ROTACOD

Absolute encoder with incremental serial interface

series **Ax58 ISI**

AS58 ISI

www.lika.biz
- 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 CONNEI 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

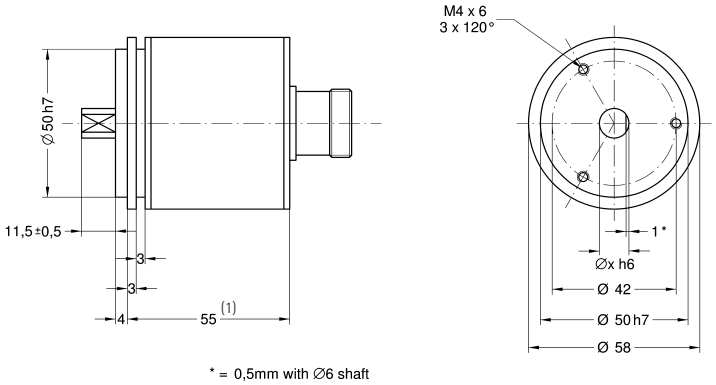
ELECTRICAL CONNECTIONS

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 CONNEI mating connector
PAN/PGF:	flexible couplings
LKM-386:	finxing clamps



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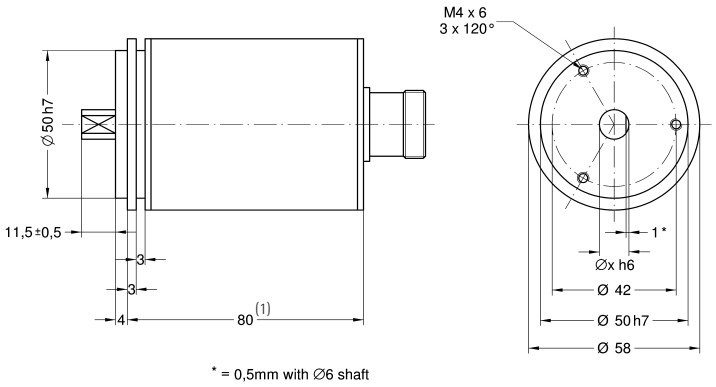

AM58 ISI

(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.

ORDERING CODE

XXXX	/	XX	-	X	X	-	X	-	X

SERIES
AS58

PULSE RATE (PPR)
80 = 720 PPR
12 = 1024 PPR
13 = 2048 PPR

OUTPUT CODE

ISI incremental serial interface	S

OUTPUT CIRCUITS

Push-Pull	Y
Line Driver	L

ADDITIONAL CODE (indicate only if necessary)

R	Side mount connector

SHAFT Ø

6	6 mm
8	8 mm
9.52	9.52 mm/ 3/8"
10	10 mm
12	12 mm

ORDERING CODE

XXXX	X	X	X	-	X	-	X

SERIES
AM58

PULSE RATE

12/4096 = 1024 PPR x 4096 rev.	
13/4096 = 2048 PPR x 4096 rev.	

OUTPUT CODE

ISI incremental serial interface	S

ADDITIONAL CODE (indicate only if necessary)

R	Side mount connector

SHAFT Ø

6	6 mm
8	8 mm
9.52	9.52 mm/ 3/8"
10	10 mm
12	12 mm

OUTPUT CIRCUITS

Y	Push-Pull
L	Line Driver