



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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Rotational Absolute Magnetic Encoder Displacement Sensor



FEATURES

- Hall effect principle
- OTP (one time programmable) technology
- Plug and play
- Good magnetic immunity
- Ball bearings
- Stainless steel shaft
- Housing protected
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912



QUICK REFERENCE DATA

Sensor type	ROTATIONAL, magnetic technology
Output type	Cable
Market appliance	Industrial, railway
Dimensions	1 1/16" (27 mm)

ELECTRICAL SPECIFICATIONS

PARAMETER	
Voltage supply	5 V \pm 0.25 V
Current supply	\leq 20 mA at 5 V (with a load > 5 k Ω)
Output	From 0.5 V _{DC} to 4.5 V _{DC}
Connection	Shielded cable
Useful electrical angle	360°
Absolute accuracy at 25 °C	\pm 1.2° on 359° (0.33 %)
Absolute accuracy at -25 °C to +85 °C	\pm 2.1° on 359° (0.58 %)
Resolution	0.09° (~ 12 bits)
Startup time	\leq 10 ms
Response time	1 ms (for an angle of 20° in 6 ms)
Dielectric strength	1000 V _{AC} / 1 min
Insulation resistance	> 50 M Ω / 500 V _{DC}
Magnetic field	< 10 mT with $\Delta U < 1^\circ$

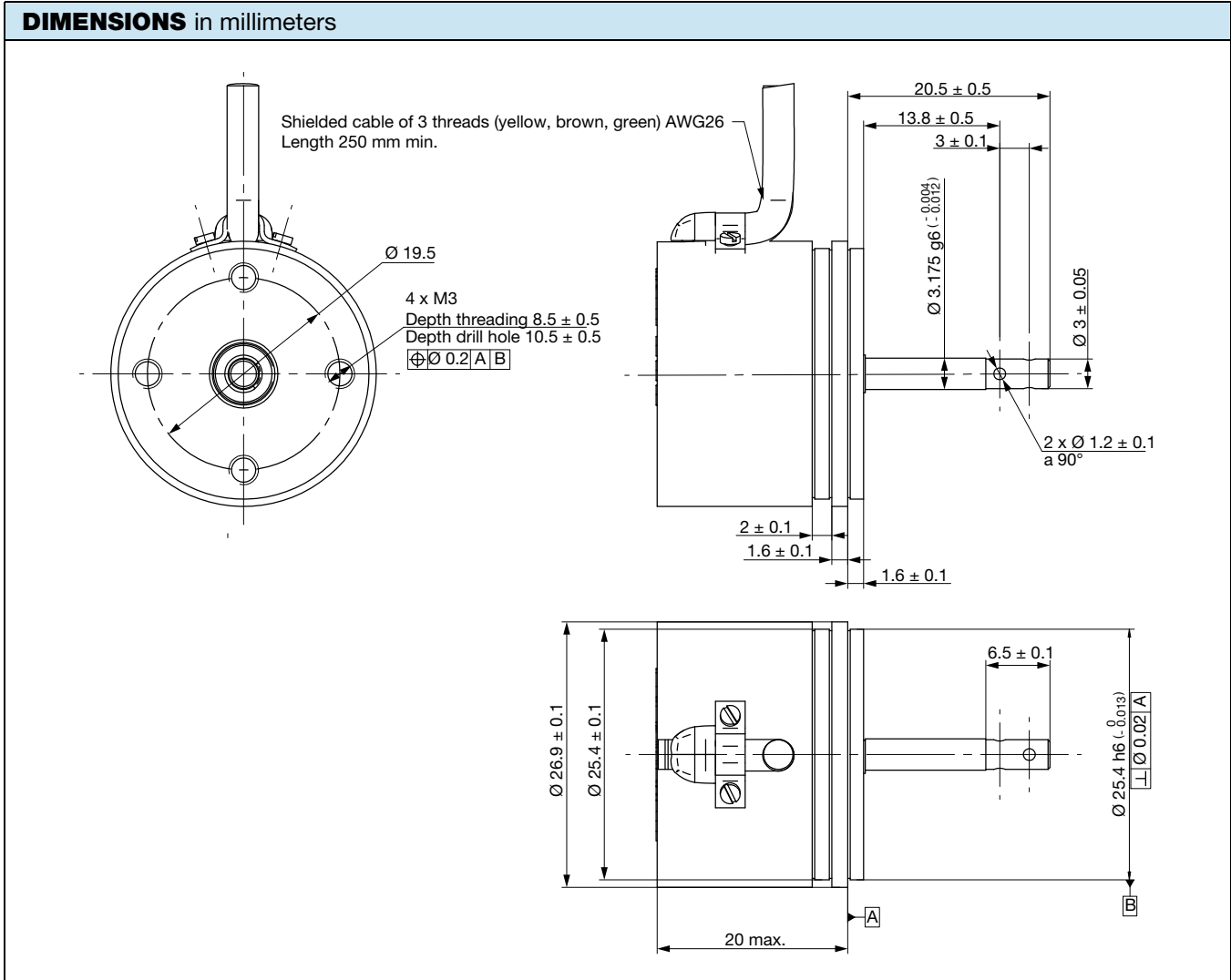
MECHANICAL SPECIFICATIONS

PARAMETER	
Mechanical angle	360°
Axial charge	3 N
Radial charge	3 N
Weight	\leq 50 g (with cable of 250 mm)

SAP PART NUMBERING GUIDELINES

TYPE	MODEL	DESIGN	SIZE (mm)	TYPE	FUNCTION	ACCURACY (BITS)	RESOLUTION (BITS)	OUTPUT	PACKAGING
R = rotational	AM	E = encoder with housing	027	R	1	07	12	A = analog CW	B = box

PERFORMANCE	
PARAMETER	
Operating temperature range	-25 °C to +75 °C
Storage temperature range	-40 °C to +85 °C
Protection class	IP55
Life	50M cycles
Vibration	CEI 61373, cat1, class B
Shock	


OPTIONS (on request)

- Other accuracy
- Other resolution
- Other mechanical dimensions and mechanical interfaces
- Other electrical interface (for example: PWM, SSI, ...)
- Possibility of function redundant
- Increasing of temperature range



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