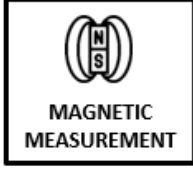
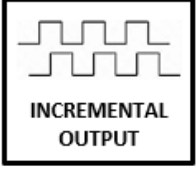
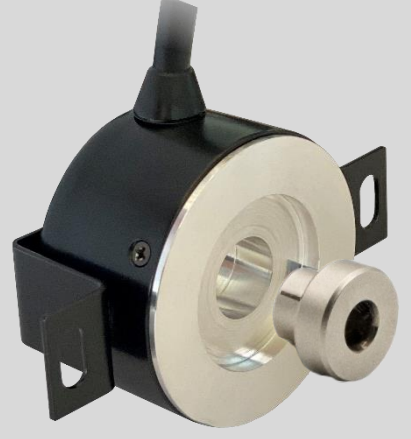


NON-CONTACT INCREMENTAL ROTARY ENCODER

ARP T 50 Series

“Magnetic Non-Contact Measurement,
50 mm Body Diameter”



- 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

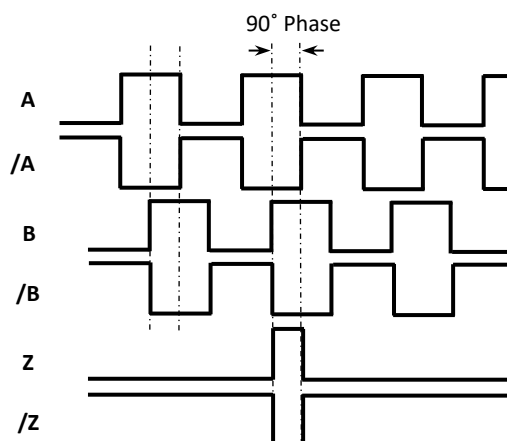
| | |
|-------------------------|----------------------|
| Protection Class | IP54 (Optional IP67) |
| Operating Temp. | -25°C...+85°C |
| Storage Temp. | -40°C...+100°C |

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 diameter: 5 ±0,2 mm) (When output signal is selected as 2 or 3) 8 x 0,14mm ² shielded cable (outer diameter: 6,5 ±0,2 mm) (When output signal is selected as 4 or 6) | | | | | | |

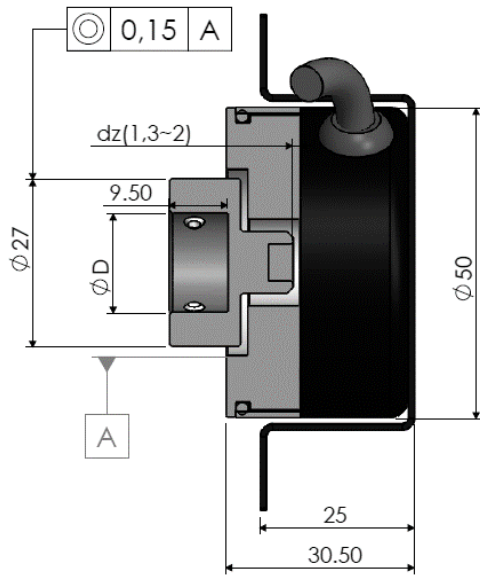
ELECTRICAL CONNECTION

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

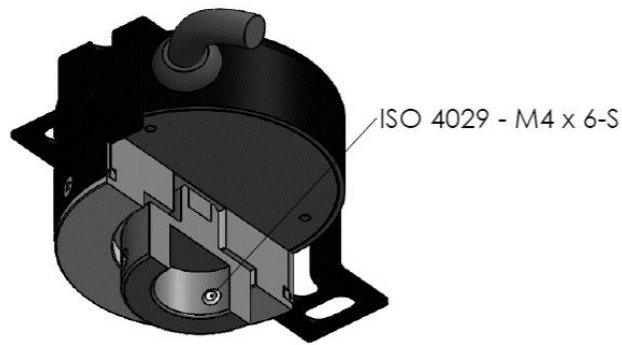
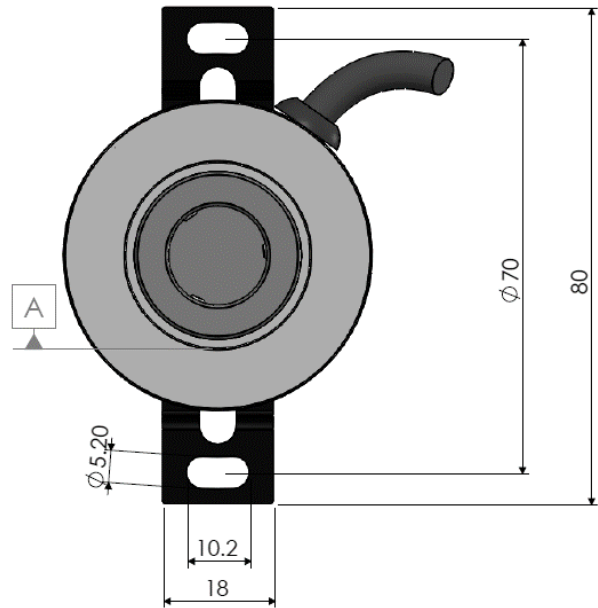


The table above shows the cable colors of the sensor output signals. If the control circuit is suitable in the Line Driver sensors of the not output signals (/A, /B, /Z) have to be added to the system. If it is not suitable /A, /B, /Z signal cables must be fixed as insulated separately. Don't forget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

MECHANICAL DIMENSIONS (mm)



ØD=Options from 5mm to 16mm



ORDER CODE

| Type | | Resolution | | Output Signals | | | Cable Direction | | Protection Class | |
|-----------------|---|---|------|--|---|----|-----------------------------------|-----|---|--|
| T : Non-contact | | All resolution values between 1 and 1024 pulses are available | | 2 (A,B) 3 (A,B,Z) 4 (A,/A,B,/B) 6 (A,/A,B,/B,Z,/Z) | | | Y : From side | | No code : IP54 (std) E067 : IP67 | |
| ARP | T | XXX | XXXX | XXX | X | XX | X | XXX | XXXX | |
| Model | | Body Diameter | | Supply and Output | | | Electrical Connection | | Rotor 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 | |