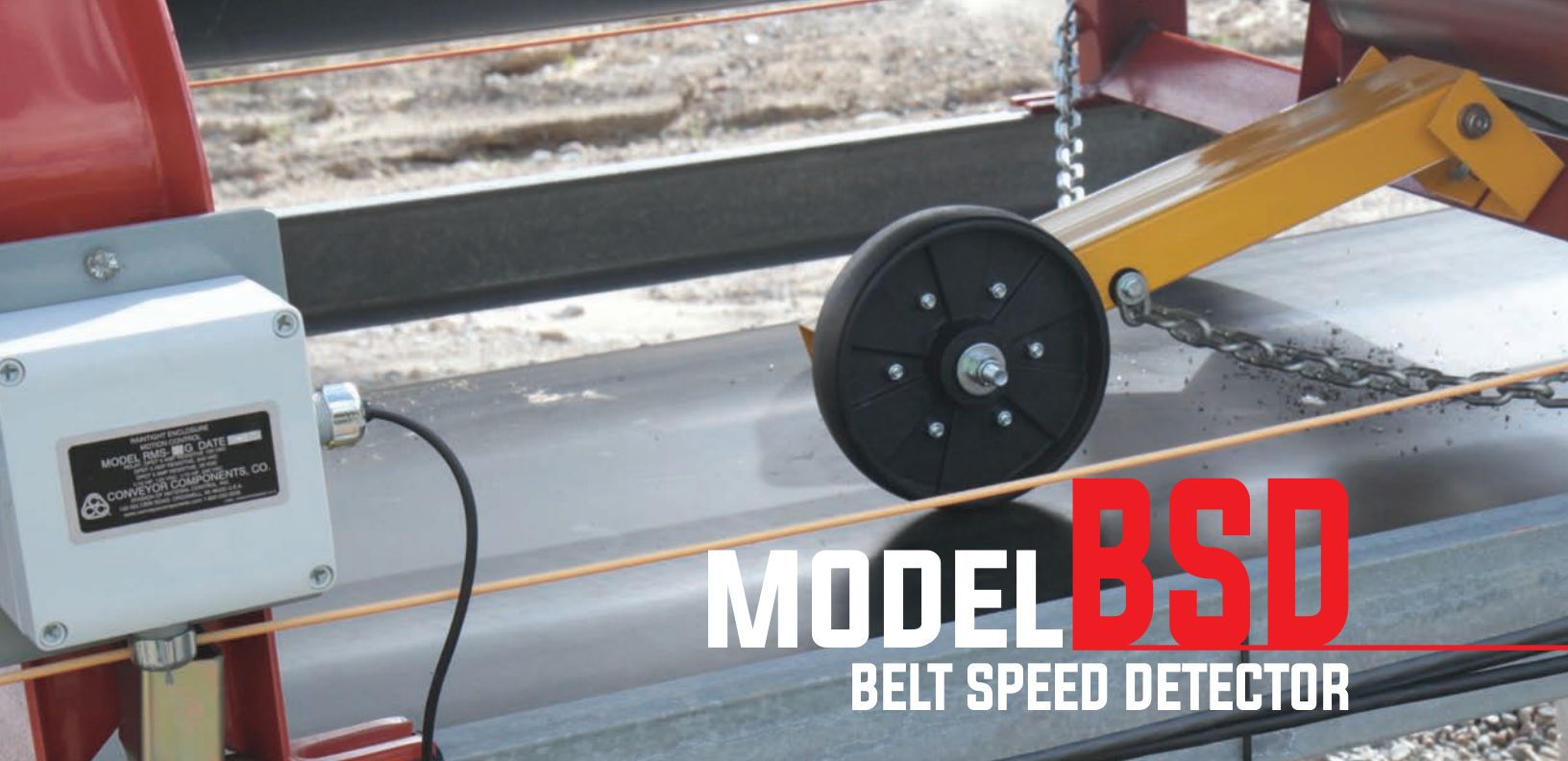


MODEL BSD

BELT SPEED DETECTOR



Conveyor Components Company



MODEL BSD

BELT SPEED DETECTOR

WHAT IT IS, AND WHAT IT DOES

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. The output of the Model BSD can be wired into a PLC or DCS, or to the optional RMS controller (or MSD controller) which has a relay to control up to two separate circuits, one for machinery shutdown and one for an alarm.

WHY IS IT NECESSARY?

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.

ADVANTAGE

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.

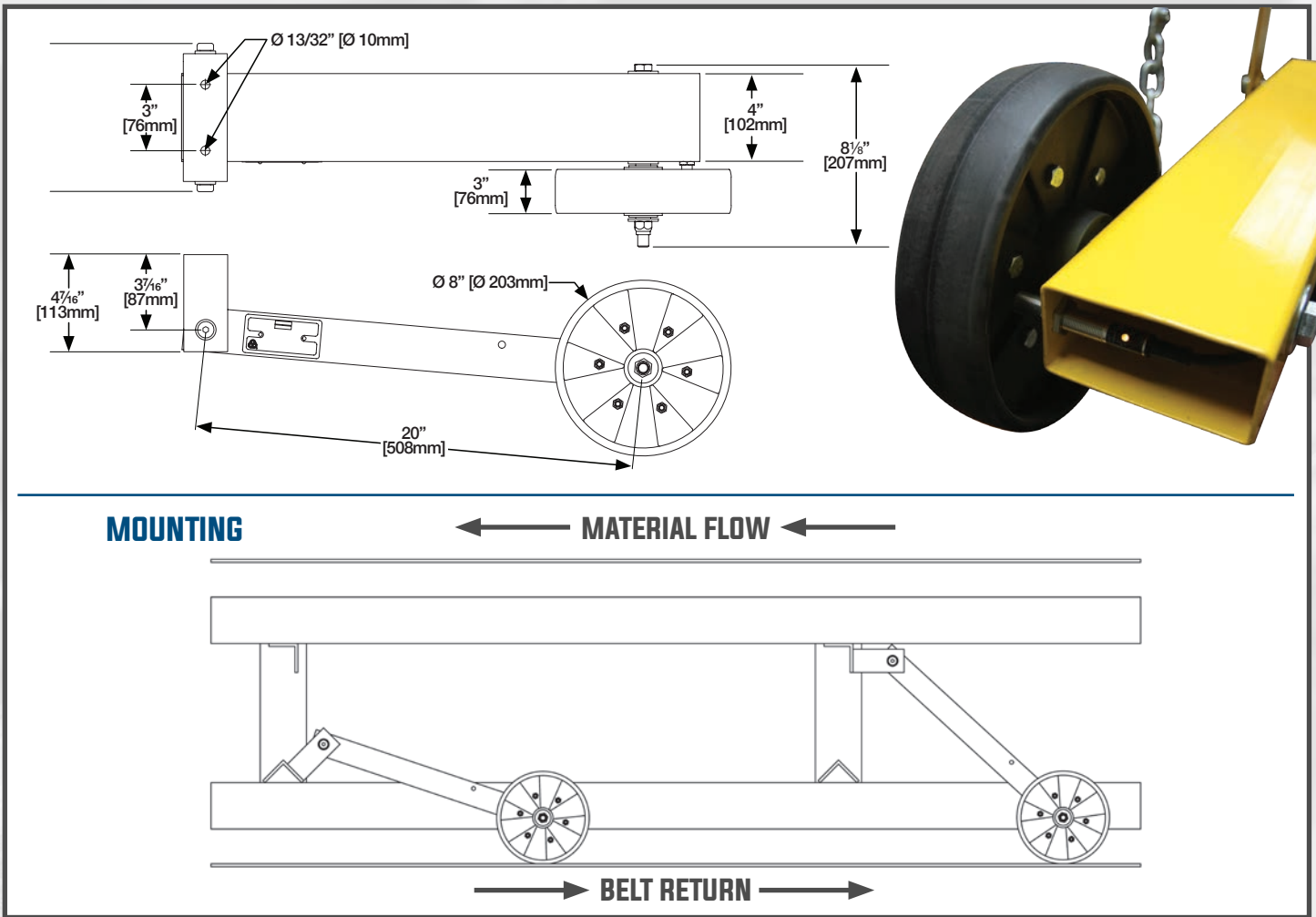
BSD MODELS AVAILABLE

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.

TECHNICAL SPECIFICATIONS

- The RMS-12S (2 wire) sensor works with the RMS-G series controller, while the MSD-12S3 (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 -13°F to 140°F (-25°C to 60°C).
- No drilling or tapping of tail pulley shaft necessary. Mounts between the conveyor belts.

MODEL BSD DIMENSIONAL INFORMATION



RMS MOTION CONTROLLERS

MODEL	DESCRIPTION	SHIP WT.
RMS-1G	Non-contact motion control, includes: 120 VAC electronics and NEMA 4,4X polycarbonate enclosure.	1.5 lbs.
RMS-2G	Non-contact motion control, includes: 240 VAC electronics and NEMA 4,4X polycarbonate enclosure.	1.5 lbs.
RMS-3G	Non-contact motion control, includes 24V AC/DC electronics and NEMA 4,4X polycarbonate enclosure.	1.5 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

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.





MODEL **BSD**

BELT SPEED DETECTOR

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OPTIONAL MOTION CONTROLLERS AVAILABLE FROM CONVEYOR COMPONENTS COMPANY®

MSD-800 MOTION CONTROL

The MSD-800 control unit is a programmable controller that has two set points permitting it to indicate two under-speed points, or two over-speed points, or one of each. The control unit acts as a digital tachometer that constantly displays the actual rotary speed of the equipment being monitored. The control unit is installed remotely in a control panel where it is free from dust, dirt and vibration. This allows the operator to monitor equipment from one central location.



MODEL **RMS** REMOTE MONITORING SYSTEM

The Model RMS non-contact motion control will provide accurate and reliable speed sensing of rotating shafts and machinery. Each optional sensor comes with 6 feet of cable, will need to field splice for longer lengths. It will produce an output signal at a predetermined speed which may be either underspeed or overspeed. Solid state electronics and analog technology make this one of the most advanced and versatile motion detectors available. The Model RMS protects all valuable rotating equipment including belt conveyors.

