Pietro Fiorentini

Trias

The **Trias** by Pietro Fiorentini is a **lever-operated** gas pressure regulator controlled by a diaphragm and contrasting regulated spring action. Mainly used for medium and low pressure natural gas distribution networks, as well as commercial and industrial applications. It should to be used with previously filtered non-corrosive gases. According to the European Standard EN 334, it is classified as **Fail Open**. The Trias is **Hydrogen Ready** for NG-H2 blending.

District stations

Medium / Small industry

Features	Values
Design pressure* (PS[1] / DP[2])	up to 1.7 MPa up to 17 barg
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 0.012 to 1.7 MPa from 0.12 to 17 barg
Range of downstream pressure (Wd[1])	from 1.2 to 400 kPa from 12 to 4000 mbarg
Available accessories	none. Pre-defined configurations
Minimum operating differential pressure (Δp_{min} [1])	0.01 MPa 0.1 barg
Accuracy class (AC[1])	up to 5
Lock-up pressure class (SG[1])	up to 20
Nominal size (DN[1,2])	DN 40 | 1” 1/2; DN 50 | 2”
Connections	Class 150 RF 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	Spheroidal ductile iron GS 400 – 18 ISO 1083
Cover	Die cast alluminium
Seat	Brass
Diaphragm	Rubberized canvas
O-rings	Nitrile rubber
Compression fittings	According to DIN 2353 in zinc-plated carbon steel.

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

Table 2 Materials

The **Trias** regulators are designed according to the European standard EN 334.
The regulators react in opening (Fail Open) according to EN 334.
The product is certified according to European Directive 2014/68/EU (PED).
Leakage class: bubble tight, better than class VIII according to ANSI/FCI 70-3.

EN 334

PED-CE

Trias competitive advantages

- Balanced type
- Operates with low differential pressure
- High accuracy
- Fail Open plug and seat regulator
- Token IRV
- High turndown ratio
- Top Entry
- Easy maintenance
- Compact dimensions
- Biomethane compatible and 20% Hydrogen blending compatible. Higher blending available on request

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