

# PROTECTIVE STOP CONTROL TILT DEVICE



The Safe-T-Tilt device is designed to provide an immediate Protective Stop when excessive tilt is detected, ensuring safe operation in even the harshest industrial environments. Built with durability in mind, the Safe-T-Tilt combines robust mechanical construction with precise detection technology, making it a reliable safeguard for equipment and personnel working under demanding conditions.

This all-in-one safety solution delivers exceptional mechanical resilience, full compliance with international safety standards, and proven field reliability across a wide range of applications. By integrating accurate tilt monitoring with instantaneous shutdown capability, the Safe-T-Tilt reduces the risk of accidents, equipment damage, and costly downtime.

Engineered for critical environments where stability is essential, the Safe-T-Tilt is the ideal choice for industrial operations requiring uncompromising performance. Its ability to respond rapidly to unsafe tilt conditions ensures maximum protection for operators while maintaining operational efficiency.

## SAFE-T-MANUAL

# INSTALLATION, DESIGN, SETTING INSTRUCTION AND TECHNICAL DOCUMENTATION

PLEASE VISIT OUR YOUTUBE CHANEL OR WEBSITE  
FOR MORE INFORMATION



FOR MORE INFORMATION

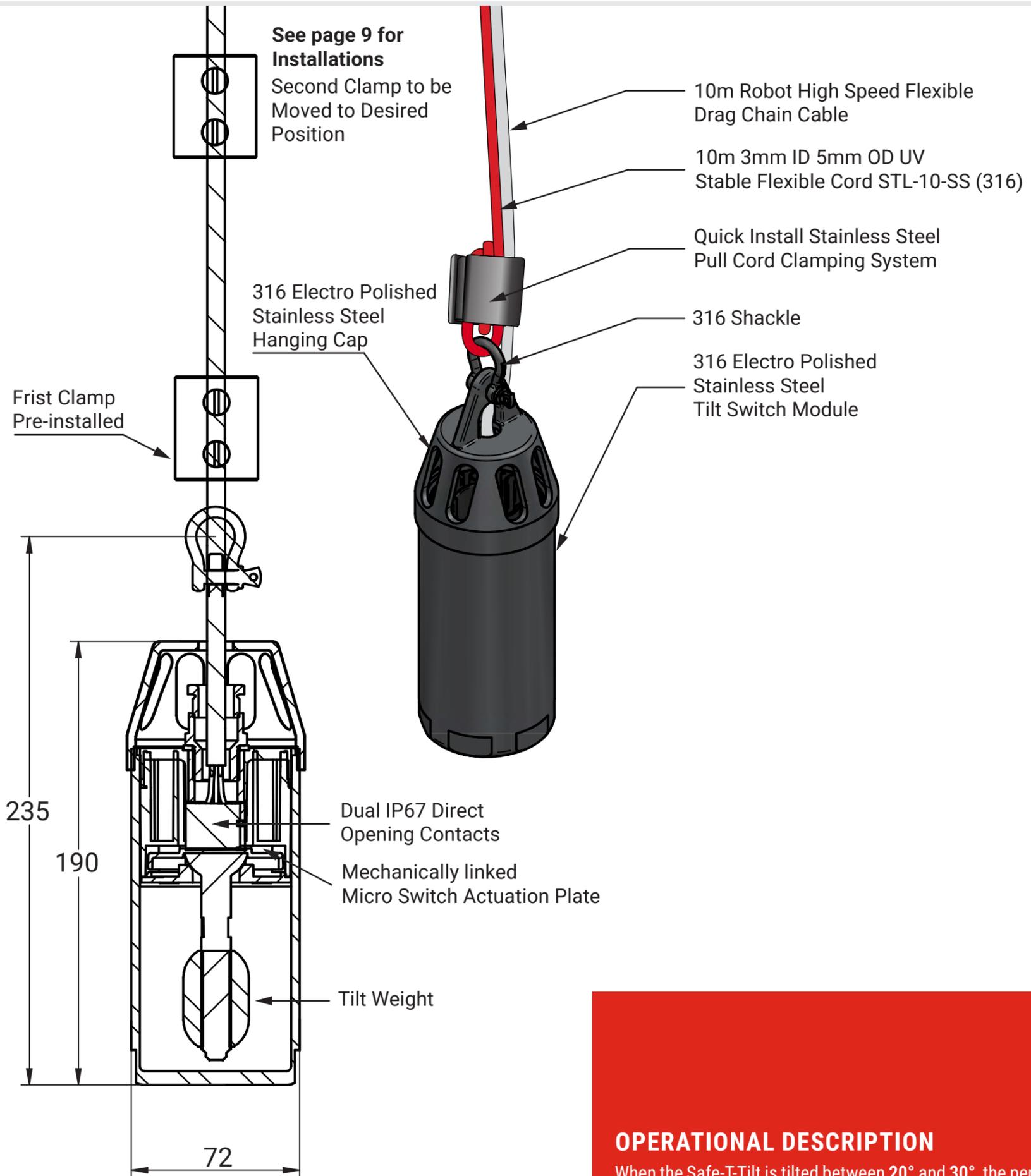
[www.safe-t-products.com.au](http://www.safe-t-products.com.au)



## **INDEX**

- 3** **PROTECTIVE STOP CONTROL TILT DEVICE**
- 4** **TECHNICAL SPECIFICATIONS**
- 5** **DIRECT OPENING ACTION - MICRO SWITCHES**
- 6** **DIRECT OPENING ACTION - MICRO SWITCHES - WIRING DIAGRAM**
- 7** **STP-52K ROPE GRIP IMSTALLATION NSTRUCTIONS - QUICK INSTALLATION**
- 8** **STP-55K ROPE GRIP IMSTALLATION NSTRUCTIONS - RAPID INSTALLATION**
- 9** **CABLE CLAMP**
- 10** **SAFE-T-TILT SIMULATION REQUIREMENTS 20-30 DEGREES**
- 11** **WARRANTY - EFFECTIVE DATE: JANUARY 2025**

## PROTECTIVE STOP CONTROL TILT DEVICE



### OPERATIONAL DESCRIPTION

When the Safe-T-Tilt is tilted between 20° and 30°, the pendulum weight shifts from its neutral vertical position.

This movement mechanically actuates an internal mechanism that engages a Linked Mechanical Function actuator, which in turn forces the Dual Direct Opening Contacts to open.

**This direct mechanical actuation ensures:**

- Fail-safe operation even under fault conditions (e.g., contact welding)
- Simultaneous and synchronized contact separation
- Full compliance with IEC 60947-5-1 Annex K for positive-opening safety contacts.

## TECHNICAL SPECIFICATIONS

### Description:

The device is equipped with dual direct opening contacts, ensuring reliable and fail-safe operation in safety-critical applications. Each contact is mechanically driven to open under actuator force, in full compliance with IEC 60947-5-1 Annex K, ensuring positive mechanical separation-even in the event of contact welding or spring failure.

### Key Characteristics:

PARAMETER	SPECIFICATION
<b>Contact Type</b>	Dual NC (Normally Closed) Direct Opening
<b>Standard Compliance</b>	IEC 60947-5-1 Annex K, GS-ET-15, ISO 13850
<b>Mechanical Linkage</b>	Mechanically linked contacts for synchronised operation
<b>Safety Function Category</b>	Suitable for use in Category 1-4 systems (ISO 13849-1)
<b>Performance Level (PL)</b>	PL d/PL e capable depending on system integration
<b>Function</b>	Ensures consistent and complete contact opening on actuation
<b>Redundancy</b>	Dual- channel contact paths for fault tolerance
<b>Application</b>	Emergency stop switches, pull -cord devices, guard interlocks and Protective Stop Controls

### Operational Benefits:

- Mechanically enforced contact separation, even under harsh conditions or component failure
- Enhances redundancy and diagnostic capability in safety circuits
- Prevents partial activation due to contact failure
- Fully compliant with international safety standards for machine safety protective stop controls and emergency stops.

### Mounting Note:

These contact are pre-fitted within the safety switch mechanism and require no additional configuration during installation.

## ELECTRICAL SPECIFICATIONS

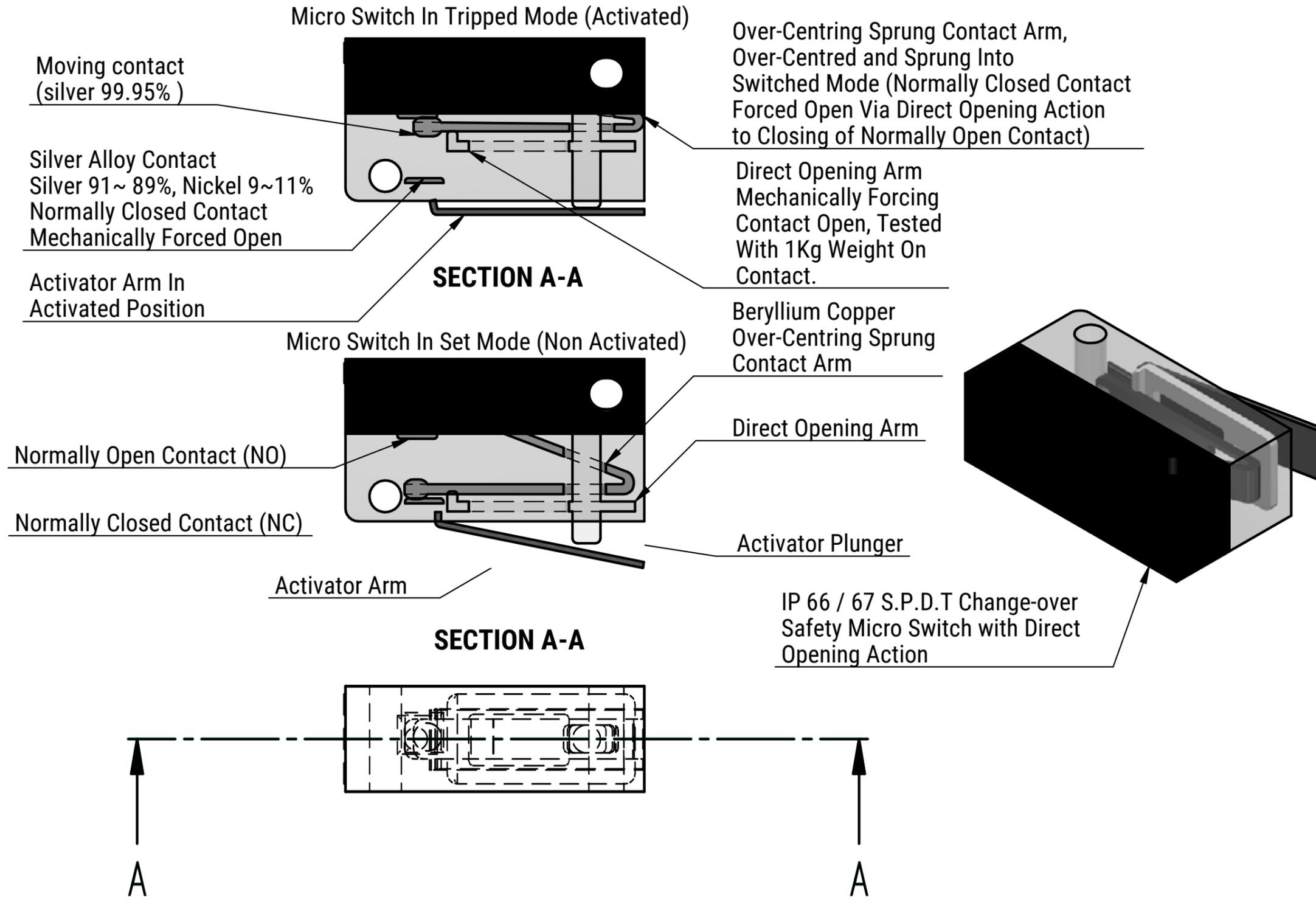
### IP 67 Safety Micro Switch with Direct Opening Action Specifications

IEC 60947-5-1 Annex K classification	Type 1 <input type="checkbox"/> <input checked="" type="checkbox"/> Type 2 Direct Opening
Change-over contact element	C <input checked="" type="checkbox"/> Za <input type="checkbox"/> Zb <input type="checkbox"/>
Contact material	Ag-Ni
Utilization category	AC-15 DC-13
Operational voltage	250 V 60 V
Operational current	1,5 A 0.5 A
Frequency	50/60 Hz -----
Number of electrical cycles	6050 (6 min-1)
Number of mechanical cycles	6050 (6 min-1)
Conventional free air thermal current	10 A
Conventional enclosed thermal current	-----
Operating Temperature	-35° C No Icing +80° C
Specifications (short-circuit with standability)	
Rated conditional short-circuit current	1 000 A
Short circuit protective device	Fuse 6 A gG (IEC 60269-2)

## WIRE SPECIFICATION

### Robot High Speed Flexible Drag Chain Cable Tested For 10 Million Bends

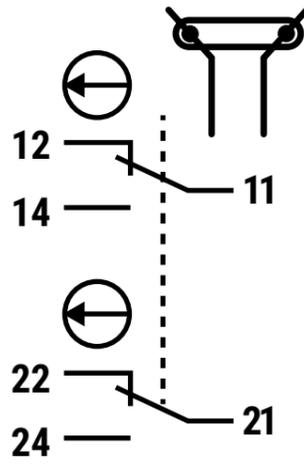
Type	6 X 0.75mm <sup>2</sup>		
Temp	-40°C~105°C	Environment	Rohs
Rate	Voltage	300/500v Current	4.5a
Conductor	Material	Bare Copper	
	Material	Nitrile Polyvinyl Chloride	
Insulation	Average Thickness	0.40mm	
	Diameter	2.2±0.2mm	
	Colour	Red, Blue, Black, Grey, Brown, Orange	
Jacket	Material	Black Nitrile Polyvinyl Chloride	
	Average Thickness	1.2mm	
	Diameter	9.3±0.5mm	
Section View			
Test	Voltage	1500v/5min	Conductor Resistance ≤26Ω/Km At 20° C



## DIRECT OPENING ACTION - MICRO SWITCHES - WIRING DIAGRAM

**SAFE-T-TILT**

ECPGS-071

**IP67 Dual Direct Opening Contacts With Linked Mechanical Function**

All NC Contacts

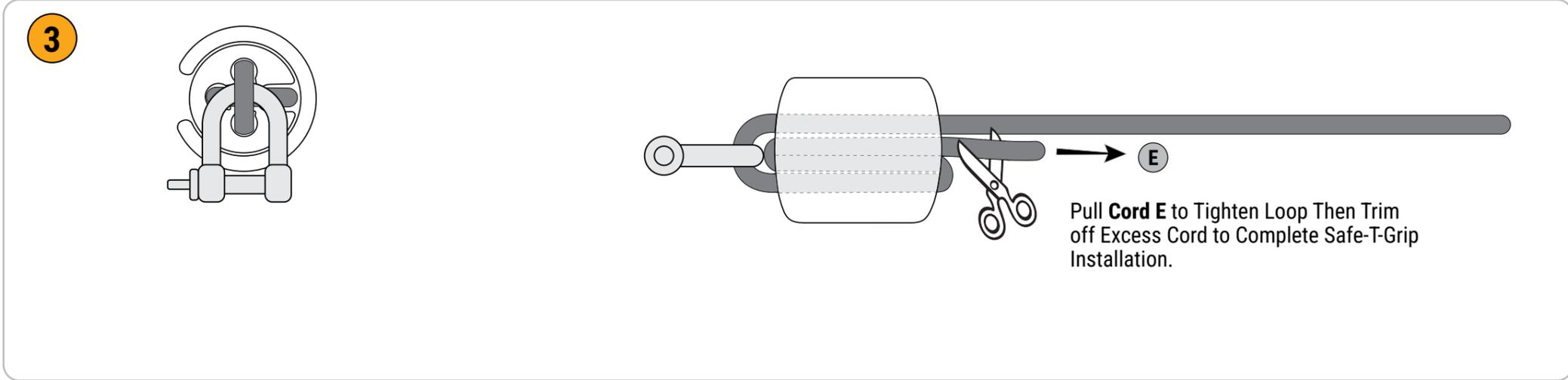
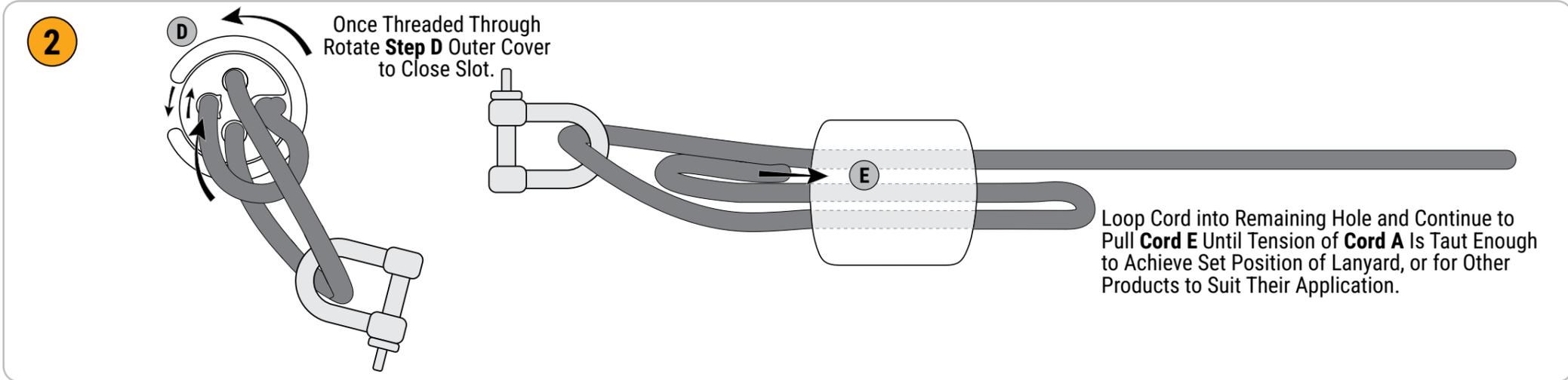
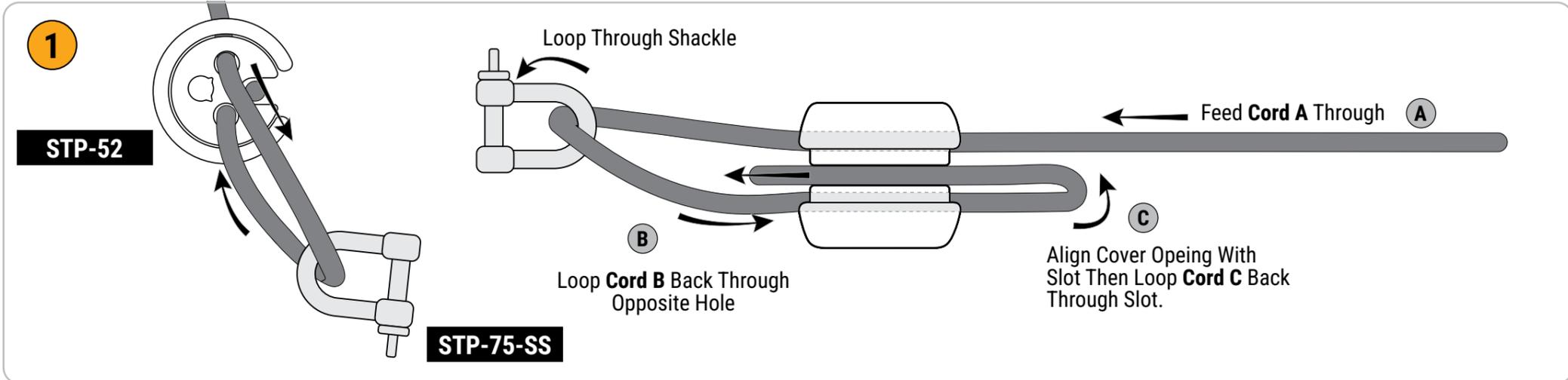
- (NC) 12 Safety Circuit 
- (COM) 11
- (NO) 14
- (NC) 22 Safety Circuit 
- (COM) 21
- (NO) 24

**Tested to IEC 60947-5-1 2016**  
 AC-15 250VAC /1.5A DC-13 60VDC /0.5A

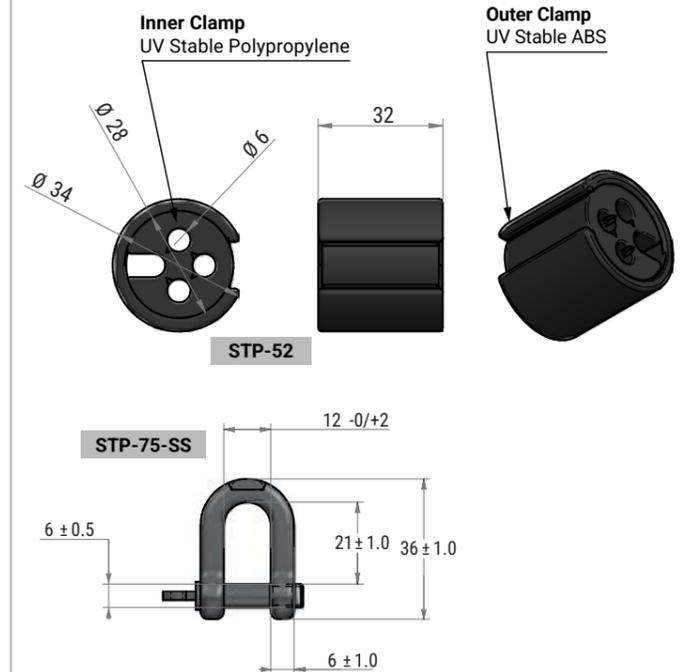
<b>Specifications (short-circuit with standability)</b>	
Rated conditions short-circuit current	1 000 A
Short-circuit protective device	Fuse 6 A 690V gG (IEC 60269-1&2)

# SAFE-T-TILT

Note: Safe-T-Grip Has Been Tested Using 3MM ID PU Coated Wire Cord. To review test results please scan QR Code see document Reference: 20240509-001



## PLASTIC PULL CORD GRIP SPARE PARTS



USE ON 3MM ID 5MM OD PU COATED PULL CORD

## SAFE-T-TILT ROPE GRIP INSTALLATION INSTRUCTIONS - QUICK INSTALLATION

BACK TO INDEX



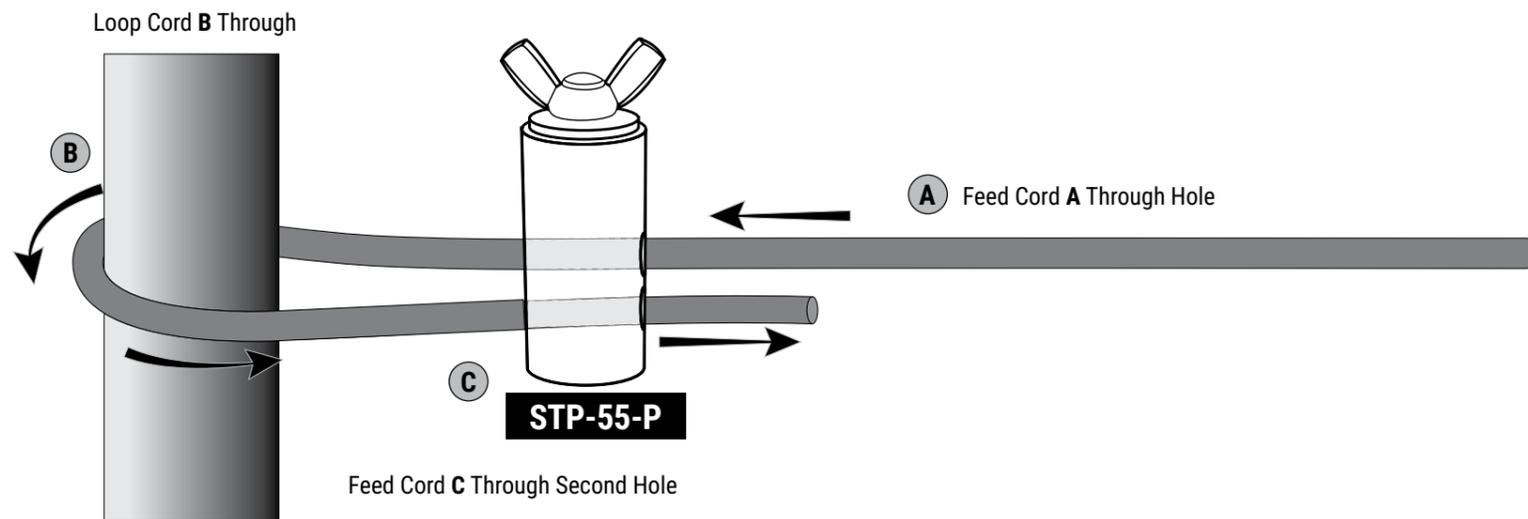
ACN: 060 617 987  
www.safe-t-products.com.au

# SAFE-T-GRIP

Note: Safe-T-Grip Has Been Tested Using 3MM ID PU Coated Cord. To review test results please scan QR Code see document Reference: 20240516-002



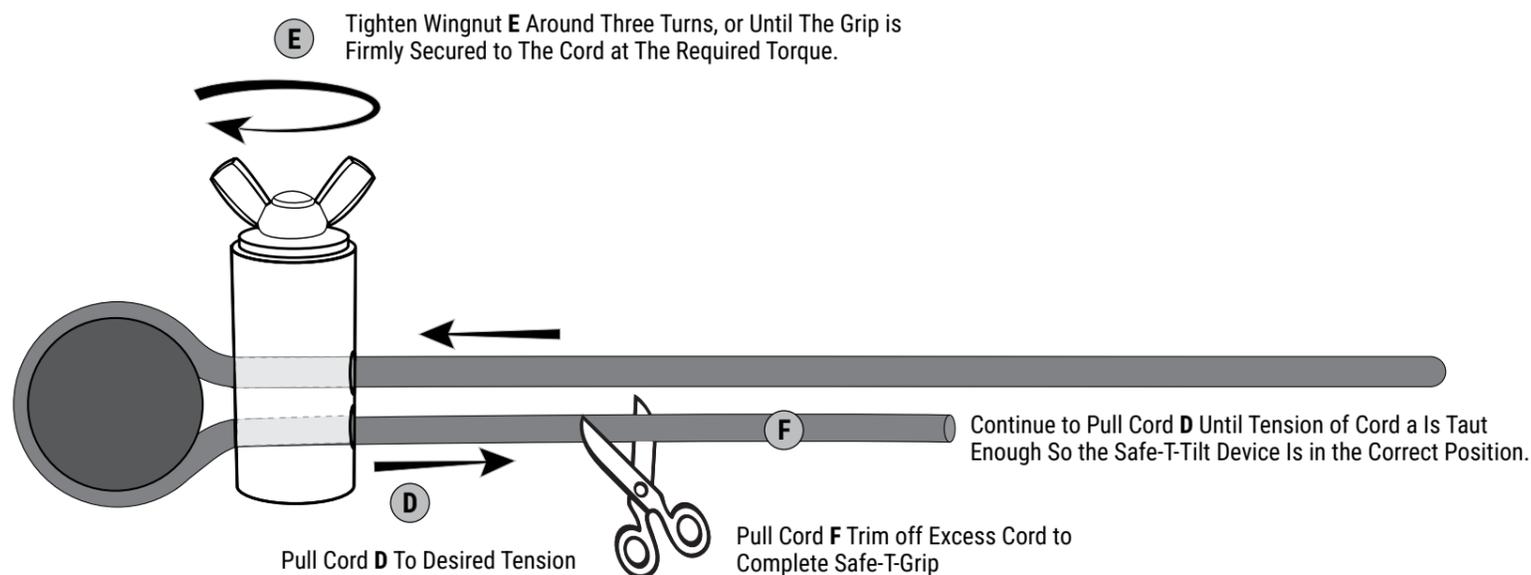
1



## STP-55-P CORD CLAMPING SYSTEM



2



USE ON 3MM ID 5MM OD PU COATED PULL CORD

## STP-55-P ROPE GRIP INSTALLATION INSTRUCTIONS - RAPID INSTALLATION

[BACK TO INDEX](#)

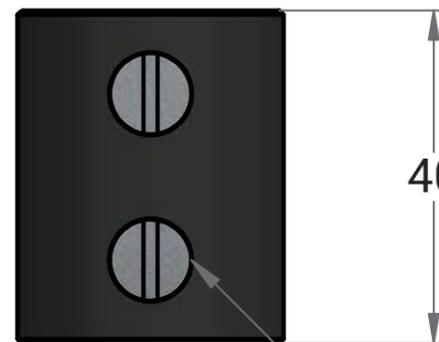


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# SAFE-T-TILT



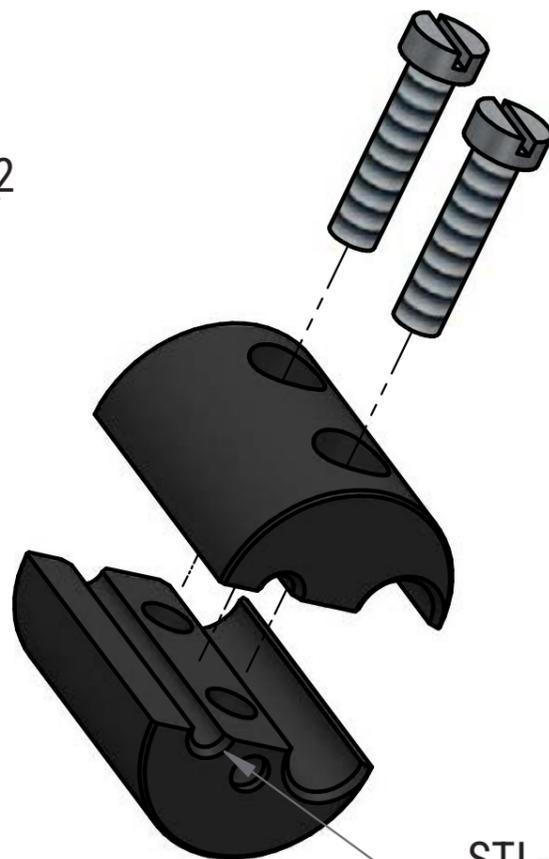
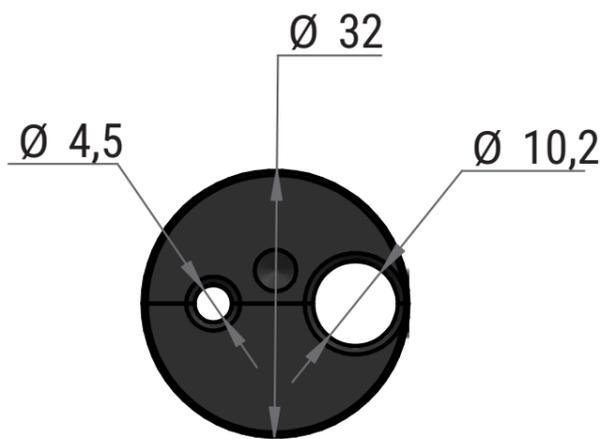
M6 Nyloc Nut 304



40

M6 x 25 Cheese Slot Screw 316

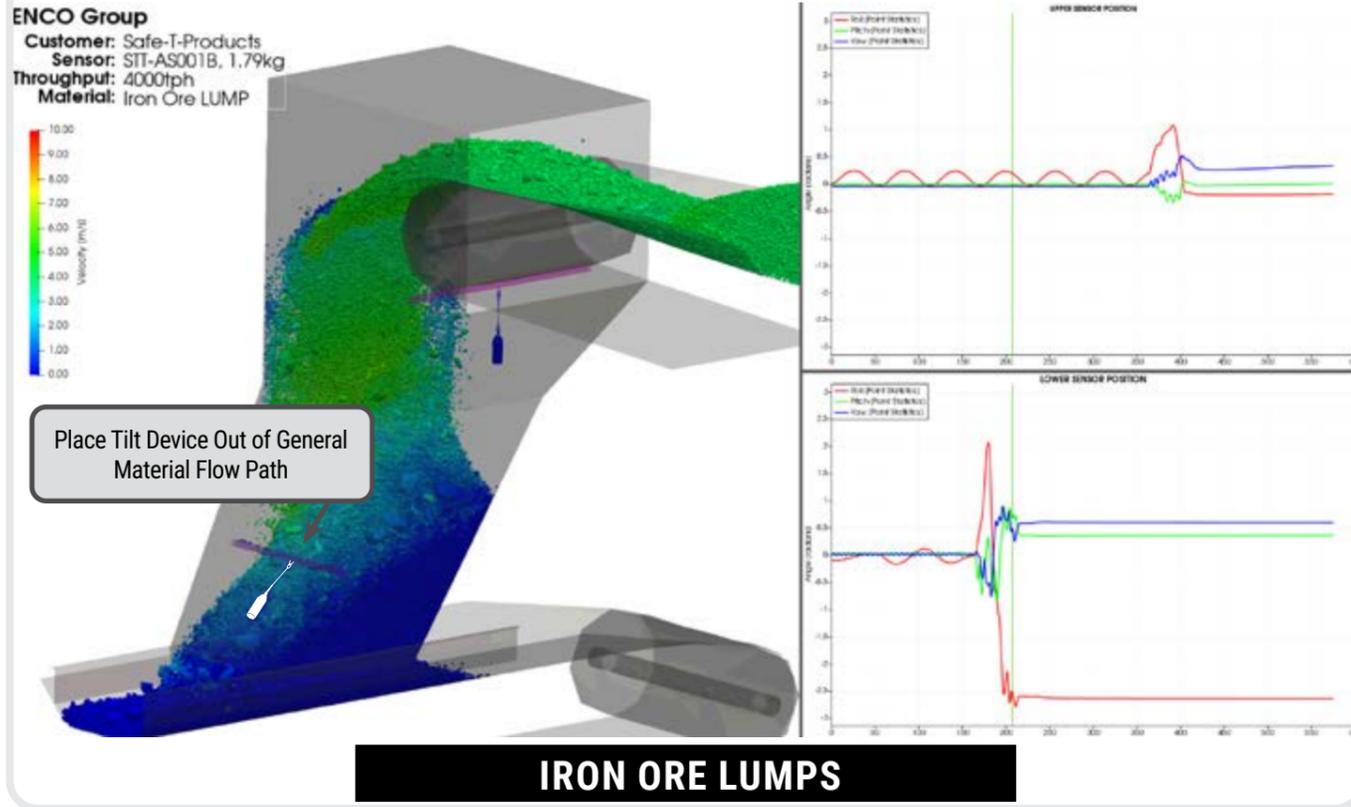
Black Control Cable Flows Through This Section



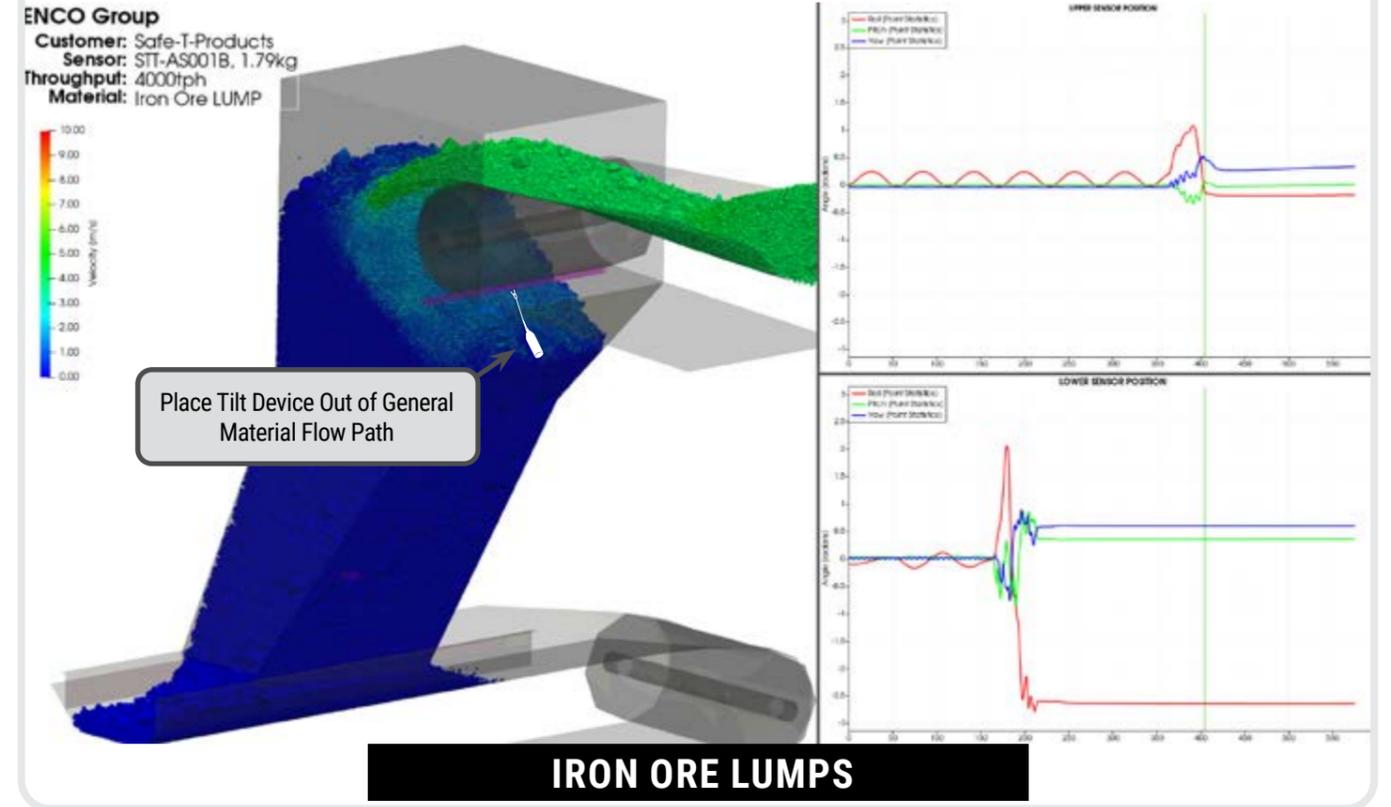
STL-10-SS Clamps Into This Section



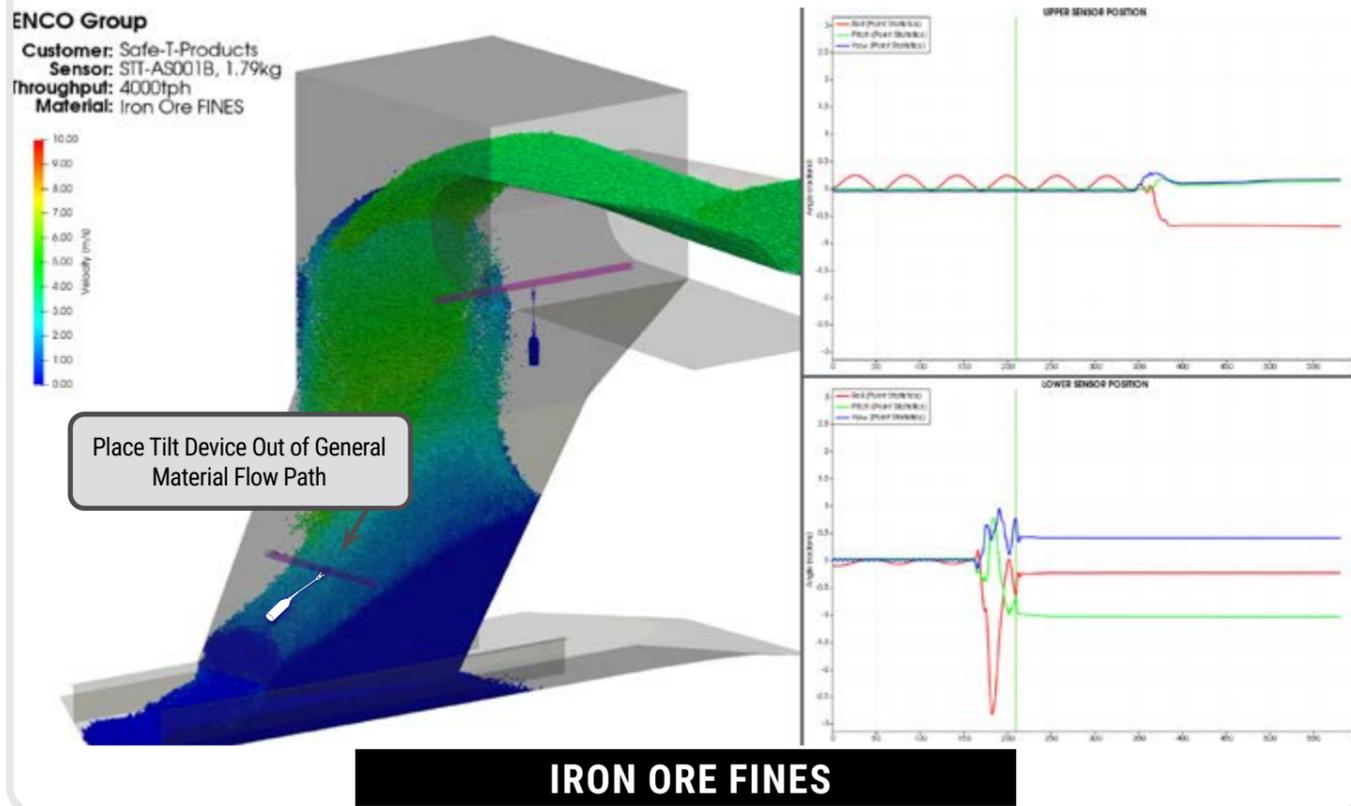
### OPTIMAL MOUNTING POSITION - EARLY DETECTING



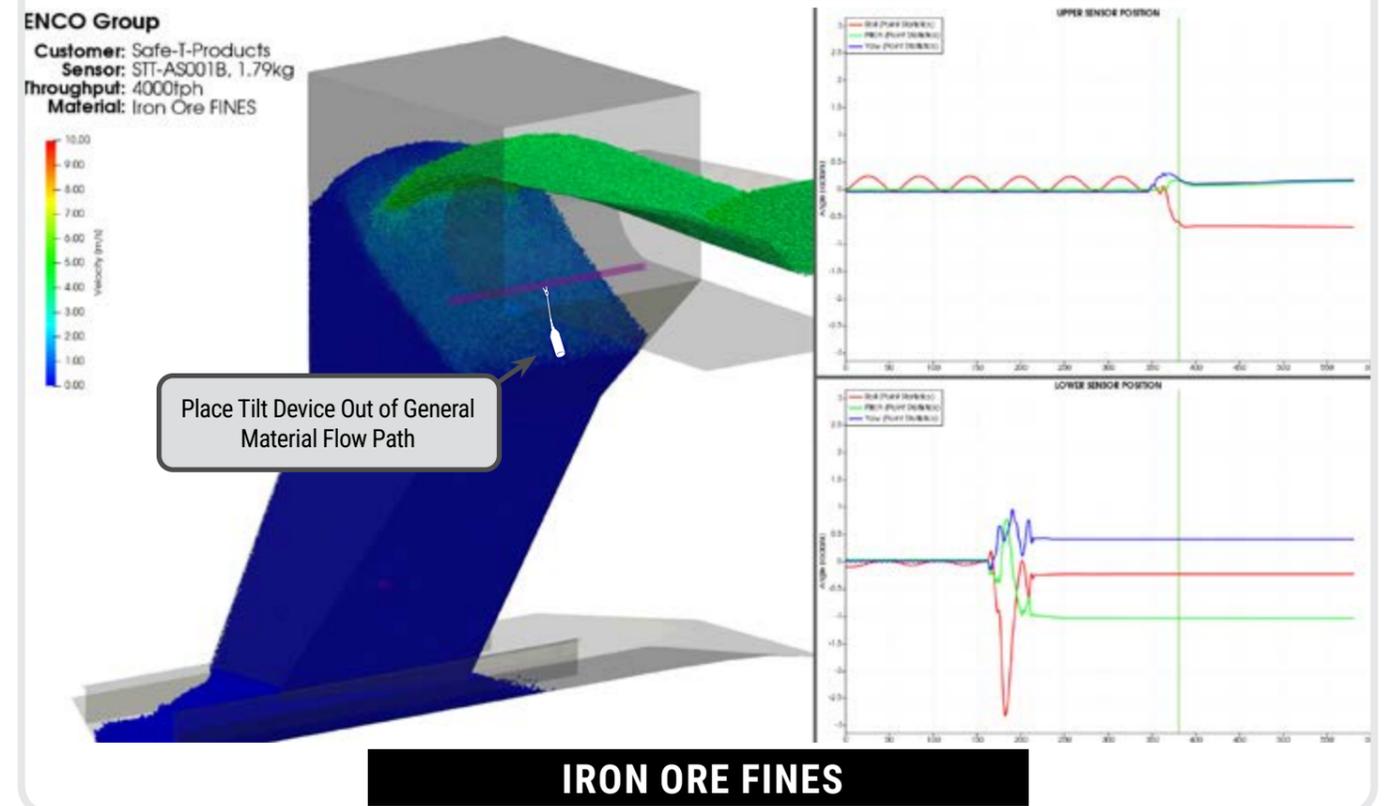
### LATE DETECTION POSITION - OVERFLOW MAY OCCUR



### OPTIMAL MOUNTING POSITION - EARLY DETECTING



### LATE DETECTION POSITION - OVERFLOW MAY OCCUR



## WARRANTY - EFFECTIVE DATE: JANUARY 2025

### OVERVIEW

Safe-T-Products of Perth, Western Australia, is dedicated to designing and manufacturing premium emergency stop and protective stop devices. As part of our commitment to customer satisfaction and compliance with Australian Consumer Law, we offer this warranty to ensure confidence in the quality and performance of our products.

### WARRANTY PERIOD

Safe-T-Products warrants its products for a period of **Twenty-Four (24) months** from the date of manufacture, unless otherwise specified. For this warranty to remain valid, all warranty claims must be initiated, and defective goods received by Safe-T-Products or its authorised distributors, within the warranty period.

### AUSTRALIAN CONSUMER LAW COMPLIANCE

This warranty provides additional benefits alongside the rights and remedies you are entitled to under Australian Consumer Law.

- Our goods come with guarantees that cannot be excluded under the law.
- You are entitled to a replacement or refund for a major failure and compensation for any other reasonably foreseeable loss or damage.
  - » If the product fails to meet acceptable quality standards but does not amount to a major failure, you are entitled to have the product repaired or replaced.

### WARRANTY COVERAGE

Safe-T-Products warrants that any defective product will, at our discretion, be either repaired or replaced free of charge, subject to the conditions outlined below.

This warranty does not cover:

- Improper use or misuse of the product.
- Failure to follow product instructions or guidelines.
- Repairs, modifications, or alterations not authorised by Safe-T-Products.
- Damage caused by external factors such as accidents, impacts, or exposure to unsuitable environments.

### CUSTOMER RESPONSIBILITIES

Before returning a defective product under warranty, the customer must:

- 1. Contact Safe-T-Products or its authorised distributor to notify us of the defect.**
  - » Email: [admin@safe-t-products.com.au](mailto:admin@safe-t-products.com.au)
- 2. Provide supporting information, including:**
  - » Proof of purchase (invoice or receipt).
  - » Description of the defect and any relevant details regarding its occurrence.

Returned products must:

- Be appropriately packaged to prevent further damage during transit.
- Comply with any specific return instructions provided by Safe-T-Products or its authorised distributor.
- Be accompanied by an advice note clearly stating the nature of the claimed defect.

**Important:** All warranty returns must be sent at the customer's expense. Safe-T-Products will not cover freight costs for products returned under warranty.

### INSPECTION AND RESOLUTION

Upon receipt of the returned product:

- Safe-T-Products or its authorised distributor will inspect and evaluate the defect.
- If the defect is confirmed, we will, at our discretion, repair or replace the product.
  - » Replacement products become the property of the customer upon delivery, and defective products become the property of Safe-T-Products.
  - » A new warranty period begins on the date the repaired or replaced product is manufactured.

### WARRANTY EXCLUSIONS

This warranty does not cover:

- Normal wear and tear.
- Cosmetic damage that does not affect product functionality.
- Losses, costs, or damages beyond the replacement or repair of the product itself.

### EXTENDED WARRANTY AND SPECIFIC PRODUCT COVERAGE

Certain Safe-T-Products devices may come with extended warranty periods or additional terms specific to the product. In such cases, the extended period or terms will be indicated at the time of purchase.

### COMMITMENT TO QUALITY AND SAFETY

Safe-T-Products is ISO 9001 certified, ensuring our products are designed and manufactured to the highest standards. All devices undergo rigorous testing to meet relevant Australian and international safety standards, including ISO 13850, AS/NZS 4024 and IEC 60947.5.5

Our emergency stop devices are designed to minimise risk and enhance safety. In the unlikely event of failure, our products are engineered to place systems into a safe mode until repairs or replacements can be completed.

### CONTACT INFORMATION

If you have any questions regarding this warranty or require further assistance, please contact us:

Safe-T-Products

Email: [admin@safe-t-products.com.au](mailto:admin@safe-t-products.com.au)

Location: Perth, Western Australia