

- Miniature optical multi turn encoder
- Resolution up to 1048576 cpr (20 bit) x 4096 turns (12 bit)
- High degree of protection, IP67
- Cable output or M12 inline plug



AMC36 • AM36

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:	IP67, IP65 shaft side
Operating temperature range:	-25°C +85°C (-13°F +185°F)
Storage temperature range:	-40°C +100°C (-40°F +212°F) (98% R.H.without condensation)
Option:	• Operating temperature range: -40°C + 100°C (-40°F +212°F)

MECHANICAL SPECIFICATIONS

Dimensions:	see drawing
Shaft diameter:	Ø 6 mm
Hollow shaft diameter:	Ø 6, 6.35 mm
Shaft loading (axial, radial):	20 N max.
Shaft rotational speed:	6000 rpm
Starting torque (at 20°C):	0,1 Ncm
Bearings life:	10 ⁹ rev. min.
Electrical connections:	M12 inline plug or cable output 1 m (3.3 ft)
Weight:	~ 100 g (3,5 oz)
Option:	• additional cable

ELECTRICAL SPECIFICATIONS

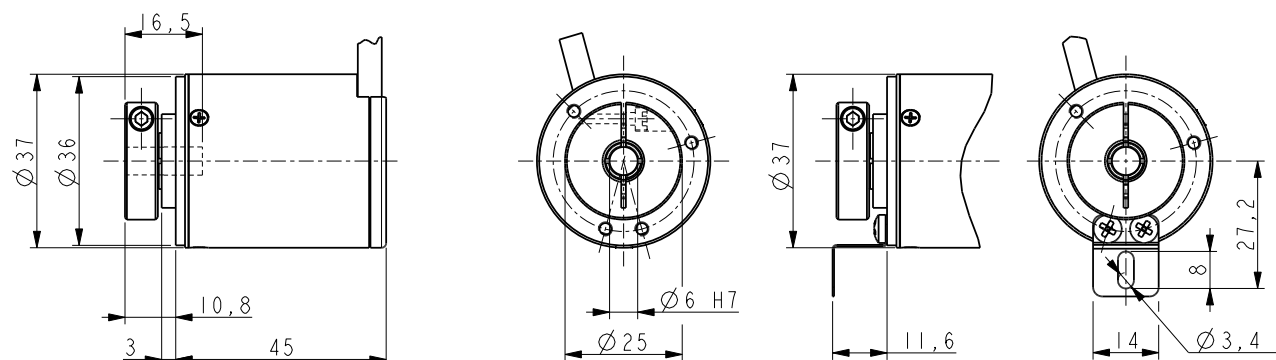
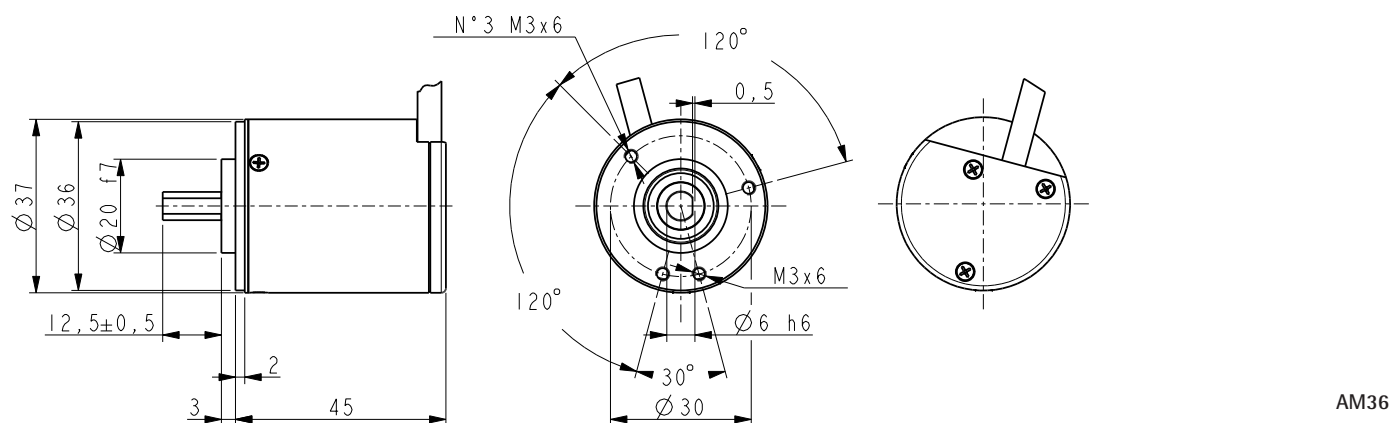
Resolution:	65536 cpr x 4096 turns, 524288 cpr x 4096 turns, 1048576 cpr x 4096 turns
Accuracy:	± 0,01°
Output circuits:	SSI (RS422), clock rate < 4 MHz BiSS-C, clock rate < 10 MHz
Output code:	Gray, Binary
Counting frequency:	> 100 kHz
Power supply:	+5V±5%, +5Vdc +30Vdc
Power consumption:	0,5 W
Protection:	against inversion of polarity and short-circuit
EMC:	electro-magnetic immunity, according to EN 61000-4-2 EN 61000-4-4
Functions:	• Counting direction (input) • Zero setting/Preset (input)

MATERIALS

Flange:	anticorodal, UNI EN AW-6082
Housing:	anticorodal, UNI EN AW-6082
Bearings:	ABEC 5
Shaft:	stainless steel, non magnetic, UNI EN 4305

ACCESSORIES

PAN:	flexible couplings
EM12F8:	M12 8 pin mating connector



Order code

AM36	-	XX-XX	-	XXX	-	XX	-	X	X	-	X	XXXX	/Sxxx
AMC36		(a)		(b)		(c)		(d)	(e)		(f)	(g)	(h)

(a) RESOLUTION (BIT SINGLETURN-BIT MULTITURN)

16-12 = 16 x 12 bit (65536 cpr x 4096 turns)
 19-12 = 19 x 12 bit (524288 cpr x 4096 turns)
 20-12 = 20 x 12 bit (1048576 cpr x 4096 turns)

(b) INTERFACE / POWER SUPPLY

BG1 = SSI, Binary MSB aligned, +5Vdc ±5%
 BG2 = SSI, Binary MSB aligned, +10+30Vdc
 GG1 = SSI, Gray MSB aligned, +5Vdc ±5%
 GG2 = SSI, Gray MSB aligned, +10+30Vdc
 SC1 = BiSS-C, +5Vdc ±5%
 SC2 = BiSS-C, +10+30Vdc
 SC4 = BiSS-C, +5Vdc+30Vdc

(c) SHAFT DIAMETER

O6 = 6 mm
 P6 = 6.35 mm (only for AMC36)

(d) PROTECTION

P = IP67, IP65 shaft side

(e) OPERATING TEMPERATURE RANGE

T = -25°C +85°C (-13°F +185°F) standard
 K = -40°C +100°C (-40°F +212°F)

(f) CONNECTION POSITION

R = radial

(g) CONNECTION TYPE & CABLE LENGTH

L010 = cable output 1 m (standard)
 Lxx0 = cable output x m (max. length 10 m)
 L100 = cable output 10 m
 M005 = 0,5 m cable + M12 8 pin inline plug
 M020 = 2 m cable + M12 8 pin inline plug

(h) CUSTOM VERSION

Document release	Date	Description
1.1	18.03.2025	Highlights update (resolution 20x12)
1.0	9.02.2024	New order code