ALS-320 series LIMIT SWITCH BOX

PROXIMITY SENSOR







● Design

The ALS-300 Series Limit Switch Boxes have three models. One is ALS-310N (mechanical), second is ALS-320N (Proximity Sensor), and third is ALS-330N (4-20mA feedback). This kind of limit switch box was designed through advance and state-of-the-art engineering technology which have the product to be solid, beautiful and with high-level quality. The product also fully meets IP specifications and the bracket is designed in light of ISO5211 and NAMUR standard.

As for ALS-320N Limit Switch Box, two kind of inductive proximity switches can be assembled. One (ALS-320Ni) is NAMUR standard inductive proximity switch (NJ2-V3-N, 2wires) which is explosive proof one. Another (ALS-320N) is 3 wires inductive proximity switch (P16AM-D3N).

● Features

1.Compact and Beautiful Design
Aluminum die-casting housing and powder coated

2.Multiview visual Position Indicator
Secure waterproof, multi-angles visual valve positions involving top and side view

3."Quick-Set" Cam
Spring loaded splined cam. No need to adjust again after initial setting and Easy setting without tool

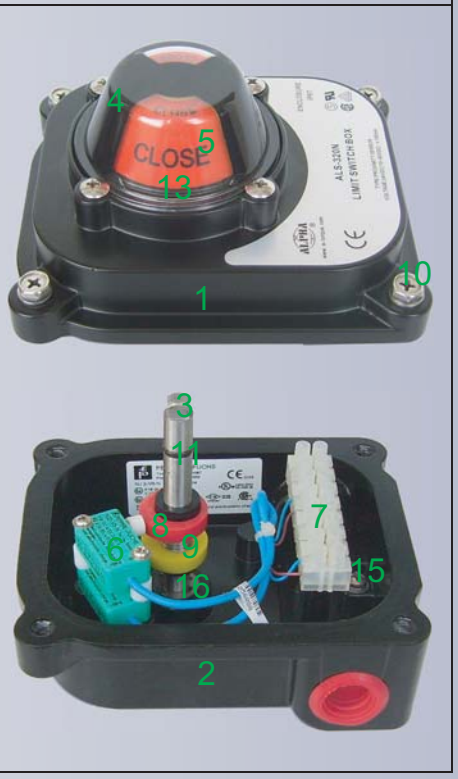
4.Multipoint terminal strip
Standard 8 points and enough strips for connection (10 points for optional)

5.Dual cable entries
2×G1/2 (Standard) and M20×1.5, 1/2NPT (Optional)

6.Captive cover bolts
No worry to loose bolts while cover opens

7.Easy mounting
NAMUR standard steel plate or stainless steel (optional) shaft and bracket

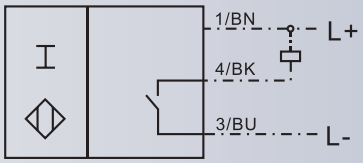
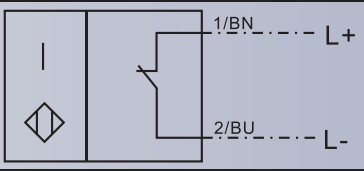
● *Structure and Material*

No.	Part Name	Qty.	Material	Picture
1	Box Cover	1	Aluminum Die Casting	
2	Box Body	1	Aluminum Die Casting	
3	Shaft	1	Stainless Steel	
4	Indicator Cover	1	Polycarbonate	
5	Indicator	1	ABS/Polycarbonate	
6	Limit Switch	2	Proximity Sensor	
7	Terminal Strip	8	Polycarbonate Tin Plated Brass Stainless Steel	
8	Cam	2	Polycarbonate	
9	Spring	1	Stainless Steel	
10	Cover Bolts	4	Stainless Steel	
11	Shaft O-ring	2	NBR	
12	Housing O-ring	1	NBR	
13	Indicator O-ring	1	NBR	
14	Bushing	2	Bronze	
15	Earth Lug	1	Stainless Steel	
16	E-ring	2	Stainless Steel	

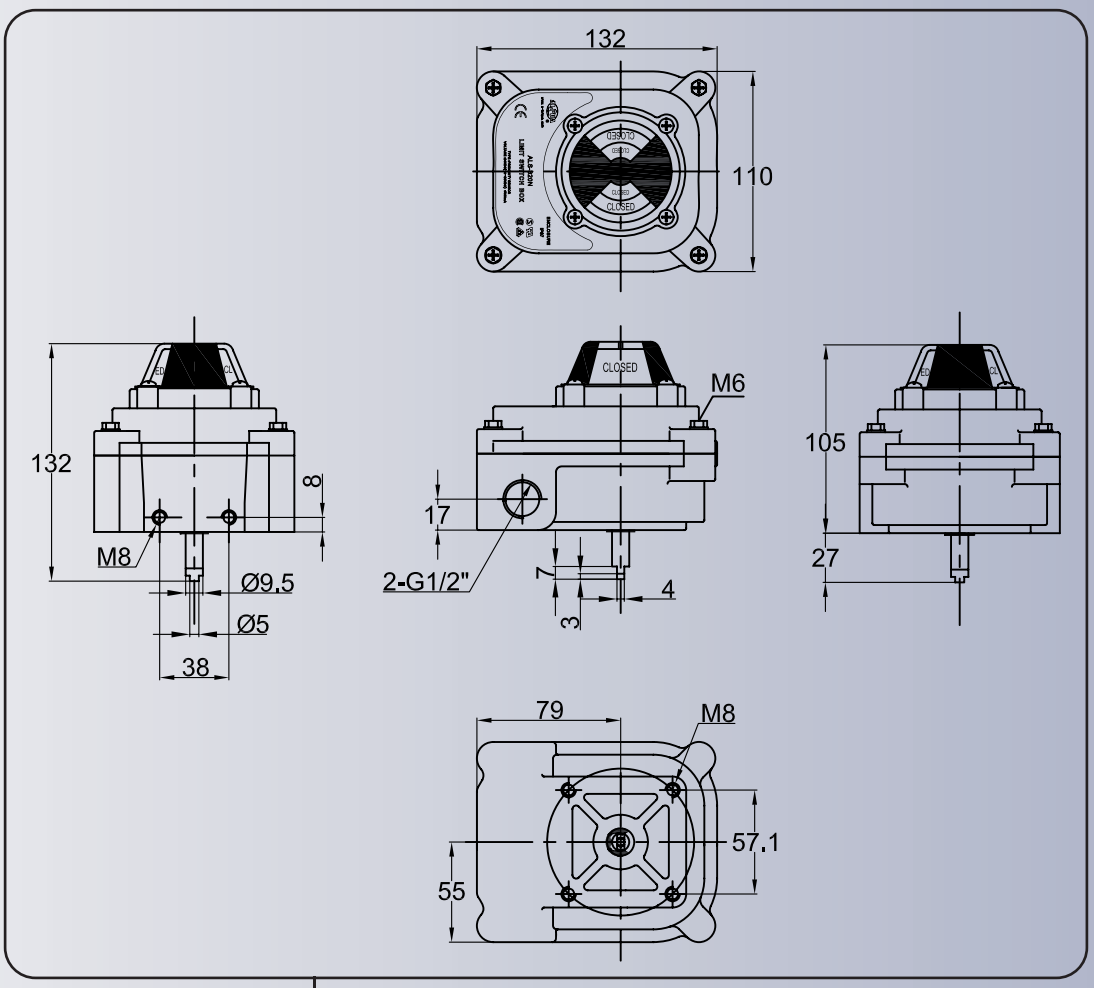
● *Limit Switch Box Specification*

Model	Weather proof	Explosive Proof	Temperature Range	Cable Entry	Terminal Strips	Position Indicator	Switches
ALS-320N	IP67	no	-20°C ~85°C	2×G1/2 (2-M20×1.5 2×1/2NPT)	8 Points (8~10 Points)	0~90° Open-Yellow Close-Red	P16AM-D3N (8~30VDC,<=150mA)
ALS-320Ni	IP67	Exia IICT6	-20°C~85°C	2×G1/2 (2-M20×1.5 2×1/2NPT)	8 Points (8~10 Points)	0~90° Open-Yellow Close-Red	NJ2-V3-N (8VDC, Detected<=1mA, Not detected>=3mA)

● *Inductive Proximity Switch Specifications*

Model	P16AM-D3N	NJ2-V3-N
Switching element function	NO	NAMUR NC
Rated operating distance	3mm	2mm
Output type	3-wire	2-wire
Installation	Embeddable	Embeddable
Nominal voltage	8-30VDC	8VDC
Switching frequency	0~500Hz	0~1000Hz
Reverse polarity protection	all connections	-
Short-circuit protection	pulsing	-
Voltage drop	less than 1V	-
Operating current	<=150mA	-
Current Consumption (Detected)	-	<=1mA
Current Consumption (Not Detected)	-	>=3mA
Ambient temperature	-25°C ~ +70°C	-25°C ~ +100°C
Connection type	0.1m , PVC cable	0.1m , PVC cable
Core cross-section	0.14 mm²	0.14 mm²
Housing material	PBT	PBT
Sensing face	PBT	PBT
Protection degree	IP67	IP67
Connection type		
picture		

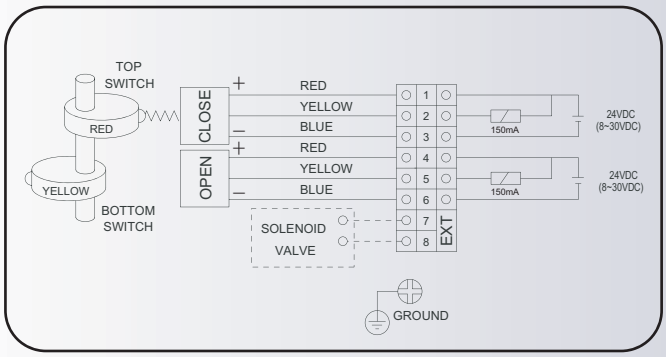
● Dimension



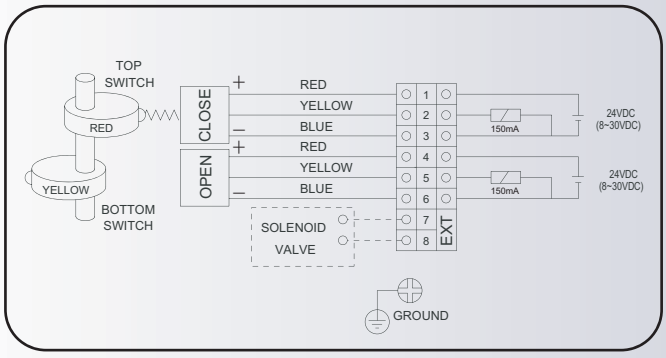
● Wiring Diagram

for ALS-320N

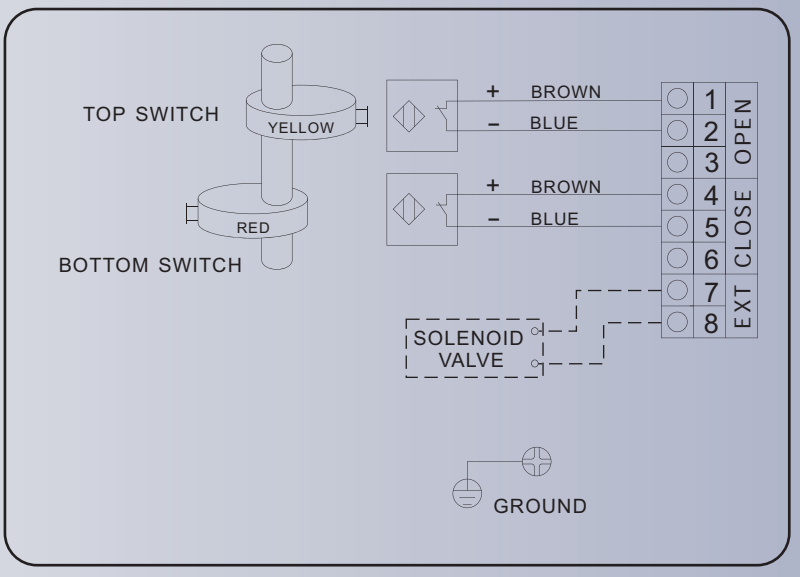
(Output Type : NPN)



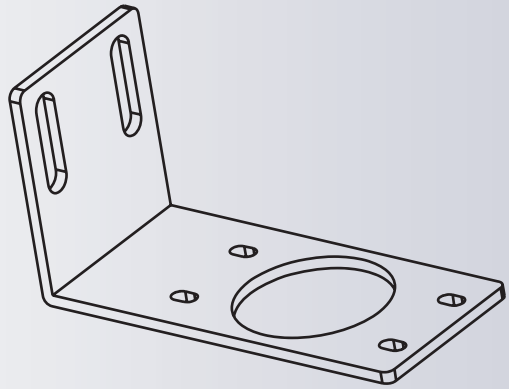
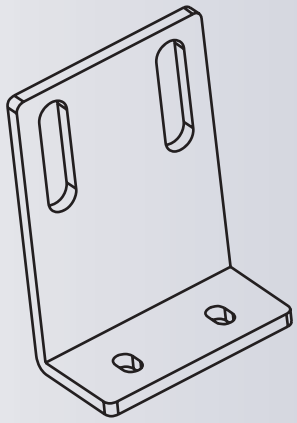
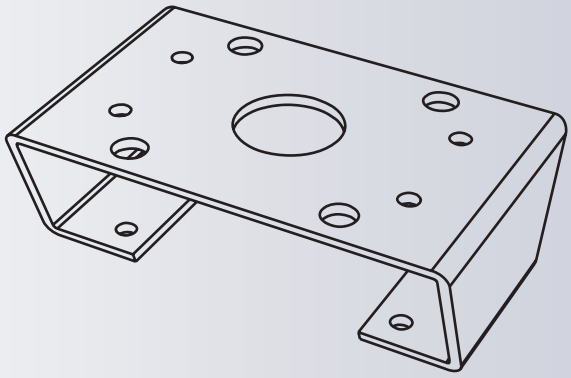
(Output Type : PNP)



for ALS-320Ni (P&F sensors)



● *Mounting Bracket*

Model	Picture	Material	Application
MB-3.0		Steel plate Stainless steel	30×80 H:20~30
MB-3.1		Steel plate Stainless steel	30×130 H:30~50
MB-3.2		Stainless steel	30x80 H:20