

- 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 • AM58 A

### ENVIRONMENTAL SPECIFICATIONS

Shock:	250 g, 6 ms acc. to CEI EN 60068-2-27
Vibrations:	10 g, 5-2000 Hz acc. to CEI EN 60068-2-6
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 x 10 <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

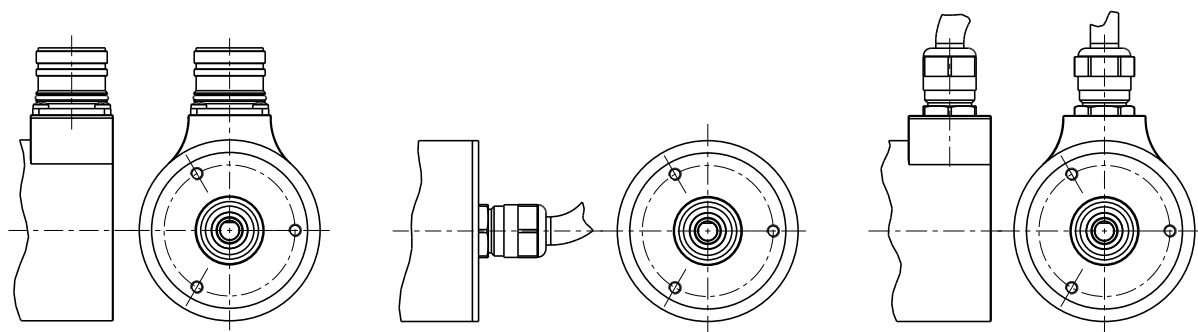
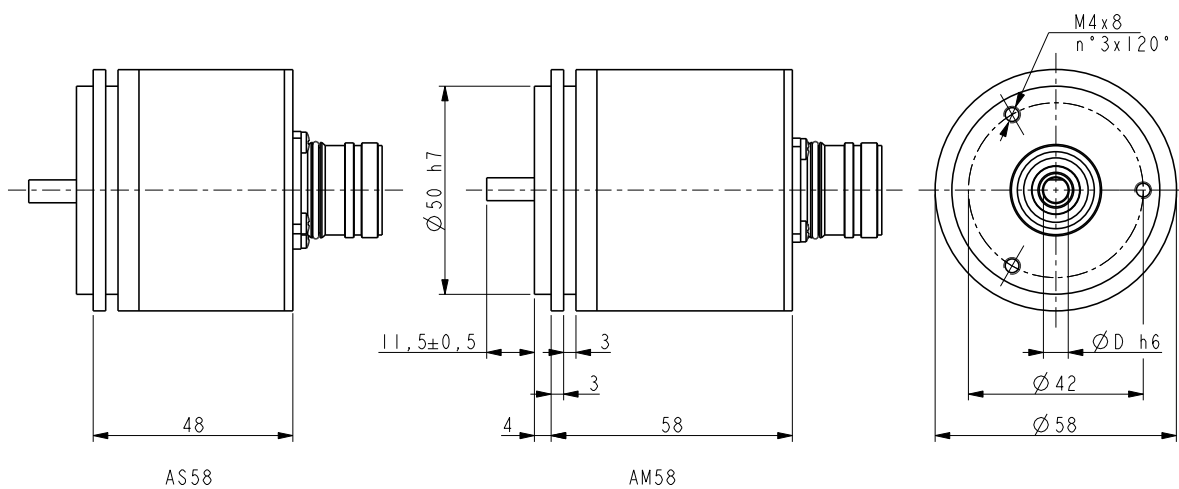
Resolution:	AS: 12 bit AM: 16 bit
Accuracy:	typically $\pm 0,01^\circ$
Output circuits:	0-5V, 0-10V, -5/+5V, -10/+10V, 0-20mA, 4-20mA, 0-24mA
Counting frequency:	> 150 kHz
Power supply:	+13Vdc ÷ 30Vdc
Power consumption:	1, 3 W max.
Start-up time:	~ 40 ms
Protection:	against inversion of polarity and 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

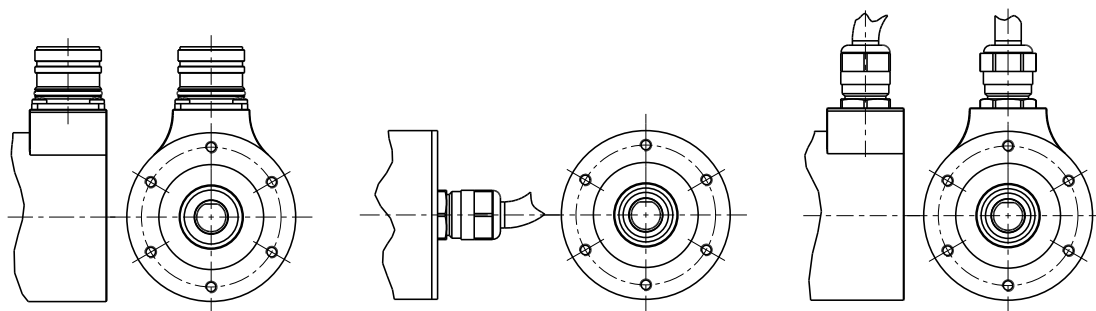
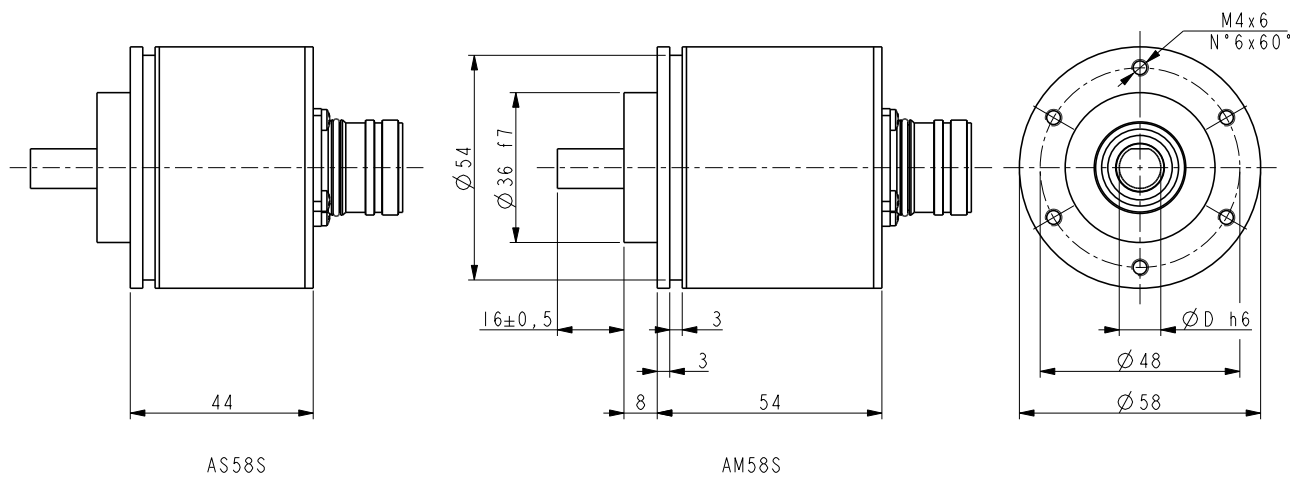
Flange:	anticorrosive, UNI EN AW-6082
Housing:	anticorrosive, UNI EN AW-6082
Bearings:	ABEC 5
Shaft:	stainless steel, non magnetic, UNI EN 4305

### ACCESSORIES

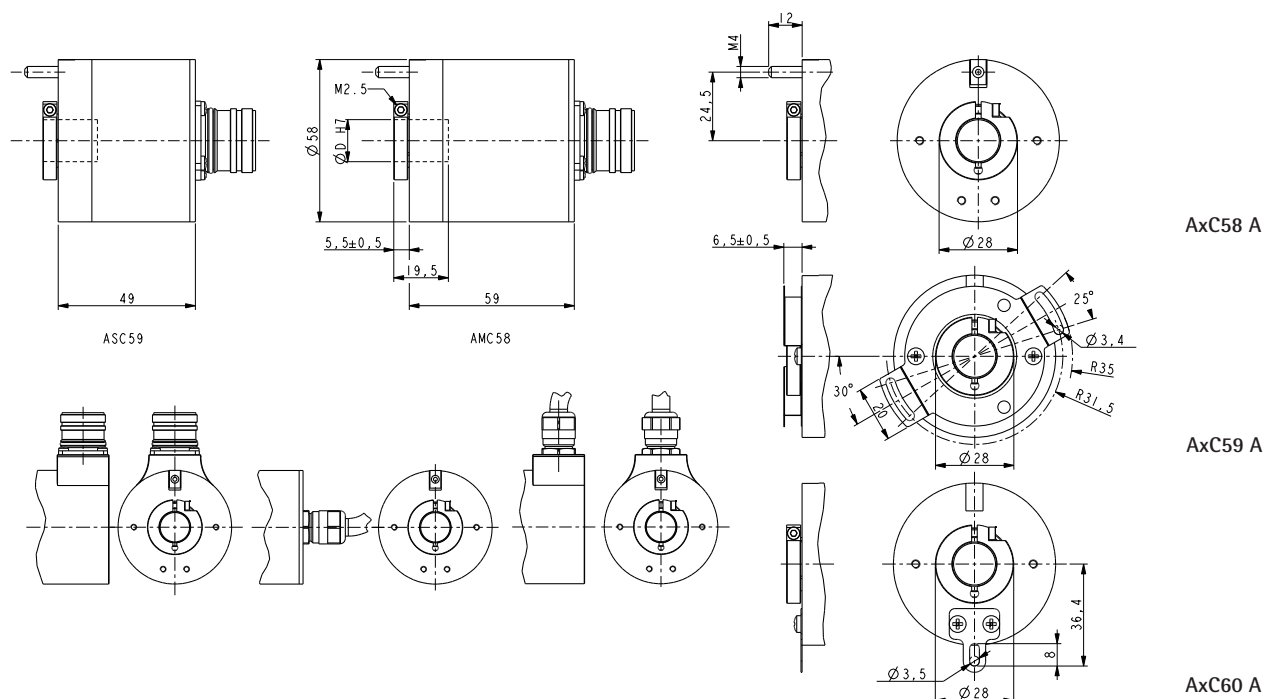
EPFL121H:	12 pin M23 mating connector
EM12F8:	8 pin M12 mating connector
PAN/PGF:	flexible couplings
BR1:	reducing sleeves
EC-M12F8-LK-M8-xxx:	M12 cordset with xx m cable
EC-CR12F-S28-T12-xxx:	M23 cordset with xx m cable
LKM-386:	fixing clamps



AS58 A - AM58 A



AS58S A - AM58S A



## Order code - Singleturn

AS58	ASC58	XX-XX	-	XXXX	-	XX	-	X	X	-	X	XXXX	/Sxxx
AS58S	ASC59	(a)		(b)		(c)		(d)	(e)		(f)	(g)	(h)
	ASC60												

<b>(a) RESOLUTION</b> (BIT SINGLETURN - BIT MULTITURN) 12-00 = 12 bit (4096 cpr x 1 turn)	<b>(c) SHAFT DIAMETER</b> 06 = 6 mm 08 = 8 mm P9 = 9.52 mm, 3/8" 10 = 10 mm 12 = 12 mm 14 = 14 mm (only ASCxx) 15 = 15 mm (only ASCxx)	<b>(d) PROTECTION</b> P = IP67, IP65 shaft side	<b>(g) CONNECTION TYPE &amp; CABLE LENGTH</b> L020 = cable output 2 m (standard) Lxx0 = cable out. x m (max. length 10m) L100 = cable output 10 m M8 = M12, 8 pin plug M2 = M23, 12 pin plug
<b>(b) INTERFACE/POWER SUPPLY</b> AI12 = 4-20mA, +13Vdc +30Vdc AI22 = 0-20mA, +13Vdc +30Vdc AI32 = 0-24mA, +13Vdc +30Vdc AV12 = 0-5V, +13Vdc +30Vdc AV22 = 0-10V, +13Vdc +30Vdc AV32 = -5/+5V, +13Vdc +30Vdc AV42 = -10/+10V, +13Vdc +30Vdc	<b>(e) OPER. TEMP. RANGE</b> T = -25°C +85°C (-13°F +185°F)	<b>(f) CONNECTION POSITION</b> A = axial R = radial	<b>(h) CUSTOM VERSION</b>

## Order code - Multiturn

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

<b>(a) RESOLUTION</b> (BIT SINGLETURN - BIT MULTITURN) 12-01 = 12 x 1bit (4096 cpr x rev.) 12-02 = 12 x 2 bit (4096 cpr x 4 rev.) 12-04 = 12 x 4 bit (4096 cpr x 16 rev.) 10-06 = 10 x 6 bit (1024 cpr x 64 rev.) 08-08 = 8 x 8 bit (256 cpr x 256 rev.) 06-10 = 6 x 10 bit (64 cpr x 1024 rev.) 04-12 = 4 x 12 bit (16 cpr x 4096 rev.)	<b>(b) INTERFACE/PWR SUPPLY</b> AI12 = 4-20mA, +13Vdc +30Vdc AI22 = 0-20mA, +13Vdc +30Vdc AI32 = 0-24mA, +13Vdc +30Vdc AV12 = 0-5V, +13Vdc +30Vdc AV22 = 0-10V, +13Vdc +30Vdc AV32 = -5/+5V, +13Vdc +30Vdc AV42 = -10/+10V, +13Vdc +30Vdc	<b>(c) SHAFT DIAMETER</b> 06 = 6 mm 08 = 8 mm P9 = 9.52 mm, 3/8" 10 = 10 mm 12 = 12 mm 14* = 14 mm (only AMCxx) 15* = 15 mm (only AMCxx)	<b>(f) CONNECTION POSITION</b> A = axial R = radial
		<b>(d) PROTECTION</b> P = IP67, IP65 shaft side	<b>(g) CONNECTION TYPE &amp; CABLE LENGTH</b> L020 = cable output 2 m (standard) Lxx0 = cable out. x m (max. length 10m) L100 = cable output 10 m M8 = M12, 8 pin plug M2 = M23, 12 pin plug
		<b>(e) OPERATING TEMP. RANGE</b> T = -25°C +85°C (-13°F +185°F)	<b>(h) CUSTOM VERSION</b>

Document release	Date	Description
1.0	September 2023	New order code