

MAIN FEATURES

Industry standard multiturn absolute encoder for factory automation applications.

- Magnetic sensor technology without contact (magnetic ASIC + Energy Harvesting)
- Sturdy construction
- Power supply up to +32 VDC with CANopen interface
- Radial M12 connector output
- 10 mm solid shaft
- Mounting by clamping flange



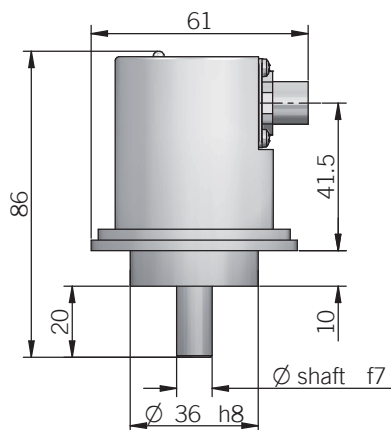
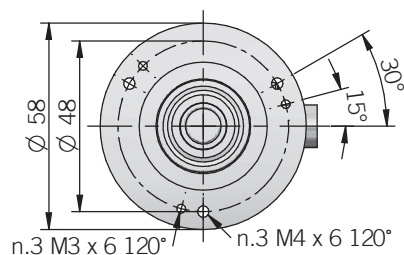
ORDERING CODE	AAM	58C	16 / 16	B	10/30	CNP	10	S	X	M12	R	. 162
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SERIES magnetic multiturn absolute encoder series AAM												
MODEL clamping flange \varnothing 36 mm 58C												
MULTITURN RESOLUTION bit 16												
SINGLETURN RESOLUTION bit 16												
CODE TYPE binary B												
POWER SUPPLY 10 ... 30 V DC 10/30												
ELECTRICAL INTERFACE CANopen CNP												
SHAFT DIAMETER mm 10												
ENCLOSURE RATING IP67 S												
OPTIONS to be reported X												
OUTPUT TYPE M12 5 pin connector M12												
DIRECTION TYPE radial R												
VARIANTE without mating connector 162												

PRELIMINARY

ORDERING CODE	
Description	P/N
AAM 58C 16 / 16 B 10/30 CNP 10 S X M12 R . 162	92560001

58C



dimensions in mm

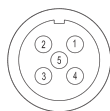
ELECTRICAL SPECIFICATIONS

Multiturn resolution	16 bit programmable during commissioning
Singleturn resolution	16 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 2015/863/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

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



MECHANICAL SPECIFICATION

Shaft diameter	∅ 10 mm
Enclosure rating IEC 60529	IP 67
Max rotation speed	8000 rpm
Max shaft load³	220 N radial / 120 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	200 g (7,05 oz) approx

¹ as measured at the transducer without cable influences

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

³ maximum load for static usage

⁴ measured on the transducer flange

⁵ condensation not allowed

PRELIMINARY