

APL-2N SERIES

- **Solid and compact design**
Aluminium die-casting housing and powder coating.
- **Bolts on visual position indicator**
- **Quick-set cam**
Spring loaded splined cam.
No need to adjust again after initial setting.
Easy setting without tool.
- **Dual cable entries**
2 x 1/2 NPT(Standard)
M20, PG13.5, PF1/2", PT1/2".(Option)
- **Captive cover bolts**
No worry to loose bolts while cover open.
- **Easy mounting bracket**
NAMUR standard stainless steel shaft and bracket.



SPECIFICATION	STANDARD	OPTION	MATERIAL	
Enclosure	Weatheproof IP67/NEMA4 & 4X	IP 68	Housing cover&body	Aluminium die-casting
Ambient temperature	-20℃~80℃		Shaft	Stainless steel
Cable Conduit	2 x NPT1/2"	PF1/2", PT1/2" M20, PG13.5	Indicator cover	Polycarbonate
Terminal Strips	8 points (0.08~2.5mm ²)		Indicator	ABS/Polycarbonate
Position indicator	Closed:red Open:yellow	Closed:red Open:green	Cam	Polycarbonate
Switches	Mechanical switch x 2 Proximity sensor x 2		Spring	Stainless steel
External coating	Polyester powder coating(black)	red, green,blue, yellow,silver color Nylon coated	Housing cover bolt	Stainless steel
			O-ring	NBR
			Bushing	Bronze
			E-ring(shaft)	Stainless steel
			Earth lug	Stainless steel
Shaft	Standard shaft(17mm)	Long shaft	Bracket	Stainless steel

Position indicator



Re-adjustment available upon required direction

Shaft position

-  90° Closed or Open for rotary application
 90° Open or Closed for rotary application
 45° Closed or Open for rotary application

Cable Conduit

Cable entry due to length and thickness



Captive cover bolts

Specially designed to prevent
loosing cover bolts during
maintenance or installation.



APL - 210



Standard switch : SZM-V16-1FA-61

2SPDT switches (option : spst-nc, spst-no)
Contact arrangement: 250V AC/16A, 125VDC/0.3A
125VDC/0.6A, 30VDC/10A

Optional switch : SS5GL,SS10GL(Omron)

2SPDT switches (option : spst-nc, spst-no)
Contact arrangement: SS5GL:250V AC/3A
SS10GL:250V AC/10.1A

Approved standards : UL, CSA, SEMKO, SEV EN61058-1

APL - 220



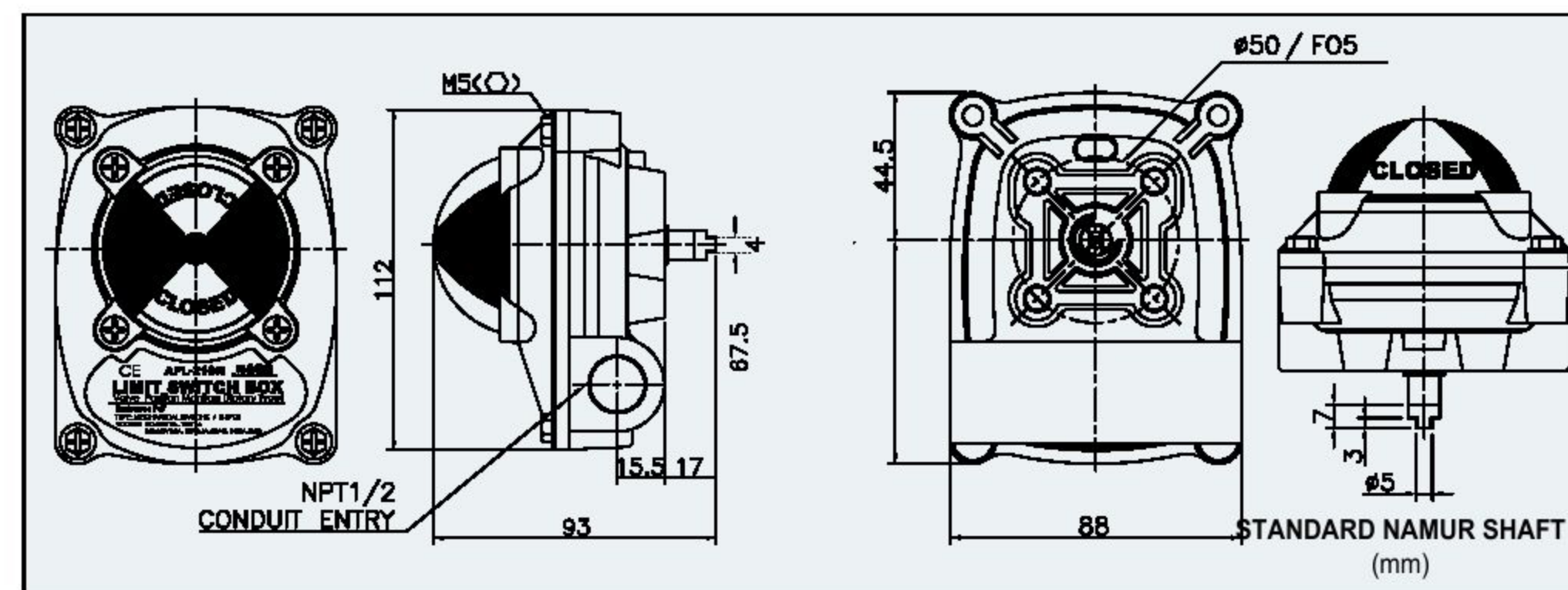
Standard sensor : NJ2-V3-N (P&F)

Inductive proximity sensor (intrinsically safe)
Voltage range: 8V DC (IP67 to IEC 60529)
Operating distance : within 2mm

Optional sensor EMC to EN60947-5-2

NBB2-V3-E2/E3(PNP): 10 - 30V DC Operating distance : 2mm
 NBB2-V3-E0 (NPN): 10 - 30V DC Operating distance : 2mm
 NBB3-V3-Z4/Z5 : 5 - 60V DC Operating distance : 3mm

DIMENSION



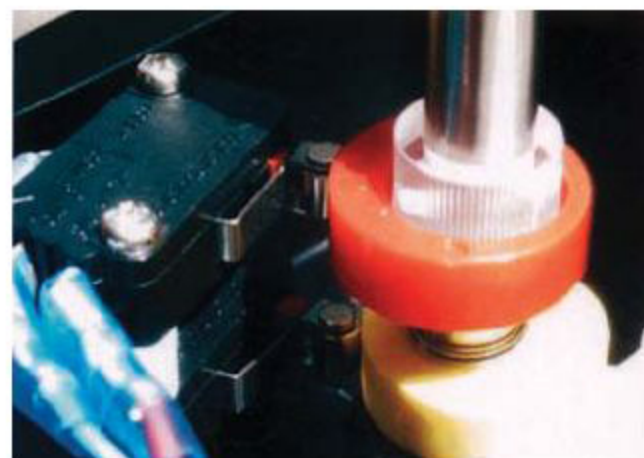
BRACKET NAMUR STANDARD



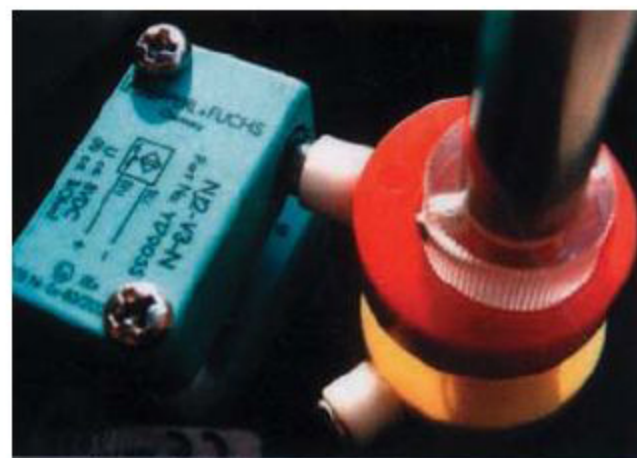
Model No	Material	Application
MBP-050	Stainless steel	25 x 50 h20
MBP-100	Stainless steel	30 x 80 h20
MBP-200	Stainless steel	30 x 80 h30
MBP-300	Stainless steel	30 x 130 h30
MBP-400	Stainless steel	30 x 130 h50

APL-3N SERIES

- Solid & flexible design
- Various options available
 - Additional switches : 3~4 mechanical switches
 - Additional terminal strips : 9~24 points
 - Proximity sensors, Magnetic switches. etc
 - Potentiometer (1 K Ω , 0~5 K Ω , 0~10 K Ω)
 - Signal output (4~20mA, DC)
- Applicable to any type valves with various Namur standard brackets



Two Mechanical S/W



Proximity Sensors



High Temperature
(Max. 150°C)

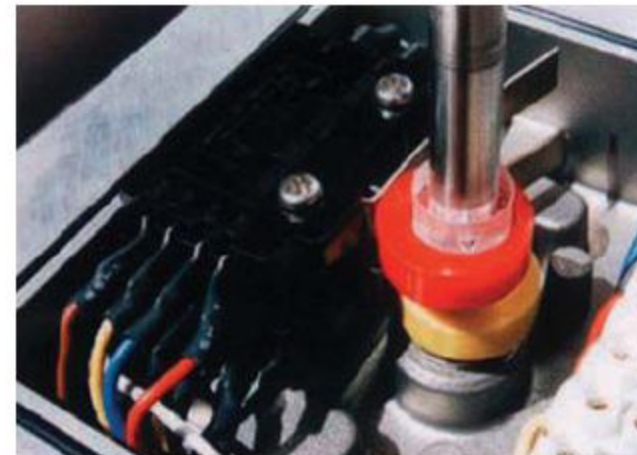


APL-4N SERIES

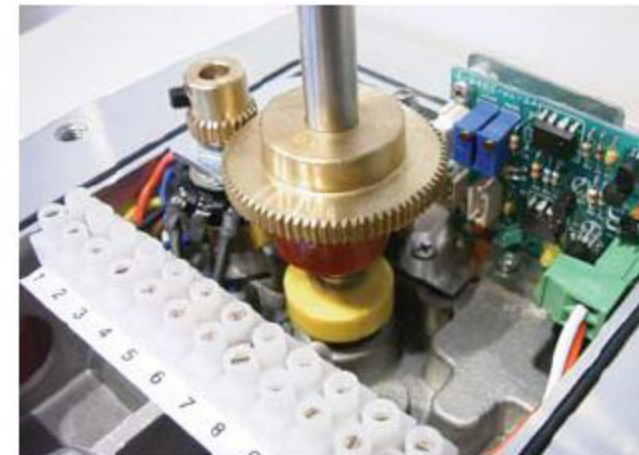
- Explosion proof application : Ex d IIB T6
- Cable entries : 2 x 3/4" NPT(standard)
- Terminal block : 9~24 points available
- Switches : DPDT switches available
- Proximity sensors, Magnetic switches, etc
- Potentiometer (1 K Ω , 0~5 K Ω , 0~10 K Ω)
- Signal output (4~20mA, DC)
- Applicable to any type valves with various Namur standard brackets



APL - 410N (2 SPDT)



APL - 414N (2 DPDT)



APL - 416N
(2 SPDT + Signal unit)

STRUCTURE

- **Enclosure**
Solid and beautiful design
aluminium die-casting
IP67
- **Painting**
Powder coating
- **Housing Body**
Aluminium die-casting
- **Quick-Set Cam**
Easy to set, Splined cam
Open-Yellow, Close-Red
- **Various Switches**
Mechanical
Proximity(P & F)
Reed & Pneumatic
- **Mounting Bracket**



- **Visual Position Indicator**
Poly-carbonated
Open-Yellow, Close-Red
- **Name Plate**
- **Housing Cover**
Aluminium die-casting
- **Captive Bolts**
Stainless steel
- **Terminal Strip**
Standard 8 points
- **Earth lug**
- **Multi-Ports**
Main.2, Max.4Ports

MATERIAL

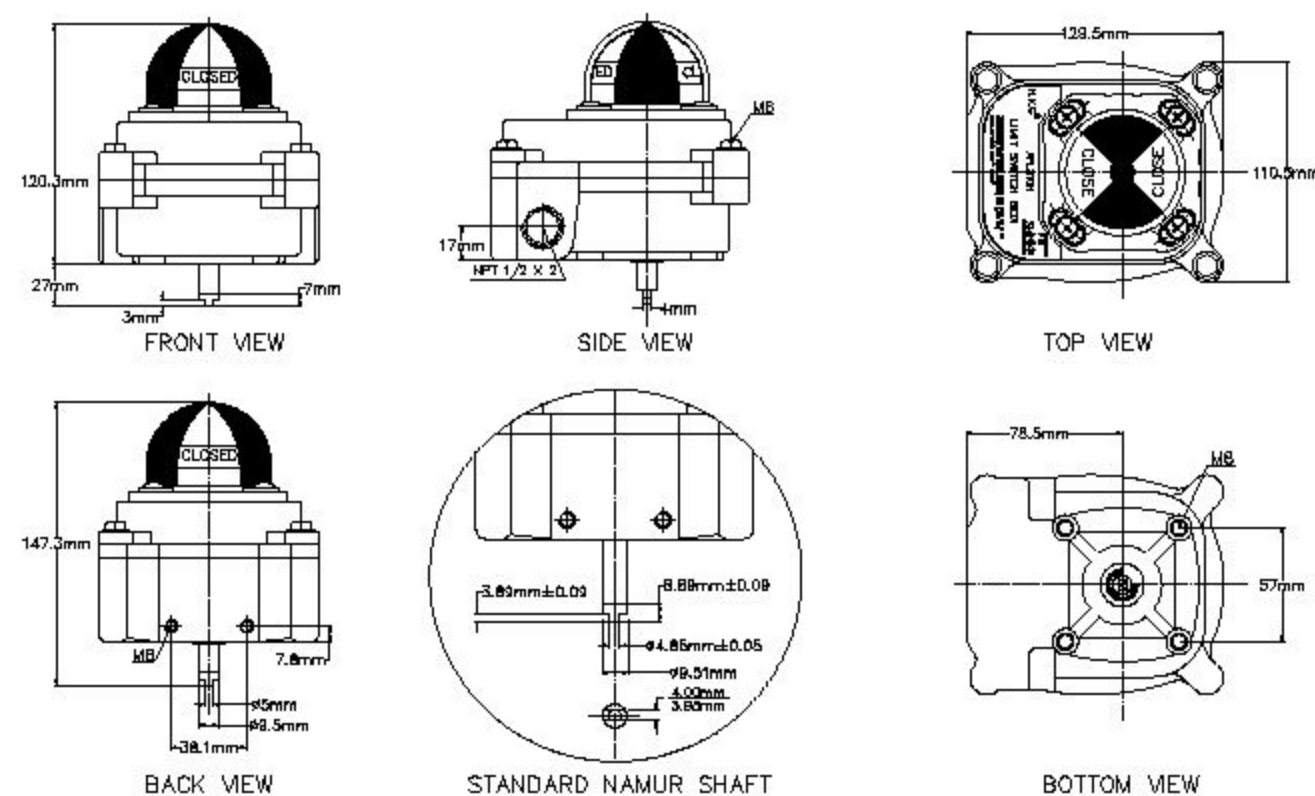
Part Name	No	Specification
Housing Cover	1	Aluminium Die Casting
Housing Body	1	Aluminium Die Casting
Shaft	1	Stainless steel
Position Indicator Cover	1	Polycarbonate
Position Indicator	1	ABS/Polycarbonate
Terminal Strip	8	Polycarbonate/Tin Plated Brass/Stainless steel
Cam	2	Polycarbonate
Spring	1	Stainless steel
Housing Cover Bolts	4	Stainless steel
	6	Stainless steel
Shaft O-ring	2	NBR
Housing O-ring	1	NBR
Position Indicator O-ring	1	NBR
Bushing	2	Bronze
Earth lug	1	Stainless steel
	2	Stainless steel
E-ring	1	Stainless steel

SPECIFICATION

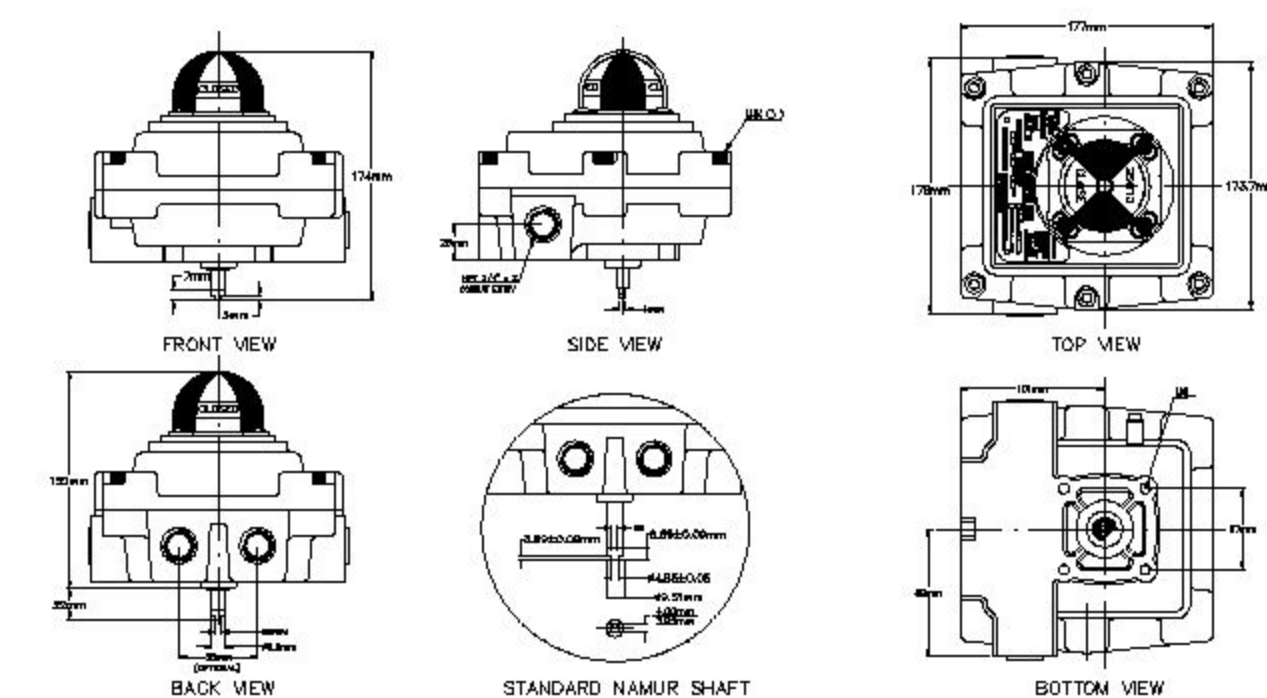
Model	APL-3N series		APL-4N series	
	Standard	Option	Standard	Option
Enclosure	Weather proof, IP67		IP67. Explosion proof Exd IIB T6 to EN50014/50018	
Temperature	-20° C ~ 85° C		-20° C ~ 85° C	
Cable Conduit	2 x 1/2 NPT	PT 1/2, PF 1/2, M20, PG 13.5, 3~4 entries	2 x 3/4 NPT	PT 3/4 ,PF3/4 3~4 entries
Terminal Strips	8 Points	9 ~ 24 Points Used in	8 Points	9 ~ 24 Points
Position Indicator	0~90° Open - Green Close - Red	0~180° Open - Yellow Close - Red	0~90° Open - Green Close - Red	0~180° Open - Yellow Close - Red
Switches	Mechanical switches, Proximity sensors, GO switches, Magnetic switches			
Potentiometer	1k ohm standard, 0-5 ohm, 0-10 k ohm			
Current Output Signal Unit	4 ~ 20mA, 20 ~ 4mA			
Painting	Polyester Power Coating with black color	Nylon Others on request	Polyester Power Coating with black color	Nylon Others on request

DIMENSION

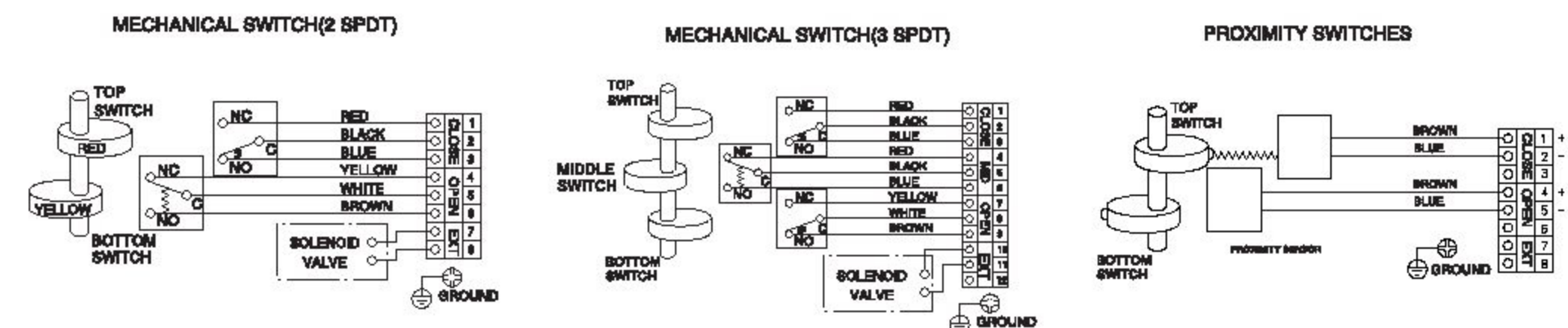
APL3N Series



APL4N Series



ELECTRICAL CONNECTION



MOUNTING BRACKET

Shape				
Size	30 × 80 H:20~30 30 × 130 H:30~50	30 × 80 H:20 30 × 80(130) H:30	30 × 80 H:20 30 × 80 H:30	30 × 130 H:30 30 × 130 H:50
Model	MB-P-L-1C MB-P-L-1S MB-P-L-2C MB-P-L-2S	MBP-001 MBP-002	MB-P-O-1C MB-P-O-1S MB-P-O-2C MB-P-O-2S	MB-P-O-3C MB-P-O-3S MB-P-O-4C MB-P-O-4S

- Last alphabet in model, **C** means plate steel, **S** means stainless steel
- MBP-001/002 are plastic material

ORDERING INFORMATION

APL - 3 10 N

Enclosure

3. Weather proof

4. Explosion proof(Exd IIB T6)

Switch type

**Bolt on
Position Indicator**

Mechanical switch		Proximity Sensor		Reed type Proximity Sensor	
10	2-SPDT	20	P & F NJ2-V3-N	30	General type
11	3-SPDT	21	Autonics. PS17-5DNU	31	High temp (Up to + 100℃)
12	4-SPDT	22	P & F NJ4-12GM-N		
13	2-SPST	23	NBB2- V3	Mechanical Switch(2-SPDT)	
14	2-DPDT			40	General type
15	2-SPDT + Potentiometer			41	High temp (Up to + 150℃)
16	2-SPDT + Signal unit (4-20mA)				