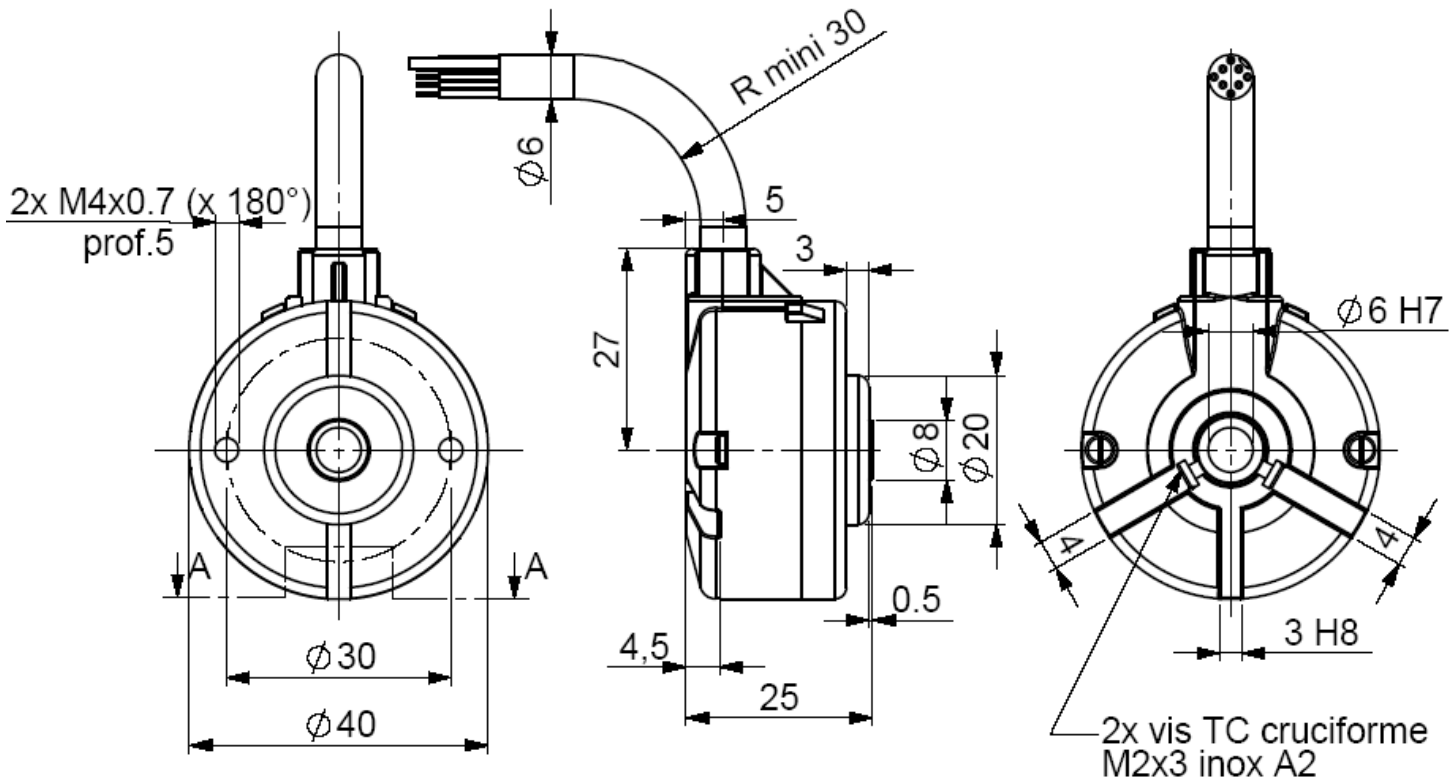


INCREMENTAL ENCODERS, GZM RANGE

- With its 40mm size and a 6mm through shaft, this encoder characterizes itself by its strength and robustness of the mechanical and opto-electronic parts, it's the most compact truly industrial encoder with a through shaft
- Coded discs in synthetic material are used: stable and unbreakable (Polyfuss™, Mylar-Myc a composite)
- Available resolution up to 1 024 counts per tum (GZM option, up to 2 500 counts per tum)
- Universal electronics 5 to 24Vdc available
- Application fields: micro-robotics, printing machines, low power DC motors, shears...



GZM connection G3R (radial cable)



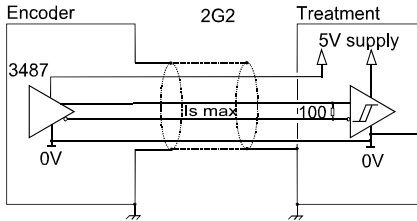
CHARACTERISTICS

Material	Axe : aluminium	EMC	EN 50082-2 (1995)
	Capot : zamac		EN 50081-1 (1992)
	Embase : zamac	Isolation	1 000 Veff
Bearings	688 serie	Operating temperature	- 20 ... + 80 °C (encoder™)
Maximum loads	Axial : 10 N	Storage temperature	- 40 ... + 80 °C
	Radial : 20 N	Protection CEM60529 (1989)	IP 52
Shaft inertia	$\leq 0,1 \cdot 10^{-6} \text{ kg} \cdot \text{m}^2$	Shocks (EN60068-2-27)	$\leq 300 \text{ m} \cdot \text{s}^2$ (during 11 ms)
Torque	$\leq 2 \cdot 10^{-3} \text{ N} \cdot \text{m}$	Vibrations (EN60068-2-6)	$\leq 100 \text{ m} \cdot \text{s}^2$ (10 ... 500 Hz)
Permissible max. speed	12 000 min^{-1}	Torque (shaft pressure screw)	Nominal: 0,3N.m ; break: 0,5N.m
Continuous max. speed	9 000 min^{-1}	Theoretic al mecha nical life time 10^9 turns (F_{axial} / F_{radial})	
Encoder weight (approx.)	0,240 kg	5 N / 10 N : 260	10 N / 20 N : 33

INCREMENTAL ENCODERS, GZM RANGE



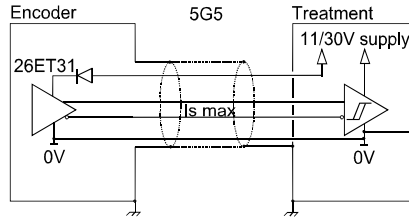
OUTPUT ELECTRONIC / POWER SUPPLY



2G2 electronic (100kHz)

Supply : 5Vdc ± 10%

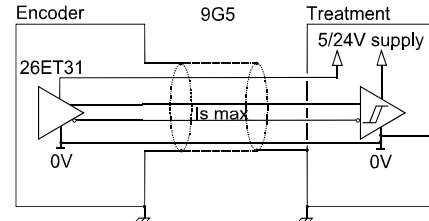
Cons. without load : 100mA max
Current per channel : 40mA max
0 max (I_s=20mA) : V_{ol} = 0,5Vdc
1 min (I_s=20mA) : V_{oh} = 2,5Vdc



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



9G5 electronic (100kHz)

Supply : 5 to 24Vdc

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 of the electronics : 5G5 and 9G5

Protection against inversion of polarity for the electronics : 5G5

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	Connector body

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

	Shaft Ø	Available electronics		Output signals	Resolution	Connectique	Connection orientation
GZM	06 : 6mm	2G2, 5G5, 9G5		9:A,A',B,B',0/ (0 gated A & B)	1 024 max Nota : 2500 with the GHT4	G3 : PVC cable 8 wires	Example : R020: radial cable 2m
	04: 4mm (option)	Supply	Output stage	A:A,A',B,B',0/ (0 gated A)			
	4 : 6.35 mm (option)	2 : 5Vdc	G2 : 5Vdc RS422	N:A,A',B,B',0/ (0 ungated)			
		5 : 11 to 30Vdc	G5 : push-pull				
		9 : 5 to 24Vdc					
Ex: GZM	06 //	5	G5	9 //	1 024 //	G3	R020

Available resolutions : 1 2 4 5 8 10 16 20 24 25 27 30 36 40 50 60 64 90 100 120 125 128 144 150 170 180 200 250 300 360 400 500 512 600 720 800 1000 1024

Made in France