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ZNCL926 PIR Lens Product Specification

PS041301-0222



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Revision History

Each instance in this document's revision history reflects a change from its previous edition. For more details, refer to the corresponding page(s) or appropriate links furnished in the table below.

Date	Revision Level	Description	Pages
Feb. 2022	01	Original issue.	All

Overview

Zilog's Passive Infrared (PIR) lenses are designed to deliver high performance for the most demanding motion detection applications. Each lens is manufactured from high density polyethylene ensuring maximum IR transmissivity with well-defined beam patterns.

The ZNCL926 is a standard 15mm lens that clips directly on to a TO-5 package PIR sensor, greatly simplifying the mechanical design.

The lens works with dual element or quad element PIR sensors and provides 52 (with dual element PIR sensor) or 104 (with quad element PIR sensor) detection zones ideal for lighting control requiring micro-motion detection.

Features

- High density polyethylene construction
- Simple mounting – clips directly on to TO-5 package PIR sensor

Applications

- General purpose motion detectors
- Lighting and HVAC control requiring micro motion detection
- Ceiling mount motion sensors



Figure 1 - ZNCL926 PIR Lens

Ordering Information

Part Number	Features	Typical Applications
ZNCL926	15mm Ceiling Mount Array 360° Circular pattern with 100° cone 52/104 detection zones 5m range/height with 2.1:1 floor diameter to height ratio Recommended PIR Sensor: Dual, Circular Dual or Quad Element	Room Occupancy and Proximity Sensing Lighting and HVAC control Micro-motion detection Kiosk/Display control Vending/Appliance power management Product display's

Len Material

High Density Polyethylene (HDPE)

Lens Color

ZNC926 – Natural

Environmental Characteristics

- 1) Operating temperature: -20°C to +70°C
- 2) Storage temperature: -25°C to +75°C

Mechanical Dimensions

The figure below shows the mechanical dimensions for the ZNCL926 lens. All dimensions are in mm.

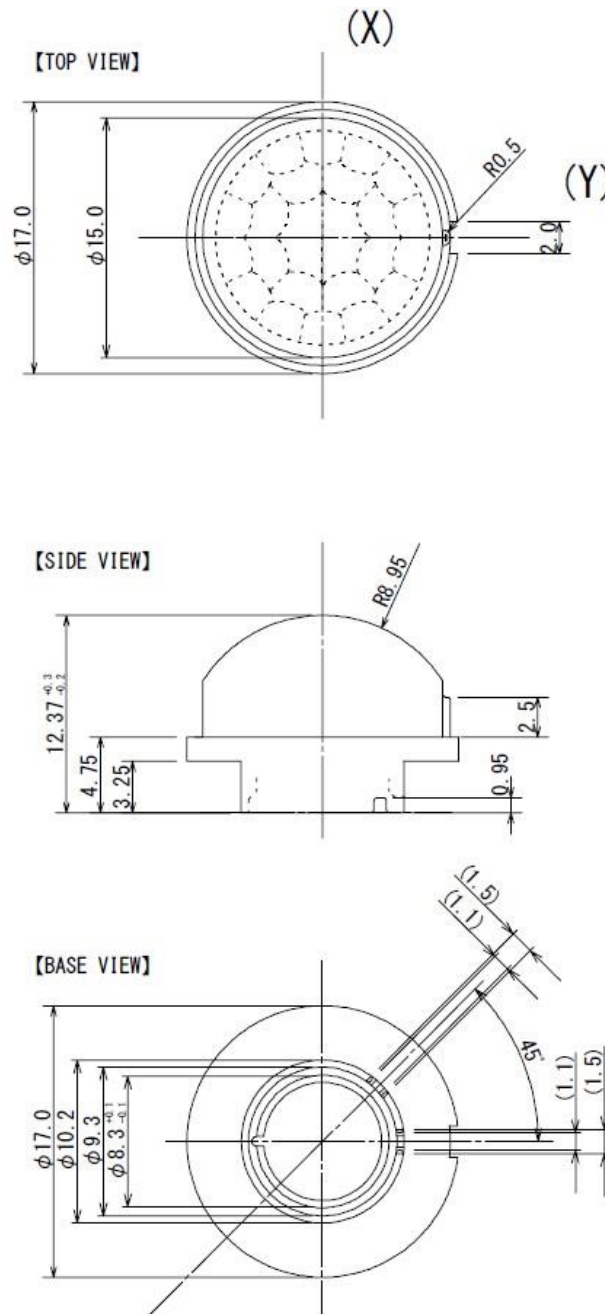


Figure 2 - ZNCL926 Dimensions

Beam Patterns

ZNCL926 beam patterns are shown in the following figures using dual and quad element PIR sensors.

All dimensions in meters.

ZNCL926
XY Axis
Dual Element PIR
Element Size: 2mm x 1mm: 1mm gap

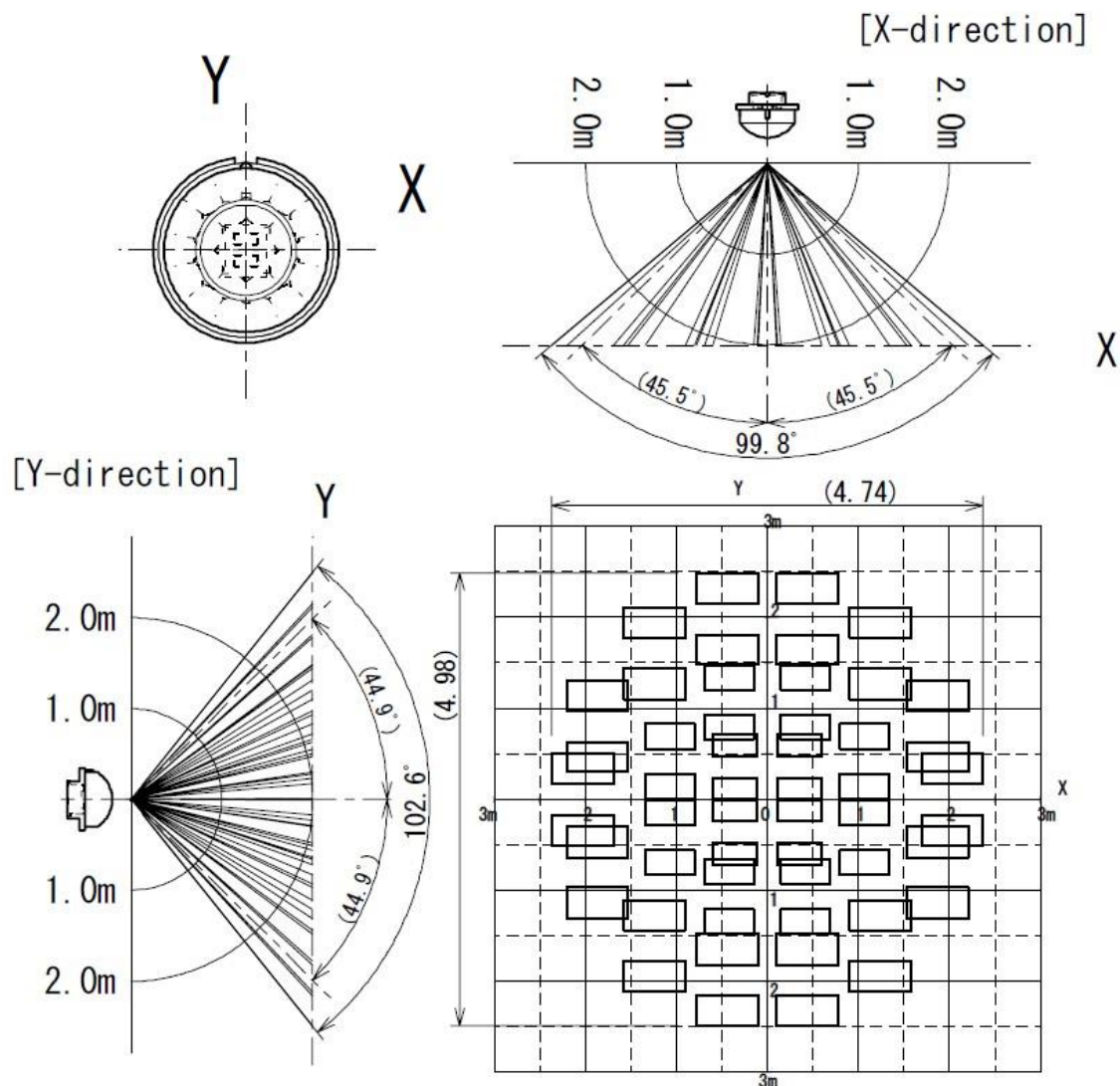


Figure 3 - ZNCL926 Detection Area with Dual Element PIR

ZNCL926
XY Axis
Quad Element PIR
Element Size: 1mm x 1mm: 1mm gap

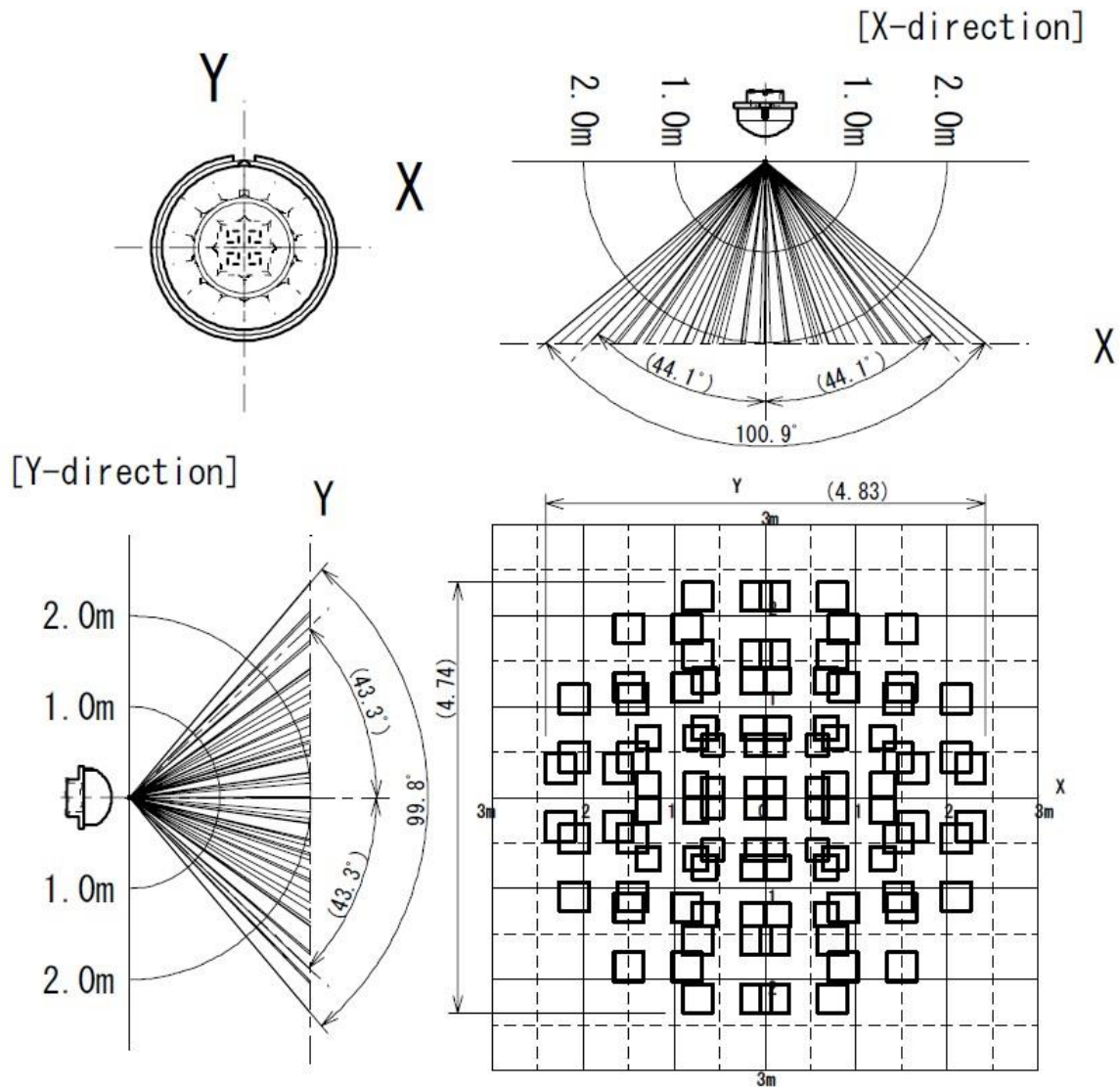


Figure 4 - ZNCL926 Detection Area with Quad Element PIR

Related Documents

The documents associated with the ZNCL926 PIR lens are listed below. Each of these documents, and others can be obtained from the [ZMOTION Product Page](http://www.zilog.com) on the Zilog website: <http://www.zilog.com>.

Document Number	Description
PB0264	PIR Lens Product Brief
PB0258	ZMOTION MCU Product Brief
PS0263	PIR Sensor Product Brief

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