

EXTERNAL CAGE LEVEL CONTROLLER

SIGMA's External cage liquid level switches are very widely used for the petroleum and power industries. Anti vibration design ensures positive switch activation. Being highly versatile, cage mounted type extends to a wide range of other possible applications.

Sigma Advant-edge

- ✓ Rugged in construction and easy to install
- ✓ Facilitates maintenance, inspection & cleaning
- ✓ High temperature and pressure versions
- ✓ Special coating and special designs for corrosive applications.

Specifications

Center - center Distance (cc)	: 150 mm - 1500 mm
Orientation Type	: Vertical
Level Control	: Single Level (One float) / Single Float with two or three level, set point between two levels 40 mm min / Two Levels Dual Float.
Float & Size	: Spherical / Cylindrical, Application based/specified.
Float Material	: SS 316 / PP / PVC
Chamber	: CS/ AISI 304 / 316 / specified.
Switch Housing	: Weather proof IP 67 / Explosion proof IIA IIB, IIC
Switch	: Micro, sealed assembly available.
Current Rating	: 10 / 15 A / 250 V A.C Max / specified.
Conduit Connection	: 1/2" or 3/4" NPT, 3/4" to 1" ET.
Differential	: Fixed 12 ± 3 mm / Adjustable differential / set point.
Process Connection	: Flanged / Threaded / Socket Weld
Process Orientation	: Side-Side or Side and bottom, Side-Side connection
Pressure	: 15 - 50 bar / specified.



Additional Features (optional):

For high temperature between 250°C - 550°C SS Cooling Fins are provided to reduce the temperature of the housing. Special construction of the chamber & flange ratings are designed for high-pressure applications. Vertical float type can be substituted with displacer in place of float for increasing pressure / temperature capacity. For low specific gravity liquids ranging from 0.5 to 0.8 additional fixture is provided for efficient operation of the switch.

Sealed Chamber Level Switch

In Sealed chamber Level Switch, the Float Chamber is completely sealed with float inside the chamber. By virtue of sealed cable entry, the switch can be used for refrigerants, with low specific gravity. Special designs for 98% H₂SO₄ applicable is also available.



Available



IBR Approved
External Cage Level Switch



Model Number Coding for External Cage Level Controller

ECLS	Orientation	Connection	Operating Pressure	Material of Cage	No. of Float	Enclosure Class	Switch Rating	Optional Features	C/C in mm
External Cage Level Switch	S- Side-Side B- Bottom-Side	F- Flanged T- Threaded S- Socket Weld B- Butt Weld	1- Upto 15 kg/cm ² 2- Upto 25 Kg/Cm ² 2- Upto 50 Kg/Cm ² S - Specify	4- SS304 5- A106 Gr.B 6- SS316 4L- SS304L 6L- SS316L P- PP V- PVC Other Specify	1- One 2- Two	W- Weather Proof F- Flame Proof	C- 5/10 A 250 V A.C, 0.2 A, 250 V D.C M - 15 A 250 V A.C, 0.25 A, 250 V D.C H - Sealed Switch, 5 A 250 V A.C, 0.2 A , 250 V D.C	N- None S- Adjustable Set Point L- Lining/ Coating C- Cooling Fins H - Heating Jacket P - Plug & Socket	for example 150 mm

Model Decoding example: ECLS - S - F - 1 - 4 - 1 - W - M - C-150 mm

External Cage Level Switch, with

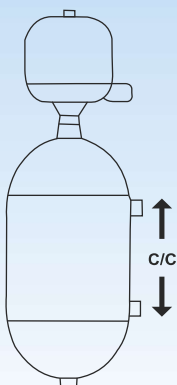
- Side-Side orientation
- Flanged Connection (specify size & rating)
- Operating Pressure up to 15 kg/cm²
- SS 304 Cage-
- with one float
- Weather Proof Enclosure
- Switch rating 15 A, 250 V AC, 0.25 A, 250 V D.C
- Cooling Fins
- 150 mm c/c

Note

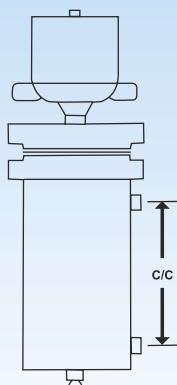
SIGMA reserves the right to modify specification / design from time to time, which is deemed suitable for the product without prior intimation.

Note

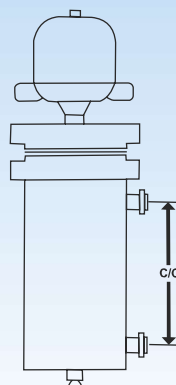
- Model Coding is categorized as per the specification of the product, for ease of selection and ordering.
- In case of choosing multiple specification under a specific category, mention the 2nd / 3rd code with a bracket, after the 1st code.
- For ordering IBR approved product, mention "IBR" immediately after the Product code.
- 2 SPDT Switch with 10A @ 250V AC, 0.2 A @ 250V DC is supplied as standard.
- PP (50° C) / PVC / Teflon max pressure rating is 8 Kg/cm² - PP/PVC/Teflon switches are available with single float option only.
- The product conforms to 97/23/EC: Pressure Equipment Directive, Article 3.3 & 2006/95/EC: Low Voltage Directive (LVD)
- In case of doubt, contact SIGMA for assistance in arriving at the model code / for specification.



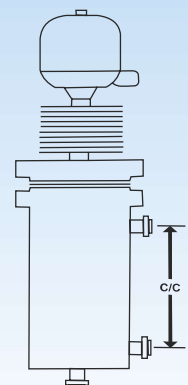
**Sealed
Side - Side**



**Threaded / Socket
Side Side**



**Flanged
Side Side**



**With Cooling
Fins**