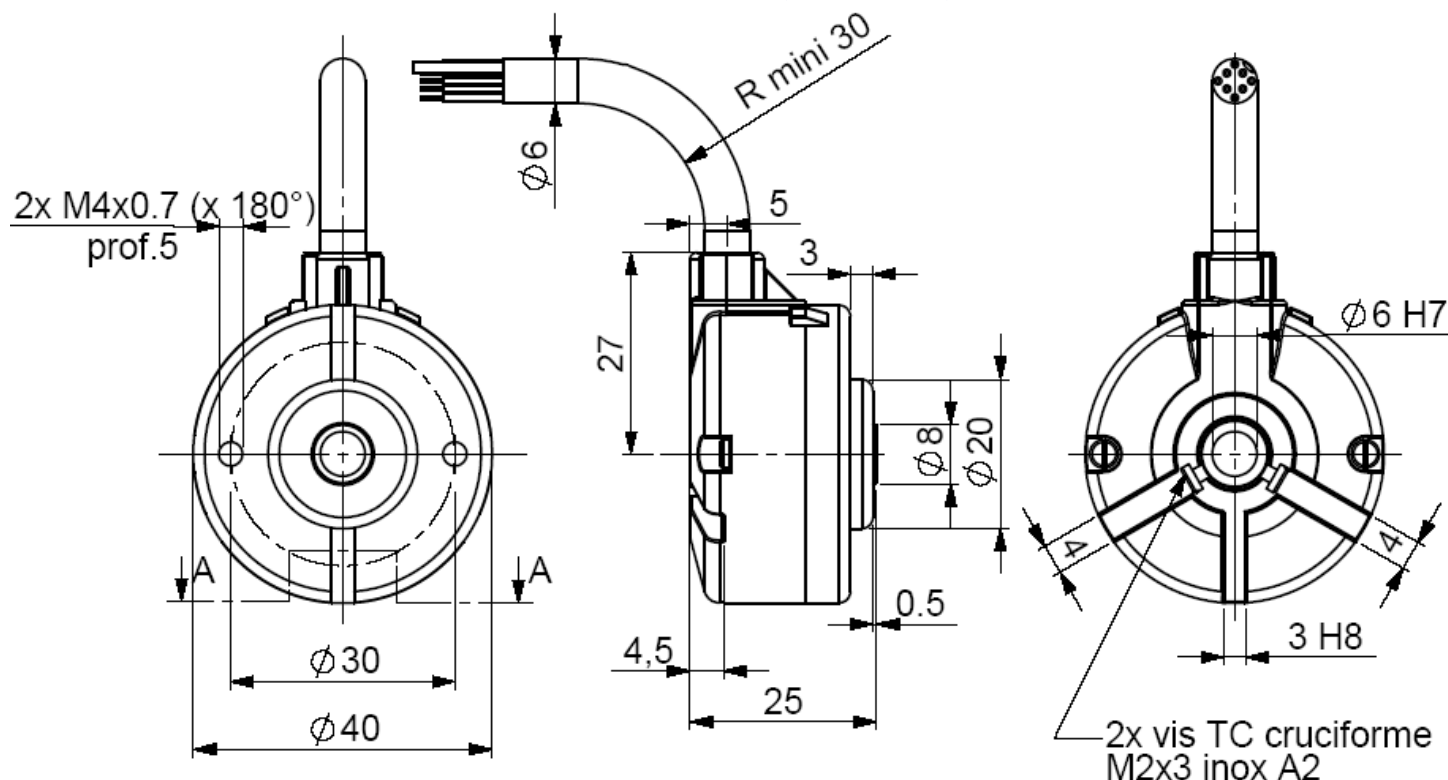


INCREMENTAL ENCODERS, GZ4 RANGE

- 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 turn (GZ4 option, up to 2 500 counts per turn)
- Universal electronics 5 to 24Vdc available
- Application fields: micro-robotics, printing machines, low power DC motors, shears...



GZ4 connection G3R (radial cable)



CHARACTERISTICS

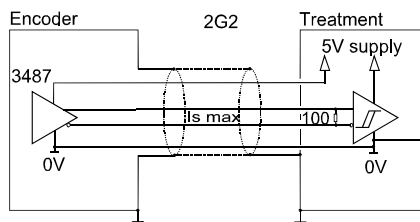
Material	Axe : aluminium
	Capot : zamac
	Embase : zamac
Bearings	688 serie
Maximum loads	Axial : 10 N
	Radial : 20 N
Shaft inertia	$\leq 0,1 \cdot 10^{-6} \text{ kg} \cdot \text{m}^2$
Torque	$\leq 2 \cdot 10^{-3} \text{ N} \cdot \text{m}$
Permissible max. speed	12 000 min ⁻¹
Continuous max. speed	9 000 min ⁻¹
Encoder weight (approx.)	0,240 kg

EMC	EN 50082-2 (1995)
	EN 50081-1 (1992)
Isolation	1 000 Veff
Operating temperature	- 20 ... + 80 °C (encoder T [°])
Storage temperature	- 40 ... + 80 °C
Protection	CE 60529 (1989) IP 52
Shocks (EN60068-2-27)	$\leq 300 \text{ m} \cdot \text{s}^{-2}$ (during 11 ms)
Vibrations (EN60068-2-6)	$\leq 100 \text{ m} \cdot \text{s}^{-2}$ (10 ... 500 Hz)
Torque (shaft pressure screw)	Nominal: 0,3 N.m ; break: 0,5 N.m
Theoretical mechanical life time 10^9 turns ($F_{\text{axial}} / F_{\text{radial}}$)	
5 N / 10 N : 260	10 N / 20 N : 33

INCREMENTAL ENCODERS, GZ4 RANGE



OUTPUT ELECTRONIC / POWER SUPPLY



2G2 electronic (100kHz)

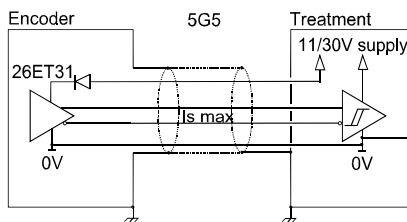
Supply : 5Vdc $\pm 10\%$

Cons. without load : 100mA max

Current per channel : 40mA max

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

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



5G5 electronic (100kHz)

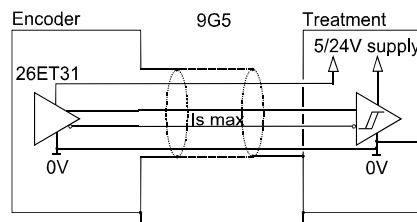
Supply : 11 to 30Vdc

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
GZ4	06 : 6mm	2G2, 5G5, 9G5		9: A, A', B, B', 0, 0/ (0 gated A & B)	1 024 max Nota : 2500 with the GHT4	G3 : PVC cable 8 wires	Example : R20: radial cable 2m
	04: 4mm (option)	Supply	Output stage	A: A, A', B, B', 0, 0/ (0 gated A)			
	14 : 6.35 mm (option)	2 : 5Vdc 5 : 11 to 30Vdc 9 : 5 to 24Vdc	G2 : 5Vdc RS422 G5 : push-pull	N: A, A', B, B', 0, 0/ (0 ungated)			
Ex: GZ4	06 //	5	G5	9 //	1 024 //	G3	R20

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

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