

MAIN FEATURES

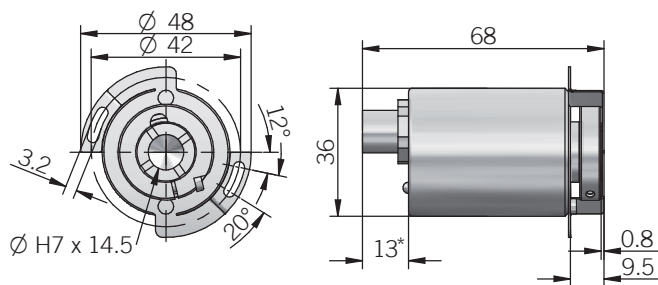
Industry standard multiturn absolute encoder for factory automation applications.

- 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 male connector M12A | | | | | | | | | | | | |
| MATING CONNECTOR mating connector not included .162 to be reported only with connector output (eg. M12A.162), for mating connector 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 (with 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° |
| Electromagnetic compatibility | according to 2014/30/EU directive |
| RoHS | 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

| | |
|--|--------------------------------------|
| 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 radial / 50 N 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 |

¹ as measured at the transducer without cable influences

² for further details refer to TECHNICAL BASICS section

³ maximum load for static usage

⁴ measured on the transducer flange

⁵ condensation not allowed

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