

# SB 300 FLAME PROOF, POSITION MONITORING SWITCH BOX AS PER IS/IEC 60079-1:2007 & WEATHER PROOF IP-67 AS PER IS/IEC 60529-2001 CCOEs IDENTIFICATION NUMBER-P305088/1

DATA SHEET  
SB-300L2-L4  
SB-300P2-P4

Rigid and compact design constructed from aluminum alloy  
Die-casting capable of operating even in hazardous Conditions

## SB-300 SERIES FLP IIC / IP 66/67 CERTIFIED CIMFR

This series is designed suitable for valve and actuators in hazardous area application, having compact but robust construction conforms to IS/IEC 60079 PART 1 2007 also suitable in Zone 1 and 2 and ingress protection IP66/67.

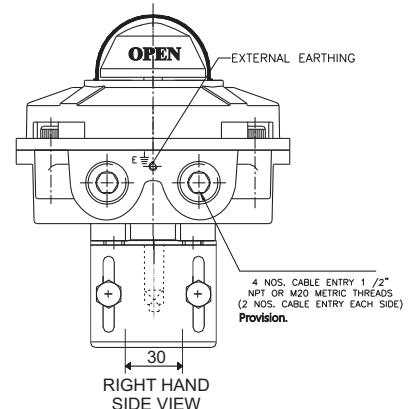
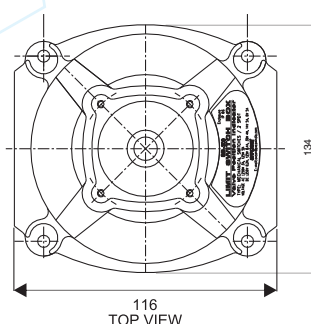
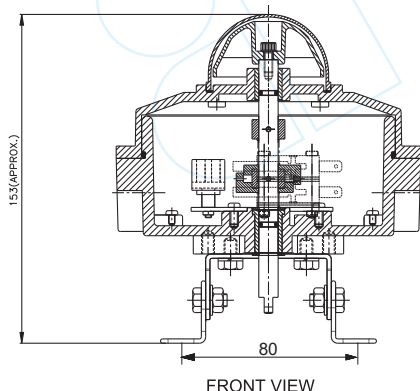
Standard aluminum housing provides reliable explosion proof performance.



| SPECIFICATION       | Standard                                                                                                                                                                                                         | Option                                                                                |
|---------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Enclosure           | Explosion proof Ex d IIC T6, IP66, O-ring sealed Weather Proof as per IS/IEC-60529 - 2001                                                                                                                        |                                                                                       |
| Outside coating     | Epoxy-Polyester outside against corrosion                                                                                                                                                                        | Nylon Coating Special color Coating                                                   |
| Ambient temperature | -20°C~+80°C                                                                                                                                                                                                      | Higher (~+100°C) and lower (~-40°C) temperature                                       |
| Cable entries       | 1/2" NPT(F) Threads 2 Nos.                                                                                                                                                                                       |                                                                                       |
| Terminal block      | 12 Nos of terminal Block<br>10 for switches, 2 Nos for solenoid valve power (Model Depended).                                                                                                                    |                                                                                       |
| Position indicator  | Dome type 0°~90°                                                                                                                                                                                                 | Others (3 Way L-Port, T-Port)                                                         |
| Mounting bracket    | Steel powder coated, Compatible to VDI/VDE 3845, NAMUR.                                                                                                                                                          |                                                                                       |
| Switches (Sensors)  | 2-SPDT mechanical switch<br>SB-300-L2- 2 Nos SPDT mechanical switch.<br>SB-300-L4- 4 Nos SPDT mechanical switch.<br>SB-300-P2- 2 Nos Proximity Sensors.<br>SB-300-P4- 4 Nos Proximity Sensors.<br>or any Others. | DPDT Switches<br>Proximity sensors (P & F),<br>Magnetic sensors, Position transmitter |

## DIMENSION

### SB 300 Series FLP and WP Switch Box.



## SB-300L2/SB-300-L4

### Mechanical SPDT Switches

Rating : 10A 125 or 250 V AC or  
24V AC  
0.5A 24 to 125 V DC  
0.25A 125 to 250 V DC

### Certification :

Flameproof Enclosure to  
IS/IEC 60079-1:2007  
for Group IIC, Exd IIC T6.

Test & Certified by : CIMFR, Dhanbad.

Test Report : CIMFR/TC/P/H673

Date-22.02.2012.

BIS Licence No. : CM/L-0007083570

CCEs No. P305088/1

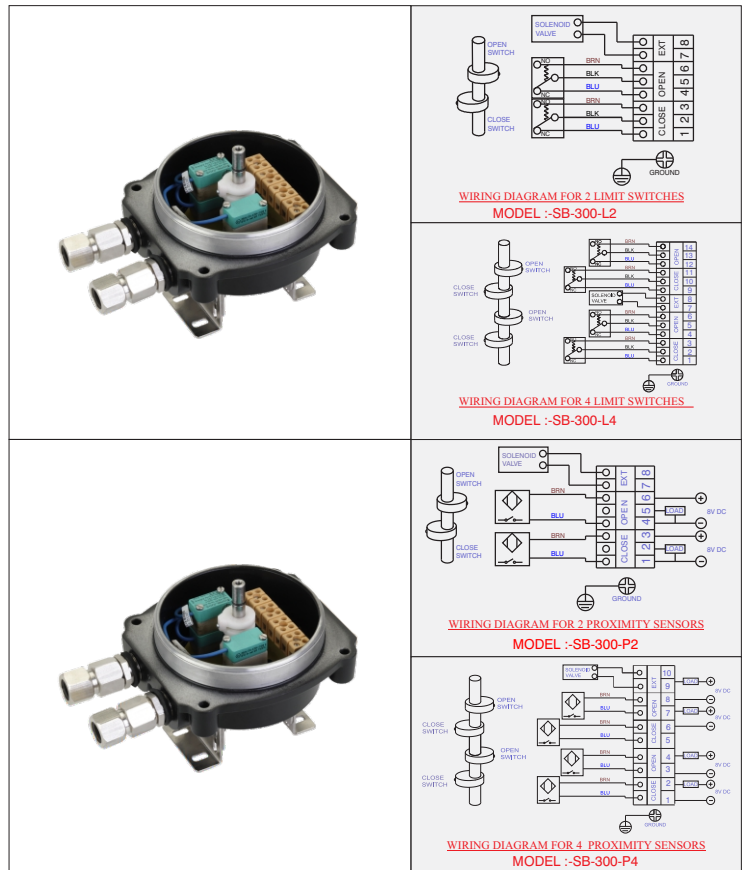
CCOEs I.d. No : P305088/1

## Proximity Sensor SB-300-P2/SB-300-P4

### Proximity or inductive Sensor (2 Nos)

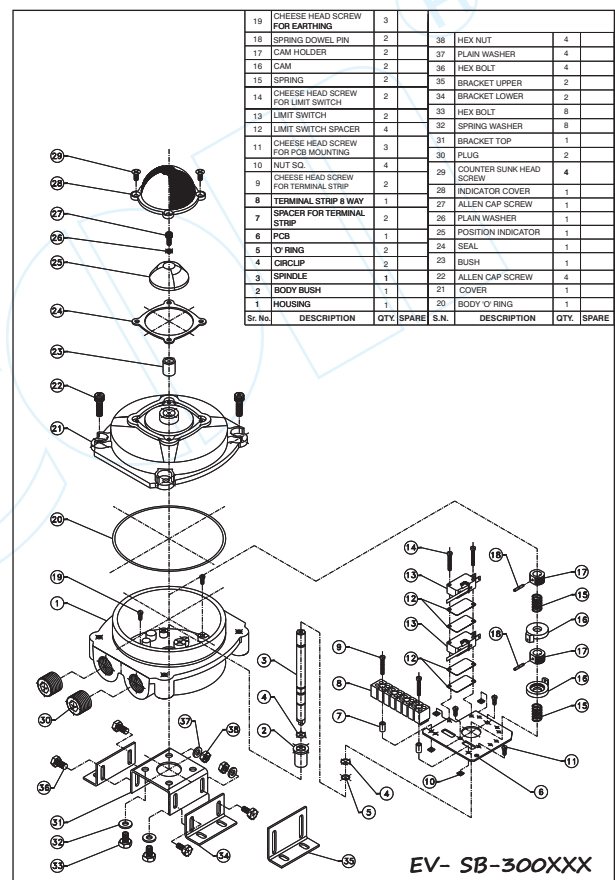
Voltage Rating : 10 to 60 V DC or 8 V DC

Sensing Distance : 2 MM



## CONSTRUCTION MATERIAL

|                  |                                                                            |
|------------------|----------------------------------------------------------------------------|
| <b>Housing</b>   | Low copper aluminium pressure die-casting                                  |
| <b>Coating</b>   | Epoxy-Polyester inside/outside                                             |
| <b>Sealing</b>   | NBR O-rings on each interface (Dome indicator, Lower/Upper housing, Shaft) |
| <b>Dome</b>      | Poly-carbonate                                                             |
| <b>Bushings</b>  | Bronze                                                                     |
| <b>Shaft</b>     | AISI304 Stainless Steel                                                    |
| <b>Earth Lug</b> | Stainless Steel                                                            |
| <b>Bolts</b>     | All in stainless steel                                                     |
| <b>Mounting</b>  | Plate steel / SS 304                                                       |
| <b>Bracket</b>   | Steel powder coated                                                        |



**PRICE LIST OF TYPE OF SWITCH BOXES (SB-300 SERIES)**

| Product No | Model No. Voltage                               | Type of Switches                                                                                                   | Approval | Protection*        | Cert.No.                        | Testing Standard        |
|------------|-------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|----------|--------------------|---------------------------------|-------------------------|
|            | SB300L2<br>230V/110V AC<br>or 24V DC            | 2-Nos. Limit Switches<br>(Cherry/Honeywell)                                                                        | CIMFR    | FLP-IIC &<br>IP66; | CIMFR/TC/P/H67<br>3 DT.22.02.12 | IS/IEC 60079-1-<br>2007 |
|            | SB300L4<br>230V/110V AC<br>or 24V DC            | 4-Nos. Limit Switches<br>(Cherry/Honeywell)                                                                        | CIMFR    | FLP-IIC &<br>IP66  | CIMFR/TC/P/H67<br>3 DT.22.02.12 | IS/IEC 60079-1-<br>2007 |
|            | SB300P2<br>24VDC<br>(No Barrier)                | 2-Nos. AVCON<br>Prox. Switches or<br>Inductive Switches<br>(NPN/PNP)                                               | CIMFR    | FLP-IIC &<br>IP66  | CIMFR/TC/P/H67<br>3 DT.22.02.12 | IS/IEC 60079-1-<br>2007 |
|            | SB300P22<br>24V DC (No<br>Barrier)              | 4-Nos. NPN/PNP (AVCON)<br>Prox. Or Inductive<br>Switches)                                                          | CIMFR    | FLP-IIC &<br>IP66  | CIMFR/TC/P/H67<br>3 DT.22.02.12 | IS/IEC 60079-1-<br>2007 |
|            | SB300P4<br>0 to 8V DC<br>(Barrier<br>Required)  | 2-Nos. P&F-NJ2V3N (2-<br>Wire Namur 2 MM Stroke<br>Proximity or Inductive<br>switches). (Intrinsic safe -<br>ISIB) | CIMFR    | FLP-IIC &<br>IP66  | CIMFR/TC/P/H67<br>3 DT.22.02.12 | IS/IEC 60079-1-<br>2007 |
|            | SB300P44<br>0 to 8V DC<br>(Barrier<br>Required) | 4-Nos. P&F-NJ2V3N<br>(2-Wire Namur 2 MM<br>Stroke Proximity or<br>Inductive Switches).<br>Intrinsic safe-ISIB      | CIMFR    | FLP-IIC &<br>IP66  | CIMFR/TC/P/H67<br>3 DT.22.02.12 | IS/IEC 60079-1-<br>2007 |
|            | SB300P6<br>10 to 30 V DC<br>(No Barrier)        | 2-Nos. P&F NBB3V3E2<br>(3-Wire Non-Namur 2MM<br>Stroke Proximity or<br>Inductive Switches).                        | CIMFR    | FLP-IIC &<br>IP66  | CIMFR/TC/P/H67<br>3 DT.22.02.12 | IS/IEC 60079-1-<br>2007 |
|            | SB300P66<br>10 to 30V DC<br>(No Barrier)        | 4-Nos. P&F NBB3V3E2 (3-<br>Wire Non-Namur 2MM<br>Stroke Proximity or<br>Inductive Switches).                       | CIMFR    | FLP-IIC &<br>IP66  | CIMFR/TC/P/H67<br>3 DT.22.02.12 | IS/IEC 60079-1-<br>2007 |
|            | SB300P8<br>5 to 60 V DC<br>(No Barrier)         | 2-Nos. P&F NBB3V3Z4<br>(2-Wire Non-Namur 3MM<br>Stroke Proximity or<br>Inductive Switches).                        | CIMFR    | FLP-IIC &<br>IP66  | CIMFR/TC/P/H67<br>3 DT.22.02.12 | IS/IEC 60079-1-<br>2007 |
|            | SB300P88<br>5 to 60V DC<br>(No Barrier)         | 4-Nos. P&F NBB3V3Z4 (2-<br>Wire Non-Namur 3MM<br>Stroke Proximity or<br>Inductive Switches).                       | CIMFR    | FLP-IIC &<br>IP66  | CIMFR/TC/P/H67<br>3 DT.22.02.12 | IS/IEC 60079-1-<br>2007 |

\*IP-67 Certification is available from Karandikar and Associates - under Cert.no.KLPL/BTG/14/07-17 DT.11.09-2014.  
(USE WITH BARRIER TYPE KFD2-SL-2EX1LK 1270 of P&F Make - NOT AVCON SCOPE OF SUPPLY)