BELT SWAY SWITCH / BELT MISALIGNMENT SWITCH / BELT RUN-OFF SWITCH

SMARTsaa manufactures Belt Sway Switch also known as a Belt Misalignment Switch or Belt Run-Off Switch for use on conveyors to stop the conveyor when it sways from its normal position. The conveyor belt sways because uneven loading on conveyor, uneven wearing of idler or bearing damage of idlers.

Belt Sway switch is mounted in pair on the walkway side of the conveyor belt, preferably at about every 30 meters. Suitable gap of approx. 100 mm is to be ket between normal belt edge and roller, so that under standard operating conditions, the conveyor belt runs centered and does not touch the roller of the switch.

When the conveyor belt sways and crosses its normal limit the belt edge touches the switch roller and pushes it and switch gets operated. NC contacts of all Belt Sway Switches are wired in series and further connected to PLC. When any switch along the belt operates, the contact opens and conveyor is stopped.

The switch is auto reset type, once the belt tracking issue is resolved, the spring-loaded roller lever automatically resets to its position, allowing the conveyor to be restarted safely.

CONSTRUCTION:

Belt Sway Switch is housed in dust and weatherproof enclosure with IP 66 grade of protection. Sturdy and heavy-duty Cam- Switch with robust contacts is used to give longer service life. Switch roller is supported on bush bearing so that it does not damage the belt edge. The roller is provided with SS sleeve for longer life.
The switch is designed with auto reset / spring return type of mechanism.

FEATURES:

- Spring Return / Auto Reset type of mechanism
- Heavy Duty Enclosure for dusty industrial use
- Special tubular silicon gasket for better protection against ingress of dust and water
- Retaining type stainless steel screws for cover
- Special rubber seal (0 ring) on shaft for better protection against ingress of dust & dirt
- Standard Cast Al enclosure. Special enclosures like DMC / SMC or Cast Iron
- Available in Flameproof enclosure (for use in hazardous areas)
- Heavy Duty contacts rated for 16 Amp resistive at 440 AC
- Models with Indicating Lamp, Junction Box, Terminal Strip
- Can also be interfaced with Belt Watch System / Trip Indicator

STANDARD SPECIFICATIONS:

Reset : Spring Return / Auto Reset
Enclosure: Weatherproof, field mounting Type, IP 66 Cast Al / Cast Iron. Epoxy painted, light gray (standard).
Other color shades are also available.
Output Contacts: 1 NO + 1 NC / 2 NO + 2 NC / 2 NC / 4 NC
Contact Operation: Normal, Slow Action Mechanism
Contact Rating for standard models: 16 Amp resistive at 440 VAC
DMC/ SMC/ Plastic / FRP enclosure for use in corrosive environment.
Special flame proof enclosure for use in hazardous area, Group IIa, IIB, IIC

OPTIONAL ACCESSORIES:

- Separate junction Box for termination of cables.
- LED Indicating lamp: For indication of operated switch
- Flameproof Enclosure
- DMC / SMC / FRP / Plastic Enclosure
- Accessories like Cable Gland, Mounting Plate

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STANDARD MODEL



WITH JUNCTION BOX



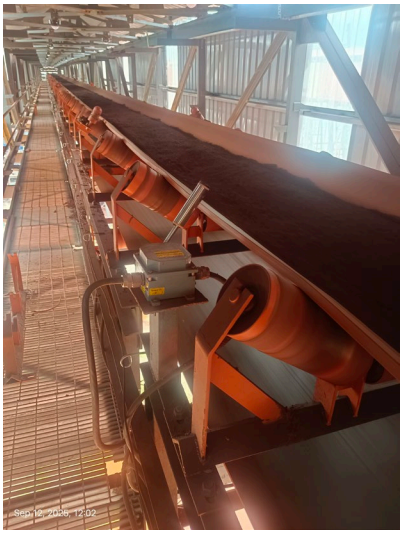
WITH INDICATING LAMP



FLAMEPROOF ENCLOSURE BS F



ROUND BODY BELT SWAY SWICH BS R





MOUNTING OF BELT SWAY SWITCH ON BOTH SIDES OF CONVEYOR

ORDERING PROFORMA FOR BELT SWAY SWITCH

GR 1	Series	
	Belt Sway Switch, Spring Return, Auto Reset Type,	BS
	Belt Sway Switch, Spring Return, Auto Reset Type, with two sets of contacts (1 NO + 1 NC for alarm and 1 NO + 1NC for Trip)	BS2C
Gr 2	**No Of Contacts**	
	1 NO + 1 NC	101
	2 NO + 2 NC	202
	4 NC	004
	2 C/O (Gr 3 should be R)	020
Gr 3	**Enclosure**	
	Cast Al, Improved seal, IP 66	C
	Corrosion resistant, SMC DMC/ Engineering Plastic, Gr. 1 should not be SPCS or SPC D), IP65	D
	Corrosion resistant Engineering Plastic, IP 65	P
	Flameproof Enclosure, IP 65, Cast Al, LM6	F
	Cast Iron, IP 65	CI
	Round Body, Cast Al, Improved Protection, IP 66, Normal Roller Position Vertical (Gr 2 should be 020)	R
G4 4	**Accessories, please add suffix**	
	No Accessories	No adder
	With Separate Junction Box, Cast Al, IP 66	JB
	With Indicating Lamp, Lamp Supply: 90-230 V AC,	ILA
	With Indicating Lamp, Lamp Supply: 24 V DC	ILD
	With Indicating Lamp, Universal Lamp Supply: 24-230 V AC DC	ILU
	Without JB but with Terminal Strip	TS
	With Double Compression Type Cable Glands, 2 No per switch	CG
	With Single Compression Type Cable glands, 2 No per switch	CGS
	With Flameproof Cable Glands ,2 No per switch	CGF
	With Canopy / Protective Plate	PP
	With Mounting Plate, 3 mm thick, Powder Coated	MP
	Tag Plate	TP
	Tag Plate SS	TPS
	Mounting Hardware, Bolts M6 x 24, 4 Nos	H
Gr 5	Special Colour (Other than our standard, Light Grey)	C
	Cable entry other than our standard ¾ inch	O
	Normal Roller Position: Vertical (Gr 1 should be BS)	D

Note: For Indicating lamp option, switch contacts will be used. Ensure to lay additional cable for driving indicating lamp.

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