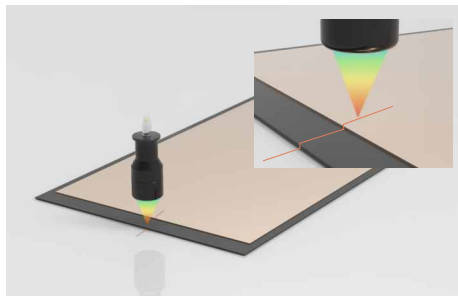
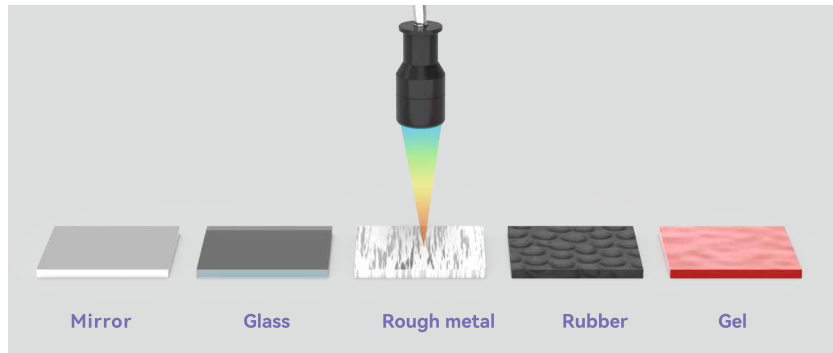


Colour Confocal Displacement Sensors

ACC Series

Stable measurement for any material

Metals, ceramics, mirrors, glass, transparent and non-transparent materials can all be detected

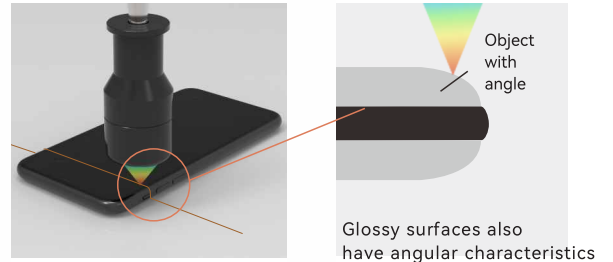


Sub-micron ultra-high measurement accuracy

The maximum resolution is 0.02um, and the minimum spot size is 2um, for precise capture of minute details

Tilt angle measurement up to $\pm 60^\circ$

The shape of object with angles can be accurately tracked, almost no impact by the shape.



High precision measurement for any surface condition

Stable detection for rough surfaces, mirrors, curved surfaces, inclined surfaces, pits, section differences, etc.

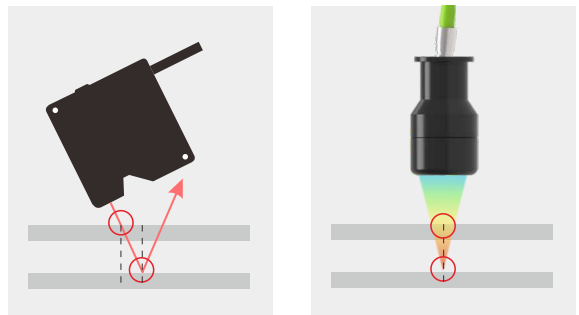
Detection from all directions, even for hollows and segment differences



Traditional laser displacement

ACC Series

Transparent and mirror objects can also be correctly measured



Traditional laser displacement

ACC Series

Application fields



Panel/glass industry



PCB board/IC chip industry



Photovoltaic / semiconductor wafer industries



Metal / precision manufacturing industries



Lithium and other industries



Lens industry

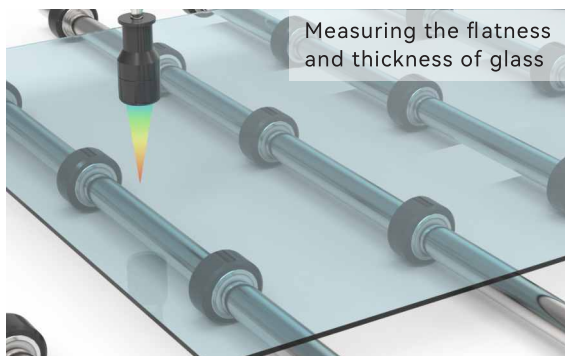


3C electronics and other industries

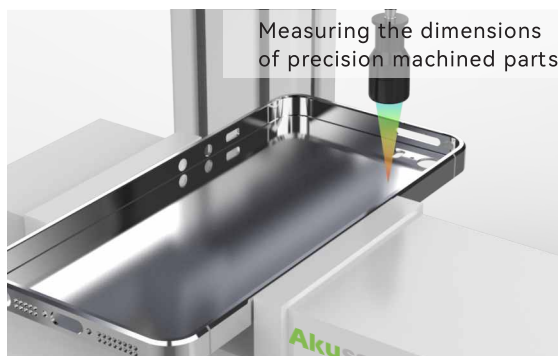


Printing/Ink industry

Applications

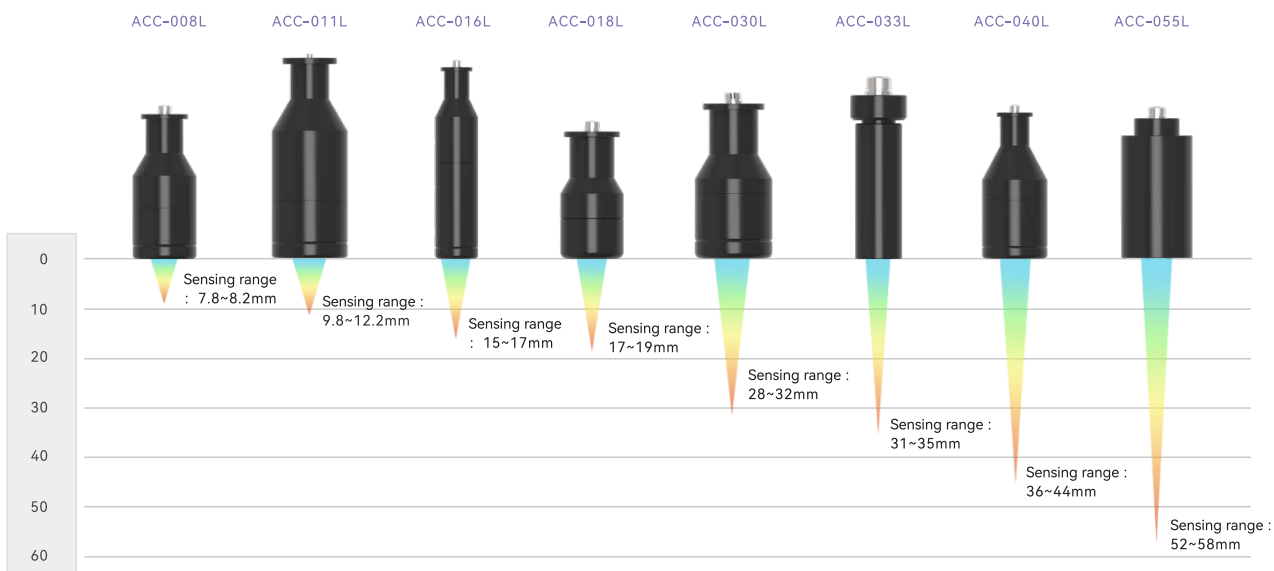


Measuring the flatness and thickness of glass



Measuring the dimensions of precision machined parts

Selection table



Model	ACC-008L	ACC-011L	ACC-016L	ACC-018L	ACC-030L	ACC-033L	ACC-040L	ACC-055L
Resolution	0.02 μ m	0.05 μ m	0.05 μ m	0.05 μ m	0.07 μ m	0.2 μ m	0.12 μ m	0.1 μ m
Spot size	2 μ m	16 μ m	8 μ m	25 μ m	9 μ m	40 μ m	40 μ m	45 μ m
Max. inclination	$\pm 40^\circ$	$\pm 60^\circ$	$\pm 30^\circ$	$\pm 22^\circ$	$\pm 15^\circ$	$\pm 7^\circ$	$\pm 15^\circ$	$\pm 11^\circ$

- Fiber Optic
- Slot Sensors
- Photoelectric
- Laser
- Proximity
- Displacement**
- Magnetic
- Contact
- Area
- Ultrasonic
- Vision
- Code Readers
- Vibration
- Temperature
- Accessories

Guidance

- Displacement**
- Triangulation
- Linear measurement
- Magnetic displacement
- LIDAR Scanner
- Color confocal

Color Confocal Displacement Sensor

ADV Series

Probe



Sensing distance	8mm	11mm	16mm	18mm
Measuring range	± 0.2mm	± 1.2mm	± 1mm	± 1mm
Resolution ^{*1}	0.02 μm	0.05 μm	0.05 μm	0.05 μm
Linearity ^{*2}	± 0.15 μm	± 0.45 μm	± 0.35 μm	± 0.3 μm
Spot diameter ^{*3}	2 μm	16 μm	8 μm	25 μm
Maximum inclination ^{*4}	± 40°	± 60°	± 30°	± 22°
Probe size	Φ41*99mm	Φ98*266mm	Φ41*159mm	Φ34*75mm
Probe weight	220g	3250g	360g	105g
Degree of protection	IP40	IP40	IP40	IP40
Model NO.	ACC-008L	ACC-011L	ACC-016L	ACC-018L

Probe



Sensing distance	30mm	33mm	40mm	55mm
Measuring range	± 2mm	± 2mm	± 4mm	± 3mm
Resolution ^{*1}	0.07 μm	0.2 μm	0.12 μm	0.1 μm
Linearity ^{*2}	± 0.45 μm	± 2 μm	± 0.5 μm	± 0.65 μm
Spot diameter ^{*3}	9 μm	40 μm	40 μm	45 μm
Maximum inclination ^{*4}	± 15°	± 7°	± 15°	± 11°
Probe size	Φ38*82mm	Φ18*55mm	Φ54*116mm	Φ33*75mm
Probe weight	145g	24g	380g	122g
Degree of protection	IP40	IP40	IP40	IP40
Model NO.	ACC-030L	ACC-033L	ACC-040L	ACC-055L

Controller



Light Source	White LED		
Size of controller(Lxwxh)	140*122*127mm		185*122*127mm
Weight of controller	1.32kg	1.38kg	-
Rated voltage	24V DC		
External communication interface	RS-232:115200 bps(max.) Ethernet:100BASE-TX/10BASE-T		
Degree of protection	IP20		
Sampling frequency	4K HZ(Max)		2K HZ(Max)
I/O function	Pulse input and output	Pulse input and output, encoder trigger input	
Number of encoder shafts	-	3-axis, incremental (A/B/Z phase)	
Encoder maximum trigger frequency	-	4K HZ(Max)	2K HZ(Max)
Fiber extension cord	Inner armor: ACC-OF-S (standard); Outer armor: ACC-OF-M(optional)		
Length	2/5/10(Standard)m		
Weight	ACC-OF-S: 23/40/69g; ACC-OF-M: 108/218/396g		
Minimum bending radius ^{*5}	50mm		
Operating temperature	5~40°C		
Environment humidity	35~80%		
Ambient illumination	<10000lx		
Clamp fixture	Customizable		
Model NO.	ADV-12CK	ADV-12CKS	ADV-12CK2

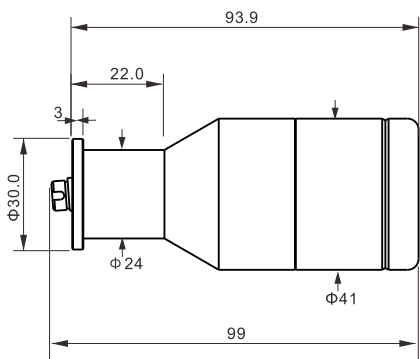
Color Confocal Displacement Sensor

Unit:mm

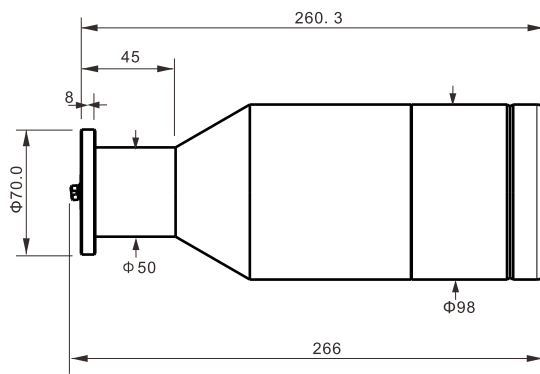
Dimensions

Displacement

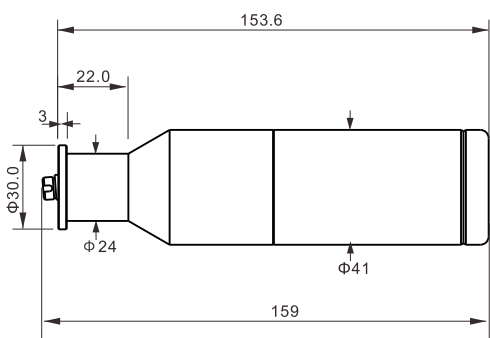
ACC-008L



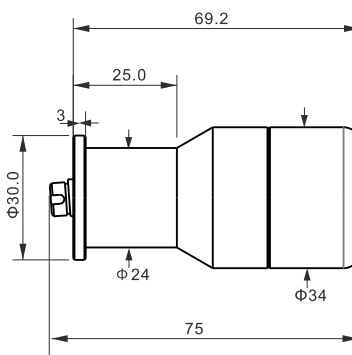
ACC-011L



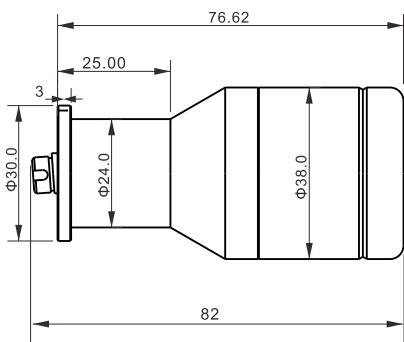
ACC-016L



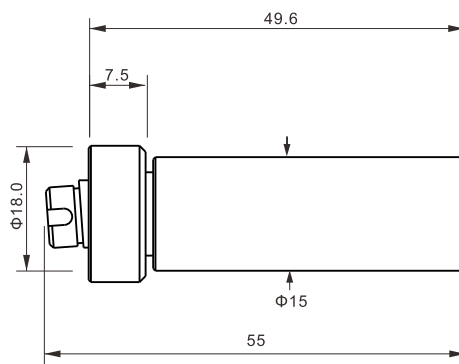
ACC-018L



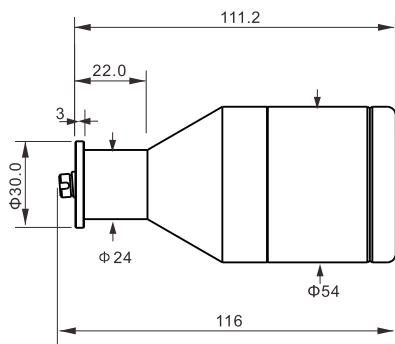
ACC-030L



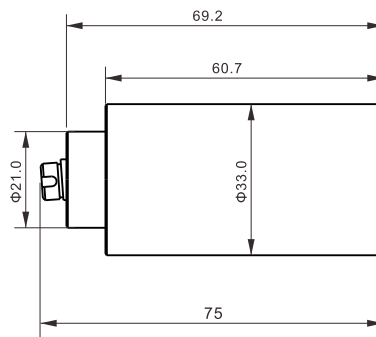
ACC-033L



ACC-040L



ACC-055L



- Fiber Optic
- Slot Sensors
- Photoelectric
- Laser
- Proximity
- Displacement**
- Magnetic
- Contact
- Area
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- Vision
- Code Readers
- Vibration
- Temperature
- Accessories

Guidance

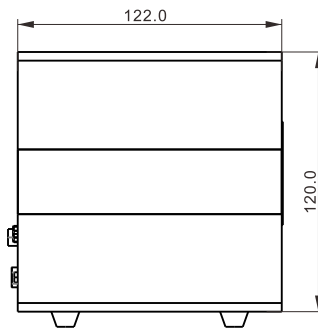
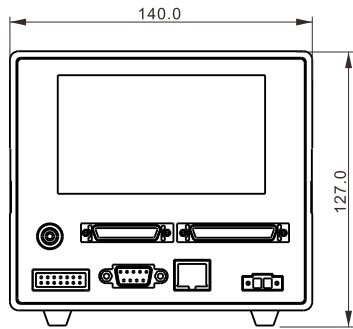
- Displacement**
- Triangulation
- Linear measurement
- Magnetic displacement
- LIDAR Scanner
- Color confocal

Color Confocal Displacement Sensor

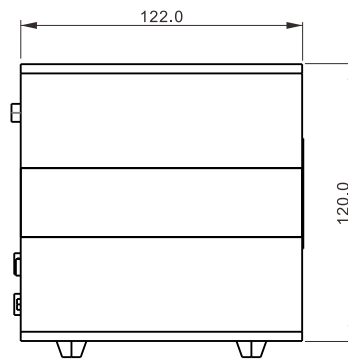
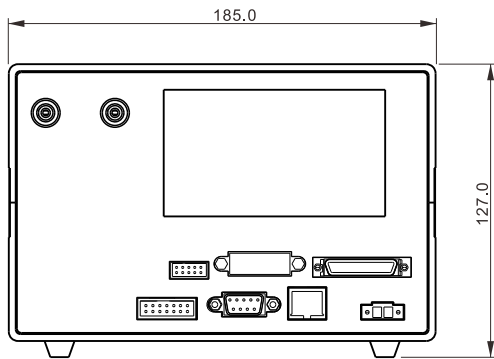
Dimensions

Unit:mm

ADV-12CK(S)



ADV-12CK2



Fiber Optic

Slot Sensors

Photoelectric

Laser

Proximity

Displacement

Magnetic

Contact

Area

Ultrasonic

Vision

Code Readers

Vibration

Temperature

Accessories

Guidance

Displacement

Triangulation

Linear measurement

Magnetic displacement

LiDAR Scanner

Color confocal

- *1. Resolution: The average level of noise for the stationary workpiece at the zero center of the range center (opening the light intensity auto adjustment and 256 times averaging function)
- *2. Linearity: Maximum error value for full-scale measurement of mirror standard parts after calibration (opening the light intensity auto adjustment and 256 times averaging function)
- *3. Spot diameter: theoretical spot diameter value at the center of the range
- *4. Maximum inclination: refers to the maximum acceptable optical signal angle under the mirror-reflective material workpiece. The diffuse reflection workpiece usually can reach 80 degrees.
- *5. Minimum bending radius: The minimum radius of curvature that can be received when the fiber is crimped and stored. Below this value, it is easy to break and damage.