Ultrasonic sensors

# Ultrasonic sensor

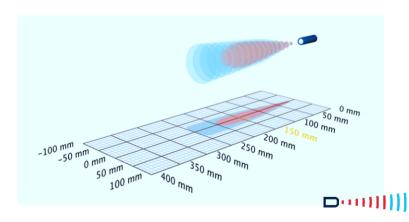
## V5UN-08 series



#### Highlights

- IO-Link interface supports the latest industry standards;
- Automatic synchronization and asynchronous work can support up to ten sensors simultaneous work at short range;
- 1 push-pull switch output compatible with pnp or npn;
- Detection range: 20 mm to 100 mm;
- Teaching can be done via IO-LINK;
- Resolution: 0.069-0.10mm
- Temperature compensation;
- The measurement is not affected by color, transparency, glossiness and ambient light;

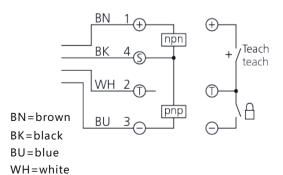
#### ■ Response characteristic curve (example)



100mm

### ■ I/O circuit diagram





#### Product parameters

Operating distance	20- 100 m
Body size	Cylindrical M8
Operating mode	IO-Link
	Proximity switch/diffuse reflection mode
	Reflector mode
	Window mode
Characteristic	IO-Link
	Smart Sensor Profile
	Listed U
Measurement methods	Echo propagation time
Transducer frequency	484 kHz
Blind spot	20mm
Scope of test	100mm
Maximum detection range	100mm
Resolution / Sampling frequency	0.1mm
Repeatability	< 0,3 mm
Accuracy	±1% (built-in temperature drift compensation)
Operating Voltage	18-30V DC
Voltage ripple	± 10%
No-load current loss	≤30 mA
Connection Type	Connector, M8 , 4-poled
Output 1	switching output
	Push-Pull,UB-3 V,-UB+3 V,Imax=150mA
Switching hysteresis	1 mm, via IO-Link adjustable up to 2 mm
On-off level	20 Hz
Response time	30 ms
Power-on delay	< 300 ms
Enter 1	IO-Link, V1.1, COM2 (38,4kBd), Smart Sensor Profile
	Synchronous input Self-learning input
Material	Copper sleeve, nickel-plated, plastic parts, PBT
Ultrasonic transducer	Polyurethane foam, glass filled epoxy resin
Maximum tightening torque of nut	10Nm
Protection level EN 60529	IP67
Operating temperature	0°C to +50°C
Storage temperature	-40°C to +85°C
Weight	30g
Indicator light	1×LED yellow light: the target in the window
Updated version	Elbow 90°