

Code <b>ST02</b>	Project <b>E11-A</b>	Release <b>A</b>	<b>TECHNICAL DATASHEET</b>
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## ABSOLUTE OPTICAL ENCODER AEN536 (Analog)

### GENERAL FEATURES

- Absolute optical encoder (singleturn or multiturn).
- Output protocol: **Analog** (0 ÷ 20 mA, 4 ÷ 20 mA, 0 ÷ 10 V).
- Aluminium flange and housing.
- Radial or axial output with connector M23 12 Pin.



### MECHANICAL AND ELECTRICAL CHARACTERISTICS

<b>MECHANICAL</b> <ul style="list-style-type: none"> <li>• Round flange, with centering Ø 36 mm.</li> <li>• Aluminium housing.</li> <li>• Stainless steel shaft.</li> <li>• Ball bearings with special high-sealed screens.</li> <li>• High protection even in harsh environmental conditions.</li> </ul> <b>ELECTRICAL</b> <ul style="list-style-type: none"> <li>• Output data: direction.</li> </ul>	<b>Cod. AEN536</b>	
	<b>Resolution</b>	10-12 Bit Singleturn up to 12 Bit Multiturn
	<b>Max. rotating speed</b>	6000 rpm
	<b>Max. shaft load</b>	40 N (axial) - 60 N (radial)
	<b>Shaft diameter (mm)</b>	Ø 6 – Ø 10
	<b>Operating temperature</b>	-10 °C ÷ 70 °C
	<b>Storage temperature</b>	-10 °C ÷ 70 °C
	<b>Vibration resistance (EN 60068-2-6)</b>	100 m/s <sup>2</sup> (10 ÷ 2000 Hz)
	<b>Shock resistance (EN 60068-2-27)</b>	1000 m/s <sup>2</sup> (6 ms)
	<b>Protection class (EN 60529)</b>	IP 64 standard IP 67 optional
	<b>Torque</b>	≤ 2 Ncm
	<b>Moment of inertia</b>	30 gcm <sup>2</sup>
	<b>Power supply</b>	10 ÷ 30 V
	<b>Current consumption</b>	100 mA (ST), 150 mA (MT)
	<b>Interface / Output</b>	Analog (0 ÷ 20 mA, 4 ÷ 20 mA, 0 ÷ 10 V)
<b>Configurability</b>	Direction / no. revolutions	
<b>Electrical connections</b>	see related table	
<b>Weight</b>	400 g (ST), 500 g (MT)	

### ORDERING CODE

MODEL	TYPE / OUTPUT	RESOL. Bit (MT)	RESOL. Bit (ST)	POWER SUPPLY	Ø SHAFT	CONNECTOR / CABLE	SIGNAL	CONNECTION	OPTIONS
<b>AEN536</b>	<b>S R</b>	<b>00</b>	<b>12</b>	<b>1030</b>	<b>D10</b>	<b>M02</b>	<b>A3</b>	<b>C</b>	<b>V2</b>

**S** = singleturn    **00** = if ST    **10** = 10 Bit    **1030** = 10÷30 V    **D06** = ø6 mm    **CG** = M23 12 Pin    **A1** = 0÷20 mA    **C** = cable    **No cod.** = standard  
**M** = multiturn    **12** = 12 Bit\*    **12** = 12 Bit    **D10** = ø10 mm    **Mnn** = cable length    **A2** = 4÷20 mA    **n** = connection    **V2** = IP 67  
**R** = radial    **A** = axial    in m    **A3** = 0÷10 V    number

**M02** = 2 m (standard)

\* Multiturn resolution from 1 to 12 Bit

**Example**  **ABSOLUTE OPTICAL ENCODER AEN536 SR 0012 1030 D10 M02 A3 C V2**

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### CABLE AND ELECTRICAL CONNECTIONS

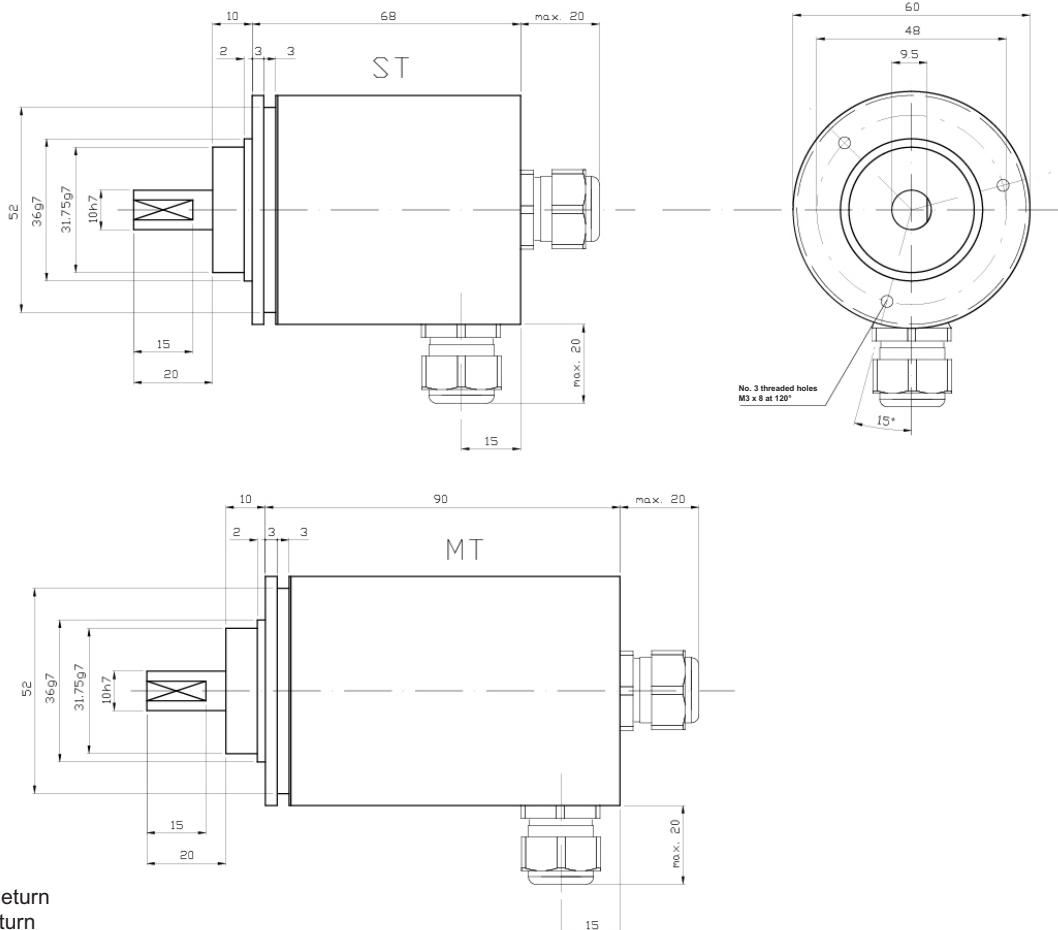
Encoder supplied with M23 12 Pin connector

CONNECTION	
N. Pin	Signals
1	0 V
2	Vcc
3 (A1, A2)	I+
4 (A1, A2)	I-
5 (A3)	V+
6 (A3)	V-
7	DIR
Shield	Shield

Encoder supplied with cable

CONNECTION (A1, A2, A3)		
Color	A1, A2	A3
Yellow	0 V	0 V
White	Vcc	Vcc
Brown	I+	V+
Green	I-	V-
Grey	DIR	DIR
SCH	Shield	Shield

### DIMENSIONS



### WHAT TO AVOID

- Any mechanical working (cutting, drilling, milling, etc.).
- Any modification of the encoder body or shaft.
- Any improper use, not complying with the technical instructions provided by the Manufacturer.
- External shocks or stresses.

