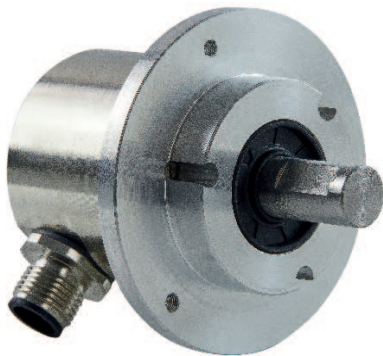


# EAMW 58 B / C - 63 A / D SSI

## SOLID SHAFT MAGNETIC MULTIURN ABSOLUTE ENCODER



### Specifications

Industry standard multiturn absolute encoder for factory automation applications.

- Magnetic sensor technology without contact (Magnetic ASIC + Energy Harvesting)
- Up to 24 bit as total resolution (12 bit single turn + 12 bit multiturn)
- Power supply up to +30 VDC with SSI as electronic interface
- Code reset for easy setup
- Cable or connector output
- Solid shaft diameter up to 10 mm
- Mounting by synchronous, clamping or centering 2,5" square flange

ORDERING CODE	EAMW	58B	12 / 12	G	8/30	S	P	ZE	6	X	X	P	R	.XXX
<p><b>SERIES</b> magnetic multiturn absolute encoder series <b>EAMW</b></p> <p><b>MODEL</b> synchronous flange ø 31.75 mm <b>63A</b> synchronous flange ø 50 mm <b>58B</b> clamping flange ø 36 mm <b>58C</b> centering square flange ø 31.75 mm <b>63D</b></p> <p><b>MULTITURN RESOLUTION</b> 12 bit</p> <p><b>SINGLETURN RESOLUTION</b> 8 / 10 / 12 bit</p> <p><b>CODE TYPE</b> binary <b>B</b> gray <b>G</b></p> <p><b>POWER SUPPLY</b> 8 ... 30 V DC <b>8/30</b></p> <p><b>ELECTRONIC INTERFACE</b> Serial Synchronous Interface - SSI <b>S</b></p> <p><b>LOGIC</b> positive <b>P</b></p> <p><b>OPTIONS</b> reset <b>ZE</b></p> <p><b>SHAFT DIAMETER</b> (mod. 58 B) mm <b>6</b> (mod. 63 A / D) (9,52 mm 3/8") mm <b>9</b> (mod. 58 C - 63 A / D) mm <b>10</b></p> <p><b>ENCLOSURE RATING</b> IP 67 cover side / IP 65 shaft side <b>X</b></p> <p><b>OPTIONS</b> to be reported <b>X</b></p> <p><b>OUTPUT TYPE</b> cable (standard length 0,5 m) <b>P</b> M12 connector <b>M12</b> <i>female connector included, without female please add 162 as variant code</i></p> <p><b>DIRECTION TYPE</b> radial <b>R</b></p> <p><b>VARIANT</b> custom version <b>XXX</b></p>														


### ELECTRICAL SPECIFICATIONS

<b>Multiturn resolution</b>	12 bit
<b>Singleturn resolution</b>	8 / 10 / 12 bit
<b>Power supply</b>	8/30 = 7,6 ... 30 V DC
<b>Power draw without load</b>	< 400 mW
<b>Output type</b>	RS-422
<b>Code type</b>	binary or gray
<b>Auxiliary inputs (U/D - Reset)</b>	active high (+Vdc) <i>connect to 0V if not used / Reset <math>t_{min}</math> 150 ms</i>
<b>Clock frequency</b>	100 kHz ... 1 MHz
<b>SSI monostable time (Tm)</b>	20 $\mu$ s
<b>SSI pause time (Tp)</b>	> 35 $\mu$ s
<b>SSI frame</b>	tree format (MSB ... LSB) 25 bit length (12MT + 12ST + '0')
<b>Accuracy</b>	$\pm 0,35^\circ$ typical
<b>Counting direction</b>	decreasing clockwise (shaft view)
<b>Start-up time</b>	150 ms
<b>Electromagnetic compatibility</b>	IEC 61000-6-2 IEC 61000-6-4

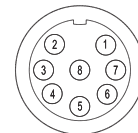
### MECHANICAL SPECIFICATIONS

<b>Shaft diameter</b>	$\varnothing$ 6 mm / 9,52 mm (3/8") / 10 mm
<b>Enclosure rating</b>	IP 67 cover side / IP 65 shaft side (IEC 60529)
<b>Max rotation speed</b>	6000 rpm continuous
<b>Max shaft load</b>	10 N axial / 20 N radial with $\varnothing$ 6 shaft 100 N axial / radial
<b>Shock</b>	50 G, 11 ms (IEC 60068-2-27)
<b>Vibration</b>	20 G, 10 ... 2000 Hz (IEC 60068-2-6)
<b>Moment of inertia</b>	$0,5 \times 10^{-6}$ kgm <sup>2</sup>
<b>Starting torque (at +20°C / +68°F)</b>	< 0,03 Nm
<b>Shaft material</b>	AISI 303 stainless steel
<b>Housing material</b>	AISI 420 stainless steel
<b>Bearing stage material</b>	EN-AW 2011 aluminium
<b>Bearings</b>	2 ball bearings
<b>Bearings life</b>	10 <sup>9</sup> revolutions
<b>Operating temperature</b>	-20° ... +85°C (-4° ... +185°F)
<b>Storage temperature</b>	-20° ... +85°C (-4° ... +185°F)
<b>Weight</b>	350 g (12,35 oz)

### CONNECTIONS

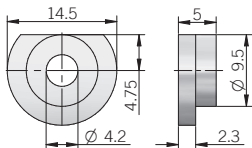
Function	Cable output	8 pin M12 connector
+ Vdc	red	8
0 Volt	black	5
data +	green	3
data -	brown	2
clock +	yellow	4
clock -	orange or pink	6
U / D	red / blue	7
RESET	white	1
	shield	housing

M12 connector (8 pin)  
M12 A coded  
solder side view FV

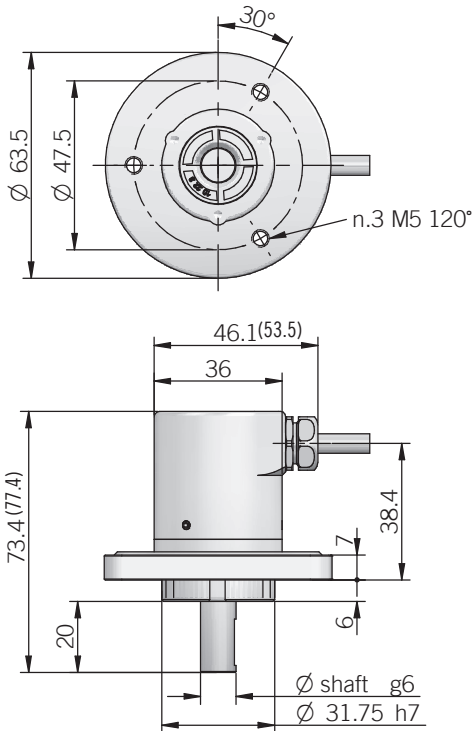


### ACCESSORIES

set n.3 fixing clamps for model 58 B  
P/N 94080001

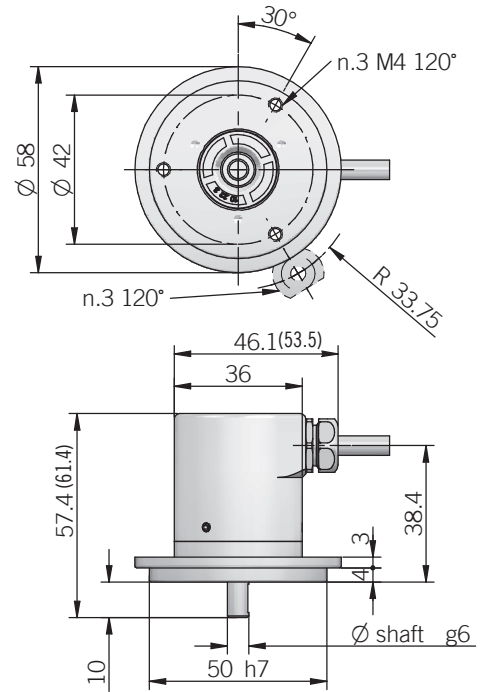


**EAMW 63 A**

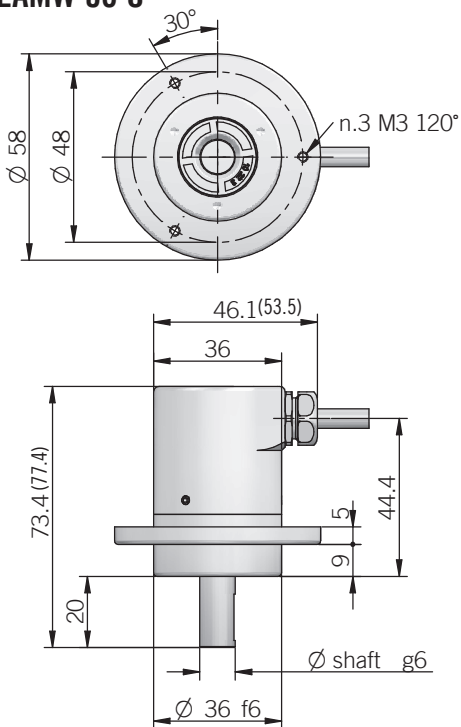


**EAMW 58 B**

*fixing clamps not included*



**EAMW 58 C**



**EAMW 63 D**

