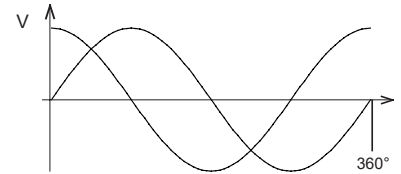


RM44 / 58 Analogue sine/cosine outputs with AM4096



Engineering samples available.

Absolute encoder with analogue sine/cosine outputs

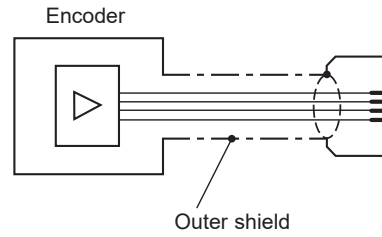
Power supply	$V_{dd} = 5\text{ V} \pm 5\%$
Current consumption	Max. 30 mA
Maximum speed	30,000 rpm
Operating temperature	-40 °C to +125 °C -30 °C to +80 °C for AC output

Outputs

AC - Single ended outputs	BC - Differential outputs
Signal amplitude: $2.2 \pm 0.2 V_{pp}$	Signal amplitude: $0.5 \pm 0.1 V_{pp}$
Signal offset: $2.5\text{ V} \pm 1\%$	Signal offset: $0 \pm 5\text{ mV}$
Internal serial impedance: 100 Ω	Internal serial impedance: 10 Ω

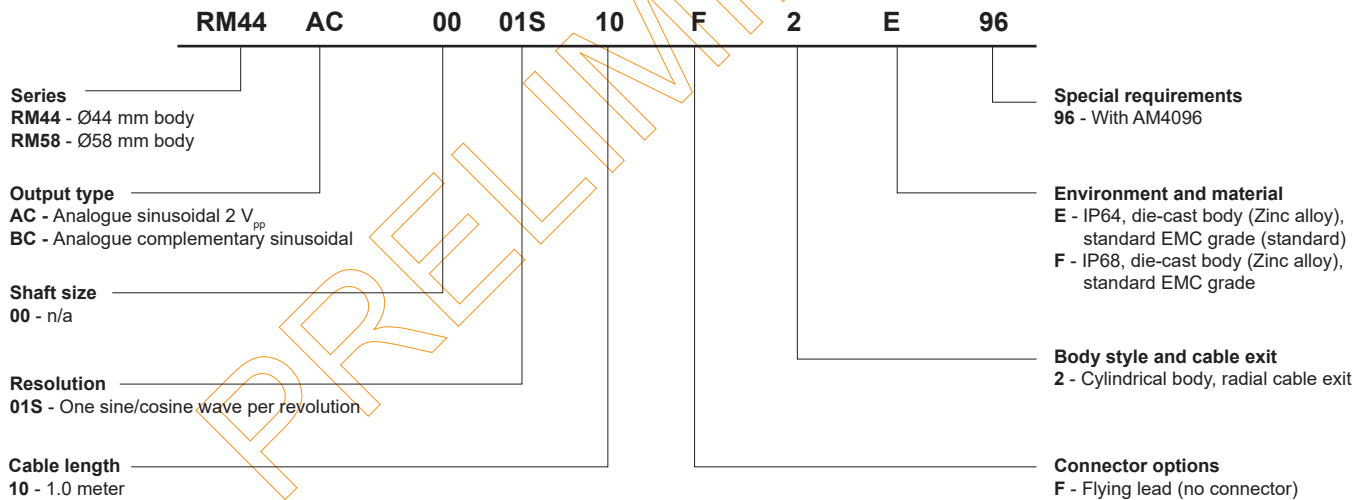
Connections

AC		BC	
Function	Wire colour	Function	Wire colour
Shield - see diagram		Shield - see diagram	
V _A	Black	V _{A+}	Green
V _B	Brown	V _{B+}	Brown
V _{dd}	Red	V _{A-}	Yellow
GND	Orange	V _{B-}	White
		V _{dd}	Red
		GND	Blue



NOTE: The encoder uses AM4096 sensor with Automatic Gain Control (AGC) enabled. It allows wider axial displacement – bigger distance between magnet and encoder body: **0 – 1.5 mm**. Product dimensions and installation drawings are available in [RM44/RM58 data sheet](#).

Part numbering



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Document issues

Issue	Date	Page	Amendments done
1	8. 8. 2019	General	New document

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