Datasensing DATA Safety Light Curtains Standard Models, Finger Protection



Safety light curtain with 14mm resolution

Features

- Includes both sender and receiver
- Integrated light curtain for finger protection
- No dead zone
- Operating distance up to 10m [32.8 ft]
- Protected heights ranging from 300 to 1200 mm [11.8 to 47.2 in]
- Compact 35 x 40 mm [1.4 x 1.6 in] profile
- Manual/automatic restart
- Reset input
- External device monitoring (EDM)
- Alignment mode
- IP65/IP67 rated
- Type 4, PLe, SIL3
- UL, CE and TUV certification



Da	Datasensing Safety Light Curtains SH4 Standard Models Selection Chart					
Part Number	Price	Protected Height	Overall Height	Number of Beams	Response Time (ms)	Drawing
<u>SH4-14-0300-S-8</u>	\$720.00	300mm [11.8 in]	309mm [12.2 in]	30	9	PDF
<u>SH4-14-0450-S-8</u>	\$903.00	450mm [17.7 in]	459mm [18.1 in]	45	10	PDF
<u>SH4-14-0600-S-8</u>	\$1,142.00	600mm [23.6 in]	609mm [24 in]	60	12	PDF
<u>SH4-14-0750-S-8</u>	\$1,336.00	750mm [29.5 in]	759mm [29.9 in]	75	13	PDF
<u>SH4-14-0900-S-8</u>	\$1,573.00	900mm [35.4 in]	909mm [35.8 in]	90	15	PDF
<u>SH4-14-1050-S-8</u>	\$1,771.00	1050mm [41.3 in]	1059mm [41.7 in]	105	16	PDF
<u>SH4-14-1200-S-8</u>	\$1,971.00	1200mm [47.2 in]	1209mm [47.6 in]	120	18	PDF

Connections

6	5	
	8	(4) (3)
		2

8-pin M12

Connector

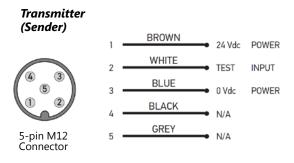
Receiver

		REDET	
2	BROWN	24Vdc	POWER
3	GREEN	EDM / SE-	INPUT
-	YELLOW	LECTION	
4		EDM	INPUT
5	GREY	OSSD1	SAFE
6	PINK	OSSD2	OUTPUT SAFE
0	BLUE	03302	OUTPUT
7	•	0 Vdc	POWER
8	RED	MAN/AUTO SELECTION	INPUT
-		SELECTION	

RESTART/ INPUT

WHITE

Pin	Description	292 Cable	295 Cable	Pin on Receiver
1	Restart/Reset	White	Brown	1
2	+24VDC	Brown	White	2
3	EDM selection	Green	Blue	3
4	EDM signal	Yellow	Black	4
5	OSSD 1 (Output Signal Switching Device)	Grey	Grey	5
6	OSSD 2 (Output Signal Switching Device)	Pink	Pink	6
7	0VDC	Blue	Violet	7
8	Manual/Auto reset function	Red	Orange	8



Pin	Description	Wire Color	Pin on Receiver	
1	+24VDC	Brown	1	
2	TEST signal	White	2	
3	0VDC	Blue	3	
4	Not used	Black	4	
5	Not used	Grey	5	

Note: Cable color represents standard industrial pinout. Confirm the specific color and pinout during installation.

Datasensing Safety Light Curtains Standard Models



	SH4-14, SH4-30, and SH4 Body Standard Models					
Model	SH4-14 Standard Models SH4-30 Standard Models SH4-3-0800 or SH4-4-xxxx (Finger Protection) (Hand Protection) (Body Protection)					
	Elec	trical Data				
Supply Voltage	24VDC ± 20%					
Current Consumption (Sender)		3.5 W maximum				
Current Consumption (Receiver)		5.5 W maximum (without load)				
OSSD Outputs		2, with short-circuit protection				
Short Circuit Protection		Self-resetting				
Output Current		0.25 amps max on each output 0.5 A max total outputs				
Output Voltage – ON status:		1V minimum				
Output Voltage – OFF status:		0.2 V maximum				
Leakage Current		< 1mA				
Capacitive Load		1 uF @ 24VDC				
Safety Category	Туре 4	(IEC 61496-1) / PLe (EN ISO13849-1) / SIL	3 (IEC 61508)			
Auxiliary Functions (configured by wiring)	Reset/test Selectable manual/automatic restart Selectable EDM Alignment mode					
Electrical Protection		Class III				
	M12 5-pole for sender					
Electrical Connections		M12 8-pole for receiver				
Cable Length	30m [98ft] maximum 30m [98ft] maximum for receiver 50m [164ft] maximum for transmitter					
	Opt	tical Data				
Light Emission	Infrared LED (850nm wavelength)					
Resolution	Finger 14mm [0.55 in]	Hand 30mm [1.18 in]	Body SH4-4-1200-xx-x-x = 400mm [15.75 in] SH4-4-0900-xx-x-x = 300mm [11.81 in] SH4-3-0800-xx-x-x = 400mm [15.75 in]			
Operating Distance	0.2 - 10 m [0.7 - 32.8 ft]	0.2 - 20 m [0.7 - 65.6 ft]	Short range (default) = 0.5 to 15 m [2 to 49 ft] Long range (selectable) = 5 to 70 m [15 to 229 ft]			
Aperture Angle (EAA)		< ±2.5° maximum @ 3m [3.8 ft]				
	Mechanical and	l Environmental Data				
Operating Temperature		-30 to 55°C [-22 to 131°F]				
Storage Temperature		-30 to 70°C [-22 to 158°F)				
Temperature Class	T6					
Humidity	15 - 95% (non-condensing)					
Mechanical Protection	IP65/IP67 (EN 60529)					
Vibration Resistance	10mm/3g with a frequency of 5 to 150 Hz					
Housing Material	Painted aluminum (yellow RAL 1003)					
Window Material		MAKROLON AR 7099 clear PC				
Cap Material		PBT (polybutylene terephthalate)				
Weight		1.4 Kg/m [0.94 lb/ft] (single bar weight))			
Agency Approvals		UL, CE, TUV				

For the latest prices, please check AutomationDirect.com.

Datasensing Safety Light Curtains Accessories





SH-LP

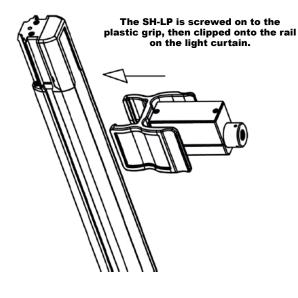




SH-PLUG-8

	Datasensing Safety Light Curtains Accessories				
Part Number Price Description Use With					
<u>SH-LP</u>	\$264.00	Laser alignment tool for class 2 laser, range up to 50 meters, 1 AAA battery included	SH4 series light curtain models		
<u>SH-PLUG-5</u>	\$53.00	Replacement cable, 5-pin M12 quick disconnect	SH4 Basic Models transmitter SH4 Basic Models receiver SH4 Standard Models transmitter		
<u>SH-PLUG-8</u>	\$85.00	Replacement cable, 8-pin M12 quick disconnect	SH4 Standard Models receiver		

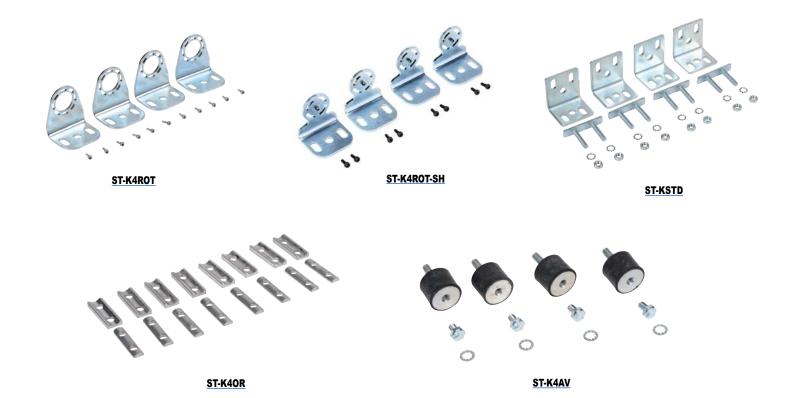
Installing the SH-LP



Datalogic Safety Light Curtains ODATALOGIC Accessories

Mounting Brackets

Datalogic Safety Light Curtains Mounting Brackets Selection Guide						
Part Number	Price	Mounting Bracket Type	For Use With	Qty Per Package	Drawing	
<u>ST-K4ROT</u>	\$20.00	Rotational	SG4 Base Series (-E) light curtains	4	PDF	
<u>ST-K4ROT-SH</u>	\$66.00	Rotational	All SH4 Series light curtains	4	<u>PDF</u>	
<u>ST-KSTD</u>	\$10.00	Standard	All SG4 and SH4 Series light curtains	4	<u>PDF</u>	
<u>ST-K4OR</u>	\$47.00	Lateral orientable	All SG4 and SH4 Series light curtains	4	PDF	
<u>ST-K4AV</u>	\$20.00	Anti-vibration	All SG4 and SH4 Series light curtains	4	<u>PDF</u>	



1-800-633-0405 Datalogic Safety Light Curtains COATALOGIC Accessories

Test Pieces

TP-14 and TP-30 test pieces are used to verify if the resolution of safety light curtains is maintained inside the entire detection field. TP-14 has a diameter of 14mm [0.55 in] and TP-30 has a diameter of 30mm [1.18 in]. Both models have an overall length of 300mm [11.81 in].

Safety Light Curtains Test Pieces			
Part Number	Price	Description	
<u>TP-14</u>	\$23.50	Test rod for 14mm resolution finger detection light curtains, plastic, 14mm diameter	
<u>TP-30</u>	\$25.50	Test rod for 30mm resolution hand detection light curtains, plastic, 30mm diameter	



Safety Products



Warning: Safety products sold by AutomationDirect are Safety components only. The purchaser/installer is solely responsible for the application of these components and ensuring all necessary steps have been taken to assure each application and use meets all performance and applicable safety requirements and/or local, national and/or international safety codes as required by the application. AutomationDirect cannot certify that our products, used solely or in conjunction with other AutomationDirect or other vendors' products, will assure safety for any application. Any person using or applying any products sold by AutomationDirect is responsible for learning the safety requirements for their individual application and applying them, and therefore assumes all risks, and accepts full and complete responsibility, for the selection and suitability of the product for their respective application.

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