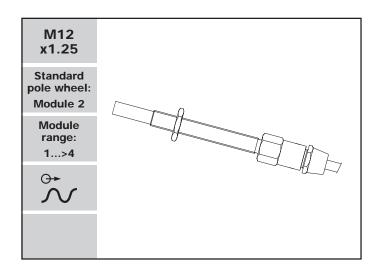


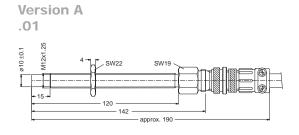
DSE 1210 A, S

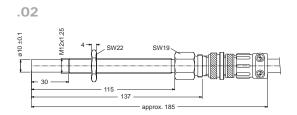


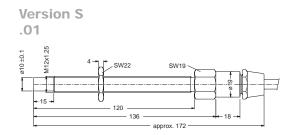
Features

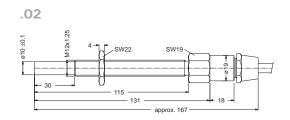
- Without line amplifier
- Turbocharger application
- High temperature version

Dimensions









Model overview

Туре	Part Nr.	Connection	Housing thread	Weight [g]	Operating temperature [°C]	Notes
DSE 1210.01 ATZ	304Z-03106	Connector	M12x1.25	150	-20+85	previously FTG 232 A
DSE 1210.01 STZ	304Z-03107	Cable 5 m	M12x1.25	520	-20+85	previously FTG 232 S
DSE 1210.02 AHZ	304Z-03109	Connector	M12x1.25	150	-20+150	previously FTG 233 A
DSE 1210.02 SHZ	304Z-03110	Cable 5 m	M12x1.25	520	-20+150	previously FTG 233 S

Electromagnetic Sensor without line amplifier

Type DSE 1210 Version A, S

Technical Data

Supply

Active sensor without power supply. Power supply

Reverse polarity protection.

No current consumption. Coil inductance acc. to Technical Data (see table 1).

Input

Frequency range ~10 Hz...50 kHz

Cable shield connected to the supply negative pole. Noise generator between Noise immunity

housing and electronics.

1.5 kV/1.5 ms/max. 5 Hz (source resistance 500 Ω), 2.0 kV/HF-bursts (level 4 in accordance with IEC 801-4),

2.5 kV/1 MHz damped resonance (class III in accordance with IEC 255-4). Ferromagnetic toothed wheel i.e. Ust37-2, involute gear form preferred.

Pole wheel

Module ≥ 1, min. tooth width 6 mm, side offset with min. tooth width: < 0.2 mm,

eccentricity < 0.2 mm or acc. to specifications for turbocharger.

Pole wheel-sensor gap ≥ 0.1 mm. Gap depending on rotational speed (circumferential) and module

acc. to diagrams A1, B1 and Technical Data (see table 1).

Output

Signal output A.C. voltage, approx. sinusoidal. Amplitude dependent on rotational speed, pole wheel-sensor gap,

pole dimensions and structural shape (involute gear form preferred). Characteristics in diagram A

show the dependence on gap d.

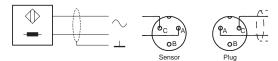
Diagram B shows lowest measuring speed N100 for different modules and gaps d. Output voltage

Un at rotational speed of 5 m/sec is the reference value.

(I.e. at pole wheel-Ø 64 mm, n = 1500 min⁻¹) acc. to Technical Data (see table 1).

Short circuit proof and protected against reverse polarity.

Connection



Shield to be connected with 0 V of power supply.

Mechanical

Protection class IP68 (head version H), IP64 (head version T), IP67 (cable connection), IP50 (jack connection).

Vibration immunity 20 g_n in the range 5...2000 Hz. Shock immunity 50 g during 20 ms, half sine wave.

Operating temperature Acc. to model overview.

Insulation Housing and electronics galvanically isolated (500 V/50 Hz/1 min).

Stainless steel 1.4305, front side hermetically sealed (H-version), electronic components potted in a Housing

chemical- and age-proof synthetic resin.

Dimensions acc. to model overview and dimensional drawings.

Weight Acc. to model overview.

304E-63922 Operating instructions

Versions

Version SH

Version AH

Version ST PVC cable: Part nr. 824L-30894, 2wire, 2 x 0.75 mm², stranded wire

(metal net insulated from the housing), grey.

Outer Ø max. 6,7 mm, bending radius min. 60 mm, weight 70 g/m. Teflon cable: Part nr. 824L-31841, 2wire, 2 x 0.75 mm², stranded wire (metal net insulated from the housing), black. Outer Ø max. 5.0 mm,

bending radius min. 80 mm, weight 45 g/m. Standard length for version SH: 2 m, 5 m.

Connection type: 820E-31142. Connection plug: 820E-31141.

DSE