

MAIN FEATURES

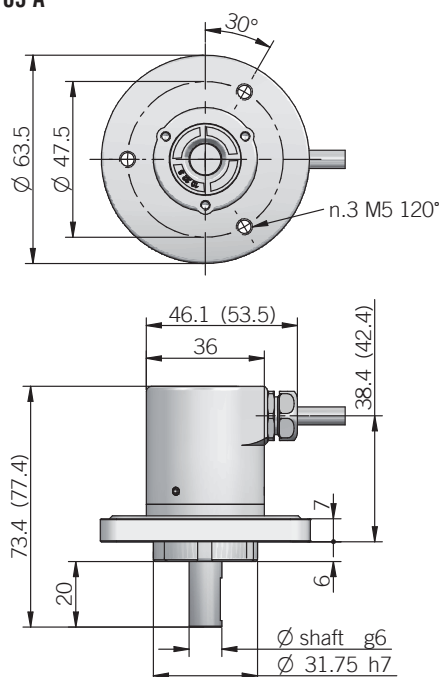
Industry standard multiturn absolute encoder for factory automation applications.

- 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 V DC with SSI as electrical 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

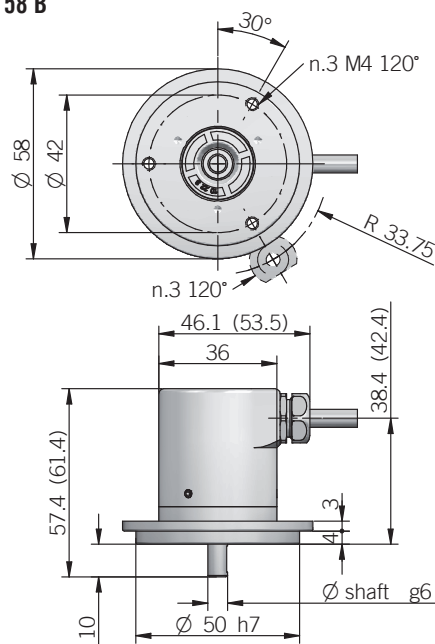


ORDERING CODE	EAMW	58B	12	/	12	G	8/30	S	P	ZE	6	X	X	P	R	.XXX
SERIES magnetic multiturn absolute encoder series EAMW																
MODEL synchronous flange ø 31.75 mm 63A synchronous flange ø 50 mm 58B clamping flange ø 36 mm 58C centering square flange ø 31.75 mm 63D																
MULTITURN RESOLUTION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

63 A

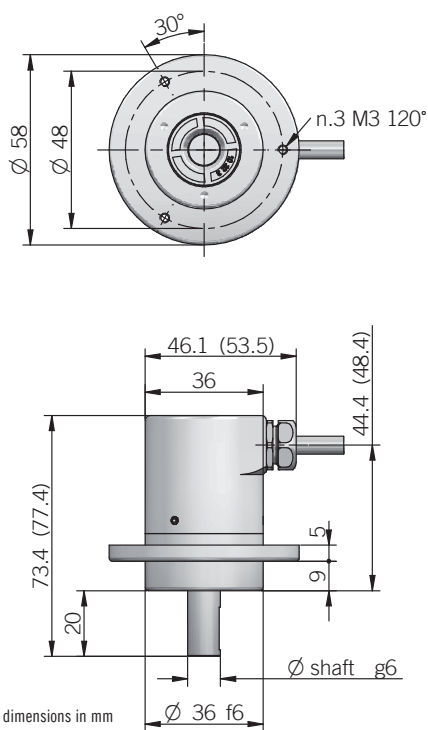


58 B



fixing clamps not included, please refer to Accessories section

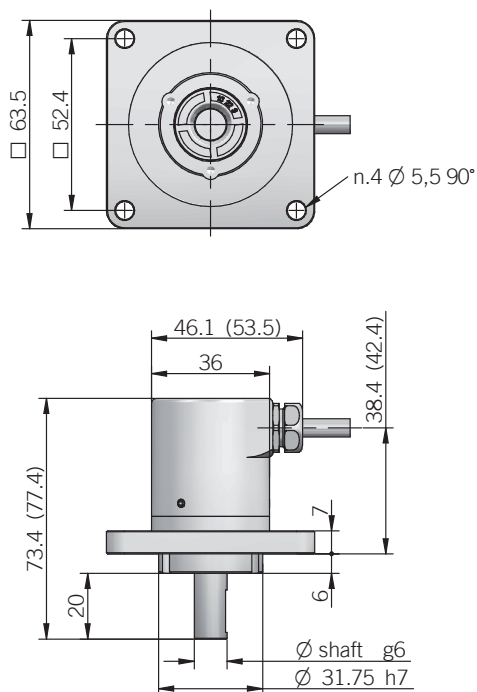
58 C



dimensions in mm

() with M12 connector

63 D



ELECTRICAL SPECIFICATIONS

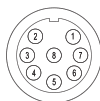
Multiturn resolution	12 bit
Singleturn resolution	8 / 10 / 12 bit
Power supply	7,6 ... 30 V DC
Power draw without load	< 400 mW
Output type*	RS-422 (SN65LBC179Q or equivalent)
Code type	binary or gray
Auxiliary inputs (U/D - Reset)	active high (+V DC) connect to 0 V if not used / Reset t_{min} 150 ms
Clock frequency	100 kHz ... 1 MHz
SSI monostable time (Tm)	20 μ s
SSI pause time (Tp)	> 35 μ s
SSI frame	tree format (MSB ... LSB) 25 bit length (12MT + 12ST + '0')
Accuracy	$\pm 0,35^\circ$ typical
Counting direction	decreasing clockwise (shaft view)
Start-up time	150 ms
Electromagnetic compatibility	according to 2014/30/EU directive
RoHS	according to 2011/65/EU directive
UL / CSA	certificate n. E212495

* for further details please see OUTPUT LEVELS under TECHNICAL BASICS section

CONNECTIONS

Function	Cable	8 pin M12
+ V DC	red	8
0 V	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



MECHANICAL SPECIFICATIONS

Shaft diameter	$\varnothing$ 6 mm / 9,52 mm (3/8") / 10 mm
Enclosure rating	IP 67 cover side / IP 65 shaft side (IEC 60529)
Max rotation speed	6000 rpm continuous
Max shaft load	10 N axial / 20 N radial with $\varnothing$ 6 shaft 100 N axial / radial
Shock	50 G, 11 ms (IEC 60068-2-27)
Vibration	20 G, 10 ... 2000 Hz (IEC 60068-2-6)
Moment of inertia	$0,5 \times 10^{-6}$ kgm ² (12×10^{-6} lbft ²)
Starting torque (at +20°C / +68°F)	< 0,03 Nm (4,25 Ozin)
Shaft material	AISI 303 stainless steel
Housing material	AISI 420 stainless steel
Bearing stage material	EN-AW 2011 aluminium
Bearings	2 ball bearings
Bearings life	10 ⁹ revolutions
Operating temperature	-20° ... +85°C (-4° ... +185°F)
Storage temperature	-20° ... +85°C (-4° ... +185°F)
Weight	350 g (12,35 oz)

SSI SCHEMATICS

