



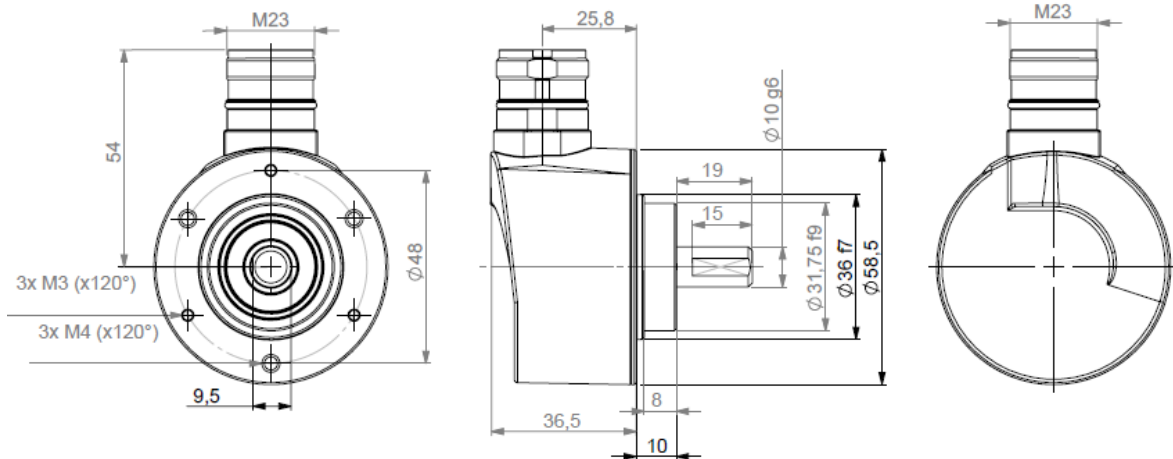
## MAGNETIC INCREMENTAL ENCODERS, HHM5 RANGE

Ø58mm european standards magnetic encoders. It characterizes itself by its strong robustness of the mechanical and electro-magnetic parts :

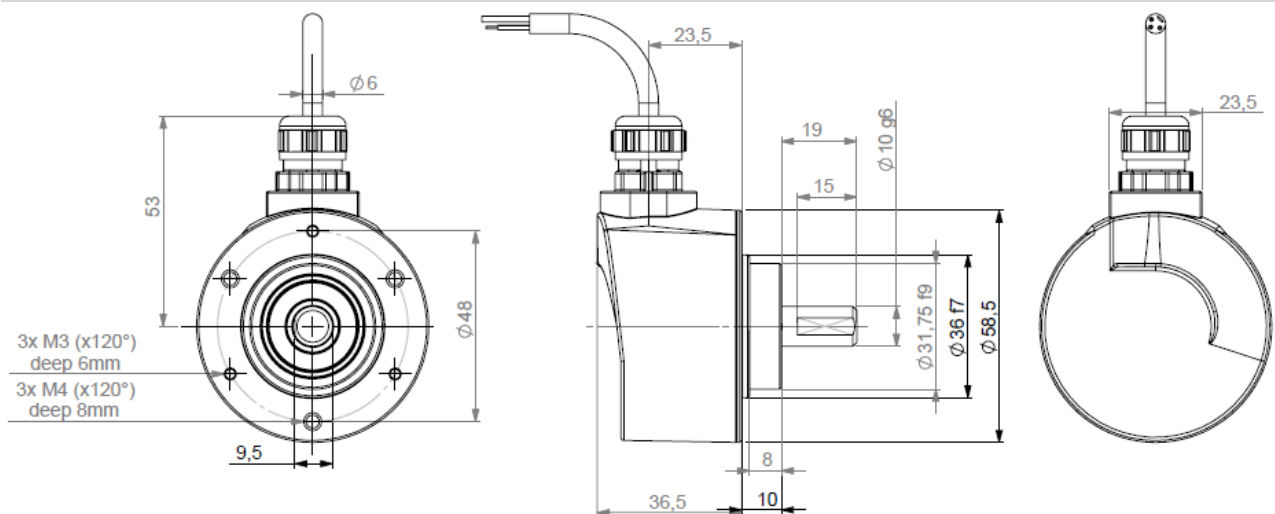
- Application fields : agriculture, construction, forestry vehicles, medical applications, solar panels...
- Magnetic technology, contactless.
- Robustness and excellent resistance to shocks / vibrations.
- High protection level IP65.
- Resolutions available : up to 1024ppr.
- Flanges and shaft adapted to the market needs.
- Universal electronic 5 to 30Vdc available.
- Available in option : Extended temperature range (up to -40..+125°C), IP67/IP69K...



HHM5\_10 with G6R connection (radial M23)



HHM5\_10 with G3R connection (radial cable)



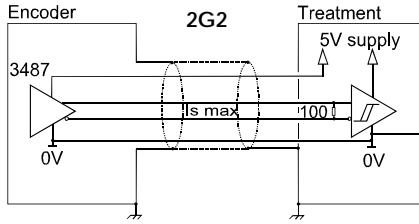
### MECHANICAL CHARACTERISTICS

Material	Shaft: Stainless steel	Isolation	500 Veff		
	Cover: Zinc alloy		EMC	EN 61000-6-4	
	Body: aluminium			EN 61000-6-2	
Bearings	6 000 series	Operating temperature	- 40... + 100 °C (at 5 Vdc)		
Maximal loads	Axial : 100 N	Storage temperature	- 40... + 100 °C		
	Radial : 200 N	Protection	IP 65		
Shaft inertia	≤ 0,4.10 <sup>-6</sup> kg.m <sup>2</sup>	Shocks (EN60068-2-27)	≤ 2000m.s <sup>-2</sup> (during 6 ms)		
Torque	≤ 7.10 <sup>-3</sup> N.m	Vibrations (EN60068-2-6)	≤ 200m.s <sup>-2</sup> (55 ... 2 000 Hz)		
Nominal max. speed	6 000 min <sup>-1</sup>	Theoretical mechanical lifetime (turns) (F <sub>axial</sub> / F <sub>radial</sub> )			
Encoder weight (approx.)	0,300 kg	50 N / 100 N	25.10 <sup>9</sup>	100N / 200N	3.10 <sup>9</sup>



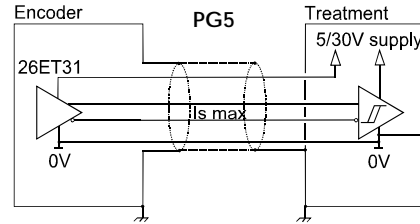
## MAGNETIC INCREMENTAL ENCODERS, HHM5 RANGE

### OUTPUT ELECTRONIC / POWER SUPPLY



#### 2G2 electronic (100kHz)

Supply : 5Vdc  $\pm$  10%  
Cons. without load : 40mA 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 : 40mA max  
Current per channel : 40mA max  
0 max ( $I_s=20mA$ ) :  $V_{ol} = 0,5Vdc$   
1min ( $I_s=20mA$ ) :  $V_{oh} = V_{cc}-3Vdc$

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 8230/020	WH white	BN brown	GN green	YE yellow	GY grey	PK pink	BU blue	RD red	Main shield
G6	M23 connector	1	2	3	4	5	6	7	8	Connector body
GP	PUR cable 12 wires 8230/050	WH white + WH/GN white/green	BU blue + BN/GN brown / green	GY grey	BN brown	RD red	PK pink	GN green	BK black	General shielding

**ORDERING REFERENCE** (Contact the factory for special versions , ex: stainless steel version, connections...)

	Shaft $\varnothing$	Supply Output stage	Signals	Resolution	Connection	Connection orientation
HHM5	06 : Shaft 6mm	2G2 : 5Vdc TTL / RS422 output	9 : A, A/, B, B/, 0, 0/	1024 max	G3 : PVC cable 8 wires	A020 : axial cable 2m
	10 : Shaft 10mm	PG5 : 5 to 30Vdc Push-pull output (TTL / RS422 available if encoder supply is 5Vdc)			GP : PUR cable 12 wires	R020 : radial cable 2m
					G6 : M23 connector	A : Axial R : Radial
Ex: HHM5_	10 //	PG5	9 //	01024 //	G3	A020

Available resolutions : 32 64 128 256 1024

Made in FRANCE