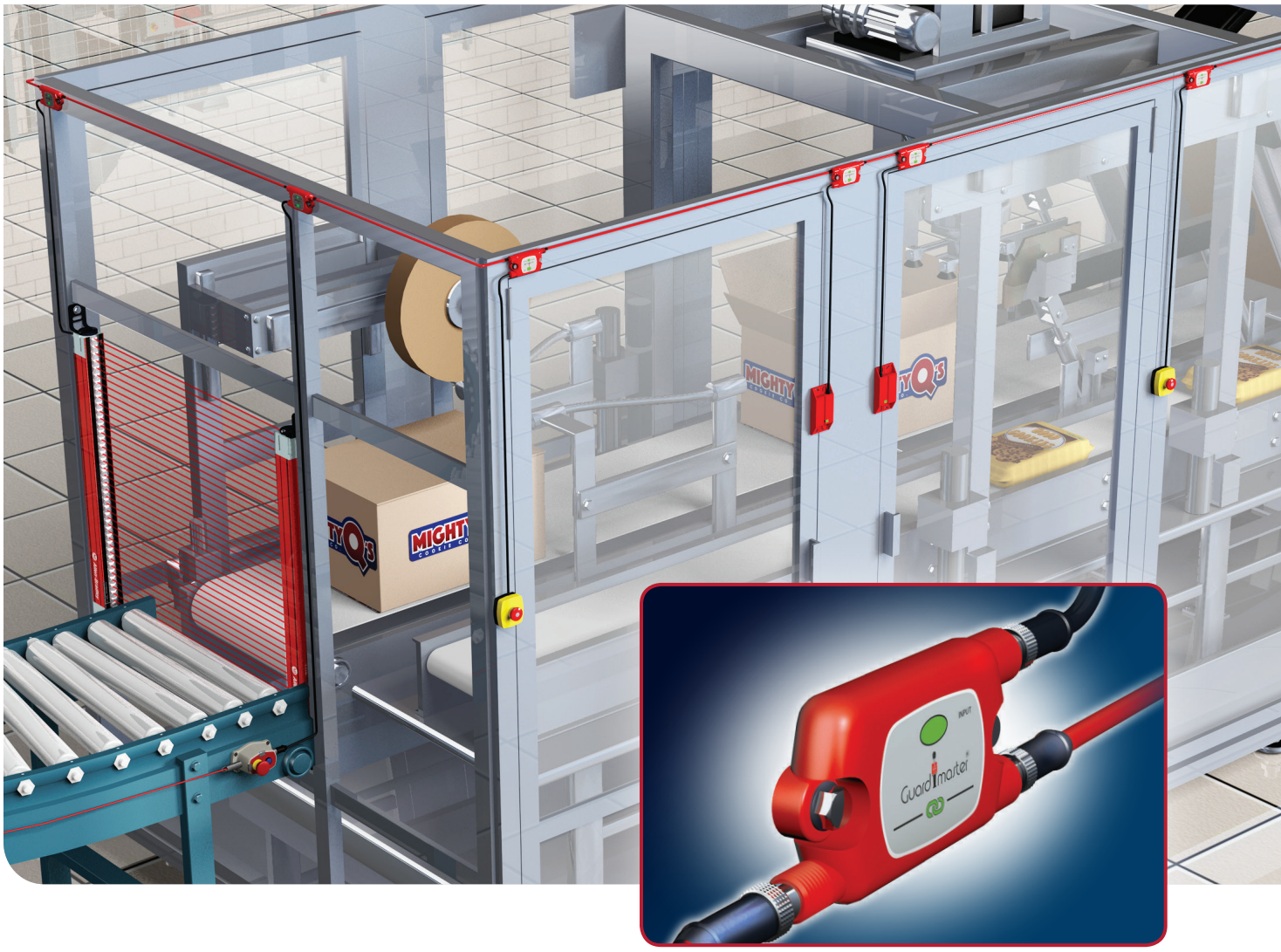
LISTEN.
THINK.
SOLVE.®



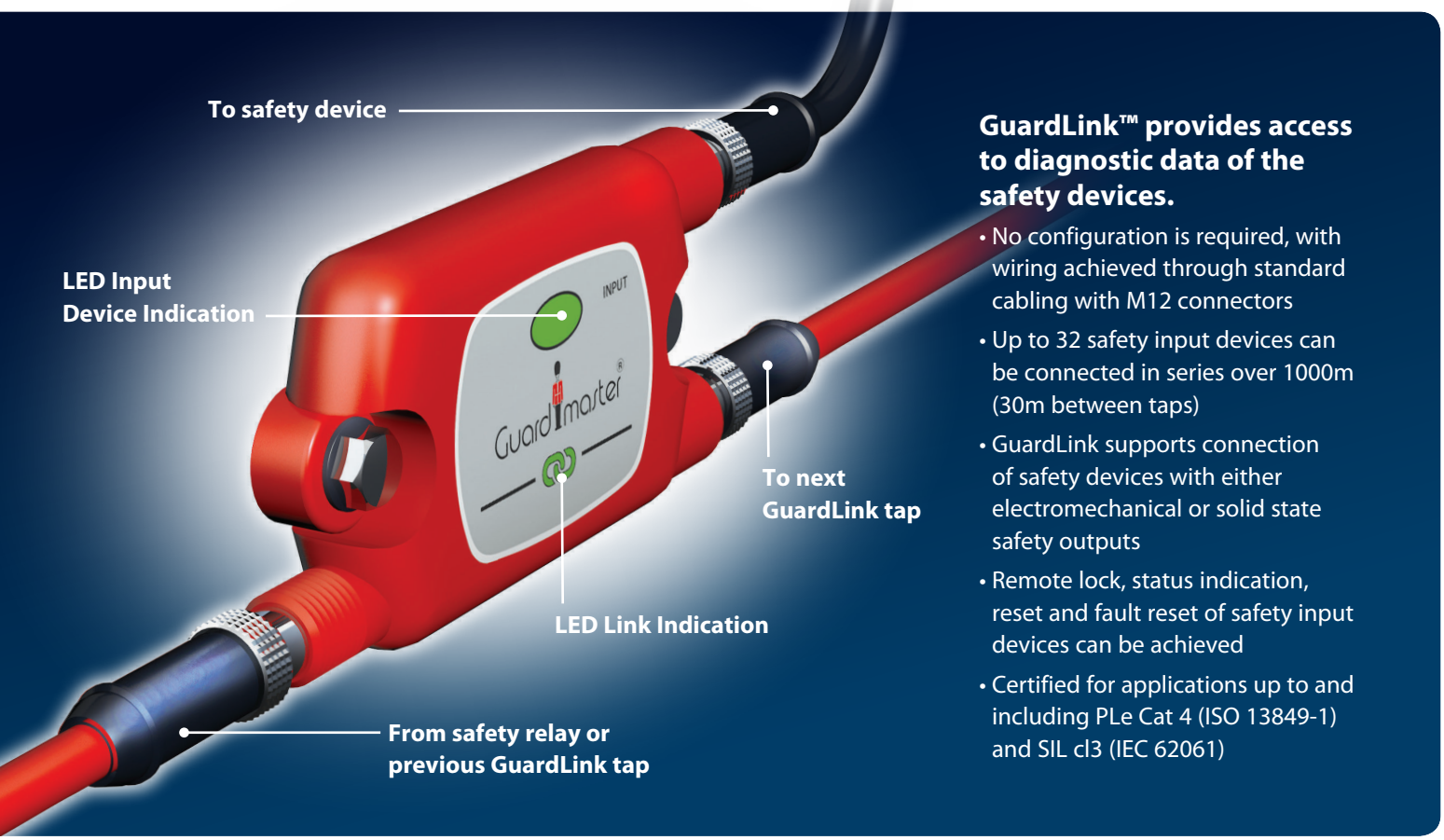
GuardLink™

DEVICE LEVEL SAFETY LINKING TECHNOLOGY

Allen-Bradley • Rockwell Software

Rockwell Automation

GUARDLINK – DEVICE LEVEL



GuardLink™ provides access to diagnostic data of the safety devices.

- No configuration is required, with wiring achieved through standard cabling with M12 connectors
- Up to 32 safety input devices can be connected in series over 1000m (30m between taps)
- GuardLink supports connection of safety devices with either electromechanical or solid state safety outputs
- Remote lock, status indication, reset and fault reset of safety input devices can be achieved
- Certified for applications up to and including PLe Cat 4 (ISO 13849-1) and SIL cl3 (IEC 62061)

WHY CHOOSE GUARDLINK?

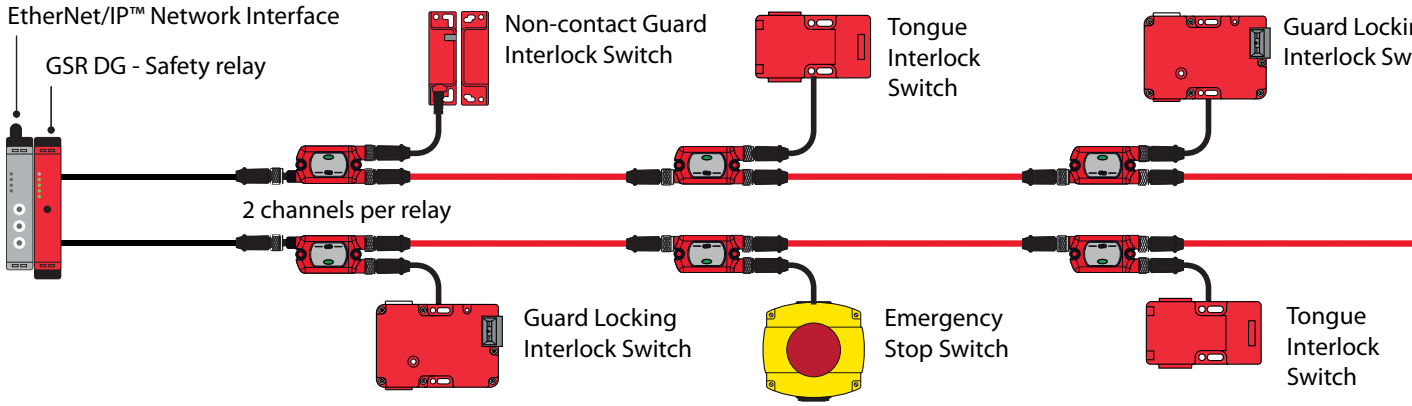
Series connection of safety input devices is common practice in safety-related control systems. However, when the system trips, fault finding can be difficult due to the lack of diagnostic information.

Providing diagnostics typically required additional wiring, increasing complexity and installation time.

GuardLink simplifies this by providing safety and diagnostic information through the same cable.

Connected to a safety relay and using an EtherNet/IP Network Interface, this information is easily passed through to the control system for increased diagnostics.

GuardLink System Example



SAFETY LINKING TECHNOLOGY

450L Light Curtains

450L Light curtains can be connected simply to GuardLink via a GuardLink enabled tap.

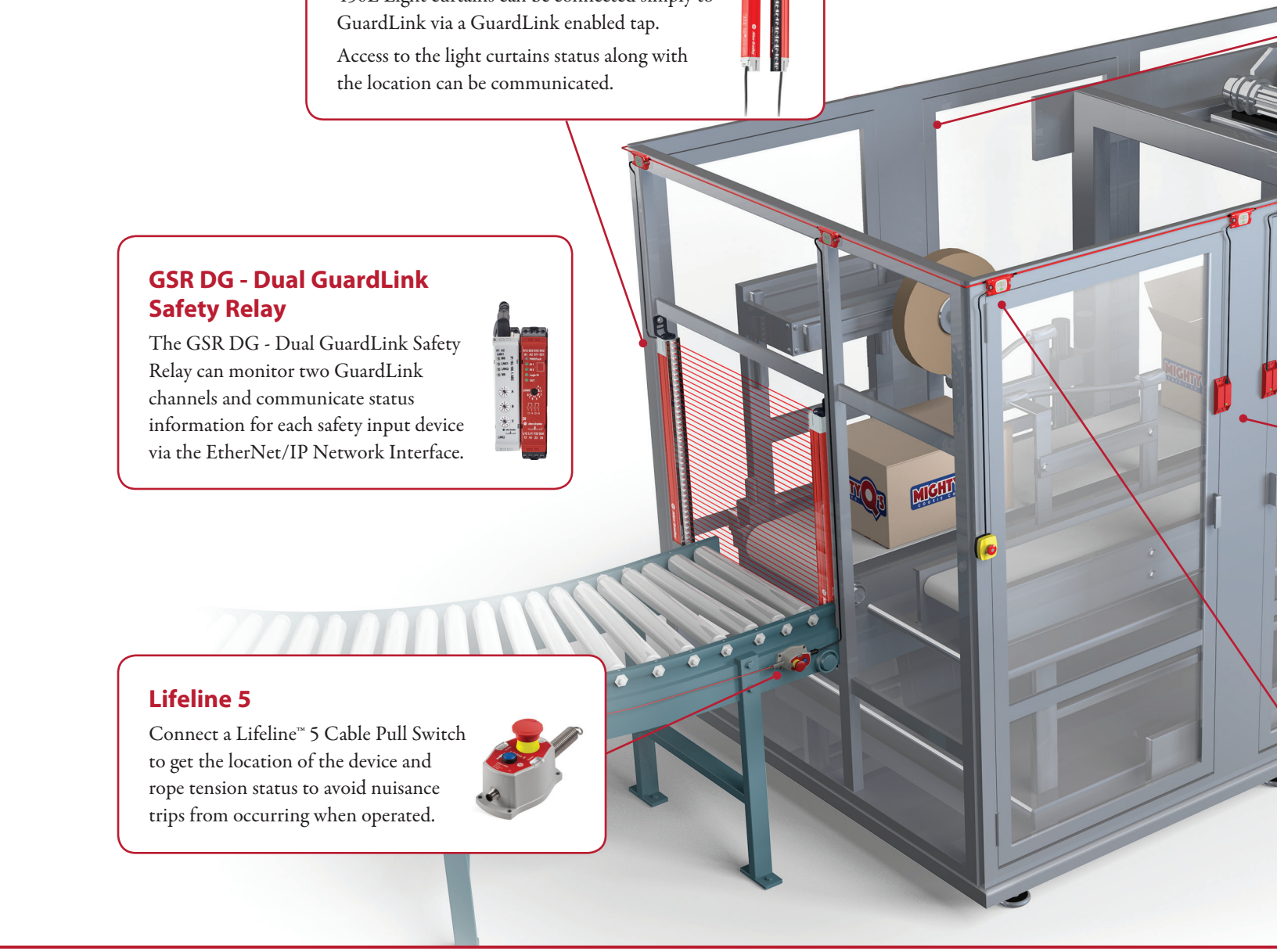
Access to the light curtains status along with the location can be communicated.

GSR DG - Dual GuardLink Safety Relay

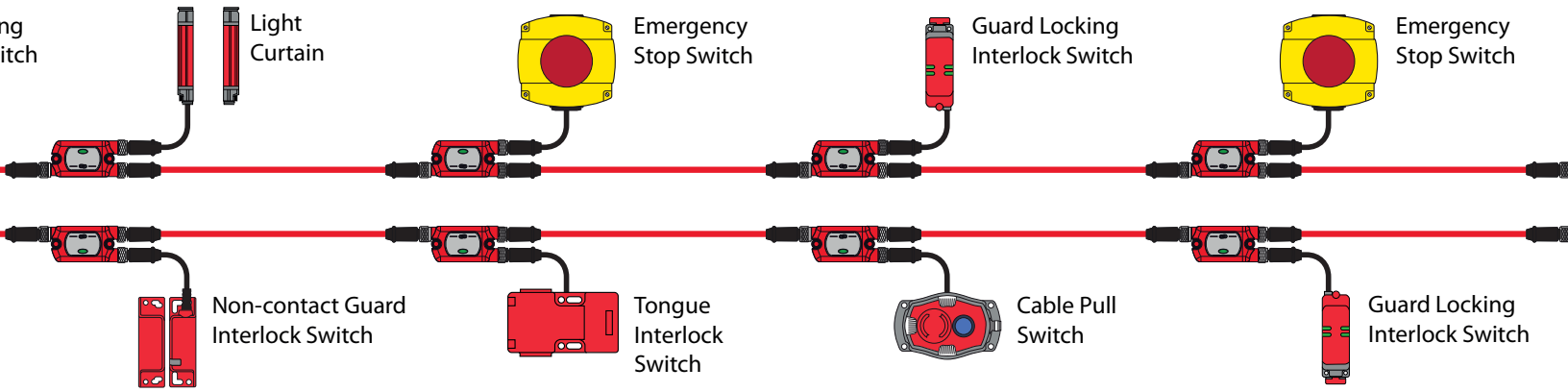
The GSR DG - Dual GuardLink Safety Relay can monitor two GuardLink channels and communicate status information for each safety input device via the EtherNet/IP Network Interface.

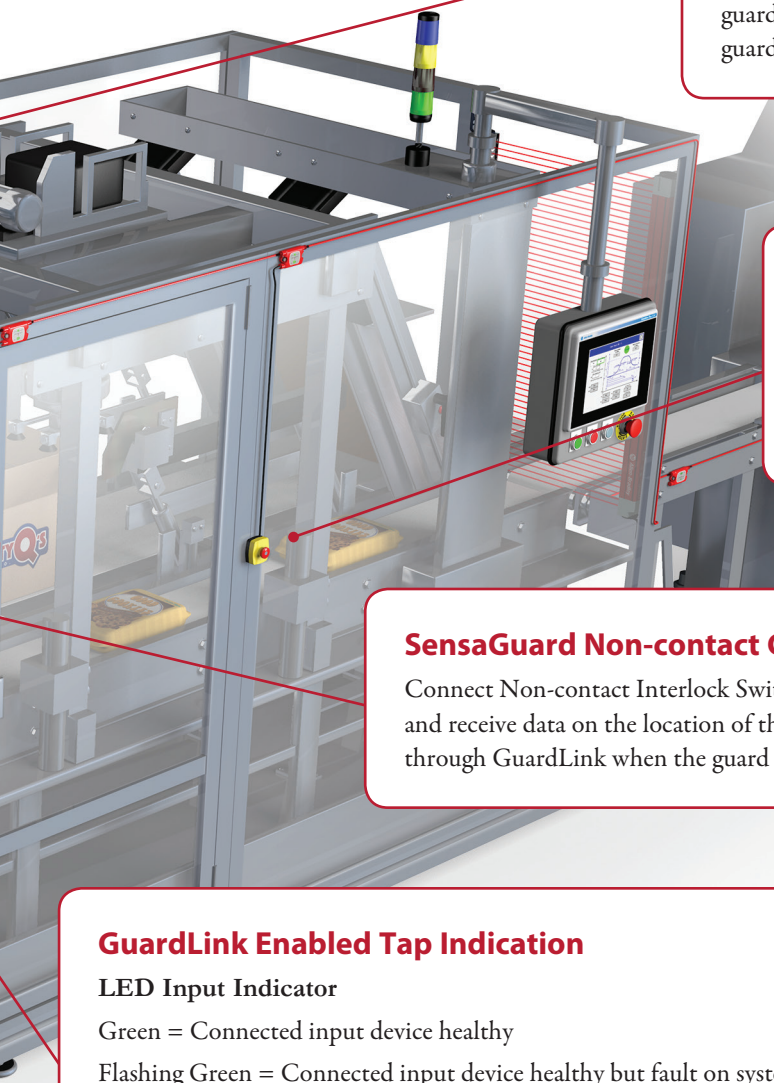
Lifeline 5

Connect a Lifeline™ 5 Cable Pull Switch to get the location of the device and rope tension status to avoid nuisance trips from occurring when operated.



Note: Rockwell Automation or 3rd party devices can be connected to the GuardLink device level safety linking technology.





440G-LZ Guard Locking Interlock Switch

Guard Locking Switches lock/unlock signals can be provided, giving the devices current state and specific location within the system. Individual indication of the guard doors state including guard open, guard closed, guard locked or guard unlocked can also be provided.

800F Emergency Stop Pushbutton

Connect Emergency Stop Pushbuttons to a GuardLink enabled tap quickly and simply via an M12 connector. Get information on its location when the device is operated.

SensaGuard Non-contact Guard Interlock Switch

Connect Non-contact Interlock Switches to a GuardLink enabled tap and receive data on the location of the switch and any fault conditions through GuardLink when the guard door is opened or closed.

GuardLink Enabled Tap Indication

LED Input Indicator

Green = Connected input device healthy

Flashing Green = Connected input device healthy but fault on system

Red = Trip on connected input device

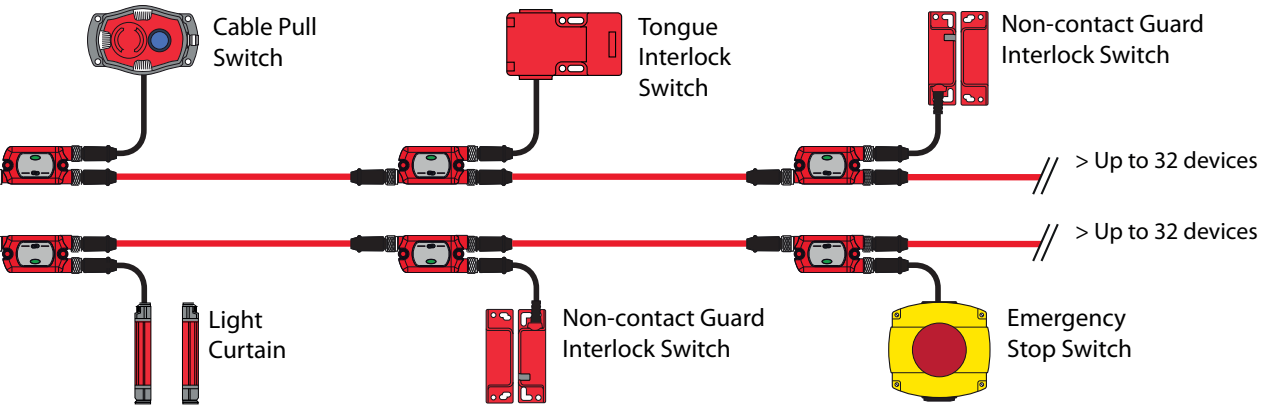
Flashing Red = Connected input device has not performed correctly

LED Link Indicator

Green = Operational

Red = Tripped

Flashing Red = Faulty tap



ORDERING DETAILS

PRODUCT	DESCRIPTION
	Safety Relay, EtherNet/IP Network Interface and cable to the first GuardLink enabled tap
440R-ENETR	EtherNet/IP™ Network Interface
440R-DG2R2T	Guardmaster™ Safety Relay Dual GuardLink
889D-F4NE-*	Replace * in order number with 2, 5, 10, 15, 20 or 30 for required cable length in Meters
	GuardLink enabled taps and cables to connect between the taps
400S-SF5D	5 Pin GuardLink enabled tap for use with 5 pin electronic safety input devices
440S-SF8D	8 Pin GuardLink enabled tap for use with 8 pin electronic safety input devices
440S-MF5D	5 Pin GuardLink enabled tap for use with 5 pin electromechanical safety devices
440S-MF8D	8 Pin GuardLink enabled tap for use with 8 pin electromechanical safety devices
889D-F4NEDM-**	Replace ** in order number with 0M3, 0M6, 1, 2, 5, 10, 15, 20 or 30 for cable length in Meters (0M3 =300mm, 0M6=600mm)
	Connection cables from the GuardLink enabled taps to the input devices
889D-F5NCDM-***	Replace *** in order number with 0M3, 0M6, 1, 2, 5 or 10 for cable length in Meters (0M3 =300mm, 0M6=600mm)
889D-F8NBDM-***	Replace *** in order number with 0M3, 0M6, 1, 2, 5 or 10 for cable length in Meters (0M3 =300mm, 0M6=600mm)
	Accessories
898D-418U-DM2	Terminator for last GuardLink enabled tap
440S-GLTAPBRK1	GuardLink enabled tap mounting bracket - QTY 1
440S-GLTAPBRK5	GuardLink enabled tap mounting bracket - QTY 5

NEXT GENERATION OF MACHINERY SAFETY DEVICES

440G-LZ Guard Locking Interlock Switch

The 440G-LZ Guard Locking Interlock Switch is designed for partial body access guard doors. This switch combines microprocessor technology with an RFID coded actuator and features a locking bolt drive mechanism that locks only when the correct actuator is detected. The switch is TÜV certified to PLe, Cat. 4 (ISO 13849-1) which is the highest level of safety for guard door position and lock monitoring.

450L GuardShield POC Safety Light Curtain

This next generation light curtain system features a patented transceiver technology. The functionality of a pair of 450L GuardShield™ safety light curtains can be selected by inserting plug-in modules. Once powered up, the transceiver learns its functionality from the plug-in module and begins operating as a transmitter or a receiver. A selection of plug-in modules are available offering different functions. This greatly reduces stock and provides a flexible, cost-effective safety solution that is ideal for hand and finger detection.

NEXT GENERATION OF MACHINERY SAFETY DEVICES

Lifeline 5 Cable Pull Switches

The 440E Lifeline™ 5 Cable Pull Switches are microprocessor-based solutions that bring advanced features and diagnostics that help enhance safety and improve productivity. These switches offer features and functions that simplify setup and allow for more efficient maintenance and troubleshooting.

SensaGuard Non-contact Interlock Switches

The SensaGuard™ Non-contact Interlock Switches feature the latest generation of RFID technology for coding and inductive technology for sensing. These switches have a large sensing range and tolerance to misalignment. They are cost-effective solutions for a wide range of industrial safety applications.

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