GMR Sensor Adapter - Valve Train Modul
ELGMR

The GMR Sensor Adapter is suitable for measurements with the FixPitch sensor from Sensitec. The electronic unit is used to amplify the acquired raw signals as well as to ensure a noise-free signal and sufficient bandwidth. The amplified sensor signals are output via separate sine and cosine outputs. The connection of two sensors in parallel is possible.

Features

- Noise-free, amplified raw signals
- Signal bandwidth > 100 MHz
- Gain flatness 0.1 dB, up tp 300 MHz
- Signal output via two separate BNC sockets (sine / cosine)
- Connections for two sensors, including supply of sensors
- Power supply via LEMO or USB socket
- Protection against under-/overvoltage
- Suitable for measurements with FixPitch sensor from Sensitec (GLM711AVB)
- Electromagnetic compatibility (EMC); electrostatic discharge (ESD) protection

Measurement chain

- GMR Sensor for valve lift measurement (Sensitec - GLM711AVB)
- RASdelta Analog Board (connection BNC to SMB connector; 2 cables per channel/GMR sensor)
- RAS Software (post-processing evaluation)

Technical Data	
Channels	
Features • Amplifier • Gain • Signal bandwidth • Gain flatness	 full differential 5.4, input inpedence > 100 Ω > 100 MHz 0.1 dB, up to 300 MHz
Inputs • Connector • Maximum input level (VINdiff) • Input impedance	 • 6-pin LEMO-receptacle, according to GLM711AVB • 1.85 Vpp • 2.75 kΩ, according to GLM711AVB
Outputs • Connector • Polarity • Symmetry	 • 50-Ohm BNC-receptacle • inverting • reffering to 0 V
Power supply	
Features • Input supply voltage range • 8-pin LEMO-receptacle EXG. • USB-C	 + 4,3 V to + 14 V, 230 mA (max.) + 12 V and/or + 5 V support of all USB typs, incl. USB-PD
Sensor supply • Output voltage • Max. current • Load regulation	 + 5 V 25 mA 30 µV/mA
Protection against under-/over voltage • Under voltage • Over voltage • Absolute maximum limits	 < + 4.3 V > + 14 V - 40 V to + 40 V
Connectors	
• Channel input • Channel output • Voltage supply	matches GLM711AVB 50-Ohm BNC-receptacles - market standard BNC cable USB-C receptacle - market standard USB cable