

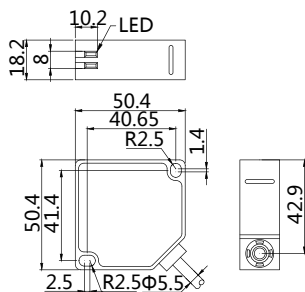


#### Features:

- Diffuse type,DC4-wire discrete output;
- Cable & connector versions;
- Q50,plastic housing;
- VDE safety class:III;
- Ingress protection:IP65



#### Dimensioned drawing

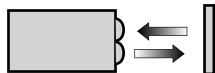


#### Model No.

Sensing range	Sn: 0.2-1 m	Sn: 0.3-2 m
NPN Light/Dark-on	FQ50-T1N-P31P2	FQ50-T2N-P31P2
PNP Light/Dark-on	FQ50-T1P-P31P2	FQ50-T2P-P31P2

#### Background suppression

##### Diffuse type sensors

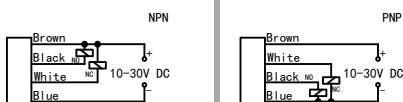


Diffuse reflection type photoelectric sensor principle and the principle of mirror reflection type photoelectric sensor is the same, but it doesn't take reflective lenses. The light emitted by the transmitter directly sending back receiver by the analyte. Receiver estimate detection of objects reflected back to the light rays, the positioning of objects is not very strict. When object under test enter 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	10-30V DC
	Switching frequency	200Hz
	Light type	Infrared light 880nm/Red light 650nm
	Response time	<2ms
	Load current	200mA
	Power-up delay	<100ms
Environment	Adjustment	Single-turn potentiometer
	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	PVC cable/2m; 4*0.25mm²
Accessories	Accessories	NO
	(to be ordered separately)	

#### Wiring



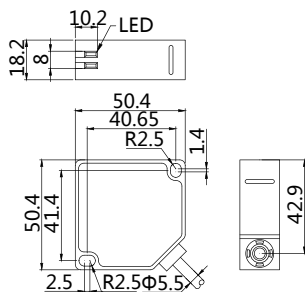


#### Features:

- Diffuse type, AC/DC 5-wire;
- Cable & connector versions;
- Q50, plastic housing;
- VDE safety class: III;
- Ingress protection: IP65



#### Dimensioned drawing

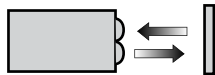


#### Model No.

Sensing range	Sn: 0.2-1 m	Sn: 0.3-2 m
Light/Dark-on	FQ50-T1U-P45P2	FQ50-T2U-P45P2

#### 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 sending 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 enter into effective light rays area, output state changes. The detection range depends on object under test size, shape, color and surface properties.

#### Technical data

<b>Electrical data</b>	Operating voltage	24-240V AC/DC
	Switching frequency	10Hz
	Light type	Infrared light 880nm/Red light 650nm
	Response time	<5ms
	Load current	3A/30VDC; 1A/220VAC
	Power-up delay	<300ms
<b>Environment</b>	Adjustment	Single-turn potentiometer
	Light immunity	<10000Lux.
	Ambient temperature	-25...55°C
<b>Mechanical data</b>	Ambient humidity	35-85%
	Housing material	PBT
	Lens material	PMMA
<b>Electrical connection</b>	Operating indicator	Yellow: output/Green: power supply
	Connectors	PVC cable/2m; 5*0.25mm²
	Accessories	NO
<b>Accessories</b>	Accessories	NO
	(to be ordered separately)	

#### Wiring

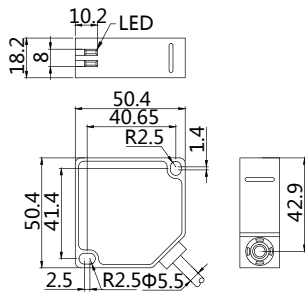
<p>AC/DC Relay Output</p> <p>Brown L+</p> <p>White NC</p> <p>Red 24-240V AC/</p> <p>Black 24-240VAC/DC</p> <p>Blue 0-</p>					
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#### Features:

- Retro-reflective,DC4-wire discrete output;
- Cable & connector versions;
- Q50,plastic housing;
- VDE safety class:III;
- Ingress protection:IP65



#### Dimensioned drawing

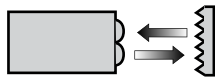


#### Model No.

Sensing range	Sn: 5 m	Sn: 5 m
NPN Light/Dark-on	FQ50-R5N-P31P2	FQ50-R5N-P31P2-F
PNP Light/Dark-on	FQ50-R5P-P31P2	FQ50-R5P-P31P2-F

#### 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

<b>Electrical data</b>	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
	Blind distance	No photosensitivity
<b>Environment</b>	Light immunity	<10000Lux.
	Ambient temperature	-25...55°C
	Ambient humidity	35-85%
<b>Mechanical data</b>	Housing material	PBT
	Lens material	PMMA
	Operating indicator	Yellow: output/Green: power supply
<b>Electrical connection</b>	Connectors	PVC cable/2m; 4*0.25mm²
<b>Accessories</b>	Accessories	NO
	(to be ordered separately)	

#### Wiring



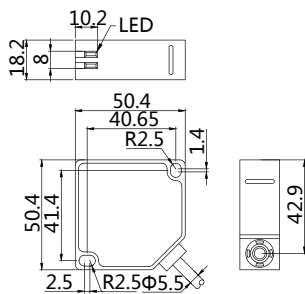


#### Features:

- Retro-reflective, AC/DC 5-wire;
- Cable & connector versions;
- Q50, plastic housing;
- VDE safety class: III;
- Ingress protection: IP65



#### Dimensioned drawing

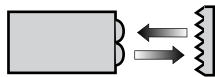


#### Model No.

Sensing range	Sn: 5 m
Light/Dark-on	FQ50-R5U-P45P2
Light/Dark-on	FQ50-R5U-P45P2-F

#### Background suppression

##### Retro-reflective sensors



Retro-reflective sensor put transmitter and receiver encapsulated into same shell, in the opposite install aspeculum, 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	24-240V AC/DC
	Switching frequency	10Hz
	Light type	Red light 650nm
	Response time	<5ms
	Load current	3A/30VDC; 1A/220VAC
	Power-up delay	<300ms
Environment	Adjustment	Single-turn potentiometer
	Blind distance	No photosensitivity
	Light immunity	<10000Lux.
Mechanical data	Ambient temperature	-25...55°C
	Ambient humidity	35-85%
	Housing material	PBT
Electrical connection	Lens material	PMMA
	Operating indicator	Yellow: output/Green: power supply
	Connectors	PVC cable/2m; 5*0.25mm²
Accessories	Accessories	FR-D83
	(to be ordered separately)	

#### Wiring

<p>AC/DC Relay Output</p> <p>Brown L+</p> <p>White NC</p> <p>Red 24-240V AC/</p> <p>Black 24-240VAC/DC</p> <p>Blue 0V</p>					
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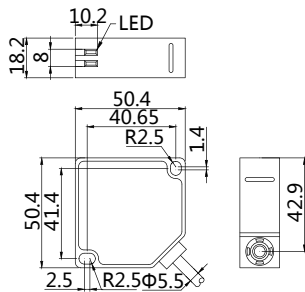


#### Features:

- Through-beam, Emitter/receiver set, DC 4-wire discrete output;
- Cable & connector versions;
- Q50, plastic housing;
- VDE safety class: III;
- Ingress protection: IP65



#### Dimensioned drawing



#### Model No.

Sensing range	Sn: 20 m	Sn: 40 m
Transmitter	FQ50-L20MD-P51P2	FQ50-L40MD-P51P2
NPN Light/Dark-on	FQ50-L20MN-P31P2	FQ50-L40MN-P31P2
PNP Light/Dark-on	FQ50-L20MP-P31P2	FQ50-L40MP-P31P2

#### Background suppression

##### Through-beam sensors

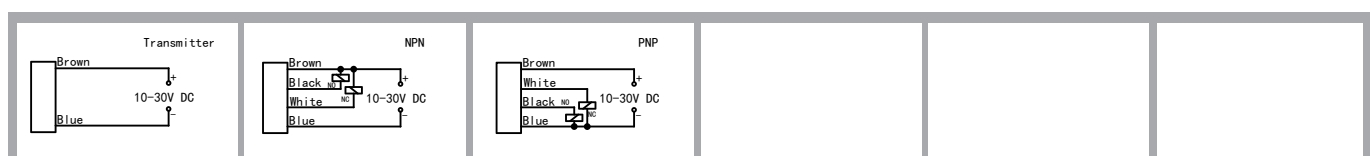


Through-beam photoelectric sensors have independent transmitters and receivers, structure two are separated from each other, the emitter (E) directly transmits to the receiver (R). At the time of installation, must be both aligned to establish light path. No matter any object blocking the light, the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

#### Technical data

<b>Electrical data</b>	Operating voltage	10-30V DC
	Switching frequency	200Hz
	Light type	Infrared light 880nm
	Response time	<2ms
	Load current	200mA
	Power-up delay	<100ms
<b>Environment</b>	Adjustment	Single-turn potentiometer
	Light immunity	<10000Lux.
	Ambient temperature	-25...55°C
<b>Mechanical data</b>	Ambient humidity	35-85%
	Housing material	PBT
	Lens material	PMMA
<b>Electrical connection</b>	Operating indicator	Yellow: output/Green: power supply
	Connectors	PVC cable/2m; 4*0.25mm²
<b>Accessories</b>	Accessories	NO
	(to be ordered separately)	

#### Wiring



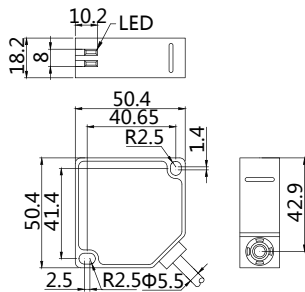


### Features:

- Through-beam, Emitter/receiver set, AC/DC 5-wire;
- Cable & connector versions;
- Q50, plastic housing;
- VDE safety class: III;
- Ingress protection: IP65



### Dimensioned drawing



### Background suppression

#### Through-beam sensors



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

### Model No.

Sensing range	Sn: 20 m	Sn: 40 m
Transmitter	FQ50-L20MU-P55P2	FQ50-L40MU-P55P2
NPN/PNP Light/Dark-on	FQ50-L20MU-P45P2	FQ50-L40MU-P45P2

### Technical data

<b>Electrical data</b>	Operating voltage	24-240V AC/DC
	Switching frequency	10Hz
	Light type	Infrared light 880nm/Red light 650nm
	Response time	<5ms
	Load current	3A/30VDC; 1A/220VAC
	Power-up delay	<300ms
<b>Environment</b>	Adjustment	Single-turn potentiometer
	Light immunity	<10000Lux.
	Ambient temperature	-25...55°C
<b>Mechanical data</b>	Ambient humidity	35-85%
	Housing material	PBT
	Lens material	PMMA
<b>Electrical connection</b>	Operating indicator	Yellow: output/Green: power supply
	Connectors	PVC cable/2m; 5*0.25mm <sup>2</sup> /2*0.5mm <sup>2</sup>
<b>Accessories</b>	Accessories	NO
	(to be ordered separately)	

### Wiring

