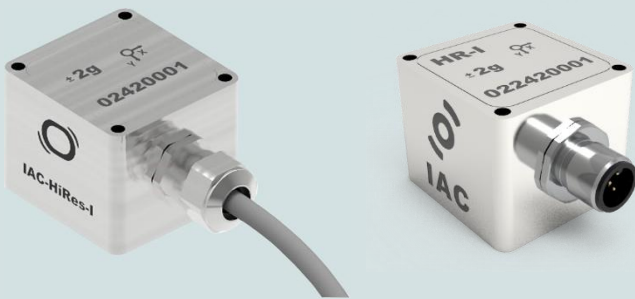


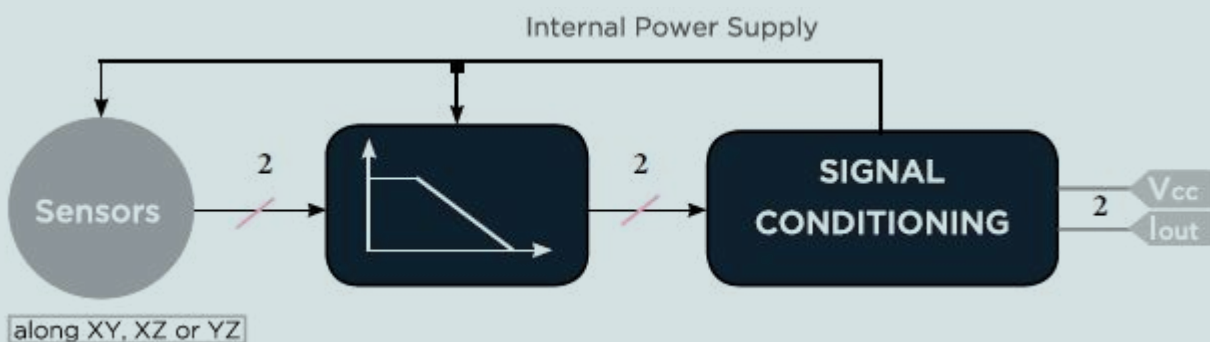
HIGH RESOLUTION ACCELEROMETER (4-20mA)



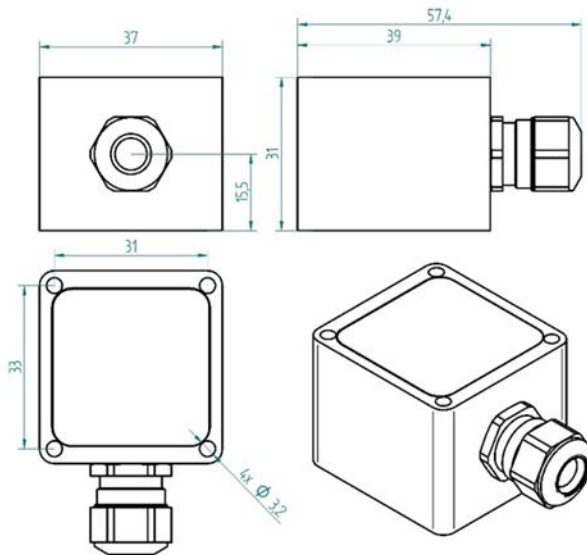
PROPERTIES

- 2-axes, low noise, high resolution
- Suited for direct connection to standard control and measurement equipment, e.g. PLCs or panel meters
- Embedded 4..20mA signal conditioning
- Galvanically Isolated
- Protected against false polarization
- Compact and rugged design
- Protection grade IP67

BLOCK DIAGRAM

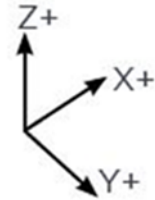


DIMENSIONS - Cable Gland Model

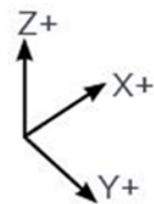
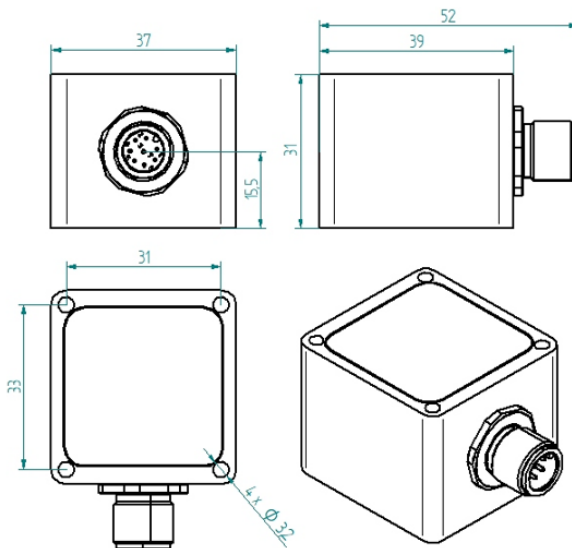


NOTE

When mounted with sensing axis vertical all units will indicate 1g offset due to gravity



DIMENSIONS - M12 Connector Model



MOUNTING ACCESSORIES

See "IAC - Accelerometer Accessories data sheet"

SPECIFICATIONS - ALL MODELS

| | | | | | | |
|--------------------------------------|--|---|-----------|---------------|---------------------------|-------------------------------|
| OUTPUT/CHANNEL | Output Range | 4-20mA | | | | |
| | Supply Voltage | 10-30 VDC | | | | |
| | Lower frequency limit | 0 Hz (DC) | | | | |
| | Non-linearity | ± 0.5 % F.S. | | | | |
| | Sensitivity Error | 0.5% typ. - 1 % max. | | | | |
| | Transverse Sensitivity | 2 % typ. - 3 % max. | | | | |
| | Offset | 0.2 % F.S. typ. - 0.5 % F.S. max. | | | | |
| | Destruction limit | ± 5000g | | | | |
| ENVIRONMENTAL CHARACTERISTICS | Operating temperature Range | <table border="0"> <tr> <td>Operating</td> <td>Non-Operating</td> </tr> <tr> <td>-40 to 125°C / -40..185°F</td> <td><-55 ; >125°C / <-67 ; >257°F</td> </tr> </table> | Operating | Non-Operating | -40 to 125°C / -40..185°F | <-55 ; >125°C / <-67 ; >257°F |
| | Operating | Non-Operating | | | | |
| | -40 to 125°C / -40..185°F | <-55 ; >125°C / <-67 ; >257°F | | | | |
| | Temperature coefficient of sensitivity | ± 0.03 %/°C | | | | |
| Temperature drift of zero point | ± 0.02 % F.S./°C | | | | | |
| Protection grade | IP67 | | | | | |
| MECHANICAL DATA | Weight Without Cable (g) | ⁽¹⁾ CG/198, CO/218 - ⁽²⁾ CG/112, CO/132 | | | | |
| | Case Material | Stainless Steel or Aluminium | | | | |
| | Mounting | 3.2 mm diameter holes (4x) | | | | |

⁽¹⁾ Stainless Steel Casing AISI316 Grade (e.g. for offshore/marine environment)

⁽²⁾ Aluminium (MIL-A-8625 Type II coating)

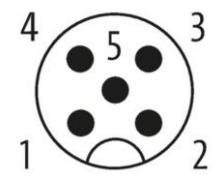
PERFORMANCES - BY MODEL

| Range - g | Sensitivity - $\mu\text{A/g}$ | Freq. Response (-3dB) - Hz | Noise - $\mu\text{g}/\sqrt{\text{Hz}}$ |
|-----------|-------------------------------|----------------------------|--|
| +/- 2 | 4000 | 0 - 400 | 8 |
| +/- 5 | 1600 | 0 - 600 | 10 |
| +/- 10 | 800 | 0 - 1000 | 13 |
| +/- 25 | 320 | 0 - 1500 | 28 |
| +/- 50 | 160 | 0 - 2000 | 53 |
| +/- 100 | 80 | 0 - 2500 | 100 |
| +/- 200 | 40 | 0 - 3000 | 200 |
| +/- 400 | 20 | 0 - 4000 | 400 |

ELECTRICAL CONNECTIONS - Cable Gland Model

| Signal XY sensing | Signal XZ sensing | Signal YZ sensing | 4 x 0,25 ² |
|-----------------------|-----------------------|-----------------------|-----------------------|
| Sensor supply + input | Sensor supply + input | Sensor supply + input | Brown |
| Sensor supply - input | Sensor supply - input | Sensor supply - input | White |
| X Axis Out | X Axis Out | Y Axis Out | Yellow |
| Y Axis Out | Z Axis Out | Z Axis Out | Green |

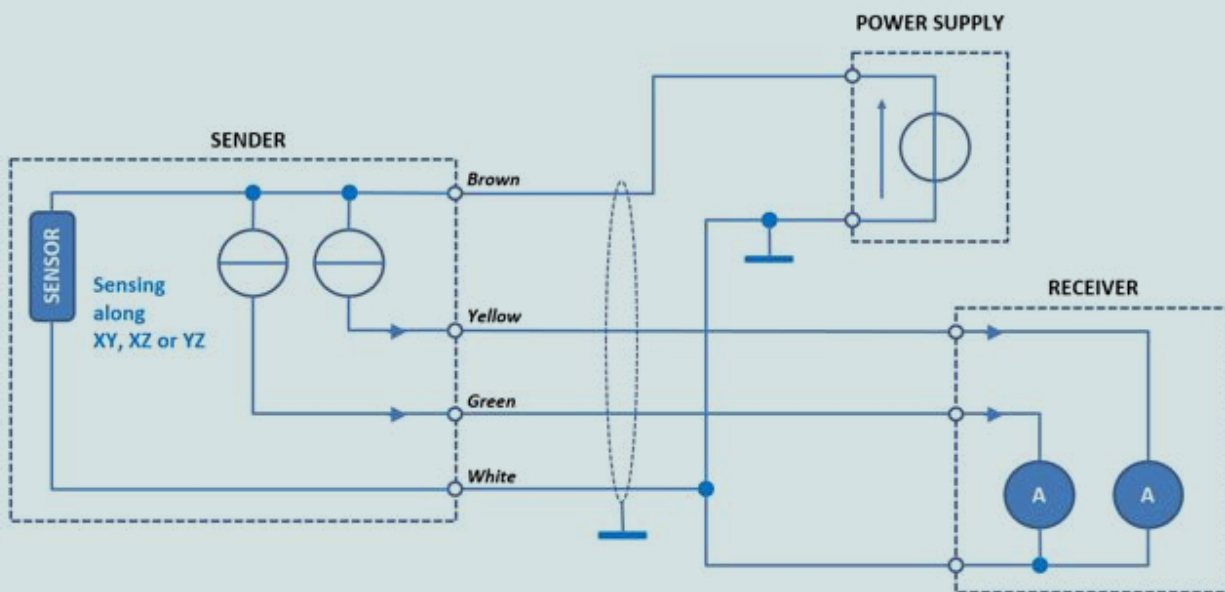
ELECTRICAL CONNECTIONS - M12 Connector Model

| | | | | |
|-------------|---|---|--------|-----------------------|
| I 02 |  | 1 | OUT 1 | 4-20mA current output |
| | | 2 | OUT 2 | 4-20mA current output |
| | | 3 | NC | - |
| | | 4 | +24VDC | Sensor supply + input |
| | | 5 | 0VDC | Sensor supply - input |

Selected Axes:

| | | | | | |
|---|-------|---|-------|---|-------|
| X | OUT 1 | X | OUT 1 | Y | OUT 1 |
| Y | OUT 2 | Z | OUT 2 | Z | OUT 2 |

ELECTRICAL CONNECTIONS



ORDERING INFORMATION

IAC - HiRes - I - 02 - AA - XX - XX - Xg - XXXXHz - X - XX.X m

| | | | | | | | | | |
|--------------|------------------|----------------|--------------------|--------|-------------|-----------------------------|-------------|------------------------|--------------------------------|
| Sensing Axis | Cable Connection | | Casing | | Range | Low Pass Filter Frequencies | | Low Pass Filter Orders | Cable Length Value in meter |
| | XY | CG Cable Gland | AL Aluminium | ± 2g | | 0100 100Hz | 1 1st order | | |
| | XZ | CO M12 | SS Stainless Steel | ± 5g | | 0250 250Hz | 2 2nd order | | |
| YZ | | | | ± 10g | 0500 500Hz | | | | |
| | | | | ± 25g | 1000 1000Hz | | | | |
| | | | | ± 50g | | | | | |
| | | | | ± 100g | | | | | |
| | | | | ± 200g | | | | | |
| | | | | ± 400g | | | | | |