

AAM 58 B / C PROFINET

SOLID SHAFT MULTITURN ABSOLUTE ENCODER



Specifications

Industry standard multiturn absolute encoder for factory automation applications.

- Solid shaft diameter up to 10 mm
- OptoASIC + gears (Optical sensor technology)
- Mounting by synchronous or clamping flange
- 13 bit single turn + 12 bit multiturn (25 bit total resolution)
- Power supply up to +30 VDC with Profinet IO as electronic interface
- Operating temperature -40° ... +80°C (-40° ... +176°F)
- M12 connectors for fast setup
- Intelligent status leds

ORDERING CODE	AAM	58B	12	/	13	B	10/30	PFN	6	X	X	M12R	.162
SERIES absolute multiurn encoder	AAM												
MODEL synchronous flange ø 50 mm clamping flange ø 36 mm		58B 58C											
MULTITURN RESOLUTION bit			12										
SINGLETURN RESOLUTION bit					13								
CODE TYPE binary						B							
POWER SUPPLY 10 ... 30 V DC							10/30						
ELECTRONIC INTERFACE PROFINET IO								PFN					
SHAFT DIAMETER (mod. 58B) mm (mod. 58C) mm									6 10				
ENCLOSURE RATING IP									65	X			
OPTIONS to be reported											X		
OUTPUT TYPE radial M12 connectors												M12R	
VARIANT without mating connectors													162

ELECTRICAL SPECIFICATIONS

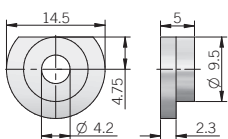
Multiturn resolution	1 ... 12 bit <i>programmabile during commissioning</i>
Singleturn resolution	1 ... 13 bit <i>programmabile during commissioning</i>
Power supply	10 ... 30 V DC (with reverse polarity protection)
Current consumption without load	< 200 mA
Electronic interface	PROFINET IO RT Class 1 / Conformance Class B
Encoder profile	V 4.1 - Application Class 3
Code type	binary
Max bus frequency	100 Mbit/s
Cycle time	≤ 1 ms
Accuracy	± 0,04°
Electromagnetic compatibility	according to 2014/30/EU directive

MECHANICAL SPECIFICATIONS

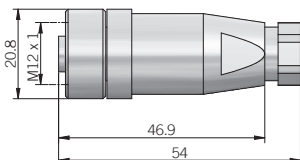
Solid shaft diameter	∅ 6 mm (mod. 58B) ∅ 10 mm (mod. 58C)
Enclosure rating	IP 65 (IEC 60529)
Max rotation speed	6000 rpm
Max shaft load	80 N radial / 40 N axial
Starting torque (at +20°C / 68°F)	< 0,05 Nm
Moment of inertia	approx 1,8 x 10 ⁻⁶ kgm ²
Shock	50 G, 11 ms (IEC 60068-2-27)
Vibrations	10 G, 10 ... 2000 Hz (IEC 60068-2-6)
Bearings life	10 ⁹ revolutions
Bearings	n° 2 ball bearings
Shaft material	1.4305 / AISI 303 stainless steel
Body / cover material	EN-AW 2011 aluminium
Housing material	painted aluminium
Operating temperature	-40° ... +80°C (-40° ... +176°F)
Storage temperature	-40° ... +85°C (-40° ... +185°F)
Weight	600 g (21 oz)

ACCESSORIES

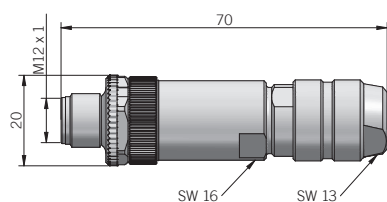
set n.3 fixing clamps for model 58 B
P/N 94080001



M12 female connector for power supply (POWER)
P/N 22030091



M12 male connector for I/O (PORT 1 / 2)
P/N 22030152



CONNECTIONS

	Pin	Function
PORT 1 Connector	1	Tx D+
	2	Rx D+
	3	Tx D-
	4	Rx D-
POWER connector	1	+Vdc
	2	/
	3	0V
	4	/
PORT 2 Connector	1	Tx D+
	2	Rx D+
	3	Tx D-
	4	Rx D-



PORT 1 POWER PORT 2

PORT 1 / 2 connector
M12 D-coded (4-pin)
(front view)

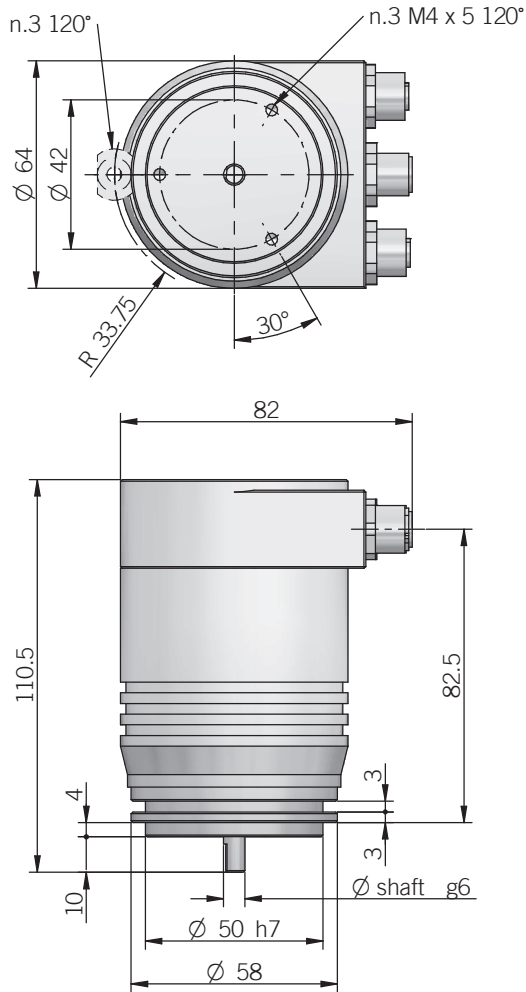


POWER connector
M12 A-coded
(front view)



AAM 58 B

fixing clamps not included



AAM 58 C

