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REOVIB SW Accelerometers

Amplitude monitoring sensors

Overview



IP 65



IP 54

The sensors, which are covered in this description, are used for measuring low frequency amplitude in the range of 0 10g, up to a maximum of 15g. 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, aluminum 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.

Technical Data:

| | |
|------------------------|---------------------------|
| Type: | SW |
| Operating voltage: | +/- 12 - 15V or 24VDC |
| Output voltage: | 300 / 600 / 2000 mV per g |
| Measurement range: | 0 - 10g |
| Operating temperature: | 0 - 45 degrees C |

Applications:

- Amplitude monitoring
- Frequency monitoring
- Measurement of mechanical vibration
- Machine protection
- Resonant vibration
- Preventative maintenance
- Power usage improvement

Technical and Safety Information

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 authorized to be responsible for the safety of the equipment, at all times, while 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.

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.

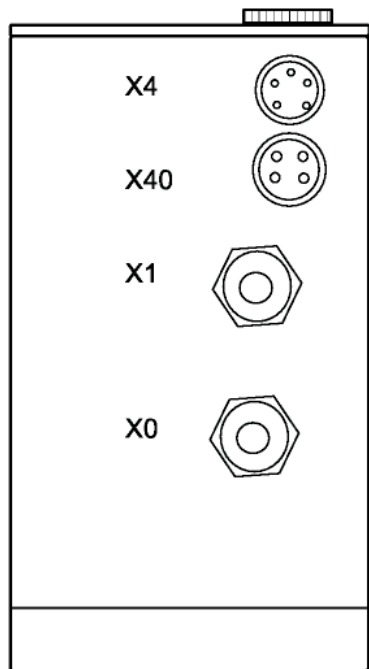
Specified use

The units described herein are electrical sensors for installation in industrial manufacturing plants. They are designed for power adjustment on vibratory feed equipment only.

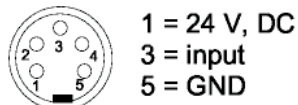
Part ID numbers

| Part ID# | Type | Signal mV/g | Frequency | Connection | Wire length (m) | Protection |
|----------|-------|-------------|-----------|---------------|----------------------|------------|
| 45707 | SW 07 | 300 | 30 - 150 | open ends | 2 | IP 65 |
| 45708 | SW 08 | 300 | 30 - 150 | M12 male plug | 2 | IP 65 |
| 45740 | SW 40 | 600 | 10 - 60 | open ends | 5 | IP 65 |
| 45741 | SW 41 | 600 | 10 - 60 | M12 male plug | 5 | IP 65 |
| 45710 | SW 10 | 300 | 30 - 150 | open ends | 2 | IP 54 |
| 45711 | SW 11 | 300 | 30 - 150 | M12 male plug | 2 | IP 54 |
| 45730 | SW 30 | 600 | 10 - 60 | open ends | 2 | IP 54 |
| 45731 | SW 31 | 600 | 10 - 60 | M12 male plug | 2 | IP 54 |
| 45770 | SW 70 | 300 | 30 - 150 | M12 male plug | 2 | IP 54 |
| 45772 | SW 72 | 600 | 10 - 60 | M12 male plug | 2 | IP 54 |
| 45771 | SW 71 | 300 | 30 - 150 | M12 male plug | 5 | IP 54 |

Replacement cable for 680 sensor socket type



Sensor plug track control (X4)



1 = 24 V, DC
3 = input
5 = GND

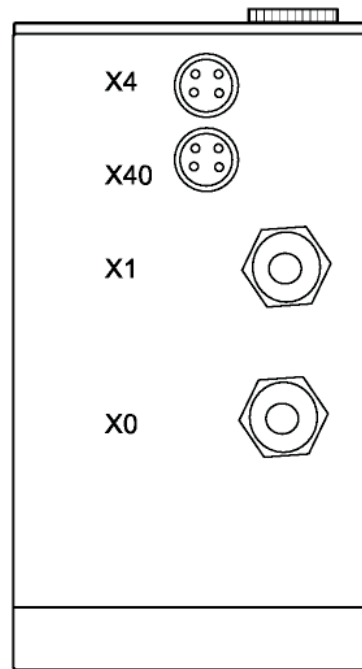
Sensor plug accelerometer (X40)



1 = GND
2 = input
3 = - UB
4 = + UB

output (X1)
feeder

line input (X0)
110 / 230 V 50/60 Hz



Sensors plug track control (X4)



1 = 24V,DC
3 = GND
4 = Einput

Sensor plug accelerometer (X40)



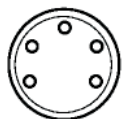
1 = 24V,DC
2 = input
3 = GND

Output (X1)
feeder

Line input (X0)
110 / 230 V 50/60 Hz

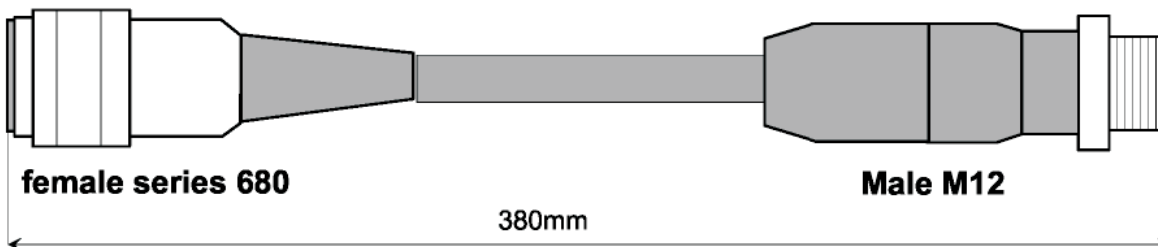
Adapter cable to connect old sensor plugs series 680 to series M12.
The adapter cable are available for track control- and accelerometer sensor.

Order number adapter cable



4/5

female series 680



380mm

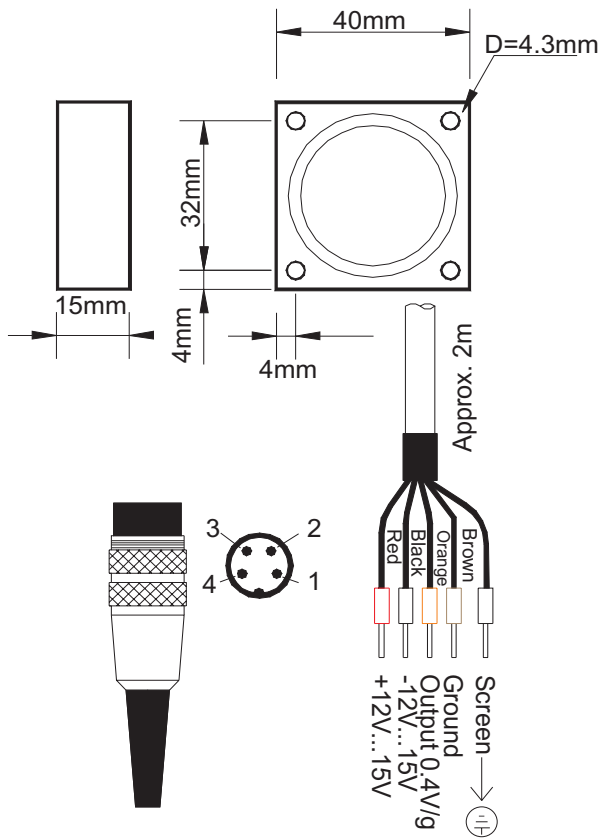
Male M12



4 pol

Accelerometer sensor: 090340
Track control sensor: 090341

Connections and Dimensions



- 1 = GND
- 2 = Output
- 3 = -12V - 15V
- 4 = +12 - 15V

