Pietro Fiorentini

Reflux 819

The **Reflux 819** is one of the **pilot-operated gas pressure regulators** designed and manufactured by Pietro Fiorentini. This device is suitable for use with previously filtered non-corrosive gases, and it is mainly used for high-pressure transmission systems, power plants and for medium pressure natural gas distribution networks. According to the European Standard EN 334, it is classified as **Fail Close**. The Reflux 819 is **Hydrogen Ready** for NG-H2 blending.

- Gas liquefaction
- Gas compression / booster stations
- Gas storage
- Gas engines
- City gates
- Heavy industries
- Regasification
- Power generation
- LNG marine
- Gas reverse-flow

Features	Values
Design pressure* (PS[1] / DP[2])	up to 10.2 MPa up to 1,479 psig
Ambient temperature* (TS[1])	from -20 °C to +60 °C from -4 °F to +140 °F
Inlet gas temperature*	from -20 °C to +60 °C from -4 °F to +140 °F
Inlet pressure (MAOP / p_{umax}[1])	from 0.05 MPa to 10.0 MPa from 7.25 psig to 1,450 psig
Range of downstream pressure (Wd[1])	from 0.03 MPa to 7.4 MPa from 4.35 psig to 1,073 psig
Available accessories	DB/819 Silencer, LDB/171 Silencer, PM/819 Monitor, SB/82 Slam shut, HB/97 Slam shut
Minimum operating differential pressure (Δp_{min}[1])	0.05 MPa | 7.25 psig
Accuracy class (AC[1])	up to 1
Lock-up pressure class (SG[1])	up to 2.5
Nominal size (DN[1,2])	DN 25 | 1"; DN 50 | 2"; DN 80 | 3"; DN 100 | 4"; DN 150 | 6"; DN 200 | 8"; DN 250 | 10"; DN 300 | 12"
Connections	Class 150, 300, 600 RF or RTJ according to ASME B16.5 and PN16 according to ISO 7005

(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

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Materials and **Approvals**

Part	Material
Body	ASTM A 352 LCC cast steel for classes ANSI 600 and 300; ASTM A 216 WCB cast steel for classes ANSI 150 and PN 16/40
Heads	ASTM A 350 LF2 steel
Stem	AISI 416 stainless steel
Plug	ASTM A 350 LF2 nickel-plated steel
Seat	Vulcanized Nitrile Rubber on metal support
Diaphragm	Rubberised Canvas (pre-formed by hot-pressing process)
O-rings	Nitrile Rubber
Compression fittings	Made of zync-plated steel according to DIN 2353; on request, stainless steel

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

Table 2 Materials

The **Reflux 819** regulator is designed according to the European standard EN 334.
The regulator reacts in closing (Fail Close) according to EN 334.
The product is certified according to European Directive 2014/68/EU (PED).
Leakage class: bubble tight, better than VIII according to ANSI/FCI 70-3.

EN 334

PED-CE

Reflux 819 competitive advantages

- Compact and simple design
- High accuracy
- High turn-down ratio
- Fail Close plug and seat regulator
- Built-in pilot filter
- Top Entry
- Easy maintenance
- Built-in accessories
- Biomethane compatible and 20% Hydrogen blending compatible. Higher blending available on request
- Balanced type