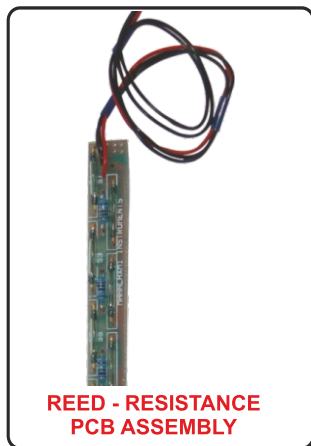


D. B. INSTRUMENTS & CONTROLS

Solid Solutions to Liquid Level Problems !

Top Mounted Float Operated Level Transmitter



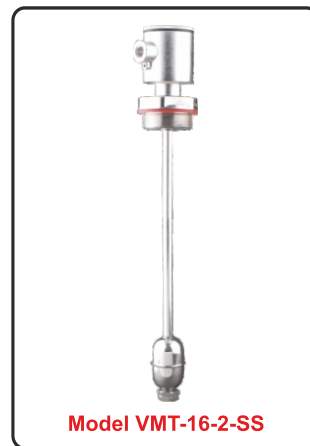
**REED - RESISTANCE
PCB ASSEMBLY**



**Model
VMT-16-F65-AW**



**HEAD MOUNTED SIGNAL
CONDITIONER**



Model VMT-16-2-SS

Principle of Operation :

Level transmitter works on the principle of reed resistance/permanent magnet basis. Reedswitches function like the center arm (as shown in fig. 1) of a potentiometer. As per liquid level float moves up or down, magnet inside the float operates the reedswitches thereby causing a change in resistance value. Change in the resistance is measured by the electronics unit and conditioned as a current output of 4 to 20 mA. Signal conditioner is head mounted and of 2-wire loop powered suitable for 12 to 24 VDC giving output of 4 to 20 mA.

Technical Specification : Our Standard Product

Model (VMT-04-F65-AW) , (VMT-04-F92-AW) top mounted magnetic reed/resistance cascade type loop powered 2 wire level transmitter. Process Connection flange 78 or 120 mm diameter with 4 bolt holes of 6mm or 14 mm dia on 65 or 92 mm PCD respectively. Wetted parts flange & float stopper in SS 304. Float material SS 316L and diameter 41, 53 or 68 mm. Operating pressure 10kg/sq.cm and Temperature 125 deg.C. maximum.



**MODEL (VMT- 04-CG)
PU FLOAT**

Specific Gravity : Suitable Down to 0.7 (Upto 0.5 optional)

Range : 0-150 mm upto 0-3000 mm.

Resolution : Better than ± 10 mm.

Span Suppression : Max. 25 % of Span

Zero Elevation : Max. 25% of Span

Excitation Voltage : 12 - 36 V DC

Loop Resistance : Max. 600 OHMs.

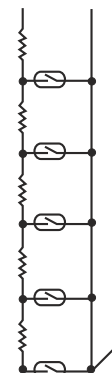


FIG. 1

D. B. INSTRUMENTS & CONTROLS

Solid Solutions to Liquid Level Problems !

Salient Features :

- ✍ Reedschwitches are hermetically sealed-in glass under an inert gas and therefore protected from contamination.
- ✍ Reedschwitches used by us are suitable for maximum working voltage of 150 VDC and current 1 Ampere. But in our circuitry they are subjected to maximum of 3 VDC and current 1 mA in case of resistance output and maximum of 24 VDC and 20 mA when used in conjunction with a signal conditioner for current output. This ensures long life of the product.
- ✍ Reedschwitches are UL approved and ISO certified for quality management.
- ✍ Operating temperature range of reedschwitches are -40 deg. C. to 125 deg. C.
- ✍ Reed Schwitches are enclosed in a moulded glass filled nylon capsule and therefore protected from mechanical shocks or damage. Moreover the stainless steel float-guide pipe, containing the PCB of reedschwitches and resistances, is solidly filled with MgO Powder. Hence this is suitable for sub zero temperatures.
- ✍ Reedschwitches are protected against mechanical damage and contact corrosion & vibration.
- ✍ Since an outer protection tube is provided (for applications like LPG, where external cage is not possible) the reedschwitch sensor assembly can be replaced without disturbing the process.
- ✍ Since the float is of 200mm dia with specific gravity -0.4 (for LPG) it will have higher buoyant force. For standard applications float shall be of 48 mm Or 68 mm in diameter.
- ✍ Above all float is the only moving part. No wear and tear.

Application :

- ✍ Applicable in environment with high temp., high pressure, strong acid, strong alkaline and hazardous locations.
- ✍ Multiple applications for textile dyeing, sewage water processing, power generating, boiler and petrochemical industries.

