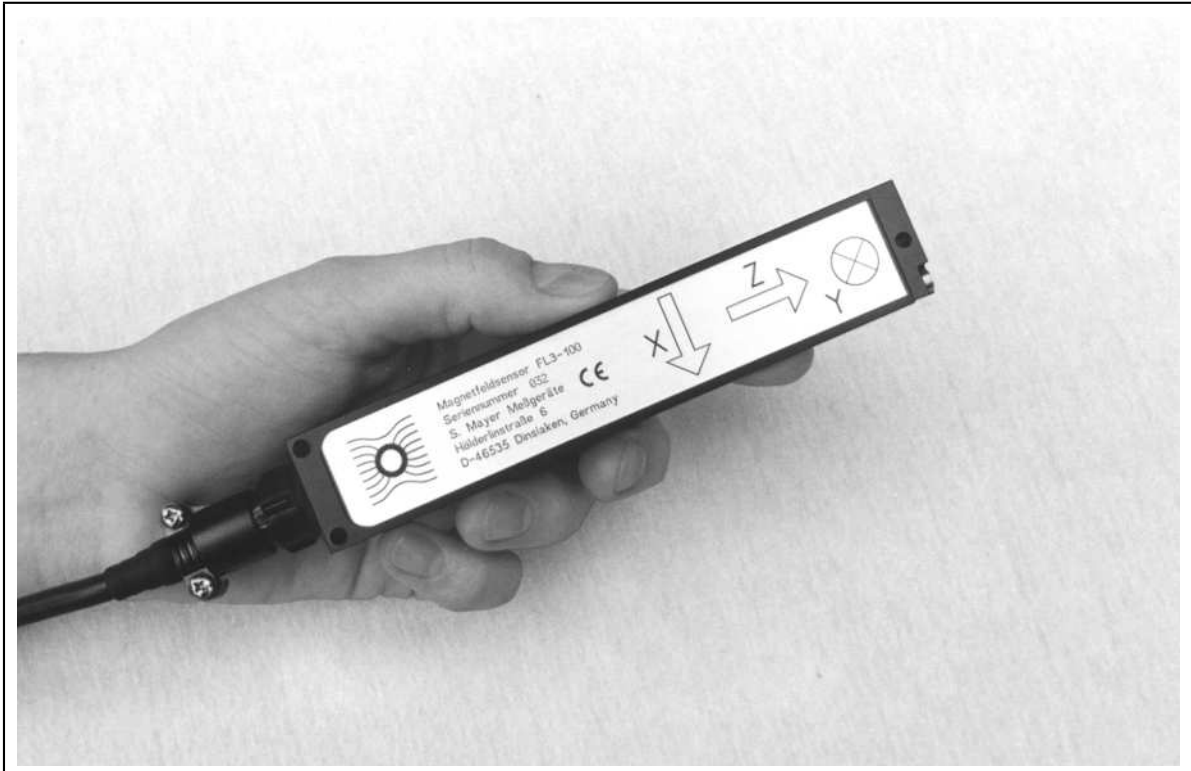




Triaxial Magnetic Field Sensor FL3-100

Measurement range $\pm 100 \mu\text{T}$, DC to 2 kHz



Features

- Complete precision 3-axis fluxgate magnetometer
- Measurement range $\pm 100 \mu\text{T}$, other ranges on request
- 3 analog voltages 10 V/ 100 μT
- Low noise and high stability
- Accuracy 0.5 %
- Offset $< 5 \text{ nT}$
- Waterproof case (protection IP65)
- Supply voltages $\pm 15 \text{ V}$

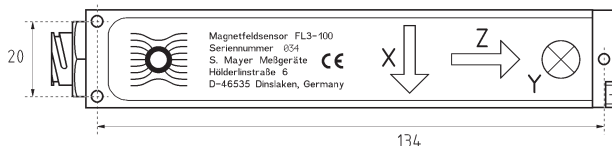
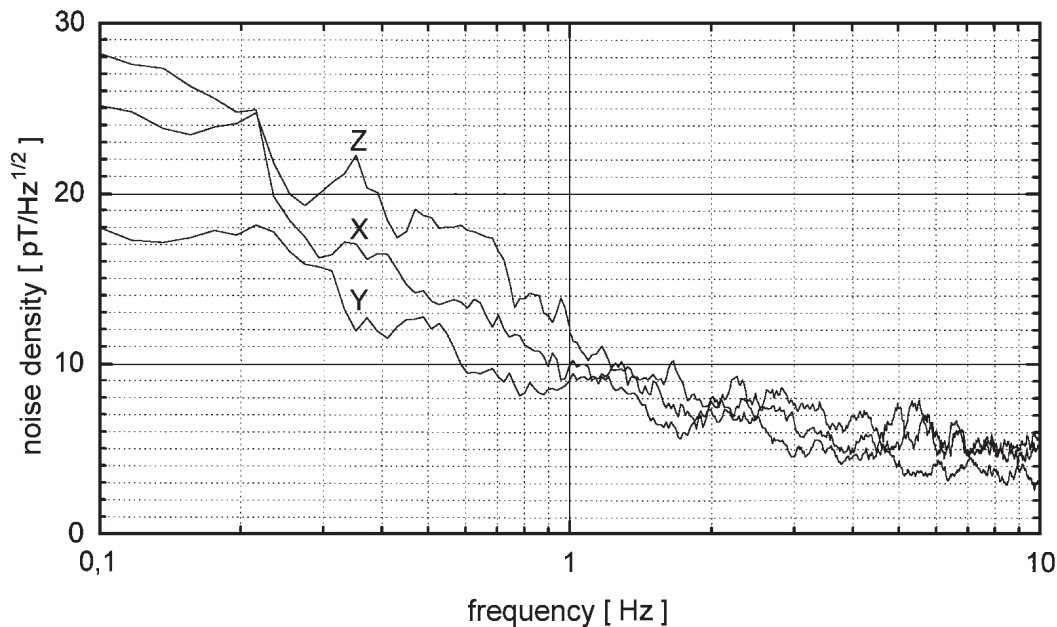
Applications

- Simultaneous measurement of the earth's field vector components
- Monitoring stray magnetic fields near power cables, transformers, etc.
- Palaeomagnetic investigations: Measurement of weak fields in rocks
- Magnetic signatures
- Package inspection
- Residual field measurement (shielding effectiveness)
- Magnetic field control and compensation (active shielding)

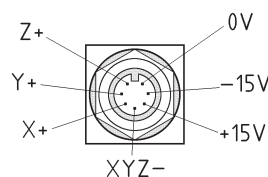
Specifications

Measurement range	$\pm 100 \mu\text{T}$, other ranges on request
Accuracy	0.5%
Orthogonality	$< 0.5^\circ$
Offset at $T=18^\circ\text{C}$	$< 5 \text{ nT}$
Operating temperature	-20 to $+75^\circ\text{C}$
Zero drift	$< 0.1 \text{ nT/K}$
Scaling temp. coeff.	$+20 \text{ ppm/K}$, typ.
Supply voltages	$\pm 15 \text{ V}$ (12.0 to 16.0 V)
Current consumption	$+22 \text{ mA}$, -15 mA ($+4.4 \text{ mA}/100 \mu\text{T}$ per axis)
Analog outputs	$0.1 \text{ V}/\mu\text{T}$ sep. for X-, Y,- and Z-comp.
Bandwidth	0 to 2000 Hz (-3 dB)
Frequency response	Butterworth, 12 dB/octave
Noise	$< 20 \text{ pT}/\text{Hz}^{1/2}$ @ 1 Hz
Power supply rejection	$> 100 \text{ dB}$
DC output impedance	$< 1 \Omega$
Enclosure	POM, black
Protection	weatherproof, IP65
Dimensions without connector	$140 \text{ mm} \times 26 \text{ mm} \times 26 \text{ mm}$
Weight	115 g
Connector	7 contacts, IP 65 (Deutsch IMC)
Subject to alterations.	

Noise spectrum of fluxgate sensor FL3-100, serial no. 023



Mounting holes for M3-screws, dims. in mm



Connector pinout