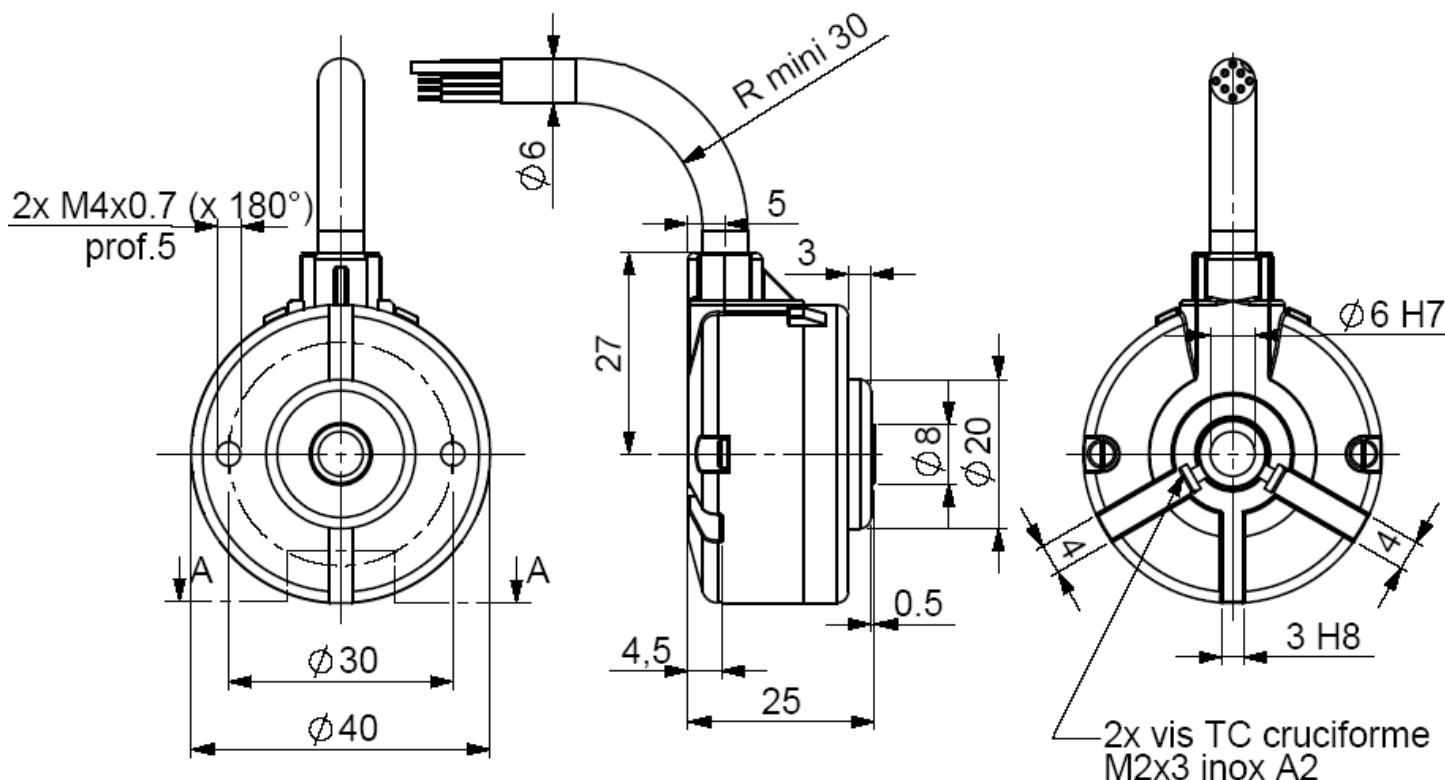


INCREMENTAL ENCODERS, GZ4 RANGE

- 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

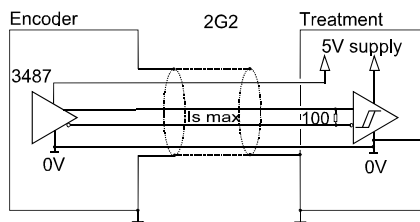
Material	Axe : aluminium
	Capot : zamac
	Embase : zamac
Bearings	688 serie
Maximum loads	Axial : 10 N
	Radial : 20 N
Shaft inertia	$\leq 0,1 \cdot 10^{-6} \text{ kg} \cdot \text{m}^2$
Torque	$\leq 2 \cdot 10^{-3} \text{ N} \cdot \text{m}$
Permissible max. speed	12 000 min ⁻¹
Continuous max. speed	9 000 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	CE60529 (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
Theoretic 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)

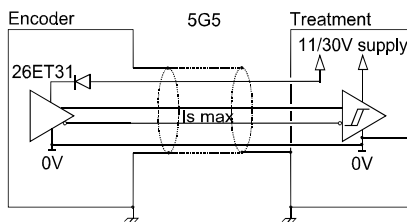
Supply : 5Vdc $\pm 10\%$

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)

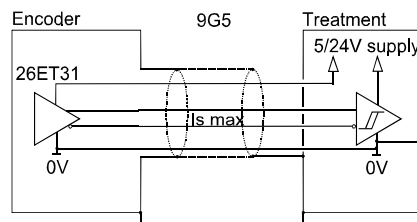
Supply : 11 to 30Vdc

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	G2 : 5Vdc RS422	N: A, A', B, B', 0, 0/ (0 ungated)			
		5 : 11 to 30Vdc	G5 : push-pull				
		9 : 5 to 24Vdc					
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

Made in France

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

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[GZT406-0024-003](#)