

# TLV<sup>®</sup>

# PRESSURE TRANSMITTER

## MODEL MBS33M

### Benefits

**Electronic pressure transmitter designed for direct installation at the measuring point. For operation in harsh industrial and climatic environments.**

1. Four silicone strain gauges on a silicon chip working to the piezoresistive principle ensure high accuracy.
2. Built-in HF filter provides immunity to electromagnetic noise and offers protection against interference from mobile telephones, electric motors etc.
3. Amplified, linearized and temperature-compensated current output signal of 4 to 20 mA can be transmitted over long distances.
4. Molded silicone compound enclosure gives maximum protection against high ambient temperature, dust and moisture.
5. Resistant to pressure surges, overpressurization and vibration up to 20 g (within frequency range).

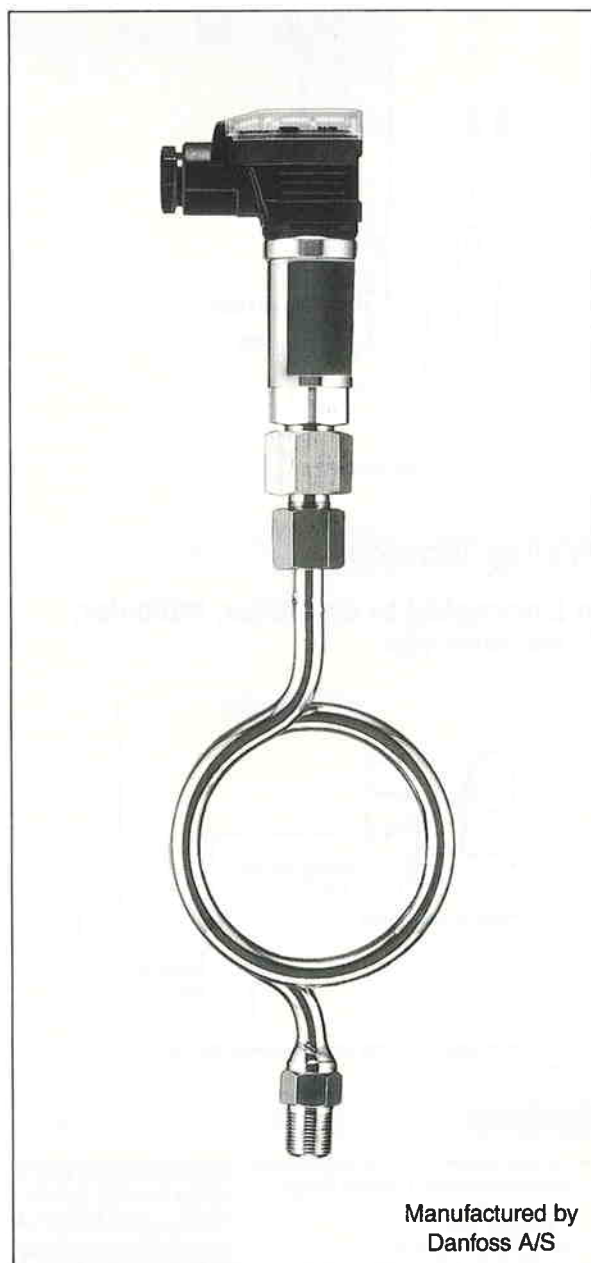
### Specifications

#### ● Pressure Transmitter

	Usable Fluids	Liquids, Gases, Steam
Pressure Characteristics	Pressure Range	Absolute pressure type 0 ~ 400 kPa abs.      Gauge pressure type 0 ~ 500 kPa G 0 ~ 1000 kPa G 0 ~ 2000 kPa G 0 ~ 2500 kPa G
	Accuracy	± 0.3 % FS
	Max. Allowable Pressure	Twice rated pressure
Electrical Characteristics	Power Source	DC 10 ~ 30 V
	Output Signal	DC 4 ~ 20 mA (2-wires)
	Load Resistance	250 ~ 1000 Ω (varies depending on source voltage) Equation: Load resistance (Ω) = $\frac{\text{Power source (V)} - 10}{0.02}$ (A)
Operating Cond.	Fluid Temperature	- 40 ~ 185°F (Siphon tube must be used above 185°F)
	Water Resistance	Rain-proof (IP65)
Construction	Material	Body: AISI316L* Joint: Brass Fluid contact area: AISI316L*      *Equivalent
	Pressure Sensor	Semiconductor strain gauge
	Connection	G 3/8
Other Characteristics	Weight	Approx. 0.9 lb
	Thermal Zero Point Drift	± 0.02 % FS/°F
	Thermal Sensivity Drift	± 0.02 % FS/°F
	Wire Connection Gland	DIN43650 (PG13.5)
	Applicable Wire Diameter	5 ~ 14 mm
	Transport Temperature	- 58 ~ 185°F
	Vibration Stability	20 g (20 Hz ~ 2 kHz) (g = 32.2 ft/sec <sup>2</sup> )
Approved by Shipping Associations	LR, DNV, GL, RINA, ABS, BV, NKK, PRS, MRS, KRS	

#### ● Attached Siphon Tube

Pipe Connection	Sensor side: G 3/8; Tube side: NPT 3/8
Material	STPG370 (Ni plated)
Maximum Operating Pressure	2850 psig
Max. Operating Temperature	662°F
Weight	Approx. 0.9 lb



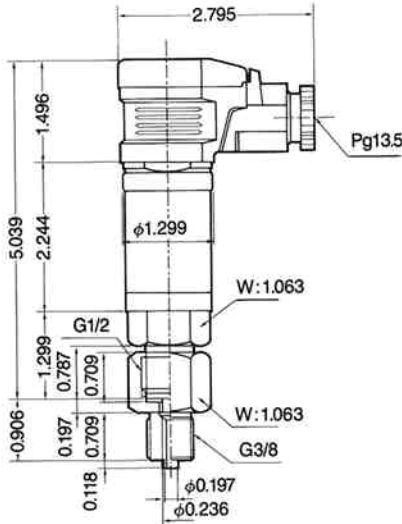
Manufactured by  
Danfoss A/S



To avoid abnormal operation, accidents or serious injury, DO NOT use products outside of the specification range.

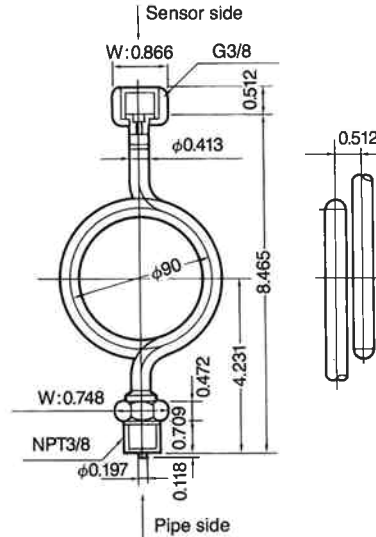
**Dimensions**

● **Pressure Transmitter (in.)**



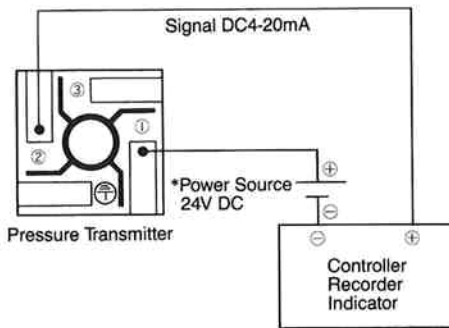
W=Width across flats.

● **Attached Siphon Tube (in.)**



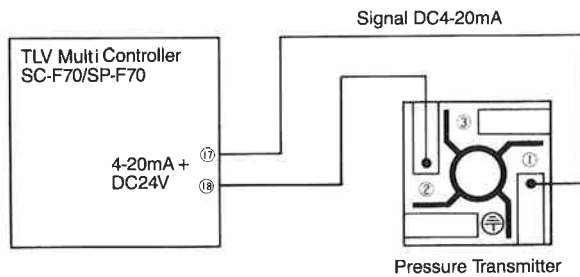
**Wiring Terminals**

● **Connected to controller, indicator, recorder etc.**



\*MBS33M requires separate power source.

● **Connected to TLV multi controller SC-F70 or SP-F70**



**Options**

Special Measuring Pressure Range	Absolute Pressure Type: 0~250 kPa abs. 0~600 kPa abs. etc. Gauge Pressure Type: 0~250 kPa G, 0~400 kPa G etc.
Pipe Joint Material	Stainless Steel SUS316 (AISI316L)
Wire Connection Gland	G1/2 (Different gland shapes also available)
Siphon Tube Material	Stainless Steel SUS316 (AISI316L)
Siphon Tube connection	Sensor Side X Pipe Side: G3/8 X G3/8; G3/8 X R3/8
Siphon Tube	Supply without Siphon Tube

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Manufacturer

**TLV** CO., LTD.  
 Kakogawa, Japan  
 is approved by LRQA Ltd. to ISO 9001/14001

ISO 9001/ISO 14001

