

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

SOLID SHAFT MULTITURN ABSOLUTE ENCODER

MAIN FEATURES

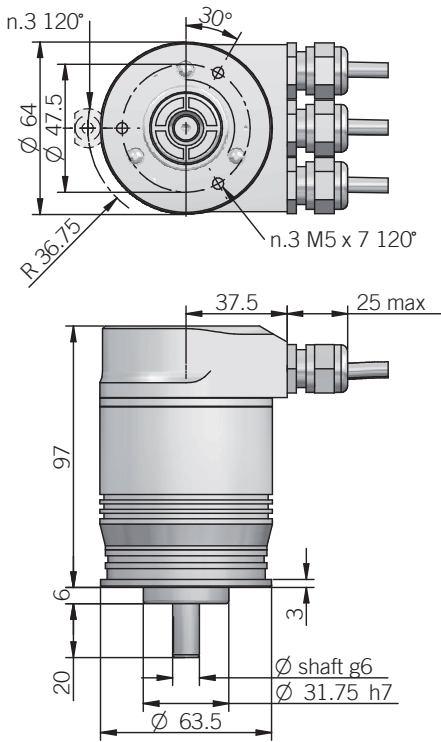
Industry standard multiturn absolute encoder for factory automation applications.

- 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



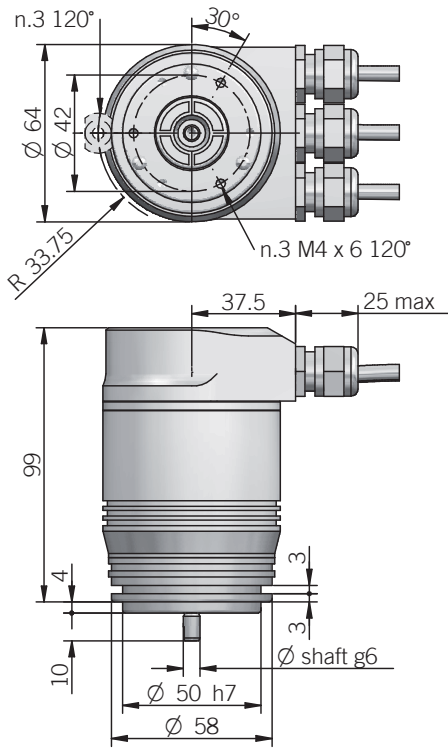
ORDERING CODE	EAM	63A	R	4096 / 4096	B	12/28	FX	10	X	6	M12R	.162	+XXX
SERIES multiturn absolute encoder EAM													
MODEL synchronous flange ø 31.75 mm 63A synchronous flange ø 50 mm 58B clamping flange ø 36 mm 58C centering square flange ø 31.75 mm 63D centering square flange ø 50 mm 63E													
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													
ELECTRICAL INTERFACE PROFIBUS DP V0 CLASS 2 FX													
SHAFT DIAMETER (mod. 58 B) mm 6 (mod. 63 A / D) (3/8") 9,52 mm 9 (mod. 58 C - 63 A / D / E) mm 10													
ENCLOSURE RATING IP 54 X 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													
MATING CONNECTORS mating connectors not included .162													
to be reported only with connectors output (eg. M12R.162), for mating connectors see Accessories													
VARIANT custom version XXX													

63 A



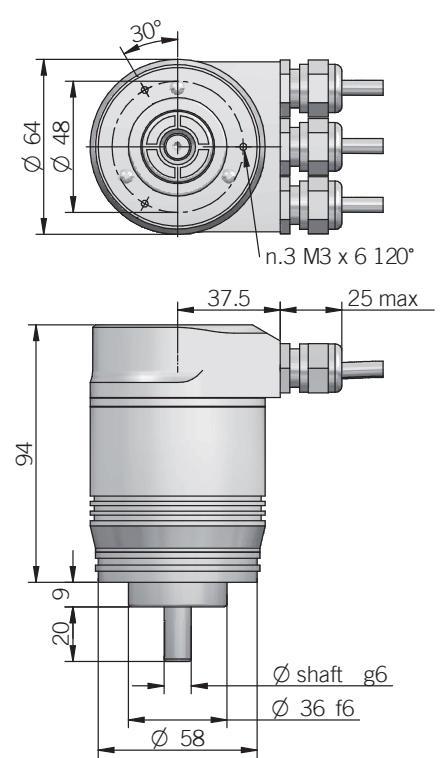
fixing clamps not included, please refer to Accessories

58 B

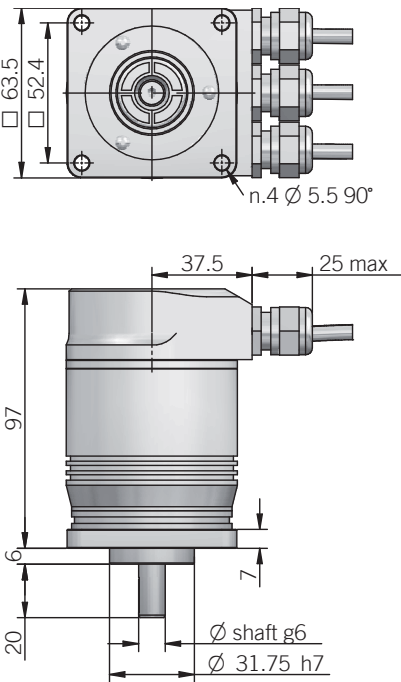


fixing clamps not included, please refer to Accessories

58 C

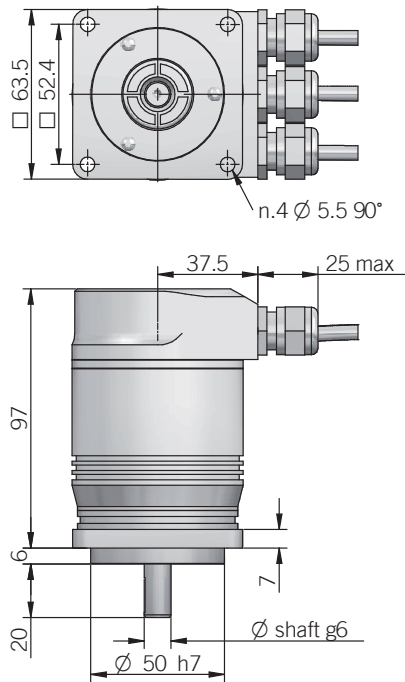


63 D



recommended mating shaft tolerance H7
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 supply¹	11,4 ... 29,4 V DC
Current consumption without load	300 mA
Electrical interface²	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 2011/65/EU directive
UL / CSA	certificate n. E212495

CONNECTIONS

Function	POWER	BUS OUT	BUS IN
+ V DC	2		
0 V	4		
A		2	
B		4	
A			2
B			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 load³	10 N axial / 20 N radial with ø6 shaft 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 (36 x 10 ⁻⁶ lbf ²)
Starting torque (at +20°C / +68°F)	< 0,02 Nm (2,83 Ozin) IP 54 < 0,06 Nm (8,50 Ozin) IP 66
Bearing stage material	EN-AW 2011 aluminum
Shaft material	1.4305 / AISI 303 stainless steel
Housing material	painted aluminium
Bearings	n.2 ball bearings
Bearings life	10 ⁹ revolutions
Operating temperature^{4, 5}	0° ... +60°C (+32° ... +140°F)
Storage temperature⁵	-15° ... +70°C (+5° ... +158°F)
Weight	650 g (22,93 oz)

¹ as measured at the transducer without cable influences

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

³ maximum load for static usage

⁴ measured on the transducer flange

⁵ condensation not allowed

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

