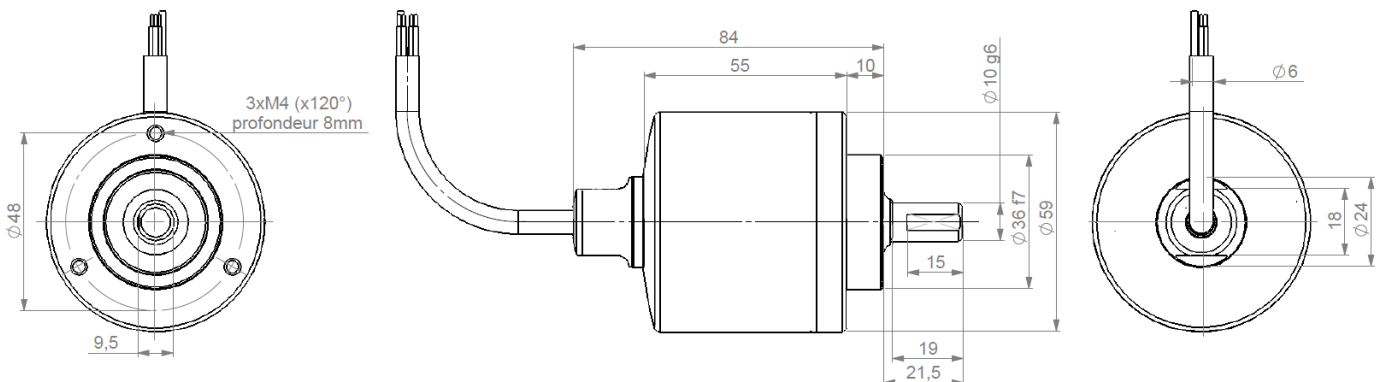


OPTICAL PARALLEL SINGLE-TURN ENCODERS, CXM5S – STAINLESS STEEL 316 - IP69K

- 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,
- Solid shaft version Ø 6 to 10mm,
- High protection level IP69K,
- Universal electronic circuits from 5 to 30Vdc,
- Isolated SSI interface, clock from 100 to 1MHz,
- Standard DIRECTION entry, LATCH option Digital or sine incremental outputs option,
- High performances in temperature –20°C to 90°C (option –40°C to 100°C),
- Optical technology, contactless,
- High resolutions possibility: up to 15 bits (Gray or binary),
- Adapted axial cable gland output.



CXM5S10 DIMENSIONS



MECHANICAL CHARACTERISTICS

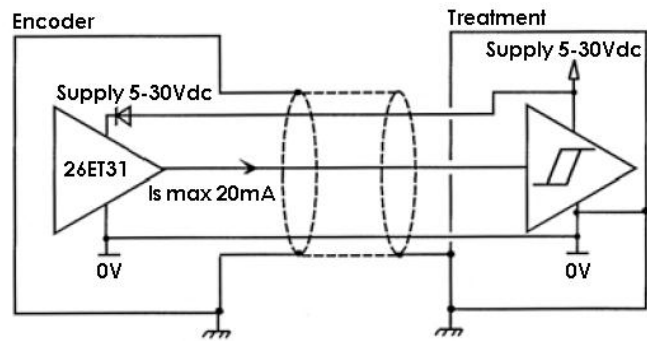
Material	Shaft: Stainless steel 316	Shaft inertia	$\leq 1,2 \cdot 10^{-6}$ kg.m ²
	Cover: Stainless steel 316	Torque	$\leq 90 \cdot 10^{-3}$ N.m
	Body: Stainless steel 316	Shocks (EN60068-2-27)	≤ 500 m.s ⁻² (during 6 ms)
Bearings	Double ball bearings	Vibrations (EN60068-2-6)	≤ 100 m.s ⁻² (10... 2 000 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	1 000 V _{eff}
Continuous max. speed	3 000 min ⁻¹	Operating temperature	-20 ... +90 °C (encoder T°)
		Storage temperature	-40 ... +100 °C

CONNECTION

	color	13 bits + DIRECTION CP or C3	14 bits + DIRECTION C1
1	white WH	0V	0V
2	brown BN	+Vcc	+Vcc
3	green GN	D0	D0
4	yellow YE	D1	D1
5	grey GY	D2	D2
6	pink PK	D3	D3
7	blue BU	D4	D4
8	red RD	D5	D5
9	black BK	D6	D6
10	violet VT	D7	D7
11	white/brown WH/BN	D8	D8
12	white/green WH/GN	D9	D9
13	white/yellow WH/YE	D10	D10
14	white/grey WH/GY	D11	D11
15	white/pink WH/PK	D12	D12
16	white/blue WH/BU	DIRECTION	D13
17	White/red WH/RD	/	DIRECTION

Example, 10 bits encoder : only MSB will be supplied (D3 to D12)

ELECTRONICS



Power supply : 5 to 30Vdc
Consumption without load : 100mA max
Current output per channel : Is=20mA max
Level '0' (Is=20mA) max : $V_{ol} = 0,5Vdc$
Level '1' (Is=20mA) min : $V_{oh} = Vcc - 2,5Vdc$

Protection against short circuits and inversion of polarity

DIRECTION

CW increasing code: DIRECTION pin to +Vcc
CCW increasing code : DIRECTION pin to 0Vdc

LATCH (option)

Active data on the outputs : LATCH pin to 0V
Frozen data on the outputs: LATCH pin to +Vcc

Consult us for the connection of an encoder with this option

ORDERING REFERENCE (Contact the factory for special versions, ex: special flanges, connections, electronics...)

Range	Shaft Ø	Mechanics	Supply	Output stage	Code	Resolution	Connection	Orientation
CXM5S	10	AA	P	C5	B	Power of 2:	C3	Example :
Magnetic – stainless steel 58mm encoder	10mm	316 stainless steel IP69K Hygienic design	5 to 30Vdc	push pull 5 to 30Vdc	Binary Gray	1: 1 bit to 14: 14 bits Max: 15 bits Consult us	cable gland + 16 wires cable	A020 axial cable 2m
Ex:CXM5S	10 /	AA /	P	C5	G //	13 //	C3	A050

Monitoring function available as option :

- of the code coherence
- of the LED internal regulated current loop
- of temperature range with 2 limits

Consult us

Entry / output available as option:

- LATCH entry
- ERROR output for monitoring functions

Made in FRANCE