

# ROTACOD

Absolute encoder with analogue output

Series

AS58 A • AM58 A



- Optical encoder with analogue output
- Accurate sensing and D/A conversion
- 0-5/10V,  $\pm 5/10V$ , 0-20mA, 4-20mA, 0-24mA
- Compact dimensions
- Cable, M12 or M23 connections



AS58 A • AM58S A

## ENVIRONMENTAL SPECIFICATIONS

Shock:	100 g, 6 ms
Vibrations:	10 g, 5-2000 Hz
Protection:	IP67, IP65 shaft side
Operating temperature range:	-25°C +85°C (-13°F +185°F)
Storage temperature range:	-40°C +100°C (-40°F +212°F) (98% R.H. without condensation)

## MECHANICAL SPECIFICATIONS

Dimensions:	see drawing
Shaft diameter:	Ø 6, 8, 9.52, 10, 12 mm
Hollow shaft diameter:	Ø 14, 15 mm
Reducing sleeves BR1-xx from Ø 15mm to:	Ø 6, 8, 9.52, 10, 11, 12 mm
Shaft loading (axial, radial):	100 N max.
Shaft rotational speed:	12000 rpm, 9000 rpm continuous operation
Bearing life:	400 x10 <sup>6</sup> rev. min. (10 <sup>9</sup> rev. min. with 20 N shaft loading max.)
Electrical connections:	M12, M23 plug or cable output 2 m (6.56 ft)
Weight:	~ 250 g (8,8 oz)
Option:	• additional cable

## ELECTRICAL SPECIFICATIONS

Resolution:	AS: 12 bit AM: 16 bit
Accuracy:	$\pm 0,04^\circ$
Output circuits:	0-5V, 0-10V, -5/+5V, -10/+10V, 0-20mA, 4-20mA, 0-24mA
Counting frequency:	> 150 kHz
Power supply:	+13Vdc $\div$ 30Vdc
Power consumption:	1, 3 W max.
Start-up time:	~ 40 ms
Protection:	against inversion of polarity and short-circuit
EMC:	electro-magnetic immunity, according to: EN 61000-4-2 EN 61000-4-4
Optoelectronic life:	> 100.000 h
Functions:	• Counting direction (input) • Zero setting (input)

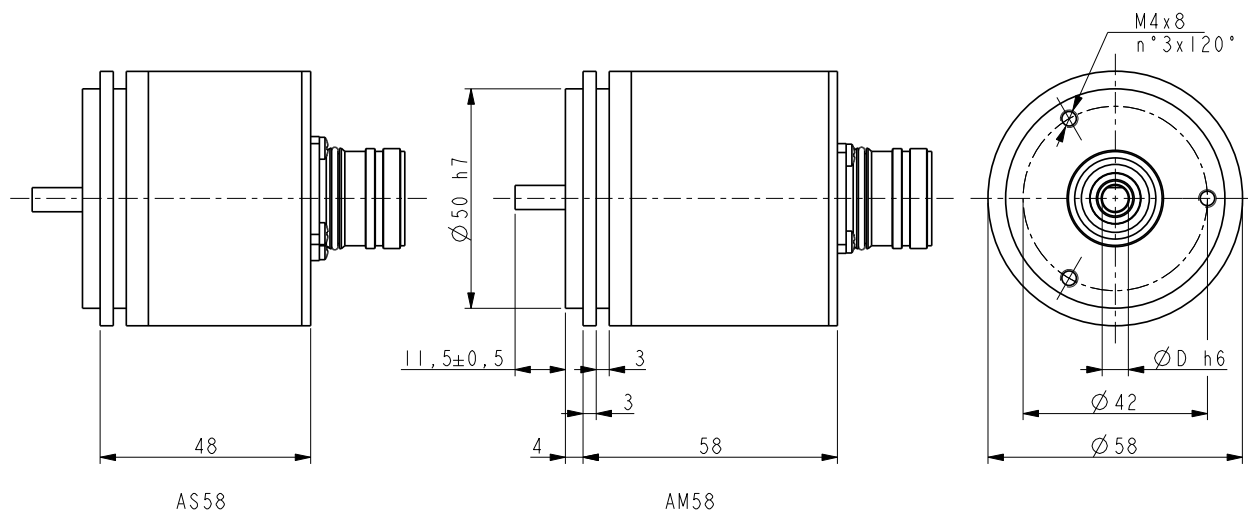
## MATERIALS

Flange:	anticorodal, UNI EN AW-6082
Housing:	anticorodal, UNI EN AW-6082
Bearings:	ABEC 5
Shaft:	stainless steel, non magnetic, UNI EN 4305

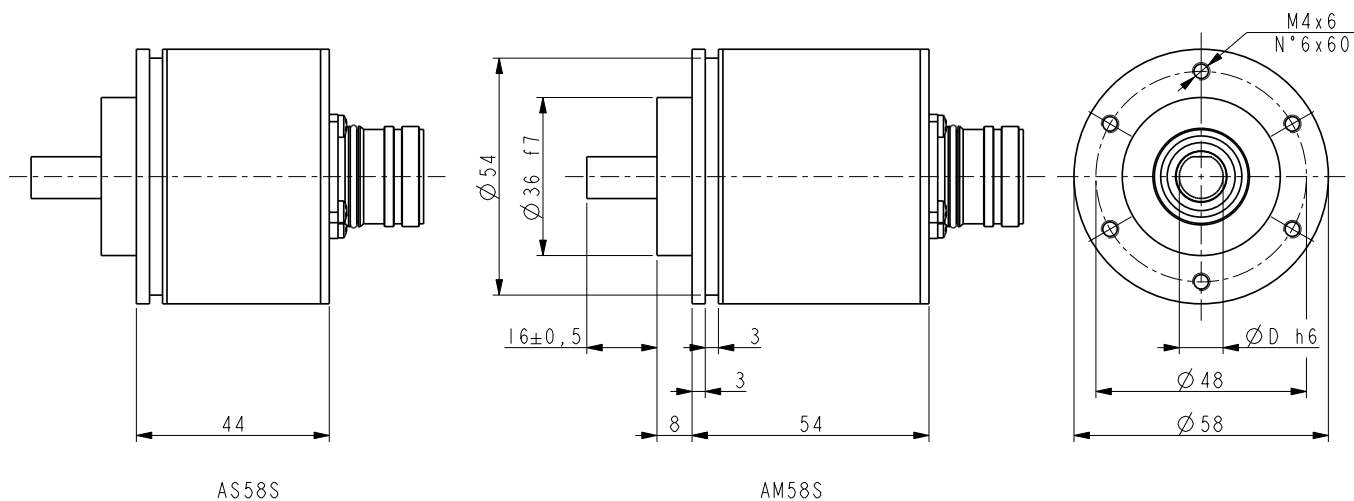
## ACCESSORIES

EPFL121H:	12 pin M23 mating connector
EM12F8:	8 pin M12 mating connector
PAN/PGF:	flexible couplings
BR1:	reducing sleeves
EC-M12F8-LK-M8-xx:	M12 cordset with xx m cable
EC-CR12F-S28-T12-xx:	M23 cordset with xx m cable
LKM-386:	fixing clamps

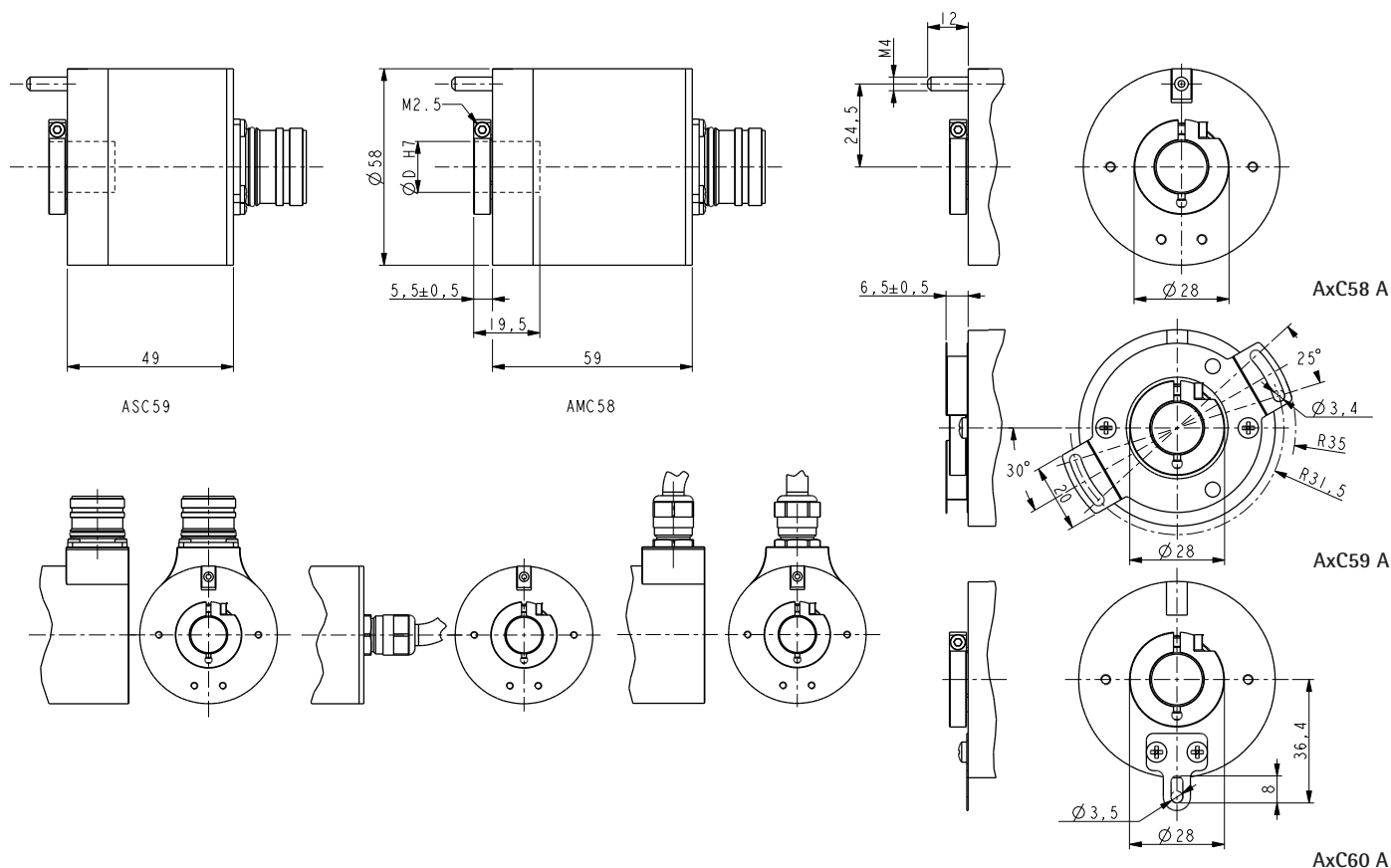
Specifications subject to changes without prior notice



AS58 A - AM58 A



AS58S A - AM58S A



Order code - Single turn

AS58	12	/	XXX	-	XX	-	X	XX	/Sxxx
AS58S	(a)		(b)		(c)		(d)	(e)	(f)
ASC58									
ASC59									
ASC60									

<p><b>(a) RESOLUTION</b> 12 = 12 bit</p>	<p><b>(b) OUTPUT</b> AI1 = 4-20mA AI2 = 0-20mA AI3 = 0-24mA AV1 = 0-5V AV2 = 0-10V AV3 = -5/+5V AV4 = -10/+10V</p>	<p><b>(c) SHAFT DIAMETER</b> 6 = 6 mm 8 = 8 mm P9 = 9.52 mm, 3/8" 10 = 10 mm 12 = 12 mm 14 = 14 mm (only ASCxx) 15 = 15 mm (only ASCxx)</p>	<p><b>(d) CONNECTION POSITION</b> - = axial R = radial</p> <p><b>(e) CONNECTIONS</b> L2 = cable output 2 m (standard) Lx = cable output x m M = M12, 8 pin plug M2 = M23, 12 pin plug</p>	<p><b>(f) CUSTOM VERSION</b></p>
--	--	---	---	----------------------------------

Order code - Multi turn

AM58	XX/XXXX	XXX	-	XX	-	X	XX	/Sxxx
AM58S	(a)	(b)		(c)		(d)	(e)	(f)
AMC58								
AMC59								
AMC60								

<p><b>(a) RESOLUTION</b> 12/2 = 2 turns 12/4 = 4 turns 12/16 = 16 turns 10/64 = 64 turns 8/256 = 256 turns 6/1024 = 1024 turns 4/4096 = 4096 turns</p>	<p><b>(b) OUTPUT</b> AI1 = 4-20mA AI2 = 0-20mA AI3 = 0-24mA AV1 = 0-5V AV2 = 0-10V AV3 = -5/+5V AV4 = -10/+10V</p>	<p><b>(c) SHAFT DIAMETER</b> 6 = 6 mm 8 = 8 mm P9 = 9.52 mm, 3/8" 10 = 10 mm 12 = 12 mm 14* = 14 mm (only AMCxx) 15* = 15 mm (only ACxx)</p>	<p><b>(d) CONNECTION POSITION</b> - = axial R = radial</p> <p><b>(e) CONNECTIONS</b> L2 = cable output 2 m Lx = cable output x m M = M12, 8 pin plug M2 = M23, 12 pin plug</p>	<p><b>(f) CUSTOM VERSION</b></p>
--	--	--	--	----------------------------------