MWS SENSORIK GMBH

Pressure Sensor Serial
DS 100

Features

- Output Signal 0.5 – 4.5 V
- Fully Compensated
- Absolute, Differential and Gage Pressure
- DIL socket for printed circuit board assembly
- Small Size

Applications

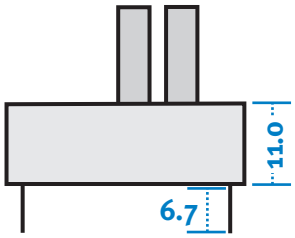
- Barometric
- Medical Instrumentation
- Factory Automation
- Control Engineering
- Air Flow Management
- HVAC

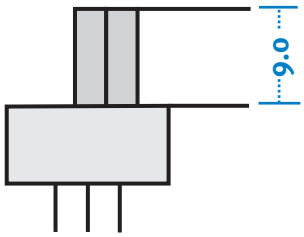
Description

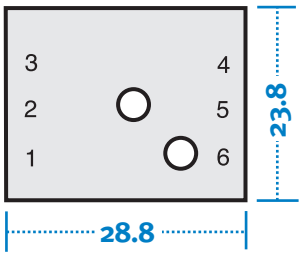
The OEM pressure sensor DS 100 has an integrated amplifier and is designed for very accurate measuring. The zero can additionally be adjusted with an external resistor (resistance). The MWS pressure sensor DS 100 is available for a pressure range from 50 mbar to 7 bar in absolute, differential and gage value.

Pressure Sensor Serial DS 100

Dimensions (in mm):

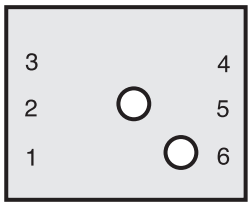




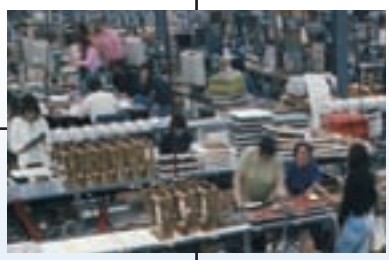


Connections:

1: supply +
2: supply -
3: output signal
4: optional external offset adjustment
5: referrence voltage output
6: supply -



top-view



Pressure Sensor Serial DS 100

Specifications:

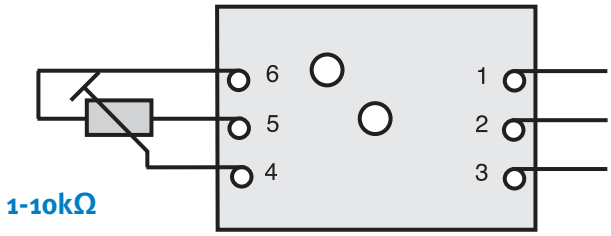
Supply voltage	9 – 30 Vdc
Compensated temperature range	-20 to 85 °C
Operation temperature	-40 to 85 °C
Storage temperature	-40 to 125 °C

Parameter	Min.	Typ	Max.	Unit
Supply voltage	9	12	30	Vdc
Current Supply		3	3.5	mA
Zero output typ A and G	0.45	0.5	0.55	Volt
Zero output typ D	2.45	2.5	2.55	Volt
Full scale output	4.45	4.5	4.55	Volt
Rate of time 10-90 % FS		1		ms
Output current			1	mA
Linearity	0	0.05	0.1	% FS
Hysteresis	0	0.01	0.1	% FS
Span failure –20 to 85°C	0	0.3	0.5	% FS
Zero failure – 20 to 85°C	0	0.1	0.5	% FS
Longterm stability		0.1		% FS
Repeatability	0	0.1	0.3	% FS
Load resistance	10			KOhm
Dependence of UB (10-24 V)		0.01	0.05	% FS
Reference voltage output		7.1		Volt
Overpressure [1]	3x			FS
Medium compatibility	Dry and non-aggressive gas			

[1] 3 x Pressure range or max. 13.5 bar

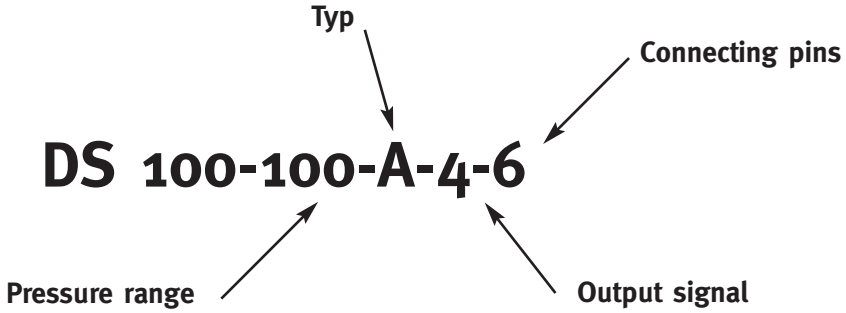
Pressure Sensor Serial DS 100

External zero balance



Bottom view

Ordering Information



Pressure range

0050 = 50 mbar
0100 = 100 mbar
0250 = 250 mbar
0500 = 500 mbar
1000 = 1 bar
2000 = 2 bar
5000 = 5 bar
7000 = 7 bar

Typ

A = Absolute
G = Gage
D = Differential

Output signal

4 = 0.5 to 4.5 V
5 = 1.0 to 6.0 V

MWS Sensorik GmbH ♦ Otto-Hahn-Straße 6 ♦ D-85276 Pfaffenhofen
Tel. +49 (0) 84 41 / 49 83 - 0 ♦ Fax +49 (0) 84 41 / 49 83 - 20
info@mws-sensorik.de ♦ www.mws-sensorik.de