

# AM58

AM58M, AM58B,  
AM58C, AM58C2,  
AM58C3, AM58D

MAGNETIC ABSOLUTE ROTARY ENCODER



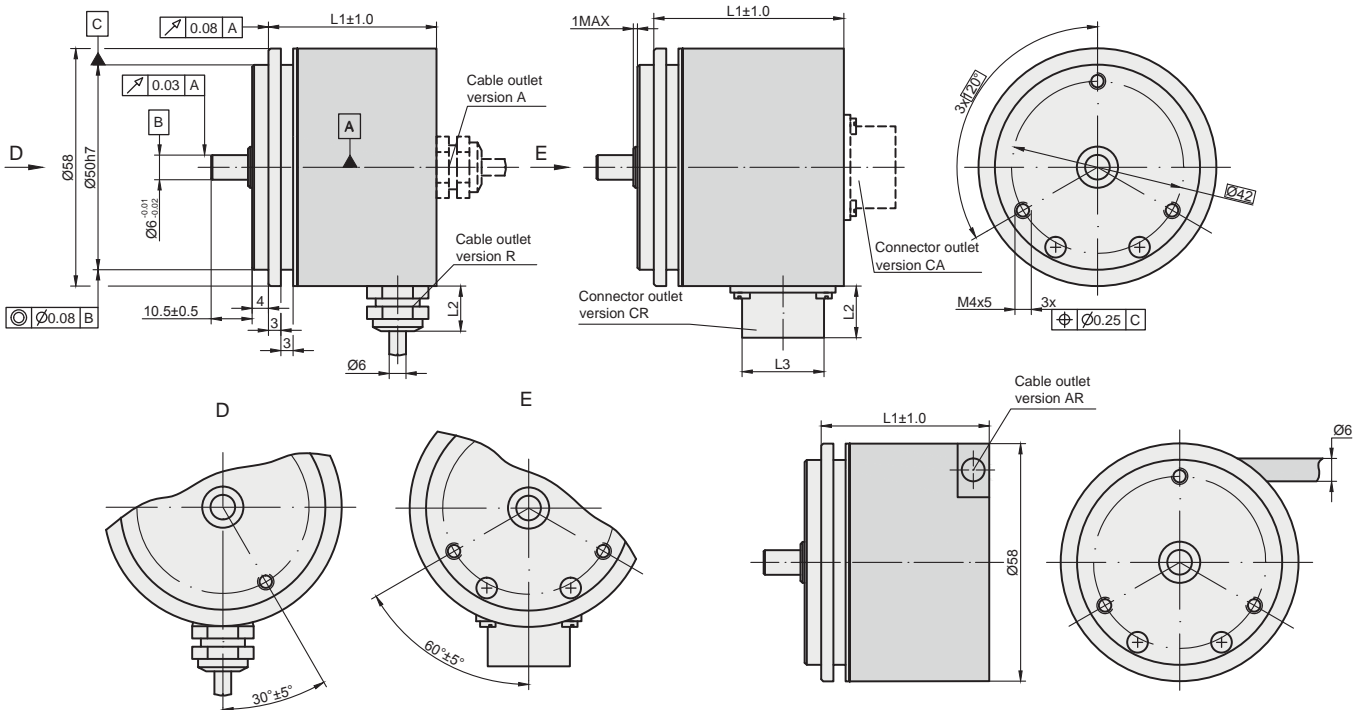
Absolute magnetic rotary encoder AM58 is used for information about rotary movements electronic units when working in the fields of metal working, industry automation, robotics industry, equipment control, measuring equipment and others.

Encoder has magnetic operation device and case. Incorporated to case special integrated circuit receives magnetic device rotation and transfers it to output signals.

## MECHANICAL DATA

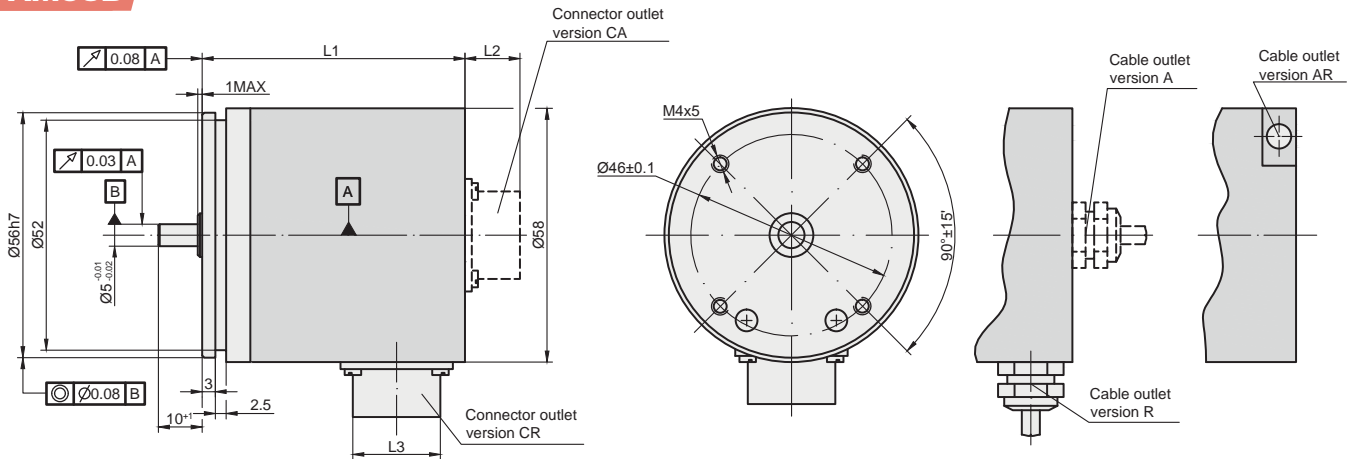
Maximum shaft speed	12000 rpm	Maximum weight without cable	0.25 kg
Maximum shaft load:		Operating temperature	-25...+85 °C
- axial	10 N	Storage temperature	-40...+125 °C
- radial (at shaft end)	20 N	Maximum humidity (non-condensing)	98 %
Starting torque at 200C	< 0.01 Nm	Permissible vibration (55 to 2000 Hz)	< 100 m/s <sup>2</sup>
Rotor moment of inertia	< 15 gcm <sup>2</sup>	Permissible shock (11 ms)	< 1000 m/s <sup>2</sup>
Protection (IEC 529):	up to IP67		

## AM58M



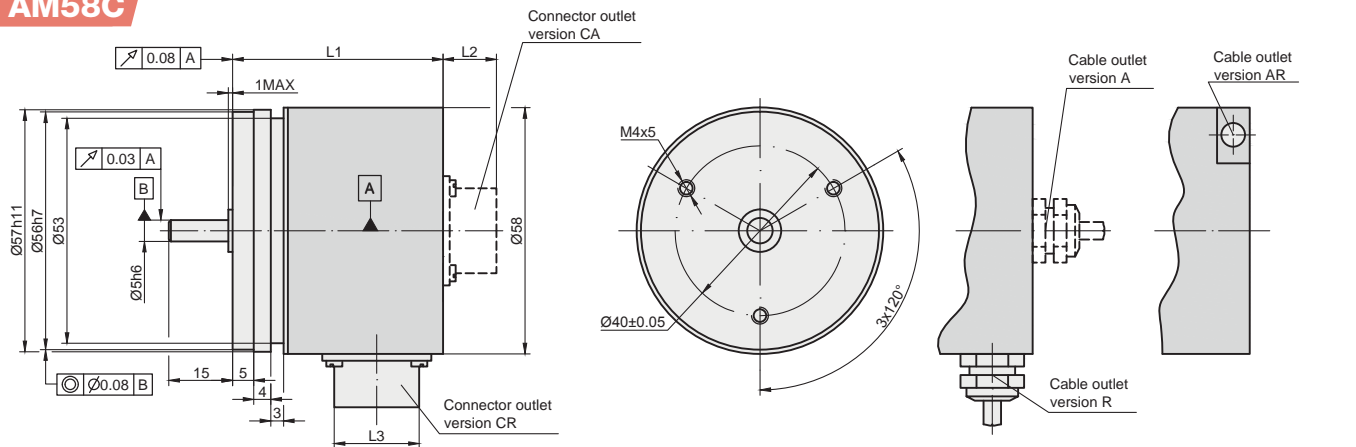
Connector type / cable outlet	ONC axial	RS10 axial	C12, C9 axial	ONC radial	RS10 radial	C12, C9 radial	Cable axial (ver. A)	Cable radial (ver. R)	Cable axial-radial (ver. AR)
L1	41 mm	41 mm	41 mm	54 mm	53 mm	53 mm	41 mm	41 mm	43 mm
L2	16 mm	9 mm	22 mm	16 mm	9 mm	22 mm	12 mm	12 mm	-
L3	M24	M14	M23	M24	M14	M23	-	-	-

## AM58B



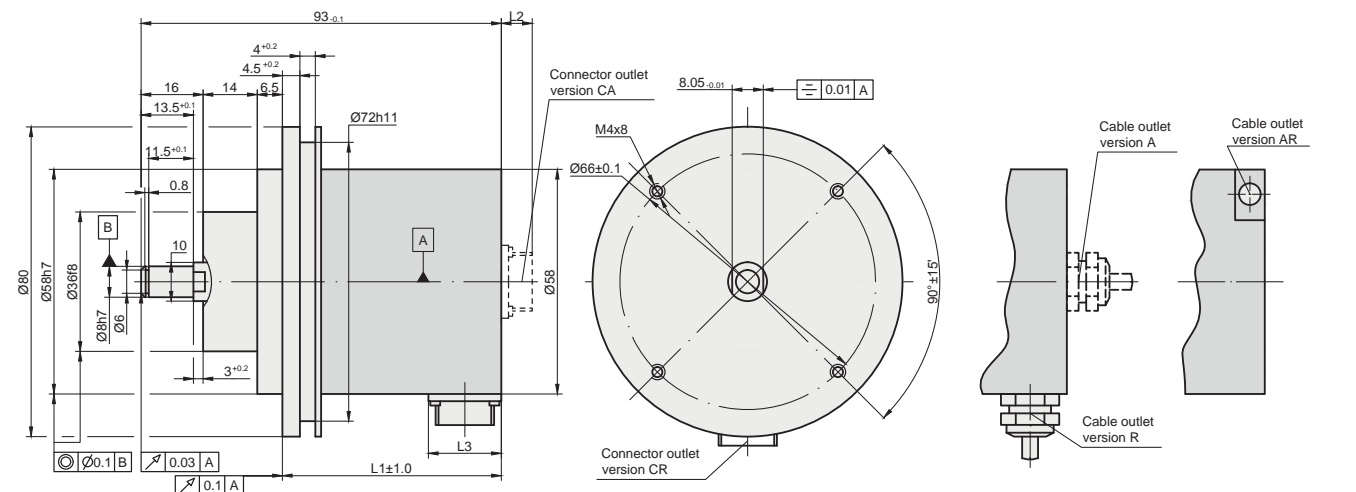
Connector type / cable outlet	ONC axial	RS10 axial	C12, C9 axial	ONC radial	RS10 radial	C12, C9 radial	Cable axial (ver. A)	Cable radial (ver. R)	Cable axial-radial (ver. AR)
L1	44.5 mm	44.5 mm	44.5 mm	57.5 mm	56.5 mm	56.5 mm	44.5 mm	44.5 mm	46.6 mm
L2	16 mm	9 mm	22 mm	16 mm	9 mm	22 mm	12 mm	12 mm	-
L3	M24	M14	M23	M24	M14	M23	-	-	-

## AM58C



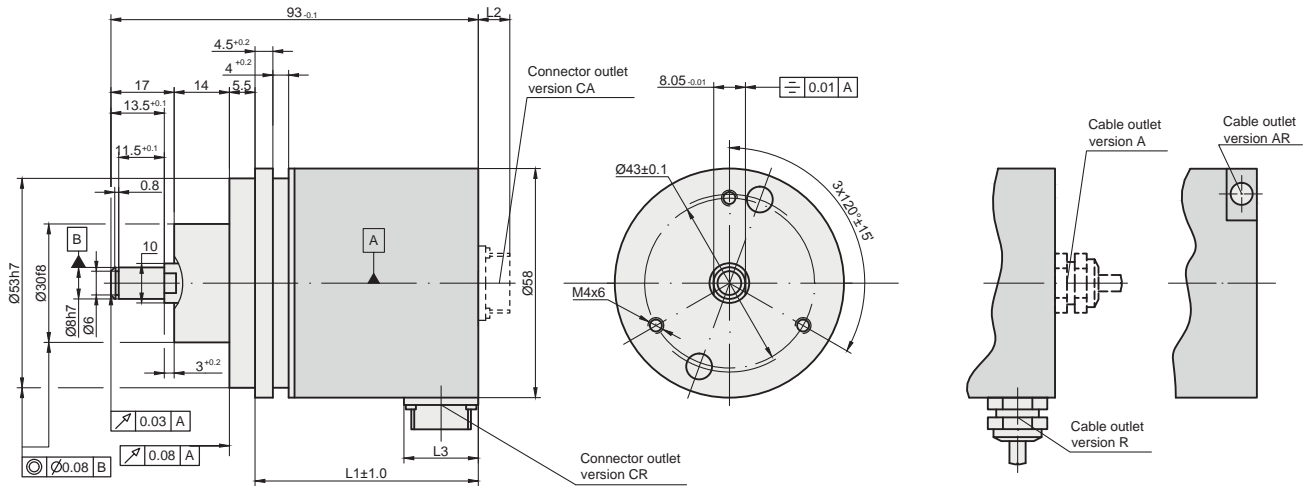
Connector type / cable outlet	ONC axial	RS10 axial	C12, C9 axial	ONC radial	RS10 radial	C12, C9 radial	Cable axial (ver. A)	Cable radial (ver. R)	Cable axial-radial (ver. AR)
L1	47 mm	47 mm	47 mm	60 mm	59 mm	59 mm	47 mm	47 mm	49 mm
L2	16 mm	9 mm	22 mm	16 mm	9 mm	22 mm	12 mm	12 mm	-
L3	M24	M14	M23	M24	M14	M23	-	-	-

## AM58C2



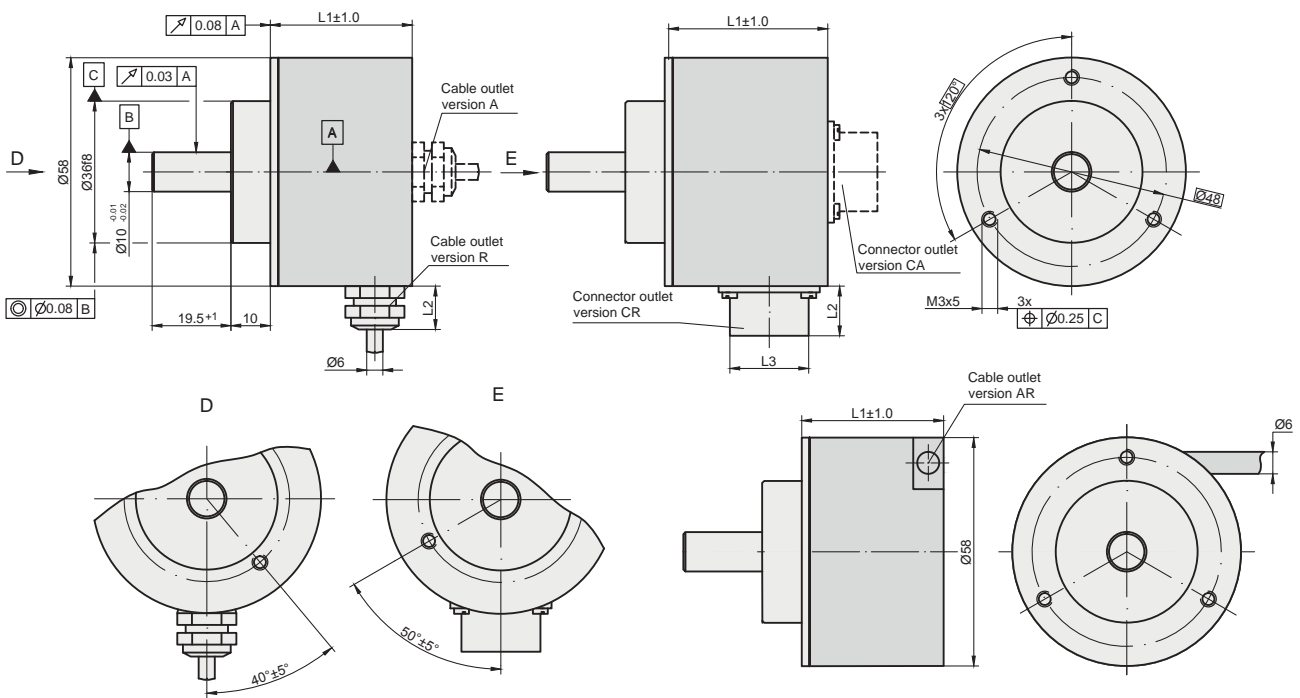
Connector type / cable outlet	ONC axial	RS10 axial	C12, C9 axial	ONC radial	RS10 radial	C12, C9 radial	Cable axial (ver. A)	Cable radial (ver. R)	Cable axial-radial (ver. AR)
L1	44.5 mm	44.5 mm	44.5 mm	-	56.5 mm	56.5 mm	44.5 mm	44.5 mm	46.5 mm
L2	16 mm	9 mm	22 mm	16 mm	9 mm	22 mm	12 mm	12 mm	-
L3	M24	M14	M23	M24	M14	M23	-	-	-

# AM58C3



Connector type / cable outlet	ONC axial	RS10 axial	C12, C9 axial	ONC radial	RS10 radial	C12, C9 radial	Cable axial (ver. A)	Cable radial (ver. R)	Cable axial-radial (ver. AR)
L1	50 mm	50 mm	50 mm	-	62 mm	62 mm	50 mm	50 mm	52 mm
L2	16 mm	9 mm	22 mm	16 mm	9 mm	22 mm	12 mm	12 mm	-
L3	M24	M14	M23	M24	M14	M23	-	-	-

# AM58D



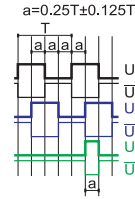
Connector type / cable outlet	ONC axial	RS10 axial	C12, C9 axial	ONC radial	RS10 radial	C12, C9 radial	Cable axial (ver. A)	Cable radial (ver. R)	Cable axial-radial (ver. AR)
L1	37.5 mm	37.5 mm	37.5 mm	-	49.5 mm	49.5 mm	37.5 mm	37.5 mm	39.5 mm
L2	16 mm	9 mm	22 mm	16 mm	9 mm	22 mm	12 mm	12 mm	-
L3	M24	M14	M23	M24	M14	M23	-	-	-

## ELECTRICAL DATA

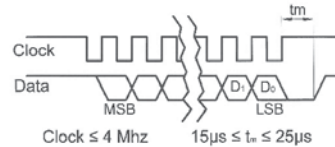
Supply voltage: - standard - optional	+5V±5% +(10...30)V±5%
Light source	LED
Accuracy	±0.3 arc. degree
Resolution	2 <sup>12</sup> (4096)
Code	binary
Maximum operating frequency, kHz	300
Standard cable length	1m
Maximum cable length	1m

### Output signals:

Incremental TTL, HTL (Up to 1024ppr)

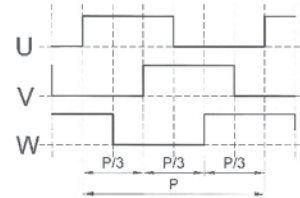


Through synchronous serial interface SSI (Up to 12bit)



Clock ≤ 4 Mhz 15µs ≤ tm ≤ 25µs  
Clock frequency - 20kHz ÷ 4 MHz; TTD - 25 ns ÷ 15 ns

Commutation UVW (pole number 2, 4, 6, 8, 10, 12, 14, 16)



## ACCESSORIES

<b>CONNECTORS FOR CABLE</b>	B12 12-pin round connector	C9 12-pin round connector	C12 12-pin round connector	D9 9-pin flat connector	D15 15-pin flat connector	RS10 10-pin round connector	ONC 10-pin round connector
<b>CONNECTORS ON HOUSING</b>	C9 12-pin round connector		C12 12-pin round connector	RS10 10-pin round connector		ONC 10-pin round connector	
<b>DIGITAL READOUT DEVICES</b>	CS3000			CS5500			
<b>COUPLING</b>	SC30						
<b>EXTERNAL INTERPOLATOR</b>	NK						

## ORDER FORM

AM58 X - X - XX - XX - XXX - XXXX - X - X								
<b>TYPE:</b>	<b>OUTPUT SIGNALS:</b>	<b>POLE NUMBER FOR SIGNAL UVW:</b>	<b>PULSE NR. PER TTL/HTL:</b>	<b>BIT NUMBER FOR SSI:</b>	<b>VOLTAGE SUPPLY:</b>	<b>CABLE LENGTH AND OUTLET OR FLANGE SOCKET ON CASE OUTLET:</b>	<b>CONNECTOR OR FLANGE SOCKET TYPE:</b>	<b>COUPLING:</b>
M - AM58M B - AM58B C - AM58C C2 - AM58C2 C3 - AM58C3 D - AM58D	H1 - TTL H2 - UVW H3 - TTL-UVW H4 - TTL-SSI H5 - TTL-UVW-SSI H6 - HTL H7 - HTL-UVW H8 - HTL-UVW-SSI	P0 - for H1, H4, H6 P2 - 2 poles P4 - 4 poles P6 - 6 poles P8 - 8 poles P10 - 10 poles P12 - 12 poles P14 - 14 poles P16 - 16 poles	for H2 - B0 - for H2 16 ppr - B6 - 6 bit 32 ppr - B7 - 7 bit 64 ppr - B8 - 8 bit 128 ppr - B9 - 9 bit 256 ppr - B10 - 10 bit 512 ppr - B11 - 11 bit 1024 ppr - B12 - 12 bit	05V - +5V 30V - +(10...30)V	A01 - 1m (A-axial cable) ... R01 - 1m (R-radial cable) ... AR01 - 1m (AR-universal cable outlet) ... CA - flange socket axial CR - flange socket radial	W* - without connector B12* - round, 12 pins C9 - round, 9 pins C12 - round, 12 pins D9* - flat, 9 pins D15* - flat, 15 pins RS10 - round, 10 pins ONC - round, 10 pins	0 - without coupling 1 - with coupling	
ORDER EXAMPLES:		1) AM58M-H8-P8-B10-05-CA/C12-1 2) AM58B-H1-P0-B12-05-R01/W-0						

\*only for cable