NON-CONTACT INCREMENTAL ROTARY ENCODER

ARP T 50 Series

"Magnetic Non-Contact Measurement,
50 mm Body Diameter"

INCREMENTAL OUTPUT | MAGNETIC MEASUREMENT | LONG SERVICE LIFE | HIGH ACCURACY | OPT. IP67 PROTECTION

- Non-contact measurement with magnetic principle
- Incremental output
- 50 mm body diameter
- Resolution options between 1 pulse and 1024 pulses
- Operating speed up to 20.000 RPM
- Standard IP54, optional IP67 protection class
- High sensitivity
- Robust structure, long service life

ARP T 50 series rotary encoders measure with magnetic principle and work contactless.

They consist of 2 parts, the encoder body and magnet. They have long operating life as they make non-contact measurement. They can also operate at high speeds up to 20,000 RPM. They work incrementally and offer resolution up to 1024 pulses.

Standard IP54, optionally IP67 protection class is available.

MECHANICAL DATA

Dimensions	Encoder: Ø50
	Rotor: Ø27
Material	Aluminum
Weight	Encoder: ~180g
	Rotor: ~10g

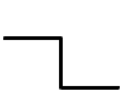
ENVIRONMENTAL DATA

Protection Class	IP54 (Optional IP67)
Operating Temp.	-25°C…+85°C
Storage Temp.	-40°C…+100°C

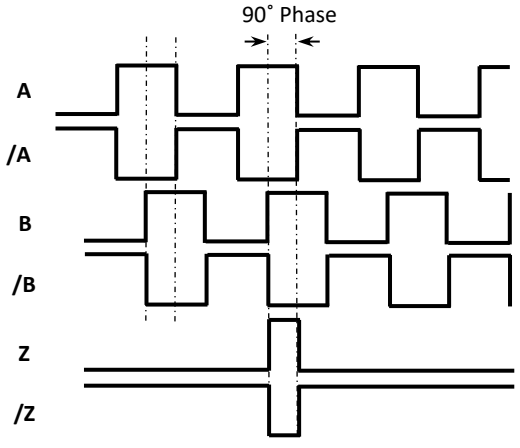
ELECTRICAL DATA

Measuring Type	Magnetic, non-contact						
Resolution	All resolution values between 1 and 1024 pulses						
Operating Speed	20.000 RPM max.						
Response Frequency	300 KHz						
Current Consumption	50 mA nominal						
Supply and Output Type		**PP**	**TTL**	**HTL**	**HPL**	**OCL**	**OCP**
	Supply	10…30 VDC	5 VDC	10…30 VDC	5…30 VDC	The supply signal should not be lower than the output signal	
	Output	10…30 VDC PP	5 VDC TTL	5 VDC TTL	5…30 VDC PP	NPN Open Collector	PNP Open Collector
Output Signals	A, /A, B, /B, Z, /Z						
Output Current	100 mA max. (per channel)						
Electrical Connection	5 x 0,14mm^2 shielded cable (outer dimater: 5 ±0,2 mm) (When output signal is selected as 2 or 3) 8 x 0,14mm^2 shielded cable (outer dimater: 6,5 ±0,2 mm) (When output signal is selected as 4 or 6)						

ELECTRICAL CONNECTION

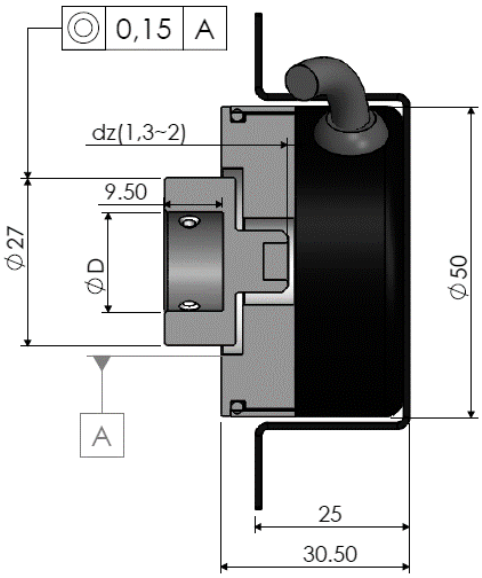


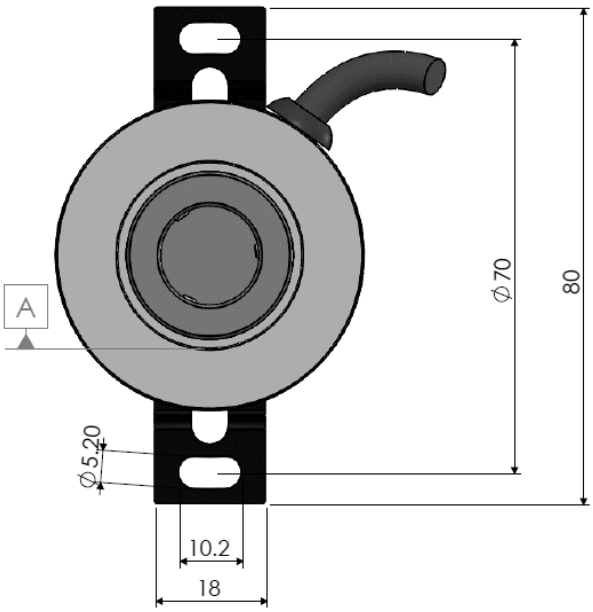
SIGNAL	CABLE COLOR
A	YELLOW
/B	WHITE
+V	RED
0 V	BLACK
/A	BLUE
B	GREEN
/Z	GREY
Z	PINK



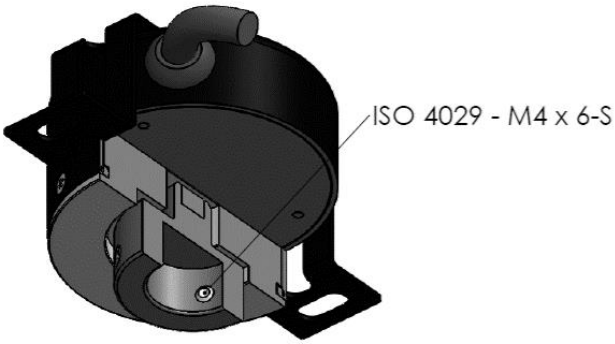
The table above shows the cable colors of the sensor output signals. If the control circuit is suitable in the Line Driver sensors of the not output signals (/A, /B, /Z) have to be added to the system. If it is not suitable /A, /B, /Z signal cables must be fixed as insulated separately. Don't forget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

MECHANICAL DIMENSIONS (mm)





ØD=Options from 5mm to 16mm



ORDER CODE

Output Signals
2 (A,B)
3 (A,B,Z)
4 (A,/A,B,/B)
6 (A,/A,B,/B,Z,/Z)

Resolution
All resolution values between 1 and 1024 pulses are available

Type
T : Non-contact

Cable Direction
Y : From side

ARP	-	T	-	XXX	-	XXXX	-	XXX	-	X	-	XX	-	X	-	XXX
Model				**Body Diameter**				**Supply and Output**				**Electrical Connection**				**Hollow Diameter**

050 : 50 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
OCL : NPN Open Collector
OCP : PNP Open Collector

2M : 2m cable
*Optional others

Different hollow diameters between 5mm and 16mm
*Optional others