

Ultra-compact, cost-effective and efficient

laser measurement experience

The MD series is equipped with ViziFuze's latest high-speed CMOS chip to achieve top stability and repeatability in its class.

MD -400

Reference distance 400mm
Measurement range 200-600mm
Linearity $\pm 0.3\%$
Repeatability 800 μ m

MD-200

Reference distance 200mm
Measurement range 120-280mm
Linearity $\pm 0.2\%$
Repeatability 200 μ m

MD-100

Reference distance 100mm
Measurement range 65-135mm
Linearity $\pm 0.1\%$
Repeatability 70 μ m

MD-50

Reference distance 50mm
Measurement range 35-65mm
Linearity $\pm 0.1\%$
Repeatability 30 μ m

MD-30

Reference distance 30mm
Measurement range 25-35mm
Linearity $\pm 0.1\%$
Repeatability 10 μ m



Long distance

Maximum 600mm

High frame rate

Maximum 2000Hz sampling

Excellent price

Extremely economical laser displacement sensor

Ultra-small design

Can be installed in small spaces

Efficient use

Parameter setting at the same time as the value display

FDA RoHS

Stable and reliable

Compact Laser Displacement Sensors

Precision optical construction

A new optical system with an internally mounted reflector reduces the size of the depth direction and realizes high-precision measurement of the sensor at the same time.

Complete qualification

All series of products comply with CE, RoHS standards, with FDA, UL certification.



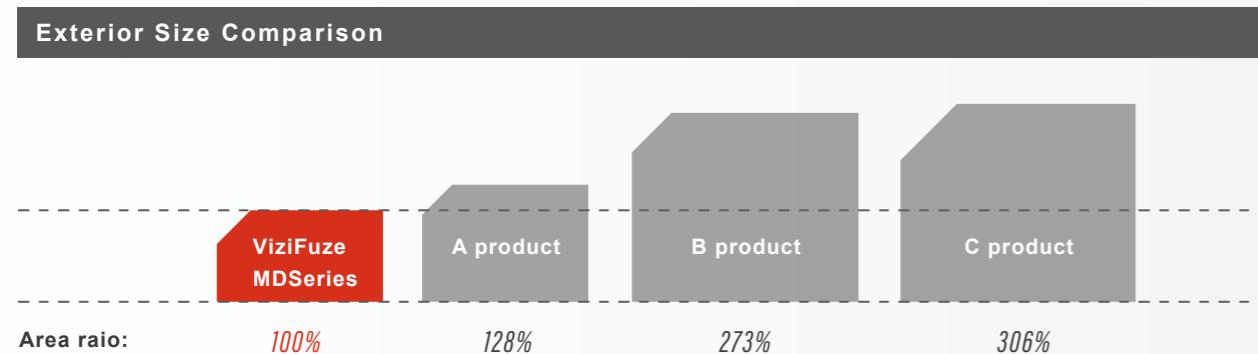
Compact, lightweight exterior design

Adopting an aluminum casting housing, it pursues the miniaturization of the body while ensuring a rugged and durable sensor structure.



1:1 Product Schematic

Exterior Size Comparison



Rough comparison between VizeFuze MD series and the mainstream A\B\C products on the market

Convenient Interactive Interface

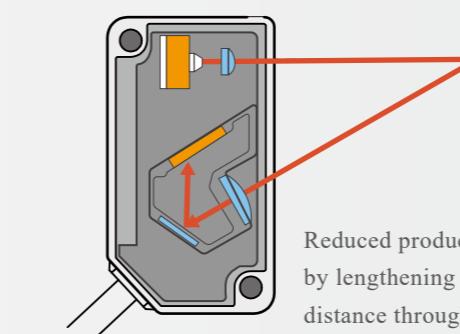
Visualize a variety of information, easily complete the sensor configuration, and achieve stable, high-speed, high-precision distance measurement with one click.

Clear display

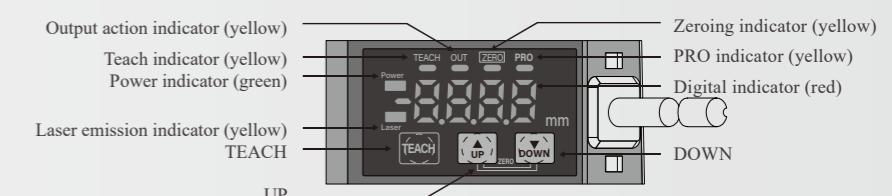
Clear display even under sunlight. Simple operation, two-point display, and limiting factor. Measurement can be started in as little as 2 seconds with only two steps.

MD Series

Reflector design



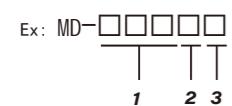
Reduced product form factor by lengthening the phase distance through mirrors.



Visual Interactive Interface

Extremely competitive products create rich benefits for users

Specification



1 Sensor range	
030:30±5mm	200:200±80mm
050:50±15mm	400:400±200mm
100:100±35mm	

2 Analog output signal type	
V:Voltage type	I:Current type
N:NPN	P:PNP

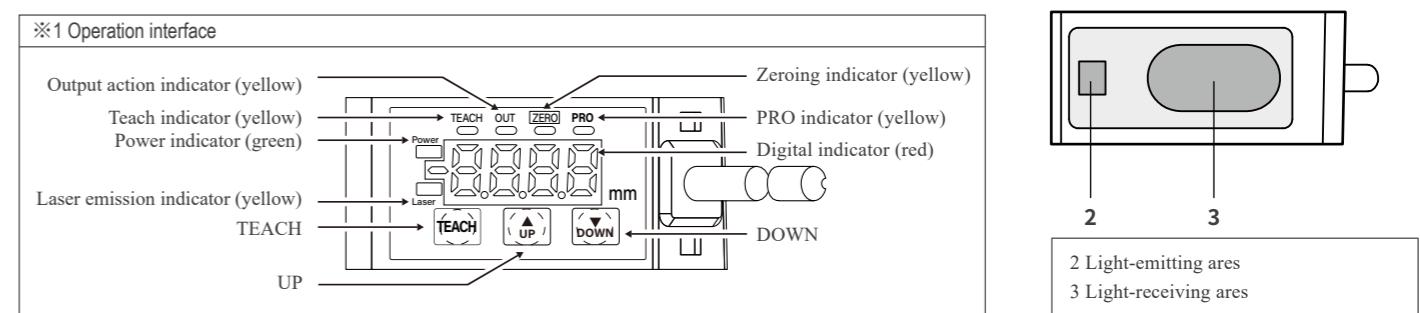
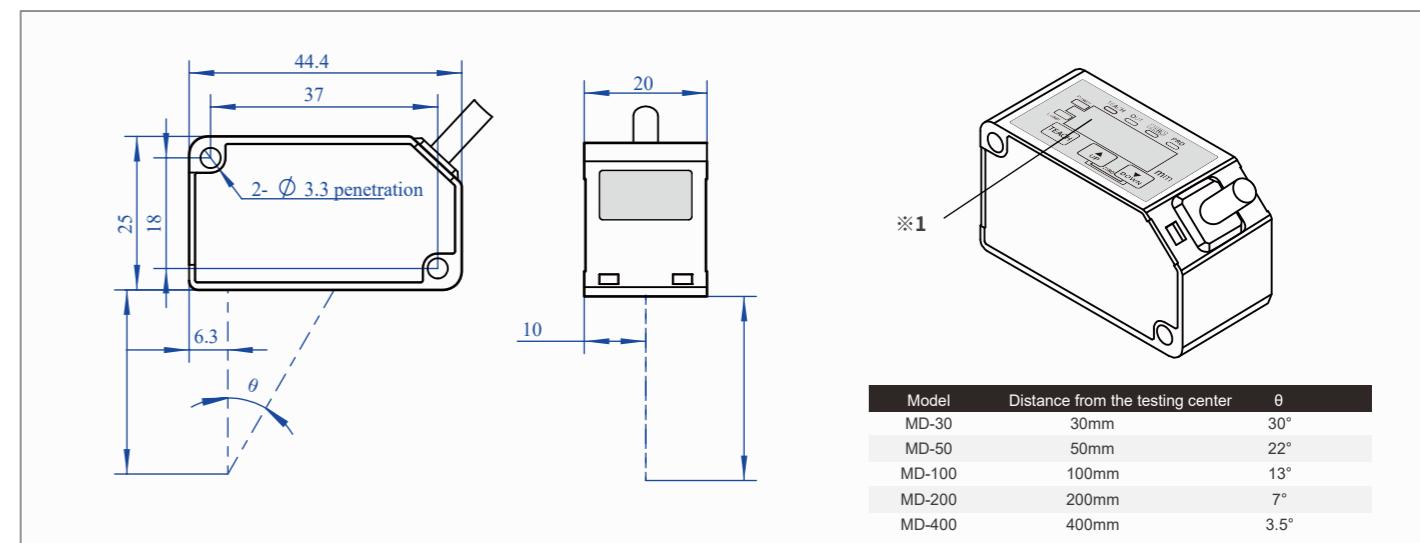
3 Determine the output type	
N:NPN	P:PNP

※Example: MD-30VN, indicated as sensor range of 30±5mm, analog output signal type is voltage type, and judgment output type is NPN type.

BZ Series Laser Displacement Sensor								
Model	MD-30	MD-50	MD-100	MD-200	MD-400			
Reference distance	30mm	50mm	100mm	200mm	400mm			
Measuring range	25-35mm	35-65mm	65-135mm	120-280mm	200-600mm			
Linearity※1	±0.1%	±0.1%	±0.1%	±0.2%	±0.3%			
Repeatability※2	10µm	30µm	70µm	200µm	800µm			
Applicable standards and certifications※3	EMC directive, ROHS directive, CE marking, FDA standards							
Light source	Visual semiconductor laser wavelength 650nm, maximum output 1mW, class 2 laser IEC/GB/FDA							
Spot size	50µm	70µm	120µm	300µm	500µm			
Optical receiving device	CMOS image sensor							
Supply voltage	12-24V DC±10% power pulsation P-P10%							
Current consumption	40mA or less (at 24V DC supply voltage)							
	NPN type	PNP type						
Judgment output	Maximum inflow current: 50mA, applied voltage below 30VDC, residual voltage 1.5V, leakage current below 0.1mA		Maximum outflow current: 50mA, maximum applied voltage below 30VDC, residual voltage 1.5V, leakage current below 0.1mA					
Output operation	ON when light is in/ON switchable when light is not in							
Output short circuit protection	Equipped (automatic reset type)							
Analog output	4-20mA (Load impedance below 300Ω), 0-5V (Output Impedance 100Ω)							
Response time	1.5ms/5ms/10ms switchable							
	NPN type	PNP type						
External input	NPN non-contact input, invalid: +8~+V DC or disconnected Valid: 0~+1.2VDC Input impedance about 10kΩ		PNP non-contact input, invalid: 0V~+0.6VDC or disconnected Valid: +4V~+VDC Input impedance about 10kΩ					
Action indicator light	Power green LED; Laser, OUT, ZERO, AL, PRO yellow LEDs							
Digital display	4-digit break code display							
Temperature characteristics	0.05%F.S./°C							
Use ambient illuminance	Illumination of lighted surfaces incandescent lamps 3000lux or less							
Ambient temperature range	Working hours 0-40°C, when saving -15~65°C							
Ambient humidity range	Working hours 35%RH-85%RH when saving 35%RH-85%RH							
Impact resistance	Acceleration 500m/s², 3 times in each direction XYZ							
Vibration resistance	10-55HZ Double amplitude 1.5mm, XYZ each direction 2 hours							
Cable length	24AWG 5-conductor composite cable, 2m long							
Protection level	IEC IP67							
Material	Housing body: cast aluminum parts, front cover: PC							
Notes	※1 Indicates the error relative to the ideal straight line of the displacement output when measuring our standardized object. Linearity and measurement values vary depending on the object. F.S. indicates the entire measuring range. ※2 The maximum range of fluctuation of the measured value when detecting the measured object in a completely stationary state. ※3 It is scheduled to be classified as diffuse-reflective type Class 2 according to IEC60825-1 in accordance with Laser Notice No. 50 of the FDA standard, and has been declared CDRH.							

*Product specifications are subject to change without notice, please consult the company's sales role shall prevail.

Product dimension



Options(sold separately)

Type	Model	Description	Product Pic.
Simple mounting bracket	MS-MD-01	Vertical mounting bracket With 2 padded diagrams and M3 screws (25mm long) (SPCC)	

