NON-CONTACT INCREMENTAL ROTARY ENCODER

ART B 58 Series

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

- Non-contact measurement with magnetic principle
- Incremental output
- 58 mm body diameter
- Resolution options between 1 pulse and 1024 pulses
- Operating speed up to 20.000 RPM
- IP65 protection class
- High sensitivity
- Robust structure, long service life

ART B 58 series rotary encoders measure with magnetic principle and work contactless.

They consist of 2 parts, the encoder body and rotor. 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.

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MECHANICAL DATA

Dimensions	Encoder: Ø58
	Rotor: Ø30
Material	Encoder: Aluminum
	Rotor: Aluminum
Weight	Encoder: ~180g
	Rotor: ~10g

ENVIRONMENTAL DATA

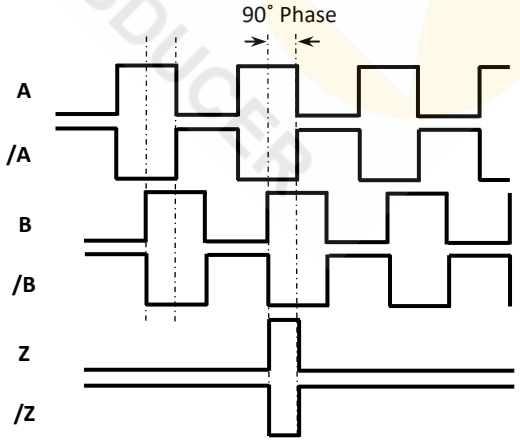
Protection Class	IP65
Operating Temp.	-25°C…+85°C
Storage Temp.	-40°C…+100°C

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

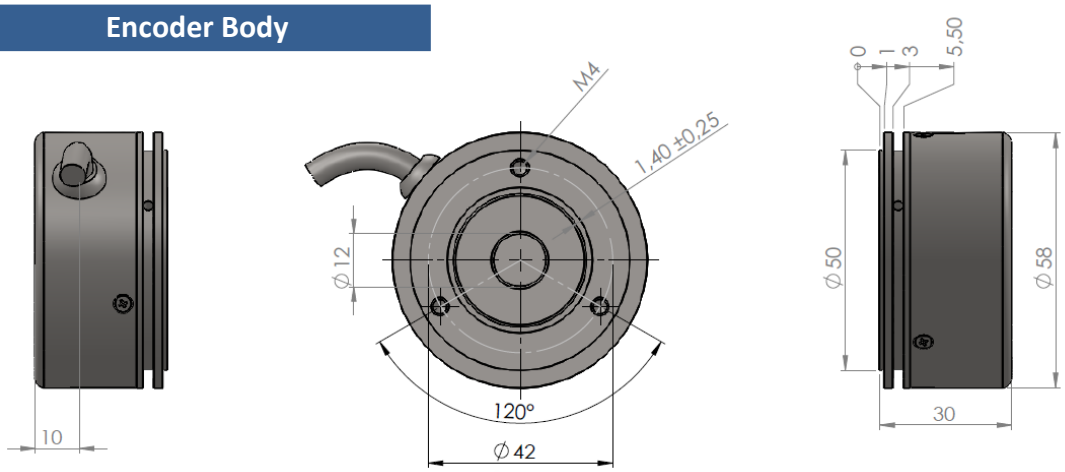
SIGNAL	CABLE COLOR
A	YELLOW
/B	WHITE
+V	RED
0 V	BLACK
/A	BLUE
B	GREEN
/Z	GREY
Z	PINK



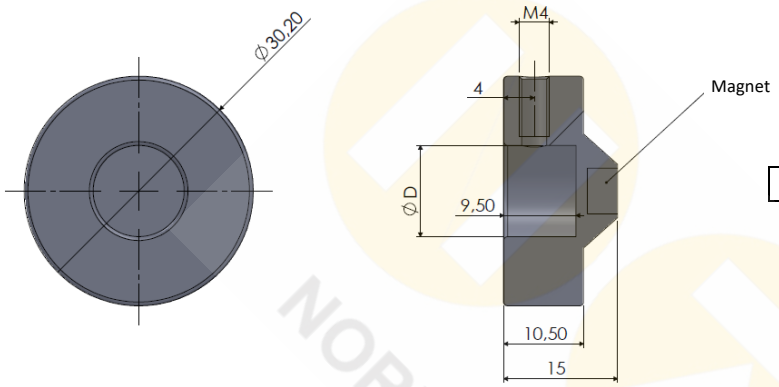
The table above shows the cable colors of the sensor output signals. If the control circuit is suitable in the Line Driver sensors of the not output signals (/A, /B, /Z) have to be added to the system. If it is not suitable /A, /B, /Z signal cables must be fixed as insulated separately. Don't forget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

MECHANICAL DIMENSIONS (mm)

Encoder Body

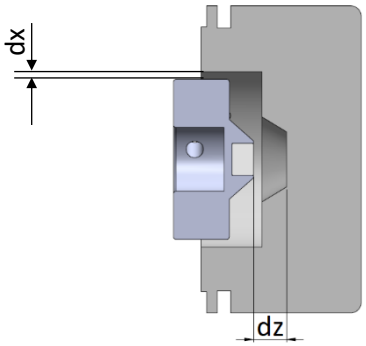


Rotor



ØD	Options from 6 mm to 20 mm

MAGNET - ENCODER SENSING DISTANCE AND POSITION TOLERANCE



Sensing Distance= dz = 1,3 - 2 mm

Alignment = dx = 1,40±0,25 mm

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
B : Semi hollow shaft

Cable Direction
Y : From side

ART	-	T	-	XXX	-	XXXX	-	XXX	-	X	-	XX	-	X	-	X

Model

Body Diameter
058 : 58 mm

Supply and Output
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

Cable Length
3M : 3M (Standard)
5M : 5M
8M : 8M
10M : 10M
*Optional others

Hollow Diameter
Different hollow diameters between 6mm and 20 mm