FIBER OPTIC ROTATION SENSOR VG035P SPECIFICATION / MANUAL

DESCRIPTION OF OUTPUT CONNECTOR PLD-10

Contact	Name	Comments
1	+ 5 V	Power input +5V ± 0.25V, 300mA max, ripple 10mV max within 0-1MHz
2, 4	—	Reserved
3	OUTPUT	Output voltage (20 mV/deg/sec). Differential input recommended.
5	AGND	Analog ground to use with OUTPUT. Differential input recommended.
6, 8	GND	Power return line, ground
7	KEY	Shortened pin
9	TS	Output of temperature sensor (TMP-36) 10mv per deg.C; 0.75V at 25 deg.C
10	—	Reserved

MAIN PARAMETERS (typical values)

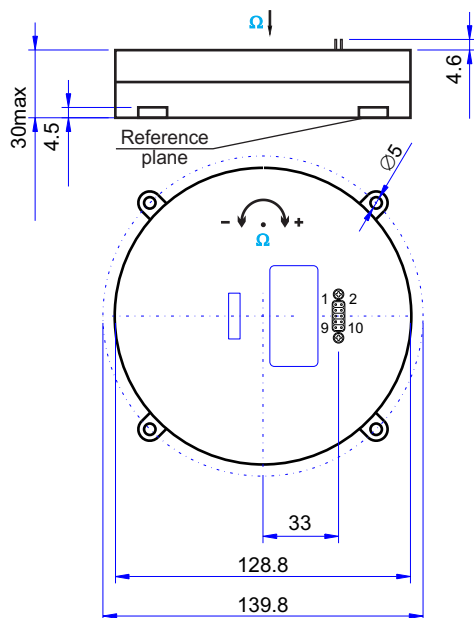|	
◆ Rate range	60 deg/s
Scale Factor (SF)	20 mV/deg/s
Frequency range	0... 0.45 kHz
Angle random walk	0.007 deg / $\sqrt{h}$
Bias stability, RMS	1 deg / h
SF stability, RMS	0.1 %
Readiness time	0.1 s

ENVIRONMENT

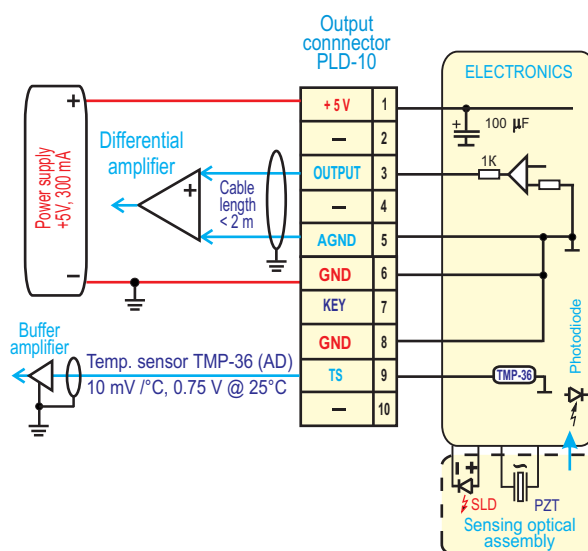|	
◆◆◆◆ Temperature operating	-30°C ... +70°C
◆◆◆◆ endurance	-55°C... +75°C
Vibration (operating), RMS	2 g, 20Hz... 2000Hz
Vibration (endurance), RMS	6 g, 20Hz... 2000Hz
Shocks (endurance)	90 g, 1 ms
Acceleration (operating)	5 g
Acceleration (endurance)	20 g, 5 s

RELIABILITY

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

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

OUTLINE DRAWING

CONNECTION DIAGRAM

RECOMMENDATIONS AND PRECAUTIONS

1. Do not deform housing
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

PHYSICAL PARAMETERS

1. Ω - sensing axis, 90°± 0.5° to the reference plane
2. Dissipation - 1 W
3. Weight - 240 gram (300 gram max)
4. Volume - 0.4 litre
5. Housing material - plastic
6. Tolerances per ISO 2768-m
7. Ingress protection class - IP67