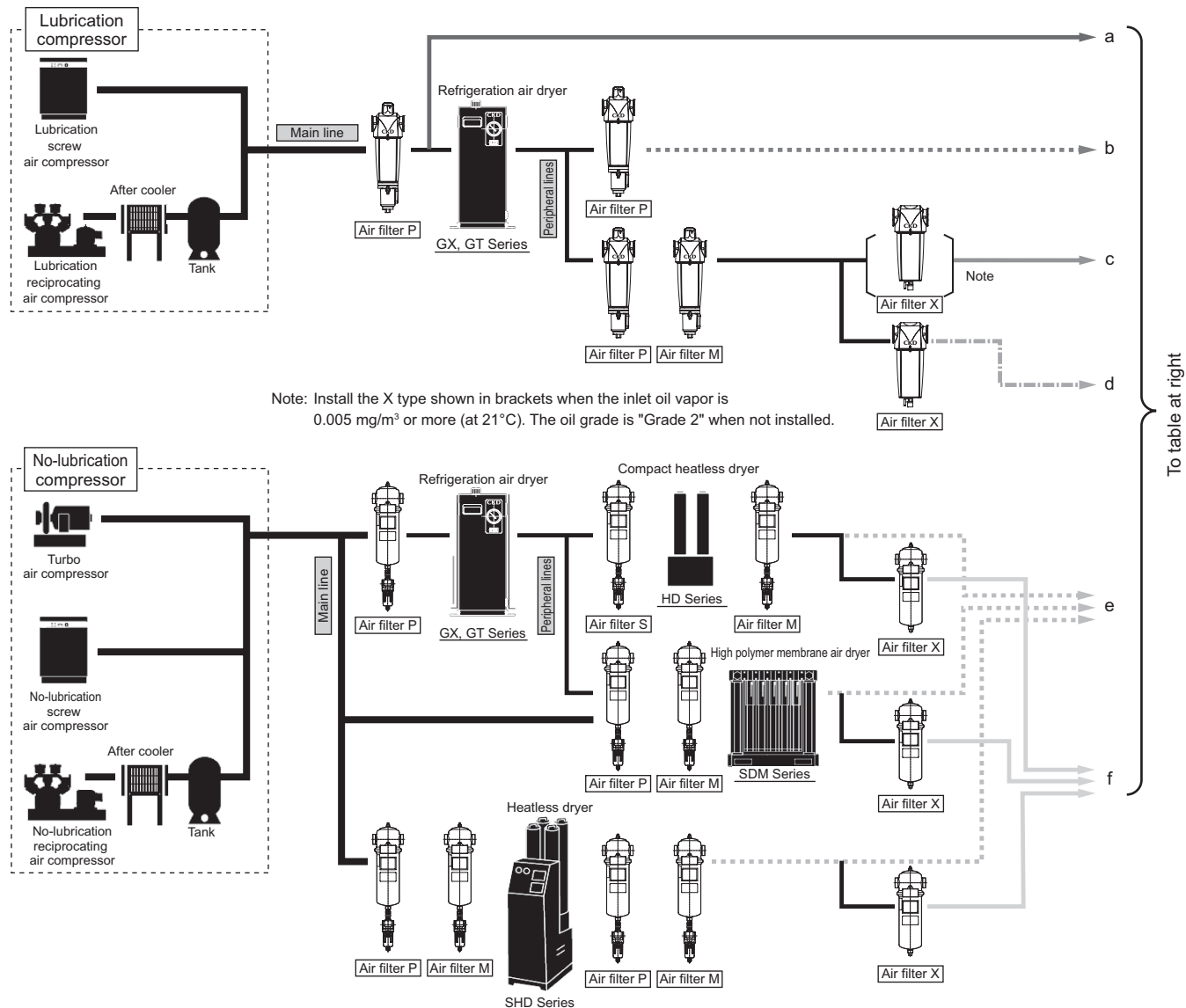


Typical working circuit



JIS B 8392-1:2012 Compressed air purity grade

Grade	Solid particles			Mass concentration Cp mg/m ³	Humidity and moisture		Oil
	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				Total oil concentration mg/m ³
0	Conditions stricter than Grade 1 to be specified by 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

JIS B 8392-1:2003 has been revised to JIS B 8392-1:2012.

For example,
What is Grade 1:2:1?

- Solid particles 0.1 to 0.5 μm are 20,000 particles or less, 0.5 to 1.0 μm are 400 particles or less, and 1.0 to 5.0 μm are 10 particles or less
- Pressure dew point -40°C or less
- Oil concentration 0.01 mg/m³ or less.

	Air quality	Applications	Grade	
a	Water drip removal air/ coarse dust removal air	For construction/civil engineering machinery Air for cleaning (dry air not required)	2.-.-	INDEX
b	General dry air	Standard pneumatic components, standard pneumatic tools, labor saving components, jigs and tools for air, air chucks, air vices, air for cleaning precision components	2.6.3	Precautions
			2.5.3	
c	Dry air (oil-free)	For instrumentation, for measurement, sequence control, high-grade paint	1.6.1	Dryer system list
			1.5.1	
d	Dry air (odorless)	Food product industry (where air is not directly blown onto food), pharmaceutical industry, for stirring/transporting/drying/packaging/brewing	1.6.1	Refrigeration dryer
			1.5.1	
e	Ultra dry air (oil-free)	Ozone generator, powder transfer, drying of atmospheric gas for furnaces, drying of high-voltage generator insulation gas, drying of computer rooms, for centralized control instruments	1.3.1	Desiccant dryer
			1.2.1	
			1.2.1	
f	Ultra dry air (odorless)	Food product industry (where air is not directly blown onto food), pharmaceutical industry, for stirring/transporting/drying/packaging/brewing	1.3.1	High polymer membrane dryer
			1.2.1	
			1.2.1	

Table of system selections

Rating (ambient temperature: 32°C, inlet temperature: 40°C, pressure dew point: 10°C)

Air compressor		Refrigeration air dryer		Main line filter P type (1 or 3 μm)	Main line filter M type (0.01 μm)	Main line filter X type (deodorizing)	
Output kW	Standard processing air rate m³/min (ANR)	Air cooling	Water cooling				Air filter
75	11.4/12.6	GT9075D	GT9075WD	AF2013P-50 AF4013S-50	AF2013M-50 AF4013M-50	AF2013X-50 AF4013X-50	Drain discharger, etc.
90	16.3/18.9	GT9090D	GT9090WD	AF2020P-50 AF4020S-50	AF2020M-50 AF4020M-50	AF2020X-50 AF4020X-50	
120	20.8/23.8	GT9120D	GT9120WD	AF2026P-65	AF2026M-65	AF2026X-65	Flow rate sensor
150	25.9/30.1	GT9150D	GT9150WD	AF5032P-80	AF5032M-80	AF5032X-80	
190	32.1/38.1	GT9190D	GT9190WD	AF5048P-100	AF5048M-100	AF5048X-100	
240	36.5/43.0	GT9240	GT9240W	AF5048P-100	AF5048M-100	AF5048X-100	
300	44.2/52.0	GT9300	GT9300W	AF5064P-100	AF5064M-100	AF5064X-100	
380	55.2/65.0	GT9380	GT9380W	AF5080P-150	AF5080M-150	AF5080X-150	
450	70.3/82.8	GT9450	GT9450W	AF5096P-150	AF5096M-150	AF5096X-150	
710	139.1	—	GT9710WV2	AF5160P-200	AF5160M-200	AF5160X-200	
960	184.2	—	GT9960WV2	AF5192P-200	AF5192M-200	AF5192X-200	