SMP Group Instrumentation

2024

INSTRUMENTATION

SMP GROUP

Design And Production
Of Technical Equipment

Automation & Control Switches

2024

SMP

GROUP

www.smpir.com

DESIGNED BY:
M.Khodadad 09133252340

SMP is one of the chief leaders in producting various technical equipment and providing consulting service,We work hard to earn our customers trust by delivering exeptional consistent quality and top notch service.With more than three-decades of experience our company is proud of making you feel confident that you are getting the best quality and service available.

Seyed Mohsen Poursaeed

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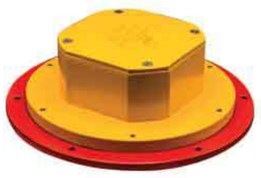

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LIMIT SWITCH

ATEX

MISALIGNMENT

SWITCH TIL100/200/300

In some industrial and factory place, also knows the misalignment switch by the name of drift switch or skew switch.SMP misalignment switch is produced in three type : TIL 100 , TIL 200 , TIL 300.
SMP rugged belt Misalignment switch is used for conveyor installations subjected to specially severe operation conditions.The stainless steel actuating roller is carried in stainless steel ball bearings for improved handling of lateral forces and jerks. The large roller with diameter of 48 mm by stainless steel or aluminum alloy permits use of this device where fast belt speeds prevail. All external parts are either of aluminum alloy or stainless steel has been specially plated .Alarm and trip points are adjusted within 15° and 30° resp.Lighted model is recommended for use in long lines over 100 meters.
The device can be optionally furnished with two parallel cable entries and an internal terminal block to be permitted for further wiring. All external parts are either of aluminum alloy or stainless steel (depends on order) have been specially plated.The actuating roller of aluminum alloy is carried in stainless steel ball bearing for improved handling of lateral forces and jerks.

These switches can be provided with a highly impact-resistant dome light which is visible from distance. Besides, the switches can be easily modified to provide alarm for a particularly prepared part. All basic parts such as bolts, shafts, screws, and springs are made of stainless metal. The switches are provided with 2*SPDT contacts. For reset , the actuating roller is reset by hand.Then the accepted order depends on your product.

SWITCH WITH CONVEYOR ALIGNED IN 3 POSITIONS:

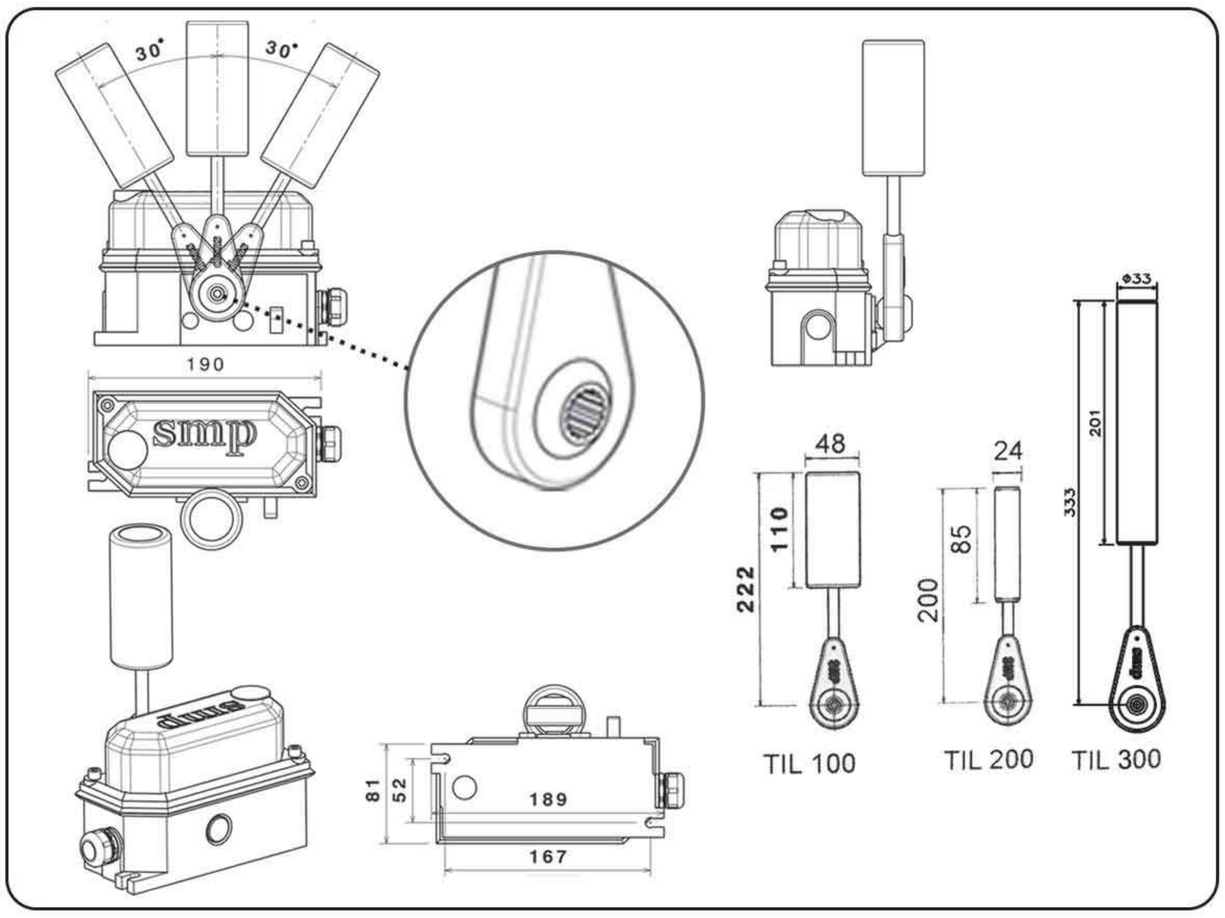
- Horizontal , vertical and 45 degree.
- Ball bearing with conveyor aligned in 90 degree with 5 to 10 cm gap.
- Speed of switching depends upon air distance between conveyor and alignment switch

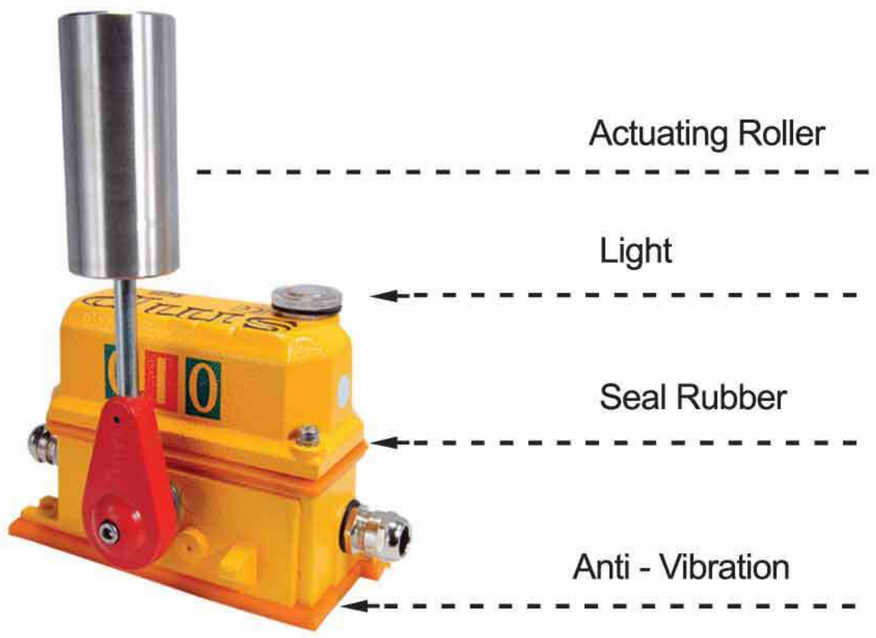
SMP ADVANCED

FEATURES

Research show that switches are mostly damaged by the equipment 's vibration or the break down in installation place, SMP 's special design is the key to the problem ; the lower part of the lever is equipped with internal spling so that the switch will have the better efficacy in unstable situations. Moreover the use of bottom silicon rubber eliminate the vibrations gramatically so that the possible break downs and machine downtime is minimized.
Seal rubbers are made of special silicon which are heat resistant up to 300° c and due to the SMP 's particular design even if the equipment isn't fixed properly by the operator, the switch will be protected againts dust and other particulates, including a vacuum seal, tested against continuous airflow and protection against full immersion for up to 30 minutes at depths between 15 cm and 1 metre. In other words SMP misaleigment switch have IP67 according to EN 60529 standard.

DIMENSIONS (mm)





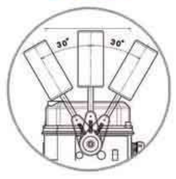
ORDERING CODE

Type | **Contact** | **Connector** | **Operation** | **Light** | **Latching** | **EX**

- **EX** — Designed for use in explosive atmospheres
- **Latching**
  - LCH — Latching Roller Lever

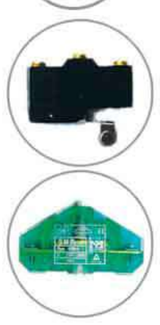
- **Light**
  - H 24 — LED Dome Light 24 volt
  - H 220 — LED Dome Light 220 volt

- **Operation**
  - 15 - 30 — **15** Degree Alarm; **30** Degree trip (Optional) ■



- **Connector**
  - **Type**
    - MF — Metal Flexible Connector
    - MC — Metal Cable Gland
    - PC — Plastic Cable Gland
  - **Size**
    - 13 — PG 13.5 Recommend for use in indoor application
    - 16 — PG 16
    - 20 — M 20
    - 1/2 — 1/2 inch

- **Contact**
  - CH2 — 2 black micro switch: 2NO. / 2NC.
  - CH4 — 4 black micro switch: 4NO. / 4NC.
  - CM4 — 4 Glass micro switch: 2NO. / 2NC. suitable for DC voltage

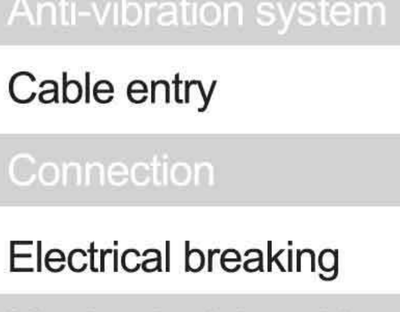


- **Type**
  - TIL 100
  - TIL 200
  - Til 300

For Example: Til 100 | CM4 | PC | 13 | 15-30 | H 220 | LCH | EX

SPECIFICATION

PRODUCT	MISALIGNMENT SWITCH
Device Complies With	VDE 0110
Finish	Burning static, yellow RAL 1028 Burning static, red RAL 3020
Housing	Al , yellow, 1028
Enclosure	Al , yellow, RAL 1028
Actuating Roller	TIL 100, Stainless Steel , 48 mm diam TIL 200, Stainless Steel, 24 mm diam TIL 300, Stainless Steel, 33 mm diam
Mounting	2 x M8 bolt
Admissible Ambient Temperature	-25°C.....+70°
Switch system	2 NO + 2 NC 4 NO + 4 NC (Optional) ■
Reset	With latching / Auto Reset (Optional) ■
Rated Insulation voltage	Ui: 380 VAC, 440 VDC
Rated Operational voltage	Ue: 240 VAC, 250 VDC
Conventional thermal current	16A
Mechanical life	1 million switching cycles
Type	Snap action
Protection	IP 67
Area classification	Hazard Area II 2D EX TC IIB T6
Seal Rubber	Thermal resistance +300°
Anti-vibration system	Silicone rubber
Cable entry	2 x PG 13.5 / 16 PG (Optional) ■
Connection	Max 2.5 mm
Electrical breaking	220 VAC - 24 VDC (Optional) ■
Mechanical breaking capacity	1 million switching cycles
Operating Angle	(15 - 30) ±5° (Optional) ■
Weight	2.5 Kg (without packing) 2.6 Kg (with packing)
Packing Dimension	L: 23 W: 13 H: 14 (cm)



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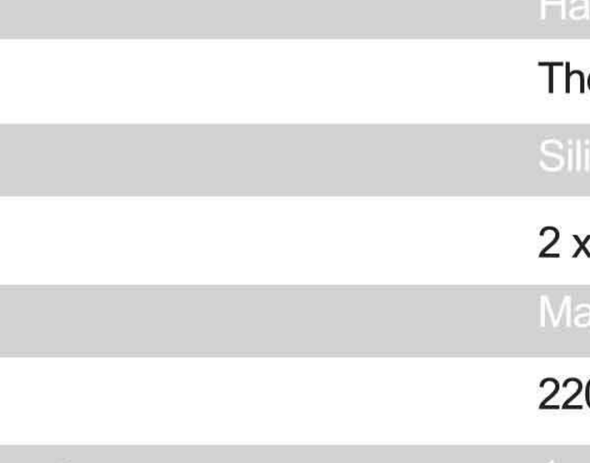

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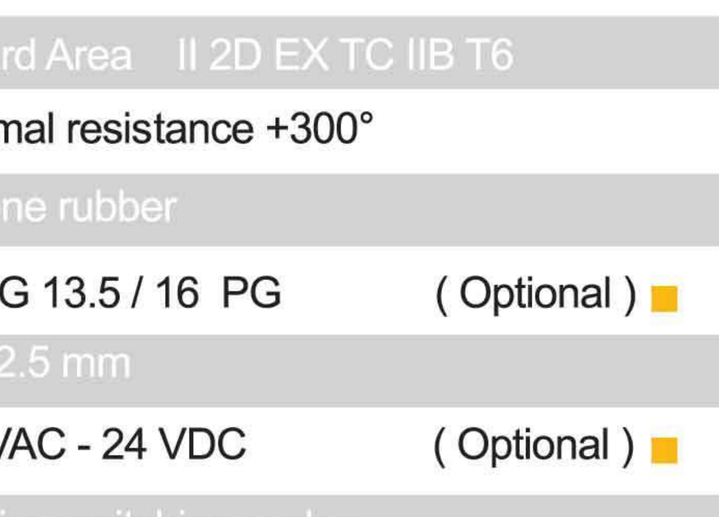
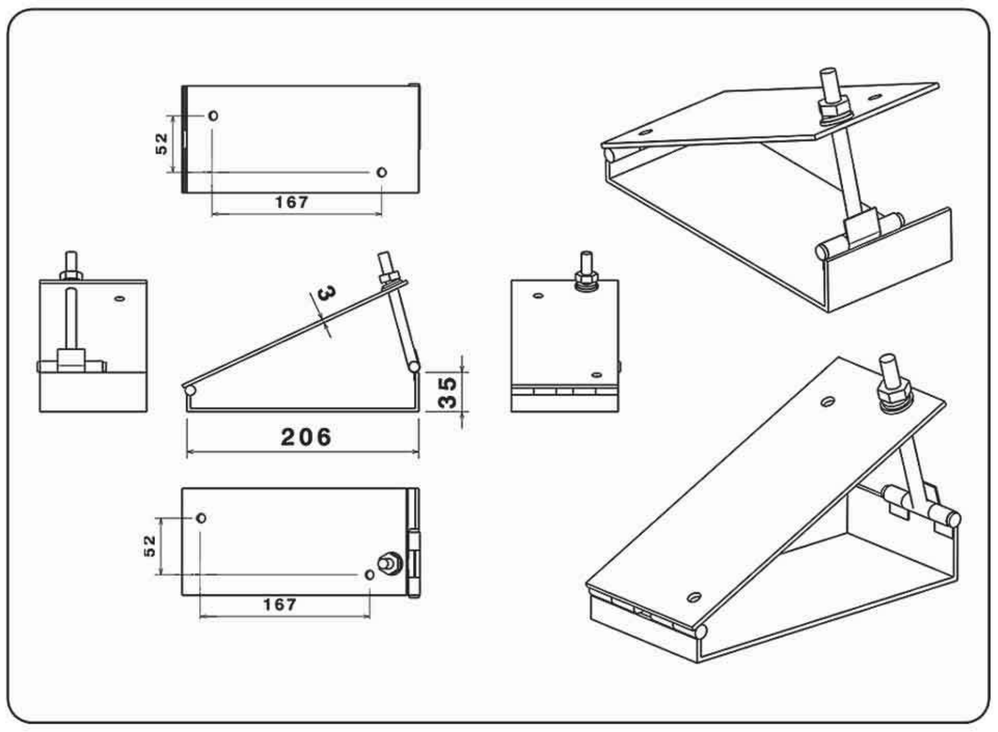


X 12

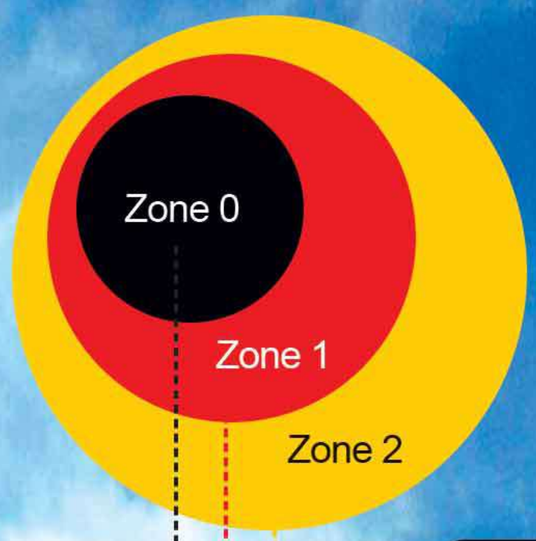
ACCESSORY Of
MISALIGNMENT
S W I T C H

DIMENSIONS (mm)



SUPPORT

SMP misalignment switch support is made of steel plate which is coated with electrostatic color, to prevent from corrosion. It's adaptable to extreme weather conditions. SMP misalignment switch is mounted by two bolt to support. After connecting the switch to the support, angle can be easily adjusted switch to the desired range and there is the possibility to change the angle of the handle switch back and forth from the conveyor. Equip angle is adjustable from 5° to 70° .



Zone 0

Explosive atmosphere is present continuously for long periods of time or will frequently occur.

Zone 1

Explosive atmosphere is likely to occur in normal operation.it may exist because of repair, maintenance operations leakage.

Zone 2

Explosive atmosphere is not likely to occur in normal operation but , if it does occur, it will persist for a short period only.these are as only become hazardous in case of an accident or some unusual operating conditions

ATEX

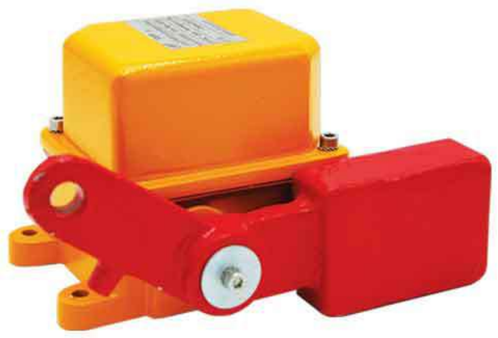
LIMIT SWITCHES

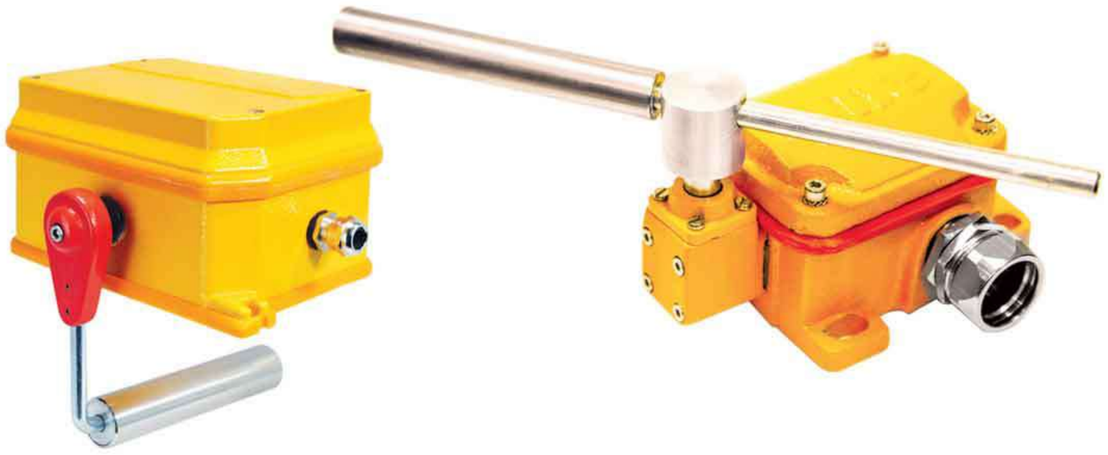
Limit switches have different types and cover the widest range of switches in the industry. Conventional belt conveyors, underground cable, supported belt conveyors ,reclaimer conveyors and tripper and shuttle conveyors. Our company produces ten samples of this type.

SMP limit switch is product in different types **LS 100, LS 200, LS 25, LS 35, LS 45,LS 175 , LS 3045, CS 300, TIL475** and designed for a maximum safe operation under severe conditions to become installed at any bulk handling system.

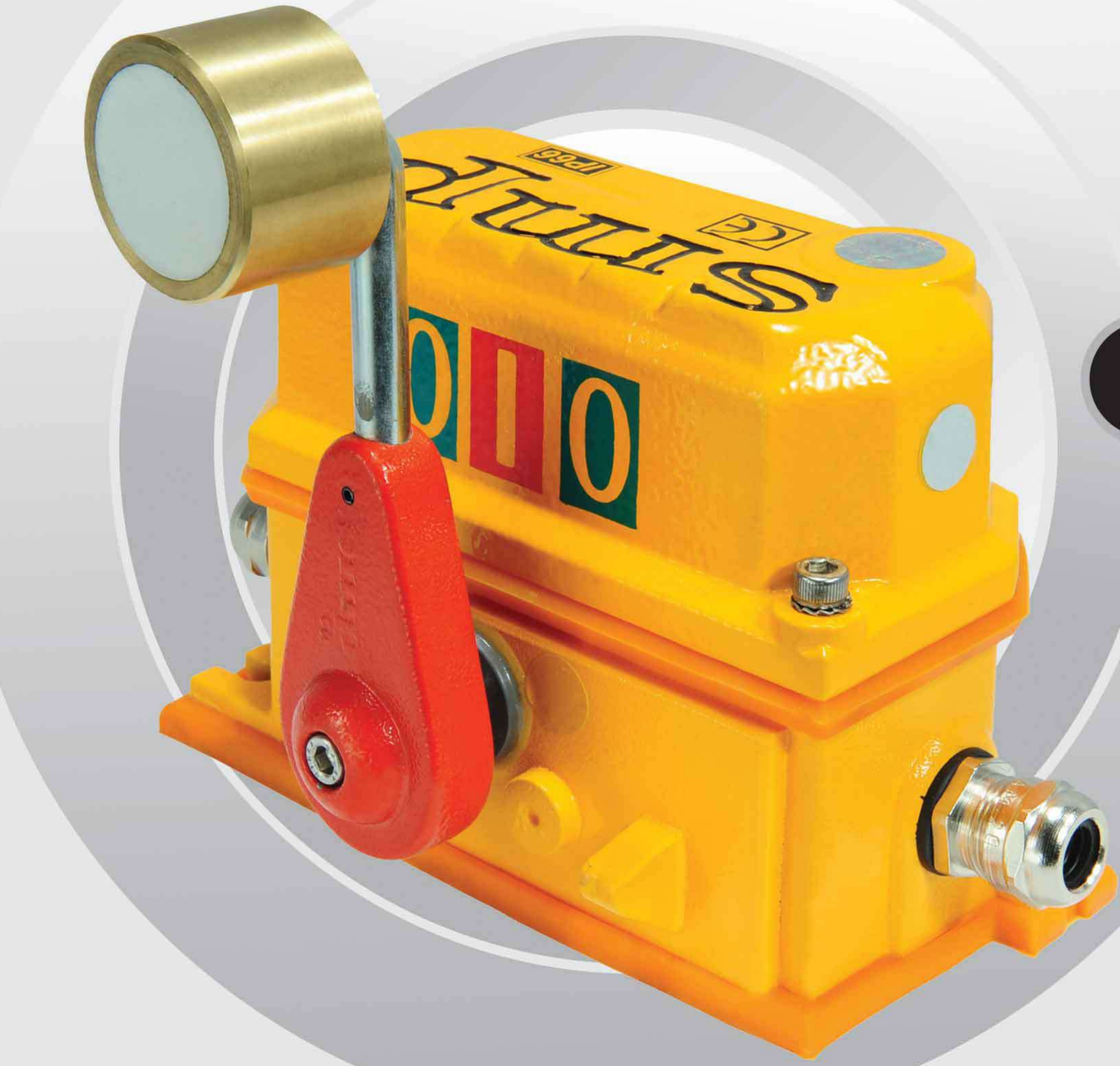
Limit switches are used to automatically detect or sense the presence of an object or to monitor and indicate whether the movement limits of that object have been exceeded. In electrical engineering, a limit switch is a switch operated by the motion of a machine part or the presence of an object.The original use for limit switches, as implied by their name, was to define the limit or endpoint over which an object could travel before being stopped. A limit switch can be used for controlling machinery as part of a control system, as a safety interlock, or as a counter enumerating objects passing a point.

Limit switches are used in a variety of applications and environments because of their ruggedness, ease of installation, and reliability of operation. They can determine the presence, passing, positioning, and end of travel of an object.





LIMIT SWITCH



LIMIT

SWITCH LS 100/200

A standard limit switch used in industrial applications is an electromechanical device that consists of a mechanical actuator linked to a series of electrical contacts. When an object comes in physical contact with the actuator, the actuator plunger's movement results in the electrical contacts within the switch to either close (for a normally open circuit) or open (for a normally closed circuit) their electrical connection. SMP limit switches type LS 100/200 use the mechanical movement of the actuator plunger to control or change the electrical switch's state. Industrial machinery that undergoes automatic operations usually requires control switches that activate according to the movements involved in a machine's performance.

Switch enclosure consists of corrosion resistant ; aluminum alloy and stainless steel. All external parts are either made of stainless steel or brass. No maintenance will be required. The trip points can be changed within resp. 15° and 30° by means of adjustable cams.
The roller lever is continuously adjustable on shaft.For safety applications,the lever has to be bolted with shaft.

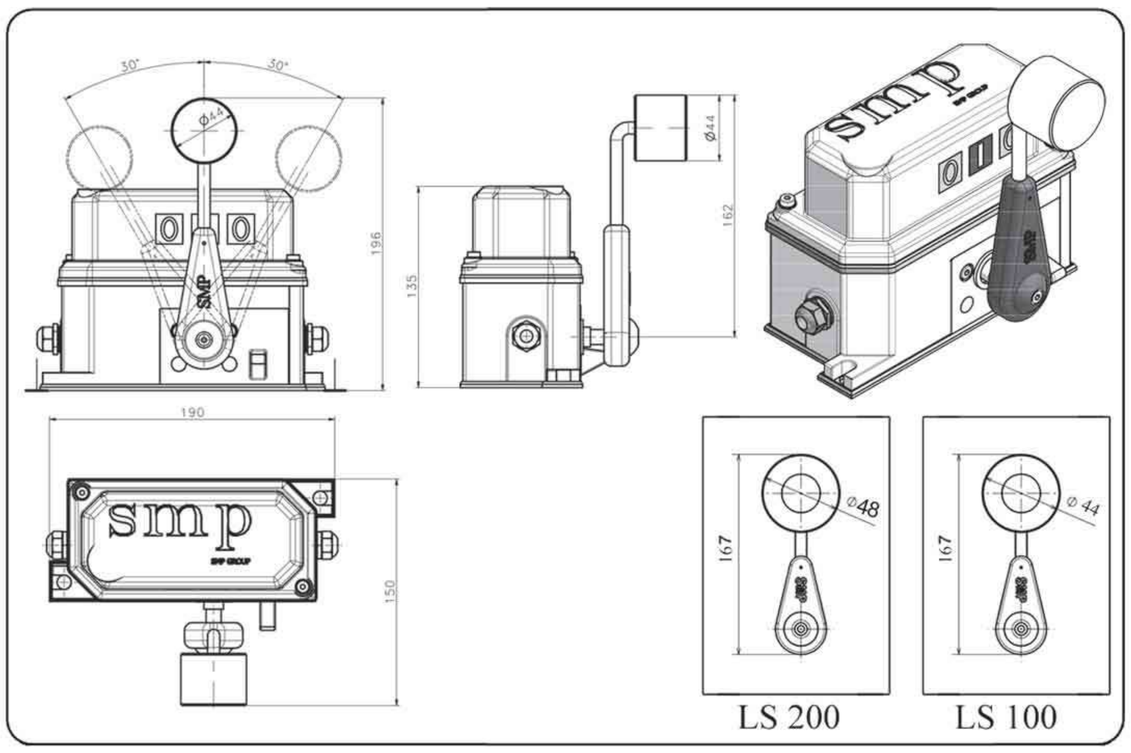
We have made many consumer choices that are among the features of this product. From the dimensions of the rollers to the type of connectors, the operating angles, the type of microswitches and the contacts, as well as the warning light for dark environments.

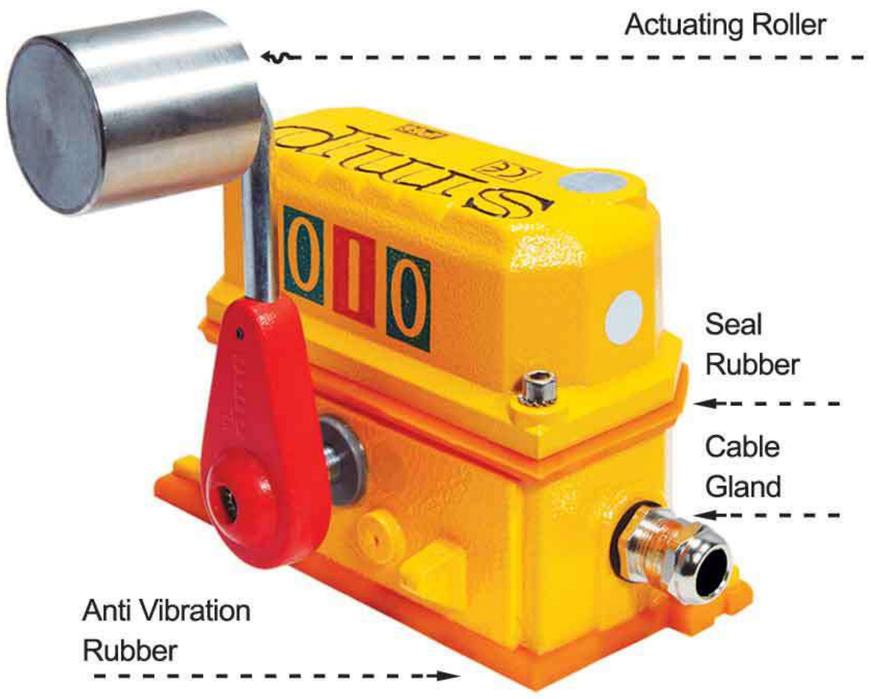
SMP ADVANCED

FEATURES

Research show that switches are mostly damaged by the equipment's vibration or the break down in installation place, SMP's special design is the key to the problem; the lower part of the lever is equipped with internal spline so that the switch will have the better efficacy in unstable situations. Moreover the use of bottom silicon rubber eliminate the vibrations dramatically so that the possible break downs and machine downtime is minimized.
Seal rubbers are made of special silicon which are heat resistant up to 300° c and due to the SMP's particular design even if the equipment aren't fixed properly by the operator, the switch will be protected against dust.

DIMENSIONS (mm)





ORDERING CODE

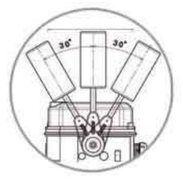
Type | **Contact** | **Connector** | **Operation** | **Light**

Light

H 24	LED Dome Light 24 volt
H 220	LED Dome Light 220 volt

Operation

15 - 30	**15** Degree Alarm **30** Degree trip (Optional) ■



Connector

Type

13	PG 13.5
16	PG 16
20	M 20
1/2	1/2 inch

MF	Metal Flexible Connector (Outdoor application)
MC	Metal Cable Gland (Outdoor application)
PC	Plastic Cable Gland (Indoor application)

Contact

CH2	2 black micro switch: 2NO. / 2NC.
CH4	4 black micro switch: 4NO. / 4NC.
CM4	4 Glass micro switch: 2NO. / 2NC. suitable for DC voltage

Type

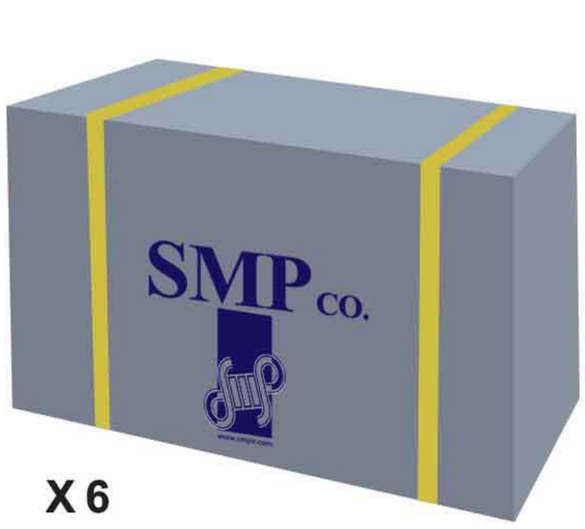
LS 100	
LS 200	

For Example: LS 100 | CM4 | PC | 13 | 15-30 | H 220

SPECIFICATION

PRODUCT	LIMIT SWITCH LS 100 / 200
Device complies with	CE Certification
Housing	Al , yellow , RAL 1028
Enclosure	Al , yellow , RAL 1028
Actuating roller	LS 100 : brass ,3020 LS 200 :Stainless steel ,3020
Cable entry	see ordering code in Pg .16 Connector part
Fixing	2 x M8 bolt
Current	16 A
Electrical breaking	220 VAC/24 VDC
Switch system	2 N.O + 2 N.C (Optional) ■ 4 N.O + 4 N.C
Operating temperature	-10 °C……70 °C
Excursion	Max 90°
Operation angle	15 – 30 (optional) ■
Mechanical life	1 million switching cycles
Protection	IP 67
Weight	2.5 Kg (without packing) 2.6 Kg (with packing)
Packing Dimension	L: 23 W: 13 H: 14 (cm)

X 1



X 6

X 12

LIMIT SWITCH

LS 35

LS 25

LS 45

+200° c
High
Temperature

LIMIT

SWITCH LS 25 / 35 / 45

HEAVY DUTY

(HIGH TEMPERATURE)

Mechanical limit switches are a common presence or position sensing device used in industrial automation systems. Typically, these switches are electromechanically operated, so they activate when an object makes physical contact with the actuator, which is often adjustable.

There are many forms of actuators, each mechanically linked, from those using an adjustable head and plunger, to others with an electrical switch block inside the housing. As the actuator is rotated or pressed, it provides the mechanical action required to operate the switch's electrical contacts, changing their state, typically using normally open and normally closed configurations of various types.

SMP limit switches are designed for a maximum safe operation under severe conditions to become installed at any Industrial machines. Switch enclosure is made of cast iron and has high mechanical strength. In addition, all external parts are made of stainless steel thus No maintenance will be required. According to international standards, the tripping angle in this limit switch is set at 35 degrees in both sides. The roller lever is continuously adjustable on shaft. For safety applications, the lever has to be bolted with stainless steel shaft which is corrosion resistant The model LS 45 is defined with and adjustable actuating roller. This switch does not need to be reset after each operation and by removing the mechanical agent; it is automatically put back into standby mode.

SMP ADVANCED

FEATURES

SMP heavy duty limit switch is used to control and limit mechanical movement in harsh thermal conditions (which other micro switches cannot be used).

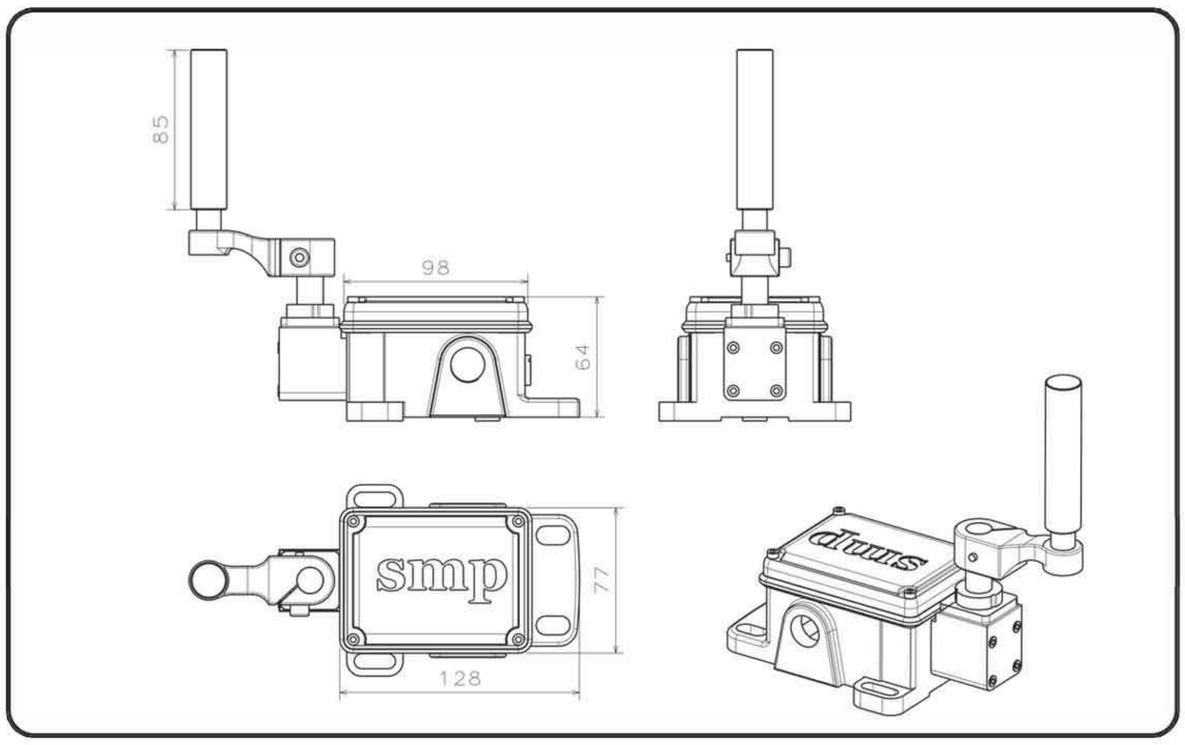
As the name implies, these limited switches are used in high temperature locations for heavy vehicles such as cranes, conveyors and heavy equipment. For example, in steel plants due to ambient temperature over 200 degrees Celsius and greater reliability for micro switches are used in conveyor is needed, the SMP heavy duty limit switch will be the best choice.

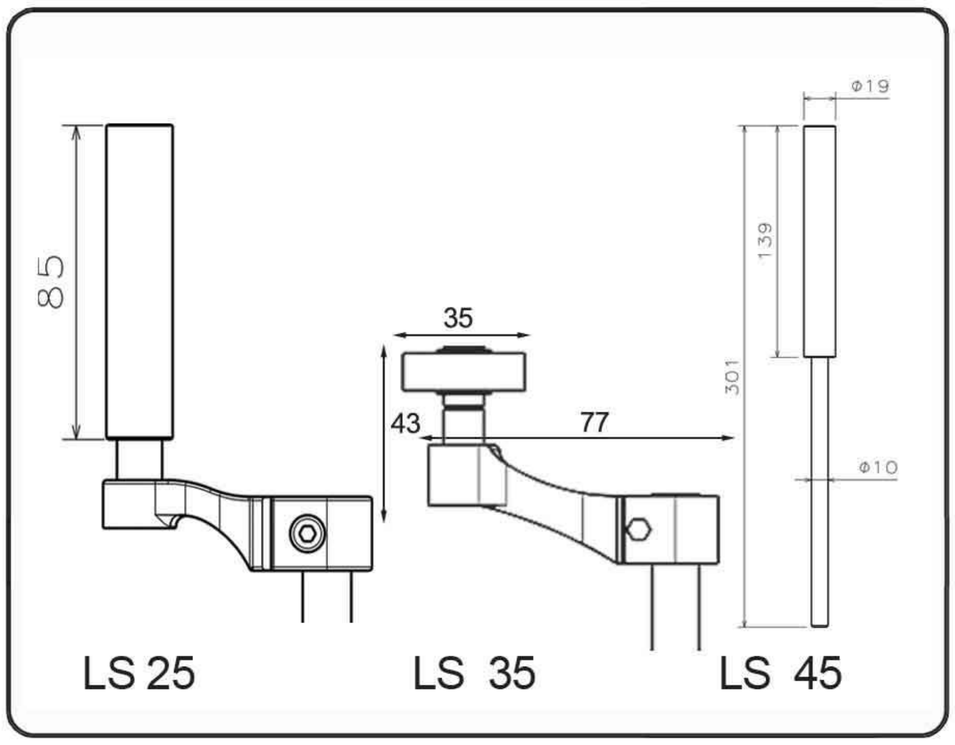
Different types of roller actuators, roller levers and multi-directional levers are available and customers will be able to use this micro switch in all physical conditions. The side rotating head has a stainless steel shaft reinforced to increase mechanical life up to 50 million operations. Superior design of plug-in terminal between switch body and receptacle maintains electrical continuity in harsh conditions of temperature extremes, equipment vibration, and shock.

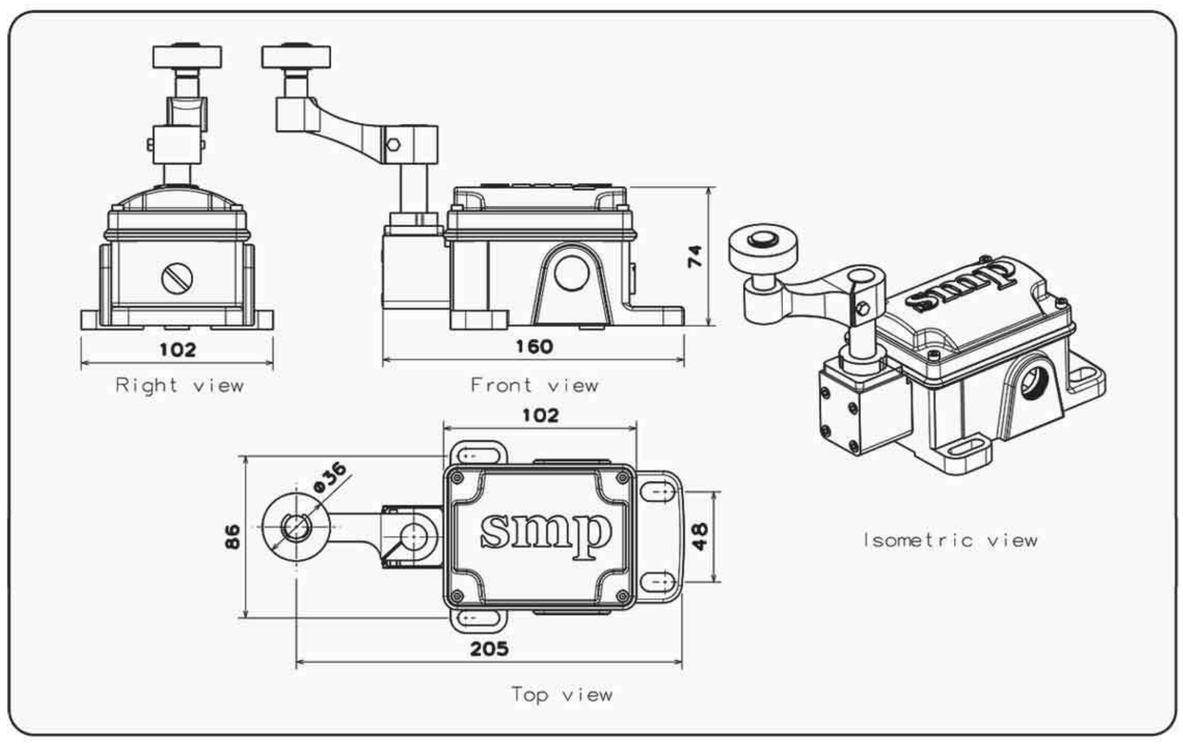
MOUNTING INSTRUCTION

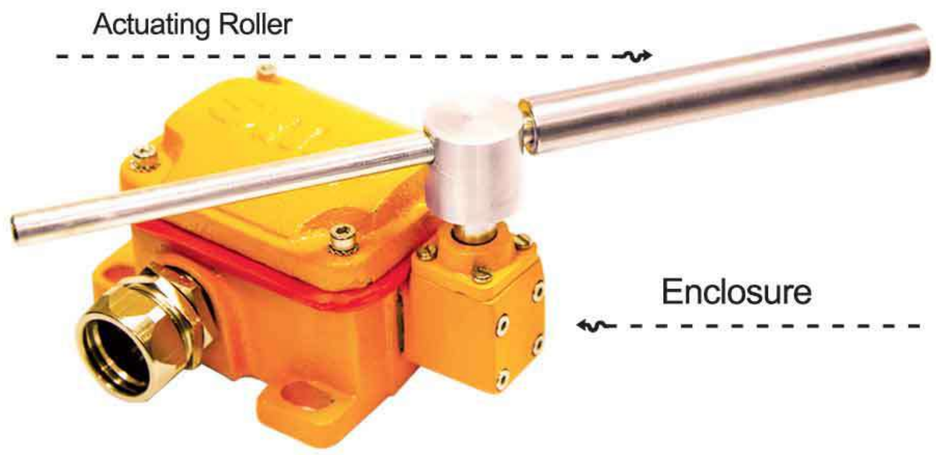
SMP limit switches (position Switch) of type either LS 25 or LS 35 function is to produce electrical signals corresponding to the positions of moving machinery. The units are suitable for use in virtually any climate or severe condition such as high temperature (over 250 °Control). Easily identified grounding terminal (inside) for compliance with regulatory standards

DIMENSIONS (mm)









ORDERING CODE

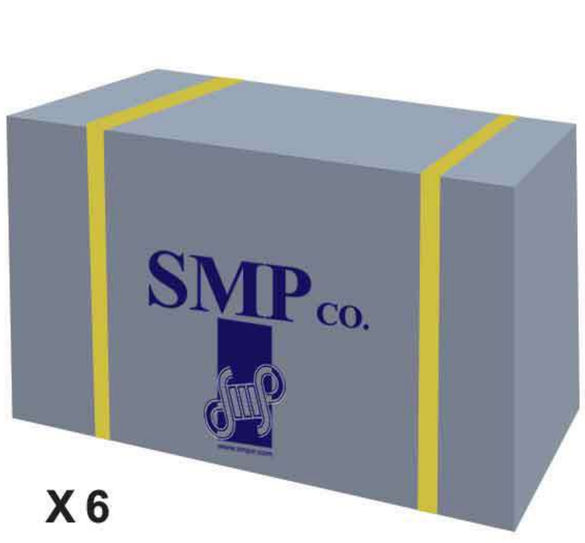
Type	Connector	Operation	
		15	15 Degree trip (Optional) ■
	MF 3/4”		Metal Flexible Connector Size 3/4”
	MC 25		Metal Cable Gland Size M 25
LS 45			
LS 35			
LS 25			

For Example: LS 35 | MC 25 | 15

SPECIFICATION

PRODUCT	LIMIT SWITCH LS 25 / 35 / 45
Device Complies With	VDE 0110
Finish	Electrostatic , Yellow RAL 1028
Housing	Cast Iron, yellow, RAL 1028
Actuating Roller	Stainless Steel
Fixing	2 x M8 bolt
Admissible Ambient Temperature	-25° C.....+200 ° C
Switch System	SPDT (1 NO / 1 NC) Center
Rated Insulation Voltage	Ui: 380 VAC
Rated Operational Voltage	Ue: 15 .....250 VAC
Rated Insulation Current	16 A
Conventional thermal current	20 A
Mechanical life	5 Millions Switching Cycles
Protection	IP 67
Cable entry	2 M20 x 1.5
Connection	Max 2.5 mm
Electrical life	1 million switching cycle
Mechanical life	1 million switching cycle
Enclosure	Cast Iron , Yellow
Earthing	Inside The Housing M4
Tolerance	± 2°
Excursion	10 to 45°
Weight	LS 25(2.50) LS 35 (2.80) LS 45 (2.80) Kg (with packing) LS 25(2.30) LS 35 (2.60) LS 45 (2.60) Kg (without packing)
Packing Dimension	L: 23 W: 13 H: 14 (cm)

X 1



X 6

X 12

LIMIT SWITCH

TIL 475

TIL 475

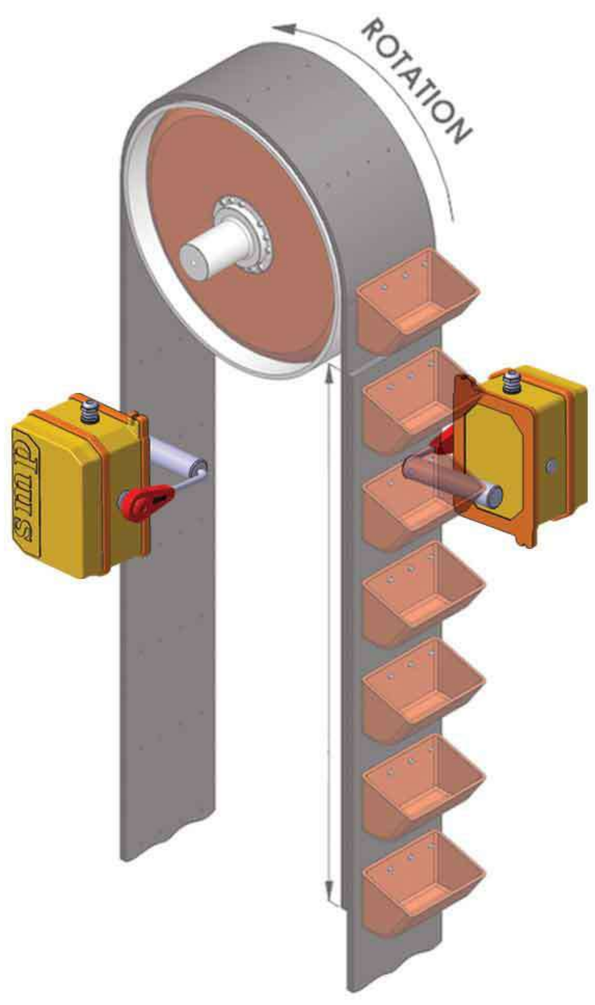
MISALIGNMENT
S W I T C H O F
BELT BUCKET
E L E V A T O R T I L 4 7 5

SMP rugged belt misalignment switch is used for conveyor installations subjected to especially severe operation conditions. The stainless steel actuating roller is carried in stainless steel ball bearings for improved handling of lateral forces and jerks. The large roller with diameter or 48mm by stainless steel or aluminum alloy permits use this device where fast belt speeds prevail. All external parts are either aluminum alloy or stainless steel has been specially plated.
Trip points are adjusted within 15° and 30° resp. The device can be optionally furnished with two parallel PG16 cable entries and an internal terminal block to be permitted for further wiring.
All external parts are either of aluminum alloy or stainless steel (depends on order) have been specially plated. The actuating roller of stainless steel is carried in stainless steel ball bearing for improved handling of lateral forces and jerks. These switches can be provided with a highly impact-resistant dome light which is visible from distance. Besides, the switches can be easily modified to provide alarm for a particularly prepared part.
All basic parts such as bolts, shafts, screws, and springs are made of stainless metal. The switches are provided with 2SPDT contacts. For unlatching, the actuating roller is reset by hand.Then the accepted order depends on your product.

- Ball bearing with conveyor aligned in 90 degrees with 5 to 7 cm gap.
- Speed of switching depends upon air distance between conveyor and alignment switch.

SMP ADVANCED
F E A T U R E S

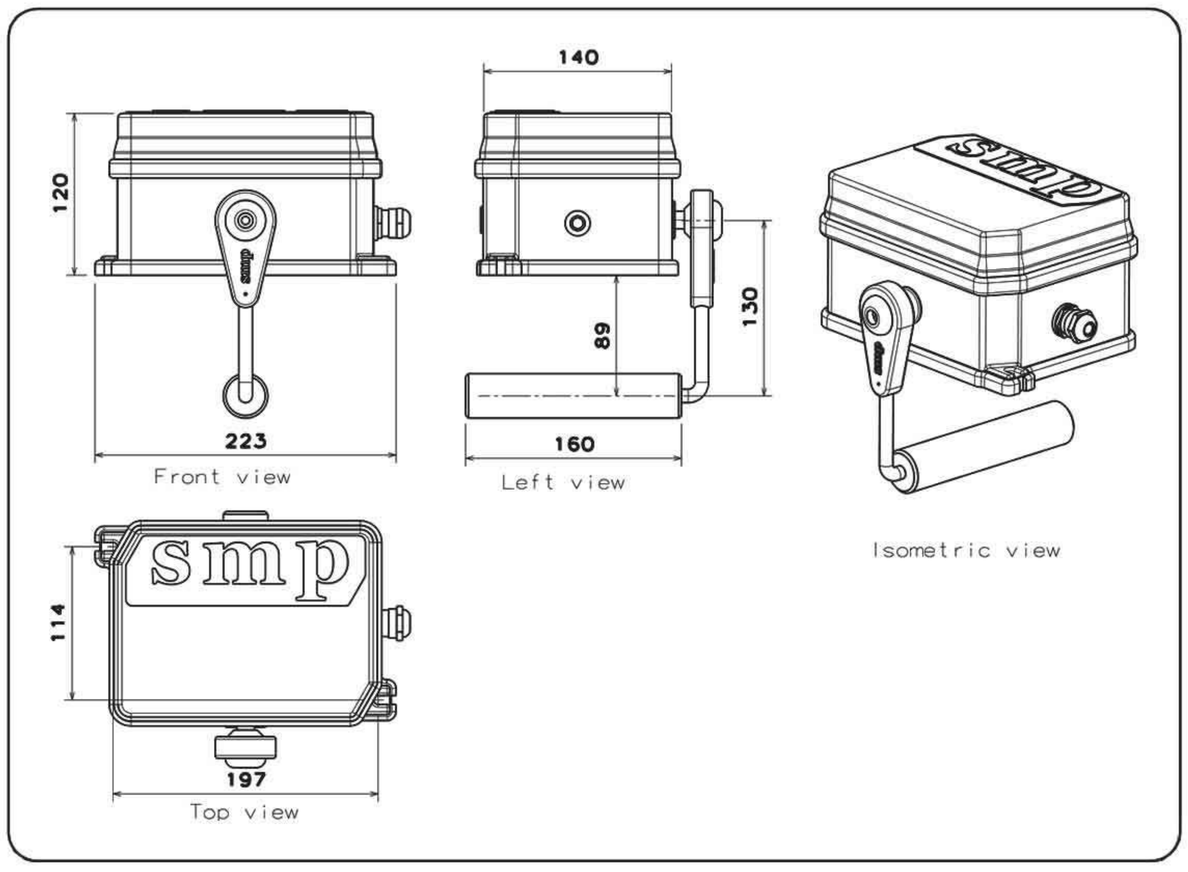
Research show that switches are mostly damaged by the equipment's vibration or the break down in installation place. SMP's special design is the key to the problem: the lower part of the lever is equipped with internal spline so that the switch will have the better efficacy in unstable situations. Moreover, the use of bottom silicon rubber eliminates the vibrations dramatically so that the possible break downs and machine downtime is minimized.
Seal rubbers are made of special silicon which are heat resistant up to 300 °c and due to the SMP's particular design even if the equipment isn't fixed properly by the operator; the switch will be protected against dust.

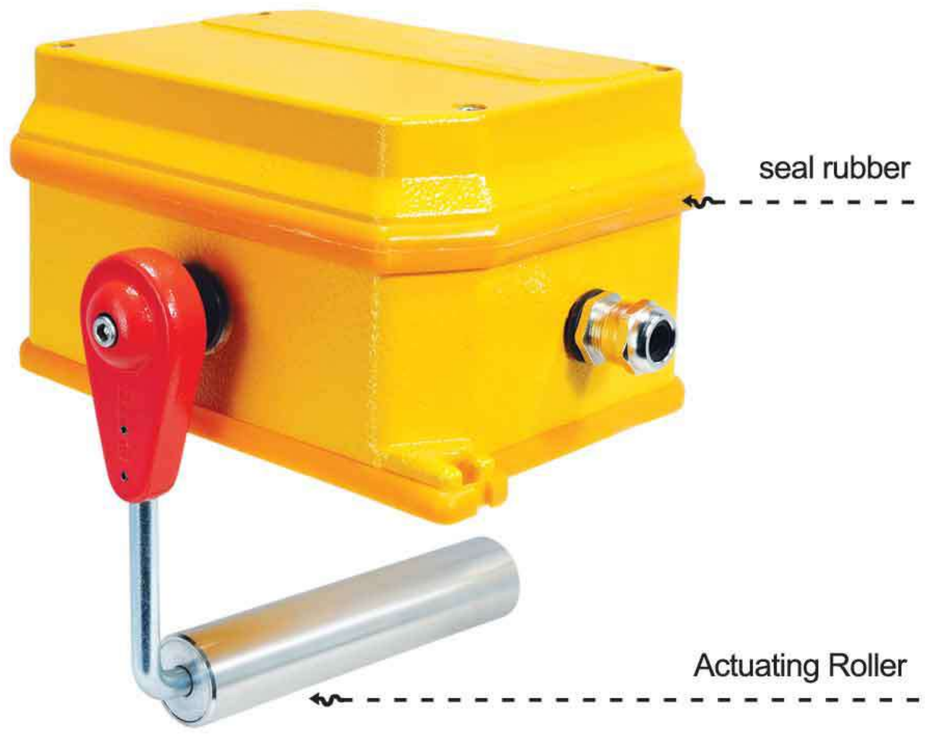


APPLICATION

They are specifically designed to use in heavy industries such as steel Industries, cement plant and mines, sugar cane factories, petrochemical industries in order to monitoring the true running of conveyor belts.

DIMENSIONS (mm)



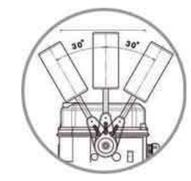


ORDERING CODE

Type | **Contact** | **Connection** | **Degree**

Degree

15 - 30	**15** Degree Alarm **30** Degree trip (Optional)



Connection → **Type**

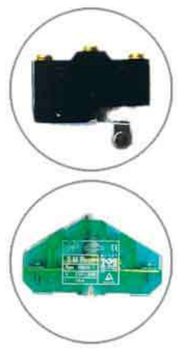
MF	Metal Flexible Connector
MC	Metal Cable Gland
PC	Plastic Cable Gland Recommend for use in indoor application

Connection → **Size**

13	PG 13.5
16	PG 16
20	M 20
1/2	1/2 inch

Contact

CH2	2 black micro switch: 2NO. / 2NC.
CH4	4 black micro switch: 4NO. / 4NC.
CM4	4 Glass micro switch: 2NO. / 2NC. suitable for DC voltage



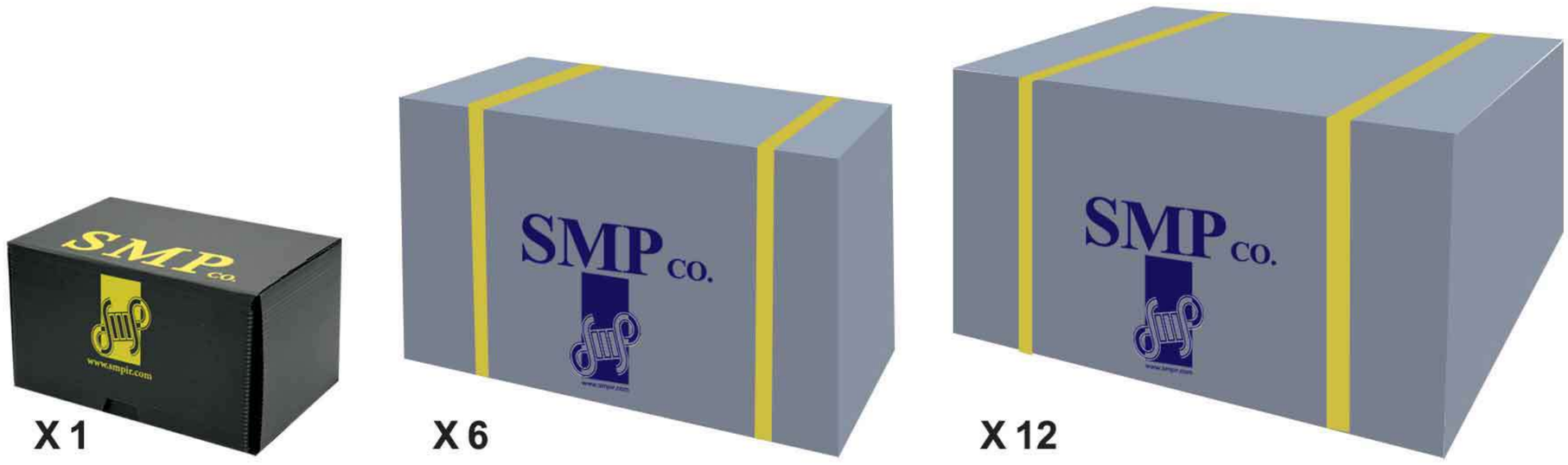
Type

TIL 475	

For Example: Til 475 | CH 4 | MC | 13 | 15 -30

SPECIFICATION

PRODUCT	Misalignment Switch of Belt Bucket Elevator	
Device Complies With	VDE 0110	
Finish	Burning static, yellow RAL 1028 Burning static, red RAL 3020	
Actuating Roller Lever	Stainless Steel	
Admissible Ambient Temperature	-25° C.....+80°C	
Switch system	4 Change Over (4 NO + 4 NC) 8 Change Over (8 NO + 8 NC)	(Optional) ■
Rated Insulation Voltage	Ui: 380 VAC, 440 VDC	
Rated Operational Voltage	Ue: 240 VAC, 250 VDC	
Conventional thermal current	16A	
Mechanical life	0.5 x 10^6 Switching Cycles	
Electrical life	1 million Switching Cycles	
Protection	IP 67	
Connection	see ordering code in Pg .24 Connector part	
Power supply	220 VAC	
Electrical breaking	1 Million Switching Cycles	
Mechanical life	1 million switching cycle	
Earthing	Within Enclosure ,M4	
Cable entry	2.5 mm	
Excursion	Max. 75°	
Weight	4.03 Kg (with packing) 4 Kg (without packing)	
Packing Dimension	L:25 W:20 H:15 Cm	



X 1 X 6 X 12

LIMIT SWITCH

LS 175

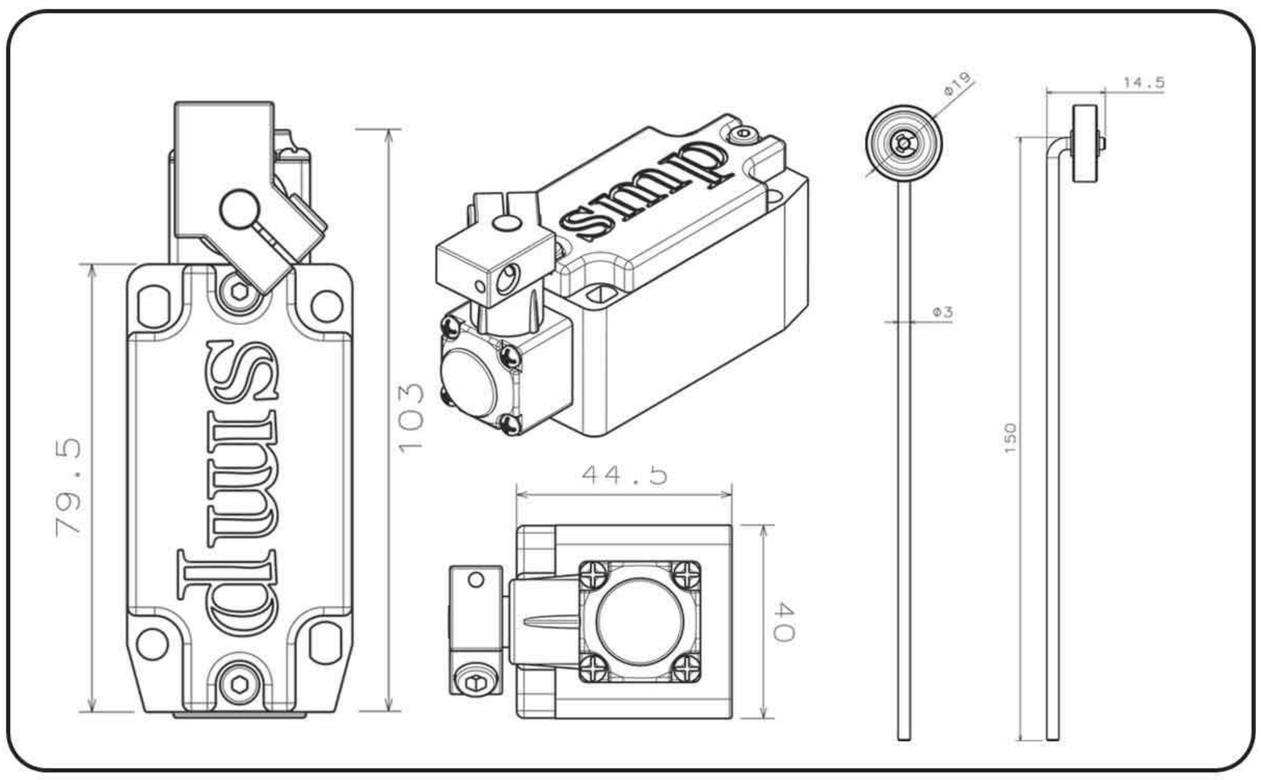
ADJUSTABLE LIMIT

SWITCH LS 175

SMP Adjustable limit switch is electromechanical device that use to control the limit in industries such as machine tools, packaging equipment, railway industry or elevators and electric stairs.
These switches are used to restrict motion movements. When the moving handle hits it, it cuts the contact and this affects directly the performance of the target machine. The actuator is the part of the switch which physically comes in contact with the target. The trip points can be changed with resp. 15° and 30° . the roller lever is continuously adjustable on shaft.
ls175 designed for bidirectional operation. For switches with swivelling lever, the lever can be fastened on straight or reverse side maintaining the positive coupling. In this way two different working planes of the lever are possible.
For switches with swiveling lever, the lever can be adjusted in 10° steps over the entire 360° range.
The limit switches does not generate noise requiring special precautionary measures in standard use and does not need special maintenance operation.

ATEX CE

DIMENSIONS (mm)



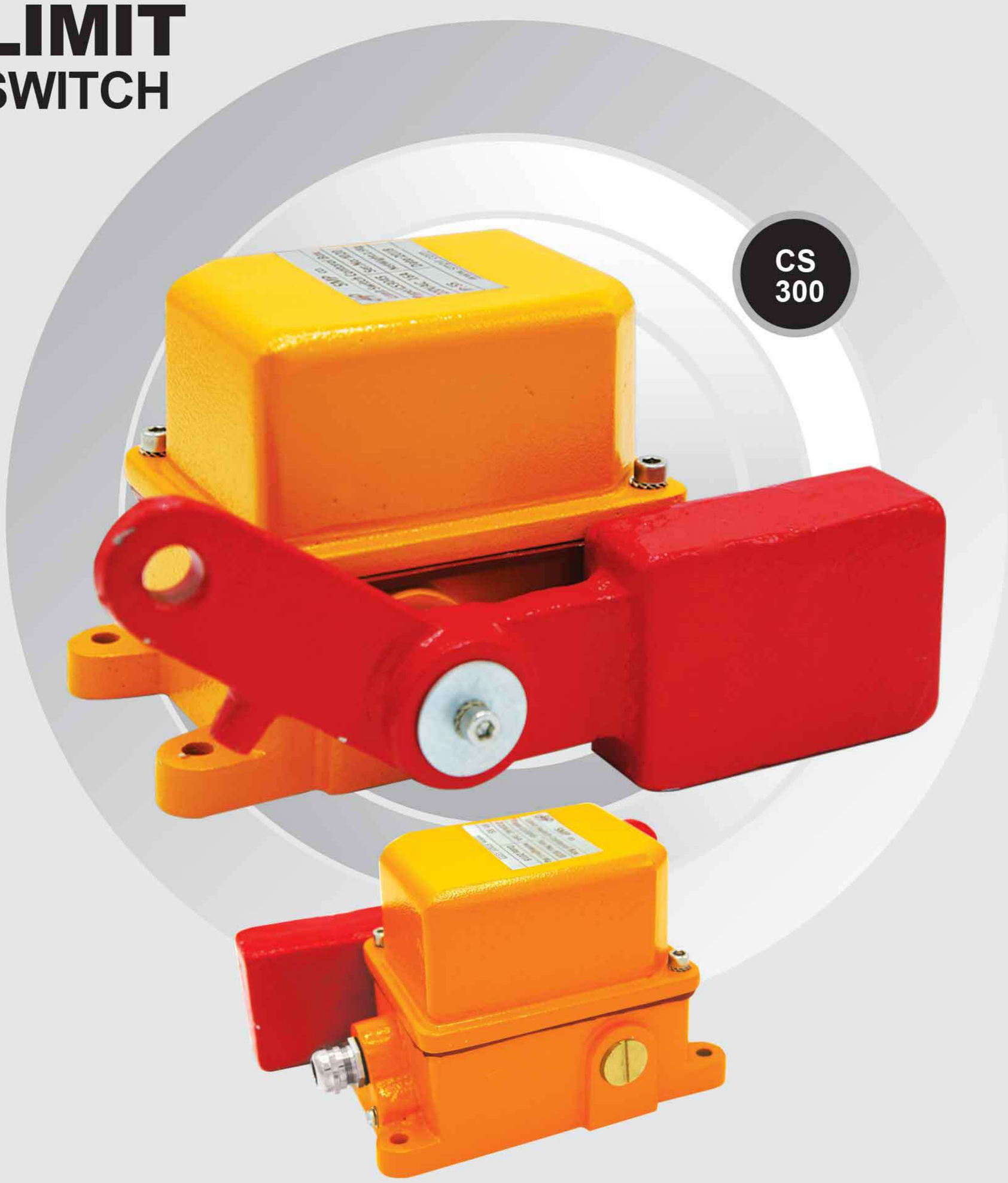
SPECIFICATION

PRODUCT	LIMIT SWITCH LS 175 /185
Device complies with	CE Certification
Finish	Cap: Al , yellow , RAL 1028
Housing	Al, alloy, RAL 9004
Actuating Roller	Stainless Steel , Al
Fixing	4 x M5 bolt
Admissible ambient temperature	-25° C ..... +70° C
Switching system	(1 NO + 1 NC)
Rated Operational Voltage	Ue: 240 VAC , 250 VDC
Conventional thermal current	10 A
Mechanical Life	1 million switching cycles
Electrical life	MIN: 500000 switching cycles
Protection	IP 67
Cable entry	1 x M20
Roller exclusion	30° trip
Electrical breaking capacity	220 VAC -24 VDC
Weight	500 gr (with Packing) 480 gr (without packing)
Packing Dimension	L: 20 W: 8 H:5 Cm

X 1

X 36

LIMIT SWITCH

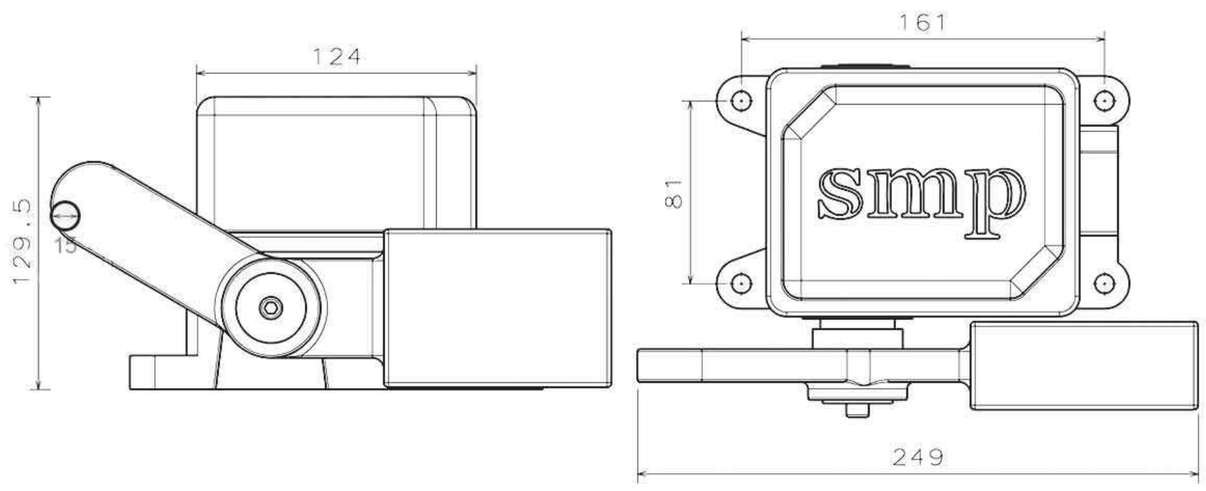


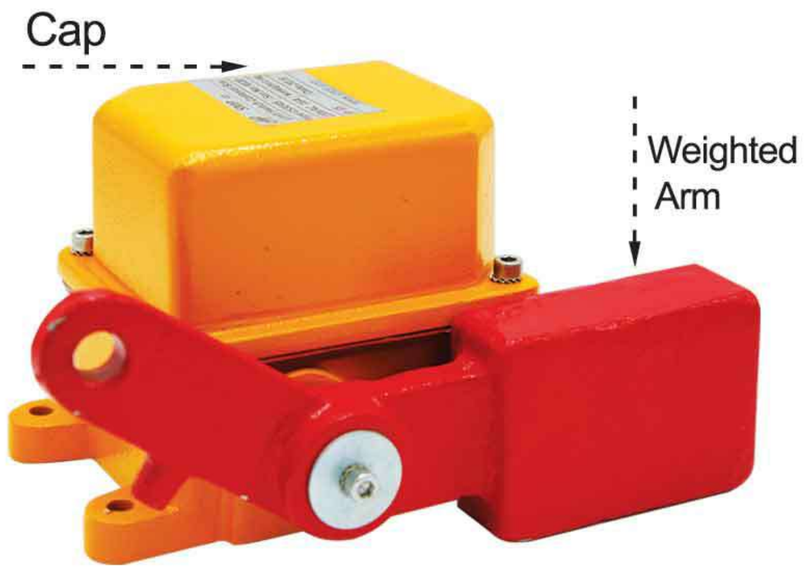
COUNTER WEIGHT

S W I T C H C S 3 0 0

Weight Operated Limit Switches are used on control / power circuit of reversing drives so as to limit their rotation / movement within a predetermined position.
Due to the weight placed on the other end of the lever this lever is pushed up.
When the lever is pushed up the shaft to which this lever is connected rotates there by rotating the cams which eventually open the contacts.
SMP counter weight limit switches are used for heavy duty controls such as overhead cranes, industrial lifts, heavy material handling equipment, winches, rolling mills and generally towing wire equipment.The operation of the equipment is such that by applying pressure or lifting the pressure from the switch arm, the microwaves cause the relevant equipment to switch on or off. The choice of weight and angle of operation depends on customer choice and technical considerations.
In the design of these switches, performance in harsh industrial environments is also calculated.

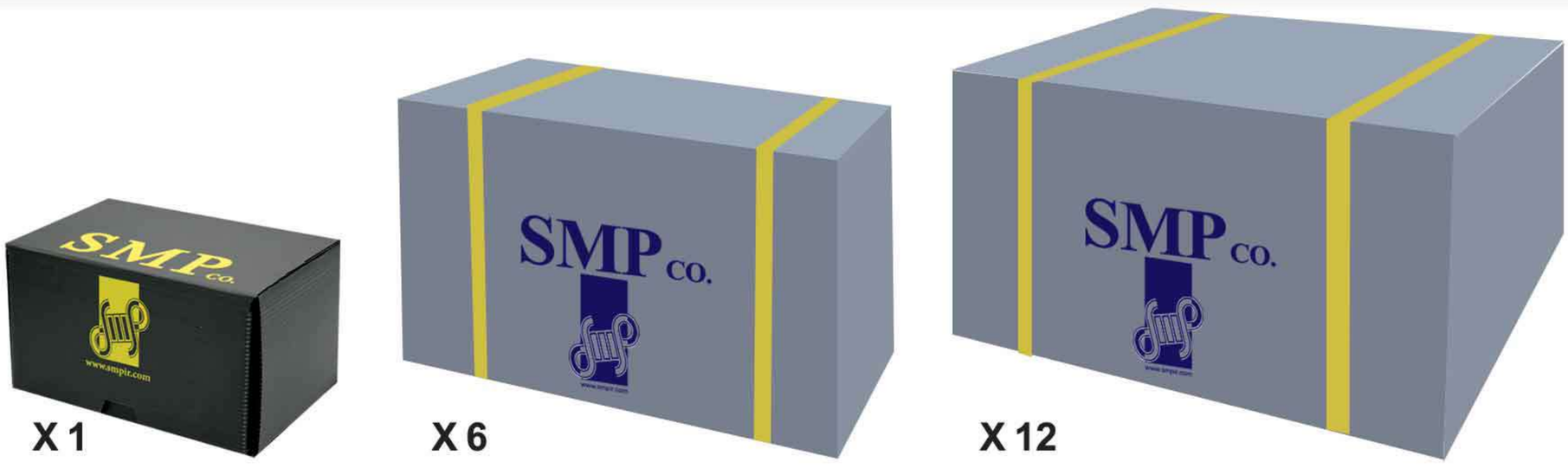
DIMENSIONS (mm)



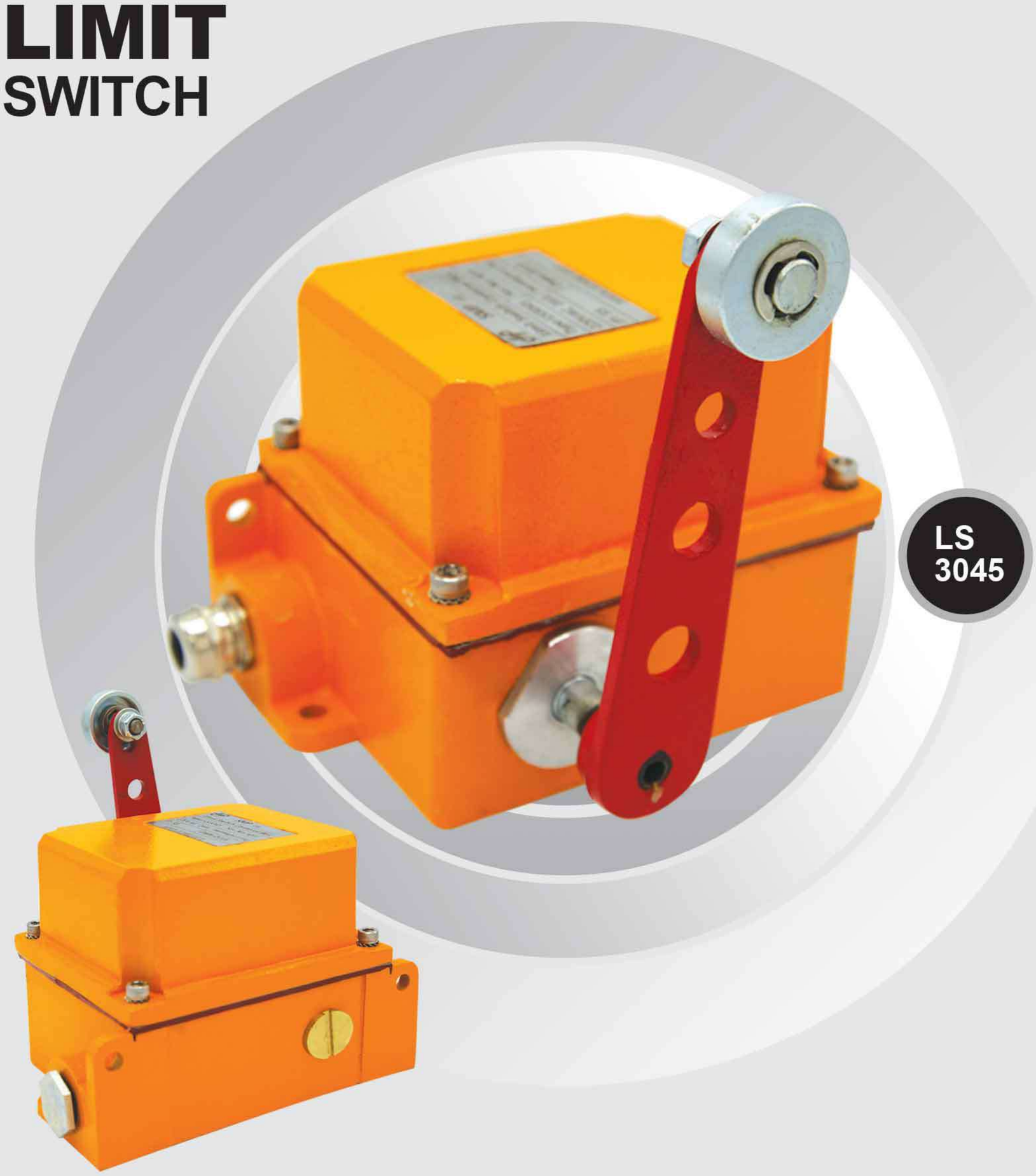


SPECIFICATION

PRODUCT	COUNTER WEIGHT SWITCH CS 300
Body material	AL. yellow, RAL 1028
Lever	Al. red. RAL 3020
Admissible ambient temperature	-15°C …… +80°C
Protection	IP 65
Mounting position	4 x M8 BOLT
Switch system	2 changeover (Optional) ■
Cable entry	1 x PG 13.5 (Optional) ■
Rated operational voltage	250 VAC
Current	16 A
Excursion	Adjustable
Mechanical Life	1 million switching cycle
Electrical Life	1 million switching cycle
Motive Force	150 N
Weight	With packing: 4.08 kg Without packing: 4.05 kg
Packing Dimension	2L: 5 W:20 H:14 (cm)



LIMIT SWITCH



LS 3045

EMERGENCY LIMIT

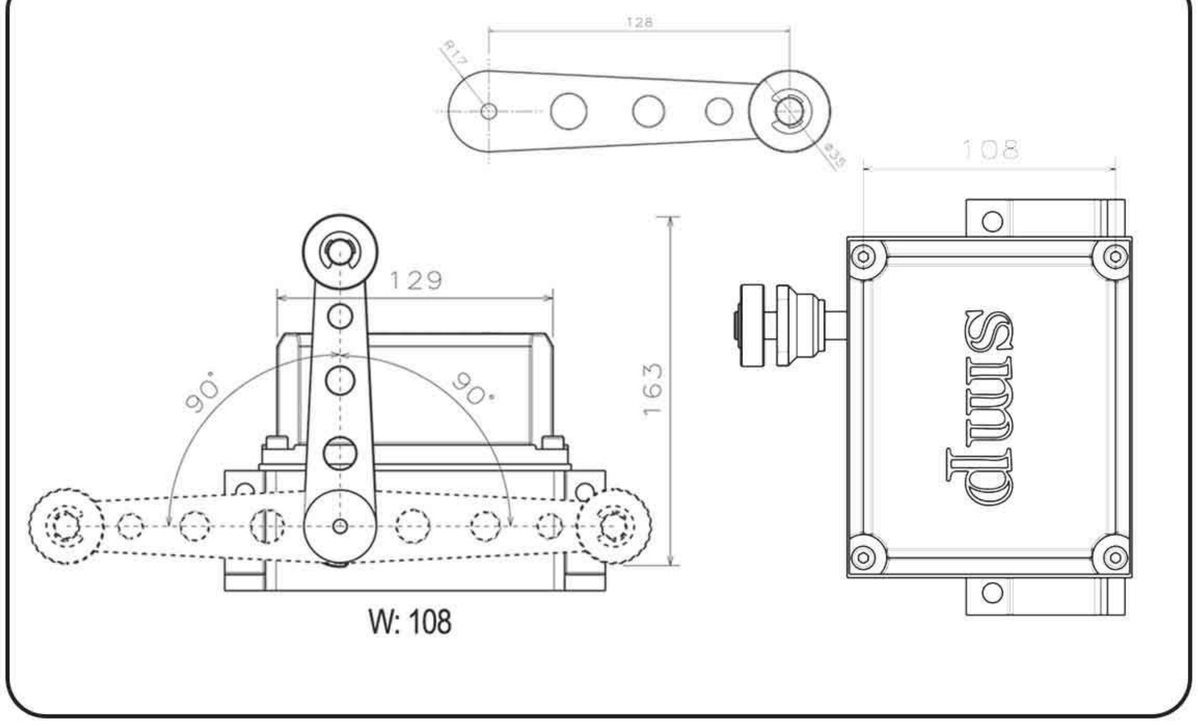
SWITCH LS 3045

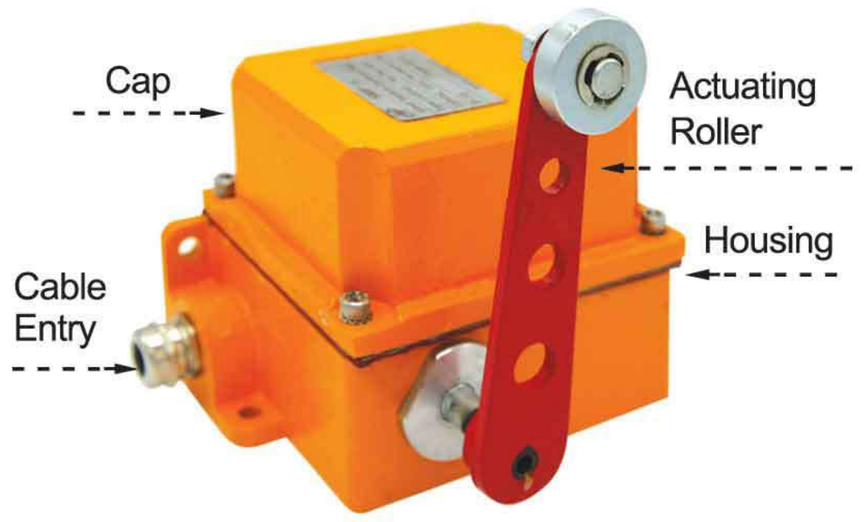
Normal limit switches in harsh industrial environments with high temperatures and industrial pollutants have lower efficiency, but SMP company designed this type of limit switches to eliminate disadvantage of traditional emergency limit switch. in addition eliminating mechanical vibrations on the switch, heat resistance is increase over 200 °C.

SMP Emergency Limit Switch use in heavy industries and specially for grab machines in material transfer systems. Provides switches by defining the operating range for these switches (based on customer's requested angle). Designed for harsh environments and configurable, this product features.

The Lever mechanism can be moved one way or both ways depending on the type of application. Lever type Limit Switch is prevent over travel of device motion within pre specified position on control or power circuit. Lever Type Limit switch is Suitable for use on Wagon shunting device,Elevators, Material handling system etc.

DIMENSIONS (mm)

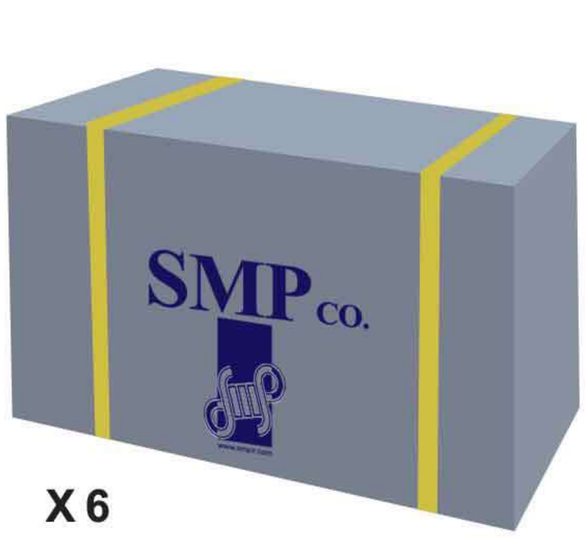




SPECIFICATION

PRODUCT	EMERGENCY LIMIT SWITCH LS 3045
Body material	AL. yellow, RAL 1028
Lever	Al. red. RAL 3020
Admissible ambient temperature	-15°C …… +80°C
Protection	IP 65
Mounting	4 x M8 BOLT
Switch system	2 change over (Optional) ■
Cable entry	1 x PG 13.5 (cable size:Optional) ■
Rated operational voltage	250 VAC
Current	16 A
Excursion	10° alarm - 30° trip (Optional)
Mechanical Life	1 million switching cycles
Electrical Life	1 million switching cycles
Weight	With packing: 2.70 kg Without packing: 2.40 kg
Packing Dimension	L: 25 W:20 H:14 (cm)

X 1

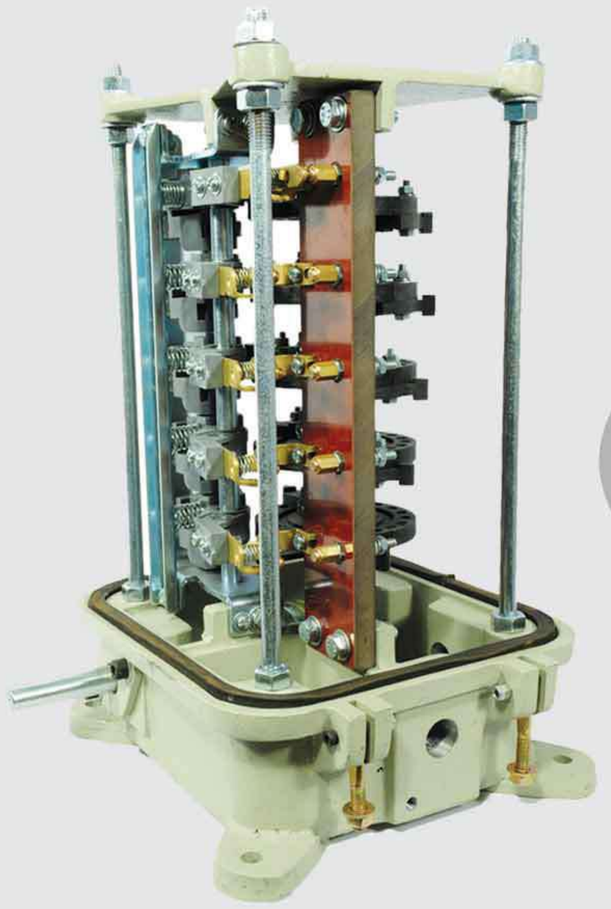


X 6

X 12

LIMIT SWITCH

GS 300



GS 300

GEAR LIMIT

SWITCH GS 300

SMP gear limit switches are suitable for several applications: from lifting machinery to industrial crane and boat lifts, renewable energy systems, like wind turbines. The geared limit switch consists of a gearbox and switch combination which are located within a housing.

SMP Gear Limit Switch is universal mechanical switchgear for general industrial applications. It consists of a two stage spur gear assembly and a contact space for max eight contacts. These gears reduce a number or rotations at the input shaft to less than one rotation at the cam discs.The gear switches are the ideal solutions for high precision ratios free from backlash.

SMP ADVANCED

FEATURES

- Wide range of applications
- Serviceable, cost optimized design and reliable mounting
- The use of strong contactors leads to high voltage resistance
- Applicable for DC current systems with high electrical arcs
- Adjustable animated cam disks.

SPECIFICATION

PRODUCT	GEAR LIMIT SWITCH
Gear Ratio	1:1 / 1: 5 / 1:15 / 1:30 (Optional)
Protection	IP 55
Thermal current	20 A
Power supply	24 - 110 VDC / 220 VAC (Optional)
Connection	3 x PG 16
Dimension	24 x 22 x 45 Cm
Weight	with packing 19.8 Kg without packing 19.5 Kg
Packing Dimension	L:42 W:25 H:30 Cm

X 1

X 2

LEVEL SWITCH

CAPACITIVE LEVEL

SWITCH CLS 100

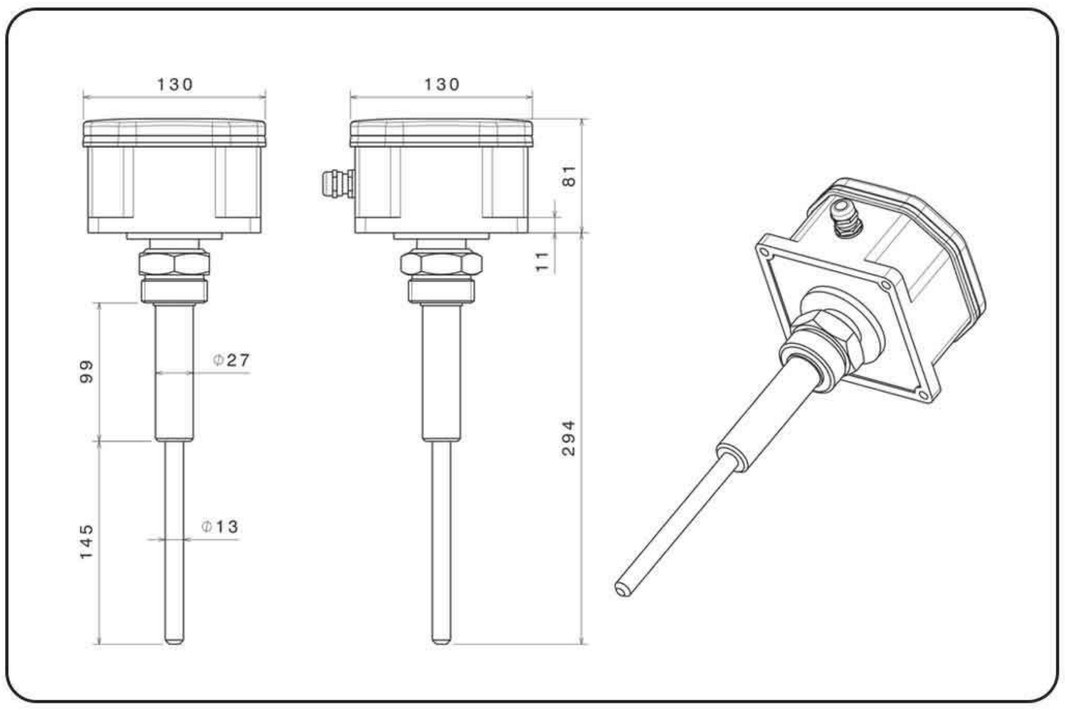
Level measurement is often used for inventory management. To provide good control, accurate measurement is essential, and several devices and systems are available for measuring product level. This sensor is of the used for the purpose of level detection of liquids such as water or chemical solution , and solids such as pellet or feed , or inter face detection of two immiscible liquids.Capacitive Level Switches are sensitive devices that operate by an electrical out-put current with the desired level. The most common use of these types of switches is in non-metallic industries. These switches do not have any moving parts, and the advanced sensor technology used in these types of switches provides a good measure of the level and stability of the material they are intended to produce. These switches are ideal for determining the level of silos, receivers and air displacement systems.

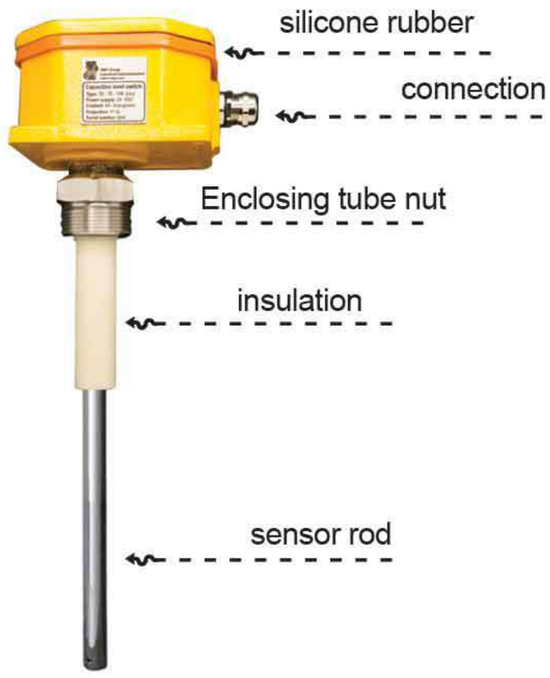
INSTALLATION

The equipment must be installed at the ambient temperature range to achieve the best performance.The device not installed near any mechanical shocks.The device should not be installed near reservoir inputs or paths.Avoid installing the probe near reservoir structures as far as possible to avoid false alarms.

CE

DIMENSIONS (mm)





SPECIFICATION

PRODUCT	CAPACITIVE LEVEL SWITCH CLS 100
Device complies with	CE Certification
Switch system	Changeover (SPDT)
Housing Material	Aluminum, RAL 1028
Probe Material	SS 304 (SS 316 Optional) ■
Time delay	0 to 60 Sec (adjustable)
Electrical rating	4 A
Power consumption	3 watts (Max)
Pressure limit	15 bar
Electrical connection	M20 , PG 13.5
Ambient tempreture	-30°C to +60 ° C
Probe length	20 / 100 CM (Optional) ■
Power supply	24 VDC / 220 VAC
Insulation type	Teflon
Sensitivity	0 to 100 pF (depended on the material)
Relay	12 V , 10 A
Weight	2.230 Kg (with packing) 2.200 Kg (without packing)
Packing Dimension	L: 80 W: 20 H: 20 (cm)

X 1

X 4

X 6

LEVEL SWITCH

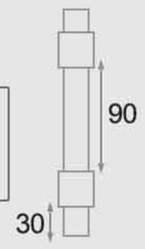
LIQUID MAGNETIC

LEVEL SWITCH MLS100

SMP Magnetic Level Switch type MLS100 consists of non-abrasive Float carrying permanent magnet and non-ferrous stem carrying one, two or multiple reed switches. The float switch is a device used to sense the level of liquid in a tank. There is a magnet in the float ball and a magnetic reed switch in the rod. When the liquid level rises, it drives the float ball up close to the reed switch inside the rod. The magnet then forces the two magnetic contacts inside the switch to connect, which allows current to pass.The float encases a sealed magnet, which moves up and down the length of the stem as a fluid level rises and falls. As the magnet passes by the contacts in the encased reed switch, they draw together and complete a circuit between the two lead wires. When the magnet comes close to the two contacts, they draw together and touch, allowing current to pass through. When the magnet is moved away, the contacts demagnetize and separate, breaking the circuit. The operation can usually be reversed by removing the bottom clip from the switch, inverting the float and replacing the clip. When this change is made, the switch circuit will be open when the float is resting on the bottom clip and closed when the float rises. Properly used, float switches can deliver millions of on/off cycles, for years of dependable operation. Failures are normally due to overloading, frequently caused by spiking voltage.

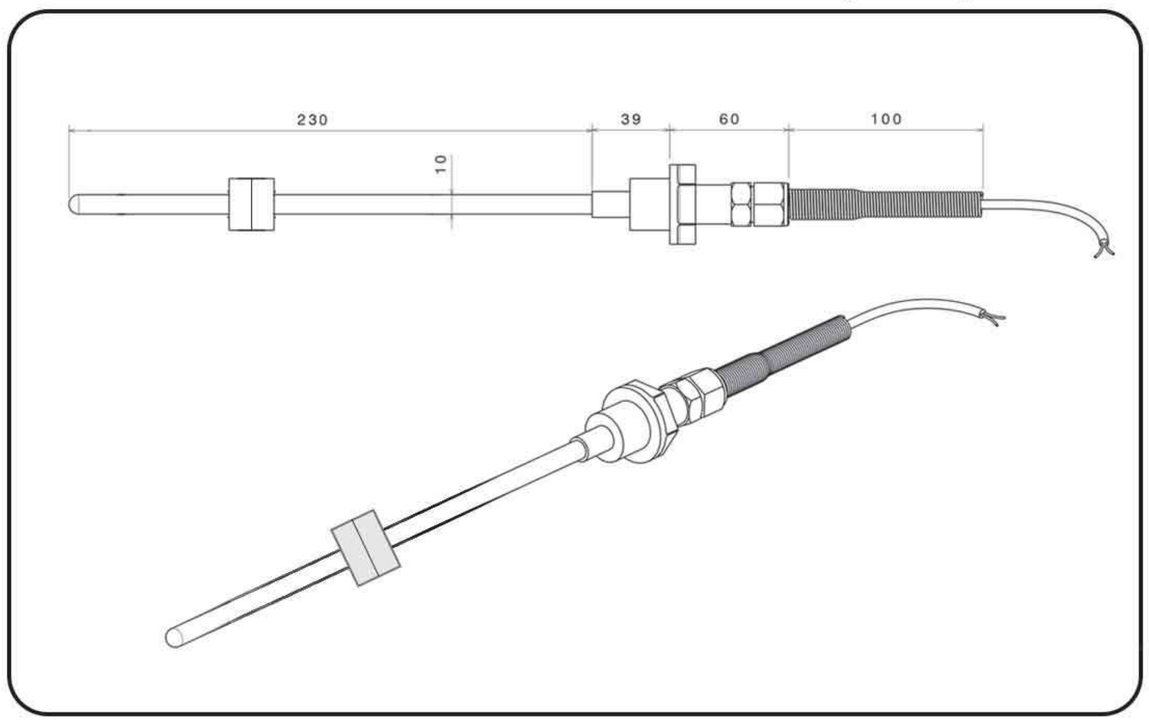
ORDERING CODE

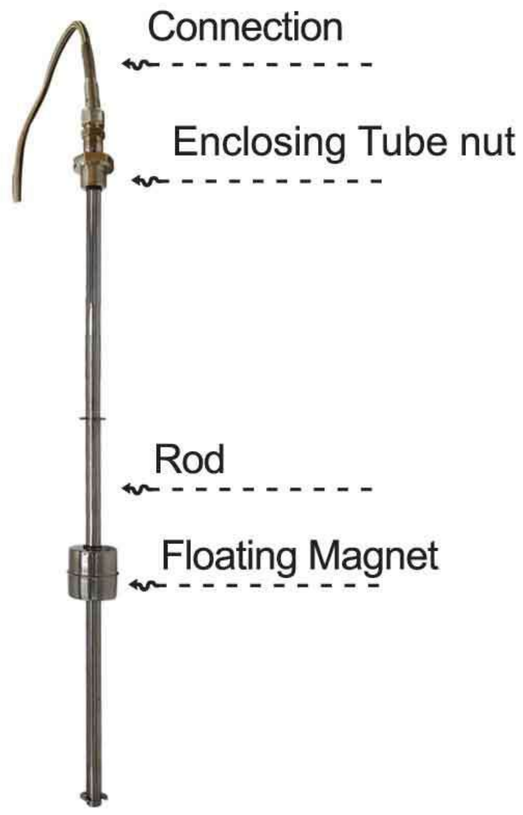
Name	MLS 100	
Contact	1	Number of contact (first down contact next up contact)
Type	NO	Normal Open
	NC	Normal Close
Length	0 to 200 cm	Length of Rod (Optional)
Distance	0 to 200 cm	Distance to the end for down contact (Optional)
	10 to 190 cm	Length distance between two contact (Optional)



For Example: MLS 100 | 1-1 | NO-NC | 150 | 30 | 90

DIMENSIONS (mm)





SPECIFICATION

PRODUCT	LIQUID MAGNETIC LEVEL SWITCH
Device complies with	CE Certification
Switch system	2*SPST
Cable length	1 m
Installation position	vertical
Fixing	M10
Probe Material	Stainless steel
Current rating	1 (A)
Power consumption	1 W
Min. liquid density	>0.6 kg/dm3
Electrical connection	3 wire
Max. temperature	80 °C
MAX. length of guide tube	10 … 50 cm (Optional) ■
Switching point	Min. distance 30 mm
Distance between contacts	Min. 4 cm
Tolerance	1%
Supply	24 VDC / 220 VAC
Weight	0.4 kg (with packing) 0.3 kg (without packing)
Protection	IP 65
Packing Dimension	L:23 W:13 H:14

X 4

X 8

LEVEL SWITCH

LSR (Thread)

LSR (Weld)

ROTARY PADDLE

LEVEL SWITCH LSR

SMP rotary paddle level switch is the most universal of all level sensing technologies and is the most popular level switch used in dry bulk materials. It is a rotary paddle switch for point level detection in bulk solids. It offers a wide variety or paddle options for unequaled application versatility. It is easy to install and requires no special tools or calibration.

The rotary paddle level switch is to detect the presence of solid/powdery material in most kinds of tanks, bins and containers. The unit is usually located through a bin wall at the top, middle or lower level of a bin.

During normal operation (no material present) a synchronous motor rotates the paddle at 5 rpm. When this paddle rotation is impeded by material, surrounding the paddle. motor will start and cause the Micro-switch to change state (indicating an alarm or control).

APPLICATIONS

SMP rotary paddle level switch has a rugged design for use in harsh conditions in the industry such as plastic granulate, wood chips, plastics and synthetics chemicals and fertilizer, pharmaceuticals, food and beverage, agriculture and fodder mills, depots of cement and ceramics.

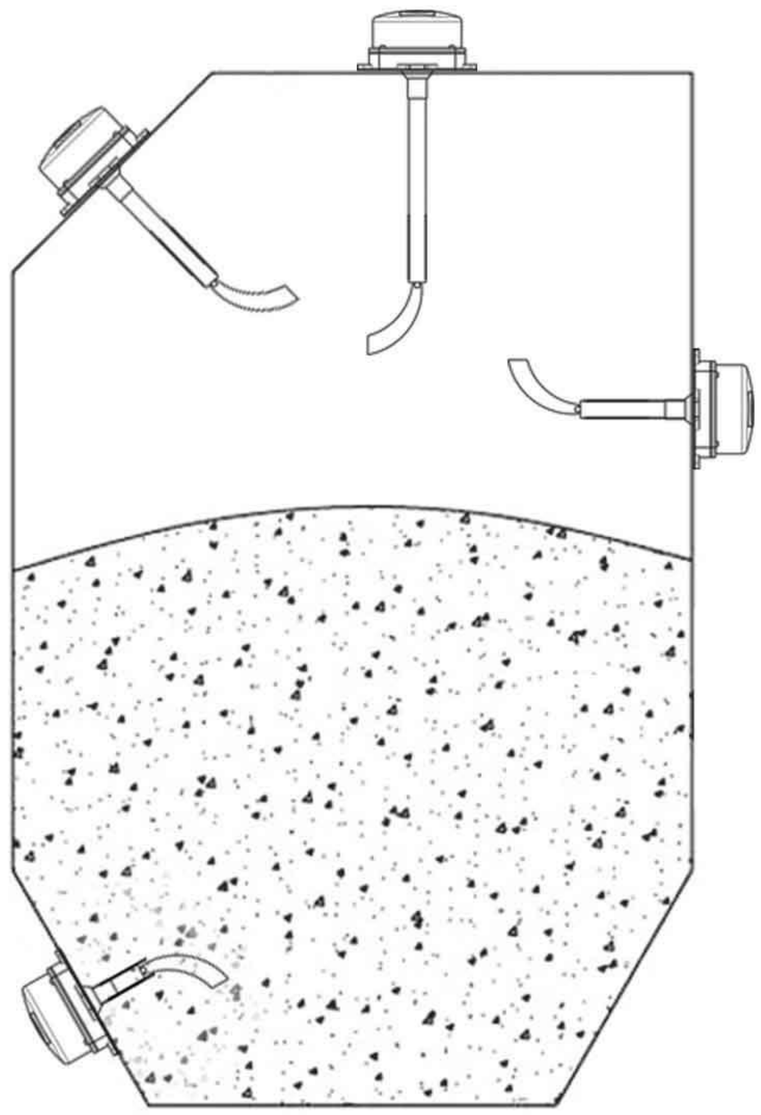
The size and shape of the rotary switch blades are selected based on the application.

Shape, density, tenacity and size of materials are among the effective factors. However, some tanks do not have a suitable inlet to pass these blades. In other words, their entrance is narrow and the blades with suitable dimensions do not pass through it. Foldable paddle blades are designed and manufactured by SMP for use in these conditions.

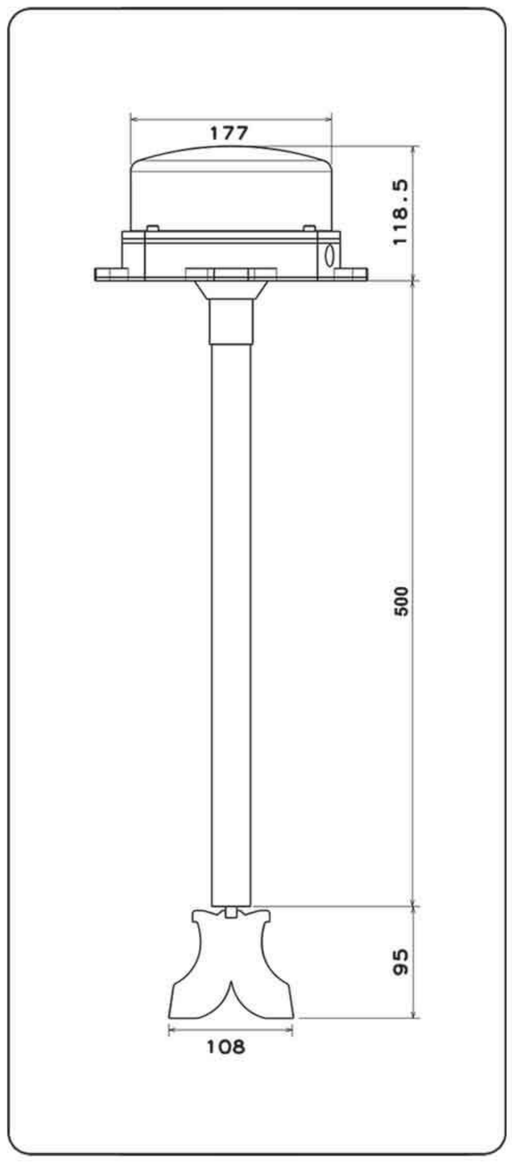
SMP ADVANCED

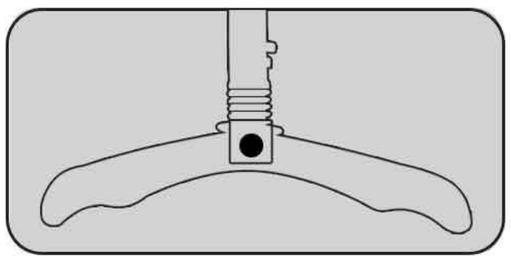
FEATURES

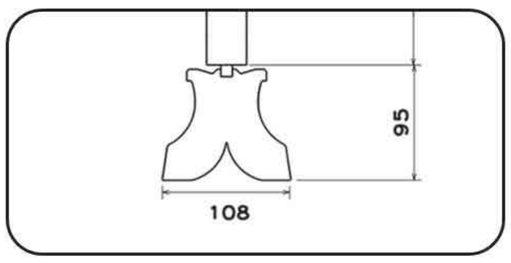
- Appropriate operating torque to suit service material can be set through adjustable spring inside the housing.
- Flexible spring shaft for absorbing material shocks
- Thick stainless steel pipe and two bearings for protecting central shaft from material flow to increase reliability.
- Rugged sealing ring prevents dust from infiltrating the housing body along the shaft
- Airtight anti-heat sealing device allows outdoor application
- The inside mechanisms are easily tore down for checking, maintenance and replacement.

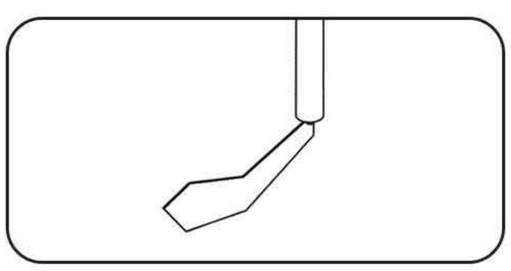


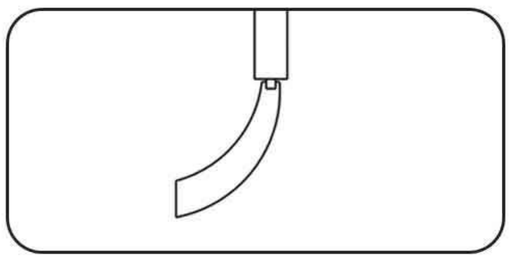
DIMENSIONS (mm)

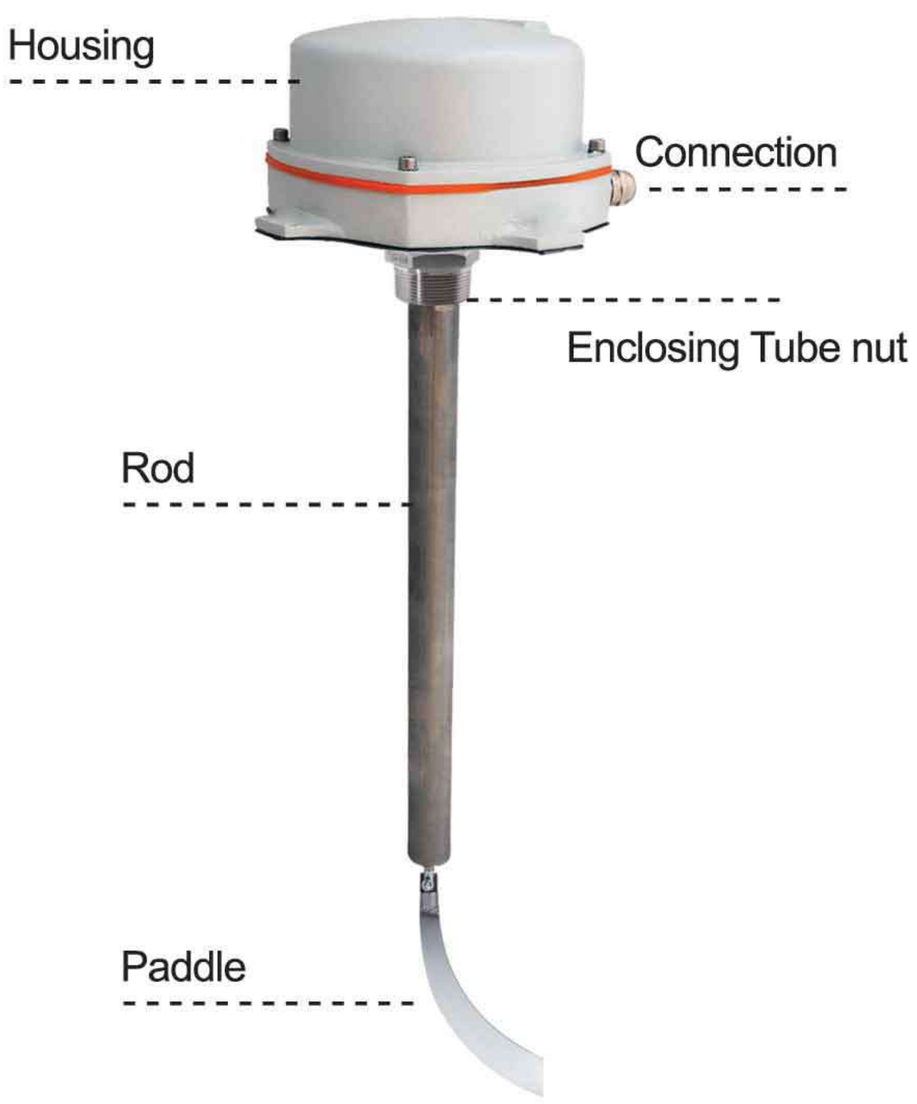












ORDERING CODE

Product	LSR-T	Thread - Rotary Paddle Level Switch: Rod
	LSR-R	Thread - Rotary Paddle Level Switch : Rope
	LSR-W	Weld - Rotary Paddle Level Switch
Voltage	230	Power Supply 230 VAC 50 Hz
	24	Power Supply 24 VDC
Length	50	Length Of Pipe (20-100 cm)
Connector Type	MF	Metal Flexible Connector
	MC	Metal Cable Gland
	PC	Plastic Cable Gland (Recommend for use in indoor application)
Connector size	13	PG 13.5
	16	PG 16
	20	M 20
	1/2	1/2 inch
Paddle	FO	Foldable (suitable for tread type)
	PO	Polygon (not suitable for tread type)
	DI	Dilemma (not suitable for tread type)
	RO	Rowing (not suitable for tread type)

For Example: LSR | 24 | 70 | MC | 13 | RO

SPECIFICATION

PRODUCT	ROTARY PADDLE LEVEL SWITCH
Device Complies With	VDE 0110
Finish	Electrostatic , Gray RAL 7032
Housing	Cast Iron
Fixing	By means of 4 M8 bolt
Admissible Ambient Temperature	-25° C.....+80°C
Motor Power Rate	10 W
Motor Voltag	220 V
Rotation	5 rpm
Switch System	2 changeover contact (1 NO + 1 NC)
Rated Insulation Voltage	380 VAC
Rated Operation Voltage	15 ..... 250 VAC
Conventional thermal Current	16 A
Protection	IP 65
Cable Entry	See ordering code in Pg .40 Connector part
Connection	Max 1.5 mm
Electrical Breaking	220 VAC / 24 VDC
Rod material	SS 316
Earthing	Inside the housing M4
Paddle Material	Stainless steel
Weight	6.7 K.g (with packing) 6.5 Kg (without packing)
Packing Dimension	L: 80 W: 30 H: 25 (cm)

X 1

X 2

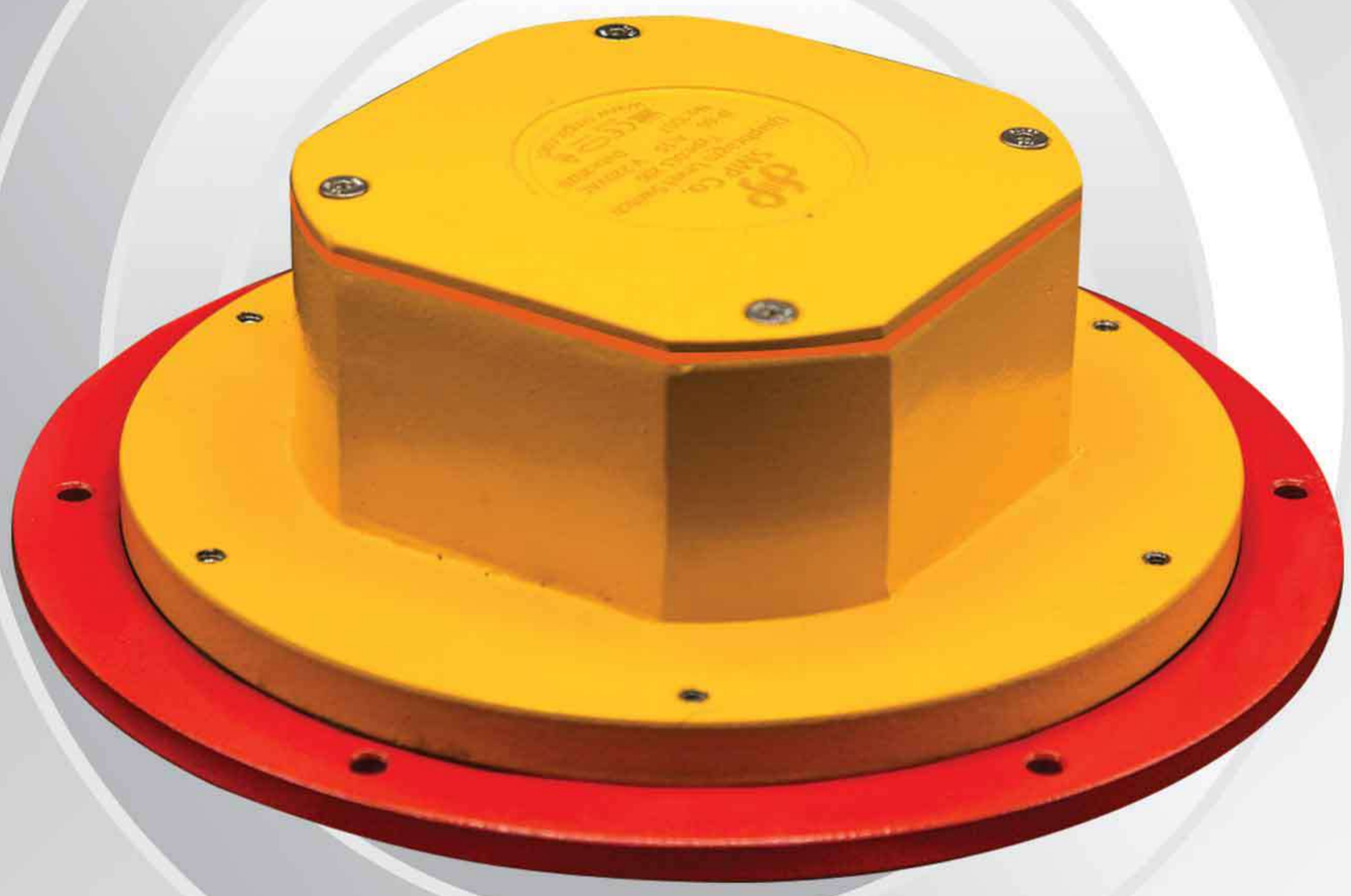
ACCESSORY

INSTALLATION'S FLANGE

Flange made of ST 37, thickness 3 mm, for better installation from the bottom of the switch

LEVEL SWITCH

DLS 200



DLS 200

DLS 100

DLS 100

CE

DIAPHRAGM LEVEL

SWITCH DLS 100/200

SMP Diaphragm Level switch is ideal for level control of bulk solids and powders. SMP Diaphragm level switch is used for detecting clogging of material on screw conveyor, boot level detection of bucket elevator and to detect level of food grain in hopper. The contact or limit switch is used for control action.
It is low cost but reliable level switch, does not require power supply for operation and directly operates limit switch. Moreover. Its installation is simple.The SMP Diaphragm level switch has a unique.
patented magnetic linkage that isolates the electrical compartment from the controlled product, reducing maintenance and improving sensitivity. The sealed switch compartment and sealed leads yield the upmost in reliable operation.A wide selection of diaphragms and switches are available with choices or flange or suspension mounting to fit your any specific application.

APPLICATIONS

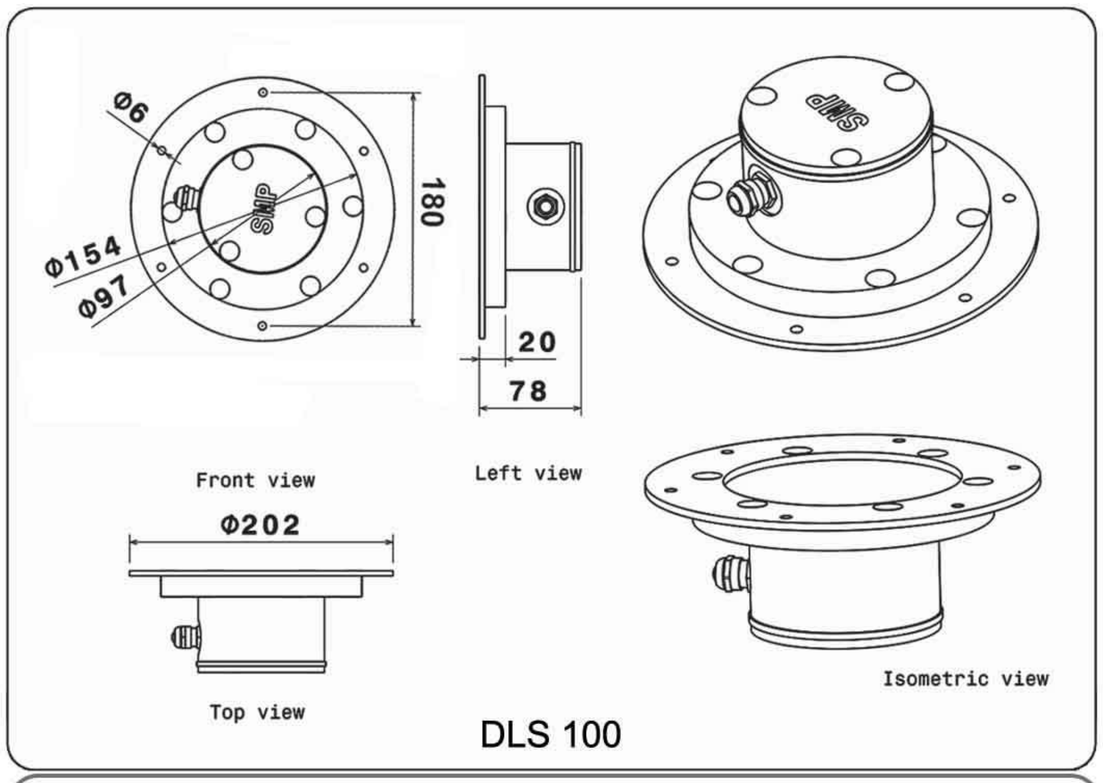
- Cement silos
- Coal storage / Bunker
- Sugar storage
- Seed storage
- Plastic powder silos

SMP ADVANCED

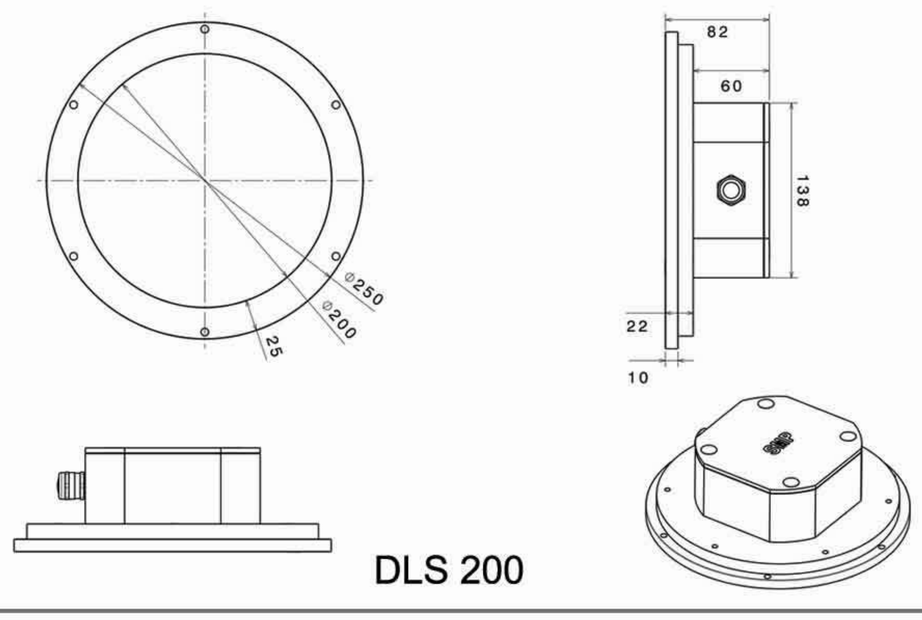
F E A T U R E S

The most important advantages of the SMP level switch are its high sensitivity, high reliability and low cost. The sealed switch compartment and sealed leads yield the upmost in reliable operation. SMP level switch is made of anti-root stainless steel diaphragm which highly heat resistance and wear resistance. Moreover SMP unique design reduce maintenance. improve sensitivity and provide simple operation. In addition to fit your specific application a wide selection of diaphragms and switches are available for various grading.
A wide range of diaphragms are available to match the flowability, required temperature, abrasiveness, or product density, which can be consulted by the technical director for a better choice according to the intended purpose.

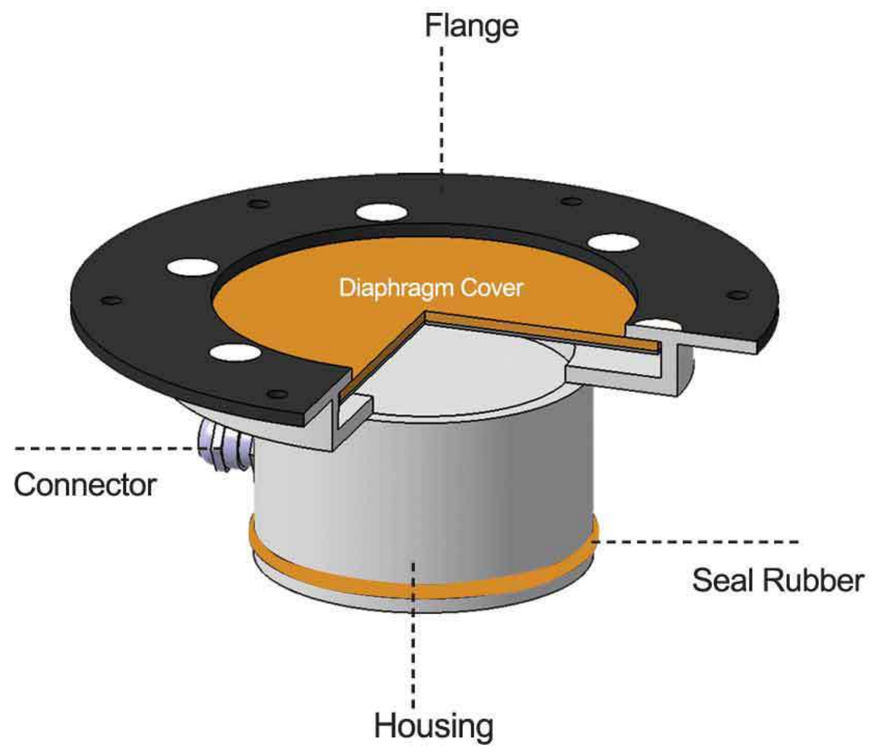
DIMENSIONS (mm)



DLS 100



DLS 200



NOTE

The diaphragm can varied according to material in two models composited of stainless steel with :

1) Silicone rubber for harsh ambiance
2) Cotton rubber for coarse aggregate

ORDERING CODE

Type | **Connector** | **Rubber**

Rubber

S	Silicone Rubber
C	Cotton Rubber

Connector

Type

size

13	PG 13.5 Recommend for use in indoor application
16	PG 16
20	M 20
1/2	1/2 inch

MF	Metal Flexible Connector
MC	Metal Cable Gland
PC	Plastic Cable Gland

DLS 100	
DLS 200	

For Example: DLS 200 | PC | 13 | S

SPECIFICATION

PRODUCT	DIAPHRAGM LEVEL SWITCH
Device complies with	CE Certification
Housing Dish	Aluminum, RAL 3020
Electrical box	Die cast, aluminum, RAL 1028
Mounting	6 Hole M6
Admissible ambient temperature	-35° ……..+125° C
Switching system	1 changeover contact
Conventional thermal current	16A
Mechanical Life	1 million switching cycles
Electrical life	Min: 500000 switching cycles
Protection	IP 65
Cable entry	see ordering code in Pg .44 Connector part
Connection	220 VAC -24 VDC
Flange type	According to the request
Pressure limit	4 Bar (Optional 0.5 bar up to 4 bar)
Weight	LS 100 : 1.09 Kg (with packing) / 1.06 Kg (without packing) LS 200 : 3.290 Kg (with packing) / 3.250 Kg (without packing)
Packing Dimension	L: 23 W: 13 H: 14 (cm)

X1

X6

X12

ACCESSORY

INSTALLATION'S FLANGE

Flange 6 holes made by ST 37.

For better and quick installation.

LEVEL SWITCH

CE

TILT LEVEL

SWITCH OFS P/T/B

SMP Tilt Level Switch is abrasion-resistant and easy to install. It detects the presence or absence of material at the elevation of its probe. It's a simple yet rugged control used for high level or material now applications.

The arriving material pushes the lower end of the hanging probe to one side.

An internal drop of liquid acts as a tilt sensor and signals when the probe moves to an angle or 15° away from vertical so the tilt switch is actuated when material rises to tilt the probe 15 degrees or more from its vertical position. The interconnecting armored cable is very flexible and heat resistance.

The tilt level switch has an adjustable time threshold which can be set via the small rotary switches on the PCB.

Customize the number of keys according to the technical design. SMP suggest using two tilt level switch for control system. Two SMP tilt level switch can be designed at different heights or at different points depending on the application. They have 2 different pcb bord that have independent function. The two tilt switches on the PCB are labeled T1 and T2 and are designed for use in one control box.

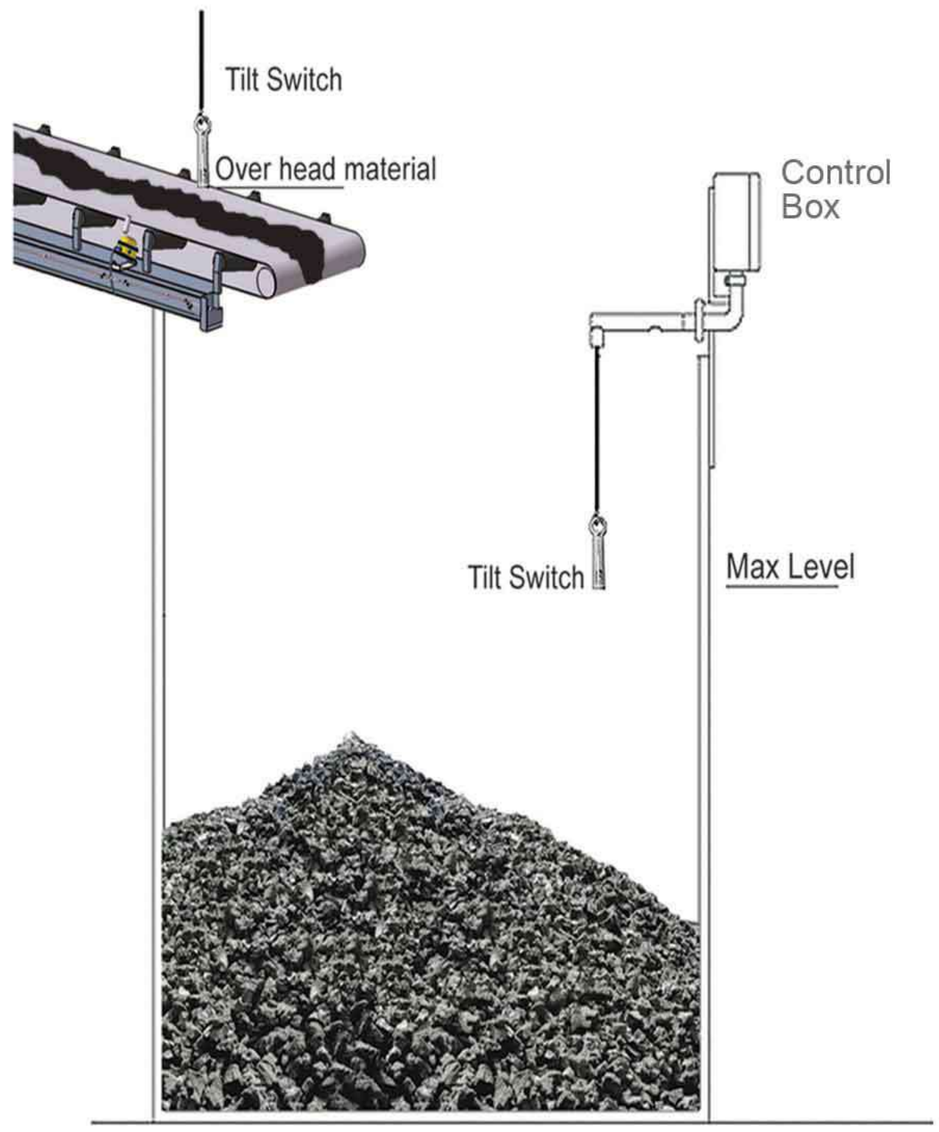
The tilt level switch contact type is designed using mercury-free mechanism.

APPLICATIONS

- High level detector in bins containers containing a wide variety of materials.
- Conveyor bell overhead detector
- Level control in volumetric batching
- Crash probe for tripper car.
- Starvation or no-flow detector for belt and vibratory feeders.
- Encapsulated in various sizes. Various probe assemblies are available to suit the application with a wide

INSTALLATION

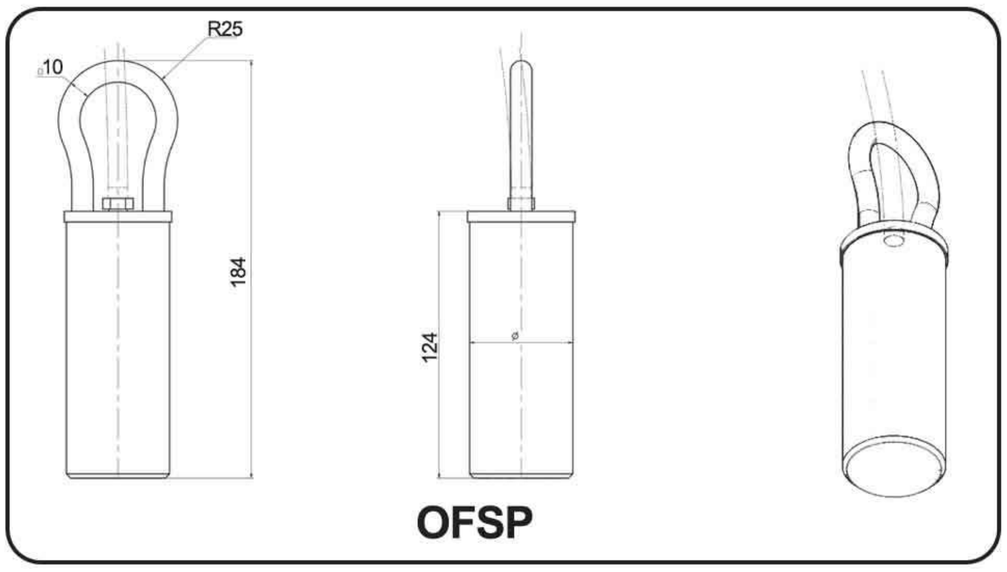
For proper tilt action the tilt switch should be suspended by attaching a chain to the provided eyelet. An extension with a paddle or sphere is available for increased sensitivity.



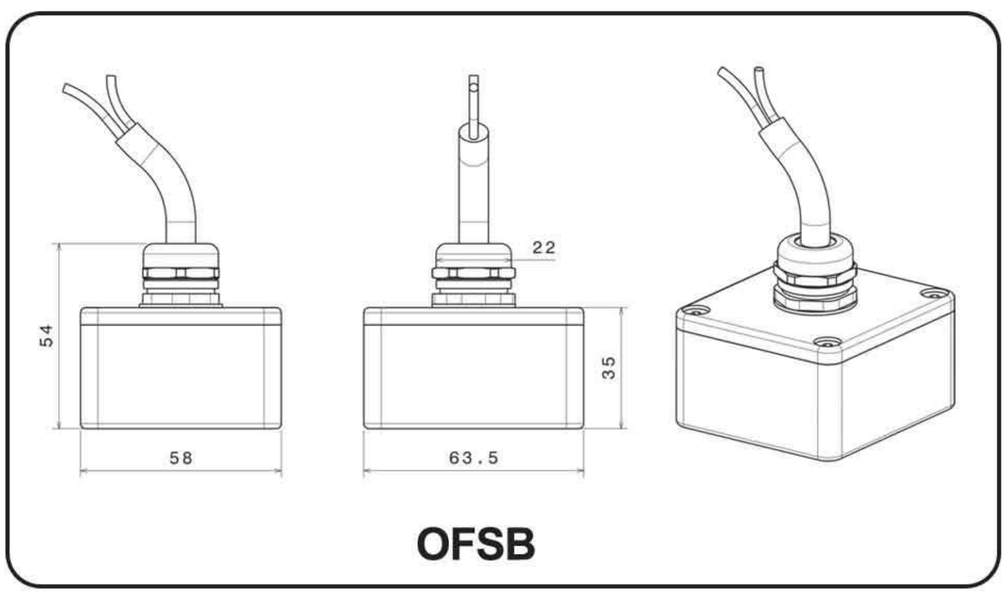
NOTE

For grading over than 40mm. an extension with a paddle or sphere is recommended.

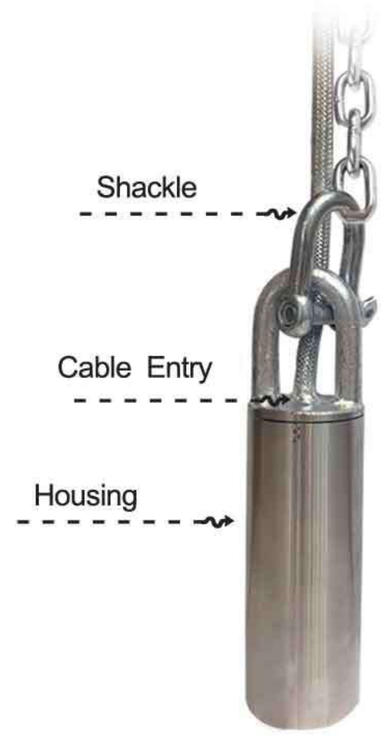
DIMENSIONS (mm)

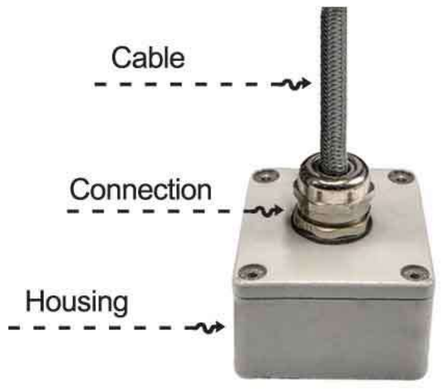


OFSP



OFSB





ORDERING CODE

Product	Operation	Length	Control	
			CB	With Control Box
		300		Cable Length (cm)
		500		Cable Length (cm)
	S			Single
	D			Dual
OFSP				Tilt Level Switch ($1\frac{1}{2}$ inch)
OFST				Tilt Level Switch ($\frac{3}{4}$ inch)
OFSB				Tilt Level Switch - Cubic

For Example: OFSP | D | 300 | CB

SPECIFICATION

PRODUCT	TILT LEVEL SWITCH
Device complies with	CE Certification
Electrical Rating	24 VDC 4A
Housing Material	stainless steel SS304
Box Color	Static
Mounting Orientation	Vertical
Service	Tilt and vibration positions
switch system	1 changeover contact
Protection	IP 67 M
Life time	1000000 cycles
Working temperature	-20° C……..+90°
Electrical Connection	Cable 3 x 0.35 mm2
Operating Time	0.5 to 10 Sec. (only in control box type)
Operation Angle	15^0 ..... 20^0
Weight (Tilt)	OFSP 1.08 Kg (without packing) OFST 1.06 kg (without packing) OFSB 1.06 kg (without packing) Packing : 20 gr
Packing Dimension (Tilt)	L: 23 W: 13 H: 14 (cm)
Weight (Control box)	1.08 Kg (with packing) 1.06 kg (without packing)
Packing Dimension (Control box)	L: 25 W: 20 H: 14 (cm)

X 1

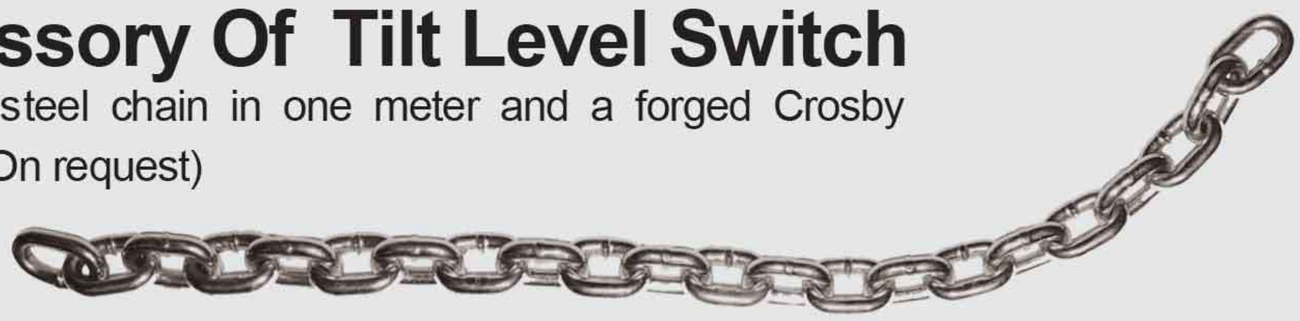
X 6

X 12

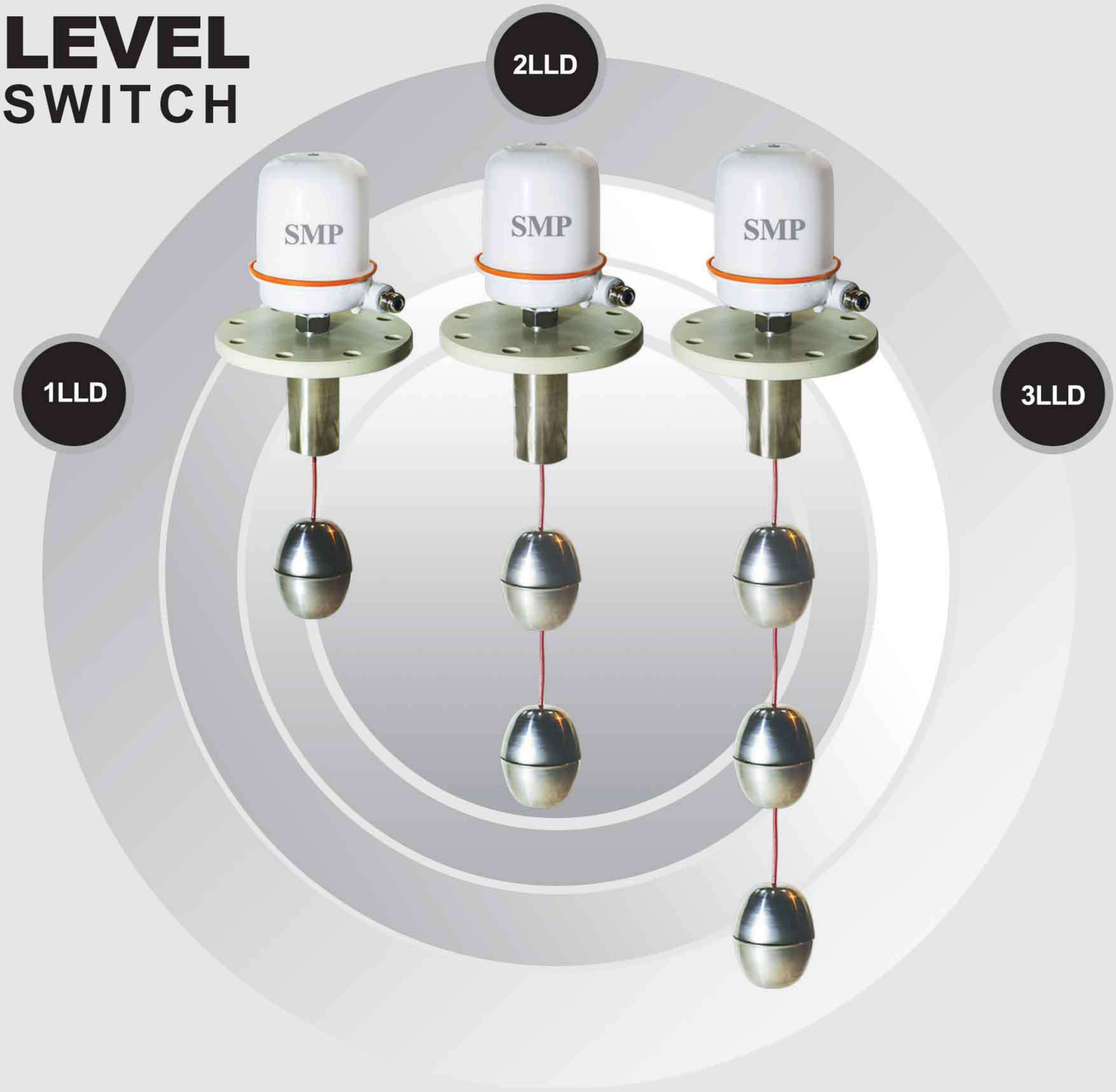
ACCESSORY

Accessory Of Tilt Level Switch

Standard steel chain in one meter and a forged Crosby shackle (On request)



LEVEL SWITCH



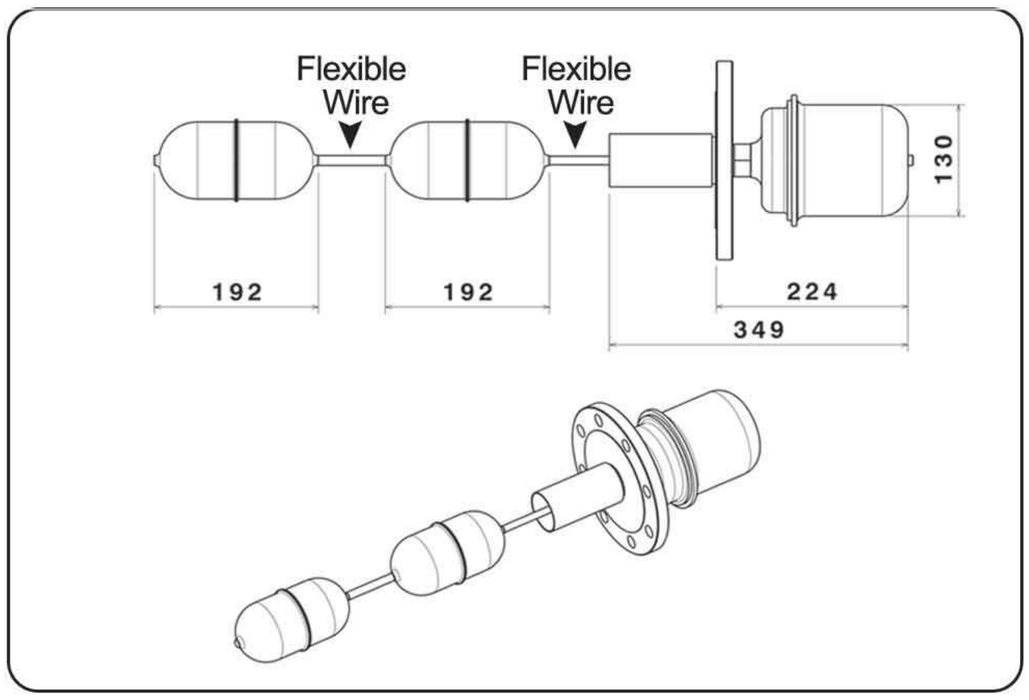
LIQUID LEVEL
SWITCH LLD

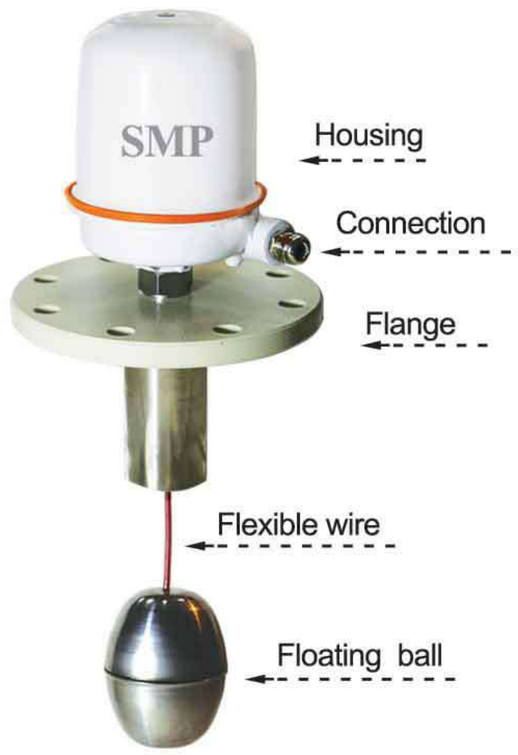
SMP liquid level switch has many applications in the industry to show the surface conditions of the control pumps, valves, etc. The most important of which is to identify and measure fluid levels in tanks, vessels or containers.The application of this switch is to be installed above the liquid level. With the change in the desired liquid level, the length of the internal spring of the switch is reduced. This spring is connected to a steel rod; this length change in which absorbs the internal part of the magnet. This operation will ultimately cause mechanical stimulation in the internal micro switch.

APPLICATION

- Day Tanks
- Condensate Receivers
- Fuel Storage Tanks
- Cooling Towers
- Interface
- High and high/high alarm from single tank entry

DIMENSIONS (mm)





SPECIFICATION

PRODUCT	LIQUID LEVEL SWITCH
Device complies with	CE Certification
Switch system	1 changeover contact (SPDT)
Floating ball	SS 304
Detection point	Hight Hight / Hight Low / Low Low (Optional) ■
Flange model	8 holes, 20 Cm diam.
Body material	Al, RAL 7035
Pressure capacity	10 bar.
Admissible Ambient Temperature	-10° C ..... 135°C
Min. adjustment point	70 mm
Cable Entry	PG 13.5
Electrical rating	250 VAC – 24 VDC
Rated current	16 A
Protection	IP 65
Operation Time	1.2 Sec
Mounting	Vertical
Weight (with 1 ball)	8.350 Kg (with packing) / 8.260 Kg (without packing)
Ball weight	~ 700 gr
Packing Dimension	L: 80 W: 30 H: 25 (cm)

X 1

X 2

LEVEL SWITCH

ML 100
Transmitter

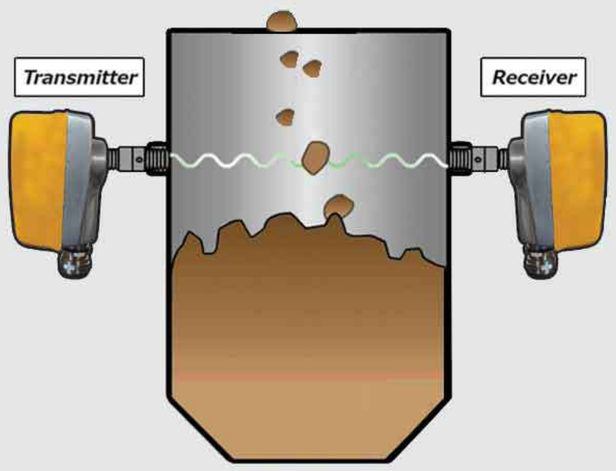
ML 100
Receiver

MICROWAVE
LEVEL SWITCH ML 100

SMP Microwave level sensors consist of two parts, transmitter and receiver. The transmitter continuously emits a low-power electromagnetic waves to the receiver, and as soon as this connection is lost due to obstruction, the output relay is released and the switch is made.These types of sensors have wide applications in industry. The basis of the operation of these sensors is based on the presence or absence, flow or absence of product flow. The most widely used positions for this type of sensors are silos and tanks.Micro waves easily pass through materials such as plastic, glass, ceramics, paper and so on. They cannot penetrate metals and water absorbs most microwaves. In contaminated environments where contamination may affect the sensors, due to the high permeability of this type of waves does not cause problems in their operation.Due to the low output power, the power of the waves is much lower than it is dangerous for the personnel.

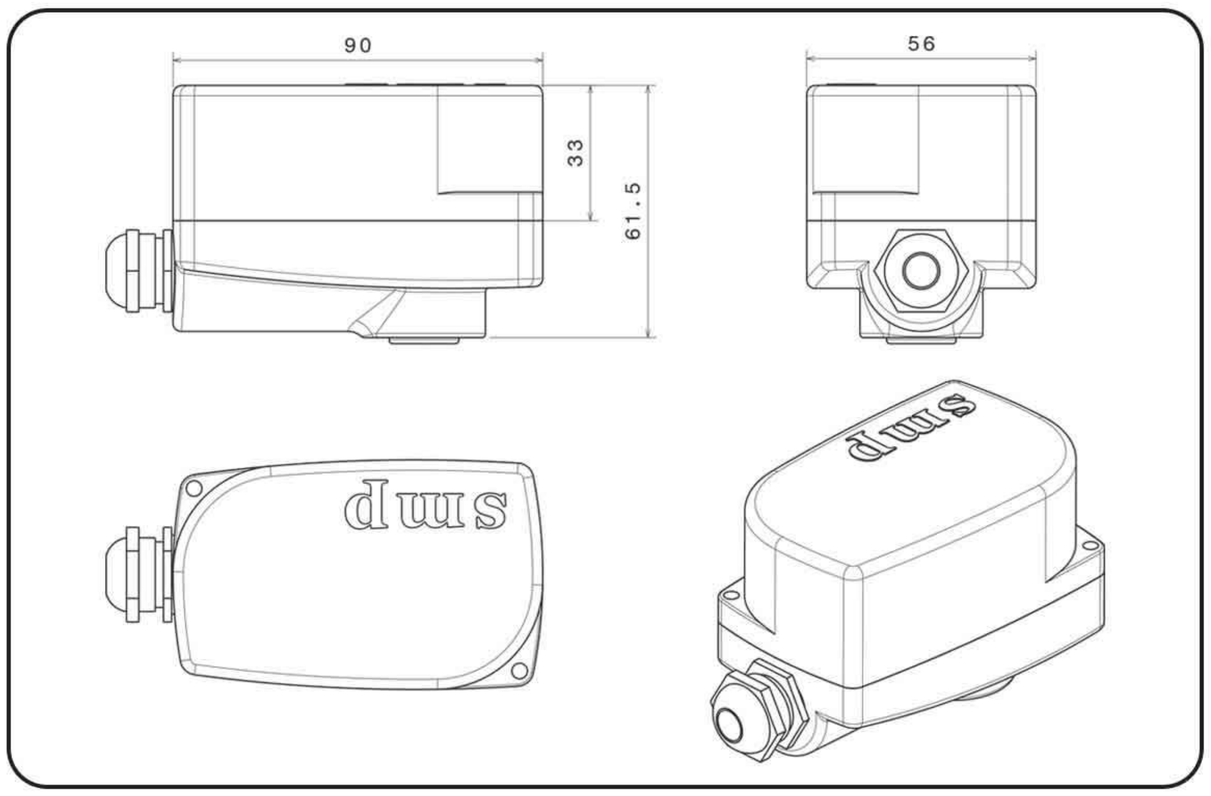
SMP ADVANCED
F E A T U R E S

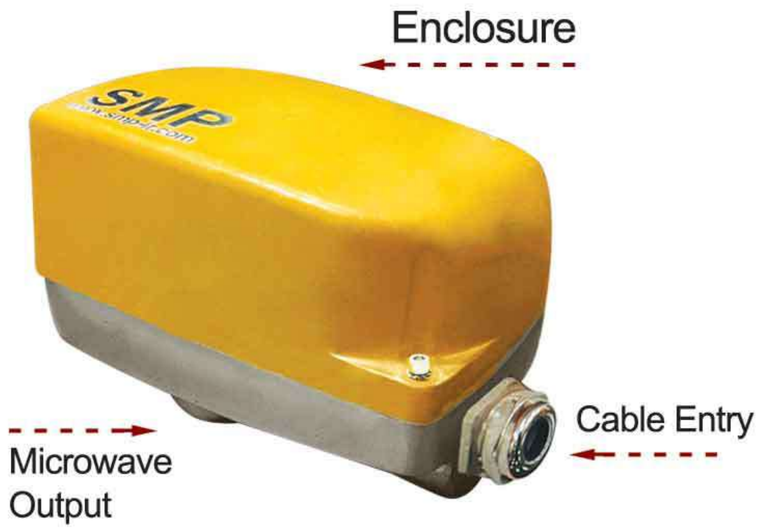
- High functional reliability
- Delay adjustability and performance type
- Applicable to a wide range of materials
- High penetration power of waves
- Quick action



CE

DIMENSIONS (mm)





SPECIFICATION

PRODUCT	MICROWAVE LEVEL SWITCH
Housing	Al, die cast
Finishing	Yellow, RAL 1028
Power supply	24 VDC
Operation distance	< 15 m
Frequency& transmission power	1.92 kHz
Operation ambient temp.	-15° …… 60° C
Output contact	3 A
Delay function	0.1 -10 Sec.
Protection	IP 65
Wave length	940 nm.
Weight	Transmitter (without packing 220 gr / with packing 230 gr) Receiver (without packing 220 gr / with packing 230 gr)
Packing dimension	L:15 W:13 H:8 (Cm)

X 1

X 6

SENSOR
SWITCH

CSM
200

SPEED SWITCH

C S M 2 0 0

SMP Speed Switch is used in connection with pulse sensor to monitor the rotational speed of machine drives. The pulse frequency set by control of the transistor.When the input frequency passes the set frequency internal output transistor is activated. Warning or control equipment can be connected to this output and operate when the speed either increase or decrease from set point. The operation of transistor doesn't work during start-up time and adjusting mode.

SMP ADVANCED

F E A T U R E S

- It has good stability.
- High speed provided.
- High switching rate.
- Work in harsh environmental conditions.
- Low cost and power consumption

APPLICATION

Two modes are available for technology of SMP compact speed monitor:

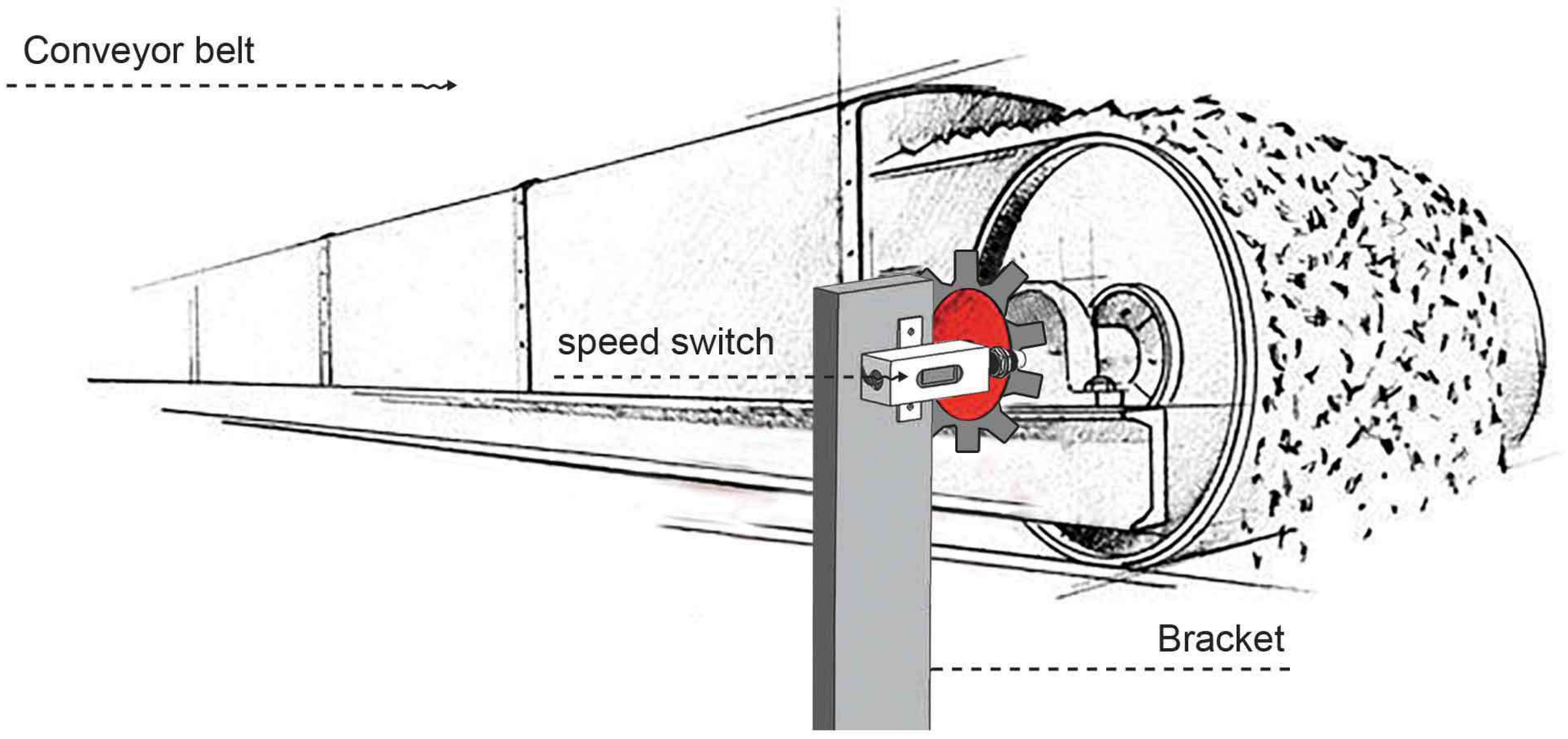
Under speed application

By rotation of motive machine. pulse signals will be specified, counted and displayed with plated proximity switch. In following, if pulse numbers are less than adjusted value by user output (third-wire) will be activated based on type of interior switch model either of NPN or PNP.

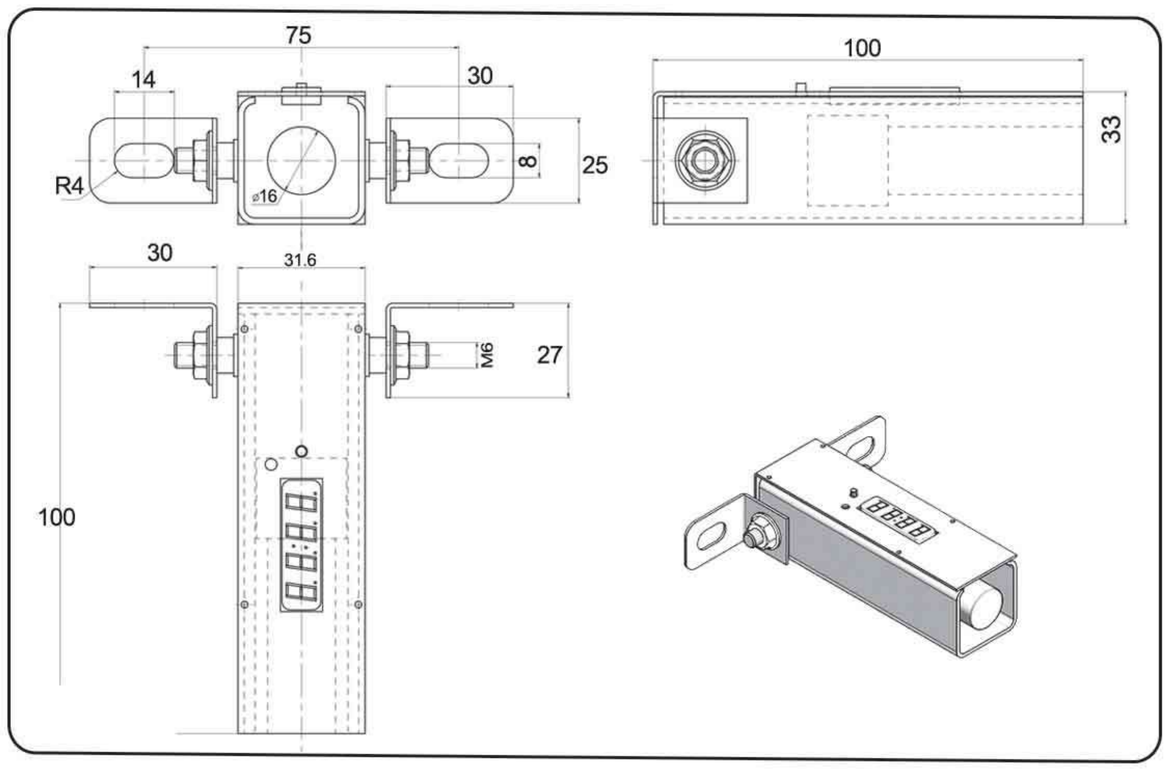
Over speed application

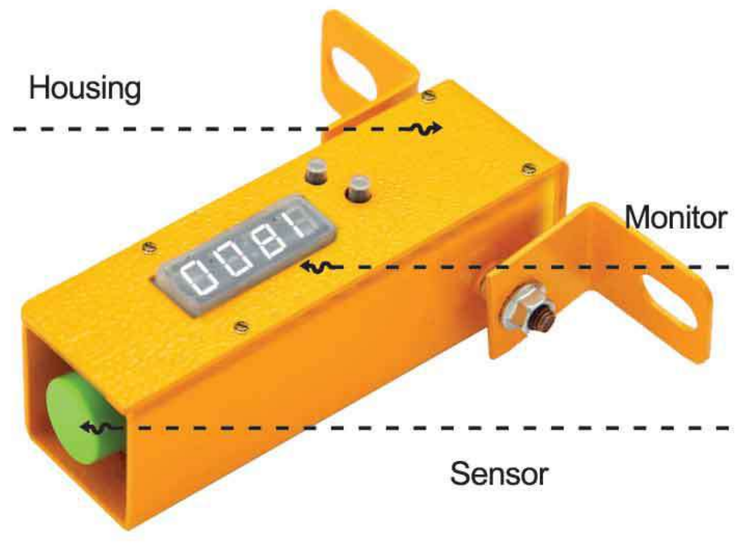
By rotation of motive machine, pulse signals will be specified, counted and displayed with plated proximity switch. In following, if pulse signals are more than adjusted value by user. output (third-wire) will be activated based on type of interior switch model either of NPN or PNP.

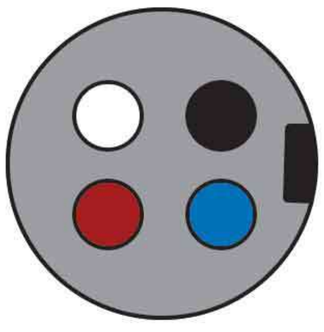
MOUNTING POSITION

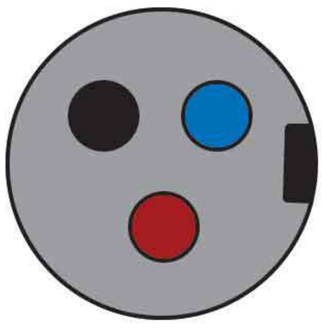


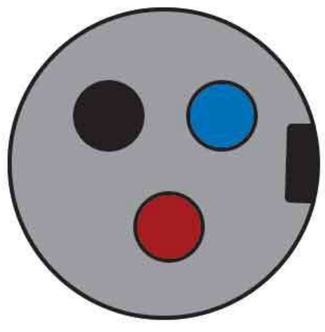
DIMENSIONS (mm)

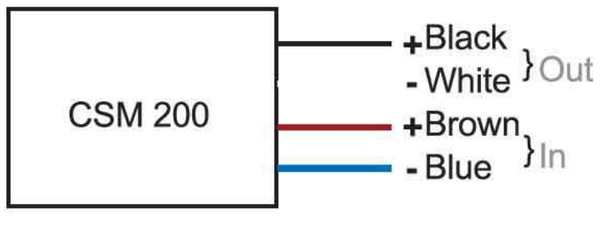


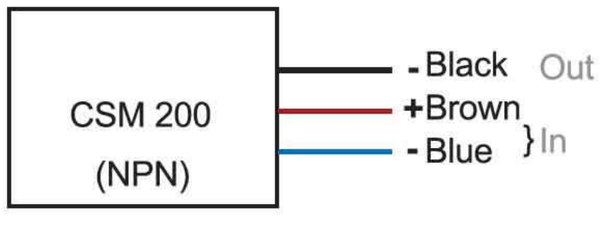


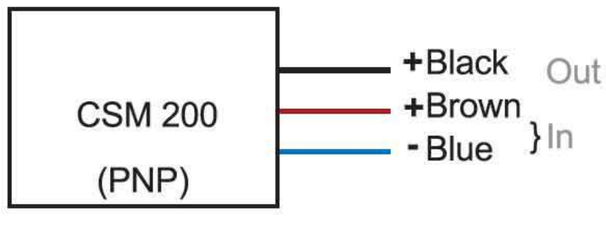




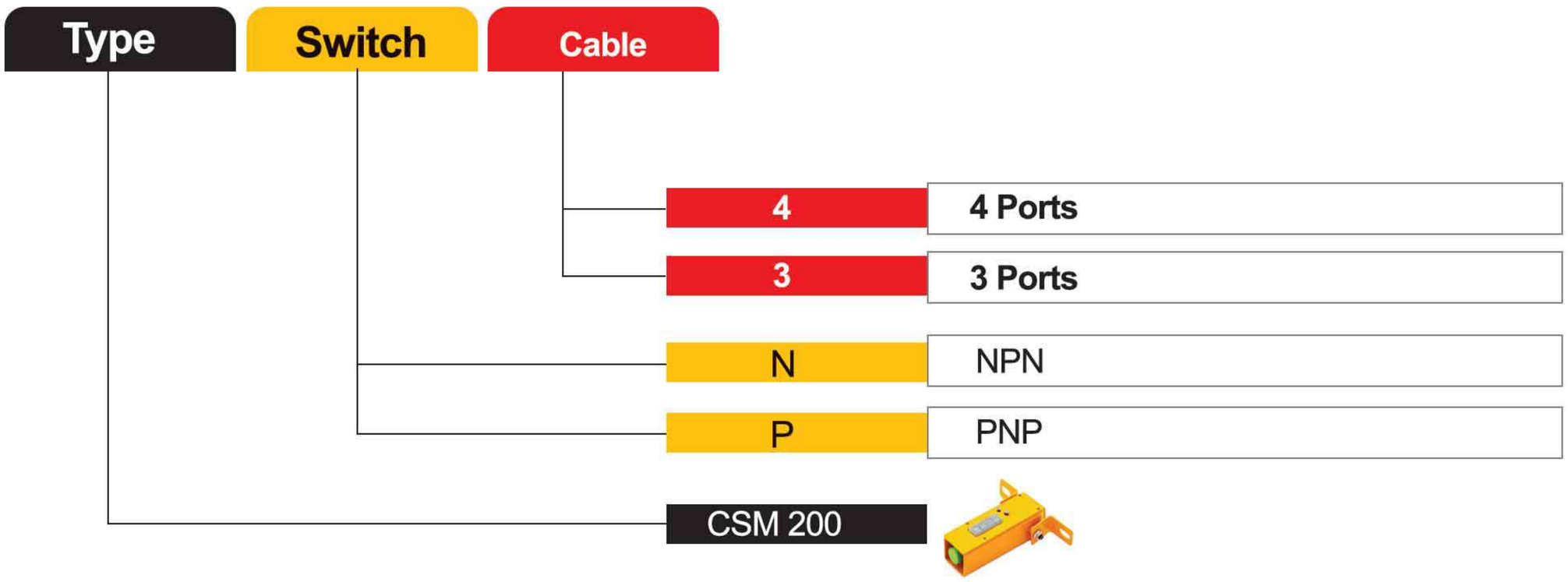








ORDERING CODE



For Example: CSM 200 P 4

SPECIFICATION

PRODUCT	SPEED SWITCH
Device complies with	CE Certification
Operating principals	Under speed or Over speed
Power supply	10-30 VDC, 100ma max current
Power consumption	2VA
Ambient temperature	-25°……..+60° C
Storage temperature	-35°……..+80° C
Protection	IP 65
Measuring range	5~999 rpm
Point range activated	6~998 rpm
Dimensions	100 x 85 x 33 mm
Output	NPN or PNP (Optional)
Pulse duration	≥ 60 ms
Trip point accuracy	< 1%
Display	Red LED (switching status) Green LED (input pulse)
Sensing Distance	0.1 to 10 mm
Weight	230 gr (with packing) 220 gr (without packing)
Packing Dimension	20 (L) x 8 (W) x 5 (H) Cm

X 1

X 2 4

SENSOR
SWITCH

ZSS 100

ZERO SPEED

SWITCH ZSS 100

Monitoring Speed is necessary in any automation process. Speed of any equipment driven by an electric motor can very due to variety of reasons e.g. overload, underload, breakage of transmission parts etc. In case of open loop control, a speed monitoring device is useful to either give an alarm or to switch ‘off’ the motor.

SMP Zero Speed Switch used to determine if a rotating shaft comes to a complete stop.

Zero speed switches (ZSS) also known as Speed Actuating Sensing Switches are used to detect the stoppage or unacceptably slow movement of a rotating shaft. Generally its applications are in various machines, conveyors, power plants, and industries involving the production of cement, sugar, textiles, paper, etc.

CE

This device actuates relay contacts at preset speed. Using these contacts desired control action such as zero speed protection/ under speed protection/ over speed protection can be achieved.
Zero speed switches mainly use electromechanical, electronic, or magnetic proximity technologies. Electromechanical speed switches are direct coupled, speed-indicating devices which open or close a set of contacts mechanically, as a function of the rotational speed of the switch shaft. Electronic zero speed switches are direct-coupled, speed-indicating devices that open or close a set of contacts through a relay and electronic circuit.
User-defined settings and the rotational input speed of the shaft determine the speed at which an electronic zero-speed switch trips.
A small timing delay may be required for avoiding nuisance tripping during running as well as during starting of the machine. This is taken care of in the electronics of the ZSS.

SMP ADVANCED

F E A T U R E S

Easy speed setting.
Built in initial by-pass time delay arrangement.
Totally enclosed sensor, works in presence of dust, dirt water, oil & chemicals.

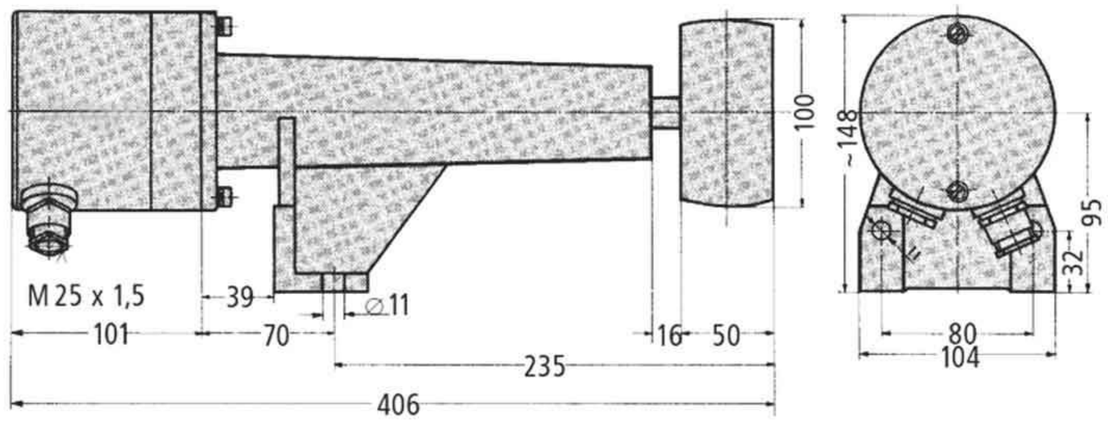
APPLICATION

Electronic Speed Monitor is used to monitor speed of

- Conveyors
- Crushers
- Rolling mills
- Agitators
- Mixers
- Stirrers
- Screw conveyors

and other industrial machinery.

DIMENSIONS (mm)



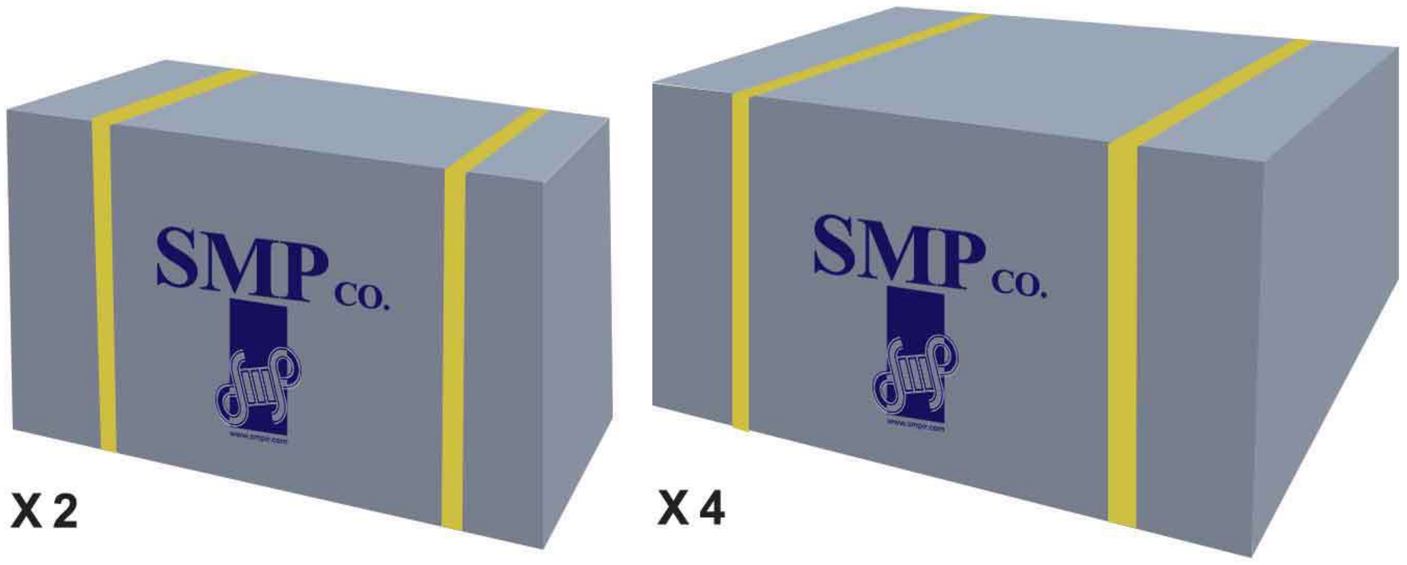
ORDERING CODE

Product	Voltage	Operation	Connector	Type	size	
					13	PG 13.5
					16	PG 16
					20	M 20
					1/2	1/2 inch
				MF		Metal Flexible Connector
				MC		Metal Cable Gland
				PC		Plastic Cable Gland Recommend for use in indoor application
		U				Under Speed
		O				Over Speed
	220					Power Supply 220 VAC 50 Hz
	24					Power Supply 24 VDC
ZSS 100						Zero Speed Switch

For Example: ZSS 220 U MC 20

SPECIFICATION

PRODUCT	ZERO SPEED SWITCH ZSS100
Device Complies With	CE Certification
Housing	Aluminium, yellow, RAL 1028
Fixing	2 x M8 bolt
Admissible Ambient Temperature	-20° C.....+70 ° C
Switch System	1 NO / 1 NC
Rated Insulation Voltage	Ui: 380 VAC
Rated Operational Voltage	Ue: 230 VAC
Rated Insulation Current	2 A
Protection	IP 65
Cable entry	2 M20 x 1.5
Operating principals	Under speed , Over speed (optional) ■
Reset differential	< 20% from cut out speed
Humidity	% 80
Warranty time	12 month
Mounting	Horizontal , Vertical
Weight	4 Kg
Packing Dimension	L:42 W:25 H: 30 Cm



X 2 X 4

SENSOR
SWITCH

SPEED MONITORING
RELAY SOUD-900

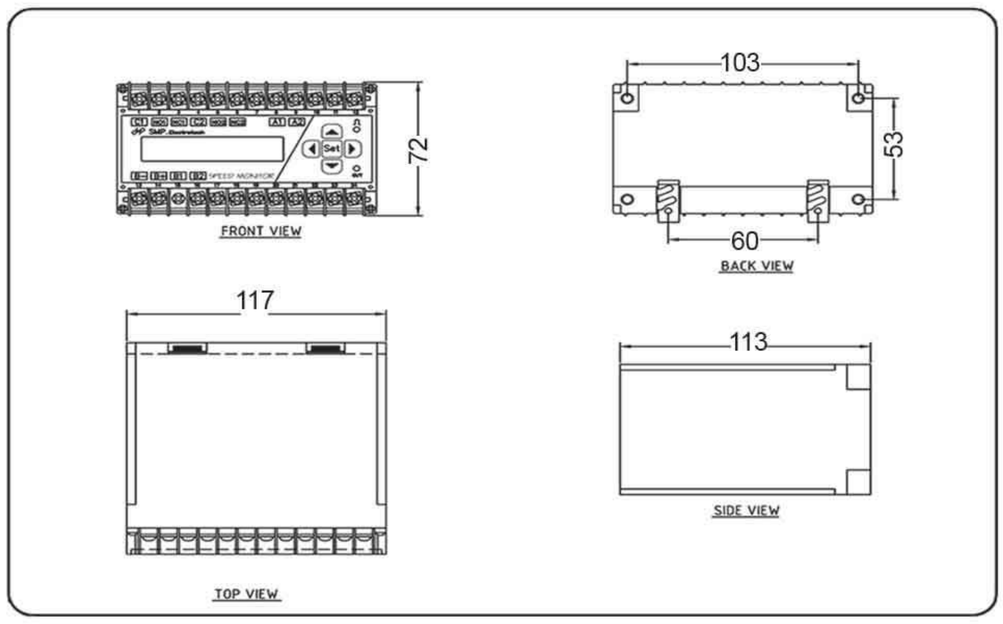
SMP Speed Monitor Relay SOUD-900 is used in connection with variant pulse sensor to monitor the rotational speed of machine drives 2-wire. 3-wire sensor (NPN and PNP) can be connected to the SOUD-900.

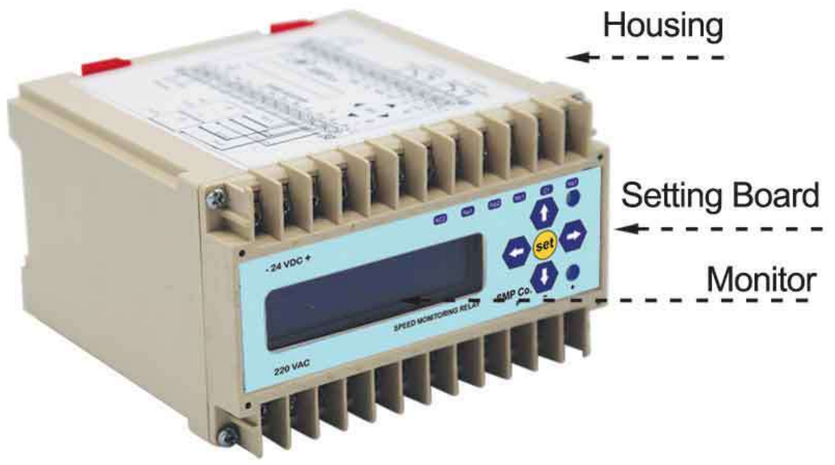
The pulse frequency is compared with frequency set by control of the relay. When the input frequency passes the set frequency.internal output relay is activated. Warning or control equipment can be connected to this output relay and operate when the speed either increase or decrease from set point. The operation of relay doesn't work during start-up time and adjusting mode.

APPLICATION

SMP speed monitor of type SOUD-900 with three including over speed. under speed and mix provides a system to control and observe the motion of machine such as bell conveyor. etc.

DIMENSIONS (mm)





SPECIFICATION

PRODUCT	SPEED MONITORING RELAY
Device Complies With	CE Certification
Operating Speed	Under Speed , Over Speed Or Mix
Power Supply	220 VAC - 50 Hz
Power Consumption	6 VA
Starting By-Pass	0-99 Sec . Adjustability
Pulse Duration	> 6 ms
Storage Temperature	-35° C.....+70° C
Protection	IP42
Housing	Plastic ABS
Measuring Range	0~9999 rpm
Alarm Set Point	1~9998 rpm By Rotary Switch
Range	0.015 Hz -160 Hz
Output Contact	2 - 5 (A) SPDT
Sensor Input	2 Wire , 3 Wire DC (NPN , PNP), Inductive, Capacitive ,NAMUR
Sensor Power	+24 VDC , 70 (mA) Max. Current
Weight	With packing 500 gr Without packing 450 gr
Packing Dimension	L: 15 W: 13 H: 8 (cm)

X 1

X 24

SENSOR
SWITCH

RQ 700

FREQUENCY RELAY

RQ 700

APPLICATION

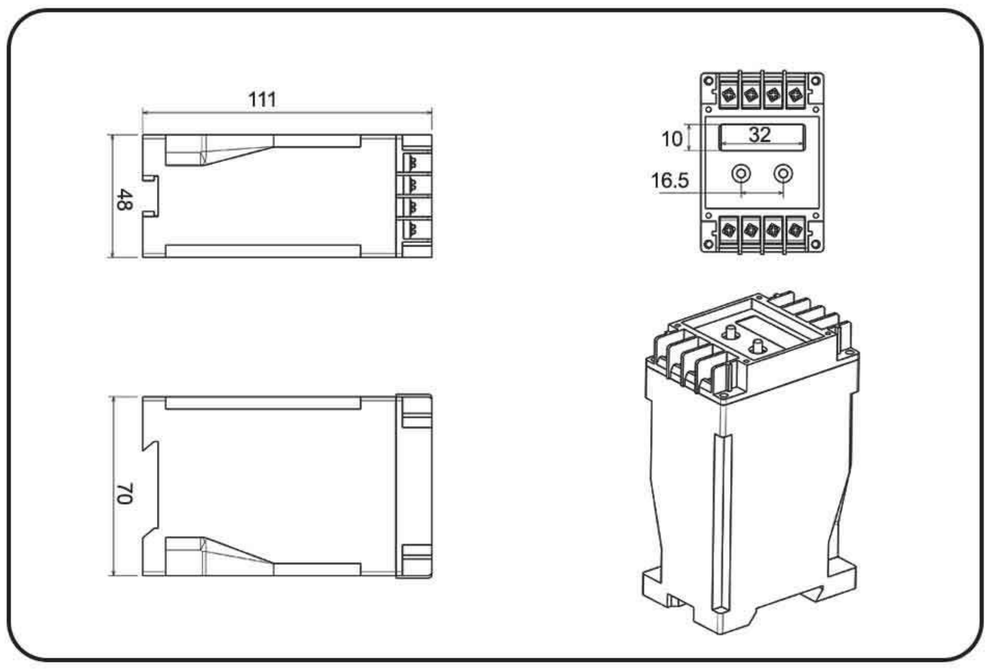
SMP frequency relay is designed and manufactured to measure the frequency of slip ring motors, the variations of which have variable cracking or variable mechanical force or variable load at start-up. If the frequency does not reach the specified level at a certain time, the relay switches and sends relevant alarms to the source.

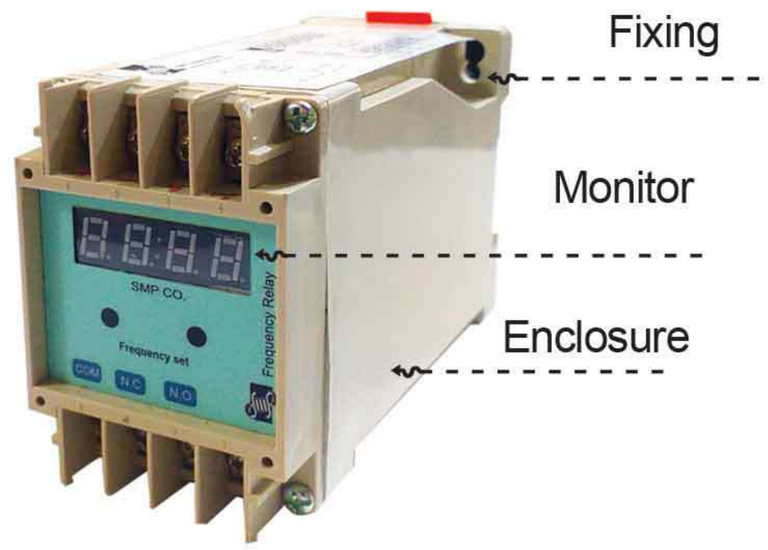
The signal generated by the frequency relay can be used for control circuits, protection circuits and control equipment.

SMP ADVANCED
F E A T U R E S

- Compact design
- Detection of under frequency
- Manual adjustment value
- High sensitivity to change the main settings
- Fast responsivity to motor load changing

DIMENSIONS (mm)



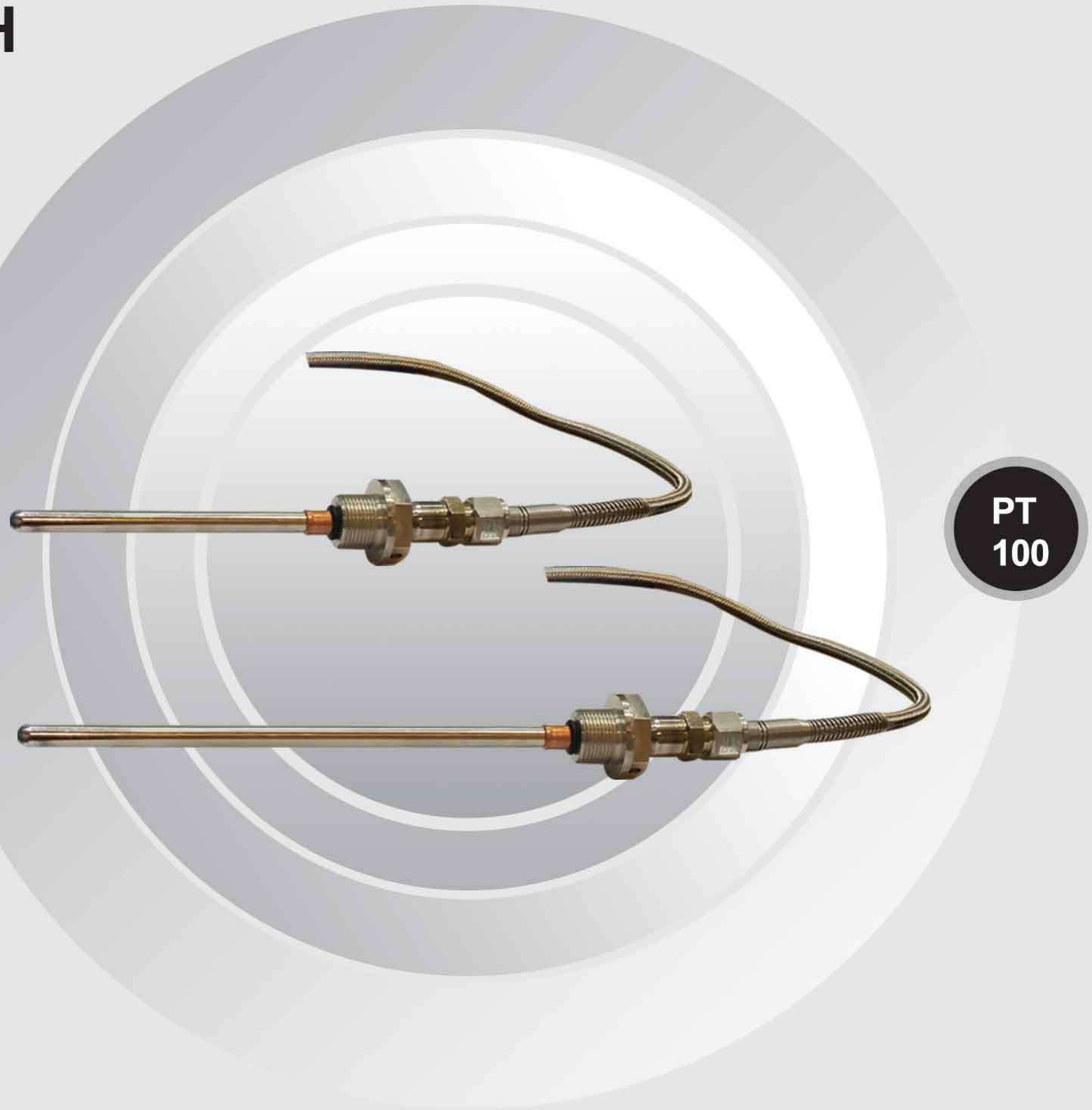


SPECIFICATION

PRODUCT	FREQUENCY RELAY
Setting range	20…….60 Hz
Input	600 V r.m.s.
Auxiliary voltage	DC 24 V
Nominal consumption	< 3 VA
Number of contact	1 NO/ 1 NC (SPDT)
Thermal current	4 A
Switching capacity	3 A
Electrical life	2.5 x 10 5 switching cycles
Operating mode	Continuous operation
Temperature range	-20 °C …….. +60 °C
Degree of protection	IP 42
Enclosure	ABS
Wire fixing	Flat terminals
Mounting	DIN Rail / 2 x M4
Weight	500 gr (with packing) / 480 gr (Without packing)
Dimensions	111 x 70 x 48 mm
Packing Dimension	L: 15 W: 13 H: 8 (cm)

X 1

X 2 4



PT
100

RTD THERMOMETER

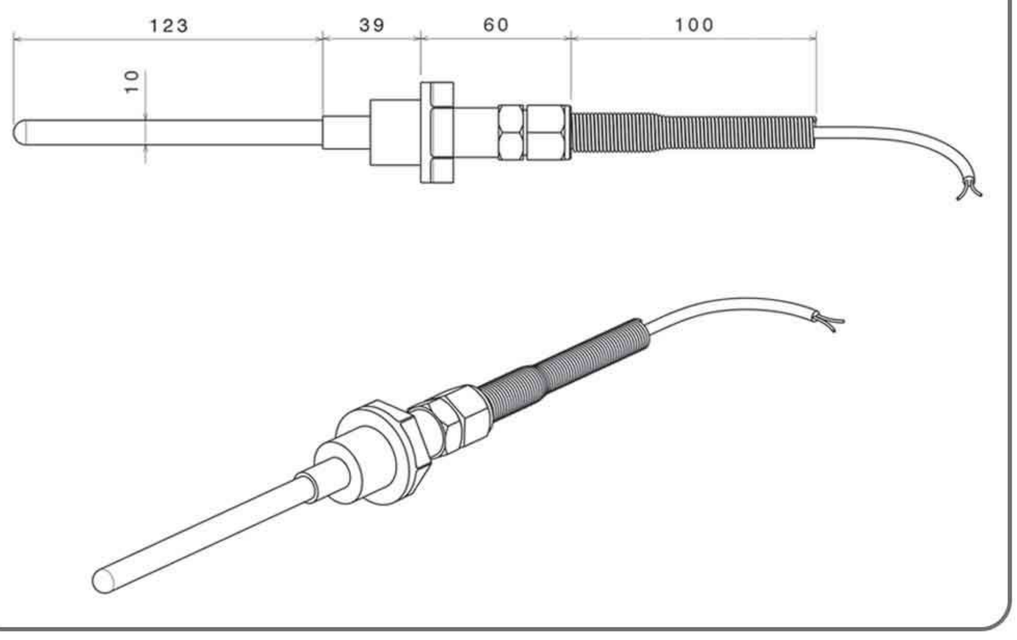
PT 100

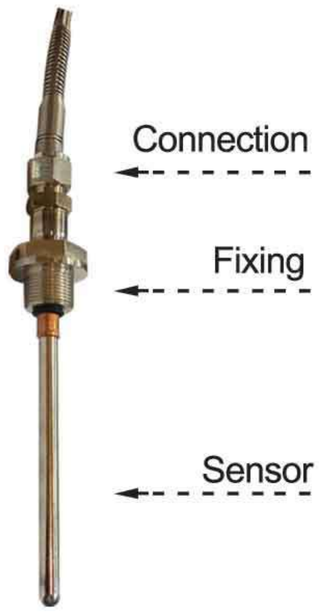
Thermometers are important and useful sensors for temperature measurement in industries, which are measured by various mechanism. To measure the temperature in the industry, two contact methods (thermocouple and resistive) and non-contact (infrared) are used.

RTD thermometers are a type of resistor that uses a variable resistive temperature to get the temperature change. Compared to other temperature sensors, it can be said that the response time is more accurate than other types of sensors. With a wide range temperature, SMP RTD Thermometer are in 3 wires style, an accuracy at 0.1 ° c and pressure bearing application up to 50 bar.

The most common type of these sensors is PT 100, which indicates the use of platinum element in its construction and its 100 ohms' resistance at 0° c. Its common uses are food, semiconductor, and medical, and high-pressure and heavy processes can be mentioned as a specific application.

DIMENSIONS (mm)





SPECIFICATION

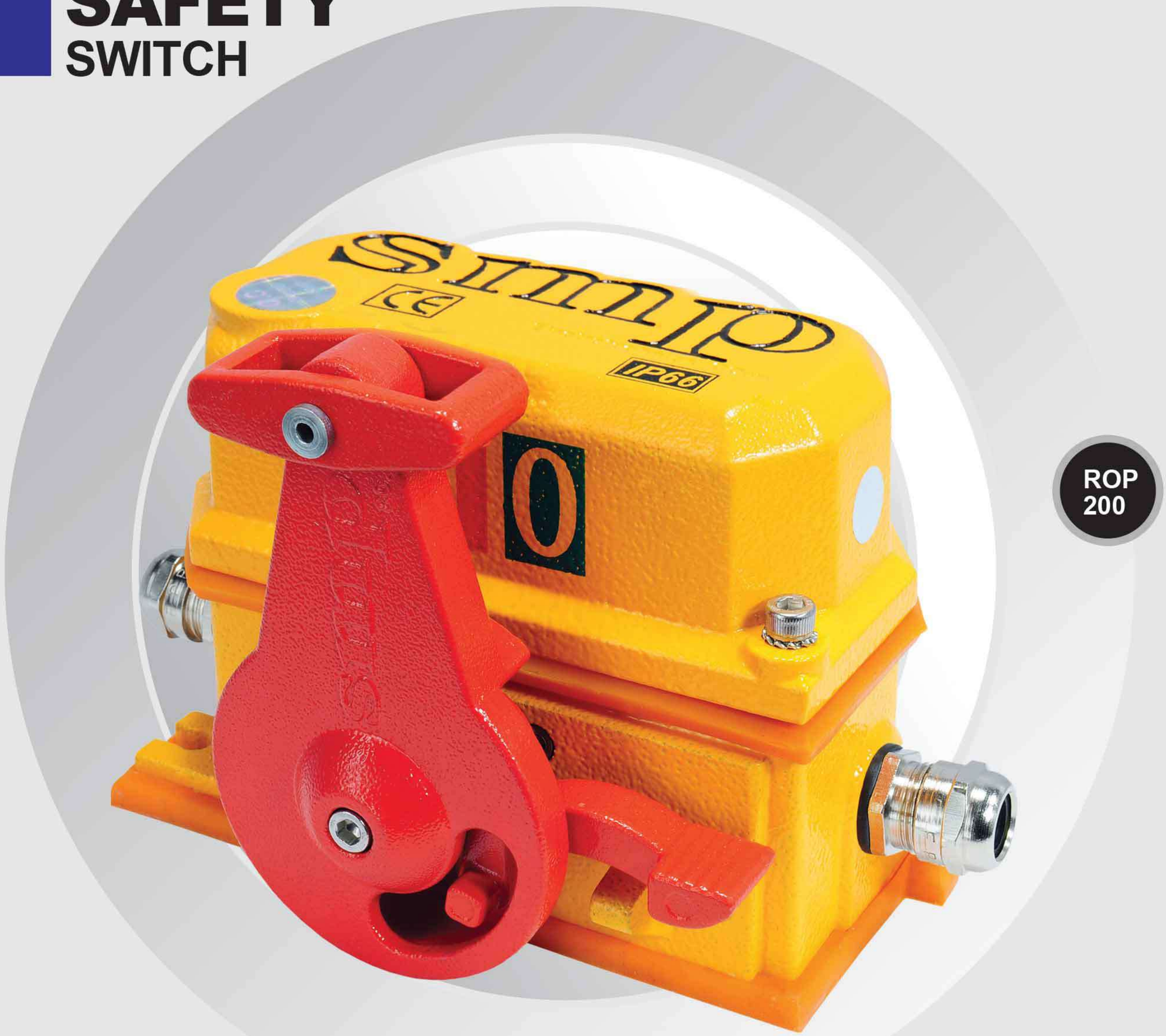
Product	RTD Thermometer
Device complies with	CE Certification
Body material	Stainless steel 304
Protection	IP 67
Fixing	PG 13.5 PG 16.5
Ambiant temp.	0 - 200° C (Optional) ■ 0 - 400° C
Length of Cable	2 m. (Optional) ■
Cable material	Silicone / SPE
Mechanical Connection	3/4 inch , 1/2 inch (Optional) ■
Tolerance	1%
Electrical Connection	3 wire
Insulation	Waterproof
Weight	1.03 Kg (with packing) 1.02 Kg (without packing)
Dimension packing	L: 23 W: 13 H: 14 (cm)

X 1

X 6

X 12

SAFETY
SWITCH



ROP 200

ROP 200 LIGHTED

ROP 100 LIGHTED

ROP 100

ATEX | CE

PULL ROPE

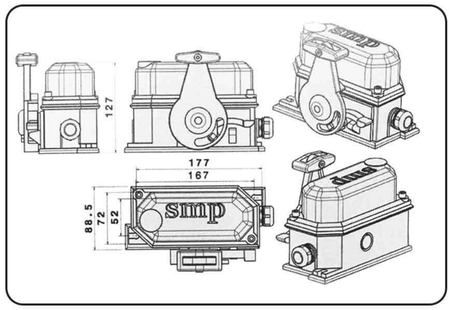
SWITCH ROP 100/200

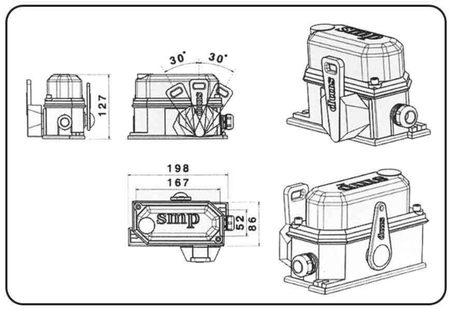
SMP pull rope switches of type ROP100 or ROP200 provide a switching system to isolate power conveyor system and other process equipment in an emergency situation either with latching or without latching.
Rope switch of type ROP100 or ROP200 is used to send a command to equipment for disconnecting the power circuit in emergency event.The mechanical devices of this equipment are made of aluminum alloy or stainless steel with furnace special static industrial color (Burning static) that successfully operate in environment with high humidity and corrosion. These devices have been designed for a maximum safe operation under severe conditions. Construction from aluminum alloy and stainless steel can successfully operate at mines, and all places where use conveyor.

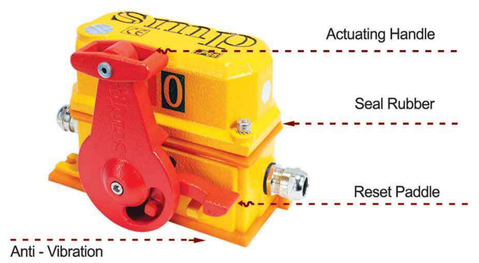
All base parts such as bolts, shafts, screws and spring are of aluminum alloy or stainless steel with special industrial color (burning static).
SMP pull rope switches and accessories meet the requirements of international safety standards authorities with respect to personal safety and equipment. It can be operated on conveyor system with different size in width and speed.

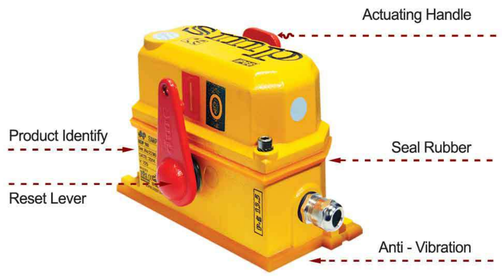
The devices can be equipped with either one or two lights.Every switch has a mechanical fuse and works over 60kg pressure on non-reset position (over load mode).
Operator can easily swap mechanical fuse with opening one screw and changing the relative part, then switch will be ready to work again.The auto reset mode of switches is optional.
In auto reset mode by pulling the Rope, switch acts and by releasing the Rope, it automatically resets. Afterward system will be ready to start again.

DIMENSIONS (mm)

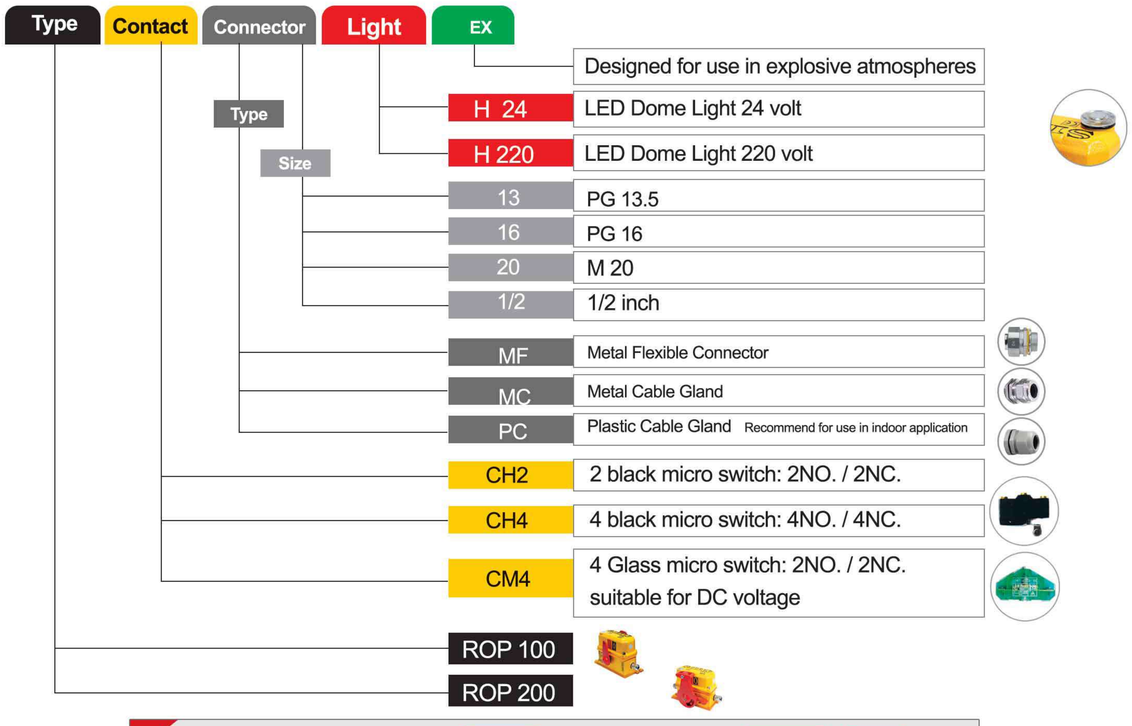








ORDERING CODE



SPECIFICATION

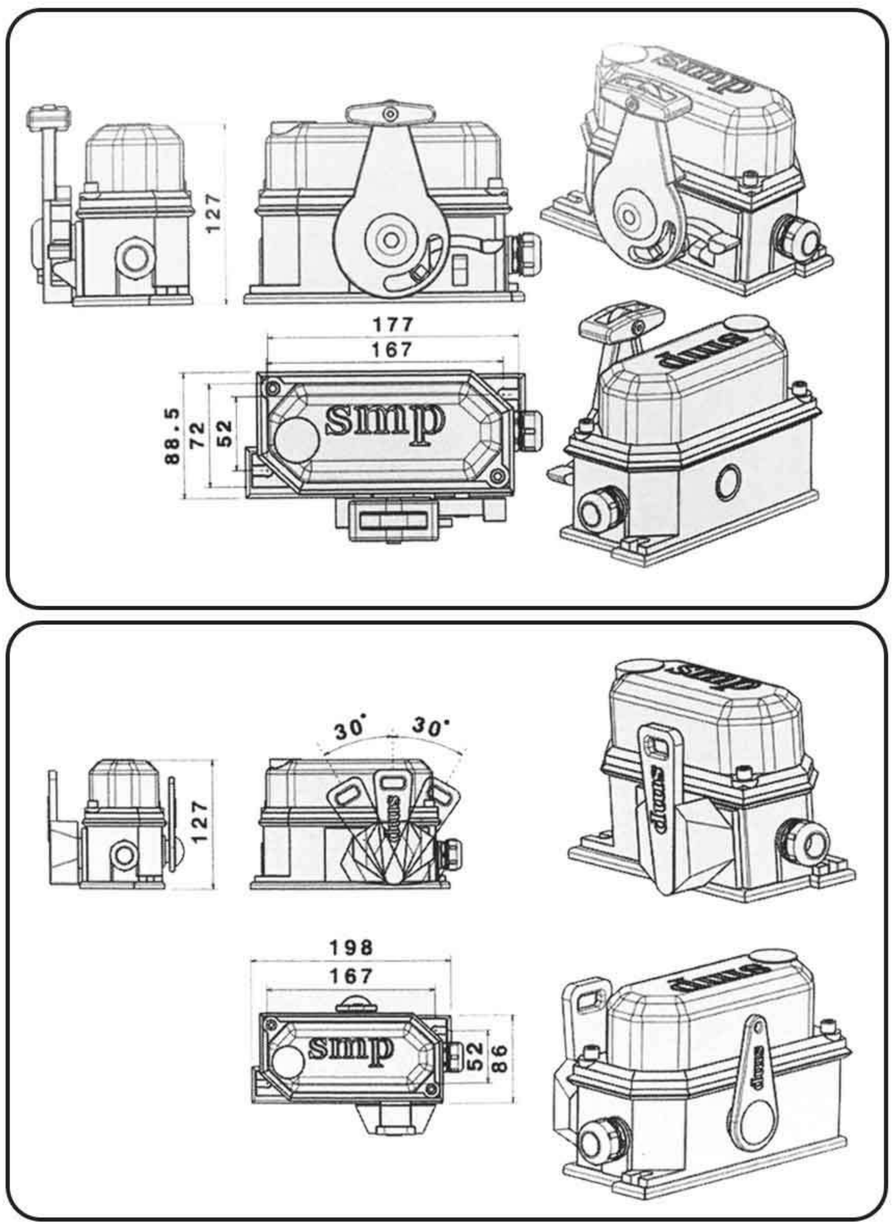
Product	Pull Rope Switch
Device Complies With	VDE 0110
Housing	Al , yellow, RAL 1028
Actuating lever	Al , red, RAL 3020
Operating angle	30°
Mounting	2 x M8 bolt
Admissible Ambient Temperature	-25°.....+70°
Switch system	2 NO + 2 NC 4 NO + 4 NC (Optional) ■
Rated Insulation voltage	Ui: 380 VAC, 440 VDC
Rated Operational voltage	Ue: 240 VAC, 250 VDC
Conventional thermal current	16A
Mechanical life	1 million switching cycles
Electrical life	MIN: 500000 switching cycles
Protection	IP 67
Area classification (Optional)	Hazard area: II 2D EX TC II BT6
Seal Rubber	Thermal resistance +300
Anti-vibration system	Bottom silicone rubber
Cable entry	See ordering code in Pg .70 Connector part
Connection	Max 2.5 mm
Electrical breaking	220 VAC - 24 VDC (Optional) ■
Mechanical breaking capacity	1 million switching cycles
Weight	2.4 Kg (without packing) 2.5 Kg (with packing)
Packing Dimension	L: 23 W: 13 H: 14 (cm)

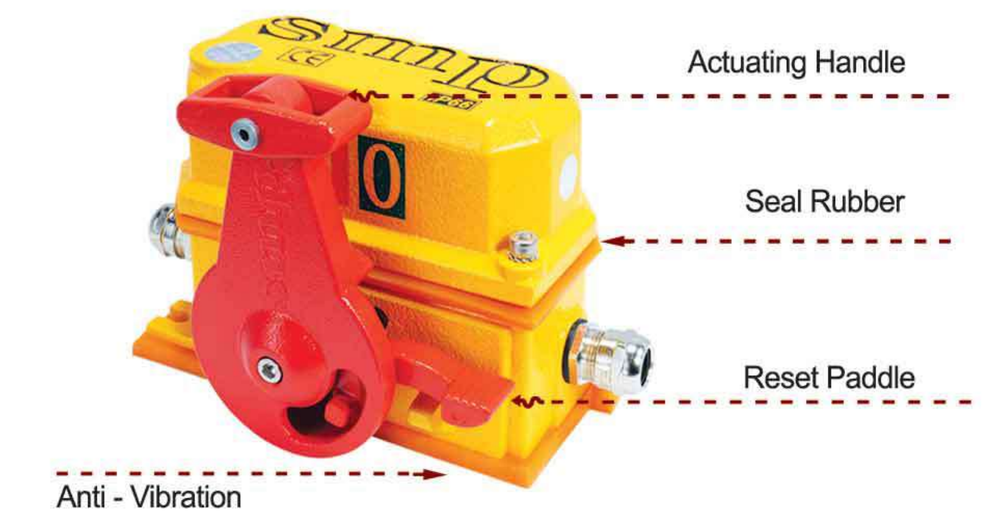
X 1

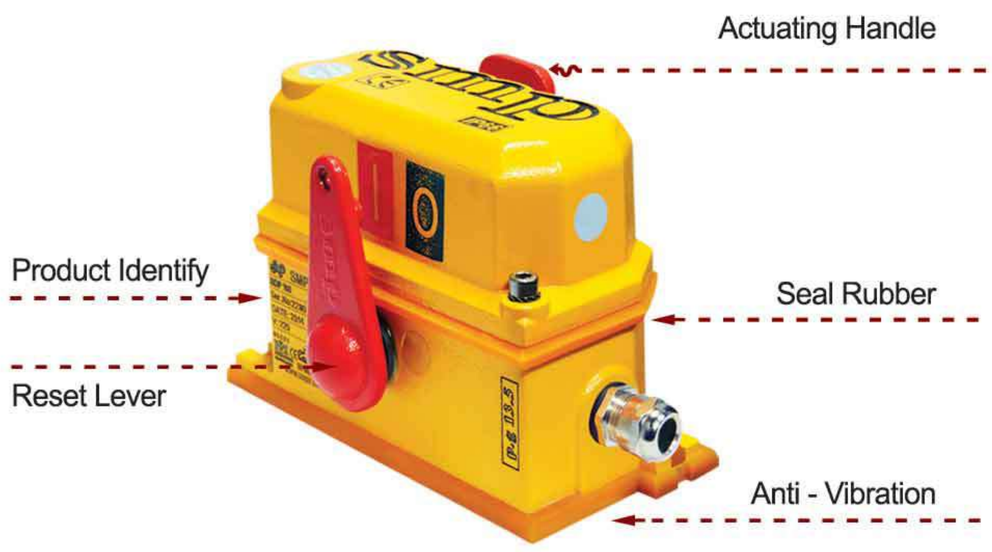
X 6

X 12

DIMENSIONS (mm)





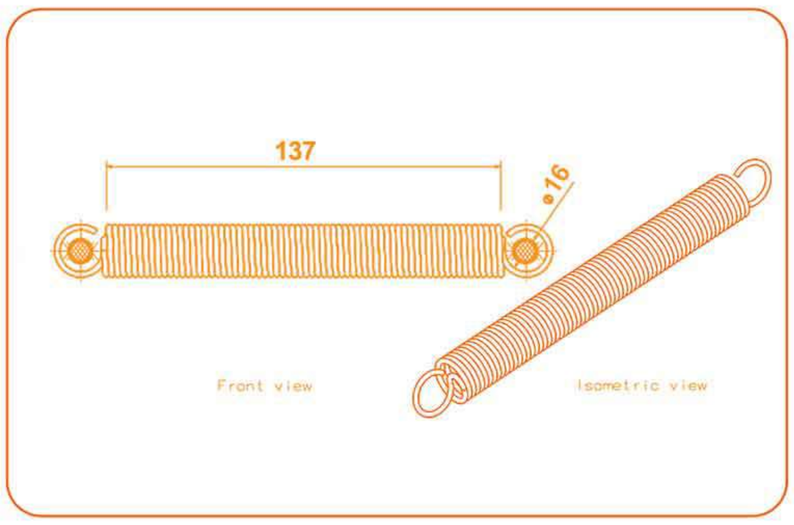


ORDERING CODE

Type	Contact	Connector	Light	EX	
					Designed for use in explosive atmospheres
			H 24		LED Dome Light 24 volt
			H 220		LED Dome Light 220 volt
		Size			
			13		PG 13.5
			16		PG 16
			20		M 20
			1/2		1/2 inch
		Type			
			MF		Metal Flexible Connector
			MC		Metal Cable Gland
			PC		Plastic Cable Gland Recommend for use in indoor application
	CH2				2 black micro switch: 2NO. / 2NC.
	CH4				4 black micro switch: 4NO. / 4NC.
	CM4				4 Glass micro switch: 2NO. / 2NC. suitable for DC voltage
ROP 100					
ROP 200					

For Example: ROP 200 | CM4 | PC | 13 | H 220 | EX

ACCESSORY Of
PULL ROPE
S W I T C H



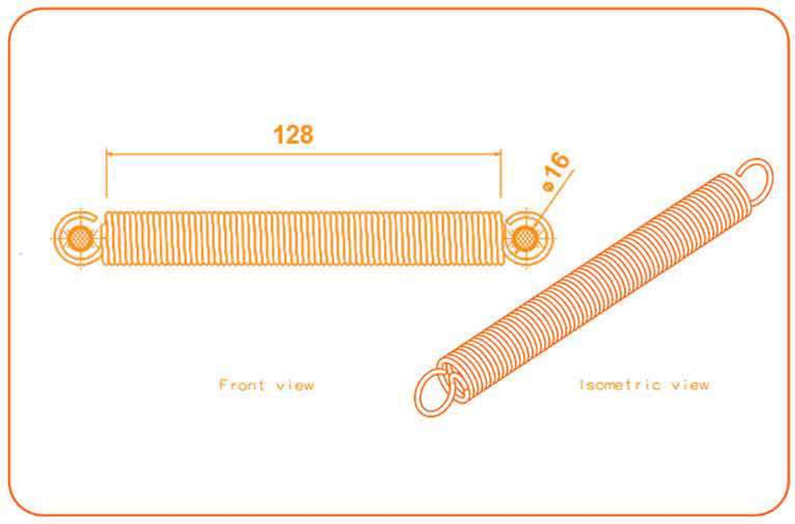
X-02 **TENSION SPRING**,
STAINLESS STEEL 304

137 mm x 20mm | wire diameter: 2 mm

Weight: 90 gr Φ : 16 mm

SPRING SS 304 (Weight percent)

C	Si	Mn	Cr	Mo	Ni	V	W	Other
0.08	0.75	2	18-20	8-10.5	0.045	0.03	0.1	-



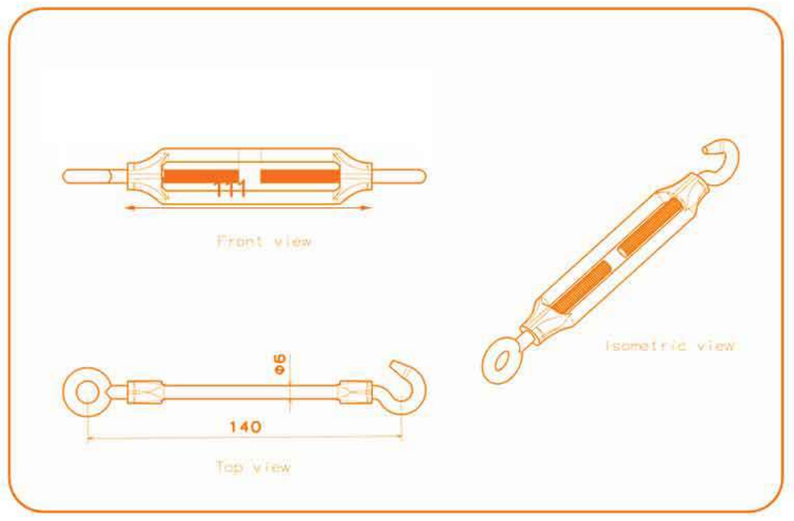
X-02-01 **TENSION SPRING**,
COLD GALVANIZED STEEL CK75

128 mm x 20mm | wire diameter: 2 mm

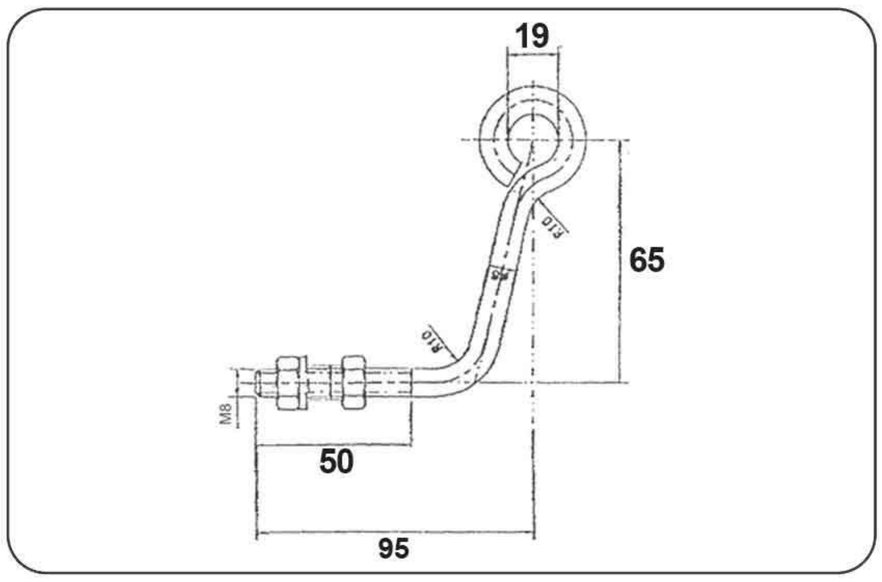
Weight: 90 gr Φ : 16 mm

SPRING STEEL CK75 (Weight percent)

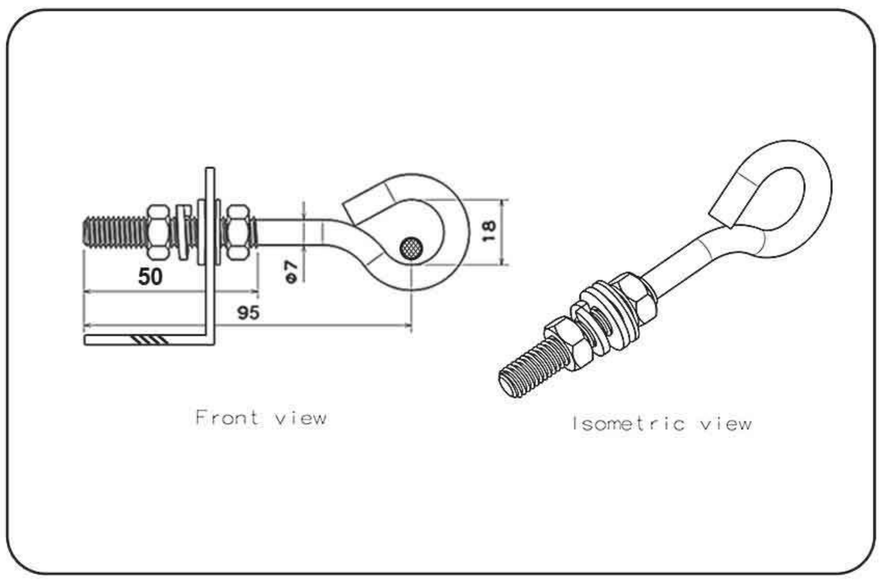
C	Si	Mn	Cr	Mo	Ni	V	W	Other
0.75	0.25	0.7	-	-	-	-	-	-



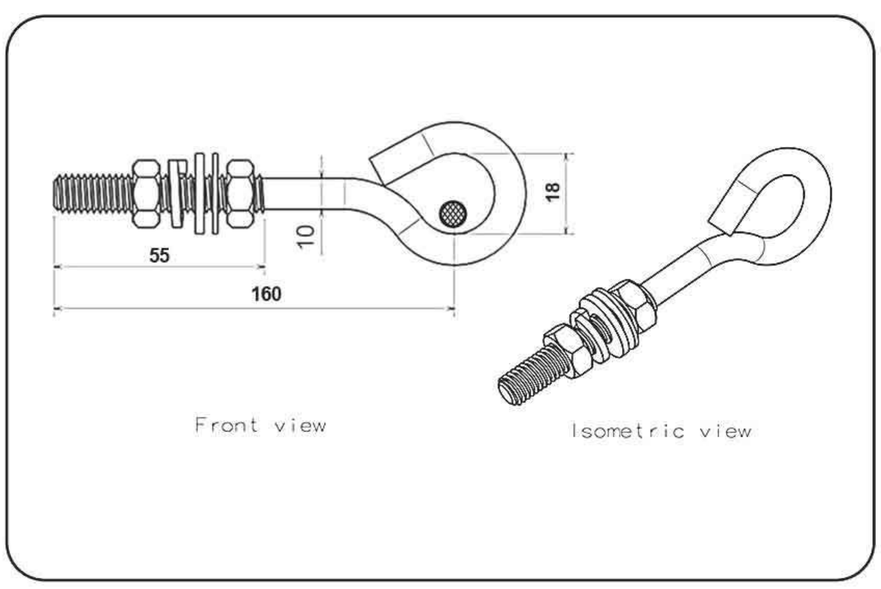
X-03 Cold Galvanized steel **TURNBUCKLE**
Y-03 Stainless steel **TURNBUCKLE**
(metal.1eye,1 hook)
Weight: 16 gr



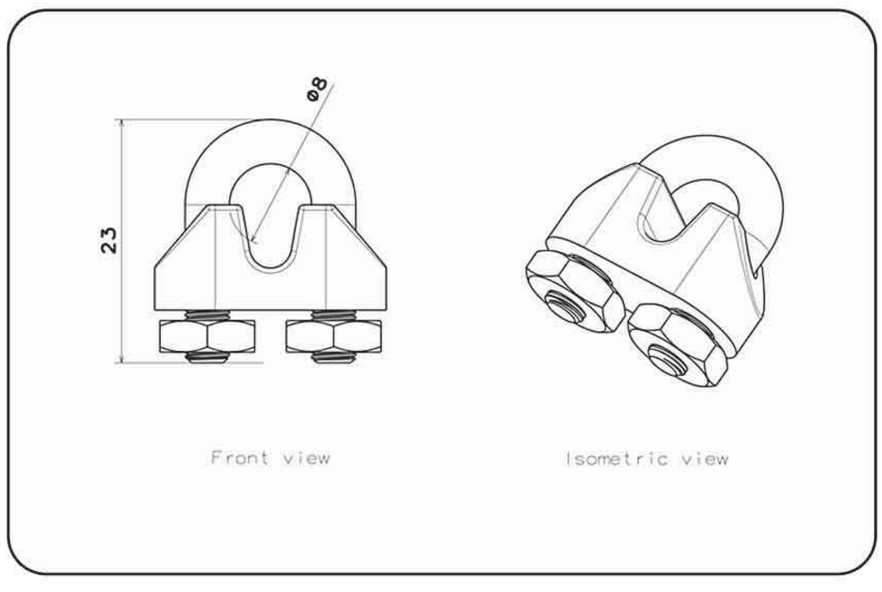
X-04-01 Cold Galvanized **EYE BOLT M8 ,** U form
Y-04-01 Stainless Steel **EYE BOLT M8**
Weight: 80 gr



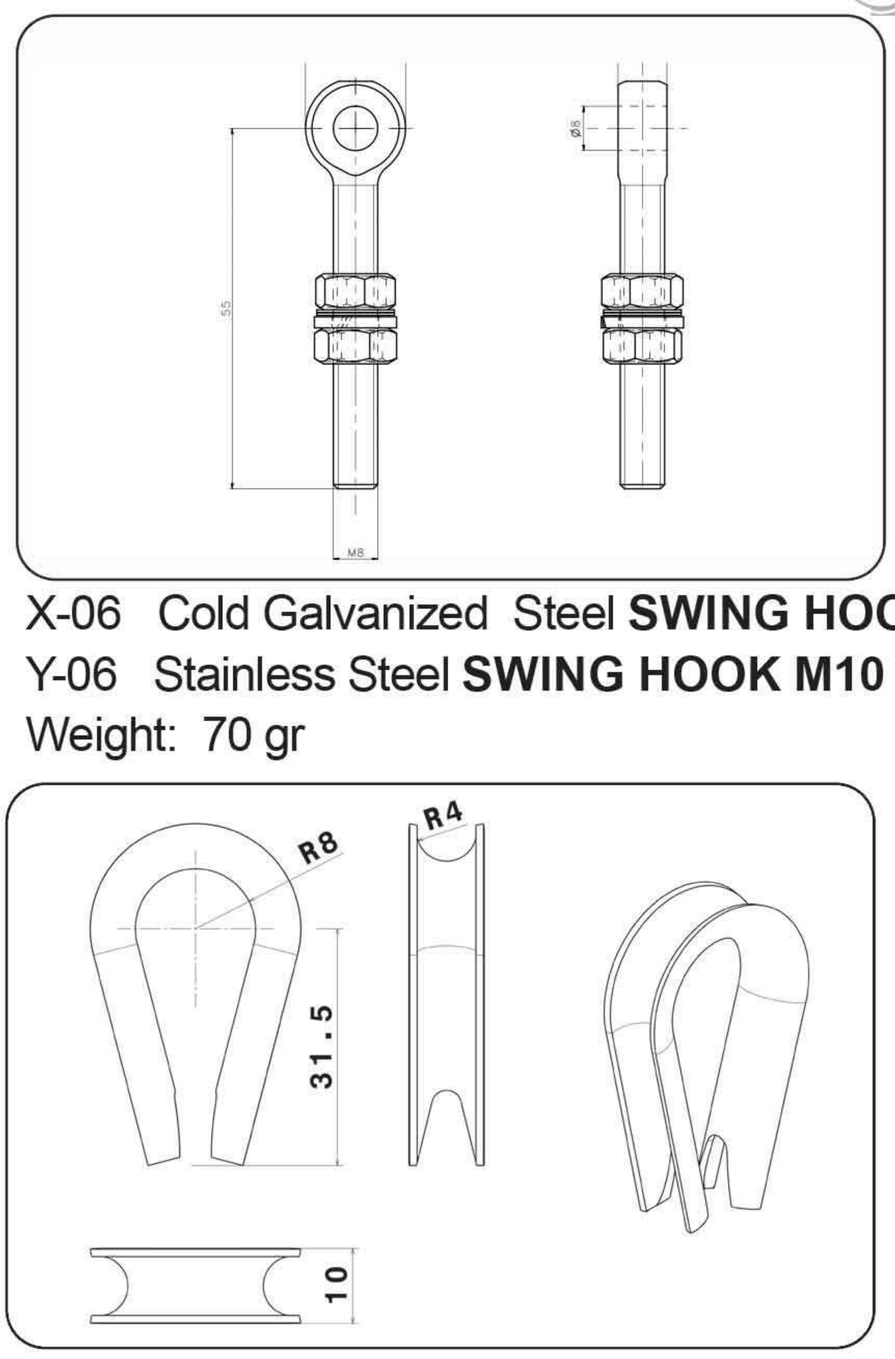
X-04-02 Cold Galvanized **EYE BOLT M8**
Y-04-02 Stainless Steel **EYE BOLT M8**
Weight: 60 gr



X-04-03 **Cold** Galvanized **EYE BOLT M10**
Y-04-03 Stainless Steel **EYE BOLT M10**
Weight: 100 gr

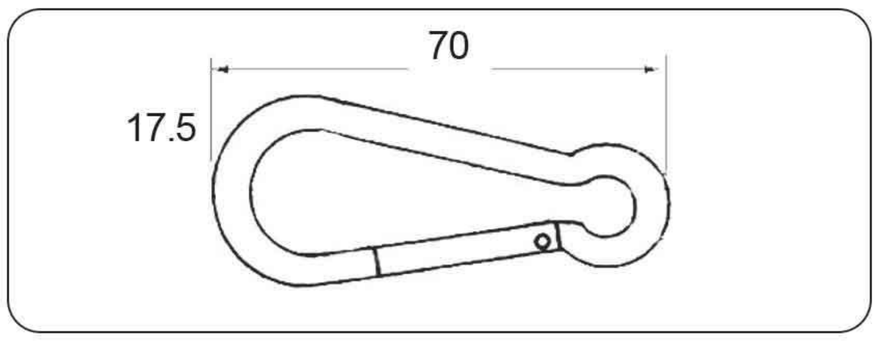


X-05 Cold Galvanized **ROPE CLAMP ,** U form
Y-05 Stainless Steel **ROPE CLAMP**
Weight: 10 gr



X-06 Cold Galvanized Steel **SWING HOOK M10**
Y-06 Stainless Steel **SWING HOOK M10**
Weight: 70 gr

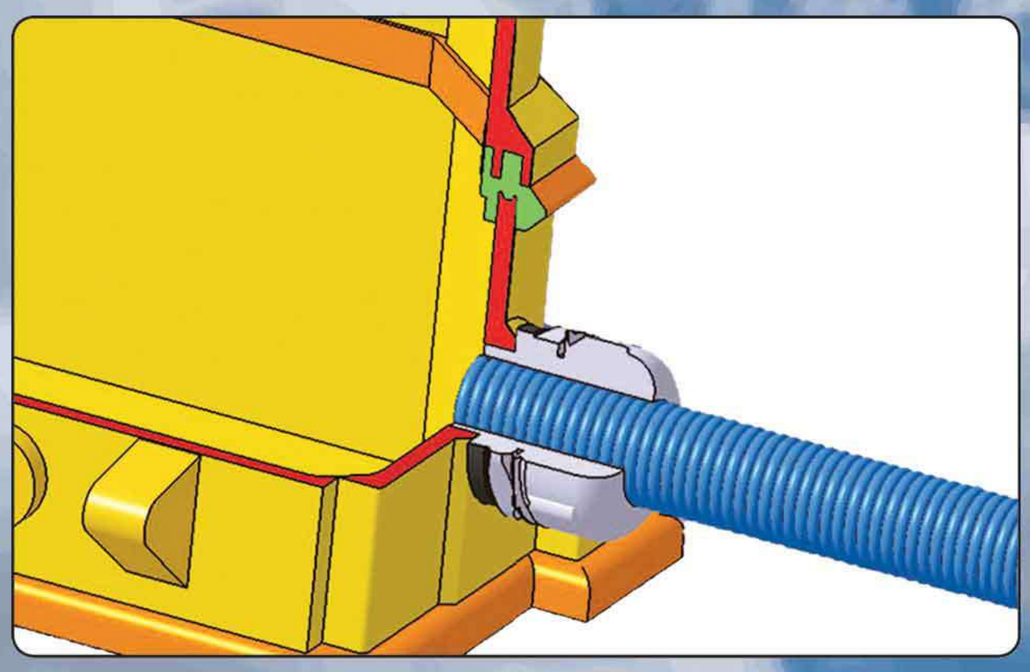
X-07 Cold Galvanized **wire rope thimble 06**
Y-07 Stainless Steel **wire rope thimble 06**
Weight: 20 gr



X-08 Cold Galvanized Carabin
Shape Gourd
Height: 7 cm Width: 3.5 cm
Weight: 40 gr

X-01 **FLEXIBLE STEEL WIRE**
PLASTIC COATED RED COLOR,
Size : 3 to 5 mm Braid : 7*7
Size : 5 to 7 mm
Size: 6 to 8 mm
Weight (3 to 5): 9 Kg (200 m)

SMP ADVANCED
F E A T U R E S



Research show that switches are mostly damaged by the equipment‘s vibration or the break down in installation place, SMP’s special design is the key to the problem, the use of bottom silicon rubber eliminate the vibrations dramatically so that the possible break downs and machine downtime is minimized.Seal rubbers are made of special silicon which are thermal resistant up to 300° c and due to SMP ‘s particular design even if the equipments aren’t fixed properly by the operator, the switch will be protected against dust.

INSTALLATION

Switches are easily installed along the edge of conveyor .The actuating lever should be positioned adjacent to the belt edge with a reset lever outside. Flexible coated steel wire is available for the pull rope. U formed clamp is used for each rope fastening point. Guiding and rope support eyebolts are used at interval up to 3 or 4 m. Stainless steel springs at the end of the rope ensure the operation of switch in event of pulled rope.The spring tension is adjustable by the means of turnbuckles which can simply be attached on to the actuating lever ,since switches are bi-directioal in operation , variants of temperature which can in fluence on the rope length, become balanced by means of these two springs.An ideal installation for SMP pull rope switches is to place the belt conveyor in every 25 to 30 m, this could be increased up to 50 m.

ADJUSTMENT

1. Install pull rope on one side of the actuating lever.

2. Adjust the rope tension in such a way that spring will properly operate the switch. Maximum extension of the spring is 200 mm. Now detach the turnbuckle again.

3. Repeat procedure 1 and 2 on another side.

4. Attach both turnbuckles and operate the switch.

5. Now , movable actuating lever should be balanced in mid position by means of these two turnbuckles.

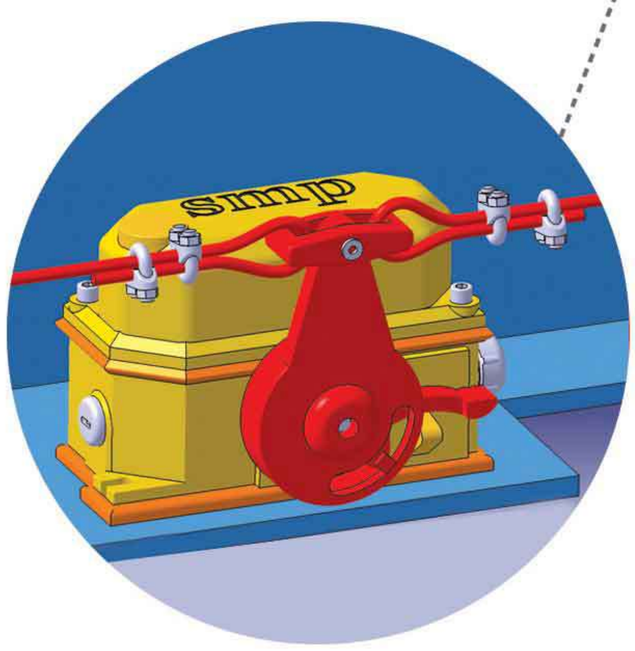
SMP set of accessory for pull rope switch (on request)

Row	Description	Code	Qty(NO.)
1	Turnbuckle	X- 03	2
2	Tension Spring	X- 02 - 01	2
3	Eye bolt M8	X- 04 - 02	16
4	Rope Clamp 5	X- 05	12
5	Swing Hook 4	X- 06	2
6	Steel wire	X- 01	30(m)
7	Thimble	X- 07	2

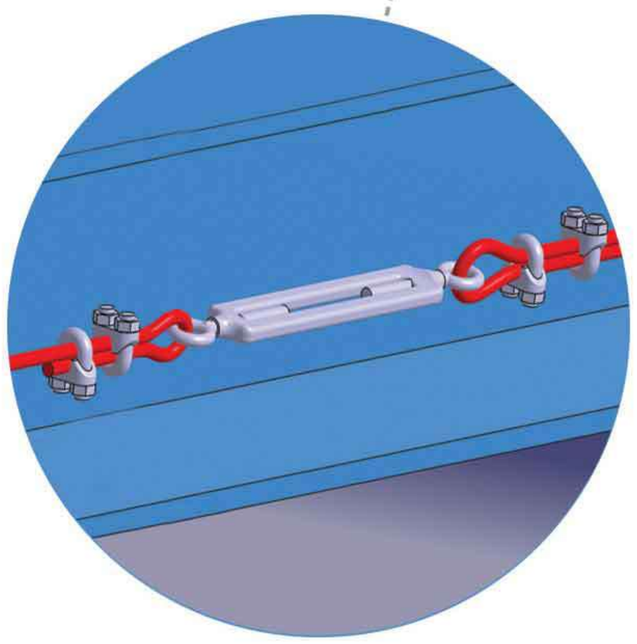
THE IMPLEMENTATION

ATTENTION

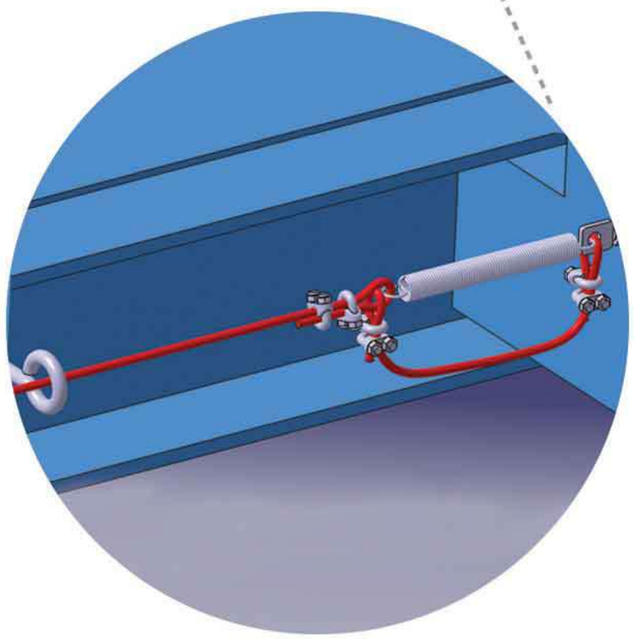
U bolt should be installed in opposite directions.
The eye bolts should have a distance of 2.5 to 3 meters.
When the towing wire is pulled up , the springs must be raised to a maximun of 1.5 times his own length .
For more ensure , when clamps is developed , we must connected two clamps.



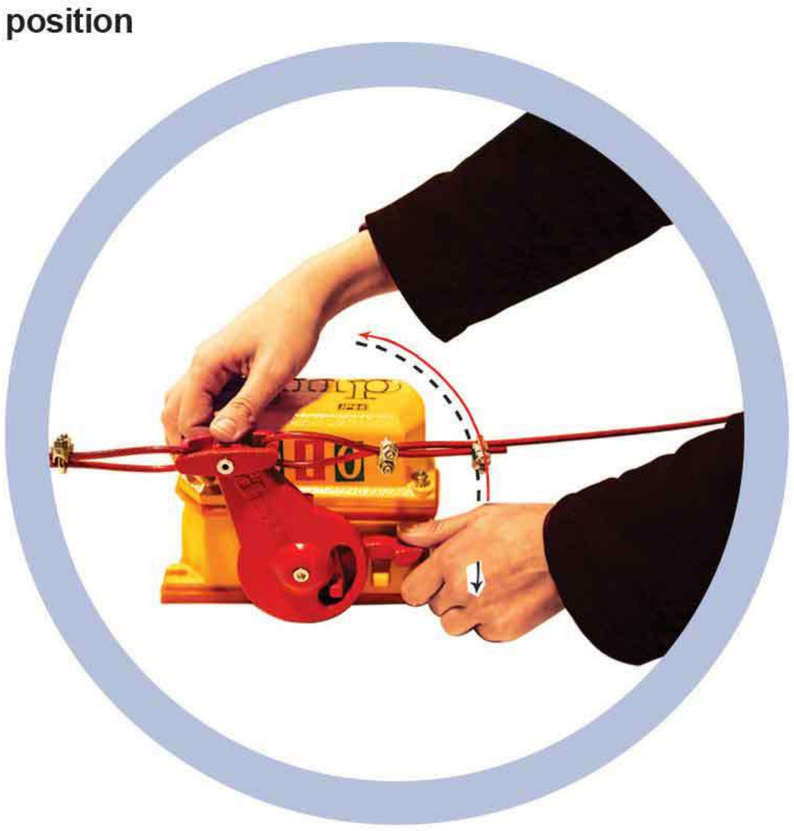
Switch in normal position

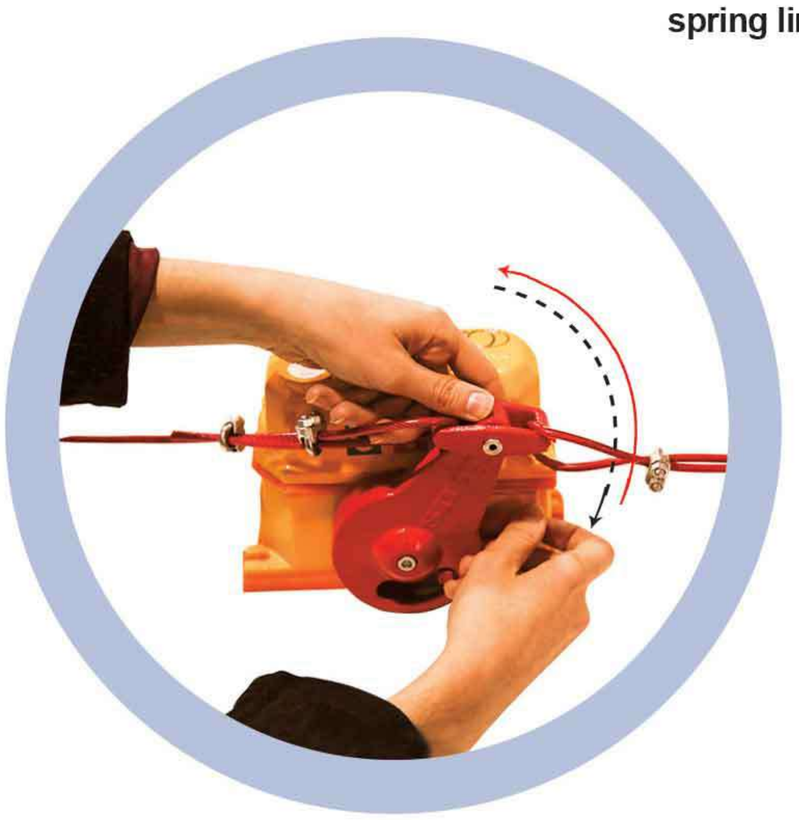


Turnbuckle position

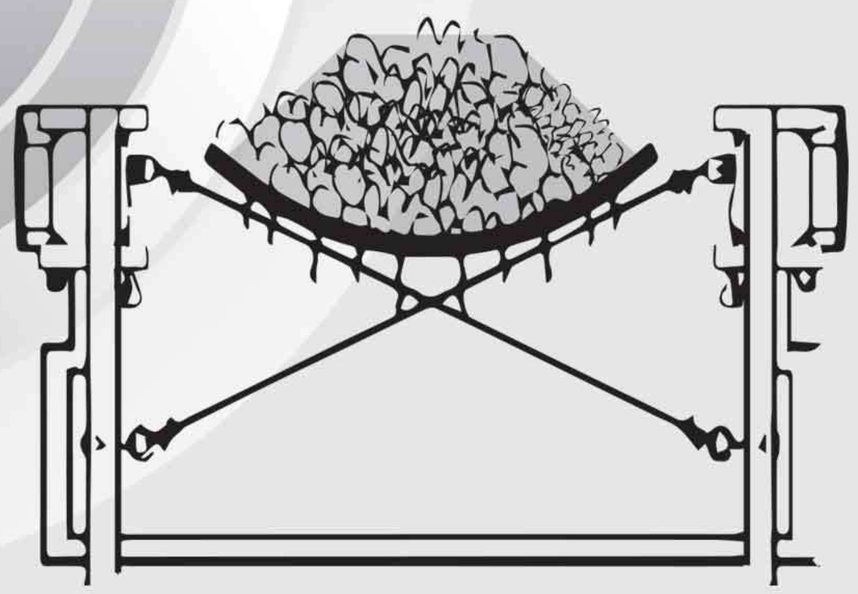


In normal position with spring limiter





BTD 100



TEAR SWITCH

BTD 100

Conveyors are very helpful in moving material and supplies within a facility. Conveyor belts are used where materials need to be transported from one point to another point, e.g. in the mining, cement, sand and gravel industries. A conveyor belt may get damaged (by sharp-edged stones / materials) or become worn out duringoperation. Such damage must be detected and the conveyor belt deactivated. Because the continuation of the situation causes more damage.The SMP tear switch type BTD 100 is used to detect belt damage.

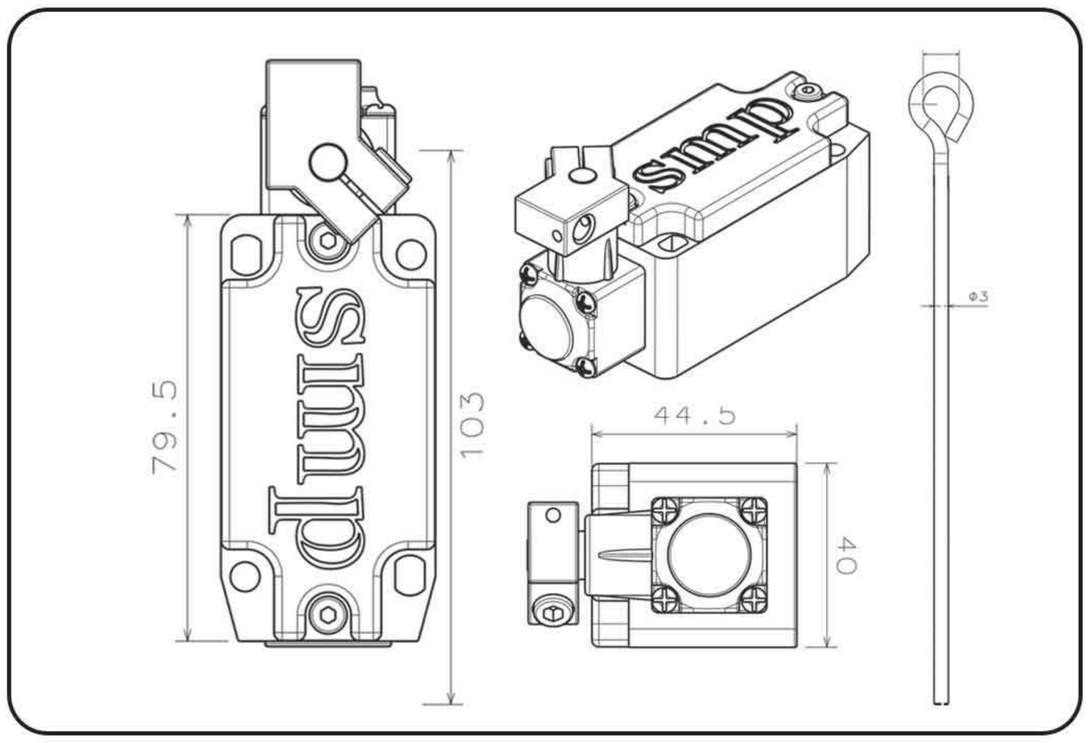
Belt Tear Detector immediately detects conveyor belt tear accident caused by foreign substance piercing the conveyor belt at the outlet of chute of conveyor, in order to stop the belt conveyor. When the tensioned tripping rope is touched by a Metal or plastic piece, an electrical switching operation is triggered.

SMP tear switches are installed according to the number of Impact Rollers. To identify rupture and damage to the conveyor, the tear switch is to be installed under the top run. In this case, a tripping rope is tightened across the conveyor belt with one rope end fixed to the conveyor belt structure.

The other rope end is fixed with u bolt in opposite direction. The unit is provided with two rope. Appropriate length to be cut while fixing the rope.
Pulling the tensioned rope activates the switching function of the belt rip and tear detection system. Rope to be manually refixed in position while restarting the belt operation. To cover the entire belt width, the system should be installed at a point where the conveyor belt is only slightly troughed, e.g. in front of the drive or deflection roller or behind a feeding point.

ATEX

DIMENSIONS (mm)



SPECIFICATION

PRODUCT	TEAR SWITCH BTD 100
Device complies with	CE Certification
Finish	Cap: Al , yellow , RAL 1028
Housing	Al, alloy, RAL 9004
Actuating Roller	Stainless Steel , Al
Fixing	4 x M5 bolt
Admissible ambient temperature	-25° C ..... +70° C
Switching system	(1 NO + 1 NC)
Rated Operational Voltage	Ue: 240 VAC , 250 VDC
Conventional thermal current	10 A
Mechanical Life	1 million switching cycles
Electrical life	MIN: 500000 switching cycles
Protection	IP 67
Cable entry	1 x M20
Electrical breaking capacity	220 VAC -24 VDC
Weight	500 gr (with Packing) 480 gr (without packing)
Packing Dimension	L: 20 W: 8 H:5 Cm

X 1

X 36

SAFETY
SWITCH

FL 300

AIRFLOW

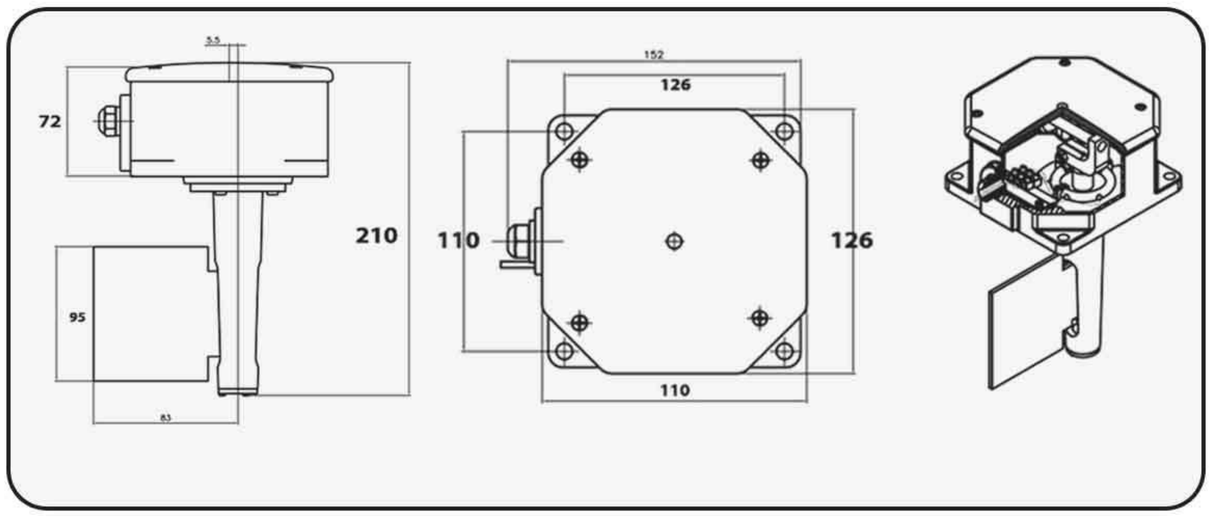
SWITCH FL 300

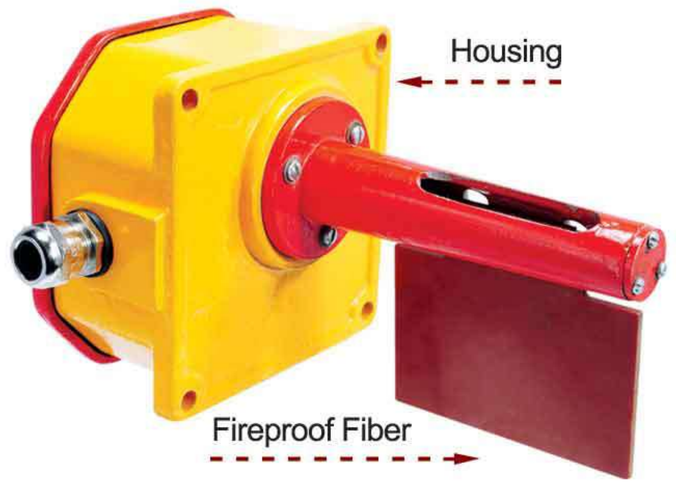
SMP Airflow Switch is designed to monitor air velocity in critical environments. These compact, easy to install units detect loss of airflow below a pre-programmed set point and provide a fast and distinct warning of airflow decreased.It's adjustable to monitor, oil flow in different situations.

SMP Airflow Switch is uni-directional. It provides NO contact and one NC. contact. It discriminates between forward and reversed airflow. indicating a fault if the air now direction reverses.

SMP Airflow Switch provides excellent sensitivity and reliability at a very reasonable price. Mounting is fast and simple.

DIMENSIONS (mm)





SPECIFICATION

PRODUCT	AIRFLOW SWITCH
Device complies with	CE Certification
Electrical Rating	220 VAC
Switch System	1 changeover contact
Housing	Al, Yellow, RAL 1028
Paddle material	Fireproof fiber
Mounting Orientation	Horizontal
Service	Air
Protection	IP 65
Fixing	4 x M20 bolt
Ambiant temp.	- 40° C……..+85°C
Pressure Limit	20 ... 60 m bar
Power supply	24 -250 VAC
Rated current	8 - 15 A
Life time	50000 cycles at normal condition
Cable Entry	2 x 0.75 mm^2
Excursion	20 to 45 (Optional)
Weight	1.50 Kg (with packing) 1.30 Kg (without packing)
Packing Dimension	L: 23 W: 13 H: 14 (cm)

X 1

X 6

X 12

SAFETY SWITCH

TS 300

RIPPED BELT

SWITCH TS 300

SMP Ripped Belt Switch is placed under the conveyor so in the case of belt decreasing diameter or overloading, it stimulates the switch, activate the alert command and finally the current cut out.

Ripped belt switch is used for conveyor installations subjected to especially severe operation conditions. An actuating roller of stainless steel is carried in stainless steel ball bearings for improved handling of lateral forces and jerks.

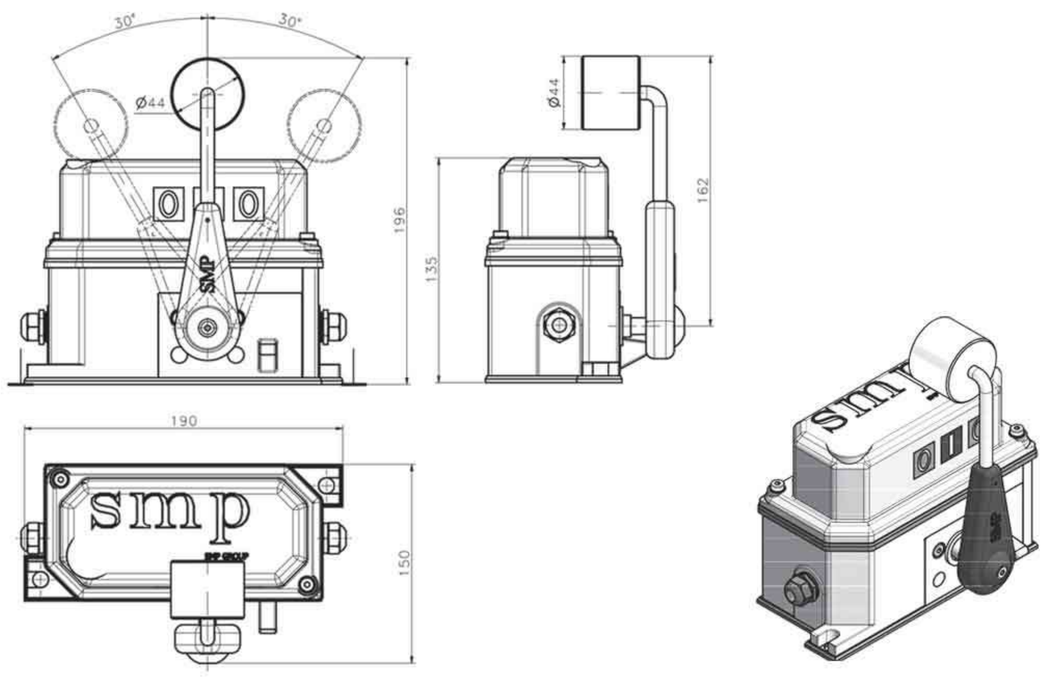
The large roller with diameter of 48mm by stainless steel permits use or this device where bell speeds prevail. All external parts are either or aluminum alloy or stainless steel has been specially plated. Trip points are adjusted within 15° ... 30° resp.

These switches can be provided with a highly impact-resistant dome light which is visible from distance.

Besides, the switches can be easily modified to provide alarm for a particularly prepared part. All basic parts such as bolts, shafts, screws, and springs are made of stainless metal (depends on order). The switches are provided with 2 SPDT contacts. For unlatching, the actuating roller is reset by hand. Then the accepted order depends on your product.

ATEX CE

DIMENSIONS (mm)



SPECIFICATION

PRODUCT	RIPPED BELT SWITCH	
Device complies with	CE Certification	
Housing	Al, Yellow, RAL 1028	
Enclosure	Al, Yellow, RAL 1028	
Actuating roller	SS, Red, RAL 3020	
Cable entry	2 x PG 13.5 / PG 16 / M 20	(Optional) ■
Mounting	2 x M8 bolt	
Current	16 A	
Electrical breaking	220 VAC/24 VDC	
Switch system	2 NO + 2 NC 4 NO + 4 NC	(Optional) ■
Operating temperature	-10 °C……80 °C	
Operation Angle	(15 - 30)	(Optional) ■
Mechanical life	1 million switching cycles	
Protection	IP 67	
Weight	2.5 Kg (without packing) 2.6 Kg (with packing)	
Packing dimension	L: 23 W: 13 H: 14 (cm)	

X 1

X 6

X 12

SAFETY SWITCH

HORN SIREN & LIGHT ALARM HL 100

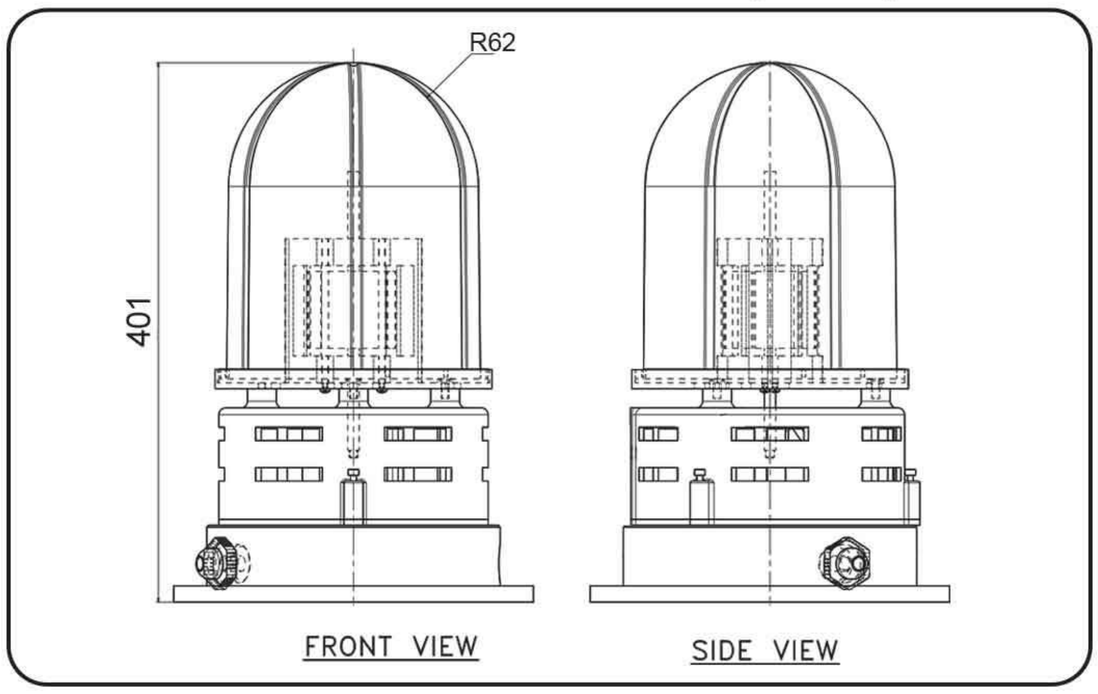
SMP horn and flash light are HL 100 the most widely used sound-making device and lighting flash for inclusion in an audible outdoor warning system.

Sirens generate sound through electromechanical means and can produce audible signals ranging from tones of varying pitch to frequency and varying time duration. The production of optical alarms is done electronically and has different types of flashes. sirens generate tones through the interaction of two principal components: a rotor and a stator.To generate alarm , the rotor spins and draws air into the siren. Then, as the vanes and holes of the stator cover and uncover the holes of the spinning rotor, the incoming airflow is pushed out in bursts through the stator each time its holes align with the holes of the rotor. This process of blocking and unblocking the airflow at regular intervals produces sound waves, with the frequency of the air bursts determining the pitch of the siren: the greater the frequency, the higher the pitch will be. The rotor of a pneumatic siren can be powered by electric motor.

APPLICATION

Vision and audible outdoor warning systems are used by public safety agencies to alert people or Factory workers about natural and manmade hazards such as start of sensitive industrial processes, accidents,chemical spills, extreme weather conditions and flooding.

DIMENSION (mm)



SPECIFICATION

PRODUCT	HORN SIREN & LIGHT ALARM
Device Complies With	VDE 0110
Finish	Electrostatic , Red 3020
Enclosure material	Aluminium , RAL 1028
Housing	Crystal
Power supply	230 VAC
Protection	IP 65
Connection	Cable 3 x 1 mm
SIL	120 dB
Color	Red or Yellow (Optional) ■
Mounting	3 x M6
Ambient Tempreture	-20° to + 80°
Dimension	H:281 R: 175 (Max) mm
Weight	1.5 kg
Packing Dimension	L:42 W:25 H:30 Cm

X 4

X 8

BOX

LCB-T

LCB-A

LCB-A

LCB-S

LCB-F

LCB-T

LOCAL CONTROL

BOX LCB

SMP Local Switch is the most convenient way of providing simple local control for myriad of applications. When inserted into a control scheme they provide the local Interface with which machinery can be easily be controlled.

SMP ADVANCED

F E A T U R E S

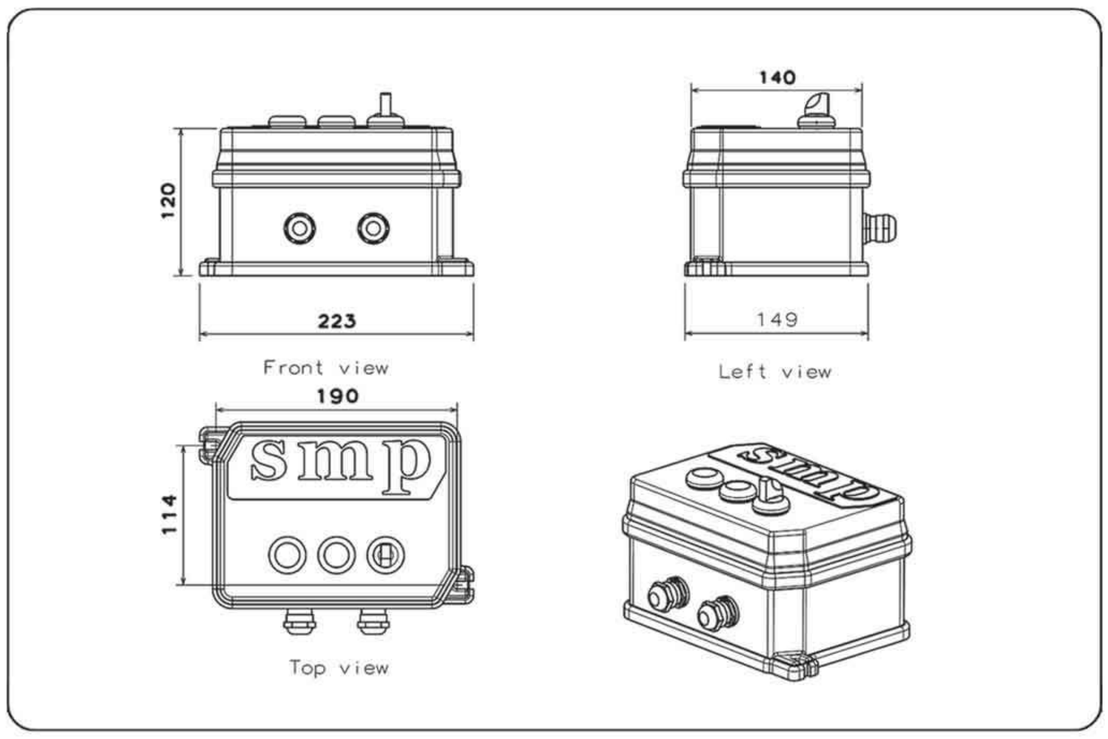
Equipment's are mostly damaged by two important factors. First, humidity and dust; Second, vibration in unsaleable situations. Smp's special design is the key to the problem. the lower part of the switch is equipped with internal spline so that the switch will have the better efficacy in unsaleable situations.In addition, the use of bottom silicon rubber eliminates the vibrations dramatically.

All screws, equipment and housing is made of stainless steel which is anticorrosion and resistance to water. The design of the housing allows high resistance to the possible breakdowns and mechanical impact.

Also, seal rubbers are made of special silicon which are heat resistance up to 300°c and due to SMP's particular design even if the equipment is not fixed properly. the switch will be protected against dust.

We are able to install different kinds of switches depending on whatever you order, on the box.

DIMENSIONS (mm)



SPECIFICATION

PRODUCT	LOCAL CONTROL BOX
Device complies with	CE Certification
Dimensions	Outdoor: (L)190 mm× (W) 140 mm × (H) 120 mm Indoor: (L) 180 mm× (w) 125 mm × (H) 95 mm
Material	Al Die cast / ST 37 / SS 304 /Fiberglass
finish	RAL 7032
Protection	IP 67
Connector	(Optional) ■
Cover fixing	Captive M5 stainless steel Allen head screw
Seal rubber	Silicone
Contact functions	(Optional) ■
Fixing	2 x M8 bolt
Terminal	(Optional) ■
Weight	with packing 3.06 Kg without packing 3.03 Kg
Packing Dimension	L: 23 W: 13 H: 14 (cm)

X 1

X 4

X 8

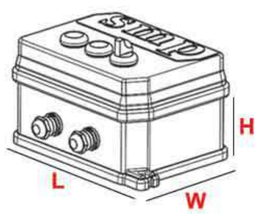
ORDERING CODE

PRODUCT TYPE

LCB - A	Local control box alluminum Alloy
LCB - T	Local control box ST 37
LCB - S	Local control box stainless steel
LCB - F	Local control box Fiberglass

DIMENSION

L	Length (cm)
W	Wide (cm)
H	High (cm)



(Optional just for type : LCB - T & LCB - S & LCB - F)

PUSH BUTTON

ST	Start
SP	Stop
MB	Emergency Mushroom

SELECTOR SWITCH

2P	On / Off (0.1)
3P	On / Off / Remote (1.0.2)
2PK	On / Off (0.1) With Key
3PK	On / Off / Remote (1.0.2) With Key

CONNECTOR

TYPE

MF	Metal Flexible Connector
MC	Metal Cable Gland
PC	Plastic Cable Gland Recommend for use in indoor application

SIZE

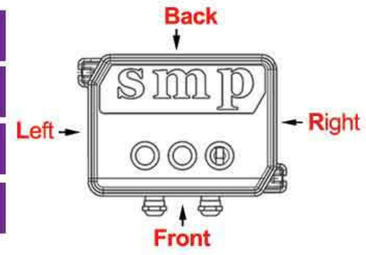
13	PG 13.5
16	PG 16
20	M 20
1/2	1/2 inch

QTY OF HOLES

1
2
3
4 (Optional)

POSITION OF HOLES

F = Front
B = Back
R = Right
L = Left



For Example: LCB - S | 25.15.14. | ST.SP | 2P | MC | 20 | 3 | 2F.1B

PB

JB

JUNCTION BOX JB

PULL BOX PB

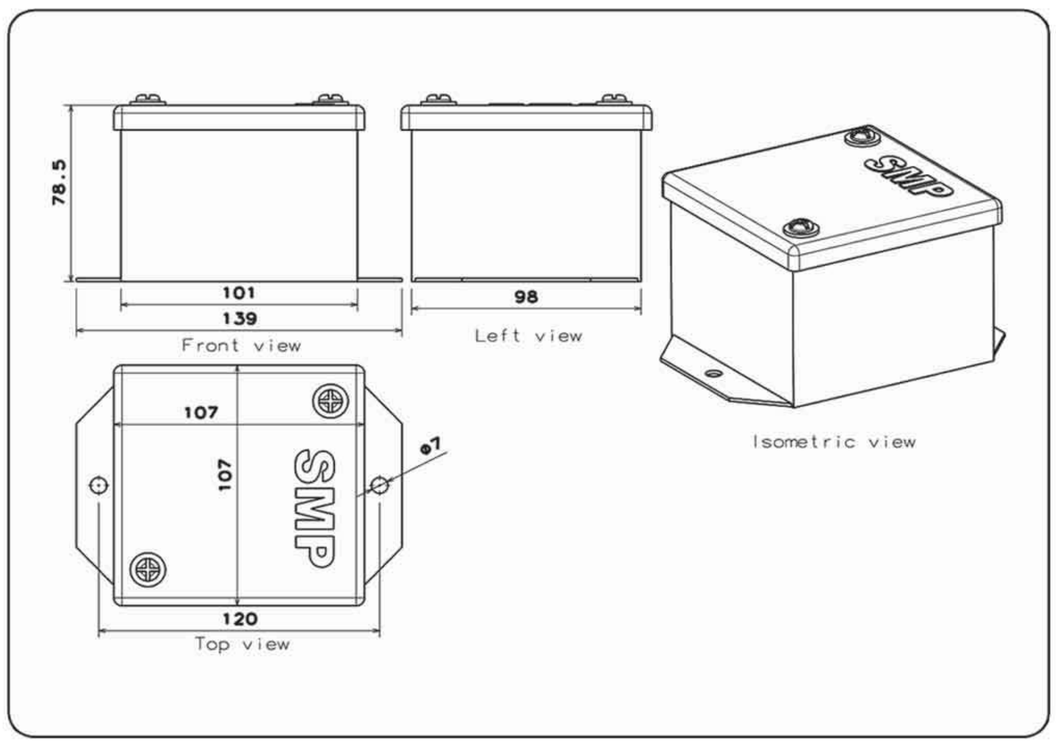
A junction box is an enclosure that protects a connection (the junction) of two or more wires carrying electrical current. Every electrical connection should be inside a protective box that is easy to find and access.

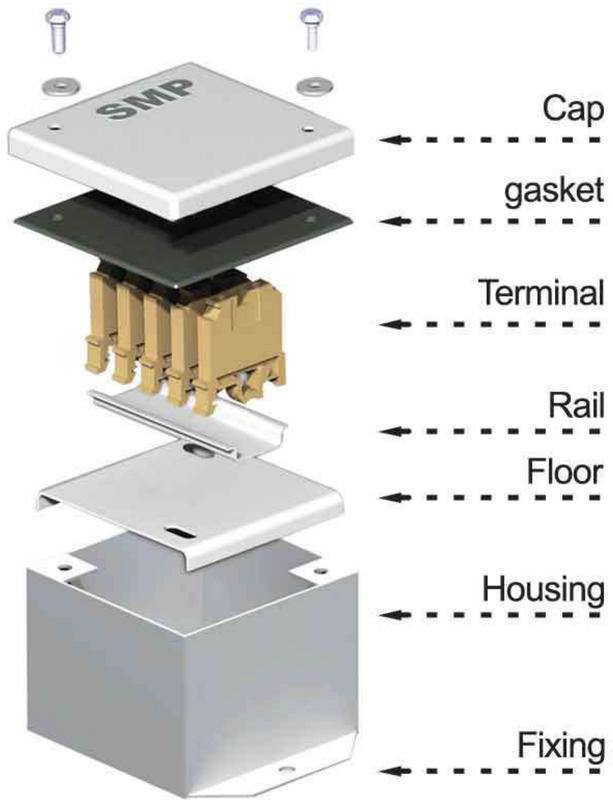
SMP Junction Box is a container made of either steel with electrostatic color or stainless steel for electrical connections, intended to conceal them from tampering.

It includes built-in terminals for the joining of wires. The size or the box could be vary according to the customer's order from 100mm to 1000mm.

Moreover various number and size for the input entrees is possible in PG, mm, inch in order to meet customer needs for different applications.The new SMP JB/PB designed and made of fiberglass, performed for for humidity ambiance.

DIMENSIONS (mm)



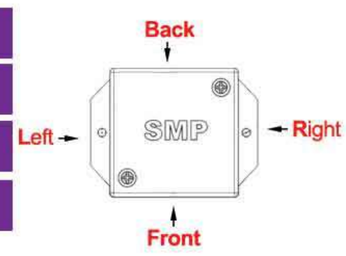


ORDERING CODE

PRODUCT TYPE	DIMENSION	QTY OF TERMINAL	CODE OF TERMINAL	CONNECTOR	QTY OF HOLES	POSITION OF HOLES

POSITION OF HOLES

- F = Front
- B = Back
- R = Right
- L = Left



QTY OF HOLES

- 1 (Optional)

CONNECTOR

TYPE

SIZE

SIZE	
13	PG 13.5
16	PG 16
20	M 20
1/2	1/2 inch

TYPE	
MF	Metal Flexible Connector
MC	Metal Cable Gland
PC	Plastic Cable Gland Recommend for use in indoor application

CODE OF TERMINAL

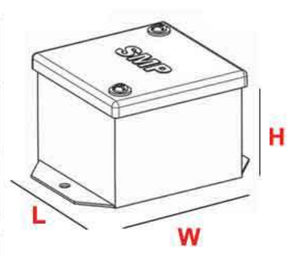
- 2.5 (Optional)

QTY OF TERMINAL

- 4 (Optional)

DIMENSION

L	Length (cm)
W	Wide (cm)
H	High (cm)

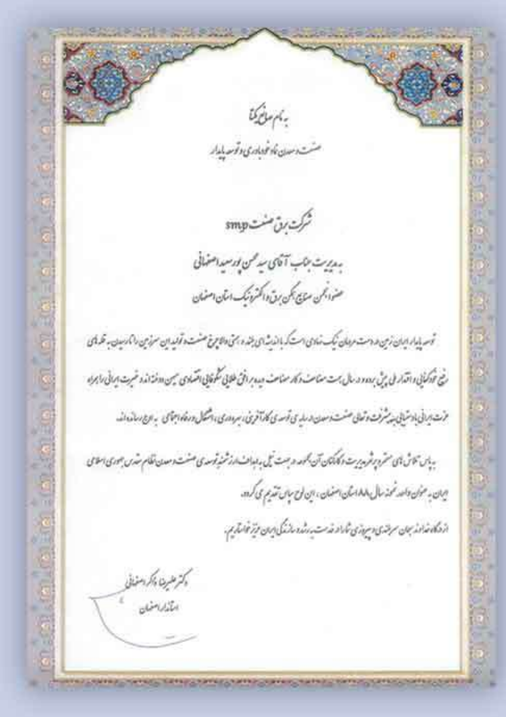


PRODUCT TYPE

JB / PB -T	Junction / Pull box ST 37
JB / PB - S	Junction / Pull box stainless steel
JB / PB - F	Junction / Pull box Fiberglass

For Example: JB - S | 35.20.15. | 12 | 2.5 | MC | 13 | 6 | 3F.3B

Part of our honours



Part of our honours

شرکت سیمان خزر

شرکت صنایع سیمان دشتستان

شرکت سهامی عام سیمان فارس و خوزستان

شرکت سیمانساز (سیمان لوشان)

شرکت سهامی عام سیمان فارس و خوزستان

گروه صنایع سیمان کرمان

شرکت سیمان اصفهان

شرکت سیمان مازندران

شرکت سهامی عام سیمان صوفیان

Part of our honours

وزارت صنایع و معادن

تاریخ ۸۰/۱۲/۱۵
شماره ۱۴۱۸۹
پیوست

جناب آقای پور سعید

مدیرعامل محترم شرکت برق و صنعت SMP

باسلام

بر اساس گزارش کارشناسان این اداره کل بدینوسیله از مجموعه فعالیتها و توانمندیهای آن شرکت در جهت تأمین قطعات مورد نیاز صنعت سیمان و بخصوص زحمات جنابعالی در ارائه گزارش علمی و کاربردی که در سی و پنجمین گردهمایی مدیران برق و الکترونیک و انرژی کارخانجات سیمان کشور در روز اول و دوم اسفند ماه سالجاری در محل کارخانه سیمان خوزستان برگزار گردید تقدیر و تشکر نموده و توفیق روزافزون جنابعالی را از درگاه حق تعالی آرزومندیم ./۳

عباس یغماکیش
مدیرکل دفتر صنایع معدنی

جمهوری اسلامی ایران
وزارت صنایع
اداره کل صنایع استان اصفهان

شماره: ۰۲۲۹۸۲/۱۳۰۸۷۲۱
تاریخ: ۱۳۷۸/۷/۲۲

((گـــــواهی فعـــالیت صنعتی))

بدینوسیله گواهی میشود کارگاه تولید انواع کلیدهای صنعتی وکالاهای سرامیکی مورد مصرف دربرق دربل کشویی

واقع در اصفهان- جهارباغ خواجو پلاک ۱۲۱

متعلق به آقای محسن پور سعید اصفهانی

از تاریخ ـــــــــ مشغول فعالیت صنعتی در رشته انواع کلیدهای صنعتی وکالاهای سرامیکی مورد مصرف در برق دربل کشویی

ظرفیت تولید سالیانه ۱ـ پنج (۵) تن انواع کلیدهای صنعتی
۲ـ هشت (۸) تن کالاهای سرامیکی مورد مصرف در برق
۳ـ ده (۱۰) تن ربل کشویی

وتعداد ۱۲ نفر نیروی انسانی و در یک شیفت کاری میباشند.

سرمایه ثابت: ۸۲۰۰۰۰ هزار ریال
سرمایه درگردش: ۲۲۲۲۰۵ هزار ریال
ارزش ماشین آلات: ۱۷۸۲۰۰ هزار ریال

مرتضی پیشهٔ
مدیرکل صنایع استان اصفهان

تذکر: این گواهی هیچگونه تعهدی برای وزارت صنایع مبنی بر تامین ارز و خدمات ندارد.

انجمن تخصصی
مراکز تحقیق و توسعه صنایع و معادن

بدینوسیله گواهی می‌شود که عضویت

شرکت برق صنعت SMP

از تاریخ ۸۶/۱۰/۰۱ به مدت یکسال با شماره ۲۷۷۴

طبق ماده ۱۰ اساسنامه به تصویب هیئت مدیره انجمن رسیده است .

This is to certify that membership of
SMP. Co
with No. 2774 was approved for one year.

رئیس هیئت مدیره
یزن محبی
Chairman

دبیر انجمن
حمید طاهباز نوکلی
Secretary

جمهوری اسلامی ایران
وزارت صنعت ، معدن و تجارت

این پروانه به استناد دستورالعمل وزارت صنعت ، معدن و تجارت به شماره ۹۰۰۷۴۹ مورخ ۹۲/۰۷/۲۸ و به استناد گواهی پایان ساخت صادره از شهرداری دولت آباد به شماره ۸۶۴۹۸-۹۰۰مورخ ۹۰/۰۹/۲۳ صادر گردید.

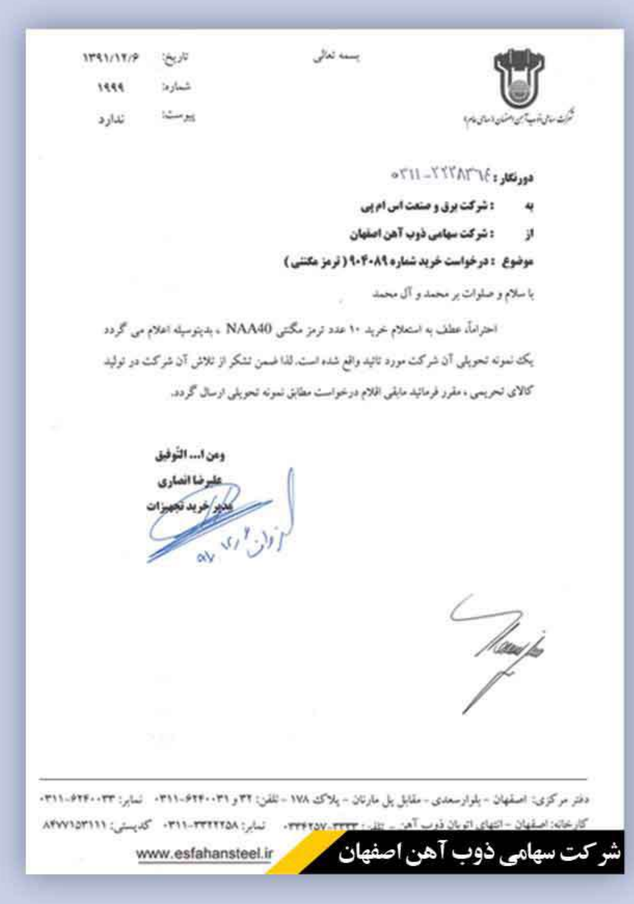
پروانه بهره برداری

آقای/خانم **سید محسن پورسعید اصفهانی** با شماره ملی [redacted] به نشانی **استان: اصفهان، شهرستان: برخوار ، منطقه صنعتی دولت آباد ، در امتداد خیابان نشاط اصفهانی – ضلع جنوبی خیابان مذکور –بلاک ۱۵ کدپستی ۸۳۴۱۶۵۵۶۳۴**

با توجه به راه اندازی و دستیابی آن واحد به انجام عملیات تولید انبوه، این پروانه جهت تولید محصولات زیر و به منظور استفاده از مزایای قانون آن اعطاء می گردد.(برای سه شیفت)

محصولات اصلی	ظرفیت سالانه	واحد	شماره شناسائی کالا
۱- انواع کلید(-کلید دستی و اتستپ- صرفا طراحی و مونتاژ)	۴	تن	۲۸۹۳۶۱۲۴۰۹
۲- انواع جاروبک ماشین های برقی(صرفا طراحی و مونتاژ)	۱۰۰۰	قطعه	۳۱۱۰۴۱۲۲۲۱
۳- راه انداز نوار(صرفا طراحی و مونتاژ)	۱۲۰	دستگاه	۳۱۱۰۵۱۲۲۸۲
۴- دزنکتور خلأ(بالاتر از ۵/۲۲ کیلوولت)(صرفا طراحی و مونتاژ)	۵۰۰	دستگاه	۳۱۲۰۵۱۲۲۸۲

اسرافیل احمدیه
رئیس سازمان صنعت، معدن و تجارت استان اصفهان



تاریخ: ۱۳۹۱/۱۲/۶
شماره: ۱۹۹۹
پیوست: ندارد

بسمه تعالی

شرکت سهامی ذوب آهن اصفهان (سهامی خاص)

دورنگار: ۰۳۱۱-۲۲۲۸۳۶۴
به : شرکت برق و صنعت اس ام پی
از : شرکت سهامی ذوب آهن اصفهان
موضوع : درخواست خرید شماره ۹۰۴۰۸۹ (ترمز مگنتی)

با سلام و صلوات بر محمد و آل محمد

احتراماً، عطف به استعلام خرید ۱۰ عدد ترمز مگنتی NAA40 ، بدینوسیله اعلام می گردد یک نمونه تحویلی آن شرکت مورد تائید واقع شده است. لذا ضمن تشکر از تلاش آن شرکت در تولید کالای تحریمی ، مقرر فرمائید مابقی اقلام درخواست مطابق نمونه تحویلی ارسال گردد.

ومن ا... التوفیق
علیرضا انصاری
مدیر خرید تجهیزات

دفتر مرکزی: اصفهان - بلوارسعدی - مقابل پل مارنان - پلاک ۱۷۸ - تلفن: ۳۲ و ۳۱-۶۲۴۰۰۳۱ ۰۳۱۱ نمابر: ۰۳۱۱-۶۲۴۰۰۳۳
کارخانه: اصفهان - انتهای اتوبان ذوب آهن - تلفن: ۳۳۳۳-۳۳۴۲۵۷ ۰۳۱۱ نمابر: ۰۳۱۱-۳۳۴۲۲۵۸ کدپستی: ۸۴۷۷۱۵۳۱۱۱

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شرکت سهامی ذوب آهن اصفهان

۱۲۶۹۲

شرکت سهامی عام سیمان فارس و خوزستان

فاکس

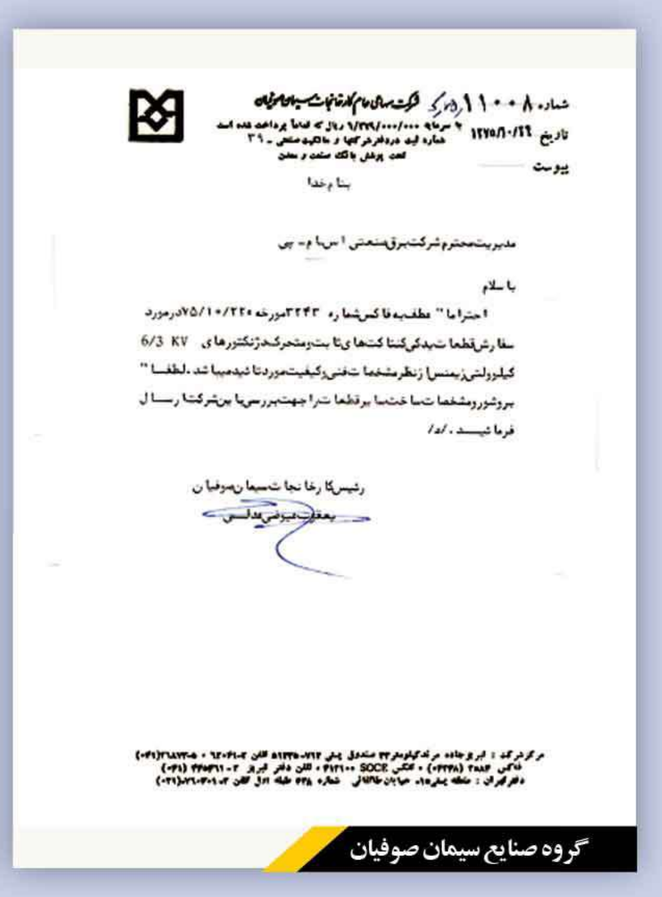
شرکت SMP

احتراماً ، باستحضار میرساند که عایده ارسالی توسط آنشرکت توسط شرکت پیمانکاری ولتاژ ۹۵ kV تسعت آزمایش قرارگرفته وهیچگونه عیب ونقص ظاهری مشاهده نگردیده است ج ع ۰۲۴۹۹

مدیرکارخانه سیمان فارس

یاس توکلی

شرکت سیمان فارس



شماره ۱۱۰۰۸ /د/ک شرکت سهامی عام کارخانجات سیمان صوفیان
تاریخ ۱۲۷۵/۱۰/۲۲۶ ۹ سری ۹ ۷/۲۴۹/۰۰۰/۰۰۰ ریال که فعلاً پرداخت شده است
شماره ثبت شرکت در کاشان ۳۹ - کمیته صنعتی
پیوست

بنام خدا

مدیریت محترم شرکت برق صنعتی اس ا م- پی

با سلام

احتراما" عطف به فاکس شماره ۳۴۴۳ مورخه ۷۵/۱۰/۲۲۰ در مورد سفارش قطعات شبدگیر کنتاکتهای تاپ ومتحرک دزنکتورهای 6/3 KV گیلرولتی زمنس از نظر مشخصات فنی وکیفیت مورد تائید میباشد .لطفا" بروشور ومشخصات سایز قطعات مزبور را جهت بررسی به شرکت ارسال فرمائید . /د/

رئیس کارخانجات سیمان صوفیان

مرکز شرکت : تهران جاده مخصوص کیلومتر ۲۳ صندوق پستی ۱۳۱۲-۱۵۸۷۵ کاشان ۰۶۲-۴۱۰۲ ۰ ۶۲۰۴۱۰۵(۰۳۱)
تلکس ۲۸۸۲ (۰۳۲۴۸) ۰ تلکس SOCE ۴۲۴۱۰۰ ۰ کاشان دفتر تهران ۰۲ - ۴۴۰۴۳۶۱ (۰۳۱)
دفتر تهران : منطقه پستی ۱۵۸۷۵ خیابان ۱۵۸۷۵ شماره ۴۴۵ طبقه ۱۱ ال کاشان ۰۳ - ۶۶۰۴۰۶۱(۰۳۶۱)

گروه صنایع سیمان صوفیان

Part of our honours

TÜV CERT

CERTIFICATE

The TÜV CERT Certification Body
of TÜV Rheinland Industrie Service GmbH

certifies in accordance with
TÜV CERT procedures that

SMP Bargh Sanat
#121, front of sadr school, chaharbagh khajoo St., Isfahan - Iran

has established and applies a quality management system for

Production of Industrial Starter

An audit was performed, Report No. **062119**.
Proof has been furnished that the requirements according to

DIN EN ISO 9001:2000

are fulfilled.
The certificate is valid until **2010-01-30**.
Certificate Registration No. **01 100 062119**

TGA-ZM-26-96-00

Cologne, 2007-01-31

TÜVRheinland®

TÜV CERT Certification Body of TÜV Rheinland Industrie Service GmbH

www.tuv.com

MOODY INTERNATIONAL CERTIFICATION

ATM Moody
A member of Moody International Certification

Certificate Number
04/779185

STATEMENT OF CONFORMITY

SMP Bargh Sanat

No.121, Charbagh Khajoo
Isfahan / Iran

Have been assessed and registered as meeting the requirements of Directive *73/23/EEC* 19th February 1973 & *93/37/EEC* 22nd July 1993

The scope of registration is detailed on the assessment schedule bearing this certificate number.

Product : Pull Rope Switch
Model(s) : ROP 100- SMP

ATM Moody Certification Services Date of issue : 16th May 2006
Notified Body number 0131

Signed by
i.V. Hess
Quality Certification Manager

Validity of Certificate
Three years subject to annual facility survey by a representativ
of this company and renewal of this certificate after three ye

ATM Moody Certification Services
Is a division of Moody International Inc. USA
Registered in Finland No. 8795/P
Registered Office:
Moody House, Asematie 4
FIN-04400, Jarvenpaa
Finland

Application Guidance Notes : These notes are based on the requirement of Moody International Inc. Rules & Regulations for the Product Type Approval Program – January 1990, Part C. Their issues within the scope of this type approval shall not any prejudice any further actions that Moody International Inc. may wish to take regarding the use of the subject parts on any application. The parts are considered acceptable for use in residential buildings.

CE

VESCERT

Certification for Quality Management System
Residence Address: Wederik 73 - 8446 AA- Heerenveen - The Netherlands

Certificate

This certificate issued to
Sarzamin Mahdyar Paya

Address: No.121. Chaharbagh Khajoo St.Isfahan.IRAN
P.O.Box : 81439 - 44489

Has been assessed by VESCERT
Conforms to the following standard.

ISO 10004: 2018

Quality Management - Customer Satisfaction Guidelines for Monitoring and Measuring

For the following scope:
Design ,Manufacure and instalation of electrical equipment and instrumentation.

Registration Number: VES019107- ISO - 0418
Issued on: 2019.07.14
Expires on: 2022.07.13
Surveillance 1due before: 2020.07.13
Surveillance 2 due to: 2021.07.12

L.Jesper
President of VESCERT

VESCERT

Certification for Quality Management System
Residence Address: Wederik 73 - 8446 AA- Heerenveen - The Netherlands

Certificate

This certificate issued to
Sarzamin Mahdyar Paya

Address: No.121. Chaharbagh Khajoo St.Isfahan.IRAN
P.O.Box : 81439 - 44489

Has been assessed by VESCERT
Conforms to the following standard.

ISO 9001: 2015

Quality Management System

For the following scope:
Design ,Manufacure and instalation of electrical equipment and instrumentation.

Registration Number: VES018102- ISO - 0277
Issued on: 2018.02.21
Expires on: 2021.02.20
Surveillance 1due before: 2019.02.20
Surveillance 2 due to: 2020.02.20

L.Jesper
President of VESCERT

VESCERT

Certification Body for Explosive Atmospheres
Residence Address: Wederik 73 - 8446 AA- Heerenveen - The Netherlands

[1]. **EC-TYPE EXAMINATION CERTIFICATE**

[2]. **Type Examination Certificate Number:** VES195ATEX00599X
[3]. **Equipment:** Position Switch/ LS 185
[4]. **Manufacturer:** Sarzamin Mahdyar Paya
[5]. **Address:** No 121, Chaharbagh Khajoo St., Isfahan, IRAN

[6]. This equipment and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.
[7]. Vescert certifies that this equipment has been found to comply with the Essential Health and Safety Requirements that relate to the design of Category 2,3 equipment, which is intended for use in potentially explosive atmospheres. These Essential Health and Safety Requirements are given in Annex II to the European Union Directive 94/9/EC of 23 March 1994.
The examination and test results are recorded in confidential report no. A195/SMP/217
[8]. Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the schedule of this certificate, has been assessed by reference to:

EN 60079- 0 : 2012 **EN 60079-1 : 2012** **EN 60079-11 : 2012**

[9]. If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.

[10]. This Type examination certificate relates only to the design of the specified equipment, and not to specific items of equipment subsequently manufactured.

[11]. The marking of the equipment or protective system shall include the following:

Ex II 2D Ex Tb IIC T6

Date of issue:2019-09-11

M.Terpstra
Technical Director

VESCERT

Certification Body for Explosive Atmospheres
Residence Address: Wederik 73 - 8446 AA- Heerenveen - The Netherlands

[1]. **EC-TYPE EXAMINATION CERTIFICATE**

[2]. **Type Examination Certificate Number:** VES256ATEX00217X
[3]. **Equipment:** Pull Rope Switch/ ROP 200
[4]. **Manufacturer:** Sarzamin Mahdyar Paya
[5]. **Address:** No 121, Chaharbagh Khajoo St., Isfahan, IRAN

[6]. This equipment and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.
[7]. Vescert certifies that this equipment has been found to comply with the Essential Health and Safety Requirements that relate to the design of Category 2,3 equipment, which is intended for use in potentially explosive atmospheres. These Essential Health and Safety Requirements are given in Annex II to the European Union Directive 94/9/EC of 23 March 1994.
The examination and test results are recorded in confidential report no. A256/SMP/568
[8]. Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the schedule of this certificate, has been assessed by reference to:

EN 60079- 0 : 2012 **EN 60079-1 : 2012** **EN 60079-11 : 2012**

[9]. If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.

[10]. This Type examination certificate relates only to the design of the specified equipment, and not to specific items of equipment subsequently manufactured.

[11]. The marking of the equipment or protective system shall include the following:

Ex II 2 D Ex Tc IIB T6

Date of issue:2020-05-05

M.Terpstra
Technical Director

VESCERT

Certification Body for Explosive Atmospheres
Residence Address: Wederik 73 - 8446 AA- Heerenveen - The Netherlands

[1]. **EC-TYPE EXAMINATION CERTIFICATE**

[2]. **Type Examination Certificate Number:** VES256ATEX00218X
[3]. **Equipment:** Misalignment Switch/TIL100
[4]. **Manufacturer:** Sarzamin Mahdyar Paya
[5]. **Address:** No 121, Chaharbagh Khajoo St., Isfahan, IRAN

[6]. This equipment and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.
[7]. Vescert certifies that this equipment has been found to comply with the Essential Health and Safety Requirements that relate to the design of Category 2,3 equipment, which is intended for use in potentially explosive atmospheres. These Essential Health and Safety Requirements are given in Annex II to the European Union Directive 94/9/EC of 23 March 1994.
The examination and test results are recorded in confidential report no. A256/SMP/569
[8]. Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the schedule of this certificate, has been assessed by reference to :

EN 60079- 0 : 2012 **EN 60079-1 : 2012** **EN 60079-11 : 2012**

[9]. If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.

[10]. This Type examination certificate relates only to the design of the specified equipment, and not to specific items of equipment subsequently manufactured.

[11]. The marking of the equipment or protective system shall include the following:

Ex II 2 D Ex Tc IIB T6

Date of issue:2020-05-05

M.Terpstra
Technical Director

OUTLINE

TIL100

TIL 100LCH

TIL 300

TIL 200

TIL475

LS 25

LS 35

LS 200

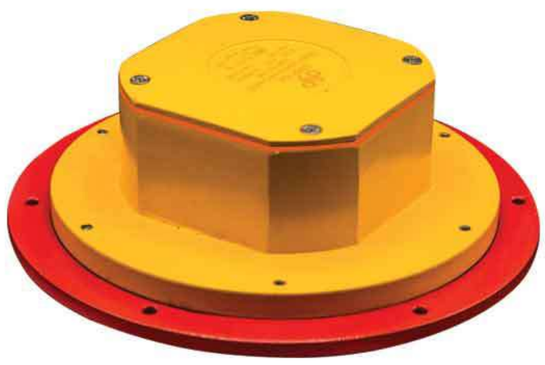
LS 45

LS 100

LS 3045

BTD 100 LS 175

DLS 100

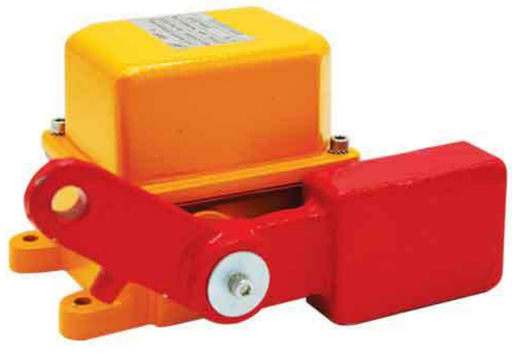


DLS 200

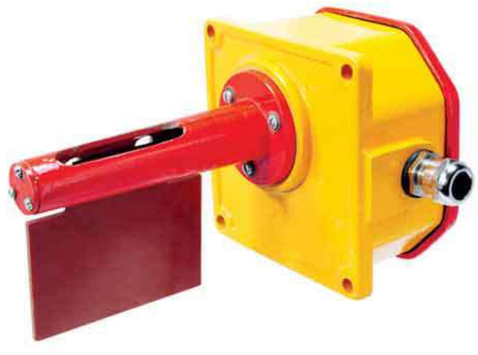
ROP 200

ROP 100

TS 300



CS 300



FL 300

ML100

OUTLINE

Control Box

SOUD-900

RQ 700

CSM 200

ZSS 100

CLS 100

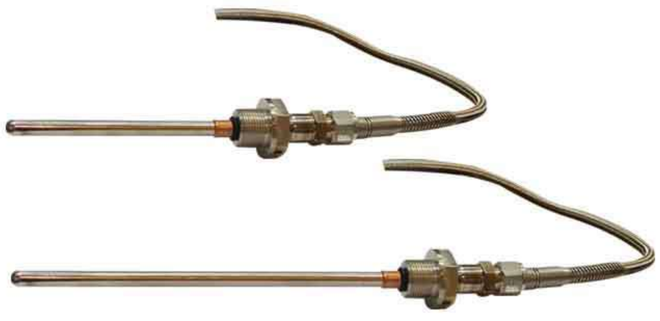
1LLD

LSR
(Weld)

MLS 100

HL 100

LA 100



PT 100

OFSB

OFSP

PB

LCB-A

LCB-S

LCB-F

Note:

SMP Group Instrumentation

2024

CENTRAL OFFICE & FACTORY

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Industrial settlements

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Tel: (+9831) 32201311

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Tehran.IRAN
P.O.Code : 1 5 5 9 6 4 9 1 3 1

Tel: (+9821) 45366
Tel: (+9821) 88549076/9

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