Fiber Optic

Slot Sensors

Photoelectric

Laser

Proximity

Displacement

Magnetic

Contact

Area

Ultrasonic

Vibration

Temperature

Cables



SAF Series



Appearance	
Security Level Type 4 Cat.4 PLe	
Executive standard GB/T19436.1; GB/T 19436.2; GB4584–2007; IEC 61496–1; IEC61496–2	
Light source Infrared LED (center wavelength 940nm)	
Sectional area 52X35mm	
NO.of beams 4~72	
Protection height 130~3000mm	
Protection distance 0.1~40m	
Beam pitch 10/20/30/40mm	
Min. sized detectable objects > \$\phi\$ 18/\$\phi\$ 28/\$\phi\$ 38/\$\phi\$ 48mm, Opaque	
EAA Meet the requirements of IEC 61496–2, when the detection distance is more than 3m, EAA <2.5°	
Supply voltage 24V DC±10%	
Current consumption Transmitter≤300mA; Receiver≤100mA (Non load)	
Output type PNP(Two groups)	
EMS Comply with the requirements of Class 4 safety light curtain in GB / T19436–1 and GB4584–2007	
EMC EMI Comply with EN61326-1 and EN55011 electromagnetic field requirements for industrial sites	
Response time ≤20ms	
Output characteristics PNP transistor output X2 (ON), load current is less than 300mA, residual voltage is less than 3.5V (excluding the effect of wire	extension)
Ambient temperature Operating: −10°C~+55°C (No freezing and no condensation); Storage: −10°C~+55°C	
Ambient humidity Operating: 35~85%RH; Storage: 35~95%RH	
Anti-interference ability Incandescent: 3000Lux; Fluorescent: 3000Lux; Sunlight: 10000Lux	
Vibration resistance Frequency: 10 ~ 55Hz; amplitude: 0.35 ± 0.05mm; Scanning times: three axes, 20 times per axis	
Impact resistance Acceleration 10g, pulse duration: 16ms, number of collisions: three axes, 1000 ± 10 times per axis	
Degree of protection IP65	
Supporting controller Not equipped with controller; or equipped with CSRMB module, output relay passive contact signal	
Accessories Transmission line, mounting bracket	

Product description

Safety light curtain integrated controller function into the sensor, is designed for risk assessment does not need to be equipped with a controller and need to have level signal control of equipment (for example: using PLC, computer—controlled equipment) to provide photoelectric protection device, can output two safe PNP signal.

Meets the requirements of safety level IV. SAF series photoelectric protection device can effectively detect any opaque objects that enter the light curtain area beyond the detection accuracy. It is suitable for the safety protection of mechanical presses, hydraulic presses, shearing machines, bending machines and other dangerous occasions. Can be used for detection and anti-theft.

Features

- Perfect self-test function, realizing full self-test including output signal.
- Floating shield function can be realized, which is convenient to realize the processing of long materials;
- Provide two relay passive contact outputs, higher safety performance
- High detection accuracy up to 18mm, which can protect fingers
- Large detection distance, up to 40m;
- Large detection height, up to 2840mm;
- Multiple product specifications, wide range of application;
- Can provide split indication function, intuitive display of beam on/off status.
- Good vibration damping performance, suitable for high speed punching, large tonnage presses, long service life.
- Strong resistance to light interference and electromagnetic interference; more stable work.
- When configured with safety relay module, it can provide 3 normally open and 1 normally closed output and 2 normally open and 1 normally closed output in two forms.

Guidance

Light curtains
Standard type
Top-emitting type
Side-emitting type

Waterproof type Measuring type

Economical type

Safety Light Curtain

Beam pitch 10mm Beam pitch 20mm

Beam pitch 30mm Beam pitch 40mm

LiDAR scanner
TOF LiDAR scanner

MINI LiDAR scanner

Navigation LiDAR

SAF₁₀

Beam pito	ch	10mm						
Min. sized detectable	d le objects	φ18, opaque						
Protection	n distance	Type A: 0~3m; Type B: 0~12m; Type C: 8~20m;						
NO.of bea	ams	16	20	24	28	32		72
Protection	n height	150mm	190mm	230mm	270mm	310mm		710mm
Light curt	ain height	239mm	279mm	319mm	359mm	399mm		799mm
	PNP NC	SAF10-T1603PC	SAF10-T2003PC	SAF10-T2403PC	SAF10-T2803PC	SAF10-T3203PC		SAF10-T7203PC
Model NO. Other 03: Type A 0~3m 12: Type B 0~12m 20: Type C 8~20m								

SAF20

Beam pito	ch	20mm						
Min. size detectabl	d le objects	φ 28, opaque						
Protectio	n distance	Type A: 0~3m; Type B: 0~12m; Type C: 8~20m;						
NO.of bea	ams	8	10	12	14	16		72
Protectio	n height	140mm	180mm	220mm	260mm	300mm		1420mm
Light curt	tain height	239mm	279mm	319mm	359mm	399mm		1519mm
	PNP NC	SAF20-T0803PC	SAF20-T1003PC	SAF20-T1203PC	SAF20-T1403PC	SAF20-T1603PC		SAF20-T7203PC
Model NO. Other 03: Type A 0~3m 12: Type B 0~12m 20: Type C 8~20m								

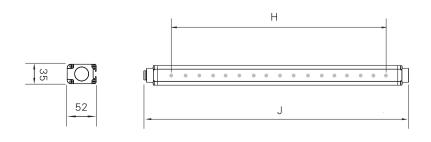
SAF30

Beam pito	ch	30mm						
Min. sized detectabl		ф 38, opaque						
Protectio	n distance	Type A: 0~3m; Type B: 0~12m; Type C: 8~20m;						
NO.of bea	ams	6	8	10	12	14		72
Protectio	n height	150mm	210mm	270mm	330mm	390mm		2130mm
Light curt	ain height	239mm	299mm	359mm	419mm	479mm		2219mm
	PNP NC	SAF30-T0603PC	SAF30-T0803PC	SAF30-T1003PC	SAF30-T1203PC	SAF30-T1403PC		SAF30-T7203PC
Model NO. Other 03: Type A 0~3m 12: Type B 0~12m 20: Type C 8~20m								

SAF40

Beam pitch	40mm						
Min. sized detectable objects		φ48, opaque					
Protection distance	,	Type A: 0~3m; Type B: 0~12m; Type C: 8~20m;					
NO.of beams	4	6	8	10	12		72
Protection height	120mm	200mm	280mm	360mm	440mm		2840mm
Light curtain heigh	239mm	319mm	399mm	479mm	559mm		2959mm
PNP NC	SAF40-T0403PC	SAF40-T0603PC	SAF40-T0803PC	SAF40-T1003PC	SAF40-T1203PC	*** ***	SAF40-T7203PC
Model NO. Other	03: Type A 0~3m	12: Type B 0~	12m 20: Type (C 8~20m			

Dimensions(Unit:mm)



- H: Protection height
- J_{\pm} Length of light emitter and light receiver

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Tester

Guidance

Light curtains
Standard type
Top-emitting type
Side-emitting type
Waterproof type
Measuring type
Economical type

Safety Light Curtain
Beam pitch 10mm
Beam pitch 20mm
Beam pitch 30mm

TOF LIDAR scanner

MINI LIDAR scanner

Navigation LIDAR

Fiber Optic Slot Sensors Photoelectric Laser

Proximity Displacement

Contact

Ultrasonic Vibration Temperature Cables Tester

Guidance

Light curtains Top-emitting type Waterproof type Measuring type Economical type

Safety Light Curtain

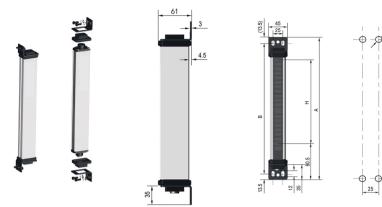
Beam pitch 30mm Beam pitch 40mm

TOF LiDAR scanner MINI LiDAR scanner Navigation LiDAR

Safety Light Curtain

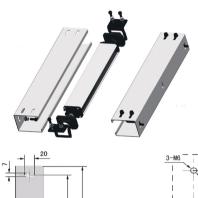
Installation Method

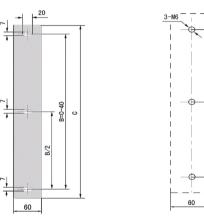
Front and side integrated installation method (ZC)

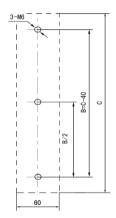


	Optical axis spacing 10mm	H+131		
	Optical axis spacing 20mm	H+141		
А	Optical axis spacing 30mm	H+131		
	Optical axis spacing 40mm	H+161		
	Optical axis spacing 10mm	H+104		
	Optical axis spacing 20mm	H+114		
В	Optical axis spacing 30mm	H+104		
	Optical axis spacing 40mm	H+134		
Н	Protection height			

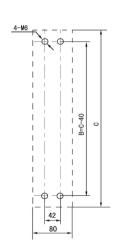
Protective cover installation method (FZC)







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Formal installation of protective cover

Side-mounted protective cover

Connection diagram

