Pietro Fiorentini

FE

Two-stage direct-operated gas pressure regulator by Pietro Fiorentini, the **FE** is a gas service regulator equipped with integrated slam shut (both OPSO and UPSO) excess flow function and optional fire protection valve. Particularly suitable for low pressure natural gas distribution networks for residential and commercial users, it can be used with previously filtered non-corrosive gases including bio-methane and natural gas blended with hydrogen.

Commercial users

Residential users

Features	Values
Design pressure*	up to 0.86 MPa up to 125 psig
Ambient temperature*	from -40 °C to +60 °C from -4 °F to +140 °F
Inlet pressure range bpu (MAOP)	from 15 kPa to 0.86 MPa from 2.2 psig to 125 psig
Range of downstream pressure Wds	• from 1.3 kPa to 18 kPa for BP version from 5”w.c. to 2.6 psig for BP version • from 181 kPa to 50 kPa for TR version from 2.61 psig to 7.25 psig for TR version
Range of downstream pressure Wdso	• from 3.5 kPa to 29.9 kPa for BP version from 14”w.c. to 4.3 psig for BP version • from 30 kPa to 80 kPa for TR version from 4.31 psig to 11.6 psig for TR version
Minimum inlet pressure and nominal capacity	• up to 24.8 Sm³/h with 28 kPa differential pressure up to 875 sfch with 4 psig differential pressure • up to 39.7 Sm³/h with 69 kPa differential pressure up up to 1,400 sfch with 10 psig differential pressure
Accuracy class AC	up to 10
Lock-up pressure class SG	up to 20, minimum 0.75 kPa | 3” w.c.
Connections*	inline 3/4” or 1” NPT according to ANSI B1.20.1, other configurations or connections 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
Body	Aluminum
Cover	Aluminum
Diaphragms and seats	Nitrile rubber for BP version Rubberized fabric for TR version
Sealing rings	Nitrile

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

Table 2 Materials

The **FE** regulator is designed according to the European standard EN 16129, Italian Standard UNI 11655, ANSI B109.4 and CSA 6.18.
ANSI Z21.80 certification is limited to 70 kPa | 10 psig maximum inlet pressure.
Leakage class: bubble tight, better than class VIII according to ANSI/FCI 70-3.

EN16129 | UNI 11655 | ANSI B109.4 | CSA 6.18 | ANSI Z21.80

FE competitive advantages

- Operates with low differential pressure
- Slam shut for over pressure
  Slam shut for under pressure
- Double stage with double diaphragms and single orifice regulator
- Highly customizable
- Suitable for 1 ft clearance installation with 2.5 cf/h limited venting
- In-built thermal valve option
- Built-in strainer for seat protection
- Built-in excess flow valve option
- Suitable for outdoor installations
- Biomethane compatible and 20% Hydrogen blending compatible. Higher blending available on request

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