

HIR61

Low bay

HIR61/R

Mid bay with IP65



Product Description

HIR61 & HIR61/R are DALI-2 PIR motion sensors, designed with Zhaga Book 20 connection standard that enables lighting designers/manufactures to freely connect to luminaires. It's embedded with DALI-2 module, PIR sensor and also a daylight sensor, and yet comes with a surprisingly super-mini size!



TYPE B

HIR61

TYPE B

HIR61/R

Hardware Features

- 3-in-1: Zhaga standard + PIR motion sensor + Daylight sensor
- Optional plastic housing accessories HA04 & HA05 for different mounting style
- Super compact mini size
- Plug'n'Play via Zhaga Book 20 connection standard
- 5-year warranty
- IP65 rated design for HIR61/R facia/lens part
- Input device (Type B) compliant to standard IEC62386_101, 103, 303, 304, 351

**The sensor cannot work mixed with Type A&D devices.*

Technical Specifications

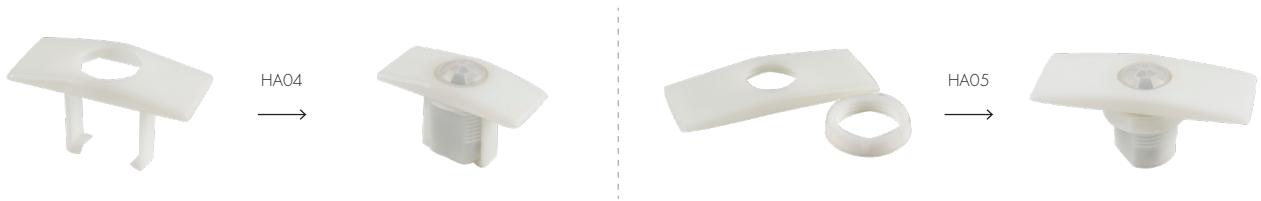
PIR Sensor Properties (HIR61 & HIR61/R)	
Sensor principle	PIR detection
Operation voltage	9.5~22.5VDC
Consumption current	Max. 10 mA (no LED) Max. 11 mA (with LED)
Detection range *	HIR61 Max installation height: 3m Max detection range (Ø): 12m HIR61/R Max installation height: 8m (for person) Max installation height: 12m (for forklift) Max detection range (Ø): 14m
Lux reading range	< 1000 lux
Detection angle	360°
Warming-up	5s

Environment	
Operation temperature	Ta: -20°C ~ 50°C
Storage temperature	-40°C ~ +70°C
Relative humidity	10 ~ 90%
IP rating	IP20

Certification	
CE	EN55015, EN61547, EN61000-3-2/-3-3, EN62386-101/103, EN62386-303/304, Zhaga Book 20

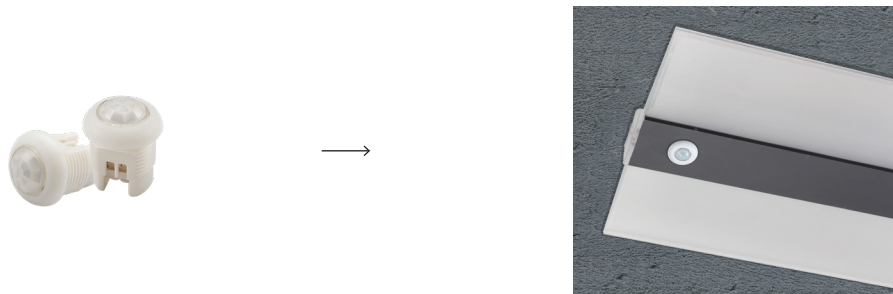
* The detection range is heavily influenced by sensor placement (angle) and different walking paces. It may be reduced under certain conditions.

Optional Accessories

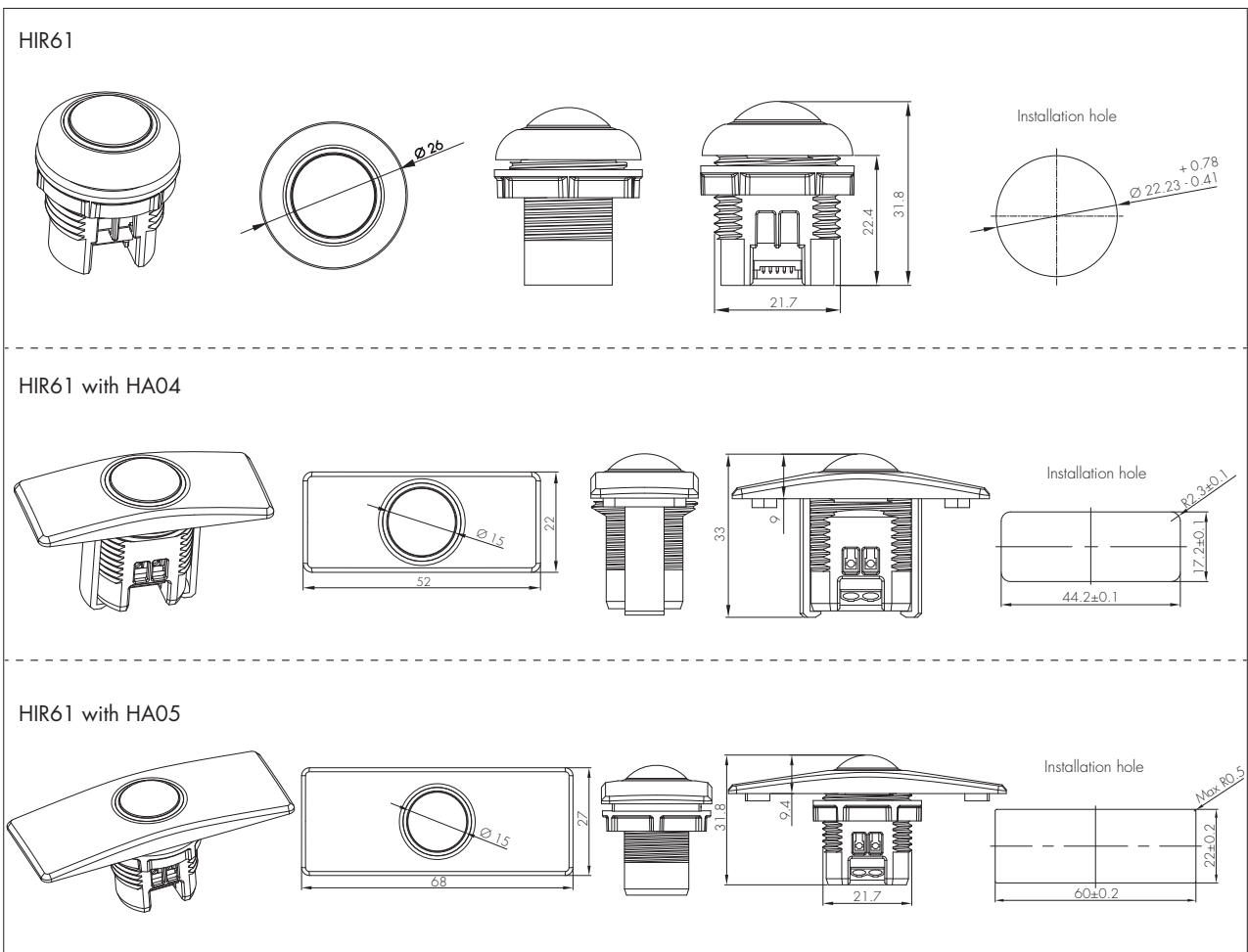


* Default: white housing, black version can be requested.

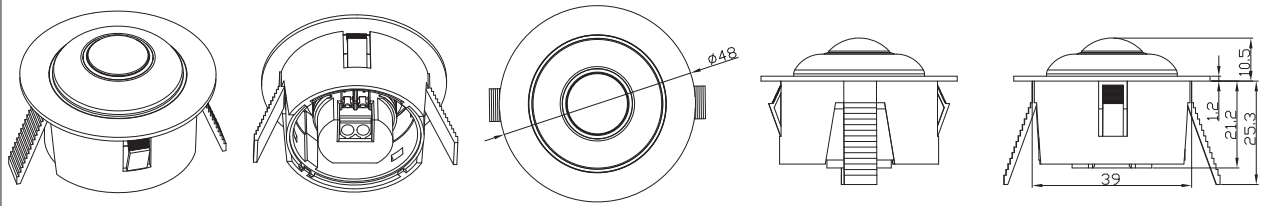
Demonstration of installation



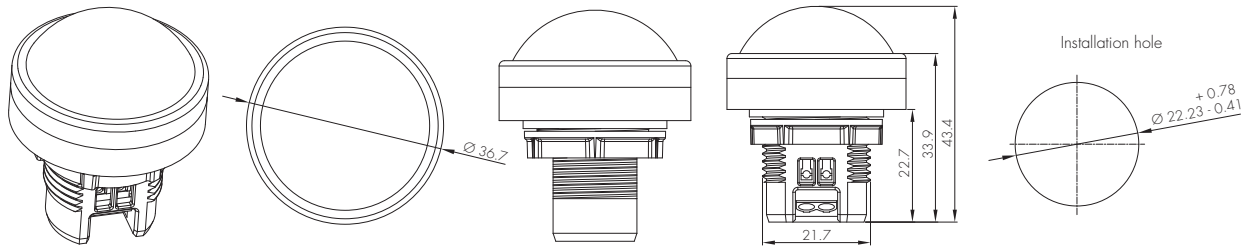
Mechanical Structure & Dimensions



HIR61 with HA10



HIR61/R (IP65)



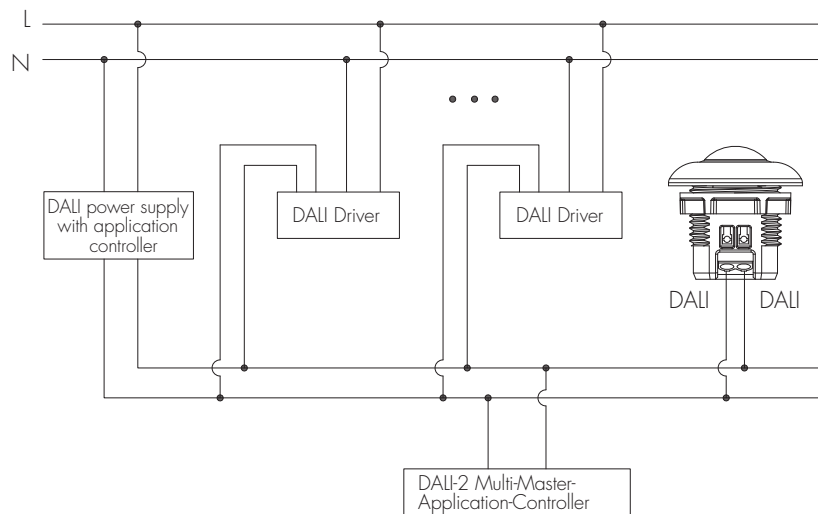
Wire Preparation



To make or release the wire from the terminal, use a screwdriver to push down the button.

1. 100 metres (total) max. for 0.5mm² CSA (T_a = 50°C)
2. 150 metres (total) max. for 0.75mm² CSA (T_a = 50°C)

Wiring Diagram



Note: HIR61 has been used as DALI-2 input device to only report DALI instance(light sensor instance and motion sensor instance) to DALI-2 application controller, who is the "main brain" to process the data communication between input devices and the control gear and assign different function.

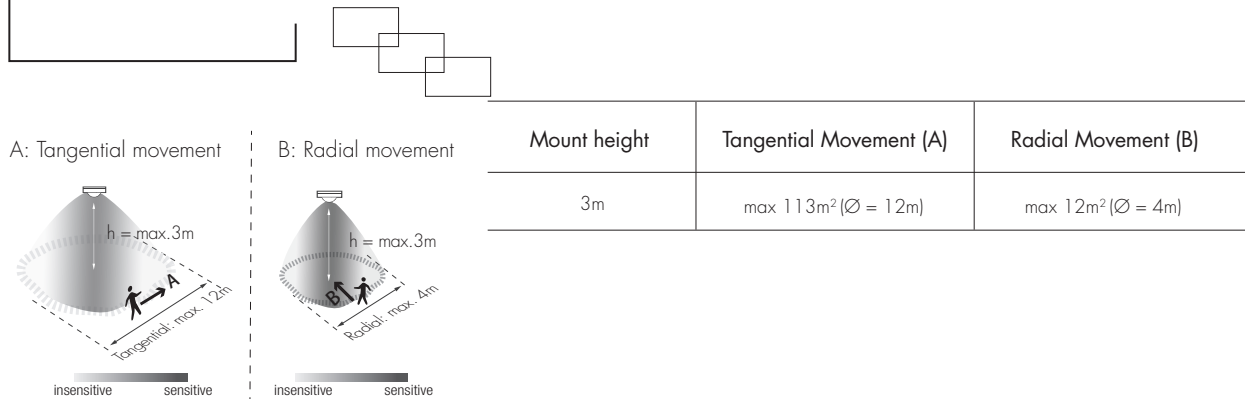
Detection Pattern - - Diagram 1

The data below is tested under following conditions:

- Single person walking;
- Sensor not connected to any driver that may have soft-on period;
- Testing temperature $T_a = 20^\circ\text{C}$;
- The testing is conducted in an open and spacious indoor field, without noticeable obstacles or influences that may affect PIR performances.



HIR61



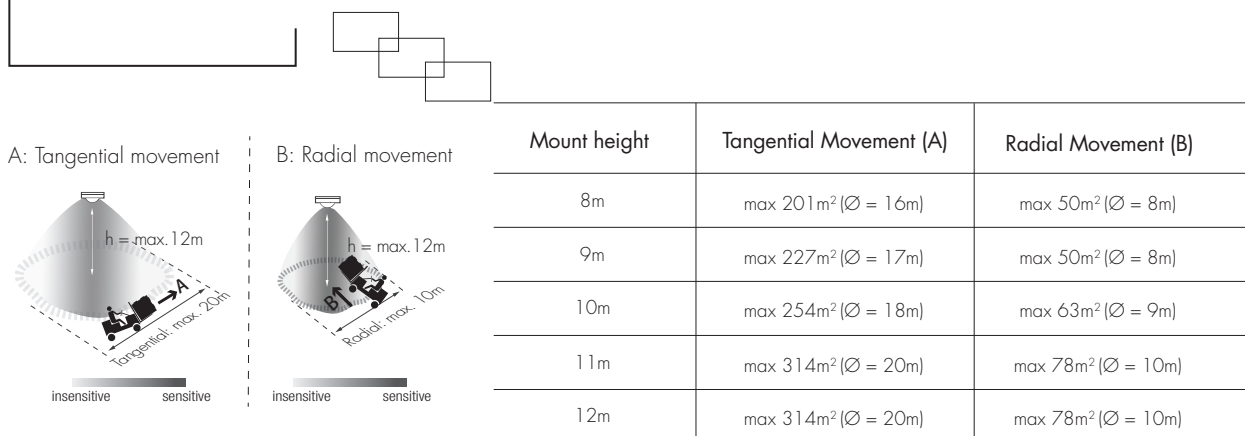
Detection Pattern - - Diagram 2

The data below is tested under following conditions:

- Forklift driving at a speed of 10km/h;
- Sensor not connected to any driver that may have soft-on period;
- Testing temperature $T_a = 20^\circ\text{C}$;
- The testing is conducted in an open and spacious indoor field, without noticeable obstacles or influences that may affect PIR performances.



HIR61/R



Detection Pattern - - Diagram 3

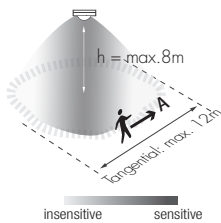
The data below is tested under following conditions:

- Single person walking;
- Sensor not connected to any driver that may have soft-on period;
- Testing temperature $T_a = 20^\circ\text{C}$;
- The testing is conducted in an open and spacious indoor field, without noticeable obstacles or influences that may affect PIR performances.



HIR61/R

A: Tangential movement



B: Radial movement



Mount height	Tangential Movement (A)	Radial Movement (B)
3m	max 38m ² (Ø = 7m)	max 7m ² (Ø = 3m)
4m	max 50m ² (Ø = 8m)	max 7m ² (Ø = 3m)
5m	max 50m ² (Ø = 8m)	max 7m ² (Ø = 3m)
6m	max 64m ² (Ø = 9m)	max 12m ² (Ø = 4m)
7m	max 95m ² (Ø = 11m)	max 12m ² (Ø = 4m)
8m	max 113m ² (Ø = 12m)	max 12m ² (Ø = 4m)

Additional Information / Documents

1. Regarding precautions for PIR Sensors installation and operation, please kindly refer to [www.hytronik.com/download ->knowledge ->PIR Sensors - Precautions for Product Installation and Operation](http://www.hytronik.com/download->knowledge->PIR%20Sensors%20-%20Precautions%20for%20Product%20Installation%20and%20Operation)
2. Data sheet is subject to change without notice. Please always refer to the most recent release on [www.hytronik.com/products/Motion Sensors ->Stand-alone Sensors](http://www.hytronik.com/products/Motion%20Sensors->Stand-alone%20Sensors)
3. Regarding Hytronik standard guarantee policy, please refer to [www.hytronik.com/download ->knowledge ->Hytronik Standard Guarantee Policy](http://www.hytronik.com/download->knowledge->Hytronik%20Standard%20Guarantee%20Policy)