EAM 90 A -115 A PROFIBUS

SOLID SHAFT MULTITURN ABSOLUTE ENCODER

Specifications

Industry standard multiturn absolute encoder for factory automation applications.

- Optical sensor technology (OptoASIC + gears)
- 25 bit total resolution (13 bit single turn (8192 ppr) + 12 bit multiturn (4096 turns))
- Power supply up to +28 VDC with Profibus DP as electronic interface
- Intelligent status leds
- Terminal box or M12 connectors for fast setup
- Solid shaft diameter up to 11 mm
- Mounting by synchronous or REO-444 flange

ORDERING CODE	EAM	90A	R	4096 / 4096	B	12/28	FXX	8	X	6	P3R	.XXX

SERIES
multiturn absolute encoder EAM

MODEL
synchronous flange ø 40 mm 90A
REO444 flange 115A

rev. 2.0 R

MULTITURN RESOLUTION
turns 4096

SINGLETURN RESOLUTION
ppr 4096 / 8192

CODE TYPE
binary B

POWER SUPPLY
12 ... 28 V DC 12/28

ELECTRONIC INTERFACE
PROFIBUS DP V0 CLASS 2 FXX

SHAFT DIAMETER
(mod. 90) (9,52mm 3/8") mm 9
mm 10
(mod. 115) mm 11

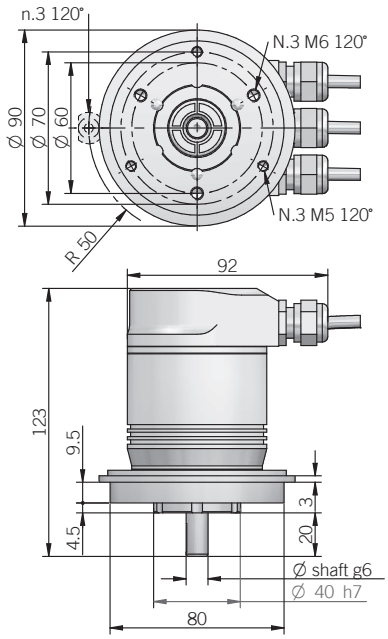
ENCLOSURE RATING
IP 54 X
(mod. 90) IP 66 S

MAX ROTATION SPEED
(IP 66) 3000 rpm 3
(IP 54) 6000 rpm 6

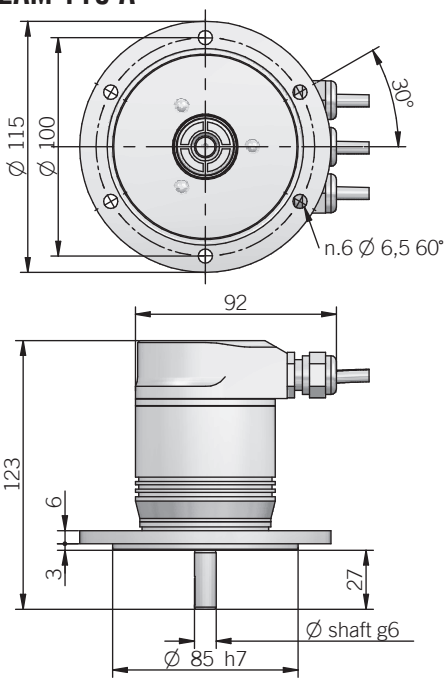
OUTPUT TYPE
terminal box - radial cable glands P3R
radial M12 connectors M12R
female connector included, without female please add 162 as variant code

VARIANT
custom version XXX

EAM 90 A



EAM 115 A



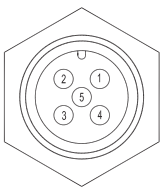
ELECTRICAL SPECIFICATIONS

Multiturn resolution	1 ... 4096 turns *programmable during commissioning*
Singleturn resolution	2 ... 4096 / 2 ... 8192 ppr *programmable during commissioning*
Power supply	12/28 = 11,4 ... 29,4 V DC
Current consumption without load	300 mA
Output type	RS 485 galvanically isolated
Max bus frequency	12 Mbaud
Diagnostic features	frequency warning position warning / alarm *please refer to installation guide for more informations*
Max frequency	25 kHz LSB
Accuracy	± 1/2 LSB
Counting direction	programmable during commissioning
Start-up time	500 ms
Electromagnetic compatibility	IEC 61000-6-2 IEC 61000-6-4

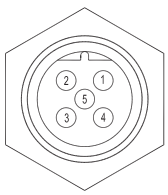
CONNECTIONS

Function	S3 connector 5-pin (power supply)	S3 connector 5-pin (line out)	S3 connector 5-pin (line in)
+ Vdc	2		
0 Volt	4		
signal A (out)		2	
signal B (out)		4	
signal A (in)			2
signal A (in)			4

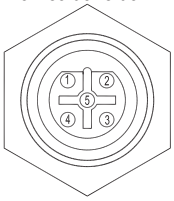
S3 connector
(M12 5 pins A coded)
power supply
view solder side FV



S3 connector
(M12 5 pins B coded)
line out
view solder side FV



S3 connector
(M12 5 pins B coded)
line in
view solder side MV

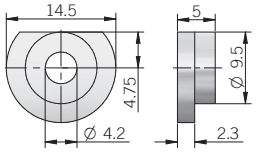


MECHANICAL SPECIFICATIONS

Shaft diameter	ø 9,52 / 10 / 11 mm
Enclosure rating	X = IP 54 (IEC 60529) S = IP 66 (IEC 60529)
Max rotation speed	3000 rpm (IP 66) 6000 rpm (IP 54)
Max shaft load	100 N axial / radial
Shock	50 G, 11 ms (IEC 60068-2-27)
Vibration	10 G, 10 ... 2000 Hz (IEC 60068-2-6)
Moment of inertia	1,5 x 10^{-6} kgm^2
Starting torque (at +20°C / +68°F)	< 0,02 Nm (IP 54) < 0,06 Nm (IP 66)
Body material	EN-AW 2011 aluminum
Shaft material	1.4305 / AISI 303 stainless steel
Housing material	painted aluminium
Bearings	2 ball bearings
Bearings life	10^9 revolutions
Operating temperature	0° ... +60°C (+32° ... +140°F)
Storage temperature	-15° ... +70°C (+5° ... +158°F)
Weight	750 g (26,46 oz)

ACCESSORIES

set n.3 fixing clamps for model 90 A
P/N 94080001



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