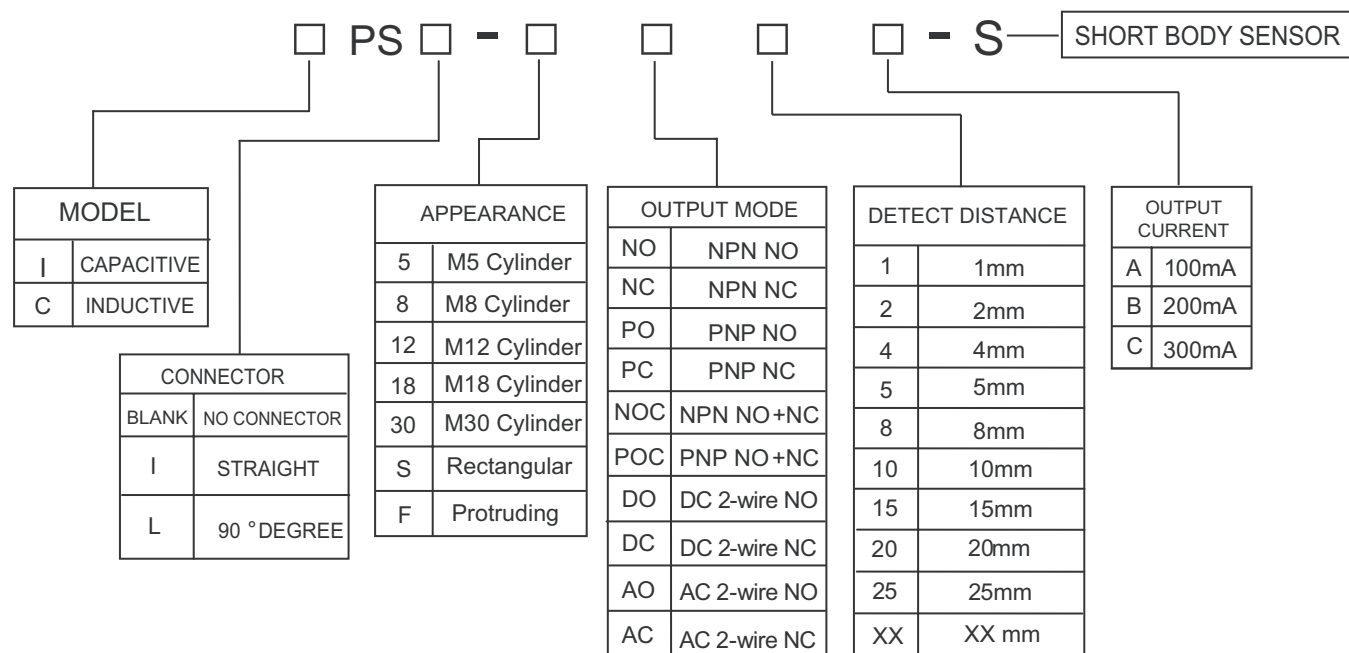


Dear clients, Thanks for choosing IBEST proximity sensors! Before installing and operating the sensors, please read this instruction manual carefully. For any questions, please contact our sales people immediately.

1.FEATURES

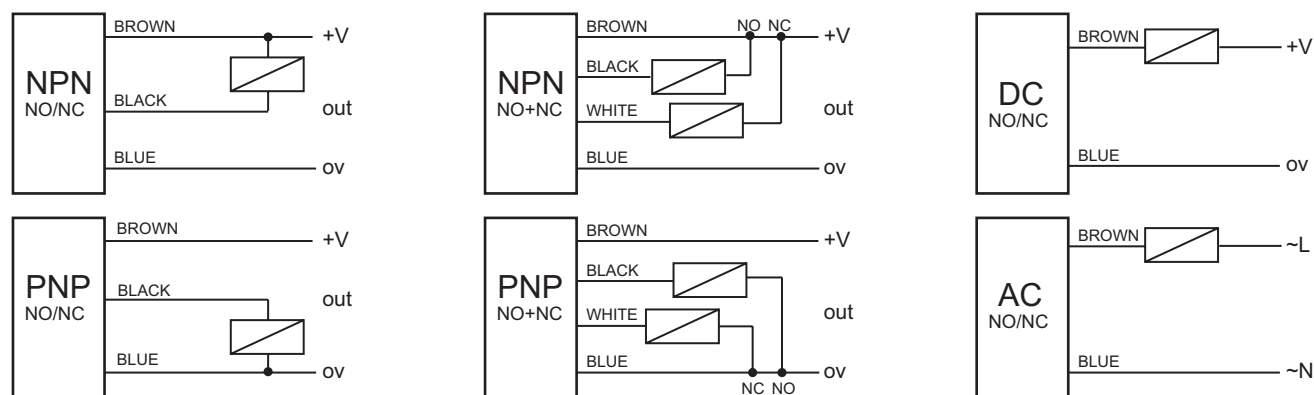
- Inductive and capacitive proximity sensor.
- Style: cylinder shape (M5, M8, M12, M18, M30); various rectangular shape and protruding shape.
- Shielded or unshielded type.
- DC 2-wire (10-30V DC), DC 3-wire(10-30V DC), DC 4-wire(10-30V DC),AC 2-wire (90-250 AC) type .
- Connection mode: 3 or 4 wires or 3 or 4 pin M8 or M12 connector.
- With LED operation indicator, easily identifiable.
- Brass nickle plated, proof of oil, water acid, alkaline.
- Standard sensing object: inductive sensor: ferrous metals; capacitive sensor: metal or non-metal objects.
- Protection rate: IP67, water resistant.
- Over-current and short circuit protection; polarity reversal protection.
- Widely applied in measuring, Counting, Rpm measuring in mechanism, chemical, paper manufacture light industry, etc

2.ORDERING CODE



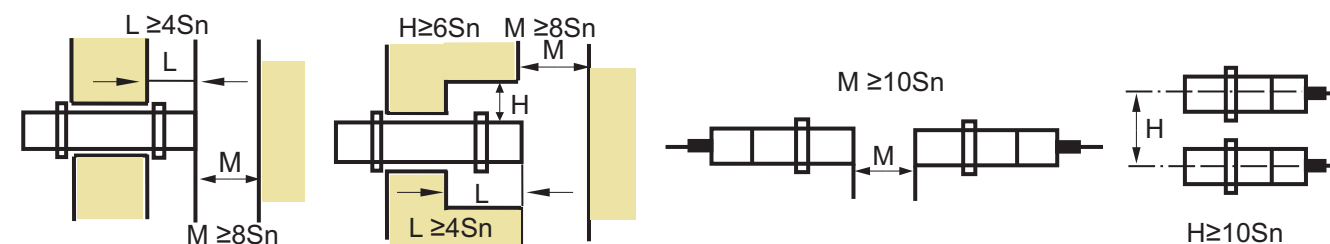
For special request of sensors (i.e.appearace,function), please indicate when order.

3.CONNECTION



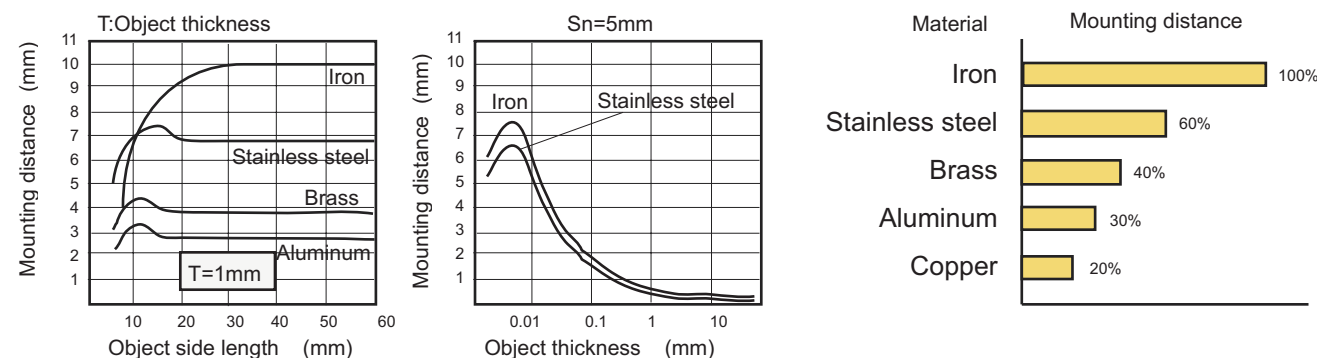
4.INSTALLATION DEMAND

If used in an area surrounded by metal or juxtaposed , Install the proximity Sensor as follows . (Sn Sensing distance)

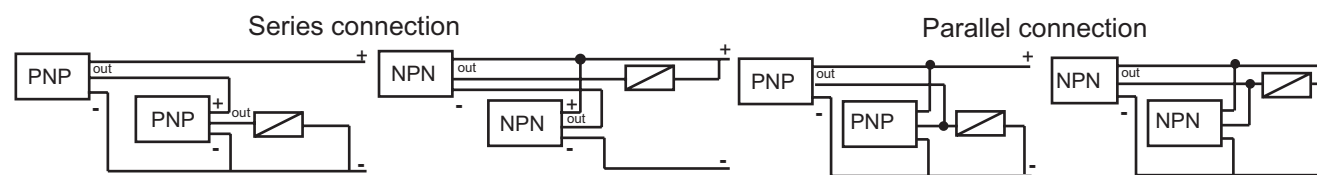


5.IPS INDUCTIVE PROXIMITY APPLICATION DIRECTION

- You had better set mounting distance equal 80% sn.
- Please set mounting distance equals 50%sn,when sensor applies in measuring mounting frequency or operating in high speed circumstance.
- Mounting distance varies with measuring object(iron, stainless steel ,brass, copper and aluminum) .

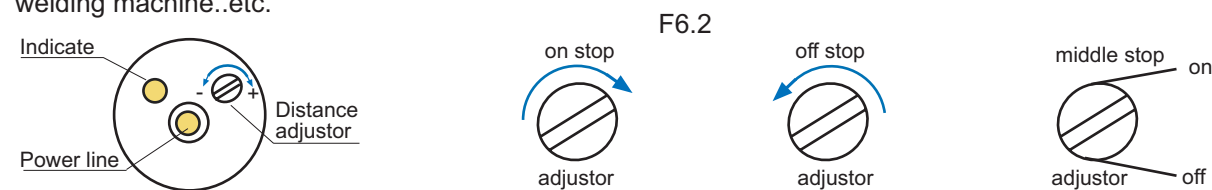
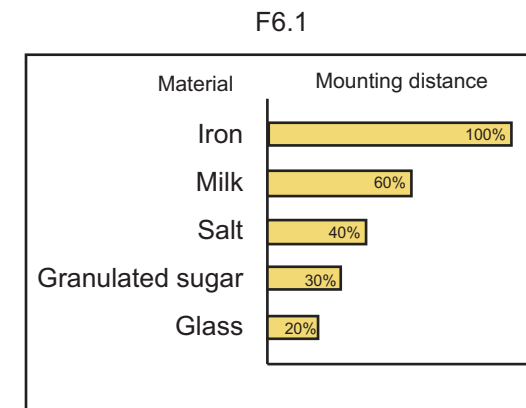


d.Ips series connection and parallel connection



6.CPS CAPACITIVE PROXIMITY SENSOR MOUNTING DISTANCE SETTING

- Capacitive proximity sensor can measure both metal and non-metal objects, such as iron, water, oil, glass,plastic....etc. The mounting distance varies with different objects because of different object conductivity, permittivity and water absorption. If the metal connects with ground(GND), the max. Mounting distance can be obtained.
- Different objects, the mounting distance is different, refer to F6.1
- The mounting distance of CPS Capacitive proximity sensor can be adjusted, and the mounting distance must be adjusted before installing, not after. Adjustment please refer to F6.2
- When operating, the capacitive proximity sensor should be far away from the high frequency electromagnetism circumstance, for example,supersonic wave emitter, high frequency welding machine..etc.



- Adjustor turns right Sn increases, turns left Sn decreases,the circle of Sn adjustor about ten
- Without object ,turn adjustor right to the on stop
- Approachingobject, turn adjustor left to the off stop
- At last set the adjust in the middle of on and off position

7.ORDERING CODE AND TECHNICAL SPECIFICATIONS:

Notice: following are basic models of proximity sensors, others models please refer to catalogues.

a.Inductive proximity sensor

Ordering code	IPS□-8□□□□			IPS□-18□□□□			IPS□-30□□□□		
Dimension									
Out put	DC			DC			DC		
	NPN	PNP	AC	NPN	PNP	AC	NPN	PNP	AC
Mode	NO	IPS(I/L)-8NO1(2)A	IPS(I/L)-8PO1(2)A	IPS(I/L)-18NO5(8)B	IPS(I/L)-18PO5(8)B	IPS(I/L)-18AO5(8)C	IPS(I/L)-30NO10(15)B	IPS(I/L)-30PO10(15)B	IPS(I/L)-30AO10(15)C
	NC	IPS(I/L)-8NC1(2)A	IPS(I/L)-8PC1(2)A	IPS(I/L)-18NC5(8)B	IPS(I/L)-18PC5(8)B	IPS(I/L)-18AC5(8)C	IPS(I/L)-30NC10(15)B	IPS(I/L)-30PC10(15)B	IPS(I/L)-30AC10(15)C
	NO+NC	/	/	IPS(I/L)-18NOC5(8)B	IPS(I/L)-18POC5(8)B	/	IPS(I/L)-30NOC10(15)B	IPS(I/L)-30POC10(15)B	/
	DO	IPS(I/L)-8DO1(2)A	/	IPS(I/L)-18DO5(8)B	/	/	IPS(I/L)-30DO10(15)B	/	/
	DC	IPS(I/L)-8DC1(2)A	/	IPS(I/L)-18DC5(8)B	/	/	IPS(I/L)-30DC10(15)B	/	/
Mounting distance	1mm/2mm			5mm/8mm			10mm/15mm		
Sensing distance	0~0.8mm/0~1.8mm			0~4mm/0~6.4mm			0~8mm/0~12mm		
Power supply	DC 10~30V			DC 10~30V AC 90~250V			DC 10~30V AC 90~250V		
Frequency	≤600Hz			≤400Hz / ≤200Hz			≤20Hz		
Current output	≤100mA			≤200mA			≤300mA		
Ambient temperature	-20℃ ~70℃			-20℃ ~70℃			-20℃ ~70℃		
Protection	over-current/polarity			over-current/polarity			over-current/polarity		
IP rating	IP67			IP67			IP67		

Ordering code	IPS□-12□□□□		IPS□-S17□□□□				IPS□-S25□□□□			
Dimension										
Out put	DC		DC				DC			
	NPN	PNP	NPN	PNP	AC	NPN	PNP	AC	NPN	PNP
Mode	NO	IPS(I/L)-12NO2(4)B	IPS(I/L)-12PO2(4)B	IPS(I/L)-S17NO5B	IPS(I/L)-S17PO5B	/	IPS(I/L)-S25NO10B	IPS(I/L)-S25PO10B	IPS(I/L)-S25AO10C	
	NC	IPS(I/L)-12NC2(4)B	IPS(I/L)-12PC2(4)B	IPS(I/L)-S17NC5B	IPS(I/L)-S17PC5B	/	IPS(I/L)-S25NC10B	IPS(I/L)-S25PC10B	IPS(I/L)-S25AC10C	
	NO+NC	IPS(I/L)-12NOC2(4)B	IPS(I/L)-12POC2(4)B	IPS(I/L)-S17NOC5B	IPS(I/L)-S17POC5B	/	IPS(I/L)-S25NOC10B	IPS(I/L)-S25POC10B	/	
	DO	IPS(I/L)-12DO2(4)B	/	IPS(I/L)-S17DO5B	/	/	IPS(I/L)-S25DO10B	/	/	
	DC	IPS(I/L)-12DC2(4)B	/	IPS(I/L)-S17DC5B	/	/	IPS(I/L)-S25DC10B	/	/	
Mounting distance	2mm/4mm		5mm				10mm			
Sensing distance	0~1.6mm/0~3.2mm		0~4mm				0~8mm			
Power supply	DC 10~30V		DC 10~30V				DC 10~30V AC 90~250V			
Frequency	≤600Hz / ≤400Hz		≤400Hz				≤200Hz			
Current output	≤200mA		≤200mA				≤300mA			
Ambient temperature	-20℃ ~70℃		-20℃ ~70℃				-20℃ ~70℃			
Protection	over-current/polarity		/				over-current/polarity			
IP rating	IP67		IP67				IP67			

8.Cautions:

- DC power connection should use insulation transformer, non self-couple transformer should be used.
- Make sure the power is off when connect the wires, connection according to the connection diagram on the prod uct.
- If there are other electrical wires around the sensor wires, please use a steel tube to cover the sensor wires so as to avoid misworking and damage to the sensor. Refer to F8.1
- For AC-2wire proximity sensors, if there are two or more sensors working together, a relay should be used for Series-connection or Parallel-connection; Do not connect the sensors directly. Refer to F8.2
- For AC-2wire proximity sensors, the sensor must connect with load, instead of connecting to power supply directly, otherwise the sensor might be damaged.Refer to F8.3
- The cable of the proximity sensor should be no more than 200mm in order to avode causing lowering voltage.

b.Capacitive proximity sensor

Ordering code	CPS□-12□□□□			CPS□-18□□□□			CPS□-30□□□□		
Dimension									
Out put	DC			DC			AC		
	NPN	PNP	AC	NPN	PNP	AC	NPN	PNP	AC
Mode	NO	CPS(I/L)-12NO4B	CPS(I/L)-12PO4B	CPS(I/L)-18NO10B	CPS(I/L)-18PO10B	CPS(I/L)-18AO10C	CPS(I/L)-30NO25B	CPS(I/L)-30PO25B	CPS(I/L)-30AO25C
	NC	CPS(I/L)-12NC4B	CPS(I/L)-12PC4B	CPS(I/L)-18NC10B	CPS(I/L)-18PC10B	CPS(I/L)-18AC10C	CPS(I/L)-30NC25B	CPS(I/L)-30PC25B	CPS(I/L)-30AC25C
	NO+NC	CPS(I/L)-12NOC4B	CPS(I/L)-12POC4B	CPS(I/L)-18NOC10B	CPS(I/L)-18POC10B	/	CPS(I/L)-30NOC25B	CPS(I/L)-30PC25B	/
	DO	CPS(I/L)-12DO4B	/	CPS(I/L)-18DO10B	/	/	CPS(I/L)-30DO25B	/	/
	DC	CPS(I/L)-12DC4B	/	CPS(I/L)-18DC10B	/	/	CPS(I/L)-30DC25B	/	/
Mounting distance	4mm			10mm			10mm		
Sensing distance	0~3.2mm			1~10mm			1~10mm		
Power supply	DC 10~30V			DC 10~30V			AC 90~250V		
Frequency	≤50Hz			≤50Hz			≤10Hz		
Current output	≤200mA			≤200mA			≤300mA		
Ambient temperature	-20℃ ~70℃			-20℃ ~70℃			-20℃ ~70℃		
Protection	over-current/polarity			over-current/polarity			over-current/polarity		
IP rating	IP67			IP67			IP67		

Ordering code	CPS□-S30□□□□		CPS□-S40□□□□	
Dimension				
Out put	DC		DC	
	NPN	PNP	NPN	PNP
Mode	NO	CPS(I/L)-S30NO10B	CPS(I/L)-S30PO10B	CPS(I/L)-S40NO20B
	NC	CPS(I/L)-S30NC10B	CPS(I/L)-S30PC10B	CPS(I/L)-S40NC20B
	NO+NC	CPS(I/L)-S30NOC10B	CPS(I/L)-S30POC10B	CPS(I/L)-S40NOC20B
	DO	CPS(I/L)-S30DO10B	/	CPS(I/L)-S40DO20B
	DC	CPS(I/L)-S30DC10B	/	CPS(I/L)-S40DC20B
Mounting distance	10mm		20mm	
Sensing distance	1~10mm		2~20mm	
Power supply	DC 10~30V		DC 10~30V	
Frequency	≤50Hz		≤50Hz	
Current output	≤200mA		≤200mA	
Ambient temperature	-20℃ ~70℃		-20℃ ~70℃	
Protection	over-current/polarity		over-current/polarity	
IP rating	IP67		IP67	

