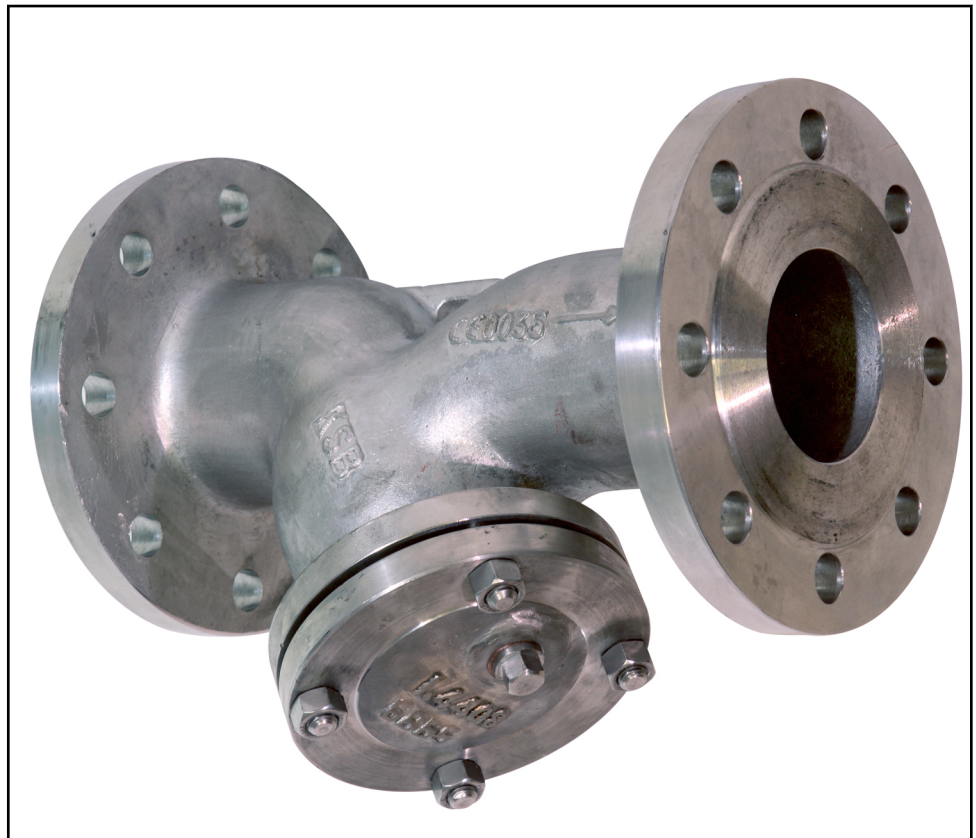


Strainer

## BOACHEM FSA

PN 10-40  
DN 15-400  
Flanged ends

## Type Series Booklet



## **Legal information/Copyright**

Type Series Booklet BOACHEM FSA

KSB Aktiengesellschaft Pegnitz

All rights reserved. Contents provided herein must neither be distributed, copied, reproduced, edited or processed for any other purpose, nor otherwise transmitted, published or made available to a third party without KSB's express written consent.

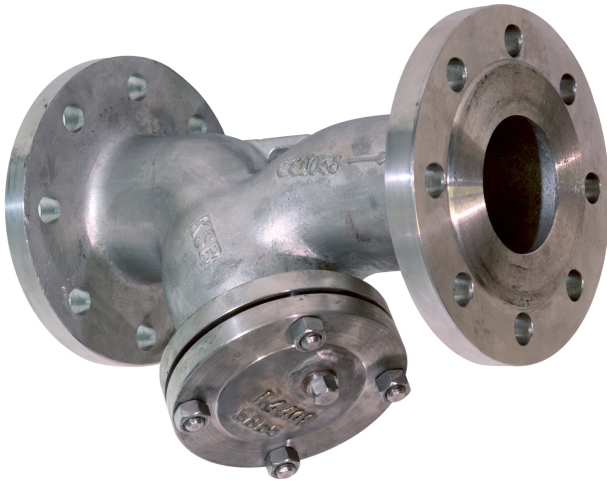
Subject to technical modification without prior notice.

© KSB Aktiengesellschaft Frankenthal 2011

## Check Valves and Strainers

### Strainers

## BOACHEM FSA



### Main applications

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

### Fluids handled

- Aggressive liquids
- Steam
- Explosive fluids
- Solids-laden fluids
- Flammable fluids
- Fluids containing gas
- Gas
- Fluids posing a health hazard
- Toxic fluids
- Hot water
- Highly aggressive fluids
- Condensate
- Corrosive fluids
- Valuable fluids
- Volatile fluids
- Fluids containing mineral oils
- 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	40 bar
Max. permissible temperature	400 °C

Selection as per pressure/temperature ratings (⇒ Page 4)

### Body materials

Overview of available materials

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

### Design details

#### Design

- Y-pattern strainer
- Strainer insert made of stainless steel
- Fully confined bonnet gasket
- Materials free from non-ferrous metals
- The valves satisfy the safety requirements of Annex I of the European Pressure Equipment Directive 97/23/EC (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 94/9/EC.

### Variants

- Oil and grease-free
- Serrated gasket (PTFE-coated)
- Applications down to -60 °C
- Fine-mesh insert
- Heating jacket made of 1.4541/1.4301 or 1.4571/1.4404
- Other flange designs

### Product benefits

- Fully confined cover gasket
- Strainer insert made of stainless steel

### Related documents

- BOACHEM ZXAB bellows-type globe valve, see type series booklet 8150.1.
- BOACHEM ZYAB bellows-type Y-pattern globe valve, see type series booklet 8151.1.
- BOACHEM ZXA globe valve with gland packing, see type series booklet 8149.1.
- BOACHEM ZYA Y-pattern globe valve with gland packing, see type series booklet 8148.1.
- BOACHEM RXA non-return valve, see type series booklet 8147.1.
- Operating manual 8115.8

**On all enquiries/orders please specify**

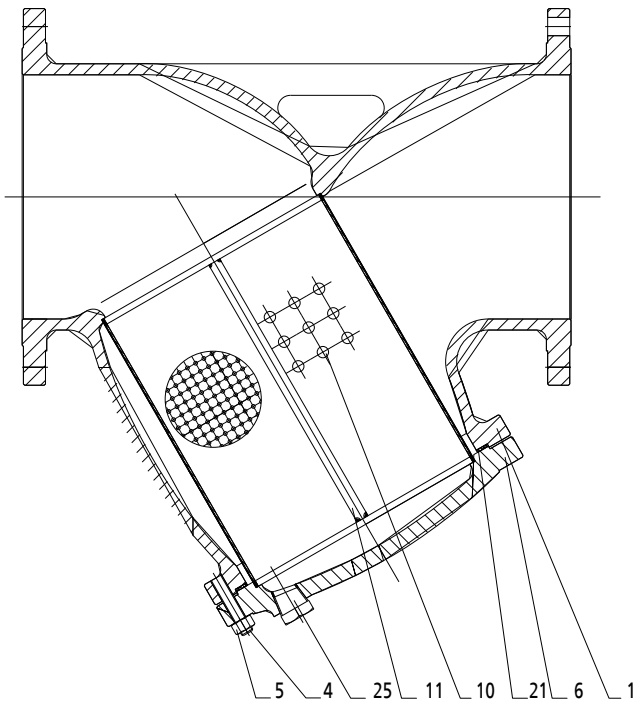
1. Type
2. Nominal pressure
3. Nominal size
4. Operating pressure
5. Differential pressure
6. Operating temperature
7. Fluid handled
8. Pipe connection
9. Variants
10. Number of type series booklet

**Pressure/temperature ratings**

Permissible operating pressures in bar at a temperature of °C (to EN 1092-1)<sup>1)</sup>

Nominal pressure PN	Material	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

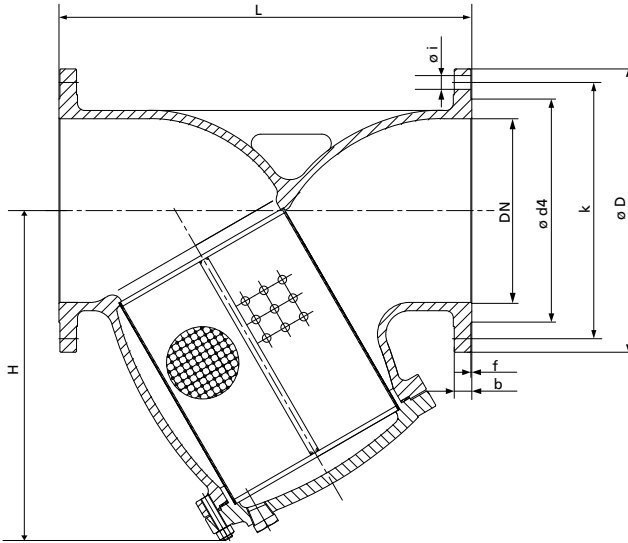
**Materials**



Overview of available materials

Part No.	Description	Material	Material number
1	Body	G X 5 CrNiMo 19-11-2	1.4408
4	Bolt	A4-70	
5	Nut	A4-70	
6	Cover	G X 5 CrNiMo 19-11-2	1.4408
10	Strainer insert	X5 CrNiMo 18-10	1.4408
11	Supporting cage	X5 CrNiMo 18-10	1.4401
21	Gasket	CrNiSt/graphite	
25	Drain plug	X5 CrNiMo 18-10	1.4401

<sup>1)</sup> The valves are suitable for temperatures down to -10 °C.

**Dimensions**

**Dimensions in mm**

PN	DN	L	Ø D	k	No. of bolt holes z	Ø i	Ø d <sub>4</sub> x f	b	H	[kg]
10-40	15	130	95	65	4	14	45 x 2	16	100	5
	20	150	105	75	4	14	58 x 2	18	110	6
	25	160	115	85	4	14	68 x 2	18	120	7,5
	32	180	140	100	4	18	78 x 2	18	125	9
	40	200	150	110	4	18	88 x 2	18	150	10,5
	50	230	165	125	4	18	102 x 3	20	165	14
10/16	65	290	185	145	8	18	122 x 3	22	185	24
	80	310	200	160	8	18	138 x 3	20	190	24
	100	350	220	180	8	18	158 x 3	20	200	29
	125	400	250	210	8	18	188 x 3	22	280	53
10	150	480	285	240	8	22	212 x 3	22	310	75
	200	600	340	295	8	22	268 x 3	24	390	125
	250	730	395	350	12	22	320 x 3	26	455	235
	300	850	445	400	12	22	370 x 4	26	665	400
	350	980	505	460	16	22	430 x 4	26	725	600
16	400	1100	565	515	16	26	482 x 4	26	783	900
	200	600	340	295	12	22	268 x 3	24	390	125
	250	730	405	355	12	26	320 x 3	26	455	239
	300	850	460	410	12	26	378 x 4	28	665	408
	350	980	520	470	16	26	438 x 4	30	725	611
25/40	400	1100	580	525	16	30	490 x 4	32	783	922
	80	310	200	160	8	18	138 x 3	24	190	28
	100	350	235	190	8	22	162 x 3	24	200	43
	125	400	270	220	8	26	188 x 3	26	280	71
25	150	480	300	250	8	26	218 x 3	28	310	99
	200	600	360	310	12	26	278 x 3	30	390	140
	250	730	425	370	12	30	335 x 3	32	455	252
	300	850	485	430	16	30	395 x 4	34	665	420
	350	980	555	490	16	33	450 x 4	38	725	630
40	400	1100	620	550	16	36	505 x 4	40	783	945
	200	600	375	320	12	30	285 x 3	34	390	148
	250	730	450	385	12	33	345 x 3	38	455	266
	300	850	515	450	16	33	410 x 4	42	665	499
	350	980	580	510	16	36	465 x 4	46	725	676
400	1100	660	585	16	39	535 x 4	50	783	978	

### Mating dimensions - Standards

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

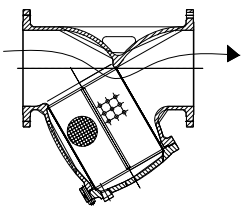
### Other flange designs

- 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

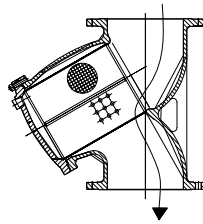
### Installation instructions

**i** The flow direction must correspond to the arrow indicated on the valve body.

**i** In both horizontal and vertical pipes, we recommend to install the strainer with the strainer insert hanging downwards to facilitate cleaning.



Horizontal installation



Vertical installation



**KSB Italia S.p.A.**

Via M. D'Azeglio, 32  
20049 Concorezzo MI  
Telefono 039 6048.1 – Fax 039 6048.097  
[www.ksb.com](http://www.ksb.com)



**Service Centers**

Concorezzo (MI) Via M. D'Azeglio, 32 • tel. 039 6048.11 • fax 039 6048.882  
Rubano (PD) Via Archimede, 13 • tel. 049 630684 • fax 049 630899  
Taranto Via Speciale, 4 • tel. 099 7797449 • fax 099 7701501