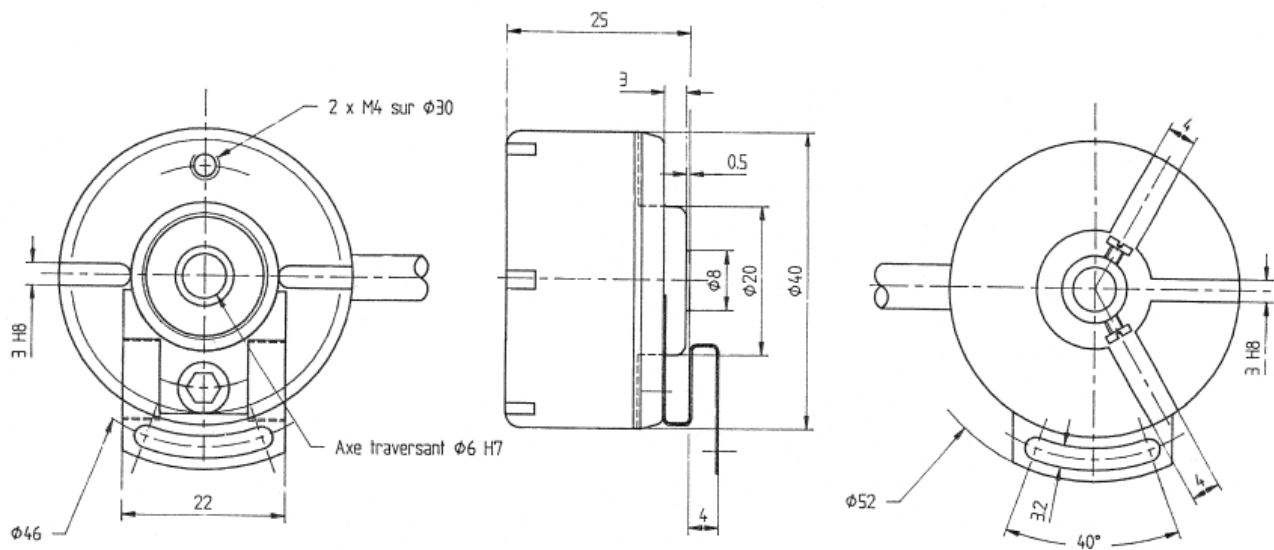


INCREMENTAL ENCODERS, GHT4 RANGE

- 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 industrial encoder with a through shaft.
- Stable and unbreakable Polyfass™, Mylar-Myca composite coded discs (Except 2500 points: glass disc is used).
- Available resolution up to 2 500 counts per turn.
- Universal electronics 5 to 30Vdc available.
- Ideal applications : micro-robotics, printing machines, low power DC motors, shears.



GHT4 connection G3R (radial cable) and 9445/006* anti-rotation system



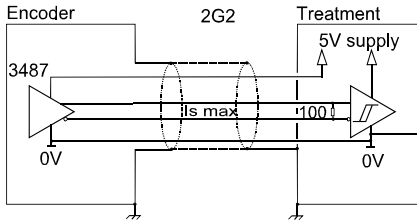
* to be ordered separately

MECHANICAL CHARACTERISTICS

| | | | |
|--------------------------|-----------------------------------------|---------------------------------------------------------------------------------------------------|---------------------------------------------|
| Material | Shaft : aluminum | EMC | EN 50082-2 (1995) |
| | Cover : aluminum | | EN 50081-1 (1992) |
| | Body : aluminum | | |
| Bearings | 688 serie | Isolation | 1 000 Veff |
| Maximum loads | Axial : 10 N | Operating temperature | - 20 ... + 80 °C (encoder T°) |
| | Radial : 20 N | Storage temperature | - 40 ... + 80 °C |
| Shaft inertia | $\leq 0,1 \cdot 10^{-6} \text{ kg.m}^2$ | Protection CEI60529 (1989) | IP 52 |
| Torque | $\leq 2 \cdot 10^{-3} \text{ N.m}$ | Shocks (EN60068-2-27) | $\leq 300 \text{ m.s}^{-2}$ (during 11 ms) |
| Permissible max. speed | 12 000 min ⁻¹ | Vibrations (EN60068-2-6) | $\leq 100 \text{ m.s}^{-2}$ (10 ... 500 Hz) |
| Continuous max. speed | 9 000 min ⁻¹ | Torque (shaft pressure screw) | Nominal : 0,3N.m ; break : 0,5N.m |
| Encoder weight (approx.) | 0,240 kg | Theoretical mechanical lifetime 10 ⁹ turns (F _{axial} / F _{radial}) | |
| | | 5 N / 10 N : 260 | 10 N / 20 N : 33 |

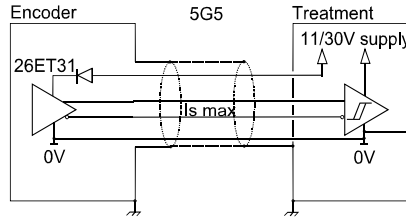
INCREMENTAL ENCODERS, GHT4 RANGE

OUTPUT ELECTRONIC / POWER SUPPLY



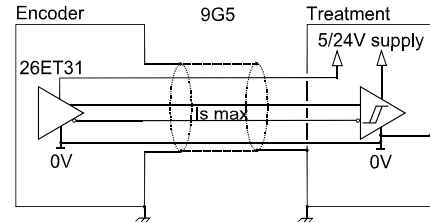
2G2 electronic (100kHz)

Supply : 5Vdc \pm 10%
Cons. without load : 100mA max
Current per channel : 40mA max
0 max (Is=20mA) : $V_{ol} = 0,5Vdc$
1 min (Is=20mA) : $V_{oh} = 2,5Vdc$



5G5 electronic (100kHz)

Supply : 11 to 30Vdc
Cons. without load: 75mA max
Current per channel : 40mA max
0 max (Is=20mA) : $V_{ol} = 0,5Vdc$
1min (Is=20mA) : $V_{oh} = Vcc-3Vdc$



9G5 electronic(100kHz)

Supply : 5 to 24Vdc
Cons. without load : 75mA max
Current per channel : 40mA max
0 max (Is=20mA) : $V_{ol} = 0,5Vdc$
1min (Is=20mA) : $V_{oh} = Vcc-3Vdc$

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 8230/024 | WH white | BN brown | GN green | YE yellow | VT violet | OG orange | BU blue | RD red | General shield |

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

| | Shaft \varnothing | Available electronics | | Output signals | Resolution | Connection | Connection orientation |
|---------|--------------------------|-----------------------|--------------------|-------------------------------------------------------|--------------|-----------------------------|-------------------------------------------|
| GHT4 | 06 : 6mm | 2G2, 5G5, 9G5 | | 9: AA/ BB/ 00/ (0 gated A & B) | 2 500 max | G3 :PVC cable 8 wires | Example : R020: radial cable 2m |
| | 04: 4mm (option) | Supply | Output stage | | | | |
| | 14 : 6.35 mm (option) | 2 : 5Vdc | G2 : 5Vdc RS422 | | | | |
| | | 5 : 11 to 30Vdc | G5 : push-pull | | | | |
| | | 9 : 5 to 24Vdc | | | | | |
| Ex:GHT4 | 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 2500

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