

Vibro-Meter

Transducer systems for rotorcraft



MEGGITT
smart engineering for
extreme environments

Engine accelerometers

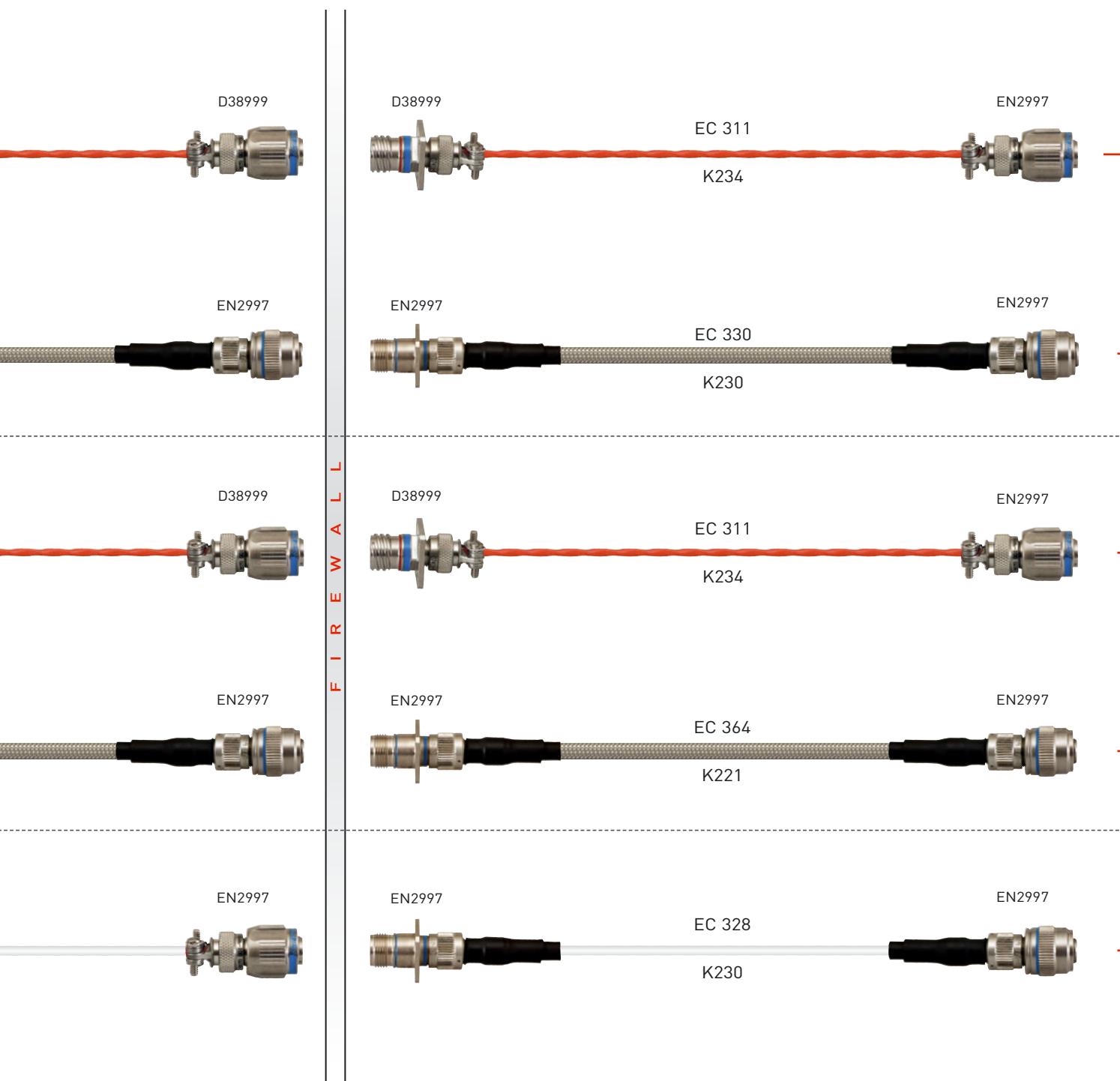
Specifications

CA 107	CA 107 7xx		MI	CG505	EC 308
	5 pC/g: 2mg to 400g Overload: 2000g Res. freq: 25 kHz Temp: -70°C to +600°C	CA 107 802		MI - Overbraid	EN2997 EC 329 K230
CA 135	CA 135 102		CG505	EC 309	K234
	20 pC/g: 2mg to 1000g Overload: 2000g Res. freq: 35 kHz Temp: -54°C to +260°C	CA 135 702		EN2997 EC 327 K230	
CA 139	CA 139		CG505	EC 340	K221
	10 pC/g: 2mg to 500g Overload: 1000g Res. freq: 27 kHz Temp: -54°C to +400°C				

Airframe accelerometer

Specifications

CE 581/2/3	CE 581/2/3		With built-in electronics	Power supply
	100 mV/g: ± 50g Overload: 5000g Res. freq: 20 kHz Temp: -55°C to +121°C		Connector type: MS3113, 4-pin CE 581: Uniaxial CE 582: Biaxial CE 583: Triaxial	Voltage: +18 to +24 VDC Current: 2 to 20 mA



Cables		
Type	Temp.	Hard/softline
K 221	200°C	S-MTLN
K 234	200°C	S-MTLN
K 230	200°C	S-MTLN
MI cable with stainless steel over braid	700°C	H-MI
MI cable	700°C	H-MI

Remote Charge Converters

RCC 291



1 channel

- Customisable, to fit the sensor's transfer function and the vibration's frequency and amplitude.
- Integrated BITE (Built-In Test Equipment)
- Temp: -54°C to +120°C

Power supply

Iconstant: 6 to 20 mA
V stand-by: 15 VDC
(VPU 271)

RCC 237 / RCC 287



2 channels

RCC 237

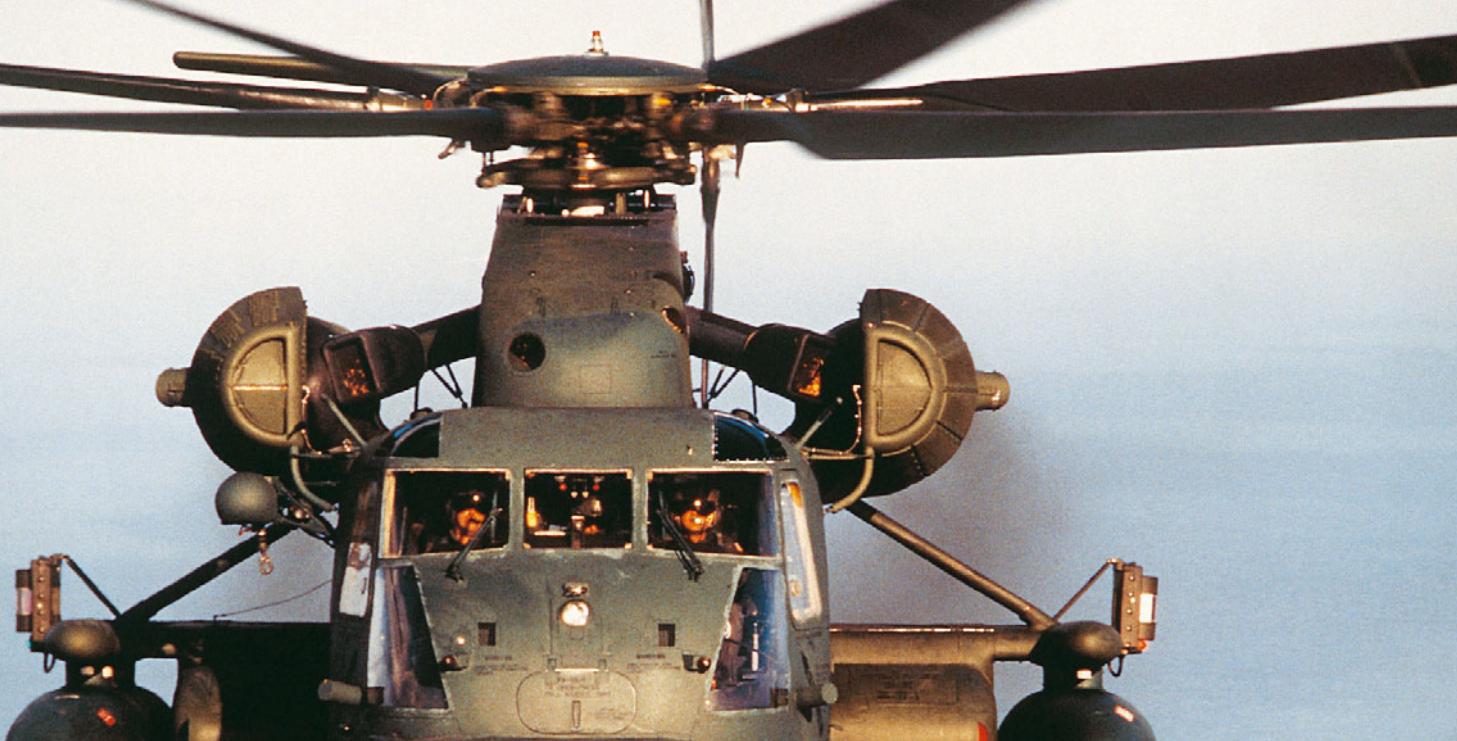
- 10 pC/g: 500g (channels A & B)
- Integrated BITE
- Temp: -54°C to +120°C

RCC 287

- 5 pC/g: 400g (channel A)
- 20 pC/g: 1000g (channel B)

Power supply

Iconstant: 6 to 12 mA
V stand-by: 16 VDC
(VPU 271)



Transducers, cables and electronics

Vibro-Meter's engine and vibration monitoring systems have been used on almost all commercial aircraft and engines since 40 years.

We design and manufacture high-end transducers systems for rotorcraft applications, which are qualified for engines and airframes vibration analysis. Our systems include piezoelectric accelerometers, cables, and charge converters.

- Absolute vibration for helicopter engines and airframes.
- High temperature capability from -70°C to +600°C.
- All products shown herein benefit from more than 40 years experience.
- No maintenance required for our vibration measuring systems.

Vibro-Meter supplies complete measuring chains as well as single components. We offer a wide range of standard products suited to the helicopter market's needs. With our commitment to engineering expertise, we also tailor designs to our customer's needs.

References

Vibro-Meter's products are widely used on many helicopter programs, including:

- Boeing CH-47 Chinook
- Eurocopter EC 225 Super Puma
- Eurocopter EC 155 Dauphin
- NHIndustries NH90
- Sikorsky UH-60 Blackhawk
- Sikorsky CH-53
- Sikorsky S-92

Quality approvals

- Quality system:
SAE AS9100
BS EN9100:2003
BS EN ISO9001:2000
- Production organisation:
JAA JAR Part 21 Subpart G
- Repair:
FAA FAR Part 145
JAA JAR Part 145
CAAC CCAR Part 145
EASA EASA Part 145



Since its foundation in 1952, Vibro-Meter has established itself as a leader in designing and manufacturing electronic measurement and processing systems, whilst remaining a leading supplier of reliable, high quality instrumentation systems to aerospace customers world-wide, providing sensors, remote charge converters (RCC) and vibration processing units (VPU) for rotorcraft systems for both civil and military applications.

The company's most significant asset is its ability to engineer reliable high quality, customer-orientated solutions. Vibro-Meter became a member of the Meggitt group of companies in 1998.

With our commitment to engineering expertise, comprehensive manufacturing resources, world-wide technical support and full service repair capabilities, help is never far away. Our international network of subsidiaries and distributors is always available.

Vibro-Meter is a Meggitt group company. Headquartered in the UK, Meggitt PLC is an international group of companies operating in North America, Europe and Asia. Known for its specialist extreme environment engineering, Meggitt is a world leader in the aerospace, defence and electronics industries.

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