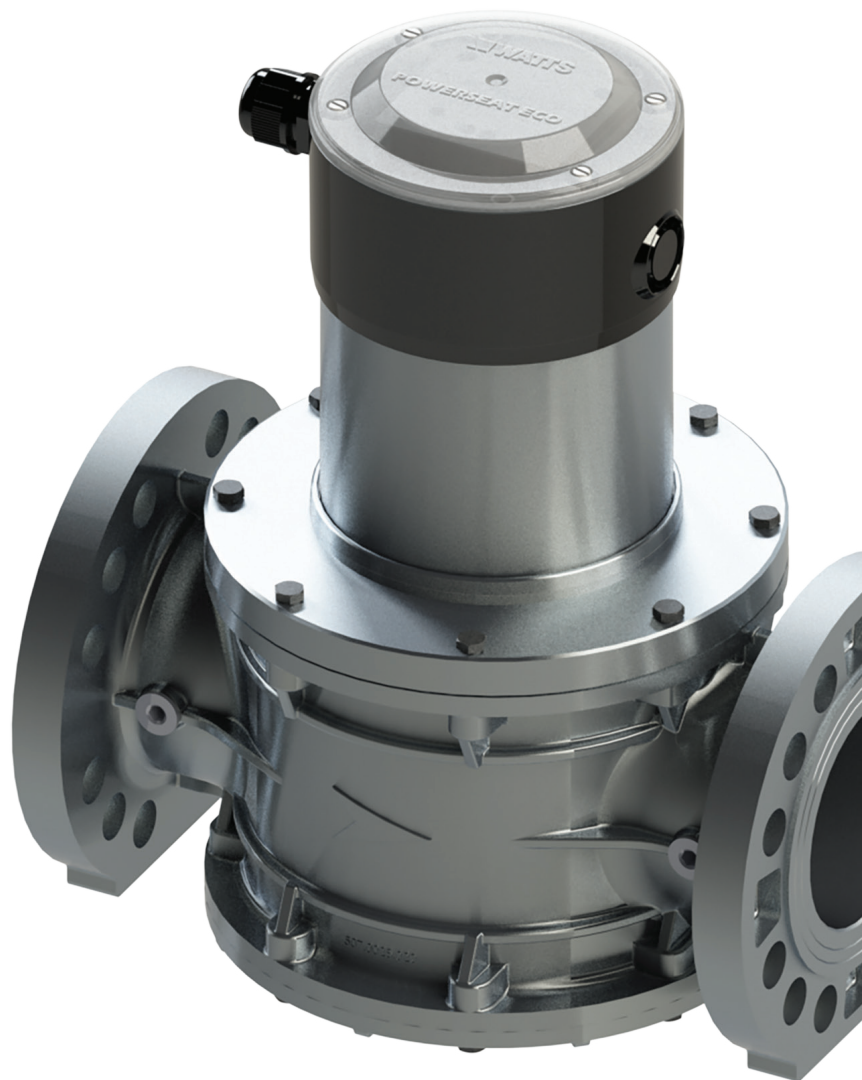


GHAV Series

Electro-hydraulic safety shut off valves

Technical Data Sheet

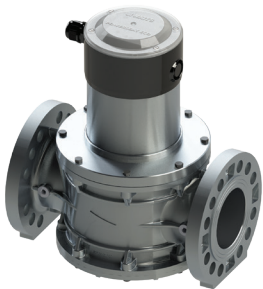


Description

The **GHAV Series** is an electro-hydraulically operated range of gas safety shut-off valves with ultra-high flow rates. Their primary function is the on-off control of low-pressure combustible gases and air. It may be used for both control and safety shut-off purposes. The valves are suitable for the three families of combustible gas as follows, 1st, Town Gas; 2nd, Natural Gas and 3rd, Liquefied Petroleum Gases, air and non-aggressive gas. The valves are normally closed, i.e., Energise to open. They are operated from A.C. mains at 230V. Electro-hydraulic operation ensures a smooth, controlled opening at low speed whilst closure time is less than 1 sec.

Valve construction consists of a die cast aluminium flanged body and an actuator having the valve closure head as an integral part. The actuator may be removed from the body for servicing.

All valves feature an **integral manual reset** switch as standard which can be wired out at any time. Also, as standard, they include a **closing position indicator (CPI)** with a changeover switch (volt free) suitable for alarm, remote management or safety system.



GHAV

Automatic ON-OFF normally closed class A gas valve. Actuated by IP56 electro-hydraulic actuator. Aluminium body. Suitable for manufactured gas, natural gas, liquefied petroleum gas (LPG), non-aggressive gas and air. Operating temperature range: -15°C to 60°C.

Type	Part Number	DN	Weight (kg)
GHAV65N	021.0100.101	DN65	10,280
GHAV80N	021.0101.101	DN80	10,700
GHAV100N	021.0102.101	DN100	14,700
GHAV125N	021.0103.101	DN125	25,590
GHAV150N	021.0104.101	DN150	28,590

Technical features	
Maximum inlet pressure:	1 bar
Operating temperature	-15°C÷60°C
Voltage rating	230V/50Hz (-15% / +10%)
Degree of protection	IP56
Power consumption	DN65 ÷ 150: opening: 200 VA, fully open: 10 VA
Opening time at -15°C	DN65 ÷100: 150 sec. max DN125÷150: 180 sec. max
Opening time at 20°C	DN65÷100: 10 sec. Max, DN125 ÷ 150: 30 sec. Max
Closing time	< 1 sec
Flanged connections	EN 1092-4, PN16
Fuel	All three families of gas (city gas, methane, LPG); non aggressive gases.

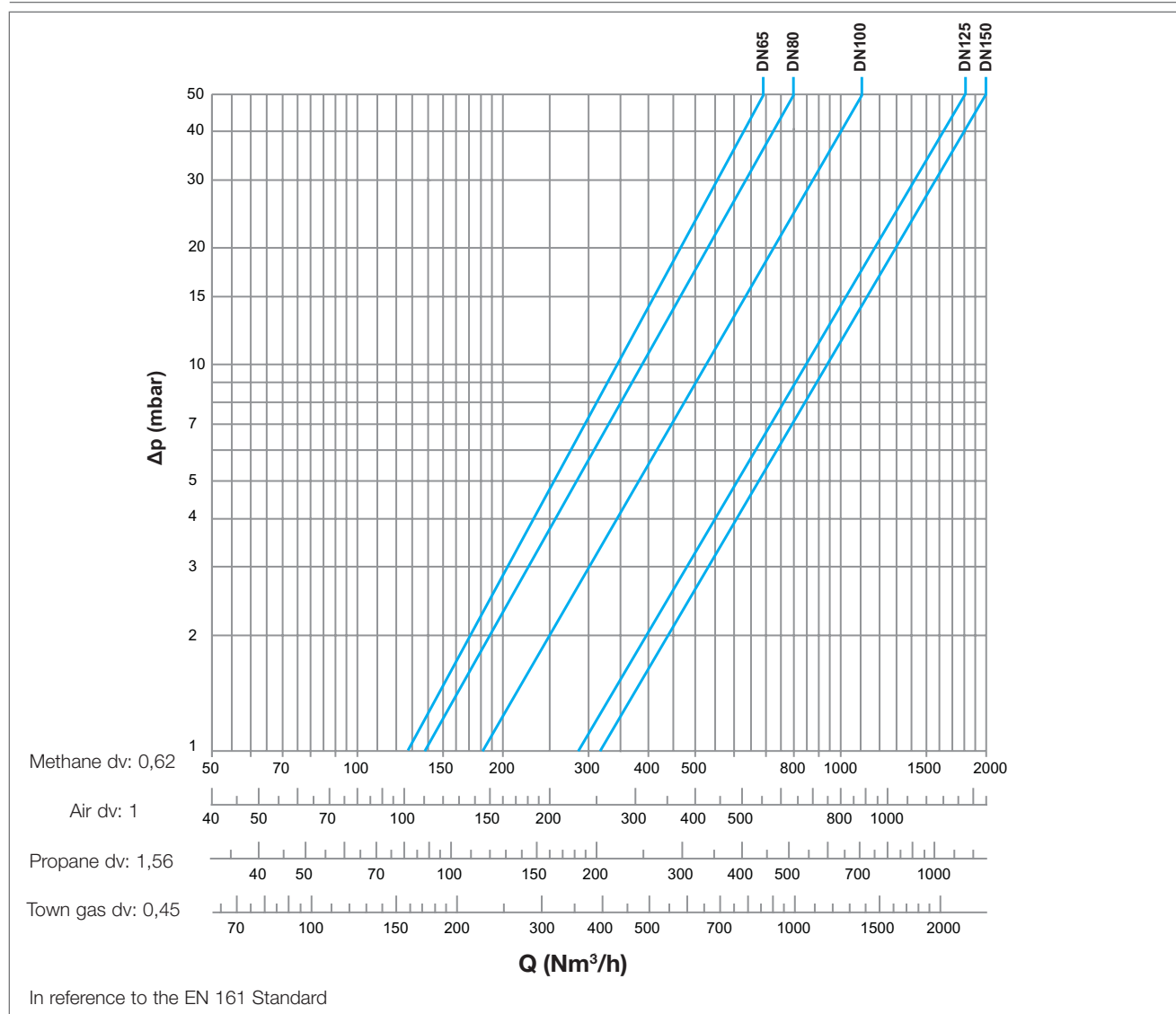
Materials	
Valve body	Aluminum
Cover	Aluminum
Springs	Stainless steel
Control Piston	Stainless steel
Gasket and Oring	NBR

Approvals

The on-off electro-hydraulic gas valves GHAV are in conformity with the EU 2016/426 (GAR) Regulation. Besides, DN125 and DN150 models are certified as pressure devices included into the II category (Enclosure II, section 3 of the Directive 2014/68/EU) in according to the procedure of the D1.

The product is made in accordance with UNI EN 161 concerning the on-off valves, Class A, Group 2 single stage mode.

Charts



Operation

Refit actuator cover after connected to power source. When the power is connected to 'L' for non-reset function, the valve will energise with no illumination. The Green LED on the switch housing will illuminate when the valve is fully opened. Red LED will only glow if the Power is connected to L1 for reset function. It will go off as the reset button is pressed. None of the LED will illuminate while the valve is opening. When the valve is fully open, Green LED will illuminate.

Maintenance

There are no user serviceable parts in the actuator except the valve rubber, which may be cleaned with turpentine substitute. To remove actuator, isolate valve from gas supply and proceed as follow. Energise to open the valve, unscrew the screws around periphery of body neck and withdraw actuator. De-energise. If fitting replacement actuator, isolate electrical supply and re-connect new actuator. Energise, refit actuator to body and tighten the screws around body neck to retain. De-energise and leak test.

Installation

The **GHAV Series** of valves can be mounted both on vertical and horizontal pipes. On the latter type it is recommended that the actuator be mounted facing upwards. The following indications should be respected:

1. do not use the actuator for leverage when mounting the valve;
2. ensure that the pipes are well-aligned and that internally they are free of dirt or other obstructions;
3. ensure that the flow respects the direction of the arrow embossed on the body of the solenoid valve;
4. check that all the pressure, tension and temperature parameters etc. are respected;;
5. mount a suitable gas filter upstream from the solenoid valve;
6. if the solenoid valve is installed outside it should be protected from atmospheric agents;
7. the electrical connections to the actuator must be made by a qualified electrician and in respect of the regulations in force.

For electrical connection of the actuator, remove the cover and insert the fitting or adapter into the housing. Refer to the diagrams below for wiring. Use 2.5-3mm slotted screwdrivers. Connection can be made by inserting the screwdriver in the rectangular slot.

CLOSED POSITION SWITCH

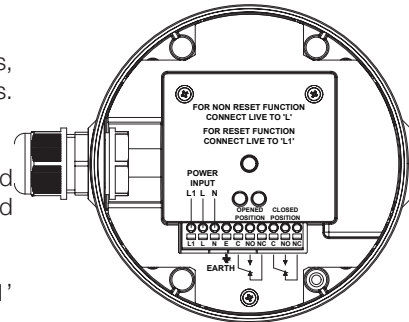
Change-over switch generally used in normally closed contact position for burner controls, i.e. closed when valve is closed and may also be wired normally open for other purposes. Contacts are volt free.

OPEN POSITION SWITCH

All models has standard factory fitted changeover switch. Connecting 'common' and 'normally closed', contacts are closed when valve is closed. Connecting 'common' and 'normally open', contacts are closed when valve is fully open. Contacts are volt free.

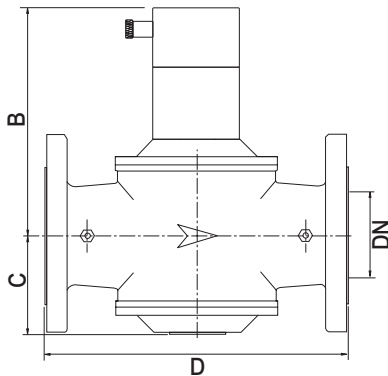
MANUAL RESET SWITCH

All models have integral manual reset switch fitted as standard. Connect live wire to 'L1' for reset function or connect to 'L' for non-reset.



Overall dimensions (mm)

GHAV



Mod.	GHAV65	GHAV80	GHAV100	GHAV125	GHAV150
A	DN 65	DN 80	DN 100	DN 125	DN 150
B	266	266	332,5	391	391
C	97	97	105	167	167
D	300	300	360	480	480

Specification text

GHAV Series

Automatic ON-OFF normally closed class A gas valve **Series GHAV** Watts brand, Giuliani Anello family. Sizes from DN65 until 150. Actuated by IP56 electro-hydraulic actuator. Aluminium body. Suitable for manufactured gas, natural gas, liquefied petroleum gas (LPG), non-aggressive gas and air. Operating temperature range: -15°C to 60°C. Powered by 230 V/50Hz. Maximum pressure 1 bar.

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