



INSTALLATION INSTRUCTION

2-WAY CONTROL VALVE – BALANCED

TYPE G1FB DN25-65 & H1FB - DN25-80

NO.: 99.234.01 - A
DATE: 11-2025

APPROVAL: APPROVED - JMI

Clorius
CONTROLS

2-WAY CONTROL VALVE – BALANCED TYPE G1FB & H1FB

WARNING INFORMATION



Warning!

Media can be hot and cause burning.
Do use safety goggles and gloves.



Warning!

Wrong installation can result in several damage or that the valve is not functioning correctly. These general instructions do not cover all possible operating scenarios.
For a more specific guidance about the usage of the valve or its qualification at the desired use, please contact BROEN.

2-WAY CONTROL VALVE – BALANCED TYPE G1FB & H1FB

1. General safety information

The valves must only be installed and serviced by fully trained and qualified personnel, observing the accepted industry codes and practices. Make sure employees or third persons is not exposed to any danger.

2. Design

Technical Data

Technical data according to data sheets.

G1FB DN25 - 65: No.: 0-2.5.03

H1FB DN25 - 80: No.: 0-2.5.04

- Valve body H1FB: Cast steel GP240GH
- Valve body G1FB: Nodular cast iron EN-GJS-400-15
- Seat and cone material: Stainless steel (W. No. 1.4305)
- Spindle material: Stainless steel (W. No. 1.4305)
- Colour: Antracit Grey RAL7016

3. Installation

It is recommended to install a strainer before the control valve if the liquid contains suspended particles.

A cooling unit should be used in accordance with the actuator's temperature limitations.

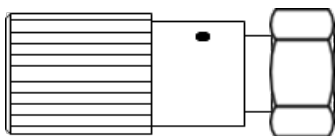
For media temperatures up to 170°C, the valve can be installed either vertically or horizontally.

If the media temperature exceeds 170°C, the valve must be installed with the electric actuator or thermostat facing downwards.

2-WAY CONTROL VALVE – BALANCED TYPE G1FB & H1FB

4. Commissioning

Manual adjusting device



The device includes a built-in stuffing box.

It allows for tightening and manual operation of the valve when no actuator is installed - for example, during construction periods.

Maximum operating temperature: 170°C.

5. Flow directional marking

The valve is marked with an arrow indicating the correct flow direction of the media. The arrow is located on the nameplate mounted on the valve.

6. Operation

When no actuator is installed, the valve remains fully open due to the internal spring mechanism.

Applying pressure to the spindle causes the internal cone to close the valve.

When used with our thermostats or electric actuators, the valve will close as the temperature rises.

2-WAY CONTROL VALVE – BALANCED TYPE G1FB & H1FB

7. Maintenance schedule – age management.

The gaskets have a durability of approximately 8 years at continuous use. However, it is recommended to inspect and changed the gaskets every 4 years if possible.

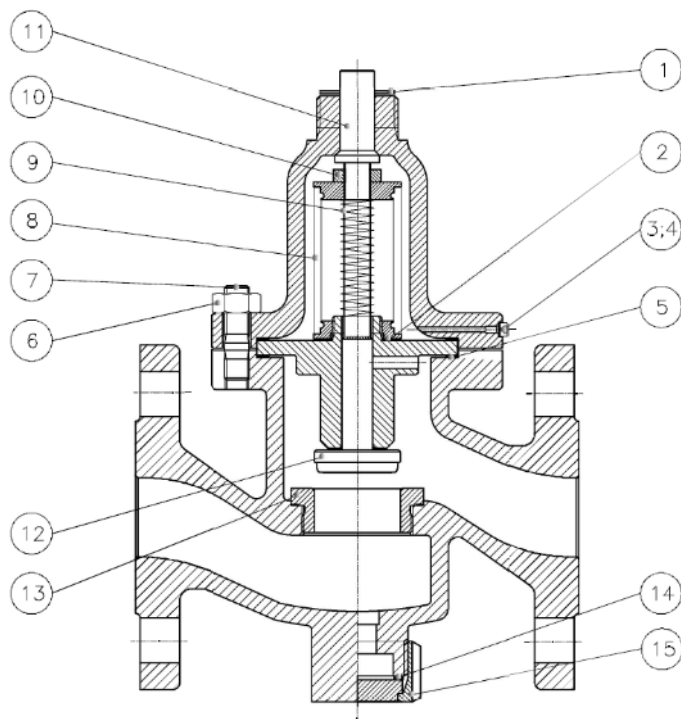
8. Maintenance actuator mounted on the valve:

Follow the separate instructions manual according to the actuator type which is installed on the valve.

Data sheets and manual - are available on www.cloriuscontrols.com.

2-WAY CONTROL VALVE – BALANCED TYPE G1FB & H1FB

9. Maintenance – and spares



Valve DN 25-65 G/H1FB

Pos.	GB
1	Gasket
2	Gasket
3	Washer
4	Nut
5	Gasket
6	Nut
7	Stud bolt
8	Bellow
9	Spring
10	Nut
11	Press button
12	Cone
13	Seat
14	Gasket
15	Screw cap

- a. Remove actuator (and positioner if installed) following separate actuator instructions – Note: When the actuator is removed the valve will no longer be tight.
- b. Replace gasket positions 1 & 2
- c. Replace gasket position 5
- d. Replace flange gaskets.
- e. Important note for position 1: A new gasket must be installed after each time the graphite gasket has been tightened and loosened again otherwise it will leak.
- f. Follow separate instructions for the actuator on how to calibrate and install the actuator.
If the actuator is not mounted, it is possible to install a manual adjusting device in order to secure no external leakage from the valve.

2-WAY CONTROL VALVE – BALANCED TYPE G1FB & H1FB

10. Transport and storage

The valve must be transported and stored dry and clean. In humid rooms, a drying material or heating must be used to avoid condensation.

During transport and intermediate storage, the valve should not be exposed to temperatures lower than -10°C.

The valves are painted (top coated) on the outside. This coating must remain without damage, otherwise the faulty spots must be repaired immediately. The standard packaging protects valves and equipment against rain and snow during trucking.

For critical transports, such as sea freight, equipment will be protected by VCI (Volatile Corrosion Inhibitor) material.

If protected by VCI do not remove the packaging until the equipment is going to be installed.

RELATED DOCUMENTS	
DATA SHEETS	DESCRIPTION
0-2.4.03	2-WAY CONTROL VALVE TYPE H1FB – DN25-80
S-2.4.03	SPARE PARTS
0-2.5.03	2-WAY CONTROL VALVE TYPE G1FB – DN25-65
S-2.5.03	SPARE PARTS

2-WAY CONTROL VALVE – BALANCED TYPE G1FB & H1FB

For further information please write to

mail@cloriuscontrols.com

or visit us at

www.cloriuscontrols.com

End of instruction