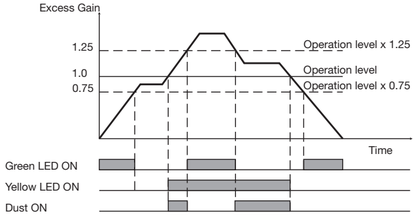
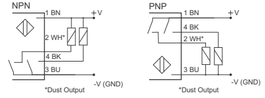
Signal Stability Indication



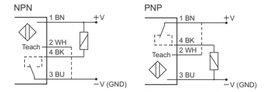
Only for CND, CNP, CNR and CNT types

Wiring diagrams

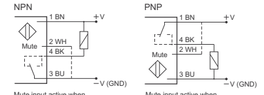
Dust-output (DU-types)



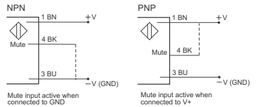
Remote/teach (RT-types)



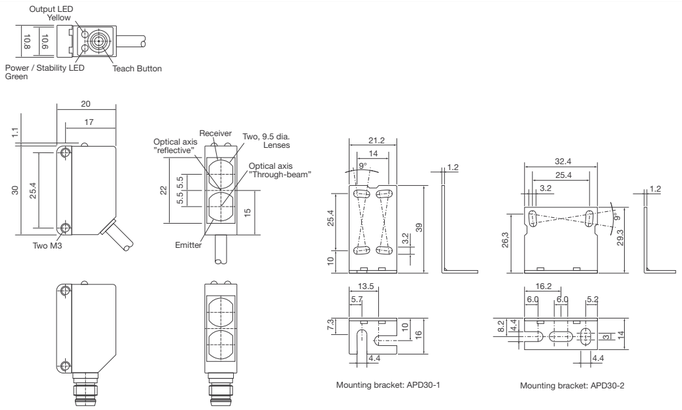
Mute input (MU-types)



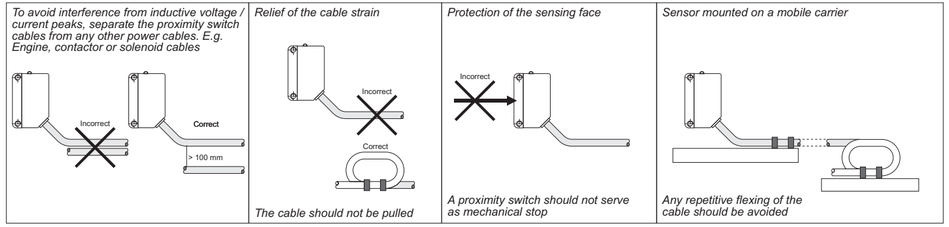
Emitter with mute



Dimensions



Installation Hints



Please Notice!
The PD30 photoelectric Switch are not designet for personal safety applications.
Clean only with a soft samp cloth. Do not use detergents or alcohol.

UL Approval

c UL us LISTED

Supply Class 2

Industrial Control Equipment
9N87

Photoelectric Switch
PD30

User Manual

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Certified in accordance with ISO 9001

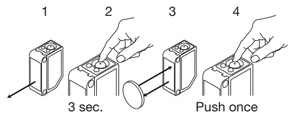
15-029-292

MAN PD30 ENG rev.11-09.08

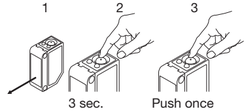
Diffuse reflective

Check the application conditions such as size and reflectance capacity of the object as well as the backgrounds influences and compare with the sensitivity curve for the CND type. Point the sensor towards the object and align the sensor in horizontal and vertical direction to find the centre of the object.

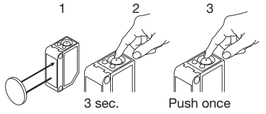
Normal operation, optimized switching point.
Teach 1st time with object and 2nd time with object



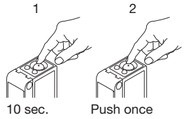
For maximum sensing distance (default setting).
Teach two times without object.



For minimum detection overhead.
Teach two times on a object.

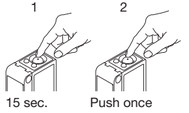


For make or break set-up on normal output.



1. Press the button for 10 seconds, until the green LEDs flashes.
2. While the green LED flashes, the output is inverted each time the button is pressed.
   Yellow LED indicates N.O. function selected.
   If the button is not pressed within the next 10 seconds, the current output is stored.

For make or break set-up on dust output.

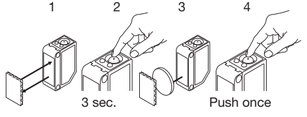


1. Press the button for 15 seconds, until the yellow LEDs flashes.
2. While the yellow LED flashes, the output is inverted each time the button is pressed.
   Green LED indicates N.O. function selected.
   If the button is not pressed within the next 10 seconds, the current output is stored.

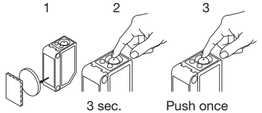
Retro-reflective (incl. Polarized versions)

Point the Photoelectric switch at the reflector. (For the polarized version the red light spot from the emitter must be visible on the reflector). Align the sensor in horizontal and vertical direction to find the centre of the reflector using the on/off signal strength indicator. When aligned the signal indicator must light up steady.

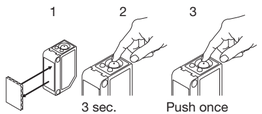
Normal operation, optimized switching point.
Teach 1st time on reflector and 2nd time on object



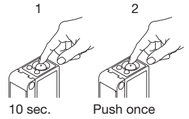
For maximum sensing distance (default setting).
Teach two times withreflector covered.



For minimum detection overhead.
Teach two times on the reflector.

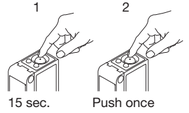


For make or break set-up on normal output.



1. Press the button for 10 seconds, until the green LEDs flashes.
2. While the green LED flashes, the output is inverted each time the button is pressed.
   Yellow LED indicates N.O. function selected.
   If the button is not pressed within the next 10 seconds, the current output is stored.

For make or break set-up on dust output.

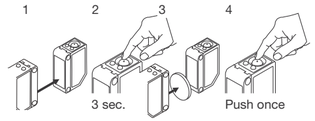


1. Press the button for 15 seconds, until the yellow LEDs flashes.
2. While the yellow LED flashes, the output is inverted each time the button is pressed.
   Green LED indicates N.O. function selected.
   If the button is not pressed within the next 10 seconds, the current output is stored.

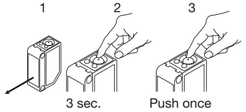
Through-beam

Mount the emitter and receiver facing each other. Align the emitter and receiver in horizontal and vertical direction to find the centre of the reflector using the on/off signal strength indicator. When aligned the signal indicator must light up steady.

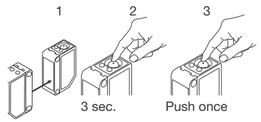
Normal operation, optimized switching point.
Teach 1st time at emitter and 2nd time on object



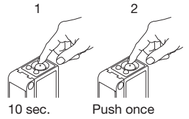
For maximum sensing distance (default setting).
Teach two times with the emitter covered.



For minimum detection overhead.
Teach two times on the emitter.

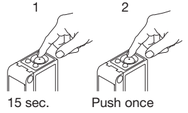


For make or break set-up on normal output.



1. Press the button for 10 seconds, until the green LEDs flashes.
2. While the green LED flashes, the output is inverted each time the button is pressed.
   Yellow LED indicates N.O. function selected.
   If the button is not pressed within the next 10 seconds, the current output is stored.

For make or break set-up on dust output.

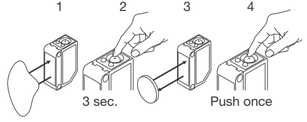


1. Press the button for 15 seconds, until the yellow LEDs flashes.
2. While the yellow LED flashes, the output is inverted each time the button is pressed.
   Green LED indicates N.O. function selected.
   If the button is not pressed within the next 10 seconds, the current output is stored.

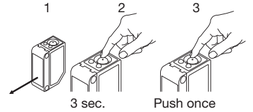
Diffuse reflective (background suppression)

Check the application conditions such as size and reflectance capacity of the object as well as the backgrounds influences and compare with the detection diagram for the CNB type. Point the sensor towards the object and align the sensor in horizontal and vertical direction to find the centre of the object.

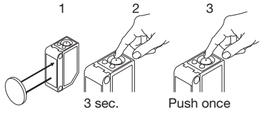
Normal operation, optimized switching point.
Teach 1st time on the background and 2nd time on the object



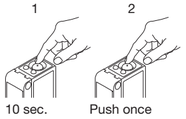
For maximum sensing distance (default setting).
Teach two times without object.



For minimum detection overhead.
Teach two times on the object.

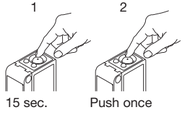


For make or break set-up on normal output.



1. Press the button for 10 seconds, until the green LEDs flashes.
2. While the green LED flashes, the output is inverted each time the button is pressed.
   Yellow LED indicates N.O. function selected.
   If the button is not pressed within the next 10 seconds, the current output is stored.

For make or break set-up on dust output.

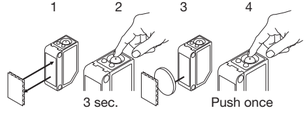


1. Press the button for 15 seconds, until the yellow LEDs flashes.
2. While the yellow LED flashes, the output is inverted each time the button is pressed.
   Green LED indicates N.O. function selected.
   If the button is not pressed within the next 10 seconds, the current output is stored.

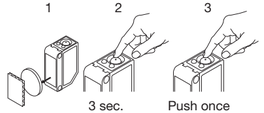
Retro-reflective for Transparant Objects

Point the Photoelectric switch at the reflector. (The red light spot from the emitter must be visible on the reflector). Align the sensor in horizontal and vertical direction to find the centre of the reflector using the on/off signal strength indicator. When aligned the signal indicator must light up steady.

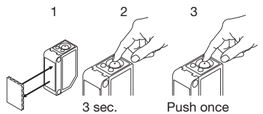
Normal operation, optimized switching point.
Teach 1st time on reflector and 2nd time on object



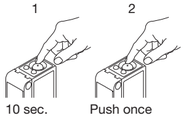
For maximum sensing distance (default setting).
Teach two times with reflector covered.



For the most transparant objects.
Teach two times on the reflector.



For make or break set-up on normal output.



1. Press the button for 10 seconds, until the green LEDs flashes.
2. While the green LED flashes, the output is inverted each time the button is pressed.
   Yellow LED indicates N.O. function selected.
   If the button is not pressed within the next 10 seconds, the current output is stored.