

OUTLINE DRAWING

MAIN PARAMETERS ( typical values )

- ◆ Rate range 350 deg/s
- ◆ Scale Factor (SF) 4.2 mV/deg/s
- ◆ Frequency range 0... 1 kHz
- ◆ Angle random walk 0.03 deg /√h
- ◆ Bias stability, RMS 4 deg / h
- ◆ SF stability, RMS 0.1 %
- ◆ Readiness time 0.02 s

ENVIRONMENT

- ◆◆ Temperature operating -55°C ... +70°C
- ◆◆ endurance ( 2 hours ) -60°C... +85°C
- ◆ Vibration, RMS 12 g, 20Hz... 2000Hz
- ◆ Shocks 150 g, 1 ms
- ◆ Acceleration 5 g

◆◆ RELIABILITY

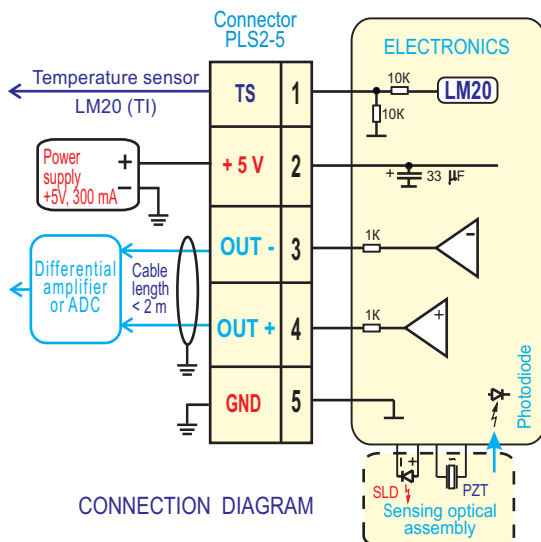
- ◆ MTBF 60000 hours (20°C, predicted)
- ◆ Lifetime (predicted) 15 years

- ◆ Precision class - ④
- ◆ Estimated for low humidity
- ◆ Operating temperature - temperature of sensor' surface
- ◆◆ Endurance temperature - environment temperature. Sensor is turned off.

DESCRIPTION OF OUTPUT CONTACTS (PLS2-5)

Contact	Name	Comments
1	TS	Output of temp. sensor ( LM20BIM7(TI) ) T [ °C ] = 160 - 172 · U <sub>TS</sub> [ V ]
2	+ 5 V	Power input + 5V ± 0.25V, 200mA max, ripple 10mV max within 0-1MHz
3	OUT -	Analog output ( ~ - 2.1 mV/ °/s ), 1V biased to "GND" *
4	OUT +	Analog output ( ~ + 2.1 mV/ °/s ), 1V biased to "GND" *
5	GND	Power return line, ground.

\* - sensor's output is a difference between the voltages at 4 and 3 contacts



CONNECTION DIAGRAM

PHYSICAL PARAMETERS

1. Ω - sensing axis, 90°± 1° to the reference plane
2. Dissipation - 1 W
3. Weight - 40 gram ( 60 gram max )
4. Volume - 0.065 litre
5. Housing material - plastic
6. Tolerances per ISO 2768-m
7. Ingress protection class - IP67

RECOMMENDATIONS AND PRECAUTIONS

1. Do not deform housing and output pins
2. Fragile components inside - no shocks, no drop
3. Treat as electrostatic sensitive unit
4. Is designed to be mounted inside water protected equipment
5. Increased humidity shortens essentially lifetime
6. Power must be off during connecting
7. Soldering to contacts - by low-temperature solder