

iM-TM

The **iM-TM CT turbine meters**, approved for custody transfer applications, is mainly used for high-pressure transmission systems, power plants, heavy industry and for medium-low pressure natural gas distribution networks. This device is suitable for use with previously filtered non-corrosive gases. It is the natural evolution of the Pietro Fiorentini know-how and experience in the gas industry. The iM-TM is **Hydrogen Ready** for NG-H2 blending.



Gas compression / booster stations



Gas reverse-flow



District stations



Gas liquefaction



Power generation



Medium / small industry



Gas storage



Heavy industry



Commercial users



City Gates



Regasification

Features	Values
Flow rates*	from 8 m ³ /h to 6500 m ³ /h from 282 cfh to 229 545 cfh
Design pressure*	up to 10 MPa up to 1450 psig
Ambient temperature*	from -40 °C to +65 °C from -40 °F to 145 °F
Gas temperature range*	from -25 °C to +55 °C from -13 °F to 131 °F
Accuracy	$Q_{min} \leq Q < Q_t \pm 2\%$ & $Q_t \leq Q \leq Q_{max} \pm 1\%$ (Q_t according to EN12261)
Rangeability	up to 1:20
Repeatability	better than 0.1%
Index Protection	IP 67
Applicable metrology standards	MID 2014/32/EU
Index & pulse out	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> optical encoder index high frequency sensors
Nominal dimensions DN	Aluminium body from DN 50 to DN 200 Carbon steel body from DN 50 to DN 300
Connections*	ANSI 150/300/600 according to ASME B16.5 From PN 16 to PN100 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 carbon steel
Rotor	aluminum alloy
Shaft & Bearings	stainless steel
Gears	technopolymer
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

iM-TM turbine meters is designed to meet EN 12261 requirements.



EN 12261

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



PED



MID



ATEX

iM-TM competitive advantages



Removable metrological cartridge assembly



High performance aluminum alloy turbine wheel



Optimized bearing construction



Multi-stage integrated flow conditioners



Simplified maintenance and repair



Multi-functional Index



Lightweight aluminum bodies



Axial Load Compensation (ALC)



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

(**) for aluminum and steel body