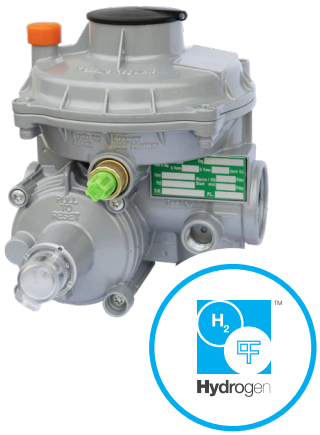
Pietro Fiorentini

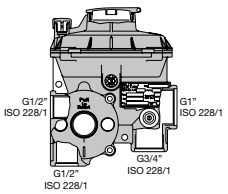
FE H



The **FE H** is one of the **direct-operated gas pressure regulators** designed and manufactured by Pietro Fiorentini. This device is suitable for **100% hydrogen applications**. It is used for low pressure gas distribution networks, as well as residential and commercial applications. The **FE H** regulator is classified as **Fail Close** (only version with slam-shut device valve for downstream overpressure).

Commercial users

Residential users

Features	Values	
Design pressure (DP)	0.86 MPa 8.6 bar	
Inlet pressure range	0.01 . 0.7 MPa (on request up to 0.86 MPa) 0.1 - 7 bar (on request up to 8.6 bar)	
Regulator capacity	212 - 1765 ft^3/h 6 - 50 m^3/h	
Adjustment range of downstream pressure	**BP Version**	1.3 - 18 kPa 13 - 180 mbar
	TR Version	18.1 - 50 kPa 181 - 500 mbar
Accuracy class (AC)	10	
Lock-up over pressure (SG)	20	
Operating ambient temperature*	**Standard version**	from -20 °C to +60 °C from -4 °F to +140 °F
	Extended minimum temperature version	from -30°C to + 60°C from -22 °F to +140 °F
	Low temperature version (Subzero)	from -40°C to + 60°C from -4 °F to +140 °F
Permissible gas temperature	**Standard version**	from -10°C to + 60°C from +14 °F to +140 °F
	Extended minimum temperature version	from -15°C to + 60°C from +5 °F to +140 °F
	Low temperature version (Subzero)	from -20 °C to +60 °C from -4 °F to +140 °F
Inlet connection	G ½" EN ISO 228/1 (modular connections on request)	
Outlet connection	• In-line outlet: G 1" EN ISO 228/1 • Outlet in a square pattern: G ¾" EN ISO 228/1 (modular connections on request)	
Modular connections	• Gas (as per UNI EN ISO 228-1:2003); • Flat swivel joint (as per NF E29-533: 2014 and NF E29-536: 2017); • NPT (according to ASME B1.20.1, excluding connections with metal/metal sealing); • Special accessories (on request).	

(*) 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

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Materials and Approvals

Part	Material
• Diaphragm • O-rings	Nitrile rubber (TR rubberised canvas)
• Caps • Discs	Plastic
• Springs	Steel
• Equipment body • Lids • Seat	Zamak metal alloy
• Equipment body • Lids	Aluminium alloy (on request) (standard for CSA version)

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

Table 2 Materials

The **FE H** regulator is designed in compliance with European standard EN 334.
Based on the version/configuration, the FE regulator complies with:

EN 334 · UNI 8827 · EN 16129 · EN 88-2 · UNI 11655 · CSA 6.18 · ANSI B109.4 · NF E29-190-2

FE H competitive advantages

- Operates with low differential pressure
- Slam-shut valve for overpressure
  Slam-shut valve for underpressure
- Two-stage regulation with balanced first stage plug
- High customisation
- Integrated thermal valve option
- Built-in filter
- Integrated flow limiter valve option
- Suitable for outdoor installations
- Suitable for 100% Hydrogen

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