# Vishay Spectrol

DIAGNOSTIC MODES				
FAILURE	V <sub>out</sub> ANALOG R <sub>pull-up</sub>	V <sub>out</sub> ANALOG R <sub>pull-down</sub>	$\begin{aligned} & \textbf{V}_{out}  \textbf{PWM} \\ & \textbf{R}_{pull-up} = \textbf{1}  \textbf{k} \Omega \\ & \textbf{V}_{pull-up} = \textbf{V}_{supply} = \textbf{5}  \textbf{V} \end{aligned}$	
1: Broken GND	Diagnostic high area	Diagnostic low area	> 97 % V <sub>supply</sub> without modulation	
2: Broken V <sub>out</sub>	Diagnostic high area	Diagnostic low area	> 97 % V <sub>supply</sub> without modulation	
3: Broken V <sub>supply</sub>	Diagnostic high area	Diagnostic low area	> 97 % V <sub>supply</sub> without modulation	
Over voltage V <sub>supply</sub> > 7 V	Diagnostic high area	Diagnostic low area	> 97 % V <sub>supply</sub> without modulation	
Under voltage V <sub>supply</sub> < 2.7 V	Diagnostic high area	Diagnostic low area	> 97 % V <sub>supply</sub> without modulation	
	V V	V <sub>pull-up</sub>		
Sensor  2  GND  V <sub>supply</sub> V <sub>pull-up</sub> can be independent to V <sub>supply</sub>			endent to V <sub>supply</sub>	
Cut off				

ENVIRONMENTAL SPECIFICATIONS		
Vibrations	20 g from 10 Hz to 2000 Hz	
Shocks	3 shocks/axis; 50 g half a sine 11 ms	
Operating temperature range	-45 °C; +125 °C	
Life	> 10M of cycles	
Rotational speed (max.)	120 rpm	
Immunity to radiated electromagnetic disturbances	200 V/m 150 kHz/1 GHz	
Immunity to power frequency magnetic field	200 A/m 50 Hz/60 Hz	
Radiated electromagnetic emissions	30 MHz/1 GHz < 30 dBμV/m	
Electrostatic discharges	Contact discharges: ± 4 kV Air discharges: ± 8 kV	
MATERIALS		
Housing	Thermoplastic housing	
Bushing	Brass nickel plated	
Shaft	Stainless steel	
Output	3 lead wires	
BUSHING MOUNT HARDWARE		
Lockwasher internal tooth	Steel nickel plated	
Panel nut	Brass nickel plated	

### Note

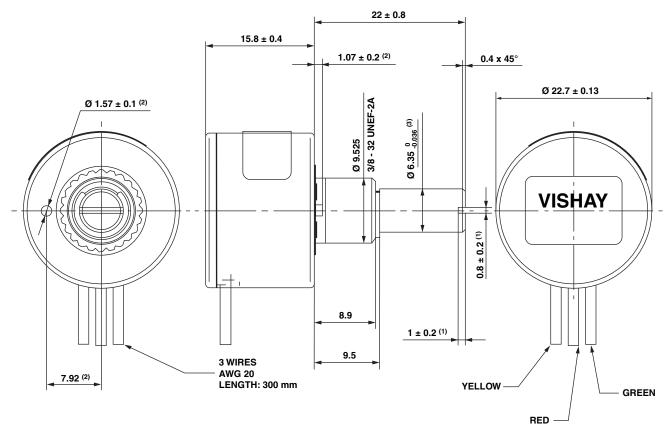
• Nothing stated herein shall be construed as a guarantee of quality or durability.



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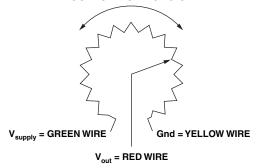
GENERAL TOLERANCE: ± 0.5 mm

#### **DIMENSIONS** in millimeters



CW OR CCW ACCORDING OUTPUT MODE CHOICE





#### **VIEWED FROM SHAFT**

#### Notes

- (1) For version slotted shaft
- (2) For version non turn pin
- (3) For shaft type "1"

MARKING	
Unit Identification	Manufacturer's name and complete sap part reference, date code, and wiring correspondance: colors versus connections.