

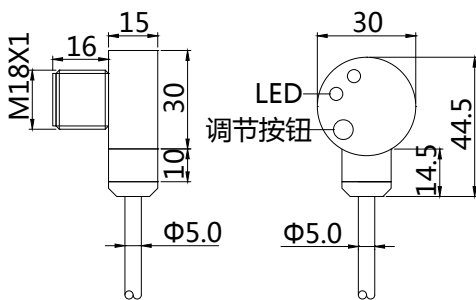


Features:

- Diffuse type,DC4-wire discrete output;
- Cable & connector versions;
- M18*1mm,Right-angle plastic housing;
- VDE safety class:III;
- Ingress protection:IP66



Dimensioned drawing

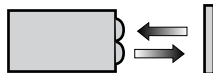


Model No.

Sensing range	Sn: 150 mm	Sn: 500 mm
NPN Light/Dark-on	FQ18-T015N-P31P2-E	FQ18-T05N-P31P2-E
PNP Light/Dark-on	FQ18-T015P-P31P2-E	FQ18-T05P-P31P2-E

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.

Technical data

Electrical data	Operating voltage	10-30V DC
	Switching frequency	500Hz
	Light type	Infrared light 880nm/Red light 650nm
	Response time	<2ms
	Load current	200mA
	Power-up delay	<300ms
	Adjustment	Single-turn potentiometer
Environment	Light immunity	<5000Lux.
	Ambient temperature	-25...55°C
	Ambient humidity	35-85%
Mechanical data	Housing material	PBT
	Lens material	PMMA
	Operating indicator	Yellow
Electrical connection	Connectors	PVC cable/2m;4*0.25mm ²
Accessories	Accessories	NO
		(to be ordered separately)

Wiring



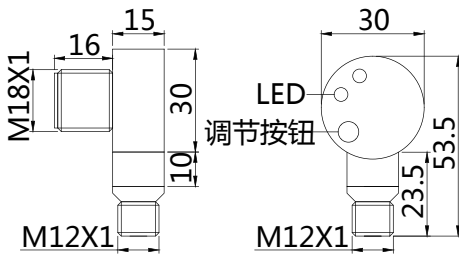


Features:

- Diffuse type,DC4-wire discrete output;
- Cable & connector versions;
- M18*1mm,Right-angle plastic housing;
- VDE safety class:III;
- Ingress protection:IP66



Dimensioned drawing

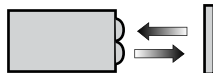


Model No.

Sensing range	Sn: 150 mm	Sn: 500 mm
NPN Light/Dark-on	FQ18-T015N-P31S12-E	FQ18-T05N-P31S12-E
PNP Light/Dark-on	FQ18-T015P-P31S12-E	FQ18-T05P-P31S12-E

Background suppression

Diffuse type sensors

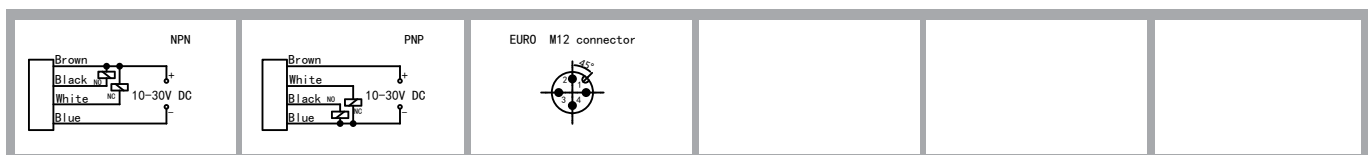


Diffuse reflection type photoelectric sensor principle and the principle of mirror reflection type photoelectric sensor is the same, but it doesn't take reflective lenses. The light emitted by the transmitter directly sends back receiver by the analyte. Receiver estimates detection of objects reflected 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.

Technical data

Electrical data	Operating voltage	10-30V DC
	Switching frequency	500Hz
	Light type	Infrared light 880nm/Red light 650nm
	Response time	<2ms
	Load current	200mA
	Power-up delay	<300ms
	Adjustment	Single-turn potentiometer
Environment	Light immunity	<5000Lux.
	Ambient temperature	-25...55°C
	Ambient humidity	35-85%
Mechanical data	Housing material	PBT
	Lens material	PMMA
	Operating indicator	Yellow
Electrical connection	Connectors	M12 connector
Accessories	Accessories	B12-4GV2/B12-4WV2 (to be ordered separately)

Wiring



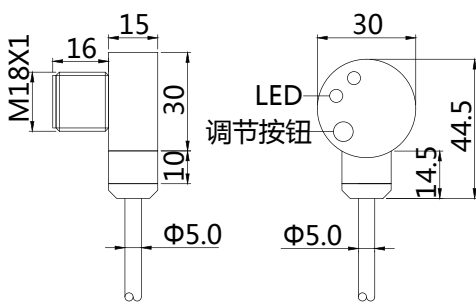


Features :

- Retro-reflective,DC4-wire discrete output;
- Cable & connector versions;
- M18*1mm,Right-angle plastic housing;
- VDE safety class:III;
- Ingress protection:IP66



Dimensioned drawing

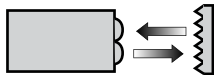


Model No.

Sensing range	Sn: 0.1-3 m
NPN Light/Dark-on	FQ18-R3N-P31P2-E
PNP Light/Dark-on	FQ18-R3N-P31P2-E

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	10-30V DC
	Switching frequency	500Hz
	Light type	Infrared light 880nm/Red light 650nm
	Response time	<2ms
	Load current	200mA
	Power-up delay	<300ms
	Adjustment	Single-turn potentiometer
Environment	Light immunity	<5000Lux.
	Ambient temperature	-25...55°C
	Ambient humidity	35-85%
Mechanical data	Housing material	PBT
	Lens material	PMMA
	Operating indicator	Yellow
Electrical connection	Connectors	PVC cable/2m;4*0.25mm ²
Accessories	Accessories	FR-Q51
		(to be ordered separately)

Wiring



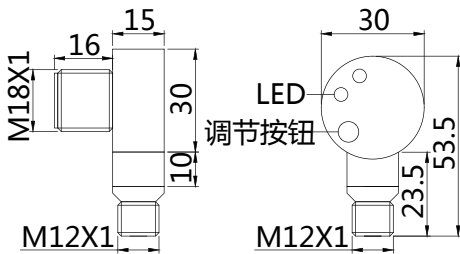


Features :

- Retro-reflective,DC4-wire discrete output;
- Cable & connector versions;
- M18*1mm,Right-angle plastic housing;
- VDE safety class:III;
- Ingress protection:IP66



Dimensioned drawing

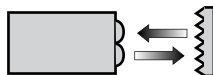


Model No.

Sensing range	Sn: 0.1-3 m
NPN Light/Dark-on	FQ18-R3N-P31S12-E
PNP Light/Dark-on	FQ18-R3P-P31S12-E

Background suppression

Retro-reflective sensors



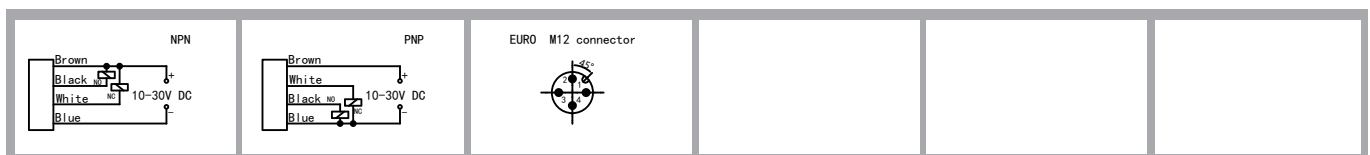
Retro-reflective sensor put transmitter and receiver encapsulated into same shell, in the opposite install aspect, the light emitted by the reflector is reflected through the reflector back to the receiver.

When the beam is occlusion, generate a switch changes.

Technical data

Electrical data	Operating voltage	10-30V DC
	Switching frequency	500Hz
	Light type	Infrared light 880nm/Red light 650nm
	Response time	<2ms
	Load current	200mA
	Power-up delay	<300ms
	Adjustment	Single-turn potentiometer
Environment	Light immunity	<5000Lux.
	Ambient temperature	-25...55°C
	Ambient humidity	35-85%
Mechanical data	Housing material	PBT
	Lens material	PMMA
	Operating indicator	Yellow
Electrical connection	Connectors	M12 connector
Accessories	Accessories	B12-4GV2/B12-4WV2/FR-Q51 (to be ordered separately)

Wiring



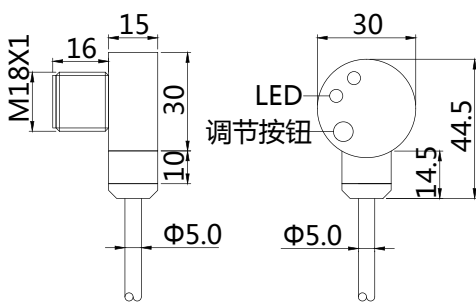


Features :

- Through-beam,Emitter/receiver set,DC4-wire discrete output;
- Cable & connector versions;
- M18*1mm,Right-angle plastic housing;
- VDE safety class:III;
- Ingress protection:IP66



Dimensioned drawing



Model No.

Sensing range	Sn: 15 m
Transmitter	FQ18-L15MD-P51P2-E
NPN Light/Dark-on	FQ18-L15MN-P31P2-E
PNP Light/Dark-on	FQ18-L15MP-P31P2-E

Background suppression

Through-beam sensors

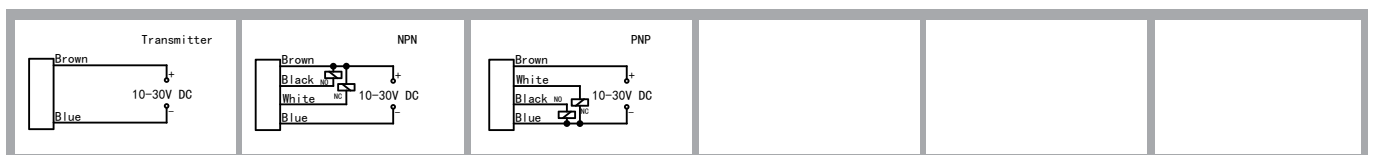


Through-beam photoelectric sensors has independent transmitters and receivers,structure two are separated from each other,the emitter(E)directly transmitted to the receiver(R).At the time of installation,must be bothaligned establish light path. No matter any objectblocking the light,the voltage of the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

Technical data

Electrical data	Operating voltage	10-30V DC
	Switching frequency	500Hz
	Light type	Infrared light 880nm/Red light 650nm
	Response time	<2ms
	Load current	200mA
	Power-up delay	<300ms
	Adjustment	Single-turn potentiometer
Environment	Light immunity	<5000Lux.
	Ambient temperature	-25...55°C
	Ambient humidity	35-85%
Mechanical data	Housing material	PBT
	Lens material	PMMA
	Operating indicator	Yellow
Electrical connection	Connectors	PVC cable/2m;4*0.25mm ² /2*0.5mm ²
Accessories	Accessories	NO (to be ordered separately)

Wiring



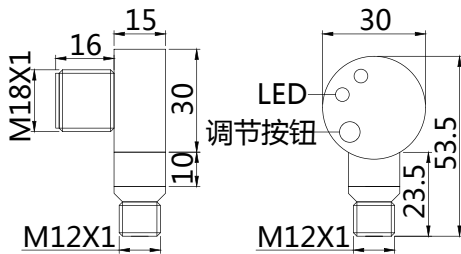


Features :

- Through-beam,Emitter/receiver set,DC4-wire discrete output;
- Cable & connector versions;
- M18*1mm,Right-angle plastic housing;
- VDE safety class:III;
- Ingress protection:IP66



Dimensioned drawing



Model No.

Sensing range	Sn: 15 m
Transmitter	FQ18-L15MD-P51S12-E
NPN Light/Dark-on	FQ18-L15MN-P31S12-E
PNP Light/Dark-on	FQ18-L15MP-P31S12-E

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	500Hz
	Light type	Infrared light 880nm/Red light 650nm
	Response time	<2ms
	Load current	200mA
	Power-up delay	<300ms
	Adjustment	Single-turn potentiometer
Environment	Light immunity	<5000Lux.
	Ambient temperature	-25...55°C
	Ambient humidity	35-85%
Mechanical data	Housing material	PBT
	Lens material	PMMA
	Operating indicator	Yellow
Electrical connection	Connectors	M12 connector
Accessories	Accessories	B12-4GV2/B12-4WV2 (to be ordered separately)

Wiring

