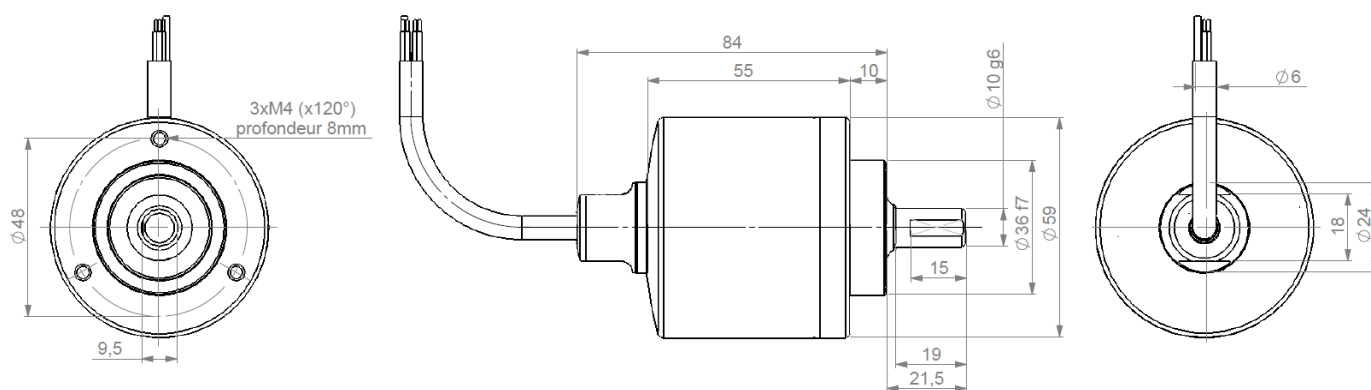


OPTICAL INCREMENTAL ENCODERS, GXM5S – STAINLESS STEEL 316 - IP69K

- 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 Ø10mm,
- High protection level IP69K & IP67,
- Industrial standard electronic RS422/TTL and HTL,
- High performances in temperature -20°C to +85°C,
- Optical technology, contactless,
- Resolutions available : up to 2 500ppr,
- Unbreakable Polyfass disc (Mylar-Mica composite),
- Adapted axial cable gland output.



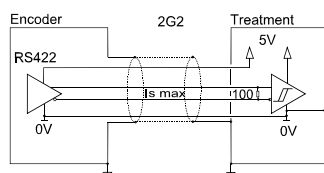
GXM5S10 DIMENSIONS



MECHANICAL CHARACTERISTICS

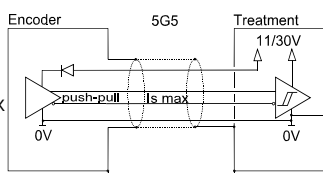
Material	Shaft: Stainless steel 316	Shaft inertia	$\leq 1,2 \cdot 10^{-6} \text{ kg.m}^2$
	Cover: Stainless steel 316	Torque	$\leq 90 \cdot 10^{-3} \text{ N.m}$
	Body: Stainless steel 316	Shocks (EN60068-2-27)	$\leq 500 \text{ m.s}^{-2}$ (during 6 ms)
Bearings	Double ball bearings	Vibrations (EN60068-2-6)	$\leq 100 \text{ m.s}^{-2}$ (55 ... 2 000 Hz)
Maximal loads	Axial : 250 N	Encoder weight (approx.)	0,600 kg
	Radial : 500 N	Protection(EN 60529)	IP 69K & IP67
Theoretical mechanical lifetime 10^9 turns ($F_{\text{axial}} / F_{\text{radial}}$) 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 ⁻¹	Isolation	1 000 V eff
Continuous max. speed	3 000 min ⁻¹	Operating temperature	- 20 ... + 85°C (encoder T°)
		Storage temperature	- 30 ... + 85°C

DIGITAL OUTPUT SIGNALS



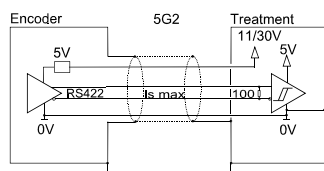
2G2 electronic

Supply : 5Vdc $\pm 10\%$
Cons. without load : 75mA max
Current per channel : 40mA max
0 max ($I_s=20mA$) : $V_{ol} = 0,5Vdc$
1 min ($I_s=20mA$) : $V_{oh} = 2,5Vdc$



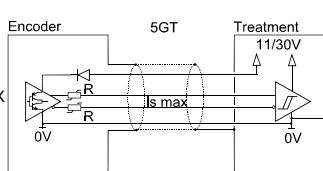
5G5 electronic

Supply : 11 to 30Vdc
Cons. without load : 75mA max
Current per channel : 40mA max
0 max ($I_s=20mA$) : $V_{ol} = 0,5Vdc$
1 min ($I_s=20mA$) : $V_{oh} = V_{cc}-3Vdc$



5G2 electronic

Supply : 11 to 30Vdc
Cons. without load : 75mA max
Current per channel : 40mA max
0 max ($I_s=20mA$) : $V_{ol} = 0,5Vdc$
1 min ($I_s=20mA$) : $V_{oh} = 2,5Vdc$



5GT electronic

Supply : 11 to 30Vdc
Cons. without load : 75mA max
Current per channel : 40mA max
0 max ($I_s=20mA$) : $V_{ol} = 1,5Vdc$
1 min ($I_s=20mA$) : $V_{oh} = V_{cc}-2,5Vdc$

The 5GT electronic can drive long length of cables (consult us).

Protection against short circuits of the electronics: 5G5, 5GT.

Protection against reverse polarity for all the electronics except 2G2.

STANDARD CONNECTION

Type	cable	0Vdc	+Vcc	A	B	0	A/	B/	0/	Ground
G3	PVC cable 8 wires 8230/020	WH white	BN brown	GN green	YE yellow	GY grey	PK pink	BU blue	RD red	General shielding

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

Range	Shaft Ø	Mechanics	Available electronics		Signals	Resolution	Cable	Orientation
GXM5S Optical – stainless steel 58mm encoder	10 10mm	AA 316 stainless steel IP69K Hygienic design	2G2, 5G2, 5G5, 5GT		9 A,A/, B,B/, 0,0/ (0, A&B gated)	2 500 max	G3 PVC cable	Example: A020 : axial cable 2m
			Supply	Output				
			2: 5Vdc 5: 11 - 30Vdc	G2: driver 5Vdc RS422/TTL G5 : push-pull GT : transistorized push-pull				
Ex: GXM5S	10 /	AA /	5	G2	9 //	01 024 //	G3	A050

AVAILABLE RESOLUTIONS

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 18 19 20 21 23 24 25 26 27 28 29 30 32 33 34 35 36 37 38 40 41 42 43 44 45 48 49 **50**
52 53 54 55 56 57 58 **60** 61 62 63 64 66 67 68 69 70 71 72 73 75 78 80 81 84 85 86 87 90 91 92 94 95 96 97 99 **100** 104 108
109 110 113 114 119 **120** 122 **125 127** 128 129 130 131 132 140 147 **150** 152 155 157 160 167 168 170 176 179 **180** 182 183 185
188 190 191 192 194 196 **200** 205 208 209 215 **216** 217 220 223 226 230 236 **240** 243 245 246 248 **250** 251 **254** 255 **256** 260 264
273 280 284 285 290 292 **300** 305 310 **314** 318 320 325 330 331 333 334 335 340 343 350 355 **360** 364 367 370 **375** 380 381 385
392 393 397 **400** 408 410 420 427 430 450 452 455 470 471 475 480 489 **500 512** 515 516 520 521 530 534 545 560 565 572 580
600 620 **625** 628 635 660 672 675 700 712 **720** 722 730 745 **750** 754 **762 768** 785 792 **800** 819 840 850 864 880 889 895 **900** 914
927 942 960 **1000** 1016 **1024** 1100 1125 1131 1143 1147 1152 **1200** 1225 **1250 1270 1280** 1300 **1440 1500** 1524 1600 1680 1700 1750
1800 1872 1885 1895 1920 **2000 2048** 2064 2100 2160 2250 2256 **2400 2480 2500**

Resolution in bold character also available in Digisine™ range 100°C – option 120°C encoder - resolution up to 80 000 ppr.