Sender Unit

2159-50 (dyn.)

The Sender Unit, integrated in the gearbox, transfers the number of revolutions of a pulse wheel or gear-wheel into electrical pulses. The revolutions are captured by inductive, touchless scanning.
The pulses, supplied by the Hall IC, are used by tachographs and on-board computers for capturing the distance covered and the road speed.
When using the integrated Sender Unit, the speedometer shaft connection is no longer necessary.

2159-50 is designed for heavy-duty purposes!

Features
- Touchless, inductive measuring procedure
- Integrated in the gearbox
- Dynamic measuring
- Double pulse (inverted)
- Pulse duty factor independent of scanning speed
- Can be sealed
- 7 different lenghts for accomodating of different types of gearboxes

Applications
- For tachographs/EC tachographs KTCO 1318, FTCO 1319 and MTCO 1390 NEC
- Generally for devices requiring an electrical pulse (double pulse, inverted) for road speed and/or distance measuring.

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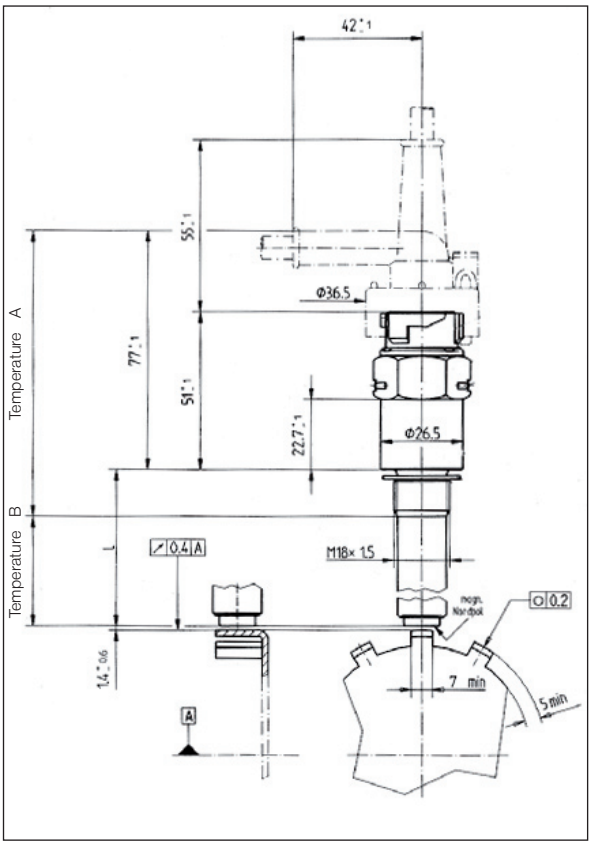
Technical information

Output	Double pulse (inverted)
Operating voltage	6 ... 15 volts
Power consumption (~U)	max. 16 mA
Operating temperature	A -30 °C ... +135 °C
	B -30 °C ... +145 °C
Storage temperature	A -40 °C ... +140 °C
	B -40 °C ... +150 °C
Connection	unearthed
Protective resistance	1,5 kΩ
Signal shape	rectangular
Frequency (max.)	< 800 Hz
Output signal A1 (idiling)	U_L ≤ 800 mV (UH ≥4 volts)
Output signal A2 (idiling)	inversion of A1
Interference protection	depending on additional circuit
Radiated susceptibility	DIN 40839 T4 (100 V/m)
Outputs, short-circuit proof	30 volts, 1 min.
Protection	IEC 529, IP 66
Resistance to vibrations	30 g
Shock resistance	100 g, 11 ms, 50 cycles
Tightness	0,5 bar oil, 120 °C, 100 h
Scanning speed	V_{min} circumference ≥ 0,1 m/s
of pulse wheel (typ.)	(V_{min} vehicle ≈ 1,5 km/h)
Pulse wheel material (typ.)	St 4 LG RP
Thickness of pulse material	2 mm
Segment/gap (typ.)	1 : 1,5 to 1 : 2
Lenght of segment (typ.)	16 mm
Air gap, Sender Unit/	1,4 mm
pulse wheel (typ.)	
Connection of sender unit	via bayonet joint
to sender unit cable	
Connection of sender unit	via thread M 18 x 1,5
to vehicle gearbox	
Torquet (wrench size)	max. 50 Nm (SW 27)
Weight	approx. 80 to 150 g
Dimensions	approx. 16 x 19,8 / 25 / 35
(Ø x L in mm)	63,2 / 90 / 115



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