

High Frequency Oscillating PROXIMITY SENSOR with Built-in Amplifier

Low Cost High Frequency Oscillating Proximity Sensor.

Can detect any kinds of Metal

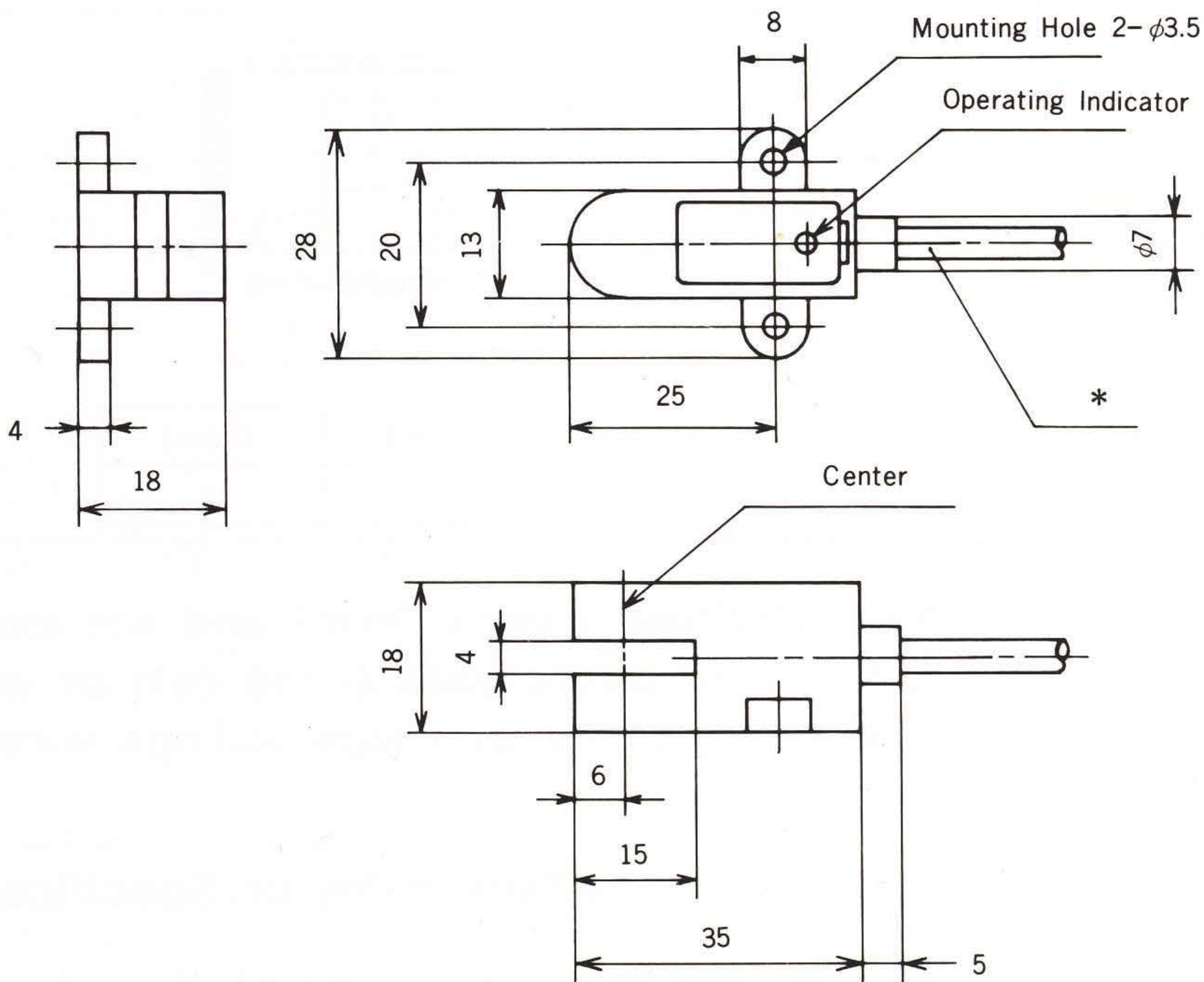
- From Aluminium to Iron; magnetic or non-magnetic; any kinds of metal within 4mm thickness (Slit width) can be detected.
- Slit shape enables you to set objects easily.
- The case enhanced to Oil/Environment proof, and conformed to IEC norm IP64 (Drip-proof).
- Can identify ON/OFF at one sight from built-in Operating Indicator.
- Offered with a choice of 5, 12, 24V Supply Voltage.



SPECIFICATIONS

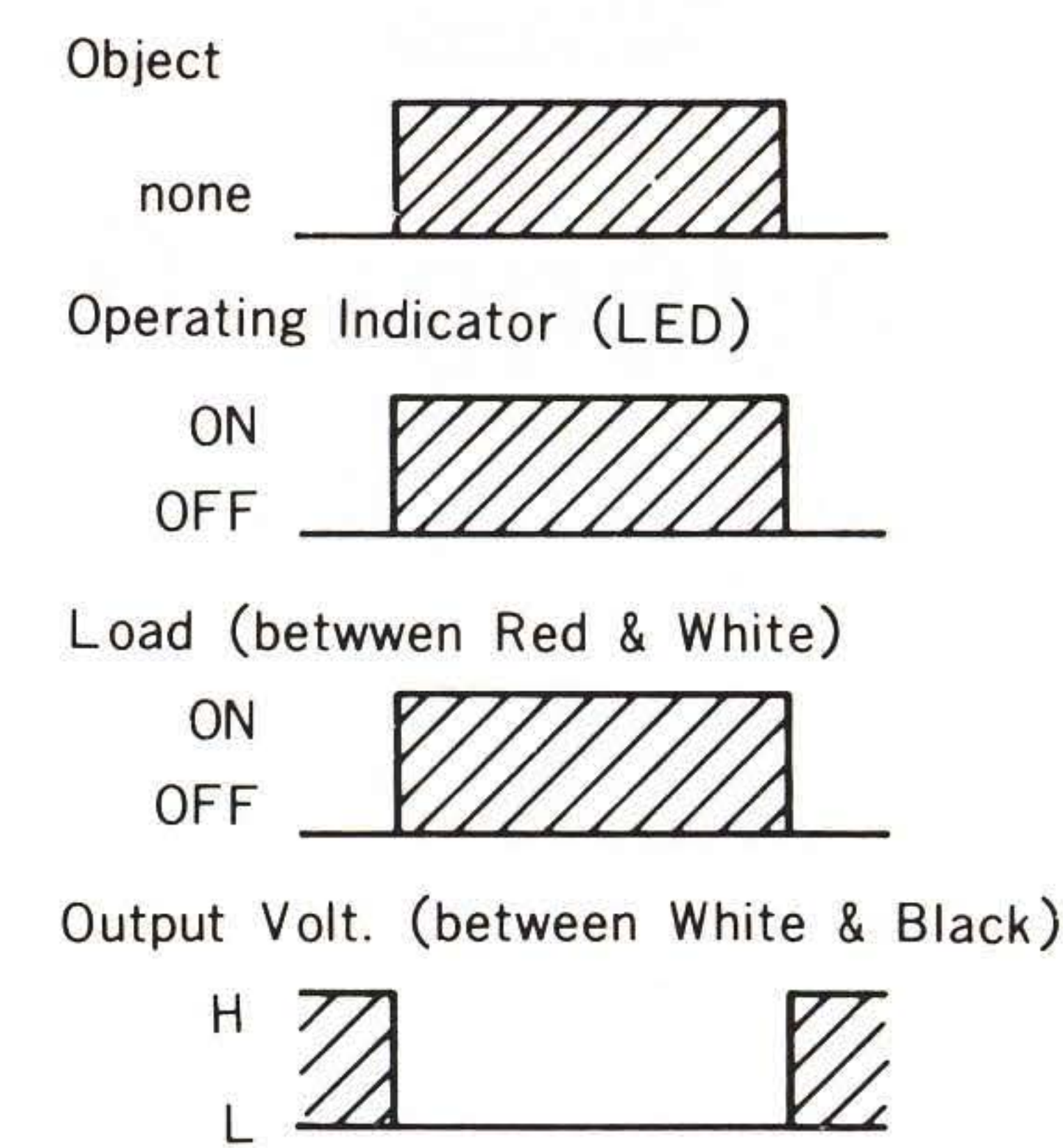
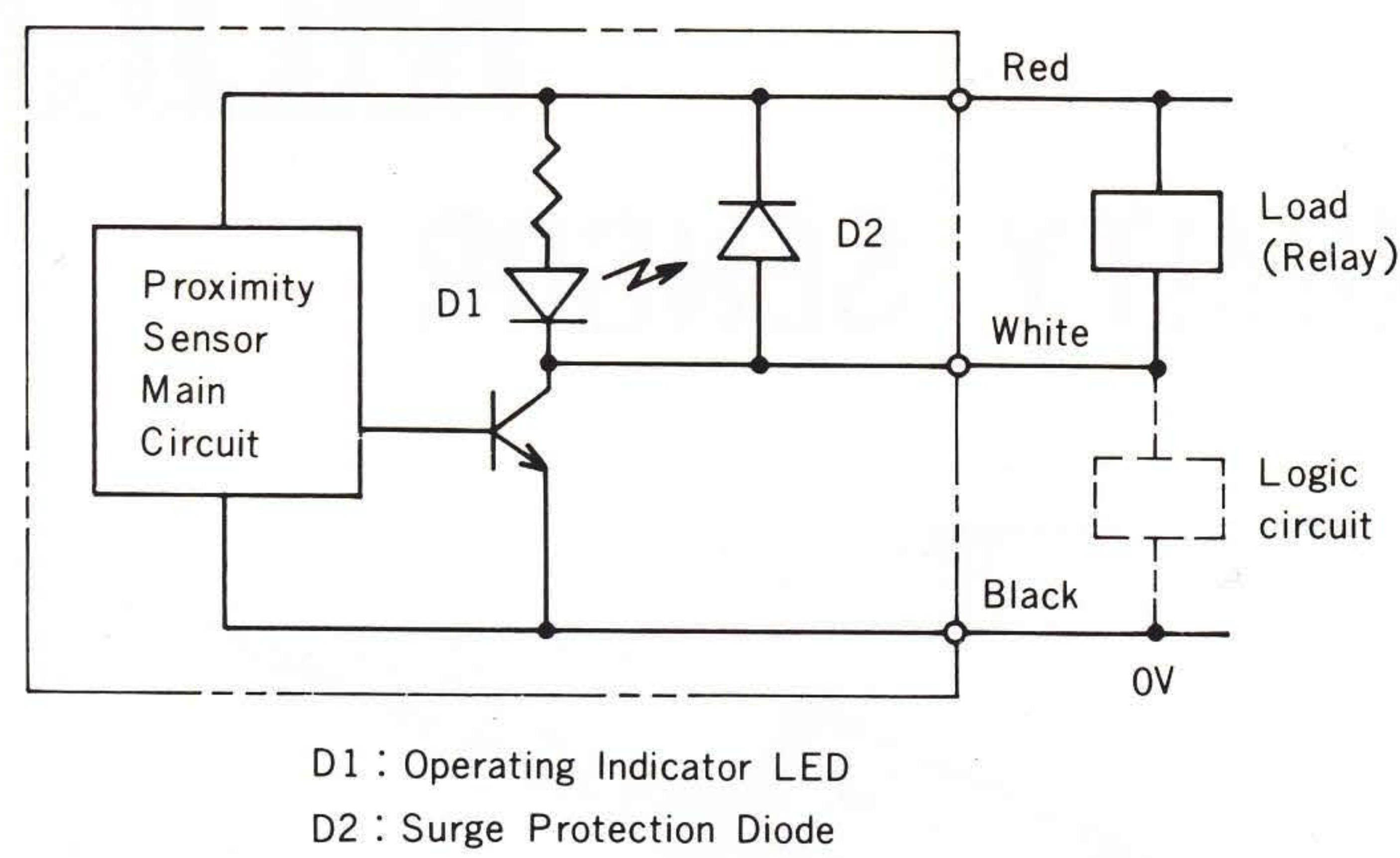
Detection Style		High Frequency Oscillating type			Residual Voltage	Less 1V, at Load Current 100mA
Supply Voltage		5V±1VDC 1VP-P	12V±4VDC 1VP-P	24V±8VDC 1VP-P	Tempareture Characteristics	Detection Distance: Less±0.8mm, at 20℃ within -10~60℃
Supply Current	non-de- tecting	Less 10mA	Less 20mA	Less 30mA	Voltage Characteristics	Detection Distance: Less ±0.4mm, at middle voltage of each Supply Voltage Range
	detect- ing	Less 20mA	Less 30mA	Less 30mA	Insulating Resistance	Over 5MΩ, at 500V DC Megger (between Live Part and Earth)
Detection Distance		8mm			Dielectric Strength	500V AC, 50~60Hz in one minute (between Live Part and Earth)
Detection Object		Magnetic/Non-magnetic Metal			Withstand Vibration	Amplitude: 1.5mm Frequency: 10-55Hz, in 2 hours
Setpoint Distance (std.)		Over 10mm (Aluminium : 15mm×15mm×1mm)			Withstand Shock	20G
Differential Distance		Max. 0.8mm			Protection	Drip-proof (IEC norm IP64)
Response Frequency		Over 400Hz			Ambient Tempareture	-10~65℃
Output Style		Output is ON when detecting (Operating Indicator: ON)			Ambient Humidity	35~85%RH
Load Current		Max. 100mA, at Supply Voltage				

OUTSIDE DIMENSIONS



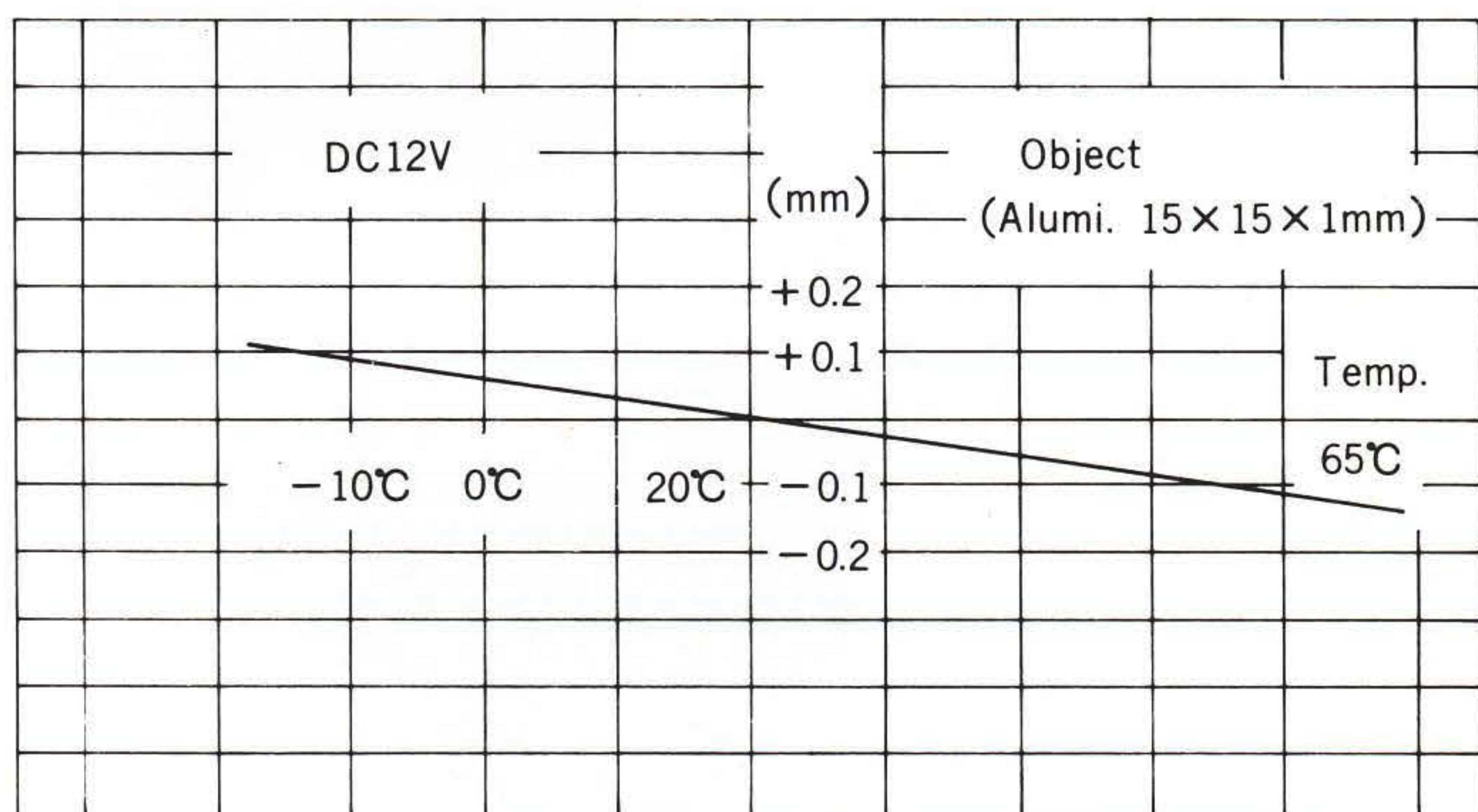
* Thermoplastic-covered Wire
(ϕ 4, 18/0.12, triple wire) Length: 1m

CIRCUIT DIAGRAMS

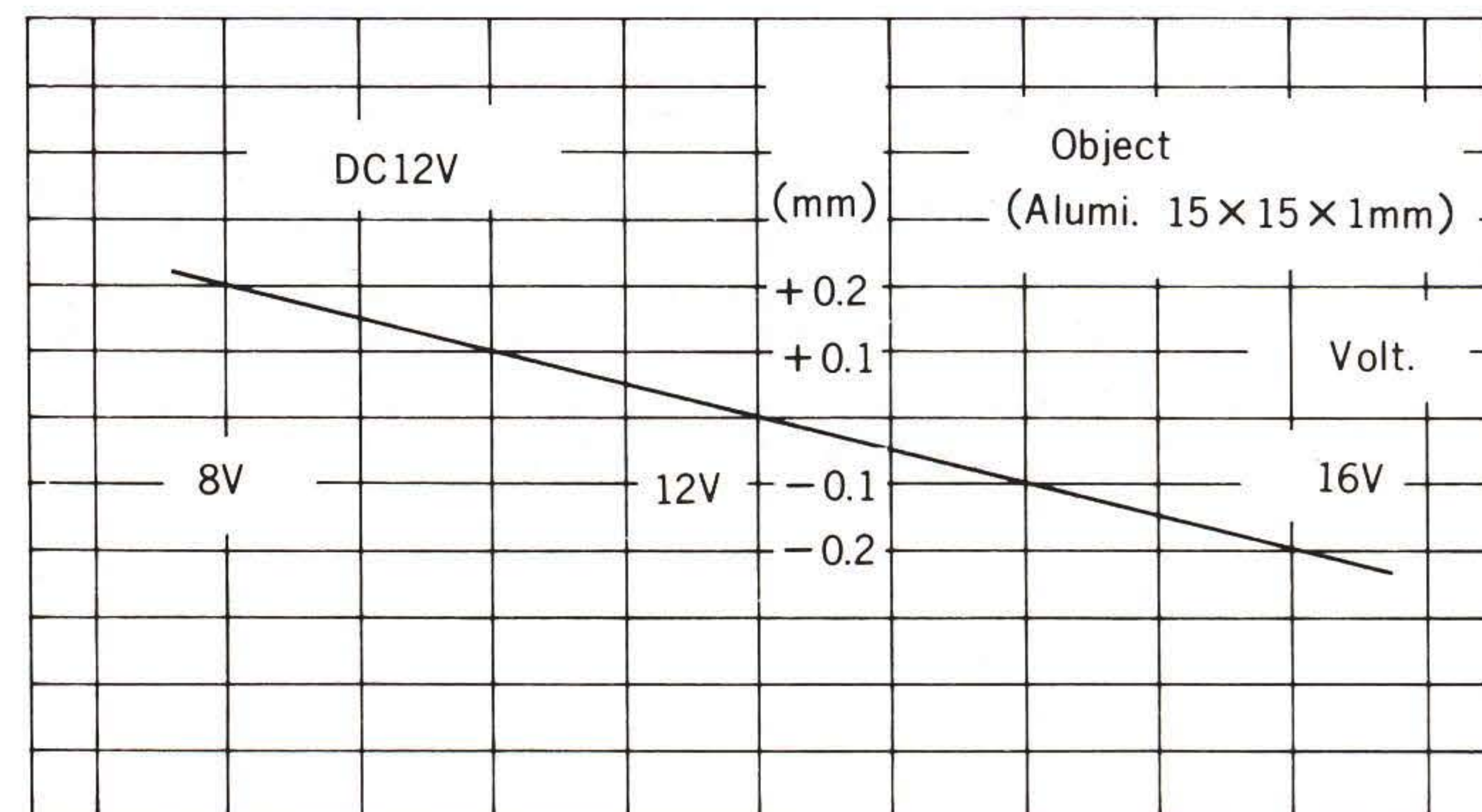


CHARACTERISTICS CURVES (Sample)

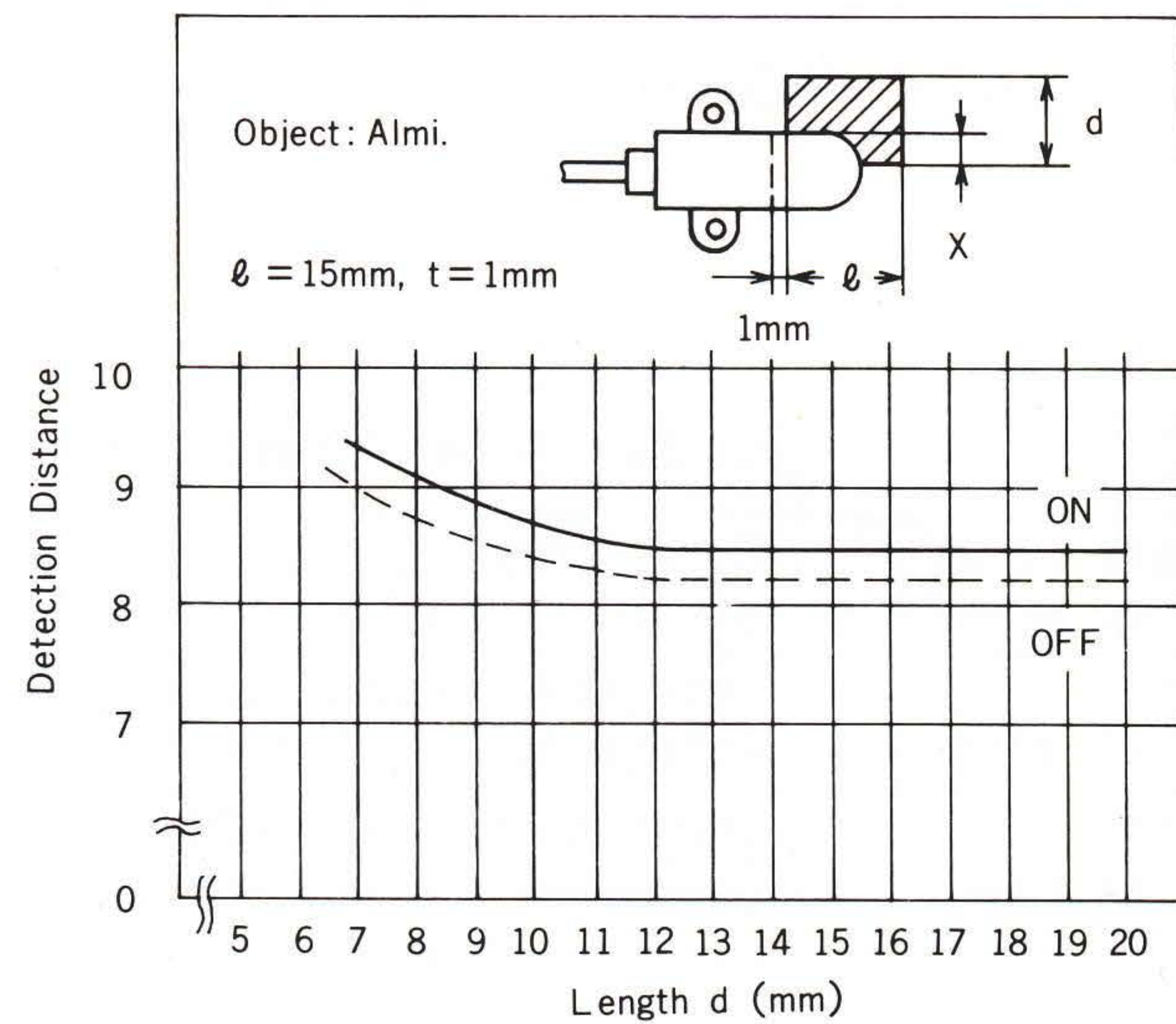
Temperature Characteristics



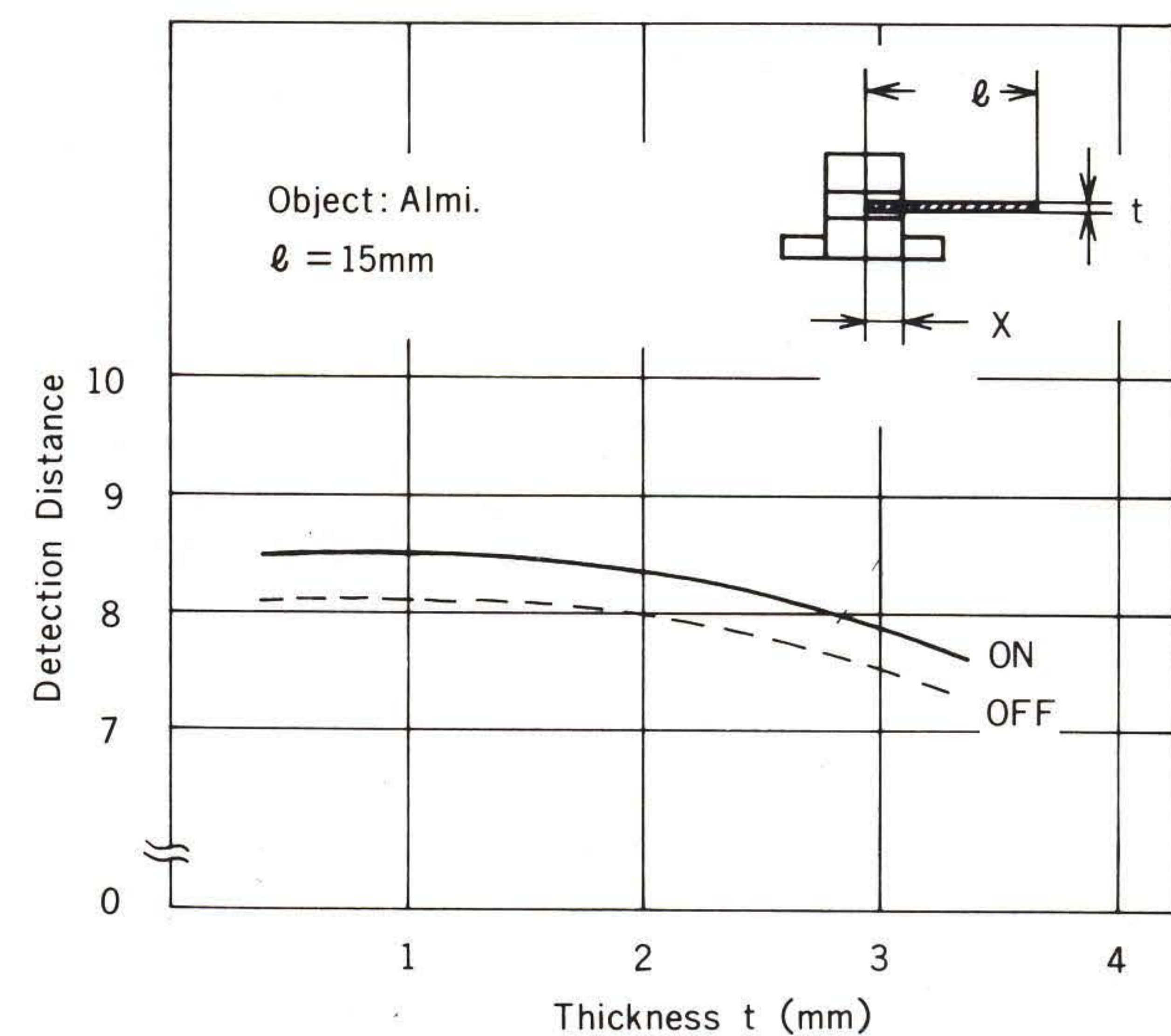
Voltage Characteristics



Size of Object — Detection Distance



Thickness of Object — Detection Distance

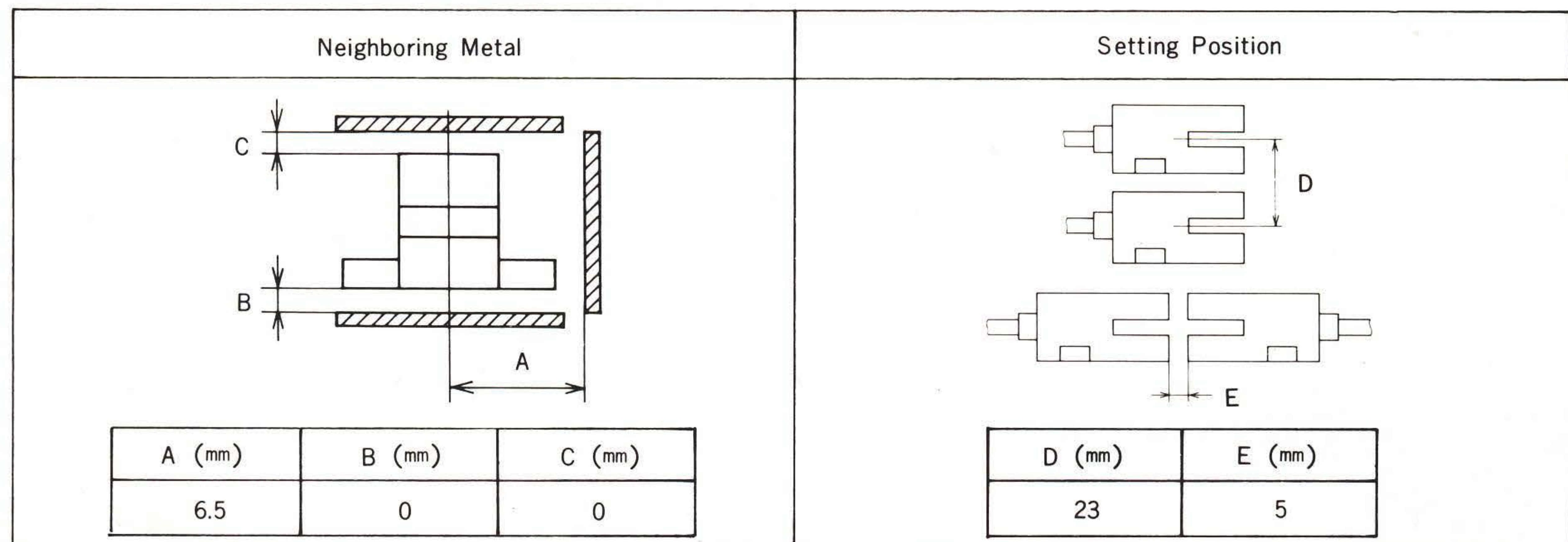


NOMENCLATURE

MPS-4 ☐ Supply Voltage — 1 : DC5V
2 : DC12V
3 : DC24V

CAUTION ON HANDLING

1. Recommend to set the sensors apart further than the distance as charted below, if there are metals or set more than two sensors side by side or face to face.



- 2. Incase to extend wire, use over 0.3mm² and not longer than 100m.
- 3. The sensors can not be detectable in the rain or water, even they are dip-proof.
- 4. Do not use same wiring pipes with high voltage wire or power lines and sensors. It may cause malfunction or breakage by induction.

*Type name or Specification etc. are subject to change with or without notice.