


Instrument Data Sheet

General	1	Product	Belt Speed Detector with 3-Wire Inductive Sensor (Included)	
	2	Model Number	BSD-3S	
	3	Manufacturer	Conveyor Components Company	
	4			
Environment	5	Ambient Temperature	-25 to 60 °C [32 to 140 °F]	
	6	Material: Frame	Powder coated steel with zinc plated hardware	
	7	Material: Wheel	Glass Filled Nylon	
	8	Sensor Enclosure Rating	IP 69; NEMA Type 4X; Type 9: Class I (Div. 2), Groups A, B, C, & D	
	9	Mounting	2 × $\varnothing^{13/32}$ " [10 mm] holes (mounting hardware included)	
	10			
	11			
Electrical	12	Sensor Type	12mm [$\frac{1}{2}$ "] non-contact inductive probe	
	13	Output Type	NPN 3-wire pulse rate speed encoder	
	14	Operating Voltage	10-36 VDC	
	15	Operating Current	≤ 200 mA	
	16	Indicating Lamp	LED on sensor body	
	17	Controller	Compatible with MSD-800 Series controllers, or other user supplied controllers (PLC, DCS, direct output, etc.)	
	18	Pulse Rate Scaling Factor	1 Hz =	0.3490 fps
	19		20.944 fpm	
	20		0.2380 mph	
	21		0.1064 m/s	
	22		0.3830 km/h	
	23		1 fps =	2.865 Hz
	24		1 fpm =	0.0477 Hz
	25		1 mph =	4.202 Hz
	26		1 m/s =	9.399 Hz
27	1 km/h =		2.611 Hz	
28				
Mechanical	29	Wheel Diameter	$\varnothing 8$ " [203mm]	
	30	Sensor Target	6 per wheel	
	31	Max Belt Speed	20 mph, 1760 fpm [32.2 km/hr, 8.94m/s]	
	32	Safety Restraint	Safety Cable (included standard): Two 2' [0.6 m] lengths of vinyl coated aircraft cable. (part# 21310016)	
	33		Safety Chain Kit (optional): Two 4' [1.2 m] lengths of safety chain, with attachment hardware (part# 21310016)	
Options	34			
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Accessories	36			
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Manufacturer	40		Conveyor Components Company Division of Material Control, Inc. 130 Seltzer Road, PO Box 167 Croswell, MI 48422 USA (810) 679-4211 info@conveyorcomponents.com www.conveyorcomponents.com	
Notes: For MSD-800 series controllers, see datasheets: DATA-0176/DATA-0177 