

Speed Sensor TDS



The speed sensor monitors the belt speed. It is directly coupled to a rotating shaft

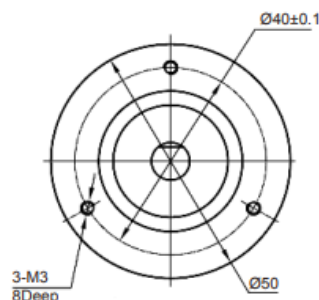
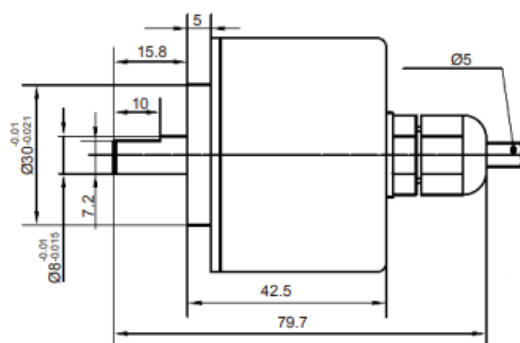
(the bend pulley) which drives a signal generator. The speed sensor submits an output signal at a frequency directly proportional to the

shaft speed.

It is typically installed on a non-driven pulley of a belt conveyor for detecting belt speed.

Technical Specifications
Ambient Temperature: -30° to 80° C (-22° to 176° F)
Enclosure: IP65
Detecting Speed Range: 20 to 280 rpm

Cable connection L2 (IP65) with 2 m cable



Mechanical Data

Housing

Flange	clamping flange
- Max. operating speed	5000 rpm
Housing	Ø 50 mm

Shaft(s)

Shaft material	stainless steel
Starting torque	approx. ≤ 1.5 Ncm at ambient temperature
Shaft	Ø 8 mm
Max. Permissible shaft load radial	50 N
Max. Permissible shaft load axial	30 N

Electrical Data

Power supply/Current consumption	4.75VDC up to 5.25VDC / 60-100mA
Power supply/Current consumption	8VDC up to 26VDC / 60-80mA
Output circuit	TTL TTL + inv HTL HTL + inv
Pulse Frequency	TTL ≤ 5000 ppr: max. 300kHz HTL ≤ 5000 ppr: max. 300kHz
Channels	ABN and inverted signals
Load	60-100 mA/channel (depends on output circuit)
Accuracy	
Phase offset	90°± max. 12.5% of the period duration

General Data

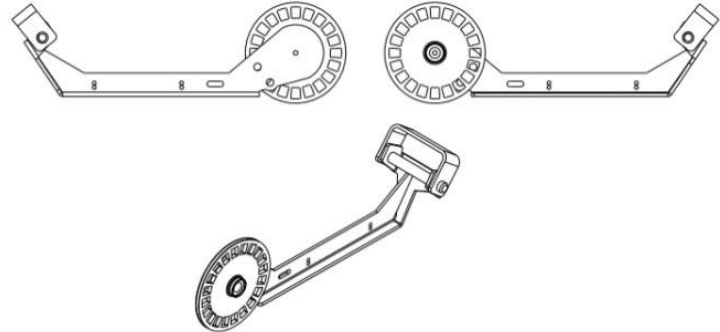
Weight	approx. 200 g
Connections	cable
Protection rating (EN 60529)	IP65
Operating temperature	-30°C ~+85°C
Storage temperature	-35°C ~+95°C
Shock	980 m/s ² , 3Dx3times, 6ms
Vibration	49 m/s ² , 10~200Hz, 3Dx120min

Description

L2 axial, shield and connected (IP65)

Assignment

Description	L2	L2
Output circuit	H05/H24	R05/R24
GND	BU	BU
(+) Vcc	BN	BN
A	BK	BK
B	WH	WH
N	OG	OG
A inv.	-	RD
B inv.	-	GY
N inv.	-	YE
Shield	Shield	Shield



- Robust encoder with small dimensions
- Reliable sturdy design
- Small Size & Easy Mounting

Shaft size					
08	8 mm				
Pulses per revolution PPR					
1024	0~5000 PPR Above 5000 PPR on request				
Channels					
ABN	ABN, ABN inverted signals				
Power Supply					
H24	Resolution PPR	Power supply VDC	Output circuit	Light reserve warning	Order key
	up to 5000	4,75 - 5,25	TTL (Push-pull)	-	H05
		4,75 - 5,25	TTL + inv. (Line Driver)	-	R05
		8 - 26	HTL (Push-pull)	-	H24
8 - 26		HTL + inv. (Line Driver)	-	R24	
Electrical connectons					
L2	Description				Order key
	Cable length (2 m standred)				L2
	axial, shield and connected (IP65)				
Cable length					
Description				Order key	
Cable length				XXX = Decimeter	

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