DAPPRA Automation

CAD Drawing

DPR-1240-NPN-NC

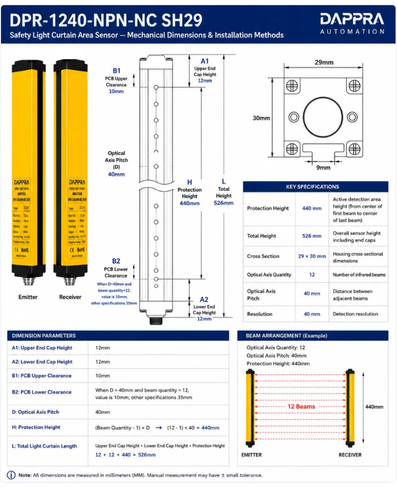
Safety Light Curtain Area Sensor — Mechanical CAD Reference

Version: 1.0 | Date: September 2026 | SKU: SH29

DAPPRA Automation — Industrial Sensor Manufacturer

1. Mechanical Drawing

The following drawing provides the complete dimensional layout of the DPR-1240-NPN-NC Safety Light Curtain Area Sensor (SKU: SH29).



DPR-1240-NPN-NC SH29 — Mechanical CAD Drawing

2. Dimensional Data

Dimension Reference	Value (mm)	Tolerance (±)
A — Protection Height	**440**	0.5
B — Total Height (including end caps)	**526**	0.5
C — Optical Axis Pitch	**40**	0.1
D — Width (Cross Section)	**29**	0.2
E — Depth (Cross Section)	**30**	0.2
F — Beam Diameter (optical)	8	0.5
G — End Cap Height (each)	20	0.3
H — Mounting Hole Spacing	500	0.5

General Tolerances: Linear dimensions: ±0.5 mm (up to 500 mm) | ±1.0 mm (over 500 mm)
Angular dimensions: ±0.5° | Surface finish: Ra ≤ 3.2 µm

3. Material & Finishing Specifications

Component	Material	Surface Treatment
Sensor Housing (Emitter / Receiver)	Aluminum Alloy 6061	Anodized (Black)
End Caps	ABS Plastic	Molded (Black)
Optical Window	PMMA (Acrylic)	Anti-reflective coating
Mounting Brackets (optional)	Stainless Steel SUS304	Passivation
Connector	M12 Metal	Nickel-plated

4. Mounting Bracket Dimensions (Optional)

The DPR-1240-NPN-NC supports mounting with standard brackets. The following dimensions are provided for reference when designing custom mounting solutions.

Mounting Hole Spacing:
32 mm (slotted for adjustment)

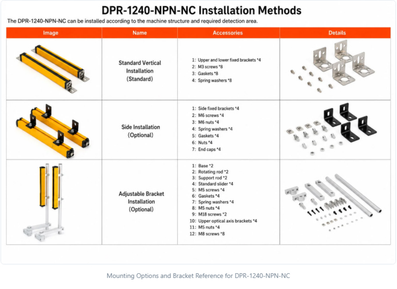
Bracket Width:
50 mm

Material:
Stainless Steel SUS304

Thickness:
3.0 mm

Adjustment Range:
±15° vertical tilt

Compatibility:
DPR-1240-NPN-NC emitter and receiver



Mounting Options and Bracket Reference for DPR-1240-NPN-NC

5. Technical Reference

Mounting Orientation:
Vertical or horizontal mounting supported. Emitter and receiver must be parallel.

Alignment Requirement:
Maximum angular deviation: ±2° between emitter and receiver.

Clearance:
Minimum 50 mm clearance around housing for airflow and maintenance.

Weight:
Emitter: ~0.6 kg | Receiver: ~0.6 kg (approx. 1.2 kg total for pair).

For engineering support: **www.dappra.com** | info@dappra.com

* All dimensions in mm. Drawings are not to scale. Refer to the official CAD file (STEP/IGES) for exact geometry.