

MICRO NON-CONTACT ROTARY ENCODER

ARM-T Series

“Ultra Small Size, Non-contact Magnetic Measurement”



- Magnetic non-contact measurement
- Ultra small size of 8mm diameter
- Resolution options up to 1024 pulse
- High operation speed up to 30.000 rpm
- Incremental output
- Push-pull or TTL line driver output
- Robust structure, long service life
- IP68 protection

ARM-T series are compact, ultra small and durable magnetic rotary encoders designed for use in small spaces.

They consist of 2 parts, the encoder and the magnet. They have a long life thanks to non-contact magnetic measurement principle. They work incrementally and offer resolution up to 1024 pulses.

MECHANICAL DATA

Dimensions	Encoder: Ø8
	Magnet: Ø4x4
Material	Encoder: Aluminum
	Magnet: SmCo (Sm2 Co17), NiCuNi coated
Weight	Encoder: ~0,5g
	Magnet: ~0,5g
Wire tickness	AWG26

ENVIRONMENTAL DATA

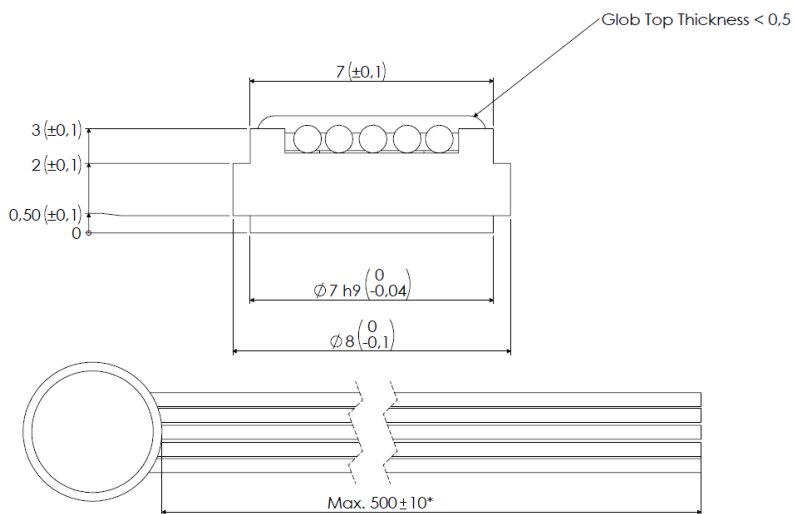
Protection	IP68
Operating Temperature	-40°C...+85°C
Storage Temperature	-40°C...+85°C

ELECTRICAL DATA

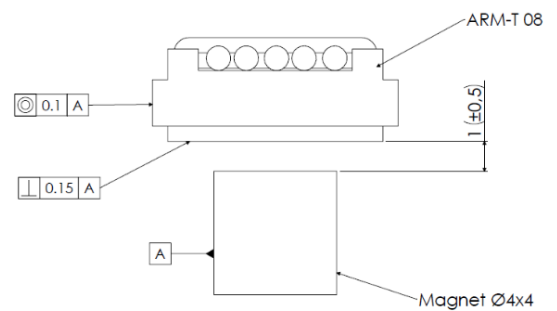
Measuring Type	Magnetic, non-contact				
Resolution	Resolution options between 1 and 1024 pulses				
Operating Speed	30.000 RPM max.				
Response Frequency	2 MHz				
Supply and Output Type	PP	TTL	HTL	HPL	
	Supply	10...30 VDC	5 VDC	10...30 VDC	5...30 VDC
	Output	10...30 VDC PP	5 VDC TTL	5 VDC TTL	5...30 VDC PP
Output Signals	A, /A, B, /B, Z, /Z				
Output Current	100 mA max. (per channel)				
Electrical Connection	Only cable (max 500mm) or line driver board with JST-SH 8 pin male connector				
Wire tickness	AWG26				

MECHANICAL DIMENSIONS AND MOUNING

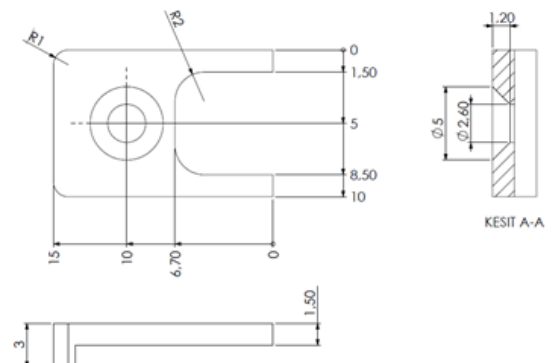
MECHANICAL DIMNSIONS (mm)



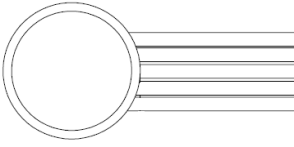
MOUNTING

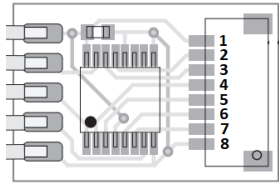


Mounting Bracket



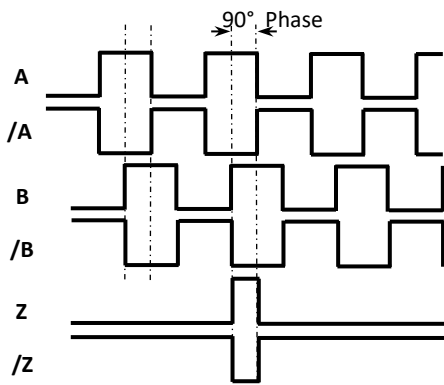
ELECTRICAL CONNECTIONS

	ENCODER CABLE COLOR
	
SIGNAL	
+V	RED
0V	BLACK
/Z	N/C
Z	PINK
B	GREEN
/B	N/C
/A	N/C
A	YELLOW

	LINE DRIVER BOARD JST-SH 8 PIN MALE CONNECTOR PIN NO
	
SIGNAL	
+V	1
0V	2
/Z	3
Z	4
B	5
/B	6
/A	7
A	8

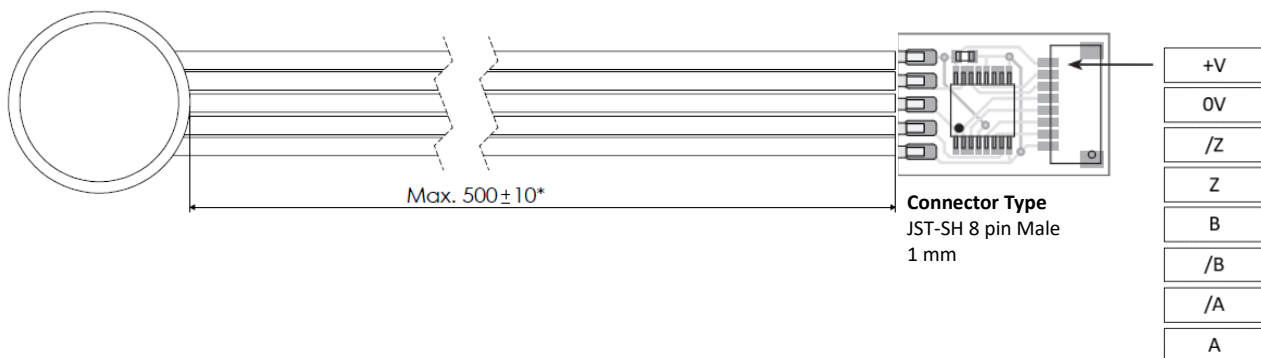
Note: If encoder is used only with cable; only A, B and Z output signals can be received.

If encoder is used with line driver board with JST connector; A, /A, B, /B, Z and /Z output signals can be received.



The table above shows the cable colors of the sensor output signals. If the control circuit is suitable in the Line Driver sensors of the not output signals (/A, /B, /Z) have to be added to the system. If it is not suitable /A, /B, /Z signal cables must be fixed as insulated separately. Don't forget that these edges have electricity too.

Line Driver Board JST-SH 8 Pin Male Connector Connection Diagram

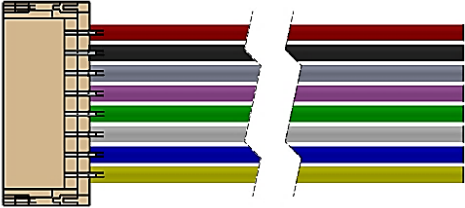


ORDER CODE

Model	Resolution	Output Signals	Connector Option ⁽¹⁾
ARM-T	XX	XXXX	XXX
Body Diameter	08 : 8 mm	Supply and Output	Cable Length
		PP : 10...30 VDC Supply : 10...30VDC Output TTL : 5 VDC Supply : 5 VDC TTL RS422 Line Driver Out. HTL : 10...30 VDC Supply : 5 VDC TTL RS422 Line Driver Out. HPL : 5...30 VDC Supply : 5...30 VDC Push-Pull Output	250mm : 250mm (standard)

- (1) If encoder is used only with cable; only A, B and Z output signals can be received.
If encoder is used with line driver board with JST connector; A, /A, B, /B, Z and /Z output signals can be received.
If the supply and output type is selected as "TTL", the product must be selected as "only cable".
If the supply and output type is selected as "PP, HTL or HPL", the product connector option should be selected as "LD".

ACCESSORIES

Product	Product Code	Description
	CB 0,5M / S28F	Connection cable with JST-SH 8 pin female connector, with 0.5 meters cable
	CB 1M / S28F	Connection cable with JST-SH 8 pin female connector, with 1 meters cable

SIGNAL	CABLE COLOR	PIN
+V	RED	1
0V	BLACK	2
/Z	YELLOW	3
Z	GREEN	4
B	BLUE	5
/B	WHITE	6
/A	ORANGE	7
A	PURPLE	8