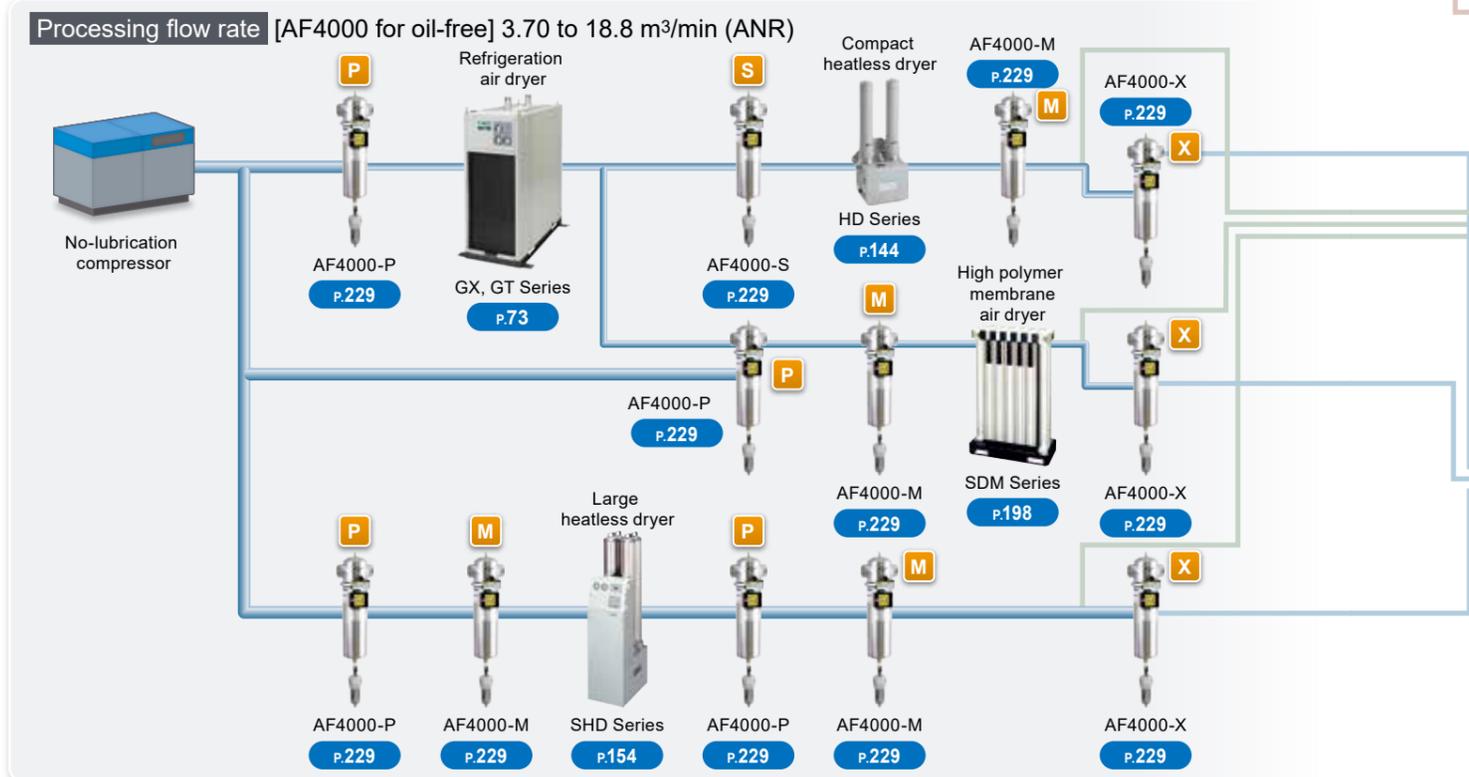
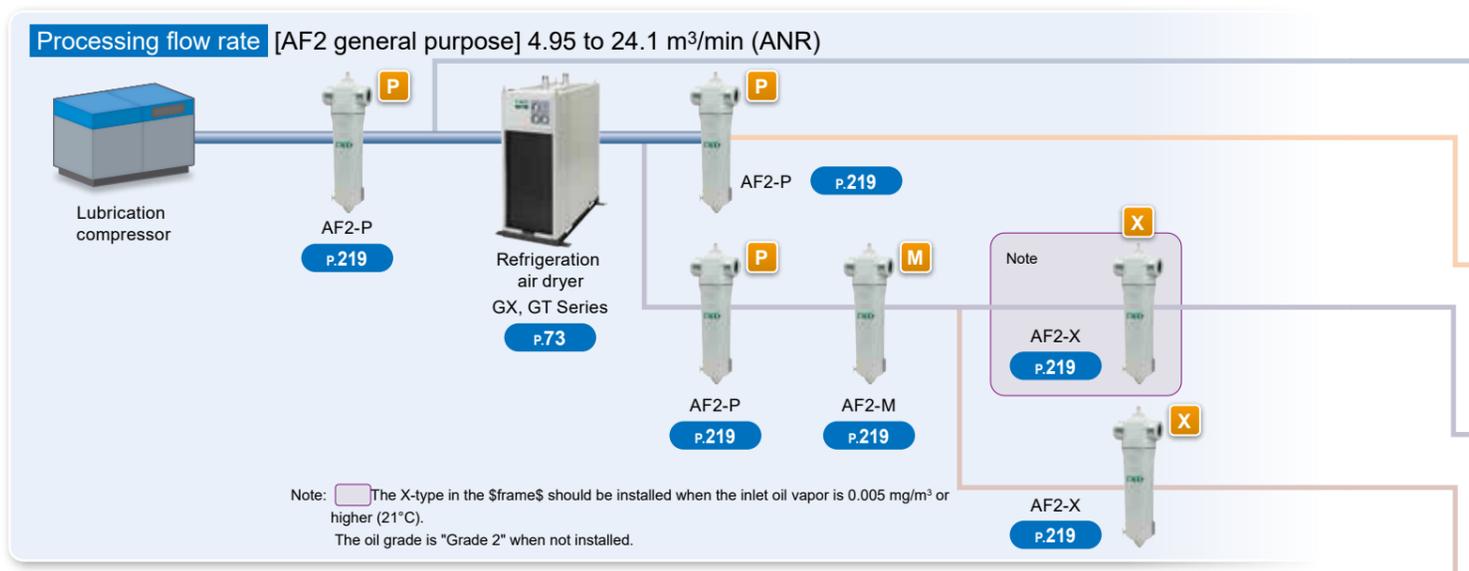


Recommended system configuration for Main Line Filter Components

Medium Main Line Filter



AF2 Series Variations

P TYPE
Removes oil mist and solids
Protects Expensive Pneumatic Components.

M TYPE
High-performance removal of oil mist and solids.
For Pneumatic Circuits Which Prohibit Passage of Oil.

X TYPE
Removes oil mist and odors
Protects Expensive Pneumatic Components.



AF4000 Series Variations

P TYPE
Removing Water Drops
Solid Particle Removal
Ideal for use as a pre-filter for air dryers.

S TYPE
Solid Particle Removal
Protects Expensive Pneumatic Components.

M TYPE
High-performance removal of oil mist and solids
For Pneumatic Circuits Which Prohibit Passage of Oil.

X TYPE
Removes oil vapor and odors
For pneumatic circuits which prohibit passage of odors



*1: If your conditions are different, refer to the specifications in the catalog in order to select a model.
 *2: This example of system selection is based on an air-cooling refrigeration air dryer. When making a selection based on an air-cooling refrigeration air dryer, the model No. of the filter may vary since the standard processing air flow rate may differ. Contact CKD Sales for details.
 *3: Air filter and oil mist filter are to be used where the inlet air temperature is 60°C or less, and X-type where the inlet air temperature is 30°C or less. If air temperature from the secondary side of the refrigeration air dryer is high, keep enough distance from the refrigeration air dryer to maintain a temperature no greater than the inlet air temperature.
 *4: This system cannot be used for high pressure specifications (1 to 1.6 MPa). In that case, contact CKD Sales.

Air Quality	Applications	Impurities in the Air			ISO 8573-1 compressed air purity grade
		Individual particles	Moisture	Oil content	
Dewatered Air Coarse dust removed air	Air for cleaning (dry air not required)	1 μm	-	-	2: -: -
General Dry Air	General Pneumatic Components General Pneumatic Tools Labor-Saving Components Pneumatic Jigs and Tools Air Chuck	1 μm	Pressure dew point 10°C	0.6 mg/m ³	2.6.3
			Pressure dew point 7°C		2.5.3
Dry Air (oil-free)	Instrumentation Measurement Sequence control Painted	0.01 μm	Pressure dew point 10°C	0.01 mg/m ³ (0.003 mg/m ³)	1.6.1
			Pressure dew point 7°C		1.5.1
Dry air (odorless)	Food and Pharmaceutical Processes (Stirring, dry blowing, packaging, brewing, pressure-feeding male, filling) Cosmetic Manufacturing Processes *If the product directly contacts the workpiece, it is recommended to install a bacteria-removing filter.	0.01 μm	Pressure dew point 10°C	0.003 mg/m ³	1.6.1
			Pressure dew point 7°C		1.5.1
Ultra dry air (oil-free)	Ozone generator Powder transfer Drying furnace gas Drying the insulation gas of a high-voltage generator Drying computer rooms Centralized control instrumentation Liquid crystal panel manufacturing Chemical plants Painted	0.01 μm	Pressure dew point -20°C	0.01 mg/m ³	1.3.1
			Pressure dew point -40°C		1.2.1
			Pressure dew point -60°C		1.2.1
Ultra-Dry Air (odorless)	Food and Pharmaceutical Processes (Stirring, dry blowing, packaging, brewing, pressure-feeding male, filling) Cosmetic Manufacturing Processes *If the product directly contacts the workpiece, it is recommended to install a bacteria-removing filter.	0.01 μm	Pressure dew point -20°C	0.003 mg/m ³	1.3.1
			Pressure dew point -40°C		1.2.1
			Pressure dew point -60°C		1.2.1

*1. The system No. is based on the class below. X not found in the table indicates odor removal; and "-" indicates no specification.

ISO 8573-1: 2010 Compressed air purity grade

Grade	Solid Particles			Mass Concentration Cp mg/m ³	Humidity and Water Content		Oil Total Oil Concentration mg/m ³
	Max. number of particles per 1 m ³ for particle diameter d (μm)				Pressure dew point °C	Water Concentration Cw g/m ³	
	0.1 < d ≤ 0.5	0.5 < d ≤ 1.0	1.0 < d ≤ 5.0				
0	Conditions stricter than Grade 1, is to be specified by the user or supplier						
1	≤ 20,000	≤ 400	≤ 10	-	≤ -70	-	≤ 0.01
2	≤ 400,000	≤ 6,000	≤ 100	-	≤ -40	-	≤ 0.1
3	-	≤ 90,000	≤ 1,000	-	≤ -20	-	≤ 1
4	-	-	≤ 10,000	-	≤ +3	-	≤ 5
5	-	-	≤ 100,000	-	≤ +7	-	-
6	-	-	-	0 < Cp ≤ 5	≤ +10	-	-
7	-	-	-	5 < Cp ≤ 10	-	Cw ≤ 0.5	-
8	-	-	-	-	-	0.5 < Cw ≤ 5	-
9	-	-	-	-	-	5 < Cw ≤ 10	-
X	-	-	-	Cp > 10	-	Cw > 10	> 5

For example,
 "Grade 1: 2: 1" means:
 ● Solid particles of 0.1 to 0.5 μm are ≤20,000 particles; 0.5 to 1.0 μm are ≤400 particles; and 1.0 to 5.0 μm are ≤10 particles
 ● Pressure dew point -40°C or less
 ● Oil concentration 0.01 mg/m³ or less
 This indicates the class.