INSTRUCTION MANUAL PROXIMITY SENSOR

About proximity switch

Honorable consumers,thanks for selecting and using the sensor of our company.When using the products of our company,please refer to the instruction first in order to avoid unnecessary losses caused by misoperation .Because the product is improved unceasingly ,the sensor of you aer may be different from the drawing in the instruction.

Uses:it is suitable for controlling the limit machine tool.detecting, counting velocity measurement, liquid level, signal and automatic line for locating sending signal, etc. it is also widely used in machinery, mine metallurgy,plastics,textile,chemicl industry,light industry ,tobacco,electric power,railway and war industry and so on departmentes.

Model explanation of proximity switch.

L M12 - 30 04 P A T3

switch category		out ward appearance code		working voltage		election distance		output form		output state		subsidiary functions	
L	inductance type	M □	cylinder type	30	6-36 VDC	01	1mm	N	three-wire DC NPN output	A	NO	T	with aviation socket
C	capacitance type	T □	angular column type and plane installstice type	310	5-24 VDC	05	5mm	P	three-wire DC PNP output	B	NC	Y	water proof oil proof
S	Hall type			320	12-60 VDC	10	10mm	L	two-wire DC. output	C	NO+NC	I	special requirement
A	Safety epiccaom pare type			20	90-250 VAC			□	AC two-wire output	MU	Mimic voltage	H	high temp resistance
X	mimic Linest type			210	24-250 VAC			W	AC three-wire output	MI	Mimic concent		
H	reed type			220	380VAC			J	Relay contact output				
R	ring type			4	12-240VDC 24-240VAC			NP	NPN+PNP double output				

For example :LM 12-3004PAT3

THE above indicates inductance type proximity switch, M12 indicates cylinder type whose diameter is 12mm,30indicates DC6-36V 04 indicates that the detecting distance is 4mm and P indicates PNP megative logic .A is NO output.T is with aviation connector.Y is water proof,oil proof

Setting operating distance(Sn)

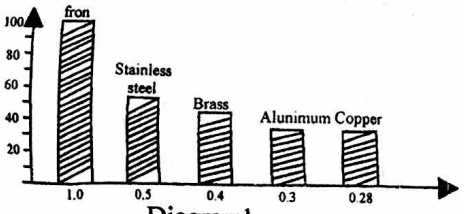
Please set the operateing distance of the switch within 80% of the standard operating distance to protect the switch from being affected by temperature and voltage.

When detecting other metals the switch has different operating distances(Diagram1)

When the switch is used for measuring operating frequency or used in other high-speed places, please set the operating distance of the switch within 1/2 of standard opreating distance ,at this postion ,the switch can reach max operating frequency.

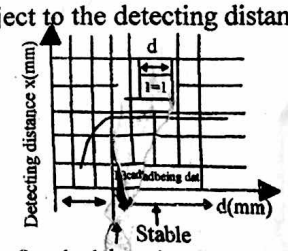
Please refer to the instruction manual of capacitive proximity switch for setting its operating distance .

Ratio of inducing different materials



Diagraml

Effect that the size of the derecting object to the detecting distance



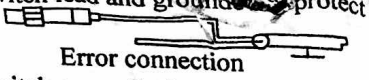
Standard detecting object Diagram2

Points for attention when using the switch

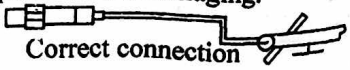
DC power supply must use insulated transformer.please do not useautotransformer.

If is strictly forbidden to connect on live line ,wire must be connected strictly according to the color code on the connection diagram.

If there is an electric line of force, and when the power line passes near the switch lead, the metal pipe should be covered on the switch lead and grounded to protect the switch from misoperation and damaging.



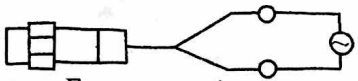
Error connection



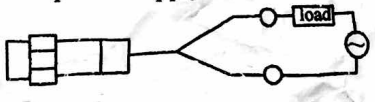
Correct connection

AC proximity switch generally is not suitable for connecting inparallel and series We suggest you to use relay in parallel and series.

AC switch,DC two-line system switch must pass load to connect switch power supply. if dire connect the switch with power supply,the switch will be damaged.



Error connection



Correct connection