

# INCREMENTAL ROTARY ENCODER "Special Manufacturing Series"

**ARS-S-1XP8001**  
**ARC-S-1XP8001**



- Magnetic (ARS) or Optical (ARC) principle measurement systems
- Special spindle with special screw
- 58mm body diameter
- 1024 pulse resolution
- With special socket connection or optional cable
- Reverse polarity and short circuit protection
- High operating speed 6000 RPM

The ARS / ARC-S-1XP8001 series have a specially manufactured shaft structure. The main body of the shaft is 12 mm and the end part is a 8 mm thread. The products have a standard diameter of 58mm.

They are frequently used in many areas such as motor speed control, speed measurement, automation applications that require length measurement, all kinds of machinery sector, etc.

## APPLICATIONS

- Motor Speed Control
- Textile Machinery
- All kinds of Automation Applications

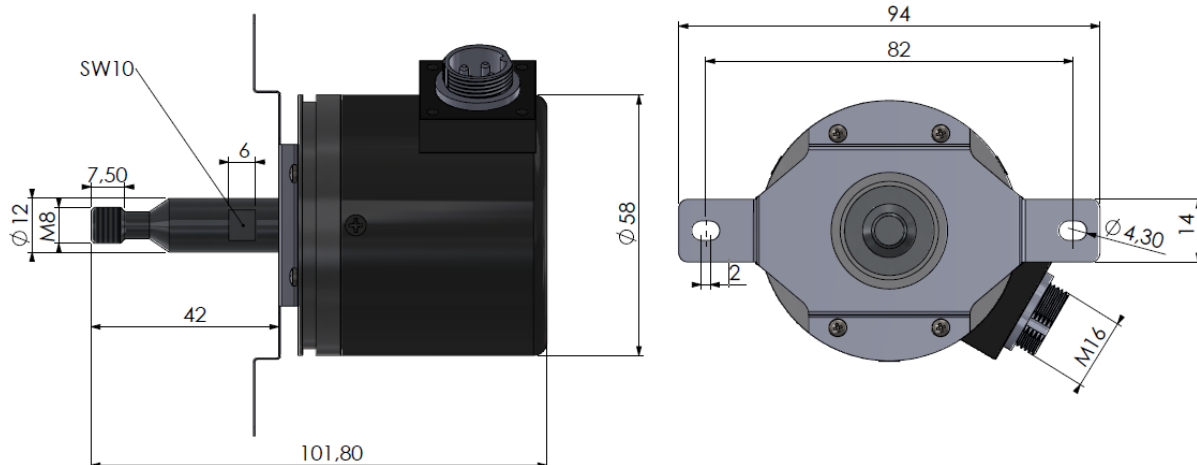
### Technical Specifications

Resolution/ per tour	Standard 1024 pulse (optional others)
Operating Principle	ARS Series : Magnetic ARC Series : Optical
Output Signal Type	Push-Pull , TTL RS422 Line Driver, Open Collector
Electrical Connexion	Standard M16 12 pin socket, other models optional
Output Signals	A B Z /A /B /Z
Input Current	Max. 60 mA per channel
Supply	10...30 VDC $\pm$ 20% , 5 VDC $\pm$ 5% , 5...24 VDC $\pm$ 20% , 5...30 VDC $\pm$ 20%
Connection Class	Reverse polarity and short circuit protection are available.
Response Frequency	50 – 300KHZ

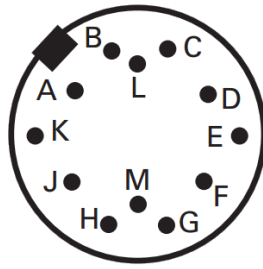
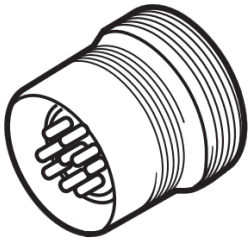
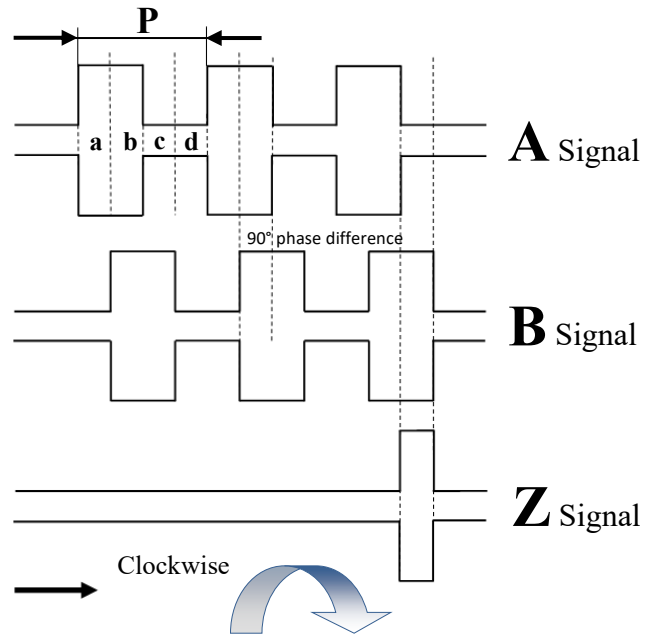
### Mechanical Specifications

Shaft Type	Special type with screw
Mechanical Measurements	58 mm body diameter
Operating Temperature	-25°C...+85°C
Starting Torque	0,5Ncm
Body	Main body: Steel Sheet Flange: Aluminum
Maximum Operating Speed	6000 RPM
Protection Class	IP54
Weight	250 grams

### Mechanical Dimensions



Signal	Cable Color	Socket Pin Number
A	YELLOW	E
/B	WHITE	A
+VCC Supply	RED	B - M
0 V	BLACK	K-L
/A	BLUE	F
B	GREEN	H
/Z	GREY	D
Z	PINK	C
GND	SHIELD	Socket body



## Order Details

### Operating Principle

S: MAGNETIC

C: OPTICAL

### Shaft type

S: Shaft

### Body Diameter

058 : 58 mm

### Resolution

Standard 1024 = 1024 pulse

\*\* Other pulse options can be selected from 4 pulse to 4096 pulse.

### Output Signals

6 : A, /A, B, /B, Z, /Z

2 : A, B

3 : A, B, Z

4 : A, /A, B, /B

### Cable Direction

A : Backside

Y : Sidewise

AS : Backside + Spiral

A R S - S - 0 5 8 - 1 0 2 4 - H P L - 6 - S 1 9 - Y - 1 X P 8 0 0 1

### Feed and Output Type

PP : 10...30 VDC Supply

: 10...30VDC Output

TTL : 5 VDC Supply

: 5 VDC TTL Output

HTL : 10...30 VDC Supply

: 5 VDC TTL Output

HPL : 5...30 VDC Supply

: 5...30 VDC Push-Pull Output

OCL : NPN Open Collector

OCP : PNP Open Collector

### Cable Length

S19 : M16 / 12 Pin Socket

5M : 5 M

10M : 10 M

\* Optionally, it is done in the desired length.

### Special production series

Specially designed shaft main body 12 mm, end section with threaded type 8 mm

1XP8001-1 Feed: 10-30VDC

1XP8001-2 Feed: 5VDC