



| AXM5S

CANOPEN SINGLE-TURN ENCODERS – STAINLESS STEEL 316 - IP69K



- Adapted to food and beverage – pharmaceutical - river – offshore applications
- Stainless steel encoder (316) with hygienic design
- Flanges and shaft adapted to the market needs
- Robustness and excellent resistance to shocks / vibrations
- Double ball bearings with safety lock system
- High protection level IP69K
- Universal electronic circuits from 5 to 30Vdc
- CANopen interface
- High performances in temperature –40°C to +85°C
- Magnetic technology, Hall effect contactless
- Available resolution up to 12 bits per revolution
- Adapted axial cable gland output



SPECIFICATIONS

Mechanical

Material	Shaft: Stainless steel 316
	Cover: Stainless steel 316
	Body: Stainless steel 316
Bearings	Double ball bearings
Maximal Loads	Axial : 250 N
	Radial : 500 N
Theoretical mechanical lifetime 10⁹ turns (Faxial / Fradial)	50 N / 100 N : 12
	250 N / 500 N : 0,5
Permissible max. speed	4 000 min ⁻¹
Continuous max. speed	3 000 min ⁻¹
Shaft inertia	≤1,2.10 ⁻⁶ kg.m ²
Torque	≤ 90.10 ⁻³ N.m
Shocks (EN60068-2-27)	≤ 2000m.s-2 (during 6 ms)
Vibrations (EN60068-2-6)	≤ 200m.s-2 (55 ... 2 000 Hz)
Encoder weight (approx.)	0,600 kg
Protection(EN 60529)	IP 69K
EMC	EN 61000-6-4, EN 61000-6-2
Isolation	500 Veff
Operating Temperature	- 40... + 85 °C (T° encoder)
Storage Temperature	- 40... + 85 °C

Electrical

Power Supply	5-30 Vdc
Consumption without load	< 40mA (at 24Vdc)
Resolution	4096 (2 ¹²)
Accuracy	± 0.3%
Repeatability	± 0.1%
Introduction	< 1s
Refresh Rate	< 400 μs

PROGRAMMABLE PARAMETERS

Resolution : defines the resolution per revolution (0 à 4 096)

Transmission speed : programmable from 10kBaude (1 000m) to 1 Mbaude (25 m) ; value per default : 20 Kbaude

Address : defines the software address of the encoder on the bus (1 à 127, Value per default : id = 1)

Direction : defines the direction of count of the encoder

RAX : define the value of the current position (stationary shaft)

Comes : high and low limits

COMMUNICATION MODES

Encoder configuration : Reading/Writing of the encoder objects dictionary (SDO mode)

3 modes are available to interrogate the encoder position/speed :

CYCLIC mode : the encoder transmits its position in an asynchronous manner. The frequency of the transmission is defined by the programmable cyclic timer register from 0 to 65 535 ms

SYNCHRO mode : the encoder transmits its position on a synchronous demand by the master

POOLING mode (Answer to a RTR signal) : the encoder only answers to a request

CONNECTION

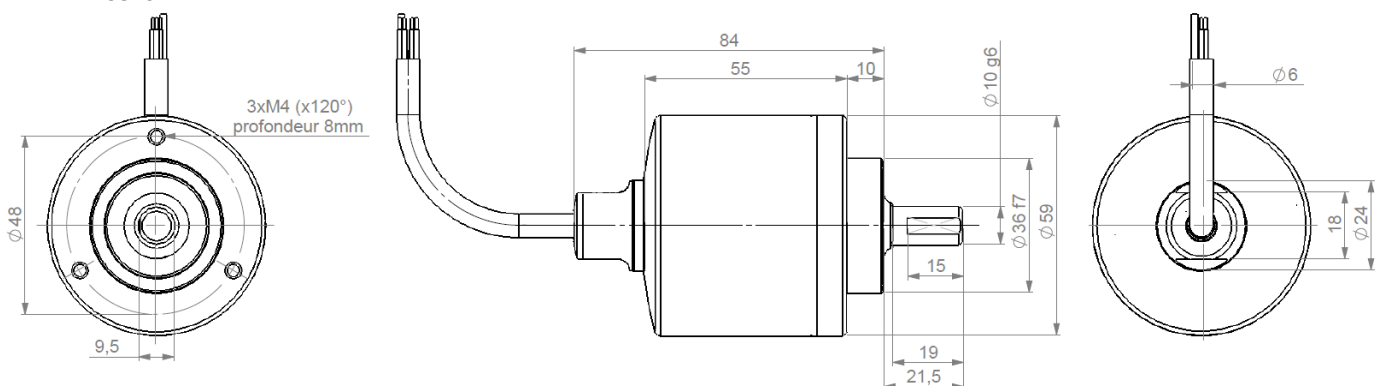
Type	Green – Grey GN - GY	Blue – Red BU - RD	Yellow – Pink YE - PK	Brown BN	White WH	Green – Grey GN - GY
BX	CAN LOW	CAN GND	CAN HIGH	OV	+ 5/30 Vdc	CAN LOW

Note : Refer to the bus standards for the maximal derivation length.

DIMENSIONS

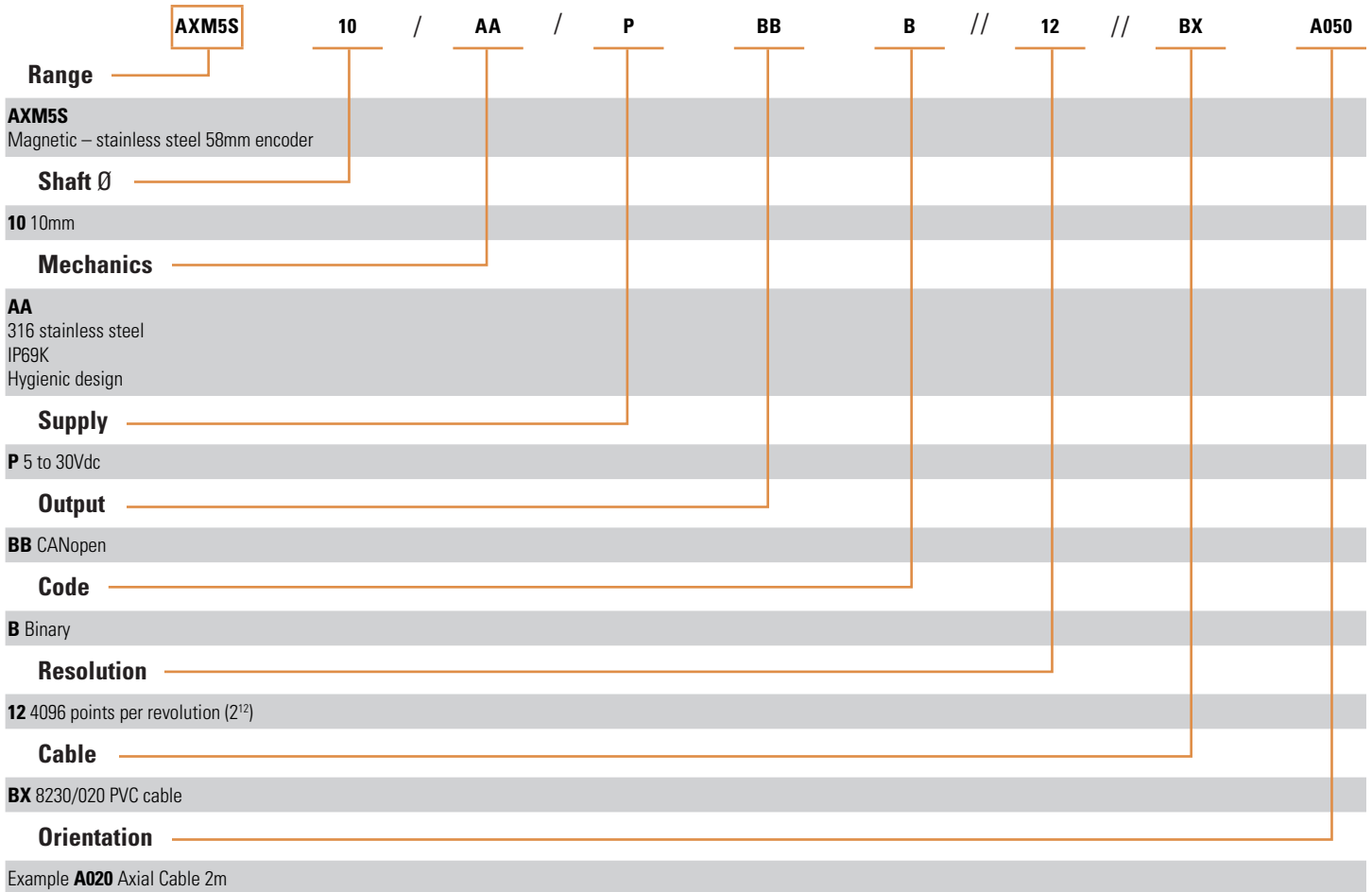
All dimensions are in mm

AXM5S10





(Contact the factory for special versions, ex : stainless steel version, connections...)



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