Industrial Filter
Series FGB

How to Order

FGB C 04 A – 10 – B 002 N

Vessel material (wetted parts)

Symbol	Vessel material (wetted parts)
C	SS400
S	Stainless steel 304

Number of arranged elements

Symbol	Number of arranged elements
04	4
07	7
13	13
19	19
30	30
36	36
55	55
83	83

Element length

Symbol	Element length
A	L250
B	L500 (L250 x 2)
C	L750 (L250 x 3)
D	L1000 (L250 x 4)

Port size

Symbol	Port size
10	25 (1B)
14	40 (1 1/2B)
20	50 (2B)
24	65 (2 1/2B)
30	80 (3B)
40	100 (4B)
60	150 (6B)

Note) The connection method is JIS 10KFF flange connection.

Element category

Symbol	Element type	Material
B	Sintered metal	Bronze
S		Stainless steel
T	Fiber (Honeycomb)	Polypropylene
G		Glass fiber
H		Cotton
P	Paper	Cotton
M	Micromesh	Stainless steel 304/Epoxy
L		Stainless steel 316

Nominal filtration accuracy (μm) Note)

Symbol	Nominal filtration accuracy (μm)
X50	0.5
001	1
002	2
005	5
010	10
020	20
040	40
050	50
070	70
074	74
075	75
100	100
105	105
120	120

Note) For a comparison with the nominal filtration accuracy according to the element category, refer to pages 1158 and 1159.

Element seal material Note 1)

Symbol	Element seal material
A Note 2)	Non-asbestos
T	Fluororesin
N	NBR
V	FKM

Note 1) Not used with fiber elements.
Note 2) Not possible with bronze elements.

- **Various types of elements can be selected according to the "filtration conditions."**
- **The element is of the hanging type, so the structure is suitable for filtration of gases having a large difference in specific gravity from particles, for "filtration" of severely fouled fluids, and for backwash type elements (sintered metal, micromesh).**
- **During maintenance, the partition plate can be removed together with the element, so internal cleaning and inspection are easy.**
- **When using with a class 2 pressure vessel, this will be handled as a special order product.**

Note 1) (Necessary number of elements) = (Number of arranged elements) x $\frac{\text{(Element length)}}{\text{(Length per element)}}$

Calculation example) If the number of arranged elements is 7, the element length is L500, and length per element is L250, then:

(Necessary number of elements) = $7 \times \frac{500}{250} = 14$

Note 2) The industrial filter/vessel series described in this catalog are products in which an element is incorporated into a vessel.

Note 3) To order only an element (replacement part), refer to "How to Order" on pages 1158 and 1159.

Note 4) When ordering only a vessel (replacement part), delete each symbol for "Element category", "Nominal filtration accuracy (μm)" and "Element seal material" from the above "How to Order".

Note 5) Please use industrial filters in combination with parts made by SMC (vessels, elements etc.)

Specifications

Standard Specifications

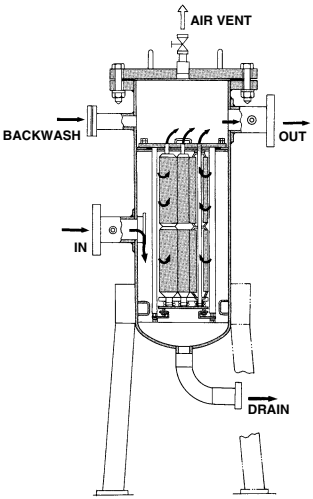
Model	FGB
Max. operating pressure (MPa)	1
Max. operating temperature (°C)	80
Port size	25 to 150 (1^{B} to 6^{B}) Note)
Vessel material (wetted parts)	SS400/Stainless steel 304
Gasket	Non-asbestos

Note) JIS 10KFF is used for this flange.

Applicable Element Specifications

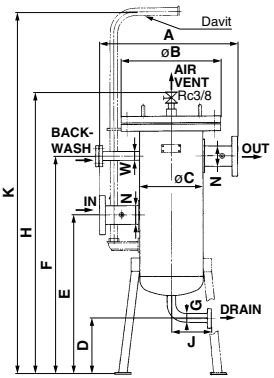
Description	Material	Nominal filtration accuracy (μm)	Size
Sintered metal	Bronze	1, 2, 5, 10, 20, 40 70, 100, 120	ø65 x L250 ø65 x L500 ø65 x L750 ø65 x L1000
	Stainless steel 316		
Paper	Cotton (Phenol)	5, 10, 20	ø65 x L250 ø65 x L500 ø65 x L750 ø65 x L1000
Fiber (Honeycomb)	Cotton	0.5, 1, 5, 10, 20 50, 75, 100	ø65 x L250
	Polypropylene		
	Glass fiber	1, 5, 10, 20	
Micromesh	Stainless steel 304	5, 10, 20, 40 74, 105	ø65 x L250
	Stainless steel 316		

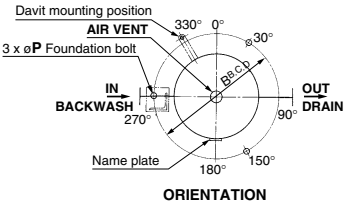
Construction



Element mounting figure

Dimensions





ORIENTATION

Standard Models

(mm)

Model	Number of arranged elements	Element length (L)	N (Port size)			G	W	A	øB	øC	D	E	F	H	J	K	øP	Weight (kg)	Internal volume (L)
FGBC FGBS	4	250	25 (1B)	40 (1 1/2B)	50 (2B)	40 (1 1/2B)	25 (1B)	620	445	318.5	200	730	910	1180	210	—	20	140	52
	4	500	25 (1B)	40 (1 1/2B)	50 (2B)	40 (1 1/2B)	25 (1B)	620	445	318.5	200	990	1170	1440	210	—	20	160	71
	4	750	25 (1B)	40 (1 1/2B)	50 (2B)	40 (1 1/2B)	25 (1B)	620	445	318.5	200	1250	1430	1700	210	3770	20	260	90
	4	1000	25 (1B)	40 (1 1/2B)	50 (2B)	40 (1 1/2B)	25 (1B)	620	445	318.5	200	1510	1690	1960	210	4030	20	290	109
	7	500	25 (1B)	40 (1 1/2B)	50 (2B)	40 (1 1/2B)	40 (1 1/2B)	660	490	ø350	200	1000	1180	1460	230	—	24	230	94
	7	750	25 (1B)	40 (1 1/2B)	50 (2B)	40 (1 1/2B)	40 (1 1/2B)	660	490	350	200	1260	1440	1720	230	3785	24	340	119
	7	1000	25 (1B)	40 (1 1/2B)	50 (2B)	40 (1 1/2B)	40 (1 1/2B)	660	490	350	200	1520	1700	1980	230	4045	24	370	144
	13	500	65 (2 1/2B)	—	—	40 (1 1/2B)	40 (1 1/2B)	770	620	450	200	960	1190	1505	290	3065	24	400	160
			—	80 (3B)	100 (4B)							940	1250	1615		3175		400	177
	13	750	65 (2 1/2B)	—	—	40 (1 1/2B)	40 (1 1/2B)	770	620	450	200	1220	1450	1765	290	3825	24	450	201
			—	80 (3B)	100 (4B)							1200	1570	1875		3935		460	219
	13	1000	65 (2 1/2B)	—	—	40 (1 1/2B)	40 (1 1/2B)	770	620	450	200	1480	1710	2025	290	4085	24	500	242
			—	80 (3B)	100 (4B)							1430	1740	2105		4165		510	255
	19	500	65 (2 1/2B)	—	—	65 (2 1/2B)	40 (1 1/2B)	820	675	500	200	1010	1240	1555	320	3115	24	460	198
			—	80 (3B)	100 (4B)							980	1290	1665		3225		480	220
	19	750	65 (2 1/2B)	—	—	65 (2 1/2B)	40 (1 1/2B)	820	675	500	200	1270	1500	1815	320	3875	24	520	249
			—	80 (3B)	100 (4B)							1240	1550	1925		3985		530	271
	19	1000	65 (2 1/2B)	—	—	65 (2 1/2B)	40 (1 1/2B)	820	675	500	200	1530	1760	2075	320	4135	24	560	300
			—	80 (3B)	100 (4B)							1470	1780	2155		4215		580	316
	30	500	80 (3B)	100 (4B)	—	65 (2 1/2B)	65 (2 1/2B)	920	795	600	200	1000	1310	1685	360	3245	24	780	320
			—	—	150 (6B)							940	1340	1765		3325		800	343
	30	750	80 (3B)	100 (4B)	—	65 (2 1/2B)	65 (2 1/2B)	920	795	600	200	1260	1570	1945	360	4005	24	890	394
			—	—	150 (6B)							1200	1600	2025		4085		910	416
	30	1000	80 (3B)	100 (4B)	—	65 (2 1/2B)	65 (2 1/2B)	920	795	600	200	1490	1800	2175	360	4235	24	950	459
			—	—	150 (6B)							1460	1860	2285		4345		980	490
	36	750	80 (3B)	100 (4B)	—	65 (2 1/2B)	65 (2 1/2B)	970	845	650	200	1280	1590	1970	390	4025	24	980	464
			—	—	150 (6B)							1220	1620	2050		4105		1000	490
	36	1000	80 (3B)	100 (4B)	—	65 (2 1/2B)	65 (2 1/2B)	970	845	650	200	1510	1820	2200	390	4255	24	1060	540
			—	—	150 (6B)							1480	1880	2310		4365		1090	577
	55	750	80 (3B)	100 (4B)	—	65 (2 1/2B)	65 (2 1/2B)	1080	970	750	200	1260	1590	1980	440	4030	24	1300	623
			—	—	150 (6B)							1220	1620	2060		4110		1330	658
	55	1000	80 (3B)	100 (4B)	—	65 (2 1/2B)	65 (2 1/2B)	1080	970	750	200	1490	1820	2210	440	4260	24	1420	725
			—	—	150 (6B)							1480	1880	2320		4370		1450	773
	83	750	80 (3B)	100 (4B)	—	80 (3B)	80 (3B)	1230	1120	900	200	1280	1630	2045	520	4140	24	1970	909
			—	—	150 (6B)							1230	1660	2125		4220		2010	960
	83	1000	80 (3B)	100 (4B)	—	80 (3B)	80 (3B)	1230	1120	900	200	1510	1860	2275	520	4370	24	2130	1055
			—	—	150 (6B)							1490	1920	2385		4480		2180	1125

Note) For the filter body diameter (øC), values of ø350 or higher indicate the inner diameter.