



KEY FEATURES

- Up to Three Axis
- Analogue Output
- -40 to +85°C
- Rugged Construction
- Excellent Stability

APPLICATIONS

- Vehicle control monitoring
- Machine control
- Structural Monitoring

Description/Application information

The HT-AKF Series Accelerometer is a versatile analogue output accelerometer with options of Voltage or Current signal. Using a low-power Monocrystalline silicon capacitive micromachined silicon chip, the signal is internally compensated for linearity and stability. Low power consumption, a rugged aluminium body, overcurrent protection and convenient industrial connector make this a popular choice.

Also available with Digital output on request

Measurement ranges

Range (g)	±2	±4	±8	±10	±20	±40	
4-20mA	2.4kHz	2.4kHz	2.4kHz	5.5kHz	5.5kHz	5.5kHz	Resonant
0-5V	5kHz	5kHz	5kHz	5kHz	5kHz	5kHz	Frequency
4-20mA	4mA/g	2mA/g	1mA/g	0.8mA/g	0.4mA/g	0.2mA/g	Sensitivity
0-5V	1.25V/g	0.62V/g	0.31V/g	0.25V/g	0.12V/g	0.063V/g	(±10%)
4-20mA	0.01%/°C	0.01%/°C	0.01%/°C	0.05%/°C	0.05%/°C	0.05%/°C	Temperature
0-5V	0.05%/°C	0.05%/°C	0.05%/°C	0.05%/°C	0.05%/°C	0.05%/°C	Coefficient

Configuration Example



HT-AKF Triaxial Sensor



5m long measuring cable



300mm long axis signal splitter cable

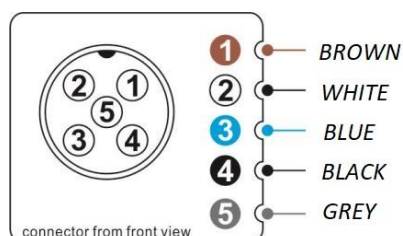


5070 multi channel measuring instrument

Specification

Technology	MEMS	
Range	$\pm 2g$ to $\pm 40g$	
Resolution	<1mg (max)	
Measuring axis	X,Y,Z	
Power off-on repeatability	<2mg	
Frequency Response	500Hz	
Bandwidth	1000Hz	3Db
Shock	>100g@11ms	(half sine wave)
Shock recovery time	<1ms	
Operating temperature range	-40 to +85°C	
Storage temperature range	-55 to +100°C	
Power supply	9-36V DC	
Max current consumption	60mA	@12V DC
Connector	M12	Supplied with mating connector
Dimensions	34.3 x 34.3 x 38.5mm	
Weight	73.5grams	
Noise density	Min 21 to Max 86.6	$\mu g/\sqrt{Hz}$
Max Calibration uncertainty	<1mg	
Protection	IP67	
Reliability	MIL-HDBK-217	Grade two

Electrical Connection Sensor - 5 pin M12

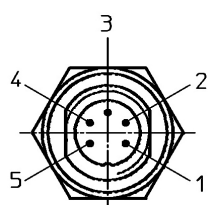


WHITE	X axis
BLUE	Y axis
GREY	Z axis
BROWN	+ Supply
BLACK	(0V)

Cable: 5 Wire

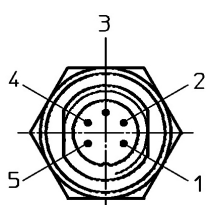
Cable Length: 1000mm Approx

Electrical Connection splitter cable - 3 x 5 pin M16



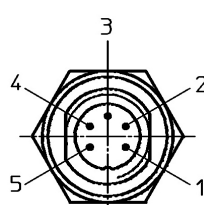
X Axis

Pin 1 = signal
Pin 2 = Ground
Pin 3 = + Supply



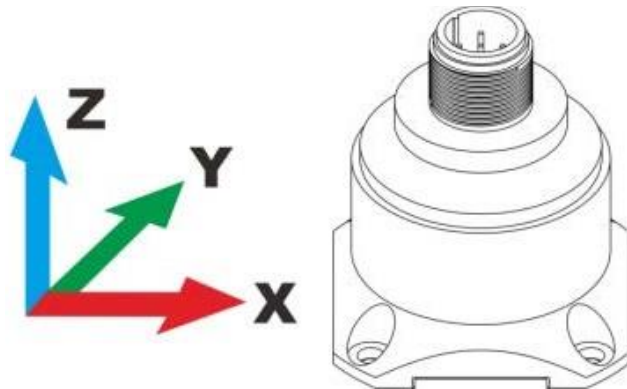
Y Axis

Pin 1 = signal
Pin 2 = Ground
Pin 3 = + Supply

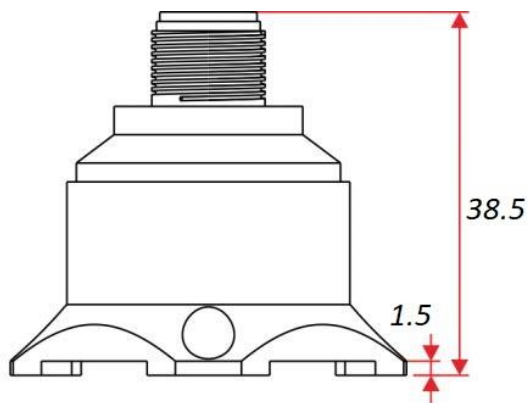


Z Axis

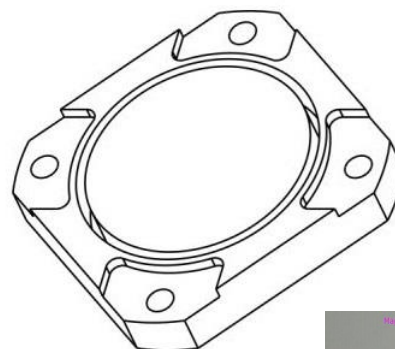
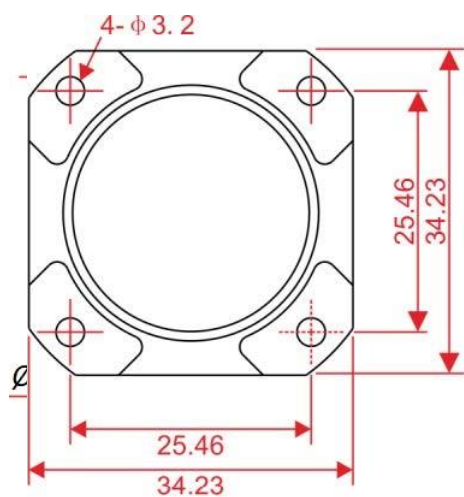
Pin 1 = signal
Pin 2 = Ground
Pin 3 = + Supply



Mounting accessories

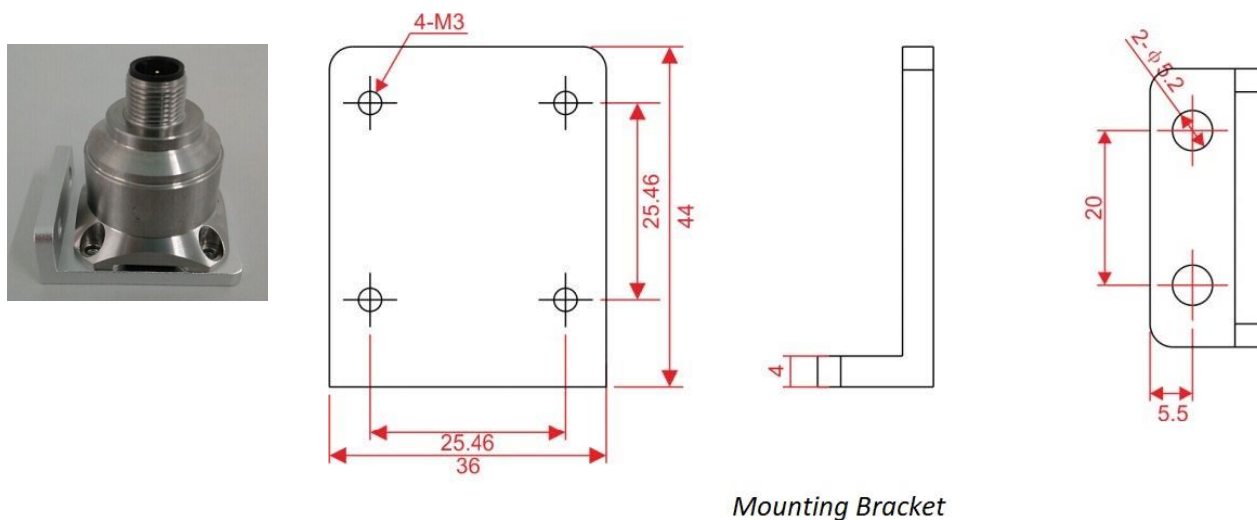


34.3 x 34.3 x 38.5mm



Optional Magnetic base





Order codes - Triaxial Sensor with or without mounting accessories

HT-AKF XXX - YY - Z

Replace **XXX** with below code for output signal required

390 = Voltage (0...5V)
398 = Current (4-20mA)

Replace **YY** with measuring range (g) required

02 = $\pm 2g$
04 = $\pm 4g$
08 = $\pm 8g$
10 = $\pm 10g$
20 = $\pm 20g$
40 = $\pm 40g$

Replace **Z** with mounting accessory (if required)

blank = 4 x M3 holes
A = magnetic base
L = mounting bracket

Order codes - Connection cables



300mm long splitter cable. 5 pin M12 female (for sensor or sensor cable) to 3 x 5 pin M16 male (for Hydrotechnik instruments)

Part Number: 8824-TA-00.30



5m long measuring cable. 5 pin M12 female (for sensor) to 5 pin M12 male (for instrument or Hydrotechnik splitter cable).

Part Number: 8824-M12-05.00TA

(Other lengths and configurations available on request)