

# Data sheet

## Rotary valves HFE 3

### Description



Danfoss HFE rotary valves are primarily designed for regulation of flow temperature in heating systems where a certain leakage can be accepted and where a defined control characteristic is not required.

HFE rotary valves can be used in combination with electric actuators AMB 162 and AMB 182.

#### Features:

- Cast iron body with flange connection
- Lowest leakage in class
- Valve position indicator
- Ergonomic handle
- For mixing and diverting applications
- Flange PN 6 connection

#### Main data:

- DN 20–150
- $k_{vs}$  12–400 m<sup>3</sup>/h
- PN 6
- $t_{max}$  = 110 °C
- 3-way
- S characteristic

### Ordering

Type	DN (mm)	$k_{vs}$ (m <sup>3</sup> /h)	PN	Code No.
HFE 3	20	12	6	<b>065Z0428</b>
	25	18		<b>065Z0429</b>
	32	28		<b>065Z0430</b>
	40	44		<b>065Z0431</b>
	50	60		<b>065Z0432</b>
	65	90		<b>065Z0433</b>
	80	150		<b>065Z0434</b>
	100	225		<b>065Z0435</b>
	125	280		<b>065Z0436</b>
	150	400		<b>065Z0437</b>

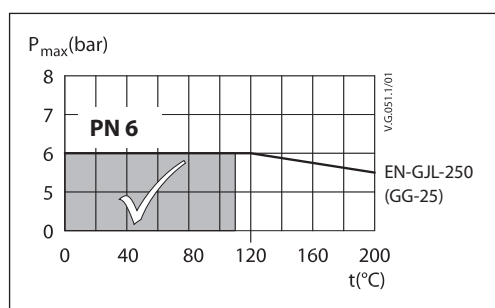
### Spare parts and accessories

Type	DN	Code No.
Replacement handle		<b>065Z0443</b>
Stuffing box and sealing	20-25	<b>065Z0454</b>
	32-40	<b>065Z0455</b>
	50-65	<b>065Z0456</b>
	80	<b>065Z0457</b>
	100-125	<b>065Z0458</b>
	150	<b>065Z0459</b>
Linkage kit for AMB (Gen. 2014)		<b>082H0255</b>

Technical data

Nominal diameter	DN	20	25	32	40	50	65	80	100	125	150
$k_{vs}$	m <sup>3</sup> /h	12	18	28	44	60	90	150	225	280	400
Control characteristic		S characteristic									
Leakage		Diverting: max. 0.5% of $k_{vs}$ / Mixing: max. 1.0 % of $k_{vs}$									
Nominal pressure	PN	6									
Max. closing pressure	bar	0.5									
Torque at PN	Nm	5			10			15			
Medium		Circulation water / glycolic mixture up to 50%									
Medium pH		Min. 7, max. 10									
Medium temperature	°C	2 ... 110									
Connections		Flanges PN 6									
<b>Materials</b>											
Valve body and cover		Grey cast iron EN-GJL-250 (GG25)									
Slide shoe		CuZn36Pb2As (BrassDZR, CW 602N)									
Stuffing box sealing		EPDM									

Pressure temperature diagram



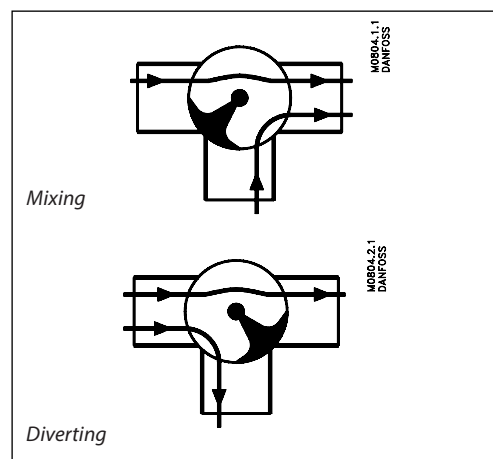
Installation

Valve mounting

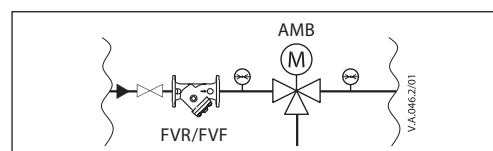
Before valve mounting pipes have to be cleaned and free from abrasion. Mechanical loads on valve body caused by the pipes are not allowed. It is recommended to install a strainer into application to avoid damaging controlling components.

Connection

HFE 3 can be used as a mixing valve, diverting valve and in connection with heat exchangers where a certain leakage can be accepted.



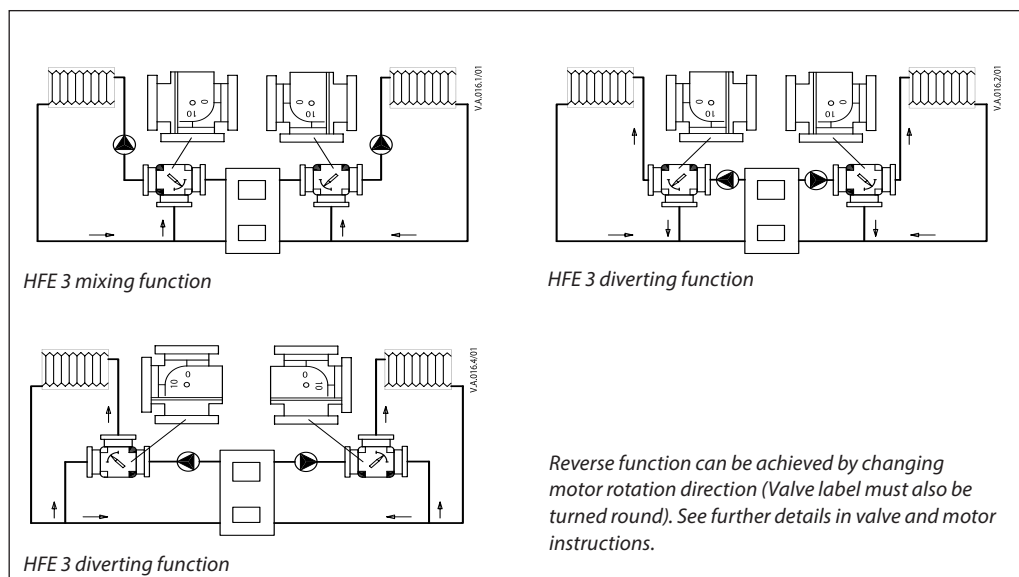
**Note:**  
Install a strainer upstream of the valve (e.g. Danfoss FVR/FVF)



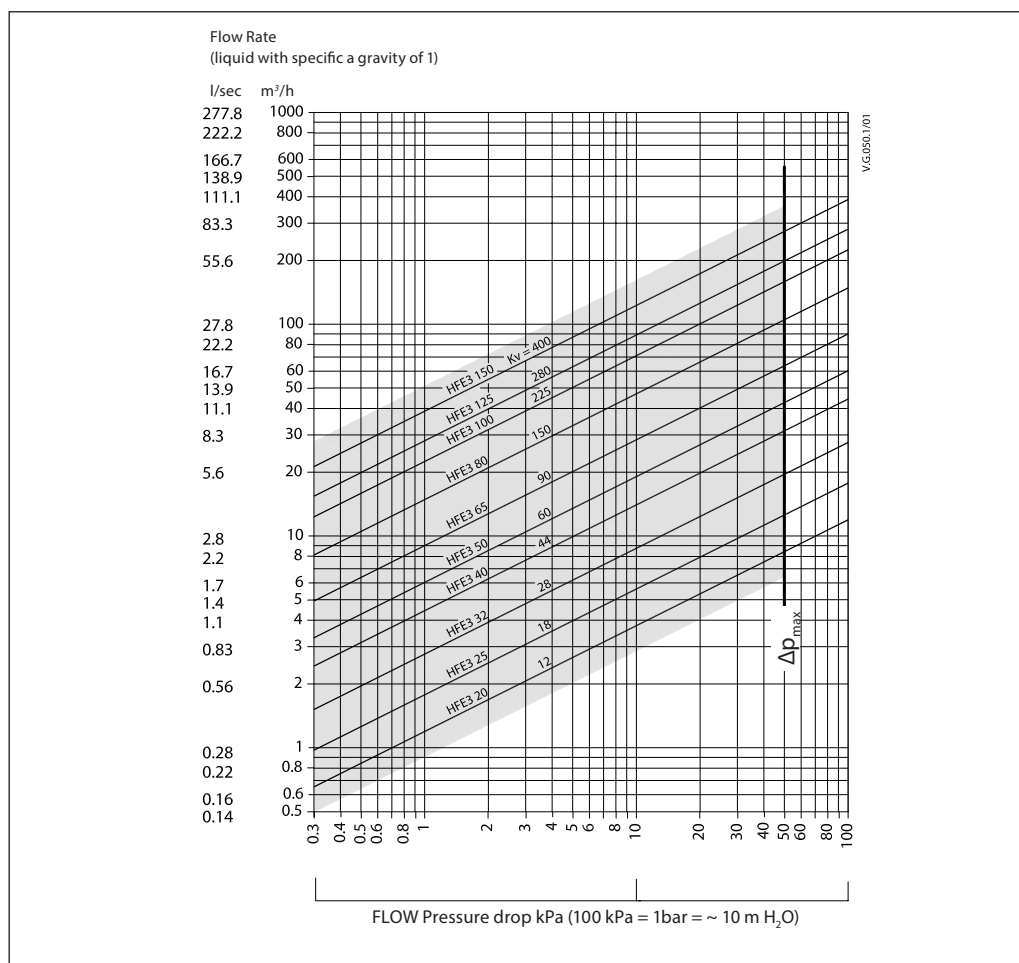
Disposal

The valve must be dismantled and the elements sorted into various material groups before disposal.

Application principles

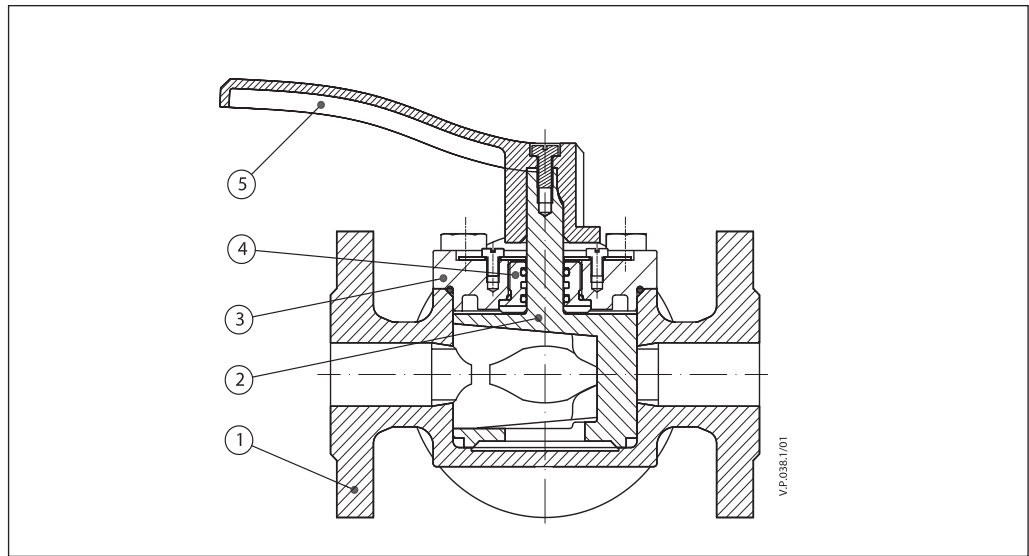


Sizing

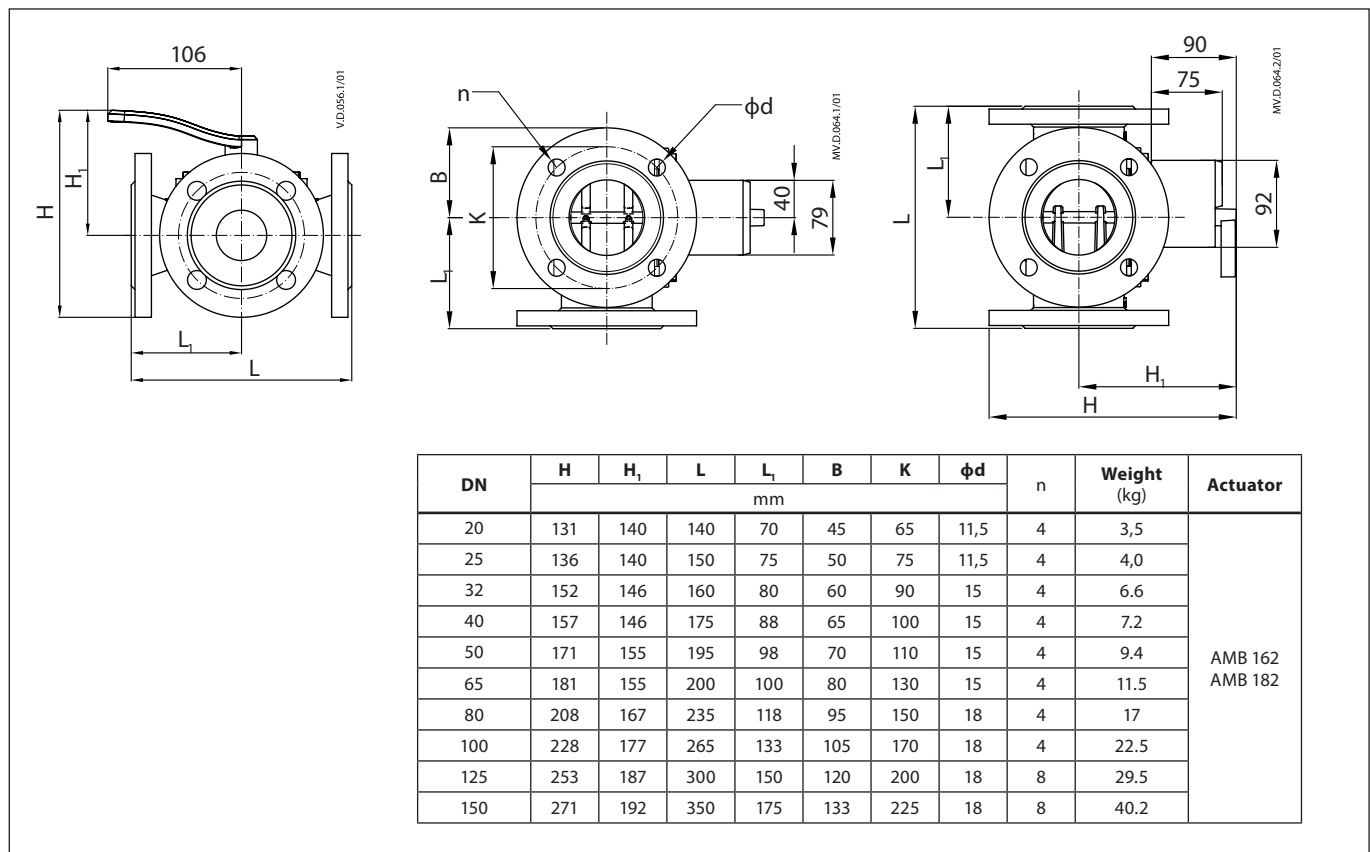


Design

1. Valve body
2. Slide shoe
3. Valve cover
4. Stuffing box
5. Handle



Dimensions



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