

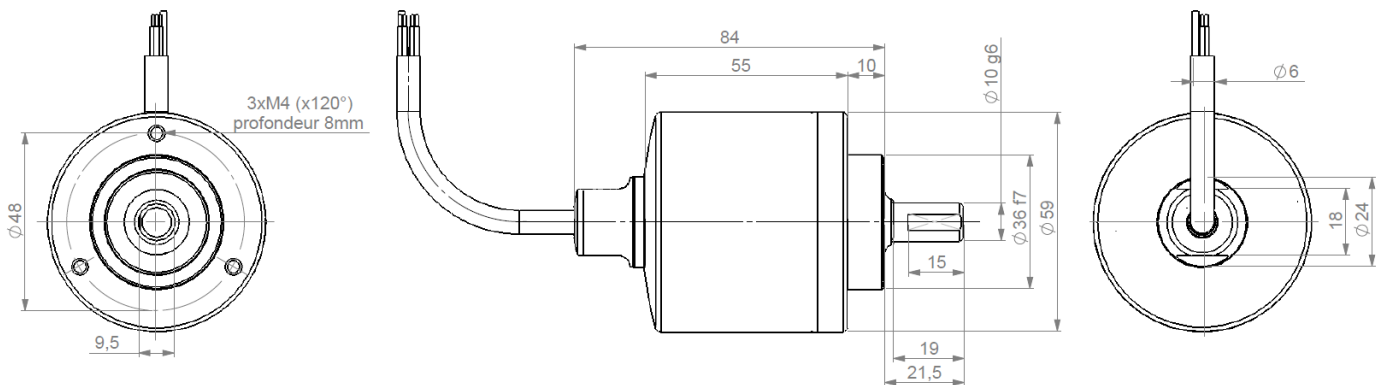
## INCREMENTAL ENCODERS, DXM5S RANGE, 100°C

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 reinforced mechanical system,
- Solid shaft version Ø10mm,
- High protection level IP69K,
- Universal power supply 4,75 to 30Vdc,
- Industrial standard electronic RS422/TTL and HTL,
- High performances in temperature -30°C to +100°C,
- Optical technology, contactless,
- Resolutions available : up to 80 000 ppr,
- Adapted axial cable gland output.



DXM5S10 (axial cable)



### 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	Shock (EN60068-2-27)	$\leq 500 \text{ m.s}^{-2}$ (during 6 ms)
Bearings	Double ball bearings	Vibration (EN60068-2-6)	$\leq 100 \text{ m.s}^{-2}$ (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 50081-1, EN 61000-6-2
Permissible max. speed	4 000 min <sup>-1</sup>	Isolation	1 000 Veff
Continuous max. speed	3 000 min <sup>-1</sup>	Operating temperature	-30 ... + 100 °C (encoder T°)
		Storage temperature	-40 ... + 100 °C

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### Electrical Characteristics:

Version	Output signals	Resolution	Operating Voltage Vcl	Supply current (no loads)	Current per channel pair	Output Levels (Is=20mA)	Frequency capability	Short circuits proof	Reverse polarity tolerant	Temperature range
5GT	HTL	Up to 5000	11-30V --- 250mA	75mA	40mA	High min: Vcl - 2.5V Low max: 1.5V	Up to 120kHz	Yes	Yes	-30°C +70°C
RG5		See available resolutions below	4.75-30V --- 250mA			High min: Vcl - 0.5V Low max: 0.5V				
RG2	TTL RS422		5V+/-5% --- 250mA			High min : 4.5V Low max: 0.5V	Up to 300kHz			Yes (except to Vcl)
2G2					Yes					
2WT	1Vpp	Up to 2500			8mA	1Vpp ± 20%				Yes

### Connections:

		-	+	A or S	B or C	Z	A/ or S/	B/ or C/	Z/	Ground
TE	Silicone cable 8 wires	WH white	BN brown	GN green	YE yellow	GY grey	PK pink	BU blue	RD red	General shielding

### Available resolutions:

**Available resolutions digital signals:** 50 60 100 120 125 127 150 180 200 240 250 256 300 314 360 375 400 500 512 600 720 750 768 800 927 1000 1024 1200 1250 1280 1440 1500 1800 2000 2048 2400 2500 3000 3600 4000 4096 5000

**Interpolated available resolutions digital signals (limited to 70°C):** 1080 1536 2560 2880 3072 4320 4500 5120 5400 5760 6000 6144 7200 7500 8000 8192 9000 10000 10240 10800 12000 12500 12288 14400 15000 16000 16384 18000 20000 20480 21600 24000 24576 25000 28800 30000 32000 32768 36000 40000 40960 43200 48000 49152 50000 57600 60000 64000 65536 80000

**Available resolutions sine wave signals (2WT electronic) :** 250 256 360 500 512 1000 1024 1500 1800 2000 2048 2500

### Ordering Options:

Use this diagram, working from left to right to construct your model number (Example : **DXM5S10/AA/RG59//01024//TEA050**)

DXM5S	__ / __	/	---	-	//	-----	//	---	---
TYPE:	SHAFT BORE/ MECHANICS:		VOLTAGE/ OUTPUT:	CHANNELS:		CYCLES/ TURN:		OUTPUT TERMINATION:	CABLE LENGTH:
DXM5S = Solid shaft encoder	10/AA/ = 10mm shaft 316 stainless steel encoder with IP69K		5GT = 11-30V voltage and push-pull output RG5 = 4.75-30V voltage and push-pull output 2G2 = 5V voltage and RS422 output RG2 = 4.75-30V voltage and RS422 output 2WT = 5V voltage and 1Vpp output	9 = AA/ BB/ ZZ/ B before A Z gated A&B  For 2WT electronic, N= SS/ CC/ ZZ/ C before S Z ungated		(Enter Cycles)  See available resolutions above		TEA = Silicone cable	xxx = cable length ex. 020 = 2meters

Made in France