

# Mod. FE

**FE** is one of the **direct-operated gas pressure regulators** designed and manufactured by Pietro Fiorentini. This device is suitable for use with previously filtered, non-corrosive gases and is particularly indicated for low-pressure natural gas distribution networks for residential and commercial fixtures. The **FE** regulator is classified as **Fail Close** (only version with slam-shut device valve for downstream overpressure).





#### Commercial fixtures



#### Residential fixtures

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 ft³/h 6 - 50 m³/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	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	<ul> <li>In-line outlet: G 1" EN ISO 228/1</li> <li>Outlet in a square pattern: G ¾" EN ISO 228/1</li> </ul>		G1/2" ISO 228/1	
	(modular connections on request)		G1/2" ISO 228/1 ISO 228/1	
Modular connections	<ul> <li>Gas (as per UNI EN ISO 228-1:2003);</li> <li>Flat swivel joint (as per NF E29-533: 2014 and NF E29-536: 2017);</li> <li>NPT (according to ASME B1.20.1, excluding connections with metal/metal sealing);</li> <li>Special accessories (on request).</li> </ul>			

(\*) REMARK: 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

Pa	rt	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** 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 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



Compatible with biomethane and blended hydrogen up to 20%. Higher mixtures available on request