

2-way Control Valve type H2F

Cast Steel, PN 40, DN 20 – 80 mm

O-2.4.05-K

Page 1 of 2



TECHNICAL DATA

Materials:	
- Valve body	Cast steel GP240GH (G5-C25)
- 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 40
Seating	Double-seated
Flow characteristic	Quadratic
Function	Closes by pressing the spindle
Leakage rate	≤ 0.5% of Kvs
Regulating capability	Kvs/Kvr > 25

Flanges drilled according to	EN 1092-1 PN 40
Counter flanges	DIN 2635
Adjustable seat interspace	

Subject to change without notice.

APPLICATIONS

Control valves type H2F 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 cast steel GP240GH (G5-C25) with flanges drilled according to EN 1092-1. The connection thread for the actuator 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

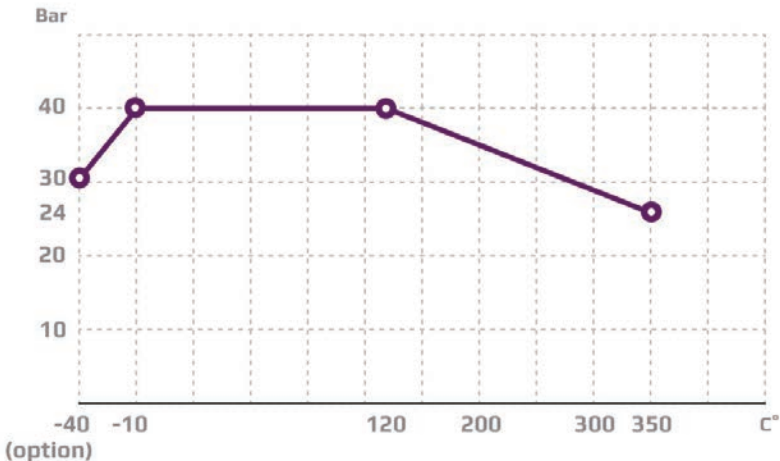
Without the actuator being connected, the valve is held in open position by means of a spring. With pressure on the spindle the valve will close. In connection with thermostats, pneumatic or electric actuators, the valves will close at rising temperatures. For cooling circuits the valve can be used in 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

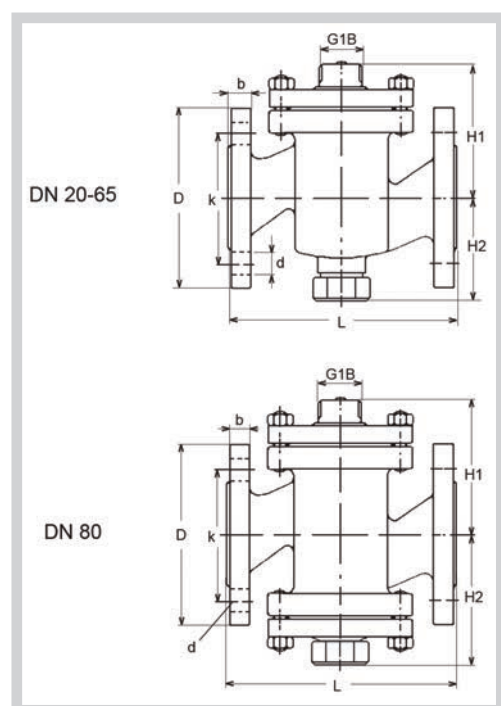
According to DIN 2401



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	b mm	D (dia.) mm	k (dia.) mm	d mm dia. (number)
20 H2F	150	85	70	18	105	75	14x(4)
25 H2F	160	95	77	18	115	85	14x(4)
32 H2F	180	105	82	18	140	100	18x(4)
40 H2F	200	110	92	18	150	110	18x(4)
50 H2F	230	125	102	20	165	125	18x(4)
65 H2F	290	135	120	22	185	145	18x(8)
80 H2F	310	145	165	24	200	160	18x(8)

SPECIFICATIONS

Type	Flange connection DN in mm	Opening (mm)	k_v -value m^3/h	Lifting height (mm)	Weight (kg)
20 H2F	20	20	5	6.5	5
25 H2F	25	25	7.5	7	6.5
32 H2F	32	32	12.5	8	9
40 H2F	40	40	20	9	11
50 H2F	50	50	30	10	16
65 H2F	65	65	50	11	21
80 H2F	80	80	80	13	38