



Solid mechanical construction
 Protection to IP 65, IP 66
 SMD technology
 Electronic preset
 Programmable



Absolut Encoder EAM 58 Interbus

Optical absolute multi-turn shaft encoder of high resolution

Resolution

Resolution (Steps/360°):

4096 Schritte/360° = 12 Bits 8192 Schritte/360° = 13 Bits

Measuring range

Measuring range

Single-Turn	1 Umdrehung
Multi-Turn	4096 Umdrehungen = 12 Bits

Type explanation

EAM 58-24B-30-IBS

Encoder type	Absolute
Flange type	Servo- / Klemmflansch
Flange diameter	ø 58 mm
Case diameter	ø 58 mm
Number of bits	12 = 12 bits x 1 turn 13 = 13 bits x 1 turn 24 = 12 bits x 4096 turns 25 = 13 bits x 4096 turns
Single-turn	Yes
Multi-turn	Yes
Supply voltage	30 = 10..30 VDC
Interface	IBS = Interbus
Shaft diameter	ø 10 mm

Technical data

Mechanical data

Rotational speed	$\leq 12.000 \text{ min}^{-1}$ (Single-turn) $\leq 6.000 \text{ min}^{-1}$ (Multi-turn)
Torque	$\leq 3 \text{ Ncm}$
Moment of inertia	30 g cm^2
Loading of bearings	110 N radial 40 N axial
Operational life of ball bearings	$> 2 \times 10^5 \text{ h}$ (1000 min^{-1} , EAMS 58) $> 1 \times 10^5 \text{ h}$ (1000 min^{-1} , EAM 58)
Weight	$\leq 0,6 \text{ kg}$

Environmental conditions

Vibration	100 m/s^2 (10 ... 1000 Hz)
Shock	300 m/s^2 (11 ms)
Operating temperature	-0 ... +60 °C
Storage temperature	-40 ... +85 °C
Atmospheric humidity	$\leq 98\% \text{ r.h.}$
Protection class	IP 65 (DIN 40050/IEC 144) IP 66 (optional)

Electrical data

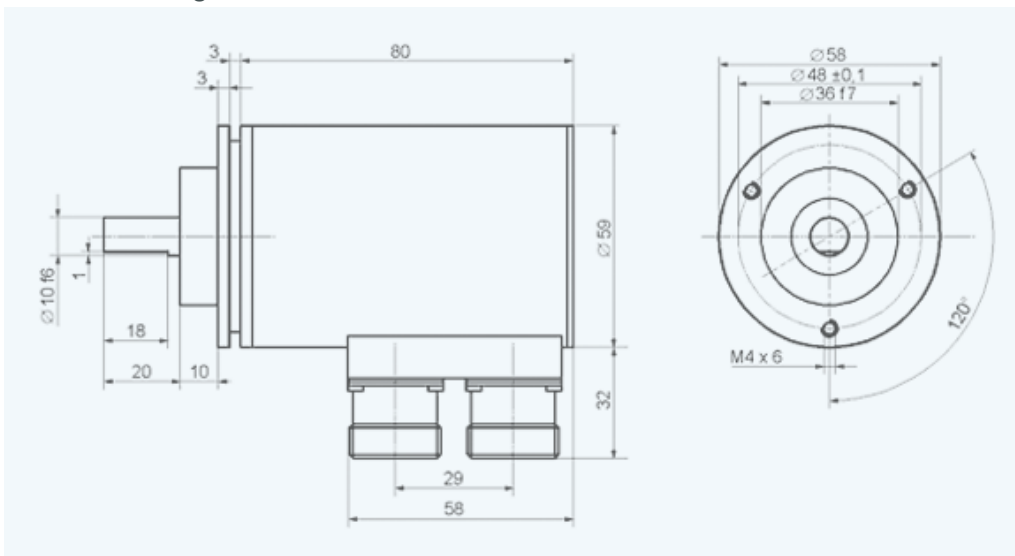
Scanning type	Optical, without contact
Transmitter, infrared	LED
Receiver	Photo-Array
Scanning frequency LSB	800 kHz
Measurement accuracy	$\pm \frac{1}{2} \text{ LSB}$ (12 bit) $\pm 1 \text{ LSB}$ (13 bit)
Supply voltage	$V_{cc} = 10 \dots 30 \text{ VDC}$
Power consumption	$\leq 150 \text{ mA}$ ($V_{cc} = 24 \text{ V}$)

Electrical connections

Interbus

Interface	RS485 with optocoupler
Clock	max. 500 kBaud or 2 MBaud

Outline drawing



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