

Strainer

BOACHEM-FSA

PN 10-40
DN 15-400

Type Series Booklet



Legal information/Copyright

Type Series Booklet BOACHEM-FSA

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Check Valves and Strainers

Strainers to DIN/EN

BOACHEM-FSA



Main applications

- Food industry and beverages industry
- Petrochemical industry
- Process engineering
- Sugar industry

Fluids handled

- Aggressive liquids
- Steam
- Explosive fluids
- Fluids containing gas
- Gas
- Fluids posing a health hazard
- Toxic fluids
- High-temperature hot water
- Highly aggressive fluids
- Condensate
- Corrosive fluids
- Oil
- Feed water
- Thermal oil
- Other fluids on request.

Operating data

Operating properties

Characteristic	Value
Nominal pressure	PN 10 - 40
Nominal size	DN 15 - 400
Max. permissible pressure [bar]	40
Min. permissible temperature [°C]	≥ -10
Max. permissible temperature [°C]	≤ +400

Selection as per pressure/temperature ratings (⇒ Page 5)

Body materials

Overview of available materials

Material	Material number	Temperature limit
GX5CrNiMo19-11-2	1.4408	≤ 400 °C

Design details

Design

- Y-pattern strainer
- Screen made of stainless steel
- Fully confined cover gasket
- Materials free from non-ferrous metals
- The valves satisfy the safety requirements of Annex I of the European Pressure Equipment Directive 2014/68/EU (PED) for fluids in Groups 1 and 2.
- The valves do not have a potential internal source of ignition and can be used in potentially explosive atmospheres, Group II, category 2 (zones 1+21) and category 3 (zones 2+22) to ATEX 2014/34/EU.

Variants

- Oil and grease-free
- Serrated gasket (PTFE-coated)
- Applications down to -60 °C
- Fine screen
- Other flange designs

Product benefits

- Fully confined cover gasket
- Screen made of stainless steel

Related documents

Information/documents

Document	Reference number
Type series booklet BOACHEM-ZXA (globe valve with gland packing)	8149.1
Type series booklet BOACHEM-ZXAB (bellows-type globe valve)	8146.1
Type series booklet BOACHEM-RXA (lift check valve)	8147.1
Operating manual BOACHEM	8115.8

Purchase order specifications

Please specify the following information in all enquiries or purchase orders:

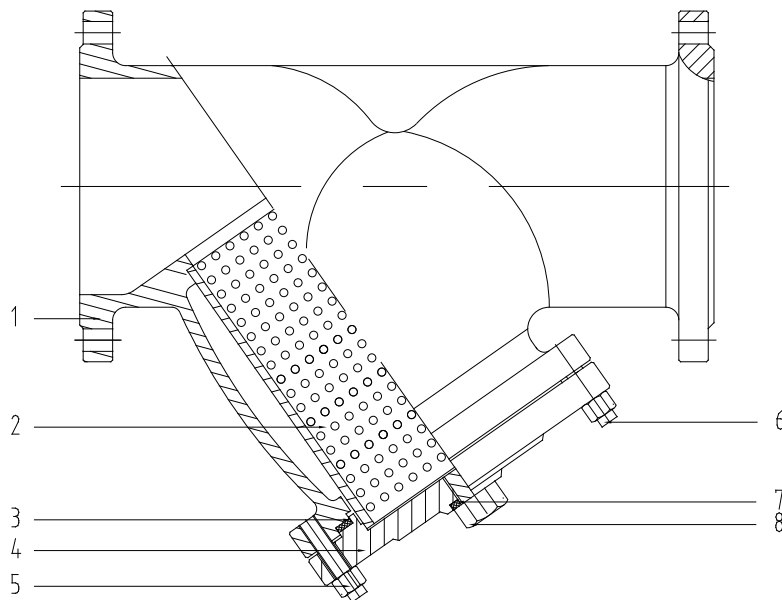
1. Type
2. Nominal pressure
3. Nominal size
4. Operating pressure
5. Differential pressure
6. Operating temperature
7. Fluid handled
8. Pipe connection
9. Variants
10. Reference number

Pressure/temperature ratings

Permissible operating pressure [bar] (to EN 1092-1)¹⁾

Nominal pressure PN	Material	[°C]							
		20	100	150	200	250	300	350	400
10	1.4408	10	10	9	8,4	7,9	7,4	7,1	6,8
16		16	16	14,5	13,4	12,7	11,8	11,4	10,9
25		25	25	22,7	21	19,8	18,5	17,8	17,1
40		40	40	36,3	33,7	31,8	29,7	28,5	27,4

Materials

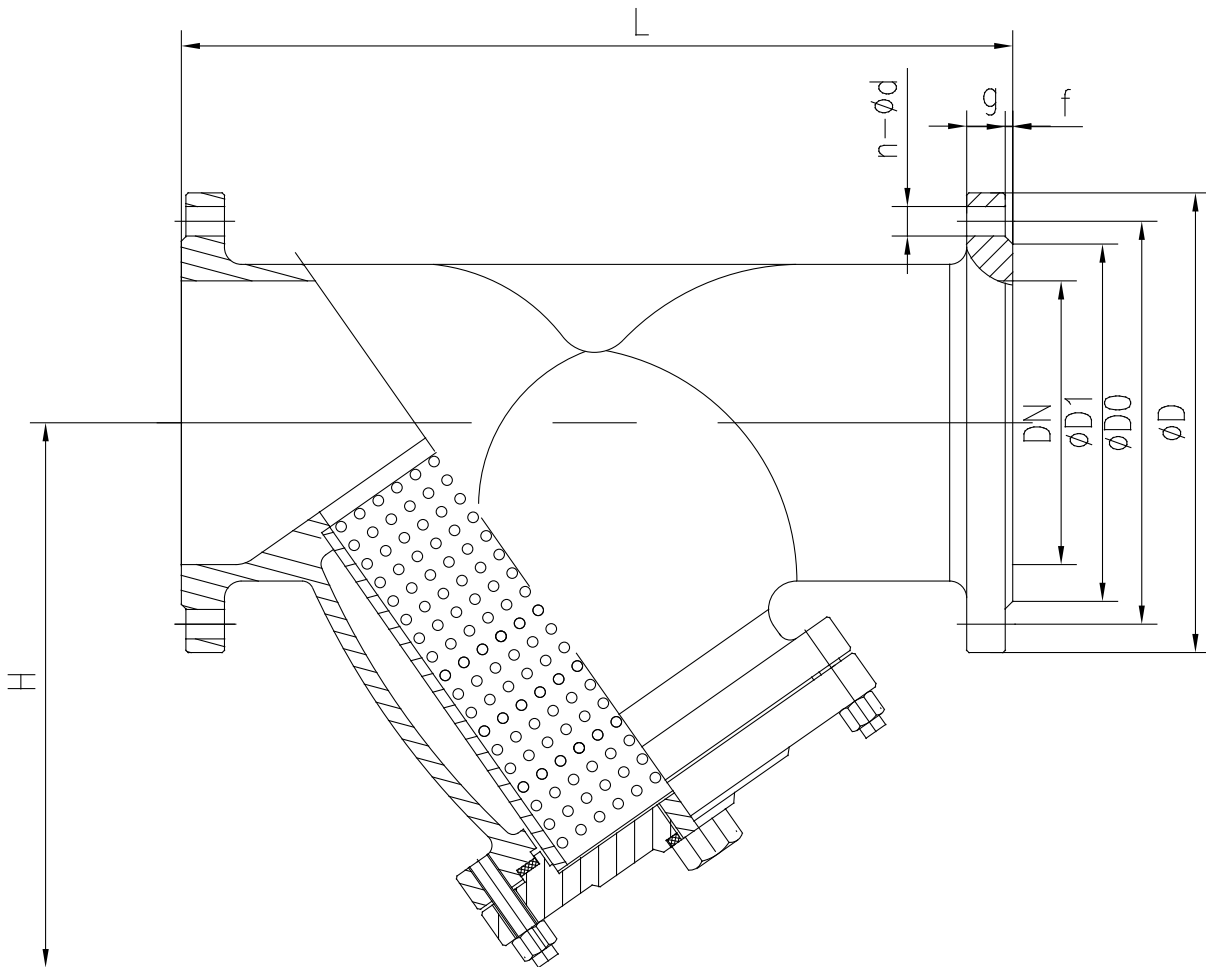


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Parts list

Part No.	Description	Material	Material number
1	Body	G X 5 CrNiMo 19-11-2	1.4408
2	Screen ²⁾	Stainless steel 316	-
3	Gasket ²⁾	Graphite + stainless steel 316	-
4	Cover	G X 5 CrNiMo 19-11-2	1.4408
5	Nut	A4-80	-
6	Stud	A4-70	-
7	Washer	SS316	-
8	Screw plug	Stainless steel 316	-

1) The valves are suitable for temperatures down to -10 °C.
2) Spare part

Dimensions and weights


Dimensions [mm] and weights [kg]

PN	DN	L	D	D0	D1	g	f	n × Ø d	H	Screw plug thread	[kg]
10-40	15	130	95	65	45	16	2	4 × 14	85	G 1/2"	3,3
	20	150	105	75	58	18	2	4 × 14	95	G 1/2"	4,0
	25	160	115	85	68	18	2	4 × 14	110	G 5/8"	4,9
	32	180	140	100	78	18	2	4 × 18	125	G 5/8"	7,4
	40	200	150	110	88	18	3	4 × 18	145	G 3/4"	9,2
	50	230	165	125	102	20	3	4 × 18	155	G 3/4"	12
10/16	65	290	185	145	122	18	3	4 × 18	175	G 3/4"	17
	80	310	200	160	138	20	3	8 × 18	210	G 3/4"	21,5
	100	350	220	180	158	20	3	8 × 18	230	G 1 1/8"	27
	125	400	250	210	188	22	3	8 × 18	270	G 1 1/8"	43
	150	480	285	240	212	22	3	8 × 22	300	G 1 1/8"	61
10	200	600	340	295	268	24	3	8 × 22	385	G 1 1/4"	107
	250	730	395	350	320	26	3	12 × 22	535	G 1 1/4"	135
	300	850	445	400	370	26	4	12 × 22	680	G 1 1/4"	220
	350	980	505	460	430	26	4	16 × 22	750	G 1 1/2"	410
	400	1100	565	515	482	26	4	16 × 26	790	G 1 1/2"	535
16	200	600	340	295	268	24	3	12 × 22	385	G 1 1/4"	107
	250	730	405	355	320	26	3	12 × 26	535	G 1 1/4"	147
	300	850	460	410	378	28	4	12 × 26	680	G 1 1/4"	247
	350	980	520	470	438	30	4	16 × 26	750	G 1 1/2"	430
	400	1100	580	525	490	32	4	16 × 30	790	G 1 1/2"	570
25/40	65	290	185	145	122	22	3	8 × 18	175	G 3/4"	18
	80	310	200	160	138	24	3	8 × 18	210	G 3/4"	23
	100	350	235	190	162	24	3	8 × 22	230	G 1 1/8"	32
	125	400	270	220	188	26	3	8 × 26	270	G 1 1/8"	48
	150	480	300	250	218	28	3	8 × 26	300	G 1 1/8"	68

PN	DN	L	D	D0	D1	g	f	n × Ø d	H	Screw plug thread	[kg]
25	200	600	360	310	278	30	3	12 × 26	385	G 1 1/4"	116
	250	730	425	370	335	32	3	12 × 30	535	G 1 1/4"	167
	300	850	485	430	395	34	4	16 × 30	680	G 1 1/4"	271
	350	980	555	490	450	38	4	16 × 33	750	G 1 1/2"	475
	400	1100	620	550	505	40	4	16 × 36	790	G 1 1/2"	620
40	200	600	375	320	285	34	3	12 × 30	385	G 1 1/4"	125
	250	730	450	385	345	38	3	12 × 33	535	G 1 1/4"	189
	300	850	515	450	410	42	4	16 × 33	680	G 1 1/4"	300
	350	980	580	510	465	46	4	16 × 36	750	G 1 1/2"	500
	400	1100	660	585	535	50	4	16 × 39	790	G 1 1/2"	650

Dimensions [mm]

PN	DN	Standard screen				Fine screen			
		Kv [m³/h]	Zeta value	Mesh width	Wire diameter	Kv [m³/h]	Zeta value	Mesh width	Wire diameter
10-40	15	9,0	1,0	0,75	1,0	8,6	1,1	0,5	1,0
	20	15,0	2,0	0,75	1,0	14,3	2,1	0,5	1,0
	25	21,0	2,0	0,75	1,0	20,0	2,1	0,5	1,0
	32	26,0	3,0	0,75	1,0	24,7	3,2	0,5	1,0
	40	32,0	4,0	1,0	1,0	30,4	4,2	0,8	1,0
	50	42,0	6,0	1,0	1,0	39,9	6,3	0,8	1,0
10/16	65	68,0	6,0	1,0	1,0	64,6	6,3	0,8	1,0
	80	100,0	7,0	1,0	1,0	95,0	7,4	0,8	1,0
	100	165,0	6,0	1,2	1,2	156,8	6,3	1,0	1,2
	125	237,0	7,0	1,2	1,2	225,2	7,4	1,0	1,2
	150	318,0	8,0	1,2	1,2	302,1	8,4	1,0	1,2
10	200	600,0	7,0	2,1	1,2	570,0	7,4	2,0	1,2
	250	824,0	9,0	3,0	2,0	782,8	9,5	2,1	2,0
	300	1520,0	6,0	3,0	2,0	1444,0	6,3	2,1	2,0
	350	1650,0	9,0	3,0	2,0	1567,5	9,5	2,1	2,0
	400	2150,0	9,0	3,0	2,0	2042,5	9,5	2,1	2,0
16	200	600,0	7,0	2,1	1,2	570,0	7,4	2,0	1,2
	250	824,0	9,0	3,0	2,0	782,8	9,5	2,1	2,0
	300	1520,0	6,0	3,0	2,0	1444,0	6,3	2,1	2,0
	350	1650,0	9,0	3,0	2,0	1567,5	9,5	2,1	2,0
	400	2150,0	9,0	3,0	2,0	2042,5	9,5	2,1	2,0
25/40	65	68,0	6,0	1,0	1,0	64,6	6,3	0,8	1,0
	80	100,0	7,0	1,0	1,0	95,0	7,4	0,8	1,0
	100	165,0	6,0	1,2	1,2	156,8	6,3	1,0	1,2
	125	237,0	7,0	1,2	1,2	225,2	7,4	1,0	1,2
	150	318,0	8,0	1,2	1,2	302,1	8,4	1,0	1,2
25	200	600,0	7,0	2,1	1,2	570,0	7,4	2,0	1,2
	250	824,0	9,0	3,0	2,0	782,8	9,5	2,1	2,0
	300	1520,0	6,0	3,0	2,0	1444,0	6,3	2,1	2,0
	350	1650,0	9,0	3,0	2,0	1567,5	9,5	2,1	2,0
	400	2150,0	9,0	3,0	2,0	2042,5	9,5	2,1	2,0
40	200	600,0	7,0	2,1	1,2	570,0	7,4	2,0	1,2
	250	824,0	9,0	3,0	2,0	782,8	9,5	2,1	2,0
	300	1520,0	6,0	3,0	2,0	1444,0	6,3	2,1	2,0
	350	1650,0	9,0	3,0	2,0	1567,5	9,5	2,1	2,0
	400	2150,0	9,0	3,0	2,0	2042,5	9,5	2,1	2,0

Mating dimensions as per standard

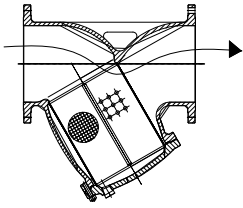
Face-to-face lengths: EN 558-1/1, ISO 5752/1
 Flanges: Mating dimensions to DIN EN 1092-1, ISO 7005
 Flange facing: DIN EN 1092-1, type B1

Other flange designs

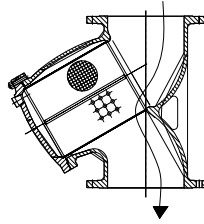
- E.g. groove (type D), tongue (type C), recess (type F), spigot (type E) to EN 1092-1 at both ends
- Other flange designs on request

Installation information

- i** The flow direction must correspond to the arrow indicated on the valve body.
- i** In both horizontal and vertical pipes, installing the strainer with the screen hanging downwards is recommended to facilitate cleaning.



Horizontal installation



Vertical installation



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