Level Measuremenmt & Control Solutions

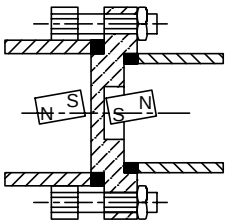
Magnetic Float Switch, 137

FEATURES

- Modular construction ...
  1. Switch module.
  2. Flange module.
  3. Float module.

  This means it gives flexibility with unlimited switch combinations to suit individual needs.
- Available in Electric On/Off and Pneumatic Proportional.
- Electric Switch available in Flameproof version.
- Available with fixed or adjustable differential.
- High temperature version available.
- All wetted parts in stainless steel.
- Different types of Float Chambers available.

OPERATING PRINCIPLE

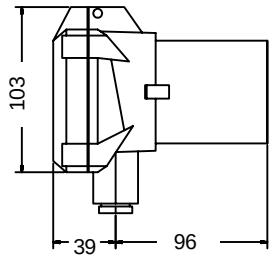
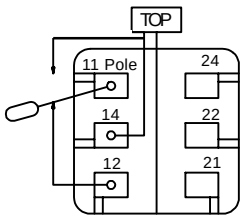
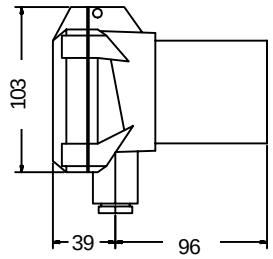
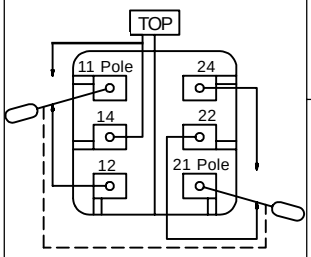
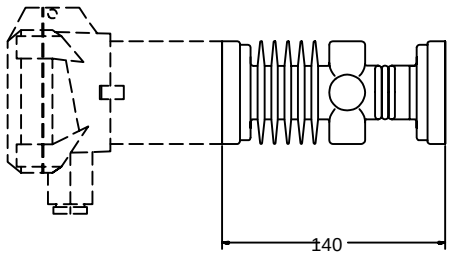


The Float movement of the level switch is transmitted through a solid non magnetic wall by the repulsion of like magnetic poles. This ensures that the float magnet imparts a snap action to the electric or pneumatic switch elements. `S.B.E.M.' level switches are absolutely leak proof & not subject to material fatigue due to gland less design.

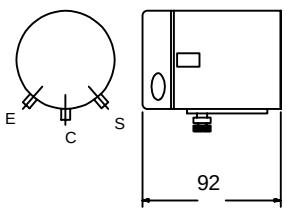
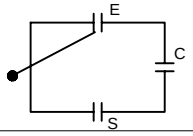
1 SWITCH MODULES

Type selection depending on application :

- ❑ Output required : electric or pneumatic
- ❑ Required action / function : Alarm annunciator, Motor starter or Pneumatic proportional valves.
- ❑ Type of enclosure to meet environmental conditions: Flame Proof or Weather Proof IP 65 / IP 67.
- ❑ Max. operating temperature inside vessel / tank for high temperature stand off.

Type Code	Output		Terminal Configuration	Enclosure material of construction	Degree of protection	Max. ambient temp.	Max. operating temp.
ES	Electric ON/OFF		C/O contact position with one microswitch 	Stainless steel AISI 316	IP 65 IP 67	0-80°C 0-80°C	0-200°C 0-200°C
EA	Electric ON/OFF			Die cast Aluminium grade LM 6	IP 65 IP 67	0-70°C 0-70°C	0-200°C 0-200°C
EX	Electric ON/OFF flame proof to Group II A & II B as per IS-2148		C/O contact position with two microswitches 	Stainless steel AISI 316	IP 65	0-70°C	0-200°C
EY				Die cast Aluminium Grade LM 6	IP 67	0-70°C	0-200°C
H	High temp. stand off with electric ON/ OFF			For high temp. stand off sleeve-cast aluminium Grade LM 6	IP 65 IP 67	0-70°C 0-70°C	-20 to 300°C -20 to 300°C

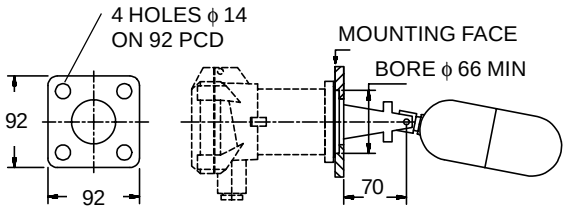
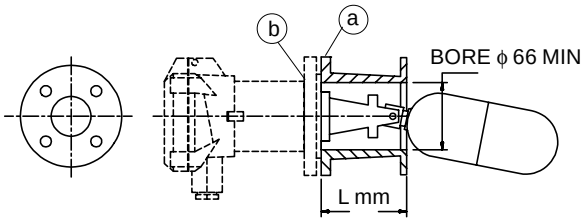
Operating pressure : 30 Kg/cm² (wet side) Gasket : AFR
Contact rating : 5 Amps 230 VAC Resistive, (standard)
CCE certificate no. : R(1) 136/SB ELECTRO-MECHANICAL Dated - 19/03/97.
CMRS Certificate no. : V/1/1/501 Dated - 30/07/91.

Type Code	Output		Input / Output diagram and pressure ratings	Enclosure material of construction	Max. ambient temp.	Max. operating temp.
PNP	Pneumatic Proportional		E - Exhaust Port S - Input Port 1.4 Kg/cm² air pressure C - Controlled output port 0.2 to 1.0 Kg/cm² 	Aluminium	0-70°C	0-300°C

Supply connections : Std. 1/8" NPT (female), Optional 1/4" NPT (male/female),1/4" BSP (male/female) with adaptors. Instrument quality air supply is essential for PNP switch modules.
For more details on PNP switch controller refer LF-137-0808

2 FLANGE MODULES

Type selection depending on :
- ❑ Standard mounting flange
- ❑ Flange / nozzle mounting to ANSI, BS, DIN, IS

Tank Code	Type		Material of Construction	Mounting Details
SF	Standard mounting square flange		Stainless steel casting AISI 316	Direct mounting tank opening Min.- ϕ 66 mounting holes to suit - M 12/ 1/2" BSW
SA SB SD SI	Slip on flange to suit side and top nozzles		a - sealing flange (fabricated) AISI 316 b - slip on flange. carbon steel passivated sealing flange.	Slip on flange nozzle mounting range 2 1/2" NB to 6" for ANSI, DIN, BS and IS NB — L max. 2 1/2", 3" — 70 4", 5" — 80 6" — 90

ORDERING INFORMATION

CODE — HIGH TEMPERATURE STAND OFF
- \- Not required
- H Required (only with electric ON-OFF switch)

CODE — PNEUMATIC
- PNP Pneumatic proportional output

CODE — ELECTRIC ON-OFF SWITCH HOUSING
- -ES Stainless steel
- -EA Aluminium
- -EX Flameproof stainless steel
- -EY Flameproof aluminium

CODE — CHANGE OVER CONTACT
- 1 One (SPDT)
- 2 Two (2 x SPDT)

CODE — DEGREE OF PROTECTION
- 5 IP-65 (STD)
- 7 IP-67

CODE — CABLE ENTRY SIZE
- F 3/4" UNF (F) (STD)
- T 1/2" NPT (F)

CODE — STANDARD MOUNTING FLANGE
- F Standard square flange

CODE — SLIP ON FLANGE STANDARD
- A ANSI standard
- B BS standard
- D DIN standard
- I IS standard

CODE — SIZE OF SLIP ON FLANGE
- \- For standard square flange
- 2 2 1/2" (65 mm) NB
- 3 3" (80 mm) NB
- 4 4" (100 mm) NB
- 5 5" (125 mm) NB
- 6 6" (150 mm) NB

CODE — FLOAT ASSEMBLY
- S Standard float assly.
- H Standard float with - Horizontal extension
- A Adjustable extension
- V Vertical extension
- Z Z type extension

Extension length L in mm (for type B in cms)

CODE — BELLOWS
- \- Not Reqd.
- 1 Nitrile Rubber
- 2 Viton Rubber
- 3 Silicon Rubber

ORDERING EXAMPLES MODEL CODES

1) | P | N | P | S | F | - | S | - | - | - | - |

Pneumatic proportional output with standard mounting square flange and standard float assembly.

2) | H | - | E | A | 2 | 5 | F | S | B | 4 | V | 3 | 0 | 0 | - |

Electric ON/OFF output, enclosure of aluminium construction with high temp. stand off having IP 65, degree of protection with 2 changeover contacts & 3/4" UNF cable entry connection. BS-4" NB slip on flange, connected with vertical extension `v', control level of liquid - 300 mm from top.