

Data sheet

# FVF strainer

Description



FVF strainer is designed for heating, district heating and cooling systems.

Strainer removes and retains foreign particles like welding beads, swarf, sand, etc. carried along by heating / cooling medium.

Strainer is installed to protect sensitive equipment like meters, pumps, control valves against danger caused by foreign particles and in wide range of other applications.

Furthermore, strainer is available with a plug, magnetic insert or ball valve. Combination with ball valve allowing a quick and efficient cleaning.

**Main data:**

- DN 15-300
- PN 16/25
- Temperature:
  - Circulation water / water with glycol: -10 ... 150 °C (PN 16), -20 ... 150 °C (PN 25)
- Connections:
  - flange (strainer) DIN EN 1092-2
  - thread (ball valve)

Ordering

Flange<sup>1)</sup> strainer **FVF**

Picture	DN (mm)	k <sub>vs</sub> <sup>2)</sup> (m <sup>3</sup> /h)	T <sub>max</sub>	Code No.	T <sub>max</sub>	Code No.	T <sub>max</sub>	Code No.
			PN 16 with draining ball valve		PN 16		PN 25	
	15	5.3	150 °C <sup>3)</sup>	<b>065B7726</b>	150 °C	<b>065B7740</b>	150 °C	<b>065B7770</b>
	20	9.5		<b>065B7727</b>		<b>065B7741</b>		<b>065B7771</b>
	25	16.5		<b>065B7728</b>		<b>065B7742</b>		<b>065B7772</b>
	32	20		<b>065B7729</b>		<b>065B7743</b>		<b>065B7773</b>
	40	33		<b>065B7730</b>		<b>065B7744</b>		<b>065B7774</b>
	50	54		<b>065B7731</b>		<b>065B7745</b>		<b>065B7775</b>
	65	95		<b>065B7732</b>		<b>065B7746</b>		<b>065B7776</b>
	80	140		<b>065B7733</b>		<b>065B7747</b>		<b>065B7777</b>
	100	201		<b>065B7734</b>		<b>065B7748</b>		<b>065B7778</b>
	125	350		<b>065B7735</b>		<b>065B7749</b>		<b>065B7779</b>
	150	542		<b>065B7736</b>		<b>065B7750</b>		<b>065B7780</b>
	200	870		<b>065B7737</b>		<b>065B7751</b>		<b>065B7781</b>
	250	1.260		<b>065B7738</b>		<b>065B7752</b>		<b>065B7782</b>
	300	1.735		<b>065B7739</b>		<b>065B7753</b>		<b>065B7783</b>

<sup>1)</sup> Flanges acc. to EN 1092-2 (PN 16 and PN 25 respectively)

<sup>2)</sup> For strainers with normal screens

<sup>3)</sup> To prevent scalds during draining the draining ball valve must be equipped with drain hose, that leads to drainage system

Flange<sup>1)</sup> strainer **FVF, I-pack**

Picture	DN (mm)	k <sub>vs</sub> <sup>2)</sup> (m <sup>3</sup> /h)	T <sub>max</sub>	Code No.
			PN 16	
	15	5.1	150 °C	<b>065B7754</b>
	20	9.2		<b>065B7755</b>
	25	15.1		<b>065B7756</b>
	32	18.4		<b>065B7757</b>
	40	30.6		<b>065B7762</b>
	50	49		<b>065B7763</b>
	65	86.7		<b>065B7764</b>
	80	133.6		<b>065B7765</b>
	100	192.8		<b>065B7766</b>
	125	326.4		<b>065B7767</b>

<sup>1)</sup> flanges acc. to EN 1092-2 (PN 16)

<sup>2)</sup> for strainers with special screens

Ordering (continuous)

Spare parts **FVF-Screen**

Picture	DN (mm)	PN (bar)	Code No.	
			(normal)	(fine)
	15/20	16, 25	<b>065B7810</b>	<b>065B7824</b>
	25		<b>065B7812</b>	<b>065B7826</b>
	32		<b>065B7813</b>	<b>065B7827</b>
	40		<b>065B7814</b>	<b>065B7828</b>
	50		<b>065B7815</b>	<b>065B7829</b>
	65		<b>065B7816</b>	<b>065B7830</b>
	80		<b>065B7817</b>	<b>065B7831</b>
	100		<b>065B7818</b>	<b>065B7832</b>
	125		<b>065B7819</b>	<b>065B7833</b>
	150		<b>065B7820</b>	<b>065B7834</b>
	200		<b>065B7821</b>	<b>065B7835</b>
	250		<b>065B7822</b>	<b>065B7836</b>
	300		<b>065B7823</b>	<b>065B7837</b>

Spare parts **FVF-Gasket**

Picture	DN (mm)	Code No.
	15/20	<b>065B7886</b>
	25/32	<b>065B7887</b>
	40	<b>065B7888</b>
	50	<b>065B7889</b>
	65	<b>065B7890</b>
	80	<b>065B7891</b>
	100	<b>065B7892</b>
	125	<b>065B7893</b>
	150	<b>065B7894</b>
	200	<b>065B7895</b>
	250	<b>065B7896</b>
	300	<b>065B7897</b>

Accessories **FVF-M** magnetic insert

Picture	DN (mm)	Code No.
	15	<b>065B7790</b>
	20	
	25	<b>065B7791</b>
	32	
	40	<b>065B7792</b>
	50	<b>065B7793</b>
	65	<b>065B7794</b>
	80	<b>065B7795</b>
	100	<b>065B7796</b>
	125	
	150	<b>065B7797</b>
	200	<b>065B7798</b>
	250	<b>065B7799</b>
	300	<b>065B7800</b>

Accessories **FVF-B** ball valve

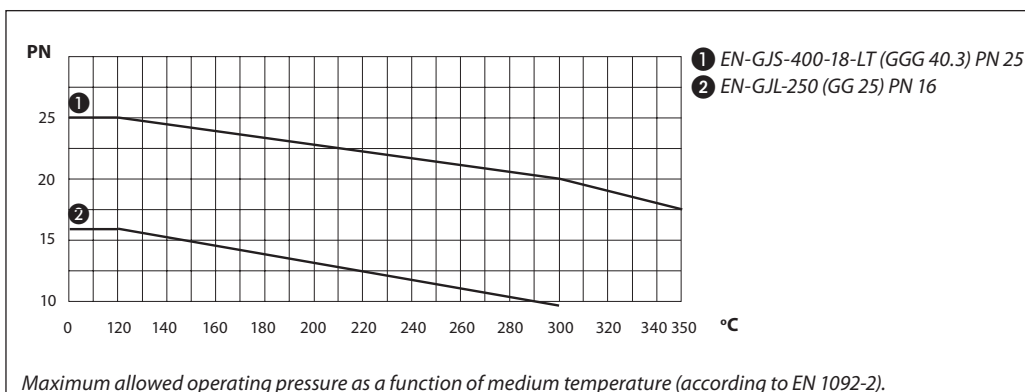
Picture	DN (mm)	T <sub>max</sub> (°C)	Code No.
	10 (used for FVF DN 15 - 50)	150	<b>065B7802</b>
	15 (used for FVF DN 65 - 300)		<b>065B7801</b>

Technical data

Nominal diameter		DN	15	20	25	32	40	50	65	80	100	125	150	200	250	300	
k <sub>vs</sub> value	normal screen	m <sup>3</sup> /h	5.3	9.5	16.5	20	33	54	95	140	201	350	542	870	1260	1735	
	fine screen		5.0	9.0	14.8	18	30	48	85	131	189	320	494	818	1184	1631	
	special screen		5.1	9.2	15.1	18.4	30.6	49	86.7	133.6	192.8	326.4	-				
k <sub>vs</sub> value (with magnetic insert)	normal screen	mm	4.8	8.6	14.9	18	29	49	86	127	183	316	489	809	1172	1613	
	fine screen		4.5	8.1	13.3	16	27	44	77	119	170	297	459	760	1101	1516	
Mesh size	normal screen	n/cm <sup>2</sup>	0.54		0.87				1.18								
	fine screen		0.25										-				
	special screen		0.40										-				
Number of meshes	normal screen	mm	150		64				25								
	fine screen		625										-				
	special screen		280										-				
Flow medium	Circulation water / glycolic water up to 50%																
Nominal pressure	PN	16 or 25															
Medium temperature	°C	-10 ... 150 (PN 16), -20 ... 150 (PN 25) <sup>1)</sup>															
Connection	Flanges acc. to DIN EN 1092-2 (PN 16 and PN 25 respectively)																
<b>Materials</b>																	
Body (strainer)	PN 16	Grey cast iron EN-GJL-250 (GG-25)															
	PN 25	Ductile iron EN-GJS-400-18-LT (GGG 40.3)															
Body (ball valve)	Dezincing free brass CuZn36Pb2As																
Screen	Stainless steel, mat. No 1.4301																
Gasket	Graphite																

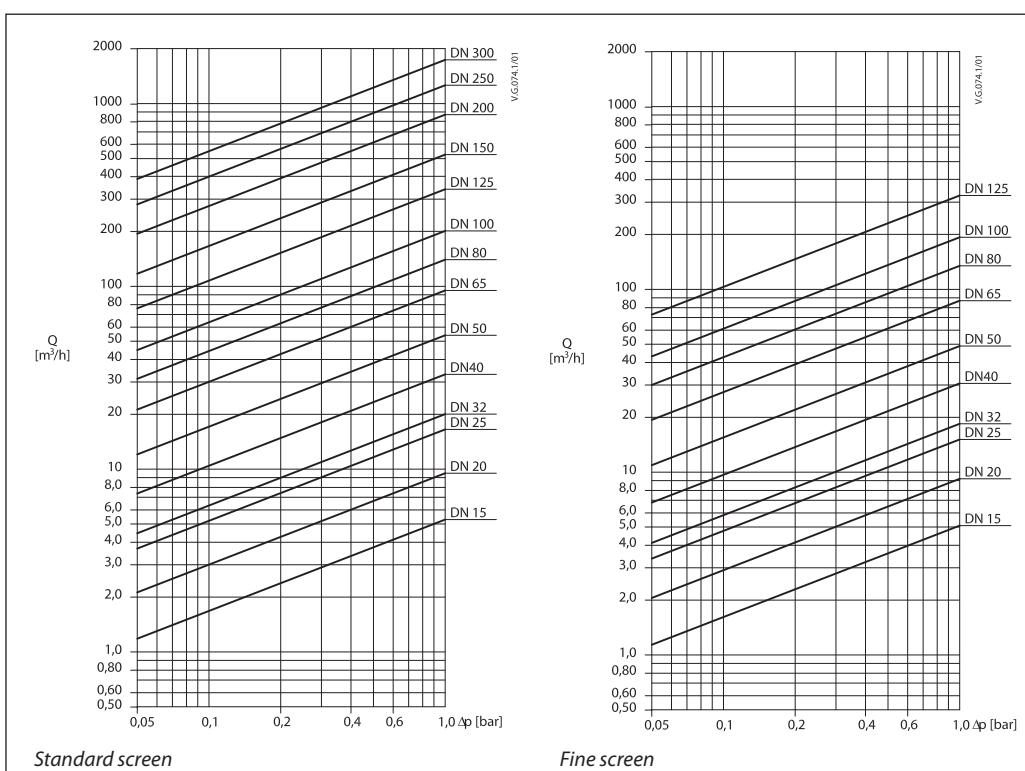
<sup>1)</sup> Danfoss uses environmentally friendly paint that is resistant to a temperature of 150 °C.

**Pressure temperature diagram**



Note: Danfoss uses environment friendly paint which may crack at temperatures above 150 °C.

**Flow diagram**

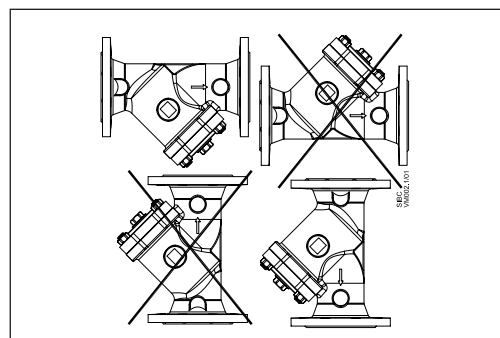


**Installation positions**

The medium flow direction must correspond to an arrow on the strainer body.

Strainers are to be installed in horizontal position with mesh bonnet directed downwards. Vertical position is also allowed (be aware - when medium flows upwards strainer retains all foreign particles but is not able to collect them).

Sufficient space to pull out the mesh for replacement and cleaning must be ensured.

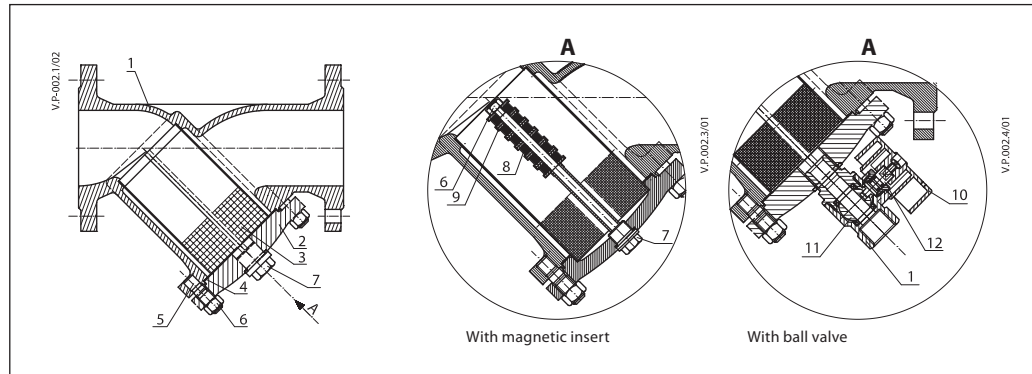


Data sheet

FVF strainer

Design

- 1. Body
- 2. Cover
- 3. Screen
- 4. Gasket
- 5. Screw
- 6. Nut
- 7. Plug screw
- 8. Magnet
- 9. Washer
- 10. Handle
- 11. Ball
- 12. Stem



Dimensions

DN	L	H	PN 16			PN 25			Weight (kg)
			ØD	Ød	dk	ØD	d	dk	
mm									
15	130	75	95	14	65	95	14	65	2.2
20	150	75	105	14	75	105	14	75	3.3
25	160	90	115	14	85	115	14	85	3.8
32	180	90	140	19	100	140	19	100	5.0
40	200	110	150	19	110	150	19	110	6.5
50	230	120	165	19	125	165	19	125	8.5
65	290	140	185	19	145	185	19	145	12.0
80	310	165	200	19	160	200	19	160	16.6
100	350	220	220	19	180	235	23	190	25.0
125	400	260	250	19	210	270	28	220	39.0
150	480	300	285	23	240	300	28	250	61.0
200	600	360	340	23	295	360	28	310	109
250	730	470	405	28	355	425	31	370	162
300	850	560	460	28	410	485	31	430	280

**Ball valve**

DN	For strainers DN	L	L1	H	D
mm					
10	15 - 50	52	43	36	10
15	65 - 300	69	50	52	17.3

Danfoss A/S

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