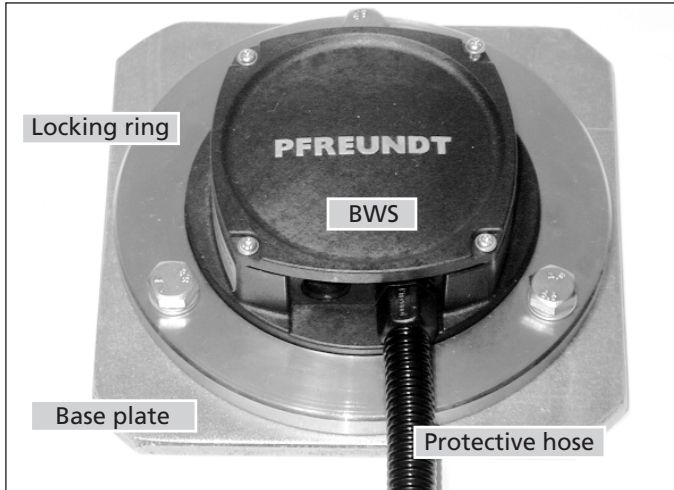


DATA SHEET

OPTIONS
PCs/Specification

	Order no.
1 Base plate for BWS	50112390
1 Locking ring for BWS	50112400
3 Hexagonal head screw M8 x 16, confirming to DIN933	50110485
3 Spring ring (d = 8mm), confirming to DIN 127	50110645
1 Protective hose (Polyflex corrugated hose PG9)	50111710
1 Special nut to corrugated hose connection	50110415
1 PG7 screw connection	50110410
1 PG7 nut	50110420


BWS
3 axis acceleration and angle sensor
Order number:
BWS
BRIEF DESCRIPTION

- Measurement of acceleration and angle in all movement directions (X/Y/Z axes) for mobile applications, e.g.: for mobile scales in wheel loaders, dumpers, conveyor belt scales etc.

ORDERING INFORMATION

- Specifications are required for the realisation of special solutions.

TECHNICAL DATA - BWS

Supply voltage:	10 to 30 V / DC
Power consumption:	max. 150 mA
Service temperature range:	-40 to + 85 °C
Protection to DIN 40050:	IP 67

Acceleration sensor:

Number of axes:	3
Measuring range XY axes:	± 2 G
Measuring range Z axes:	± 1 G
Will withstand shocks up to:	1000 G
Resolution:	1 mG
Bandwidth:	5 Hz

Interfaces: (can be selected by means of rotary switch)

1 x CAN-BUS	
1 x RS485	
1 x RS232	9600 baud, 8 data bit no parity, 1 stop bit
2 x analogue outputs:	0 - 4.095 V (X,Y axes)

Temperature sensor:

Temperature range:	- 50°C to + 127 °C
Resolution:	1 °C

Analogue outputs for xy axes:

Voltage range:	0 - 4.095 V (1mV/LSB)
Medium voltage:	2.0 V
Value range:	± 2000 mG, 1mV = 1mG

Digital values for xy axes:

Number range:	-32.768 ... +32.767 (signed int, 2byte)
Value range:	± 2000 mG, 1E = 1mG

Digital values for z axis:

Number range:	-32.768 ... +32.767 (signed int, 2byte)
Value range:	± 1000 mG, 1E = 1mG

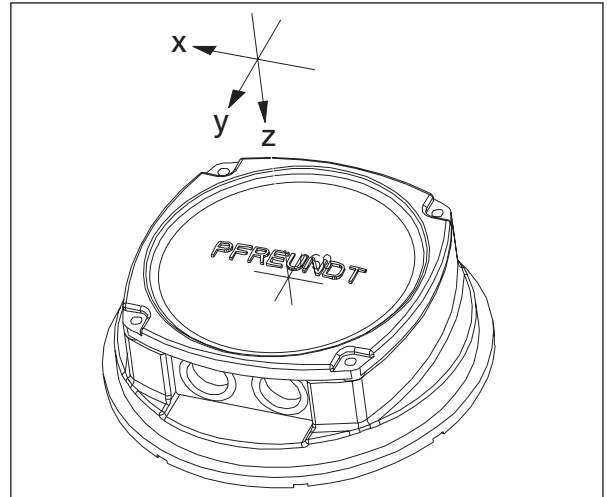
Digital values for temperature:

Number range:	-128 ... +127 (signed char, 1byte)
Value range:	- 50°C ... +127°C 1E = 1°C

Angle sensor:

Angle measuring range:	0 to 360 °
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REFERENCE DIRECTIONS FOR THE 3 AXES



- For an acceleration in the direction of the arrow the measured values are displayed as positive values.

TERMINAL DESIGNATION

Terminal	CANBUS
CH	CANH
CL	CANL
⊥	---
+UB	Operating voltage
GND	Ground

Terminal	RS485	RS232
CH	A	TxD
CL	B	RxD
⊥	---	---
+UB	Operating voltage	
GND	Ground	

Terminal	Analogue outputs
CH	x-axis
CL	y-axis
⊥	Analogue Ground
+UB	Operating voltage