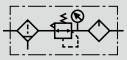


F.R.L. combination Standard White Series

C1000/C2000/C2500-W C3000/C4000/C6500/C8000-W Series

Space-saving with integrated filter, regulator and lubricator

● Port size: 1/8 to 1

JIS symbol 

RoHS CAD

Specifications

1 MPa ≈ 145.0 psi, 1 MPa = 10 bar

Item		C1000-W	C2000-W	C2500-W	C3000-W	C4000-W	C6500-W	C8000-W
Appearance								
Components	Air filter	F1000-W	F2000-W	F3000-W	F3000-W	F4000-W	F6000-W	F8000-W
	Regulator	R1000-W	R2000-W	R2000-W	R3000-W	R4000-W	R6000-W	R8000-W
	Lubricator	L1000-W	L3000-W	L3000-W	L3000-W	L4000-W	L8000-W	L8000-W
Working fluid		Compressed air						
Max. working pressure MPa		1.0 (≈150 psi, 10 bar) *2						
Proof pressure MPa		1.5 (≈220 psi, 15 bar)						
Ambient / fluid temperatures °C		5 (41°F) to 60 (140°F)						
Filtration rating μm		5						
Set pressure MPa		0.05 to 0.85 *2	0.05 (≈7.3 psi, 0.5 bar) to 0.85 (≈120 psi, 8.5 bar)					
Min. drip flow rate (*1) m^3/min(ANR)		0.015	0.03	0.03	0.03	0.065	0.065	0.065
Pressure relief		With relief mechanism						
Oil storage capacity cm^3		20	85	85	85	170	170	170(MAX 360)
Drain capacity cm^3		12	25	45	45	80	80	80 (*3)
Oil used		Turbine oil Class 1 ISO VG32 (spindle oil cannot be used)						
Port size Rc,NPT,G		1/8,1/4 (3/8 uses an adaptor)	1/4,3/8 (1/2 uses an adaptor)	1/4,3/8 (1/2 uses an adaptor)	1/4,3/8 (1/2 uses an adaptor)	1/4,3/8,1/2 (3/4 uses an adaptor)	3/4,1 (1 1/4 uses an adaptor)	3/4,1 (1 1/4 uses an adaptor)
Weight kg		0.40	1.01	1.01	1.15	1.79	3.64	4.5
Standard accessories		Pressure gauge, bracket, bowl guard						

*1: The min. drip flow is that at which five drops of turbine oil drip per minute at the set pressure of 0.5 MPa.

*2: When using the C1000-W Series "F1" with auto-drain, the min. working pressure is 0.2 MPa and max. working pressure is 0.7 MPa. Refer to the max. working flow rate table (page 106) for F1000-W-F1 auto-drain for the max. working flow rate. Set the working flow rate to less than or equal to the max. working flow rate.

*3: Up to 170 cm^3 is stored with the manual drain cock only.

*4: In the case of "F" or "FF" with auto-drain, the min. working pressure of auto-drain is 0.1 MPa. Air is purged with initial drain until pressure reaches 0.1 MPa.

*5: In the case of "F1" or "FF1" with auto-drain, the min. working pressure of auto-drain is 0.15 MPa.

*6: When element option "Y" is selected, refer to the max. working flow rate table (page 108) for the max. flow rate. Set the working flow rate to less than or equal to the max. working flow rate.

*7: C2000-W Series with "F1" (with auto-drain) must be used at equal to or less than the max. working flow rate. (Refer to the F2000-W section on page 106 for max. flow rate.)

Option weight

* Add to the weight of the standard accessories.

Unit: kg

Code	Drain discharge					Bowl material		Press.gauge	Pipe adaptor set						
	F	F1	FF	FF1	C	M	M1	T*	A6*W	A8*W	A10*W	A15*W	A20*W	A25*W	A32*W
C1000		0.007			0			0	0.09	0.09	0.09				
C2000		0.02			0		0.2	0		0.16	0.16	0.16			
C2500		0.02			0	0.2	0.2	0		0.16	0.16	0.16			
C3000	0.02	0.02			0	0.2	0.2	0		0.16	0.16	0.16			
C4000	0.02	0.02			0	0.2	0.2	0		0.16	0.16	0.16	0.16		
C6500	0.02	0.02			0	0.2	0.2	0					0.53	0.53	0.53
C8000	0.02	0.02	0.02	0.02	0	0.2	0.2	0					0.53	0.53	0.53

Code	Assembled components					Pressure gauge					
	D	S	P	V	K	G45P	G49P	G59P	G40P	G52P	R2
C1000	0.056	0.15		0.18		0.074	0.086	0.115	0.085	0.15	0.04
C2000	0.17	0.23	0.54	0.29	0.34	0.074	0.086		0.085	0.15	0.04
C2500	0.17	0.23	0.54	0.29	0.34	0.074	0.086	0.115	0.085	0.15	0.04
C3000	0.17	0.23	0.54	0.29	0.34	0.074	0.086	0.115	0.085	0.15	0.04
C4000	0.17	0.23	0.54	0.29	0.34	0.074	0.086	0.115	0.085	0.15	0.04
C6500	0.45	0.51			0.9	0.074	0.086	0.115	0.085	0.15	0.04
C8000	0.45	0.51			0.9	0.074	0.086	0.115	0.085	0.15	0.04

F.R.L. Combination

How to order

Refer to page 30 for the explanation of the option.

C1000 – 6 ( ) – W – C – U DSV – ( ) – A6W ( ) ( )

Ⓐ Model No. *2
Ⓑ Port size
Ⓒ Port thread
Ⓓ Option
Ⓔ Assembled components
Ⓕ Display unit *11
Ⓖ Pipe adaptor set (included)
Ⓗ Attachment
Ⓘ Pressure gauge option (included)

Code	Description	Ⓐ Model No. *1 C1000	C2000	C2500	C3000	C4000	C6500	C8000
Ⓑ Port size								
6	1/8	●						
8	1/4	●	●	●	●	●		
10	3/8		●	●	●	●		
15	1/2					●		
20	3/4					●*1	●	●
25	1						●	●
Ⓒ Port thread								*2
Blank	Rc thread	●	●	●	●	●	●	●
N	NPT thread	●	●	●	●	●	●	●
G	G thread	●	●	●	●	●	●	●
Ⓓ Option								*3
Drain discharge *4 Blank	Filter with manual drain cock, lubricator without manual cock	●	●	●	●	●	●	●
C	Lubricator with manual cock	●	●	●	●	●	●	●
F	Filter/auto-drain with manual override (NO: Exhaust when not pressurized)			●	●	●	●	●
F1	Filter/auto-drain with manual override (NC: No exhaust when not pressurized)	●	●	●	●	●	●	●
FF	Filter/large auto-drain with manual override (NO: Exhaust when not pressurized)							●
FF1	Filter/large auto-drain with manual override (NC: No exhaust when not pressurized)							●
Bowl material Blank	Polycarbonate bowl	●	●	●	●	●	●	●
Z	Nylon bowl	●	●	●	●	●	●	●
M	Metal bowl			●	●	●	●	●
M1	Metal bowl with manual drain cock *5		●	●	●	●	●	●
Element Blank	5 µm	●	●	●	●	●	●	●
Y	0.3 µm (submicron) *6			●	●	●	●	●
Diff press detect Blank	Without differential pressure detection port	●	●	●	●	●	●	●
Q	With differential pressure detection port (Rc1/4)						●	●
Pressure range Blank	0.05 to 0.85 MPa	●	●	●	●	●	●	●
L	0.05 to 0.35 MPa *7	●	●	●	●	●	●	●
Pressure relief Blank	With relief mechanism	●	●	●	●	●	●	●
N	Non-relief	●	●	●	●	●	●	●
Pressure gauge Blank	With standard pressure gauge (G401-W)	●	●	●	●	●	●	●
T	No pressure gauge (gauge port (1/4) is assembled sealed)	●	●	●	●	●	●	●
T8	Pressure gauge ready (gauge port (1/4) is left open)	●	●	●	●	●	●	●
Flow direction Blank	Standard flow (left → right)	●	●	●	●	●	●	●
X1	Reverse flow (right → left)	●	●	●	●	●	●	●
Ⓔ Assembled components								Pages 166 to 171, 182 to 187, 348 and 349
Blank	Without assembled component	●	●	●	●	●	●	●
U	Assembled component *8	●	●	●	●	●	●	●
Assembled component D	Distributor (D101-W, D401-W, D801-W)	●	●	●	●	●	●	●
S	Pressure switch (P1100-W, 4100-W, 8100-W)	●	●	●	●	●	●	●
P	Pressure switch (P4000-W)		●	●	●	●		
V	Residual pressure exhaust valve (V1000-W, 3000-W)	●	●	●	●	●		
K	Residual pressure exhaust valve with keyhole (V3010-W, V6010-W)		●	●	●	●	●	●
Ⓕ Display unit								
Blank	MPa display (Rc thread), psi display (NPT thread), bar display (G thread)	●	●	●	●	●	●	●
J1	MPa display (NPT, G thread)	●	●	●	●	●	●	●
Ⓖ Pipe adaptor set (included)								Page 350 *9
Blank	Not included	●	●	●	●	●	●	●
A6*W	1/8 pipe adaptor set	●						
A8*W	1/4 pipe adaptor set	●	●	●	●	●		
A10*W	3/8 pipe adaptor set	●	●	●	●	●		
A15*W	1/2 pipe adaptor set		●	●	●	●		
A20*W	3/4 pipe adaptor set					●	●	●
A25*W	1 pipe adaptor set						●	●
A32*W	1 1/4 pipe adaptor set						●	●
Adaptor thread								
Blank	Rc thread	●	●	●	●	●	●	●
N	NPT thread	●	●	●	●	●	●	●
G	G thread	●	●	●	●	●	●	●
Ⓗ Other attachments								
Blank	Not included	●	●	●	●	●	●	●
PW	Pressure switch (P4000-W) + joiner set		●	●	●	●		
VW	Residual pressure exhaust valve (V1000-W, V3000-W) + joiner set	●	●	●	●	●		
Ⓘ Pressure gauge option (included)								Page 363 *10
Blank	Not included	●	●	●	●	●	●	●
G45P	G45D-8-P10(L:G45D-8-P04)	●	●	●	●	●	●	●
G49P	G49D-8-P10(L:G49D-8-P04)	●	●	●	●	●	●	●
G59P	G59D-8-P10(L:G59D-8-P04)	●		●	●	●	●	●
G40P	G40D-8-P10(L:G40D-8-P04)	●	●	●	●	●	●	●
G52P	G52D-8-P10(L:G52D-8-P10)	●	●	●	●	●	●	●

⚠ Precautions for model No. selection

1: Pipe adaptor A400-20-W is assembled on both ends of C4000-20*-W. A20*W does not need to be selected for the pipe adaptor set.
*2: G threads and NPT threads are available for IN, OUT, gauge port and drain outlet (metal bowl with auto-drain). Attachments P and V are also included.
*3: Select options for the drainage, bowl material, element, differential pressure detection and regulator. When selecting options for several items, list options in order from the top.
*4: Refer to page 354 for the auto-drain usage conditions.
*5: When selecting option "M1", select the drain discharge option "C".
*6: Refer to page 108 for max. processing flow rate when option "Y" is selected.
*7: The pressure gauge's indication range is 0 to 0.4 MPa for the option "L".
*8: Installation position for assembled components

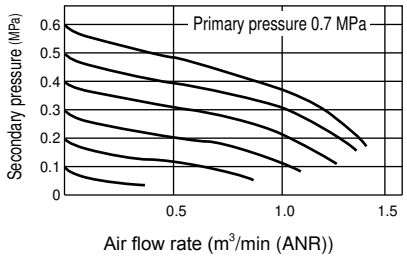
Code	Attachment Install positions	Compatible model
D	F+(D)+R+L	C1000-W to C8000-W
S or P	F+R+(S,P)+L	C1000-W to C8000-W ("P" excludes 1000, 6000 and 8000 Series)
V or K	F+R+L+(V,K)	C1000-W to C8000-W ("V" excludes 6000 and 8000 Series and "K" excludes 1000 Series)

Note) Indicate "U"+"D", "S","P","V" and "K" when selecting an assembled component.
Use customized combination specifications sheet for any other combination.

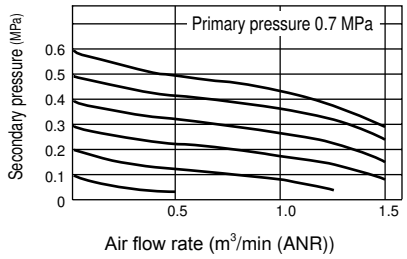
*9: The joiner set is enclosed with the pipe adaptor set.
*10: The pressure gauge option (included) can be selected only when Ⓒ Port thread is Rc thread.
*11: Display unit options when selecting NPT threads: If Blank is selected, the pressure unit is psi and the temperature display unit is °F.
When G thread and Blank display unit option are selected, the pressure unit will be bar and the temperature display unit will be °C.
When NPT/G thread and "J1" display unit option are selected, the pressure unit will be MPa and the temperature display unit will be °C.

Flow characteristics

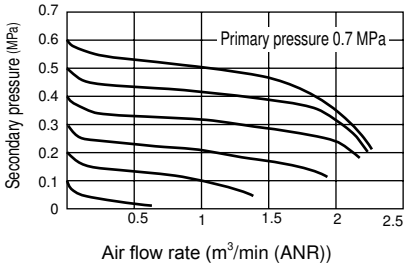
● C1000-6-W



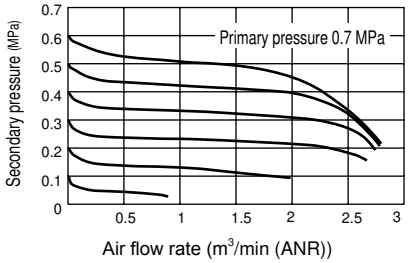
● C1000-8-W



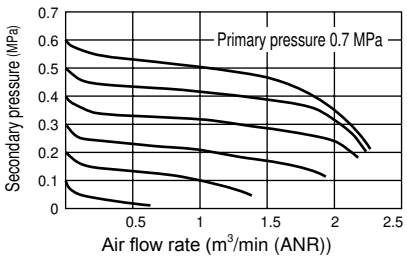
● C2000-8-W



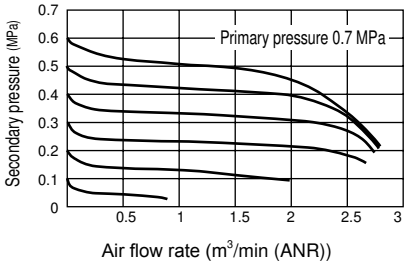
● C2000-10-W



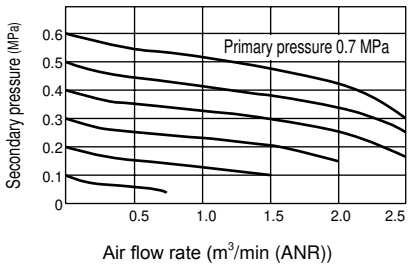
● C2500-8-W



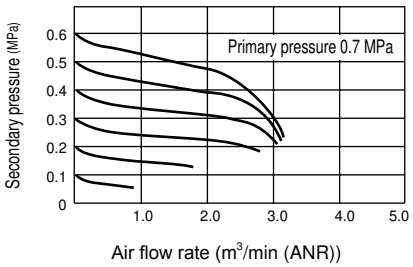
● C2500-10-W



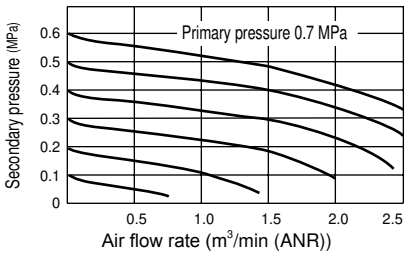
● C3000-8-W



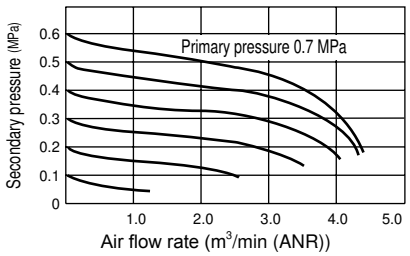
● C3000-10-W



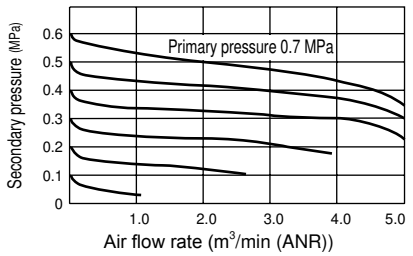
● C4000-8-W



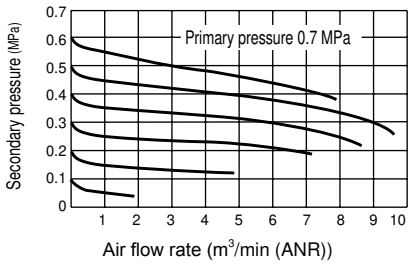
● C4000-10-W



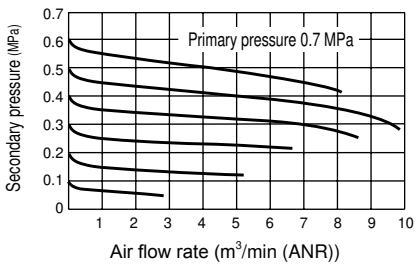
● C4000-15-W



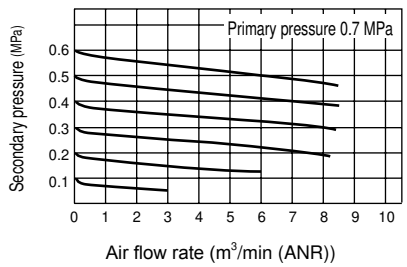
● C6500-20-W



● C6500-25-W



● C8000-20-W



● C8000-25-W

