

2-way Control Valve type G2F

Nodular cast iron, 2 seats, PN 25, DN 20 – 80 mm, Flanged ends

0-2.5.04-F

Page 1 of 2



TECHNICAL DATA

Materials:

- Valve body	Nodular cast iron EN-GJS-400-15
- Spring	1.4568
- Cone	1.4408, 1.4305
- Gasket	Stainless steel foil and graphite
- Upper seat	AISI 303
- Lower seat	1.4301, 1.4305, 1.4307
- Bolts, nuts	24 CrMo 4/A4
Nominal pressure	PN 25
Seating	Double seated
Flow characteristic	Quadratic
Leakage rate	$\leq 0.5\%$ of Kvs
Regulating capability	Kvs/Kvr > 25

Flanges drilled according to	EN 1092-2 PN 25
Counter flanges	DIN 2634
Adjustable seat interspace	

APPLICATIONS

Control valves type G2F are designed for regulating hot water, steam and hot oil systems. The double-seated valves are used in installations where the system pressure necessitates a closing force greater than available in the actuator programme for a single-seated valve. The valves are used in conjunction with our temperature or pressure differential regulators for controlling industrial processes, district or central heating plants or marine installations.

DESIGN

The valve components - spindle, seats and cone - are made of stainless steel. The valve body is made of nodular cast iron EN-GJS-400-15 with flanges drilled according to EN 1092-2. The thread for the actuator connection is G1B ISO 228. The valves are double-seated. The leakage rate is less than 0.5% of the full flow (according to VDI/VDE 2174).

FUNCTION

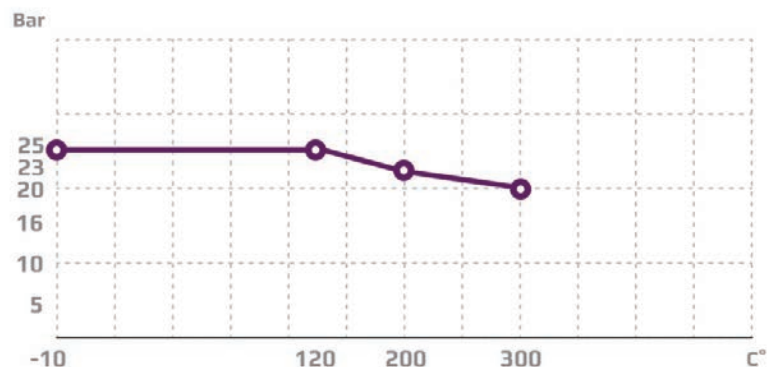
Without the actuator being connected, the valve is held in open position by means of a spring. With pressure on the spindle the valve will close. In connection with our thermostats, pneumatic or electric actuators, the valves will close at rising temperatures. For cooling circuits the valve can be used in conjunction with a reverse acting electric actuator. Alternatively a reverse acting valve can be used with our self-acting thermostats. The quadratic characteristic will not cease, until the flow has dropped below 4% of the full flow.

FEATURES

- Simple design secures reliable controls.
- Location of the pack box in the actuator makes the valve service friendly
- Reliable and secure due to internal parts of stainless steel

PRESSURE/TEMPERATURE DIAGRAM

According to DIN 2401



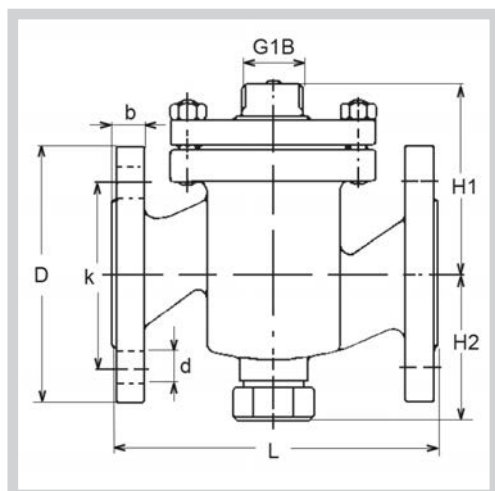
Subject to change without notice.

MOUNTING

The valve can be installed with vertical as well as horizontal spindles. For valve temperatures of max. 170 °C, the thermostat/ actuator can be fitted below or above the valve. For valve mounted with thermostats in media temperatures above 170 °C, a cooling unit has to be applied with connection downwards (please refer to data sheet for thermostat accessories). For electric actuators a high temperature adaptor must be used (please refer to data sheets for the electric actuators).



DIMENSION SKETCH



Type	L mm	H1 mm	H2 mm	D (dia.) mm	b mm	k (dia.) mm	d mm dia. (number)
20 G2F	150	85	70	105	16	75	14x(4)
25 G2F	160	95	77	115	16	85	14x(4)
32 G2F	180	105	82	140	18	100	19x(4)
40 G2F	200	110	92	150	19	110	19x(4)
50 G2F	230	125	102	165	19	125	19x(4)
65 G2F	290	135	120	185	19	145	19x(4)
80 G2F	310	145	130	200	19	160	19x(8)

SPECIFICATIONS

Type	Flange connection DN in mm	Opening mm	k_{vs} -value m^3/h	Lifting height mm	Weight kg
20 G2F	20	20	5	6.5	5
25 G2F	25	25	7.5	7	6.5
32 G2F	32	32	12.5	8	9
40 G2F	40	40	20	9	11
50 G2F	50	50	30	10	16
65 G2F	65	65	50	11	21
80 G2F	80	80	80	13	38