

### 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
- Blind hollow shaft diameter up to 15 mm
- Mounting by stator coupling, spring or torque pin

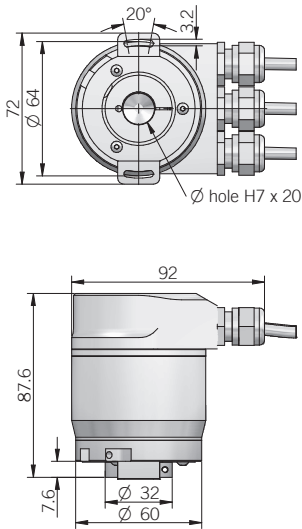


### ORDERING CODE

EA 58F 4096 B 12/28 FXX 10 X 3 P3R .XXX

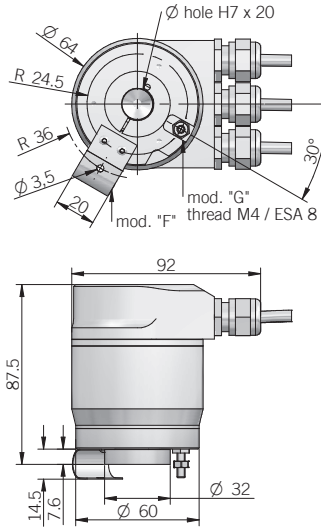
<b>SERIES</b> singleturn absolute encoder EA											
<b>MODEL</b> blind hollow shaft with stator coupling 58F blind hollow shaft with spring 63F blind hollow shaft with torque pin 63G											
<b>RESOLUTION</b> ppr 4096 / 8192											
<b>CODE TYPE</b> binary B											
<b>POWER SUPPLY</b> 12 ... 28 V DC 12/28											
<b>ELECTRICAL INTERFACE</b> PROFIBUS DP V0 CLASS 2 FXX											
<b>BORE DIAMETER</b> mm 8 (3/8") 9,52 mm 9 mm 10 mm 12 mm 14 mm 15											
<b>ENCLOSURE RATING</b> IP 54 X											
<b>MAX ROTATION SPEED</b> 3000 rpm 3											
<b>OUTPUT TYPE</b> terminal box - radial cable glands P3R radial M12 connector M12R female connector included, without female please add 162 as variant code											
<b>VARIANT</b> custom version XXX											

58 F



dimensions in mm

63 F - G



torque pin is included in model G, for mounting instruction please refer to product installation notes

ELECTRICAL SPECIFICATIONS

<b>Resolution</b>	2 ... 4096 / 2 ... 8192 ppr programmable during commissioning
<b>Power supply</b>	11,4 ... 29,4 V DC
<b>Current consumption without load</b>	300 mA
<b>Output type</b>	RS 485 galvanically isolated
<b>Max bus frequency</b>	12 Mbaud
<b>Diagnostic features</b>	frequency warning position warning / alarm please refer to installation manual for more informations
<b>Max frequency</b>	max 25 kHz LSB
<b>Accuracy</b>	± 1/2 LSB
<b>Counting direction</b>	programmable during commissioning
<b>Start-up time</b>	500 ms
<b>Electromagnetic compatibility</b>	according to 2014/30/EU directive
<b>RoHS</b>	according to 2011/65/EU directive
<b>UL / CSA</b>	certificate n. E212495

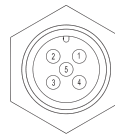
CONNECTIONS

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

<b>Bore diameter</b>	ø 8* / 9,52 (3/8")* / 10* / 12* / 14 / 15 mm * with supplied adapter shaft
<b>Enclosure rating</b>	IP 54 (IEC 60529)
<b>Max rotation speed</b>	3000 rpm
<b>Shock</b>	50 G, 11 ms (IEC 60068-2-27)
<b>Vibration</b>	10 G, 10 ... 2000 Hz (IEC 60068-2-6)
<b>Moment of inertia</b>	5 x 10 <sup>-6</sup> kgm <sup>2</sup> (119 x 10 <sup>-6</sup> lbft <sup>2</sup> )
<b>Starting torque (at +20°C / +68°F)</b>	< 0,02 Nm (2,83 Ozin)
<b>Bearing stage material</b>	EN-AW 2011 aluminum
<b>Shaft material</b>	1.4305 / AISI 303 stainless steel
<b>Housing material</b>	painted aluminium
<b>Bearings</b>	2 ball bearings
<b>Bearings life</b>	10 <sup>9</sup> revolutions
<b>Operating temperature</b>	0° ... +60°C (+32° ... +140°F)
<b>Storage temperature</b>	-15° ... +70°C (+5° ... +158°F)
<b>Fixing torque for collar clamping</b>	1,5 Nm (212 Ozin) recommended
<b>Weight</b>	650 g (22,93 oz)

S3 connector (M12 5 pins A coded) power supply 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

