

# DIFFERENTIAL PRESSURE TRANSMITTER FOR LIQUIDS

## SDW 1 . . Eng.

- Differential pressure active transducer 0 ... 10 V-
- Bracket mounting
- Operating voltage 24 V ~.

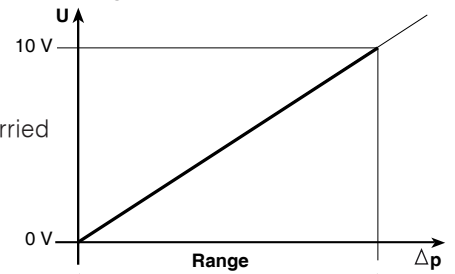


### 1. APPLICATION

Differential transmitter for hot/cold fluids either in control or conditioning plants. PSDW 1.. can be used as a measurement or adjustment transmitter when paired with controllers or readers with input 0 ... 10 Volt. It is suitable for hot/cold water (glycol max 50%). Do not use fluids with chemical agents.

### 2. OPERATION

The transmitter sends a signal 0 ... 10 Volt which is proportional to the carried out measurement. It does not require any further adjustment.



### 3. MOUNTING

The transmitter is supplied with a bracket for its mounting (fig.7.4). Whatever mounting position is allowed. The junctions for the pressure inlets are two female threaded holes G1/8". For the correct maintenance of the transmitter it is advisable to insert isolation valves in the plant. The wiring must be carried out using the three-core wire already mounted on SDW1.., following the electric diagram in the data sheet (point 6) Current IEE regulations must be met and any steam/liquids leaking must be prevented.

If used with fluids with temperature over 80°C or under 0°C and with steam, a spacing collar must be installed.

### 4. MODELS

Code	Application range (bar)	Max Overpressure P1 P2 (bar)	Output signal (Volt -)	Temperature influence (fs/°C)
<b>SDW 101</b>	0... 1	5 5	0 ... 10	TC0 < 0.1 %
<b>SDW 102</b>	0... 2.5	12 12	0 ... 10	TC0 < 0.1 %
<b>SDW 106</b>	0... 6	12 12	0 ... 10	TC0 < 0.04 %

**5. TECHNICAL DATA**

• **Sensor:**  
 application range see models available  
 time constant 5ms  
 Output signal 0 ... 10 V  
 Linearity, hysteresis and repeatability:

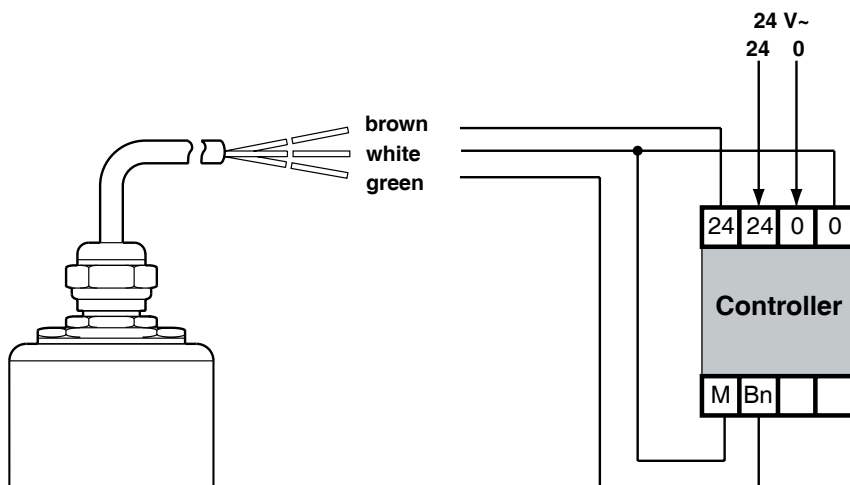
< ±0.5% fs at 2 x rated pressure  
 < ±0.8% fs at 3 x rated pressure  
 < ±1.3% fs at 5 x rated pressure

• **Electrical:**  
 Power supply 18 – 33V~  
 24 V~  
 Frequency 50 Hz  
 Consumption 5 mA  
 Load 10 kOhm

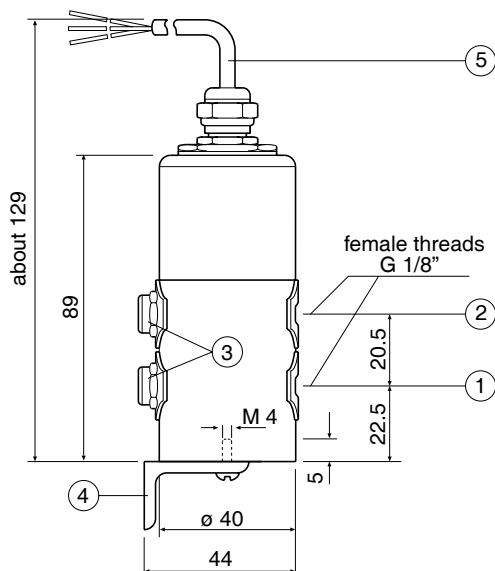
Protection IP 65  
 Electromagnetic compatibility 89/336 EEC  
 Construction standards Italian Electrotech. Comm.(CEI)

• **Mechanical:**  
 Mounting bracket  
 Construction standards Italian Electrotech. Comm.(CEI)  
 Materials: sensor ceramic  
 seals CR (Neoprene)  
 Pressure inlets: threaded female holes R 1/8"  
 Temperature: operation: -15 ... 80°C  
 storage: -25 ... 80°C  
 Weight 430 g

**6. WIRING**



**7. OVERALL DIMENSIONS**



- 1 – high pressure inlet, or low pressure inlet for vacuum
- 2 – low pressure inlet, or high pressure inlet for vacuum
- 3 – venting screws
- 4 – mounting bracket
- 5 – cable and signal

**MAmendment to data sheet**

Date	Revision No.	Page	Section	Details of amendments
01.12.08 MZ	<b>01</b>	2	5. TECNICAL DATA	Operation and Storage adjustments under technical data



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