

SPEEDWAGON

Non-Contact optical speed measurement

- Contactless detection
- Incremental encoder and programmable trigger in one
- No Slip
- Plug & Play Play

A GOOD SIGN.

SPEEDWAGON®



Further information are available on our Website:
www.speedwagon-sensors.com

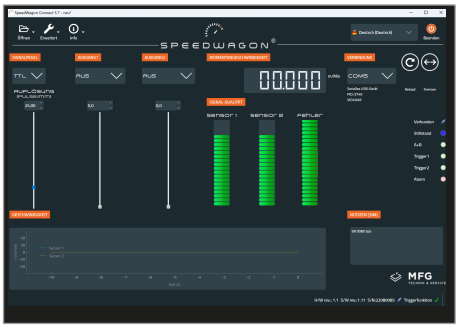
Non-Contact optical speed measurement

The innovation for your production - simple and universal !

Speedwagon measures the speeds of moving tracks and piece goods in order to monitor, control and regulate production systems. The big advantage: The measurement is non-contact, purely optical, without mechanical components and therefore slip-free. In contrast to measuring wheels and other mechanical processes, Speedwagon achieves greater measuring accuracy and does not damage the material due to mechanical stress. In addition, the system is also able to take on a trigger function, i.e. to output a start pulse, e.g. for marking devices, as soon as a previously defined increment value has been reached. Speedwagon is suitable for almost all materials and surfaces - even for reflective and smooth glass surfaces. Operation is intuitive.



User friendly:
Simple process integration and programming



Programming Software Speedwagon "Connect":
Intuitive and stylish



Small and compact:
The Speedwagon is only 37 mm x 46 mm x19 mm

Technical Details

Optical Data	
Measuring distance	15 ... 60 mm
Wave length	850 nm
Lifetime(Tu = 25˚C)	100.000 h (EN ISO 13849-1)*
Max. Permissible extraneous light	10.000 lux

Electric Data	
Supply voltage	5 ... 32 V
Power consumption	100 mA
Sampling rate	0,9 ms
Response time	3,6 ms
Temperature drift	50 µm/K
Temperature range	-10 ... 60 ˚C
Analog Output encoder	HTL / TTL
Output frequency	< 800 kHz
Accuracy	+/- 0,3 % **
Speed	< 0,5 ... 135 m/min. 2.250 mm/sec ***
Acceleration	< 8 g
Output trigger	PNP / NPN / push-pull
Output Error	PNP
Short circuit strength	Yes
Reverse polarity protected	Yes
Protection class	III

Mechanical Data	
Housing material	Aluminium
Full encapsulation	Yes
Protection class	IP67, on the housing side with installed connector
Connection type	Connector M8, 6 Pin
Programming port	Micro-USB

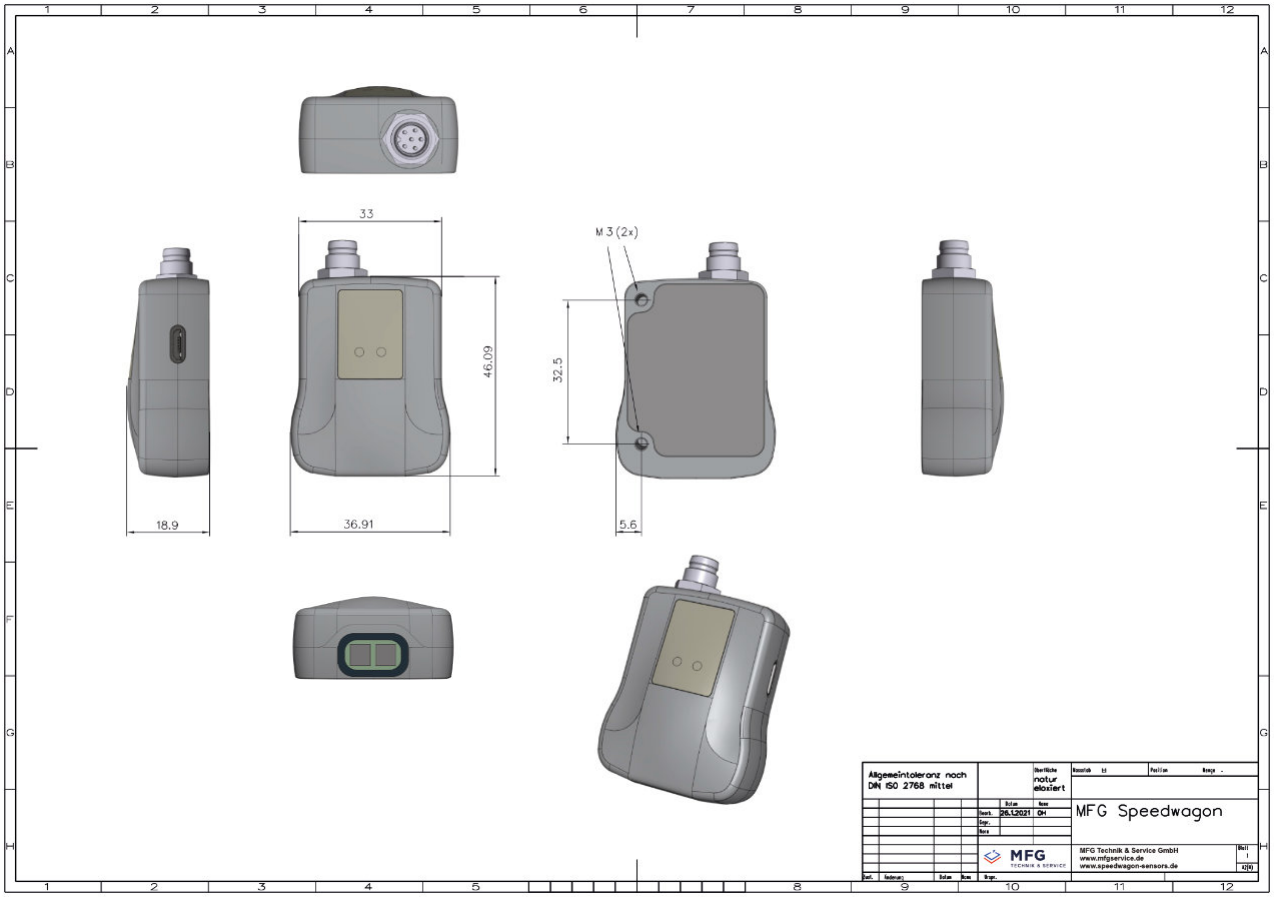
Miscellaneous	
Software	Speedwagon Connect
Optional accessories	Mounting brackets. Signal connection cable. Programming cable

*) This product is a standard product and not a safety component in the sense of the Machinery Directive. Calculation based on the nominal load of the components. average ambient temperature 2s · c. Frequency of use 8760 h / a. All electronic failures are considered dangerous failures.

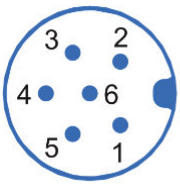
**) Error limit for the systematic measurement error according to DIN 1319-1: 1995. Valid between 1 m / min ... 120 m / min. Till 40 m/min the deviation will be lower. Regular adjustment required.

***) Depending on the material, this value is better or worse. Top speed is of shining metallic surfaces to be expected and the lowest maximum speed with white-matt paper.

SPEEDWAGON®



Dimensions: Housing Speedwagon



1: 5..30V DC
2: TR1
3: GND
4: TR2/ERR/DIR
5: ENC A
6: ENC B

Illustration: Pin Assignment

CE RoHS

LASERKLASSE 1
LASER 1
EN / IEC 60825-1:2014

MADE IN GERMANY

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