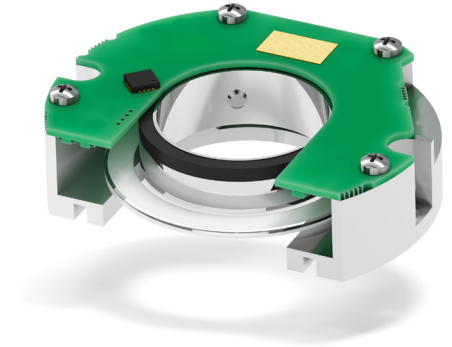


- Absolute kit-encoders
- Precise optical sensing
- Singleturn resolution up to 23 bit
- Electronic multiturn counter
- Incremental sine/cosine track
- Hollow shaft up to Ø24 mm

Applications:

- Robotic joints
- Cobots
- Hollow shaft motors
- Electric actuators
- Electromedical devices



AMM5B

ENVIRONMENTAL SPECIFICATIONS

Shock:	250 g, 6 ms acc. to CEI EN 60068-2-27
Vibrations:	10 g, 5-2000 Hz acc. to CEI EN 60068-2-6
Protection:	IP00
Operating temperature range:	-25°C +100°C (-13°F +212°F) (-25°C +115°C, -13°F +239°F on request)
Storage temperature range:	-25°C +85°C (-13°F +185°F)

MECHANICAL SPECIFICATIONS

Dimensions:	see drawing
Hollow shaft diameter:	Ø 24 mm (smaller on request)
Shaft rotational speed:	10000 rpm max. (mechanical)
Axial shaft run-out:	±50 µm max.
Radial shaft run-out:	20 µm max.
Electrical connections:	PCB connector (connection cable to be ordered separately)
Weight:	encoder module: < 23 g (0,81 oz) (without connection cable) disk hub: < 12 g (0,42 oz) @ Ø24mm hollow shaft

ELECTRICAL SPECIFICATIONS

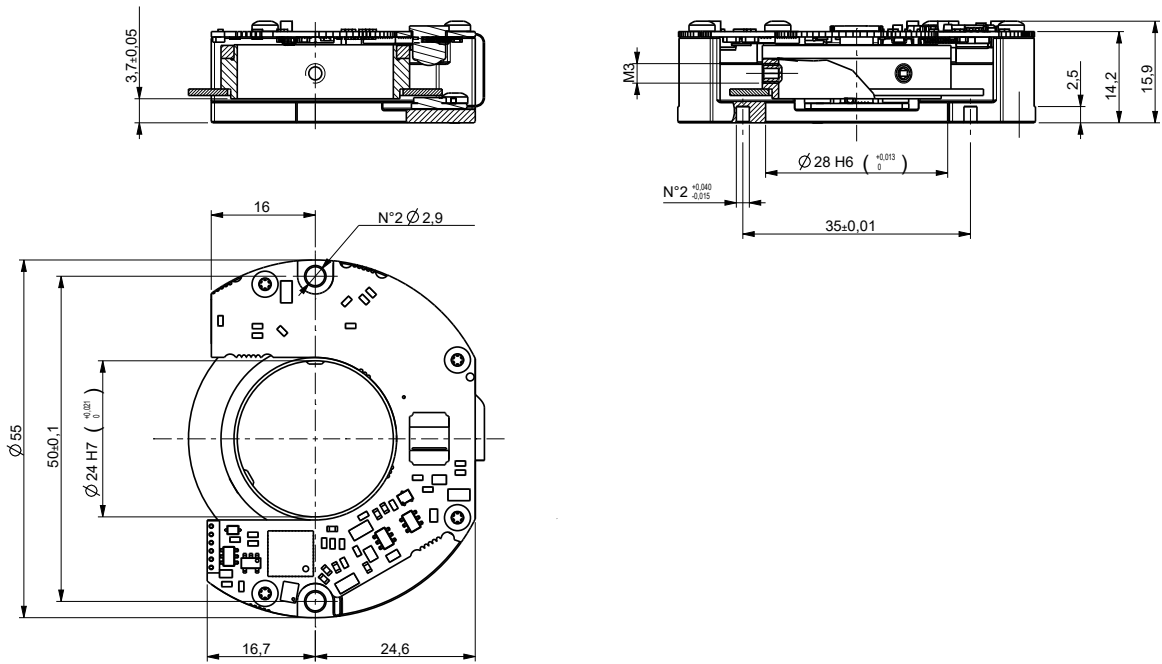
Resolution:	absolute: max. 23 bit (8388608 cpr) x 65536 rev. incremental: 512 PPR AB /AB
Accuracy:	< ±0,02° typ. (± 0,2° max.)
Output circuit:	BiSS-C (clock max. 10MHz) +1Vpp AB /AB sin/cos SSI (clock 100 kHz ÷ 4MHz, T _p = 20 µs) +1Vpp AB /AB sin/cos RS485 (4 Mbit/s max.)
Counting frequency:	200 kHz max. (on 512 PPR incr. track)
Position refresh rate:	5 µs
Power supply:	+5Vdc ± 5% (multiturn counter backup: 3-5Vdc)
Power consumption:	0,5 W (multiturn counter backup: 30 µA max.)
EMC:	electro-magnetic immunity, EN 61000-4-2 EN 61000-4-4

MATERIALS

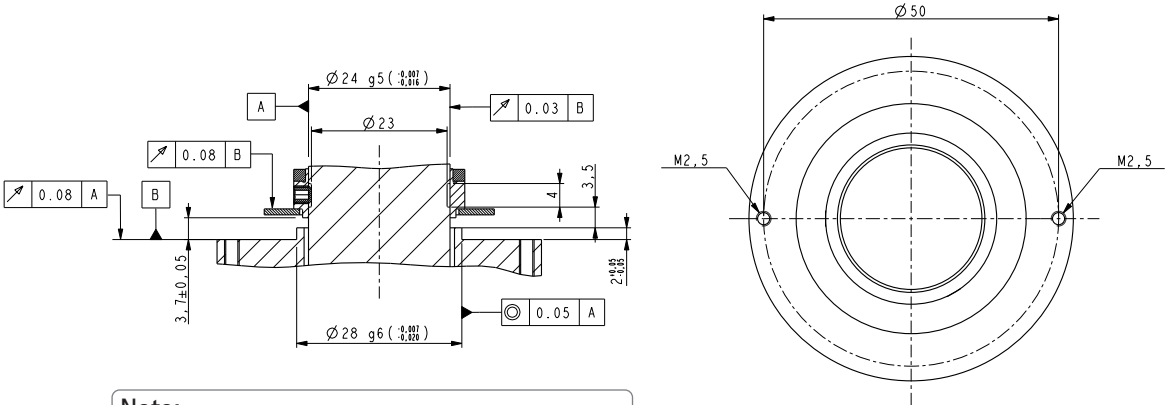
Encoder body:	anticorodal, UNI EN AW-6082
Disk hub:	UNI EN 4305 + glass

ACCESSORIES

EC-DF19-LK-TF12-L010:	Connection cable, 1 m
PF5030:	Disk hub for AMMB-XX-00 (spare part)
PF5017:	Disk hub for AMMB-XX-16 (spare part)
PF5019:	Disk spacer tool



AMM5B



AMM5B - Mounting requirements

Note:
 Precise alignment of the encoder is provided by the flange pilot (Ø28 mm) or by two precision pins which guide the encoder module to the correct position on the mechanical interface.

Order code

AMM5B	-	XX a	-	XX b	-	XXX c	-	XX d	-	XX e	/Sxxx f
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<p>Ⓐ BIT SINGLETURN 17 = 17 bit (131072 cpr) 21 = 21 bit (2097152 cpr) 23 = 23 bit (8388608 cpr)</p>	<p>Ⓑ BIT MULTITURN 00 = singleturn 16 = 65536 turns</p>	<p>Ⓒ INTERFACE SC1 = BiSS-C +1Vpp (5Vdc) BG1 = SSI, binary MSB aligned + 1Vpp (5Vdc) JT1 = RS485 T type (5Vdc)</p>	<p>Ⓓ CONNECTIONS X1 = Hirose flat connector (mating type: DF19-14-1C)</p>	<p>Ⓔ SHAFT DIAMETER 24 = 24 mm</p>	<p>Ⓕ CUSTOM VERSION</p>
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Document release	Date	Description
1.1	April 2024	New order code
1.0	04.02.2022	First release