

ReFlx[®] Distance Detection & Collision Avoidance Systems

ReFlx 120 and ReFlx 120 "PLUS"

Electromotive Systems' ReFlx 120 and 120 "Plus" Collision Avoidance Systems enhance the performance of your overhead material handling system by preventing crane to crane or crane to object collisions. And avoiding collisions means reduced maintenance costs and increased operator safety! The ReFlx Systems are ideal for use with all types of adjustable frequency drives and stepped controls.

The ReFlx 120 and 120 "Plus" Systems now feature a more reliable, solid-state control board in a smaller enclosure, making it easier to install. This means it can be used as a stand-alone unit, or be removed from its enclosure and mounted as one piece on your existing control sub-panel.

Electromotive Systems offers two types of ReFlx Collision Avoidance Systems.

ReFlx 120

The ReFlx 120 System features a two-channel infrared sensor, which can be adjusted to give separate outputs for each channel at distances from 20 to 120 feet. The most commonly wired configuration is the use of one channel to provide the primary stop command to the motion control, while the second channel is used as a redundant stop command.



ReFlx 120 (reflector not shown)



ReFlx 120 "Plus" (reflector not shown)

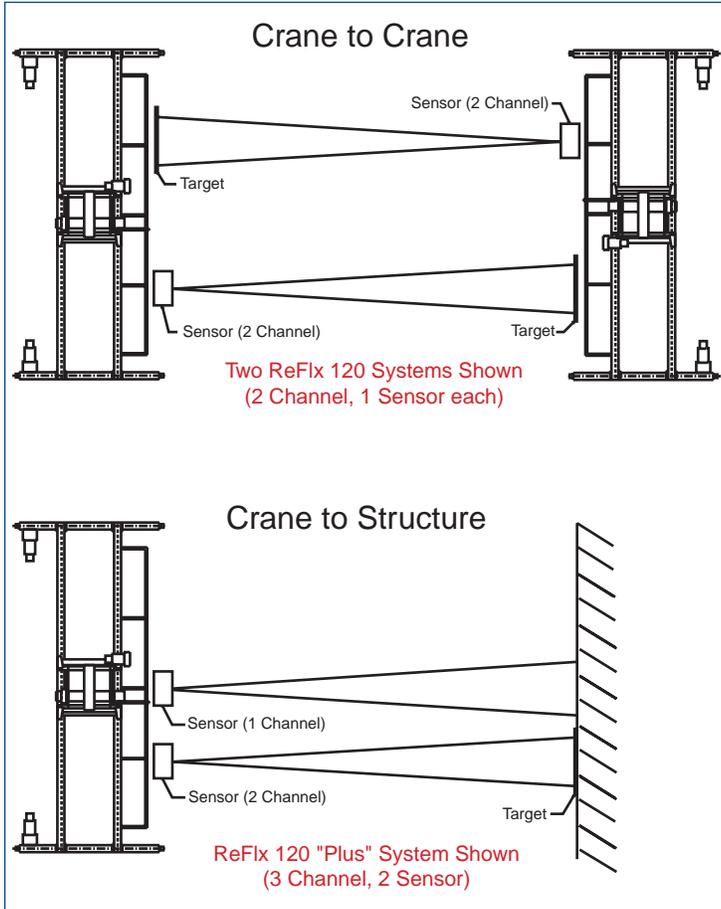
ReFlx 120 "Plus"

To provide an extra measure of safety to your collision avoidance system, the ReFlx 120 "Plus" offers you the addition of a second, shorter range, sensor. The first sensor, which has two channels, is most commonly wired to use the first channel as a "slow down" command or warning signal, and the second channel as a primary stop command. The second sensor has a single channel, with a range of 1.5 to 20 feet, and is most commonly used as a redundant stop command. The second sensor does not require a reflective target to be utilized.

If the application is crane to crane, monorail carriers, or crane/monorail to obstruction, Electromotive Systems' ReFlx 120 and 120 "Plus" Systems help keep your overhead material handling system up and running safely by providing the solution for collision avoidance.

Diagram of How the ReFlx System Works

The ReFlx sensors consist of a transmitter and receiver(s). The infrared signal is transmitted at the target or object. The reflected signal from the target or object is sensed by the receiver. The information is processed and the relay opens, providing a slow down or stop of the bridge control.



System Specifications:

ReFlx 120:

- (1) Two-Channel Sensor
- (1) Controller
- (1) Diamond Reflective Target (2ft x 2ft)

ReFlx 120 "Plus":

- (1) Two-Channel Sensor
- (1) Single-Channel Sensor
- (1) Controller
- (1) Diamond Reflective Target (2ft x 2ft)

Component Specifications:

Two(2) Channel Sensor:

- Maximum Sensing Distance—120 ft.
- Minimum Sensing Distance—20 ft.
- Enclosure IP65 (NEMA 12, 13)
- Fully Adjustable Scanning Range
- Status LEDs For Each Channel
- 16 ft. Sensor Cable

Single (1) Channel Sensor:

- Maximum Sensing Distance—20 ft.
- Minimum Sensing Distance—1.5 ft.
- Enclosure IP65 (NEMA 12, 13)
- Fully Adjustable Scanning Range
- Status LED For Sensor
- 16 ft. Sensor Cable

Controller:

- Enclosure NEMA 12, 13
- Dimensions—8"H x 6"W x 3.5"D



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Brochure No. RFX-04A mini
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