


Transmission Coupler

Transmission coupler

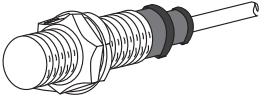
■ Features

- Loop powered type
The signal is transmitted by magnetic coupling of coils.
- Superior with environmental resistance
It does not cause any malfunction even the device is smeared with oily substances.
- Applications
A drilling, machine table, robot arm, conveyor belt and various revolution axis.

 Please read "Caution for your safety" in operation manual before using.



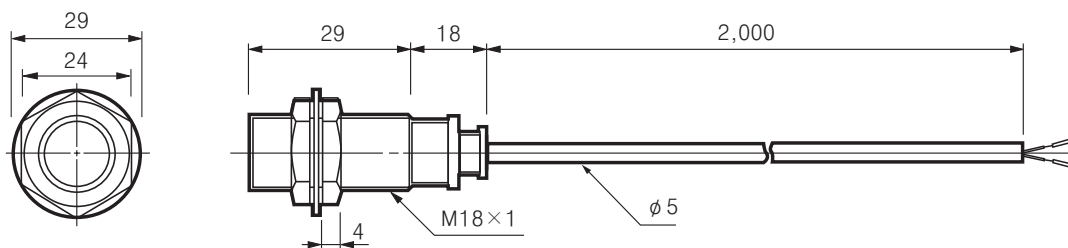
■ Type

Appearances	Model
M18 	PET18-5

■ Specifications

Model	PET18-5
Transmission distance	5mm ±10%
Setting transmission distance	1 ~ 4.5mm
Response time	Max. 1ms
Ambient temperature	-25 ~ +70 °C (at non-freezing status)
Ambient humidity	35 ~ 95%RH
Insulation resistance	500m/s ² (50G) in X, Y, Z direction for 3 times
Dielectric strength	1500VAC 50/60Hz for 1minute
Vibration	1mm amplitude at frequency of 10 ~ 55Hz in each of X, Y, Z directions for 2 hours
Shock	500m/s ² (50G) in X, Y, Z direction for 3 times
Protection	IP67 (IEC standard)
Unit weight	Approx. 121g
Applicable proximity sensor	PR18-5DN PRW18-5DN PRCM18-5DN PRWL18-5DN PRL18-5DN PRCML18-5DN PRT18-5DO PR18-5DP PRW18-5DP PRCM18-5DP PRWL18-5DP PRL18-5DP PRCML18-5DP PRT18-5DC PR18-5DN2 PRW18-5DN2 PRCM18-5DN2 PRWL18-5DN2 PRL18-5DN2 PRCML18-5DN2 PRCMT18-5DO PR18-5DP2 PRW18-5DP2 PRCM18-5DP2 PRWL18-5DP2 PRL18-5DP2 PRCML18-5DP2 PRCMT18-5DC

■ Dimensions



(Unit:mm)

(A)
Counter

(B)
Timer

(C)
Temp.
controller

(D)
Power
controller

(E)
Panel
meter

(F)
Tacho/
Speed/
Pulse
meter

(G)
Display
unit

(H)
Sensor
controller

(I)
Switching
power
supply

(J)
Proximity
sensor

(K)
Photo
electric
sensor

(L)
Pressure
sensor

(M)
Rotary
encoder

(N)
Stepping
motor &
Driver &
Controller

(O)
Graphic
panel

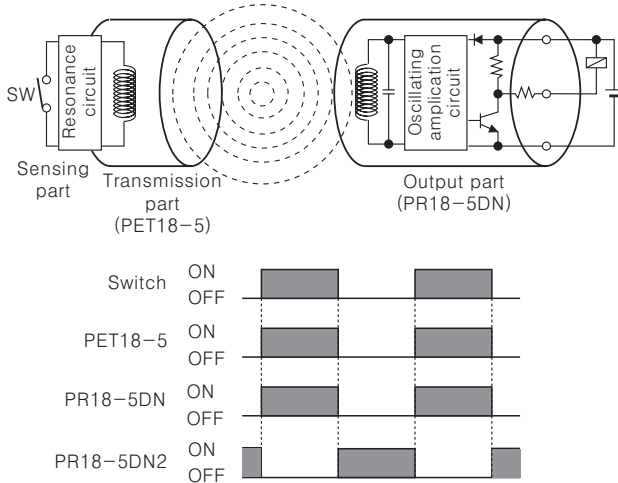
(P)
Production
stoppage
models &
replacement

PET18-5

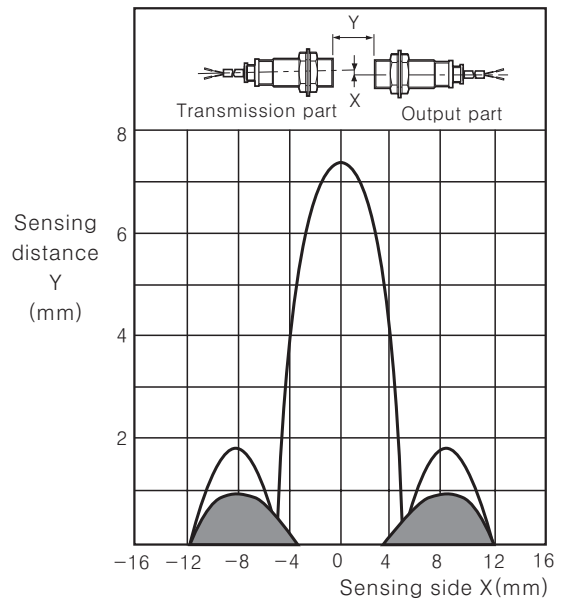
Operation mechanism

It transmits ON/OFF signal with a magnetic coupling of coils.

The coil of transmission part and proximity sensor is coupled electronically, the induced current is generated at closed-loop of transmission part influenced by a magnetic field from proximity sensor coil when the switch of sensing part is ON.

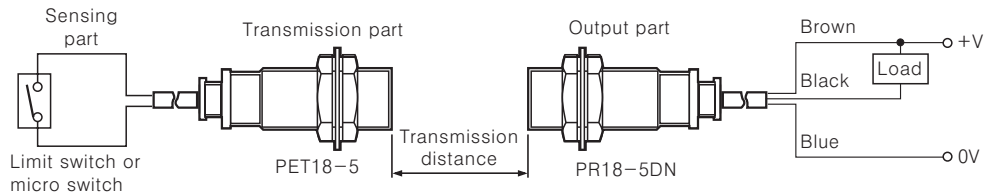


Feature data



Please note the proximity sensor detects the surrounding cover of the sensing side of transmission coupler even the connection switch is OFF. (Sensing part) for ■ part.

Connections



Proper usage

- Please use the device within the rated temperature range and do not use outdoors.
- Please use the code tensile strength within the rated range.
- Please do not share the connection of proximity code and power line.
- Please do not tighten the nut with excessive power and use a washer for assembling.
 - The allowable tightening strength at the front and latter part is 150kgf • cm.
 - The above allowable tightening strength is for using a washer.
- Please shorten the wiring to avoid noise.
- Please use the cable written on the specification of the product. If the other cable or a crooked cable is used, the waterproof cannot be maintained.
- 0.3mm² or larger cable can be extended up to 5m.
- When the transceiver is attached to the proximity sensor or close to the wires, it may cause a malfunction.
- The contact switch in the sensing part should not have leakage current when it is OFF.
- The contact resistance is under 300mΩ, open resistance is more than 10MΩ to satisfy the specification of contact switch. (Limit switch or micro switch)
- The inductive proximity sensor used in output part may cause a malfunction, if metal particles attach to sensing area.
- It is able to transmit signal through the plastic or mirror.
- Please set sensing distance within part A of the below operation range for mounting at the rotator.

