

### MAIN FEATURES

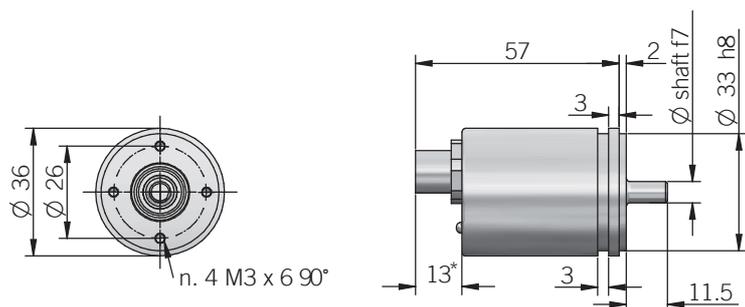
Industry standard multiturn absolute encoder for factory automation applications.

- Magnetic sensor technology without contact (magnetic ASIC + Energy Harvesting)
- Sturdy construction thanks to separated chambers
- Power supply up to +32 VDC with CANopen interface
- Cable or M12 connector axial output
- 6 mm diameter solid shaft
- Mounting by synchronous flange



ORDERING CODE	AAM	36B	24 / 14	B	10/30	CNP	6	X	X	M12A	.162	+XXX
<b>SERIES</b> magnetic multiturn absolute encoder series <b>AAM</b>												
<b>MODEL</b> synchronous flange ø 33 mm <b>36B</b>												
<b>MULTITURN RESOLUTION</b> bit <b>24</b>												
<b>SINGLETURN RESOLUTION</b> bit <b>14</b>												
<b>CODE TYPE</b> binary <b>B</b>												
<b>POWER SUPPLY</b> 10 ... 30 V DC <b>10/30</b>												
<b>ELECTRICAL INTERFACE</b> CANopen <b>CNP</b>												
<b>SHAFT DIAMETER</b> mm <b>6</b>												
<b>ENCLOSURE RATING</b> IP67 cover side / IP 65 shaft side <b>X</b>												
<b>OPTIONS</b> to be reported <b>X</b>												
<b>OUTPUT TYPE</b> axial cable (standard length 2 m) <b>PA2</b> 5 pin M12 axial male connector <b>M12A</b>												
<b>MATING CONNECTOR</b> mating connector not included <b>.162</b> to be reported only with connector output (eg. M12A.162), for mating connector see Accessories												
<b>VARIANT</b> custom version <b>XXX</b>												

## AAM 36B



\* with cable output + 7mm

 recommended mating shaft tolerance H7  
 dimensions in mm

## ELECTRICAL SPECIFICATIONS

<b>Multiturn resolution</b>	24 bit programmable during commissioning
<b>Singleturn resolution</b>	14 bit programmable during commissioning
<b>Power supply<sup>1</sup></b>	+10 ... 32 V DC (with reverse polarity protection)
<b>Power draw without load</b>	0,5 W
<b>Electrical interface<sup>2</sup></b>	CAN
<b>Protocol</b>	CANopen Communication profile CiA 301 Encoder profile CiA 406 V3.2 class C2
<b>Node number</b>	1 ... 127 (default 127) programmable during commissioning
<b>Baud rate</b>	10 kBaud ... 1 Mbaud with automatic bit rate detection
<b>LSS protocol</b>	according to CiA 305
<b>CAN transmission modes</b>	programmable (Synchronous and Asynchronous)
<b>LED error messages</b>	according to CiA 303-3
<b>Code type</b>	binary
<b>Position update rate</b>	≤ 600 μs
<b>Start-up time</b>	< 1,5 s
<b>Accuracy</b>	± 0,35°
<b>Electromagnetic compatibility</b>	according to 2014/30/EU directive
<b>RoHS</b>	according to 2011/65/EU directive

## CONNECTIONS

Function	5 pin M12
+ V DC	2
0 V	3
CAN_H	4
CAN_L	5
CAN_GND (shield)	1
⊥	shield connected to encoder housing

## MECHANICAL SPECIFICATION

<b>Shaft diameter</b>	∅ 6 mm
<b>Enclosure rating IEC 60529</b>	IP 67 cover side / IP65 shaft side
<b>Max rotation speed</b>	12000 rpm
<b>Max shaft load<sup>3</sup></b>	80 N radial / 50 N axial
<b>Shock</b>	100 G, 6 ms (IEC 60068-2-27)
<b>Vibrations</b>	30 G, 10 ... 2000 Hz (IEC 60068-2-6)
<b>Starting torque (at +20°C / +68°F)</b>	< 0,002 Nm (0,28 Ozin)
<b>Bearing stage material</b>	aluminium
<b>Shaft material</b>	stainless steel
<b>Housing material</b>	chromium plated steel
<b>Bearings</b>	2 ball bearings
<b>Bearings life</b>	10 <sup>9</sup> revolutions
<b>Operating temperature<sup>4,5</sup></b>	-40° ... +85°C (-40° ... +185°F)
<b>Storage temperature<sup>5</sup></b>	-40° ... +100°C (-40° ... +212°F)
<b>Weight</b>	110 g (3,88 oz) approx

<sup>1</sup> as measured at the transducer without cable influences

<sup>2</sup> for further details refer to TECHNICAL BASICS section

<sup>3</sup> maximum load for static usage

<sup>4</sup> measured on the transducer flange

<sup>5</sup> condensation not allowed

 M12 connector(5 pin)  
 M12 A coded  
 solder side view FV
