



INNOBIZ



LIMIT SWITCH BOX

Valve Position Indicator "Quick Set" Cams Compact Design

ALS 3X Series



ALS 1X Series



AUTOMA
Automatic Valve & Accessories



1. Valve Position Indicator

Limit switch box indicator offers clear location of the current valve position by 2 mechanical switches

2. "Quick-Set" Cam

The operating position of the switches can be easily changed by adjusting the high resolution spline cams manually and independently without the need for additional tools(cam closed-up, cam open-down)

3. Easy Wiring

ALS series are equipped with 2 standard conduit entries and 1 terminal strip with 8 point

4. Dual Wire Conduit

ALS10 : Dual 1/2" conduit entries
ALS30 : Dual 3/4" conduit entries

5. Captive Cover Bolts

Designed to be capted into the cover

6. Easy Mounting Bracket

Any actuator for rotary motion can be easily mounted. NAMUR bracket supplied for easy in mounting onto the actuator



ALS 1X Series
WEATHERPROOF (IP68)



ALS 3X Series
EXPLOSION PROOF (Exd IIC T6, IP67)

■ Ordering Number

Series	Area Classification	Switch Type
ALS	1: Weatherproof	0: 2 SPDT
	3: Explosion Proof	1: Proximity Sensor (PNP/NPN)
		2: 3 SPDT
		3: 4 SPDT
		4: 2 DPDT (ALS 3X Series Only)

■ Standard Materials of Construction

NAME	NO.	SPECIFICATION
Outer Position Indicator	1	PE
Inner Position Indicator	1	ABS
Housing	2	Die-Casting Aluminum
Shaft (stem)	1	303 Stainless Steel
Mechanical Switch	2	Used in UL CSA approved
Inserts	2	Bronze
O-Ring	4	Nitrile (Rubber)
Cam	2	ABS
Spring	1	304 Stainless Steel
Cover Screws	4	304 Stainless Steel
Terminal Strip	1	Polyethylene

■ Specification

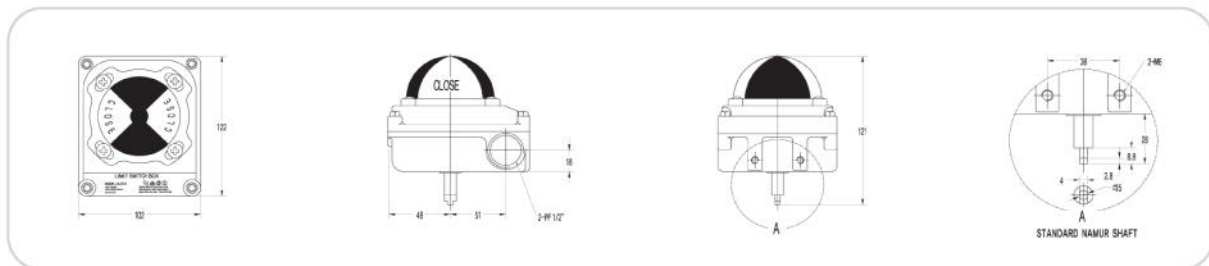
Description	Series	
Model	ALS 1X Series	ALS 3X Series
Ambient Temperature	-20°C to 85°C (-4°F to 185°F)	
Cable Entry Standard	2×1/2" PF/PT	2×3/4" PF/PT
Cable Entry Option	2×1/2" NPT/M20/PG13.5	2×3/4" NPT/M20/M25/PG13.5/PG16
Terminal Block Standard	8 Points	
Terminal Block Option	12 & 14 Points / Solenoid Valve Connection 14 Points	
Position Indicator	0° to 90° (Red for Close / Yellow for Open)	
Painting	Polyester Powder Coating with Black Color	
Bracket	Aluminium / Steel / SUS	

■ Certificate

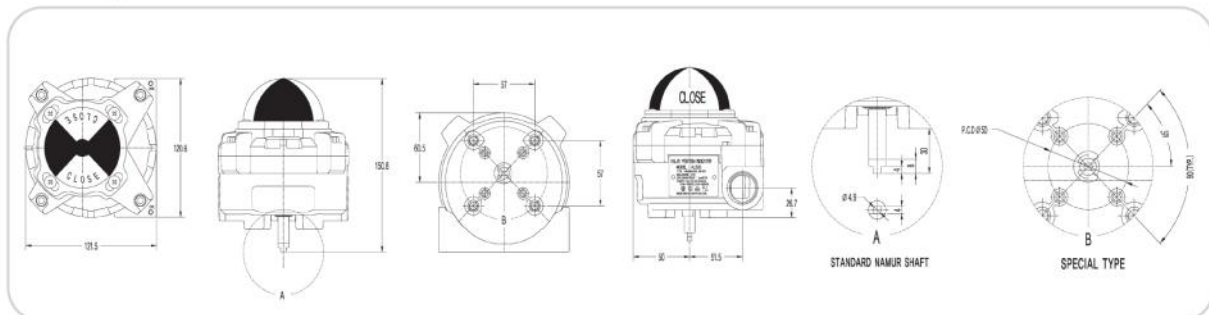
Mark	ALS 1X Series		ALS 3X Series	
	Ratings	Reg No.	Ratings	Reg No.
KCS	IP68	2011-455-739	EX d IIC T6 IP67	10-AV2BO-0247
CE (TUV NORD)	Low-Voltage Directive 2006/95/EC	K3441/L 10	Low-Voltage Directive 2006/95/EC	K3441/L 10
FM Approvals			XP/II/1/ABCD/T5Ta=+85° C:I/1/AEx d IIC/T5 Ta=+85° C; DIP/II, III/1/EFG/T5 Ta =+85° C; IP67	3041064

■ Dimension

ALS10 Weatherproof









ALS30 Explosion Proof



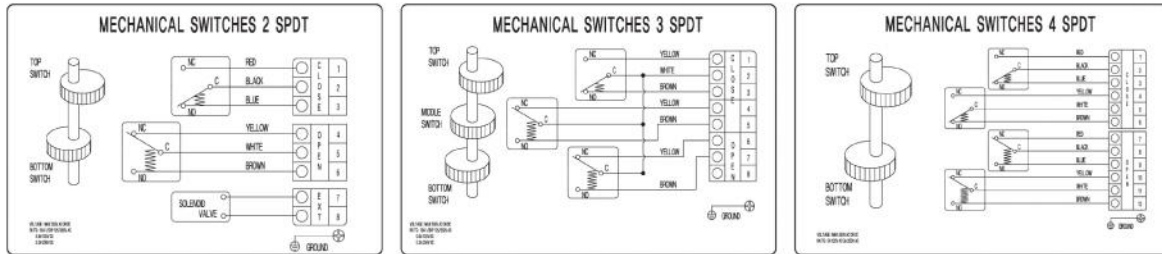
■ Mounting Bracket

1 NAMUR standard bracket is supplied together with 1 limit switch box as standard

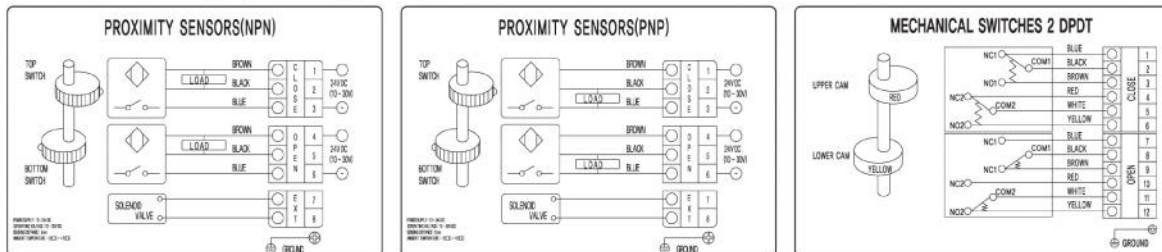
Model	Bracket	Material	Actuator Size	Model	Bracket	Material	Actuator Size
	S1 ALS 1X Series	Steel	30 X 80 H:20~30		A1 ALS 3X Series	Aluminium	30 X 80 H:20
	AB1 ALS 1X Series	SUS	30 X 80 H:20		A2 ALS 3X Series	Aluminium	30 X 80 H:30
	AB1 ALS 3X Series	SUS	30 X 80 H:20		A3 ALS 3X Series	Aluminium	30 X 130 H:30

Wiring Diagram

Mechanical Switch Type (UL CSA VDE Approved)



Proximity Sensor Type (UL CE Approved)



MECHANICAL SWITCHES

USED IN  APPROVED

- TYPE : MECHANICAL SWITCH
- VOLTAGE : MAX 250V AC OR DC
- CURRENT : 0.6A 125V DC OR 16A 1/2HP
125, 250V AC



AUTOMA

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※ The product is subject to change for technical development and quality improvement without prior notice.