Air Preparation Equipment

Air Preparation Filters

Air Dryers

Air Tank

Aftercoolers

Clean Gas Filters

Clean Air Filters

INDEX

SMC Air Preparation System

Class	Solid particle: Max. number of particles/1 m³ — Particle diameter d μm: ≤ 0.10	0.10 < d ≤ 0.5	0.5 < d ≤ 1.0	1.0 < d ≤ 5.0	Particle diameter μm	Concentration mg/m³
1	Not specified	100	1	0	NA	NA
2	Not specified	100000	1000	10		
3	Not specified	Not specified	10000	500		
4	Not specified	Not specified	Not specified	1000		
5	Not specified	Not specified	Not specified	20000		
6	NA				≤ 5	≤ 5
7	NA				≤ 40	≤ 10

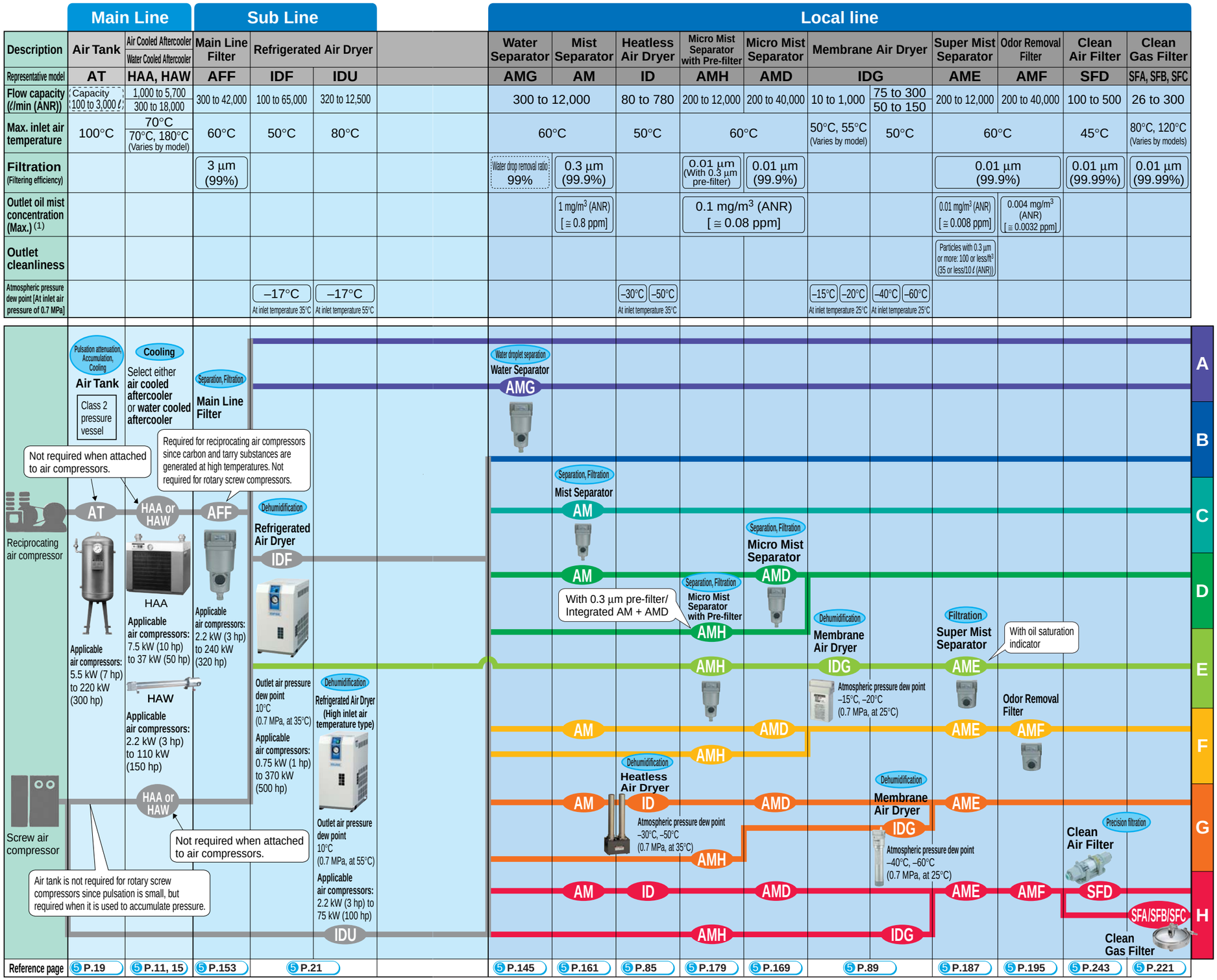
Class	Moisture: Pressure dew point (At air pressure of 0.7 MPa) °C
1	≤ –70
2	≤ –40
3	≤ –20
4	≤ +3
5	≤ +7
6	≤ +10

Class	Oil: Oil concentration mg/m³
1	≤ 0.01
2	≤ 0.1
3	≤ 1
4	≤ 5

Indication: The degree of quality is indicated with 1, 4 and 2 for systems with solid particle “class 1,” moisture “class 4” and oil “class 2.”

System no.	Application	Impurity in compressed air: Moisture — Dew point	Moisture content	Filtration	Oil mist density (1)	Cleanliness	Oil odor	Quality grade as system (2)
A	Water drop removal air • Air blowing (Simple removal of particles) • General pneumatic tools	Atmospheric pressure dew point 6°C 0.7 MPa Pressure dew point 40°C	7 g/m³ (ANR)	3 μm (Filtering efficiency 99%)	—	—		3, -, -
B	Dry air • Used for the same applications as A, when temperature drop in the middle of piping is large.							3, 4, - 3, 5, - 3, 6, -
C	Dry air • General pneumatic equipment • General painting	Atmospheric pressure dew point –14 to –23°C 0.7 MPa Pressure dew point 15 to 3°C	1.7 g/m³ (ANR) to 0.8 g/m³ (ANR)	0.3 μm (Filtering efficiency 99.9%)	Max. 1 mg/m³ (ANR) 0.8 ppm		Yes	2, 4, 3 2, 5, 3 2, 6, 3
D	Dry clean air • High grade painting • Sequence control • Measurement device • Instrumentation Drying and cleaning (Precision parts) • Machine tools (Pneumatic bearing)				Max. 0.1 mg/m³ (ANR) 0.08 ppm			1, 4, 2 1, 5, 2 1, 6, 2
E	Dry clean air • Without refrigerated air dryer on the sub line • Built-in with equipment (With machine tools, 3-D measurement device, etc.)			0.01 μm (Filtering efficiency 99.9%)	Max. 0.01 mg/m³ (ANR) 0.008 ppm	Particles with 0.3 μm or more: 100 or less/ft³ (35 or less/10 ℓ (ANR))		1, 4, 1 1, 5, 1 1, 6, 1
F	Deodorant air • Stirring, transporting, drying and packaging • Food industry (Except direct blowing to foods)				Max. 0.004 mg/m³ (ANR) 0.0032 ppm		No	
G	Low dew point clean air • Drying electric and electronic parts • Drying a filling tank • Transporting powders • Ozone generator • Low temperature actuated equipment	Atmospheric pressure dew point –30 to –60°C 0.7 MPa Pressure dew point –6 to –42°C	0.5 g/m³ (ANR) to 0.02 g/m³ (ANR)	0.01 μm (Filtering efficiency 99.9%)	Max. 0.01 mg/m³ (ANR) 0.008 ppm	Particles with 0.3 μm or more: 100 or less/ft³ (35 or less/10 ℓ (ANR))	Yes	(3) 1, 1, 1 1, 2, 1 1, 3, 1
H	Low dew point clean air (For clean room) • Blowing semiconductor parts in the clean room				Max. 0.004 mg/m³ (ANR) 0.0032 ppm	Particles with 0.1 μm or more: 0/6 ℓ	No	

Note 1) When the inlet oil mist density (compressed air density) is approximately 30 mg/m³ (ANR) or less.
Note 2) This describes the grade of compressed air quality based on ISO8573-1: 2001 (JIS B8392-1: 2003), which is the maximum quality grade for the system. It varies, however, depending on the inlet air conditions.
Note 3) Contact SMC since this can be manufactured as a special order (depending on the operating conditions).



SMC Air Preparation System Technical Information

Impurities Reducible by Air Preparation Equipment

Product name	Model	Solid foreign matter		Oil mist	Smell	Moisture	
		Filtration Minimum solid diameter that can be removed more than 95 % (μm)	Outlet cleanliness	Outlet oil mist concentration Max. mg/m³ (ANR) [ppm]		Droplet	Water steam
						Removal rate (%)	Atmospheric pressure dew point (°C)
Air Filter	AF	5	—	△	×	△	×
Main Line Filter	AFF	3		1 [0.8]			
Mist Separator	AM	0.3		0.1 [0.08]			
Micro Mist Separator	AMD	0.01	35 particles or less of 0.3 μm diameter or larger/10 ℓ (ANR) (100 particles/ft³ or less)	0.01 [0.008]		×	
Super Mist Separator	AME						
Odor Removal Filter	AMF		—	△	Deodorization of oil smell	×	
Clean Gas Filter	SFA SFB SFC			×	×	99	
Clean Air Filter	SFD						
Drain Catch	AMG	△	—				
Air-cooled Aftercooler Water-cooled Aftercooler	HAA HAW	×				△	△
Refrigerated Air Dryer	IDF/IDU						–14 to –23
Heatless Air Dryer	ID					×	–30 to –60
Membrane Air Dryer	IDG						–14 to –60

Red: Reducible ×: Not reducible △: Reducible as secondary effect.

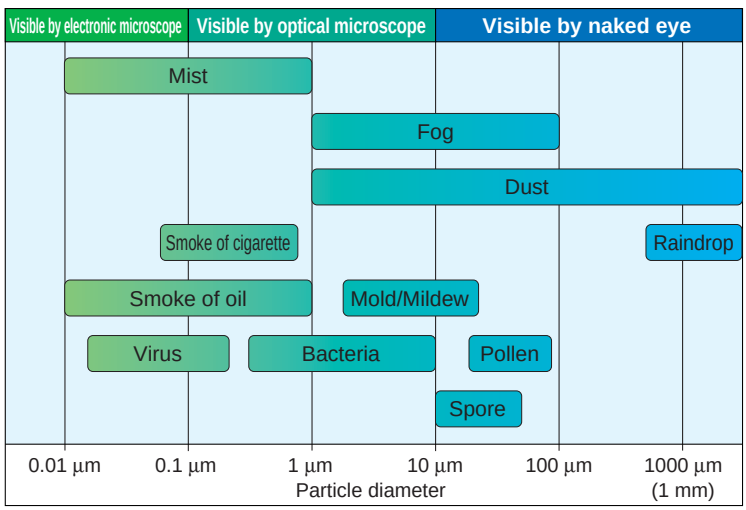
Dew Point

When air is cooled under the constant pressure and water vapor becomes saturated into dew. The temperature at which the condensed water is formed is defined as the dew point.

Atmospheric pressure dew point: The dew point under atmospheric pressure
<Ex.> Blow the compressed air into atmospheric:
Dew appears when cooled under the atmospheric pressure.

Pressure dew point: The dew point under applied pressure
<Ex.> Compressed air line:
Condensed into dew when cooled lower than the pressure dew point.

Particle Diameter (Reference)



ISO Compressed Air Quality Grade

The grade of compressed air purity with solid particles, water, and oil as defined by ISO 8573-1: 2001 (JIS B8392-1: 2003).

Class	Solid particle: Max. number of particles/1 m³, Particle diameter d μm				Particle diameter μm	Concentration mg/m³
	≤ 0.10	0.10 < d ≤ 0.5	0.5 < d ≤ 1.0	1.0 < d ≤ 5.0		
1	Not specified	100	1	0	NA	NA
2	Not specified	100000	1000	10		
3	Not specified	Not specified	10000	500		
4	Not specified	Not specified	Not specified	1000		
5	Not specified	Not specified	Not specified	20000		
6	NA				≤ 5	≤ 5
7	NA				≤ 40	≤ 10

Class	Moisture: Pressure dew point (At air pressure of 0.7 MPa) °C
1	≤ –70
2	≤ –40
3	≤ –20
4	≤ +3
5	≤ +7
6	≤ +10

Class	Oil: Oil concentration mg/m³
1	≤ 0.01
2	≤ 0.1
3	≤ 1
4	≤ 5

Indication: The degree of quality is indicated with 1, 4 and 2 for systems with solid particle "class 1," moisture "class 4" and oil "class 2."

AF, AFF, AM, AMD, AME, AMF ··· P. 153, 327
SFA, SFB, SFC ··· P. 221
AMG ··· P. 141
HAA, HAW ··· P. 11
IDF/IDU ··· P. 21
ID, IDG ··· P. 85

Air Tank

Pulsation prevention
Accumulation
Cooling

Air Tank

AT

2nd class pressure vessel

(Japan)

P. 19

Model		Size (ℓ)	Port size for air inlet/outlet	Applicable compressor output (kW)	Mass (kg)	Operating conditions range		Proof pressure (MPa)	Safety valve set pressure (MPa)	Material	Painting color	Accessories
						Max. operating pressure (MPa)	Max. fluid temperature (°C)					
AT	6C	100	Rc 1/2	5.5	55	0.97	0 to 100	1.46	0.97	Rolled steel plate	External surface: Mansel N-5.5 (Gray) Internal surface: Not painted	Safety valve Pressure gauge Drain valve Anchor bolts
	11C	200	Rc 3/4	11	105							
	22C	400	Rc 1 1/2	22	170							
	37C	500		37	195							
	55C	700	50 (2B) flange	55	265							
	75C	1,000		75	385							
	125C	1,500	80 (3B) flange	125	495							
	150C	2,000	100 (4B) flange	150	770							
	220C	3,000		220	960							

Variant Model

Model		Stainless steel	Paint and color change	Painting method	Internal surface treatment	Port size change	Flange connection	With companion flange	With auto drain	Mounting hole location change	Horizontal type	Vacuum	High pressure	International standards
AT	6C	○	○	○	○	○	○	○	●	○	○	○	▲	—
	11C													
	22C													
	37C													
	55C						●	◎						
	75C													
	125C													
	150C													
	220C													

P. 19

●: Standard (Including option) ◎: Made to Order (∗1) ○: Special order A (∗2) ▲: Special order B (∗3) —: Not available

∗1) Special listed in the catalog.

∗2) Available by modifying the standard model.

∗3) This is technically possible, but consult with SMC for dimensions, costs and delivery.

Aftercoolers

Cooling

Aftercooler Air cooled

HAA

P. 11

Aftercooler Water cooled

HAW

P. 15

Model		Basic performance: Outlet air temperature (°C)	Basic performance conditions: Air flow rate ℓ/min (ANR) [Applicable compressor output (kW)] Screw compressor	Air flow rate ℓ/min (ANR) [Applicable compressor output (kW)] Reciprocating compressor	Inlet air temperature (°C)	Inlet air pressure (MPa)		Ambient temperature (°C)	Cooling water inlet temperature (°C)	Operating conditions range: Inlet air temperature (°C)	Inlet air pressure (MPa)	Ambient temperature (°C)	Port size for inlet/outlet	Drain size	Power supply (Air cooled)	Cooling water amount ℓ/min (Water cooled)
HAA	7	40	1,000 [7.5]		70	0.7		32	—	5 to 100	0.05 to 1.0 (With auto drain: 0.15 to 1.0)	2 to 50	Rp 3/4 Socket	Rc 3/8	Single phase 100 V AC (50/60 Hz) Single phase 200 V AC (50/60 Hz)	—
	15		2,200 [15]										1B Union		Single phase 100 V AC (50/60 Hz) 3 phase 200 V AC (50/60 Hz)	
	22		3,300 [22]								0.05 to 0.97 (With auto drain: 0.15 to 0.97)		$1\frac{1}{2}$ Union		3 phase 200 V AC (50/60 Hz)	
	37		5,700 [37]											Rc 1/2 (With auto drain: Rc3/8)		
HAW	2	40	300 [2.2]		70	0.7		32	30	5 to 100	0.05 to 1.0 (With auto drain: 0.15 to 1.0)	2 to 50	Air side Rc 1/2 Cooling water side Rc 1/2	Rc 1/2	—	5
	7		1,000 [7.5]										Air side Rc 3/4 Cooling water side Rc 1/2			
	22		3,300 [22]	2,100 [15]	Screw compressor 70 Reciprocating compressor 180					5 to 200	0.05 to 0.97 (With auto drain: 0.15 to 0.97)		Air side $1\frac{1}{2}$ Cooling water side Rc 3/4	Rc 3/4		17
	37		5,700 [37]	4,300 [22]									Air side $1\frac{1}{2}$ Cooling water side Rc 1			25
	55		8,600 [55]	5,600 [37]									Air side Rc 2 Cooling water side Rc 1			36
	75		12,000 [75]	8,000 [55]												40
	110		18,000 [110]	11,000 [75]									Air side 80 (3B) flange Cooling water side $1\frac{1}{4}$	Rc 1		45

Variant Model

Model		Power terminal connection	With auto drain	With pre-filter	With base	With companion flange (Screwed flange)	Paint and color change	Port size change
HAA	7	●	●	●	●	○	○	▲
	15							
	22							
	37							
HAW	2	—	●	—	—	●	○	▲
	7							
	22							
	37							
	55							
	75							
	110							

P. 11

P. 15

● : Standard (Including option) ○ : Special order A (∗1) ▲ : Special order B (∗2) — : Not available

∗1) Available by modifying the standard model.

∗2) This is technically possible, but consult with SMC for dimensions, costs and delivery.

Air Dryers (Refrigerated Type)

Cooling, Dehumidification

Refrigerated Air Dryer

Standard inlet air type

Max. inlet air temperature: 35, 40°C

IDF

5 P. 21

Refrigerated Air Dryer

High inlet air temperature type

Max. inlet air temperature: 50, 66°C

IDU

5 P. 21

Model		Applicable compressor output (kW)	Basic performance: Dew point (°C)	Basic performance conditions: Air flow rate (m³/min [ANR]) 50 Hz	Air flow rate 60 Hz	Inlet air temperature (°C)	Inlet air pressure (MPa)		Ambient temperature (°C)	Operating condition range: Inlet air temperature (°C)	Inlet air pressure (MPa)	Ambient temperature (°C)	Power supply voltage (V) (50/60 Hz)		Power consumption (W) 50 Hz	60 Hz	Port size	Refrigerant	Refrigerant condensation method
IDF	1E	0.75	Pressure dew point 10 (At 0.7 MPa) Atmospheric pressure dew point –17	0.1	0.12	35	0.7		32	5 to 50	0.15 to 1.0	2 to 40	Single phase AC 100/100, 110 Single phase AC 200/200, 220		180	202	Rc 3/8	R134a (HFC)	Air cooled condenser
	2E	1.5		0.2	0.235														
	3E	2.2		0.32	0.37														
	4E	3.7		0.52	0.57														
	6E	5.5		0.75	0.82												Rc 1/2		
	8E	7.5		1.22	1.32										208	236	Rc 3/4		
	11E	11		1.65	1.82										385	440			
	15E	15		2.8	3.1										540	620	Rc 1		
	22E	22		3.9	4.3								Single phase AC 200/200, 220	3 phase AC 200/200, 220	810	940	R 1	R407C (HFC)	
	37E	37		5.7	6.1												R 1 1/2		
	55E	55		8.4	9.8	40	0.7						3 phase AC 200/200, 220		1,400	1,750	R 2		
	75E	75		11.0	12.4										2,100	2,500			
	120D	120		20.0	23.0										2,500	3,100	65 (2 1/2B) flange		
	150D	150		25.0	30.0										4,000	5,000	80 (3B) flange		
	190D	190		32.0	38.0										4,900	5,900			
	240D	240		43.0	50.0										6,300	7,600	100 (4B) flange		
	370B	370		54.0	65.0	35	0.7								6,400	7,700	150 (6B) flange	R22	Water cooled condenser
IDU	3E	2.2	Pressure dew point 10 (At 0.7 MPa) Atmospheric pressure dew point –17	0.32	0.37	55	0.7		32	5 to 80	0.15 to 1.0	2 to 40	Single phase AC 100/100, 110 Single phase AC 200/200, 220		180	220	Rc 3/8	R134a (HFC)	Air cooled condenser
	4E	3.7		0.52	0.57										208	236	Rc 1/2		
	6E	5.5		0.75	0.82										385	440	Rc 3/4		
	8E	7.5		1.1	1.2										340	415			
	11E	11		1.5	1.7										325	375			
	15E	15		2.6	2.8										360	385			
	22E	22		3.9	4.3										348	384			
	37E	37		5.7	6.1										583	700	Rc 1		
	55E	55		8.4	9.8					5 to 60					597	690			
	75E	75		11.0	12.5								Single phase AC 200/200, 220	3 phase AC 200/200, 220	750	880	R 1	R407C (HFC)	
															870	1,040	R 1 1/2		
													3 phase AC 200/200, 220		1,520	1,910	R 2		
															2,290	2,770			

Air Dryers (Refrigerated Type)

IDF ····· 5 P. 21 IDU ····· 5 P. 21

Variant Model

International Standards

CE

Single phase 230 V AC (50 Hz)
The IDFA series are available.

UL

Single phase 115 V AC (60 Hz) or
Single phase 230 V AC (60 Hz)
The IDFB series are available.

Heat Exchanger

Stainless steel (Plate type heat exchanger)

Anti-corrosion and compact stainless steel plate heat exchanger is adopted.

Stainless steel (Shell & tube type)

Integrating a plate fin tube type heat exchanger (Material: Copper, Aluminum) in a stainless vessel.

Auto Drain

With heavy duty auto drain

Durable float type auto drain
Higher reliability with waste.

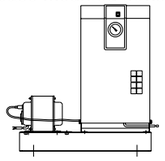
With motor driven auto drain

High reliability with waste and high viscosity material.
Periodical discharge by opening/closing the valve.

Electric

Optional voltage (Base mounted transformer)

Common base mounted transformer



Corresponding voltage
Single phase 110 V to 480 V AC (50 Hz)
110 V to 520 V AC (60 Hz)
3 phase 220 V to 440 V AC (50, 60 Hz)

Optional voltage (Without transformer)

Electric parts of a refrigerator and a fan motor uses the corresponding voltage components without using a transformer.
Corresponding voltage
Single phase 115 V AC (60 Hz)
Single phase 220 V to 240 V AC (50 Hz)

Optional voltage (Built-in transformer)

Installing a transformer inside a panel.
Corresponding voltage
3 phase 220 V, 240 V, 380 V, 400 V, 415 V, 440 V AC

With terminals for operation/irregular signal

Integrating the terminals which can read the following signals:
Operation signal
(During operation: Contact closed with no voltage.)
Irregular signal
(Irregular happens: Contact closed with no voltage.)

With electric leak breaker

Sensitivity current: 30 mA
Integrated or mounted on the side panel of a dryer. (Depending on the model)

Environment

Anti-corrosive treatment copper tube

Epoxy painting on the copper and copper alloy parts to resist corrosive gases (Hydrogen sulphide, sulfurous acid gas etc.) Except for electric parts.

Others

For medium pressure

Max. operating pressure: 1.5 MPa
Changing a heat exchanger and an auto drain to the medium pressure specifications.

Water cooled condenser

Possible to use under the environment at high ambient temperatures or closed locations without raising the ambient temperature.
(A cooling tower is required when the cooling water is circulated for using.)

For compressed air cooling

Using for cooling purpose because cooled and dehumidified air (approx.10°C) will not be processed without heating.
(Pay attention to the air consumption because it will be less consumed than a standard model. Use caution when selecting a model.)

Air clean unit

Mounting mist separator, micro mist separator and super mist separator are integrated to supply clean and dehumidified air.

Air clean unit (With temperature control unit)

Electric heater and temperature control unit are integrated into the air clean unit to adjust the cooled and dehumidified air to a certain temperature level and supply clean and temperature-controlled air.
Set temperature range: 18 to 30°C

Contents	Model	IDF																	IDU									
		1E	2E	3E	4E	6E	8E	11E	15E	22E	37E	55E	75E	120D	150D	190D	240D	370B	3E	4E	6E	8E	11E	15E	22E	37E	55E	75E
International standards	CE	▲							●						▲								▲					
	UL	▲				●							▲						▲				▲					
Heat exchanger material	Stainless steel (Plate heat type exchanger)		▲				●						▲								●							
	Stainless steel (Shell & tube type)										●			▲										●				
Electric	Optional voltage (Without transformer)	▲				● (*4)							▲						▲									
	Optional voltage (Built-in transformer)															●												
	Optional voltage (Base mounted transformer)		▲							●									●									
	With terminals for operation/irregular signal		○								●								●									
	With electric leak breaker		○									●						◎	●									
Auto drain	With heavy duty auto drain		○									●						◎	●									
	With motor driven auto drain		○								●								●									
Environment	Anti-corrosive treatment copper tube									●									●									
	Copper-free, Fluorine-free									—									—									
Others	For medium pressure		○			▲				●						▲			●									
	Water cooled condenser						▲					▲			●				▲									
	For compressed air cooling								●					▲											▲			
	Air clean unit				○							▲													▲			
	Air clean unit (With temperature control unit)		▲			○						▲													▲			

●: Standard (Including option) ◎: Made to Order (*1) ○: Special order A (*2) ▲: Special order B (*3) —: Not available /: Substitutable

*1) Special listed in the catalog. *2) Available by modifying the standard model.
*3) This is technically possible, but consult with SMC for dimensions, costs and delivery.
*4) Select the IDFA series when power supply is single phase, 220 to 240 V AC (50 Hz).
Select the IDFB series when power supply is single phase, 115 V, 230 V AC (60 Hz).

Air Dryer (Desiccant Type)

Dehumidification

Heatless Air Dryer

ID

P. 85

Model		Atmospheric pressure dew point (°C)	Basic performance conditions: Air flow rate ℓ/min (ANR) Outlet	Air flow rate ℓ/min (ANR) Purge	Inlet air temperature (°C)	Inlet air pressure (MPa)	Ambient temperature (°C)	Operating condition range: Inlet air temperature (°C)	Inlet air pressure (MPa)	Ambient temperature (°C)	Power supply voltage (V)	Port size for air inlet/outlet Rc, G, NPT
ID	200	−30	80	20	35	0.7	32	5 to 50	0.3 to 1.0	2 to 50	Single phase 100/100, 110 VAC (50/60 Hz)	1/4
	300		155	37								1/2
	400		330	85					0.3 to 0.9			
	600		780	195								3/4
	205		80	20					0.3 to 1.0		Single phase 200/200, 220 VAC (50/60 Hz)	1/4
	305		155	37								1/2
	405		330	85					0.3 to 0.9			
	605		780	195								3/4
	201		80	20					0.3 to 1.0		Single phase 110 VAC (50 Hz)	1/4
	301		155	37								1/2
	401		330	85					0.3 to 0.9			
	601		780	195								3/4
	206		80	20					0.3 to 1.0		Single phase 220 VAC (50 Hz)	1/4
	306		155	37								1/2
	406		330	85					0.3 to 0.9			
	606		780	195								3/4

Variant Model

Lower dew point (Atm. pressure dew point: −50°C)

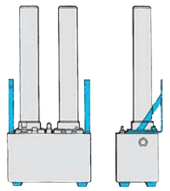
Changing desiccant, from standard silica aluminum oxide gel to synthetic zeolite.
Outlet atmospheric pressure dew point: −50°C
(Conditions: Inlet pressure: 0.7 MPa,
Inlet air temperature: 20°C)

Desiccant change

Changing desiccant to synthetic zeolite (small particle type) or active alumina, etc. to conform to the outlet air atmospheric temperature dew point −60°C.
Possible to fulfill the desiccant dividing into double layer, making use of characteristics of each desiccant.

With bracket

Wall mounting brackets are available. (Standard type is floor sitting.)



Model	ID			
Size	20□	30□	40□	60□
Lower dew point (Atm. pressure dew point: −50°C)	◎			
Desiccant change	○			
With bracket	◎			
Copper-free, Fluorine-free	—			
International standards (CE/UL)	▲			

◎: Made to Order (∗1) ○: Special order A (∗2) ▲: Special order B (∗3) —: Not available
∗1) Special listed in the catalog ∗2) Available by modifying the standard model.
∗3) This is technically possible, but consult with SMC for dimensions, costs and delivery.

Air Dryer (Membrane Type)

Dehumidification

Membrane Air Dryer

P. 89

Model		Basic performance	Basic performance conditions					Operating condition range			Port size for air inlet/outlet Rc, G, NPT
		Atmospheric pressure dew point (°C)	Air flow rate ℓ/min (ANR)		Inlet air temperature (°C)	Inlet air pressure (MPa)		Inlet air temperature (°C) (No freezing)	Inlet air pressure (MPa)	Ambient temperature (°C) (No freezing)	
			Outlet	Purge							
IDG	1	−20	10	2.5	25	0.7		−5 to 55	0.3 to 0.85	−5 to 55	1/4
	3		25	6							1/8, 1/4
	5		50	12							
	10		100	25							1/4, 3/8
	20		200	50							
	30		300	75				−5 to 50	0.3 to 1.0	−5 to 50	
	50		500	125							3/8, 1/2
	60		600								
	75		750	150							1/2
	100		1,000	190							
	3H	−15	25	3				−5 to 55	0.3 to 0.85	−5 to 55	1/8, 1/4
	5H		50	6							
	10H		100	11							1/4, 3/8
	20H		200	22							
	30H		300	35				−5 to 50	0.3 to 1.0	−5 to 50	
	50H		500	60							3/8, 1/2
	60H		600	65							
	75H		750	80							1/2
	100H		1,000	110							
	30L	−40	75	25							1/4, 3/8
	50L		110	40							
	60L		170	57							3/8, 1/2
	75L		240	80							
	100L		300	100							
	60S	−60	50	27							3/8, 1/2
	75S		100	54							
	100S		150	85							

Variant Model

With purge air fitting

Purge air for dehumidification and a dew point indicator will be exhausted to the outside by tubing, not exhausted to around the dryer.

Purge volume change

Purge volume can be changed by changing the orifice diameter.
Purge volume/Large: Dehumidification performance is increased.
Purge volume/Small: Even though dehumidification performance is decreased, consumption volume for a compressor is reduced and lower running cost is achieved.
(Guide: Atmospheric pressure increases by approx. 1°C by reducing the purge volume by 10 %.)

Modular connection (w/ filter, regulator)

Modular connection is available.

Clean room application

- Assembled in the clean room
- Clean double package
- With purge air fitting (Clean fitting)

Model	IDG									
Size	1	3	5	10	20	30	50	60	75	100
With purge air fitting	◎									
Purge volume change	▲	○								
Modular connection (w/ filter, regulator)	—	●								
Clean room application	○	◎								
Copper-free, Fluorine-free	—									

● : Standard (Including option) ◎ : Made to Order (∗1) ○ : Special order A (∗2) ▲ : Special order B (∗3) — : Not available
∗1) Special listed in the catalog ∗2) Available by modifying the standard model.
∗3) This is technically possible, but consult with SMC for dimensions, costs and delivery.

Air Preparation Filters

Water droplet removal

Water Separator

Water droplet separation rate: 99%

P. 141

AMG150C to 550C AMG650, 850

Large dust particle filtration, Oil droplet separation

Main Line Filter

Nominal filtration rating: 3 μm
[Filtration efficiency: 99%]

P. 153

AFF2C to 22C AFF37B, 75B AFF75A to 220A

Dust filtration, Oil mist separation

Mist Separator

Nominal filtration rating: 0.3 μm
[Filtration efficiency: 99.9%]
Oil mist density at outlet:
Max. 1.0 mg/m³ (ANR)
[Approx. 0.8 ppm]

P. 161

AM150C to 550C AM650, 850

Dust filtration, Oil mist separation

Micro Mist Separator

Nominal filtration rating: 0.01 μm
[Filtration efficiency: 99.9%]
Oil mist density at outlet:
Max. 0.1 mg/m³ (ANR)
[Approx. 0.08 ppm]

P. 169

AMD150C to 550C AMD650, 850

Model		Flow capacity ℓ/min (ANR) Max. flow capacity at 0.7 MPa inlet pressure	Port size	Note
AMG	150C	300	1/8, 1/4	Piping support type
	250C	750	1/4, 3/8	
	350C	1,500	3/8, 1/2	
	450C	2,200	1/2, 3/4	
	550C	3,700	3/4, 1	
	650	6,000	1, 1 1/2	
	850	12,000	1 1/2, 2	
AFF	2C	300	1/8, 1/4	Piping support type
	4C	750	1/4, 3/8	
	8C	1,500	3/8, 1/2	
	11C	2,200	1/2, 3/4	
	22C	3,700	3/4, 1	
	37B	6,000	1, 1 1/2	
	75B	12,000	1 1/2, 2	
	75A		50(2B) flange	Free standing type
	125A	22,000	80(3B) flange	
	150A	28,000	100(4B) flange	
	220A	42,000		
AM	150C	300	1/8,1/4	Piping support type
	250C	750	1/4,3/8	
	350C	1,500	3/8,1/2	
	450C	2,200	1/2,3/4	
	550C	3,700	3/4, 1	
	650	6,000	1, 1 1/2	
	850	12,000	1 1/2, 2	
AMD	150C	200	1/8, 1/4	Piping support type
	250C	500	1/4, 3/8	
	350C	1,000	3/8, 1/2	
	450C	2,000	1/2, 3/4	
	550C	3,700	3/4, 1	
	650	6,000	1, 1 1/2	
	850	12,000	1 1/2, 2	
	801	8,000	50(2B) flange	
	901	24,000	50(2B), 80(3B), 100(4B) flange	
	800	8,000	50(2B) flange	Free standing type
	900	24,000	50(2B), 80(3B), 100(4B) flange	
	1000	40,000	100(4B), 150(6B) flange	

Dust filtration, Oil mist separation

Micro Mist Separator with Pre-filter

Built-in 0.3 µm pre-filter
The AM + AMD element have been integrated to achieve a space-saving design.
Nominal filtration rating: 0.01 µm
[Filtration efficiency: 99.9%]
Oil mist density at outlet:
Max. 0.1 mg/m³ (ANR)
[Approx. 0.08 ppm]

P. 179

AMH150C to 550C AMH650, 850

Dust filtration, Oil mist separation

Super Mist Separator

Color change indicates when element is saturated.
Nominal filtration rating: 0.01 µm
[Filtration efficiency: 99.9%]
Oil mist density at outlet:
Max. 0.01 mg/m³ (ANR)
[Approx. 0.008 ppm]
Cleanliness at outlet:
Not more than 35 particles of size 0.3 µm or larger/10 ℓ
(100 particles or less/ft³)

P. 187

AME150C to 550C AME650, 850

Deodorization

Odor Removal Filter

Nominal filtration rating: 0.01 µm
[Filtration efficiency: 99.9%]
Oil mist density at outlet:
Max. 0.004 mg/m³ (ANR)
[Approx. 0.0032 ppm]

P. 195

AMF150C to 550C AMF650, 850

Model		Flow capacity ℓ/min (ANR) Max. flow capacity at 0.7 MPa inlet pressure	Port size	Note
AMH	150C	200	1/8, 1/4	Piping support type
	250C	500	1/4, 3/8	
	350C	1,000	3/8, 1/2	
	450C	2,000	1/2, 3/4	
	550C	3,700	3/4, 1	
	650	6,000	1, 1 1/2	
	850	12,000	1 1/2, 2	
AME	150C	200	1/8, 1/4	Piping support type
	250C	500	1/4, 3/8	
	350C	1,000	3/8, 1/2	
	450C	2,000	1/2, 3/4	
	550C	3,700	3/4, 1	
	650	6,000	1, 1 1/2	
	850	12,000	1 1/2, 2	
AMF	150C	200	1/8, 1/4	Piping support type
	250C	500	1/4, 3/8	
	350C	1,000	3/8, 1/2	
	450C	2,000	1/2, 3/4	
	550C	3,700	3/4, 1	
	650	6,000	1, 1 1/2	
	850	12,000	1 1/2, 2	
	801	8,000	50(2B) flange	
	901	24,000	50(2B), 80(3B) 100(4B) flange	
	800	8,000	50(2B) flange	
	900	24,000	50(2B), 80(3B) 100(4B) flange	Free standing type
	1000	40,000	100(4B), 150(6B) flange	

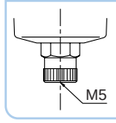
Air Preparation Equipment Filters

AMG P. 141 | AFF P. 153 | AM P. 161 | AMD P. 169
AMH P. 179 | AME P. 187 | AMF P. 195

Variant Model

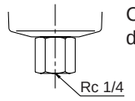
Draint Port

With drain cock / M5



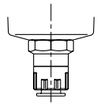
Manual discharge of accumulated drain inside the housing

With drain guide / Rc 1/4



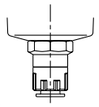
Connectable to the drain discharge part.

With N.O. auto drain / ø10 One-touch fitting



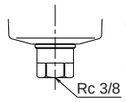
Auto-discharge of accumulated drain inside the housing {Valve opens at atmospheric pressure (0 MPa)}.

With N.C. auto drain / ø10 One-touch fitting



Auto-discharge of accumulated drain inside the housing (Normally closed: Valve closes at atmospheric pressure.)

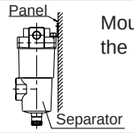
With N.O. auto drain / Rc 3/8



Auto-discharge of accumulated drain inside the housing (Normally open: Valve opens at atmospheric pressure.)

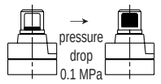
Other Equipment Accessories

With bracket



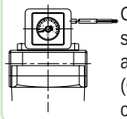
Mounting a separator on the panel, etc.

With element checker



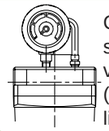
Confirmation of clogged status of a separator visually (Confirmation of service life of an element)

Differential pressure switch with indicator



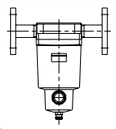
Confirmation of clogged status of a separator visually and by electric signal (Confirmation of service life of an element)

With differential pressure gauge



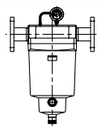
Confirmation of clogged status of a separator visually (Confirmation of service life of an element)

With IN/OUT flange



Flange connection is possible with the pneumatic piping.

With differential pressure gauge / IN/OUT flange



Flange connection is possible with the pneumatic piping. Confirmation of clogged status of a separator visually (Confirmation of service life of an element)

Environment

With white Vaseline

Using white Vaseline instead of grease or turbine oil etc. (Applied for painting)

Clean series

Possible to use in clean room. (High-purity air blow is performed under clean environment and packed by double package with an antistatic prevention material.)

Copper-free, Fluorine-free

No copper & no fluorine materials are included. Nickel plated on copper materials. (Applied for display manufacturing)

Silicon-free

Silicon is not included in materials.

Others

FKM seal

Using FKM for O-rings and gaskets, etc.

IN/OUT flow reversible

Reverse air inlet is available. (Right to left, Normal flow: Left to right)

Filtration grade change

Changing the elements for the AFF75A to 220A to the 0.3 µm element for servicing a large flow mist separator.

Contents \ Model	AMG 150C	AMG 250C	AMG 350C	AMG 450C	AMG 550C	AMG 650	AMG 850	AFF 2C	AFF 4C	AFF 8C	AFF 11C	AFF 22C	AFF 37B	AFF 75B	AFF 75A to 220A
Drain port: With drain cock / M5			●				○			●				○	—
Drain port: With drain guide / Rc 1/4			●				○			●				○	○
Drain port: With N.O. auto drain / ø10 One-touch fitting			●				○			●				○	○
Drain port: With N.C. auto drain / ø10 One-touch fitting		●				○			●				○		
Drain port: With N.O. auto drain / Rc 3/8			○			●				○				●	
Other equipment accessories: With bracket			●							●					—
Other equipment accessories: With element checker			▲							●					○
Other equipment accessories: Differential pressure switch with indicator			▲							○					
Other equipment accessories: With differential pressure gauge			▲							◎					○
Other equipment accessories: With IN/OUT flange	○			◎				○			◎				●
Other equipment accessories: With differential pressure gauge / IN/OUT flange			▲						○		◎				○
Environment: With white Vaseline			◎							◎					○
Environment: Clean series			○							○					—
Environment: Copper-free, Fluorine-free			○							○					
Environment: Silicon-free			○							▲					
Environment: Grease-free			○							○					
Material: FKM seal		●				○				●				○	
Material: Stainless vessel			▲							▲					
Material: IN/OUT flow reversible			◎							◎					○
Material: Filtration grade change			▲							▲					◎
Medium pressure (1.4 MPa)			◎							◎					▲
High pressure (2 MPa or more)			▲							▲					
High temperature (80°C or more)			▲							▲					

Contents \ Model	AM 150C	AM 250C	AM 350C	AM 450C	AM 550C	AM 650	AM 850	AMD 150C	AMD 250C	AMD 350C	AMD 450C	AMD 550C	AMD 650	AMD 850	AMD 800, 900, 1000 801, 901
Drain port: With drain cock / M5				●			○			●				○	—
Drain port: With drain guide / Rc 1/4				●			○			●				○	○
Drain port: With N.O. auto drain / ø10 One-touch fitting				●			○			●				○	○
Drain port: With N.C. auto drain / ø10 One-touch fitting			●			○				●			○		
Drain port: With N.O. auto drain / Rc 3/8				○			●				○			●	
Other equipment accessories: With bracket				●						●					—
Other equipment accessories: With element checker				●						●					○
Other equipment accessories: Differential pressure switch with indicator				○						○					
Other equipment accessories: With differential pressure gauge				◎						◎					○
Other equipment accessories: With IN/OUT flange	○			◎				○		◎					●
Other equipment accessories: With differential pressure gauge / IN/OUT flange	○			◎				○		◎					○
Environment: With white Vaseline				◎						◎					○
Environment: Clean series				○						○					—
Environment: Copper-free, Fluorine-free				○						▲					○
Environment: Silicon-free				▲						▲					○
Environment: Grease-free				○						○					
Material: FKM seal			●			○				●				○	
Material: Stainless vessel				▲						▲					
Material: IN/OUT flow reversible				◎						◎					○
Material: Filtration grade change				▲						▲					
Medium pressure (1.4 MPa)				◎						◎					▲
High pressure (2 MPa or more)				▲						▲					
High temperature (80°C or more)				▲						▲					

Contents \ Model	AMH 150C	AMH 250C	AMH 350C	AMH 450C	AMH 550C	AMH 650	AMH 850	AME 150C	AME 250C	AME 350C	AME 450C	AME 550C	AME 650	AME 850	AMF 150C	AMF 250C	AMF 350C	AMF 450C	AMF 550C	AMF 650	AMF 850	AMF 800, 900, 1000 801, 901
Drain port: With drain cock / M5				●			○				—							—				
Drain port: With drain guide / Rc 1/4				●			○				—							—				○
Drain port: With N.O. auto drain / ø10 One-touch fitting				●			○				—							—				○
Drain port: With N.C. auto drain / ø10 One-touch fitting			●			○					—							—				○
Drain port: With N.O. auto drain / Rc 3/8				○			●				—							—				○
Other equipment accessories: With bracket				●							●							●				—
Other equipment accessories: With element checker				●							▲							▲				
Other equipment accessories: Differential pressure switch with indicator				○							▲							▲				
Other equipment accessories: With differential pressure gauge				○							▲							▲				
Other equipment accessories: With IN/OUT flange	○			◎				○			◎				○			◎				●
Other equipment accessories: With differential pressure gauge / IN/OUT flange				▲							▲							▲				
Environment: With white Vaseline				○							◎							◎				○
Environment: Clean series				○							○							○				
Environment: Copper-free, Fluorine-free				▲							▲							▲				—
Environment: Silicon-free				▲							▲							▲				○
Environment: Grease-free				○							○							○				
Material: FKM seal				●			○				●			○				●				○
Material: Stainless vessel				▲							▲							▲				
Material: IN/OUT flow reversible				◎							◎							◎				○
Material: Filtration grade change				▲							▲							▲				
Medium pressure (1.4 MPa)				◎							◎							▲				
High pressure (2 MPa or more)				▲							▲							▲				
High temperature (80°C or more)				▲							▲							▲				

● : Standard (Including option) ◎ : Made to Order (∗1) ○ : Special order A (∗2) ▲ : Special order B (∗3) — : Not available
∗1) Special listed in the catalog ∗2) Available by modifying the standard model. ∗3) This is technically possible, but consult with SMC for dimensions, costs and delivery.

Clean Gas Filters

Disc type

- Short IN/OUT distance
- Easy element replacement

Cartridge type
SFA

P. 221

Straight type

- Compact
- Easy element replacement
- For small flow rate filtration

Cartridge type
SFB

P. 221

Disposal type
SFB

P. 221

Multistage disc type

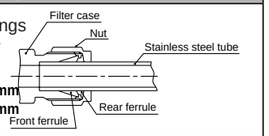
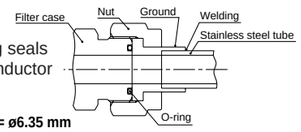
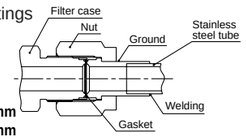
- Large flow rate can be filtrated.

Disposal type
SFC

P. 221

Model		Air flow rate ℓ/min (ANR)	Filtration (μm)	Element surface (cm²)	Connection	Element replacement	Inlet air temperature (°C)		Ambient temperature (°C)	Other Specifications
SFA	100	26	0.01 (Filteration efficiency 99.99%)	14	Rc 1/4	Possible	5 to 80		5 to 80	• Operating fluid: Air, Nitrogen • Maximum operating pressure: 0.99 MPa • Material / Housing: Stainless steel 316 (Electrolytic polishing) • Filter medium: PTFE • Seal material: Fluoro-rubber (FKM) (PTFE: SFC only) • Inspection: 0.1 μm purification inspection (All products) Helium leak test (The SFB300, SFC100 series only) • Packaging: Antistatic double packaging
	101				NPT 1/4					
	102				TSJ 1/4					
	103				UOJ 1/4					
	200	70		33	Rc 1/4					
	201				NPT 1/4					
	202				TSJ 1/4					
	203				UOJ 1/4					
	300	140		57	Rc 1/4					
	301				NPT 1/4					
	302				TSJ 1/4					
	303				UOJ 1/4					
SFB	100	45	0.01 (Filteration efficiency 99.99%)	10	Rc 1/4	Possible	5 to 80		5 to 80	
	101				NPT 1/4					
	102				TSJ 1/4					
	103				UOJ 1/4					
	104				M5					
	200	400	Nominal 120 (Sintered metallic element)		Rc 1/4					
	201				NPT 1/4					
	202				TSJ 1/4					
	203				UOJ 1/4					
	300	45	0.01 (Filteration efficiency 99.99%)		Rc 1/4	Not Possible	5 to 120		5 to 120	
	302				TSJ 1/4					
	305				URJ 1/4					
	315									
SFC	100	240	0.01 (Filteration efficiency 99.99%)	300	Rc 1/4, 3/8	Not Possible	5 to 120		5 to 120	
	102				TSJ 1/4, 3/8					
	105				URJ 1/4, 3/8					

Connection symbol

Symbol	Meaning	Description
TSJ	Tube Swage Joint (Equivalent to Swagelok® fittings)	A type of the self-align fittings Popular in semi-conductor industry **Outside diameter 1/4" = ø6.35 mm** **Outside diameter 3/8" = ø9.53 mm** 
UOJ	Union O-ring Joint (Equivalent to Swagelok® VCO® fittings)	A type of the O-ring seals Popular in semi-conductor industry **Outside diameter 1/4" = ø6.35 mm** 
URJ	Union Ring Joint (Equivalent to Swagelok® VCR® fittings)	A type of the metal seal fittings Popular in semi-conductor industry **Outside diameter 1/4" = ø6.35 mm** **Outside diameter 3/8" = ø9.53 mm** 

Variant Model

Aluminum body

- Light weight and inexpensive.
- For small flow rate filtration.
- White anodized aluminum treatment.

Filtration grade change

- Filtration grade is selectable with stainless steel element between 2 to 120 μm because of adopting a sintered metal stainless steel element.

P. 221

Model		Variant model	
		Aluminum body	Filtration grade change
SFA	100	—	▲
	101		
	102		
	103		
	200		
	201		
	202		
	203		
	300		
	301		
	302		
	303		
SFB	100	◎	—
	101	○	
	102		
	103		
	104		
	200		◎
	201		
	202		
	203		
	300	—	—
	302		
	305		
	315		
SFC	100	—	—
	102		
	105		

P. 221

P. 221

◎ : Made to Order (∗1) ○ :Special order A (∗2)
▲ : Special order B (∗3) — :Not available
∗1) Special listed in the catalog
∗2) Available by modifying the standard model.
∗3) This is technically possible, but consult with SMC for dimensions, costs and delivery.

Integrated production in a clean environment

P. 222

Under a clean environment, all components are washed by ultrasonic wave/ultra-pure deionized water. Assembly inspection and antistatic double packaging processes are conducted in an integrated production system.

Assembly environment
- **Clean room Class M5.5 (ISO Class 7)∗**
- **Clean bench Class M3.5 (ISO Class 5)∗**

∗Fed.Std.209E ( ): based on ISO14644-1

Upper concentration for cleanliness class (Particles/m³)

Particle diameter (mm)	Cleanliness level	
	Class 5	Class 7
0.1	10^5	(10^7)
0.2	23,600	—
0.3	10,100	1,010,000
0.5	3,500	350,000
5	29	2,900
Particle diameter range for cleanliness class	0.1 to 5	0.3 to 5
Relation to the Fed. Std. 209E	Class 100	Class 10,000

- Number in a ( ) is the reference value for evaluating the cleanliness class.
- Fed.Std.=FEDERAL STANDARD

Clean Air Filters

- Nominal filtration rating: **0.01** µm (filtration efficiency 99.99%)
- Initial pressure drop: **0.03** MPa (at inlet pressure 0.7 MPa, maximum flow)
- Maximum operating pressure: **1.0** MPa (at 20°C)

5 P. 243

		SFD100			SFD200			SFD101	SFD102
								 Made to Order	
Type		Disposable type (non-replaceable element)			Cartridge type (replaceable element)				
Flow rate ℓ/min (ANR) (at inlet pressure 0.7 MPa)		Up to 60	Up to 80	Up to 100	Up to 300	Up to 400	Up to 500	Up to 100	
Port size	**One-touch fitting** Note 1)	ø4	ø6	ø8	ø8	ø10	ø12	—	
	Female thread	—	—	Rc 1/4, G 1/4 NPT 1/4	—	—	Rc 1/4, G 1/4 NPT 1/4	Rc 1/4, G 1/4, NPT 1/4	
Case material		Resin			Resin			Aluminum	Stainless steel
Fluid		Air (Nitrogen)							
Nominal filtration rating		0.01 µm (filtration efficiency: 99.99%) Note 2)							
Initial pressure drop		0.03 MPa (at inlet pressure 0.7 MPa, maximum flow)							
Operating pressure (at 20°C)		–100 kPa to 1.0 MPa (in case of nitrogen: 0.99 MPa)							
Operating temperature		5 to 45°C							

Note 1) When using One-touch fittings, handle them in accordance with instructions of Clean One-touch Fittings (Series KP).
Note 2) The clean air filter is designed for the filtration of solid objects. It is not suitable for the separation of water and oil.

Integrated production in a clean environment

Under a clean environment, all components are washed by ultrasonic wave/ultra-pure deionized water. Assembly inspection and antistatic double packaging processes are conducted in an integrated production system.

Upper concentration for cleanliness class (Particles/m³)

Particle diameter (mm)	Cleanliness level	
	Class 5	Class 7
0.1	10^5	(10^7)
0.2	23,600	—
0.3	10,100	1,010,000
0.5	3,500	350,000
5	29	2,900
Particle diameter range for cleanliness class	0.1 to 5	0.3 to 5
Relation to the Fed. Std. 209E	Class 100	Class 10,000

• Number in a ( ) is the reference value for evaluating the cleanliness class.
• Fed.Std.=FEDERAL STANDARD

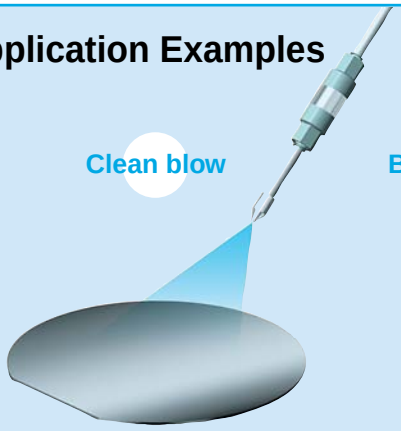
Assembly environment

- **Clean room**
  Class M5.5 (ISO Class 7)*
- **Clean bench**
  Class M3.5 (ISO Class 5)*

*Fed.Std.209E ( ): based on ISO14644-1

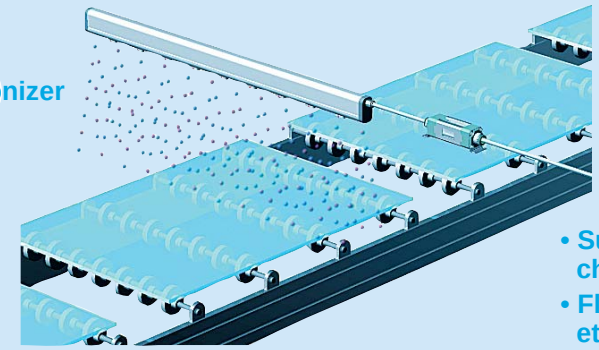
5 P. 245

Application Examples



Clean blow

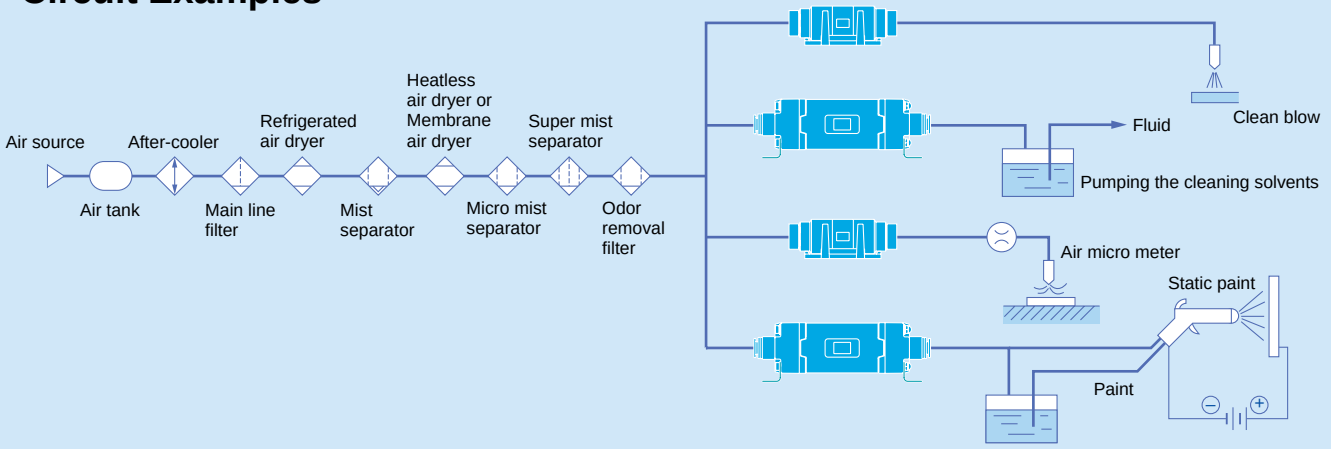
Blow of ionizer



- Substitution of chamber
- Fluid pumping, etc.

∗ When blowing, take care not to entrain ambient air which could contaminate the workpieces.

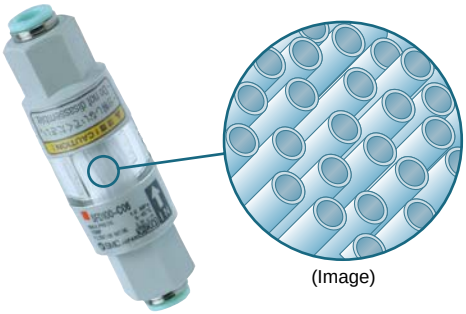
Circuit Examples



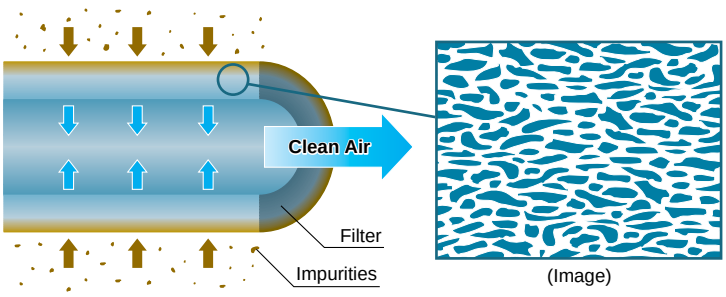
∗ The equipment mounted to the outlet side of SFD should be cleaned by flushing and have the same level of cleanliness as SFD.

Hollow fiber membrane

The hollow fiber membrane has a porous construction with numerous fine holes on a straw type fiber membrane wall.
The hollow fiber membrane filter traps and filtrates the impurities from the compressed air through the overlapping layered fine holes.



(Image)



(Image)

Clean Air Module

Modularizes clean equipment (Reduced piping man-hours/ space-saving). Easily obtains clean air.

- Nominal filtration rating: **0.01** µm (filtration efficiency 99.99%)
- Fluid contact space: Grease-free, Silicon-free
- Clean-room assembly and **double**-packaging

LLB3
Flow range: 5 to 100ℓ/min (ANR)

LLB4
Flow range: 50 to 500ℓ/min (ANR)

Clean Air Module Common Specifications

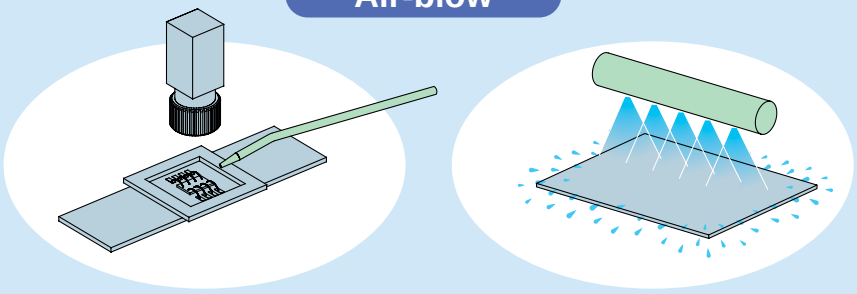
Model			LLB3	LLB4
Fluid			Clean air, N_2 gas (Inlet air conditions: equivalent to ISO 8573-1 and Quality Class 1.4.1-1.6.1) Note 3)	
Maximum operating pressure			0.7 MPa	
Set pressure			0.05 to 0.4 MPa	
Withstand pressure			1.0 MPa	
Fluid temperature			5°C to 45°C (No freezing) ∗ The guaranteed display of digital flow switch ranges between 15 and 35°C.	
Ambient temperature				
Flow range Note 1)			5 to 100 ℓ/min (ANR)	50 to 500 ℓ/min (ANR)
Nominal filtration rating Note 2)			0.01 µm (Filtration efficiency 99.99%)	
Fluid contact space			Grease-free, Silicon-free	
	Material	**Body**	PBT	
		Module connection seal	FKM	
		One-touch fitting seal	EPDM	

5 P. 257

Note 1) The maximum flow rate varies depending on set pressure. Refer to “Flow Characteristics” for detail.
Note 2) According to SMC measurement conditions.
Note 3) Refer to page 270 in Best Pneumatics No. 5 “Operating Environment.”

Applications

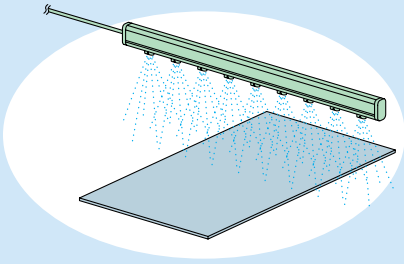
Air-blow



N_2 blow to prevent lead frame oxidation,
N_2 blow to prevent detection camera blur

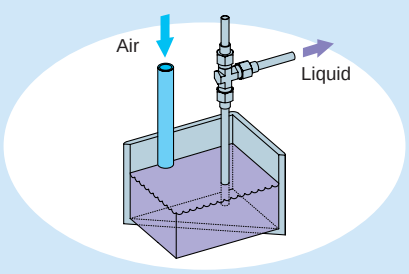
Prevents traces of water droplets.
Air-knife

Ionizer



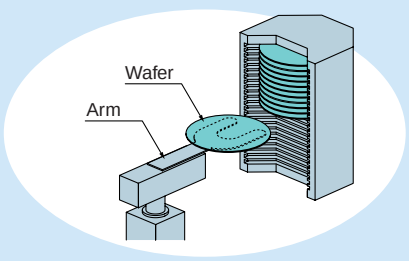
Supplies main pressure to the ionizer.

Applies pressure to tank



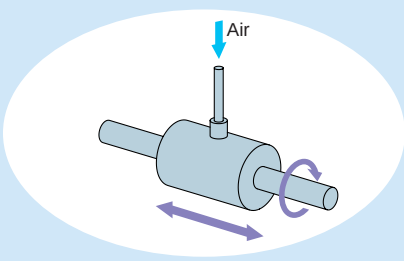
Compressed air for lifting clean liquid

Adsorption and transfer



Suction/release air for wafer-transfer robot

Static pressure gas bearing



Heavy Duty Auto Drain

Model		Max. drain discharge	Operation	Valve type	Max. operating pressure (MPa)	Proof pressure (MPa)	Operating pressure range (MPa)	Ambient and fluid temperature (°C)	Fluid
ADH	4000	400 cc/min. (In case of water at 0.7 MPa pressure)	Float type	N.O. (Open when pressure is not applied)	1.6	2.5	0.05 to 1.6	5 to 60	Compressed air

ADH

P. 280

- Reliable to heavy duty operation
- Large drain discharge capacity
- Easy manual flush button: Manual discharge & flushing
- Common exhaust is possible at the drain outlet.

Variant Model

Model		With ball valve	With bracket	Painting color change
ADH	4000	◎	◎	○

◎: Made to Order (∗1) ○: Special order A (∗2)

∗1) Special listed in the catalog

∗2) Available by modifying the standard model.

With ball valve With bracket

Differential Pressure Gauge

Model		Method	Diaphragm size	Max. operating pressure (MPa)	Proof pressure (MPa)	Scale range (MPa)	Accuracy (MPa)	Ambient and fluid temperature (°C)	Fluid
GD	40	Diaphragm	ø40	1	1.5	0.0 to 0.2	±0.006	5 to 60	Compressed air

GD

P. 283

Variant Model

Pressure unit indication change

Possible to change the standard MPa unit to psi, bar unit or the parallel notation.

With white Vaseline

Changing to white Vaseline instead of grease or turbine oil etc. (Applied for painting)

Copper-free, Fluorine-free

No copper and no fluorine are included. Nickel plated on copper materials. (Applied for display manufacturing)

Model		Pressure unit indication change	With white Vaseline	Copper-free, Fluorine-free
GD	40	○	○	▲

○ : Special order A (∗1) ▲ : Special order B (∗2)

∗1) Available by modifying the standard model.

∗2) This is technically possible, but consult with SMC for dimensions, costs and delivery.