

Cylindrical

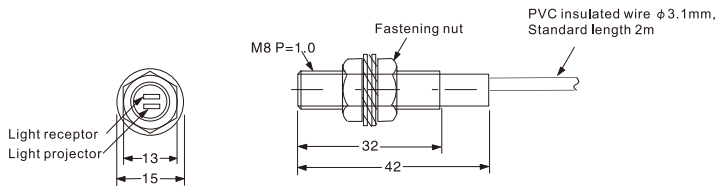
PM08 Series



| | | |
|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|
| Appearance | | |
| Sensing type | Diffuse reflection | |
| Sensing distance | 30mm (White 30X30mm) | |
| Hysteresis | < 20% | |
| Light source | IR Diode(940nm) | |
| Operating voltage | 12~24V DC \pm 10% ripple(p-p) < 10% | |
| Current consumption | \leq 30mA | |
| Control output | NPN open-collector output | PNP open-collector output |
| Switch mode | L.on | |
| Protection circuit | Short circuit protection, reverse polarity protection, anti-interference protection | |
| Response time | Action/Reset: < 3ms | |
| Ambient brightness | Sunlight \leq 10000lux, Incandescent Lamp \leq 3000lux | |
| Ambient temperature | Operation: $-25^{\circ}\text{C} \sim +55^{\circ}\text{C}$, Storage: $-30^{\circ}\text{C} \sim +70^{\circ}\text{C}$ (No freezing, No condensation) | |
| Ambient humidity | Operation: 30~85% RH, Storage: 35~95% RH | |
| Insulation resistance | > 20M Ω | |
| Withstand voltage | 500 V/AC 50/60Hz 1min | |
| Anti-vibration | 10 to 55 Hz with 1.5mm up&down amplitude for 2 hours each in X, Y, and Z directions | |
| Impact resistance | 500m/s ² for 3 times each in X, Y, Z directions | |
| Degree of protection | IP65 | |
| Connection method | 2M 3core cable | |
| Weight | Approx 80g | |
| Material | Stainless steel | |
| Accessories | Mounting screws | |
| Model No. | PM08-D03NO HOT | PM08-D03PO |

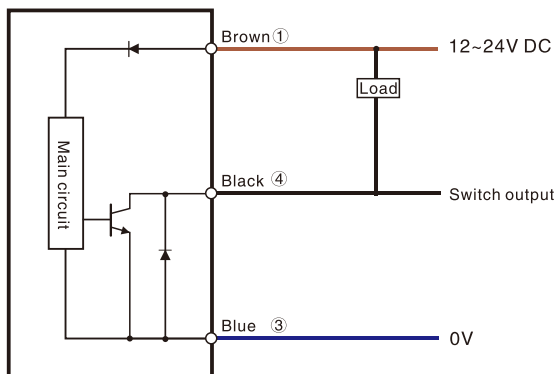
Dimensions

Unit: mm

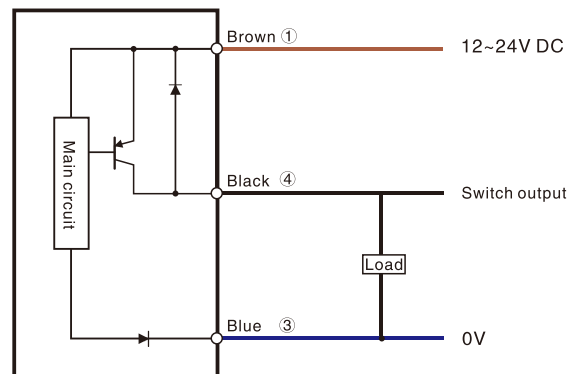


Circuit diagram

NPN Output



PNP Output





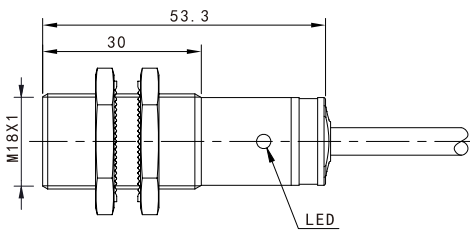
Appearance

| | | | | | | |
|----------------------|---------------------------------------------------|-------------------|-----------------------------------------|--------------------|--------------------|--------------------|
| Sensing type | Diffuse reflection | | Thru-beam | | Retro-reflection | |
| Sensing distance | 10cm(fixed) | 40cm(adjustable) | 1000cm(fixed) | 2000cm(fixed) | 300cm(fixed) | |
| Hysteresis | 3~20% | | ... | | | |
| Repeat accuracy | < 5% | | | | | |
| Output type | NPN/PNP Open-collector | | | | | |
| Switch type | Selectable L.on/D.on | | | | | |
| Indicator | Yellow LED | | Green LED(Emitter)/Yellow LED(Receiver) | | Yellow LED | |
| Response time | < 8.2 ms | | | | | |
| Light source | Infrared LED(880nm) | | | | | |
| Operating voltage | 10~30V DC | | | | | |
| Voltage drop | < 2.5V | | | | | |
| Current consumption | < 25mA | | | | | |
| Load current | < 200mA | | | | | |
| Protection circuit | Reverse polarity, short circuit, surge protection | | | | | |
| Ambient temperature | -15°C~+55°C, No freezing | | | | | |
| Ambient humidity | 35%~95%RH, No condensation | | | | | |
| Degree of protection | IP67 | | | | | |
| Material | Nickel copper alloy | | | | | |
| Connection method | 2M 4core cable | | | | | |
| Accessories | Mounting screws | | | | | |
| Model No. | NPN | PM18-D10NR | PM18-D40NR | PM18-TM10NR | PM18-TM20NR | PM18-R300NR |
| | PNP | PM18-D10PR | PM18-D40PR | PM18-TM10PR | PM18-TM20PR | PM18-R300PR |

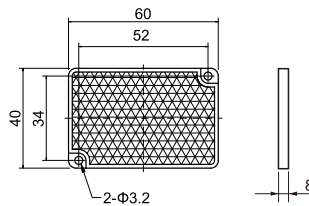
- Fiber Optic
- Slot Sensors
- Photoelectric**
- Laser
- Proximity
- Displacement
- Magnetic
- Contact
- Area
- Ultrasonic
- Vision
- Code Readers
- Vibration
- Temperature
- Annexes

Dimensions

Unit: mm



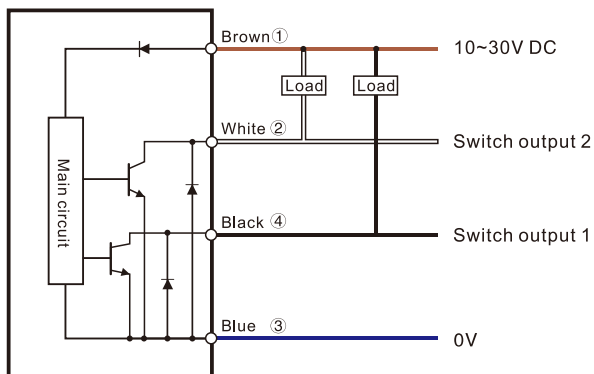
Reflector for PM18-R300



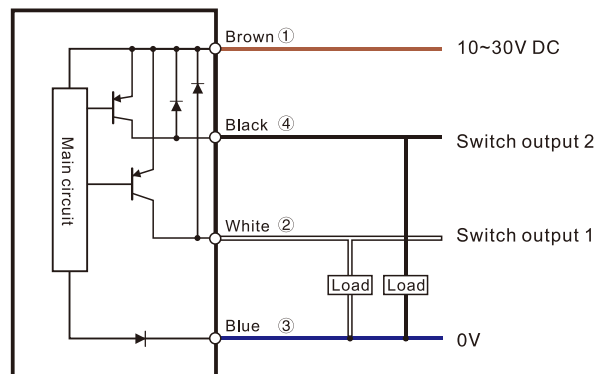
(Standard TD-09)

Circuit diagram

NPN Output



PNP Output



Guidance

Photoelectric

Cylindrical

Square

Flat type

Thin type

BGS

Transparent detection

Color/Mark Detection

TOF type

IP69K high protection type

Anti-glare type

IO-Link type

Reflectors

Reflectors

Cylindrical

Pm18 Series

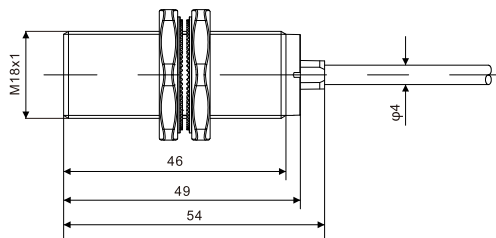
Economy type



Appearance

| | Disffuse Reflection | Thru-beam | | | |
|----------------------|----------------------------------------------------------|-------------------------------------------------------------------------------------------|------------------------------------------|------------------------------------------|------------------------------------------|
| Sensing type | Disffuse Reflection | 5m(fixed) | 20m(fixed) | | |
| Sensing distance | 10cm(fixed) | | | | |
| Detected object | 100mm × 100mm 90% whiteness white paper | > φ 18mm, opaque | | | |
| Output type | NPN Open-collector | NPN/PNP Open-collector | | | |
| Switch type | L.on | Selectable L.on/D.on | | | |
| Indicator | Motion indicator light: yellow | Transmitter end: power indicator: green; Receiving end: action indicator light: yellow | | | |
| Response time | 0.5ms | 33ms | | | |
| Light source | Infrared LED 940nm (modulation) | Infrared LED 850nm (modulation) | | | |
| Operating voltage | 10~30V DC | 12~24V DC | 10~24V DC | | |
| residual voltage | < 2V | | | | |
| Current consumption | < 25mA | Transmitter < 20 mA; Receiver < 20mA | Transmitter < 25 mA; Receiver < 25mA | | |
| Load current | < 150mA | < 100mA | | | |
| Protective circuit | Reverse polarity, short circuit, surge protection | | | | |
| Ambient temperature | -20°C~+55°C, No freezing | -20°C~+60°C, No freezing | | | |
| Storage temperature | -25°C~+65°C | -25°C~+70°C | -20°C~+60°C | | |
| Ambient humidity | 35~90%RH, No condensation | | | | |
| Store humidity | 35~90%RH | | | | |
| Withstand Voltage | ± 1000V 50/60Hz 60s | | | | |
| Electrostatic | ± 4000V | | | | |
| group value | ± 2000V | | | | |
| Resistance | 10~50Hz, 0.5mm amplitude, X, Y, Z direction 2 hours each | | | | |
| Ambient brightness | Incandescent lamp: < 3000lux, sunlight: < 10000lux | | | | |
| Degree of protection | IP67 | | | | |
| Material | Nickel copper alloy | | | | |
| Connection method | 2M 3core cable | | | | |
| Accessories | Mounting screws | | | | |
| Model No. | NPN PM18-D10NO | PM18-D10NC | PM18-TM05NO PM18-TM05PO | PM18-TM20NO PM18-TM20PO | PM18-TM20NC PM18-TM20PC |

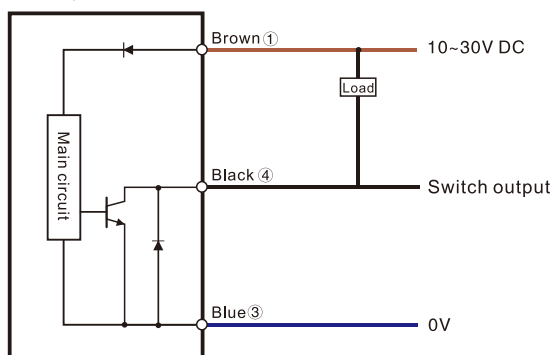
Dimensions



Unit: mm

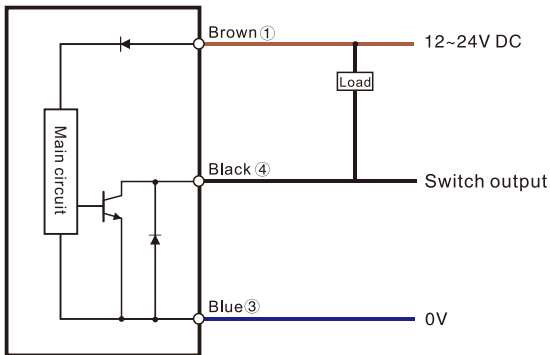
PM18-D10NO(NC)

NPN Output

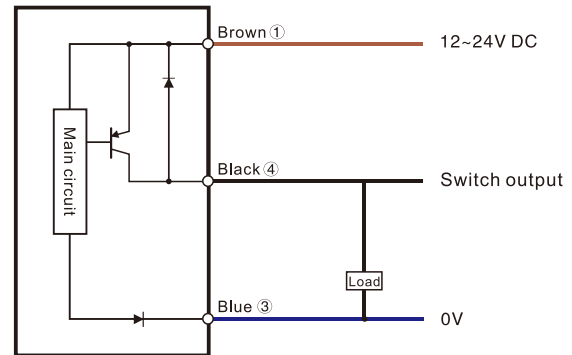


PM18-TM05N(P)O

NPN Output

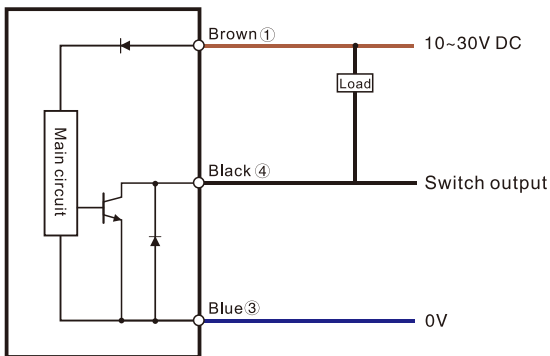


PNP Output

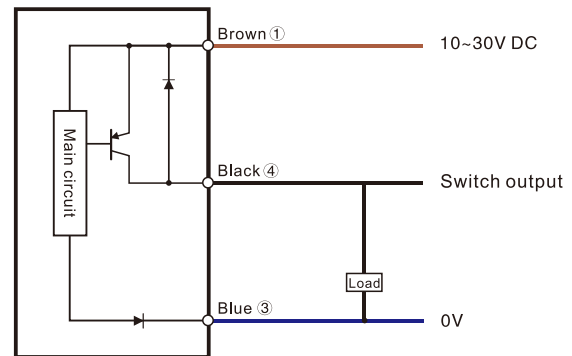


PM18-TM20N(P)O(C)

NPN Output



PNP Output



Fiber Optic

Slot Sensors

Photoelectric

Laser

Proximity

Displacement

Magnetic

Contact

Area

Ultrasonic

Vision

Code Readers

Vibration

Temperature

Annexes

Guidance

Photoelectric

Cylindrical

Square

Flat type

Thin type

BGS

Transparent detection

Color/Mark Detection

TOF type

IP69K high protection type

Anti-glare type

IO-Link type

Reflectors

Reflectors

Cylindrical

PSM12 Series

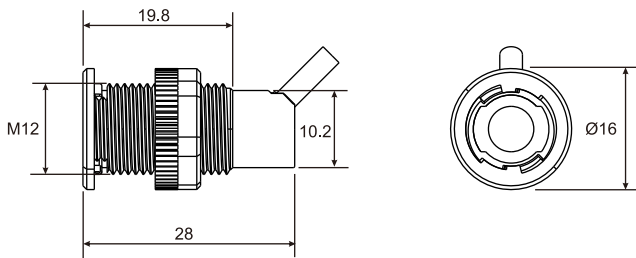


NEW!

| | | | | | | | |
|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|---------------------|---------------------|-----|---------------------|---------------------|
| Appearance | | | | | | | |
| Sensing type | Through beam | | | | | | |
| Sensing distance | 5m | | | | | | |
| Light source | Infrared LED | | | | | | |
| Sensing object | opaque object, $\phi > 8\text{mm}$ | | | | | | |
| Output | NPN / PNP for option | | | | | | |
| Switch Type | Light on/ Dark on selectable | | | | | | |
| Response time | <2ms | | | | | | |
| Indicators | Power: Green, Operation indicator: Orange | | | | | | |
| Power supply | 12~24V DC $\pm 10\%$ Ripple P-P10% or less | | | | | | |
| Residual voltage | < 1 V (When input current is equal to 50 mA) | | | | | | |
| Current consumption | Emitter < 18 mA, Receiver < 15 mA | | | | | | |
| Load current | <50mA | | | | | | |
| Protective Circuit | Short circuit protection | | | | | | |
| Ambient temperature | Operation: $-25\sim 55^{\circ}\text{C}$; storage: $-30\sim 70^{\circ}\text{C}$, no freezing | | | | | | |
| Ambient humidity | Operation: 30~90% RH, storage: 35~85% RH, no condensation | | | | | | |
| Protective degree | IP67 | | | | | | |
| Material | Housing, lens: PC | | | | | | |
| Connection | Emitter: 2m 2 core cable; Receiver: 2m 2 core cable | | | | | | |
| Weight | Approx. 25g | | | | | | |
| Model No. | <table border="1" style="width: 100%;"> <tr> <td>NPN</td> <td>PSM12-TM05NO</td> <td>PSM12-TM05NC</td> </tr> <tr> <td>PNP</td> <td>PSM12-TM05PO</td> <td>PSM12-TM05PC</td> </tr> </table> | NPN | PSM12-TM05NO | PSM12-TM05NC | PNP | PSM12-TM05PO | PSM12-TM05PC |
| NPN | PSM12-TM05NO | PSM12-TM05NC | | | | | |
| PNP | PSM12-TM05PO | PSM12-TM05PC | | | | | |

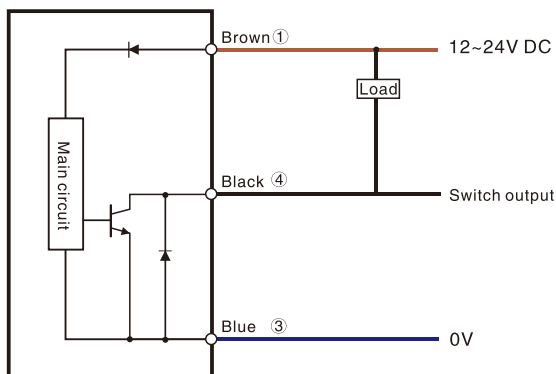
Dimensions

Unit: mm

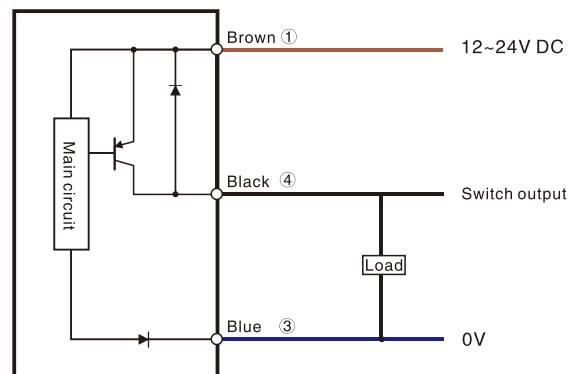


Circuit diagram

NPN Output



PNP Output





NEW!

| | |
|---------------------|--------------------------------------------------------------|
| Appearance | |
| Sensing type | Diffuse reflective |
| Sensing distance | 40 cm (adjustable) |
| Light source | Red light LED |
| Sensing object | opaque object, $\phi > 18$ mm |
| Output | NPN / PNP for option |
| Switch Type | Light on/ Dark on selectable |
| Indicators | Power: Green, Operation indicator: Red |
| Power supply | 10~30V DC |
| Residual voltage | <2V |
| Current consumption | <25mA |
| Load current | <120mA |
| Response time | <2ms |
| Protective Circuit | reverse polarity protection, short circuit protection |
| Ambient temperature | -15~55°C, no freezing |
| Ambient humidity | 35~90% RH, no condensation |
| Ambient light | Sunlight $\leq 1,000$ Lux |
| Withstand volatge | $\pm 1000V$ 50/60Hz 60s |
| Static electricity | $\pm 8000V$ |
| Group pulse | $\pm 2000V$ 5KHz/100KHz |
| Anti-vibration | 10~50Hz, amplitude 0.5mm; 2 hours each in X, Y, Z directions |
| Protective degree | IP65 |
| Material | PC |
| Connection | 2m 3 wire cable |
| Model No. | NPN PSM18-D40N PNP PSM18-D40P |

- Fiber Optic
- Slot Sensors
- Photoelectric**
- Laser
- Proximity
- Displacement
- Magnetic
- Contact
- Area
- Ultrasonic
- Vision
- Code Readers
- Vibration
- Temperature
- Annexes

Guidance

Photoelectric

Cylindrical

Square

Flat type

Thin type

BGS

Transparent detection

Color/Mark Detection

TOF type

IP69K high protection type

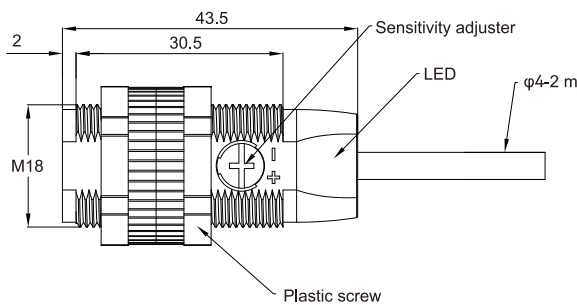
Anti-glare type

IO-Link type

Reflectors

Reflectors

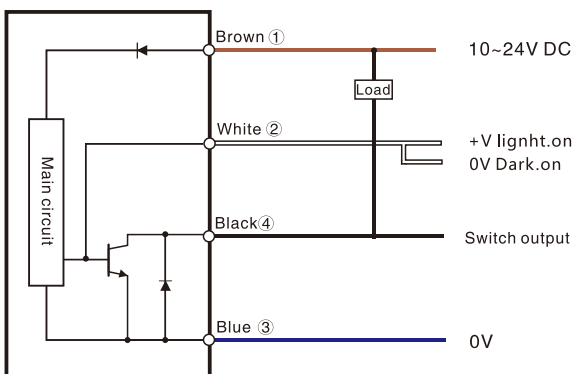
Dimensions



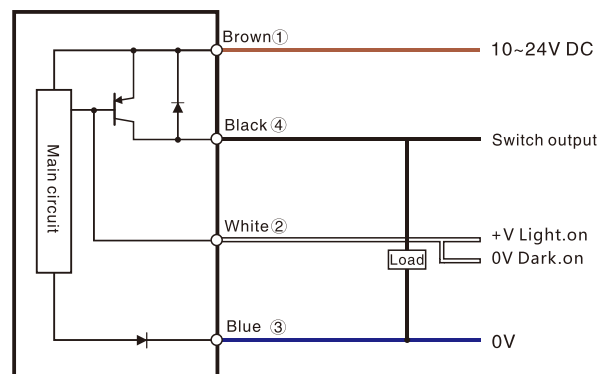
Unit: mm

Circuit diagram

NPN Output



PNP Output



Cylindrical

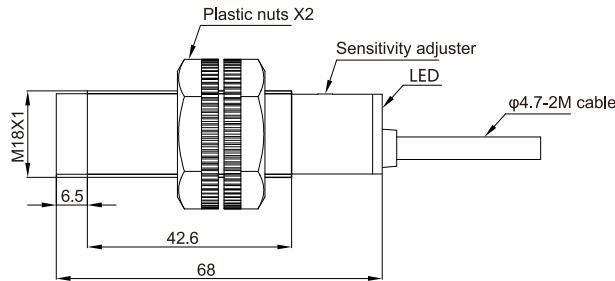
PXM18 Series



Appearance

| | | |
|----------------------|--------------------------------------------------------------------------------------------|-------------------|
| Sensing type | Diffuse reflection | |
| Sensing distance | 10cm(adjustable) | 40cm(adjustable) |
| Hysteresis | ≤10% | |
| Repeat accuracy | 5% | |
| Output type | NPN/PNP Open-collector | |
| Switch type | Selectable L.on/D.on | |
| Response time | 20ms | |
| Indicator | Red LED(660nm) | Red LED(880nm) |
| Operating voltage | 10~30V DC(±10%) | |
| Voltage drop | 2V max 1L=100mA | |
| Leakage current | 10 μA | |
| Current consumption | 30mA | |
| Load current | 100mA | |
| Protective circuit | Reverse polarity protection, output short circuit protection, pulse overvoltage protection | |
| Ambient temperature | -25°C~+70°C, No freezing | |
| Ambient brightness | Sunlight ≤10000 lux, Incandescent lamp ≤3000 lux | |
| Degree of protection | IP67 | |
| Tightening torque | 1Nm | |
| Material | Housing: PBT, Lens: PC | |
| Weight | ≈50g | |
| Connection method | 2M 4core cable | |
| Accessories | Mounting screws | |
| Model No. | NPN | PXM18-D10N |
| | PNP | PXM18-D10P |
| | | PXM18-D40N |
| | | PXM18-D40P |

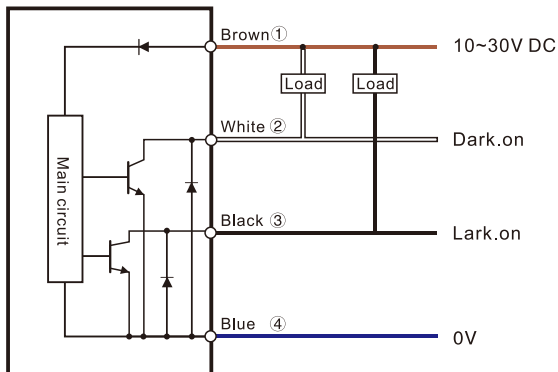
Dimensions



Unit: mm

Circuit diagram

NPN Output



PNP Output

