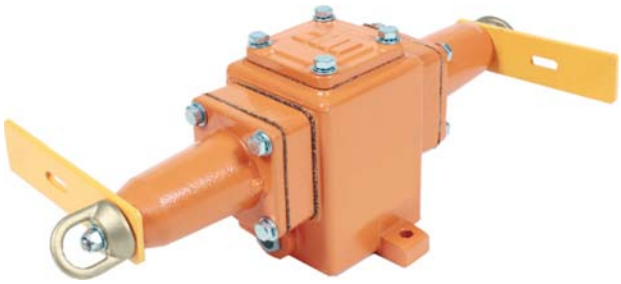
Safe and reliable conveyor belt control, always ready for action

IEC AFU Conveyor Belt Trip Switch



General Operation:

The conveyor trip switch facilitates stopping the conveyor, in the event of an emergency from any point along the entire length of the conveyor, giving safety to physical harm and mechanical damage.

Single End Standard

Description	Catalog Number
Single End Conveyor Trip Switch	**CHW53198**

Double End Standard

Description	Catalog Number
Double End Conveyor Trip Switch	**CHW53197**

Single End Slack Rope

Description	Catalog Number
Slack Rope Single End Conveyor Trip Switch	**CHW53198A**

Double End Slack Rope

Description	Catalog Number
Slack Rope Double End Conveyor Trip Switch	**CHW53197A**

Flashing LED 110/220 VAC

Description	Catalog Number
Flashing LED Light Kit – 110/220 VAC – Amber	**CHW53203A**
Flashing LED Light Kit – 110/220 VAC – Red	**CHW53203B**

Padlock Attachment

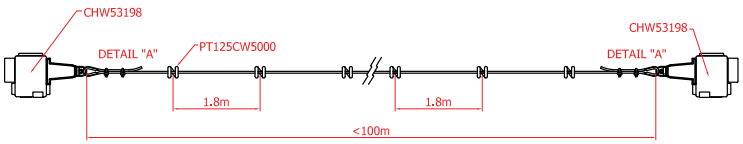
Description	Catalog Number
Padlock Attachment for Conveyor Trip Switch	**CHW53201**

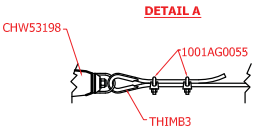
Conveyor Switch Unit

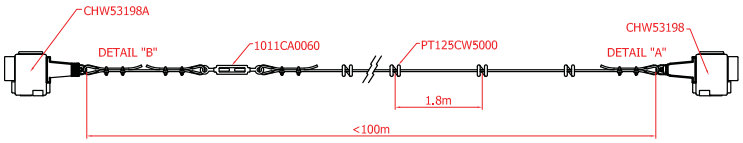
Description	Catalog Number
Switch Unit for Standard Conveyor Trip Switch	**CHW53199**
Switch Unit for Slack Rope Conveyor Trip Switch	**CHW53199A**

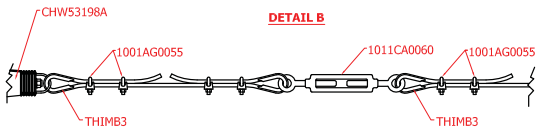
IEC AFU Conveyor Belt Trip Switch

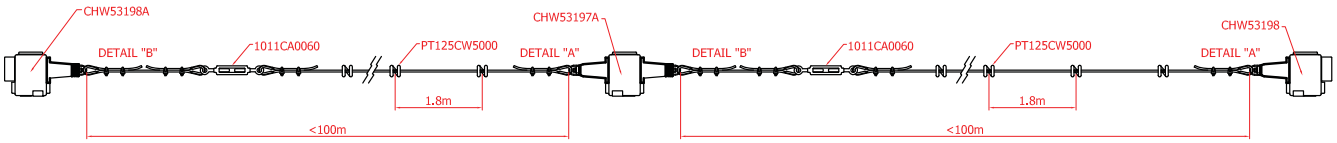
Selection Criteria:



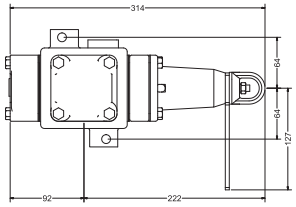




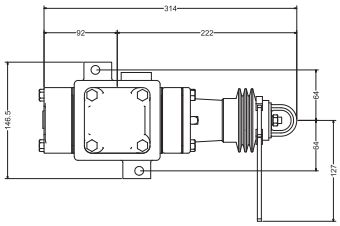




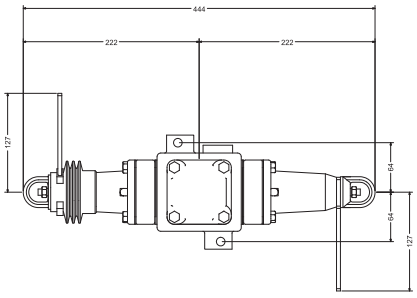
Dimensions (mm):



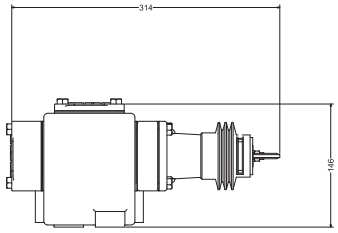
Single End Standard Belt Trip Switch
CHW53198



Single End Slack Belt Trip Switch
CHW53198A



Double End Slack Belt Trip Switch
CHW53197A



Single End Slack Belt Trip Switch
CHW53198A

Technical Details:

Standards	IEC/SANS 60079-0 2005 Ed3					
	IEC/SANS 60079-1 2004 Ed3					
	IEC 60947-5-1					
	Zones 21 & 22					
Mounting	2 Bolts M10					
Ambient Temperature	-20°C to 70°C					
Protection	IP66					
Cable Entry	3 x M20					
Maximum Ampere Rating (A)			**AC**			**DC**
Volts	120	240	480	600	125	250
Make and Emergency Interupting Capacity	60.0	30.0	15.0	12.0	1.1	0.55
Normal Load Break	6.0	3.0	1.5	1.2	1.1	0.55
Continuous Current	10.0	10.0	10.0	10.0	5.0	5.0

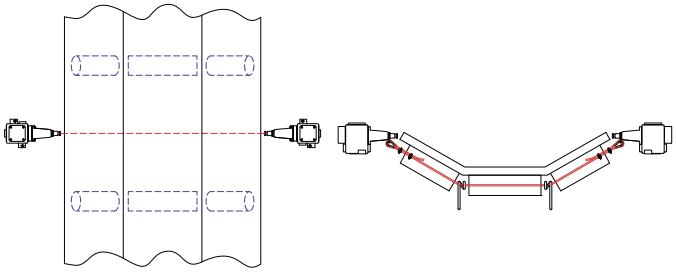
IEC AFT Conveyor Belt Ripped/Torn Switch

General Operation:

The conveyor belt ripped/torn switch is used in conveyor systems to provide a fail-safe stop mechanism for torn or ripped conveyor belts. The rip switches are typically installed just after loading points where belts are more likely to develop tears or rips and at 300 meter intervals on longer conveyors. Once activated, these switches isolate the control circuits of the motors driving the conveyors and other process equipment.

Application Requirement:

Two belt rip switches are required, one on either side of the belt. Between the two switches is a wire rope with two forked keys at either end, which attach to each rip switch. The ripped belt or debris protruding through the belt activates the wire rope spanned below the belt in strategic zones of high risk to ensure quick detection limiting damage to the belt and associated equipment.

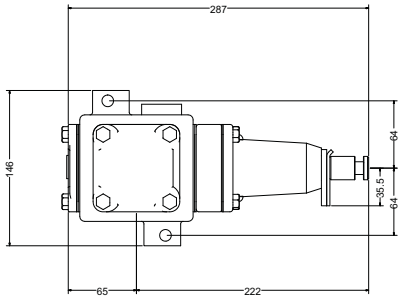


Top View Front View

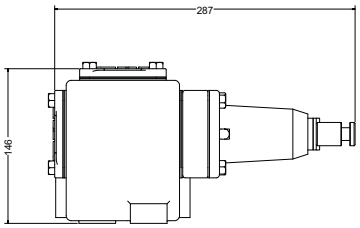
AFT Ripped/Torn Conveyor Belt Switch

Description	Catalog Number
Ripped/Torn Conveyor Belt Trip Switch	**CHW53198B**

Dimensions (mm):



Top View



Side View

Technical Details:

Standards	IEC/SANS 60079-0 2005 Ed3					
	IEC/SANS 60079-1 2004 Ed3					
	IEC 60947-5-1					
	Zones 21 & 22					
Mounting	2 Bolts M10					
Ambient Temperature	-20°C to 70°C					
Protection	IP66					
Cable Entry	3 x M20					
Maximum Ampere Rating (A)			**AC**			**DC**
Volts	120	240	480	600	125	250
Make and Emergency Interrupting Capacity	60.0	30.0	15.0	12.0	1.1	0.55
Normal Load Break	6.0	3.0	1.5	1.2	1.1	0.55
Continuous Current	10.0	10.0	10.0	10.0	5.0	5.0

IEC AFA Conveyor Belt Alignment Switch

General Operation:

The alignment switches are mounted on both sides of conveyor systems to provide a fail-safe mechanism for conveyor belts that have misaligned to the left or right.

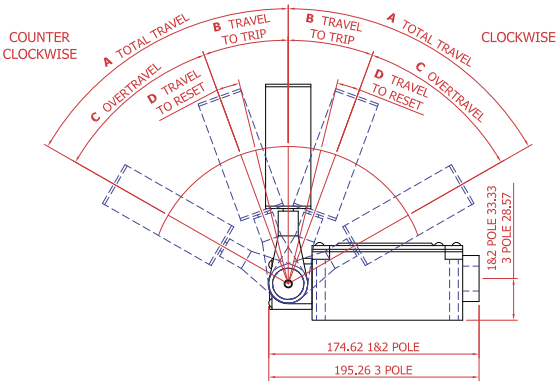
Alignment switches are typically mounted on either side of the header and tail pulleys on all conveyors, after every 300 meters and at every tripper drive on longer conveyor belts.

Once activated, these switches interrupt the control circuits to motors driving the conveyors and other process equipment.

AFA Conveyor Belt Alignment Switch

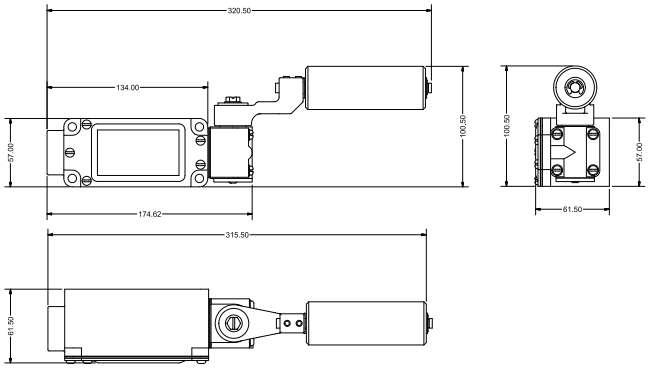
Description	Contacts	Catalog Number
Single Pole Conveyor Alignment Switch	1NO/1NC	**CHW93053**
Double Pole Conveyor Alignment Switch	2NO/2NC	**CHW93058**

Mechanical Details:



	CHW93053	CHW93058
A – Max	60°	65°
B – Trip	17°	40°
C – Overtravel	43°	25°
D – Reset	6°	35°

Dimensions (mm):



Technical Details:

	SANS	IEC
Standards	60529 : 2001 Ed 1.01	60529 : 2001 Ed 2.1
	61241-0 : 2005 Ed 1	61241-0 : 2004 Ed 1
	61241-1 : 2005 Ed 1	61241-1 : 2004 Ed 1
		Zones 21 & 22
Mounting	4 Bolts M6	
Ambient Temperature	-15°C to 80°C	
Protection	IP65	
Cable Entry	1 x M20	
Lever Operation	Spring Return Action	

Electrical Detail	AC				DC		
Volts	110	220	380	550	120	240	600
Single Pole Bin No. 93053							
Max. Make	60A	30A	17.5A	15A			
Max. Break	6A	3A	1.7A	1.2A	2.2A	1.1A	0.4A
Double Pole Bin No. 93058							
Max. Make	40A	20A	12A	8A			
Max. Break	15A	10A	7A	5A	0.5A	0.2A	0.002A

Note: Must be the same polarity on each pole.

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