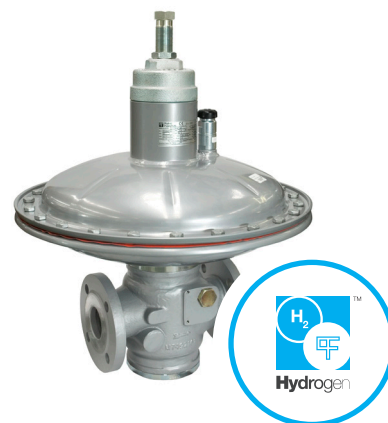


Norval H

The **Norval H** by Pietro Fiorentini is a **direct-operated** gas pressure regulator. This device is suitable for **100% hydrogen applications**. It is used in medium and low-pressure gas distribution networks. It is classified as **Fail Open** according to the European Standard EN 334.



Medium/small industry



District stations



Blending units



Regasification plants



Commercial users

Features	Values
Design pressure* (PS ¹ / DP ²)	up to 1.89 MPa up to 18.9 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)	<ul style="list-style-type: none"> for DN up to 3": from 0.01 to 1.89 MPa from 0.1 to 18.9 barg for DN 4", 6" and 8": from 0.01 to 0.8 MPa from 0.1 to 8 barg
Range of downstream pressure (Wd ¹)	<ul style="list-style-type: none"> for DN up to 4": from 0.8 to 440 kPa from 0.008 to 4.4 barg for DN 6" and 8": from 1.2 to 180 kPa from 0.012 to 1.8 barg
Available accessories	SN Slam shut, silencer, ER monitor attachment
Minimum operating differential pressure (Δp _{min} ¹)	10 kPa 100 mbarg
Accuracy class (AC ¹)	up to 5 (depending on working conditions)
Lock-up pressure class (SG ¹)	up to 10 (depending on working conditions)
Nominal size (DN ^{1,2})	DN 25 1"; DN 40 1" 1/2; DN 50 2"; DN 65 2" 1/2; DN 80 3"; DN 100 4"; DN 150 6"; DN 200 8"
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

Materials and Approvals

Part	Material
Body	Cast steel ASTM A 216 WCB (all DN). Spheroidal ductile iron GS 400 – 18 ISO 1083 DN 150 (6") included.
Cover	From diameter 375 mm to 630 mm die stamped carbon steel From diameter 658 mm to 817 mm alluminium
Seat	Stainless steel
Diaphragm	Rubberized canvas (performed by hot-pressing process).
O-rings	Nitrile rubber
Compression fittings	On request

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

Table 2 Materials

The **Norval H** regulator is designed according to the European standard EN 334. The regulator reacts 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

Norval H competitive advantages



Compact and simple design



High accuracy



Fail Open plug and seat regulator



Balanced type



Top Entry



Easy maintenance



In-built accessories



Suitable for 100% Hydrogen