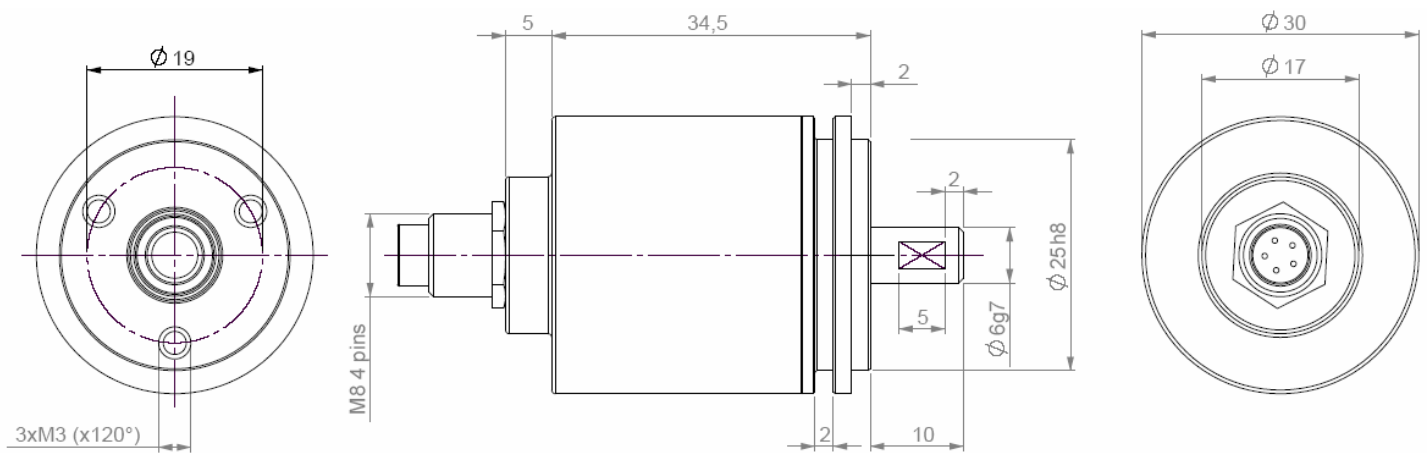


**OPTICAL INCREMENTAL ENCODERS, GHM3 RANGE**

- With its 30mm size and a 6mm solid shaft, this encoder characterizes itself by its strong robustness of the mechanical and electro-magnetic parts, it's the most compact really industrial encoder with a solid shaft
- High accuracy optical technology
- Available resolution up to 512 pulses per revolution
- Universal electronics 5 to 30Vdc available
- Application fields : agriculture, construction, forestry vehicles...

**GHM3 connection GLA (axial M8)**



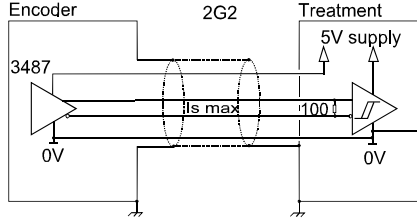
**MECHANICAL CHARACTERISTICS**

Material	Shaft: stainless steel	Isolation	1 000 Veff	
	Cover: aluminium		EMC	EN 50082-2 (1995)
	Body: aluminium			EN 50081-1 (1992)
Maximal loads	Axial : 10 N	Operating temperature	- 20... + 80 °C (encoder T°)	
	Radial : 20 N	Storage temperature	- 40... + 80 °C	
Shaft inertia	$\leq 0,2 \cdot 10^{-6} \text{ kg.m}^2$	Protection CEI60529 (1989)	IP 65	
Torque	$\leq 4 \cdot 10^{-3} \text{ N.m}$	Shocks (EN60068-2-27)	$\leq 300 \text{ m.s}^{-2}$ (during 11 ms)	
Permissible max. speed	6 000 min <sup>-1</sup>	Vibrations (EN60068-2-6)	$\leq 100 \text{ m.s}^{-2}$ (10 ... 500 Hz)	
Continuous max. speed	4 500 min <sup>-1</sup>	Theoretical mechanical lifetime 10 <sup>9</sup> turns (F <sub>axial</sub> / F <sub>radial</sub> )		
Encoder weight (approx.)	0,150 kg	5 N / 10 N : 263	10 N / 20 N : 33	

## OPTICAL INCREMENTAL ENCODERS, GHM3 RANGE



### OUTPUT ELECTRONIC / POWER SUPPLY



#### 2G2 electronic (100kHz)

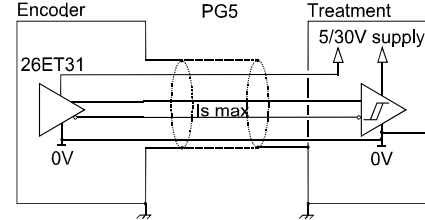
Supply : 5Vdc  $\pm$  10%

Cons. without load : 100mA max

Current per channel : 40mA max

0 max ( $I_s=20mA$ ) :  $V_{ol} = 0,5Vdc$

1 min ( $I_s=20mA$ ) :  $V_{oh} = 2,5Vdc$



#### PG5 electronic(100kHz)

Supply : 5 to 30Vdc

Cons. without load : 75mA max

Current per channel : 40mA max

0 max ( $I_s=20mA$ ) :  $V_{ol} = 0,5Vdc$

1 min ( $I_s=20mA$ ) :  $V_{oh} = V_{cc}-3Vdc$

Protection against short circuits and inversion of polarity for the electronic PG5

### STANDARD CONNECTION

		-	+	A	B	0	A/	B/	0/	Ground
G3	PVC cable, 8 wires	WH white	BN brown	GN green	YE yellow	GY grey	PK pink	BU blue	RD red	Main shield
GL	M8 connector 4 pinouts	1	2	3	4	/	/	/	/	Connector body

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

	Shaft $\varnothing$	Available electronics		Signals	Resolution	Connection	Connection orientation
GHM3	06 : 6mm	2G2, PG5		1 : A, B  9 : A, A/ B, B/ 0, 0/	512 max	GL : M8 4 pinouts	A : axial
		Supply	Output stage			G3 : PVC cable 8 wires	Example : <b>A020</b> : axial cable 2m <b>R020</b> : radial cable 2m
		2 : 5Vdc  P : 5 to 30Vdc	G2 : 5Vdc TTL / RS422  G5 : push- pull				
Ex: GHM3_	06 //	P	G5	1 //	00250//	G3	A020

**Available resolutions** : 1000, 512, 500, 250, 200, 125, 100, 50 (other available on request)

Made in FRANCE