Vibro Meter IPC704 244-704-000-032

Charge Signal Conditioner

Vibro Meter IPC704 244-704-000-032 is a legacy conditioner in the IPC704 piezoelectric measurement family. It interfaces a sensor charge signal with monitoring electronics, using amplification and filtering appropriate to the configured measurement chain. The photographed unit carries an IPC704P-CP237 marking with a 7.5 pC/kPa input calibration and 50 µA/kPa output scaling. These visible calibration details help identify the pressure-measurement configuration, while the full 032 part number distinguishes it from later IPC704 hardware.



Technical Specifications

Product Identity	
Complete legacy part number	IPC704 244-704-000-032
Functional Configuration	
Visible unit configuration	IPC704P-CP237; manufacturer calibration marking
Photographed input calibration	7.5 pC/kPa
Photographed output scaling	50 µA/kPa
Reference data scope	IPC704 262-710 Version 12, later 042/511 variants
Filtering	Configured HP/LP cutoffs; exact installed settings require confirmation
Dynamic-pressure chain	Suitable GSI galvanic separation unit required
Legacy equivalence	032-to-042/511 interchangeability not established
Performance & Power	
Supply - newer reference	18-30 V DC; 25 mA maximum
Current transmission - newer reference	12 mA ±0.5 mA standing current; ±5 mA peak dynamic component
Environment	
Environmental protection with optional housing	The optional ABA160 housing encloses one IPC704 and provides IP66 enclosure protection.

Selected original manufacturer material follows on pages 3–4.

Compatibility & Selection Guide

System compatibility. Match the complete CP237 sensor and conditioner calibration, output scaling and monitor interface. A suitable GSI galvanic separation unit is required for dynamic-pressure measurement chains. The later 042 and 511 versions have different sensor-material applicability, so neither a common housing nor an IPC704 family name proves an equivalent replacement.

Wiring & Installation Reference

Installation precautions

Dynamic-pressure sensors require a suitable GSI galvanic separation unit.

Do not transfer newer supply limits, approval conditions or filter selections to the legacy unit without checking applicability.

View terminal reference (PDF) — page 4 · View mounting reference (PDF) — page 4

SPECIFICATIONS *(continued)*

Output characteristics (ordering option D)

RFI filter : Symmetrical LC network

2-wire current transmission

- *Dynamic signal* : Max. ±5 mA peak
- *Standing current* : 12 mA ±0.5 mA
- *Electrical connection* : +24 V = "+", COM = "−"
- *Output sensitivity* : See **Ordering information on page 12**
- *Max. dynamic range* : 5 mA peak/output sensitivity

3-wire voltage transmission

- *Dynamic signal* : Max. ±5 V peak
- *Standing voltage* : 7.5 V ±0.2 V
- *Output sensitivity* : See **Ordering information on page 12**
- *Output impedance* : 750 Ω (3-wire configuration)
- *Max. dynamic range* : 5 V peak/output sensitivity

⚠ **The 3-wire voltage output without galvanic separation unit should only be used with piezoelectric-based transducers which are insensitive to frame voltage.**
Dynamic pressure transducers should always be used with a GSI galvanic separation unit.

Filter characteristics (ordering options E and F)

High-pass filter

- *Cutoff frequencies (at −3 dB)* : 0.5, 1, 2, 5 or 10 Hz (all ±20%)
- *Slope* : 24 dB/octave (4th order)

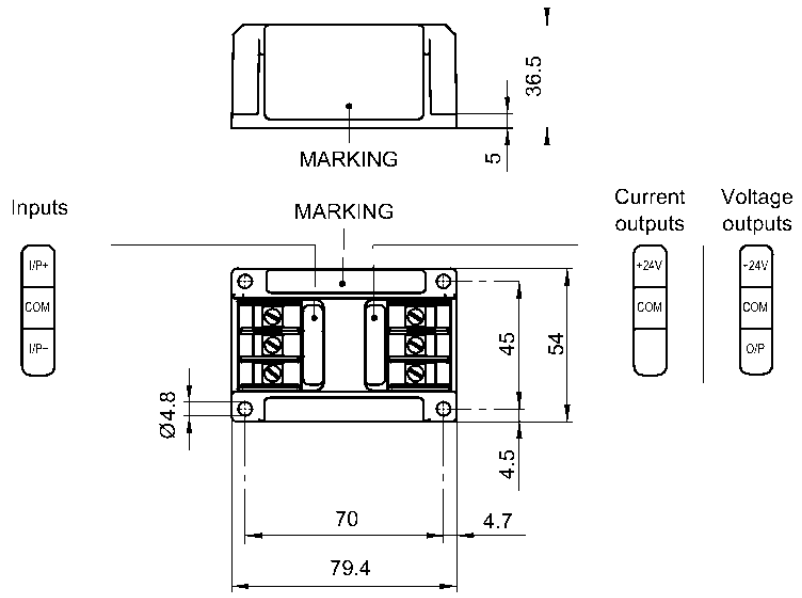
⚠ **When selecting a high-pass filter, be careful to select an appropriate frequency for the charge amplifier. See the charge amplifier frequencies versus transfer unit graphs on the following pages.**

Low-pass filter

- *Cutoff frequencies (at −1 dB)* : 200, 500, 1000, 2000, 5000, 10000 or 20000 Hz (all ±10%)
- *Slope* : 12 dB/octave (2nd order)

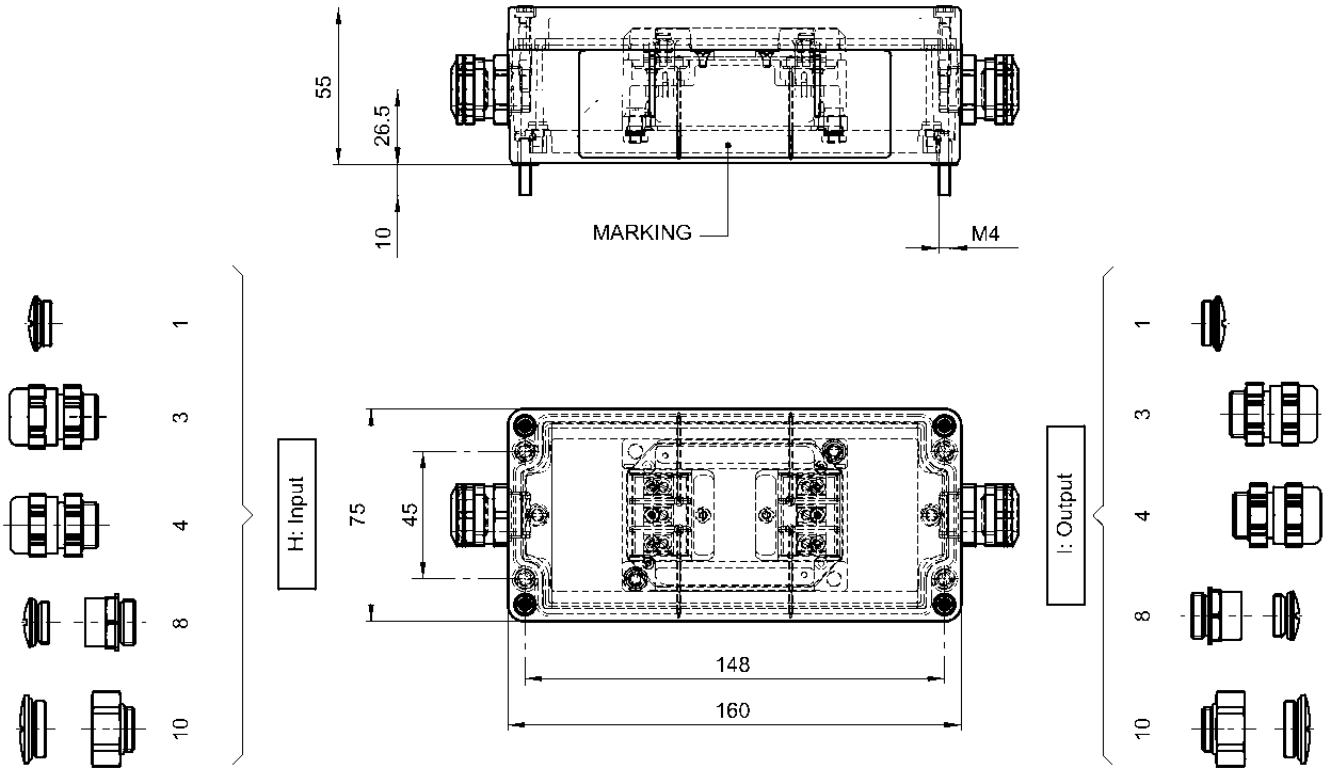
MECHANICAL DRAWINGS

Signal conditioner without industrial housing (ordering option G0)



Note: All dimensions in mm unless otherwise stated.

Signal conditioner with industrial housing (ordering option G1)



Note: All dimensions in mm unless otherwise stated.

© Meggitt SA / 262-710 / Version 12 / 08.11.2017 / E