

MAIN FEATURES

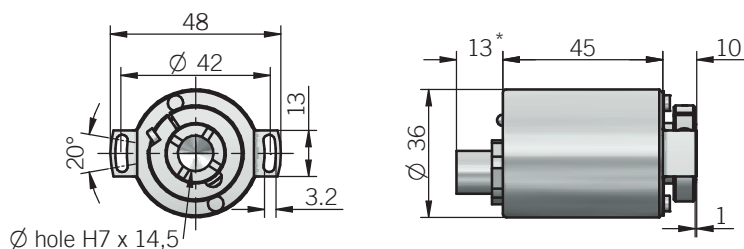
Industry standard multiturn absolute encoder for factory automation applications.

- 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
- 8 or 10 mm blind hollow shaft
- Mounting by stator coupling



ORDERING CODE	AAM	36F	24 / 14	B	10/30	CNP	10	X	X	M12A	.162	+XXX
SERIES magnetic multiturn absolute encoder series AAM												
MODEL blind hollow shaft with stator coupling 36F												
MULTITURN RESOLUTION bit 24												
SINGLETURN RESOLUTION bit 14												
CODE TYPE binary B												
POWER SUPPLY 10 ... 30 V DC 10/30												
ELECTRICAL INTERFACE CANopen CNP												
BORE DIAMETER mm 8 mm 10												
ENCLOSURE RATING IP67 cover side / IP 65 shaft side X												
OPTIONS to be reported X												
OUTPUT TYPE axial cable (standard length 2 m) PA2 5 pin M12 axial plug connector M12A												
SOCKET socket not included .162 to be reported only with connector output (eg. M12A.162), for socket see Accessories												
VARIANT custom version XXX												

AAM 36F



* with cable output + 7mm

 recommended mating shaft tolerance g6
 dimensions in mm

ELECTRICAL SPECIFICATIONS

Multiturn resolution	24 bit programmable during commissioning
Singleturn resolution	14 bit programmable during commissioning
Power supply¹	10 ... 32 V DC (reverse polarity protection)
Power draw without load	0,5 W
Electrical interface²	CAN
Protocol	CANopen Communication profile CiA 301 Encoder profile CiA 406 V3.2 class C2
Node number	1 ... 127 (default 127) programmable during commissioning
Baud rate	10 kBaud ... 1 Mbaud with automatic bit rate detection
LSS protocol	according to CiA 305
CAN transmission modes	programmable (Synchronous and Asynchronous)
LED error messages	according to CiA 303-3
Code type	binary
Position update rate	≤ 600 μs
Start-up time	< 1,5 s
Accuracy	± 0,35°
Mean time to dangerous failure (MTTF_d)³ according to EN ISO 13849-1	1000 years
Mission time (T_m)³	20 years
Diagnostic coverage (DC)³	0%
Cable type	shielded - fixed or flexible installation conductors section 0,25 mm ² / AWG 24 bending radius min 35 mm (fixed installation) bending radius min 95 mm (flexible installation)
Electromagnetic compatibility	according to 2014/30/EU directive
RoHS	according to 2011/65/EU directive

¹ as measured at the transducer without cable influences

² for further details refer to OUTPUT LEVELS on TECHNICAL BASICS section

³ this product is not a safety component, for further details refer to TECHNICAL BASICS section

⁴ maximum load for static usage

⁵ measured on the transducer flange

⁶ condensation not allowed

MECHANICAL SPECIFICATION

Bore diameter	∅ 8 / 10 mm
Enclosure rating IEC 60529	IP 67 cover side / IP65 shaft side
Max rotation speed	6000 rpm
Max shaft load³	80 N (17,98 lbs) radial / 50 N (11,24 lbs) axial
Shock	100 G, 6 ms (IEC 60068-2-27)
Vibrations	30 G, 10 ... 2000 Hz (IEC 60068-2-6)
Starting torque (at +20°C / +68°F)	< 0,002 Nm (0,28 Ozin)
Bearing stage material	aluminium
Shaft material	stainless steel
Housing material	chromium plated steel
Bearings	2 ball bearings
Bearings life	10 ⁹ revolutions
Operating temperature^{4,5}	-40° ... +85°C (-40° ... +185°F)
Storage temperature⁵	-40° ... +100°C (-40° ... +212°F)
Weight	110 g (3,88 oz) approx

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

 M12 connector (5 pin)
 M12 A coded
 front view
