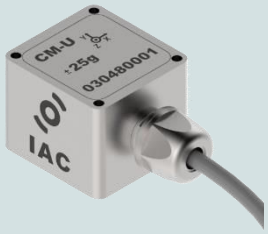
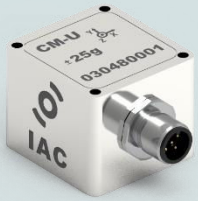
RECOVIB

IAC-CM-U-03

ACCELEROMETER FOR CONDITION MONITORING

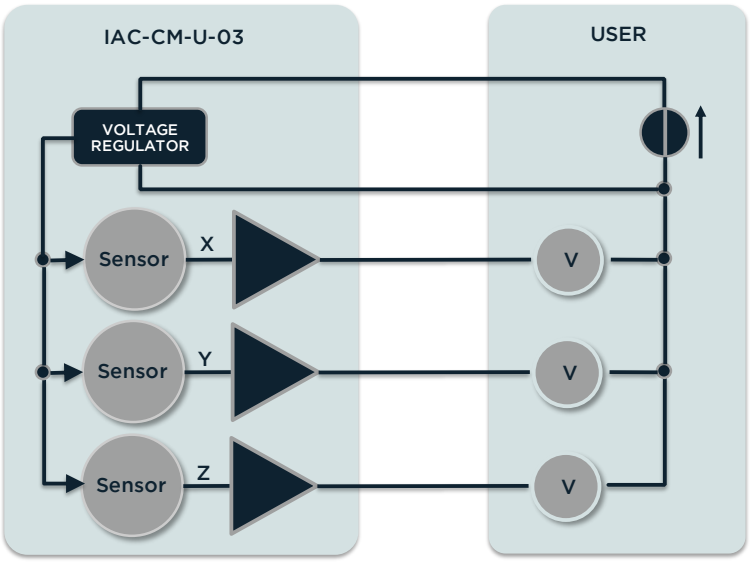




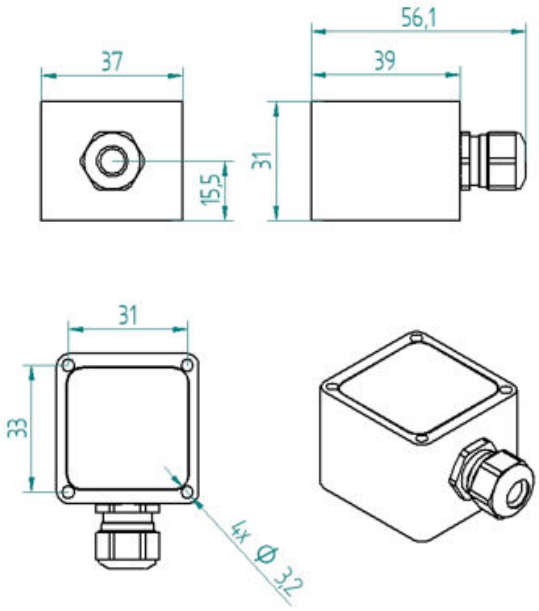
PROPERTIES

- 3-axes
- Wide bandwidth (0 – 24kHz)
- Embedded 0 – 5 V signal conditioning.
- Self-powered current loop
- Galvanically isolated
- Protected against false polarization.
- Compact and rugged design
- IP67 ingress protection grade

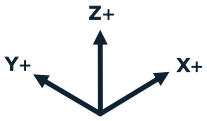
BLOCK DIAGRAM



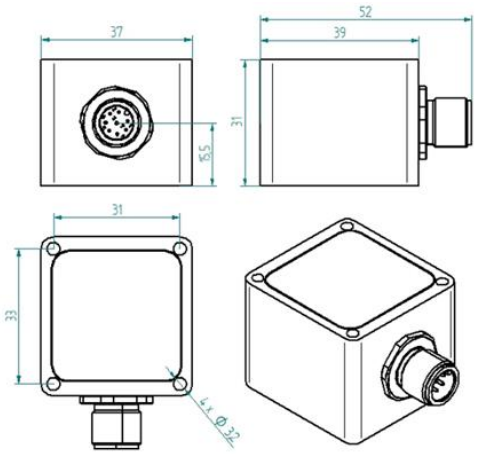
DIMENSIONS – Cable Gland Model

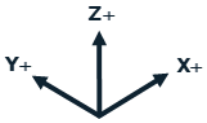


NOTE
When mounted with sensing axis vertical all units will indicate 1g offset due to gravity



DIMENSIONS – M12 Connector Model





MOUNTING ACCESSORIES

See “IAC – Accelerometer Accessories data sheet”

SPECIFICATIONS – ALL MODELS

OUTPUT/CHANNEL	Output Range	0-5V	
	Supply Voltage	12-30V	
	Bandwidth (-3dB)	0-24kHz	
	Non-linearity	0.5% F.S. typ. – 1.5% F.S. max.	
	Sensitivity Error	2%	
	Transverse Sensitivity	2% typ. – 5% max.	
	Offset dispersion	±1g typ. - ±2g max.	
	Destruction limit	1000g	
ENVIRONMENTAL CHARACTERISTICS	Temperature Range	Operating -40 to 125°C / -40..185°F	Non-Operating <-55 ; >125°C / <-67 ; >257°F
	Sensitivity drift	±500ppm/°C	
	Offset drift	±50mg/°C	
	Ingress protection grade	IP67	
MECHANICAL DATA	Weight Without Cable (g)	(1) CG/75, CO/102 - (2) CG/42, CO/68	
	Case Material (1)	Stainless Steel or Aluminium	
	Mounting	3.2mm diameter holes (4x)	

(1) Stainless Steel Casing AISI316 Grade (e.g. for offshore/marine environment)
(2) Aluminium (MIL-A-8625 Type II coating)

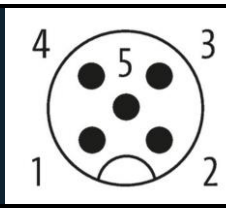
PERFORMANCES – BY MODEL

Range - g	Sensitivity - mV/g	Freq. Response (-3dB) - kHz	Noise - µg/√Hz
+/- 25	80	0 - 10	40
+/- 50	40	0 - 10	40
+/- 100	20	0 - 10	45
+/- 200	10	0 - 15	70
+/- 500	4	0 - 24	150

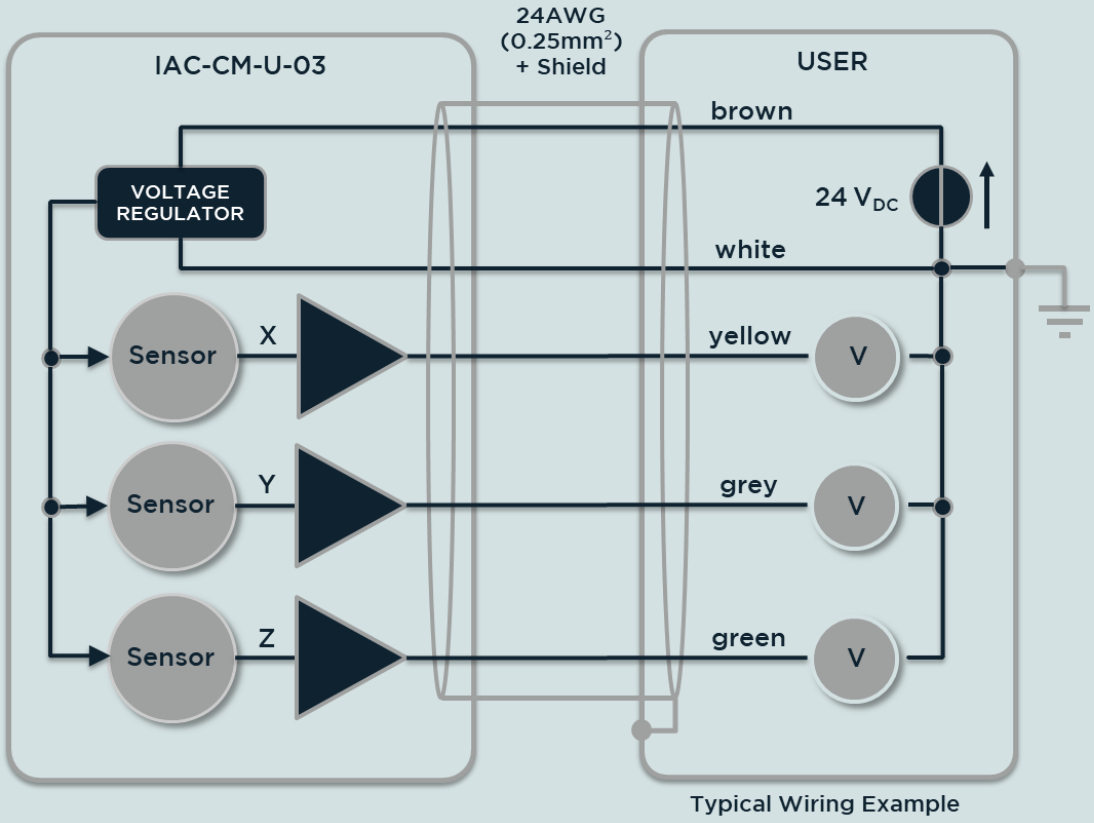
ELECTRICAL CONNECTIONS – Cable Gland Model

Signal X sensing	Signal Y sensing	Signal Z sensing	5 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			Yellow
	Y Axis Out		Grey
		Z Axis Out	Green

ELECTRICAL CONNECTIONS - M12 Connector Model

U 03		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



Typical Wiring Example

ORDERING INFORMATION

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

Cable Connection	
CG	Cable Gland
CO	M12

Range
± 25g
± 50g
± 100g
± 200g
± 500g

Casing	
AL	Aluminium
SS	Stainless Steel

Cable Length
Value in meter

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Sensorik und Messtechnik
Q7, 24 - 68161 Mannheim
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