

ROTACOD

Absolute encoder with analogue output

series

AS58 A • AM58 A

- Analogue output (optical potentiometer)
- 0-10 V, 0-5 V or 4-20 mA
- Single & multi-turn versions
- Special versions on request



Ax58 A



www.lika.biz
 • Data-sheet
 • User manual

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:	Ax58, Ax58S: Ø 6, 8, 9.52, 10, 12 mm Ax58C: Ø 14, 15 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.)
Weight:	~ 0,3 kg (10,6 oz)
Electrical connections:	E7MLP MIL connector

ELECTRICAL SPECIFICATIONS

Resolution:	AS5812 = 4096 cpr AM5812/16 = 4096 cpr x 16 turns AM5809/64 = 512 cpr x 64 turns AM5806/256 = 64 cpr x 256 turns
Power supply:	+15V +30V
Power consumption:	AS58 A = 1 W AM58 A = 1,5 W
Protection:	against inversion of polarity
Optoelectronic life:	100.000 h min.

MATERIALS

Housing:	EN AW-6082 (UNI EN 573) non corroding
Flange:	EN AW-6082 (UNI EN 573) non corroding
Bearings:	ABEC 5
Shaft:	1.4305 (UNI EN 10088-1) stainless steel, non-magnetic
Light source:	GaAl diodes

ELECTRICAL CONNECTIONS

with analogue output A1

7 pin MIL mating connector

A	- lout (4-20mA)	E	Fault
B	+ lout (4-20mA)	F	GND
C	Complementary	G	+15V +30V
D	Hold		

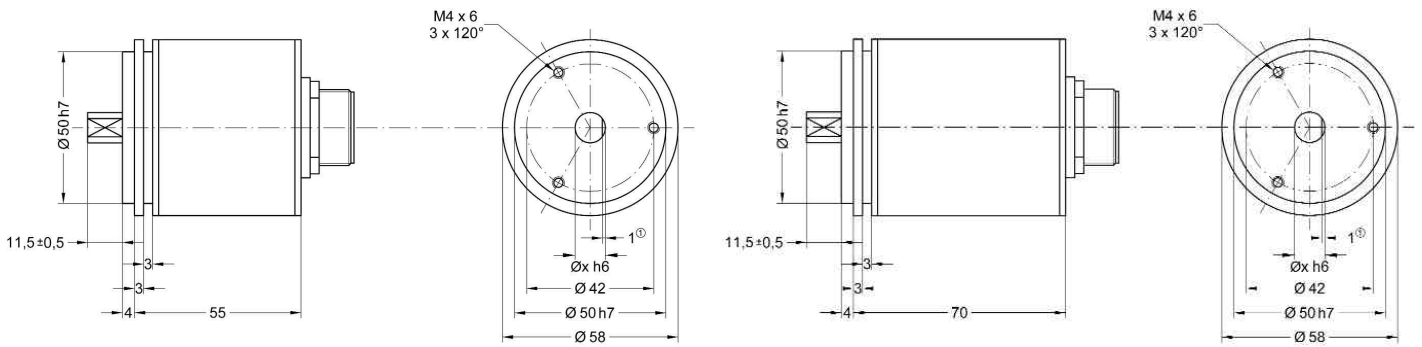
with analogue output AV1, AV2

7 pin MIL mating connector

A	GND	E	n.c.
B	+ Vout	F	GND
C	Complementary	G	+15V +30V
D	Hold		

ACCESSORIES

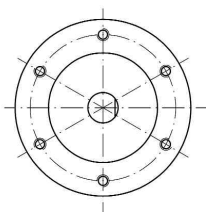
E7MLS:	7 pin MIL mating connector
PAN/PGF:	flexible couplings
LKM-386:	fixing clamps
EC-M7F-S09-l8-x:	x m connection cable



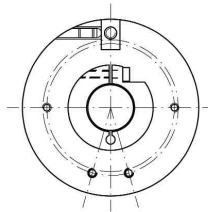
1 = 0,5 mm with ø6 mm shaft

AS58 A

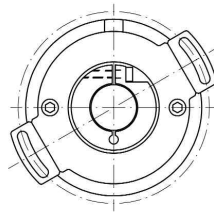
AM58 A



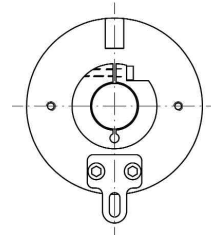
Ax58S A



Ax58 A

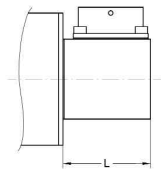


Ax58 A



Ax58 A

RADIAL OUTPUT R



7 pin MIL connector, L = 36 mm

Description:

Output AI1: Quote 0 = 4mA, max. quote = 20mA

Output AV1: Quote 0 = 0V, max. quote = 5V

Output AV2: Quote 0 = 0V, max. quote = 10V

"-lout" signal is internally connected to GND.

Hold = Data latch in memory (active high +10V +30V).

Fault = Open collector signal (i.e. to be connected to a LED see fig.1)

for cable integrity check (only AI1 output).

INCREMENT EACH STEP

Type	0-10 V	0-5 V	4-20 mA
AS5812	2,441 mV	1,22 mV	3,9 µA
AM5812/16	0,153 mV	0,076 mV	0,24 µA
AM5809/64	0,305 mV	0,153 mV	0,48 µA
AM5806/256	0,61 mV	0,305 mV	0,97 µA

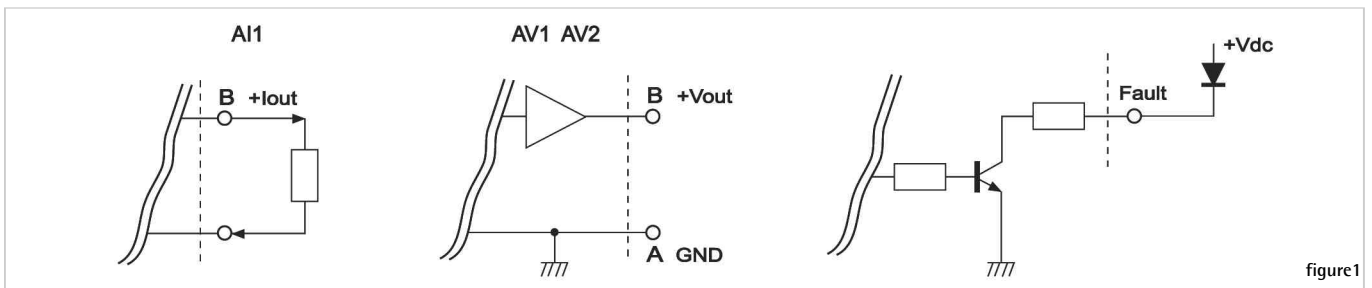


figure1

ORDERING CODE

XXXXXX / XXX - XXX

SERIES

- ASx58x*12
- AMx58x*12/16
- AMx58x*09/64
- AMx58x*06/256

* including ASC59, ASC60, AMC59, AMC60

OUTPUT CIRCUITS

- Current analog output (4-20mA) **AI1**
- Voltage analog output (0-5V) **AV1**
- Voltage analog output (0-10V) **AV2**

SHAFT DIAMETER

- 6 6 mm
- 8 8 mm
- P9 9.52 mm/ 3/8"
- 10 10 mm
- 12 12 mm
- 14 14 mm*
- 15 15 mm*

* only ASCxx, AMCxx

ADDITIONAL CODE (indicate only if necessary)

- X

- R** Side mount connector