

MAIN FEATURES

Industry standard multiturn absolute encoder for factory automation applications.

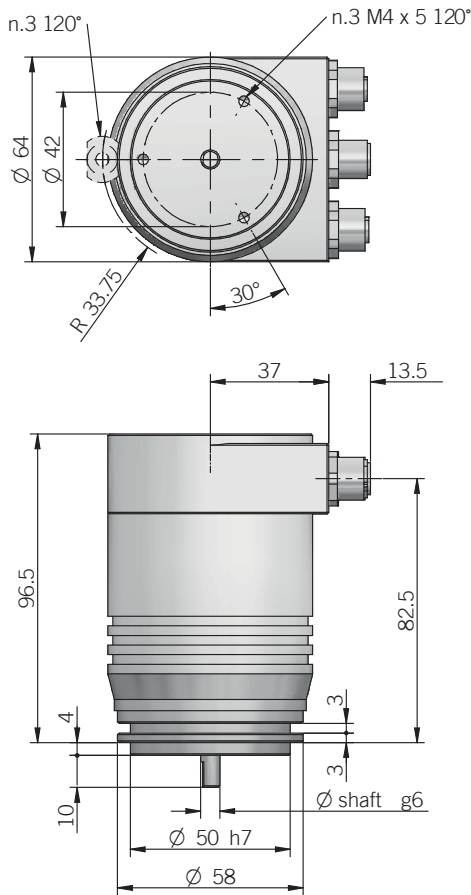
- Optical sensor technology (OptoASIC + gears)
- 25 bit total resolution (13 bit single turn + 12 bit multiturn)
- Power supply up to +30 V DC with Profinet IO as electrical interface
- Intelligent status leds
- M12 connector for fast setup
- Solid shaft diameter up to 10 mm
- Mounting by synchronous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



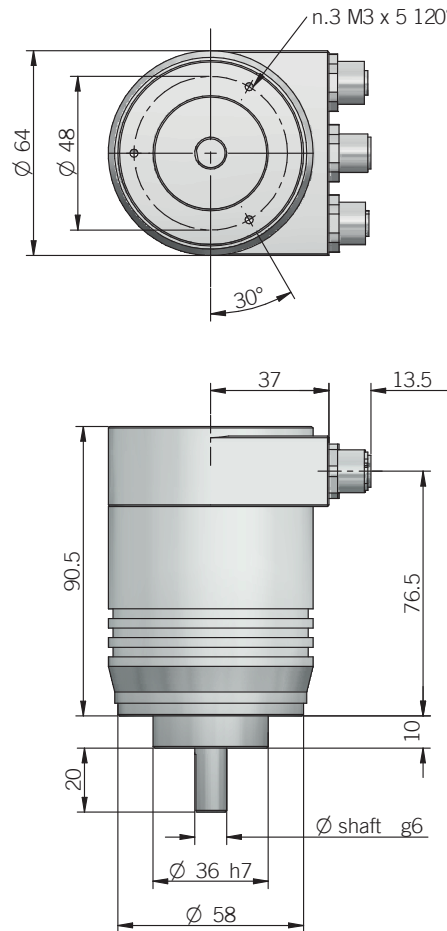
ORDERING CODE	AAM	58B	12	/	13	B	10/30	PFN	6	X	X	M12R	.162
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SERIES absolute multiurn encoder AAM													
MODEL synchronous flange ø 50 mm 58B clamping flange ø 36 mm 58C													
MULTITURN RESOLUTION bit 12													
SINGLETURN RESOLUTION bit 13													
CODE TYPE binary B													
POWER SUPPLY 10 ... 30 V DC 10/30													
ELECTRICAL INTERFACE PROFINET IO PFN													
SHAFT DIAMETER (mod. 58B) mm 6 (mod. 58C) mm 10													
ENCLOSURE RATING IP 65 X													
OPTIONS to be reported X													
OUTPUT TYPE radial M12 connectors M12R													
SOCKETS sockets not included .162 for sockets see Accessories													

58B



58C



fixing clamps not included, please refer to Accessories
recommended mating shaft tolerance H7
dimensions in mm

ELECTRICAL SPECIFICATIONS

Multiturn resolution	1 ... 12 bit programmabile during commissioning
Singleturn resolution	1 ... 13 bit programmabile during commissioning
Power supply¹	10 ... 30 V DC (reverse polarity protection)
Current consumption without load	< 200 mA
Electrical interface²	PROFINET IO RT Class 1 / Conformance Class B
Hardware features	Ertec 200 auto-negotiation auto-polarity auto-crossover diagnostic LEDs
Code type	binary
Max bus frequency	100 Mbit/s
Cycle time	≤ 1 ms
Accuracy	± 0,04°
Start-up time	500 ms
Electromagnetic compatibility	according to 2014/30/EU directive
RoHS	according to 2011/65/EU directive

MECHANICAL SPECIFICATIONS

Shaft diameter	∅ 6 mm (mod. 58B) ∅ 10 mm (mod. 58C)
Enclosure rating	IP 65 (IEC 60529)
Max rotation speed	6000 rpm
Max shaft load³	80 N (17,98 lbs) radial / 40 N (9 lbs) axial
Starting torque (at +20°C / +68°F)	< 0,05 Nm (7 Ozin)
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	stainless steel
Bearing stage / cover material	aluminium
Housing material	painted aluminium
Operating temperature^{4,5}	-40° ... +80°C (-40° ... +176°F)
Storage temperature⁵	-40° ... +85°C (-40° ... +185°F)
Weight	600 g (21 oz)

CONNECTIONS

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

socket connectors not included, please refer to Accessories



PORT 1 POWER PORT 2

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



POWER connector (4 pin)
M12 A coded
front view

