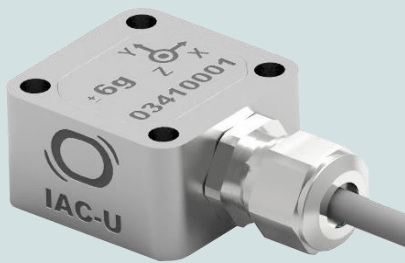


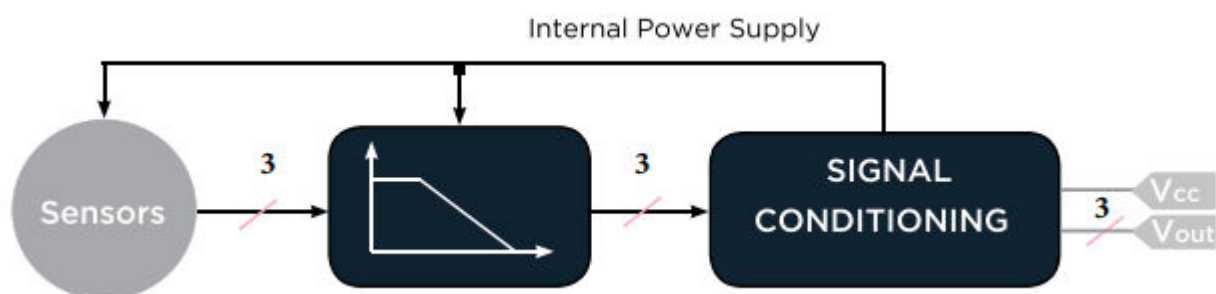
## ROBUST ACCELEROMETER



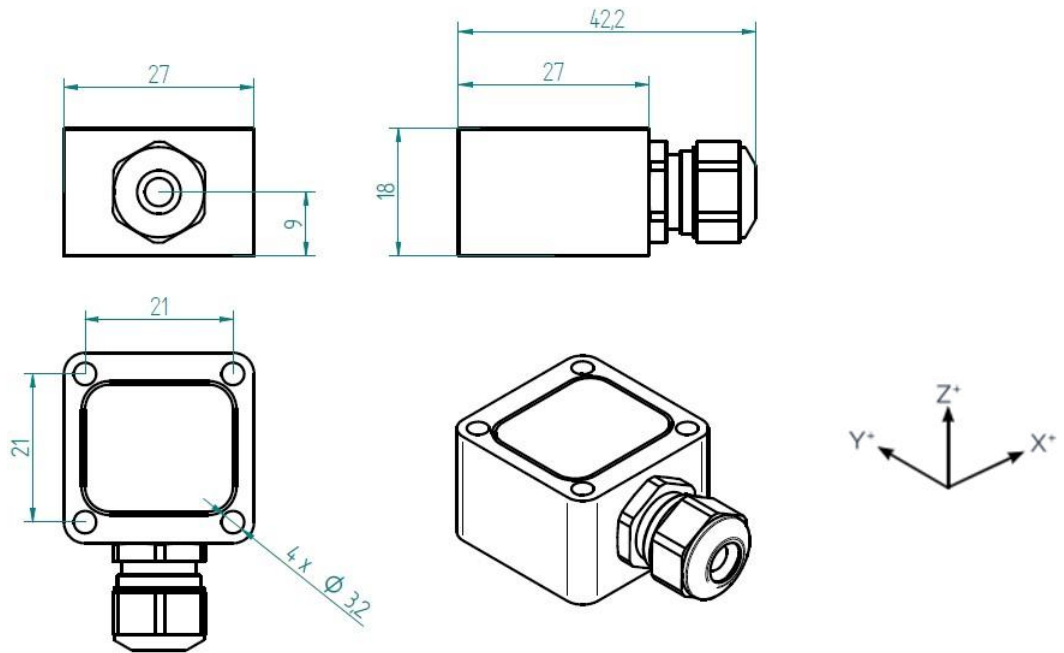
### PROPERTIES

- 3 axes
- Suited for direct connection to standard control and measurement equipment, e.g., PLCs or panel meters.
- Embedded 0..3V signal conditioning
- Galvanically Isolated
- Protected against false polarization
- Compact and rugged design
- Protection grade IP67

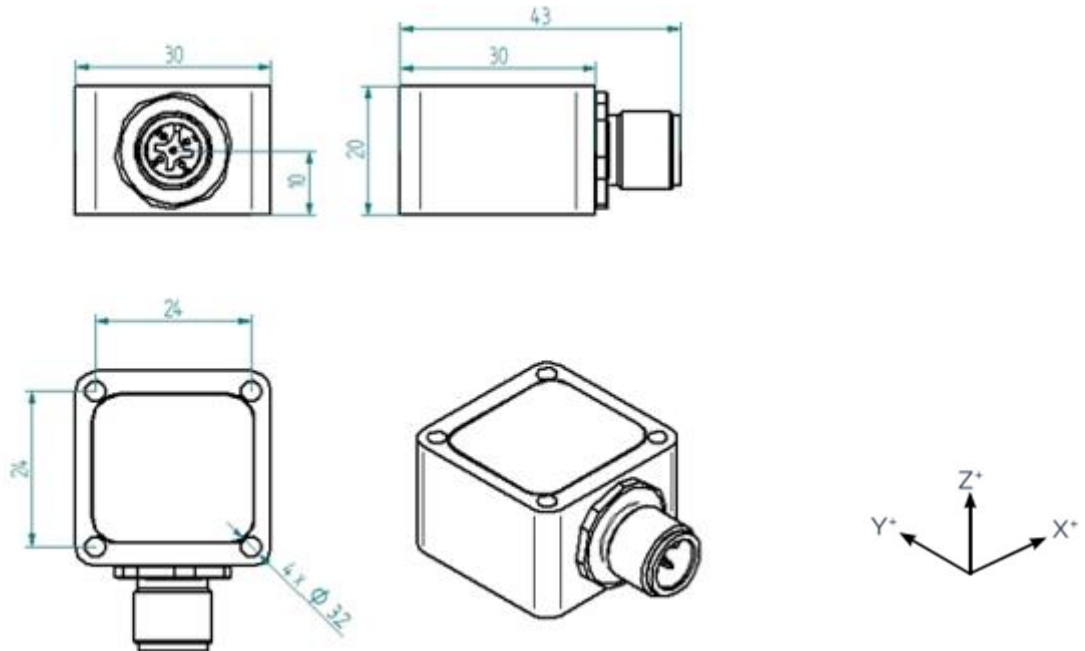
### BLOCK DIAGRAM



## DIMENSIONS - Cable Gland Model



## DIMENSIONS - M12 Connector Model



## MOUNTING ACCESSORIES

See "IAC - Accelerometer Accessories data sheet"

## SPECIFICATIONS - ALL MODELS

|                                      |  |   |           |               |                       |                             |
|--------------------------------------|--|---|-----------|---------------|-----------------------|-----------------------------|
| <b>OUTPUT/CHANNEL</b>                | Output Range                           | 0-3.0 V   |           |               |                       |                             |
|                                      | Supply Voltage                         | 12-30 V   |           |               |                       |                             |
|                                      | Measuring Range                        | ± 2g or ± 6 g   |           |               |                       |                             |
|                                      | Sensitivity                            | 0.6 V/g (± 2g range) or 0.2 V/g (± 6g range)  |           |               |                       |                             |
|                                      | Lower frequency limit                  | 0 Hz (DC)   |           |               |                       |                             |
|                                      | Upper -3 dB frequency limit            | 100, 250, 500 or 1000 Hz (1st of 2nd order)   |           |               |                       |                             |
|                                      | Non-linearity                          | ± 0.5 % F.S.  |           |               |                       |                             |
|                                      | Residual noise                         | < 50 µg/√Hz   |           |               |                       |                             |
|                                      | Transverse sensitivity                 | < 5 %   |           |               |                       |                             |
|                                      | Destruction limit                      | ± 5000g   |           |               |                       |                             |
| <b>ENVIRONMENTAL CHARACTERISTICS</b> | Temperature range                      | <table border="0"> <tr> <td>Operating</td> <td>Non-Operating</td> </tr> <tr> <td>-20..85°C / -4..185°F</td> <td>&lt;-40 ; &gt;85°C / &lt;-40; &gt;185°F</td> </tr> </table> | Operating | Non-Operating | -20..85°C / -4..185°F | <-40 ; >85°C / <-40; >185°F |
|                                      | Operating                              | Non-Operating   |           |               |                       |                             |
|                                      | -20..85°C / -4..185°F                  | <-40 ; >85°C / <-40; >185°F   |           |               |                       |                             |
|                                      | Temperature coefficient of sensitivity | ± 0.01 %/°C   |           |               |                       |                             |
| Temperature drift of zero point      | ± 0.5 mg/°C                            |   |           |               |                       |                             |
| Protection grade                     | IP67                                   |   |           |               |                       |                             |
| <b>MECHANICAL DATA</b>               | Weight Without Cable (g)               | <sup>(1)</sup> CG/80, CO/125 - <sup>(2)</sup> CG/46, CO/84  |           |               |                       |                             |
|                                      | Case Material                          | Stainless Steel or Aluminium  |           |               |                       |                             |
|                                      | Mounting                               | 3.2 mm diameter holes (4x)  |           |               |                       |                             |

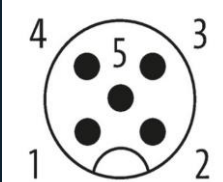
<sup>(1)</sup> Stainless Steel Casing AISI316 Grade (e.g. for offshore/marine environment)

<sup>(2)</sup> Aluminium (MIL-A-8625 Type II coating)

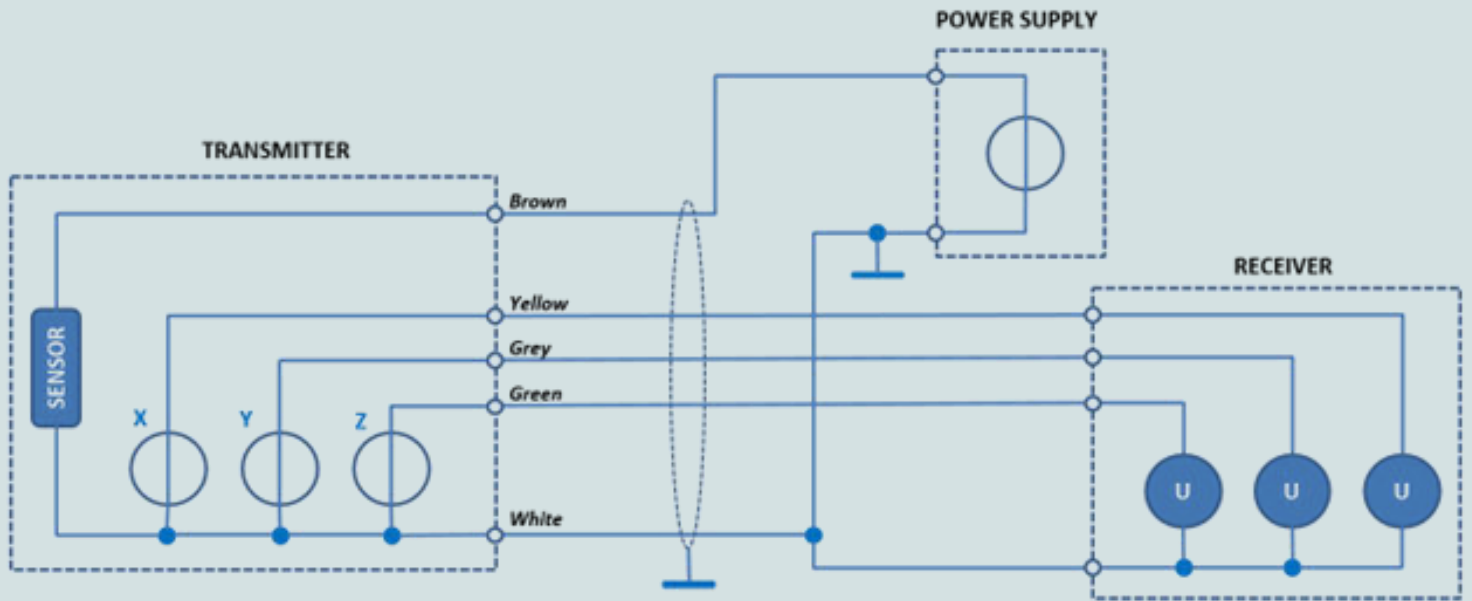
## ELECTRICAL CONNECTIONS - Cable Gland Model

| Signal X sensing      | Signal Y sensing      | Signal Z sensing      | 5 x 0,25 <sup>2</sup> |
|-----------------------|-----------------------|-----------------------|-----------------------|
| Sensor supply + input | Sensor supply + input | Sensor supply + input | Brown                 |
| Sensor supply - input | Sensor supply - input | Sensor supply - input | White                 |
| X Axis Out            |                       |                       | Yellow                |
|                       | Y Axis Out            |                       | Grey                  |
|                       |                       | Z Axis Out            | Green                 |

## ELECTRICAL CONNECTIONS - M12 Connector Model

|             |   |   |        |                         |
|-------------|---|---|--------|-------------------------|
| <b>U 03</b> |  | 1 | OUT X  | Voltage unipolar output |
|             |   | 2 | OUT Y  | Voltage unipolar output |
|             |   | 3 | OUT Z  | Voltage unipolar output |
|             |   | 4 | +24VDC | Sensor supply + input   |
|             |   | 5 | 0VDC   | Sensor supply - input   |

# ELECTRICAL CONNECTIONS



## ORDERING INFORMATION

IAC - U - 03 - XX - XX - Xg - XXXXHz - X - XX.X m

| Cable Connection |             | Casing |                 | Range | Low Pass Filter Frequencies |        | Low Pass Filter Orders |           | Cable Length   |
|------------------|-------------|--------|-----------------|-------|-----------------------------|--------|------------------------|-----------|----------------|
| CG               | Cable Gland | AL     | Aluminium       | ± 2g  | 0100                        | 100Hz  | 1                      | 1st order | Value in meter |
| CO               | M12         | SS     | Stainless Steel | ± 6g  | 0250                        | 250Hz  | 2                      | 2nd order |                |
|                  |             |        |                 |       | 0500                        | 500Hz  |                        |           |                |
|                  |             |        |                 |       | 1000                        | 1000Hz |                        |           |                |