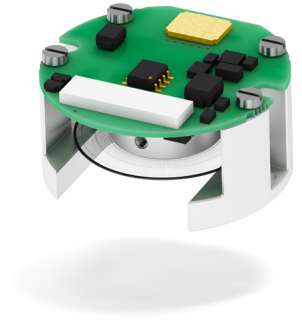




- Absolute frameless encoder
- Precise optical sensing
- Singleturn resolution up to 22 bit
- Electronic multiturn counter
- BiSS-C/SSI interface + incremental track 1Vpp
- High temperature version on request

### Applications:

- Servomotor feedback
- Robotics
- Drones/UAV
- Electromedical devices



AMM36

#### 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 +85°C (-13°F +185°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:	Ø6, 6.35 mm
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:	< 20 g (0,70 oz) (without connection cable)

#### ELECTRICAL SPECIFICATIONS

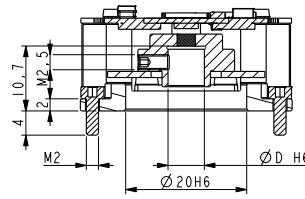
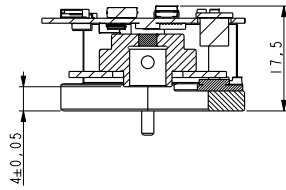
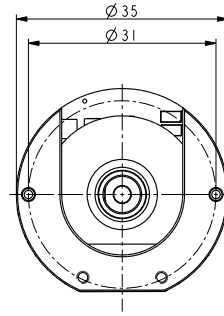
Resolution:	absolute: max. 22 bit (4194304 cpr) x 65536 rev. incremental: 256 PPR AB /AB
Accuracy:	< ±0,05° typ. (with standard disk) < ±0,01° typ. (with glass disk)
Output circuit:	BiSS-C (clock max. 10MHz) + 1Vpp AB /AB sin/cos SSI (clock 100 kHz ÷ 4MHz, T <sub>p</sub> = 20µs) + 1Vpp AB /AB sin/cos RS485 (4 Mbit/s max.)
Counting frequency:	200 kHz max. (on 256 PPR incr. track) position refresh rate 5µs
Power supply:	+5Vdc ± 5% (multiturn counter backup: 3-6Vdc)
Power consumption:	0,5 W (multiturn counter backup: 30 µA max.)
EMC:	electro-magnetic immunity, EN 61000-4-2 EN 61000-4-4

#### MATERIALS

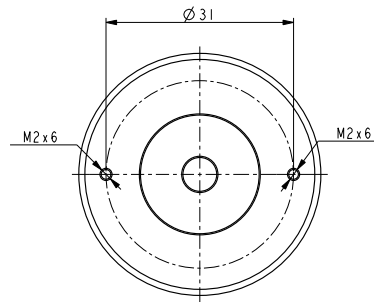
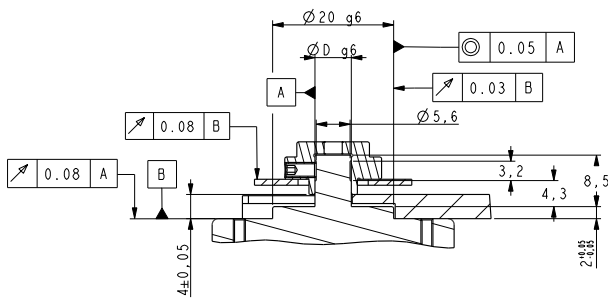
Encoder body:	anticorodal, UNI EN AW-6082
Disk hub:	UNI EN 4305 + Mylar / UNI EN 4305 + glass

#### ACCESSORIES

EC-DF19-LK-TF12-L010:	Connection cable, 1 m
PF5027:	Disk hub for ø 6 mm (spare part)
PF5037:	Disk hub for ø 6.35 mm (spare part)
PF5035:	Glass disk hub ø 6 mm (spare part)
PF5036:	Glass disk hub ø 6.35 mm (spare part)
PF5029:	Disk spacer tool



AMM36



**Note:**

Precise alignment of the encoder is provided by the flange pilot (Ø20 mm) which guides the encoder module to the correct position on the mechanical interface.

AMM36 - Mounting requirements

**Order code**

AMM36	-	XXX Ⓐ	-	XX Ⓑ	-	XXX Ⓒ	-	X Ⓓ	-	XX Ⓔ	/Sxxx Ⓕ
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<p>Ⓐ BIT SINGLETURN</p> <p>17 = 17 bit (131072 cpr)</p> <p>21 = 21 bit (2097152 cpr)</p> <p>22 = 22 bit (4194304 cpr)</p> <p>17G = 17 bit (131072 cpr), glass disk</p> <p>21G = 21 bit (2097152 cpr), glass disk</p> <p>22G = 22 bit (4194304 cpr), glass disk</p>	<p>Ⓑ BIT MULTITURN</p> <p>00 = singleturn</p> <p>16 = 65536 turns</p>	<p>Ⓒ INTERFACE</p> <p>SC1 = BiSS-C + 1Vpp (5Vdc)</p> <p>BG1 = SSI, binary MSB aligned + 1Vpp (5Vdc)</p> <p>JT1 = RS485 T type (5Vdc)</p>	<p>Ⓓ SHAFT DIAMETER</p> <p>06 = 6 mm</p> <p>P6 = 6.35 mm</p>	<p>Ⓔ CONNECTIONS</p> <p>X1 = Hirose flat connector (mating type: DF19-14-1C)</p>	<p>Ⓕ CUSTOM VERSION</p>
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Document release	Date	Description
1.2	April 2024	New order code
1.1	13.01.2023	Accessories and Order code update