



AAM 58 F PROFINET

BLIND HOLLOW SHAFT MULTITURN ABSOLUTE ENCODER

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 VDC with Profinet IO as electronic interface
- Intelligent status leds
- M12 connectors for fast setup
- Blind hollow shaft diameter up to 15 mm
- Mounting by stator coupling
- Operating temperature -40° ... +80°C (-40° ... +176°F)



ORDERING CODE	AAM	58F	12 / 13	B	10/30	PFN	15	X	X	M12R	.162
SERIES absolute multiurn encoder	AAM										
MODEL blind hollow shaft with stator coupling		58F									
MULTITURN RESOLUTION bit 12			12								
SINGLETURN RESOLUTION bit 13				13							
CODE TYPE binary					B						
POWER SUPPLY 10 ... 30 V DC					10/30						
ELECTRONIC INTERFACE PROFINET IO						PFN					
BORE DIAMETER mm							15				
ENCLOSURE RATING IP 65								X			
OPTIONS to be reported									X		
OUTPUT TYPE radial M12 connectors										M12R	
VARIANT without mating connectors											.162



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OPTICAL MULTITURN ABSOLUTE ENCODERS | AAM 58 F PROFINET

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

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-

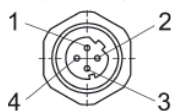
MECHANICAL SPECIFICATIONS

Bore diameter	∅ 15 / 12* / 10* mm
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
Flange material	EN-AW 2011 aluminium
Operating temperature	-40° ... +80°C (-40° ... +176°F)
Storage temperature	-40° ... +85°C (-40° ... +185°F)
Weight	600 g (21 oz)

* with optional adapter shaft

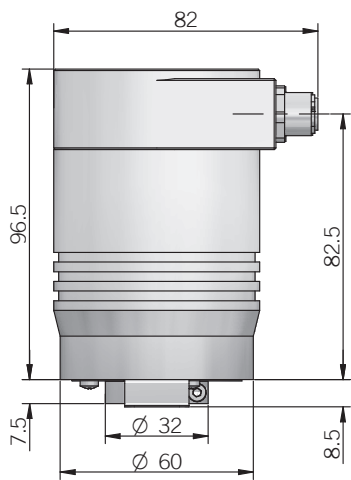
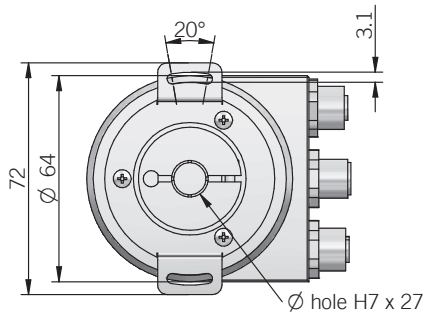


PORT 1 POWER PORT 2

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

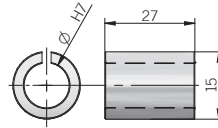
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AAM 58 F



ACCESSORIES

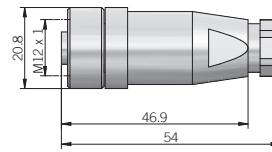
Shaft adapter



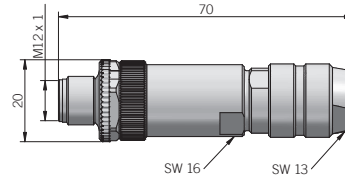
Description	P/N
AAM 58 F adapter shaft 15/12 mm	41890398
AAM 58 F adapter shaft 15/10 mm	41890399

For further shaft adapter diameters please directly contact our offices

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



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



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