

Data Sheet

Concept of the Future EMD Speed Sensor

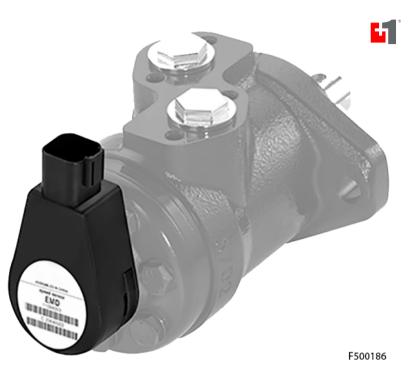
EMD Speed Sensor for Orbital motors

- Available for following LSHT-motors: OMM, OMP, OMR, OMS, OMT, OMV, TMK, TMT and TMV
- Flexible and adaptable speed sensor solution that covers many application needs
- Speed and Direction output
- Highest resolution in the market
- Easy mounting
- Sensor is not in contact with oil making it robust and exchangeable in the field
- Compact design
- Patented Design
- IP 69K

Features

- EMD speed sensor up to 180 pulses/rev
- PLUS+1[®] Compliant
- Rotation speed and direction output available
- Speed range up to 2500 rpm
- Push-pull amplifier
- CAN output signal
- DEUTSCH DT connector 6 pin

Comprehensive technical literature online at *powersolutions.danfoss.com*



ENGINEERING TOMORROW



D1

Square

Wave

Square

Wave

Phase A

D2

n

Directio

Square

Wave

Phase B

ENGINEERING TOMORROW

Push-pull output. Direction

= CCW: high, CW: low

2 channels with 90°

pull output

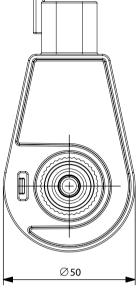
Configurable up to 180 pulse/revolutions

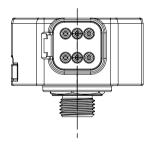
phaseshift each with 90

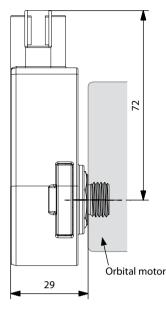
pulses/revolution Push-

Supports CAN 2.0B with SAE J1939 Message Protocol with Proprietary Messages Baudrate: 250 kbaud (fixed) Shaft velocity: ± 2500 rpm

Dimensions







r	Speed range		0 - 2500 rpm
	Supply voltage		9 - 36 Vdc
	Maximum power		0.8 W
	Temperature range		-30 °C to 60 °C
	(ambient)		
	EMC-Immunity (EMI)		100 V/m ISO 13766

Grade of enclosure**

further information.

Vibration

Shock

Specifications

Pulse

mode

mode

Quadrature

CAN mode

Output

signal*

P301 315

** According to IEC 529.

IP 69 K

30 G (294 m/s²) 30 G (294 m/s²)

Configurable with PLUS+1[®] Service Tool - Please contact Danfoss for

Sensor Pinout

DEUTSCH DT connector – 6 pin	Pin	Controller function
	1	Power supply 9-36 V dc
	2	Power ground
	3	D1 output
	4	CAN L
I YH OOO JIV	5	CAN H
	6	D2 output
P301 314		

Warning

Please note that the EMD speed sensor may fail. Output signals may not represent correct rotation speed or direction. Any application of the EMD speed sensor should be subjected to appropriate hazard and risk assessment, according to relevant safety standards for the application. Reliability data MTTFd for the EMD speed sensor are available on request from your Danfoss representative.

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