



UBS500-M18Q Ultrasonic Sensor

Instruction manual

Thank you for purchasing our products. This manual describes how to install and use ZF/ZR ultrasonic sensors. Please read this manual carefully before use to fully understand the product properties.



Summarize

- The ultrasonic sensor can quickly set the detection distance and accurately detect a variety of materials
- Built-in intelligent chip, stable, safe and reliable thread shape is easy to install
- Two-color indicator light monitors the machine at any time
- Ultrasonic sensors have more applications than you can imagine: interval measurement, bottle counting, size measurement, material accumulation height measurement, diameter and velocity measurement, profile measurement, loop monitoring, quality inspection, distance monitoring, filling level measurement.

Measurement control mode setting

1、 Single point detection mode setting operation:

Place a test object at the location where the distance needs to be set, press and hold the S key for 3 seconds. If the test object is captured, the PW power blue finger

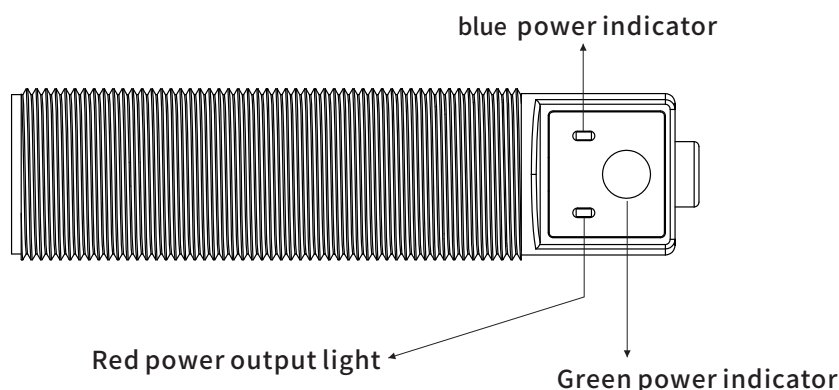
The indicator light flashes slowly 5 times before starting to flash rapidly, and the OUT light remains on.

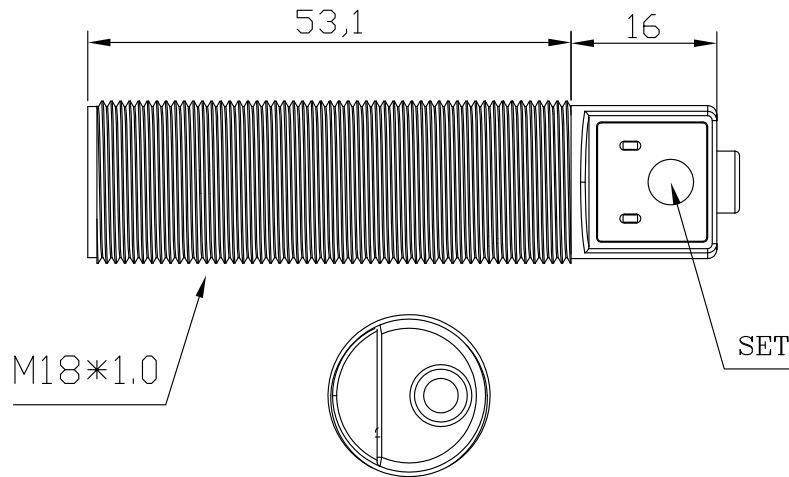
Enter Adaptive adjustment setting mode, power indicator light after about 15 seconds PW blue and output indicator light OUT are constantly on at the same time, indicating distance Setting successful.

2、 Interval normally open (two-point) detection mode operation: when needed Place a test object at a designated distance and press and hold the S key for 3 seconds

If the tested object is captured, the PW power indicator light will turn blue and slow After flashing 5 times, it starts flashing rapidly and the OUT light stays on, representing the first point setting Set successfully, then move the object to be measured to the second one Position, press the S key to set the second point, the power indicator light PW changes Green slow flashing, after about 3 seconds, the power indicator light PW will turn green and output The indicator light OUT is constantly on at the same time, indicating the second point distance setting success. At this point, it is in a normally open output state between two points.

3、 Normally open and normally closed switching: use white and blue lines in one It can switch from normally open to normally closed.





Technical parameter	UBS500-M18Q	UBS1000-M18Q
Detection range	5-500mm	5-1000mm
Range of regulation	5-500mm	5-1000mm
Dead zone	0-5mm	
Standard test board	100X100MM	
Angle sensor	7°C	
Frequency	Approximately 200KHZ	
Response delay	50MS	
Operating voltage	10~30VDC,10%VPP	
Protection circuit	Anti-reverse protection, instantaneous overvoltage protection	
No-load current	$\leq 25\text{MA}$	
Load	Voltage output : $\geq 1\text{KQ}$	
Output mode	Switching output	
Resolution	0.5MM	
Repeatability	0.3% full scale value	
Temperature drift	$\leq 2\%$ of full scale (built-in temperature compensation) $< 1\%$	
Linearity	$< 1\%$	
Operating Temperature	$-20^{\circ}\text{C} \sim +45^{\circ}\text{C}$	
Storage temperature	$-20\text{C} \sim +50^{\circ}\text{C}$	
Electromagnetic compatibility	GB/T17626.2-2006 GBT17626.4-2008	
Class of protection	Ip65	
Housing material	304 stainless steel housing	
Line length	2mPVC oil resistant composite material	

■ Connection mode

● N/P output wiring diagram

