● PROGRAMMABLE INCREMENT ENCODER Ø 50 MM.

PR-04-SERIES

PROGRAMMABLE INCREMENT ENCODER Ø 50 MM.

PRIMUS

CE

PR-04-S **PR-04-H**

DESCRIPTION

- It is a device that converts the axis of the encoder shaft into a pulse. The electric pulse can be programmed in the same P/R. Easy to use
- The program can select the district pulse/ cycle from 1-4096 Pulses
- Push-Pull output is available for NPN, PNP Open Collector and Line-Driver
- Push-Pull output (A, B, Z) and Line-Driver (A, $\overline{A}$, B, $\overline{B}$, Z, $\overline{Z}$)
- Power supply B-27 VDC (Push-pull) and 5 VDC (Line Driver)

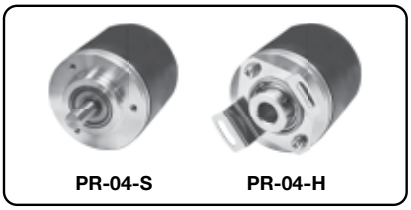
TECHNICAL SPECIFICATION

Power Supply		Push-Pull	8-30VDC
		Line Driver	5VDC
Pulse/Revolution (PPR)		1-16,384 Pulse/Revolution	
Index Pulse Lenght		90°, 180°, 270°, 360°	
Current Consumption		Max 42.5mA	
Output Wave Form		2-phase+Index Position A,B,Z and $\overline{A}$, $\overline{B}$, $\overline{Z}$	
		Duty Ratio 50%	
Rise/Fall Time		100 ns.	
Max Frequency Response		200kHz	
Max Speed		12,000 RPM	
Operating Temperature		-10 °C to 70 °C	
Storage Temperature		-30 °C to 85 °C	
Operating Humidity		85% RH Non-Condensing	
Degree of Protection		IP50	
Vibration		10-55Hz	
Shaft Diameter		8 mm.	
Hollow Shaft Diameter		8 mm.	
Housing Diameter		50 mm.	
Cable		50 cm. Shield Cable	
Direction of Rotation		Positive Direction/ Negative Direction	
Material	Cover	Steel	
	Encoder	Aluminium	
	Shaft	Stainless	
Weight		215 g.	

OPERATION

PR-04-SERIES is Programmable Increment Encoder that can program Pulse/ cycle range from 1-4096 Pulse/Cycle by connecting PR-PRO (Converter+ USB Cable+ Software) to PR-04-SERIES (Programmable Increment) Encoder) and ComputerSet the pulse/cycle range through software before use

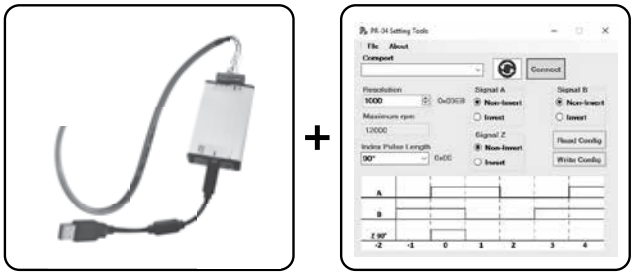
Connect the Programmable Increment Encoder PR-04-SERIES to the motor shaft or work piece to be measured on the shaft. The PR-04-SERIES rotates according to the motor sends a pulse signal according to the pulse/ cycle of the model. For example, the PR-04-S-100 works by dividing one round into 100 parts, while the moving shaft sends the pulse out of the rotating parts. Signal B and A are 90 ° electrical lead / lag . When clockwise rotation, B will take page A, but if turn counterclockwise A will go to page B, which will be useful to check the direction of rotation of the encoder. Signal Z will have 1 pulse/cycle to indicate the anniversary. Program can provide pulse lengths of 90 °, 180 °, 270 ° and 360 ° as desired.



PR-04-S **PR-04-H**

Programmable Incremental Encoder

PR-PRO



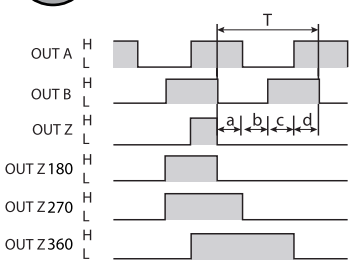
Converter + USB Cable **Software**

Accessories Converter + USB Cable + Software

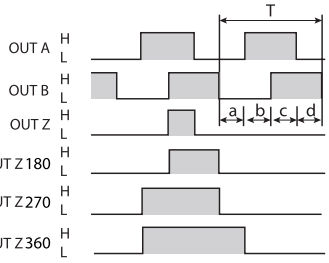
GRAPH OF ENCODER OPERATION

FIGURE 1.

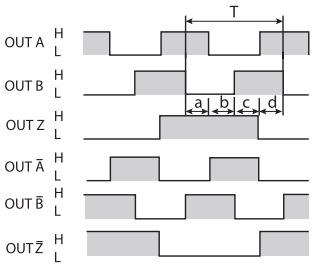
Push-Pull
Positive Direction



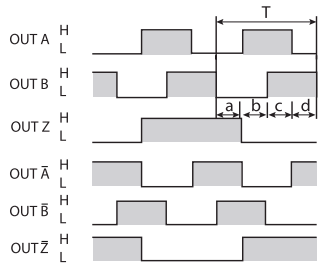
Negative Direction



Line Driver
Positive Direction

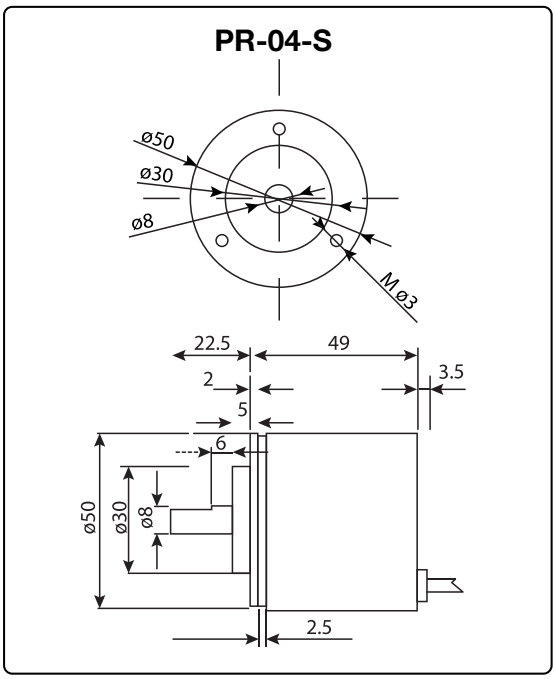


Negative Direction

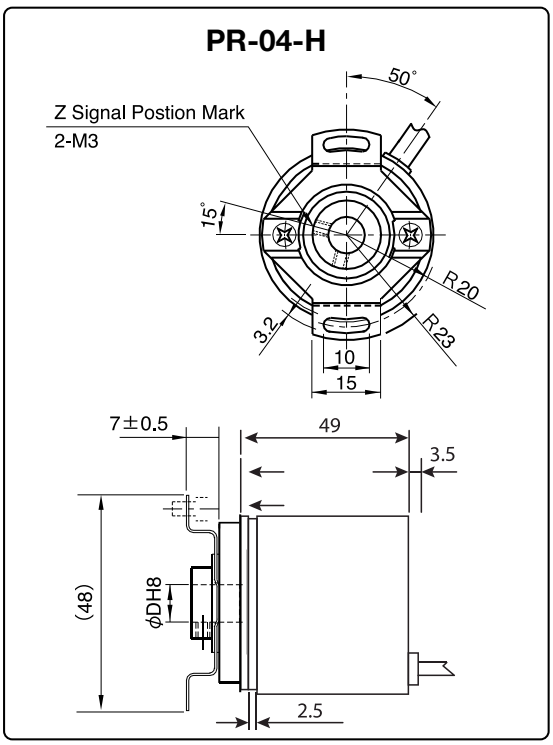


DIMENSION

PR-04-S



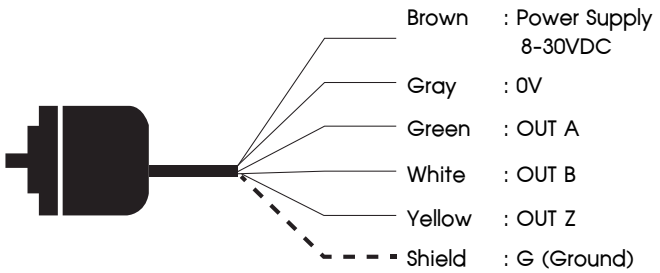
PR-04-H



WIRING DIAGRAM

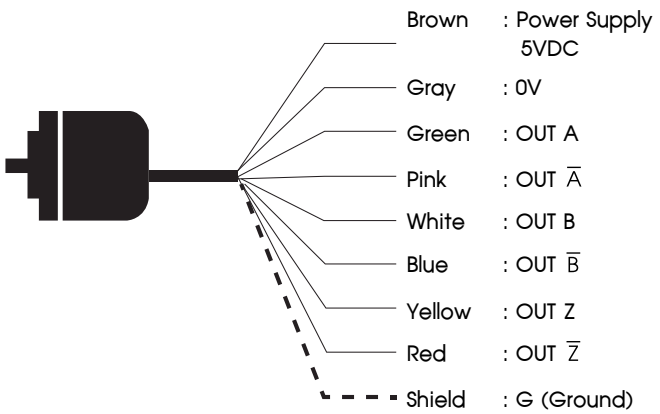
Push-Pull

The Shielded Wire is Connected to the main body.

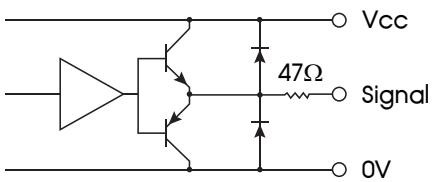


Line Driver

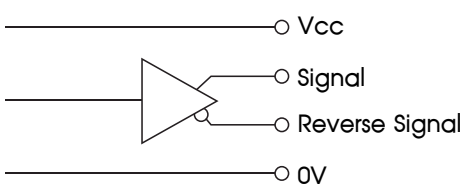
The Shielded Wire is Connected to the main body.



CIRCUIT OF OUTPUT SIGNAL



Push-Pull



Line Driver

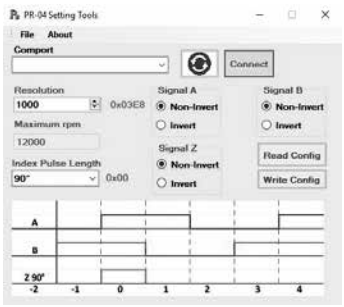
ACCESSORIES FOR MODEL PR-04-SERIES

Using of PR-PRO for Pulse/ cycle Setting

1. Connect the USB between the PR-PRO and the PC and connect the cable to the program pulse/ cycle value to Encoder PR-04

PR-PRO

Exsemple Software



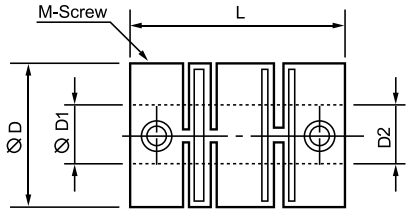
2. Open the PR-04 SettingTools program and select the Comport of the PR-04. You can find the Comport number atWINl O's Device manager
3. Click Connect. The program will read the configuration on the PR-04 or press Read Config to read the value.
4. Set the value and click Write Config. The value is set and written into RP-04

ACCESSORIES

PR-02-08 COUPLING for PR-04-S

- For PR-04-S
- It is a connector for connecting the Encoder to Load or Motor

DIMENSION



Model	D1/D2	L	D	Torque	Angular	Material
PR-02-08	8/8 mm.	25 mm.	22 mm.	2 N.m.	5 องศา	Polyester Resin

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PROGRAMMABLE INCREMENT ENCODER

PR-04- [ ] - [ ] - [ ]

TYPE	
S	Shaft
H	Hollow-Shaft

PULSE/REVOLUTION	
100	100 PULSE/Revolution (Standard) Can Programmalde From1-16,384 PULSE/Revolution
XXX	Can specify Default PULSE/Revolution From 1-16,384 PULSE / Revolution As required

SIGNAL OUTPUT	
None	PUSH-PULL 8-30VDC (Supply)
L	LINE-DRIVER 5VDC (Supply)

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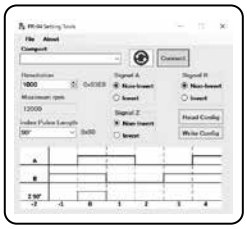
Accessories Converter + USB Cable + Software

PR-PRO

PR-PRO

+



Converter + USB Cable **Software**

ORDERING CODE

Accessories Coupling

PR-02-08

** Remark Coupling connect with PR-04-5, 8 mm