2-way control valves type H2F, Cast steel PN 25, DN 100 – 150 mm

Characteristics

- Nominal pressure PN 25
- Regulating capability $\frac{k_{vs}}{k_{vr}} > 25$
- Double seated
- Characteristic - almost linear

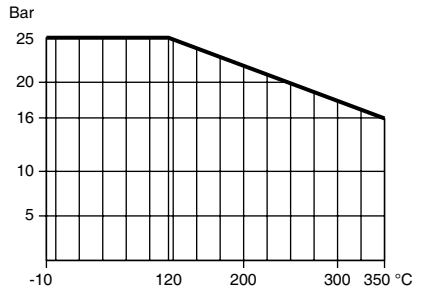
Applications

Control valves type H2F are designed for use in regulating high pressure hot water, steam and heat transfer oil, ammonia, freon, etc.
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 temperature or pressure differential regulators for controlling district or central heating plants, industrial processes or marine installations.

Dimensioning

For sizing of control valves and selection of actuators please see “Quick Choice” datasheet No. 9.0.00.

Pressure/Temperature Diagram



Design

The valve components – spindle, seats and cone – are made of stainless steel. The valve body is made of cast steel GS-C25 with flanges drilled according to EN 1092-1. The connection thread for the actuator is G1B ISO 228.
The valves are double-seated and designed for tight closure. The leakage rate is less than 0.5% of the full flow (according to VDI/VDE 2174).

Quality assurance

All valves are manufactured under an ISO 9001 certification, and are pressure and leakage tested before shipment.
For marine applications the valves can be supplied with relevant test certificates from recognized classification societies.

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 or electronic actuators, the valves will close at rising temperatures. For cooling circuits a reverse acting valve can be used.
The linear characteristic will not cease, until the flow has dropped below 4% of the full flow.

Technical Data

Materials	
– Valve body	Cast steel GS-C25
– Components	Stainless steel
– Bolts, nuts	24 CrMo 4/A4
Nominal pressure	PN 25
Seating	Double seated
Valve characteristic	Linear
Regulating capability	$\frac{k_{vs}}{k_{vr}} > 25$
Function	Closing with pressure on spindle
Leakage rate	≤ 0.5% of k_{vs}
Temperature range	See pressure/ temperature diagram
Mounting	See page 2
Flanges drilled according to EN 1092-1	
Counter flanges	DIN 2635
Colour	Green

Specification

Type	Flange connection DN	Opening mm	k_{vs}-value m^3/h	Lifting height mm	Weight kg
100 H2F	100	100	125	15	38
125 H2F	125	125	215	18	73
150 H2F	150	150	310	18	76

Subject to change without notice.

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2-way control valves type H2F, Cast steel PN 25, DN 100 – 150 mm

Definition of k_{VS}-value

The k_{VS}-value is identical to the IEC flow coefficient k_V and defined as the water flow rate in m^3/h through the fully open valve by a constant differential pressure, Δp_V, of 1 bar.

Mounting

The valves can be installed with vertical as well as horizontal spindles. For valve temperatures of max. 150°C, the thermostat/actuator can be fitted below or above the valve. For valve temperatures above 150°C, a cooling unit of type KS has to be applied with connection downwards - according to the following instructions:

Valve Temperature	Cooling Unit	Suitable for
150°C - 250°C	KS-4	All actuators
250°C - 300°C	KS-5	Thermostats
250°C - 300°C	KS-6	Valve Motors

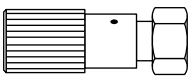
KS-5 or KS-6 must be applied to hot oil systems.

Strainer

It is recommended to use a strainer in front of the control valve if the liquid contains suspended particles.

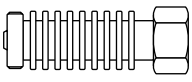
Accessories

Manual Adjusting Device



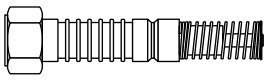
The device has a built-in stuffing box. For sealing and manual operation of valves when an actuator has not been fitted, e.g. during periods of construction.

Cooling Unit KS-4

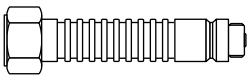


Cooling unit protecting the stuffing box of the motor/thermostat. To be applied at valve temperatures between 150°C and 250°C.º°

Cooling Unit KS-5

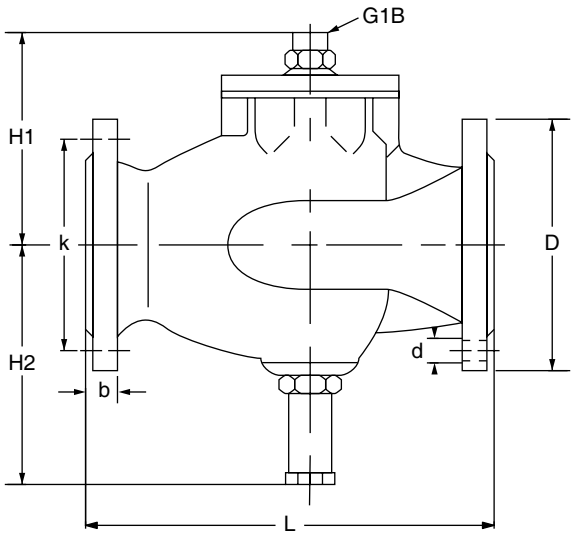


Cooling Unit KS-6



Cooling units with built-in bellow glands, replacing stuffing box of thermostat (KS-5) or valve motor (KS-6). Must be applied at valve temperatures above 250°C and in hot oil systems.

Dimension Sketch



Dimensions

Type	L mm	H1 mm	H2 mm	D (dia.) mm	b mm	k (dia.) mm	d mm dia. (number)
100 H2F	350	185	209	235	24	190	23x(8)
125 H2F	400	240	230	270	26	220	27x(8)
150 H2F	400	240	230	300	28	250	27x(8)

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