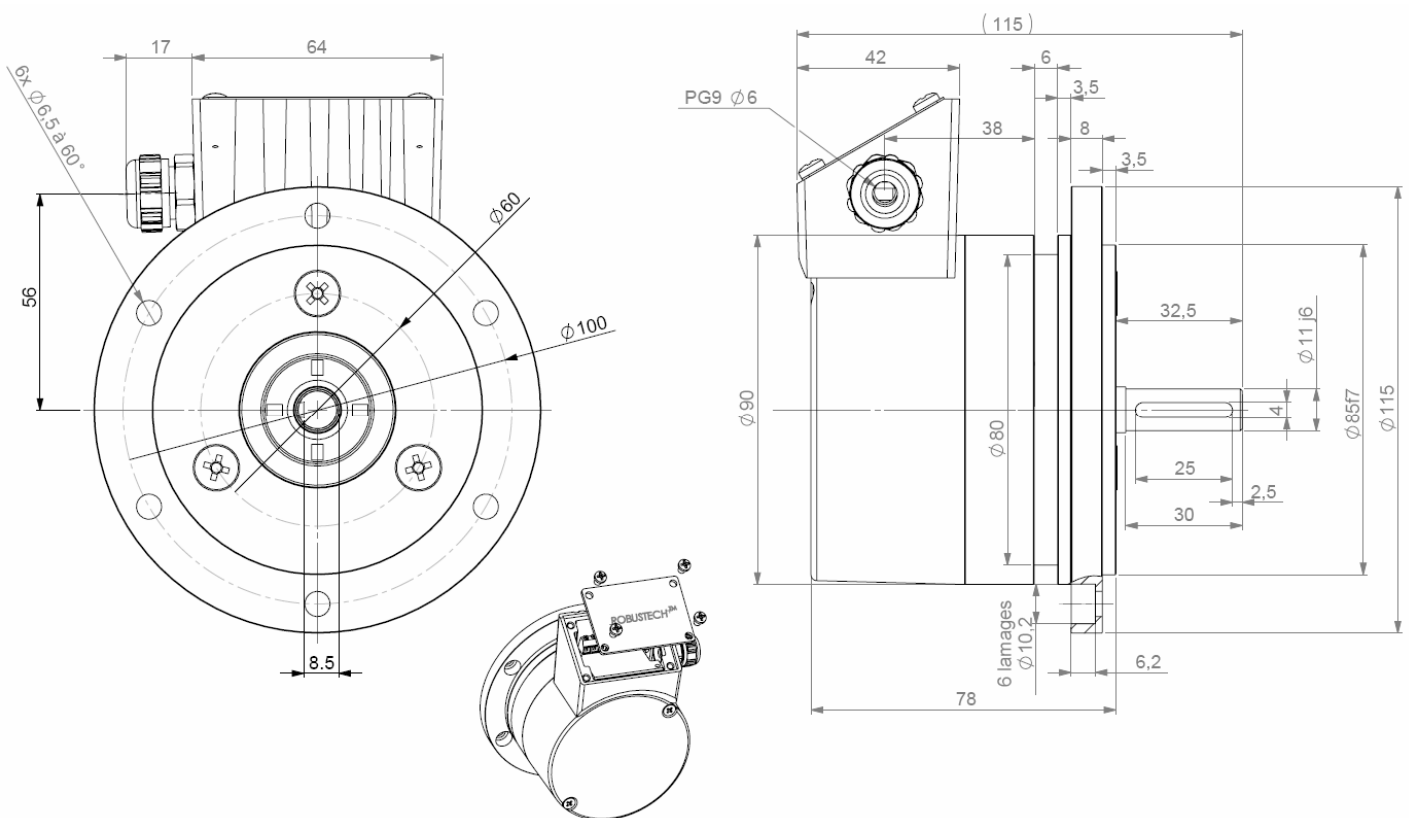


INCREMENTAL ENCODERS, GHM9 RANGE, ROBUSTECH™

- Especially designed for heavy duty applications: steel and paper mills, lumber, cranes, etc...
- Solid shaft of 12 mm or 11 mm with RE0 115 mm flange (Euroflange B10) for tachogenerator type mounting.
- Excellent resistance to shocks/vibrations and to extreme axial/radial loads.
- High protection level: IP67.
- Connection with terminal box (cable or connectors output also available).
- Electronic compatible with industrial standards.
- Digital incremental output, optional analog output (tachoenoders, optotacho) or sine output.
- Resolution up to 10000ppr.
- Mechanical over-speed switch option.
- Max control option : detection of shocks, vibrations, temperatures...



GHM9_11 connection GTR (radial terminal box) with 115mm flange

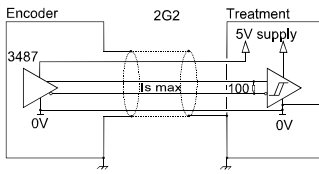


MECHANICAL CHARACTERISTICS

Material Stainless steel or marine aluminium option	Cover : zinc alloy	Vibration (EN60068-2-6)	≤ 200 m.s ⁻² (10 ... 1 000 Hz)
	Body: aluminium		EMC
Shaft	Stainless steel	Isolation	1 000 Veff
Bearings	6001 serie	Weight (connector or cable version)	1,2kg zinc alloy cover, alu body
Maximal loads	Axial : 100 N		2,5kg zinc alloy cover, stainless steel body
	Radial : 200 N		2,7kg stainless steel cover and body
Shaft inertia moment	≤ 15.10 ⁻⁶ kg.m ²	Operating temperature	- 20 ... + 80 °C (Encoder T°)
Torque	≤ 10.10 ⁻³ N.m	Storage temperature	- 40 ... + 80 °C
Permissible max. speed	9 000 min ⁻¹	Protection(EN 60529)	IP 67
Continuous max. speed	6 000 min ⁻¹	Theoretical mechanical lifetime (F _{axial} / F _{radial})	
Shaft seal	Viton double lips	50 N / 100 N	30 . 10 ⁹ turns
Shock (EN60068-2-27)	≤ 500 m.s ⁻² (during 6ms)	100 N / 200 N	2,5 . 10 ⁹ turns

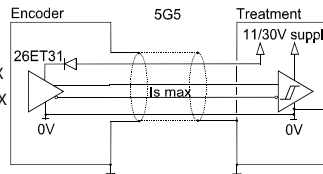
INCREMENTAL ENCODERS, GHM9 RANGE, ROBUSTECH™

OUTPUT ELECTRONIC / SUPPLY



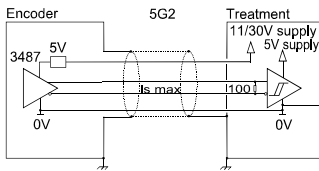
2G2 electronic (100kHz)

Supply : 5Vdc ± 10%
Cons. without load : 100mA max
Current per channel : 40mA max
0 max (I_s=20mA) : V_{ol} = 0,5Vdc
1 min (I_s=20mA) : V_{oh} = 2,5Vdc



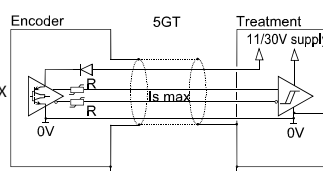
5G5 electronic (100kHz)

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 (100kHz)

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, optional (100kHz)

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}-2,5Vdc

5GT electronic permits to drive long cable (contact our factory)

Available in option :

- 3G3 electronic, supply between 15 and 30Vdc, push-pull output regulated 12Vdc
- 5GH electronic permits to drive different inputs (PLC + display for example)

Protection against short circuits for electronics: 5G5, 5GT, 3G3

Protection against polarity inversion for all electronics except 2G2

Option "Max control" : the encoder gives on real time its physical environment parameters: shocks and vibrations, too high or too low temperature, too low or too high supply, quality of the output signals : upon request..



STANDARD CONNECTION

		-	+	A	B	0	A/	B/	0/	Ground
GT	Terminal box	1	2	3	4	5	6	7	8	On cable gland

ORDERING CODE (Special versions upon request, for ex. over-speed switches, special flanges/electronics/connections...)

		Shaft Ø	Available electronic		Output signal	Resolution	Connection	Connection orientation		
GHM9	GBM9 Stainless steel body	11 : 11mm	2G2, 5G2, 5G5, 5GT, 5GH, 3G3		9 : A,A/,B,B/,0,0/ (0, A&B gated) A : A,A/,B,B/,0,0/ (0, A gated) N : A,A/,B,B/,0,0/ (0 un gated) K : max control option	10 000 max	GT : terminal connection	R : radial		
		12 : 12mm	Supply	Output stage						
		C1 : 11mm Length 20mm	2 : 5Vdc	G2 : driver 5Vdc RS422 G3 : driver 12Vdc G5 : push-pull						
		C2 : 12mm Length 25mm	5 : 11 to 30Vdc 3 : 15 to 30Vdc	GT : push-pull 11-30Vdc transistorized GH : push-pull 11-30Vdc 150 mA						
Ex: GHM9		11	//	5	G5	9	//	5 000 //	GT	R

Available resolutions : 1 2 3 4 5 6 7 8 9 10 12 13 14 15 16 19 20 21 24 25 26 28 29 30 32 35 36 39 40 43 45 46 48 50 54 56 58 60 62 63 64 66 67 70 72 74 75 76 80 84 86 88 89 90 91 94 96 100 107 110 120 122 123 125 127 128 130 132 135 138 140 147 150 157 159 160 168 169 170 172 175 180 188 191 196 200 201 205 220 222 225 234 240 241 242 245 246 248 250 254 255 256 258 259 267 268 275 283 285 295 300 305 314 315 318 320 330 340 350 360 367 375 378 380 381 388 390 397 400 405 410 424 425 438 443 450 471 480 489 495 500 505 512 515 534 540 550 565 580 600 623 625 628 630 632 635 650 660 700 720 746 750 752 754 800 810 840 860 880 891 900 942 990 1000 1024 1080 1100 1131 1200 1225 1250 1260 1280 1290 1400 1414 1440 1500 1536 1570 1600 1620 1630 1750 1800 1885 2000 2048 2250 2400 2500 2640 3000 3456 3600 3680 3750 4000 4096 4500 4900 5000 7200 9000 10000

Made in FRANCE