

**DIAGNOSTIC MODES**

FAILURE	V_{out} ANALOG $R_{pull-up}$	V_{out} ANALOG $R_{pull-down}$	V_{out} PWM $R_{pull-up} = 1\text{ k}\Omega$ $V_{pull-up} = V_{supply} = 5\text{ V}$
1: Broken GND	Diagnostic high area	Diagnostic low area	$> 97\% V_{supply}$ without modulation
2: Broken V_{out}	Diagnostic high area	Diagnostic low area	$> 97\% V_{supply}$ without modulation
3: Broken V_{supply}	Diagnostic high area	Diagnostic low area	$> 97\% V_{supply}$ without modulation
Over Voltage $V_{supply} > 7\text{ V}$	Diagnostic high area	Diagnostic low area	$> 97\% V_{supply}$ without modulation
Under Voltage $V_{supply} < 2.7\text{ V}$	Diagnostic high area	Diagnostic low area	$> 97\% V_{supply}$ without modulation

$V_{pull-up}$ can be independent to V_{supply}

✕ Cut off

ENVIRONMENTAL SPECIFICATIONS

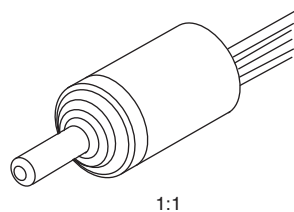
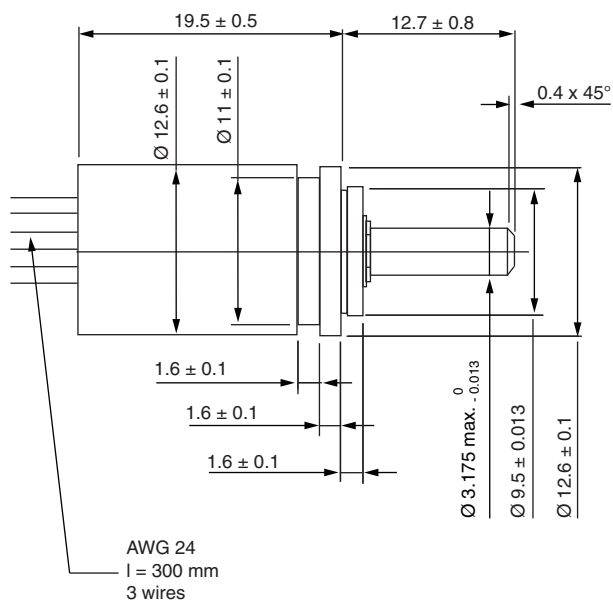
Vibrations	20 g from 10 Hz to 2000 Hz, EN 60068-2-6
Shocks	3 shocks/axis; 50 g half a sine 11 ms, EN 60068-2-7
Operating temperature range	-40 °C; +125 °C
Life	> 50M of cycles
Rotational speed (max.)	120 rpm
Immunity to radiated electromagnetic disturbances	200 V/m 150 kHz/1 GHz, IEC 62132-2 part 2 (level A)
Immunity to power frequency magnetic field	200 A/m 50 Hz/60 Hz, EN 61000-4-8 (level A)
Radiated electromagnetic emissions	30 MHz/1 GHz < 30 dBμV/m, EN 61000-6-4 (level A)
Electrostatic discharges	Contact discharges: $\pm 4\text{ kV}$ Air discharges: $\pm 8\text{ kV}$, EN 61000-4-2
MATERIALS	
Housing	Aluminum
Shaft	Stainless steel
Output	3 lead wires (AWG 24)

Note

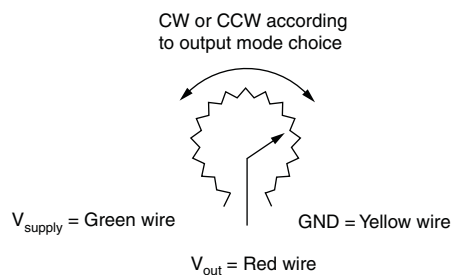
- Nothing stated herein shall be construed as a guarantee of quality or durability.



DIMENSIONS in millimeters



General tolerance: ± 0.5 mm



View from shaft side