INSTRUCTION MANUAL

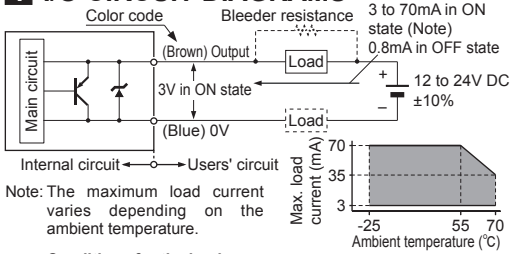
Inductive Proximity Sensor | DC 2-wire Type

Front sensing | Top sensing

GXL-8FU□ **GXL-8HU□**

BMJE-GXL8FHU No.0057-39V

1 I/O CIRCUIT DIAGRAMS



Note: The maximum load current varies depending on the ambient temperature.

Conditions for the load

(1) The load should not be actuated by the leakage current (0.8mA) in the OFF state.
(2) The load should be actuated by (supply voltage - 3V) in the ON state.
(3) The current in the ON state should be between 3 to 70mA DC.
(In case the current is less than 3mA, connect a bleeder resistance in parallel to the load so that a current of 3mA, or more, flows.)

2 CAUTIONS

- This product has been developed / produced for industrial use only.
- If power is supplied from a commercial switching regulator, ensure that the frame ground (F.G.) terminal of the power supply is connected to an actual ground.
- Do not run the wires together with high-voltage lines or power lines or put them in the same raceway. This can cause malfunction due to induction.
- Do not use during the initial transient time (50ms) after the power supply is switched on.
- Extension up to total 50m is possible with a 0.3mm^2, or more, cable. However, in order to reduce noise, make the wiring as short as possible.

3 SENSING RANGE

- Please use this product by 1.8mm or less. However, this value is for a standard detection object (iron 15×15×t1mm).
  With a non-ferrous metal, the sensing range is obtained by multiplying with the correction coefficient specified on the right.

Correction coefficient

Sensing object	Correction coefficient
Iron	1
Stainless steel (SUS304)	0.82 approx.
Brass	0.59 approx.
Aluminum	0.57 approx.

- Keep in mind that sensing range becomes short when a detection object is small.
- Further, the sensing range also changes if the sensing object is plated.

4 MOUNTING

- Do not use a washer between the sensor and the mounting screw.
- The tightening torque should be 0.5N・m or less.
- To mount the sensor with a nut, the thru-hole diameter should be ø3.4mm. With the attached mounting screw and nut, take care that the thickness of the mounting plate should be 2.3mm or less.
- If a screw other than the attached screw to use a M3 truss head screw. (Do not use a flat head screw or a pan head screw.)
- **Influence of surrounding metal**

・When there is a metal near the sensor, keep the minimum separation distance specified below.
Refer to the figures shown on the reverse side.

	A	B	C	D	E	F	G
GXL-8FU□	7mm	8mm	3mm	—	—	—	—
GXL-8HU□	—	—	—	4mm	10mm	3mm	3mm

- **Mutual interference prevention**

・When two or more sensors are installed in parallel or face to face, keep the minimum separation distance specified below to avoid mutual interference.
Refer to the figures shown on the reverse side.

	H	J
Between '**I**' type and non '**I**' type	0mm (Note)	15mm
Between two '**I**' types or two non '**I**' types	18mm	30mm

Note: Close mounting is possible for up to two sensors. When mounting three sensors or more, at an equal spacing, in a row, the minimum value of dimension 'H' should be 5mm.

5 INTENDED PRODUCTS FOR CE MARKING

- The models listed under '**Catalogue**' come with CE Marking. As for all other models, please contact our office.

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For sales network, please visit our website.

PE PE-LD LDPE

This bag is made of polyethylene. Even if it burns, harmful gas is not generated.