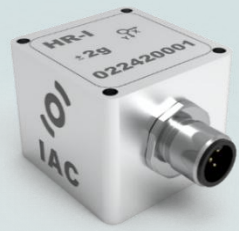
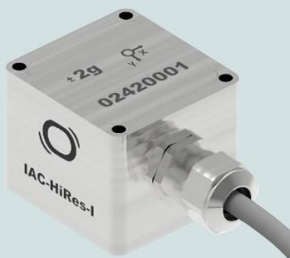


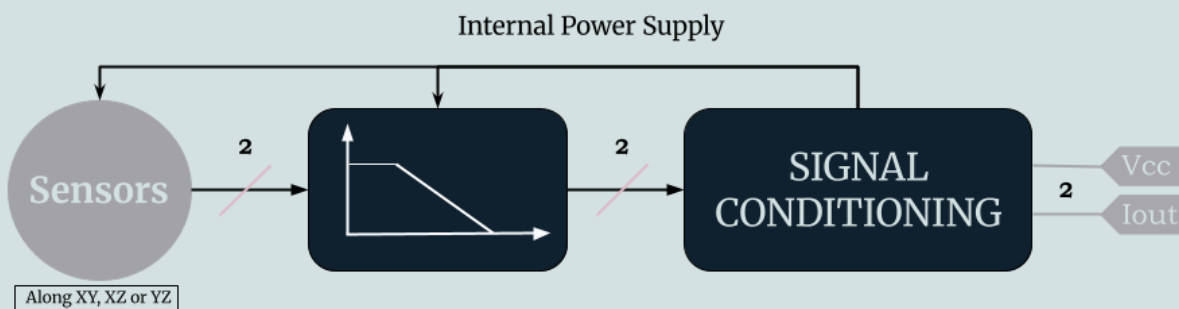
HIGH RESOLUTION ACCELEROMETER (4-20mA)



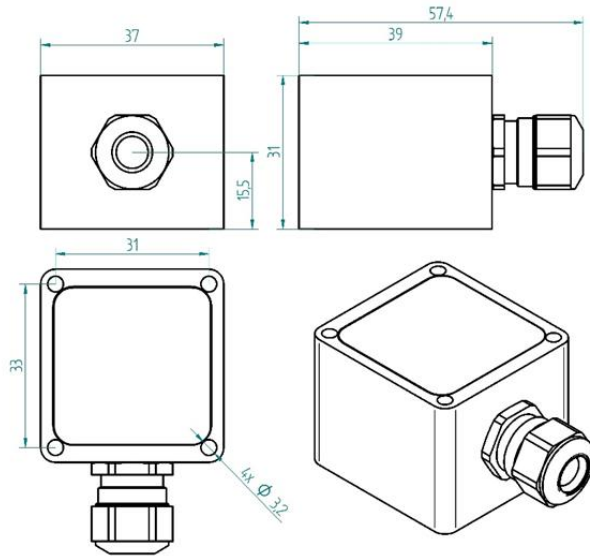
PROPERTIES

- 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 reverse polarization
- Compact and rugged design
- Protection grade IP 67

BLOCK DIAGRAM

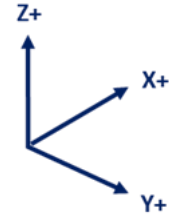


DIMENSIONS – Cable Gland Model

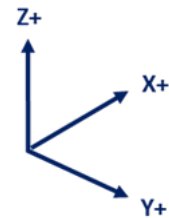
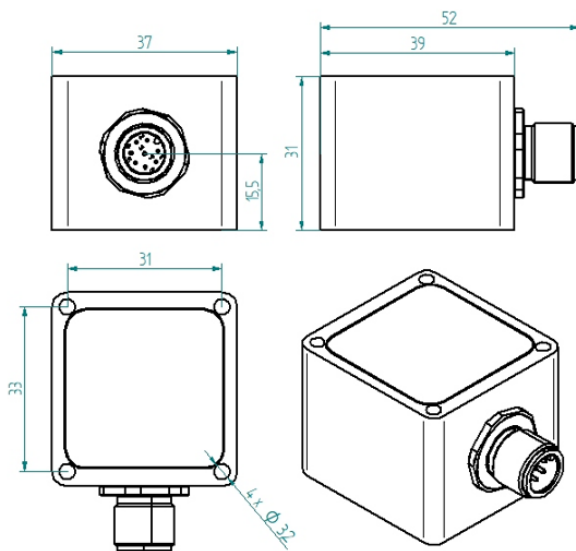


NOTE

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 ⁽¹⁾	± 2000g (±2g / ±5g variants) ; ± 5000g (other variants)
ENVIRONMENTAL CHARACTERISTICS	Temperature Range	Operating -40 to 85°C / -40 to 185°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)	⁽²⁾ CG/198, CO/218 - ⁽³⁾ CG/112, CO/132
	Case Material	Stainless Steel or Aluminium
	Mounting	3.2 mm diameter holes (4x)

⁽¹⁾ Handle the component with caution: dropping the accelerometer on a hard surface can generate several thousand g of acceleration, potentially exceeding absolute maximum limits and damaging the product.

⁽²⁾ Stainless Steel Casing Grade (e.g. for offshore/marine environment)

⁽³⁾ Aluminium (MIL-A-8625 Type II coating)

PERFORMANCES – By Model

Range - g	Sensitivity - $\mu\text{A/g}$	Freq. Response (-3dB) - Hz	Noise - $\mu\text{g}/\sqrt{\text{Hz}}$ (Typical)
± 2	4000	0 – 400	11
± 5	1600	0 – 600	13
± 10	800	0 – 1000	19
± 25	320	0 – 1500	26
± 50	160	0 – 2000	50
± 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

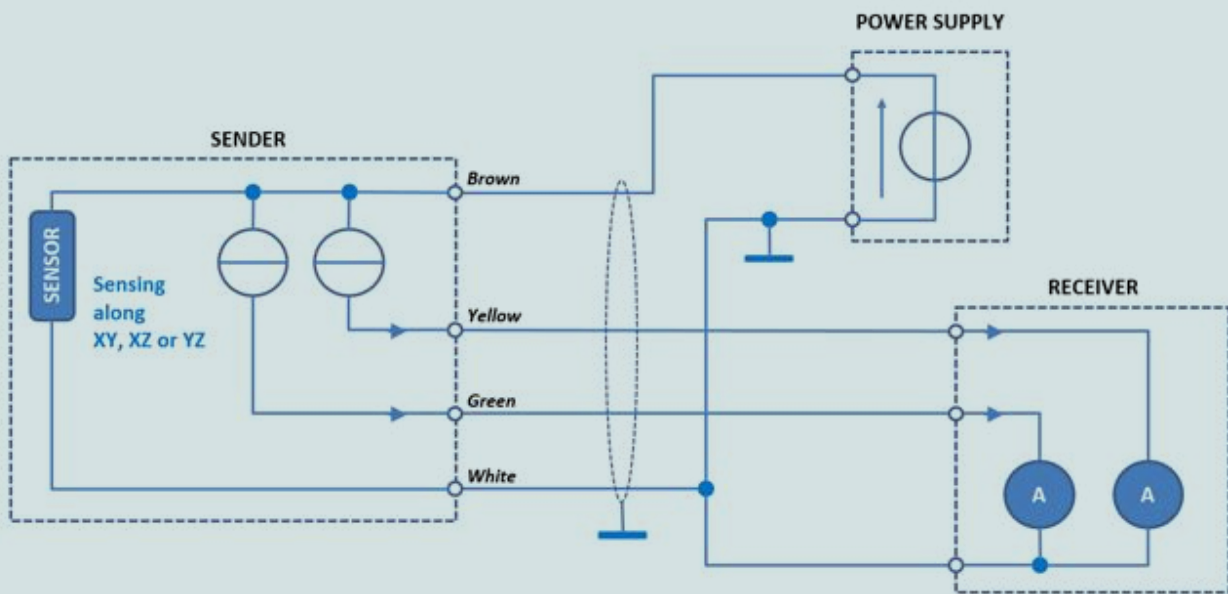
ELECTRICAL CONNECTIONS – M12 Connector Model

I 02		1	OUT 1	4-20mA current output
		2	OUT 2	4-20mA current output
		3	NC	-
		4	+24 VDC	Sensor supply + input
		5	0 VDC	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			
XY	CG Cable Gland	AL Aluminium	± 2g	0100 100Hz	1 1st order	Value in meter			
XZ	CO M12	SS Stainless Steel	± 5g	0250 250Hz	2 2nd order				
YZ			± 10g	0500 500Hz					
			± 25g	1000 1000Hz					
			± 50g						
			± 100g						
			± 200g						
			± 400g						

Specifications subject to change without notice. – Last updated: April 2026