

ROTACOD

Absolute encoder with incremental serial interface

series

Ax58 ISI



AS58 ISI



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- application info
- datasheet

ENVIRONMENTAL SPECIFICATIONS

Shock:	100 g, 6 ms (acc. to MIL STD 202F)
Vibrations:	10 g, 5-2000 Hz (acc. to MIL STD 202F)
Operating temperature range:	-20°C +70°C (-4°F +158°F)
Storage temperature range:	-20°C +80°C (-4°F +176°F)
	(98% R.H.without condensation)
Protection:	IP65

MECHANICAL SPECIFICATIONS

Dimensions:	see drawing
Shaft:	Ø 6, 8, 9.52, 10, 12 mm
Shaft loading (axial and radial):	40 N max.
Shaft rotational speed:	6000 rpm max.
Starting torque at 20°C:	< 1 Ncm (typical)
Moment of inertia:	~95 gcm ²
Bearing life:	400x10 ⁶ rev. min. (10 ⁹ rev. min. with shaft loading of 20 N max.)
Peso/Weight:	~0,3 kg (10,6 oz)
Electrical connections:	EML 121 CONNE1 connector

ELECTRICAL SPECIFICATIONS

STD pulse rate (other PPR upon request):	720 - 1024 - 2048
Power supply:	+10V +30V
Input current:	250 mA max.
Output current (per channel):	40 mA max.
Output frequency:	50 kHz max.
Protection:	against inversion of polarity
Optoelectronic life:	100.000 h min.

MATERIALS

Housing:	non corroding
Flange:	non corroding
Bearings:	ABEC 5
Shaft:	stainless steel, non-magnetic
Light source:	GaAl diodes

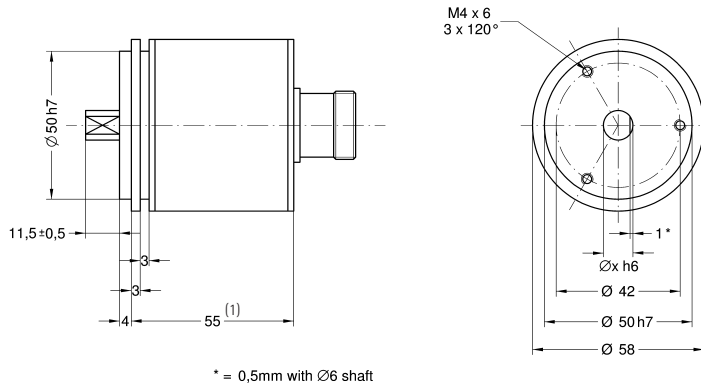
ELECTRICAL CONNECTIONS

12 pin IP65 mating connector			
1	A	7	n.c.
2	/A	8	Error output
3	B	9	Zero setting
4	/B	10	Complementary
5	0	11	+10Vdc +30Vdc
6	/0	12	0 Vdc

ACCESSORIES

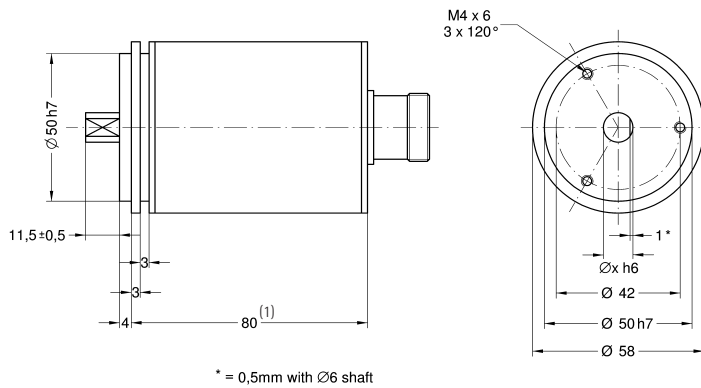
EPFL 121:	12 pin CONNE1 mating connector
PAN/PGF:	flexible couplings
LKM-386:	finxing clamps

Specifications subject to changes without prior notice



* = 0,5mm with Ø6 shaft

AS58 ISI



* = 0,5mm with Ø6 shaft

AM58 ISI

(1) Mechanical dimensions with connector output see on page 64

ISI - Incremental serial interface

The absolute encoder with ISI interface, supplies an incremental output with A and channel (90° shifted) and index pulse. When switched on and enabled the encoder gives out a pulse train corresponding to the current absolute position. This allows to measure absolute positions even if the following electronics has only an incremental encoder input. Encoders with ISI interface are available as single turn and multi turn.

<p style="text-align: center;">ORDERING CODE</p> <p style="text-align: center;">XXXX / XX - X X - X - X</p> <p style="text-align: center;">SERIES AS58</p> <p style="text-align: center;">PULSE RATE (PPR) 80 = 720 PPR 12 = 1024 PPR 13 = 2048 PPR</p> <p style="text-align: center;">OUTPUT CODE ISI incremental serial interface S</p> <p style="text-align: center;">OUTPUT CIRCUITS Push-Pull Y Line Driver L</p>	<p style="text-align: center;">ADDITIONAL CODE (indicate only if necessary)</p> <p style="text-align: center;">R Side mount connector</p> <p style="text-align: center;">SHAFT Ø 6 6 mm 8 8 mm 9.52 9.52 mm/ 3/8" 10 10 mm 12 12 mm</p>
<p style="text-align: center;">ORDERING CODE</p> <p style="text-align: center;">XXXX X X X - X - X</p> <p style="text-align: center;">SERIES AM58</p> <p style="text-align: center;">PULSE RATE 12/4096 = 1024 PPR x 4096 rev. 13/4096 = 2048 PPR x 4096 rev.</p> <p style="text-align: center;">OUTPUT CODE ISI incremental serial interface S</p>	<p style="text-align: center;">ADDITIONAL CODE (indicate only if necessary)</p> <p style="text-align: center;">R Side mount connector</p> <p style="text-align: center;">SHAFT Ø 6 6 mm 8 8 mm 9.52 9.52 mm/ 3/8" 10 10 mm 12 12 mm</p> <p style="text-align: center;">OUTPUT CIRCUITS Push-Pull Y Line Driver L</p>