

EAM 58 B / C - 63 A / D / E

SOLID 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 (8192 ppr) + 12 bit multiturn (4096 turns))
- · Power supply up to +28 V DC with Profibus DP as electrical interface
- · Intelligent status leds
- · Terminal box or M12 connector for fast setup
- · Solid shaft diameter up to 10 mm
- · Mounting by synchronous, clamping or centering 2,5" square flange









ORDERING CODE	EAM	63A	R	4096	/ 4096	В	12/28	FXX	10	Х	6	P3R	. XXX
ORDERING CODE	SERIES multiturn absolute encoder EAM synchronous flange ø 31.75 synchronous flange ø 50 clamping flange ø 36 centering square flange ø 31.75 centering square flange ø 50	MODEL mm 63A mm 58B mm 58C mm 63D mm 63E	rev. 2.0 R TURN RESI tui	OLUTION rns 4096 Turn res	OLUTION 06 / 8192 CC	DDE TYPE binary B POWEI		FXX	10	X	6	P3R	. XXX
					I	PROFIBUS (n	nod. 63 A / [SHAFT D (mod. 58 0) (3/8") 9, - 63 A / D / B		E RATING IP 54 X IP 66 S			
				mat	ing connect	ors include	d, without n		terminal	(IP 54) 60 box - radia radial M1	000 rpm 3 000 rpm 6	ors M12R de	MADIANT



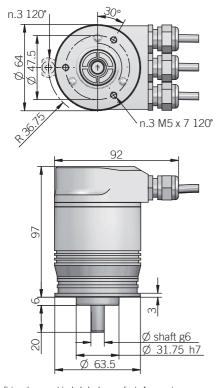
custom version XXX





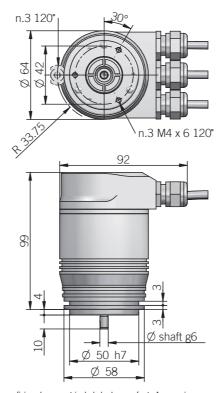
OPTICAL MULTITURN ABSOLUTE ENCODERS | EAM 58 B/C-63 A/D/E PROFIBUS

63 A



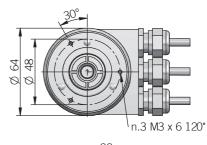
fixing clamps not included, please refer to Accessories

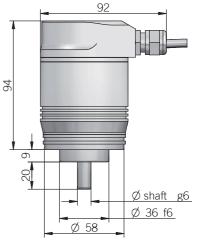
58 B



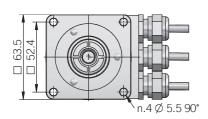
fixing clamps not included, please refer to $\ensuremath{\mathsf{Accessories}}$

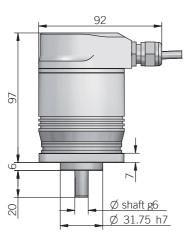
58 C





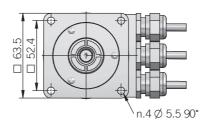
63 D

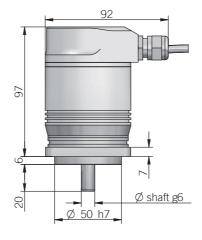




dimensions in mm

63 E









ELECTRICAL SPECIFICATIONS			
Multiturn resolution 1 4096 turns programmable during commissioning			
Singleturn resolution	2 4096 / 2 8192 ppr programmable during commissioning		
Power supply ¹	11,4 29,4 V DC		
Current consumption without load	300 mA		
Electrical interface ²	RS 485 galvanically isolated		
Max bus frequency	12 Mbaud		
Diagnostic features	frequency warning position warning / alarm please refer to installation manual for more informations		
Max frequency	max 25 kHz LSB		
Code type	binary		
Counting direction	programmable during commissioning		
Start-up time	500 ms		
Accuracy	± 1/2 LSB		
Electromagnetic compatibility	according to 2014/30/EU directive		
RoHS	according to 2015/863/EU directive		
UL / CSA	certificate n. E212495		

CONNECTIONS					
Function	POWER	LINE OUT	LINE IN		
+ V DC	2				
0 V	4				
A		2			
В		4			
А			2		
В			4		

MECHANICAL SPECIFICATIONS			
Shaft diameter	ø 6 / 9,52 (3/8") / 10 mm		
Enclosure rating	X = IP 54 (IEC 60529) S = IP 66 (IEC 60529)		
Max rotation speed	IP 54 - 6000 rpm IP 66 - 3000 rpm		
Max shaft load ³	10 N axial / 20 N radial with ø6 shaft 100 N axial / radial		
Shock	ock 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 (36 x 10 ⁻⁶ lbft ²)		
Starting torque (at +20°C / +68°F)			
Bearing stage material	naterial EN-AW 2011 aluminum		
Shaft material	1.4305 / AISI 303 stainless steel		
Housing material	painted aluminium		
Bearings n.2 ball bearings			
Bearings life	e 10° revolutions		
Operating temperature ^{4, 5}	0° +60°C (+32° +140°F)		
Storage temperature ⁵	-15° +70°C (+5° +158°F)		
Weight	650 g (22,93 oz)		

¹ as measured at the transducer without cable influences

POWER connector (5 pin) LINE OUT - female (5 pin) LINE IN - male (5 pin) M12 A coded M12 B coded M12 B coded view solder side FV



solder side view FV



solder side view MV







² for further details refer to OUTPUT LEVELS on TECHNICAL BASICS section

³ maximum load for static usage

⁴ measured on the transducer flange

 $^{^{\}rm 5}\,\rm condensation$ not allowed