

Key Features

- Hinged door option allows easy installation and access
- Straightforward installation new or retrofit
- Facilitates regular proactive maintenance inspections
- Provides early warning of conveyor or elevator belt misalignment
- Protects employee safety, plant machinery and prevents unscheduled downtime
- Five unique cutout styles



Description

Electro-Sensors, Inc. offers a wide variety of alignment rub blocks for the monitoring of belt alignment. The options include both wired and wireless options as well as fixed, adjustable, and hinged door options. Each option include a brass surface area for detection of misaligned equipment.

Principle of Operation

Electro-sensors alignment rub blocks are mounted along the conveyor belt that needs to be monitored for misalignment. The rub block assemblies are mounted so that the brass surface area is in-line with the edge of the conveyor belt. When the belt wanders it then rubs up against the brass block. The contact with the belt creates friction and heat that the sensor in the brass block records as a rise in temperature. In the case of HazardPRO™ rub block assemblies, there is a wear detect feature. This functionality will send an alert if the brass is worn too thin, eliminating the need to continuously check the brass block.

After a brass block has worn through it must be replaced. The Rub Block Door Assemblies are all capable of having the brass piece easily replaced. The options using a 3/8-16 thread can be replaced individually from the brass block but the options with a attached sensor need to have the whole assembly replaced after the brass wears out.



Any Rub Block Assembly with a threaded Sensor can have the brass block replaced separately



Rub Block Assemblies have Replaceable Brass Blocks that can be replaced apart from the Door or Fixed Mount.



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Alignment Rub Blocks

Brass Rub Block Alignment Assemblies

Rub Block Assembly Options

| Model | Classification | Brass Type | Door/Fixed |
|------------------------------------|--------------------------------------------------------------------------------|------------------------------------------------|-----------------------------------------|
| Standard Rub Block Door Assembly | Universal (fits 3/8-16 UNC threaded sensor) | 2"x4" brass Block 4" circle Compatible | Hinged door |
| Adjustable Rub Block Door Assembly | Universal (fits 3/8-16 UNC threaded sensor) | 4"x5" brass block | Hinged door with adjustable brass block |
| Uni-Strut Rub Block Assembly | Universal (fits 3/8-16 UNC threaded sensor) | 4.63"x3.63" brass block | Attachment to Uni-Strut |
| Threaded Snout Rub Block Door | Threaded snout to house a threaded sensor utilizing 3/8-16 sensor body threads | 2"x4" brass Block 4" circle Compatible | Hinged door |
| Retrofit Rub Block | Universal (fits 3/8-16 UNC threaded sensor) | 1 piece Brass circle (2" belt contact area) | Fixed (4 mounting bolt holes) |
| HazardPRO™ Fixed Rub Block | Built-In HazardPRO™ Cable with wear-detect (PUR or ARM) | 2" brass Circle | Fixed (6 mounting Bolt Holes) |
| HazardPRO™ Rub Block Door | Built-In HazardPRO™ Cable with wear-detect (PUR or ARM) | 2" brass Circle | Hinged door |

Universal Rub Block Assemblies



Standard Hinged Rub Block Door Assembly - 800-002800
Designed for installation on most elevators and conveyors and allows for quick and easy inspection of belts and replacement of worn rub blocks saving time and promoting regular maintenance inspections. Available with 2"x4" brass block and modified 2"x4" block for 4" round cutouts.



Adjustable Rub Block Door Assembly - 800-003000
Designed for installation in difficult to monitor locations such as equipment with frames that interfere with optimum sensor mounting. This assembly has a hinged door with slots for adjusting the rub block and sensor. After adjusting the rub block, it can slide approximately one inch into its sensing position to align closely to machine walls.



Strut Channel Rub Block Assembly - 776-001200
Designed for installation on open conveyors, the brass rub block is mounted on the side of the door facing the belt and strut channel can be directly connected to the other side. This assembly allows easy vertical and horizontal adjustment of the rub block for proper belt misalignment monitoring. No need to fabricate expensive and time consuming custom mounting brackets.



Snouted Rub Block Door Assembly - 800-002803
The Snouted Rub Block Door has a threaded sensor housing that provides a connection for 1/2" liquid tight conduit. The snout runs down to the 3/8-16 threaded opening in the brass for the sensor to be connected to the brass block. Available with 2"x4" brass block and modified 2"x4" block for 4" round cutouts.



Optional: compatible with 4" Round Rub Block for 4" circular cutout.



Round 2" Rub Block Assembly - 800-004400

For installations with electro-sensors temperature sensors where a 2" hole has been drilled.



HazardPRO Polyurethane (PUR) Rub Block - 775-007054

HazardPRO belt alignment sensors connect directly to the transmitter Node as an integral part of the wireless hazard monitoring system. This is an integral assembly without a replaceable brass wear block. The HazardPRO Rub Block assemblies feature "Wear Detect" which will alert the system should the sensor reach a critical wear level.



HazardPRO Stainless Steel Jacket (ARM) Rub Block - 775-007055

HazardPRO belt alignment sensors connect directly to the transmitter Node as an integral part of the wireless hazard monitoring system. This is an integral assembly without a replaceable brass wear block. The HazardPRO Rub Block assemblies feature "Wear Detect" which will alert the system should the sensor reach a critical wear level.



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Alignment Rub Blocks

Brass Rub Block Alignment Assemblies

Standard Rub Block Door Compatible Products

| Model | Part Number | Approvals (NRTL) |
|------------------------------------|-------------|-----------------------------------------------------------------|
| TT420S-LT (1/2 in, c, straight) | 800-001524 | Class II Div 1 Grp E,F,G; Class III Div 1 (Dust-Ignition Proof) |
| TT420S-LT (1/2 in, c, right-angle) | 800-001527 | Class II Div 1 Grp E,F,G; Class III Div 1 (Dust-Ignition Proof) |
| RTDS-LT (1/2 in, c, straight) | 800-001538 | I.S. Class I and II Intrinsically Safe Simple Apparatus |
| RTDS-LT (1/2 in, c, right-angle) | 800-001556 | I.S. Class I and II Intrinsically Safe Simple Apparatus |
| HazardPRO™ Stud Sensor PUR | 775-007124 | Class II Div 1 Grp E,F,G; Class III Div 1 (Intrinsically Safe) |
| HazardPRO™ Stud Sensor ARM | 775-007125 | Class II Div 1 Grp E,F,G; Class III Div 1 (Intrinsically Safe) |

Rub Block Accessories

Standard/4" Hole Rub Block Door Assemblies - 800-002800 & 800-002804

| | |
|------------------------------------------------------|------------|
| Brass Rub Block 2"X4" with 3/8-16 Tap | 301-000101 |
| Brass Rub Block for 4" Round Opening with 3/8-16 Tap | 301-000107 |
| Gasket Rub Block Door (Black) | 295-001500 |
| Thermal Insulator (Green) | 295-001400 |
| Rub Block Spacer (0.176" Thick) | 776-001000 |
| Rub Block Spacer for 4" Round Opening (0.176" Thick) | 776-001601 |

Adjustable Rub Block Door Assembly - 800-003000

| | |
|-----------------------------------------------------|------------|
| Brass Rub Block for Adjustable Door with 3/8-16 Tap | 301-000102 |
| Gasket Rub Block Door (Black) | 295-001500 |
| Thermal Insulator Slotted Door (Green) | 295-001401 |

Strut Channel Rub Block Assembly - 776-001200

| | |
|---------------------------------------|------------|
| Brass Rub Block 2"X4" with 3/8-16 Tap | 301-000101 |
| Rub Block Spacer 2"X4" (0.176" Thick) | 776-001000 |
| Gasket Rub Block Door (Black) | 295-001500 |
| Thermal Insulator (Green) | 295-001400 |

Threaded Snout Rub Block Assembly - 800-002803

| | |
|------------------------------------------------------|------------|
| Brass Rub Block 2"X4" with 3/8-16 Tap | 301-000101 |
| Brass Rub Block for 4" Round Opening with 3/8-16 Tap | 301-000107 |
| Gasket Rub Block Door (Black) | 295-001500 |
| Thermal Insulator (Green) | 295-001400 |
| Rub Block Spacer (0.176" Thick) | 776-001000 |
| Rub Block Spacer for 4" Round Opening (0.176" Thick) | 776-001601 |

Round 2" Rub Block Assembly - 800-004400

| | |
|---------------------------------|------------|
| Gasket Round Rub Block Retrofit | 295-000100 |
| Brass Rub Block Round Retrofit | 301-000106 |

HazardPRO™ Rub Block Assembly

| | |
|---------------------------------|------------|
| Standard PUR Rub Block Assembly | 775-007054 |
| ARM Rub Block Assembly | 775-007055 |
| O-Ring | 315-000700 |
| Brass Circle Rub Block | 301-000300 |

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