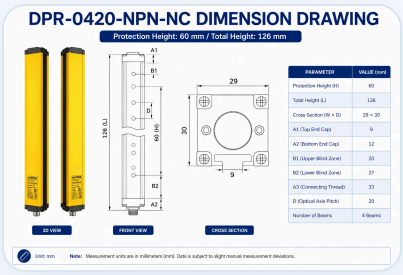
DAPPRA Automation

Industrial Sensor Manufacturer



DPR-0420-NPN-NC

CAD Drawing — Mechanical Dimensions

SKU: SD69

DAPPRA Automation

CAD Drawing

Version 1.0 — September 2020

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CAD Drawing — Mechanical Dimensions

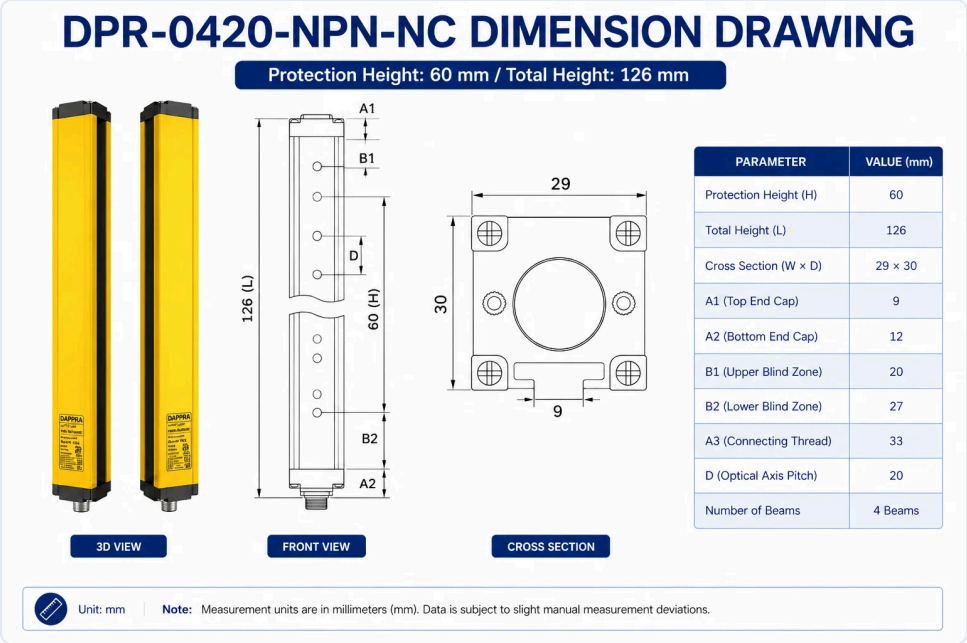
SKU: SD69 DAPPRA Automation

Overview

This document provides mechanical dimension drawings for the DAPPRA DPR-0420-NPN-NC Industrial Area Sensor. These drawings are intended for engineering reference during machine design and installation.

Product Dimensions Summary

Dimension	Value
Protection Height	60 mm
Optical Axis Pitch	20 mm
Total Housing Height	126 mm
Cross Section	29 × 30 mm
Emitter Length	126 mm
Receiver Length	126 mm
End Cap Width	30 mm



Mechanical dimensions of the DAPPRA DPR-0420-NPN-NC SD69 Industrial Area Sensor.

Installation Clearance Requirements

Clearance	Recommended
Between emitter and receiver	0.2–3 m
Minimum distance to reflective surfaces	> 0.5 m
Minimum bending radius of cable	25 mm
Ambient temperature range	-10°C to 55°C

Mounting Hole Details

Parameter	Specification
Mounting Hole Diameter	4.5 mm
Hole Spacing	Standard pattern
Screw Type	M4 or equivalent

Parameter	Specification
Torque Specification	1.2–1.5 Nm

Detailed Dimensions

Emitter Unit

Dimension	Value
Total Length	126 mm
Cross Section (W × H)	29 × 30 mm
Optical Axis Pitch	20 mm
Protection Height	60 mm
Mounting Hole Position	Center aligned
Cable Length	2 m
Connector Type	M12 3-Pin

Receiver Unit

Dimension	Value
Total Length	126 mm
Cross Section (W × H)	29 × 30 mm
Optical Axis Pitch	20 mm
Protection Height	60 mm
Mounting Hole Position	Center aligned
Cable Length	2 m

Dimension	Value
Connector Type	M12 4-Pin

Beam Configuration

- **Beam Quantity:** 4 Beams
- **Optical Axis Pitch:** 20 mm
- **Protection Height:** 60 mm
- **Total Housing Height:** 126 mm

Protection Height = (Beam Quantity - 1) × Optical Axis Pitch
(4 - 1) × 20 mm = 60 mm

Notes for Engineers

1. **Tolerances:** ±0.5 mm unless otherwise specified
2. **Material:** Housing — Aluminum alloy / End caps — ABS
3. **Protection Rating:** IP65 (when properly installed with gaskets)
4. **Orientation:** Emitter and receiver must be aligned within ±2°
5. **Beam Alignment:** Visible indicator LEDs assist with alignment
6. **Cable Management:** Allow adequate service loop for maintenance

Contact for Technical Support

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