

01 - 09.5

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**Strainers - flanged
FP 110, FP 210, FP 220**



FP 110 FP 210 FP 220



Strainers - flanged DN 15 - 400, PN 16, 25, 40

Description

Flanged strainers FP 110, 210, 220 are designed to clean process media from mechanical impurities. The strainers excel with a robust body construction made of stainless steel with possibility of draining without necessity of bonnet dismantling.

Application

The strainers are designed for applications in heating and other industries especially in hot-water, possibly steam circuits. The wide range of diametres enables using of these strainers in most of the common applications.

Process media

The strainers are suitable for water, steam, air and other neutral media compatible with material of body and screen.

Installation

Flow direction is determined by the arrows on the body. General mounting position of the strainer in a horizontal pipeline is by the bonnet downwards.

In a vertical pipeline is allowed top-down flow direction only. When used for water steam or gases, preferable mounting position is to avoid floatation (i. e. bonnet sideward).

Technical data

Series	FP 110	FP 210	FP 220
Execution	Strainer - flanged		
Diameter nominal range	DN 15 to 400	DN 15 to 200	DN 15 to 200
Nominal pressure	PN 16	PN 25	PN 40
Material of body and bonnet	Grey cast iron EN-JL1040 (EN-GJL-250)	Spheroidal cast iron EN-JS1050 (EN-GJS-500-7)	Cast steel 1.0619 (GP240GH)
Mesh screen material	Stainless steel 1.4301		
Range of operating temp.	0 to +300°C	-10 to +350°C	-20 to +400°C
Connection	Type B1 (raised-faced flange) acc. to ČSN-EN 1092-2 (1/1999)		B1 acc. to ČSN-EN 1092-1 (4/2002)
Face to face dimensions	Face to face dimensions acc. to ČSN-EN 558-1, section 1		

Kvs values and loss coefficient ζ (zeta)

	DN															
	15	20	25	32	40	50	65	80	100	125	150	200	250	300	350	400
Kvs [m ³ /h]	5.7	10.4	16.4	27.3	42	64.7	96	149	223	347	480	853	1104	1450	1800	2200
ζ	2.5	2.4	2.3	2.3	2.3	2.4	3.1	3.0	3.2	3.2	3.5	3.5	5.1	6.2	7.4	8.5

Mesh size table

Row "A" is a mesh screen standard execution		DN															
		15	20	25	32	40	50	65	80	100	125	150	200	250	300	350	400
A	Marking	FS45				FS28				FS15							
	Size	Ø 1,0 mm				Ø 1,25 mm				Ø 1,6 mm							
B	Marking	FS100															
	Size	Ø 0,6 mm															
C	Marking	FS200															
	Size	Ø 0,5 mm															
D	Marking	FS300															
	Size	Ø 0,4 mm															
E	Marking	FS400															
	Size	Ø 0,32 mm															
F	Marking	FS600															
	Size	Ø 0,25 mm															
G	Marking	FS1.0								FS1.6				FS3.1			
	Size	Ø 1,0 mm								Ø 1,6 mm				Ø 3,1 mm			

Specification code for ordering the strainers series FP

		XX	XXX	X	XX	XX	/	XXX	-	XXX
1. Strainer	Strainer - flanged	FP								
2. Series	Strainer made of grey cast iron EN-JL1040		110							
	Strainer made of spheroidal cast iron EN-JS1050		210							
	Strainer made of cast steel 1.0619		220							
3. Execution	Stainless screen			S						
	Stainless screen with magnetic insertion ¹⁾			M						
4. Mesh size	A to G (according to the Mesh size table)				X					
5. Body material	Grey cast iron EN-JL1040		110		3					
	Spheroidal cast iron EN-JS1050		210		4					
	Cast steel 1.0619		220		1					
6. Nominal pressure	PN 16		110			16				
	PN 25		210			25				
	PN 40		220			40				
7. Max. operating temp. °C	300°C		110					300		
	350°C		210					350		
	400°C		220					400		
8. Nominal diameter	DN 15 to 400		110							XXX
	DN 15 to 200		210							XXX
	DN 15 to 200		220							XXX

Order example: **FP 210 SA4 25/250-65**

Dimensions and weights for the strainers series FP

DN	PN 16					PN 25					PN 40					PN 16, 25, 40				PN16,25	PN 40	PN 16	PN 25	PN 40							
	Dz	Dp	Do	n	d	g	Dz	Dp	Do	n	d	g	Dz	Dp	Do	n	d	g	L	B	C	H ₁	H	H	m	m	m				
	mm	mm	mm		mm	mm	mm	mm	mm		mm	mm	mm	mm	mm		mm	mm	mm	mm	mm	mm	mm	mm	kg	kg	kg				
15	95	46	65	4	14	14	95	46	65	4	14	14	95	45	65	4	14	16	130	56	23	135	90	70	2,6	2,6	2,7				
20	105	56	75			16	105	56	75			16	105	58	75			18	150	68	28	150	100	80	3	3	3,6				
25	115	65	85			16	115	65	85			16	115	68	85			18	160	82	36	180	115	88	4,3	4,3	4,5				
32	140	76	100			18	140	76	100			18	140	78	100			18	180	98	42	215	135	100	6,8	6,8	6,3				
40	150	84	110			18	150	84	110			19	150	88	110			18	200	114	50	240	150	125	8,8	9	8,7				
50	165	99	125			20	165	99	125			19	165	102	125			20	230	119	61,5	250	160	140	11	10,7	11				
65	185	118	145	8	19	19	185	118	145	8	19	19	185	122	145	8	18	22	290	134	78,5	285	180	170	16,8	16,1	15				
80	200	132	160			22	200	132	160			19	200	138	160			24	310	149	89,5	330	215	190	19,5	18,2	22				
100	220	156	180			24	235	156	190			19	235	162	190			22	350	169	109,5	365	235	225	34	32,5	31,5				
125	250	184	210			26	270	184	220			19	270	188	220			26	400	199	137,5	425	280	260	42,5	39,2	46				
150	285	211	240			26	300	211	250			20	300	218	250			28	480	224	160	480	320	320	56	52,2	71				
200	340	266	295			30	360	274	310			22	375	285	320			12	30	34	600	284	210	610	405	420	110	103	135		
250	405	319	355	12	28	32	---	---	---	12	---	---	---	---	---	---	---	730	434	258	915	540	---	165	---	---					
300	460	370	410			32	---	---	---			---	---	---	---			---	---	---	---	---	850	555	308	1110	680	---	285	---	---
350	520	429	470			36	---	---	---			---	---	---	---			---	---	---	---	---	---	980	640	365	1200	755	---	373	---
400	580	480	525	16	31	38	---	---	---	---	---	---	---	---	---	---	---	1100	695	415	1320	835	---	461	---	---					

Max. permissible pressure values [MPa]

Material	PN	Temperature [°C]						
		120	150	200	250	300	350	400
Grey cast iron EN-JL1040 (EN-GJL-250)	16	1,60	1,44	1,28	1,12	0,96	---	---
Spher. cast iron EN-JS1050 (EN-GJS-500-7)	25	2,50	2,38	2,25	2,00	1,75	1,38	---
Cast steel 1.0619 (GP240GH)	40	4,00	4,00	3,50	3,15	2,80	2,45	2,10

