

# Borehole sensor



The borehole sensor is a stainless-steel IP68 container able to integrate a triaxial velocity sensor based on geophones or a triaxial accelerometer sensor based on MEMS.

It is suitable for different applications:

- Free field input motion monitoring
- Deep bed rock monitoring
- Down hole / drilling

## Borehole sensor

The borehole sensor is able to contain a triaxial velocity sensor MS2003+ with geophones sensing elements or a triaxial acceleration sensor MS2008+ with MEMS sensing elements. It is very rugged, entirely made of stainless steel and fully protected against liquids, IP68. It is dedicated to go deep into drills for underground vibration monitoring and have to be connected to an MR2002-SM24-K or MR3003 datalogger for dataprocessing and communications.

### Technical Specifications

<b>Structure</b>	Three-component sensing elements integration, frequencies up to 200 Hz
<b>Velocity sensor</b>	Refer to MS2003+ datasheet
<b>Acceleration sensor</b>	Refer to MS2008+ datasheet
<b>Datalogger</b>	Refer to MR2002-SM24-K or MR3003 datasheets
<b>Orientation</b>	Vertical borehole
<b>Accessories</b>	25 m cable with LEMO plug MR side. M16 cable gland on the borehole enclosure 25 m steel cable for borehole extraction post-measures

### Borehole physical characteristics

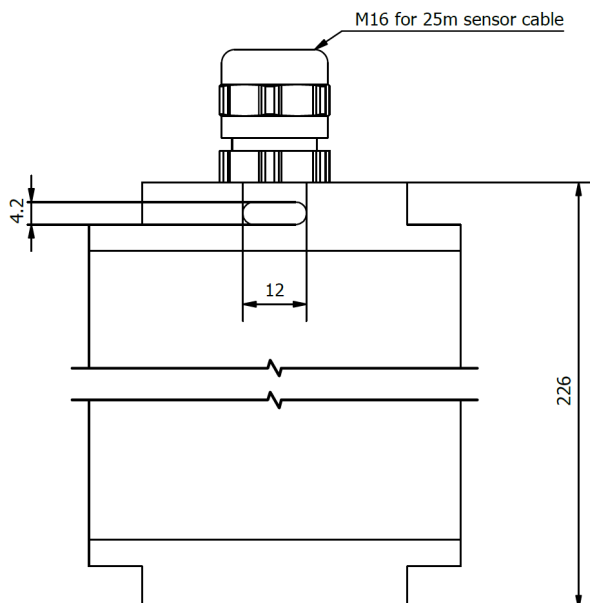
<b>Housing</b>	Stainless steel, diameter 70 mm (2.756 in) height 226 mm (8.897 in)
<b>Weight</b>	~ 3 kg
<b>Protection degree</b>	IP 68, fully protected against liquids

### Part number

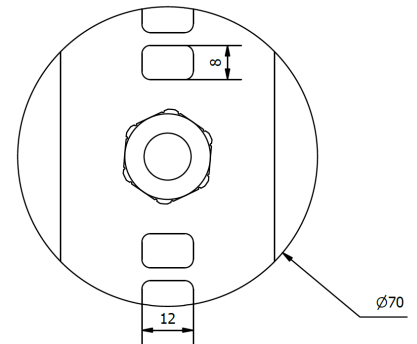
**MS2003-B-TRIA** Triaxial velocity sensor in an IP68 stainless steel borehole enclosure.

**MS2008-B4-S-DIFF-TRIA** Triaxial acceleration sensor in an IP68 stainless steel borehole enclosure.

The borehole enclosure comes with a 25 m signal cable length and a LEMO connector for direct mating to the motion recorder. For other non-standard cable length, please contact Syscom directly.



Borehole enclosure



### SYSCOM Instruments SA

Rue de l'Industrie 21  
1450 Sainte-Croix  
SWITZERLAND

T. +41 (0) 24 455 44 11

www.syscom.ch  
info@syscom-instruments.com