

FE 25/50

The **FE** is a two-stage gas pressure regulator by Pietro Fiorentini. It is particularly suitable for low pressure natural gas distribution networks for residential and commercial users. It should be used with previously filtered non-corrosive gases including biomethane and natural gas blended with hydrogen. According to the European Standard EN 334, it is classified as **Fail Close** because it is always supplied with an overpressure protection device (slam shut valve). The FE is **Hydrogen Ready** for NG-H2 blending.



Residential users

Features	Values
Design pressure* (PS ¹ / DP ²)	up to 860 kPa up to 125 psig
Ambient temperature* (TS ¹)	All versions -40°C to +65°C -40°F to +150°F
Inlet gas temperature*	<ul style="list-style-type: none"> Standard version -10°C to +65°C 14°F to +150°F Arctic version -20°C to +65°C -22°F to +150°F
Inlet pressure (MAOP / p _{umax} ¹)	from 10 kPa to 0.86 MPa from 1.45 psig to 125 psig
Range of downstream pressure Wds	<ul style="list-style-type: none"> from 1.3 kPa to 18 kPa for BP version from 5.2" w.c. to 2.6 psig for BP version from 18.1 kPa to 50 kPa for MP version from 2.61 psig to 7.25 psig for MP version
Range of downstream pressure Wdso	<ul style="list-style-type: none"> from 1.3 kPa to 18 kPa for BP version from 5.2" w.c. to 2.6 psig for BP version from 30 kPa to 80 kPa for MP version from 4.31 psig to 11.6 psig for MP version
Minimum inlet pressure and nominal capacity	<ul style="list-style-type: none"> up to 24.8 Sm³/h 875 sfch with 28 kPa 4 psig differential pressure up to 42.7 Sm³/h 1,500 sfch with 69 kPa 10 psig differential pressure
Accuracy class (AC ¹)	10
Lock-up pressure class (SG ¹)	20, minimum 0.75 kPa 3" w.c.
Connections*	In-line 3/4" or 1" NPT according to ANSI B1.20.1, other configurations or connections on request

(¹) according to EN334 standard

(²) according to ISO 23555-1 standard

(*) NOTE: Different functional features and/or extended temperature ranges may be available on request. Stated inlet gas temperature range is the maximum for which the equipment's full performance, including accuracy is guaranteed. Product may have a different pressure or temperature ranges according to the version and/or installed accessories.

Table 1 Features

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

Construction Standards and Approvals

The FE regulator is designed according to the European standard EN 16129, Italian Standard UNI 11655, ANSI B109.4 and CSA 6.18.

The FE 25/50 BP versions are CSA certified.

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 25/50 competitive advantages



Operates with low differential pressure



Built-in thermal valve option



Slam shut for over pressure
Slam shut for under pressure



Built-in strainer for seat protection



Two-stage double diaphragm and single orifice regulator



Built-in flow limiter valve option



Highly customizable



Suitable for outdoor installations



Suitable for 1 ft clearance installation with 2.5 cf/h limited venting



Biomethane compatible and 20% Hydrogen blending compatible. Higher blending available on request