

Proximity Sensor DLQ Series



User Manual

Thank you for choosing Degson products. Please read this manual carefully before using the product.
For your convenience, please keep this manual properly so that you can refer to it at any time.

symbol

The following symbols are important reminders in this manual. Please be sure to comply with the following.

	Indicates that if you ignore this mark and operate incorrectly, it may cause death or serious injury. In addition, you may suffer significant material damage.
	There is a risk of malfunction or fire. Please do not exceed the rated voltage when using.
	Do not use AC power as there is a risk of rupture.
	There is a risk of burns due to high temperatures.

Safety Tips

The following contents are necessary to ensure safe use, please be sure to comply.

- Do not use in an environment with flammable, volatile or explosive gases. Do not disassemble, repair or modify this product. About power supply voltage:
- Do not use the product beyond the specified voltage. If you use a voltage higher than the rated voltage or apply AC power to a product that can only use DC power, it may cause the product to explode or burn.
- For short circuit at load end:
Do not short-circuit the load. Do not connect the load end directly to the power supply. Otherwise, the product may explode or burn.
- About wiring:
Do not make mistakes such as mistaking the power polarity or miswiring. Otherwise, the product may explode or burn. Regarding wiring
- when there is no load:
If the power is turned on without connecting a load, there is a risk of internal components rupturing or burning, so please connect the wires and turn on the power after connecting a load.

Instructions for use

- Do not use in the following places:
Outdoor places with direct sunlight, rain, snow, water drops, etc. Chemicals, especially in solvent and acid vapor environments. In the presence of corrosive gases.
- When used near mobile phones, transceivers, etc., the proximity switch may malfunction, so please be careful.
- When mixed with high-voltage wires and power wires in the same wiring conduit or wiring trough, malfunction or damage may occur due to induction. Please separate or wire separately.
- Regarding cleaning work:
Do not use solvent cleaners as they may melt the product surface.
- Please set the tightening torque of the fixing screws to no more than 0.95N·m.
- Influence of surrounding metal:
If there is metal around, it may cause a reset failure, etc. Even if there is no reset failure, the detection distance may change due to the surrounding metal or temperature changes.

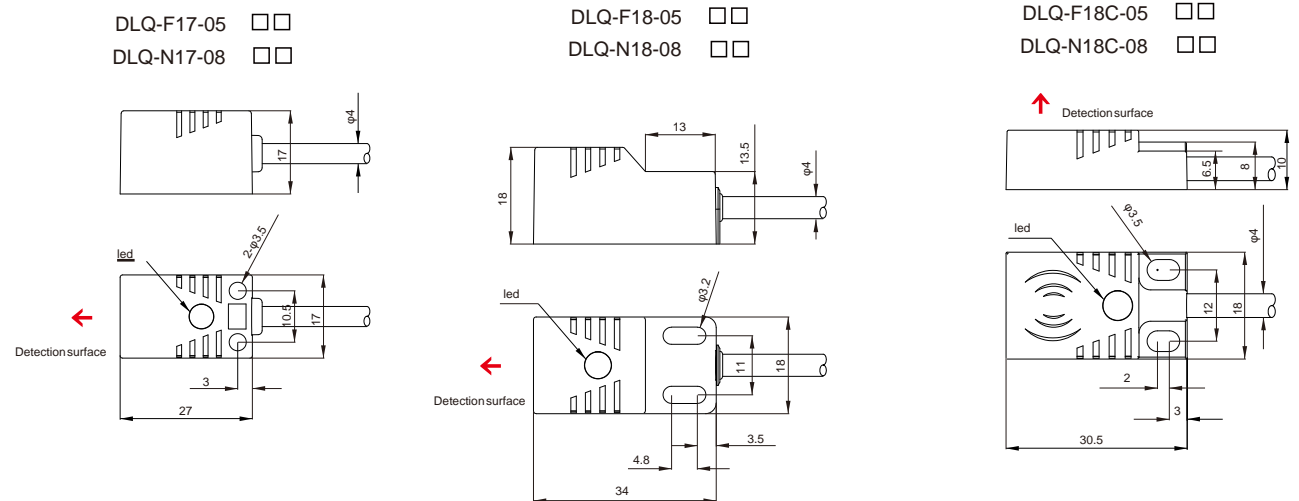
Confirmation of packaging contents

- sensor one
- User Manual one

Technical Parameters

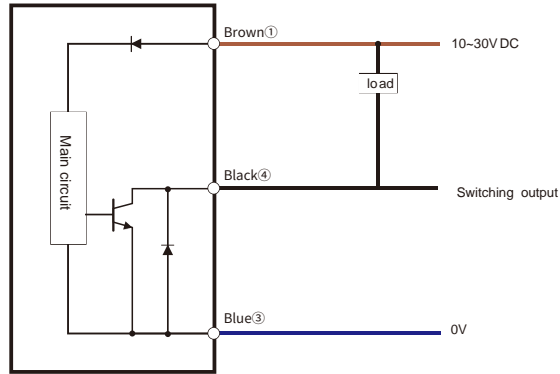
Installation	Embed	Non-embedded	Embed	Non-embedded	Embed	Non-embedded	
size	Q17		Q18		Q18C		
Detection distance	5mm±10%	8mm±10%	5mm±10%	8mm±10%	5mm±10%	8mm±10%	
Shell material	plastic						
Operating voltage	10~30V DC						
Residual voltage	<1.5V						
Maximum load current	150mA						
Current consumption	<10mA						
Leakage Current	<0.01mA						
Switching frequency	1KHz	300Hz	1KHz	300Hz	1KHz	300Hz	
Repeatability	<1.0% (Sr)						
Hysteresis	<15% (Sr)						
Material	ABS						
Operating temperature	-25°C~+75°C						
Protection Circuit	Short circuit protection						
Protection level	IP67						
model	NPN Normally Open	DLQ-F17-05[N/O]	DLQ-N17-08[N/O]	DLQ-F18-05[N/O]	DLQ-N18-08[N/O]	DLQ-F18C-05[N/O]	DLQ-N18C-08[N/O]
	other	[N/O]:NPN Normal	[N/C]:Normally Closed	[P/O]:PNP Normally Open	[P/C]:PNP Normally Closed		

Dimensions

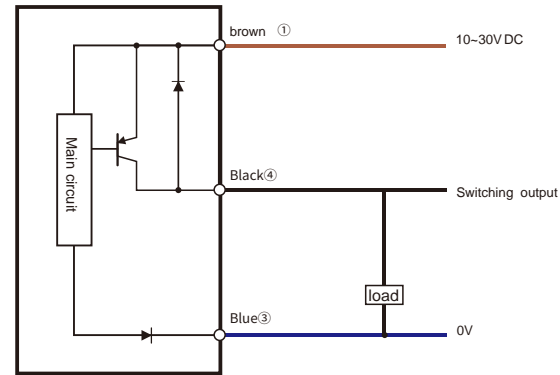


Circuit Diagram

NPN



PNP



Product Commitment

Degson's products undergo strict factory inspection. If a fault occurs, please contact the nearest Degson office and provide detailed information so that we can solve it as soon as possible.

Warranty

- The product warranty period is one year, starting from the date the product is shipped to the place designated by the purchaser.

Warranty coverage

(1) If a fault occurs during the warranty period stated above and caused by Degson, Degson will repair the product free of charge. However, the following situations are not covered by the warranty.

- Failure caused by improper operation or improper use under the conditions or environment not specified in the operating instructions, user manual or technical requirements specially agreed upon between the purchaser and Degson.
- The failure is not due to a product defect but is caused by the design of the purchaser's equipment or software.
- The failure is caused by modification or repair performed by someone other than Degson.
- Failures that can be completely avoided by properly repairing or replacing wearing parts according to the operating instructions or user manual.
- Failures caused by unforeseen changes in the level of science and technology after the product is shipped from Degson.
- Failures caused by natural disasters such as fire, earthquake and flood, or external factors such as abnormal voltage are not covered by Degson.

(2) The warranty covers only the situations specified in Article (1). Degson shall not be liable for any indirect losses (damage to equipment, loss of opportunity, loss of profits, etc.) or other losses caused to the purchaser by its equipment.

Product Suitability

Degson's products are designed and manufactured as general-purpose products for general industries. Therefore, Degson's products must not be used for the following applications and are not suitable for their use. However, if the purchaser consults Degson in advance about the use of the product with a responsible attitude and understands the technical specifications, grades and performance of the product, and takes necessary safety measures, the product can be used. In this case, the product warranty scope is the same as above.

- Uses that may result in chemical contamination or electrical interference, or use under conditions or environments not described in the product catalog, instruction manual, etc.
- Atomic power control equipment, incineration equipment, railway, aviation, vehicle equipment, safety devices, and administrative agencies and equipment manufactured in accordance with the regulations of individual industries.
- Machinery, systems and devices that may endanger life or property.
- Gas, water, and electricity supply systems require highly reliable equipment that operates continuously 24 hours a day.