

MODEL A58SB - ABSOLUTE SHAFT ENCODER



Ø58 mm



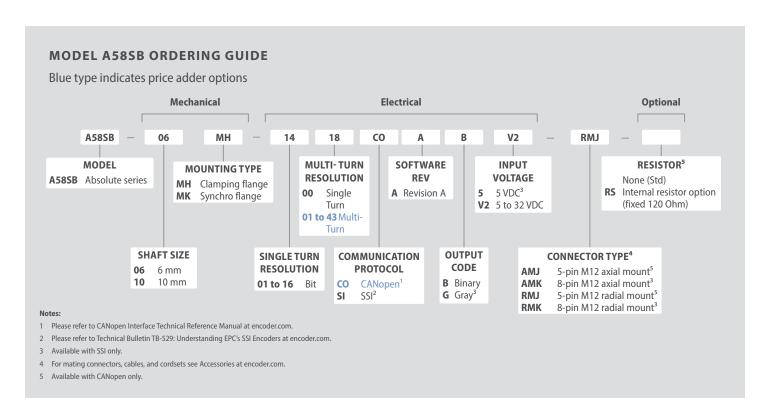
FEATURES

Single Turn/Multi-Turn Absolute Encoder (16 Bit ST / 43 Bit MT)
SSI or CANopen® communication
Maintenance-free and environmentally friendly magnetic design
Energy harvesting magnetic multi-turn technology
No gears or batteries
58 mm (2.28") diameter shaft encoder
Meets CE/EMC standards for immunity and emissions

The Model A58SB absolute encoder offers a high performance solution for your absolute feedback needs. It provides maintenance-free feedback thanks to its innovative battery-free and gear-free multi-turn technology. This encoder is especially suited for applications where position information must be retained after loss of system power. Its rugged magnetic technology and high IP rating make the Model A58SB an excellent choice, even in tough industrial environments. Available with two shaft sizes, 6 mm or 10 mm, and two mounting options, the Model A58SB is easily designed into a variety of applications.

COMMON APPLICATIONS

Robotics, Telescopes, Antennas, Medical Scanners, Wind Turbines, Elevators, Lifts, Motors, Automatic Guided Vehicles, Rotary and X/Y Positioning Tables



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See encoder.com for more information.



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MODEL A58SB SPECIFICATIONS

Electrical

.....<± 0.0878°

CANopen Interface

Protocol.......CANopen:

Communication profile CiA 301

Device profile for encoder CiA 406 V3.2 class C2

Node Number......0 to 127 (default 127)

Baud Rate......10 Kbaud to 1 Mbaud with automatic bit rate detection

Note: The standard settings, as well as any customization in the software, can be changed via

LSS (CiA 305) and the SDO protocol (e.g., PDOs, scaling, heartbeat, node-ID, baud rate, etc.)

Programmable CANopen Transmission Modes

SSI Interface

Turn On Time< 1.5 sec

Pos. Counting Dir.Connect DIR to GND for CW

Connect DIR to VDC for CCW

(when viewed from shaft end)

Set to Zero......Yes, see Technical Bulletin TB-529: Understanding EPC's SSI

Encoders

Protection......Galvanic Isolation with SSI option

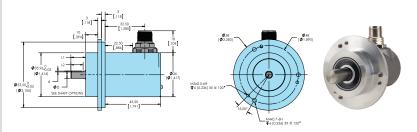
Mechanical

.....7.5 oz typical

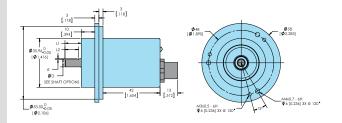
Environmental

Weight.....

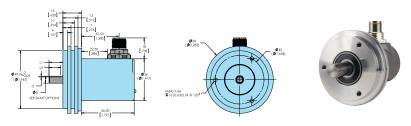
MODEL A58SB CLAMPING FLANGE (MH) RADIAL CONNECTOR



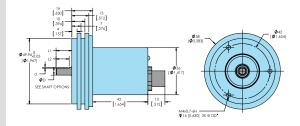
MODEL A58SB CLAMPING FLANGE (MH) AXIAL CONNECTOR



MODEL A58SB SYNCHRO FLANGE (MK) RADIAL CONNECTOR



MODEL A58SB SYNCHRO FLANGE (MK) AXIAL CONNECTOR



All dimensions are in inches with a tolerance of +0.005" or +0.01" unless otherwise specified. Metric dimensions are given in brackets [mm].



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SHAFT SIZES

SHAFT SIZE	ØD	L1	d	L2
6mm	6 [0.236]	12 [0.472]	0.70 [0.028]	10 [0.394]
10mm	10 [0.394]	20 [0.787]	no flat	n/a

WIRING TABLE

For EPC-supplied mating cables, refer to wiring table provided with cable.

For CE (Conformity European) requirements, use M12 cordset with shield connected to M12 coupling nut. Trim back and insulate unused wires.

SSI Encoders 8-pin M12



Function	8-Pin M12
Ground (GND)	1
+VDC	2
SSI CLK+	3
SSI CLK-	4
SSI DATA+	5
SSI DATA-	6
PRESET	7
DIR	8
Shield	Housing

CANopen Encoders 5-pin M12



Function	5-Pin M12
+VDC	2
Ground (GND)	3
CAN _{High}	4
CAN _{Low}	5
CAN _{GND} / Shield	1