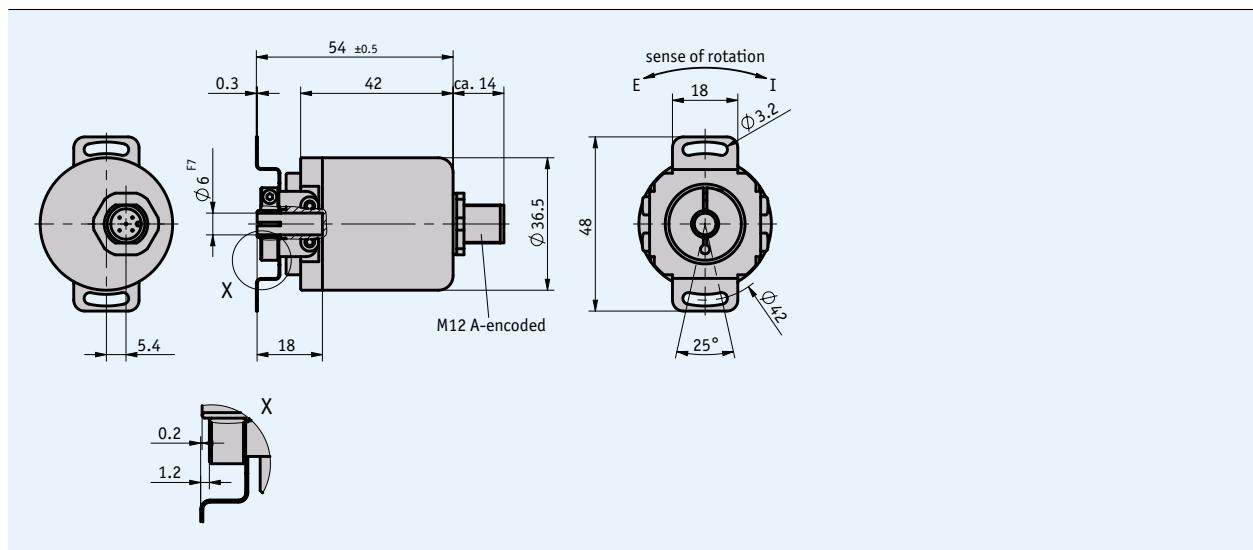


### Profile

- Absolute analog encoder
- 12 Bit (4096) resolution above the measuring range
- Operating temperature up to -40 °C
- Voltage (0 ... 10 V)/current (4 ... 20 mA) outputs
- Programmable measuring range via teach-in function with external inputs
- Hollow shaft with Ø6 mm



2.1

### Mechanical data

Feature	Technical data	Additional information
Max. speed	≤12000 rpm	
Shaft moment of inertia	≤20 gcm <sup>2</sup>	
Starting torque	≤2 Ncm	at 25 °C
Shaft load rating	radial 80 N axial 20 N	
Weight	~0.15 kg	
Protection category	housing IP65, shaft IP54	
Operating temperature	-40 ... +85 °C	
Storage temperature	-40 ... +85 °C	
Shock resistance	≤100 g/6 ms	according to DIN EN 60068-2-27
Vibration resistance	≤10 g (10 ... 1000 Hz)	according to DIN EN 60068-2-6
Humidity	98%	condensation inadmissible
Shaft	stainless steel	
Housing	aluminium and coated steel	

# Absolute encoder AH36M

## Metal housing with hollow shaft

### Electrical data

#### ■ Analog outputs

Feature	4 ... 20 mA (MWI)	0 ... 10 V (MWU)	Additional
Operating voltage	15 ... 30 V DC	12 ... 30 V DC	
Load resistance	<500 Ω, at UB ≥ 15 V DC	<10 kΩ, at UB ≥ 12 V DC	
Linearity	0.15 %	0.15 %	
Starting time	<1 s	<1 s	
Settling time	80 ms	80 ms	
Power consumption (typ.)	50 mA	50 mA	

#### ■ Encoder data

Feature	Technical data	Additional information
Resolution	12 bit	above the programmed measuring range
Smallest measuring range	22.5°	
Accuracy Singleturn	±0.35°	
Resolution singleturn	12 bit	
Largest measuring range	65 536 revolution	16 revolution factory setting, only multturn

### 2.1 Pin assignment

Signal	PIN
I <sub>out</sub> /U <sub>out</sub>	1
+UB	2
GND	3
Set 2	4
Set 1	5

### Order

#### ■ Order table

Feature	Order text	Specification	Additional information
Analog output	MWI MWU A	4 ... 20 mA 0 ... 10 V	
Measuring range	M B S	multiturn singleturn	measuring range max. 360°

#### ■ Order code

AH36M -   -   - M12  
A      B

**Scope of delivery:** AH36M, User information

**Accessories:**

Mating connectors  
Electronic display MA50

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**Additional information:**

General information and areas of application

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