Industrial Filter
FGA Series
(Produced upon receipt of order)

How to Order

FGA C 04 A – 10 – B 002 N

Wetted parts material (Vessel)

Symbol	Wetted parts material
C	SS400
S	Stainless steel 304

Number of arranged elements

Symbol	Number of arranged elements
04	4
07	7
09	9
18	18
22	22
29	29
34	34
37	37

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 (1^B)
14	40 ($1\ 1/2^B$)
20	50 (2^B)
24	65 ($2\ 1/2^B$)
30	80 (3^B)
40	100 (4^B)
60	150 (6^B)

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

Element category

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

Element seal material Note)

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

Note) Refer to the below table for the element seal material types by the element category.

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 41 and 42.

Element/Element Seal Material Combinations

Element material \ Element seal material		Nil (Without seal)	Non-asbestos A	PTFE T	NBR N	FKM V
B	Bronze			○	○	○
S	Stainless steel		○	○	○	○
T	Polypropylene	○				
G	Glass fiber	○				
H	Cotton (Fiber)	○				
P	Cotton (Paper)				○	○
M	Stainless steel 304/Epoxy				○	○
L	Stainless steel 316		○	○	○	○

- **Various types of elements can be selected according to the "filtration conditions," and the unit can be used for a wide range of applications.**
- **This type has a vertical structure, so there is little loss of "filtrate."**
- **Maintenance — element replacement in particular is easy.**
- **When used for a gas, the product is handled as a class 2 pressure vessel compliant special order product. (Except for products with an internal capacity of less than 40 L)** Note 7)
- **Confirm the lead time with each order.**

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 41 and 42.

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.)

Note 6) For the "FGAS" model, carbon steel is used and coated with silver in locations except for wetted parts material.

Note 7) For details about the internal capacity, refer to the dimensions on page 37.

Specifications

Standard Specifications

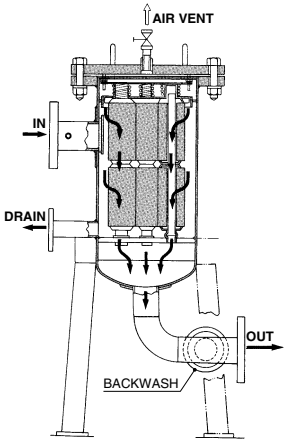
Model	FGA
Max. operating pressure (MPa)	1
Operating temperature (°C)	0 to 80
Port size	25 to 150 (1^B to 6^B) Note)
Wetted parts material (Vessel)	SS400/Stainless steel 304
Gasket	Non-asbestos

Note) JIS 10KFF is used for this flange.

Applicable Element Specifications

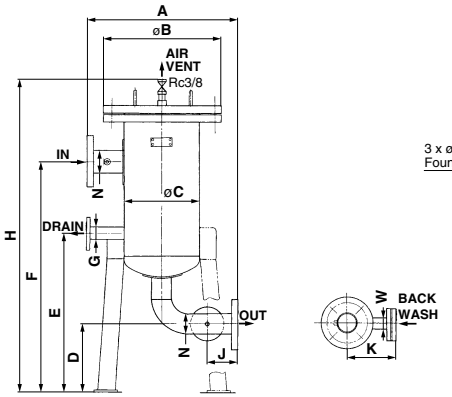
Description	Material	Nominal filtration accuracy (μm)	Size
Sintered metal	Bronze	1, 2, 5, 10, 20, 40 70, 100, 120	ø65 x L250 ø65 x L500 ø65 x L750 ø65 x L1000
	Stainless steel 316		
Paper	Cotton (Phenol)	5, 10, 20	ø65 x L250 ø65 x L500 ø65 x L750 ø65 x L1000
Fiber	Cotton	0.5, 1, 5, 10, 20 50, 75, 100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

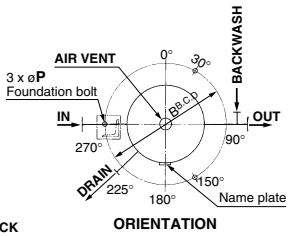
Construction



Element mounting figure

Dimensions





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)
FGAC FGAS	4	250	25 (1B)	40 (1 1/2B)	50 (2B)	20 (3/4B)	20 (3/4B)	500	330	216.3	230	490	660	965	80	120	20	70	15
	4	500	25 (1B)	40 (1 1/2B)	50 (2B)	20 (3/4B)	20 (3/4B)	500	330	216.3	230	490	905	1220	80	120	20	80	24
	4	750	25 (1B)	40 (1 1/2B)	50 (2B)	20 (3/4B)	20 (3/4B)	500	330	216.3	230	490	1160	1485	80	120	20	90	32
	4	1000	25 (1B)	40 (1 1/2B)	50 (2B)	20 (3/4B)	20 (3/4B)	500	330	216.3	230	490	1415	1750	80	120	20	105	41
	7	500	25 (1B)	40 (1 1/2B)	50 (2B)	25 (1B)	20 (3/4B)	570	400	267.4	230	510	915	1250	100	150	20	115	37
	7	750	25 (1B)	40 (1 1/2B)	50 (2B)	25 (1B)	20 (3/4B)	570	400	267.4	230	510	1175	1510	100	150	20	130	50
	7	1000	25 (1B)	40 (1 1/2B)	50 (2B)	25 (1B)	20 (3/4B)	570	400	267.4	230	510	1440	1775	100	150	20	150	64
	9	500	40 (1 1/2B)	50 (2B)	65 (2 1/2B)	40 (1 1/2B)	25 (1B)	620	445	318.5	240	560	935	1290	100	150	20	150	54
	9	750	40 (1 1/2B)	50 (2B)	65 (2 1/2B)	40 (1 1/2B)	25 (1B)	620	445	318.5	240	560	1195	1550	100	150	20	175	73
	9	1000	40 (1 1/2B)	50 (2B)	65 (2 1/2B)	40 (1 1/2B)	25 (1B)	620	445	318.5	240	560	1460	1815	100	150	20	200	92
	18	500	65 (2 1/2B)	80 (3B)	100 (4B)	40 (1 1/2B)	40 (1 1/2B)	720	560	400	270	710	1045	1445	100	150	24	260	103
	18	750	65 (2 1/2B)	80 (3B)	100 (4B)	40 (1 1/2B)	40 (1 1/2B)	720	560	400	270	710	1305	1705	100	150	24	295	137
	18	1000	65 (2 1/2B)	80 (3B)	100 (4B)	40 (1 1/2B)	40 (1 1/2B)	720	560	400	270	710	1570	1970	100	150	24	340	171
	22	500	65 (2 1/2B)	80 (3B)	100 (4B)	40 (1 1/2B)	40 (1 1/2B)	760	620	450	270	720	1055	1455	100	150	24	330	131
	22	750	65 (2 1/2B)	80 (3B)	100 (4B)	40 (1 1/2B)	40 (1 1/2B)	760	620	450	270	720	1315	1715	100	150	24	380	173
	22	1000	65 (2 1/2B)	80 (3B)	100 (4B)	40 (1 1/2B)	40 (1 1/2B)	760	620	450	270	720	1580	1980	100	150	24	430	217
	29	500	80 (3B)	100 (4B)	150 (6B)	65 (2 1/2B)	65 (2 1/2B)	820	675	500	300	850	1120	1575	120	250	24	375	163
	29	750	80 (3B)	100 (4B)	150 (6B)	65 (2 1/2B)	65 (2 1/2B)	820	675	500	300	850	1380	1835	120	250	24	435	216
	29	1000	80 (3B)	100 (4B)	150 (6B)	65 (2 1/2B)	65 (2 1/2B)	820	675	500	300	850	1640	2095	120	250	24	495	269
	34	750	80 (3B)	100 (4B)	150 (6B)	65 (2 1/2B)	65 (2 1/2B)	870	745	550	300	860	1390	1845	120	250	24	560	262
	34	1000	80 (3B)	100 (4B)	150 (6B)	65 (2 1/2B)	65 (2 1/2B)	870	745	550	300	860	1650	2105	120	250	24	635	326
	37	750	80 (3B)	100 (4B)	150 (6B)	65 (2 1/2B)	65 (2 1/2B)	920	795	600	300	880	1410	1865	120	250	24	630	317
	37	1000	80 (3B)	100 (4B)	150 (6B)	65 (2 1/2B)	65 (2 1/2B)	970	795	600	300	880	1670	2125	120	250	24	710	394

Note) For the filter body diameter (øC), values of ø400 or higher indicate the inner diameter.