

MAIN FEATURES

Industry standard multiturn absolute encoder for factory automation applications.

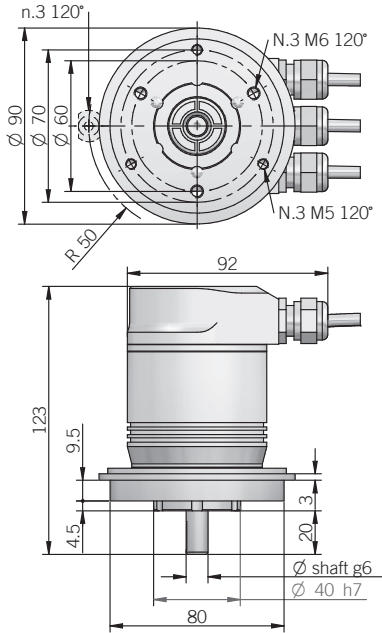
- Optical sensor technology (OptoASIC + gears)
- 25 bit total resolution (13 bit single turn (8192 ppr) + 12 bit multiturn (4096 turns))
- Power supply up to +28 VDC with Profibus DP as electronic interface
- Intelligent status leds
- Terminal box or M12 connectors for fast setup
- Solid shaft diameter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



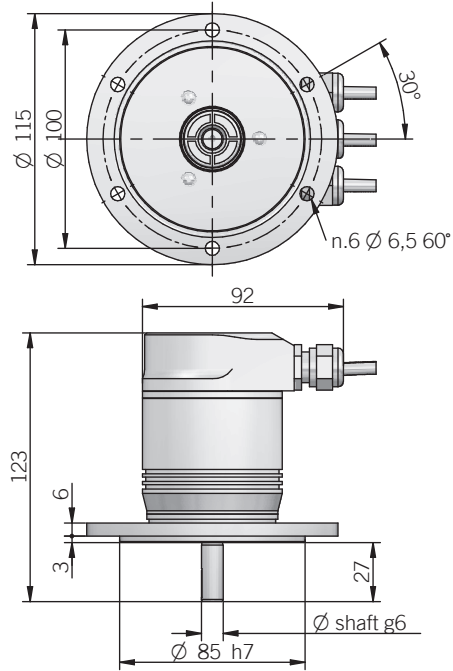
ORDERING CODE	EAM	90A	R	4096 / 4096	B	12/28	FXX	8	X	6	P3R	.XXX
SERIES multiturn absolute encoder EAM												
MODEL synchronous flange ø 40 mm 90A REO444 flange 115A												
rev. 2.0 R												
MULTITURN RESOLUTION turns 4096												
SINGLETURN RESOLUTION ppr 4096 / 8192												
CODE 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												
<i>female connector included, without female please add 162 as variant code</i>												
VARIANT custom version XXX												

EAM 90 A

fixing clamps not included



EAM 115 A



dimensions in mm

ELECTRICAL SPECIFICATIONS | **MECHANICAL SPECIFICATIONS**

Multiturn resolution	1 ... 4096 turns <i>programmable during commissioning</i>
Singleturn resolution	2 ... 4096 / 2 ... 8192 ppr <i>programmable during commissioning</i>
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 <i>please refer to installation guide for more informations</i>
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

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)

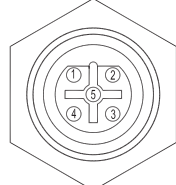
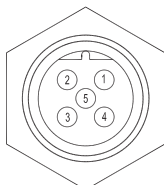
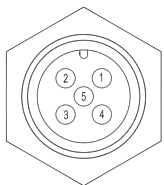
CONNECTIONS

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



ACCESSORIES

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

