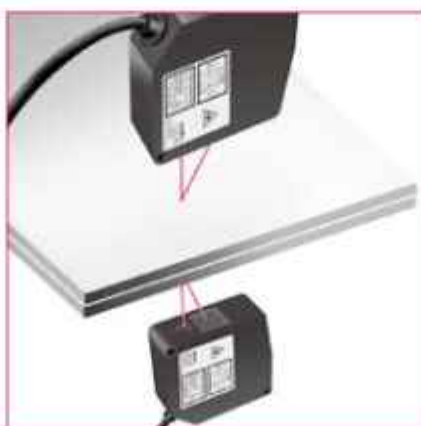




High accuracy measurement with high sensitivity linear image sensor and electronic shutter



Specifications

Sensor head

Kinds		Ultra-high accuracy	High accuracy (short)	High accuracy (middle)	High accuracy (long)
Model No.		HXA-25KL	HXA-30K	HXA-85K	HXA-350K
Optical system		Direct reflection	Coaxial reflection		
Measuring range		25mm±1mm	30mm±5mm	85mm±20mm	350mm±100mm
Light source		Visible red semiconductor laser 650nm			
Laser class		JIS/IEC class1	JIS/IEC class2		
Max.power		390 μW	3mW		
Laser life		Approx. 50,000 hours (at 40℃)			
Spot diameter*1		Approx.25X35 μm	Approx.30X100 μm	Approx.70X290 μm	Approx.300X700 μm
Linearity*2		±0.1%F.S			
Resolution*3		0.1μm	1μm	3μm	40μm
Temperature drift		±0.01%FS/℃			
Indication lamps	Laser emitting lamp	Green LED (Lights up when emitting)			
	Measuring range lamp	Red LED (short side), orange LED (center), green LED (long side) Red/green mutual blinking (out of measuring and impossible measuring)			
Ambient illuminance		Incandescent lamp: 3,000lux or less, sun light: 10,000lux or less			
Ambient temperature/humidity		-10 to +45℃ (-20 to +60℃ when stored), 35 to 85%RH (35 to 95%RH when stored) Not icing, not condensing			
Insulation resistance		20MΩ (DC500V) or more			
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		498m/s², each 3 time in X, Y and Z directions			
Protective structure		IP67 (IEC standard)			
Case materials		Body: Aluminum die-casting, window: glass			
Weight		250g (including cable)			
Cable extension		Up to 10m max.with available extension cable			
Accessory		Screw (M4X35)			

*1. This is defined with 1/e (13.5%) of center strength at center of measuring.It may be affected if there are any objects with high reflectance.

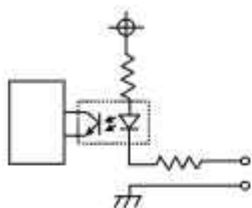
*2. Mean numbers 256(exclusive amplifier),white ceramic.

*3. Mean numbers 256(exclusive amplifier),typical value at center of measuring.It may be changed depending on objects.

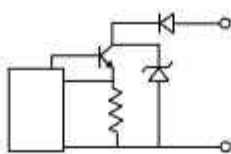
Amplifier

Kinds	Amplifier for ultra-high accuracy (HXA-25KL)	Amplifier for high accuracy (HXA-30K/80K/350K)
Model No.	LXA-DCL	LXA-DC
Power source	12 to 24VDC (+10%, -10%, ripple 10% or less)	
Current consumption	270mA when 24VDC (including 2 pcs of sensor head and analog output current)	
Sensor connectable numbers	Max.2 pcs	
Sampling cycle	100 μsec	
Temperature drift	±0.01% F.S/°C	
Control output	NPN open-collector output, 100mA 24VDC or less (residual voltage 1.8V or less) 5 output (individual setting is available), Hysteresis setting is available	
Analog output	Voltage output: ±5V/F.S. (Output impedance 100Ω, resolution 1mV) Current output: 4 to 20mA/F.S. (Load impedance 300Ω, resolution 1.5 μA)	
Alarm output	NPN open-collector output 100mA 24VDC or less (residual voltage 1.8V or less) ON when head can't measure	
Bank input	ON when connecting to GND, 8 banks (8 patterns of measuring condition can be registered or changed)	
Hold input	ON when connecting to GND, Laser off or measuring value is held (set by menu)	
Zero reset input	ON when connecting to GND, Zero reset is available for Head A value, head B value and calculating value	
Optional functions	Average sampling times, filter mode (cut-off frequency), calculation, hold setting output during alarm, output control (hysteresis), Analog output, sensor head sensitivity control, timer function, memory function, bank function, auto-zero reset	
Circuit stable time	5 min. or less	
Display	LCD	
Connection	Terminal stand	
Ambient temperature/humidity	-10 to +45°C (-20 to +60°C at stored), 35 to 85%RH (35 to 85% 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	196m/s ² , each 3 time in X, Y and Z directions	
Protective structure	IP20 (IEC standard)	
Case materials	Body: Polycarbonate, terminal stand: nylon66	
Weight	240g (including terminal stand)	
Accessory	Terminal stand	

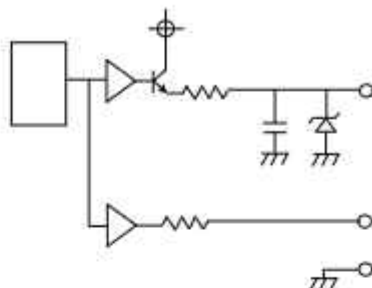
Bank input, hold input, zero reset input



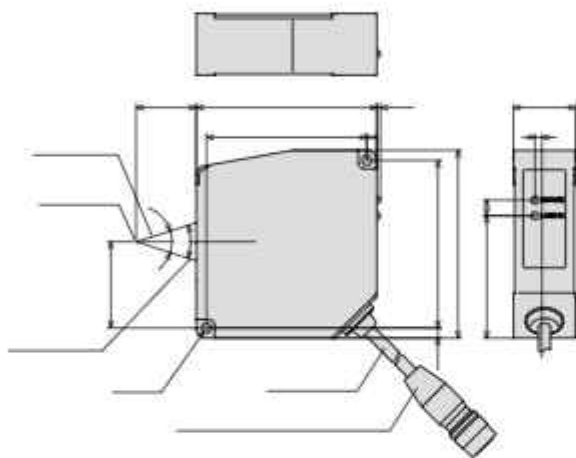
Control output, alarm output



Analog output (A/B)



HXA25KL



HXA-30K HXA-85K HXA-350K

