

# SAFE-T-PULL®

CE Conformity

Switch features 3 Independent positive drive mechanisms and IP 67 Rated S.P.D.T Change-over Safety Micro Switches with Direct Opening Action for high safety performance, enclosed in an IP 66/67 flame retardant high impact enclosure.

Yellow trip indication flag and plastic pull wire set up gauge supplied with all switches.



Tested to

## IP66/67



Made in Western Australia

The **SAFE-T-PULL** Pull Wire Switch has been tested to the requirements of IEC 60947-5-5 and AS4024.

Tripping occurs under the following conditions:-

- (a) One or both trip wires are removed or cut/broken
- (b) One or both trip wires are overtensioned
- (c) One or both trip wires are activated
- (d) Manual trip via reset knob.

The switch cannot be reset unless both trip wires are attached and correctly tensioned, Manual reset via the external reset knob is required after a trip has occurred.

### FEATURES

- Tamper Proof Switch Plate Mechanism.
- Every Switch is individually, electrically and mechanically tested with Test Certificates available.
- Absolute simplicity in initial setup and adjustment. All Set Point adjustments are done from the outside of the enclosure.
- UV stable high impact robust non-metallic enclosure.
- Simple design ensures low maintenance.
- Stainless steel internal compression type springs.
- Electro polished 316 stainless steel pull rods and mounting feet.
- Pull rods have spring loaded external dust protecting boots so the pull rod is always covered for extra seal protection and pull rods are not exposed to contaminants.
- Double lip oil seals on pull rods and reset operator for secure dust and weather protection to IP 66 / 67.
- Non-metallic pull rod bushings so no electrolysis issues between the safety mechanism (pull rod) and bushing. Increasing functional safety.
- Independent positive drive pull rod cams, switch plate mechanism and lid drive cam for 3 fail safe trip mechanisms to ensure the switch will trip and fail to safe.
- Complies to
 

IEC 60947-5-1 Ed 3.1	AS/NZS 60947-5-1:2015	IEC 60947-5-5 Ed 1.1
AS/NZS 60947.5.5:2015	AS/NZS 4024.1-2014	AS/NZS 4024.3610:2015
AS/NZS 4024.3611:2015		
- Internal switch connections are fully shrouded for added safety during inspection.
- IP 67 S.P.D.T Change-over Safety Micro Switches with Direct Opening Action (IEC 60947-5-1 Annex K) in contact element form C tested and passed too IEC 60947-5-1.
- Cam design compensates for pull wire expansion/contraction up to 30mm either side of the set point. Eliminates nuisance tripping due to vibration.
- Pull forces to actuate trip @ 60Nm (6Kg) 90° to pull wire axis and 90Nm (9Kg) along pull wire axis.
- Cam position signal sensing before tripping.

## PULL WIRE SWITCH

# SAFE-T-PULL

## VARIATIONS

- Max 4 IP 67 S.P.D.T Change-over Safety Micro Switches with Direct Opening Action in contact element form C,
- External signal flag (Note: Comes with Switch),
- External light,
- Single sided operation, right hand or left hand,
- Two x M20 stainless steel armoured cable glands.

## INSTALLATION

One centrally mounted switch for every 200m of pull wire. Consult STP-P Safety, Installation, Design and Setting Instruction sheet for recommendations.

## REMOTE END

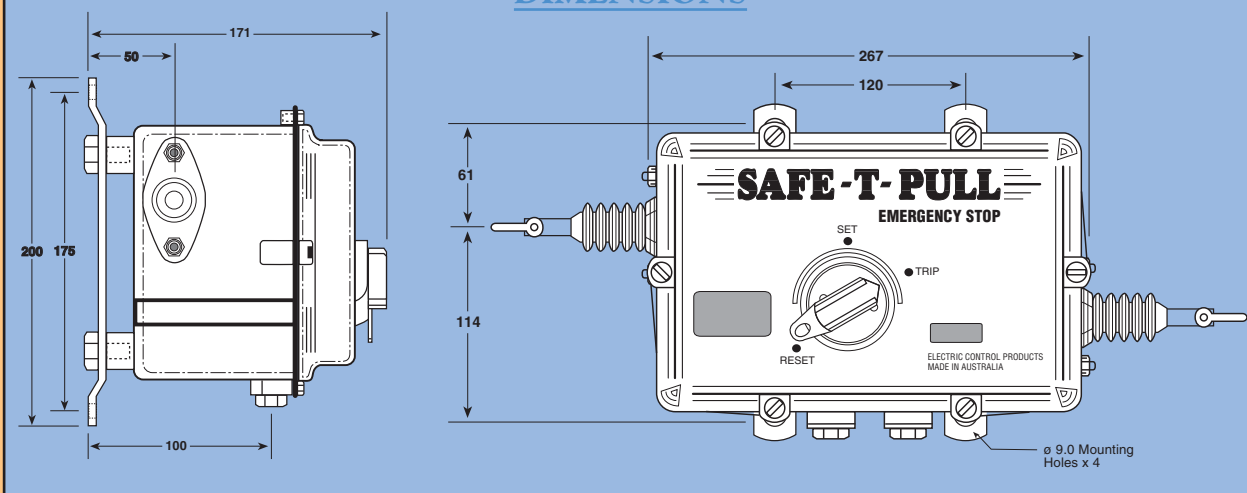
- Matched stainless steel compensation springs for remote end attachment. P/N STP-E60.

To comply with safety critical functions AS/NZS 4024.3610 -2015 section 2.10.5 Emergency Stop. A matched compensation spring must be fitted to the remote end of the Pull Wire to allow tripping in both directions.

## SWITCH SETTINGS

Switch setting is via a turnbuckle from the outside of the switch. No internal access needed to adjust to set point.

## DIMENSIONS



## ORDERING DETAILS

Standard Switch with 316 Stainless Steel mounting feet and 2 IP 67 rated S.P.D.T Safety Micro with Direct Opening Action.....STP-P-2

Standard Switch with 316 Stainless Steel mounting feet and 4 IP 67 rated S.P.D.T Safety Micro Switches with Direct Opening Action.....STP-P-4

Add to above Cat No. for variations:

External strobe light ..... -S number .....

S2 = Red Strobe for 10 – 100V DC 20 – 72V AC Current Use 130-37mA @ Flash Rate = 75fpm  
 S3 = Red Strobe for 90 -125V AC Current Use 30mA @ Flash Rate = 60fpm  
 S4 = Red Strobe for 207 – 253V AC Current Use 15mA @ Flash Rate = 60fpm  
 S6 = Amber Strobe for 10 – 100V DC 20 – 72V AC Current Use 130-37mA @ Flash Rate = 75fpm  
 S7 = Amber Strobe for 90 -125V AC Current Use 30mA @ Flash Rate = 60fpm  
 S8 = Amber Strobe for 207 – 253V AC Current Use 15mA @ Flash Rate = 60fpm

Left hand operation only..... -LH

Right hand operation only..... -RH

Two x M20 stainless steel armoured cable glands..... -ACGS

Matched SS Compensation Spring..... STP-E60

## ENCLOSURE SPECIFICATIONS

- High Impact PBT/PC - Non Corrosive Material.
- U.V Stabilised. (See Plastic Specs Sheet)
- Flame retarded ASTM.UL94.V-0 (1.6mm)
- Resists splash and spillage of most hydrocarbon solvents, mild acids and strong alkali. (See Plastic Specs Sheet)

## ENCLOSURE SPECIFICATIONS

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

IEC 60947-5-1 Annex K classification	<input type="checkbox"/> Type 1	<input checked="" type="checkbox"/> Type 2 Direct Opening
Change-over contact element	<input checked="" type="checkbox"/> C	<input type="checkbox"/> Za <input type="checkbox"/> Zb
Contact material	Ag-Ni	
Utilization category	AC-15	DC-13
Operational voltage	230 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	3 00 A	1 000 A
Short circuit protective device	Fuse 6 A gG (IEC 60269-2)	Fuse 6 A gR (IEC 60269-4)

Manufactured in Australia by:

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**Electric Control**  
PRODUCTS

www.safe-t-products.com.au

Sold by:

# PULL WIRE SWITCH