

MAIN FEATURES

Industry standard singleturn absolute encoder for factory automation applications.

- Optical sensor technology (OptoASIC)
- Resolution up to 13 bit (8192 ppr)
- Power supply up to +28 V DC with Profibus DP as electrical interface
- Cable gland or M12 connector output
- Solid shaft diameter up to 10 mm
- Mounting by synchronous, clamping or centering 2,5" square flange



ORDERING CODE

EA 63A 4096 B 12/28 FXX 10 X 6 P3R .XXX

SERIES
singleturn absolute encoder EA

MODEL
synchronous flange \varnothing 31.75 mm 63A
synchronous flange \varnothing 50 mm 58B
clamping flange \varnothing 36 mm 58C
centering square flange \varnothing 31.75 mm 63D
centering square flange \varnothing 50 mm 63E

RESOLUTION
ppr 4096 / 8192

CODE TYPE
binary B

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

ELECTRICAL INTERFACE
PROFIBUS DP V0 CLASS 2 FXX

SHAFT DIAMETER
(mod. 58 B) mm 6
(mod. 63 A / D) (9,52mm 3/8") mm 9
(mod. 58 C - 63 A / D / E) mm 10

ENCLOSURE RATING
IP 54 X
IP 66 S

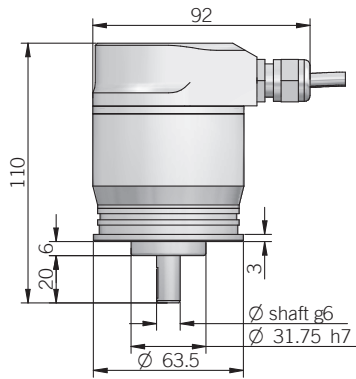
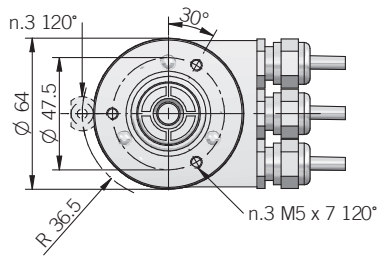
MAX ROTATION SPEED
(IP 66) 3000 rpm 3
(IP 54) 6000 rpm 6

OUTPUT TYPE
terminal box - radial cable glands P3R
radial M12 connector M12R

female connector included, without female please add 162 as variant code

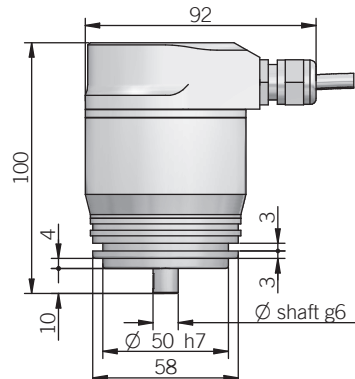
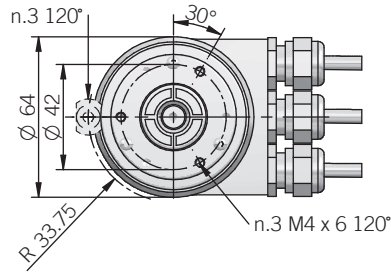
VARIANT
custom version XXX

63 A



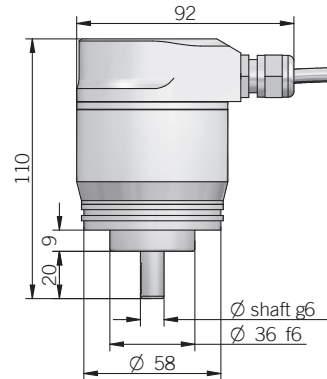
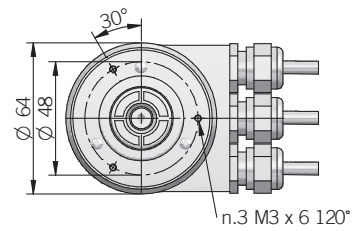
fixing clamps not included, please refer to Accessories section

58 B

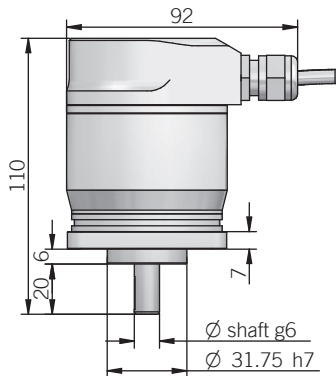
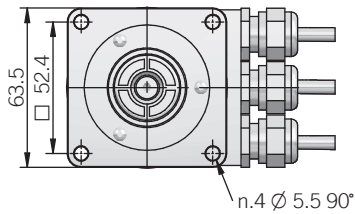


fixing clamps not included, please refer to Accessories section

58 C

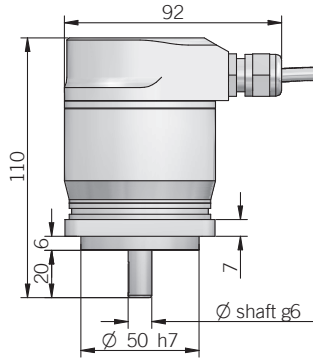
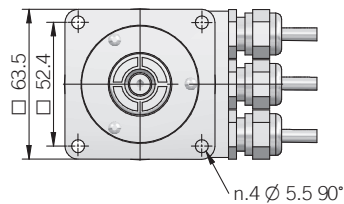


63 D



dimensions in mm

63 E



ELECTRICAL SPECIFICATIONS

Resolution	2 ... 4096 / 2 ... 8192 ppr programmable during commissioning
Power supply	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 manual for more informations
Max frequency	max 25 kHz LSB
Accuracy	± 1/2 LSB
Counting direction	programmable during commissioning
Start-up time	500 ms
Electromagnetic compatibility	according to 2014/30/EU directive
RoHS	according to 2011/65/EU directive
UL / CSA	certificate n. E212495

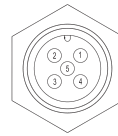
CONNECTIONS

Function	Pin M12A male	Pin M12B female	Pin M12B male
+ V DC	2		
0 V	4		
signal A (out)		2	
signal B (out)		4	
signal A (in)			2
signal B (in)			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	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 lbft 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	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	650 g (22,93 oz)

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



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



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

