



| AXM5S

SSI 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
- Isolated SSI interface, clock from 100 to 500 kHz
- High performances in temperature –20°C to +85°C
- Magnetic technology, Hall effect contactless
- Available resolution up to 12 bits per revolution
- Adapted axial cable gland output



SPECIFICATIONS

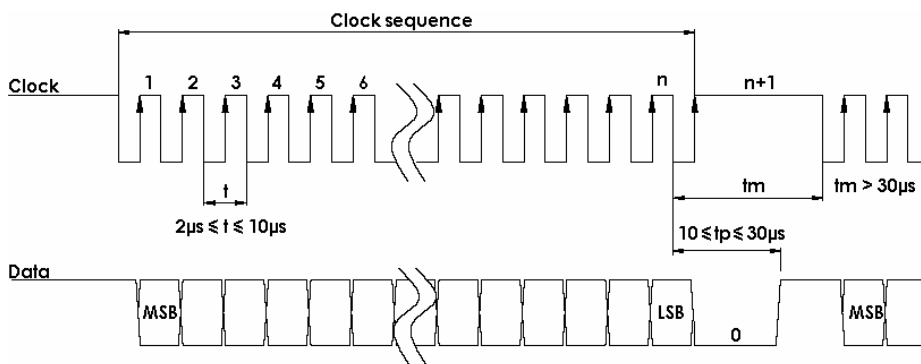
Mechanical

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)	≤ 2000m.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	- 20... + 85 °C (T° encoder)
Storage temperature	- 20... + 85 °C

Electrical

Power Supply	5-30 Vdc
Consumption without Load	<40mA (at 24Vdc)
Resolution	12 bits
Accuracy	± 0,3% (on 360°)
Repeatability	± 0,1% (on 360°)
Introduction	< 1s
Refresh Rate	< 400µs
Input Signal Clock CLK	Per optocoupler
Output Signal DATA	line - driver RS422

SSI TRANSMISSION



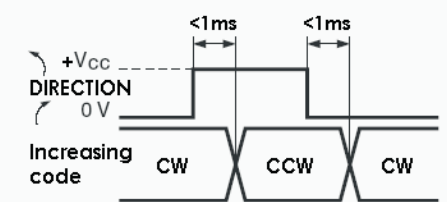
Transmission	Transmission up to 400m at 100kHz in function of the cable characteristics.
Cable	High security of transmission by using shielded cable and twisted pairs.

* Consult us for length > 100m.

SSI CONNECTION

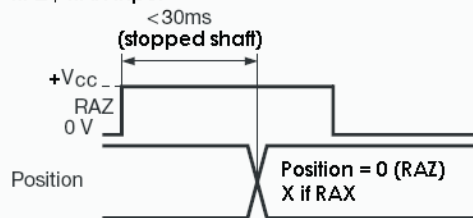
Type	Cable	+ Vcc	0V	Clk+	Data+	RAZ	Data-	Clk-	Direction	Ground
S5	PUR cable 8230/050	BN/GN Brown/Green	WH/GN White/Green	GN Green	GY Gray	BU Blue	PK Pink	BN Brown	WH White	General Shielding

DIRECTION input



	min	max	Increasing
Level "0"	0 V	0,3x(+Vcc)	CW
Level "1"	0,7x(+Vcc)	+Vcc	CCW
I direction	< 5mA		

RAZ / RAX input



	min	max
Level "0"	0 V	0,3x(+Vcc)
Level "1"	0,7x(+Vcc)	+Vcc
I raz/rax	< 5mA	

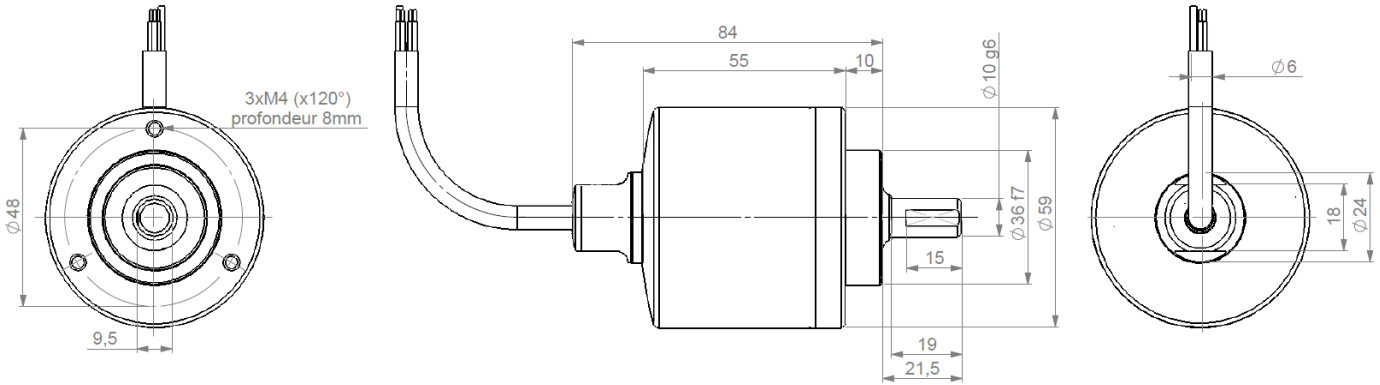
Note : Do not connect other pinouts, connect DIRECTION and RAZ to a potential (RAZ at 0V if not used)



DIMENSIONS

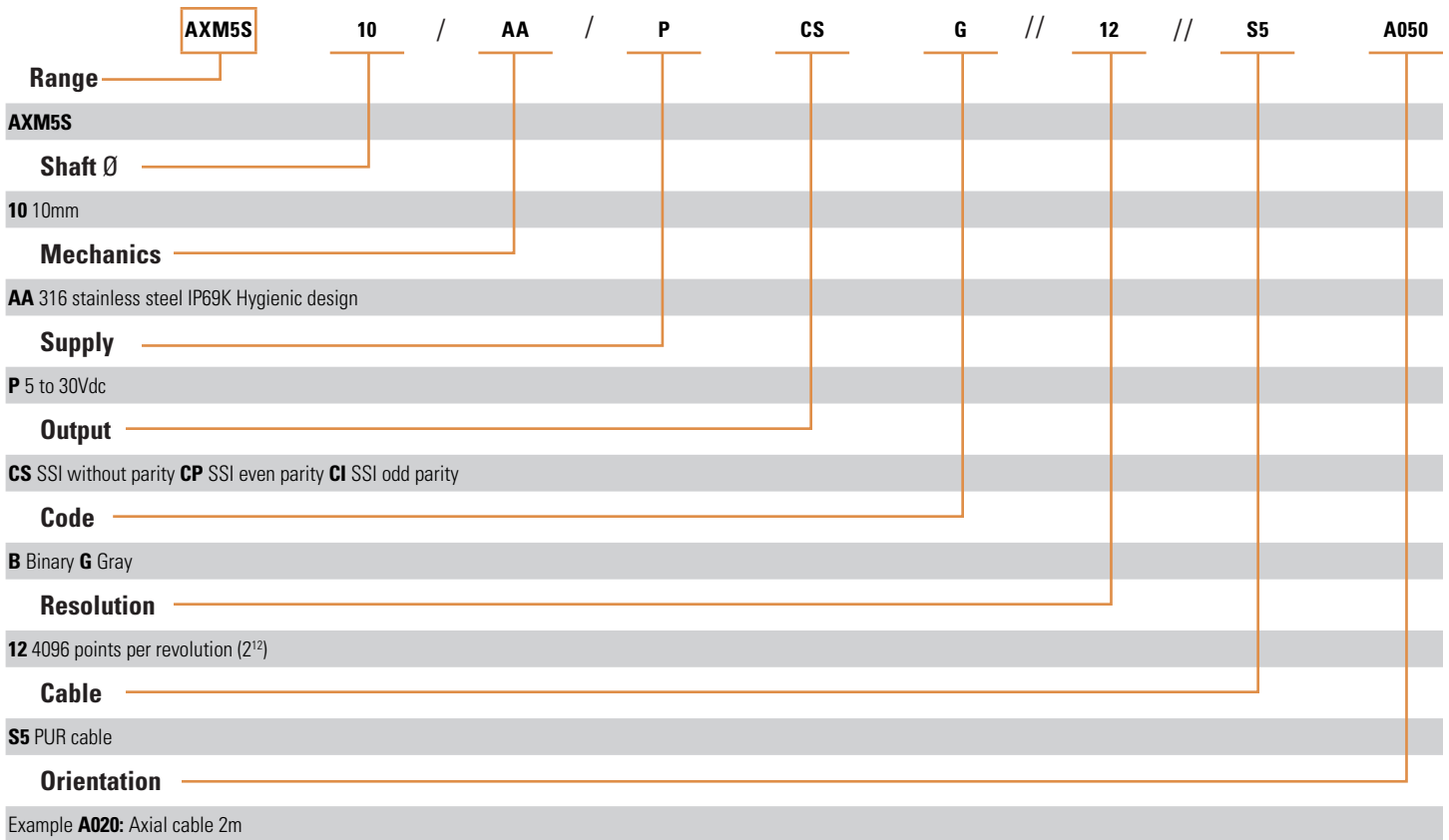
All dimensions are in mm

AXM5S10





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



AGENCY APPROVALS & CERTIFICATES



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