

# Cargo Tank Measuring System

## Float Operated Type Level Switch



### ELECTRICAL SWITCH MECHANISM

- Dry contact switches are recommended for critical environmental conditions.
- Standard switch mechanisms are offered in rugged stainless steel construction.
- Dry contact mechanisms are supplied in both SPDT & DPDT. Generally a maximum of two mechanisms per single control are available as standard.

### FEATURES

- High load carrying capacity
- Environmental safety
- Vibration resistance

### OPERATING PRINCIPLE

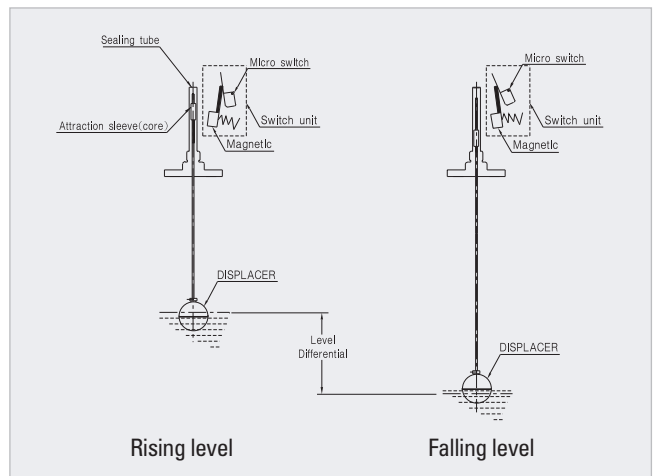
This level switch consists of displacer, switch unit in which micro switch and magnetic are assembled. The operation is based upon simple buoyancy. Immersion of the displacer in the liquid results in buoyancy force change, which moves the attraction sleeve upward or downward. Simultaneously, the contact of micro switch is changed by magnetic force as the attraction sleeve is in the field of magnet force. This principle allows adjustment of the switching point up to 15mm by moving the switch unit position.

### Model number code system

**OMS** - [ ] - [ ] - [ ] - [ ]

- Main application
  - F401, F402, F301, F302: Flanged external chamber
  - S401, S301, S302, S303: Sealed external chamber
  - SF: Side flange type
  - TF: Top flange type
- Connection method
  - SS: Side-side
  - SB: Side-bottom
  - SV: Side-bottom side
- Radiation fin
 

FIN	Temp. range
Not provided	0(T<110)
F4 4Wings	110(T<200)
F6 6Wings	200(T<250)
F9 9Wings	250(T<310)
- Switch housing
  - W: Weather proof(IP56)
  - E: Explosion proof(Exd II CT6)
- Connection size
  - S1: 1" Socket weld
  - S1 1/2: 1-1/2" Socket weld
  - S2: 2" Socket weld
  - F1: JIS 5K 25A
  - F2: JIS 16K 25A
  - FS: Special flange (ANSI, DIN)



### Standard model and specification

Model	Chamber material and pipe size	Max. No. of switch mechan.	Control press. rating				Minimum liquid Sp.Gr	Switch contact rating	Switch contact type
			Psig		Bars				
			100° F	750° F	38° C	400° C Max.			
OMS-F401	Carbon steel (4")	2	285	95	20	7	0.57	120VAC, 15A	SPDT
OMS-F402	Carbon steel (4")	2	600	450	41	31	0.65	120VAC, 15A	SPDT
OMS-F301	Carbon steel (3")	1	285	95	20	7	0.67	120VAC, 15A	SPDT
OMS-F302	Carbon steel (3")	1	350	260	24	18	0.67	120VAC, 15A	SPDT
OMS-S401	Carbon steel (4")	2	600	450	41	31	0.65	120VAC, 15A	SPDT
OMS-S301	Carbon steel (3")	1	300	225	21	16	0.57	120VAC, 15A	SPDT
OMS-S302	Carbon steel (3")	1	350	260	24	18	0.67	120VAC, 15A	SPDT
OMS-SF	Carbon steel	1	230	95	16	7	0.50	120VAC, 15A	SPDT
OMS-TF	Carbon steel	1	225	165	16	11	0.81	120VAC, 15A	SPDT
OMS-S303	Carbon steel	1	285	95	20	7	0.70	120VAC, 15A	SPDT