

Volume Measurement System for Milk & Allied Hygienic Services - HVS

A reliable and cost effective solution for continuous **level & volume** measurement of milk in dairy, fruit juice, aerated drinks, vegetable oils and wide variety of services in food & beverage industry.

Salient Features

- Visual display of readings on backlit LCD
- Pressure transmitter with robust flush membrane sensor
- Condensate proof hermetically sealed diaphragm
- FDA approved oil filled sensor
- Complies with CIP, SIP requirements
- Customised hygienic connections available on demand
- EHEDG & 3-A certified versions (Optional)
- Re- transmission 4-20 mA output (Optional)
- Serial Communication RS485 ((Optional)

System Configuration & Working

The system consists of hygienic pressure transmitter connected to Indicating Controller through a cable. The transmitter senses the liquid level in the vessel/tanks to display both level & volume in desired units. Control action is provided through inbuilt relays which can be independently configured for alarm and set- reset functions. Besides one can choose retransmission o/p and RS 485 communication as an option.

Specifications

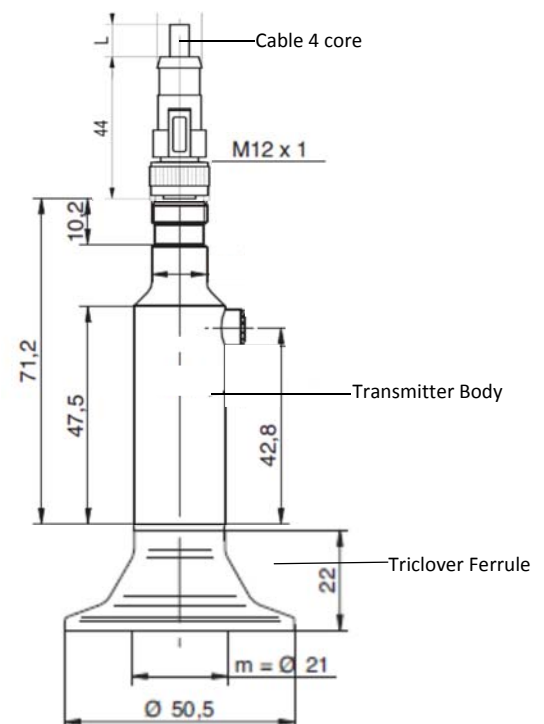
Pressure Transmitter (HPT)

Sensor	: Hygienic flush membrane
Measuring Ranges	: 0-2, 4, 6, 10, 20 mtrs WC
Accuracy	: $\pm 1\%$ FS
Wetted Parts	: SS316L
Protection	: IP67
Process Connection	: 50 mm Triclover Ferrule
Termination	: M12, 4 pin, connector (M)
Supply	: 11 – 30 VDC
Output	: 4-20mA (2 wire)
Load Resistance	: 600 Ohms @24VDC
Long Term Stability	: $\pm 0.2\%$ FS
Max Optg. Temp	: -20 – 85 °C
Temp Compensation	: -20 to 125°C
Mating Conn.	: M12 connector (F)
Connecting Cable	: 5 m x 4 wire, polyurethane cable

Note: Suitable for liquid temp up to 135°C (< 60min) and up to 150°C (< 35min) for SIP & CIP



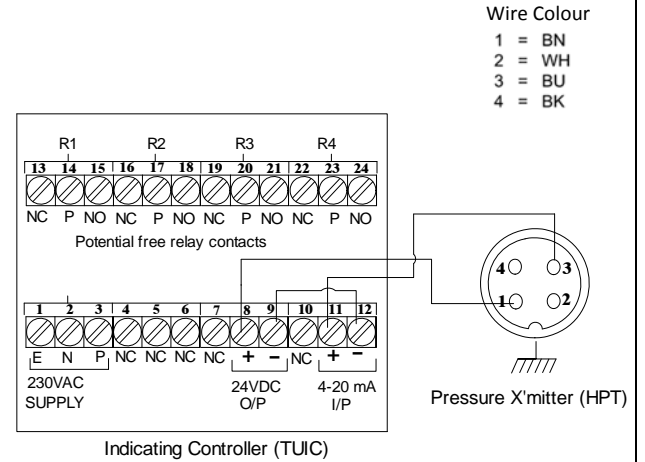
Transmitter Dimensions



Indicating Controller (TUIC)

- Display Indication : 1) 2 digits Tank Identification
 2) 5 digits Level in (% , mm , cm , m)
 3) 7 digits Volume in (% , Litre , KL)
- Display Size : 2 line x 16 character dot-matrix with backlit
 LCD display with 4 mm height character
- Alarm Indication : 4 x Red LEDs ('Relay On' status)
- Programming : Through four keys
- Power Supply : 90-270VAC or 24 VDC \pm 10%
- Input : 4-20mA
- Accuracy : \pm 0.25% of FSD
- Resolution : 1mm
- Relay Output : 4 x SPDT, 5A, 250 VAC
 Independently programmable
- Enclosure : 1) ABS Plastic, Panel Mounted, IP41
 Size: 96 x 96 x 150 (D); Cut out: 92 x 92
- Special Features : 1) Retransmission 4-20 mA o/p
 2) RTU Modbus RS485 communication

Wiring Terminations



Ordering Information

HVS -2, HVS -4, HVS -6, HVS -10, HVS -20 (HVS-2 = system with 2 mtrs range)