

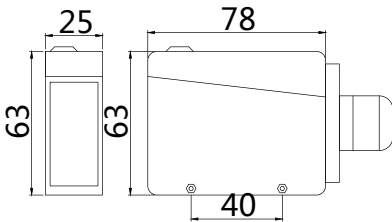


Features:

- Diffuse type, DC3-wire discrete output;
- Cable & connector versions;
- Q78, plastic housing;
- VDE safety class: III;
- Ingress protection: IP65

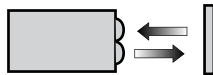


Dimensioned drawing



Background suppression

Diffuse type sensors



Diffuse reflection type photoelectric sensor principle and the principle of mirror reflection type photoelectric sensor is the same, but it doesn't take reflective lenses. The light emitted by the transmitter directly sends back receiver by the analyte. Receiver estimates detection of objects reflected back to the light rays, the positioning of objects is not very strict. When object under test enters into effective light rays area, output state changes. The detection range depends on object under test size, shape, color and surface properties.

Model No.

Sensing range	Sn: 2 m	Sn: 2 m
NPN Light/Dark-on	FQ78-T2N-P31T	FQ78-T2N-P31T-D
PNP Light/Dark-on	FQ78-T2P-P31T	FQ78-T2P-P31T-D

Technical data

Electrical data	Operating voltage	10-30V DC
	Switching frequency	200Hz
	Light type	Infrared light 880nm/Red light 650nm
	Response time	<2ms
	Load current	200mA
	Power-up delay	<100ms
	Adjustment	Single-turn potentiometer
Environment	Time control	0.1s-7s±2s
	Light immunity	<10000Lux.
	Ambient temperature	-25...55°C
Mechanical data	Ambient humidity	35-85%
	Housing material	PBT
	Lens material	PMMA
Electrical connection	Operating indicator	Yellow: output/Green: power supply
	Connectors	Terminal up to 2.5mm ²
Accessories	Accessories	NO
		(to be ordered separately)

Wiring



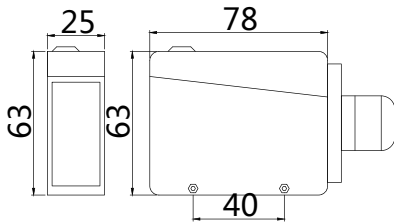


Features :

- Diffuse type, AC/DC 5-wire;
- Cable & connector versions;
- Q78, plastic housing;
- VDE safety class: III;
- Ingress protection: IP65



Dimensioned drawing

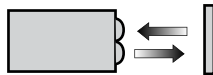


Model No.

Sensing range	Sn: 2 m	Sn: 2 m
NPN/ PNP Light/Dark-on	FQ78-T2U-P45T	FQ78-T2U-P45T-D

Background suppression

Diffuse type sensors



Diffuse reflection type photoelectric sensor principle and the principle of mirror reflection type photoelectric sensor is the same, but it doesn't take reflective lenses. The light emitted by the transmitter directly sends back receiver by the analyte. Receiver estimate detection of objects reflected back to the light rays, the positioning of objects is not very strict. When object under test enters into effective light rays area, output state changes. The detection range depends on object under test size, shape, color and surface properties.

Technical data

Electrical data	Operating voltage	24-240VAC/DC
	Switching frequency	10Hz
	Light type	Infrared light 880nm/Red light 650nm
	Response time	<5ms
	Load current	5A/30VDC; 5A/220VAC
	Power-up delay	<300ms
	Adjustment	Single-turn potentiometer
	Time control	0.1s-7s±2s
Environment	Light immunity	<10000Lux.
	Ambient temperature	-25...55°C
	Ambient humidity	35-85%
Mechanical data	Housing material	PBT
	Lens material	PMMA
	Operating indicator	Yellow: output/Green: power supply
Electrical connection	Connectors	Terminal up to 2.5mm ²
Accessories	Accessories	NO
		(to be ordered separately)

Wiring



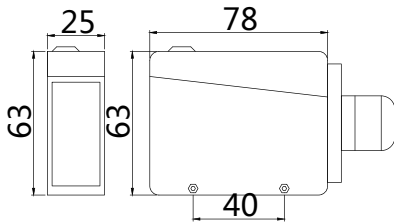


Features :

- Retro-reflective,DC3-wire discrete output;
- Cable & connector versions;
- Q78,plastic housing;
- VDE safety class:III;
- Ingress protection:IP65

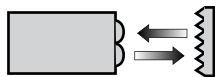


Dimensioned drawing



Background suppression

Retro-reflective sensors



Retro-reflective sensor put transmitter and receiver encapsulated into same shell, in the opposite install aspect, the light emitted by the reflector is reflected through the reflector back to the receiver.

When the beam is occlusion, generate a switch changes.

Model No.

Sensing range	Sn: 10 m	Sn: 10 m
NPN Light/Dark-on	FQ78-R10MN-P31T-F	FQ78-R10MN-P31T-FD
PNP Light/Dark-on	FQ78-R10MP-P31T-F	FQ78-R10MP-P31T-FD

Technical data

Electrical data	Operating voltage	10-30V DC
	Switching frequency	200Hz
	Light type	Infrared light 880nm/Red light 650nm
	Response time	<2ms
	Load current	200mA
	Power-up delay	<100ms
	Adjustment	Single-turn potentiometer
Environment	Time control	0.1s-7s±2s
	Light immunity	<10000Lux.
	Ambient temperature	-25...55°C
Mechanical data	Ambient humidity	35-85%
	Housing material	PBT
	Lens material	PMMA
Electrical connection	Operating indicator	Yellow:output/Green:power supply
	Connectors	Terminal up to 2.5mm ²
Accessories	Accessories	FR-D83
		(to be ordered separately)

Wiring



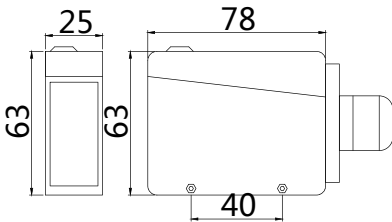


Features :

- Retro-reflective,AC-DC5-wire;
- Cable & connector versions;
- Q78,plastic housing;
- VDE safety class:III;
- Ingress protection:IP65



Dimensioned drawing

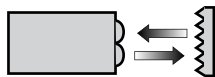


Model No.

Sensing range	Sn: 10 m	Sn: 10 m
NPN/PNP Light/Dark-on	FQ78-R10MU-P45T-F	FQ78-R10MU-P45T-FD

Background suppression

Retro-reflective sensors



Retro-reflective sensor put transmitter and receiver encapsulated into same shell, in the opposite install aspect, the light emitted by the reflector is reflected through the reflector back to the receiver.

When the beam is occlusion, generate a switch changes.

Technical data

Electrical data	Operating voltage	24-240VAC/DC	
	Switching frequency	10Hz	
	Light type	Infrared light 880nm/Red light 650nm	
	Response time	<5ms	
	Load current	5A/30VDC;5A/220VAC	
	Power-up delay	<300ms	
	Adjustment	Single-turn potentiometer	
	Time control	0.1s-7s±2s	
	Environment	Light immunity	<10000Lux.
		Ambient temperature	-25...55°C
Ambient humidity		35-85%	
Mechanical data	Housing material	PBT	
	Lens material	PMMA	
	Operating indicator	Yellow:output/Green:power supply	
Electrical connection	Connectors	Terminal up to 2.5mm ²	
	Accessories	Accessories FR-D83 (to be ordered separately)	

Wiring



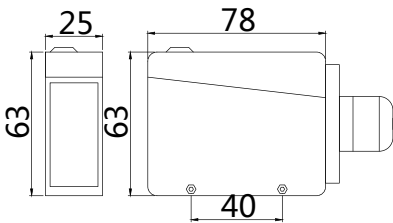


Features :

- Through-beam,Emitter/receiver set,DC3-wire discrete output;
- Cable & connector versions;
- Q78,plastic housing;
- VDE safety class:III;
- Ingress protection:IP65



Dimensioned drawing



Model No.

Sensing range	Sn: 50 m	Sn: 50 m
Transmitter	FQ78-L50MD-P51T	FQ78-L50MD-P51T-D
NPN Light/Dark-on	FQ78-L50MN-P31T	FQ78-L50MN-P31T-D
PNP Light/Dark-on	FQ78-L50MP-P31T	FQ78-L50MP-P31T-D

Background suppression

Through-beam sensors

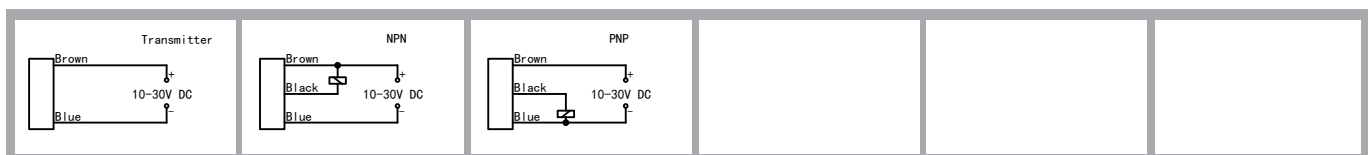


Through-beam photoelectric sensors has independent transmitters and receivers,structure two are separated from each other,the emitter(E)directly transmitted to the receiver(R).At the time of installation,must be bothaligned establish light path. No matter any objectblocking the light,the voltage of the receiver drops,switch changes.

Technical data

Electrical data	Operating voltage	10-30V DC
	Switching frequency	200Hz
	Light type	Infrared light 880nm/Red light 650nm
	Response time	<2ms
	Load current	200mA
	Power-up delay	<100ms
	Adjustment	Single-turn potentiometer
Environment	Time control	0.1s-7s±2s
	Light immunity	<10000Lux.
	Ambient temperature	-25...55°C
Mechanical data	Ambient humidity	35-85%
	Housing material	PBT
	Lens material	PMMA
Electrical connection	Operating indicator	Yellow:output/Green:power supply
	Connectors	Terminal up to 2.5mm ²
Accessories	Accessories	NO
		(to be ordered separately)

Wiring



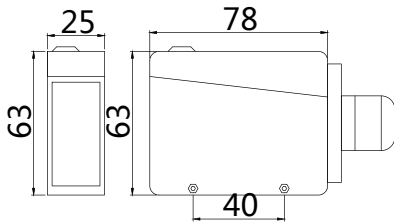


Features :

- Through-beam,Emitter/receiver set,AC/DC5-wire;
- Cable & connector versions;
- Q78,plastic housing;
- VDE safety class:III;
- Ingress protection:IP65



Dimensioned drawing



Background suppression

Through-beam sensors



Through-beam photoelectric sensors has independent transmitters and receivers,structure two are separated from each other,the emitter(E)directly transmitted to the receiver(R).At the time of installation,must be bothaligned establish light path. No matter any objectblocking the light,the voltage of the receiver drops,switch changes.

Model No.

Sensing range	Sn: 50 m	Sn: 50 m
Transmitter	FQ78-L50MU-P55T	FQ78-L50MU-P55T-D
NPN/PNP Light/Dark-on	FQ78-L50MU-P45T	FQ78-L50MU-P45T-D

Technical data

Electrical data	Operating voltage	24-240VAC/DC
	Switching frequency	10Hz
	Light type	Infrared light 880nm/Red light 650nm
	Response time	<5ms
	Load current	5A/30VDC;5A/220VAC
	Power-up delay	<300ms
	Adjustment	Single-turn potentiometer
Environment	Time control	0.1s-7s±2s
	Light immunity	<10000Lux.
	Ambient temperature	-25...55°C
Mechanical data	Ambient humidity	35-85%
	Housing material	PBT
	Lens material	PMMA
Electrical connection	Operating indicator	Yellow:output/Green:power supply
	Connectors	Terminal up to 2.5mm ²
Accessories	Accessories	NO
		(to be ordered separately)

Wiring

