

MODEL BSD

BELT SPEED DETECTOR

Shown with optional Safety Chains

TRACTION ACTION

The Model BSD is a traction action™ motion control that indicates when a conveyor belt has slowed or quit moving altogether. It can be used as an overspeed, underspeed, or zero speed control. For maximized control the Model BSD should be wired into our optional RMS controllers or MSD controllers which can be set to shutdown machinery or activate an alarm. These controllers allow the BSD to indicate either Over-Speed, Under-Speed or Zero-Speed.

The Model BSD can shut down rotating equipment before damage is encountered. It provides protection for interlocked conveyor belts, especially if one of the belts fails due to overloading or quits due to tearing. Also prevents material backup or plugged chute.

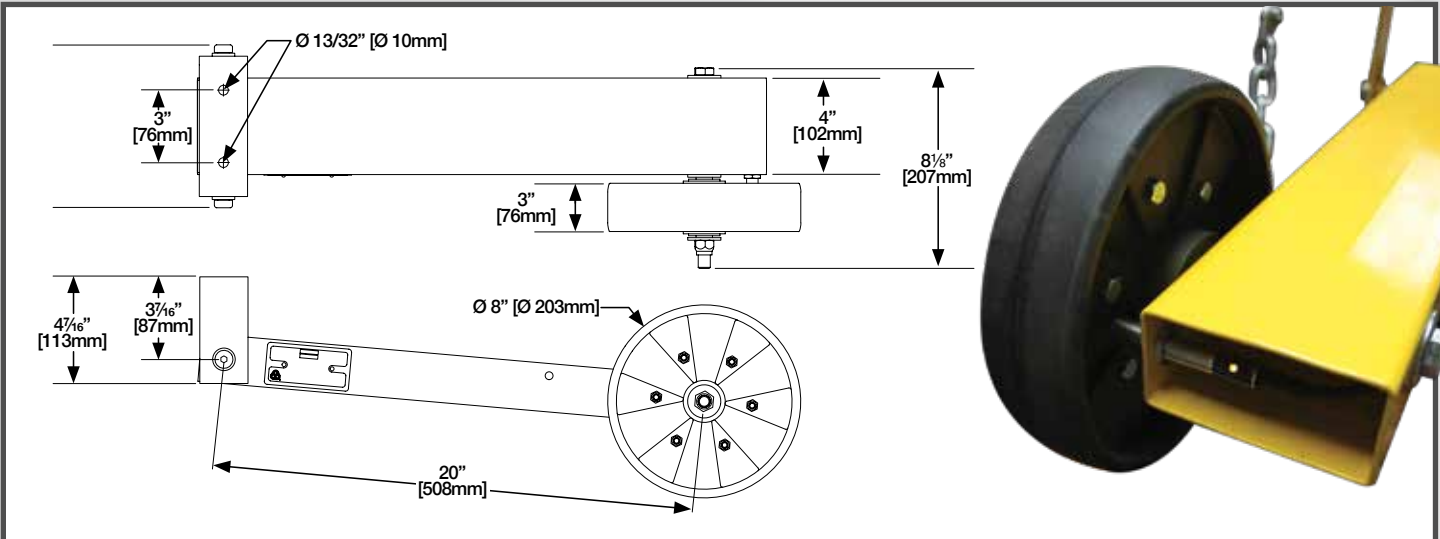
No drilling or tapping of tail pulley shaft required. Unit is shielded between top and bottom of conveyor belt, and can be placed anywhere on the conveyor belt.

***SIMPLE DESIGN AND INSTALLATION.
NO DRILLING OR TAPPING OF TAIL PULLEY
SHAFT REQUIRED, UNIT IS SHIELDED
BETWEEN TOP AND BOTTOM OF CONVEYOR
BELT, AND THE UNIT CAN BE PLACED
ANYWHERE ON THE CONVEYOR BELT.***

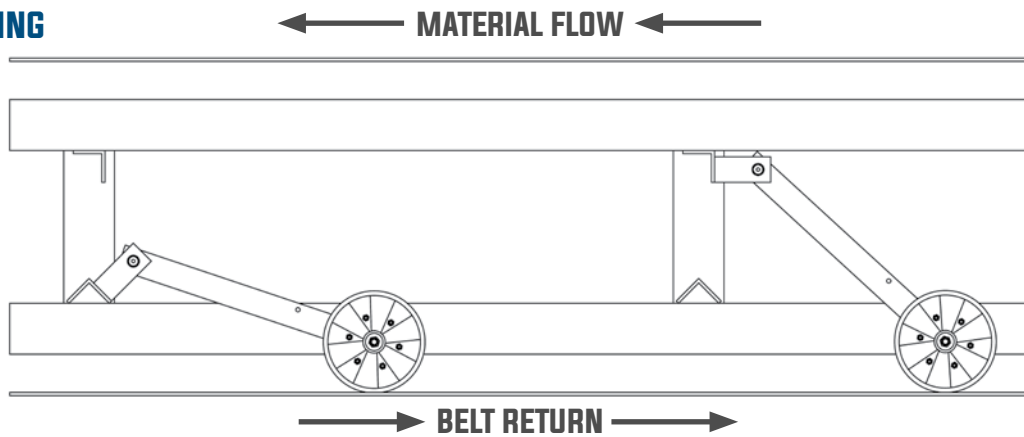
TECHNICAL SPECIFICATIONS

- The BSD-2S (2 wire sensor) works with the RMS-G series controller, while the BSD-3S (3 wire sensor) works with the MSD-800 series controller.
- The RMS-G controller is available in a NEMA Type 4 polycarbonate housing, while the MSD-800 controller is a panel-mount plastic housing with display.
- Both controllers are available in either a 120 VAC, 240 VAC, or 24V AC/DC power input. Specify input voltage upon ordering.
- The sensor can be used in outdoor environments and is connected to the controller(s) with Belden 8442 or 8760 or similar.
- Each inductive sensor is supplied with 6 feet of electrical cable. Field splice for longer lengths.
- The maximum separation distance between controller and sensor is 200 feet.
- Each controller has a dry, unpowered relay rated for 5A @ 120 VAC, 240 VAC.
- 6 targets are built into the wheel assembly. The wheel is replaceable if necessary.
- The operating temperature range is -4°F to 158°F (-20°C to 70°C).

MODEL BSD DIMENSIONAL INFORMATION



MOUNTING



MODELS

MODEL	DESCRIPTION	SHIP WT.
BSD-2S	Wheel (traction action™) motion control, includes 12mm 2-wire (RMS-12S) inductive sensor and wheel target. Does not include optional RMS-G controller.	18 lbs.
BSD-3S	Wheel (traction action™) motion control, includes (MSD-12S3) 12mm 3-wire inductive sensor and wheel target. Does not include optional MSD-800 controller.	18 lbs.
BSD-0S	Wheel (traction action™) motion control, sensor not included. Does not include optional controller.	18 lbs.

ACCESSORIES / SPARE PARTS

MODEL	DESCRIPTION	SHIP WT.
RMS-12S	12mm (2 wire) inductive proximity sensor (for use with RMS-G series controller).	1 lb.
MSD-12S3	12mm (3 wire) inductive proximity sensor (for use with MSD-800 or MSD-800-24 controller).	1 lb.
21310007	Nylon wheel assembly with 6 targets.	2 lbs.
21310016	Safety chain & hardware kit, 2 pieces at 4 feet each.	5 lbs.
21310015	Safety cable, 1 piece at 2 feet each (2 required).	1 lb.
MSD-14	Two conductor electrical cable (Belden 8442 or 8760).	.02 lbs/ft

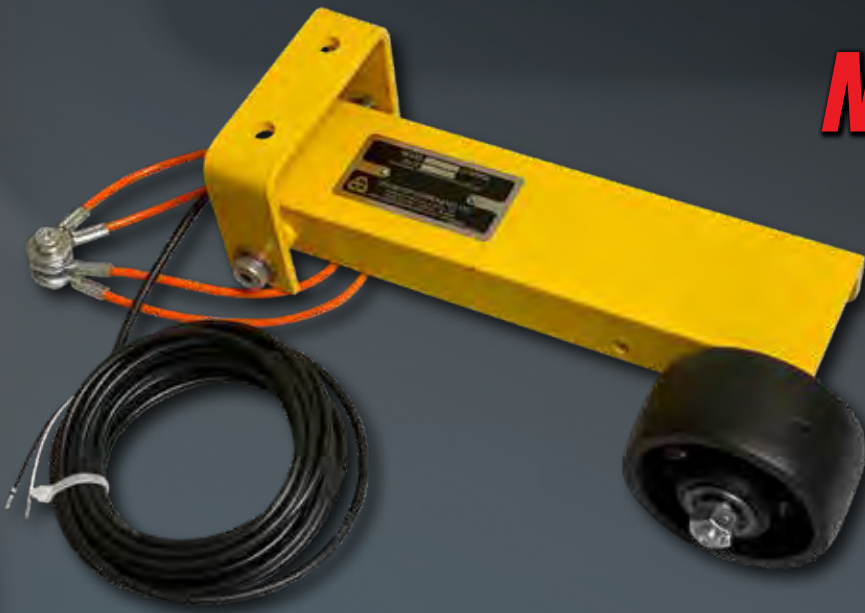


Shown with optional Safety Chains

NEW!

MODEL BSDC

COMPACT BELT SPEED DETECTOR



SIMPLE DESIGN AND INSTALLATION. NO DRILLING OR TAPPING OF TAIL PULLEY SHAFT REQUIRED, UNIT IS SHIELDED BETWEEN TOP AND BOTTOM OF CONVEYOR BELT, AND THE UNIT CAN BE PLACED ANYWHERE ON THE CONVEYOR BELT.

The Model BSDC is a compact (reduced-size) version of our heavy duty “traction action” motion control that indicates when a conveyor belt has slowed or quit moving altogether. The unit can be adjusted as an overspeed, underspeed, or zero speed control. The output of the Model BSDC can be wired into a PLC or DCS, or to the optional RMS controller (or MSD controller) which has a DP/DT relay to control up to two separate circuits, one for machinery shutdown and one for an alarm.

The Model BSDC can shut down rotating equipment before damage is encountered. It provides protection for interlocked conveyor belts, especially if one of the belts fails due to overloading or quits due to tearing.

MODELS

MODEL	DESCRIPTION	SHIP WT.
BSDC-2S	Wheel (traction action™) motion control, includes 12mm 2-wire (RMS-12S) inductive sensor and wheel target. Does not include optional RMS-G controller.	10 lbs.
BSDC-3S	Wheel (traction action™) motion control, includes (MSD-12S3) 12mm 3-wire inductive sensor and wheel target. Does not include optional MSD-800 controller.	10 lbs.
BSDC-0S	Wheel (traction action™) motion control, sensor not included. Does not include optional controller.	10 lbs.

COMPATIBLE CONTROLLERS FOR BSD / BSDC

MSD-800 CONTROLLERS

MODEL	DESCRIPTION	SHIP WT.
MSD-800	Panel mount style, indicates two under-speed or two over-speed points, or one of each. 100-240 VAC power input. Digital RPM tachometer display.	1.5 lbs.
MSD-800-24	Panel mount style, indicates two under-speed points, two over-speed points or one of each. 24 VDC power input. Digital RPM tachometer display.	1.5 lbs.

RMS MOTION CONTROLLERS

MODEL	DESCRIPTION	SHIP WT.
RMS-1G	Non-contact motion control, includes: 120 VAC electronics *	1.5 lbs.
RMS-2G	Non-contact motion control, includes: 240 VAC electronics *	1.5 lbs.
RMS-3G	Non-contact motion control, includes: 24 VAC/VDC electronics *	1.5 lbs.

* GENERAL PURPOSE NEMA TYPE 4 & 4X



MSD-800 control unit



RMS control unit