

Industrial Filters Selection 2

Selecting the Element

Element category		Element type			Applicable fluid check										Element material	
Filtration level	Disposable/Reusable	Element description	Element model	Element symbol	Fluid applicability								Filter media	Core		
					Pure water	Industrial water	Cleaning fluid Alkali-based	Acid	Solutions			Cutting oil Grinding oil				
									Petroleum	Flourine	Alcohol					
Nominal filtration	Disposable	Fiber element	EH	H	×	⊙	○	×	⊙	⊙	○	⊙	Cotton	Stainless steel 304		
			EHM	T	×	⊙	⊙	⊙	○	×	⊙	○	Polypropylene	Polypropylene		
			EHK	G	×	○	×	⊙	○	○	○	○	Glass fiber	Stainless steel 316		
	Reusable	P.P. depth element	EJ	W	○	⊙	⊙	⊙	○	×	⊙	○	Polypropylene Polyethylene	Polypropylene		
			EP	P	×	×	×	×	○	×	○	⊙	Cotton	Polypropylene		
			EJ	E	×	⊙	○	○	○	○	○	⊙	⊙	Polyester	—	
	Reusable	Micromesh element	EM	M	×	○	○	○	○	○	○	⊙	⊙	Stainless steel 304 (Epoxy parts)	Stainless steel 304	
			EM	L	×	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	Stainless steel 316	Stainless steel 316	
		Sintered metal element	EB	B	×	×	×	×	○	○	×	○	Bronze	—		
			ES	S	×	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	Stainless steel 316	—	
Filter plate laminated element	END	S	×	⊙	○	○	○	×	○	⊙	Stainless steel 304	—				

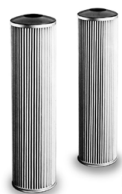
⊙: Optimal ○: Applicable △: Caution ×: Not applicable



EH/EHM/EHK



EJ



EP

Industrial Filters Selection 3

Selecting the Element

Element category		Element type			Applicable fluid check								Element material	
Filtration level	Disposable/Reusable	Element name	Element model	Element symbol	Fluid applicability								Filter media	Core
					Pure water	Industrial water	Cleaning fluid		Solutions			Cutting oil		
							Alkali-based	Acid	Petroleum	Flourine	Alcohol			
High filtration accuracy	Disposable	HEPO II element	EJ	J	⊙	○	×	×	⊙	○	⊙	⊙	Polyester	Polypropylene
		P.P. HEPO II element	EJ102S	R	○	○	○	○	○	△	○	○	Polypropylene	Polypropylene
		Membrane element	ED	D	⊙	○	○	○	○	○	○	×	Polyether Sulphone (0.2 μm) Cellulose acetate (0.4 μm)	Polypropylene
					⊙	○	×	×	○	×	○	×		
		Membrane P.P. element	ED102S	U	○	○	○	○	○	△	○	×	Polypropylene	Polypropylene
Membrane CA element	ED111S	D	○	○	×	×	⊙	×	⊙	×	Polyester	Polypropylene		

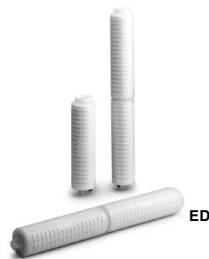
⊙: Optimal ○: Applicable △: Caution ×: Not applicable



EJ



EJ102S



ED

Operating temperature

Operating temperature	Filtration accuracy (Filtration efficiency 99% or more)	Recommended flow rate	Element seal (Symbol)				Applicable housing models								
			NBR (N)	FKM (V)	PTFE (T)	Non-asbestos (A)	FGA	FGC	FGD	FGE	FGG	FQ	FGH	FGF	FN
0 to 80°C	2 μm	20 L/min	●	●	—	—	△	△	⊙	⊙	×	⊙	×	×	×
	4 μm		—	—	●	—	×	×	×	×	×	⊙	×	×	
	6 μm		●	●	—	—	△	△	△	△	×	⊙	×	×	×
	13 μm		—	—	●	—	×	×	×	×	×	⊙	×	×	
0 to 80°C	2 μm	20 L/min	●	●	—	—	△	△	△	△	×	⊙	×	×	×
	4 μm		—	—	●	—	×	×	×	×	×	⊙	×	×	
	6 μm		●	●	●	—	△	△	△	△	×	△	×	×	×
	13 μm		—	—	●	—	×	×	×	×	×	⊙	×	×	
0 to 80°C	0.2 μm	5 L/min	●	●	●	—	△	△	△	△	×	△	×	×	×
	0.4 μm		—	—	●	—	×	×	×	×	×	⊙	×	×	
0 to 70°C	0.2 μm	5 L/min	●	●	—	—	△	△	△	△	×	△	×	×	×
	0.4 μm		●	●	●	—	△	△	△	△	×	△	×	×	×
0 to 80°C	0.2 μm	5 L/min	●	●	●	—	△	△	△	△	×	△	×	×	×
	0.4 μm		●	●	●	—	△	△	△	△	×	△	×	×	×

These values are for water
(The flow rates will differ if the fluids are of other, higher viscosity types.)

●: Compatible seal

⊙: Standard △: Made to Order specification ×: Cannot be incorporated

FGD

FGE

FGG

FGA

FGC

FGF

FGH

FQ1

FN

EB:

ES:



ED102S



ED111S

Industrial Filters Selection 4

Selecting the Element Seal

Seal material	Symbol	Applicable fluid check								Operating temperature
		Fluid applicability								Operating temperature
		Pure water	Industrial water	Cleaning fluid		Solutions			Cutting oil Grinding oil	
Alkali-based	Acid			Petroleum	Flourine	Alcohol				
NBR	N	○	◎	×	△	×	×	×	○	0 to 80°C
FKM	V	○	○	○	○	△	△	×	○	0 to 120°C
Fluororesin	T	○	○	○	○	◎	◎	◎	○	0 to 120°C
Non-asbestos	A	○	○	△	△	△	○	○	○	0 to 150°C

◎: Optimal ○: Applicable △: Caution ×: Not applicable

Applicable housing models

FGA	FGC	FGD	FGE	FGG	FQ	FGH	FGF	FN
—	—	⊙	⊙	⊙	⊙	—	⊙	⊙
—	—	—	⊙	⊙	⊙	—	⊙	⊙
—	—	⊙	⊙	—	—	⊙	—	—
⊙	⊙	—	—	—	—	—	—	—

⊙: Standard

Applicable element symbols

H	T	G	W	P	E	M	L	B	S	J	R	D	U	D
N/A	N/A	N/A	N/A	●	N/A	●	●	●	●	●	●	▲	●	●
N/A	N/A	N/A	N/A	●	N/A	●	●	●	●	●	●	▲	●	●
N/A	N/A	N/A	N/A	—	N/A	—	●	●	●	▲	—	●	—	●
N/A	N/A	N/A	N/A	—	N/A	—	●	—	●	—	—	—	—	—

●: Applicable ▲: Partially applicable

FGD

FGE

FGG

FGA

FGC

FGF

FGH

FQ1

FN

EB:

ES:

Industrial Filters Selection 5

Selecting the Housing

Filter type	Series	Model	Product specification		Material		
			Maximum operating pressure	Operating temperature	Housing	Seal	□1
Cartridge	FGH	FGH□2-□3-*1*2	1.0 MPa	0 to 80°C	Stainless steel 316	Fluoropolymer	—
	FQ	FQ101□2□1-□3-*1*2	1.0 MPa	0 to 80°C	Stainless steel 304	NBR	N
						FKM	V
	FGD	FGD□1□2-□3-*1*2	0.7 MPa	0 to 80°C	Aluminum SPCD	NBR	C
			1.0 MPa		SCS14 Stainless steel 316L	Fluoropolymer	T
FGE	FGE□1□2-□3-*1*2	0.7 MPa	0 to 80°C	Stainless steel 304	NBR	S	
					FKM	L	
					Fluoropolymer	T	
FGG	FGG□1□2-□3-*1*2	0.7 MPa	0 to 80°C	Stainless steel 304	NBR	S	
					FKM	L	

□1: Housing/seal material
 □2: Number of elements
 □3: Port size
 *1: Element symbol
 *2: Element seal



FGH



FQ



FGD

Selection

Number of elements				Port size		Applicable element																	
Element placement	Element levels	Number of elements	□2	Port size	□3	≠1																	
						H	T	G	P	M	L	W	B	S	J	R	D	U					
1 line	0.5	0.5	100	Rc 3/8	03																		
	1	1	200	Rc 1/2	04	X	X	X	X	X	X	X	X	X	⊙	X	⊙	X					
	2	2	300	Rc 3/4	06																		
1 line	0.5	0.5	0	Rc 1/2	04																		
	1	1	1	Rc 3/4	06	⊙	⊙	⊙	⊙	⊙	⊙	△ X0	⊙	⊙	⊙	⊙	⊙	△ X94	△ X0				
	2	2	2	Rc 1	10																		
1 line	1	1	A	Rc 3/8	03																		
	2	2	B	Rc 1/2	04	⊙	⊙	⊙	⊙	⊙	⊙	△ X29	⊙	⊙	⊙	⊙	△ X151	△ X94	△ X30				
4 lines	1	4	A	Rc 3/4	06																		
	2	8	B	R 1	10	⊙	⊙	⊙	⊙	⊙	⊙	△ X29	⊙	⊙	⊙	⊙	△ X58	△ X94	△ X30				
	3	12	C	R 2	20																		
7 lines	2	14	B	Rc 2	20																		
	3	21	C			⊙	⊙	⊙	⊙	⊙	⊙	⊙	△ X29	⊙	⊙	X	X	X	X				
	4	28	D																				

- FGD
- FGE
- FGG
- FGA
- FGC
- FGF
- FGH
- FQ1
- FN
- EB
- ES



FGE



FGG

Industrial Filters Selection 6

Selecting the Housing

Filter type	Series	Model	Product specification		Material		
			Maximum operating pressure	Operating temperature	Housing	Seal	□1
Cartridge	FGA	FGA □1□2-□3-*1*2	1.0 MPa	0 to 80°C	Stainless steel 304 SS400	Non-asbestos	S C
	FGC	FGC □1□2-□3-*1*2	1.0 MPa 2.0 MPa 4.0 MPa	0 to 80°C	Stainless steel 304 SS400	Non-asbestos	S C
Bag	FGF	FGF □1□2-□3-*1*2	0.5 MPa	0 to 80°C	Stainless steel 304	NBR FKM	S L
			0.5 MPa	0 to 80°C	Stainless steel 304 SS400 Stainless steel 304 SS400	NBR FKM	S C L R
Back-flushing type	FN	FN □2□1-□3-*1*2	1.0 MPa	0 to 80°C	Stainless steel 304	NBR FKM	N V

□1: Housing/seal material
 □2: Number of elements
 □3: Port size
 *1: Element symbol
 *2: Element seal



Number of elements				Port size		Applicable element												
Element placement	Element level	Number of elements	<input type="checkbox"/> 2	<input type="checkbox"/> 3	÷1													
					H	T	G	P	M	L	W	B	S	J	R	D	U	
4 to 83 lines	× 1 to 4	= 4 to 332	Refer to p. 35	1B to 6B	Refer to p. 35	⊙	⊙	⊙	⊙	⊙	⊙	△ X29	⊙	⊙	△ X80	△ X151	△ X94	△ X30
1 line	× 1	= 1	A	1/2 B	04	⊙	⊙	⊙	⊙	⊙	⊙	△ X29	⊙	⊙	△ X80	△ X151	△ X94	△ X30
	× 2	= 2	B	3/4 B	06													
Bag element	⊙190 x L440	1 L440	1A	Rc 2	20	Bag element												
	⊙190 x L770	1 L770	1B															
Bag element	⊙190 x L440	3 L440	3A	4 B	40	Back-flushing element												
		3 L770	3B															
	⊙190 x L770	5 L440	5A	6 B	60													
		5 L770	5B															
Back-flushing element	Element type · Cylindrical · Multilevel type	Cylindrical 1 L250	1101	Rc 1	10													
		Multilevel 1 L250	1111															
	Element length · L250 · L500	Cylindrical 1 L500	1102	Rc 2	20													
		Multilevel 1 L500	1112															
		Cylindrical 4 L500	4102															

For L250

FGD

FGE

FGG

FGA

FGC

FGF

FGH

FQ1

FN

EB

ES



FGF



FN