



Features

- Non-contacting magnetic technology
- Highly resistant to vibration/shock
- Highly resistant to fluid/dust ingress
- Programmable at factory for zero position
- Robust design for industrial applications
- Highly repeatable

- RoHS compliant*

AMS22S Non-Contacting Analog Rotary Position Sensor

Electrical Characteristics (@ 25 °C)

VDD Supply Voltage	5 V ± 10 %
Supply Current	
For Low Speed Processing (Code L)	10 mA max.
For High Speed Processing (Code H)	20 mA max.
Output Signal (Single)	Analog
Independent Linearity	±0.5 %
	(±0.3 % available on request)
Hysteresis	1 % VDD max.
Effective Electrical Angle	340 °
Programmable Electrical Angle	10 ° to 360 ° (10 ° increments)
Voltage Output (Programmable)	1 to 99 % VDD ±1 %
Output Resolution	12 bit
Load Resistance Recommended	10K ohms min.
Overvoltage Protection	+20 VDC
Reverse Voltage Protection	-10 VDC

Environmental Characteristics

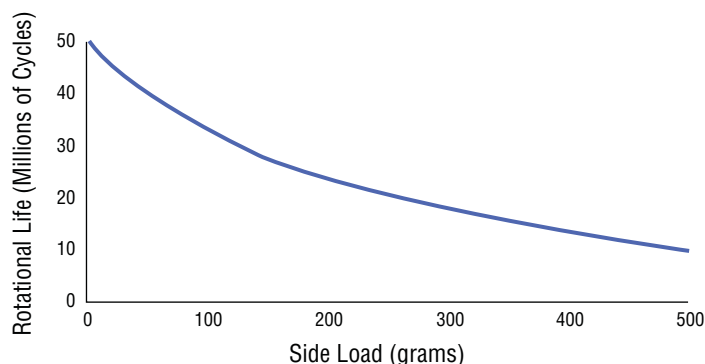
Operating Temperature	-40 ° to +125 °C
Rotational Life (Shaft Revolutions)	50 million
Vibration	15 G
Shock	50 G
IP Rating	IP50

Mechanical Characteristics (@ 25 °C)

Mechanical Angle	Continuous
Shaft/RPM	120 RPM max.
Torque (Starting & Running)	1.06 N-cm. (1.5 oz-in.) max.
Shaft Material	Stainless steel
Terminals	Solder lugs

¹At room ambient: +25 °C nominal and 50 % relative humidity nominal, except as noted.

Rotational Life vs. Side Load



Product Dimensions

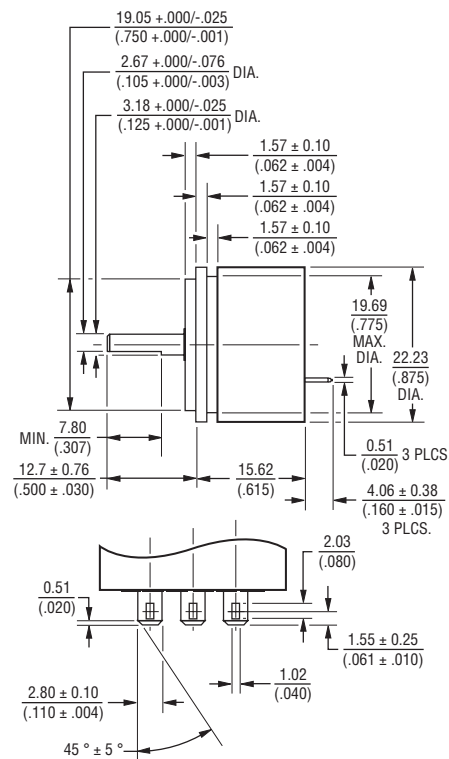
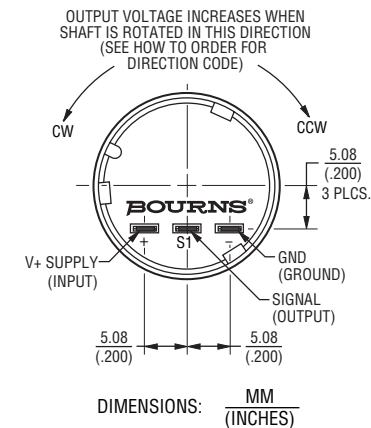
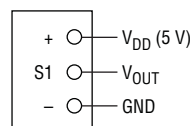


Figure 1



Schematic

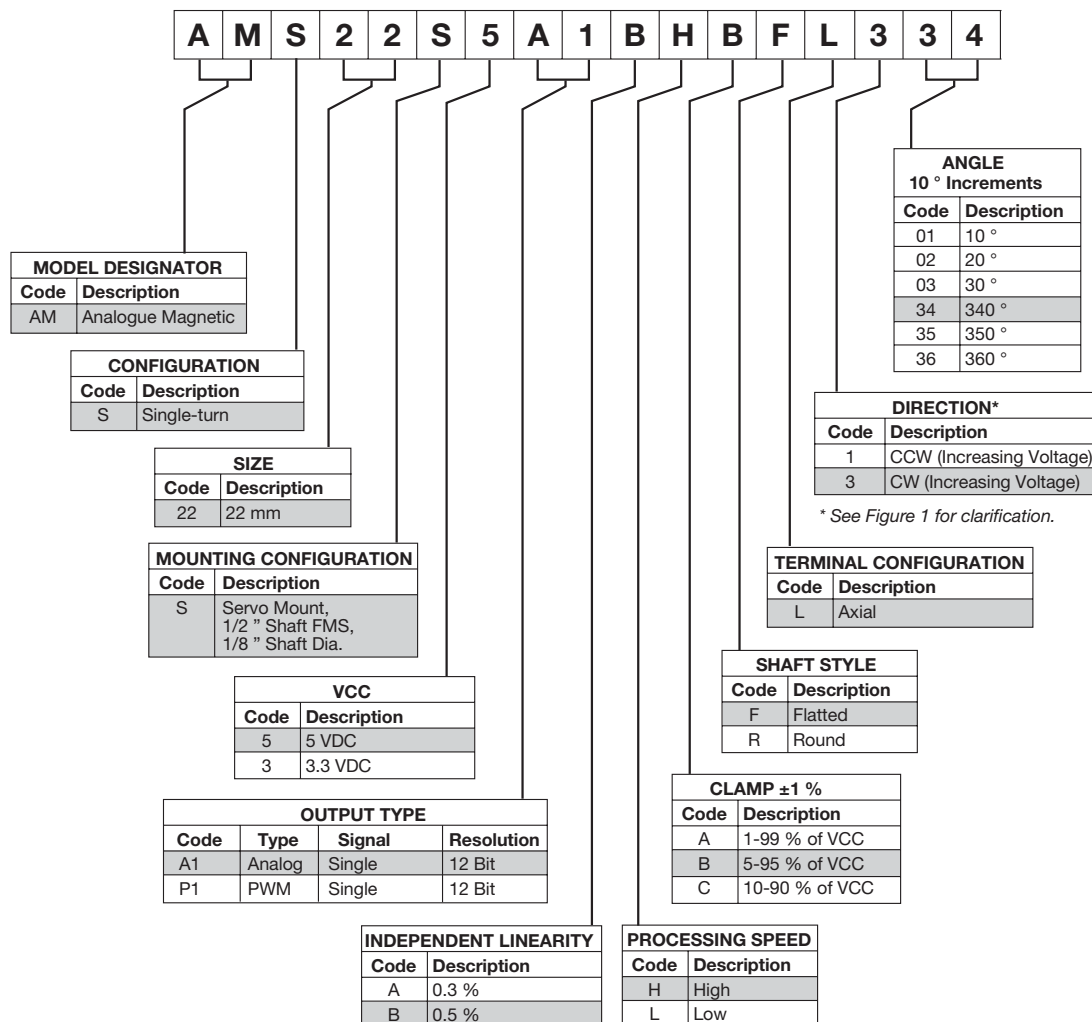


*RoHS Directive 2002/95/EC Jan 27, 2003 including Annex.
Specifications are subject to change without notice.
Customers should verify actual device performance in their specific applications.

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How To Order



Shaded areas represent most common features.

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