



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 thickness	AWG26

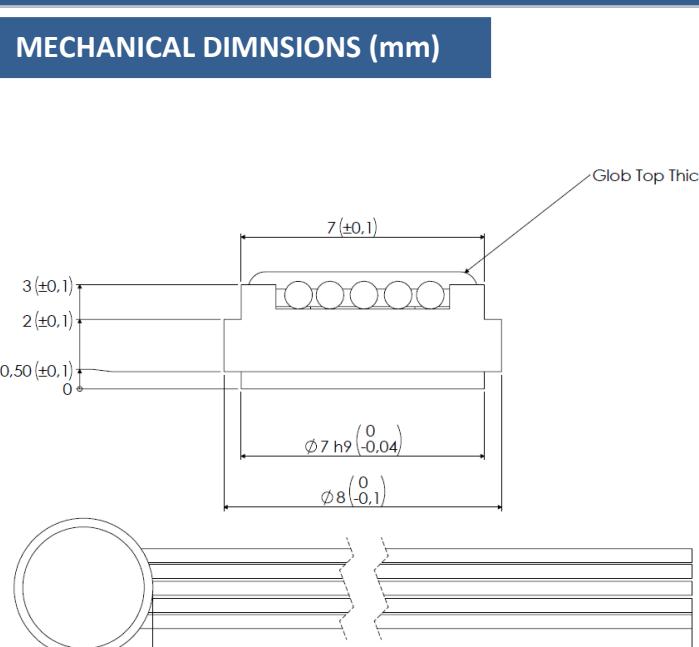
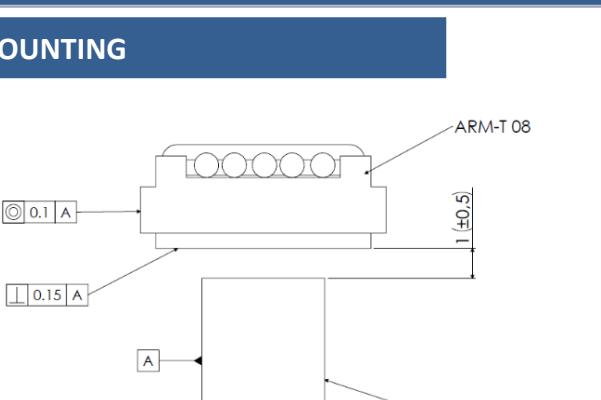
ENVIRONMENTAL DATA

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
Output Signals	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 thickness	AWG26			

MECHANICAL DIMENSIONS AND MOUNTING

MECHANICAL DIMNSIONS (mm)	MOUNTING
 <p>Technical drawing showing mechanical dimensions. Encoder: Ø8, Magnet: Ø4x4. Dimensions: 3 (±0,1), 2 (±0,1), 0,50 (±0,1), 0. Ø7 h9 (0/-0,04), Ø8 (-0,1). Max. 500±10*. Glob Top Thickness < 0,5.</p>	 <p>Mounting Bracket</p> <p>ARM-T 08</p> <p>Magnet Ø4x4</p> <p>1 (±0,5)</p> <p>0,15 A</p> <p>A</p>

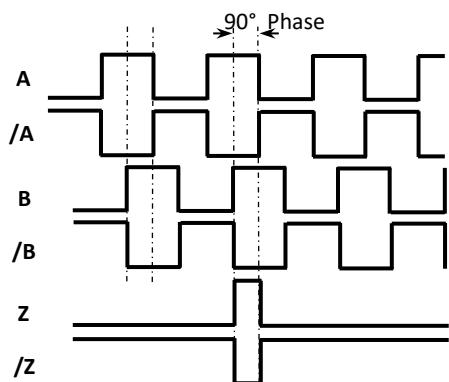
ELECTRICAL CONNECTIONS

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

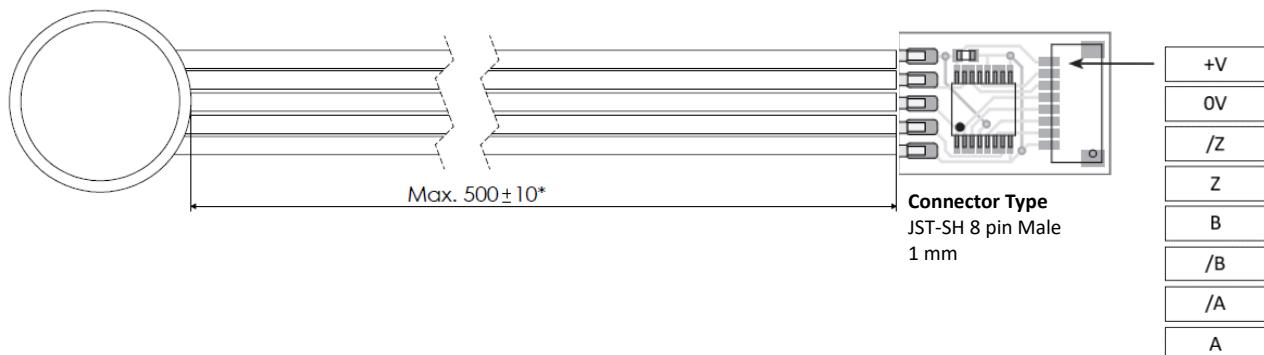
Note: If encoder is used only with cable; only A, B and Z output signals can be received.

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

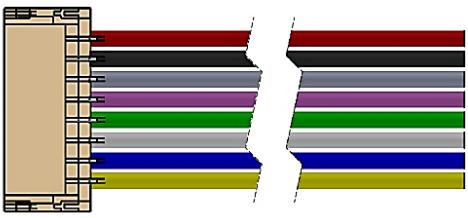


ORDER CODE

Model	Resolution			Output Signals			Connector Option ⁽¹⁾
	All resolution options between 1 pulse and 1024 pulses			2 (A,B) 3 (A,B,Z) 4 (A,/A,B,/B) 6 (A,/A,B,/B,Z,/Z)			
ARM-T	XX	XXXX	XXX	X	XXX	XX	No code : Only cable LD : Line driver board with JST connector
	Body Diameter		Supply and Output		Cable Length		
	08 : 8 mm		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