PR-01N-SERIES

INCREMENT ENCODER Ø 50 MM.

PRIMUS

CE **PR-01N-S** **PR-01N-H**

DESCRIPTION

- It is a device to convert the axis of the shaft of the Encoder into an electrical pulse.
- divided by number of pulse
- Number of Pulse/ Cycle can be selected from 25 - 2048 Pulse
- Push-Pull output can be used for both NPN, PNP Open Collector and Line - Driver.
- Push-Pull output signal (A, B, Z) and Line-Driver (A, $\overline{A}$, B, $\overline{B}$, Z, $\overline{Z}$)
- Power supply 8 - 30 VDC (Push-Pull) and 5 VDC (Line-Driver)

TECHNICAL SPECIFICATION

Power Supply	Push-Pull	8-30VDC
	Line Driver	5VDC
Current Consumption	Max 42.5mA	
Pulse/Revolution	25-2048 Pulse/Revolution	
Wave Form Output	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	20,000 RPM	
Operating Temperature	-10 °C to 70 °C	
Storage Temperature	-30 °C to 85 °C	
Operating Humidity	0-80%RH	
Degree of Protection	IP50	
Vibration	10-55Hz	
Weight	200 g.	
Shaft Diameter	6 mm./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

OPERATION

Connect the shaft of the Encoder PR-01 N to the motor shaft or the work to be measured. When the PR-01 N shaft rotates according to the motor, it sends a pulse signal according to the pulse per round of the model PR-01 N-S-100 will be divided into 100 parts per 1 round. As the shaft moves, it sends the pulse out of the rotating parts. Signal A and Signal B Lead/ Lag angle 90 degrees by the electric clockwise rotation A will lead B, but if turn counterclockwise B will be ahead of A, which will be useful to check the direction. The Signal Z will have 1 Pulse to inform you of the anniversary

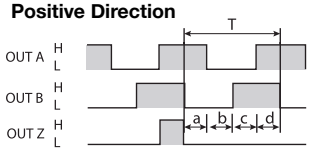
If the line-driver output signal is 6 Signal is (A, $\overline{A}$, B, $\overline{B}$, Z, $\overline{Z}$) by A will invert with $\overline{A}$, $\overline{B}$ will invert with B and $\overline{Z}$ will invert with Z displayed by Signal Graph

SIGNAL OPERATION GRAPH

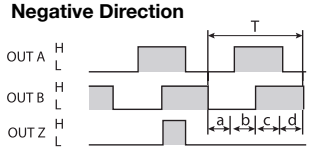
PR-1N-S

Push-Pull

Positive Direction



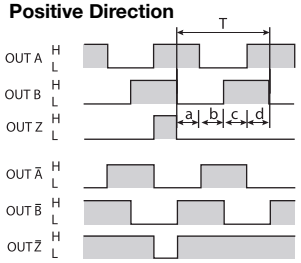
Negative Direction



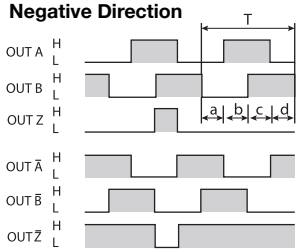
PR-1N-S-L

Line Driver

Positive Direction

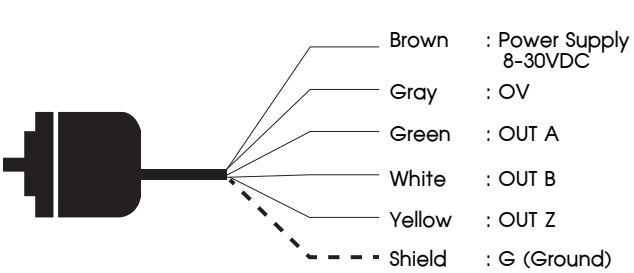


Negative Direction

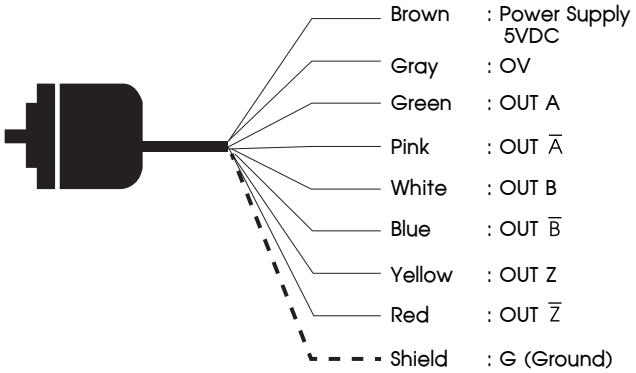


WIRING DIAGRAM

Push-Pull The Shielded Wire is Connected to the main body.

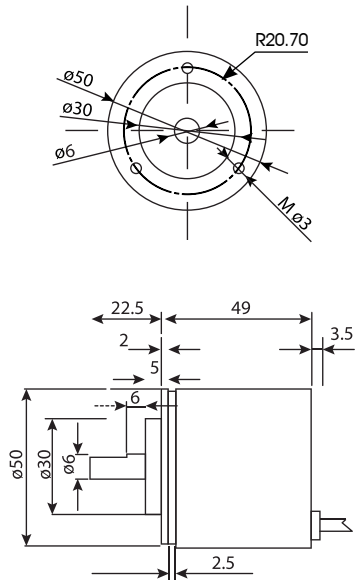


Line Driver The Shielded Wire is Connected to the main body.

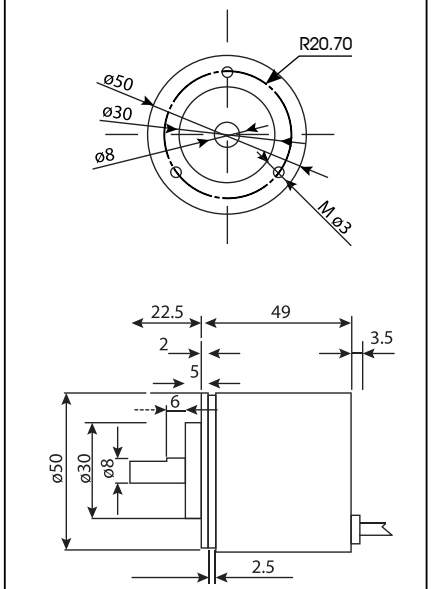


DIMENSION

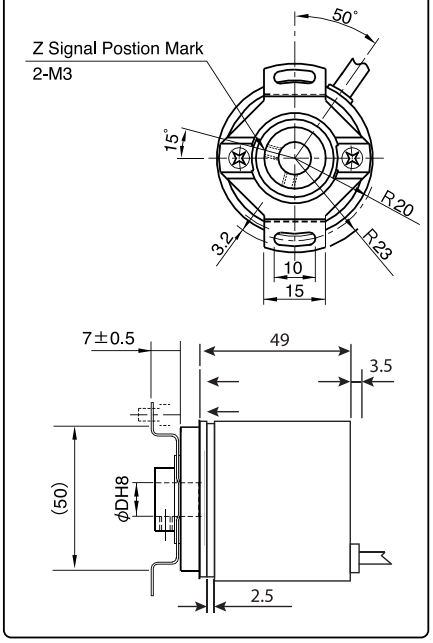
PR-01N-S (Shaff 6 mm.)



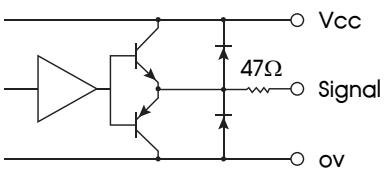
PR-01N-S (Shaff 8 mm.)



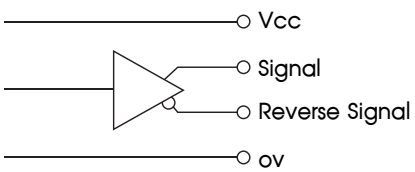
PR-01N-H (Hollow-Shaft 8 mm.)



CIRCUIT OF OUTPUT SIGNAL



Push-Pull



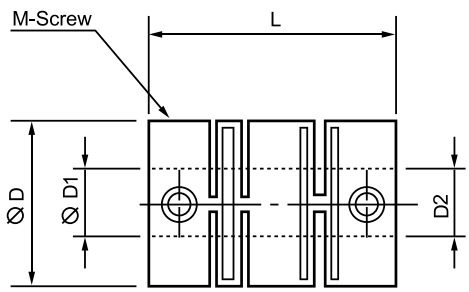
Line Driver

ACCESSORY

PR-02N-08
COUPLING for PR-01N-S

- ForPR-01N-S
- It is a connector for welding 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
PR-02-06	6/6 mm.	25 mm.	22 mm.	2 N.m.	5 องศา	Polyester Resin

ORDERING CODE

PR-01N- [ ] - [ ] - [ ] - [ ]

TYPE	
S	Shaft
H	Hollow-Shaft

Diameter Shaft	
None	8 mm.
06	6 mm.

6 mm. Type have only Shaft Type

PULSE/REVOLUTION	
25	25 Pulse/Revolution
50	50 Pulse/Revolution
100	100 Pulse/Revolution
128	128 Pulse/Revolution
200	200 Pulse/Revolution
256	256 Pulse/Revolution
360	360 Pulse/Revolution
400	400 Pulse/Revolution
500	500 Pulse/Revolution
512	512 Pulse/Revolution
1000	1000 Pulse/Revolution
1024	1024 Pulse/Revolution
2048	2048 Pulse/Revolution

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

ORDERING CODE

Accessories Coupling

Model	
PR-02-06	6 mm.
PR-02-08	8 mm.

PR-02-08

***Remark: Coupling is used with PR-01 N-S only