

# Panasonic

## ideas for life

Ultra-slim

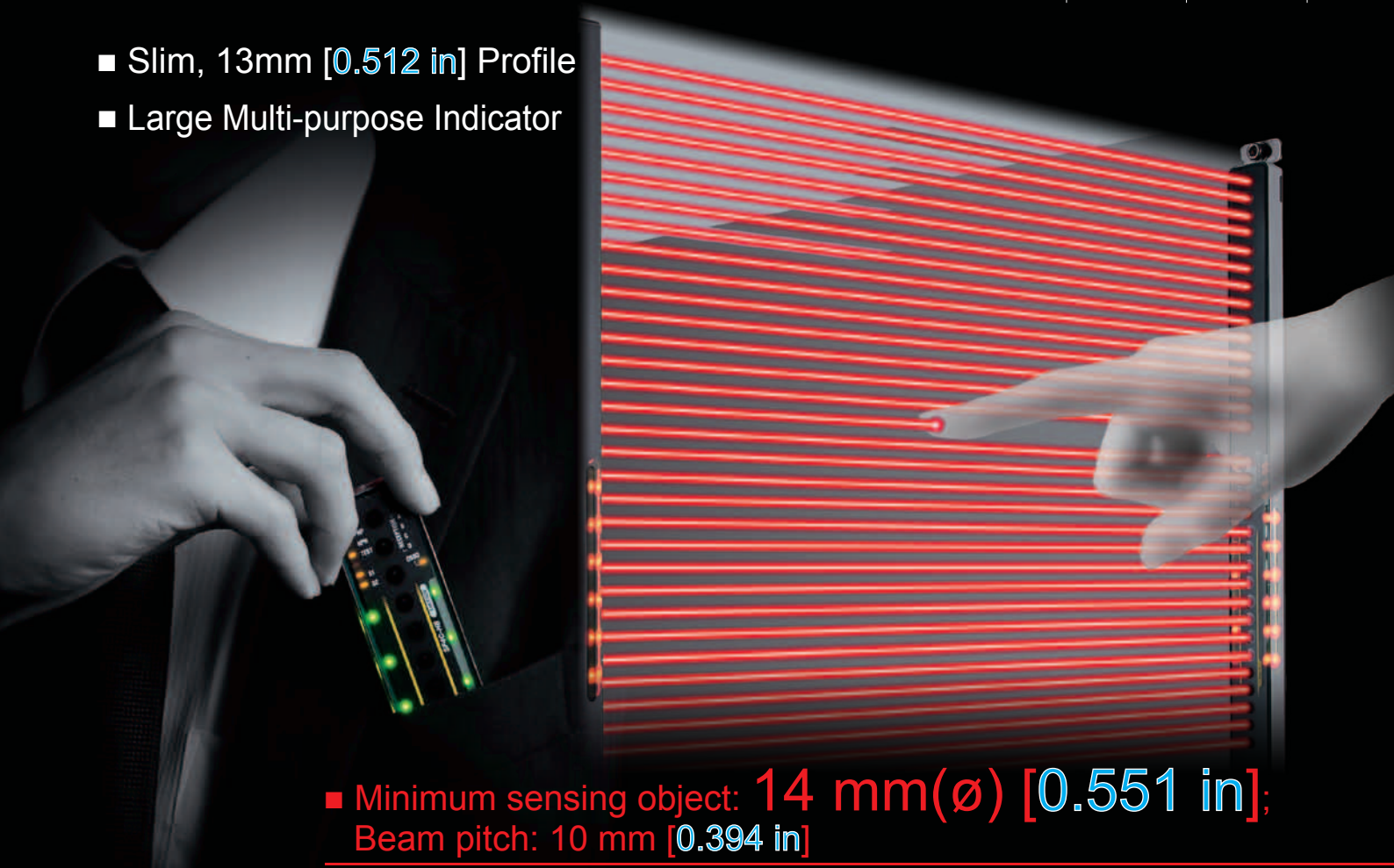
Type4 PLe SIL3

## LIGHT CURTAIN

### SF4C-F SERIES

## Space Saving Light Curtain Finger Protection

- Slim, 13mm [0.512 in] Profile
- Large Multi-purpose Indicator



- Minimum sensing object: **14 mm(∅) [0.551 in]**;  
Beam pitch: **10 mm [0.394 in]**

### Tighter Beam Pitch

The SF4C-F light curtain has a 10 mm 0.394 in beam pitch which allows additional protection while reducing overall size.

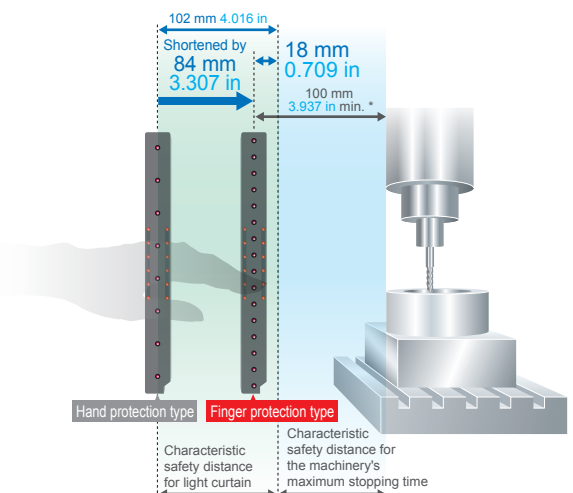
Safety distance

Hand protection type	102 mm 4.016 in	▶ Shortened by 84 mm 3.307 in
Finger protection type	18 mm 0.709 in	

\* Calculation based on ISO 13855 with 41 ms or longer being the machinery's maximum stopping time.

### Simple Safety Distance Calculations

The response time of all finger protection light curtains in the SF4C-F series is 9 ms or less. Recalculation of the safety distance is unnecessary for each time light curtain length is changed.



\*The light curtain cannot be installed within a distance of 100 mm 3.937 in. (ISO 13855)

Type	Appearance	Operating range	Model No.		Number of beam channels	Protective height (mm in)
			Pigtailed type	Cable type		
Finger protection type Min. sensing object of 14 mm $\phi$ 0.551 in (10 mm 0.394 in beam pitch)		0.1 to 3 m 0.328 to 9.843 ft	<b>SF4C-F15-J05</b>	<b>SF4C-F15</b>	15	160 mm 6.299 in
			<b>SF4C-F23-J05</b>	<b>SF4C-F23</b>	23	240 mm 9.449 in
			<b>SF4C-F31-J05</b>	<b>SF4C-F31</b>	31	320 mm 12.598 in
			<b>SF4C-F39-J05</b>	<b>SF4C-F39</b>	39	400 mm 15.748 in
			<b>SF4C-F47-J05</b>	<b>SF4C-F47</b>	47	480 mm 18.898 in
			<b>SF4C-F55-J05</b>	<b>SF4C-F55</b>	55	560 mm 22.047 in
			<b>SF4C-F63-J05</b>	<b>SF4C-F63</b>	63	640 mm 25.197 in

**Spare parts (Accessories for light curtain)**

Designation	Model No.	Description
Test rod $\phi$ 14	<b>SF4C-TR14</b>	Min. sensing object for regular checking ( $\phi$ 14 mm $\phi$ 0.551 in)

**LIGHT CURTAIN INDIVIDUAL SPECIFICATIONS**

Item	Type	Min. sensing object $\phi$ 14 mm $\phi$ 0.551 in type (10 mm 0.394 in beam pitch)							
	Model No.	Pigtailed type	SF4C-F15-J05	SF4C-F23-J05	SF4C-F31-J05	SF4C-F39-J05	SF4C-F47-J05	SF4C-F55-J05	SF4C-F63-J05
	Cable type		<b>SF4C-F15</b>	<b>SF4C-F23</b>	<b>SF4C-F31</b>	<b>SF4C-F39</b>	<b>SF4C-F47</b>	<b>SF4C-F55</b>	<b>SF4C-F63</b>
No. of beam channels			15	23	31	39	47	55	63
Protective height			160 mm 6.299 in	240 mm 9.449 in	320 mm 12.598 in	400 mm 15.748 in	480 mm 18.898 in	560 mm 22.047 in	640 mm 25.197 in
Current consumption	Large multi-purpose indicator lights off		Emitter: 70 mA or less Receiver: 80 mA or less	Emitter: 75 mA or less Receiver: 85 mA or less		Emitter: 80 mA or less Receiver: 90 mA or less		Emitter: 85 mA or less Receiver: 95 mA or less	
	Large multi-purpose indicator lights up		Emitter: 105 mA or less Receiver: 110 mA or less	Emitter: 110 mA or less Receiver: 115 mA or less		Emitter: 115 mA or less Receiver: 120 mA or less		Emitter: 120 mA or less Receiver: 125 mA or less	
PFH <sub>d</sub>			$2.29 \times 10^{-9}$	$2.73 \times 10^{-9}$	$3.18 \times 10^{-9}$	$3.62 \times 10^{-9}$	$4.06 \times 10^{-9}$	$4.50 \times 10^{-9}$	$4.95 \times 10^{-9}$
MTTF <sub>d</sub>			100 years or more						
Net weight (Total of emitter and receiver)	Pigtailed type		210 g approx.	270 g approx.	340 g approx.	400 g approx.	470 g approx.	540 g approx.	600 g approx.
	Cable type		600 g approx.	670 g approx.	730 g approx.	800 g approx.	860 g approx.	930 g approx.	1,000 g approx.

**DIFFERENCES FROM THE HAND PROTECTION TYPE**

	Response time	Beam pitch	Min. sensing object	Position of digital error indicator (Note 1)	Current consumption, PFH <sub>d</sub> and net weight
Hand protection type	7 ms	20 mm 0.787 in	$\phi$ 25 mm $\phi$ 0.984 in		Refer to the <b>SF4C</b> series catalog or our website.
Finger protection type	9 ms	10 mm 0.394 in	$\phi$ 14 mm $\phi$ 0.551 in		

Notes: 1) **SF4C-F15 (-J05)** is not equipped with a digital error indicator.  
 2) The finger protection type is not certified with the Korean S mark. Other specifications, the I/O circuit, and options, etc., are the same as the basic type.  
 For further information including specifications, refer to the **SF4C** series catalog and our website.