



Admotec's Flat Magnetic Encoder has the narrowest profile and the highest performance in condensing humidity.

The new Admotec Series FM750 flat magnetic encoder permits OEMs to achieve optimum performance from a narrow profile, fully enclosed magnetic encoder. Only 27mm long (31mm with dust cover), the Series FM750 requires less space than traditional optical encoders and delivers higher performance. In addition to a once-per-revolution marker, this flat magnetic encoder provides up to 1,024 pulses per revolution on each of two quadrature channels and operates in harsh environments including high shock, vibration, and condensing humidity.

In addition, the self-contained, hollow-shaft FM750 is easily installed and automatically aligned—no additional shaft coupling is required. Two set screws secure the FM750 on the rotating shaft, and three screws attach the flexible spring assembly of the encoder body to the stationary flange. This low profile design virtually eliminates shaft loading, and accommodates up to 0.2mm (0.008") of shaft end play.

Conforming to the rigorous European EMC directive, the Series FM750 flat magnetic encoder carries the prestigious CE mark and is qualified for demanding international and domestic applications.

The combination of narrow profile, high performance in condensing humidity, and simple installation make the new series FM750 the perfect choice for general industrial automation including servo motor feedback, textile, packaging, test equipment, and aerospace applications.

Admotec—motion and position sensing for original equipment manufacturers.

FM

FLAT MAGNETIC ENCODER

SERIES FM750

FEATURES & BENEFITS

Magnetic, not optical	Reliable operation in harsh environments: high shock and vibration, dust, oil, etc.
Withstands condensation	Perfect for use in high humidity, outdoor, and washdown applications.
Flat design	Shorter axial length saves space.
Hollow shaft for direct coupling	Higher accuracy without precise adjustment.
CE mark	Conforms to European EMC directive.
IP54 rating	Protected against dust and water sprays.

GENERAL SPECIFICATIONS

Operating Temperature	-30 to +90	°C
Maximum Speed	6,000	RPM
Weight	120	grams nom.
Inertia	35	gram cm ²
Starting Torque	30	gram cm
Cable Length	500	mm
Supply Voltage	5.0 ±5%	V dc
Supply Current	160	mA max.
Output Load Resistance	100	Ω min.
Channel Frequency	200	kHz max.
Quadrature	90 ±30	° electrical
Cycle Error (max.)	±9	° electrical

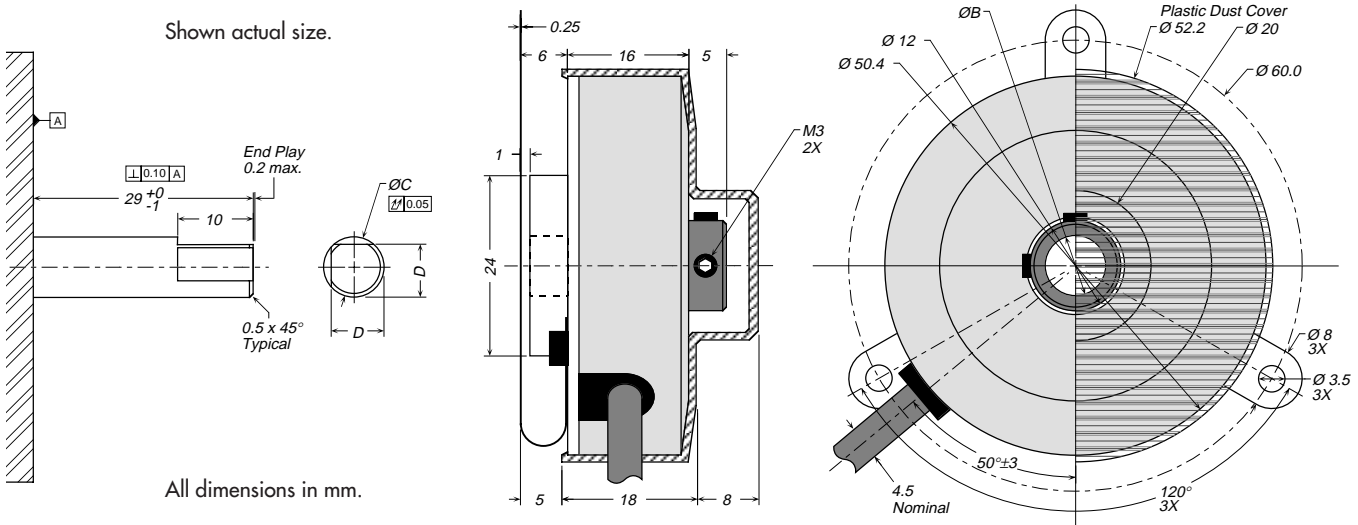
ORDERING INFORMATION

FM750 - 3 - □ □ - □ □ □ □

Hollow-Shaft Bore
08 = 8mm
25 = 1/4"

Resolution (PPR)
500, 1000, 1024

OUTLINE & MOUNTING DIMENSIONS AND SHAFT SPECIFICATIONS



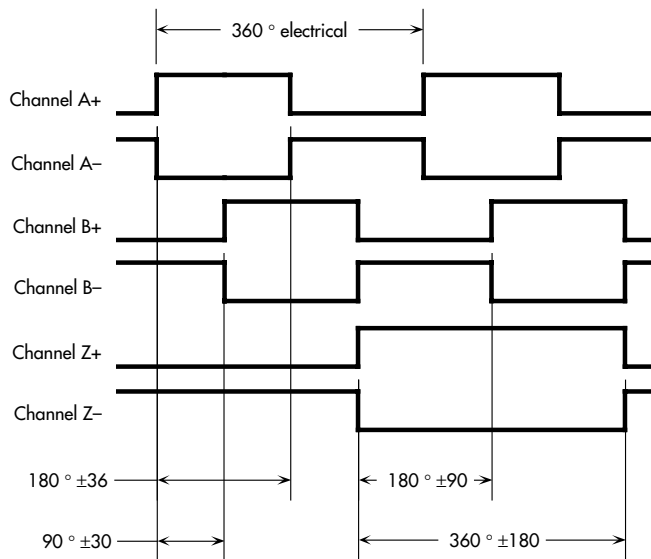
HOLLOW-SHAFT BORE (ØB)

Model Number	ØB	ØB Tolerance
FM750-3-08-□□□□	8.00mm	+0.015/-0 (ISO H7)
FM750-3-25-□□□□	6.35mm (1/4")	+0.015/-0 (ISO H7)

RECOMMENDED SHAFT DIMENSIONS (ØC, D)

Model Number	ØC	ØC Tolerance	D
FM750-3-08-□□□□	8.00mm	+0/-0.009 (ISO h6)	7.0
FM750-3-25-□□□□	6.35mm (1/4")	+0/-0.009 (ISO h6)	5.0

OUTPUT SIGNAL FORMAT



TYPICAL CONNECTION

