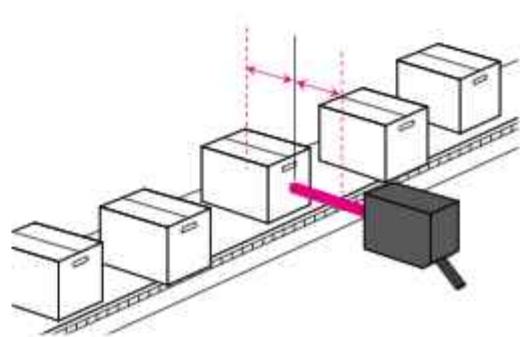
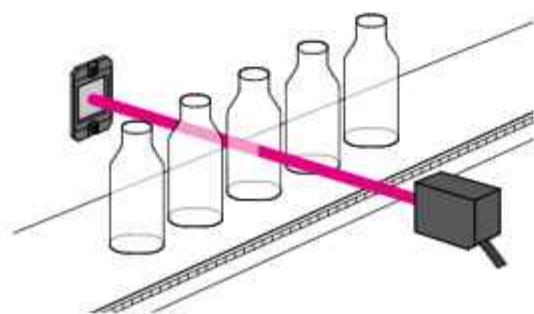
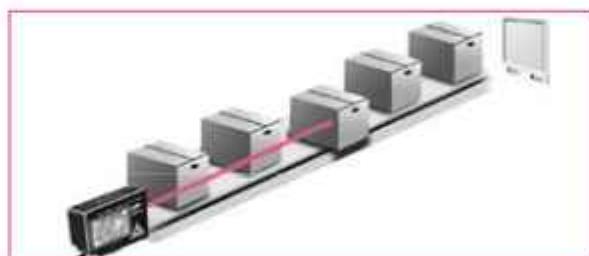
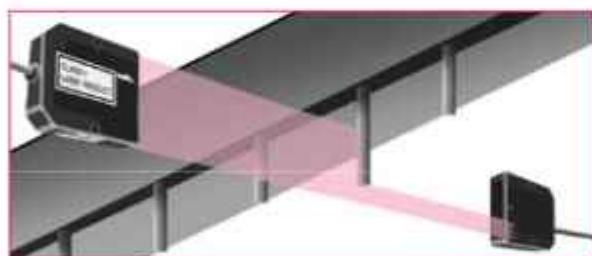
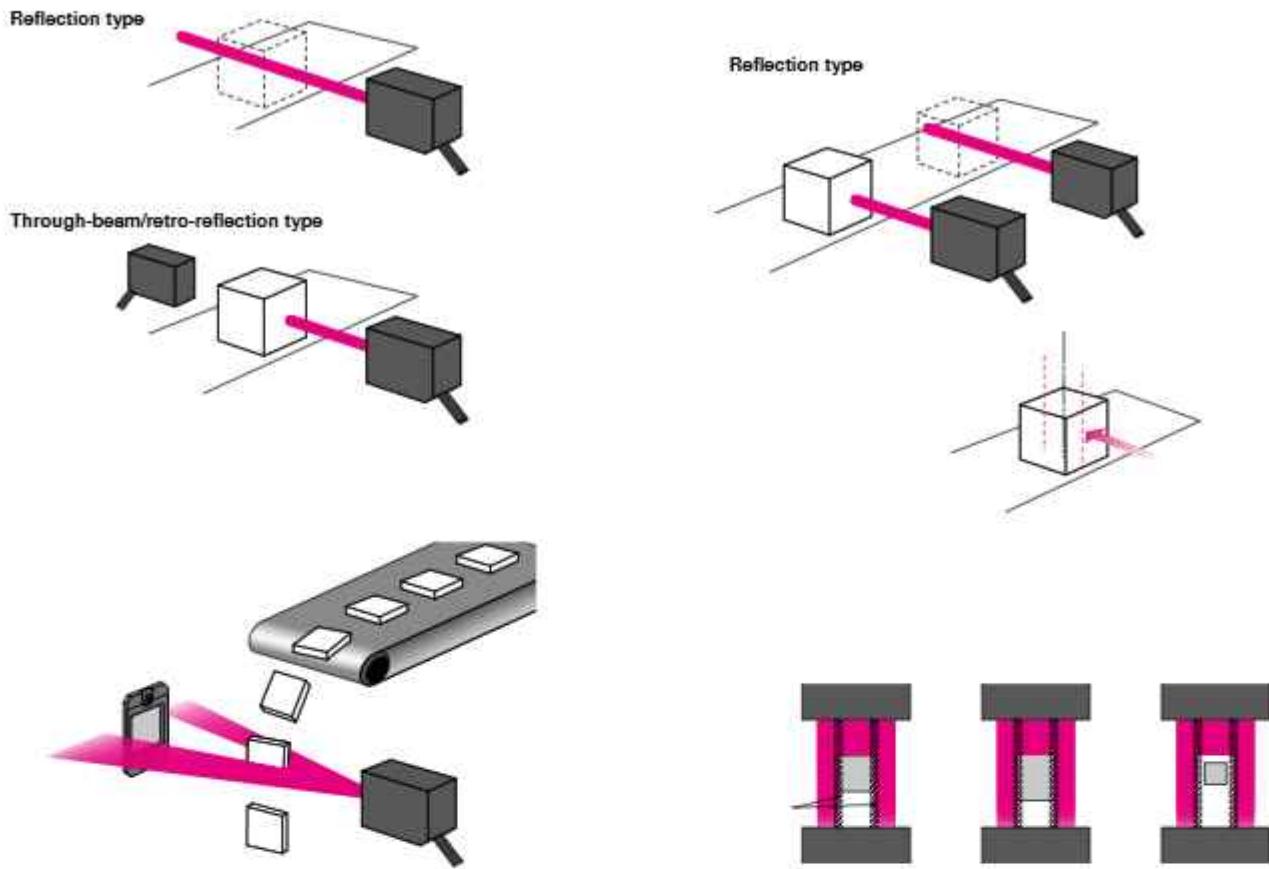


CE

High performance with easy handling!
Possible to detect transparent object!





■ Specifications

Sensor head

Kinds	Through-beam type	Length measurement	Coaxial retro-reflection	Coaxial retro-reflection (long type)	Coaxial reflection																		
Appearance																							
Model No.	JDA-15K5 Projector: JDA-15K5P Receiver: JDA-15K5R	JDA-15K5-W Projector: JDA-15K5-WP Receiver: JDA-15K5-WR	HDA-70K3	HDA-350K3	HDA-08K1																		
Optical system	Coaxial reflection																						
Light source	Visible red semiconductor laser 650nm																						
Laser class	JIS/IEC class1																						
Max.power	390 μW																						
Laser life	Approx.45,000 hours (at 55°C)																						
Detecting distance	<table border="1"> <tr> <td>Long</td> <td>1.5m</td> <td>1.5m (0.5 when length measurement mode*)</td> <td>0.08m~7m*</td> <td>0.5~35m*</td> <td>0.8m*</td> </tr> <tr> <td>Standard</td> <td></td> <td></td> <td>0.05m~4m*</td> <td>0.3~25m*</td> <td>0.6m*</td> </tr> <tr> <td>Fast</td> <td></td> <td></td> <td>0.02m~2m*</td> <td>0.1m~14m*</td> <td>0.2m*</td> </tr> </table>	Long	1.5m	1.5m (0.5 when length measurement mode*)	0.08m~7m*	0.5~35m*	0.8m*	Standard			0.05m~4m*	0.3~25m*	0.6m*	Fast			0.02m~2m*	0.1m~14m*	0.2m*				
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Standard			0.05m~4m*	0.3~25m*	0.6m*																		
Fast			0.02m~2m*	0.1m~14m*	0.2m*																		
Spot diameter	Φ 2 mm (at 1.5m)		30×2.5 mm (at 1.5m)	Φ 9mm (at 7m)*	Φ 45mm (at 35m)																		
Repeatability	0.2mm		0.3mm	0.2mm	0.2mm																		
Indication lamps	Laser emitting lamp (only projector): green LED, Output lamp (only receiver): orange LED			Laser emitting lamp: green LED, Output lamp: orange LED																			
Connection	Connector type																						
Ambient illuminance	Incandescent lamp: 3,000lux or less, sun light: 10,000lux or less																						
Ambient temperature/humidity	-10 to +55°C (-20 to +60°C at stored), 35 to 85%RH (35 to 95% at stored) Not icing, not condensing																						
Withstand voltage	1,000VAC/min.																						
Vibration resistance	Double amplitude 1.5mm, 10 to 55Hz, each 2 hour in X, Y and Z directions																						
Impact resistance	500m/s ² , each 3 time in X, Y and Z directions																						
Protective structure	IP67 (IEC standard)																						
Case materials	Case: polycarbonate, window: glass, PMMA resin																						

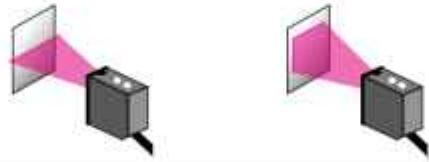
Weight (including cable)	Approx.90g	Approx.115g	Approx.45g
Accessory		Reflector (RRL-23S)	Reflector (RRL-51S)

- *1. Setting of the response time when measuring mode is available only under Long mode or standard mode.
- *2. The attached reflector is used.
- *3. The detecting object is a white paper with 200×200mm.
- *4. Spot diameter can be changed with the attachment as an option.

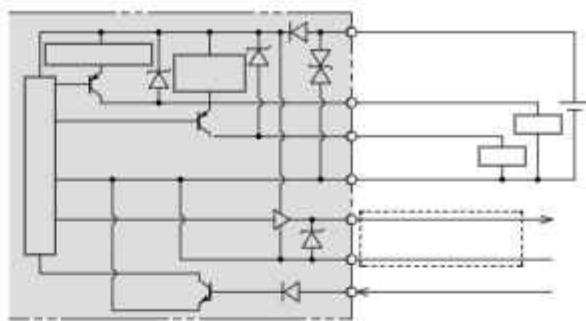
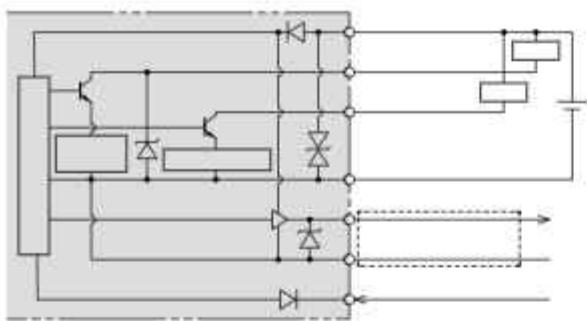
Amplifier

Model No.	LDA-DC	LDA-DA
Power source	12 to 24VDC (+10%, -10%, ripple 10% or less)	
Current consumption	45mA when 24VDC (including sensor head but excluding analog output current)	
Response speed (sensing mode)	60 μs/500 μs/2ms (Fast/Standard/Long depending on the sensing mode)	
Output	NPN open-collector output	PNP open-collector output
Control output	100mA 24VDC or less (Residual voltage 1.8V or less)	
Indication lamps	Laser emission lamp: Green, output lamp: orange, teaching lamp: red, channel lamp: green (1/2CH)	
Digital indicators	7-segment LED, 8 digits	
Timer function	ON-delay, OFF-delay, one-shot	
Timer time	1msec to 9sec	
Teaching	1-point, 2-point, zone, transparent detection, length measuring	
Operating mode	Changeover switch (L: Light-ON, D: Dark-ON)	
Analog output	4 to 20mA	
Input/output setting	Outer input setting:1-point teaching, synchronous input, laser OFF, counter reset Output setting:2CH output + alarm setting	
Zero reset	Provided	
Initial reset	Provided (Mode is returned to initial setting)	
Connection	Cable 2m long	
Ambient temperature/humidity	-25 to +55°C (-20 to +60°C at stored), 35 to 85%RH (35 to 95% at stored) Not icing, not condensing	
Withstand voltage	1,000VAC/min.	
Insulation resistance	20MΩ(500VDC) or more	
Vibration resistance	Double amplitude 1.5mm, 10 to 55Hz, each 2 hour in X, Y and Z directions	
Impact resistance	500m/s ² , each 3 time in X, Y and Z directions	
Protective structure	IP50 (IEC standard)	
Case material	Body/cover: Polycarbonate	
Weight	Approx.65g (including cable)	
Accessory	Fitting metal	
Mounting	DIN rail mounting	

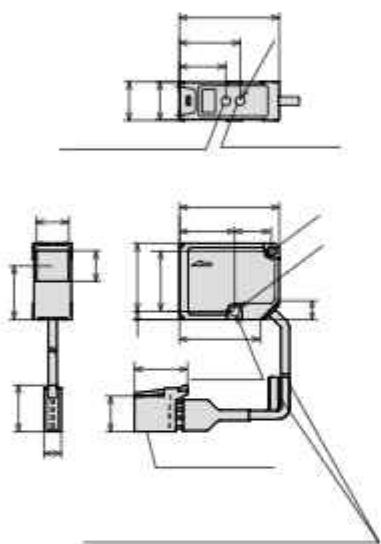
Lens attachment (as an option)

Appearance	Model No.	Spot diameter	Remark
	FPL-A01		Spot diameter can be changed with exclusive lens attachment.

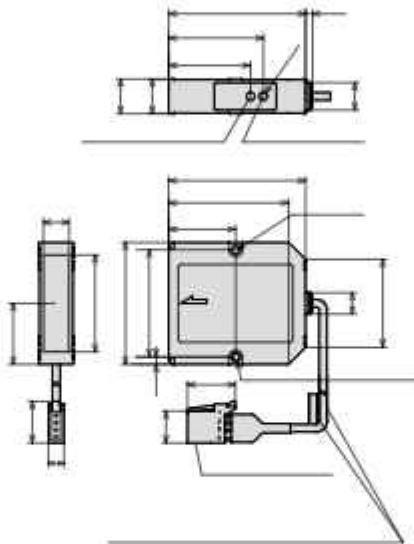
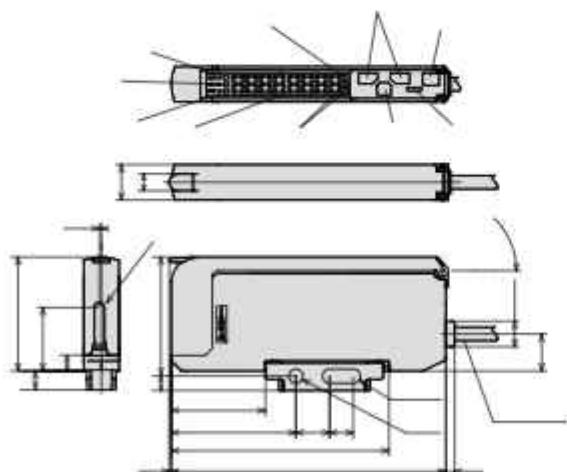
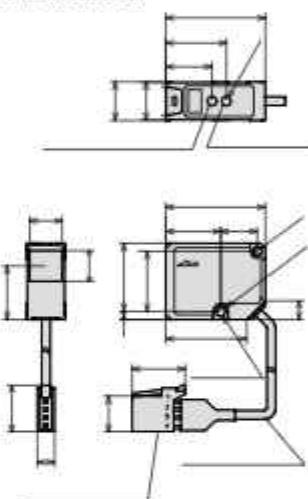
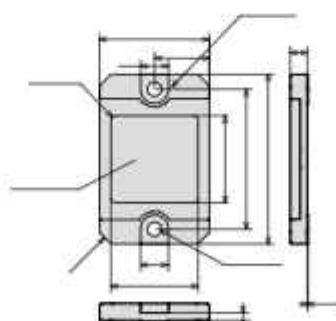




Through-beam type



Length measurement

Coaxial retro-reflection
Coaxial retro-reflection long distance
Coaxial reflectionRRL-23S (RRRL001)
(attached to HDA-70K3)RRL-51S (RRRL002)
(attached to HDA-350K3)