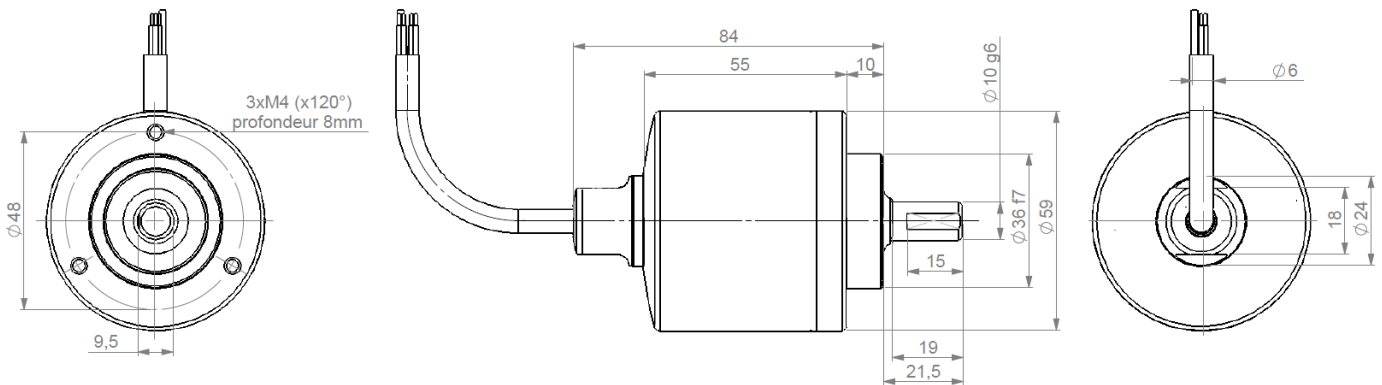


MAGNETIC SSI SINGLE-TURN ENCODERS, AXM5S – STAINLESS STEEL 316 - IP69K

- 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.



AXM5S10 DIMENSIONS



MECHANICAL CHARACTERISTICS

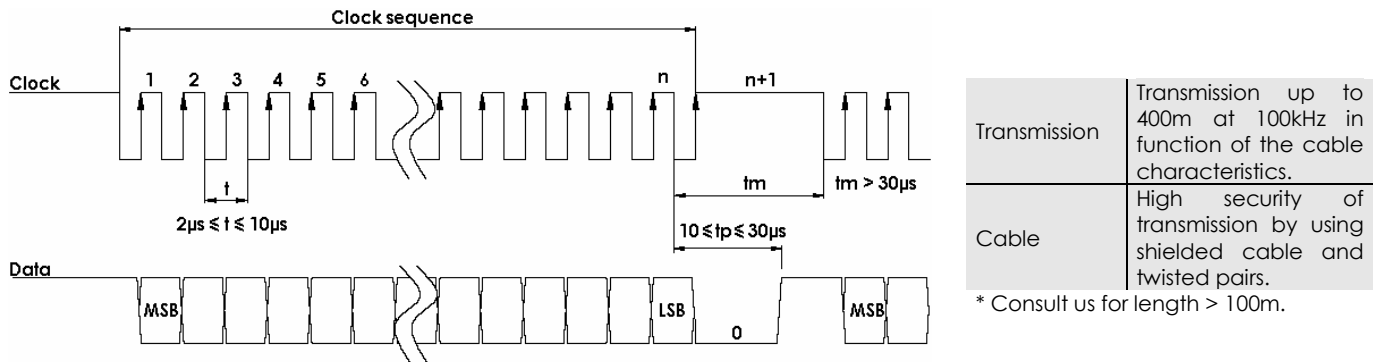
Material	Shaft: Stainless steel 316	Shaft inertia	$\leq 1,2 \cdot 10^{-6} \text{ kg.m}^2$
	Cover: Stainless steel 316	Torque	$\leq 90 \cdot 10^{-3} \text{ N.m}$
	Body: Stainless steel 316	Shocks (EN60068-2-27)	$\leq 2000 \text{ m.s}^{-2}$ (during 6 ms)
Bearings	Double ball bearings	Vibrations (EN60068-2-6)	$\leq 200 \text{ m.s}^{-2}$ (55 ... 2 000 Hz)
Maximal loads	Axial : 250 N	Encoder weight (approx.)	0,600 kg
	Radial : 500 N	Protection(EN 60529)	IP 69K
Theoretical mechanical lifetime 10^9 turns (F_{axial} / F_{radial}) 50 N / 100 N : 12 250 N / 500 N : 0,5		EMC	EN 61000-6-4, EN 61000-6-2
Permissible max. speed	4 000 min ⁻¹	Isolation	500 Veff
Continuous max. speed	3 000 min ⁻¹	Operating temperature	- 20... + 85 °C (T° encoder)
		Storage temperature	- 20... + 85 °C

MAGNETIC SSI SINGLE-TURN ENCODERS, AXM5S – STAINLESS STEEL 316 - IP69K

ELECTRICAL DATA

Power supply	5 – 30Vdc	Introduction	<1s
Consumption without load	<40mA (at 24Vdc)	Refresh rate	< 400µs
Resolution	12 bits	Input signal clock CLK	Per optocoupler
Accuracy	± 0,3%	Output signal DATA	line - driver RS422
Repeatability	± 0,1%		

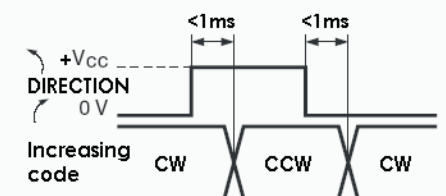
SSI TRANSMISSION



SSI CONNECTION

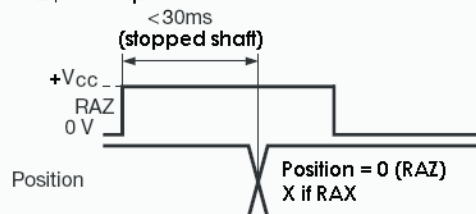
Type	Cable	+ Vcc	0 V	Clk+	Data+	RAZ	Data-	Clk-	Direction	Ground
S5	PUR cable 8230/050	BN/GN Brown/Green	WH/GN White/Green	GN Green	GY Gray	BU Blue	PK Pink	BN Brown	WH White	General shielding

DIRECTION input



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

RAZ / RAX input



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

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

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

Range	Shaft Ø	Mechanics	Supply	Output	Code	Resolution	Cable	Orientation
AXM5S	10 10mm	AA 316 stainless steel IP69K Hygienic design	P 5 to 30Vdc	CS SSI without parity CP SSI even parity CI SSI odd parity	B Binary G Gray	12 4096 points per revolution (2 ¹²)	S5 PUR cable	Example A020 : Axial Cable 2m

Ex: AXM5S 10 / AA / P CS G // 12 // S5 A050

Made in France