

# REOVIB

SW  
Accelerometer

## Technical Safety Information for the User

This description contains the necessary information for the correct application of the product described below. It is intended for use by technically qualified personal.

Qualified personnel are persons who, because of their training, experience and position as well as their knowledge of appropriate standards, regulations, health and safety requirements and working conditions, are authorised to be responsible for the safety of the equipment, at all times, whilst carrying out their normal duties and are therefore aware of, and can report, possible hazards (Definition of qualified employees according to IEC 364)

### Safety Instructions

The following instructions are provided for the personal safety of operators and also for the protection of the described product and connected equipment.



#### Warning!

Hazardous Voltage

Failure to observe can kill, cause serious injury or damage

- Isolate from mains before installation or dismantling work, as well as for fuse changes or post installation modifications.
- Observe the prescribed accident prevention and safety rules for the specific application.
- Before putting into operation check if the rated voltage for the unit conforms with the local supply voltage.
- Emergency stop devices must be provided for all applications. Operation of the emergency stop must inhibit any further uncontrolled operation.
- **Electrical connections must be covered**
- **The earth connection must be checked, for correct function, after installation.**
- **After switching off the unit, some internal components will still be charged due to capacitance.**
- **Before opening the unit wait at least five minutes to allow capacitors to discharge.**

### Specified Use

The units described herein are electrical controllers for installation in industrial plant. They are designed for power adjustment on vibratory feed equipment.



The units conform to the directive 2004/108/EC  
EMC-Directive

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## 1.0 General

The sensors, which are covered in this description, are used for measuring low frequency amplitude in the range of 0...35 g.

Inside the unit there is a piezo electric amplitude element connected to an amplifier. The amplitude is detected by the piezo element which generates a proportional voltage which is converted into a usable signal of 300 / 600 / 2000 mV/g by the amplifier.

The components are built into a robust, aluminium housing and are completely epoxy-sealed. Electrical connections are brought out on a four-core, screened cable. The screen is earthed at the control unit end. The reference point (ground), of the operating voltage, is earthed to the suppression circuit inside the sensor housing.

## 2.0 Applications

- Machine protection
- Measurement of mechanical vibration
- Amplitude monitoring i.e. safety braking

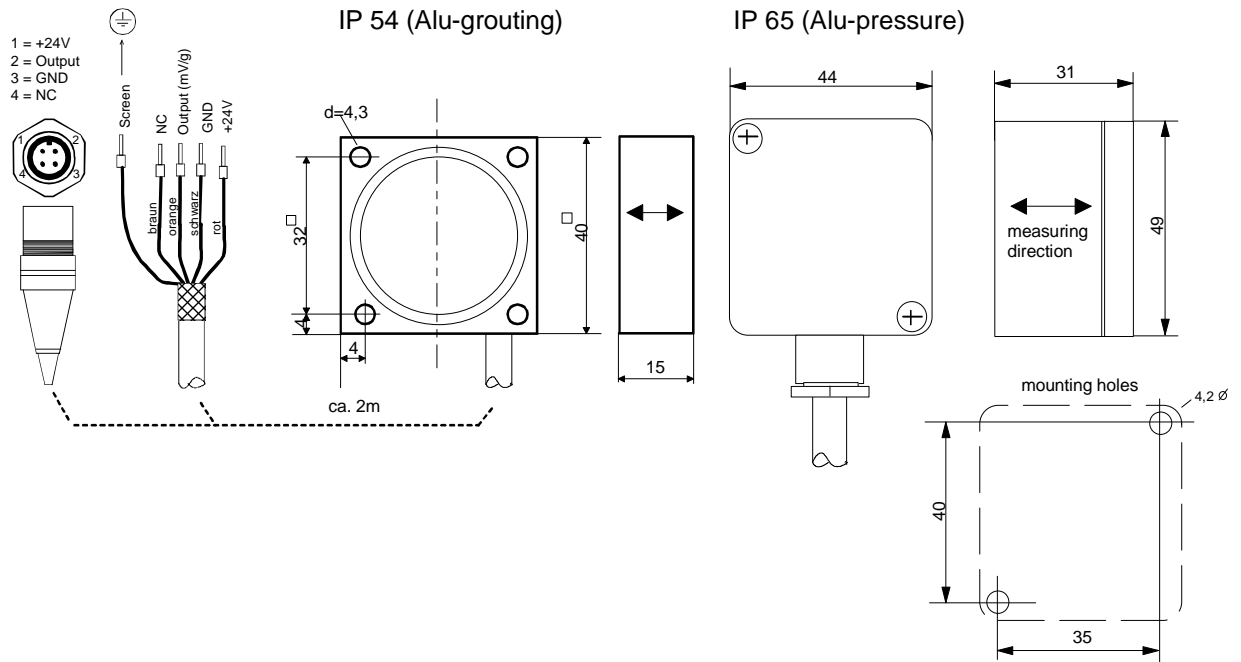
## 3.0 Technical data

Type	SW
Operating voltage	+24VDC
Output voltage	100 / 300 / 600 / 2000 mV / g
Measurement range	0...35 g (frequency dependent)
Operating temperature	0...+45 °C
Output current	2 mA

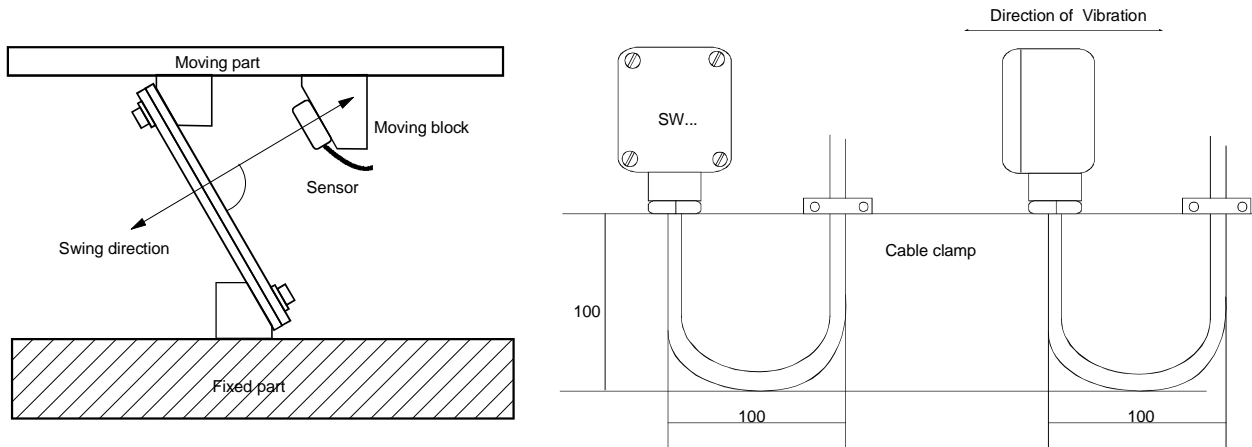
## 4.0 Type summary

ID-Nr.:	Type	Signal mV/g	Frequency-range (Hz)	Connection	Wire length ( m )	Protection	Housing
045707	SW 07	300	30...150	wire, open ends	5	IP 65	Alu- pressure
045780	SW 80	300	30...150	wire, open ends	16	IP 65	Alu- pressure
045785	SW 85	300	30...150	plug M12, 4 pol.	5	IP 65	Alu- pressure
045740	SW 40	600	10...60	wire, open ends	5	IP 65	Alu- pressure
045742	SW 42	600	10...60	wire, open ends	15	IP 65	Alu- pressure
045761	SW 61	100	60...250	wire, open ends	5	IP 54	Alu- grouting
045762	SW 62	100	60...250	plug M12, 4 pol.	5	IP 54	Alu- grouting
045710	SW 10	300	30...150	wire, open ends	2	IP 54	Alu- grouting
045750	SW 50	300	30...150	wire, open ends	5	IP 54	Alu- grouting
045751	SW 51	300	30...150	wire, open ends	10	IP 54	Alu- grouting
045752	SW 52	300	30...150	wire, open ends	15	IP 54	Alu- grouting
045754	SW 54	300	30...150	wire, open ends	30	IP 54	Alu- grouting
045770	SW 70	300	30...150	plug M12, 4 pol.	2	IP 54	Alu- grouting
045769	SW 69	300	30...150	plug M12, 4 pol.	3	IP 54	Alu- grouting
045771	SW 71	300	30...150	plug M12, 4 pol.	5	IP 54	Alu- grouting
045768	SW 68	300	30...150	plug M12, 4 pol.	10	IP 54	Alu- grouting
045767	SW 67	300	30...150	plug M12, 4 pol.	15	IP 54	Alu- grouting
045730	SW 30	600	10...60	wire, open ends	2	IP 54	Alu- grouting
045729	SW 29	600	10...60	wire, open ends	3	IP 54	Alu- grouting
045727	SW 27	600	10...60	wire, open ends	10	IP 54	Alu- grouting
045726	SW 26	600	10...60	wire, open ends	15	IP 54	Alu- grouting
045772	SW 72	600	10...60	plug M12, 4 pol.	2	IP 54	Alu- grouting
045773	SW 73	600	10...60	plug M12, 4 pol.	5	IP 54	Alu- grouting
045774	SW 74	600	10...60	plug M12, 4 pol.	10	IP 54	Alu- grouting
045775	SW 75	600	10...60	plug M12, 4 pol.	15	IP 54	Alu- grouting
045714	SW 14	2000	5...20	wire, open ends	10	IP 54	Alu- grouting

### 5.0 Connections and Dimensions



### 6.0 Installation of Accelerometer



The sensor cable needs to be fixed with a cable clamp to avoid damage of the cable.