

IM-RM

The **IM-RM rotary meters** are used in gas distribution systems, compressor stations, and end users such as chemical and processing plants. Rotary meters are used in the measurement of a variety of filtered and dry non-corrosive gases, including specialty gases. **Pietro Fiorentini** rotary meters are approved for custody transfer applications and used by natural gas transmission and gas distribution companies. Some sizes of meters are available in the HTR version according to EN12480 - Annex C. The IM-RM is **Hydrogen Ready** for NG-H2 blending.





City Gates



Gas engines



Medium / small industry



Regasification



Commercial users



Power generation

Gas reverse-flow



District stations



Biomethane production



Heavy industry

| Features | Values |
|--------------------------------|--|
| Flow rates* | from 0.5 m ³ /h to 1000 m ³ /h from 17.6 cfh to 35314 cfh |
| Design pressure* | up to 2.5 MPa up to 362 psig |
| Ambient temperature* | from -25 °C to +55 °C from -13 °F to 131 °F |
| Gas temperature range* | from -25 °C to +55 °C from -13 °F to 131 °F |
| Accuracy | Qmin \leq Q $<$ Qt \pm 2% & Qt \leq Q \leq Qmax \pm 1% (Qt according to EN12480) |
| Rangeability | up to 1:250 |
| Repeatability | better than 0.1% |
| Index Protection | IP 67 |
| Applicable metrology standards | MID 2014/32/EU |
| Index & pulse out | 8 digits 2x low frequency pulse out (NO reed contact) 1x anti fraude out (NC reed contact) |
| Hazardous area certification | ATEX II 2 G Ex h IIB T6 Gb |
| Accessories | optical encoder indexhigh frequency sensorsby-pass valve on Twin versions |
| Nominal dimensions DN | from DN 40 to DN 150 |
| Connections* | ANSI 150 according to ASME B16.5 or PN 16/25 according to EN 1092-1 |

(*) NOTE: Different functional features and/or extended temperature ranges available on request. Stated temperature ranges are the maximum for which the equipment's full performance, including accuracy, are fulfilled. Standard product may have a narrower range.

Table 1 Features



Materials and Approvals

| Part | Material |
|------------------|---|
| Body | hard anodized aluminum alloy or spheroidal graphite cast iron |
| Rotor | aluminum alloy |
| Shaft & Bearings | stainless steel |
| Index enclosure | UV resistant polycarbonate case suitable for outdoor installation |

NOTE: The materials indicated above refer to the standard models. Different materials can be provided according to specific needs.

Table 2 Materials

The IM-RM rotary meters is designed to meet EN 12480 requirements & OIML R137 1&2:2012.





EN 12480

OIML R137 1&2:2012

The product is certified according to European Directive 2014/68/EU (PED), 2014/32/EU (MID), 2014/34/EU (ATEX).







PED

MID

ATFX

IM-RM competitive advantages



High rangeability



Superior strength



Simplified maintenance and repair



Compact size and lower weight



Biomethane compatible and 25% Hydrogen blending compatible. Higher blending available on request**

ogo

High performance rotor profile



Low pressure drop



Multi-functional Index



Decreased susceptibility to damage from pressure shocks

(**) for aluminum body