MAGNETIC ROTARY ENCODER





SSI protocol



Magnetic Technology





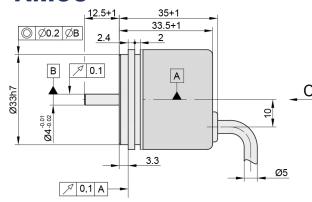
ENCODER MODIFICATION OTHER MODIFICATIONS

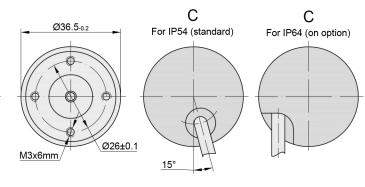
See A58 series data sheet See A58 series data sheet

AM36 and AM58 series' incremental/absolute encoders use magnetic technology and output up to 12 bit resolution through binary

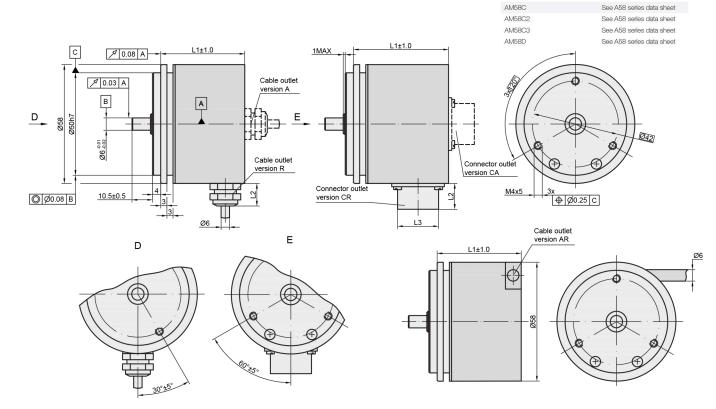
code. These encoders can have different signal modifications: incremental, serial interface, commutation.

AM36





AM58



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	15
L3	M24	M14	M23	M24	M14	M23		-	

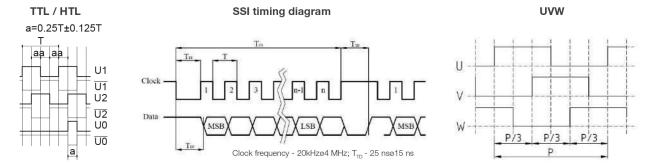
MECHANICAL DATA

AM58		AM36	
Maximum shaft speed	12000 rpm	Maximum shaft speed	10000 rpm
Maximum shaft load: - axial - radial (at shaft end)	10 N 20 N	Maximum shaft load: - axial - radial (at shaft end)	5 N 10 N
Starting torque at 20°C	≤ 0.01 Nm	Starting torque at 20°C	$\leq 0.002 \ Nm$
Rotor moment of inertia	< 15 gcm²	Rotor moment of inertia	< 2 gcm²
Protection (IEC 529)	up to IP67	Protection (IEC 529)	up to IP64
Maximum weight without cable	0.25 kg	Maximum weight without cable	0.07 kg
Operating temperature	-25+85 °C	Operating temperature	-25+85 °C
Storage temperature	-40+125 °C	Storage temperature	-40+125 °C
Maximum humidity (non-condensing)	98 %	Maximum humidity (non-condensing)	98 %
Permissible vibration (55 to 2000 Hz)	$\leq 100 \text{ m/s}^2$	Permissible vibration (55 to 2000 Hz)	$\leq 100 \text{ m/s}^2$
Permissible shock (5 ms)	$\leq 300~\text{m/s}^2$	Permissible shock (5 ms)	$\leq 300~\text{m/s}^2$

ELECTRICAL DATA

Supply voltage - standard - optional	+5V±5% +(1030)V±5%
Light source	LED
Accuracy	±0.3 arc. degree
Resolution	212 (4096)
Code	binary
Output signals: - incremental - through synchronous serial interface - commutation	TTL, HTL SSI UVW (pole number 2, 4, 6, 8, 10, 12, 14, 16)
Maximum operating frequency, kHz	300
Standard cable length	1m, without connector
Maximum cable length	25m

OUTPUT SIGNALS



ACCESSORIES

CONNECTORS FOR CABLE	C9 9-pin round connector	C12 12-pin round connector	D9 9-pin flat connector
COUPLING		SC30	

ORDER FORM

AMX1	-	X2	ХЗ	-	X4	-	X5	-	X6/X7

Encoder Modification (X1):	Output signal version (X2):	Pole number for signal uvw (X3):	Bit number (X4):	Voltage Supply (X5):	Cable length and output (X6):	Connector type (X7):
36 - AM36 58M - AM58M 58B - AM58B 58C - AM58C 58C2 - AM58C2 58C3 - AM58C3 58D - AM8D	H1- TTL H2 - UVW H3 - TTL-UVW H4 - TTL- SSI H5 - TTL - UVW - SSI H6 - HTL H7- HTL - UVW H8 - HTL - UVW - SSI	P2 - 2 P4 - 4 P6 - 6 P8 - 8 P10 - 10 P12 - 12 P14 - 14 P16 - 16	B6 - 6 B8 - 8 B10 - 10 B12 - 12	05V - +5V 30V - +(10 to 30)V	A01 - 1m (axial) A02 - 2m (axial) R03 - 3m (radial)	W - without connector D9 - flat, 9 pin C9 - round, 9pin C12 - round, 12pin PC10 - round, 10 pin
) AM36-H3-P6-6-05V-R01/W 2) AM58M-H4-B12-30V-A01/D9	7				