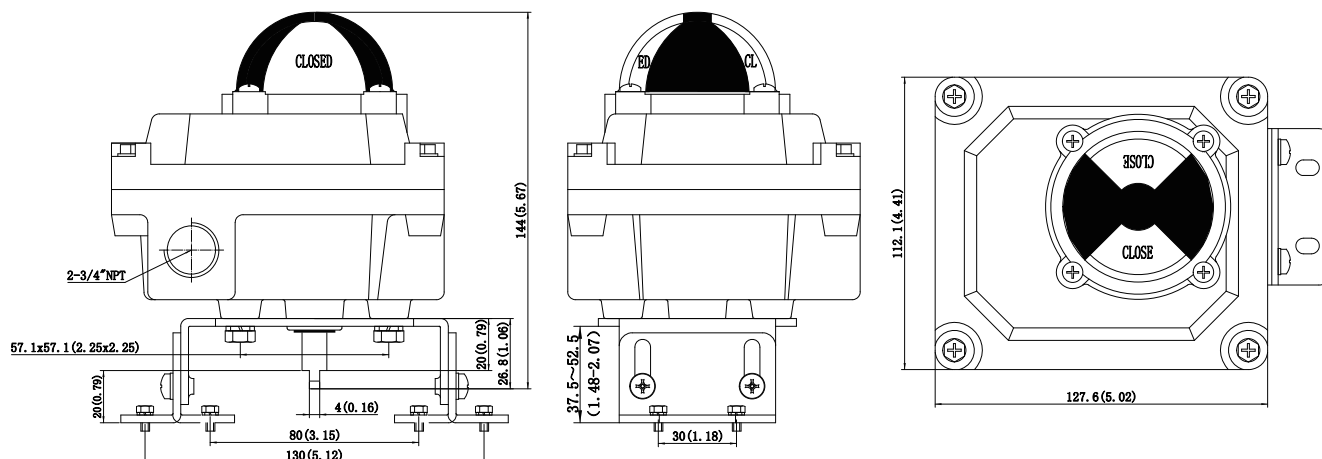


II 2 G Ex db IIB T4 Gb
II 2 G Ex db IIB T6 Gb

Technical Data

Enclosure	Stainless steel 304 or 316; O-ring sealed	Conduit Entries	Two 3/4"NPT
Coating	Resistance to corrosion of chemicals and salty fog		Two 1/2" NPT (Optional)
O-rings	Buna N	Terminal Strip Contacts	8
Environment	NEMA 4,4X, IP66	Area Classification	Ex db IIB T6 Gb
Fasteners	304 or 316 Stainless steel	Ambient Temperature	-5°F ~ 120°F
Shaft	304 Stainless steel Namur	Mounting Bracket	Also MB-3.4:30x80~130;H:20~30 (Stainless Steel)

Drawing and Dimensions



Popular Switch and Sensor

► Mechanical Switches

Electrical Ratings

M2 2SPDT 16A 125-250VAC

M3 3SPDT 16A 125-250VAC

M4 4SPDT 16A 125-250VAC

M5 2DPDT 16A 125-250VAC

Ambient Temperature -15°F ~ 185°F



Electrical Ratings

ML2 Low Temp.

2SPDT 16A 125-250VAC

Ambient Temperature -40°F ~ 185°F



Electrical Ratings

MG2 Gold contacts

2SPDT 0.1A 24-48VDC

0.5A 125-250VAC

Ambient Temperature -15°F ~ 250°F



► Analog Output

Aanalog output 4-20mA transmitter(0°-90°)



M5+4~20mA Output



Proximity Sensor (PP22)

► Proximity Sensor (Inductive)

Electrical Ratings

PP22 2-p+f Inductive sensors (2 wire)

NCB2-V3-N0 8VDC, <=1mA

Ambient Temperature -15°F ~ 185°F



Electrical Ratings

PA22/3 2- ALPS Inductive sensors (2 or 3 wire)

10-30VDC, <=100mA

Ambient Temperature -15°F ~ 170°F



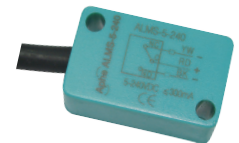
► Proximity Sensor (Magnet)

Electrical Ratings

QA22/3 2- ALMS Magnet sensors (3 wire)

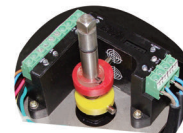
5-240VAC/DC, <=300mA

Ambient Temperature -15°F ~ 170°F

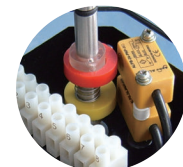


► AS-i Communication Card

AS2 AS-Interface 20-28VDC, <=41mA



AS-i Sensors



Proximity Sensor (PA23)

► Open/Closed Path Indicators

Y90 – 90° Yellow Open, Red Closed

G90 – 90° Green Open, Red Closed

P90 – Yellow Base Red Bar

L – Three Way “L” Yellow Base Red Bar

T – Three Way “T” Yellow Base Red Bar

P180 – Yellow Base Red Bar



ALSD Top Valve Controller

► Description

ALSD series Top Valve Controller is an optimizing solution to integrate sensors, solenoid coil and spool valve together and use for on/off valve control and position sensing in the process industries.

► ALSD300

Die-cast aluminum
with polyester power coated
O-ring: Buna sealed
Cable entry 2-1/2" NPT
NAMUR shaft ISO Bracket
IP67, NEMA4, 4X



► ALSD400

Die-cast aluminum
with polyester power coated
O-ring: Buna N sealed
Cable entry 2-3/4" NPT,
2-1/2" NPT (Optional)
Ex d IIC T6, IP66, NEMA4, 4X



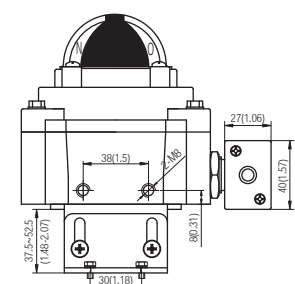
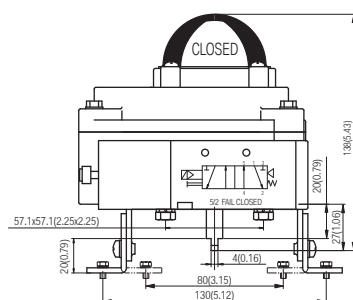
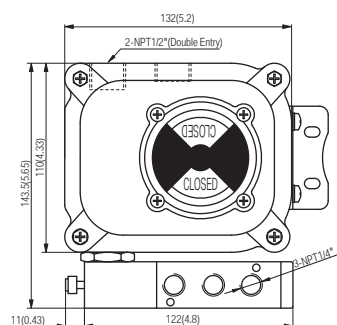
► ALSD500

Die-cast aluminum
with polyester power coated
O-ring: Buna N sealed
Single entry 1-1/2" NPT
NAMUR shaft ISO Bracket
Ex d IIB T6
IP66, NEMA4, 4X, 7

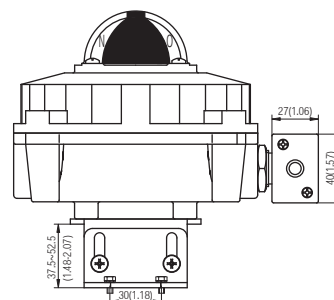
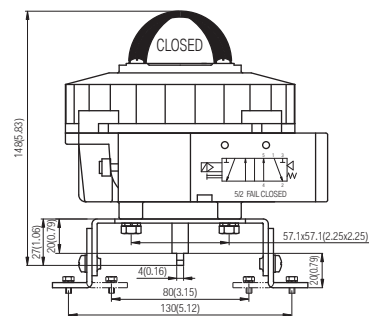
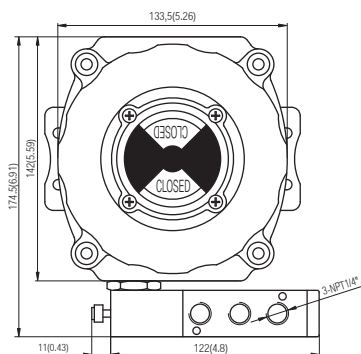


► Dimension

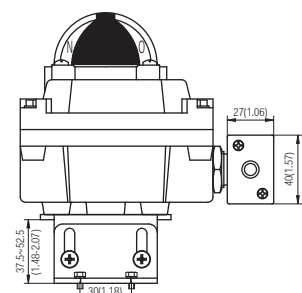
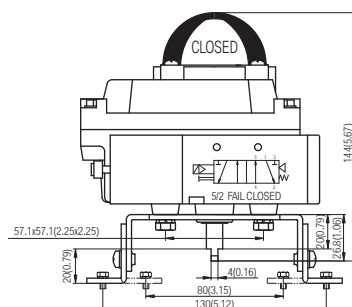
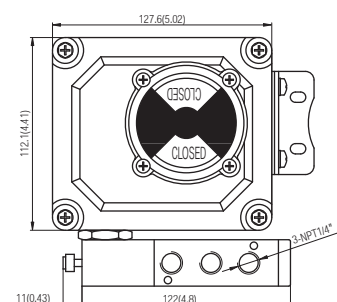
ALSD300



ALSD400



ALSD500



ALSD Top Valve Controller

► Coil/ Pilot

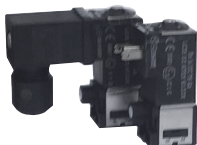
C1 15mm pilot
Orifice 1.1mm
12,24VDC, <2.5W
110,220VAC
<3VA



C2 15mm pilot
Orifice 1mm
24VDC 1W

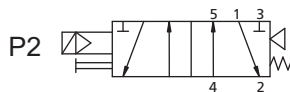


C3 15mm pilot
Orifice 0.5mm
24VDC(<1W)
Ex ia II C T6



► Spool/ Valve

P2 5/2 spool valve
Aluminum
Anodized coated
Single pilot actuated
With manual operator
Cv=1.4
3/2 available with plug



► Sensor/ Bus

Mechanical Switches

Honeywell or CROUZET switches
M2 2SPDT16A125-250VAC
M3 3SPDT16A125-250VAC
M4 4SPDT16A125-250VAC
M5 2DPDT16A125-250VAC



Proximity Sensor

PA2/3 ALPS Inductive

2 or 3 wire

10-30VDC, <=100mA



PP22 p+f Inductive (2 wire)

NCB2-V3-N0

8DCV, <=1mA Ex ia IIC T6



Magnet Sensor

QA2/3 ALMS Magnet

2 or 3 wire

5- 240VAC/DC, <=300mA



ASi Sensor-communication Card

AS2 AS-Interface

20-24VDC





Flo-Tite, Inc.

4815 W 5th Street Lumberton, NC 28358

P.O. Box 1293 Lumberton, NC 28359

Tel:(910) 738-8904 Fax:(910) 738-9112

Website: www.flotite.com

E-mail: flotite@flotite.com