

LISTEN.
THINK.
SOLVE.™

Cascading GuardShield Safety Light Curtains

Enhanced flexibility for multi-sided machine guarding applications

The Allen-Bradley Guardmaster GuardShield safety light curtain is an economical, fully featured, Type 4 safety light curtain in a uniquely styled housing. GuardShield safety light curtains are general purpose presence sensing devices designed for use on hazardous machinery providing point of operation, as well as perimeter and access guarding. The latest additions to the GuardShield line are cascading models that allow a GuardShield safety light curtain system to protect multiple sides of a machine or simply add flexibility for a wide range of machine guarding applications.

GuardShield reliability and functionality, with added flexibility

Like its standard GuardShield counterpart, the cascading GuardShield safety light curtain is a self-contained, two box safety light curtain with DIP switch selectable operating modes. Available in both 14 mm and 30 mm resolutions, cascaded GuardShield is essentially a standard GuardShield safety light curtain with additional M12 connectors on top of the transmitter and receiver, which allow the interconnection (cascading) of up to three GuardShield pairs with a common pair of OSSDs. The complete cascading GuardShield system has the full functionality of a standard GuardShield: beam coding, EDM, start/restart interlock, fixed and floating blanking.

Cascaded GuardShield light curtains enhance flexibility for applications that require two or three sided protection in front of automated processes where corner mirrors cannot be used. At the same time, cascaded GuardShield reduces overall system wiring and simplifies the safety circuit resulting in lower overall cost for a multiple safety light curtain system. And since these light curtains meet IEC61496 and UL61496 and are CE marked by TÜV, they are also a global solution for a wide range of challenging machine guarding applications.

The cascading GuardShield safety light curtains are ordered as pairs (transmitter and receiver) and are shipped under a single catalog number for ease of selection.





Features:

- M12 connectors on top of the transmitter and receiver allow the interconnection of up to three GuardShield pairs
- Cascading segments are offered in protective heights from 320...1760mm in both 14mm and 30mm resolutions
- Possible to mix 14mm and 30mm pairs in a cascaded system
- Interconnection patchcords available in 0.3m (1ft), 1m and 2m lengths
- DIP switch selectable operating modes
- Segments can be used as standalone light curtain pairs or can be interconnected for up to three segments
- Ordered as pairs (transmitter and receiver) and shipped under a single catalog number
- A global safeguarding solution that meets IEC61496 and UL61496 and is CE marked by TÜV


Ordering Information

Protected Height [mm (in.)]	Resolution [mm (in.)]	Number of Beams	Pair Weight [kg (lbs)]	Cat. No.		
				Sensor Pair	Transmitter	Receiver
320 (12.59)	14 (0.55)	32	0.9 (1.9)	440L-C4J0320YD	440L-G4J0320YD	440L-F4J0320YD
480 (18.089)	14 (0.55)	48	1.1 (2.4)	440L-C4J0480YD	440L-G4J0480YD	440L-F4J0480YD
640 (25.19)	14 (0.55)	64	1.6 (3.5)	440L-C4J0640YD	440L-G4J0640YD	440L-F4J0640YD
800 (31.49)	14 (0.55)	80	2.0 (4.4)	440L-C4J0800YD	440L-G4J0800YD	440L-F4J0800YD
960 (37.79)	14 (0.55)	96	2.5 (5.5)	440L-C4J0960YD	440L-G4J0960YD	440L-F4J0960YD
1120 (44.09)	14 (0.55)	112	2.9 (6.4)	440L-C4J1120YD	440L-G4J1120YD	440L-F4J1120YD
1280 (50.39)	14 (0.55)	128	3.4 (7.5)	440L-C4J1280YD	440L-G4J1280YD	440L-F4J1280YD
1440 (56.69)	14 (0.55)	144	3.8 (8.4)	440L-C4J1440YD	440L-G4J1440YD	440L-F4J1440YD
1660 (62.99)	14 (0.55)	160	4.3 (9.5)	440L-C4J1600YD	440L-G4J1600YD	440L-F4J1600YD
1760 (69.29)	14 (0.55)	176	4.7 (10.4)	440L-C4J1760YD	440L-G4J1760YD	440L-F4J1760YD
320 (12.59)	30 (1.18)	16	0.9 (1.9)	440L-C4K0320YD	440L-G4K0320YD	440L-F4K0320YD
480 (18.89)	30 (1.18)	24	1.1 (2.4)	440L-C4K0480YD	440L-G4K0480YD	440L-F4K0480YD
640 (25.19)	30 (1.18)	32	1.6 (3.5)	440L-C4K0640YD	440L-G4K0640YD	440L-F4K0640YD
800 (31.49)	30 (1.18)	40	2.0 (4.4)	440L-C4K0800YD	440L-G4K0800YD	440L-F4K0800YD
960 (37.79)	30 (1.18)	48	2.5 (5.5)	440L-C4K0960YD	440L-G4K0960YD	440L-F4K0960YD
1120 (44.09)	30 (1.18)	56	2.9 (6.4)	440L-C4K1120YD	440L-G4K1120YD	440L-F4K1120YD
1280 (50.39)	30 (1.18)	64	3.4 (7.5)	440L-C4K1280YD	440L-G4K1280YD	440L-F4K1280YD
1440 (56.69)	30 (1.18)	72	3.8 (8.4)	440L-C4K1440YD	440L-G4K1440YD	440L-F4K1440YD
1600 (62.99)	30 (1.18)	80	4.3 (9.5)	440L-C4K1600YD	440L-G4K1600YD	440L-F4K1600YD
1760 (69.29)	30 (1.18)	88	4.7 (10.4)	440L-C4K1760YD	440L-G4K1760YD	440L-F4K1760YD

Patchcords/Connectors

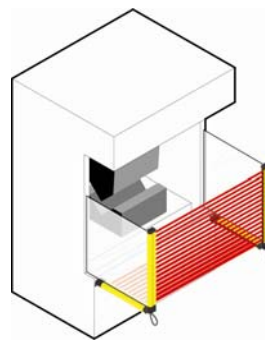
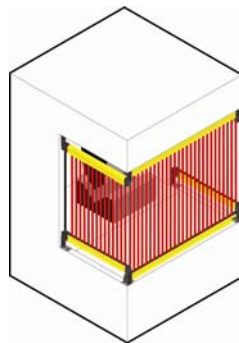
Face View of Female	Description	Cat. No.
Transmitter Patchcord		
	4-pin M12 patchcord, 12 inches	889D-F4ACDM-0M3
	4-pin M12 patchcord, 1 meter	889D-F4ACDM-1
	4-pin M12 patchcord, 2 meter	889D-F4ACDM-2
Receiver Patchcord		
	8-pin M12 patchcord, 12 inches	889D-F8ABDM-0M3
	8-pin M12 patchcord, 1 meter	889D-F8ABDM-1
	8-pin M12 patchcord, 2 meter	889D-F8ABDM-2

Termination Plug

Face View of Female	Description	Cat. No.
Receiver		
	Termination plug 8-pin M12 quick disconnect	898D-81CU-DM

Note: Termination plug required on top M12 connector of receiver if the pair is used as the last segment in a cascaded system or as a stand alone pair.

Application Examples



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