F.R.L.
Filter Regulator
Filter
Regulator
Lubricator
Drain Separator
Mechanical Pressure SW
Residual Pressure Exhaust Valve
Slow Start Valve
Antibacterial/ Bacteria Removing Filter
Ozone FR
Siloxane/ OzoneRemover
Flame Resistant FR
Oil-free Regulator
Medium Pressure FR
No copper/ PTFEv Specification
Air Unit Equipment
Adapter Joiner
Pressure Gauge
Compact F.R.L.
Large F.R.L.
Precision Regulator
Clean FR
Electro-Pneumatic Regulator
Air Booster
Ending

Air Unit

CXU

■ Air Preparation Components



CONTENTS

Product Introduction 392
● C ustomized Air Unit (Customized combinations) 397
● Air Units Special Specification Product 461
● Valve air unit 465
● Single air unit 477
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Air Preparation Components
F.R.L.
Filter Regulator
Filter
Regulator
Lubricator
Drain Separator
Mechanical Pressure SW
Residual Pressure Exhaust Valve
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Large F.R.L.
Precision Regulator
Clean FR
Electro-Pneumatic Regulator
Air Booster
Ending

Next-generation pneumatic unit

Piping is not necessary　No complicated work required　Flexible combination

Various parts are available for your desired combination includingcustomized specifications.



Pilot Operated 2-Port Solenoid Valve
[For blow valve, etc.]



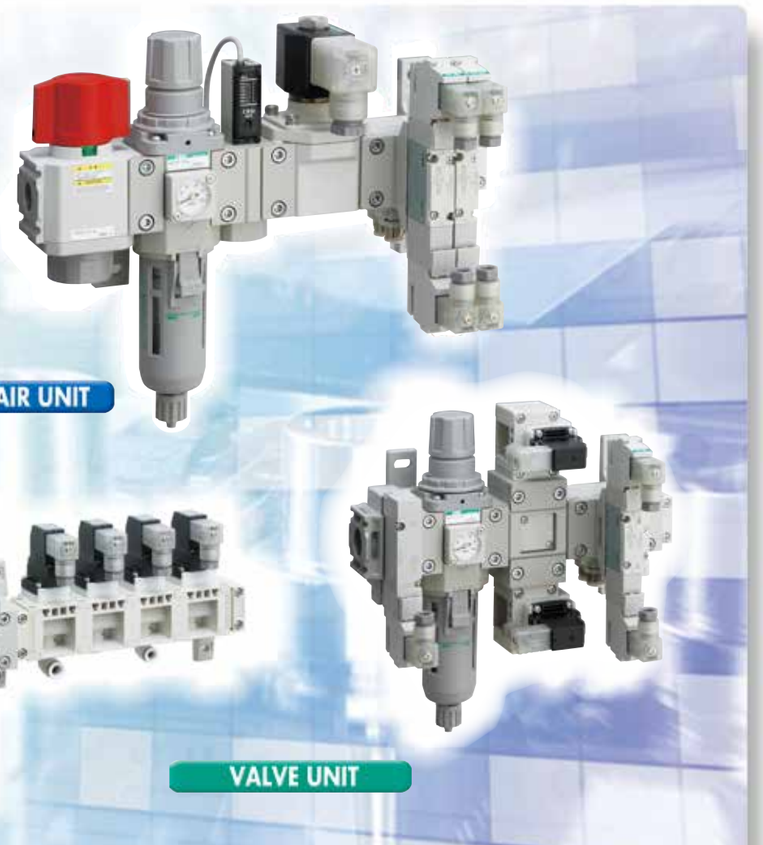
Direct acting 2-port solenoid valve
[For blow valve, etc.]



Residual pressure exhaust 3-port solenoid valve
[For modular components master valve]

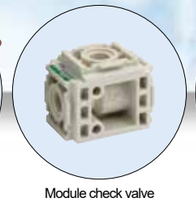


Pilot kick 2-port solenoid valve
[For main ON/OFF valve, etc.]

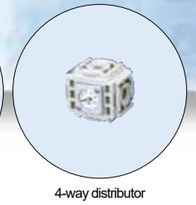




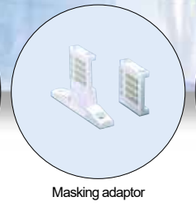
Pilot operated 5-port valve
[Actuator drive]



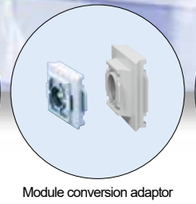
Module check valve
[Reverse flow prevention]



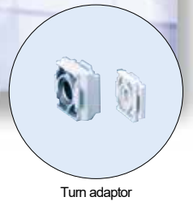
4-way distributor
[For branching a line]



Masking adaptor
[For masking a connection]



Module conversion adaptor
[For adopting another series]
1000 Series and 3000 Series
8000 Series, 4000 Series
can be connected.



Turn adaptor
[90° rotatable]

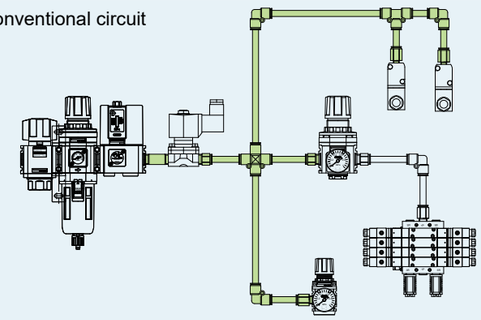
The CXU Series combines various air components from valves to filter regulators, essential to pneumatic control and actuator drives. The number of processes for design and piping has been dramatically reduced, and installation space has also been reduced.

Piping is not necessary/no complicated work

Pipeless and space-saving

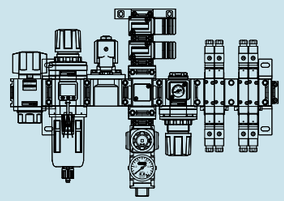
Save space from reduced piping and work, and just order a single unit. There is no tedious and time consuming installation of components, no need to follow complicated piping designs. Without most of the piping, the device not only looks well-organized, but also saves space.

Conventional circuit



Compared to conventional **50% less**

CXU Series



High quality

There are no screw-in parts and so there are no worries about external leakage. Entry of foreign matter during piping can be prevented.

Flexible combination

Unrestricted in vertical/horizontal directions

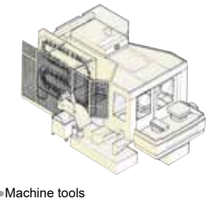
Vertical and horizontal piping is freely available. Solenoid valves can also be connected directly. Layout is easy, and piping design man-hours can be reduced. (AIR UNIT Custom Product)



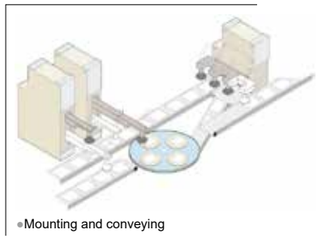
Flexible change and expansion

Modular connection enables flexible exchange and expansion of pneumatic components. The units are easily maintained as they can be attached/detached from the front of the components.

Mounting and conveying



●Machine tools



●Mounting and conveying

Customized Air Unit (Customized combinations)

Model Name	Model No.	Series 1000	Series 2000 3000 4000	Listed Page
CXU10 Series	CXU10-UN-	●		400, 401
CXU30 Series	CXU30-UN-		●	402 to 405
CXU13 Series	CXU13-UN-	●		406, 407

Air Units Special Specification Product

Model Name	Model No.	Series 1000	Series 2000 3000 4000	Listed Page
Air Units Special Specification Product	CXUZ-FL	●	●	461

Valve air unit

Model Name	Model No.	Series 1000	Series 2000 3000 4000	Listed Page
Pilot Operated 2-Port Solenoid Valve	CXU10-GEXA	●		466
Pilot Operated 5-Port Valve	CXU30-M4G2R		●	470

Single air unit

Model Name	Model No.	Series 1000	Series 2000 3000 4000	Series 6000 8000	Listed Page
Module residual pressure exhaust valve	CXU30-VE		●		480
Pilot Operated 2-Port Solenoid Valve	CXU10-EXA	●			486
Direct Acting 2-Port Solenoid Valve	CXU10-FAB3	●			488
	CXU30-FAB4U		●		490
Pilot kick 2-port solenoid valve	CXU30-ADK		●		492
Pilot Operated 5-Port Valve	CXU30-4G2R		●		494
Module check valve	CXU10-CHV	●			500
4-way distributor	CXU10-D4	●			502
	CXU30-D4		●		502
Turn adaptor	CXU10-TA	●			504
	CXU30-TA		●		504
Masking adaptor	CXU10-MA	●			505
Module conversion adaptor	CXU13-CA	●			506
	CXU48-CA		●		

Customized Air Unit

Customized Combinations

Overview

Complex pneumatic components can be configured by purchasing customized units. Work such as piping is eliminated, enabling the unit to be used immediately.

Features

① Flexible combinations
Flexible layouts reduce the man-hours required for design.

② Simplified order placement
Units can be purchased using only one form, making order placement and delivery management easy.

③ Reduced man-hours
FR components and solenoid valves are connected as a module, eliminating work such as piping.

④ Space-saving
Piping free and fitting free simple design. Compact design that fits into confined spaces.

⑤ Front access
Units can be easily mounted/removed and added from the front. The maintenance operation is simple as well.

Descriptions of icons

For custom orders only

① Dedicated model No. for customized combinations
Model No. containing "-UN" are used exclusively for customized combinations. components cannot be purchased individually.

Interface 56 mm

② Face-to-Face Dimension
Interface dimensions are shown in icons.

No thread Open type

③ Cannot be used at terminals
Since no port thread is provided, a masking adaptor or pipe adaptor is required for use at terminals.



CONTENTS

[F.R.L. components, solenoid valve]
- Filter Regulator 408
- Reverse Filter Regulator 412
- Air Filter 416
- Oil mist filter 418
- High Performance Oil Mist Filter 422
- Regulator 424
- Reverse Regulator 426
- Lubricator 428
- Drain Separator 430
- Mechanical Pressure Switches 432
- Residual Pressure Exhaust Valve 436
- Slow Start Valve 438
- Residual pressure exhaust 3-port solenoid valve 440
- Direct Acting 2-Port Solenoid Valves 443
- Pilot Operated 2-Port Solenoid Valves Lee Dae-min 444
- Pilot Kick Operated 2-Port Solenoid Valves 446
- Pilot operated 5-port valve 448

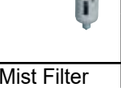
[Distributor, adaptor]
- Module check valve 452
- Distributor 453
- Turn adaptor 454
- Pipe adaptor 455
- L-type pipe adaptor 455
- Masking adaptor 456
- Module conversion adaptor 457

[Joiner, bracket]
- T-bracket 458
- Joiner 458

Air Preparation Components
F.R.L.
Filter Regulator
Filter
Regulator
Lubricator
Drain Separator
Mechanical Pressure SW
Residual Pressure Exhaust Valve
Slow Start Valve
Antibacterial/ Bacteria Removing Filter
Ozone FR
Siloxane/ OzoneRemover
Flame Resistant FR
Oil-free Regulator
Medium Pressure FR
No copper/ PTFEv Specification
Air Unit Equipment
Adapter Joiner
Pressure Gauge
Compact F.R.L.
Large F.R.L.
Precision Regulator
Clean FR
Electro-Pneumatic Regulator
Air Booster
Ending

Customized Air Unit

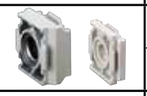
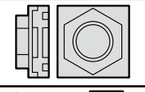
[F.R.L. components]

Series Name	Model No.	Module			Port size (OUT)									Listed Page
		1000 Series	3000 Series	8000 Series	ø4	ø6	ø8	1/8	1/4	3/8	1/2	3/4	1	
● Filter Regulator 	W1000	●						●	●					408
	W2000		●						●	●				
	W3000		●						●	●	●			
	W4000		●						●	●	●			
	W8000			●								●	●	
● Reverse Filter Regulator 	W1100	●						●	●					412
	W2100		●						●	●				
	W3100		●						●	●				
	W4100		●						●	●	●			
	W8100			●								●	●	
● Air Filter 	F1000	●						●	●					416
	F2000		●						●	●				
	F3000		●						●	●				
	F4000		●						●	●	●			
	F6000			●								●	●	
	F8000			●								●	●	
● Oil mist filter 	M1000	●						●	●					418
	M2000		●						●	●				
	M3000		●						●	●				
	M4000		●						●	●	●			
	M6000			●								●	●	
	M8000			●								●	●	
● High Performance Oil Mist Filter 	MX1000	●						●	●					422
	MX3000		●						●	●				
	MX4000		●						●	●	●			
	MX6000			●								●	●	
	MX8000			●								●	●	
● Regulator	R1000	●						●	●					424
	R2000		●						●	●				
	R3000		●						●	●				
	R4000		●						●	●	●			
	R6000			●								●	●	
	R8000			●								●	●	
● Reverse Regulator	R1100	●						●	●					426
	R2100		●						●	●				
	R3100		●						●	●				
	R4100		●						●	●	●			
	R6100			●								●	●	
	R8100			●								●	●	
● Lubricator	L1000	●						●	●					428
	L3000		●						●	●				
	L4000		●						●	●	●			
	L8000			●								●	●	
● Drain Separator 	FX1004		●						●	●				430
	FX1011		●						●	●	●			
	FX1037			●								●	●	
● Mechanical Pressure Switches	P4000		●						●	●	●			432
	P1100-UN	●						●	●					434
	P4100-UN		●						●	●	●			
	P8100-UN			●								●	●	
● Residual Pressure Exhaust Valve	V1000	●						●	●					436
	V3000		●						●	●	●			
	V3010		●						●	●	●			437
	V6010			●								●	●	
● Slow Start Valve 	V3301		●						●	●	●			438
	V3321		●						●	●	●			

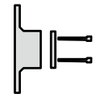
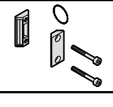
[Solenoid Valve]

Series Name	Model No.	Module			Port size (OUT)									Listed Page
		1000 Series	3000 Series	8000 Series	ø4	ø6	ø8	1/8	1/4	3/8	1/2	3/4	1	
● Residual pressure exhaust 3-port solenoid valve 	CXU30-VE-UN		●											440
● Pilot Operated 2-Port Solenoid Valves 	CXU10-EXA-UN	●				●	●							443
● Direct Acting 2-Port Solenoid Valves 	CXU10-FAB3-UN	●				●	●							444
	CXU30-FAB4U-UN		●						●					445
● Port 2-Port Solenoid Valves 	CXU30-ADK-UN		●											446
● Pilot operated 5-port valve 	CXU30-4G2R-UN		●		●	●	●							448

[Distributor, adaptor]

Series Name	Model No.	Module			Port size (OUT)							Listed Page
		1000 Series	3000 Series	8000 Series	ø6	ø8	1/8	1/4	3/8	1/2	3/4	1	
● Module check valve 	CXU10-CHV-UN	●											452
● Distributor	D101-UN	●					●	●					453
	D401-UN		●					●	●	●			
	D801-UN			●							●	●	
	D300		●					●	●				
● Turn adaptor 	CXU10-TA-UN	●											454
	CXU30-TA-UN		●										
● Pipe adaptor 	A100-UN	●					●	●	●				455
	A400-UN		●					●	●	●			
	A800-UN			●							●	●	
● L-type pipe adaptor 	A101-UN	●					●	●					455
	A401-UN		●					●	●	●			
	A801-UN			●							●	●	
● Masking adaptor 	CXU10-MA-UN	●											456
	CXU30-MA-UN		●										
● Module conversion adaptor 	CXU13-CA-UN	●											457
	CXU48-CA-UN			●									

[Joiner, bracket]

Series Name	Model No.	Module			Height to pipe center				Listed Page
		1000 Series	3000 Series	8000 Series	40	45	55	65	
● T-bracket set 	B110-UN	●			●				458
	B110-UN-H	●				●			
	B310-UN		●			●			
	B410-UN		●				●		
	B810-UN			●				●	
Note) T type bracket sets of different heights cannot be combined.									
● Joiner 	C1000-J100-UN	●							458
	C4000-J400-UN		●						
	C8000-J800-UN			●					

Example of CXU10 Series customized combination specifications sheet 1000 Series base

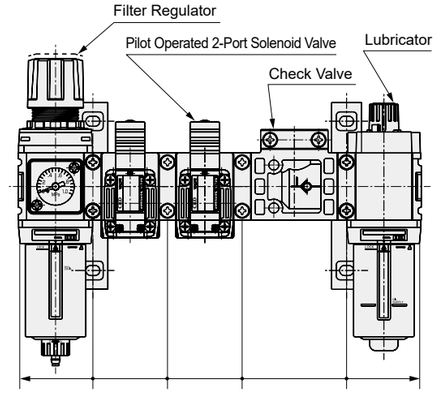
Overview

Custom Combination is a customer-oriented combination that responds to various combination needs of users. Please issue the following specification sheet and place your order. Additional models such as solenoid valves, etc., are available as well as conventional customized combinations.

How to Create a Custom Combination Specification Sheet

① Indicate the full model No. in the model No. field for the required part.
② Indicate "○" for the installation position and "Up" or "Down" for the direction of the required part.
③ Indicate "○" in the bracket and joiner fields.

- Refer to each section in this catalog by configuration for "How to order" and descriptions, etc.
- Only the FRL Standard White Series and Air Units components (CXU) can be selected.
- If Air Units components (CXU) is not included, use the specifications for C□000.



The external dimensions can be calculated by summing the face-to-face dimensions of each device. The mounting position of the bracket can also be calculated.

CXU10 Series Custom Combination Specification Sheet 1000 Series base

Person in Charge / Slip No. / Quantity Set / Delivery Date (Month/Day) / Date of Issue / / / Company / Contact / Order No.

● **Model No. :**
CXU10 — UN — ○ — ○

Do not fill in. It is used by CKD for your control No.

Flow Direction	
Blank	Left → Right
X1	Right → Left

Please specify the flow direction of compressed air when viewed from the front. Do not write anything when "blank" is selected.

For products marked with *, please enter the up/down direction. For regulator, indicate up/down for knob and other port directions.

Indicate the installation position from the left when seen from the front.

Name	Face-to-Face Dimension	Model No.	Direction	Installation Position								Technical Usage Column
Filter Regulator	40	W1000-8-W		○								
		W1100- -W										
Air Filter	40	F1000- -W										
Oil Mist Filter	40	M1000- -W										
High-Performance Oil Mist Filter	40	MX1000- -W										
Regulator ★	40	R1000- -W										
	40	R1100- -W										
Lubricator	40	L1000-8-W					○					
Pressure Switch	28	P1100-UN- -W		*2							*2	
Residual Pressure Exhaust Valve	40	V1000- -W										
Pilot Operated 2-Port Solenoid Valve	40	CXU10-EXA-UN-CL8-2HS-3		*2	○	○					*2	
Direct Acting 2-Port Solenoid Valve	40	CXU10-FAB3-UN-		*2							*2	
		CXU10-FAB3-UN-		*2							*2	
Module check valve ★	56	CXU10-CHV-UN-00-MA		*2			○				*2	
Distributor ★	28	D101-UN-00-W		*2							*2	
Turn adaptor	10	CXU10-TA-UN-00										
Piping Adapter	21.5	A100-UN- -W										
L-type Piping Adapter ★	28	A101-UN- -W										
Masking adaptor	10	CXU10-MA-UN-00										

One pipe adaptor is included. This is not a two-piece set and so fill in the required fields.

If using products with different options, bore sizes, etc., please enter them in this column.

T-bracket set	*1	B110-UN-W			○			○				
T-bracket set	*2	B110-H-UN-W										
Joiner Set		C1000-J100-UN-W				○	○					

Use T-bracket at regular intervals. Use T-brackets for 3 stations or less with cantilever, and 5 stations or less with double support. Changes to brackets other than the listed T-bracket are not allowed.

* 1 : The distance from pipe center to the mounting surface is 40mm.
* 2 : The distance from pipe center to the mounting surface is 45mm.
* 3 : When using a product at the end of the combination, a pipe adaptor (A100-UN, A101-UN) or masking adaptor (CXU10-MA) shall be used at its end. (The horizontal direction port does not have threads.)

Technical Comments Column	

Approved	Reviewed	Person in Charge

Do not fill in. This is our confirmation seal column.

CXU10 Series Custom Combination Specification Sheet 1000 Series base

Person in Charge / Slip No. / Quantity Set / Delivery Date (Month/Day) / Date of Issue / / / Company / Contact / Order No.

● **Model No. :**
CXU10 — UN — ○ — ○

Flow Direction	
Blank	Left → Right
X1	Right → Left

★ For products marked with *, please enter the up/down direction. For regulator, indicate up/down for knob and other port directions.

Indicate the installation position from the left when seen from the front.

Name	Face-to-Face Dimension	Model No.	Direction	Installation Position								Technical Usage Column
Filter Regulator	40	W1000- -W										
		W1100- -W										
Air Filter	40	F1000- -W										
Oil Mist Filter	40	M1000- -W										
High-Performance Oil Mist Filter	40	MX1000- -W										
Regulator ★	40	R1000- -W										
	40	R1100- -W										
Lubricator	40	L1000- -W										
Pressure Switch	28	P1100-UN- -W		*2							*2	
Residual Pressure Exhaust Valve	40	V1000- -W										
Pilot Operated 2-Port Solenoid Valve	40	CXU10-EXA-UN-		*2							*2	
Direct Acting 2-Port Solenoid Valve	40	CXU10-FAB3-UN-		*2							*2	
		CXU10-FAB3-UN-		*2							*2	
Module check valve ★	56	CXU10-CHV-UN-00		*2							*2	
Distributor ★	28	D101-UN-00-W		*2							*2	
Turn adaptor	10	CXU10-TA-UN-00										
Piping Adapter	21.5	A100-UN- -W										
L-type Piping Adapter ★	28	A101-UN- -W										
Masking adaptor	10	CXU10-MA-UN-00										

T-bracket set	*1	B110-UN-W										
T-bracket set	*2	B110-H-UN-W										
Joiner Set		C1000-J100-UN-W										

* 1 : The distance from pipe center to the mounting surface is 40mm.
* 2 : The distance from pipe center to the mounting surface is 45mm.
* 3 : When using a product at the end of the combination, a pipe adaptor (A100-UN, A101-UN) or masking adaptor (CXU10-MA) shall be used at its end. (The horizontal direction port does not have threads.)

Technical Comments Column	

Approved	Reviewed	Person in Charge

Example of CXU30 Series customized combination specifications sheet 2000, 3000 Series base

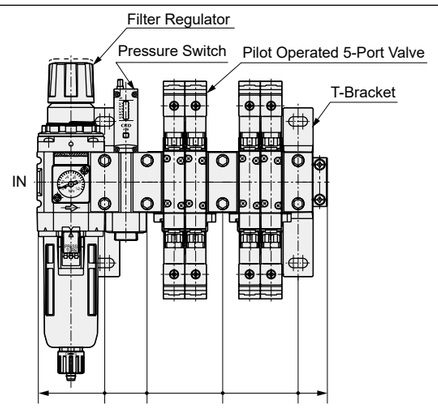
Overview

Custom Combination is a customer-oriented combination that responds to various combination needs of users. Please issue the following specification sheet and place your order. Additional models such as solenoid valves, etc., are available as well as conventional customized combinations.

How to Create a Custom Combination Specification Sheet

① Indicate the full model No. in the model No. field for the required part.
② Indicate "◯" for the installation position and "Up" or "Down" for the direction of the required part.
③ Indicate "◯" in the bracket and joiner fields.

- Refer to each section in this catalog by configuration for "How to order" and descriptions, etc.
- Only the FRL Standard White Series and Air Units components (CXU) can be selected.
- If Air Units components (CXU) is not included, use the specifications for C□000.



The external dimensions can be calculated by summing the face-to-face dimensions of each device. The mounting position of the bracket can also be calculated.

CXU30 Series Custom Combination Specification Sheet 2000, 3000 Series base

Person in Charge / Slip No. / Quantity Set / Delivery Date (Month/Day) / Date of Issue / Company / Contact / Order No.

● Model No. : CXU30 — UN — ◯ — [ ]

Do not fill in. It is used by CKD for your control No.

Flow Direction	
Blank	Left → Rig
X1	Right → L

Please specify the flow direction of compressed air when viewed from the front. Do not write anything when "blank" is selected.

For products marked with *, please enter the up/down direction. For regulator, indicate up/down for knob and other port directions.

Indicate the installation position from the left when seen from the front.

Name	Face-to-Face Dimension	Model No.	Direction	Installation Position								Technical Usage Column
Filter Regulator	50	W2000-10-W-		○								
		W2100- -W										
	63	W3000- -W										
		W3100- -W										
Air Filter	50	F2000- -W										
	63	F3000- -W										
Oil Mist Filter	50	M2000- - -W										
	63	M3000- -W										
High-Performance Oil Mist Filter	63	MX3000- -W										
Regulator ★	50	R2000- -W										
		R2100- -W										
	63	R3000- -W										
		R3100- -W										
Lubricator	63	L3000- -W										
Drain Separator	63	FX1004- -W										
Pressure Switch	80	P4000- -W										
	31.5	P4100-UN-10-W		*2	○						*2	
Residual Pressure Exhaust Valve	63	V3000-10-W-S										
		V3010- -W-										
Residual pressure exhaust 3-port solenoid valve	45	CXU30-VE-UN-00										
Slow Start Valve	63	V3301- -W-										
		V3321- -W-										
Direct Acting 2-Port Solenoid Valve	50	CXU30-FAB4U-UN-8L-		*2							*2	
Pilot Kick Operated 2-Port Solenoid Valve	63	CXU30-ADK-UN-00-		*2							*2	
Pilot Operated 5-Port Valve	56	CXU30-4G2R-UN-33-C8-BS-3		*2		○	○				*2	
		CXU30-4G2R-UN-										
Distributor ★	31.5	D401-UN-00- -W		*2							*2	
Distributor	42	D300- -W										
Turn adaptor	22.5	CXU30-TA-UN-00										
Piping Adapter	*3	A400-UN- -W										
L-type Piping Adapter ★	31.5	A401-UN- -W										
Masking adaptor	21.5	CXU30-MA-UN-00					○					
T-bracket set *1		B310-UN-W			○			○				
Joiner Set		C4000-J400-UN-W				○	○					

Use the pilot operated 5-port valve with up to three stations.

One pipe adaptor is included. This is not a two-piece set and so fill in the required fields.

If using products with different options, bore sizes, etc., please enter them in this column.

Use the T-brackets at regular intervals. Use T-brackets for 3 stations or less with cantilever, and 5 stations or less with double support. Changes to brackets other than the listed T-bracket are not allowed.

* 1 : The distance from pipe center to the mounting surface is 45mm.
* 2 : When using a product at the end of the combination, a pipe adaptor (A400-UN, A401-UN) or masking adaptor (CXU30-MA) shall be used at its end. (The horizontal direction port does not have threads.)
* 3 : 20mm for port sizes 8, 10 and 15, and 25mm for 20.

Technical Comments Column	

Approved	Reviewed	Person in Charge

Do not fill in. This is our confirmation seal column.

CXU30 Series Custom Combination Specification Sheet 2000, 3000 Series base

Person in Charge / Slip No. / Quantity Set / Delivery Date (Month/Day) / Date of Issue / / Company / Contact / Order No.

● Model No. : CXU30 — UN — ◯ — [ ]

Flow Direction	
Blank	Left → Right
X1	Right → Left

★ For products marked with, please enter the up/down direction. For regulator, indicate up/down for knob and other port directions.

Indicate the installation position from the left when seen from the front.

Name	Face-to-Face Dimension	Model No.	Direction	Installation Position								Technical Usage Column
Filter Regulator	50	W2000- -W										
		W2100- -W										
	63	W3000- -W										
		W3100- -W										
Air Filter	50	F2000- -W										
	63	F3000- -W										
Oil Mist Filter	50	M2000- -W										
	63	M3000- -W										
High-Performance Oil Mist Filter	63	MX3000- -W										
Regulator ★	50	R2000- -W										
		R2100- -W										
	63	R3000- -W										
		R3100- -W										
Lubricator	63	L3000- -W										
Drain Separator	63	FX1004- -W										
Pressure Switch	80	P4000- -W										
	31.5	P4100-UN- -W		*2							*2	
Residual Pressure Exhaust Valve	63	V3000- -W										
		V3010- -W										
Residual pressure exhaust 3-port solenoid valve	45	CXU30-VE-UN-00										
Slow Start Valve	63	V3301- -W-										
		V3321- -W-										
Direct Acting 2-Port Solenoid Valve	50	CXU30-FAB4U-UN-8L-		*2							*2	
Pilot kick 2-port solenoid valve	63	CXU30-ADK-UN-00-		*2							*2	
Pilot Operated 5-Port Valve	56	CXU30-4G2R-UN-		*2							*2	
		CXU30-4G2R-UN-										
Distributor ★	31.5	D401-UN-00- -W		*2							*2	
Distributor	42	D300- -W										
Turn adaptor	22.5	CXU30-TA-UN-00										
Piping Adapter	*3	A400-UN- -W										
L-type Piping Adapter ★	31.5	A401-UN- -W										
Masking adaptor	21.5	CXU30-MA-UN-00										
T-bracket set	*1	B310-UN-W										
Joiner Set		C4000-J400-UN-W										

* 1 : The distance from pipe center to the mounting surface is 45mm.
* 2 : When using a product at the end of the combination, a pipe adaptor (A400-UN, A401-UN) or masking adaptor (CXU30-MA) shall be used at its end. (The horizontal direction port does not have threads.)
* 3 : 20mm for port sizes 8, 10 and 15, and 25mm for 20.

Technical Comments Column	

Approved	Reviewed	Person in Charge

Example of CXU30 Series customized combination specifications sheet 4000 Series base

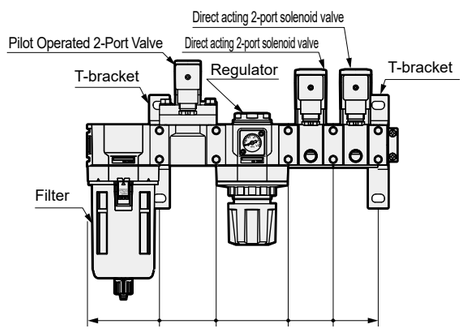
Overview

Custom Combination is a customer-oriented combination that responds to various combination needs of users. Please issue the following specification sheet and place your order.
Additional models such as solenoid valves, etc., are available as well as conventional customized combinations.

How to Create a Custom Combination Specification Sheet

① Indicate the full model No. in the model No. field for the required part.
② Indicate "◯" for the installation position and "Up" or "Down" for the direction of the required part.
③ Indicate "◯" in the bracket and joiner fields.

- Refer to each section in this catalog by configuration for "How to order" and descriptions, etc.
- Only the FRL Standard White Series and Air Units components (CXU) can be selected.
- If Air Units components (CXU) is not included, use the specifications for C□000.



The external dimensions can be calculated by summing the face-to-face dimensions of each device. The mounting position of the bracket can also be calculated.

CXU30 Series Custom Combination Specification Sheet 4000 Series base

Person in Charge
Slip No.
Quantity Set
Delivery Date (Month/Day)
Date of Issue / /
Company
Contact
Order No.

● Model No. : CXU30 ─ UN ─ ( ) ─

Do not fill in. It is used by CKD for your control No.

Flow Direction	
Blank	Left → Rig
X1	Right → Le

Please specify the flow direction of compressed air when viewed from the front.
Do not write anything when "blank" is selected.

For products marked with *, please enter the up/down direction. For the regulator's knob direction, indicate up/down, and the port up/down for other components.

Indicate the installation position in order from the left as seen from the front.

Name	Face-to-Face Dimension	Model No.	Direction	Installation Position								Technical Usage Column
Filter Regulator	63	W3000- -W										
		W3100- -W										
	80	W4000- -W										
		W4100- -W										
Air Filter	63	F3000- -W										
	80	F4000-15-W		◯								
Oil Mist Filter	63	M3000- -W										
	80	M4000- -W										
High-Performance Oil Mist Filter	63	MX3000- -W										
	80	MX4000- -W										
Regulator ★	63	R3000- - -W										
		R3100- -W										
	80	R4000-15-W	Down			◯						
		R4100- -W										
Lubricator	63	L3000- -W										
	80	L4000- -W										
Drain Separator	63	FX1004- -W										
	80	FX1011- -W										
Pressure Switch	80	P4000- -W										
	31.5	P4100-UN- -W		*2							*2	
Residual Pressure Exhaust Valve	63	V3000- -W										
		V3010- -W										
Residual pressure exhaust 3-port solenoid valve	45	CXU30-VE-UN-00										
Slow Start Valve	63	V3301- -W-										
		V3321- -W-										
Direct Acting 2-Port Solenoid Valve	50	CXU30-FAB4U-UN-8L-2HS-3		*2			◯	◯			*2	
Pilot kick 2-port solenoid valve	63	CXU30-ADK-UN-00-2HS-3		*2	◯						*2	
Pilot Operated 5-Port Valve	56	CXU30-4G2R-UN-										
		CXU30-4G2R-UN-		*2							*2	
Distributor ★	31.5	D401-UN-00- -W		*2							*2	
Distributor	42	D300- -W										
Turn adaptor	22.5	CXU30-TA-UN-00										
Piping Adapter	*3	A400-UN- -W										
L-type Piping Adapter ★	31.5	A401-UN- -W										
Masking adaptor	21.5	CXU30-MA-UN-00						◯				
T-bracket set *1		B410-UN-W			◯				◯			
Joiner Set		C4000-J400-UN-W				◯	◯	◯				

Use the pilot operated 5-port valve with up to three stations.

One pipe adaptor is included. This is not a two-piece set and so fill in the required fields.

If using products with different options, bore sizes, etc., please enter them in this column.

Use the T-brackets at regular intervals. Use T-brackets for 3 stations or less with cantilever, and 5 stations or less with double support. Changes to brackets other than the listed T-bracket are not allowed.

* 1 : The distance from pipe center to the mounting surface is 55mm.
* 2 : When using a product at the end of the combination, a pipe adaptor (A400-UN, A401-UN) or masking adaptor (CXU30-MA) shall be used at its end. (The horizontal direction port does not have threads.)
* 3 : 20mm for port sizes 8, 10 and 15, and 25mm for 20.

Technical Comments Column	

Approved	Reviewed	Person in Charge

Do not fill in. This is our confirmation seal column.

CXU30 Series Custom Combination Specification Sheet 4000 Series base

Person in Charge
Slip No.
Quantity Set
Delivery Date (Month/Day)
Date of Issue / /
Company
Contact
Order No.

● Model No. : CXU30 ─ UN ─ ( ) ─ ( )

Flow Direction	
Blank	Left → Right
X1	Right → Left

★ For products marked with *, please enter the up/down direction. For regulator, indicate up/down for knob and other port directions.

Indicate the installation position from the left when seen from the front.

Name	Face-to-Face Dimension	Model No.	Direction	Installation Position								Technical Usage Column
Filter Regulator	63	W3000- -W										
		W3100- -W										
	80	W4000- -W										
		W4100- -W										
Air Filter	63	F3000- -W										
	80	F4000- -W										
Oil Mist Filter	63	M3000- -W										
	80	M4000- -W										
High-Performance Oil Mist Filter	63	MX3000- -W										
	80	MX4000- -W										
Regulator ★	63	R3000- -W										
		R3100- -W										
	80	R4000- -W										
		R4100- -W										
Lubricator	63	L3000- -W										
	80	L4000- -W										
Drain Separator	63	FX1004- -W										
	80	FX1011- -W										
Pressure Switch	80	P4000- -W										
	31.5	P4100-UN- -W		*2							*2	
Residual Pressure Exhaust Valve	63	V3000- -W										
		V3010- -W										
Residual pressure exhaust 3-port solenoid valve	45	CXU30-VE-UN-00										
Slow Start Valve	63	V3301- -W-										
		V3321- -W-										
Direct Acting 2-Port Solenoid Valve	50	CXU30-FAB4U-UN-8L-		*2							*2	
Pilot kick 2-port solenoid valve	63	CXU30-ADK-UN-00-		*2							*2	
Pilot Operated 5-Port Valve	56	CXU30-4G2R-UN-										
		CXU30-4G2R-UN-		*2							*2	
Distributor ★	31.5	D401-UN-00- -W		*2							*2	
Distributor	42	D300- -W										
Turn adaptor	22.5	CXU30-TA-UN-00										
Piping Adapter	*3	A400-UN- -W										
L-type Piping Adapter ★	31.5	A401-UN- -W										
Masking adaptor	21.5	CXU30-MA-UN-00										
T-bracket set *1		B410-UN-W										
Joiner Set		C4000-J400-UN-W										

* 1 : The distance from pipe center to the mounting surface is 55mm.
* 2 : When using a product at the end of the combination, a pipe adaptor (A400-UN, A401-UN) or masking adaptor (CXU30-MA) shall be used at its end. (The horizontal direction port does not have threads.)
* 3 : 20mm for port sizes 8, 10 and 15, and 25mm for 20.

Technical Comments Column	

Approved	Reviewed	Person in Charge

Example of CXU13 Series customized combination specifications sheet 1000, 2000, 3000 Series mix

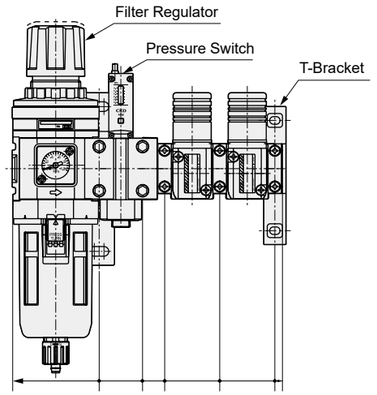
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① Indicate the full model No. in the model No. field for the required part.
② Indicate "◯" for the installation position and "Up" or "Down" for the direction of the required part.
③ Indicate "◯" in the bracket and joiner fields.

- Refer to each section in this catalog by configuration for "How to order" and descriptions, etc.
- Only the FRL Standard White Series and Air Units components (CXU) can be selected.
- If Air Units components (CXU) is not included, use the specifications for C□000.



The external dimensions can be calculated by summing the face-to-face dimensions of each device. The mounting position of the bracket can also be calculated.

CXU13 Series Custom Combination Specification Sheet 1000, 3000 Series mix

Person in Charge / Slip No. / Quantity Set / Delivery Date (Month/Day) / Date of Issue / Company / Contact / Order No.

● Model No. : CXU13 — UN — ◯ — ▭

Do not fill in. It is used by CKD for your control No.

Please specify the flow direction of compressed air when viewed from the front. Do not write anything when "blank" is selected.

Flow Direction	
Blank	Left → Right
X1	Right → Left

★ For products marked with *, please enter the up/down direction. For regulator, indicate up/down for knob and other port directions.

Indicate the installation position from the left when seen from the front.

Name	Face-to-Face Dimension	Model No.	Direction	Installation Position								Technical Usage Column
Filter Regulator	40 : 1000 50 : 2000 63 : 3000	W3000-10-W		◯								
		W100- -W										
Air Filter	40 : 1000 50 : 2000 63 : 3000	F000- -W										
Oil Mist Filter	40 : 1000 50 : 2000 63 : 3000	M000- -W										
High-Performance Oil Mist Filter	40	MX1000- -W										
	63	MX3000- -W										
Regulator	40 : 1000 50 : 2000 63 : 3000	R000- -W										
		R100- -W										
Lubricator	40	L1000- -W										
	63	L3000- -W										
Drain Separator	63	FX1004- -W										
Pressure Switch	80	P4000- -W										
	28	P1100-UN- -W		*2							*2	
	31.5	P4100-UN-8-W		*2	◯						*2	
Residual Pressure Exhaust Valve	40	V1000- -W										
	63	V300- -W										
Residual pressure exhaust 3-port solenoid valve	45	CXU30-VE-UN-00										
Slow Start Valve	63	V3301- -W-										
		V3321- -W-										
Pilot Operated 2-Port Solenoid Valve	40	CXU10-EXA-UN-		*2							*2	
Direct Acting 2-Port Solenoid Valve	40	CXU10-FAB3-UN-C6-2HS-3		*2		◯	◯				*2	
Direct Acting 2-Port Solenoid Valve	50	CXU30-FAB4U-UN-8L-		*2							*2	
Pilot Kick Operated 2-Port Solenoid Valve	63	CXU30-ADK-UN-00-		*2							*2	
Pilot Operated 5-Port Valve	56	CXU30-4G2R-UN-		*2							*2	
		CXU30-4G2R-UN-										
Module check valve ★	56	CXU10-CHV-UN-00-		*2							*2	
Module conversion adaptor	16	CXU13-CA-UN-00		*2		◯					*2	
Distributor ★	28	D101-UN-00- -W		*2							*2	
	31.5	D401-UN-00- -W										
Distributor	42	D300- -W										
Turn adaptor	10	CXU10-TA-UN-00										
	22.5	CXU30-TA-UN-00										
Piping Adapter	21.5	A100-UN- -W										
	*3	A400-UN- -W										
L-type Piping Adapter ★	28	A101-UN- -W										
	31.5	A401-UN- -W										
Masking adaptor	10	CXU10-MA-UN-00						◯				
	21.5	CXU30-MA-UN-00										
T-bracket set	*1	B110-H-UN-W						◯				
T-bracket set	*1	B310-UN-W			◯							
Joiner Set		C1000-J100-UN-W				◯	◯					
Joiner Set		C4000-J400-UN-W			◯							

4000 Series cannot be selected. This is due to a height difference between B410-W and B110-H-W.

Use the pilot operated 5-port valve with up to three stations.

One pipe adaptor is included. This is not a two-piece set and so fill in the required fields.

Use the T-brackets at regular intervals. Use T-brackets for 3 stations or less with cantilever, and 5 stations or less with double support. Changes to brackets other than the listed T-bracket are not allowed.

* 1 : The distance from pipe center to the mounting surface is 45mm.
* 2 : When using a product at the end of the combination, a pipe adaptor (A□00-UN, A□01-UN) or masking adaptor (CXU□0-MA) shall be used at its end. (The horizontal direction port does not have threads.)
* 3 : 20mm for port sizes 8, 10 and 15, and 25mm for 20.

Technical Comments Column	

Approved	Reviewed	Person in Charge

Do not fill in. This is our confirmation seal column.

CXU13 Series Custom Combination Specification Sheet 1000, 2000, 3000 Series mix

Person in Charge / Slip No. / Quantity Set / Delivery Date (Month/Day) / Date of Issue / Company / Contact / Order No.

● Model No. : CXU13 — UN — ◯ — ▭

Flow Direction	
Blank	Left → Right
X1	Right → Left

★ For products marked with *, please enter the up/down direction. For regulator, indicate up/down for knob and other port directions.

Indicate the installation position from the left when seen from the front.

Name	Face-to-Face Dimension	Model No.	Direction	Installation Position								Technical Usage Column
Filter Regulator	40 : 1000 50 : 2000 63 : 3000	W000- -W										
		W100- -W										
Air Filter	40 : 1000 50 : 2000 63 : 3000	F000- -W										
Oil Mist Filter	40 : 1000 50 : 2000 63 : 3000	M000- -W										
High-Performance Oil Mist Filter	40	MX1000- -W										
	63	MX3000- -W										
Regulator	40 : 1000 50 : 2000 63 : 3000	R000- -W										
		R100- -W										
Lubricator	40	L1000- -W										
	63	L3000- -W										
Drain Separator	63	FX1004- -W										
Pressure Switch	80	P4000- -W										
	28	P1100-UN- -W		*2							*2	
	31.5	P4100-UN- -W										
Residual Pressure Exhaust Valve	40	V1000- -W										
	63	V3000- -W										
Residual pressure exhaust 3-port solenoid valve	45	CXU30-VE-UN-00										
Slow Start Valve	63	V3301- -W-										
		V3321- -W-										
Pilot Operated 2-Port Solenoid Valve	40	CXU10-EXA-UN-		*2							*2	
Direct Acting 2-Port Solenoid Valve	40	CXU10-FAB3-UN-		*2							*2	
Direct Acting 2-Port Solenoid Valve	50	CXU30-FAB4U-UN-8L-		*2							*2	
Pilot kick 2-port solenoid valve	63	CXU30-ADK-UN-00-		*2							*2	
Pilot Operated 5-Port Valve	56	CXU30-4G2R-UN-		*2							*2	
		CXU30-4G2R-UN-										
Module check valve ★	56	CXU10-CHV-UN-00		*2							*2	
Module conversion adaptor	16	CXU13-CA-UN-00		*2							*2	
Distributor ★	28	D101-UN-00- -W		*2							*2	
	31.5	D401-UN-00- -W										
Distributor	42	D300- -W										
Turn adaptor	10	CXU10-TA-UN-00										
	22.5	CXU30-TA-UN-00										
Piping Adapter	21.5	A100-UN- -W										
	*3	A400-UN- -W										
L-type Piping Adapter ★	28	A101-UN- -W										
	31.5	A401-UN- -W										
Masking adaptor	10	CXU10-MA-UN-00										
	21.5	CXU30-MA-UN-00										
T-bracket set	*1	B110-H-UN-W										
T-bracket set	*1	B310-UN-W										
Joiner Set		C1000-J100-UN-W										
Joiner Set		C4000-J400-UN-W										

* 1 : The distance from pipe center to the mounting surface is 45mm.
* 2 : When using a product at the end of the combination, a pipe adaptor (A□00-UN, A□01-UN) or masking adaptor (CXU□0-MA) shall be used at its end. (The horizontal direction port does not have threads.)
* 3 : 20mm for port sizes 8, 10 and 15, and 25mm for 20.

Technical Comments Column	

Approved	Reviewed	Person in Charge



Filter Regulator Standard White Series

W1000/W2000/W3000/W4000/W8000-W Series

Series with 5 µm element for dust removal and 0.3 µm element for tar removal.

Port Size : Rc1/8 to Rc1

Circuit Diagram Symbol 

RoHS

W1000 Interface 40 mm
W2000 Interface 50 mm
W3000 Interface 63 mm
W4000 Interface 80 mm
W8000 Interface 100 mm

Model No. Notation

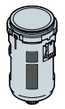
W3000 - 8 - W - Z - (White Type)

❶ Model No. ❷ Port Size ❸ Option ❹ Attachment (Included)

❷ Port Size

Code	Content	❶ Model No. W1000	W2000	W3000	W4000	W8000
6	Rc1/8	●				
8	Rc1/4	●	●	●	●	
10	Rc3/8		●	●	●	
15	Rc1/2			●	●	
20	Rc3/4					●
25	Rc1					●

❸ Option *1

Type	Code	Content	
*2 *3 Drain Discharge	Blank	With Manual Drain Cock	
	F	Auto Drain with Manual Override (NO : Discharge when not pressurized) (W3000 to W8000 Series)	
	F1	Auto Drain with Manual Override (NC : No discharge when not pressurized)	
	FF	Large Discharge Auto Drain with Manual Override (NO : Discharge when not pressurized) (W8000 Series)	
	FF1	Large Discharge Auto Drain with Manual Override (NC : No discharge when not pressurized) (W8000 Series)	
Bowl Material	Blank	Polycarbonate Bowl	
	Z	Nylon Bowl	
	M	Metal Bowl (W3000 to W8000 Series)	
	M1	Metal Bowl, with Manual Drain Cock (W2000 to W8000 Series)	
Element	Blank	5 µm	
	Y	0.3 µm (submicron) (W3000 to W8000 Series) *4	
Pressure Range	Blank	0.05 to 0.85 MPa	
	L	0.05 to 0.35 MPa	
Relief	Blank	With Relief Mechanism	
	N	Non-relief Type	

Type	Code	Content	
Pressure Gauge	Blank	Standard Pressure Gauge (with G401-W)	
	T	No Pressure Gauge (Pressure Gauge Mounting Port (1/4) is sealed when assembled)	
	T8	For Attaching Pressure Gauge (Pressure Gauge Mounting Port (1/4) is vented when assembled)	
	T6	Digital Pressure Sensor PPX attachment option *5	
	RN	Pressure Switch with Display PPR Assembled (NPN Output 1 Point) (W1000, W3000 to W8000 Series)	
	RP	Pressure Switch with Display PPR Assembled (PNP Output 1 Point) (W1000, W3000 to W8000 Series)	
Flow Direction	Blank	Standard Flow (Left → Right)	
	X1	Reverse Flow (Right → Left)	

*1 : Select options for the drainage, bowl material, element, and Regulators Items. When selecting options across multiple items, list them in order from the top.
*2 : For the auto-drain usage conditions, P. 540.
*3 : A manual drain cock is attached to all drainage types.
*4 : Refer to P. 121 for max. processing flow rate when option "Y" is selected.
*5 : If "T6" is selected, ❹ Attachment (included) can only be selected as "Blank" or "R2". Digital Pressure Sensor PPX mounting port (Rc1/8) is assembled in a vented state.

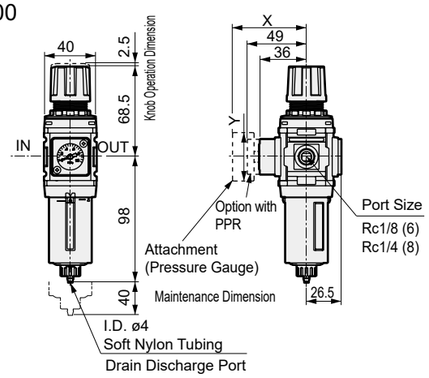
❹ Attachment (Included)

Code	Content	
Blank	None 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) (W1000, W3000 to W8000 Series)	
G40P	G40D-8-P10 (L : G40D-8-P04)	
G52P	G52D-8-P10 (L : G52D-8-P10)	
R2	Digital Pressure Sensor : PPX-R10N-6M	

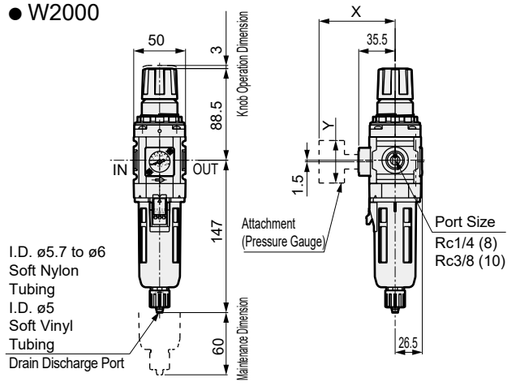
Refer to the modular design F.R.L. for specifications and internal structure diagram.

External Dimension Drawings

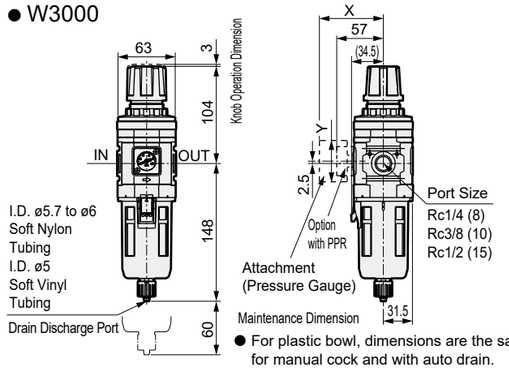
● W1000



● W2000

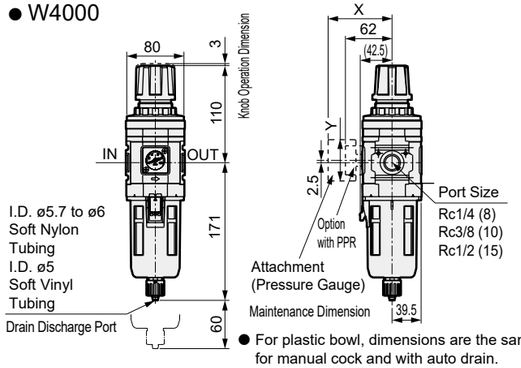


● W3000



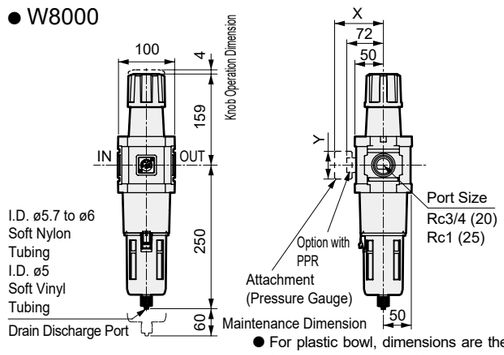
● For plastic bowl, dimensions are the same for manual cock and with auto drain.

● W4000



● For plastic bowl, dimensions are the same for manual cock and with auto drain.

● W8000



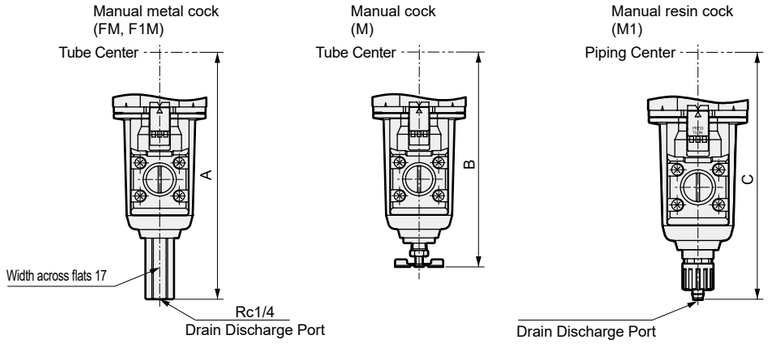
● For plastic bowl, dimensions are the same for manual cock and with auto drain.

Pressure Gauge Attached Option Dimension Table

Attached Pressure Gauge	X					Y
	W1000	W2000	W3000	W4000	W8000	
G45P	(74)	(73.5)	(70)	(75)	(85)	ø39
G49P	(73.5)	(73)	(69.5)	(74.5)	(84.5)	ø43.5
G59P	(76)	-	(72)	(77)	(87)	ø52
G40P	(75.5)	(75)	(71.5)	(76.5)	(86.5)	ø42.5
G52P	(86)	(85.5)	(82)	(86)	(98)	ø52.5
R2	(74)	(73)	(69.5)	(75)	(85)	□30

Option External Dimension Drawing

● Metal Bowl (Option)



Model No.	F1M	M	M1
	A	B	C
W2000	-	-	147
W3000	163.5	143.5	154
W4000	187	166.5	177
W8000	256	245.5	256



Reverse Filter Regulator/Standard White Series

W1100/W2100/W3100/W4100/W8100-W Series

Built-in reverse flow function, series with 5 µm element for dust removal and 0.3 µm element for tar removal. Port Size : Rc1/8 to Rc1

W1100 Interface 40 mm
W2100 Interface 50 mm
W3100 Interface 63 mm
W4100 Interface 80 mm
W8100 Interface 100 mm

Circuit Diagram Symbol 

RoHS

Model No. Notation

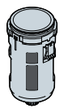
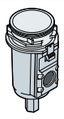
W3100 - 8 - W - Z - (White Type)

❶ Model No.
❷ Port Size
❸ Option
❹ Attachment (Included)

❷Port Size

Code	Content	❶Model No. W1100	W2100	W3100	W4100	W8100
6	Rc1/8	●				
8	Rc1/4	●	●	●	●	
10	Rc3/8		●	●	●	
15	Rc1/2			●	●	
20	Rc3/4					●
25	Rc1					●

❸Option *1, *2

Type	Code	Content	
*3 *4 Drain Discharge	Blank	With Manual Drain Cock	
	F	Auto Drain with Manual Override (NO : Discharge when not pressurized) (W3100 to W8100 Series)	
	F1	Auto Drain with Manual Override (NC : No discharge when not pressurized)	
	FF	Large Discharge Auto Drain with Manual Override (NO : Discharge when not pressurized) (W8100 Series)	
	FF1	Large Discharge Auto Drain with Manual Override (NC : No discharge when not pressurized) (W8100 Series)	
Bowl Material	Blank	Polycarbonate Bowl (W1100, W3100 to W8100 Series)	
	Z	Nylon Bowl	
	M	Metal Bowl (W3100 to W8100 Series)	
	M1	Metal Bowl, with Manual Drain Cock (W2100 to W8100 Series) *4	
Element	Blank	5 µm	
	Y	0.3 µm (submicron) (W3100 to W8100 Series) *5	
Pressure Range	Blank	0.05 to 0.85 MPa	
	L	0.05 to 0.35 MPa	
Relief	Blank	With Relief Mechanism	
	N	Non-relief Type	

Type	Code	Content	
Pressure Gauge	Blank	Standard pressure gauge (with G401)	
	T	No Pressure Gauge (Pressure Gauge Mounting Port (1/4) is sealed when assembled)	
	T8	For Attaching Pressure Gauge (Pressure Gauge Mounting Port (1/4) is vented when assembled)	
	T6	Digital Pressure Sensor PPX attachment option *6	
	RN	Pressure Switch with Display PPR Assembled (NPN Output 1 Point) (W1100, W3100 to W8100 Series)	
	RP	Pressure Switch with Display PPR Assembled (PNP Output 1 Point) (W1100, W3100 to W8100 Series)	
Flow Direction	Blank	Standard Flow (Left → Right)	
	X1	Reverse Flow (Right → Left)	

*1 : Select options for the drainage, bowl material, element, and Regulators Items. When selecting options across multiple items, list them in order from the top.
*2 : Positions of check valve and pressure gauge cannot be changed. If the IN and OUT direction must be reversed, indicate "X1" at the end of the option field.
*3 : Refer to P. 540 for the auto-drain usage conditions.
*4 : A manual drain cock is attached to all drainage types.
*5 : Refer to P. 121 for max. processing flow rate when option "Y" is selected.
*6 : If “T6” is selected, ❹ Attachment (included) can only be selected as “Blank” or “R2”. Other attachments Digital Pressure Sensor PPX mounting port (Rc1/8) is assembled in a vented state.

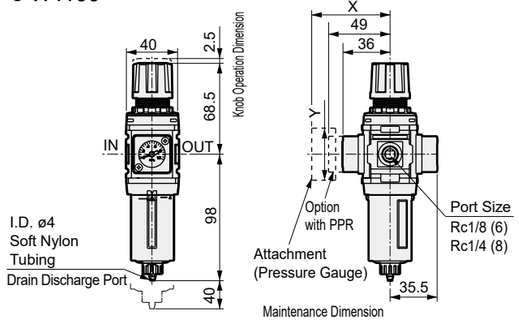
❹Attachment (Included)

Code	Content	
Blank	None 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) (W1100, W3100 to W8100 Series)	
G40P	G40D-8-P10 (L : G40D-8-P04)	
G52P	G52D-8-P10 (L : G52D-8-P10)	
R2	Digital Pressure Sensor : PPX-R10N-6M	

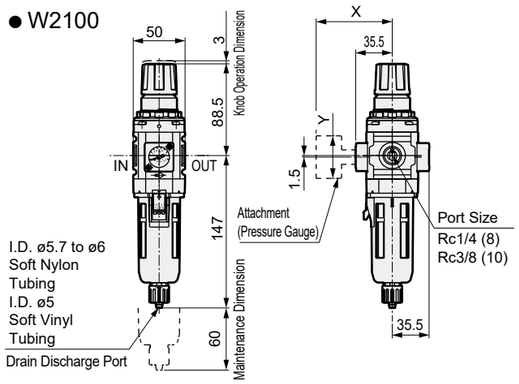
Refer to the modular design F.R.L. for specifications and internal structure diagram.

External Dimension Drawings

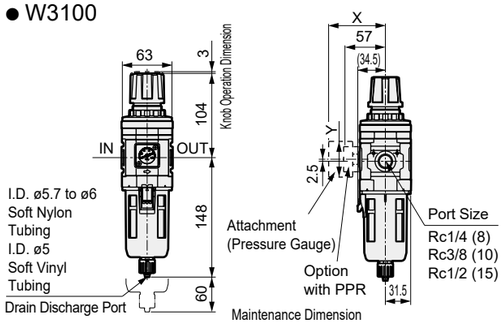
● W1100



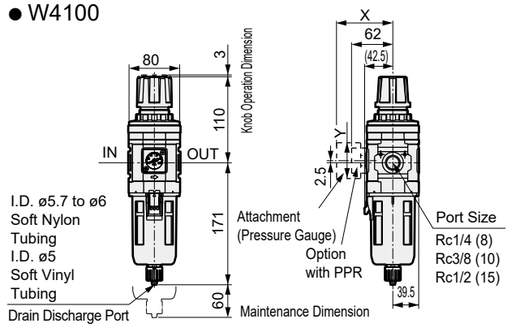
● W2100



● W3100

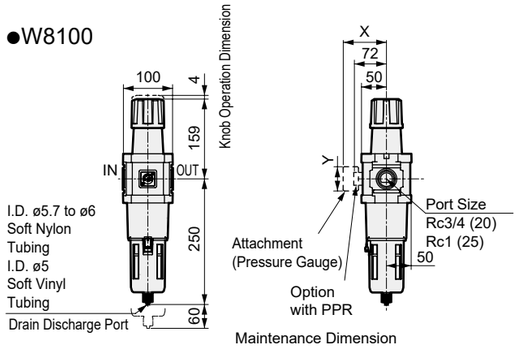


● W4100



● For plastic bowl, dimensions are the same for manual cock and with auto drain.

●W8100



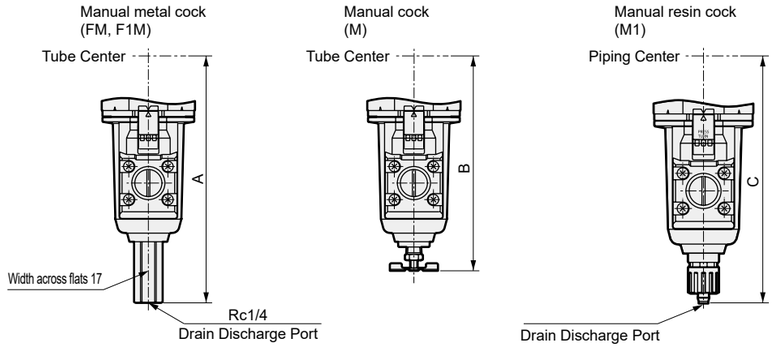
● For plastic bowl, dimensions are the same for manual cock and with auto drain.

Pressure Gauge Attached Option Dimension Table

Attached Pressure Gauge	X					Y
	W1100	W2100	W3100	W4100	W8100	
G45P	(74)	(73.5)	(70)	(75)	(85)	ø39
G49P	(73.5)	(73)	(69.5)	(74.5)	(84.5)	ø43.5
G59P	(76)	-	(72)	(77)	(87)	ø52
G40P	(75.5)	(75)	(71.5)	(76.5)	(86.5)	ø42.5
G52P	(86)	(85.5)	(82)	(86)	(98)	ø52.5
R2	(74)	(73)	(69.5)	(75)	(85)	□30

Option External Dimension Drawing

● Metal Bowl (Option)



Model No.	F1M	M	M1
	A	B	C
W2100	-	-	147
W3100	163.5	143.5	154
W4100	187	166.5	177
W8100	256	245.5	256



Air Filter : Standard White Series

F1000/F2000/F3000/F4000/F6000/F8000-W Series

5 µm dust removing and tar removing components
Series with 0.3 µm element.
Port Size : Rc1/8 to Rc1

F1000 Interface 40 mm
F2000 Interface 50 mm
F3000 Interface 63 mm
F4000 Interface 80 mm
F6000 Interface 90 mm
F8000 Interface 100 mm

RoHS

Circuit Diagram Symbol

Model No. Notation

F3000 - 8 - W - Z (White Type)

1 Model No. 2 Port Size 3 Option

2 Port Size

Code	Content	1 Model No. F1000	F2000	F3000	F4000	F6000	F8000
6	Rc1/8	●					
8	Rc1/4	●	●	●	●		
10	Rc3/8		●	●	●		
15	Rc1/2				●		
20	Rc3/4					●	●
25	Rc1					●	●

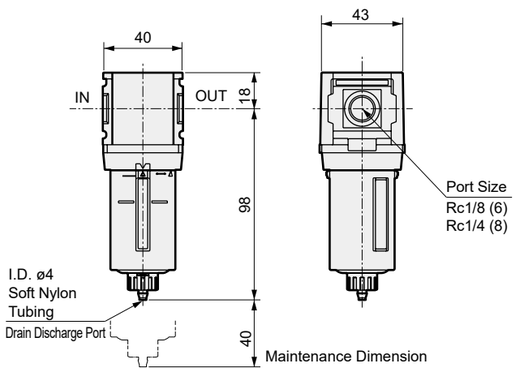
3 Option *1

Type	Code	Content
Drain Discharge *2	Blank	With Manual Drain Cock
	F	Auto Drain with Manual Override (NO : Discharge when not pressurized) (F3000 to F8000 Series)
	F1	Auto Drain with Manual Override (NC : No discharge when not pressurized)
	FF	Large Discharge Auto Drain with Manual Override (NO : Exhaust when not pressurized) (F8000 Series)
	FF1	Large Discharge Auto Drain with Manual Override (NC : No exhaust when not pressurized) (F8000 Series)
Bowl Material	Blank	Polycarbonate Bowl
	Z	Nylon Bowl
	M	Metal Bowl (F3000 to F8000 Series)
	M1	Metal Bowl, with Manual Drain Cock (F2000 to F8000 Series) *3
Element	Blank	5 µm
	Y	0.3 µm (submicron) (F3000 to F8000 Series)
Differential pressure detection	Blank	No Differential Pressure Detection Port
	Q	With differential pressure detection port (Rc1/4) (F6000 and F8000 Series)
Flow Direction	Blank	Standard Flow (Left → Right)
	X1	Reverse Flow (Right → Left)

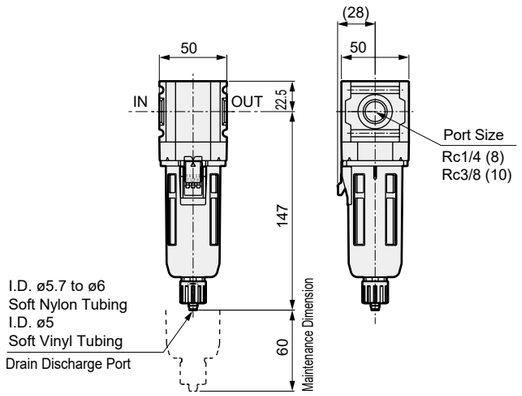
*1 : Select options for the drainage, bowl material, element, differential pressure detection, and Regulators Items. When selecting options across multiple items, list them in order from the top.
*2 : For the auto-drain usage conditions, P. 540.
*3 : A manual drain cock is attached to all drainage types.

External Dimension Drawings

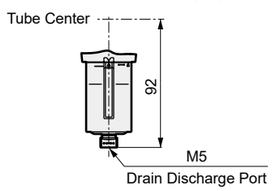
● F1000



● F2000

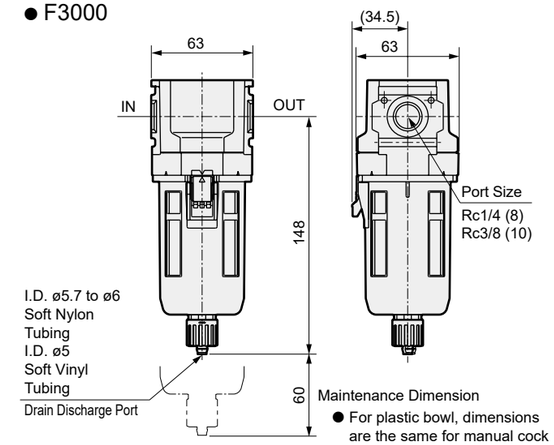


● Option External View With Auto Drain (F1)



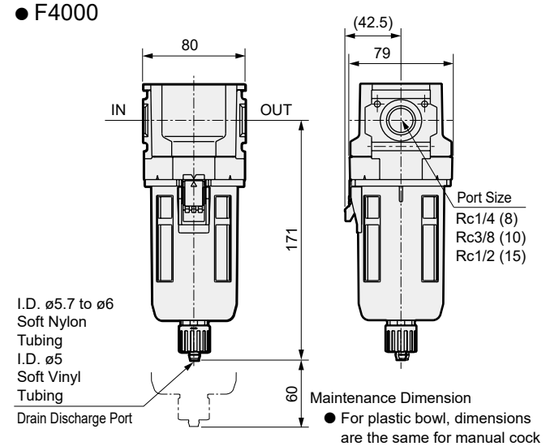
External Dimension Drawings

● F3000



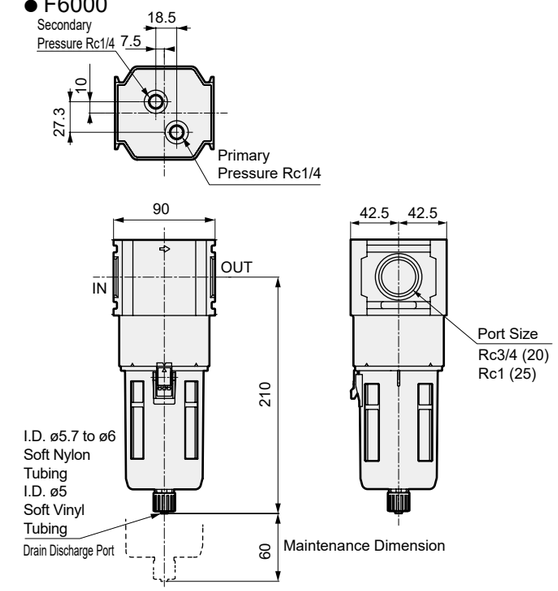
● For plastic bowl, dimensions are the same for manual cock and with auto drain.

● F4000

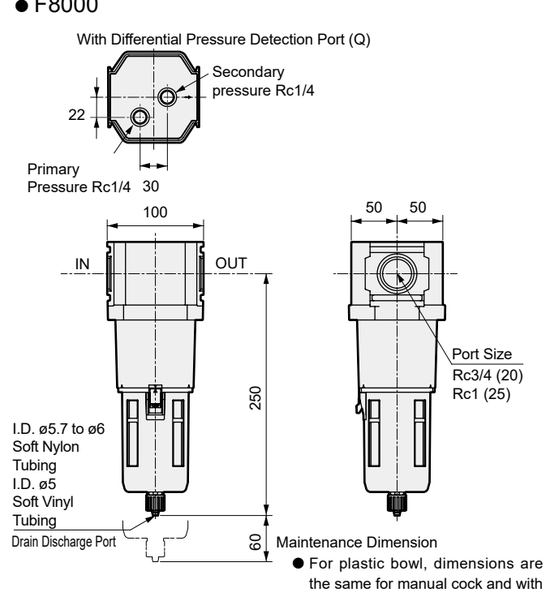


● For plastic bowl, dimensions are the same for manual cock and with auto drain.

● F6000



● F8000

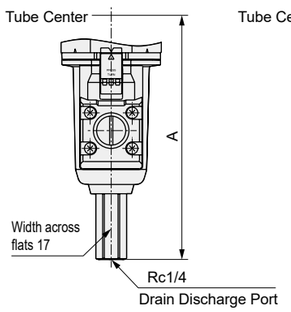


● For plastic bowl, dimensions are the same for manual cock and with auto drain.

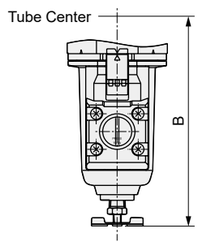
Option External Dimension Drawing

● Metal Bowl (Option)

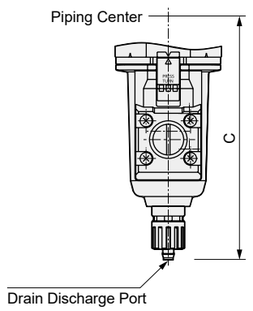
Metal Manual Cock (FM, F1M)



Manual Petcock (M)



Resin Manual Cock (M1)



Model No.	FM/F1M	M	M1
	A	B	C
F2000	-	-	147
F3000	164	143.5	154
F4000	187	166.5	177
F6000	226	205	216
F8000	266	245.5	256

Refer to the modular design F.R.L. for specifications and internal structure diagram.



Oil Mist Filter Standard White Series

M1000/M2000/M3000/M4000/M6000/M8000-W Series

Ideal for circuits that avoid oil, such as measurement and instrumentation

Port Size : Rc1/8 to Rc1

M1000 Interface 40 mm | M2000 Interface 50 mm | M3000 Interface 63 mm

M4000 Interface 80 mm | M6000 Interface 90 mm | M8000 Interface 100 mm

Circuit Diagram Symbol

RoHS

Model No. Notation

M3000 - 8 - W - S (White Type)

1 Model No. 2 Port Size 3 Option

2 Port Size

Code	Content	M1000	M2000	M3000	M4000	M6000	M8000
6	Rc1/8	●					
8	Rc1/4	●	●	●	●		
10	Rc3/8		●	●	●		
15	Rc1/2				●		
20	Rc3/4					●	●
25	Rc1					●	●

3 Option *1

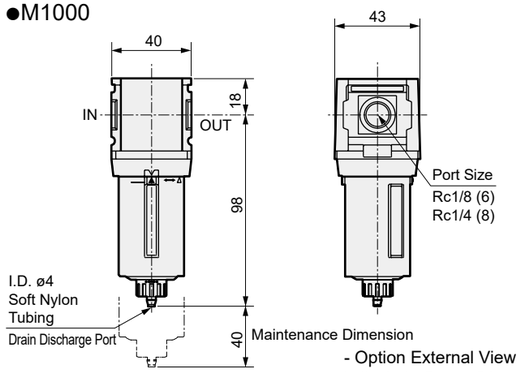
Type	Code	Content
Drain Discharge	Blank	With manual drain cock
	F1	Auto Drain with Manual Override (NC : No discharge when not pressurized)
Bowl Material	Blank	Polycarbonate Bowl
	Z	Nylon Bowl
	M	Metal Bowl (M2000 to M8000 Series)
	M1	Metal Bowl, with Manual Drain Cock (M2000 to M8000 Series) *4
Mantle (Element)	Blank	M Type (Nominal 0.01 µm ; remaining oil 0.01 mg/m³ or less)
	S	S Type (0.3 µm ; remaining oil 0.5 mg/m³ or less)
	X	X Type (Deodorization ; remaining oil 0.03 mg/m³) *5

Type	Code	Content
Differential pressure detection	Blank	No Differential Pressure Detection Port
	Q	With differential pressure detection port (Rc1/4) (M6000, M8000 Series)
Differential Pressure Indicator	Blank	No Differential Pressure Indicator
	Q1	With differential pressure indicator (M4000 Series) *6
	Q2	With differential pressure indicator (M2000 to M6000 Series)
Differential Pressure Switch	Q3	Differential Pressure Indicator + Switch 1 Point (SW2) (M2000 to M6000 Series)
	Q4	Differential pressure indicator + switch 2-point (SW1, SW2) (M2000 to M6000 Series)
Flow Direction	Blank	Standard Flow (Left → Right)
	X1	Reverse Flow (Right → Left)

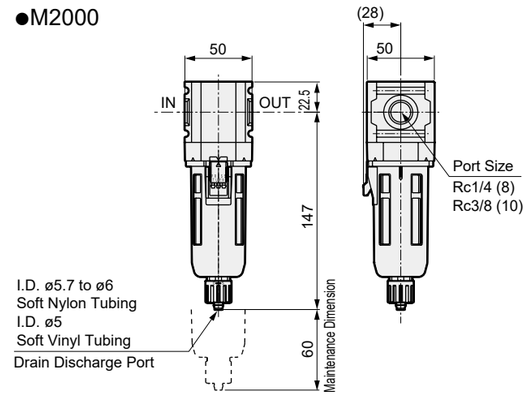
*1 : Select options per drainage, bowl material, mantle, and flow Item. When selecting options across multiple items, list them in order from the top.
*2 : NO type auto drain cannot be selected.
*3 : Refer to P. 540 for the auto-drain usage conditions.
*4 : A manual drain cock is attached to all drainage types.
*5 : Combination with option "F1" is not possible.
*6 : This cannot be selected with "M" and "X". Replace the element before the differential pressure indicator's color changes completely to red. The differential pressure indicator functions only when the compressed air is flowing. Note that it does not operate simply by pressurization.

External Dimension Drawings

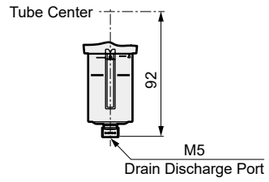
●M1000



●M2000

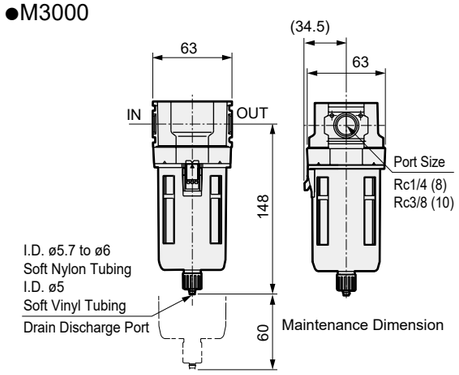


- Option External View With Auto Drain (F1)



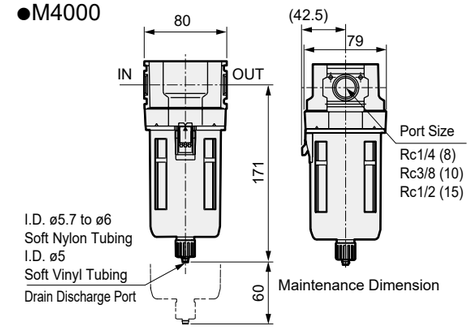
Refer to the modular design F.R.L. for specifications and internal structure diagram.

●M3000



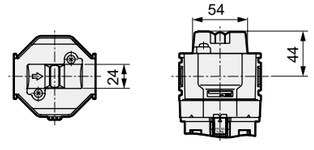
● For plastic bowl, dimensions are the same for manual cock and with auto drain.

●M4000



● For plastic bowl, dimensions are the same for manual cock and with auto drain.

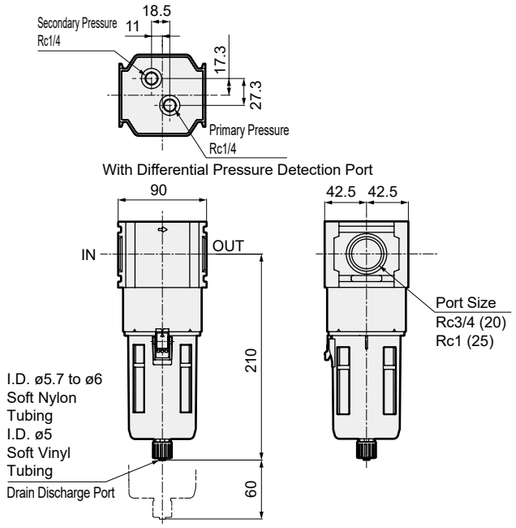
● With differential pressure indicator (option) Q1



Oil Mist Filter Series

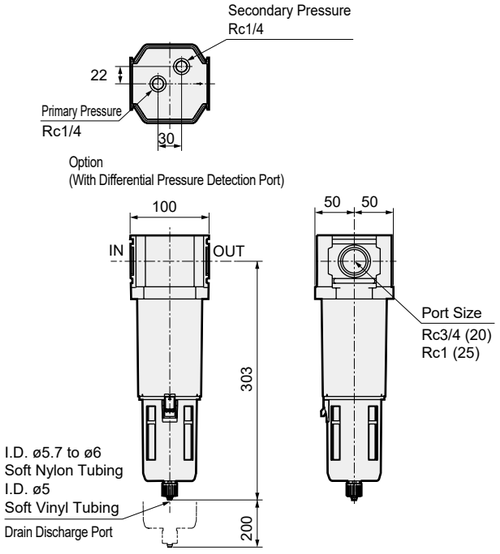
External Dimension Drawings

●M6000



● For plastic bowl, dimensions are the same for manual cock and with auto drain.

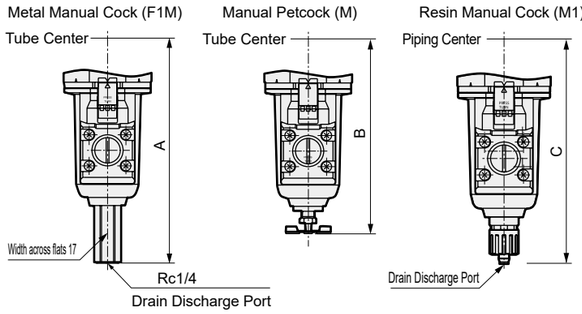
●M8000



● For plastic bowl, dimensions are the same for manual cock and with auto drain.

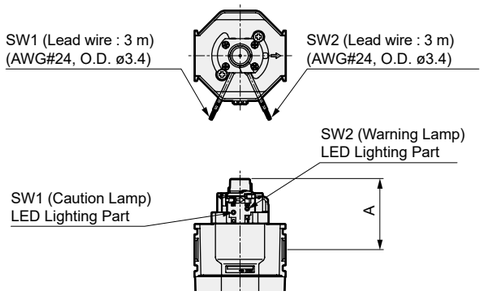
Option External Dimension Drawing

● Metal bowl



Model No.	F1M	M	M1
	A	B	C
M2000	-	-	147
M3000	164	143.5	154
M4000	187	166.5	177
M6000	226	205	216
M8000	319	298	309

● Differential pressure indicator/differential pressure switch Q2/Q3/Q4



Model No.	A
M2000	62
M3000	62
M4000	62
M6000	72.5

MEMO

Air Preparation Components
F.R.L.
Filter Regulator
Filter
Regulator
Lubricator
Drain Separator
Mechanical Pressure SW
Residual Pressure Exhaust Valve
Slow Start Valve
Antibacterial/ Bacteria Removing Filter
Ozone FR
Siloxane/ OzoneRemover
Flame Resistant FR
Oil-free Regulator
Medium Pressure FR
No copper/ PTFEv Specification
Air Unit Equipment
Adapter Joiner
Pressure Gauge
Compact F.R.L.
Large F.R.L.
Precision Regulator
Clean FR
Electro-Pneumatic Regulator
Air Booster
Ending



High Performance Oil Mist Filter Standard White Series

MX1000/MX3000/MX4000/MX6000/MX8000-W Series

Secondary oil content 0.001 mg/m^3

Ideal for optical devices such as optical positioning devices and laser processing machines.

Port Size : Rc1/8 to Rc1

Circuit Diagram Symbol

RoHS

MX1000	MX3000	MX4000	MX6000	MX8000
Interface 40 mm	Interface 63 mm	Interface 80 mm	Interface 90 mm	Interface 100 mm

Model No. Notation

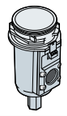
MX3000 - 8 - W - Z (White Type)

❶ Model No. ❷ Port Size ❸ Option

❷Port Size

Code	Content	❶Model No. MX1000	MX3000	MX4000	MX6000	MX8000
6	Rc1/8	●				
8	Rc1/4	●	●	●		
10	Rc3/8		●	●		
15	Rc1/2			●		
20	Rc3/4				●	●
25	Rc1				●	●

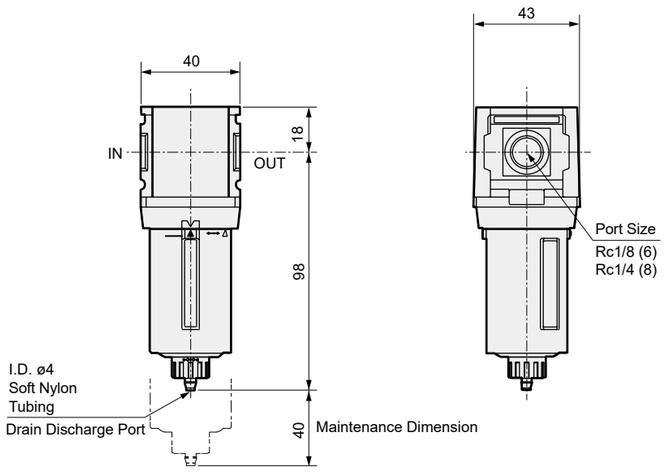
❸Option *1

Type	Code	Content	
Drain Discharge *2 *3	Blank	With manual drain cock	
	F1	Auto Drain with Manual Override (NC : No discharge when not pressurized)	
Bowl Material	Blank	Polycarbonate Bowl	
	Z	Nylon Bowl	
	M	Metal Bowl (MX3000 to MX8000 Series)	
	M1	Metal Bowl, with Manual Drain Cock (MX3000 to MX8000 Series) *4	
Differential pressure detection	Blank	No Differential Pressure Detection Port	
	Q	With differential pressure detection port (Rc1/4) (MX6000, MX8000 Series)	
Flow Direction	Blank	Standard Flow (Left → Right)	
	X1	Reverse Flow (Right → Left)	

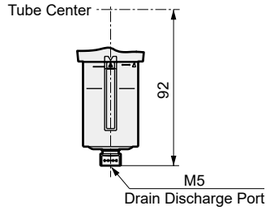
*1 : Select options for the drainage, bowl material and differential pressure detection Items. When selecting options across multiple items, list them in order from the top.
*2 : NO type auto drain cannot be selected.
*3 : Refer to P. 540 for the auto-drain usage conditions.
*4 : A manual drain cock is attached to all drainage types.

External Dimension Drawings

● MX1000



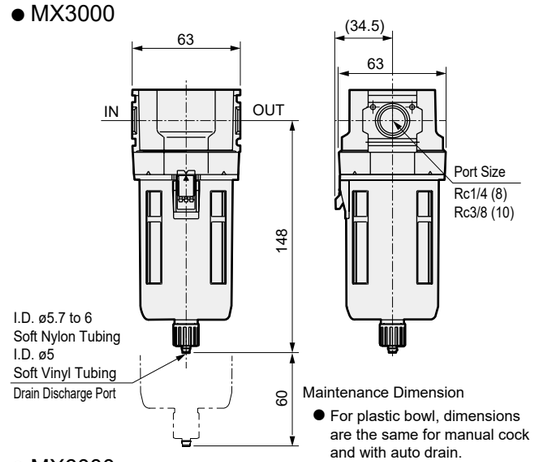
● Option External View With Auto Drain (F1)



Refer to the modular design F.R.L. for specifications and internal structure diagram.

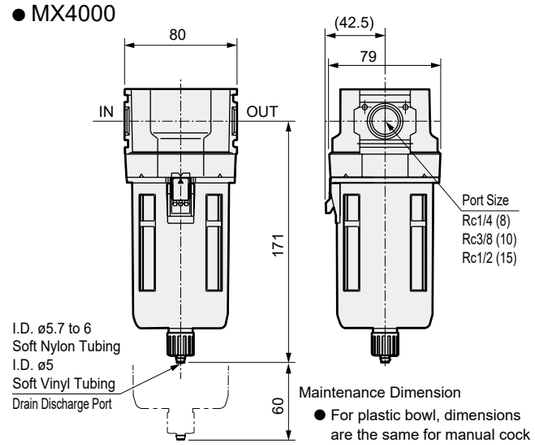
External Dimension Drawings

● MX3000



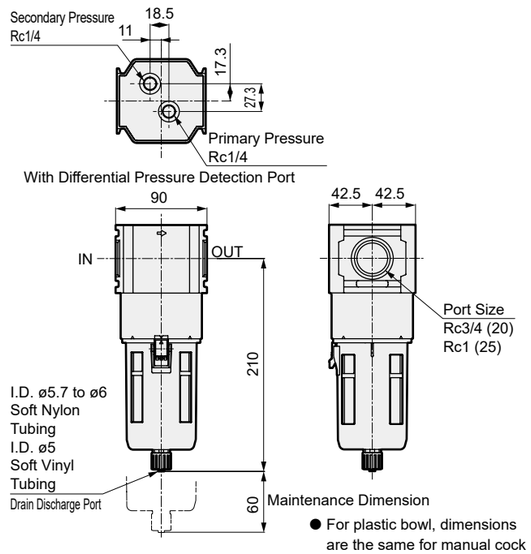
● For plastic bowl, dimensions are the same for manual cock and with auto drain.

● MX4000



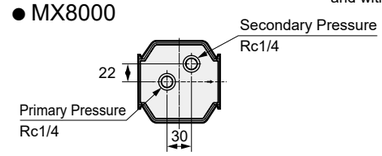
● For plastic bowl, dimensions are the same for manual cock and with auto drain.

● MX6000

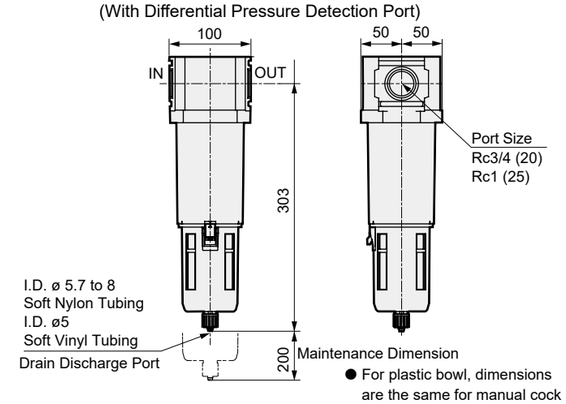


● For plastic bowl, dimensions are the same for manual cock and with auto drain.

● MX8000



Option
(With Differential Pressure Detection Port)

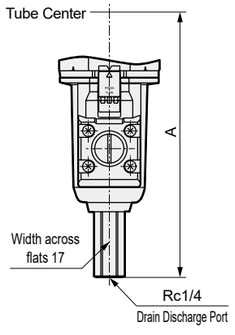


● For plastic bowl, dimensions are the same for manual cock and with auto drain.

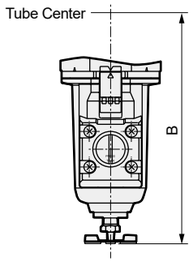
Option External Dimension Drawing

● Metal Bowl (Option)

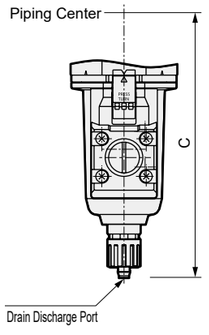
Metal Manual Cock (F1M)



Manual Petcock (M)



Resin Manual Cock (M1)



Model No.	F1M	M	M1
	A	B	C
MX3000	164	143.5	154
MX4000	187	166.5	177
MX6000	226	205	216
MX8000	319	298	309



Regulator Standard White Series

R1000/R2000/R3000/R4000/R6000/R8000-W Series

Compact with Embedded Pressure Gauge.
Port Size : Rc1/8 to Rc1

R1000 Interface 40 mm | R2000 Interface 50 mm | R3000 Interface 63 mm
R4000 Interface 80 mm | R6000 Interface 90 mm | R8000 Interface 100 mm

Circuit Diagram Symbol

RoHS

Model No. Notation

R3000 - 8 - W (White Type) - LT8 - G49P

1 Model No. | 2 Port Size | 3 Option | 4 Attachment (Included)

2 Port Size

Code	Content	1 Model No. R1000	R2000	R3000	R4000	R6000	R8000
6	Rc1/8	●					
8	Rc1/4	●	●	●	●		
10	Rc3/8		●	●	●		
15	Rc1/2				●		
20	Rc3/4					●	●
25	Rc1					●	●

3 Option *1

Type	Code	Content	
Pressure Range	Blank	0.05 to 0.85 MPa	
	L	0.05 to 0.35 MPa	
Relief	Blank	With Relief Mechanism	
	N	Non-relief Type	
Pressure Gauge	Blank	With standard pressure gauge (G401)	
	T	No Pressure Gauge (Pressure Gauge Mounting Port (1/4) is assembled sealed)	
	T8	For Attaching Pressure Gauge (Pressure Gauge Mounting Port (1/4) is left open)	
	T6	Digital Pressure Sensor PPX Attachment option *2	
	RN	Pressure Switch with Display PPR Assembled (NPN Output 1 Point)	
	RP	Pressure Switch with Display PPR Assembled (PNP Output 1 Point)	
Flow Direction	Blank	Standard Flow (Left → Right)	
	X1	Reverse Flow (Right → Left)	

*1 : When selecting options for several Items, list optionsin order from the top.
*2 : The Digital Pressure Sensors PPX mounting port (Rc1/8) is assembled open.

4 Attachment (Included)

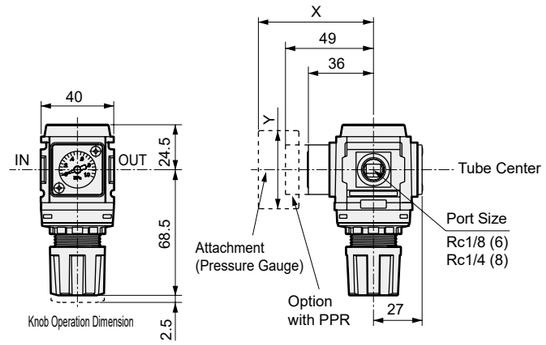
Code	Content	
Blank	None included	
G45P	G45D-8-P10 (L : G45D-8-P04)	
G49P	G49D-8-P10 (L : G49D-8-P04)	
G59P	G59D-8-P10 (L : G59D-8-P04)	
G40P	G40D-8-P10 (L : G40D-8-P04)	
G52P	G52D-8-P10 (L : G52D-8-P10)	
*1 R2	Digital Pressure Sensor : PPX-R10N-6M	

*1 : If “T6” is selected, 4 Attachment (included) can only be selected as “Blank” or “R2”. Other attachments Digital Pressure Sensor PPX mounting port (Rc1/8) is assembled in a vented state.

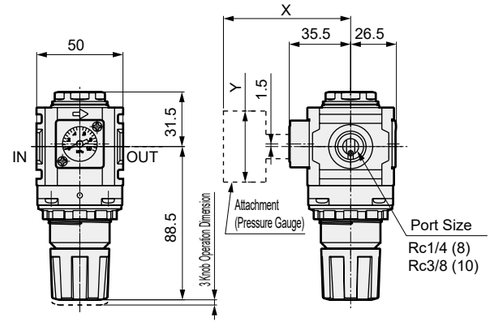
Refer to the modular design F.R.L. for specifications and internal structure diagram.

External Dimension Drawings

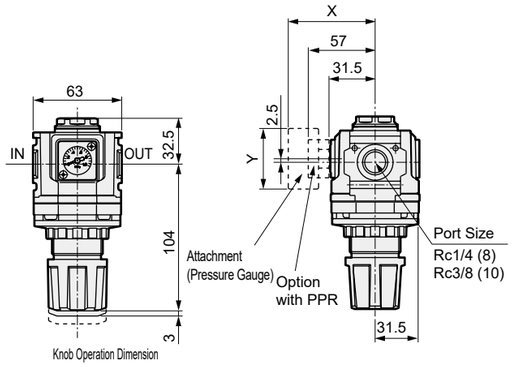
●R1000



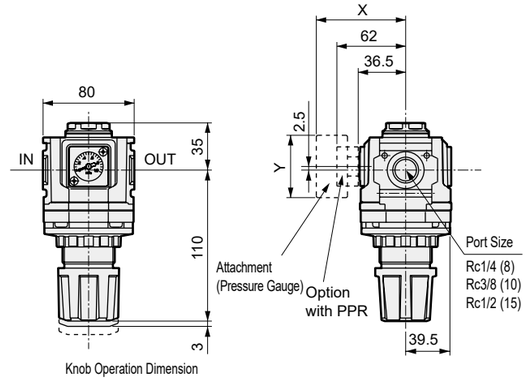
●R2000



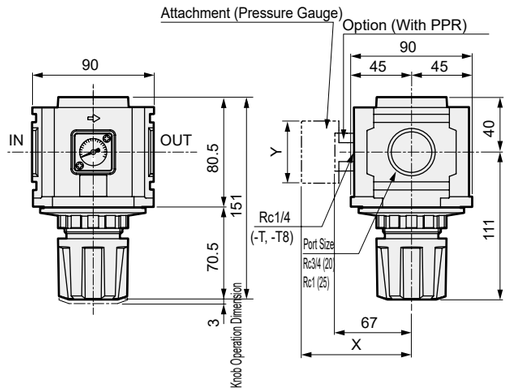
●R3000



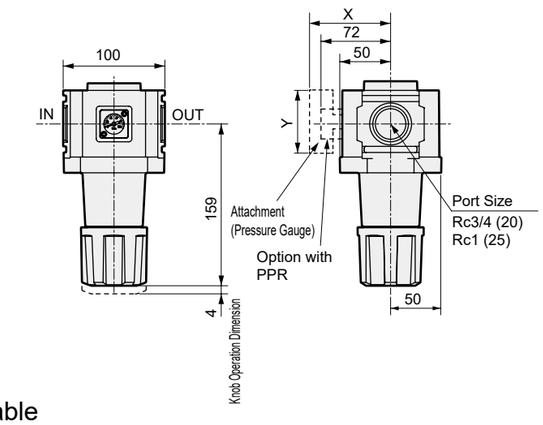
●R4000



●R6000



●R8000



Pressure Gauge Attached Option Dimension Table

Attached Pressure Gauge	X R1000	R2000	R3000	R4000	R6000	R8000	Y
G45P	(74)	(73.5)	(70)	(75)	(80)	(85)	ø39
G49P	(73.5)	(73)	(69.5)	(74.5)	(79.5)	(84.5)	ø43.5
G59P	(76)	(75.5)	(72)	(77)	(82)	(87)	ø52
G40P	(75.5)	(75)	(71.5)	(76.5)	(81.5)	(86.5)	ø42.5
G52P	(86)	(85.5)	(82)	(86)	(93)	(98)	ø52.5
R2	(74)	(73)	(69.5)	(75)	(80)	(85)	□30



Reverse Regulator Standard White Series

R1100/R2100/R3100/R4100/R6100/R8100-W Series

Built-in reverse flow function, transfers secondary pressure to primary side.

Port Size : Rc1/8 to Rc1

Circuit Diagram Symbol



RoHS

R1100 Interface 40 mm
R2100 Interface 50 mm
R3100 Interface 63 mm
R4100 Interface 80 mm
R6100 Interface 90 mm
R4100 Interface 100 mm

Model No. Notation

R3100 - 8 - W - L - G49P

(White Type)

1 Model No. R3100
2 Port Size 8
3 Option L
4 Attachment (Included) G49P

2 Port Size

Code	Content	1 Model No. R1100	R2100	R3100	R4100	R6100	R8100
6	Rc1/8	●					
8	Rc1/4	●	●	●	●		
10	Rc3/8		●	●	●		
15	Rc1/2				●		
20	Rc3/4					●	●
25	Rc1					●	●

3 Option

*1, *2

Type	Code	Content	
Pressure Range	Blank	0.05 to 0.85 MPa	
	L	0.05 to 0.35 MPa	
Relief	Blank	With Relief Mechanism	
	N	Non-relief Type	
Pressure Gauge	Blank	With standard pressure gauge (G401)	
	T	No Pressure Gauge (Pressure gauge port (1/4) is assembled sealed)	
	T8	For pressure gauge attachment (Pressure gauge port (1/4) is left open)	
	T6	Digital Pressure Sensor PPX Attachment option *3	
	RN	Pressure Switch with Display PPR Assembled (NPN Output 1 Point)	
	RP	Pressure Switch with Display PPR Assembled (PNP Output 1 Point)	
Flow Direction	Blank	Standard Flow (Left → Right)	
	X1	Reverse Flow (Right → Left)	

*1 : When selecting options for several Items, list optionsin order from the top.
***2 : Positions of check valve and pressure gauge cannot be changed. If reverse direction of IN/OUT is required, please indicate by putting "X1" at the end of the option column.**
*3 : The Digital Pressure Sensors PPX mounting port (Rc1/8) is assembled open.

4 Attachment (Included)

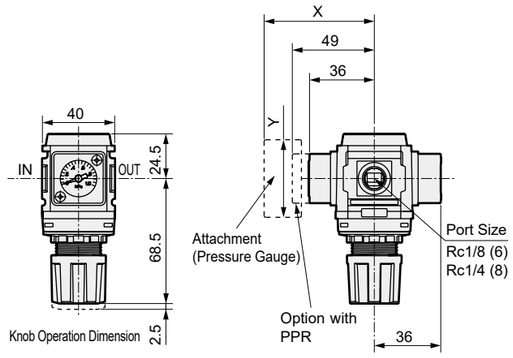
Code	Content	
Blank	None included	
G45P	G45D-8-P10 (L : G45D-8-P04)	
G49P	G49D-8-P10 (L : G49D-8-P04)	
G59P	G59D-8-P10 (L : G59D-8-P04)	
G40P	G40D-8-P10 (L : G40D-8-P04)	
G52P	G52D-8-P10 (L : G52D-8-P10)	
*1 R2	Digital Pressure Sensor : PPX-R10N-6M	

*1 : If "T6" is selected, 4 Attachment (included) can only be selected as "Blank" or "R2". Digital Pressure Sensor PPX mounting port (Rc1/8) is assembled in a vented state.

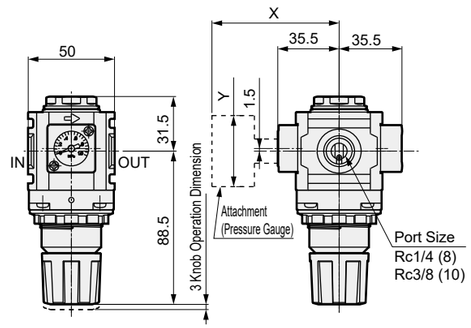
Refer to the modular design F.R.L. for specifications and internal structure diagram.

External Dimension Drawings

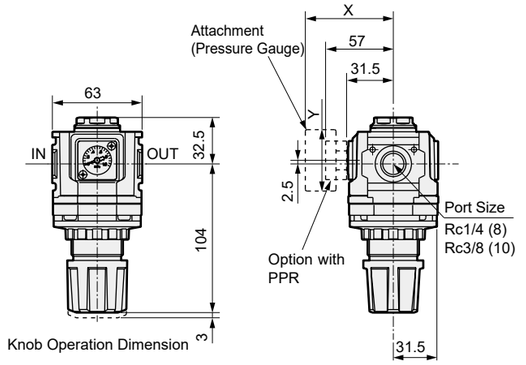
● R1100



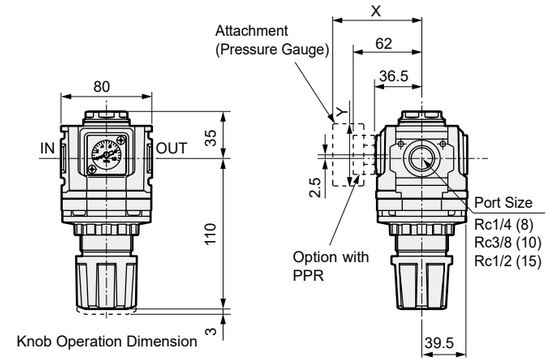
● R2100



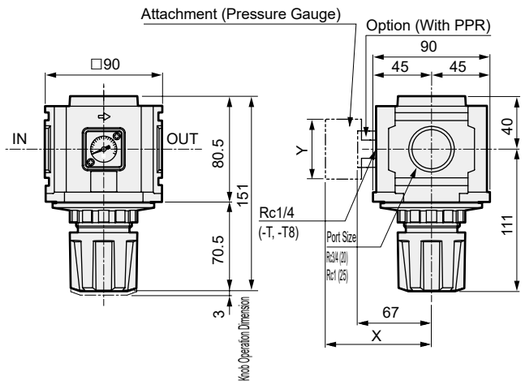
● R3100



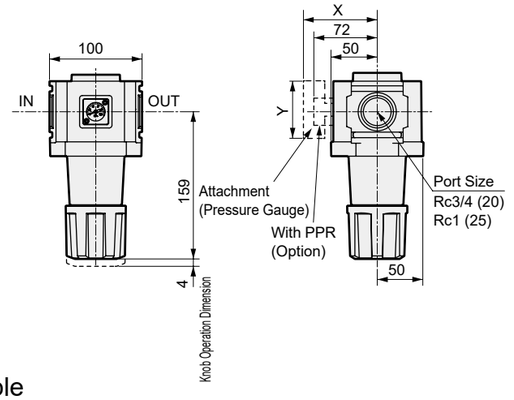
● R4100



● R6100



● R8100



Pressure Gauge Attached Option Dimension Table

Attached Pressure Gauge	X R1100	R2100	R3100	R4100	R6100	R8100	Y
G45P	(74)	(73.5)	(70)	(75)	(80)	(85)	ø39
G49P	(73.5)	(73)	(69.5)	(74.5)	(79.5)	(84.5)	ø43.5
G59P	(76)	(75.5)	(72)	(77)	(82)	(87)	ø52
G40P	(75.5)	(75)	(71.5)	(76.5)	(81.5)	(86.5)	ø42.5
G52P	(86)	(85.5)	(82)	(86)	(93)	(98)	ø52.5
R2	(74)	(73)	(69.5)	(75)	(80)	(85)	□30



Lubricator Standard White Series

L1000/L3000/L4000/L8000-W Series

Supplies Fine Oil Mist.
Port Size : Rc1/8 to Rc1

Circuit Diagram Symbol

L1000 Interface 40 mm
L3000 Interface 63 mm
L4000 Interface 80 mm
L8000 Interface 100 mm

RoHS

Model No. Notation

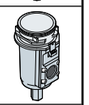
L3000 - 8 - W - C
(White Type)

1 Model No.
2 Port Size
3 Option

2 Port Size

Code	Content	1 Model No. L1000	L3000	L4000	L8000
6	Rc1/8	●			
8	Rc1/4	●	●	●	
10	Rc3/8		●	●	
15	Rc1/2			●	
20	Rc3/4				●
25	Rc1				●

3 Option *1

Type	Code	Content	
Drain Discharge	Blank	No Manual Cock	
	C	With Manual Cock	
	LL	With Float Switch (L3000 to L8000 Series)	
*2 Bowl Material	Blank	Polycarbonate Bowl	
	Z	Nylon Bowl	
	M	Metal Bowl (L3000 to L8000 Series)	
Flow Direction	Blank	Standard Flow (Left → Right)	
	X1	Reverse Flow (Right → Left)	

*1 : When selecting options for several Items, list optionsin order from the top.
*2 : The adjusting dome material remains unchanged (polycarbonate), even when a nylon bowl or metal bowl is selected. Contact CKD if a different material is required.

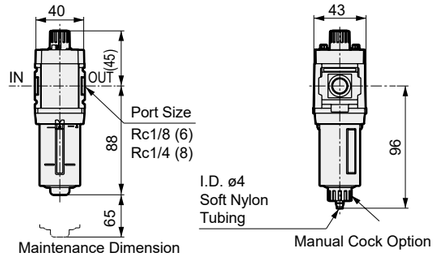
Drainage and bowl material combination (How to order Item 3)

Option ● with float switch

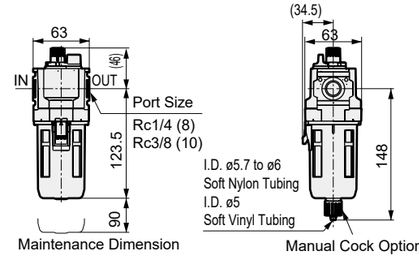
	3000, 4000, 8000 Series		
Shape			
Material	Plastic Bowl		Metal Bowl
	Polycarbonate	Nylon	Aluminum
Lubricator L□000	LL	LLZ	LLM

External Dimension Drawings

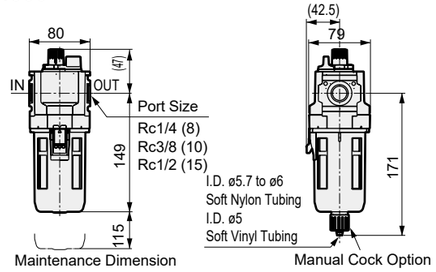
● L1000



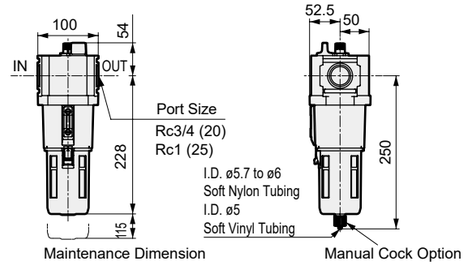
● L3000



● L4000



● L8000



Refer to the modular design F.R.L. for specifications and internal structure diagram.

Air Preparation Components
F.R.L.
Filter Regulator
Filter
Regulator
Lubricator
Drain Separator
Mechanical Pressure SW
Residual Pressure Exhaust Valve
Slow Start Valve
Antibacterial/ Bacteria Removing Filter
Ozone FR
Siloxane/ OzoneRemover
Flame Resistant FR
Oil-free Regulator
Medium Pressure FR
No copper/ PTFEv Specification
Air Unit Equipment
Adapter Joiner
Pressure Gauge
Compact F.R.L.
Large F.R.L.
Precision Regulator
Clean FR
Electro-Pneumatic Regulator
Air Booster
Ending



Drain Separator

FX Series

Lightweight and compact drain separator
Compatible compressor 0.75 kW to 37 kW
Port Size : Rc1/4 to Rc1

Circuit Diagram Symbol

FX1004 Interface 63 mm
FX1011 Interface 80 mm
FX1037 Interface 100 mm

RoHS

Model No. Notation

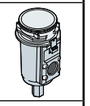
FX1004 - 8 - W - F

1 Model No.
2 Port Size
3 Option

2 Port Size

Code	Content	1 Model No. FX1004	FX1011	FX1037
8	Rc1/4	●	●	
10	Rc3/8	●	●	
15	Rc1/2		●	
20	Rc3/4			●
25	Rc1			●

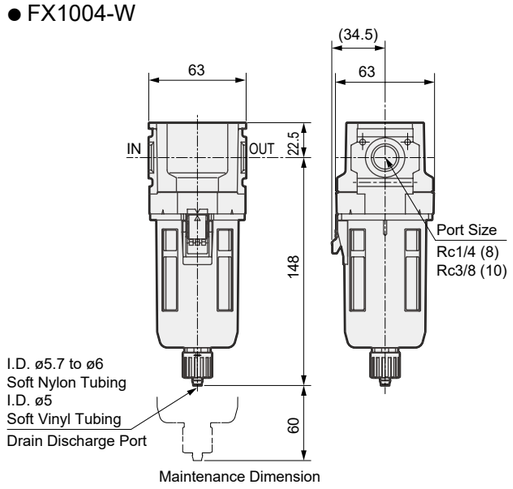
3 Option

Type	Code	Content	
Drain Discharge	Blank	With Manual Drain Cock (1/8 female thread only for metal bowl)	
	C	With Manual Cock (Selectable only for metal bowl)	
	F	Auto Drain with Manual Override (NO : Discharge when not pressurized)	
	F1	Auto Drain with Manual Override (NC : No discharge when not pressurized)	
Bowl Material	Blank	Polycarbonate Bowl	
	Z	Nylon Bowl	
	M	Metal Bowl	
	M1	Metal Bowl, with Manual Drain Cock	
Flow Direction	Blank	Standard Flow (Left → Right)	
	X1	Reverse Flow (Right → Left)	

*1 : Select options for the drainage, bowl material, and flow Item. When selecting options across multiple items, list them in order from the top.
*2 : Refer to P. 540 for the auto-drain usage conditions.

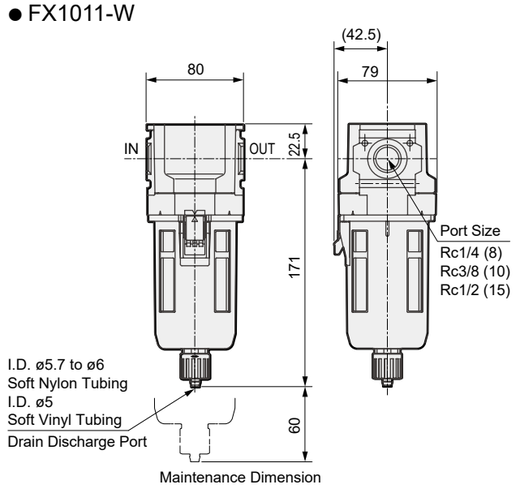
External Dimension Drawings

● FX1004-W



● For plastic bowl, dimensions are the same for manual cock and with auto drain.

● FX1011-W

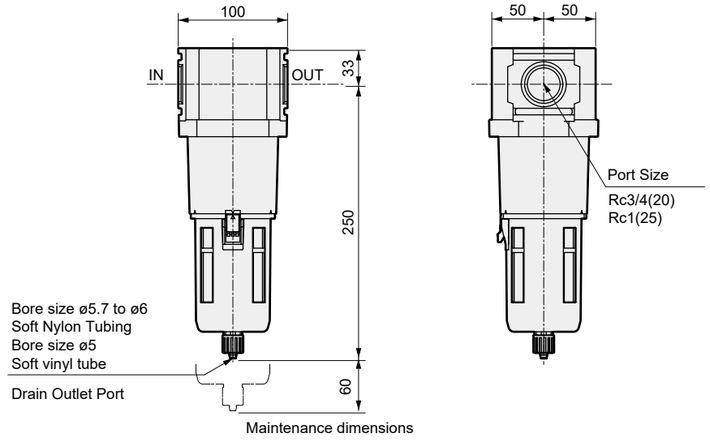


● For plastic bowl, dimensions are the same for manual cock and with auto drain.

Refer to the modular design F.R.L. for specifications and internal structure diagram.

External Dimension Drawings

● FX1037-W

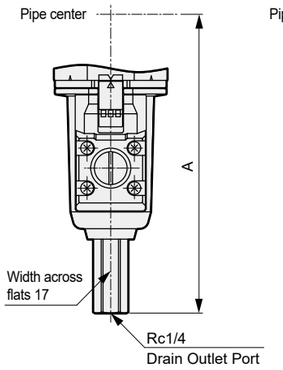


● For plastic bowl, dimensions are the same for manual cock and with auto drain.

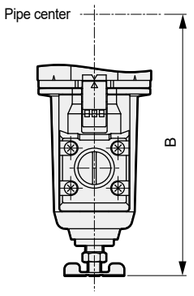
Option External Dimension Drawing

● Metal Bowl FX1004-W, FX1011-W, FX1037-W (Option)

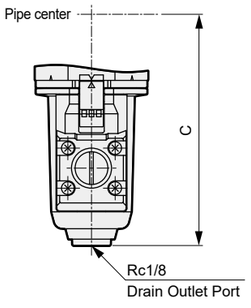
Metal bowl with auto-drain (FM, F1M)



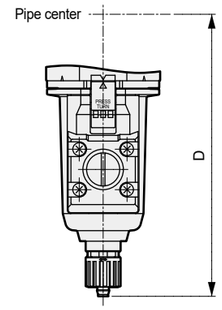
Metal bowl with manual petcock (CM)



Metal bowl without cock (M)



Metal bowl with manual cock (CM1, FM1, F1M1)



Dimension Table

Model No.	FM/F1M	CM	M	CM1, FM1, F1M1
	A	B	C	D
FX1004	164	143.5	127	154
FX1011	187	166.5	150	177
FX1037	266	245.5	229	256

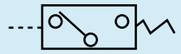


Mechanical Pressure Switch Standard White Series

P4000-W Series

Wide pressure setting range of 0.1 to 0.8 MPa is possible.
Port Size : Rc1/4 to Rc1/2

Circuit Diagram Symbol



RoHS

Interface 80 mm

Model No. Notation

P4000 - 8 - W - 1N

(White Type)

Model No.

❶ Port Size

❷ Option

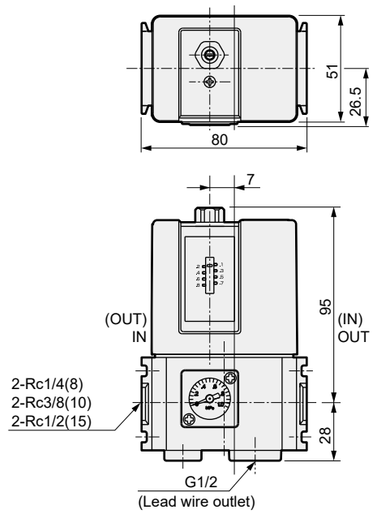
❶Port Size

Code	Content
8	Rc1/4
10	Rc3/8
15	Rc1/2

❷Option

Code	Content	
Blank	No Lamp	
1N	With Lamp for 100/200 VAC	
3N	With Lamp for 24 VDC	
T	No pressure gauge	

External Dimension Drawings



Refer to the modular type SELEX F.R.L. for specifications, internal structure diagram, and safety precautions.

MEMO

Air Preparation Components
F.R.L.
Filter Regulator
Filter
Regulator
Lubricator
Drain Separator
Mechanical Pressure SW
Residual Pressure Exhaust Valve
Slow Start Valve
Antibacterial/ Bacteria Removing Filter
Ozone FR
Siloxane/ OzoneRemover
Flame Resistant FR
Oil-free Regulator
Medium Pressure FR
No copper/ PTFEv Specification
Air Unit Equipment
Adapter Joiner
Pressure Gauge
Compact F.R.L.
Large F.R.L.
Precision Regulator
Clean FR
Electro-Pneumatic Regulator
Air Booster
Ending



Reed Switch Type Mechanical Compact Pressure Switch

P1100/P4100/P8100-UN- Series

Compatible with module connection to F.R.L.

P1100 Interface 28 mm
P4100 Interface 31.5 mm
P8100 Interface 50 mm
For custom orders only

Circuit Diagram Symbol

RoHS

Model No. Notation (Module Connection Compatible)

P 4100 -UN- 6 L -W- 3 (White Type)

1 Series model No. 2 Port Size 3 Branch direction 4 Lead Wire Length

* Dedicated model No. for customized combinations. components cannot be purchased individually.

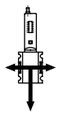
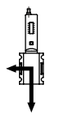
1 Series model No.

Code	Content
1100	For 1000 Series
4100	For 2000, 3000, 4000 Series
8100	For 6000, 8000 Series

2 Port Size

Code	Content	1 Series model No.		
		1100	4100	8100
6	Rc1/8	●		
8	Rc1/4	●	●	
10	Rc3/8		●	
15	Rc1/2		●	
20	Rc3/4			●
25	Rc1			●

3 Branch direction *1

Code	Content
Blank *2	
L	
R	

*1 : This is used for the intermediate connection of the module series and so the module connection section is not threaded.

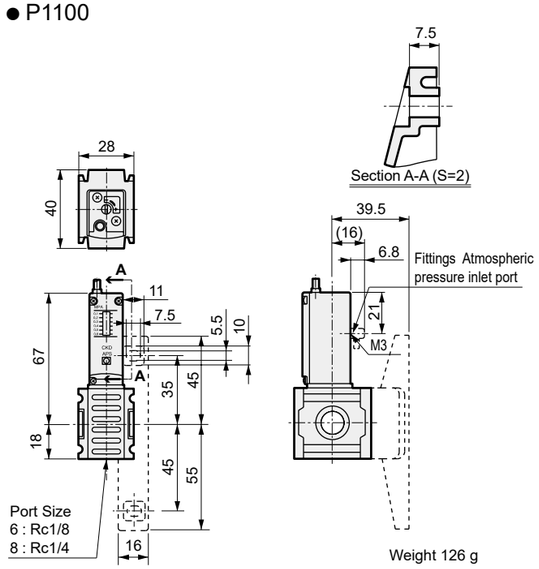
*2 : A plug matching the port size is included.

4 Lead Wire Length

Code	Content
Blank	1 m
3	3 m
5	5 m

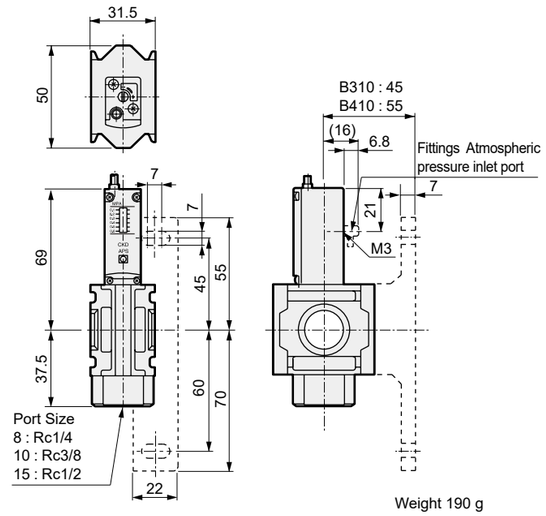
External Dimension Drawings

● P1100



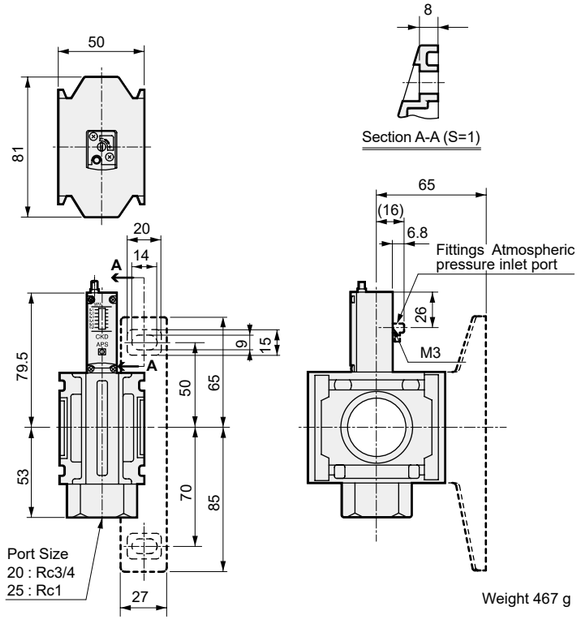
Weight 126 g

● P4100



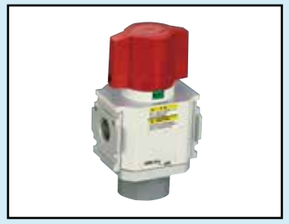
Weight 190 g

● P8100



Weight 467 g

Refer to the modular design F.R.L. for specifications and safety precautions.



Residual Pressure Exhaust Valve Standard White Series

V1000/V3000-W Series

Exhaust operation is 1 action. Ideal for preventing residual pressure accidents in pneumatic lines.

Port Size : Rc1/8 to Rc1/2

Circuit Diagram Symbol



RoHS

V1000 Interface 40 mm

V3000 Interface 63 mm



Residual pressure exhaust valve with locking hole (OSHA compliant)

V3010-W/V6010-W Series

Ideal for preventing residual pressure accidents in pneumatic lines.

Port Size : Rc1/4 to Rc1

Circuit Diagram Symbol



RoHS

V3010 Interface 63 mm

V6010 Interface 90 mm

Model No. Notation

V3000 - 8 -W- X1 - S

(White Type)

❶ Model No.

❷ Port Size

❸ Option

❹ Attachment

*1 : When installing the V□000-W on the primary side of the Regulators and filter regulator, select (□R100-W) reverse filter regulator (□W100-W).

❶Model No.

Code	Content
V1000	For 1000 Series
V3000	For 2000, 3000, 4000 Series

❷Port Size

Code	Content	❶Model No. V1000	❶Model No. V3000
6	Rc1/8	●	
8	Rc1/4	●	●
10	Rc3/8		●
15	Rc1/2		●

❸Option

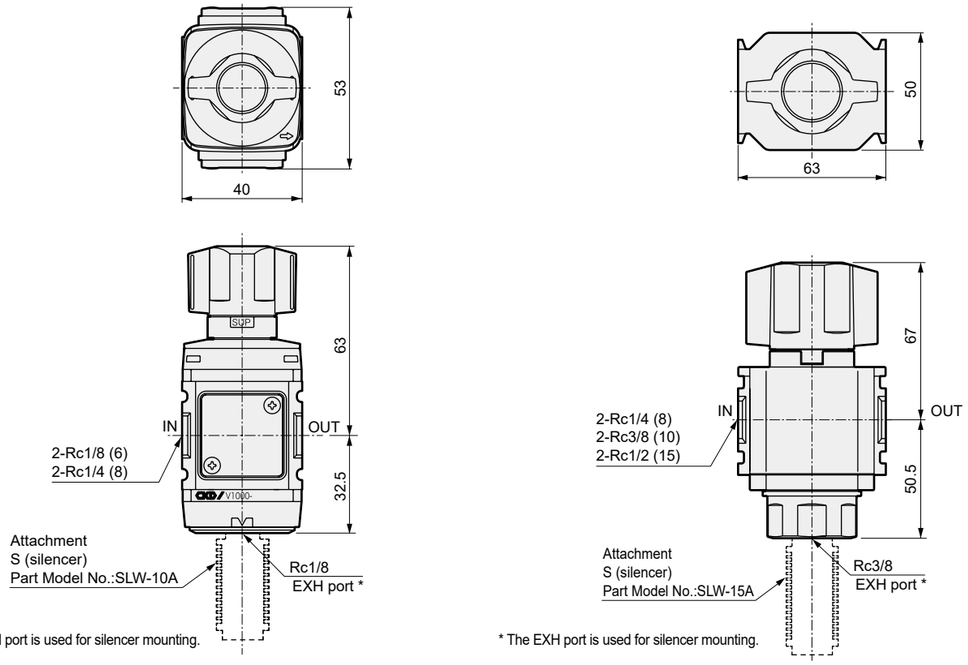
Code	Content
Blank	None
X1	IN/OUT Reverse Flow (Right → Left)

❹ Attachment (Included)

Code	Content
Blank	None included
S	Silencer

External Dimension Drawings

● V1000



* The EXH port is used for silencer mounting.

● V3000

* The EXH port is used for silencer mounting.

Refer to the modular design F.R.L. for specifications and internal structure diagram.

Model No. Notation

V3010 - 8 -W- X1 - S

(White Type)

❶ Model No. *1, *2

❷ Port Size

❸ Option

❹ Attachment

*1 : Contact CKD for locking at the air supply position.

*2 : When installing the V□010-W on the primary side of the Regulators and filter regulator, select (□R100-W) reverse filter regulator (W□100-W).

❷Port Size / ❶Model No.

Code	Content	❶Model No. V3010	❶Model No. V6010
8	Rc1/4	●	
10	Rc3/8	●	
15	Rc1/2	●	
20	Rc3/4		●
25	Rc1		●

❸Option

Code	Content
Blank	None
X1	IN/OUT Reverse Flow (Right → Left)

❹ Attachment (Included)

Code	Content
Blank	None included
S	Silencer

Note) The silencer element is not made of flame resistant resin.

OSHA (Occupational Safety and Health Administration)

OSHA establishes the US safety standards for employees.

[Lockout/Tagout Regulation]

When performing maintenance on machinery, the air source is shut off with a SHUT-OFF VALVE (Residual Pressure Exhaust Valve) and residual pressure is exhausted simultaneously. If a third party inadvertently operates the valve during such operation and compressed air is applied, the cylinder, etc., could move suddenly and injure personnel. This standard states that, "All valves used for such purposes shall have a key or a structure which can be locked with a key."

Usage

● During Normal Use



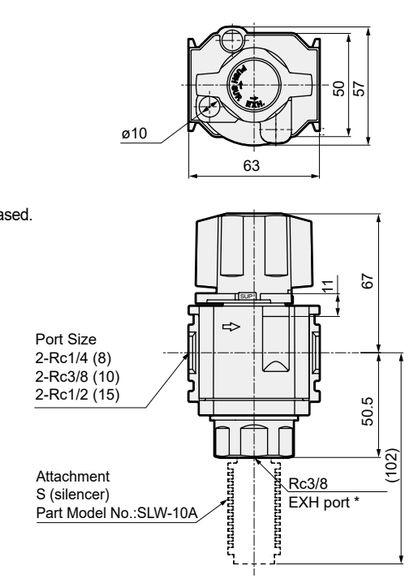
● During maintenance

A lock is set where residual pressure is released.

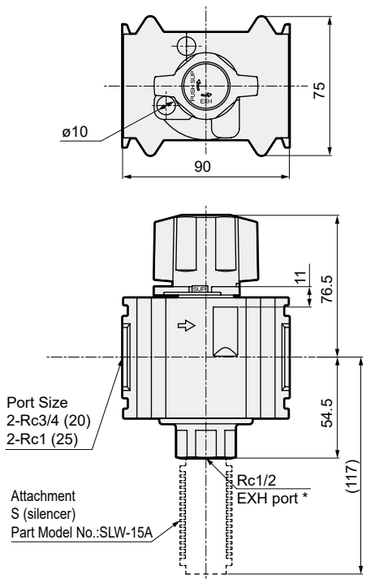


External Dimension Drawings

● V3010



● V6010



* The EXH port is used for silencer mounting.



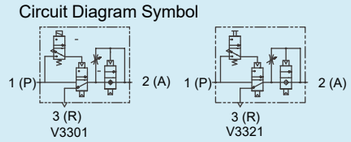
Slow Start Valve Standard White Series

V3301-W/V3321-W Series

For safety at startup and shutdown.

- Port Size : Rc1/4 to Rc1/2

Circuit Diagram Symbol



RoHS

Interface 63 mm

Model No. Notation

- Solenoid valve

V3301 - 08 - W - ( ) ( ) - 1 - S

1 Port Size (White Type) | 2 Manual Operation | 3 Wiring Connection | 4 Voltage | 5 Attachment (Included)

- Manual

V3321 - 08 - W ——— S

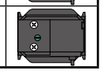
1 | 5

Note) When installing V3301-W or V3321-W on the primary side of a regulator or filter regulator, select a reverse regulator (R□100-W) or reverse filter regulator (W□100-W).

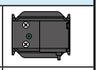
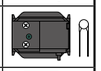
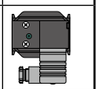
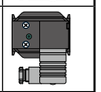
1 Port Size

Code	Content
	1 (P) / 2 (A) Port
08	Rc1/4
10	Rc3/8
15	Rc1/2

2 Manual Operation

Code	Content	
Blank	Non-lock Type	
M1	Lock Type	

3 Wiring Connection

Code	Content	
Blank	Grommet Lead Wire	
S	Grommet Lead Wire with surge Suppressor	
B	Terminal Box	
LS	Terminal Box with surge Suppressor/ Lamp	

4 Voltage

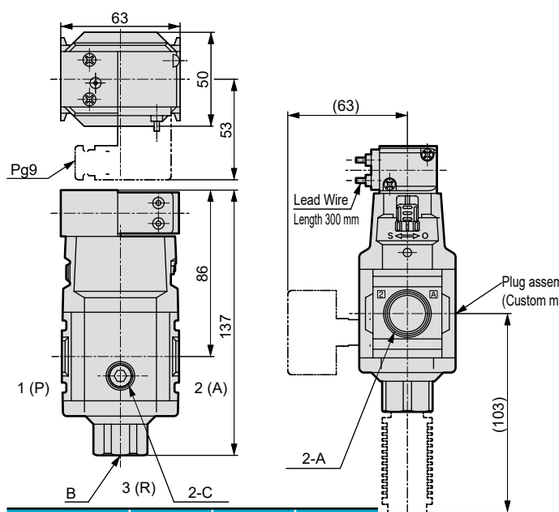
Code	Content	
1	100 VAC 50/60 Hz	Standard
2	200 VAC 50/60 Hz	
3	24 VDC	Option
4	12 VDC	
5	110 VAC 50/60 Hz	
6	220 VAC 50/60 Hz	

5 Attachment (Included)

Code	Content	
Blank	None included	
G49P	Pressure Gauge : G49D-8-P10	
S	Silencer	

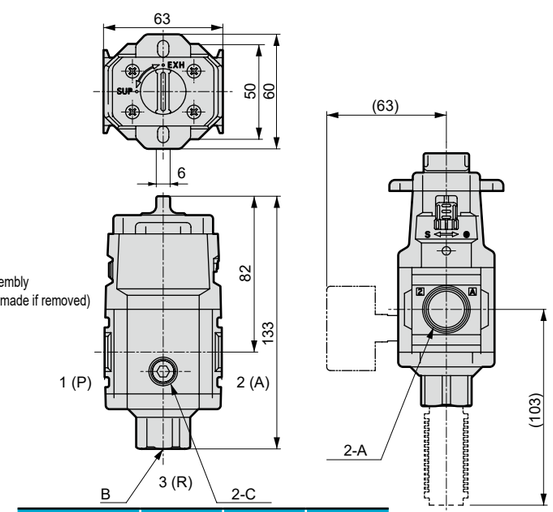
External Dimension Drawings

● V3301-W



	A	B	C
V3301-08-W	Rc1/4	Rc3/8	Rc1/4
V3301-10-W	Rc3/8		
V3301-15-W	Rc1/2		

● V3321-W



	A	B	C
V3321-08-W	Rc1/4	Rc3/8	Rc1/4
V3321-10-W	Rc3/8		
V3321-15-W	Rc1/2		

Refer to the modular design F.R.L. for specifications and internal structure diagram.

MEMO

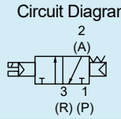


Residual pressure exhaust 3-port solenoid valve

CXU30-VE-UN Series

Residual pressure exhaust 3-port solenoid valve for modular connection with 2000, 3000, 4000 Series
Suitable for modular component master valves

Circuit Diagram Symbol



Interface 45 mm

RoHS

For custom orders only

Model No. Notation

CXU30 - VE - UN - 00 - P X1 - E20 S - 3

Model No.

❷ Flow direction option

❹ Option

❶ Pressure switch option

❸ Wiring Connection

❺ Rated Voltage

* Dedicated model No. for customized combinations. components cannot be purchased individually. Refer to P. 480 for the model No. of your order.

❶Pressure switch option

Code	Content
Blank	Without Pressure Switch
P	With pressure switch

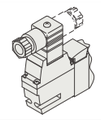
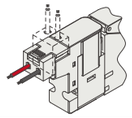
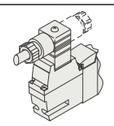
*1 *2

*1 : The length of the lead wire for the pressure switch is 1 m.
*2 : The tube for the atmospheric pressure inlet port of the pressure switch is attached.

❷Flow direction option

Code	Content
Blank	Standard Flow (Left → Right)
X1	Reverse Flow (Right → Left)

❸Wiring Connection

Code	Content	
B	DIN terminal box (Pg7) With surge suppressor and indicator lamp	
E20	E-connector, lead wire (500 mm) with surge suppressor and indicator lamp	
*1 B2	DIN terminal box with M12 connector cable (300 mm) with surge suppressor and indicator lamp	

*1 : Only the rated voltage "3" is available for the electrical connection "B2".

❹Option

Code	Content	
Blank	None	
S	Silencer (SLW-8L) included	

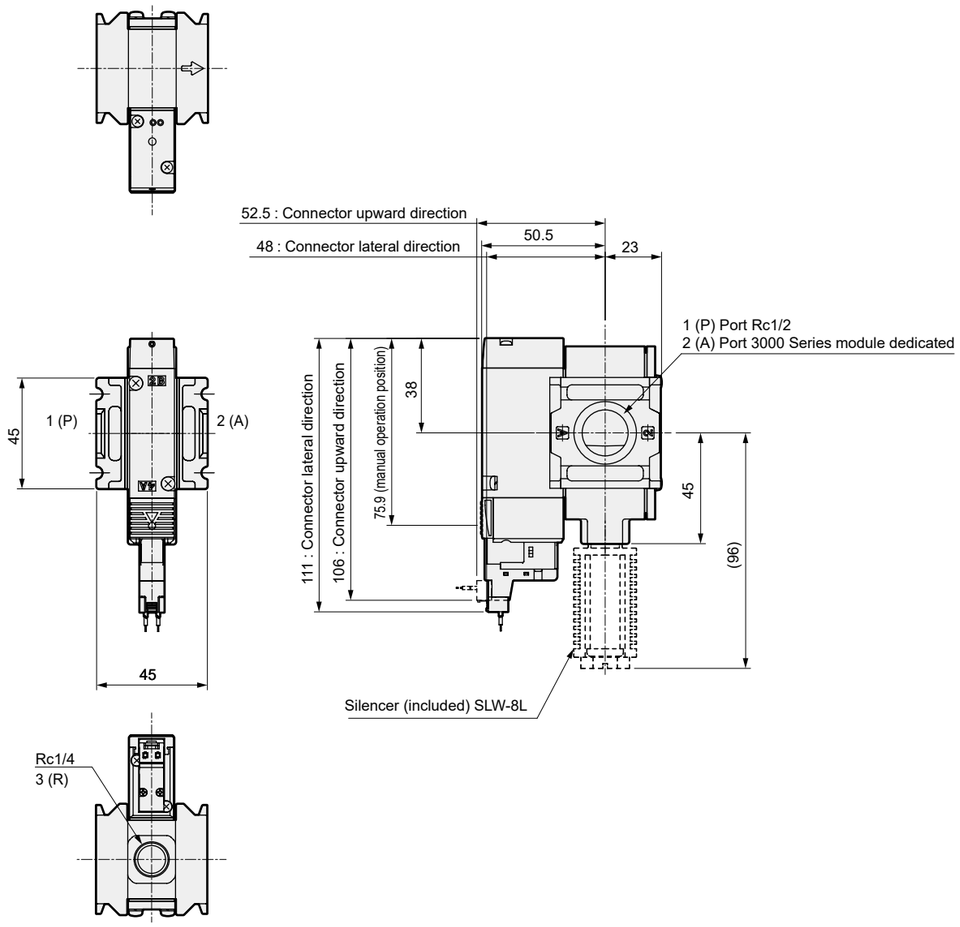
❺Rated Voltage

Code	Content
1	100 VAC (rectifier integrated)
*1 3	24 VDC

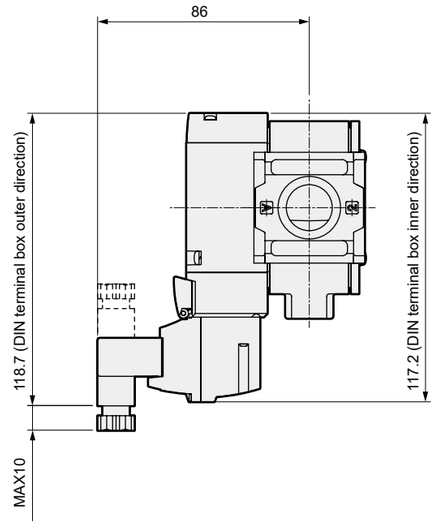
*1 : Only the rated voltage "3" is available for the electrical connection "B2".

External Dimension Drawings

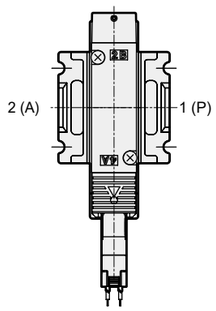
● E type connector (E)



● DIN terminal box (B)



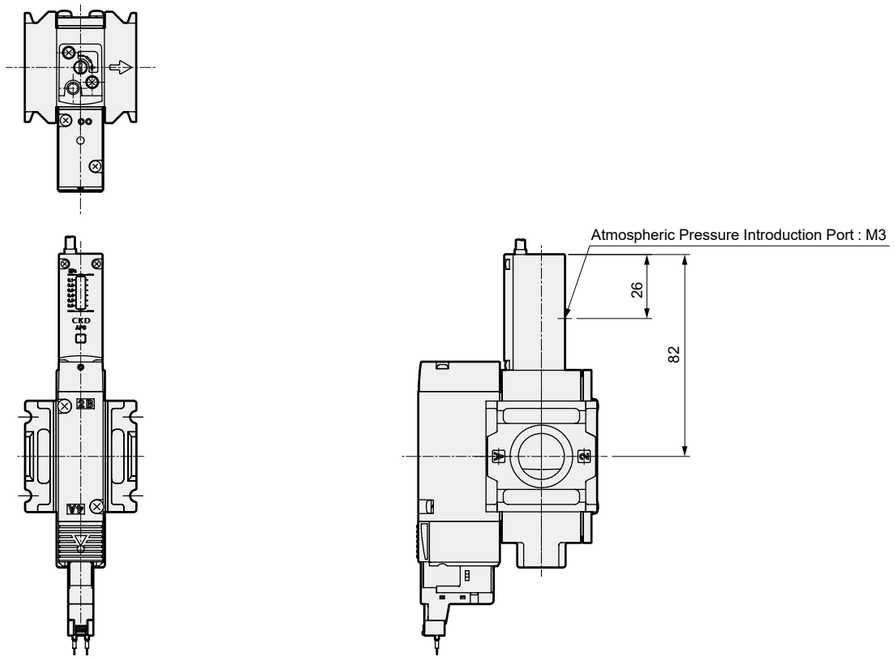
● Flow direction : Reverse flow (X1)



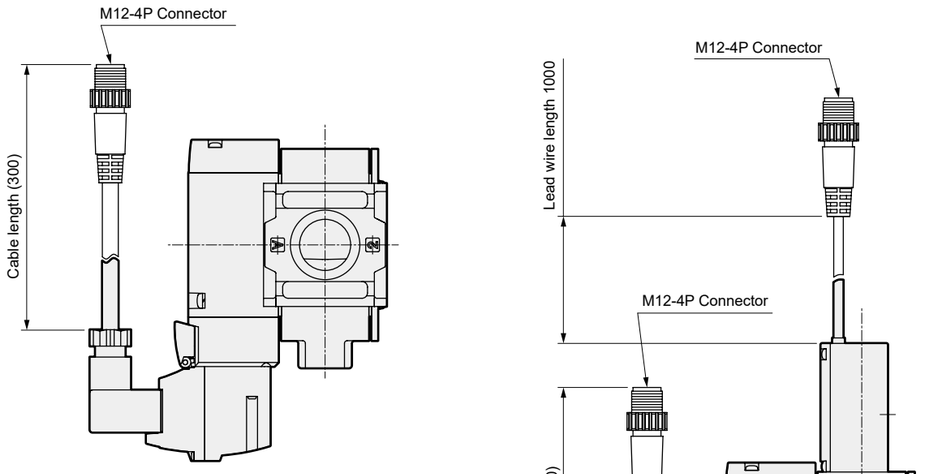
Air Preparation Components
F.R.L.
Filter Regulator
Filter
Regulator
Lubricator
Drain Separator
Mechanical Pressure SW
Residual Pressure Exhaust Valve
Slow Start Valve
Antibacterial/ Bacteria Removing Filter
Ozone FR
Siloxane/ OzoneRemover
Flame Resistant FR
Oil-free Regulator
Medium Pressure FR
No copper/ PTFEv Specification
Air Unit Equipment
Adapter Joiner
Pressure Gauge
Compact F.R.L.
Large F.R.L.
Precision Regulator
Clean FR
Electro-Pneumatic Regulator
Air Booster
Ending

External Dimension Drawings

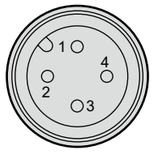
● Pressure switch (P)



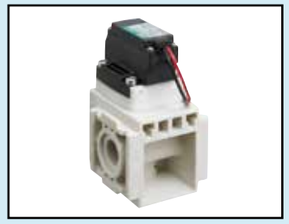
● DIN terminal box with M12 connector cable (B2)/pressure switch (P-B2)



Pin array (common to DIN terminal box and pressure switch)



PIN No.	Application
1 PIN	(Not Used)
2 PIN	(Not Used)
3 PIN	Power -
4PIN	Power +

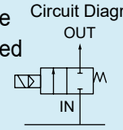


Pilot Operated 2-Port Solenoid Valve for Compressed Air

CXU10-EXA-UN Series

NC (open when energized), diaphragm drive
Modular connection with 1000 Series enabled
Ideal for modular component blow valves

Circuit Diagram Symbol



No thread Open
For custom orders only
Expandable
Interface 40 mm
RoHS

Model No. Notation

CXU10 - EXA - UN - C6 - 2C - 1

Model No.
❷ Coil option
❶ Port size (OUT)
❸ Voltage

* Dedicated model No. for customized combinations. components cannot be purchased individually. Refer to P. 486 for the model No. of your order.

(Appendix Table 1)

Coil option	Voltage 1	Voltage 3
2C	●	●
2H	●	
2HS		●

Select from the combinations indicated with ● on the left.

❶Port size (OUT)

Code	Content
C6	ø6 Push-in fitting
CL6	ø6 push-in L fitting
C8	ø8 Push-in Fitting
CL8	ø8 push-in L fitting

❷Coil option

Code		Content	
2C	Standard	Lead Wire (without lamp/surge suppressor)	
2H	Option	DIN terminal box (Pg7), with lamp (inside terminal box)	
2HS	Option	DIN terminal box (Pg7) with lamp/surge suppressor (inside terminal box)	

*1 : Refer to Appendix 1 for the available coil option and voltage combinations.

❸Voltage

Code	Content
1	100 VAC 50/60 Hz
3	24 VDC

*1 : Refer to Appendix 1 for the available coil option and voltage combinations.

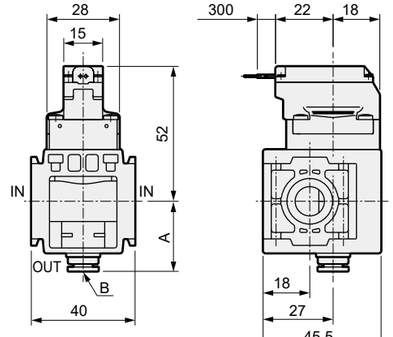
*2 : When using with an extremely small flow rate or when the solenoid valve's secondary side is restricted, set the pressure so that the pressure difference does not fall below 0.01 MPa with the valve opened. Refer to the instruction manual of EXA Series for details. CKD Components Product Site (https://www.ckd.co.jp/kiki/en/) → "Model No." → Instruction Manual. Contact CKD if the differential pressure before/after the solenoid valve with the valve opened is small.

External Dimension Drawings

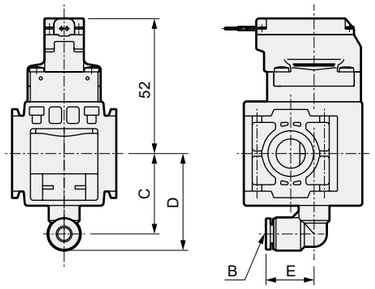
● Grommet lead wire

CXU10-EXA-UN-□-2C-□

Cartridge Fitting Straight type

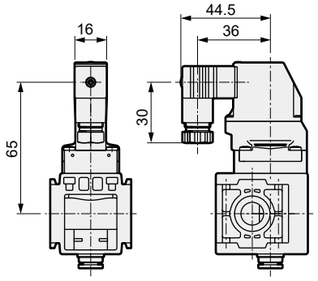


Cartridge Fitting Elbow Type



● With DIN terminal box (Pg7) type

CXU10-EXA-UN-□-2HS-□



Optional dimensions table

Option	A	B	C	D	E
C6	27	Push-in fitting ø6	-	-	-
CL6	-	Push-in fitting ø6	31	37	18.5
C8	27	Push-in fitting ø8	-	-	-
CL8	-	Push-in fitting ø8	32	39	21

Refer to Air Units components P. 486 and P. 487 for specifications and internal structure diagram.

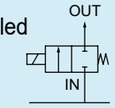


Direct Acting 2-Port Solenoid Valve

CXU10-FAB3-UN Series

NC (Normally Closed) Type
Modular connection with 1000 Series enabled
Ideal for modular component blow valves

Circuit Diagram Symbol



No thread Open
Interface 40 mm
RoHS
For custom orders only

Model No. Notation

CXU10 - FAB3 - UN - C6 - 2C - 3

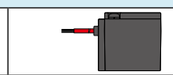
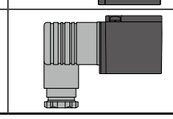
* Dedicated model No. for customized combinations. components cannot be purchased individually. Refer to P. 488 for the model No. of your order.

Model No.
❷ Coil option
❶ Port size (OUT)
❸ Rated Voltage

❶Port size (OUT)

Code	Content
C6	ø6 Push-in fitting
CL6	ø6 push-in L fitting
C8	ø8 Push-in Fitting
CL8	ø8 push-in L fitting

❷Coil option

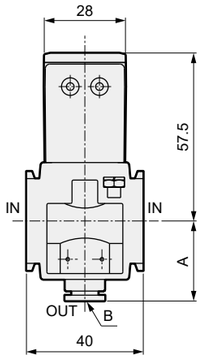
Code		
2C	Grommet Lead Wire	
2HS	DIN terminal box with lamp/ surge suppressor (Pg11)	

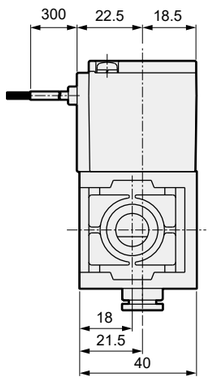
❸Rated Voltage

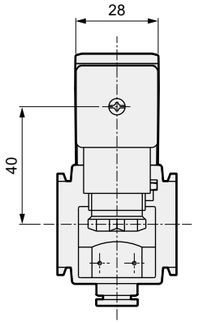
Code	Content
1	100 VAC 50/60 Hz, 110 VAC 60 Hz
3	24 VDC

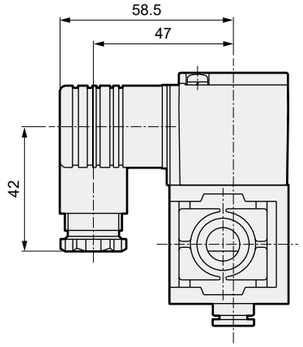
External Dimension Drawings

● Grommet lead wire
CXU10-FAB3-UN-□-2C-□
Cartridge Fitting Straight type

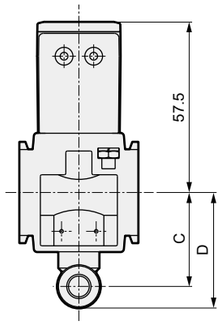


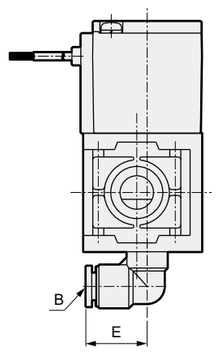






Cartridge Fitting Elbow Type





Optional dimensions table

Option	A	B	C	D	E
C6	27	Push-in fitting ø6	-	-	-
CL6	-	Push-in fitting ø6	31	37	18.5
C8	27	Push-in fitting ø8	-	-	-
CL8	-	Push-in fitting ø8	32	39	21

● With DIN terminal box (Pg11) type
CXU10-FAB3-UN-□-2HS-□

Refer to Air Units components P. 488 and P. 489 for specifications and internal structure diagram.

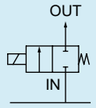


Direct Acting 2-Port Solenoid Valve

CXU30-FAB4U-UN Series

NC (Normally Closed) Type
Modular connection with 2000, 3000, 4000 Series enabled
Ideal for modular component blow valves

Circuit Diagram Symbol



Interface 50 mm
No thread Open
RoHS
For custom orders only

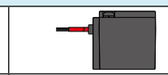
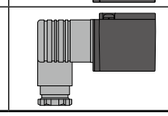
Model No. Notation

CXU30 - FAB4U - UN - 8L - 2C - 3

* Dedicated model No. for customized combinations. components cannot be purchased individually. Refer to P. 490 for the model No. of your order.

Model No.
❷ Rated Voltage
❶ Coil option

❶Coil option

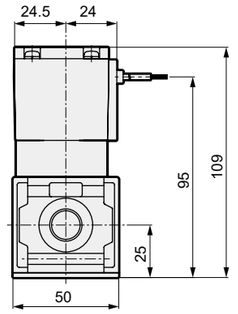
Code		
2C	Grommet Lead Wire	
2HS	DIN Terminal Box With lamp/surge suppressor (Pg11)	

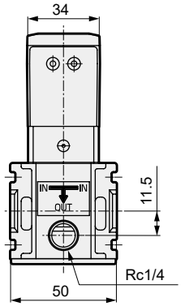
❷Rated Voltage

Code	Content
1	100 VAC 50/60 Hz, 110 VAC 60 Hz
3	24 VDC

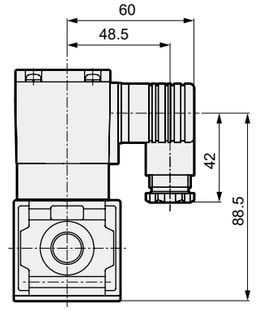
External Dimension Drawings

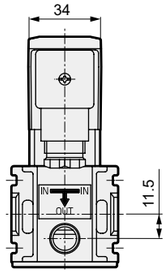
● Grommet lead wire
CXU30-FAB4U-UN-8L-2C-□





● With DIN terminal box (Pg11) type
CXU30-FAB4U-UN-8L-2HS-□





Refer to Air Units components on P. 490 and P. 491 for specifications and internal structure diagram.

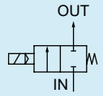


Pilot kick 2-port solenoid valve

CXU30-ADK-UN Series

NC (Normally Closed) Type
Diaphragm drive
Modular connection with 2000, 3000, 4000 Series enabled
Suitable for modular component master valves

Circuit Diagram Symbol



RoHS

Interface 63 mm

For custom orders only

Model No. Notation

CXU30 - ADK - UN - 00 - F 2C - 1

- CXU30: Model No.
- F: ❶ Seal Material
- 2C: ❷ Coil option
- 1: ❸ Rated Voltage

* Dedicated model No. for customized combinations. components cannot be purchased individually. Refer to P. 492 for the model No. of your order.

❶Seal Material

Code	Content
Blank	Nitrile Rubber
F	Fluoro Rubber

❷Coil option

Code		
2C	Grommet Lead Wire	
2HS	DIN terminal box with lamp/ surge suppressor (Pg11)	

*1

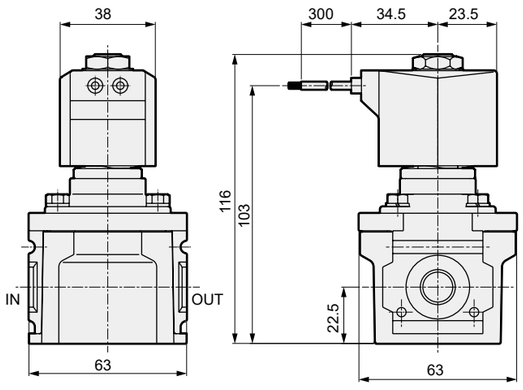
*1 : The coil option "2C" is available for rated voltage "1" only.

❸Rated Voltage

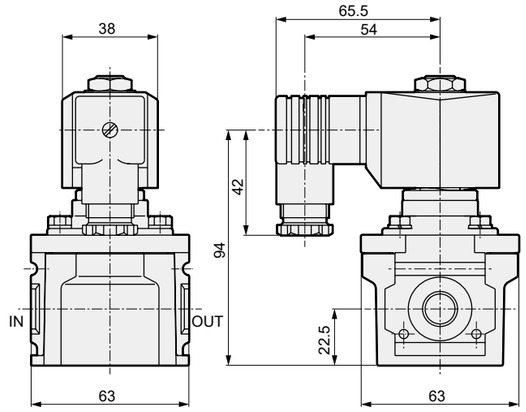
Code	Content
1	100 VAC 50/60 Hz, 110 VAC 60 Hz
3	24 VDC

External Dimension Drawings

● Grommet lead wire
CXU30-ADK-UN-00-□2C-□



● With DIN terminal box (Pg11) type
CXU30-ADK-UN-00-□2HS-□



Refer to Air Units components P. 492 and P. 493 for specifications and internal structure diagram.

MEMO

Air Preparation Components
F.R.L.
Filter Regulator
Filter
Regulator
Lubricator
Drain Separator
Mechanical Pressure SW
Residual Pressure Exhaust Valve
Slow Start Valve
Antibacterial/ Bacteria Removing Filter
Ozone FR
Siloxane/ OzoneRemover
Flame Resistant FR
Oil-free Regulator
Medium Pressure FR
No copper/ PTFEv Specification
Air Unit Equipment
Adapter Joiner
Pressure Gauge
Compact F.R.L.
Large F.R.L.
Precision Regulator
Clean FR
Electro-Pneumatic Regulator
Air Booster
Ending



Pilot Operated 5-Port Valve

CXU30-4G2R-UN Series

5-port solenoid valve for modular connection
with 2000, 3000, 4000 Series

Interface 56 mm

RoHS

For custom orders only

No thread Open

Model No. Notation

CXU30 - 4G2R - UN - 3 3 - C6 - E20 S - 3

- CXU30 - 4G2R - UN: Model No.
- 2nd 3: ❷ Solenoid valve ② solenoid position
- 1st 3: ❶ Solenoid valve ① solenoid position
- C6: ❸ Port size (OUT)
- E20: ❹ Wiring Connection
- S: ❺ Option
- 3: ❻ Rated Voltage

*1 : R1 port can be mounted with the same tank as GWS/-8-S.
*2 : Dedicated model No. for customized combinations. components cannot be purchased individually. Refer to P. 494 and 495 for the model No. of your order.

❶Solenoid valve ① solenoid position

Code	Content
0	Without solenoid valve : Masking plate
1	2-position single ; with exhaust check valve
2	2-position double ; with exhaust check valve
3	3-Position Closed Center
4	3-position A/B/R connection ; with exhaust check valve
5	3-position P/A/B connection

*1 : The exhaust check valve is provided as standard. 3-position all ports closed and P/A/B connection are not provided with the exhaust check valve. Refer to P. 512 for details on the exhaust check valve.
*2 : If the connection port size, electrical connection, options, or voltage differ between solenoid valves ① and ②, the product will be a custom order.
*3 : For the positions of solenoid valves ① and ②, refer to the dimensional drawing.
*4 : When masking plates are used for all solenoid valves, electrical connections and rated voltage options are blank.

❷Solenoid valve ② solenoid position

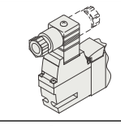
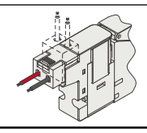
Code	Content
0	Without solenoid valve : Masking plate
1	2-position single ; with exhaust check valve
2	2-position double ; with exhaust check valve
3	3-Position Closed Center
4	3-position A/B/R connection ; with exhaust check valve
5	3-position P/A/B connection

*1 : The exhaust check valve is provided as standard. 3-position all ports closed and P/A/B connection are not provided with the exhaust check valve. Refer to P. 512 for details on the exhaust check valve.
*2 : If the connection port size, electrical connection, options, or voltage differ between solenoid valves ① and ②, the product will be a custom order.
*3 : For the positions of solenoid valves ① and ②, refer to the dimensional drawing.
*4 : When masking plates are used for all solenoid valves, electrical connections and rated voltage options are blank.

❸Port size (OUT)

Code	Content
C4	ø4 Push-in Fitting
C6	ø6 Push-in fitting
CL6	ø6 push-in L-fitting (facing rear)
C8	ø8 Push-in Fitting

❹Wiring Connection

Code	Content	
B	DIN terminal box (Pg7) with surge suppressor and indicator lamp	
E20	E-connector, lead wire (500 mm) with surge suppressor and indicator lamp	

❺Option

Code	Content	
Blank	None	
S	Two silencers (SLW-8S) attached	

❻Rated Voltage

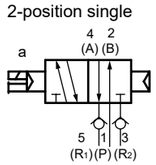
Code	Content
1	100 VAC (rectifier integrated)
3	24 VDC

Refer to P. 499 for the solenoid valve model No. list.

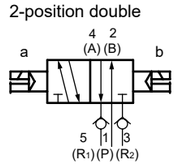
Refer to Air Units components P. 495 and P. 498 for specifications and internal structure diagram.

Circuit Diagram Symbol

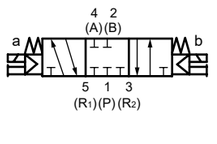
2-position single



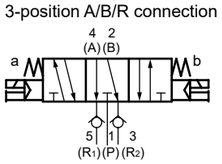
2-position double



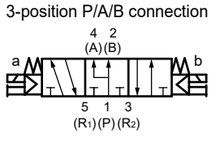
3-Position Closed Center



3-position A/B/R connection



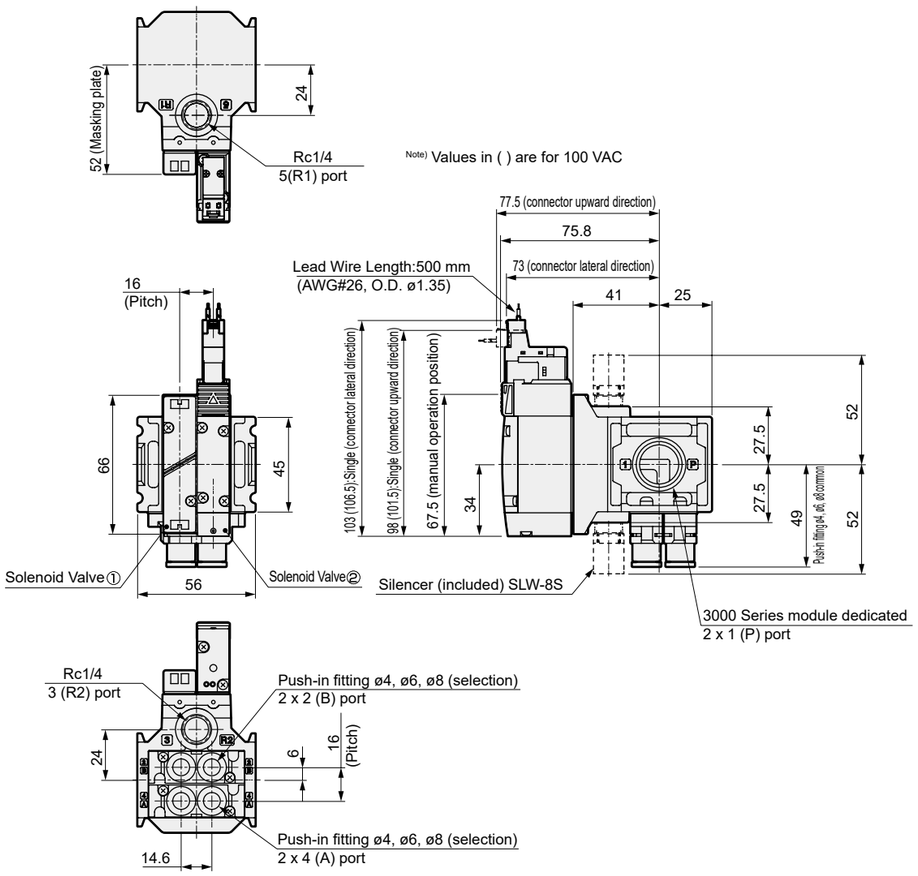
3-position P/A/B connection



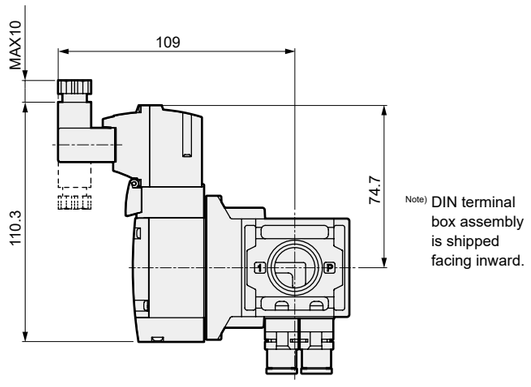
External Dimension Drawings

CXU30-4G2R-$^{0}_{1}$

● E-connector (E)
Cartridge Fitting : Straight type

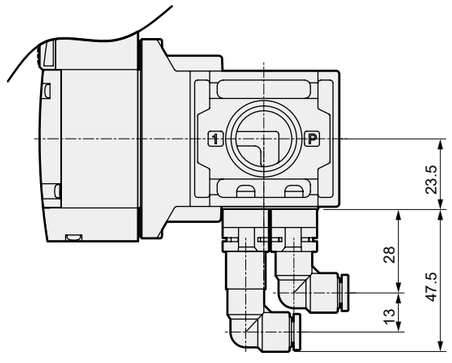


● DIN terminal box (B)
Cartridge Fitting : Straight type



Note) DIN terminal box assembly is shipped facing inward.

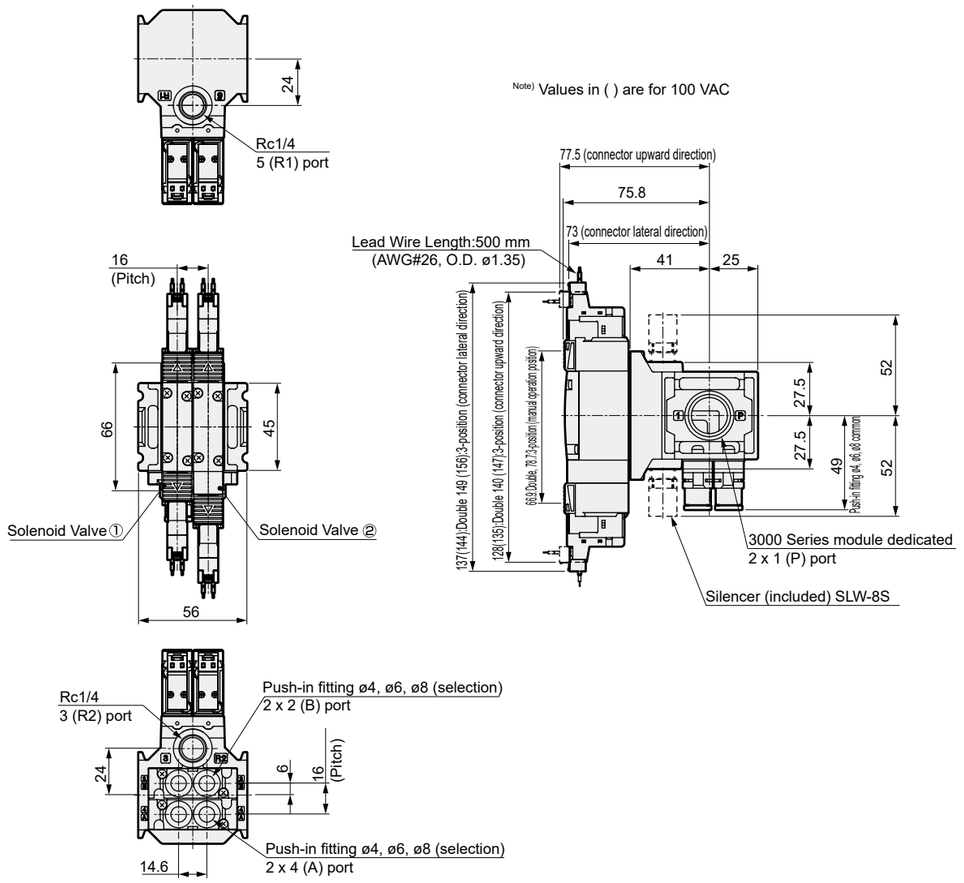
● ø6 push-in L fitting (facing rear)



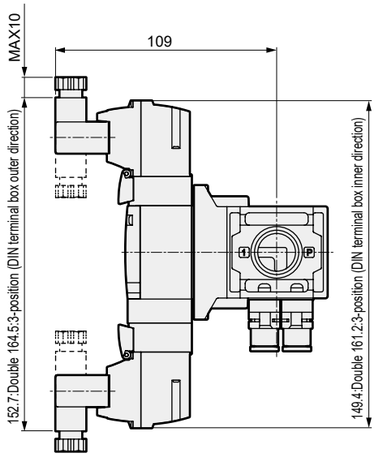
External Dimension Drawings

CXU30-4G2R-$^{2}_{3}{}^{4}_{5}$

● E-connector (E)
Cartridge Fitting : Straight type

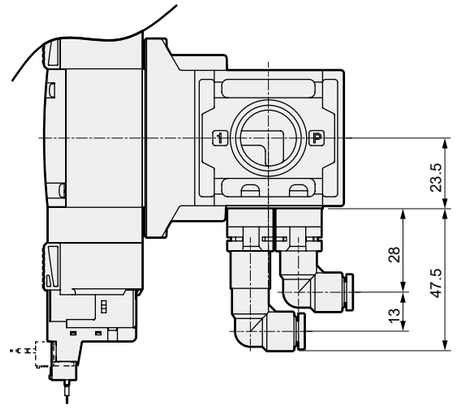


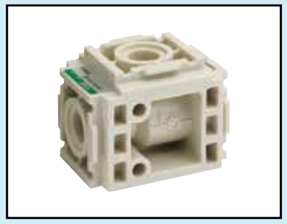
● DIN terminal box (B)
Cartridge Fitting : Straight type



Note) DIN terminal box assembly is shipped facing inward.

● ø 6 push-in L fitting (facing rear)



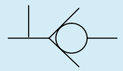


Module check valve

CXU10-CHV-UN Series

Completely prevents backflow of fluids such as compressed air.
Modular connection with F.R.L. 1000 Series enabled
Intermediate extraction of air with branching port

Circuit Diagram Symbol



Interface 56 mm

RoHS

For custom orders only

Model No. Notation

CXU10 - CHV - UN - 00 - 6 - A - X1

- CXU10: Model No.
- 6: ❶ Port Size
- A: ❷ Option
- X1: ❸ Flow Direction

*1 : Dedicated model No. for customized combinations. components cannot be purchased individually. Refer to P. 500 for the model No. of your order.
*2 : The pipe adaptor and masking adaptor are assembled facing upward from the product front.

❶ Port size (OUT)

Code	Content
6	Pipe adaptor (Rc1/8") assembled
8	Pipe adaptor (Rc1/4") assembled
10	Pipe adaptor (Rc3/8") assembled
MA	Masking adaptor assembled

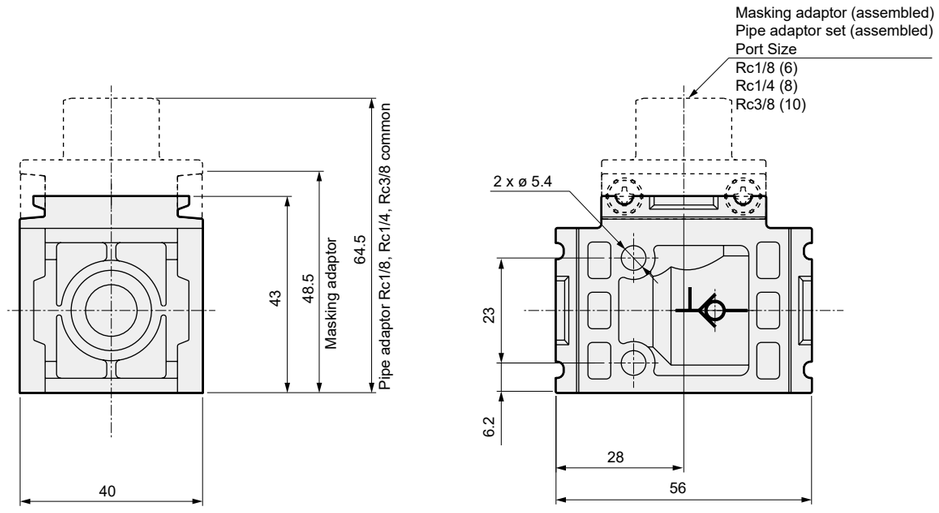
❷ Option

Code	Content
Blank	No Option
A	Fluoro rubber specifications

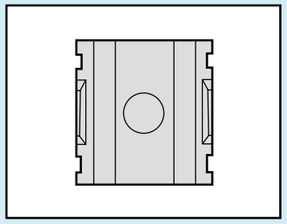
❸ Flow Direction

Code	Content
Blank	Standard Flow (Left → Right)
X1	Reverse Flow (Right → Left)

External Dimension Drawings



Refer to Air Units components on P. 500, P. 501 for specifications and internal structure diagram.



Distributor : Standard White Series

D101/D401/D801-UN-W/D300-W Series

For pipe branching.
Port Size : Rc1/8 to Rc1

D101 Interface 28 mm
D401 Interface 31.5 mm
D801 Interface 50 mm
D300 Interface 42 mm

RoHS

Model No. Notation

D101 - UN - 00 - 6 - W (White Type)

- D101: ❶ Model No.
- 6: ❷ Port Size

❶ Model No.

Code	Content
D101	For 1000 Series
D401	For 2000, 3000, 4000 Series
D801	For 6000, 8000 Series

❷ Port Size

Code		❶ Model No.		
		D101	D401	D801
6	Rc1/8	●		
8	Rc1/4	●	●	
10	Rc3/8		●	
15	Rc1/2		●	
20	Rc3/4			●
25	Rc1			●

D300 - 8 - W - Q (White Type)

- 8: ❶ Port Size
- Q: ❷ Option

❶ Port Size

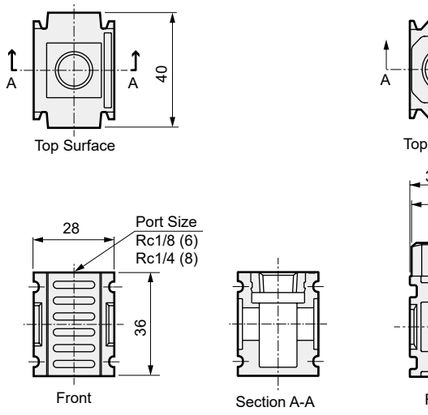
Code	Content
8	Rc1/4
10	Rc3/8

❷ Option

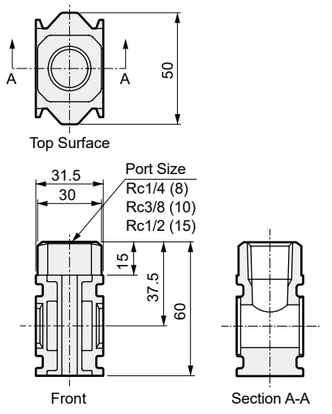
Code	Content
Blank	None
Q	R1/4 pipe plug 2 each of R3/8 pipe plug included

External Dimension Drawings

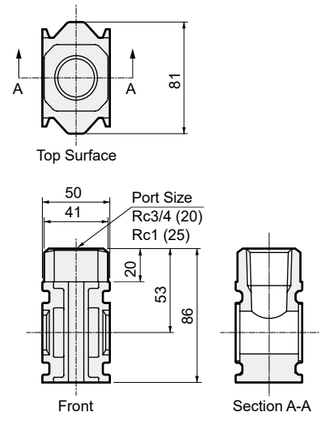
●D101-UN-00



●D401-UN-00

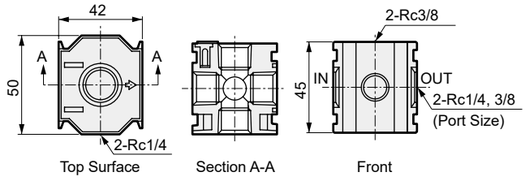


●D801-UN-00



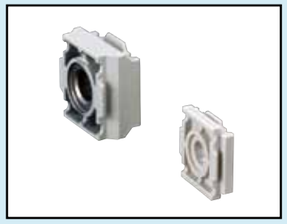
External Dimension Drawings

●D300



Application examples (D101-00-W, D401-00-W, D801-00-W)





Turn adaptor

CXU10-TA-UN/CXU30-TA-UN Series

Rotates module fitting section by 90 degrees.
Direction of module components can be changed.

No thread
Open type

RoHS

For custom orders only

Model No. Notation

CXU10-TA-UN-00

❶ Model No.

* Dedicated model No. for customized combinations. components cannot be purchased individually. Refer to P. 504 for the model No. of your order.

❶Model No.

Code	Content
CXU10	1000 Series
CXU30	3000 Series

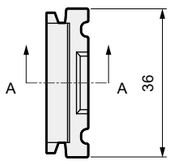
*1 : CXU30-TA can be connected to 2000 Series, 3000 Series, and 4000 Series.

Usage

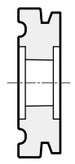


External Dimension Drawings

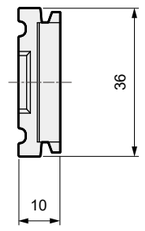
● CXU10-TA-UN



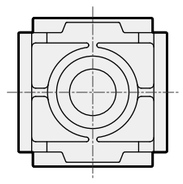
Top side



Cross-section A-A

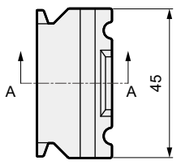


Front

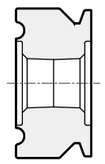


Side

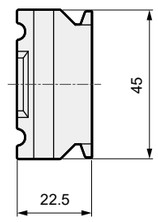
● CXU30-TA-UN



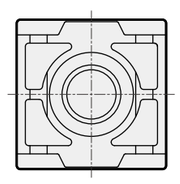
Top side



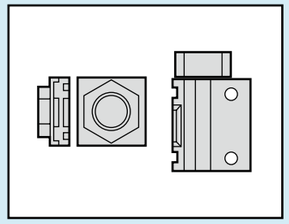
Cross-section A-A



Front



Side



Pipe adaptor/L-type pipe adaptor Standard White Series

A100/A400/A800-UN-W Series
A101/A401/A801-UN-W Series

Port Size : Rc1/8 to Rc1, Rc1/4 to Rc1

RoHS

For custom orders only

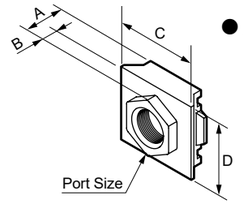
* Dedicated model No. for customized combinations. components cannot be purchased individually.

Piping Adapter

Model No. Notation

A100-UN-6, 8, 10-W
A400-UN-8, 10, 15, 20-W
A800-UN-20, 20, 32-W

Dimensions and applications



● Applications



Model No.	Port Size	Applicable Model	A	B	C	D	Other
A100-UN-6-W	Rc1/8	1000 Series	21.5	13.5	40	36	-
A100-UN-8-W	Rc1/4						
A100-UN-10-W	Rc3/8						
A400-UN-8-W	Rc1/4	2000 3000 Series 4000 Series	20 (25)	6 (11)	50	45	Numbers in ( ) are for Rc3/4
A400-UN-10-W	Rc3/8						
A400-UN-15-W	Rc1/2						
A400-UN-20-W	Rc3/4						
A800-20-W	Rc3/4	6000 8000 Series	35 (38)	15 (18)	81	66	Numbers in ( ) are for 1 1/4.
A800-25-W	Rc1						

L-type Piping Adapter

Model No. Notation

A101-UN-6-W (White Type)

❶ Model No. ❷ Port Size

❷Port Size

Code		Model No.		
		A101	A401	A801
6	Rc1/8	●		
8	Rc1/4	●	●	
10	Rc3/8		●	
15	Rc1/2		●	
20	Rc3/4			●
25	Rc1			●

❶Model No.

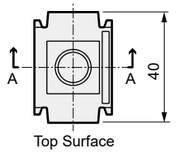
Code	Content
A101	For 1000 Series
A401	For 2000, 3000, 4000 Series
A801	For 6000, 8000 Series

● Applications

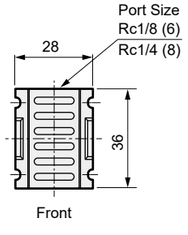


External Dimension Drawings

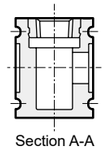
● A101-UN



Top Surface

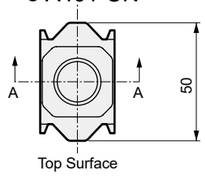


Front

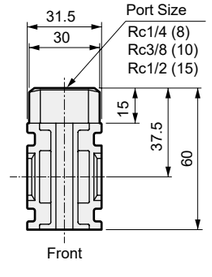


Section A-A

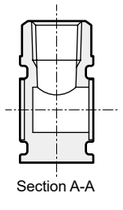
● A401-UN



Top Surface

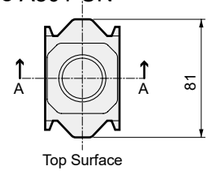


Front

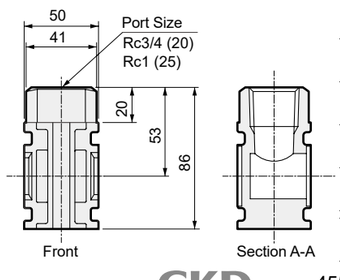


Section A-A

● A801-UN

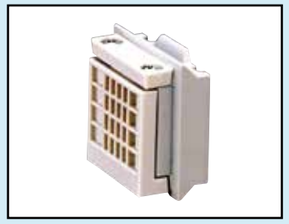


Top Surface



Front

Section A-A



Masking adaptor

CXU10-MA-UN
CXU30-MA-UN Series

Used for masking the fitting section.

For custom orders only

CXU10-MA: Interface 10.5 mm

CXU30-MA: Interface 21.5 mm

RoHS

Model No. Notation

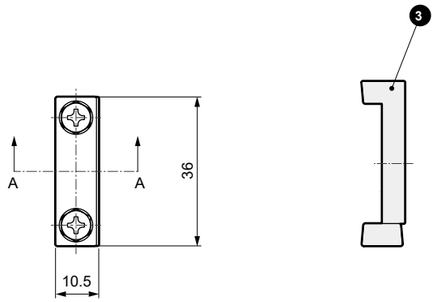
CXU10-MA-UN-00

CXU30-MA-UN-00

* Dedicated model No. for customized combinations. components cannot be purchased individually.

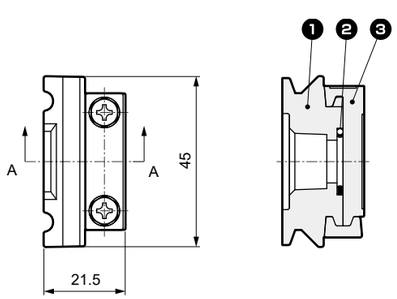
External Dimensions/Internal Structure Diagram/Material

●CXU10-MA-UN-00



Front　　Section A-A

●CXU30-MA-UN-00



Front　　Section A-A

No.	Part Name	Model No.
1	Module conversion adaptor	CXU13-CA-00
2	O-ring	JASO-2013
3	Masking adaptor	CXU10-MA-00



Module conversion adaptor

CXU13-CA-UN/CXU48-CA-UN Series

Capable of connecting 1000 Series with 2000, 3000, 4000 Series and 2000, 3000, 4000 Series with 6000, 8000 Series.

RoHS

Interface 16 mm

For custom orders only

No thread Open type

Model No. Notation

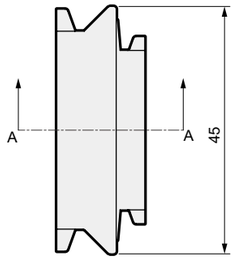
CXU13-CA - UN - 00

CXU48-CA - UN - 00

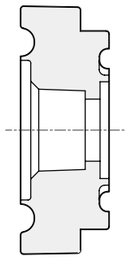
* Dedicated model No. for customized combinations. components cannot be purchased individually. Refer to P. 506 for the model No. of your order.

External Dimension Drawings

●CXU13-CA-UN-00

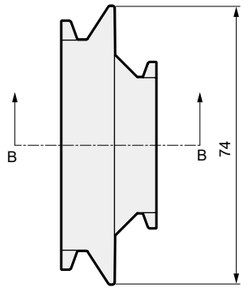


Top Surface

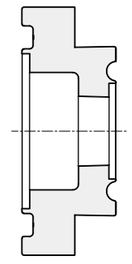


Section A-A

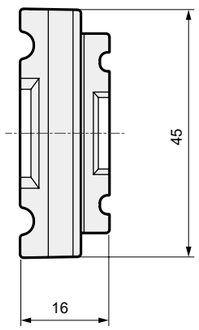
●CXU48-CA-UN-00



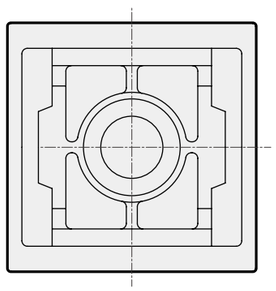
Top Surface



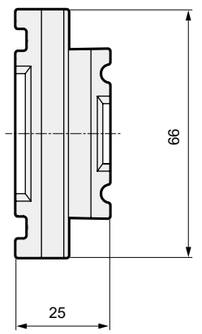
Section B-B



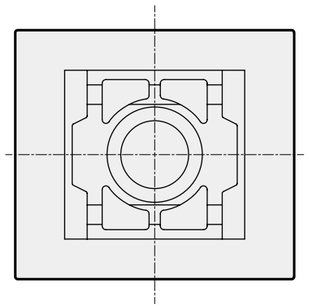
Front



Side



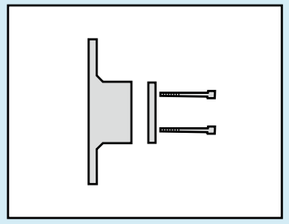
Front



Side

Air Preparation Components

F.R.L.
Filter Regulator
Filter
Regulator
Lubricator
Drain Separator
Mechanical Pressure SW
Residual Pressure Exhaust Valve
Slow Start Valve
Antibacterial/ Bacteria Removing Filter
Ozone FR
Siloxane/ OzoneRemover
Flame Resistant FR
Oil-free Regulator
Medium Pressure FR
No copper/ PTFEv Specification
Air Unit Equipment
Adapter Joiner
Pressure Gauge
Compact F.R.L.
Large F.R.L.
Precision Regulator
Clean FR
Electro-Pneumatic Regulator
Air Booster
Ending



Bracket/Joiner

B-UN-W/J-UN-W Series

RoHS

For custom orders only

Note) Dedicated model No. for customized combinations. components cannot be purchased individually. Refer to P. 507 for the model No. of your order.

T-bracket set

Model No. Notation

B110-UN-W

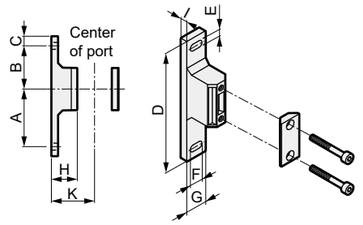
B310-UN-W

B410-UN-W

B810-UN-W

*1 : B310-UN-W and B410-UN-W cannot be combined.
*2 : By using B110-UN-W, the 1000 Series can be adjusted to the same height as the 3000 Series.

Dimensions and applications



● Applications



Model No.	Applicable Model	A	B	C	D	E	F	G	H	I	K
B110-UN-W	1000 Series	45	35	10	100	5.5	7.5	16	25	7.5	40
B110-UN-H-W	1000 Series	45	35	10	100	5.5	7.5	16	30	7.5	45
B310-UN-W	2000 Series 3000 Series	60	45	10	125	7	14	22	27	7	45
B410-UN-W	4000 Series	60	45	10	125	7	14	22	37	7	55
B810-UN-W	6000 Series 8000 Series	70	50	15	150	9	14	27	37	8	65

Joiner Set

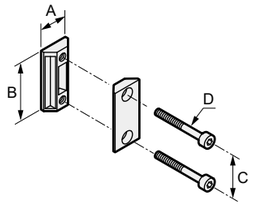
Model No. Notation

C1000-J100-UN-W

C4000-J400-UN-W

C8000-J800-UN-W

Dimensions and applications



● Applications



Model No.	Applicable Model	A	B	C	D
C1000-J100-UN-W	1000 Series	10	36	26	M3.5
C4000-J400-UN-W	2000 Series 3000 Series 4000 Series	21	44	32	M5
C8000-J800-UN-W	6000 Series 8000 Series	26	65	50	M6

MEMO

F.R.L.
Filter Regulator
Filter
Regulator
Lubricator
Drain Separator
Mechanical Pressure SW
Residual Pressure Exhaust Valve
Slow Start Valve
Antibacterial/ Bacteria Removing Filter
Ozone FR
Siloxane/ OzoneRemover
Flame Resistant FR
Oil-free Regulator
Medium Pressure FR
No copper/ PTFEv Specification
Air Unit Equipment
Adapter Joiner
Pressure Gauge
Compact F.R.L.
Large F.R.L.
Precision Regulator
Clean FR
Electro-Pneumatic Regulator
Air Booster
Ending

Air Unit
Special Order Products

Overview

CKD customizes all air unit combinations. Allows vertical module connections, which are not available with customized units.

Features

① Unrestricted in vertical/horizontal directions
Vertical and horizontal piping is freely available. Solenoid valves can also be connected to the desired position.

② Unlimited flexibility
Module components not listed in this catalog are also available.

③ Reduced man-hours
All components are connected as modules, eliminating work such as piping.



CONTENTS

● Air Units Special Specification Product CXUZ Series 462

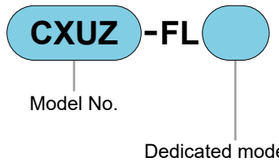
Air Preparation Components
F.R.L.
Filter Regulator
Filter
Regulator
Lubricator
Drain Separator
Mechanical Pressure SW
Residual Pressure Exhaust Valve
Slow Start Valve
Antibacterial/ Bacteria Removing Filter
Ozone FR
Siloxane/ OzoneRemover
Flame Resistant FR
Oil-free Regulator
Medium Pressure FR
No copper/ PTFEv Specification
Air Unit Equipment
Adapter Joiner
Pressure Gauge
Compact F.R.L.
Large F.R.L.
Precision Regulator
Clean FR
Electro-Pneumatic Regulator
Air Booster
Ending



Air Units Special Specification Product

CXUZ Series

Model No. Notation



Air unit components can be combined depending on applications and space.
Sales Contact CKD for combinations.

Related products (compatible module combination products)

CXU10 (Compatible model : 1000 Series)		
Model Name	Precision Regulator	Electro-Pneumatic Regulator
Model No.	RPE1000 	EVD-1000 
Page	688	752

CXU30 (Compatible model : 2000, 3000, 4000 Series)			
Model Name	Spool position detection Residual pressure exhaust valve with function	Precision Regulator	Electro-Pneumatic Regulator
Model No.	SNS 	RP2000 	EVD-3000 
Page	222	700	760

MEMO

Air Preparation Components
F.R.L.
Filter Regulator
Filter
Regulator
Lubricator
Drain Separator
Mechanical Pressure SW
Residual Pressure Exhaust Valve
Slow Start Valve
Antibacterial/ Bacteria Removing Filter
Ozone FR
Siloxane/ OzoneRemover
Flame Resistant FR
Oil-free Regulator
Medium Pressure FR
No copper/ PTFEv Specification
Air Unit Equipment
Adapter Joiner
Pressure Gauge
Compact F.R.L.
Large F.R.L.
Precision Regulator
Clean FR
Electro-Pneumatic Regulator
Air Booster
Ending

Valve Air Unit

Overview

In valve air units, the solenoid valve is connected to components such as regulators. Work such as piping is eliminated, enabling the unit to be used immediately.

Features

① Simplified order placement

Units can be purchased using only one form, making order placement and delivery management easy.

② Reduced man-hours

FR components and solenoid valves are connected as a module, eliminating work such as piping.

③ Space-saving

Piping free and fitting free simple design. Compact design that fits into confined spaces.

Descriptions of icons

①Model selection is easy.

Simple manifold

Complex options are eliminated to allow easier selection even for the first order.



CONTENTS

● Pilot Operated 2-Port Solenoid Valves CXU10-GEXA Series 466
● Pilot operated 5-port valve CXU30-M4G2R Series 470

Series Variation [Solenoid valves]

Series Model No.	Voltage		Connection port					FR component			Wiring Connection		
	24 VDC	100 VAC	Port size (IN)	Port Size (OUT)				Regulator	Filter Regulator		Grommet lead	EType connector	DIN Terminal Box
			3/8	ø4	ø6	ø8	1/4	R2000	W2000	W3000			
●Pilot Operated 2-Port Solenoid Valves CXU10-GEXA Simple manifold 	●	●	●		●	●		●	●		●		●
●Pilot operated 5-port valve CXU30-M4G2R Simple manifold 	●	●	●	●	●	●		●		●		●	●



Pilot Operated 2-Port Solenoid Valve for Compressed Air

CXU10-GEXA Series

NC (Normally Closed) Type
Order as a manifold with a connected regulator

Simple manifold

Model No. Notation

CXU10 - GEXA - C6 - R - 3 - 2C - 3

- CXU10 - GEXA: Model No.
- C6: ❶ Port Size (OUT)
- R: ❷ FR component options
- 3: ❸ No. of solenoid valves
- 2C: ❹ Coil option
- 3: ❺ Rated Voltage

❶Port size (OUT)

Code	Content
C6	ø6 Push-in fitting
CL6	ø6 push-in L fitting
C8	ø8 Push-in Fitting
CL8	ø8 push-in L fitting

❷FR component options

Code		Content
Component options	A	Pipe adaptor (Rc3/8)
	R	Regulators (R2000-10-W-X2 *2)
	RT8	Regulators (R2000-10-W-T8X2 *2) No pressure gauge (port Rc1/4 left open)
	W	Filter Regulator (W2000-10-W-F1 *2)
	WT8	Filter Regulator (W2000-10-W-F1T8 *2) No pressure gauge (port Rc1/4 left open)
Direction	Blank	IN side left
	X	IN side right

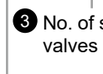
*1

*1 : The standard filter regulator is NC auto-drain. Specify "A" unless the component options R, RT8, W, WT8 are selected. Multiple FR component options cannot be selected.
*2 : The model No. for the IN side left (FR components direction option "Blank").

❸No. of solenoid valves

Code	Content
1	1 Station
to	to
4	4 stations

❹Coil option

Code	Content		
2C	Standard	Lead wire (without both lamp/ surge suppressor)	
2H	Option	DIN terminal box (Pg7), with lamp (inside terminal box)	
2HS		DIN terminal box (Pg7) with lamp/surge suppressor (inside terminal box)	

*1 : Refer to Appendix 1 for the available coil option and voltage combinations.
*2 : M12 Contact CKD for models with connector cables.

❺Rated Voltage

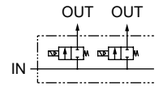
Code	Content
1	100 VAC
3	24 VDC

(Appendix Table 1)

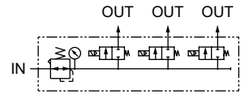
Coil option	Voltage	
	1	3
2C	●	●
2H	●	
2HS		●

Select from the combinations indicated with ● above.

Circuit Diagram Symbol



(Example) CXU10-GEXA-C6-R-3-2C-3



Specifications

Item	CXU10-GEXA			
Operating Fluid	Compressed Air			
Operating pressure differential MPa	0.01 to 0.7 *1			
Max operating pressure MPa	0.7			
Proof pressure MPa	1.05			
Fluid temperature °C	5 to 55			
Ambient Temperature °C	5 to 55			
Atmosphere	Place free of corrosive gas/explosive gas and not exposed to water			
Valve Structure	Pilot operated diaphragm drive			
Valve section leakage cm³/min (ANR)	10 or less			
Mounting Orientation	Any			
Port size (IN)	IN : Rc3/8			
Connecting wire bore size (OUT)	Push-in fitting ø6	Push-in fitting ø6 L	Push-in fitting ø8	Push-in fitting ø8 L type
C[dm³/(s·bar)] *2	1.6		3.0	
b	0.37		0.32	
Electrical Specifications				
Rated Voltage	100 VAC, 24 VDC *2			
Rated power VA	1.2			
Power Consumption (W) DC	0.6			
Heat Resistance Class	B			
Protection Structure (IEC Standard 529)	Lead wire type : IP x 0 with DIN terminal box : IP x 5			

*1 : When using with an extremely small flow rate or when the solenoid valve's secondary side is restricted, set the pressure so that the pressure difference does not fall below 0.01 MPa with the valve opened. (For details, refer to the CKD components product site (https://www.ckd.co.jp/kiki/en/) → "Model No." →Instruction Manual.) Otherwise, operation faults may occur.
*2 : Effective cross-sectional area S and sonic conductance C are converted as S ≈ 5.0 x C.
*3 : The voltage fluctuation range is ±10 %.

Regulator specifications		
Set Pressure MPa	0.05 to 0.7 *4, *5	
Relief	With Relief Mechanism	
Port Size	Rc 3/8	
Ambient/Fluid Temperatures °C	5 to 60	
Filter specifications		
Filtration Rating µm	5	
Drain capacity cm³	12.0	
Port Size	Rc 3/8	

*4 : CXU10-EXA Operating pressure limits the set pressure range.
*5 : In the case of "F1" withauto-drain, the min. Operating pressure of auto-drain is 0.15 MPa.

Weight

(Unit : kg)

Item	Content
FR components (including T-brackets and joiners)	
A : Piping Adapter	0.21
R : Regulator	0.58
RT8 : Regulators (without pressure gauge)	0.57
W : Filter Regulator	0.7
WT8 : Filter regulator (without pressure gauge)	0.69
2-Port Solenoid Valve	
CXU10-EXA (discrete valve and joiner) *6	0.11

*6 : Add 20 g when DIN terminal box is attached.

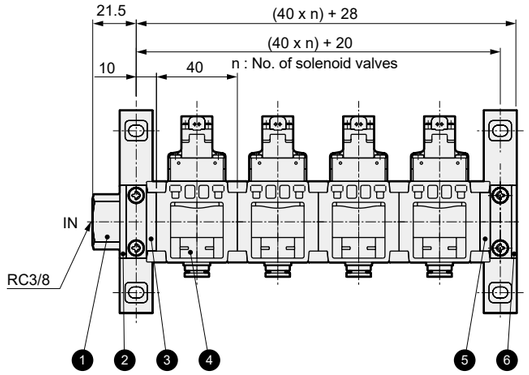
The weight is calculated as FR components + 2-port solenoid valve x number of stations.

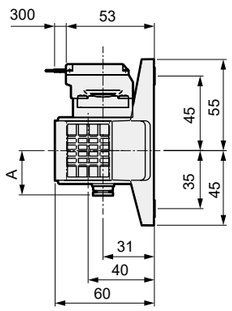
External Dimension Drawings

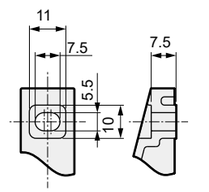
● Grommet lead wire

CXU10-GEXA-□-A-□-2C-□

Cartridge Fitting : Straight type







Enlarged View of -Bracket Part

Configured product table

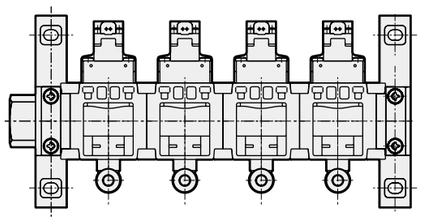
No.	Product name	Model No.
1	Pipe adaptor *1	(FR component option -A)
2	T-Bracket	B110-W
3	Turn adaptor	CXU10-TA-00
4	Pilot Operated 2-Port Solenoid Valve	CXU10-EXA-□
5	Turn adaptor	CXU10-TA-00
6	Masking adaptor	CXU10-MA-00-B

*1 : Configured products may differ depending on the FR components option.
*2 : Mounting directions of brackets and solenoid valves differ from those of the customized units.

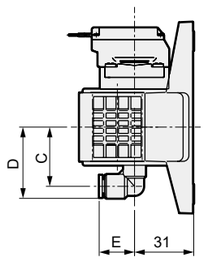
Optional dimensions table

Option	A	B	C	D	E
C6	27	Push-in fitting ø6	-	-	-
CL6	-	Push-in fitting ø6	31	37	18.5
C8	27	Push-in fitting ø8	-	-	-
CL8	-	Push-in fitting ø8	32	39	21

Cartridge Fitting : Elbow Type

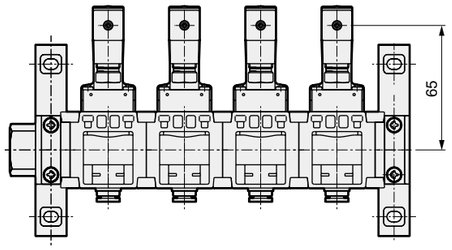


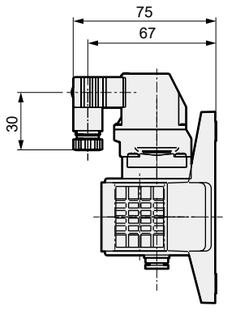
n : No. of solenoid valves



● With DIN terminal box (Pg7) type

CXU10-GEXA-□-A-□-2HS-□

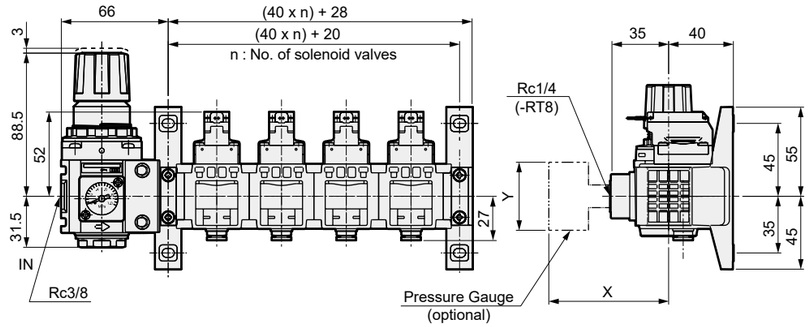




External Dimension Drawings

● FR components option : Regulators

CXU10-GEXA-□-$\frac{R}{RT8}$-□-□-□

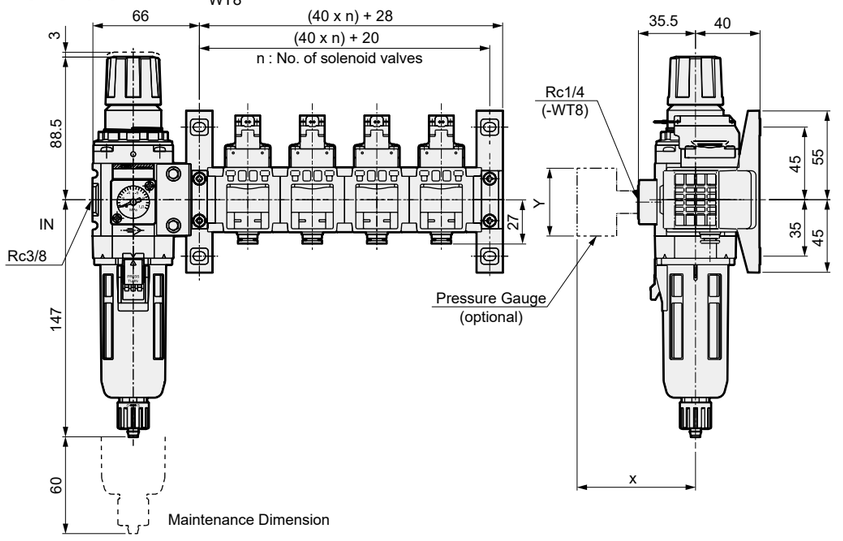


Pressure gauge dimensions table

Pressure Gauge (optional)	X	Y
G45D	(73.5)	ø39
G49D	(73)	ø43.5
G59D	(75.5)	ø52
G40D	(75)	ø42.5
G50D	(75)	ø52.5
G41D	(73.5)	ø42
G52D	(85.5)	ø52.5

● FR components option : Filter/regulator

CXU10-GEXA-□-$\frac{W}{WT8}$-□-□-□

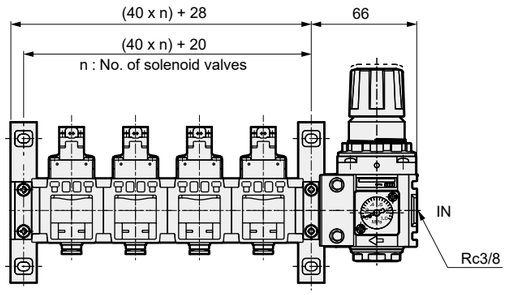


Pressure gauge dimensions table

Pressure Gauge (optional)	X	Y
G45D	(73.5)	ø39
G49D	(73)	ø43.5
G40D	(75)	ø42.5
G41D	(73.5)	ø42
G52D	(85.5)	ø52.5

● FR components option : Reverse Flow

CXU10-GEXA-□-$\frac{R}{RT8}$ X-□-□-□



Note) When the reverse flow option X is selected, the IN side and FR components are on the right. The figure on the left is for the regulator.

Internal Structure Diagram/Material

Model	Page
CXU10-EXA	P. 487
CXU10-TA	P. 504
CXU10-MA	P. 505
R2000	P. 157
W2000	P. 108



Pilot Operated 5-Port Valve

CXU30-M4G2R Series

Order as a manifold with a connected regulator

Simple manifold

Model No. Notation

Solenoid valve No.

① ② ③ ④

CXU30 - M4G2R - 0 1 2 3 - C6 - R - B - 3

- CXU30 - M4G2R: Model No.
- ❶ 0 1: Solenoid valve ①② solenoid position
- ❷ 2 3: Solenoid valve ③④ solenoid position
- ❸ C6: Port size (OUT)
- ❹ R: FR component options
- ❺ B: Wiring Connection
- ❻ 3: Rated Voltage

*1 : GWS□-8-S fittings can be mounted to R1 port.
*2 : Two silencers (SLW-8S) are attached to one sub-base.

❶Solenoid valve ①, ② solenoid valve switching position

Code	Content
0	Without solenoid valve : Masking plate
1	2-position single ; with exhaust check valve
2	2-position double ; with exhaust check valve
3	3-Position Closed Center
4	3-position A/B/R connection ; with exhaust check valve
5	3-position P/A/B connection

*1 : The exhaust check valve is provided as standard. 3-position all ports closed and P/A/B connection are not provided with the exhaust check valve. Refer to P. 512 for details on the exhaust check valve.
*2 : For solenoid valves, if the port size, electrical connection, or voltage is changed, the product is made to order.
*3 : For the positions of solenoid valves ① to ④, refer to the dimensional drawing.
*4 : When masking plates are used for all solenoid valves, electrical connections and rated voltage options are blank.

❷Solenoid valve ③, solenoid valve ④ switching position

Code	Content
Blank	No sub-base
0	Without solenoid valve : Masking plate
1	2-position single ; with exhaust check valve
2	2-position double ; with exhaust check valve
3	3-Position Closed Center
4	3-position A/B/R connection ; with exhaust check valve
5	3-position P/A/B connection

*1 : The exhaust check valve is provided as standard. 3-position all ports closed and P/A/B connection are not provided with the exhaust check valve. Refer to P. 512 for details on the exhaust check valve.
*2 : For solenoid valves, if the port size, electrical connection, or voltage is changed, the product is made to order.
*3 : For the positions of solenoid valves ① to ④, refer to the dimensional drawing.
*4 : When masking plates are used for all solenoid valves, electrical connections and rated voltage options are blank.

❸Port size (OUT)

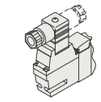
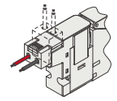
Code	Content
C4	ø4 Push-in Fitting
C6	ø6 Push-in fitting
CL6	ø6 push-in L-fitting (facing rear)
C8	ø8 Push-in Fitting

❹FR component options

Code		Content
Component options	A	Pipe adaptor (Rc3/8)
	R	Regulators (R2000-10-W-X2 *2)
	RT8	Regulators (R2000-10-W-T8X2 *2) No pressure gauge (port Rc1/4 left open)
	W	Filter Regulator (W3000-10-W-F *2)
	WT8	Filter Regulator (W3000-10-W-FT8 *2) No pressure gauge (port Rc1/4 left open)
Direction	Blank	IN side left
	X	IN side right

*1
*1 : The standard filter regulator is NO auto-drain. Multiple FR component options cannot be selected.
*2 : The model No. for the IN side left (FR components direction option "Blank").

❺Wiring Connection

Code	Content	
B	DIN terminal box (Pg7) with surge suppressor and indicator lamp	
E20	E-connector, lead wire (500 mm) with surge suppressor and indicator lamp	

❻Rated Voltage

Code	Content
1	100 VAC (rectifier integrated)
3	24 VDC

Refer to P. 499 for the solenoid valve model No. list.

Common Specifications

Item		Content
Valve Type and Operation Method		Pilot operated soft spool valve
Operating Fluid		Compressed Air
Max operating pressure MPa		0.7
Min. Operating Pressure MPa		0.2 (2-position, 3-position)
Proof pressure MPa		1.05
Fluid temperature °C		5 to 55
Ambient Temperature °C		5 to 55
Atmosphere		Place free of corrosive gas and explosive gas Not exposed to water
Port Size	Port A/B	Push-in Fitting ø4, ø6, ø8
	Port R1/R2	Rc1/4
Manual Override		Non-locking/locking common
Pilot exhaust method		Main valve/pilot valve common exhaust
Lubrication *1		Not Required
Degree of protection *2		Dust-proof
Vibration/shock resistance m/s²		≤ 50 / ≤ 300

*1 : When lubricating, use Turbine Oil Class 1 ISO VG32. Excessive or intermittent lubrication results in unstable operation.

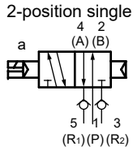
*2 : Avoid water drops or oil, etc., during use. IP65 (water jet proof) applies for DIN terminal box specifications. However, the specified outer diameter of the cord and tightening torque must be used for fixing in place.

Electrical Specifications

Item		Content
Rated Voltage V	DC	24
	AC	100
Rated voltage fluctuation range		±10%
Holding current A	24 VDC	0.017
	100 VAC	0.009
Power consumption W	24 VDC	0.4
Apparent power VA	100 VAC	0.98
Heat Resistance Class		B
Surge Suppressor		Standard
Indicator		With indicator lamp (standard)

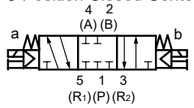
Circuit Diagram Symbol

2-position single

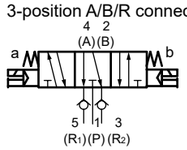


2-position double

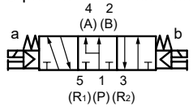
3-Position Closed Center



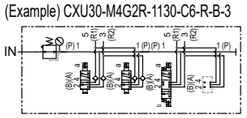
3-position A/B/R connection



3-position P/A/B connection



(Example) CXU30-M4G2R-1130-C6-R-B-3



Weight

(Unit : kg)

Item			Content	
FR components (including T-brackets and joiners)				
A : Piping Adapter			0.54	
R : Regulator			0.80	
RT8 : Regulators (without pressure gauge)			0.79	
W : Filter Regulator			1.06	
WT8 : Filter regulator (without pressure gauge)			1.05	
5-port valve : Switching Position Classification			Single Unit Valve	Valve sub-base
Without solenoid valve : Masking Plate			0.02	0.32
2-position	Single	E-type Connector	0.08	
		DIN Terminal	0.10	
	Double	E-type Connector	0.10	
		DIN Terminal	0.14	
3-position	Closed center	E-type Connector	0.11	
		DIN Terminal	0.15	

The weight is calculated as FR components used + solenoid valve ① to ④ + valve sub-base.

Flow Characteristics

Switching Position Classification		P→A/B		A/B→R1/R2	
		C[dm³/(s·bar)]	b	C[dm³/(s·bar)]	b
2-position		2.3	0.29	1.8	0.24
3-position	Closed center	2.1	0.27	2.3	0.27
	A/B/R connection	2.1	0.34	1.7	0.2
	P/A/B connection	2.2	0.34	2.4	0.29

*1 : Effective cross-sectional area S and sonic conductance C are converted as S ≈ 5.0 x C.

*2 : Values for 2-position and ABR connection are the values when an exhaust check valve is integrated.

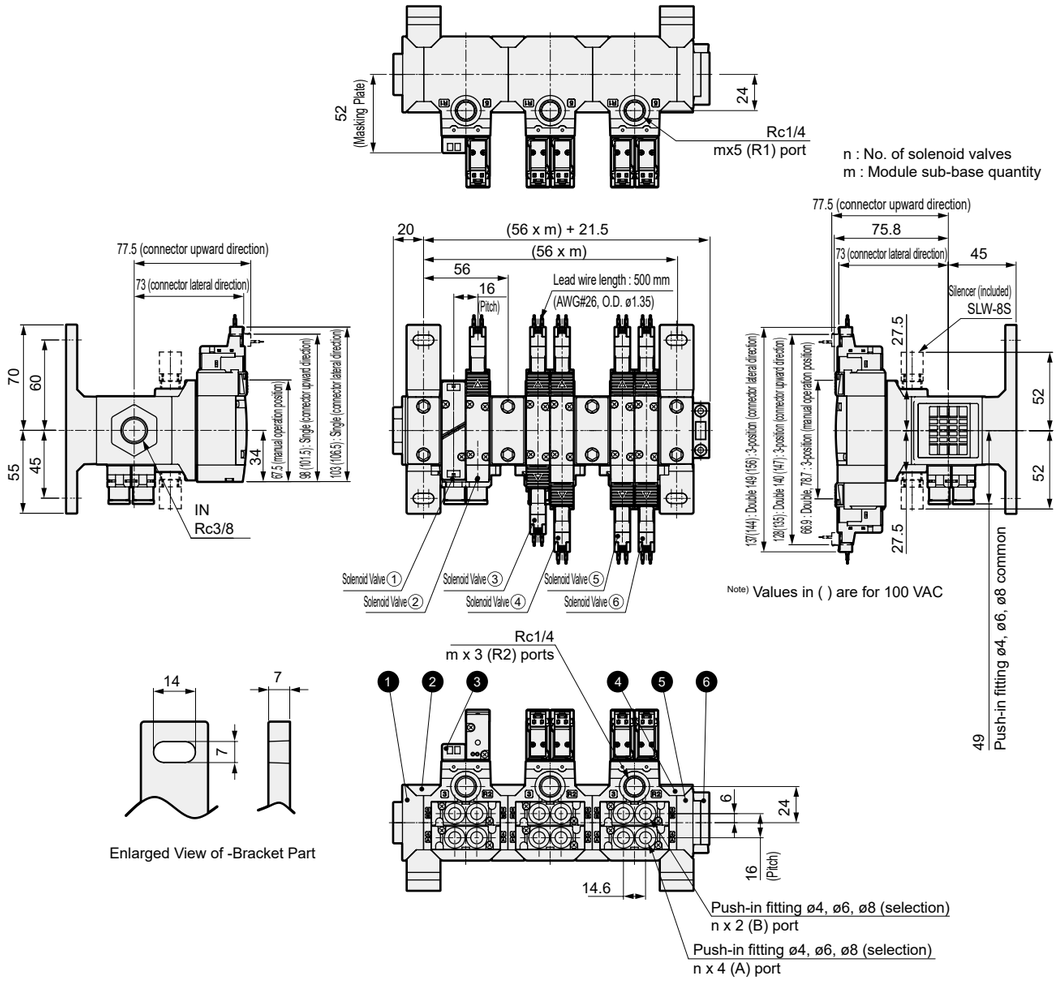
Regulator specifications		
Set Pressure (MPa)		0.2 to 0.7 *3
Relief		With Relief Mechanism
Port Size		Rc3/8
Filter specifications		
Filtration Rating	μm	5
Drain capacity	cm³	45
Port Size		Rc3/8

*3 : CXU30-4G2R Operating pressure limits the set pressure range.

External Dimension Drawings

CXU30-M4G2R -A

● E-connector (E)
Cartridge Fitting : Straight type



Configured product table

No.	Product name	Model No.
1	Pipe adaptor *1	(FR component option -A)
2	T-Bracket	B310-W
3	Pilot Operated 5-Port Valve	CXU30-4G2R-□
4	T-Bracket	B310-W
5	Module conversion adaptor	CXU13-CA-00
6	Masking adaptor	CXU10-MA-00

*1 : Configured products may differ depending on the FR components option.

Solenoid valve and module sub-base quantity

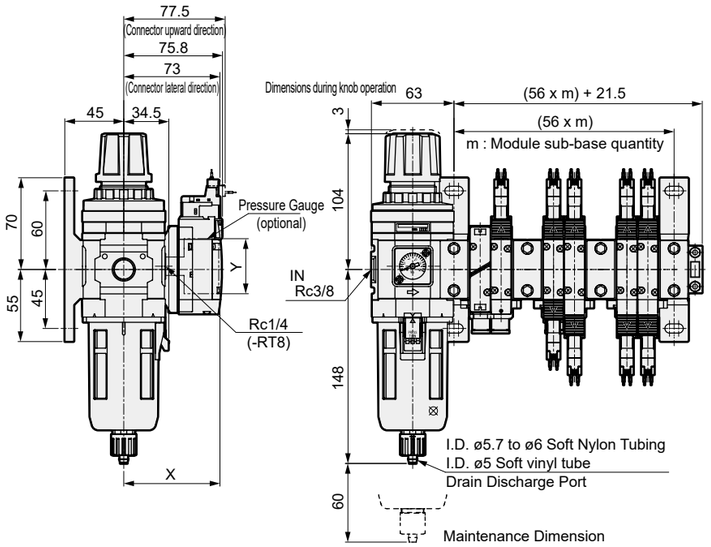
Model No.	No. of solenoid valves	Module sub-base quantity
CXU30-M4G2R-①②	2	1
CXU30-M4G2R-①②③④	4	2

Note) The masking plate quantity is included in the solenoid valve quantity. There are two solenoid valves for each module sub-base.

External Dimension Drawings

● FR components option : Filter/regulator

CXU30-M4G2R-□ □-□- $^{W}_{WT8}$ -□-□

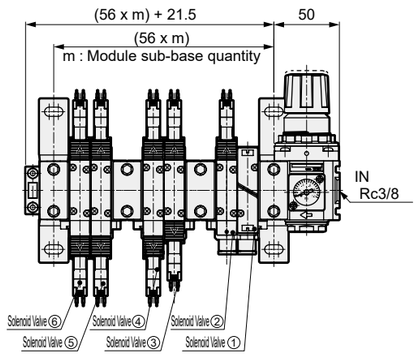


Pressure gauge dimensions table

Pressure Gauge (optional)	X	Y
G49D	(69.5)	ø43.5
G59D	(72)	ø52
G40D	(71.5)	ø42.5
G50D	(71.5)	ø52.5
G41D	(70)	ø42
G52D	(75)	ø52.5

● FR components option : Reverse Flow

CXU30-M4G2R-□□-□- $^{R}_{RT8}$ X-□-□



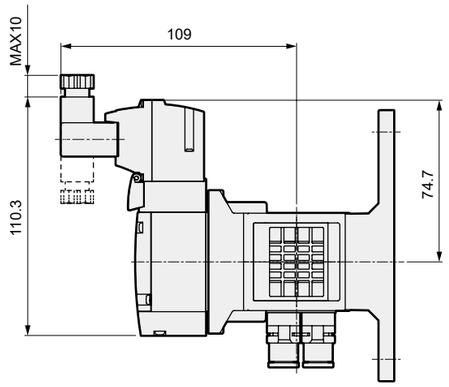
Note) When the reverse flow option X is selected, the IN side and FR components are on the right. Solenoid valves are arranged in order from the left. The figure on the left is for the regulator.

External Dimension Drawings

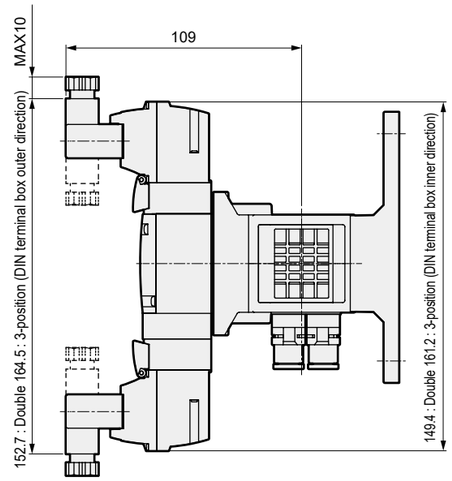
● DIN terminal box (B)

Cartridge Fitting : Straight type

2-position single

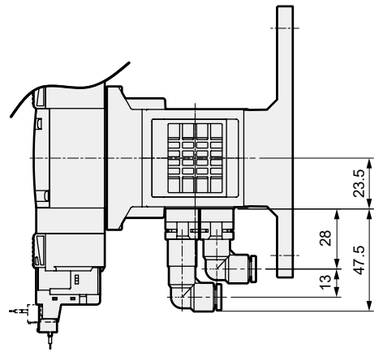


Double, 3-position



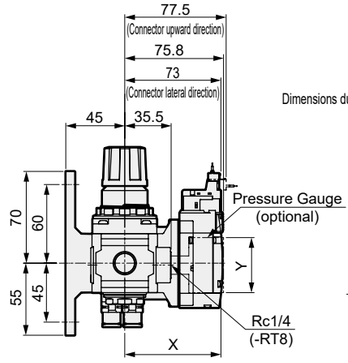
Note) DIN terminal box assembly is shipped facing inward.

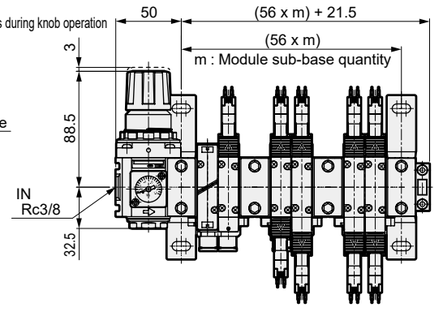
● ø 6 push-in L fitting (facing rear)



● FR components option : Regulators

CXU30-M4G2R-□ □-□- $^{R}_{RT8}$ -□-□





Pressure gauge dimensions table

Pressure Gauge (optional)	X	Y
G49D	(73)	ø43.5
G59D	(75.5)	ø52
G40D	(75)	ø42.5
G50D	(75)	ø52.5
G41D	(73.5)	ø42
G52D	(78.5)	ø52.5

Refer to P. 545 for single pressure gauge model No.

Internal Structure Diagram/Material

Model	Page
CXU30-4G2R	P. 498
CXU10-MA	P. 505
CXU13-CA	P. 506
R2000	P. 157
W3000	P. 108

F.R.L.
Filter Regulator
Filter
Regulator
Lubricator
Drain Separator
Mechanical Pressure SW
Residual Pressure Exhaust Valve
Slow Start Valve
Antibacterial/ Bacteria Removing Filter
Ozone FR
Siloxane/ OzoneRemover
Flame Resistant FR
Oil-free Regulator
Medium Pressure FR
No copper/ PTFEv Specification
Air Unit Equipment
Adapter Joiner
Pressure Gauge
Compact F.R.L.
Large F.R.L.
Precision Regulator
Clean FR
Electro-Pneumatic Regulator
Air Booster
Ending

Single Air Unit

Overview

Air unit components can be easily added on to existing units and can be conveniently purchased during maintenance. Also, general components can be purchased together and assembled with air unit components.

Features

① Module connection of solenoid valves
2-port and 5-port valves are conventional F.R.L. machinesCan be connected to a device.

② Easy connection using a joiner
Since conventional piping materials and tubes are not used, there is no concern about foreign matter or pressure loss.

③ Various module components
Modules can be split into four directions, twisted 90 degrees, or resized.

Descriptions of icons

IN gasket
① Gasket connection on the IN side
A gasket is required for connecting module concavities.

No thread Open
② Cannot be used at terminals
Since no port thread is provided, a masking adaptor or pipe adaptor is required for use at terminals.

Expandable
③ Easy to expand stations
IN structures are used on both sides of the module connection section, making it easy to expand stations.

Inline
④ Main inline
The component can be used as main inline. This structure is incompatible with the expandable type.



CONTENTS

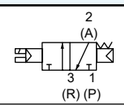
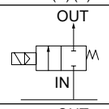
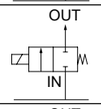
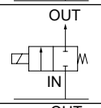
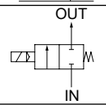
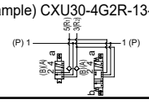
● Residual pressure exhaust 3-port solenoid valve 480
CXU30-VE Series
●Pilot Operated 2-Port Solenoid Valves Lee Dae-min 486
CXU10-EXA Series
●Direct Acting 2-Port Solenoid Valves 488
CXU10-FAB3 Series
●Direct Acting 2-Port Solenoid Valves 490
CXU30-FAB4U Series
● Pilot Kick Operated 2-Port Solenoid Valves 492
CXU30-ADK Series
● Pilot operated 5-port valve 494
CXU30-4G2R Series
● Module check valve 500
CXU10-CHV Series
● 4-way distributor 502
CXU10-D4 Series
CXU30-D4 Series
● Turn adaptor 504
CXU10-TA Series
CXU30-TA Series
● Masking adaptor 505
CXU10-MA Series
● Module conversion adaptor 506
CXU13-CA Series
CXU48-CA Series
● Brackets, joiners, O-rings/gaskets, pipe plugs
B-W J-W ORING GASKET CXU-PP 507

System Chart

Single air unit

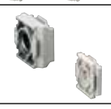
[Solenoid Valve]

*1 : Effective cross-sectional area S and sonic conductance C are converted as S ≈ 5.0 x C.

Series Name	Major applications	Circuit Diagram Symbol	Model No.		Module: 1000 Series	Module: 2000 3000 Series 4000	Port size (OUT): ø4	ø6	ø8	1/8	1/4	3/8	1/2	Flow Characteristics C [dm³/(s·bar)] *1	Listed Page
●Residual pressure exhaust 3-port solenoid valve Module dedicated Inline 	For modular components Master valve		CXU30-VE			●								7	480
●Pilot Operated 2-Port Solenoid Valves IN gasket Expandable No thread Open 	For Air Blow		CXU10-EXA		●			●	●					1.4 to 3.2	486
●Direct Acting 2-Port Solenoid Valves IN gasket Expandable No thread Open 	For Air Blow		CXU10-FAB3		●			●	●					1.2	488
●Direct Acting 2-Port Solenoid Valves IN gasket Expandable No thread Open 	For Air Blow		CXU30-FAB4U			●					●			2.1	490
●Port 2-Port Solenoid Valves No thread Open Inline 	Main ON/OFF		CXU30-ADK			●								11	492
●Pilot operated 5-port valve IN gasket Expandable No thread Open 	For Cylinder Drive	(Example) CXU30-4G2R-13-C6-B-1 	CXU30-4G2R			●	●	●	●					2.2 to 2.7	494

[Distributor, adaptor]

*2 : CXU30-D4 has a port size.

Series Name	Major applications	Usage Example	Model No.		Module: 1000 Series	Module: 2000 3000 Series 4000	Module: 6000 8000 Series	Port Size: 3/8	Listed Page
● Module check valve IN gasket No thread Open 	Backflow Prevention		CXU10-CHV		●				500
● 4-way distributor IN gasket No thread Open *2 	4-Way Branching		CXU10-D4		●				502
			CXU30-D4			●		●	
● Turn adaptor IN gasket No thread Open 	Change Module Orientation by 90 Degrees		CXU10-TA		●				504
			CXU30-TA			●			
● Masking adaptor 	Module Masking		CXU10-MA		●				505
● Module conversion adaptor  IN gasket No thread Open	Connection of 1000 Series and 3000 Series		CXU13-CA		●				506
	Connection of 4000 Series and 8000 Series		CXU48-CA			●			

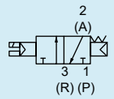


Residual pressure exhaust 3-port solenoid valve

CXU30-VE Series

Residual pressure exhaust 3-port solenoid valve for modular connection with 2000, 3000, 4000 Series
Suitable for modular component master valves

Circuit Diagram Symbol



Module Dedicated

RoHS

In line

Model No. Notation

CXU30 - VE - 00 - P X1 - E20 S - 3

- CXU30: Model No. *1
- P: ❶ Pressure switch option
- X1: ❷ Flow direction option
- E20: ❸ Wiring Connection
- S: ❹ Option
- 3: ❺ Rated Voltage

*1 : The joiner set (joiner, bolt, O-ring) and one gasket are included.

❶Pressure switch option

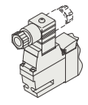
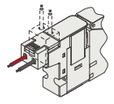
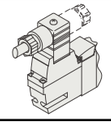
	Code	Content
*1	Blank	Without pressure switch
*2	P	With pressure switch

*1 : The length of the lead wire for the pressure switch is 1 m.
*2 : The tube for the atmospheric pressure inlet port of the pressure switch is attached.

❷Flow direction option

Code	Content
Blank	Standard Flow (Left → Right)
X1	Reverse Flow (Right → Left)

❸Wiring Connection

	Code	Content	
	B	DIN terminal box (Pg7) with surge suppressor and indicator lamp	
	E20	E-connector, lead wire (500 mm) with surge suppressor and indicator lamp	
*1	B2	DIN terminal box with M12 connector cable (300 mm) with surge suppressor and indicator lamp	

*1 : Only the rated voltage "3" is available for the electrical connection "B2".

❹Option

Code	Content	
Blank	None	
S	Silencer (SLW-8L) included	

❺Rated Voltage

	Code	Content
	1	100 VAC (rectifier integrated)
*1	3	24 VDC

*1 : Only the rated voltage "3" is available for the electrical connection "B2".

Common Specifications

Item		Content	
Configuration		Without pressure switch	With pressure switch
Valve Type and Operation Method		Pilot operated soft spool valve	
Operating Fluid		Compressed Air	
Max operating pressure	MPa	0.7	
Min. Operating Pressure	MPa	0.2	
Proof pressure	MPa	1.05	
Fluid temperature	°C	5 to 55	
Ambient Temperature	°C	-5 to 55 (No freezing)	5 to 55 (No freezing)
Atmosphere		Place free of corrosive gas/explosive gas and not exposed to water	
Port Size	P Port	Rc1/2 (capable of connection with 2000, 3000, and 4000 Series)	
	A Port	For module only (2000, 3000, and 4000 Series)	
	R Port	Rc1/4	
Manual Override		Non-locking/locking common	
Pilot exhaust method		Main valve/pilot valve individual exhaust	
Lubrication	*1	Not Required	
Degree of protection	*2	Dust-proof	
Vibration/impact	m/s^2	≤ 50 / ≤ 294	
Effective Area	P → A mm^2	35	
	A → R mm^2	20	
Weight (excluding joiner) kg	*3	0.38	0.45

*1 : Use turbine oil Class 1 ISOVG32 for lubrication. Excessive or intermittent lubrication results in unstable operation.
*2 : Avoid water drops or oil, etc., during use. IP65 (water jet proof) applies for DIN terminal box specifications. However, the specified outer diameter of the cord and tightening torque must be used for fixing in place.
*3 : DIN with the terminal box is +0.02 kg.

Solenoid Valve Specifications

Item			Content
Rated voltage	V	DC	24
		AC	100
Rated voltage fluctuation range			±10 %
Holding current	A	24 VDC	0.017
		100 VAC	0.009
Power consumption	W	24 VDC	0.4
Apparent power	VA	100 VAC	0.98
Heat Resistance Class			B
Surge Suppressor			Standard
Indicator			With indicator lamp (standard)
Wiring			E20 : oil resistant vinyl cabtyre cable B : DIN terminal box (VCTF2 core (ø 3.5 to 7) specified in the cable compatible Dimensions JIS C3306) B2 : DIN terminal box with M12 connector cable (oil resistant vinyl cabtyre cable)

Pressure switch specifications

Item		Content
Set Pressure Range	MPa	0.1 to 0.6
Hysteresis	MPa	0.08 or less
Repeatability	MPa	±0.02 or less
Contact Configuration		1a *4
Wiring		E20, B : Lead wire (oil resistant vinyl cabtyre cable 2-conductor 0.2 mm^2) B2 : Lead wire (oil resistant vinyl cabtyre cable) + M12 connector
Protection Structure		IP65 equiv. *5

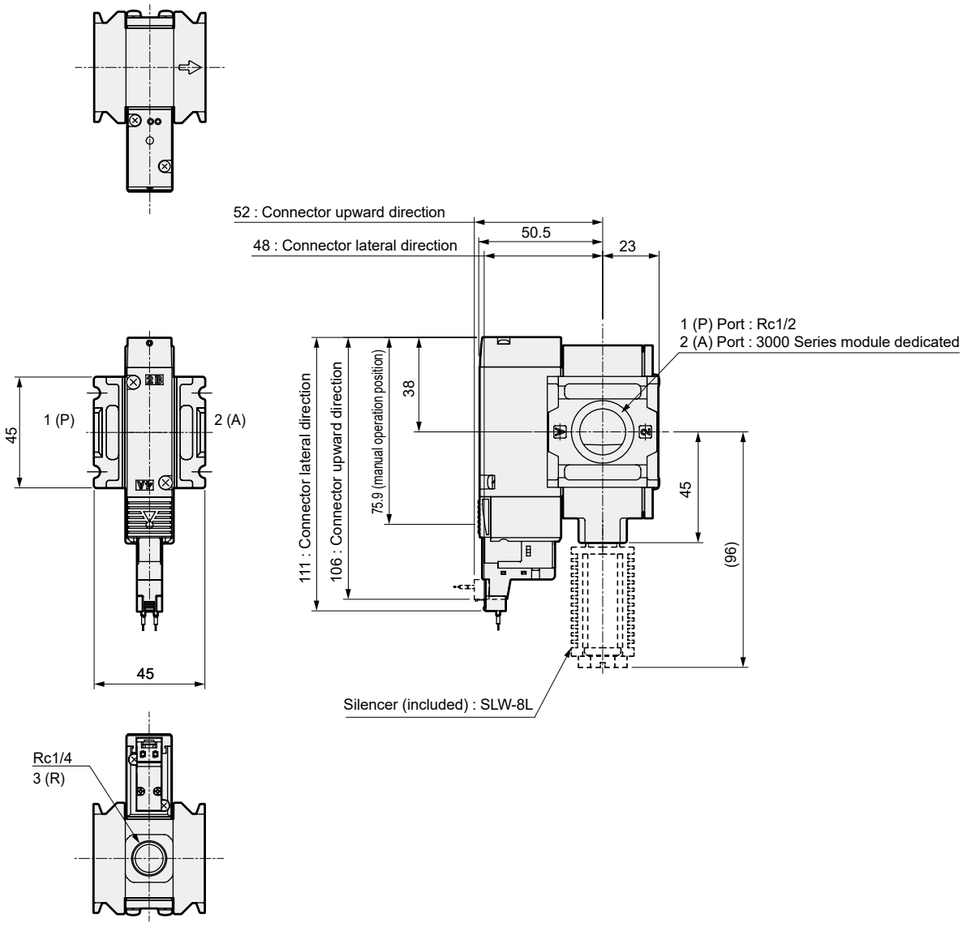
*4 : The contact turns ON when air pressure exceeding the scale setting pressure is applied.
*5 : As a condition of use, the included fitting must be installed to the atmospheric pressure introduction port, and the tube must be extended to a location where water will not enter.

Pressure switch wiring section specification

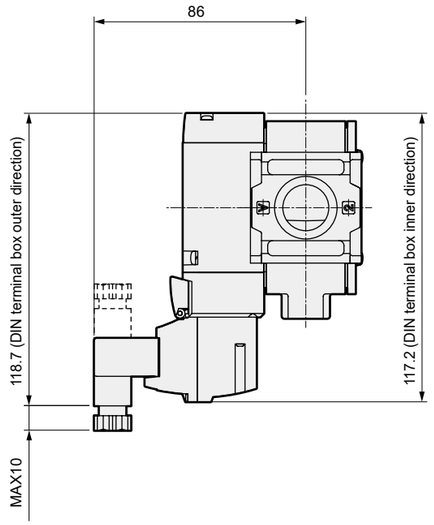
Item	Content	
Load Voltage	24 VDC	100 VAC
Load Current	5 to 50 mA	7 to 20 mA
Internal Voltage Drop	3 V or less	
Lamp	LED (Lights up when ON)	
Insulation Resistance	20 MΩ or more at 500 VDC Megger	
Withstand Voltage	No abnormality when applying 1000 VAC for 1 minute	

External Dimension Drawings

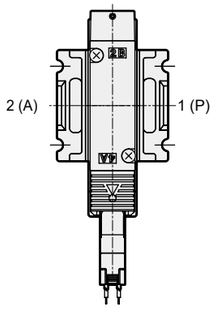
● E-connector (E)



● DIN terminal box (B)

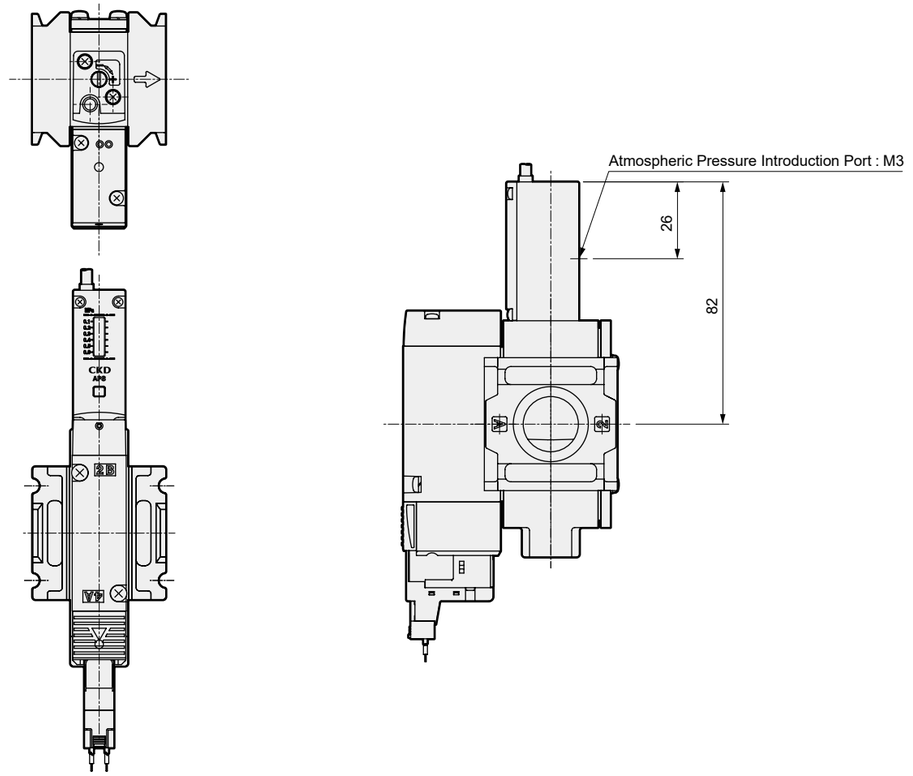


● Flow direction : Reverse flow (X1)

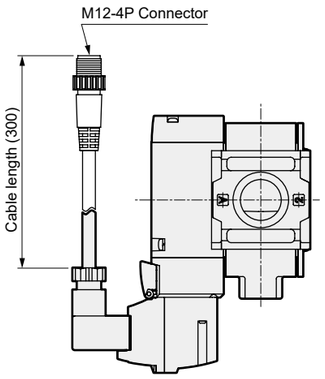


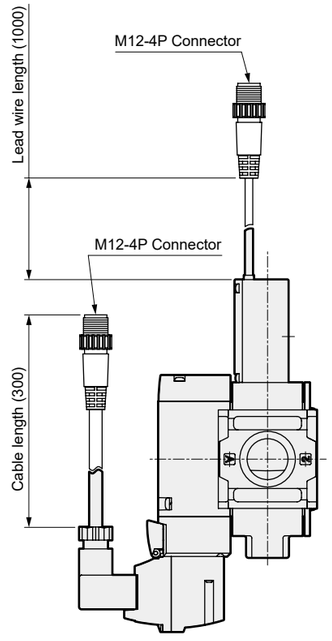
External Dimension Drawings

● Pressure switch (P)



● DIN terminal box with M12 connector cable (B2)/pressure switch (P-B2)





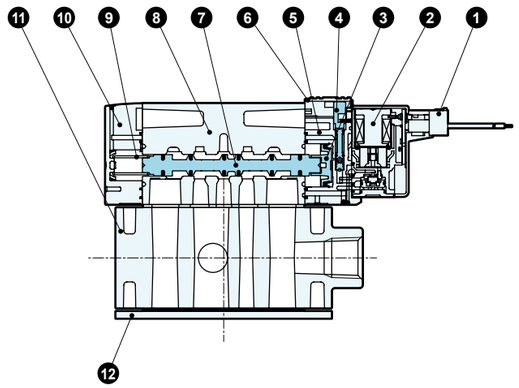
Pin array (common to DIN terminal box and pressure switch)



PIN No.	Application
1 PIN	(Not Used)
2 PIN	(Not Used)
3 PIN	Power -
4PIN	Power +

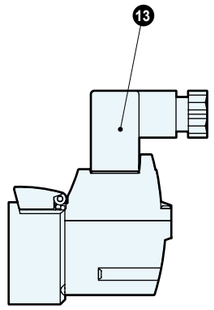
Internal Structure Diagram/Material

● E-connector (E)

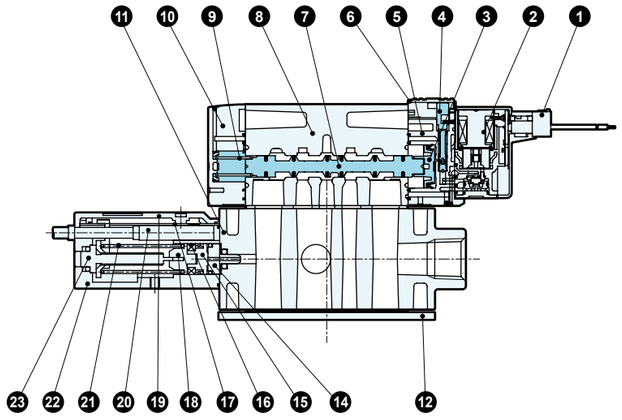


No.	Part Name	Material
1	E-connector socket assembly	-
2	Coil Assembly	-
3	Piston D assembly	-
4	Manual Override	Resin
5	Piston Chamber	Resin
6	Manual Protective Cover	Resin
7	Spool Assembly	-
8	Body	Aluminum Alloy Die-casting
9	Spool Spring	Stainless Steel
10	Cap	Resin
11	Module sub-base	Aluminum Alloy Die-casting
12	Masking Plate	Steel Plate
13	DIN terminal box assembly	-
14	Adapter	Brass
15	Piston	Resin
16	Magnet	-
17	Shield Plate	Steel Plate
18	Stopper	Resin
19	Plate	Resin
20	Cylinder Switch	-
21	Spring	Piano Wire
22	Body	Aluminum Alloy Die-casting
23	Screw	Steel

● DIN terminal box (B)

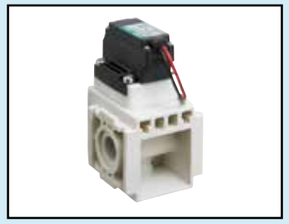


● Pressure switch (P)



MEMO

Air Preparation Components
F.R.L.
Filter Regulator
Filter
Regulator
Lubricator
Drain Separator
Mechanical Pressure SW
Residual Pressure Exhaust Valve
Slow Start Valve
Antibacterial/ Bacteria Removing Filter
Ozone FR
Siloxane/ OzoneRemover
Flame Resistant FR
Oil-free Regulator
Medium Pressure FR
No copper/ PTFEv Specification
Air Unit Equipment
Adapter Joiner
Pressure Gauge
Compact F.R.L.
Large F.R.L.
Precision Regulator
Clean FR
Electro-Pneumatic Regulator
Air Booster
Ending

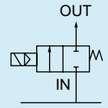


Pilot Operated 2-Port Solenoid Valve for Compressed Air

CXU10-EXA Series

NC (open when energized), diaphragm drive
Modular connection with 1000 Series enabled
Ideal for modular component blow valves

Circuit Diagram Symbol



No thread Open
IN gasket
RoHS
Expand-able

Model No. Indication

CXU10 - EXA - C6 - 2C - 1

- CXU10: Model No.
- C6: ❶ Port size (OUT)
- 2C: ❷ Coil option
- 1: ❸ Voltage

❶Port size (OUT)

Code	Content
C6	ø6 Push-in fitting
CL6	ø6 Push-in L fitting
C8	ø8 Push-in fitting
CL8	ø8 Push-in L fitting

❷Coil option

Code		Content	
2C	Standard	Lead Wire (without lamp/surge suppressor)	
2H	Option	DIN terminal box (Pg7), with lamp (inside terminal box)	
2HS	Option	DIN terminal box (Pg7) with lamp/ surge suppressor (inside terminal box)	

*1 : Refer to Appendix 1 for the available coil option and voltage combinations.
*2 : M12 Contact CKD for models with connector cables.

(Appendix Table 1)

Coil option	Voltage	
	1	3
2C	●	●
2H	●	
2HS		●

Select from the combinations indicated with ● above.

❸Voltage

Code	Content
1	100 VAC 50/60 Hz
3	24 VDC

*1 : Refer to Appendix 1 for the available coil option and voltage combinations.

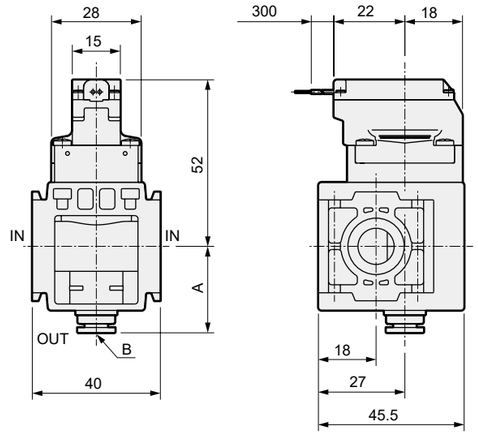
Specifications

Item	CXU10-EXA			
Operating Fluid	Compressed Air			
Working pressure differential MPa	0.01 to 0.7 *1			
Maximum operating pressure MPa	0.7			
Proof pressure MPa	1.05			
Fluid temperature °C	0 to 55			
Ambient Temperature °C	-5 to 55			
Atmosphere	Place free of corrosive gas/explosive gas and not exposed to water			
Valve Structure	Pilot operated diaphragm drive			
Valve section leakage cm^3/min	10 or less			
Mounting Orientation	Any			
Port size (IN)	None			
Connecting wire bore size (OUT)	Push-in fitting ø6	Push-in fitting ø6 L	Push-in fitting ø8	Push-in fitting ø8 L type
C $[dm^3/(s \cdot bar)]$ *2	1.6		3.0	
b	0.37		0.32	
Weight kg *3	0.098	0.095	0.098	0.1
Electrical Specifications				
Rated Voltage	100 VAC (50/60 Hz), 24 VDC *4			
Apparent power VA	1.2			
Power Consumption (W) DC	0.6			
Heat Resistance Class	B			
Protection Structure (IEC Standard 529)	Lead wire type : IPx0 with DIN terminal box : IPx5			

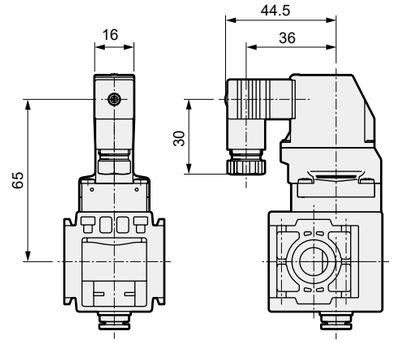
*1 : When using with an extremely small flow rate or when the solenoid valve's secondary side is restricted, set the pressure so that the pressure difference does not fall below 0.01MPa with the valve opened. (For details, refer to the CKD components product site (https://www.ckd.co.jp/kiki/en/) → "Model No." → Instruction Manual.) Otherwise, operation faults may occur.
*2 : Effective cross-sectional area S and sonic conductance C are converted as S ≈ 5.0 x C.
*3 : DIN with the terminal box is +0.02 kg.
*4 : The voltage fluctuation range is ±10 %.

External Dimension Drawings

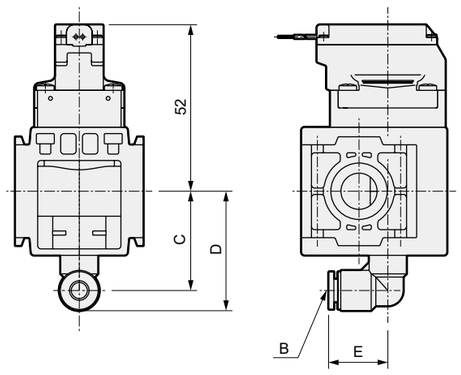
● Grommet lead wire
CXU10-EXA-□-2C-□
Cartridge Fitting : Straight type



● With DIN terminal box (Pg7) type
CXU10-EXA-□-2HS-□



Cartridge Fitting : Elbow Type

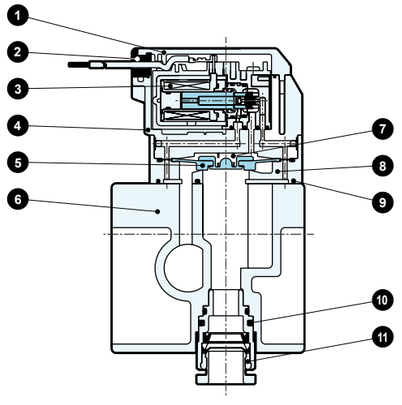


Optional dimensions table

Option	A	B	C	D	E
C6	27	Push-in fitting ø6	-	-	-
CL6	-	Push-in fitting ø6	31	37	18.5
C8	27	Push-in fitting ø8	-	-	-
CL8	-	Push-in fitting ø8	32	39	21

Internal Structure Diagram/Material

● CXU10-EXA



Part No.	Part Name	Material
1	Cover (*1)	Polybutylene terephthalate
2	Bushing	Nitrile rubber
3	Coil Assembly	-
4	Stuffing	Polyphenylene sulfide
5	Diaphragm assembly	Hydrogenated nitrile rubber/polyphenylene sulfide
6	Body	Polyamide resin
7	Spring	Stainless steel
8	Valve Body	Polybutylene terephthalate
9	Gasket	Hydrogenated Nitrile Rubber
10	Pin	Stainless steel
11	Cartridge Fitting	

*1 Polyamide resin is used when the DIN terminal box is attached.

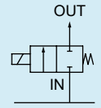


Direct Acting 2-Port Solenoid Valve

CXU10-FAB3 Series

NC (Normally Closed) Type
Modular connection with 1000 Series enabled
Ideal for modular component blow valves

Circuit Diagram Symbol



No thread Open
IN gasket
RoHS
Expand-able

Model No. Indication

CXU10 - FAB3 - C6 - 2C - 3

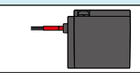
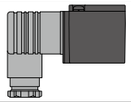
- CXU10: Model No.
- C6: ❶ Port size (OUT)
- 2C: ❷ Coil option
- 3: ❸ Rated Voltage

*1 : The joiner set (joiner, bolt, O-ring) and one gasket are included.

❶Port size (OUT)

Code	Content
C6	ø6 Push-in fitting
CL6	ø6 Push-in L fitting
C8	ø8 Push-in fitting
CL8	ø8 Push-in L fitting

❷Coil option

Code		
2C	Grommet Lead Wire	
2HS	DIN terminal box with lamp/surge suppressor (Pg11)	

❸Rated Voltage

Code	Content
1	100 VAC 50/60 Hz, 110 VAC 60 Hz
3	24 VDC

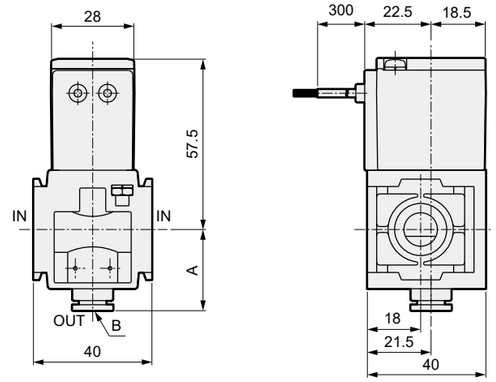
Specifications

Item		CXU10-FAB3
Operating Fluid		Compressed Air
Working pressure differentia MPa		AC : 0 to 1.0, DC : 0 to 0.6
Maximum operating pressure MPa		1.0
Proof pressure MPa		1.5
Fluid temperature °C		AC : 5 to 60, DC : 5 to 40
Ambient Temperature °C		AC : 5 to 60, DC : 5 to 40
Atmosphere		Place free of corrosive gas/explosive gas and not exposed to water
Valve Structure		Direct acting poppet structure
Valve section leakage cm^3/min		10 or less
Mounting Orientation		Any
Port size (IN)		None
Orifice diameter mm		3
C[$dm^3/(s \cdot bar)$] *1		1.2
b		0.56
Weight kg		0.25
Electrical Specifications		
Rated Voltage		100 VAC, 24 VDC
Rated power VA	50Hz	Holding : 7.5, when starting : 20
	60Hz	Holding : 5.5, when starting : 17
Power Consumption W	50Hz	4.0
	60Hz	3.4
	DC	6.5
Heat Resistance Class		B

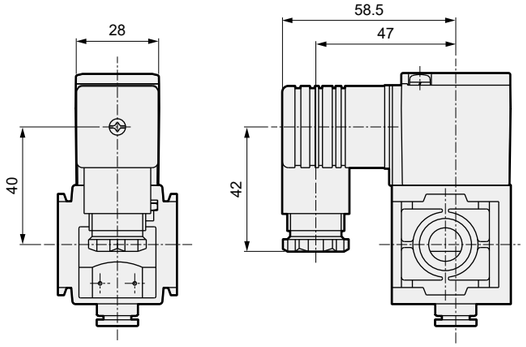
*1 : Effective cross-sectional area S and sonic conductance C are converted as S ≈ 5.0 x C.

External Dimension Drawings

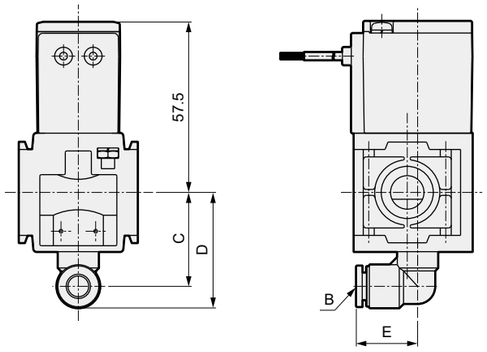
● Grommet lead wire
CXU10-FAB3-□-2C-□
Cartridge Fitting : Straight type



● With DIN terminal box (Pg11) type
CXU10-FAB3-□-2HS-□



Cartridge Fitting : Elbow Type

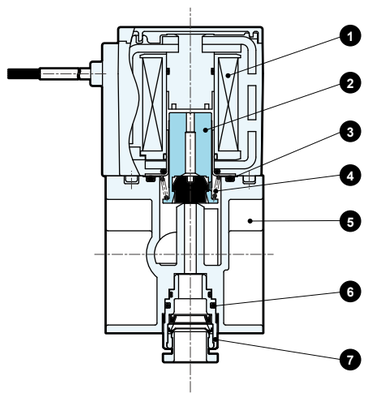


Optional dimensions table

Option	A	B	C	D	E
C6	27	Push-in fitting ø6	-	-	-
CL6	-	Push-in fitting ø6	31	37	18.5
C8	27	Push-in fitting ø8	-	-	-
CL8	-	Push-in fitting ø8	32	39	21

Internal Structure Diagram/Material

●CXU10-FAB3



No.	Part Name	Material
1	Coil Assembly	Class B molded coil
2	Plunger Assembly	Stainless steel, nitrile rubber
3	O-ring	Nitrile rubber
4	Spring	Stainless steel
5	Body	Polyamide resin
6	Pin	Stainless steel
7	Cartridge Fitting	



Direct Acting 2-Port Solenoid Valve

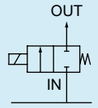
CXU30-FAB4U Series

NC (Normally Closed) Type

Modular connection with 2000, 3000, 4000 Series enabled

Interchangeable with GFAB actuator assembly

Circuit Diagram Symbol



RoHS

No thread Open

IN gasket

Expand-able

Model No. Indication

CXU30 - FAB4U - 8L - 2C - 3

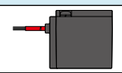
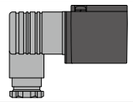
Model No.

❶ Coil option

❷ Rated Voltage

*1 : The joiner set (joiner, bolt, O-ring) and one gasket are included.

❶Coil option

Code	Content	
2C	Grommet Lead Wire	
2HS	DIN Terminal Box With lamp/surge suppressor (Pg11)	

❷Rated Voltage

Code	Content
1	100 VAC 50/60 Hz, 110 VAC 60 Hz
3	24 VDC

Specifications

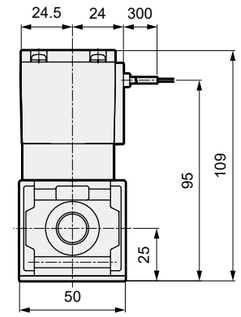
Item		CXU30-FAB4U
Operating Fluid		Compressed Air
Working pressure differentia MPa		AC : 0 to 1.0, DC : 0 to 0.9
Maximum operating pressure MPa		1.0
Proof pressure MPa		1.5
Fluid temperature °C		AC : 5 to 60, DC : 5 to 40
Ambient Temperature °C		AC : 5 to 60, DC : 5 to 40
Atmosphere		Place free of corrosive gas/explosive gas and not exposed to water
Valve Structure		Direct acting poppet structure
Valve section leakage cm^3/min (ANR)		10 or less
Mounting Orientation		Any
Port Size	IN	None
	OUT	Rc1/4
Orifice diameter mm		4
C[$dm^3/(s \cdot bar)$] *1		2.1
b		0.34
Weight kg		0.55
Electrical Specifications		
Rated Voltage		100 VAC, 24 VDC
Rated power VA	50Hz	Holding : 15, when starting : 40
	60Hz	Holding : 11, when starting : 35
Power Consumption W	50Hz	7.5
	60Hz	6.5
	DC	8.0
Heat Resistance Class		B

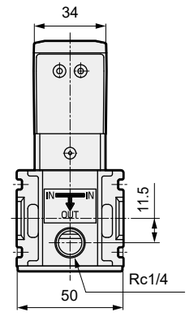
*1 : Effective cross-sectional area S and sonic conductance C are converted as S ≈ 5.0 x C.

External Dimension Drawings

● Grommet lead wire

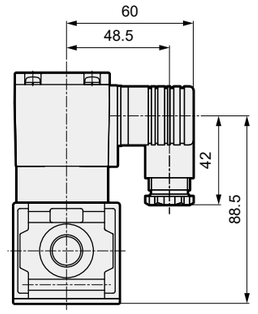
CXU30-FAB4U-8L-2C-□

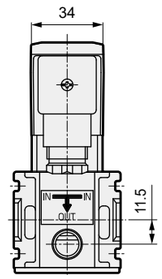




● With DIN terminal box (Pg11) type

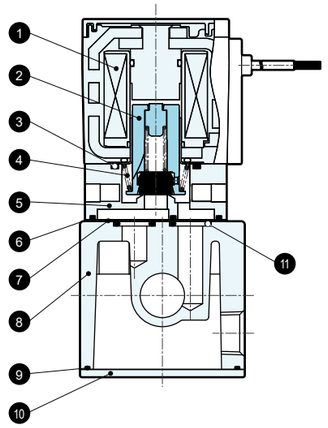
CXU30-FAB4U-8L-2HS-□





Internal Structure Diagram/Material

● CXU30-FAB4U



No.	Part Name	Material
1	Coil Assembly	Class B molded coil
2	Plunger Assembly	Stainless steel, nitrile rubber
3	O-ring	Nitrile rubber
4	Spring	Stainless steel
5	Body	Polyphenylene sulfide
6	Gasket	Nitrile rubber
7	Plate	Stainless steel
8	Body	Aluminum Die-casting
9	O-ring	Nitrile rubber
10	Bottom plate	Steel Plate
11	O-ring	Nitrile rubber

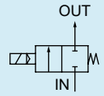


Pilot kick 2-port solenoid valve

CXU30-ADK Series

NC (Normally Closed) Type
Diaphragm drive
Modular connection with 2000, 3000, 4000 Series enabled
Suitable for modular component master valves

Circuit Diagram Symbol



RoHS

Module dedicated

Inline

Model No. Indication

CXU30 - ADK - 00 - F 2C - 1

- CXU30: Model No.
- F: ❶ Seal Material
- 2C: ❷ Coil option
- 1: ❸ Rated Voltage

*1 : The joiner set (joiner, bolt, O-ring) is attached.

❶Seal Material

Code	Content
Blank	Nitrile rubber
F	Fluoro Rubber

❷Coil option

Code	Content	
2C	Grommet Lead Wire	
2HS	DIN terminal box with lamp/surge suppressor (Pg11)	

*1 : The coil option "2C" is available for rated voltage "1" only.

❸Rated Voltage

Code	Content
1	100 VAC 50/60 Hz, 110 VAC 60 Hz
3	24 VDC

*1 : The coil option "2C" is available for rated voltage "1" only.

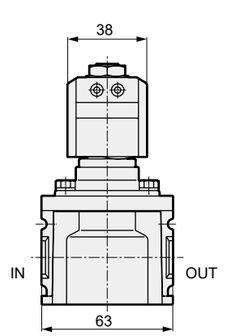
Specifications

Item		CXU30-ADK
Operating Fluid		Compressed Air
Working pressure differential MPa		AC : 0 to 1.0, DC : 0 to 0.7
Maximum operating pressure MPa		2
Proof pressure (water pressure) MPa		4
Fluid temperature *1 °C		Nitrile rubber -10 to 60, fluoro rubber : 5 to 60
Ambient Temperature °C		-10 to 60
Atmosphere		Place free of corrosive gas/explosive gas and not exposed to water
Valve Structure		Pilot kick poppet, diaphragm drive
Valve section leakage cm^3/min		10 or less
Mounting Orientation		Any
Port Size		None
Orifice diameter mm		12
C[$dm^3/(s \cdot bar)$] *2		10.4
b		0.46
Weight kg		0.65
Electrical Specifications		
Rated Voltage		100 VAC, 24 VDC
Apparent power VA	50Hz	24.0
	60Hz	19.0
Power Consumption W	50Hz	10.0
	60Hz	8.0
	DC	11.0
Heat Resistance Class		B

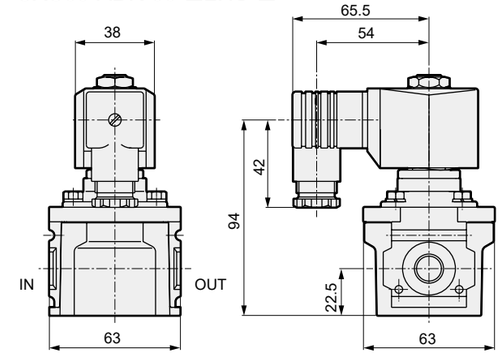
*1 : No freezing.
*2 : Effective cross-sectional area S and sonic conductance C are converted as S ≈ 5.0 x C.

External Dimension Drawings

● Grommet lead wire
CXU30-ADK-00-□2C-□

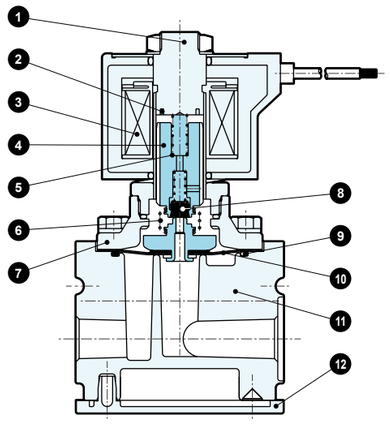


● With DIN terminal box (Pg11) type
CXU30-ADK-00-□2HS-□



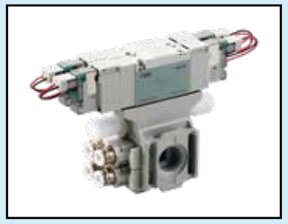
Internal Structure Diagram/Material

● CXU30-ADK



No.	Part Name	Material
1	Core Assembly	Stainless steel
2	Shading Coil	Copper
3	Coil	-
4	Plunger Assembly	Stainless steel
5	Plunger spring	Stainless steel
6	Kick spring	Stainless steel
7	Stuffing	Bronze casting
8	Seal	Nitrile rubber (Fluoroelastomer)
9	Diaphragm assembly	Stainless steel/nitrile rubber (stainless steel/fluoro rubber)
10	O-ring	Nitrile rubber (Fluoroelastomer)
11	Body	Aluminum Die-casting
12	Plate Cover	ABS Resin

Note) Values ❶ shown in ( ) are when seal material "F" (fluoro rubber) is selected.



Pilot Operated 5-Port Valve

CXU30-4G2R Series

5-port solenoid valve for modular connection with 2000, 3000, 4000 Series

No thread Open
IN gasket
RoHS
Expand-able

Model No. Indication

CXU30 - 4G2R - 3 3 - C6 - E20 S - 3

Model No. ❶ Solenoid valve ① switching position classification ❸ Port size (OUT) ❺ Option

❷ Solenoid valve ② switching position classification ❹ Wiring Connection ❻ Rated Voltage

*1 : The fitting that can be installed to the R1 port is GWS□-8-S.
*2 : The joiner set (joiner, bolt, O-ring) and one gasket are included.

❶Solenoid valve ① switching position classification

Code	Content
0	Without solenoid valve : Masking plate
1	2-position single ; with exhaust check valve
2	2-position double ; with exhaust check valve
3	3-Position Closed Center
4	3-position A/B/R connection ; with exhaust check valve
5	3-position P/A/B connection

*1 : The exhaust check valve is provided as standard. 3-position all ports closed and P/A/B connection are not provided with the exhaust check valve. Refer to P. 512 for details on the exhaust check valve.
*2 : If the connection port size, electrical connection, options, or voltage differ between solenoid valves ① and ②, the product will be a custom order.
*3 : For the positions of solenoid valves ① and ②, refer to the dimensional drawing.
*4 : When masking plates are used for all solenoid valves, electrical connections and rated voltage options are blank.

❷Solenoid valve ② switching position classification

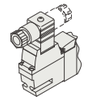
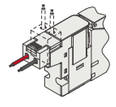
Code	Content
0	Without solenoid valve : Masking plate
1	2-position single ; with exhaust check valve
2	2-position double ; with exhaust check valve
3	3-Position Closed Center
4	3-position A/B/R connection ; with exhaust check valve
5	3-position P/A/B connection

*1 : The exhaust check valve is provided as standard. 3-position all ports closed and P/A/B connection are not provided with the exhaust check valve. Refer to P. 512 for details on the exhaust check valve.
*2 : If the connection port size, electrical connection, options, or voltage differ between solenoid valves ① and ②, the product will be a custom order.
*3 : For the positions of solenoid valves ① and ②, refer to the dimensional drawing.
*4 : When masking plates are used for all solenoid valves, electrical connections and rated voltage options are blank.

❸Port size (OUT)

Code	Content
C4	ø4 Push-in fitting
C6	ø6 Push-in fitting
CL6	ø6 push-in L-fitting (facing rear)
C8	ø8 Push-in fitting

❹Wiring Connection

Code	Content	
B	DIN Terminal Box (Pg7) with Surge Suppressor/Lamp	
E20	E-connector lead wire (500 mm) with surge suppressor/lamp	

❺Option

Code	Content	
Blank	None	
S	Two silencers (SLW-8S) are included.	

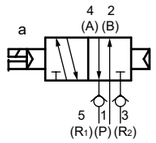
❻Rated Voltage

Code	Content
1	100 VAC (rectifier integrated)
3	24 VDC

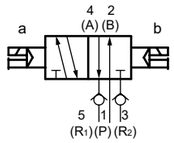
Refer to P. 499 for the solenoid valve model No. list.

Circuit Diagram Symbol

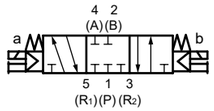
2-position single



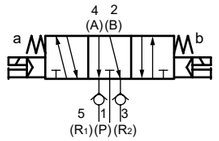
2-position double



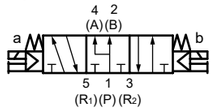
3-Position Closed Center



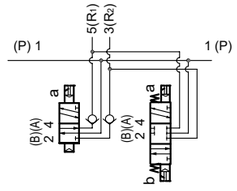
3-position A/B/R connection



3-position P/A/B connection



(Example) CXU30-4G2R-13-C6-B-1



Common Specifications

Item		Content
Valve Type and Operation Method		Pilot operated soft spool valve
Operating Fluid		Compressed Air
Maximum operating pressure MPa		0.7
Min. Operating Pressure MPa		0.2 (2-position, 3-position)
Proof pressure MPa		1.05
Fluid temperature °C		5 to 55
Ambient Temperature °C		-5 to 55 (No freezing)
Atmosphere		Place free of corrosive gas/explosive gas and not exposed to water
Port Size	Port A/B	Push-in Fitting ø4, ø6, ø8
	P Port	None (connectable with 3000 Series)
	Port R1/R2	Rc1/4
Manual Override		Non-locking/locking common
Pilot exhaust method		Main valve/pilot valve common exhaust
Lubrication *1		Not Required
Degree of protection *2		Dust-proof
Vibration/shock resistance m/s²		≤ 50 / ≤ 300

*1 : Use turbine oil Class 1 ISOVG32 for lubrication. Excessive or intermittent lubrication results in unstable operation.
*2 : Avoid water drops or oil, etc., during use. IP65 (water jet proof) applies for DIN terminal box specifications. However, the specified outer diameter of the cord and tightening torque must be used for fixing in place.

Electrical Specifications

Item		Content
Rated Voltage V	DC	24
	AC	100
Rated voltage fluctuation range		±10 %
Holding Current A	24 VDC	0.017
	100 VAC	0.009
Power Consumption W	24 VDC	0.4
Apparent power VA	100 VAC	0.98
Heat Resistance Class		B
Surge Suppressor		Standard
Indicator		With indicator lamp (standard)

Weight

(Unit : kg)

Item			Content	
Switching Position Classification			Single Unit Valve	Valve sub-base
Without solenoid valve : Masking Plate			0.02	0.32
2-position	Single	E-type Connector	0.08	
		DIN Terminal	0.10	
	Double	E-type Connector	0.10	
		DIN Terminal	0.14	
3-position	Closed center	E-type Connector	0.11	
		DIN Terminal	0.15	

The mass can be calculated as : Individual Valve ① + Single Valve ② + Valve Sub-base.

Flow Characteristics

Switching Position Classification		P→A/B		A/B→R1/R2	
		C [dm³/(s·bar)]	b	C [dm³/(s·bar)]	b
2-position		2.3	0.29	1.8	0.24
3-position	Closed center	2.1	0.27	2.3	0.27
	A/B/R connection	2.1	0.34	1.7	0.2
	P/A/B connection	2.2	0.34	2.4	0.29

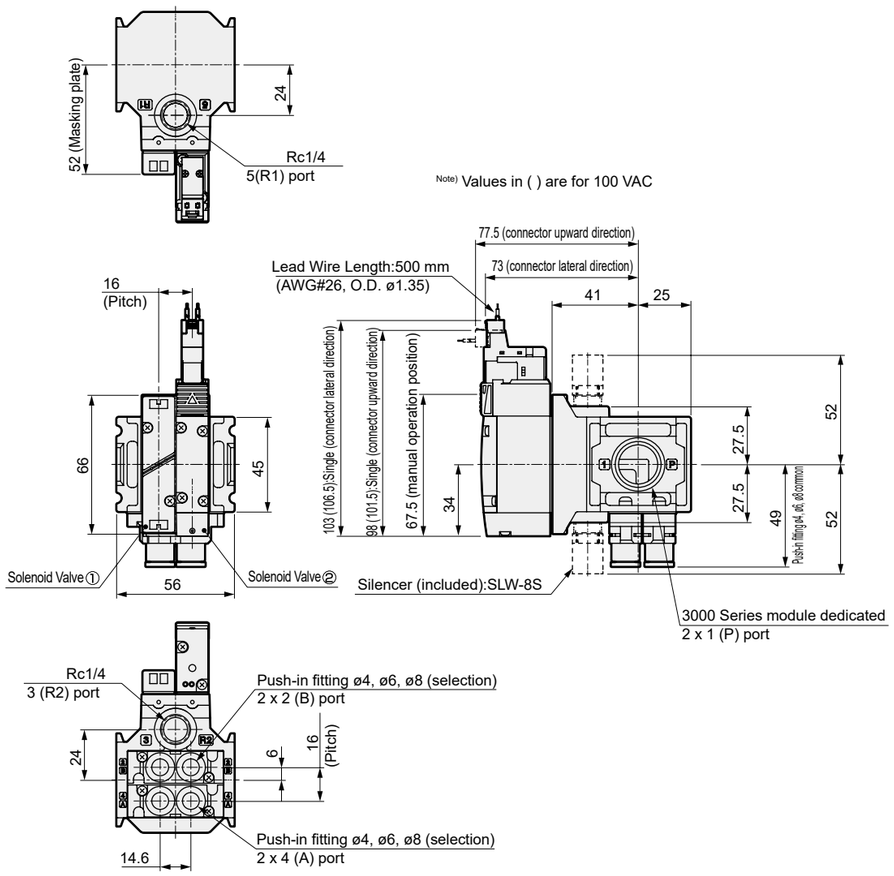
*1 : Effective cross-sectional area S and sonic conductance C are converted as S ≈ 5.0 x C.
*2 : Values for 2-position and A/B/R connection are the values when an exhaust check valve is integrated.

Air Preparation Components
F.R.L.
Filter Regulator
Filter
Regulator
Lubricator
Drain Separator
Mechanical Pressure SW
Residual Pressure Exhaust Valve
Slow Start Valve
Antibacterial/ Bacteria Removing Filter
Ozone FR
Siloxane/ OzoneRemover
Flame Resistant FR
Oil-free Regulator
Medium Pressure FR
No copper/ PTFEv Specification
Air Unit Equipment
Adapter Joiner
Pressure Gauge
Compact F.R.L.
Large F.R.L.
Precision Regulator
Clean FR
Electro-Pneumatic Regulator
Air Booster
Ending

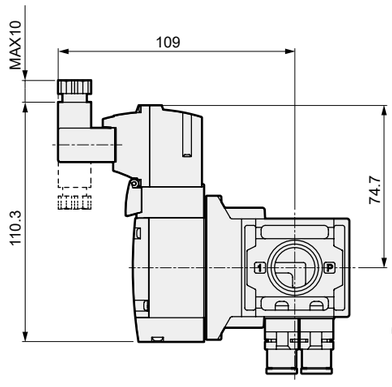
External Dimension Drawings

CXU30-4G2R-$^{0}_{1}$

● E-connector (E)
Cartridge Fitting : Straight type

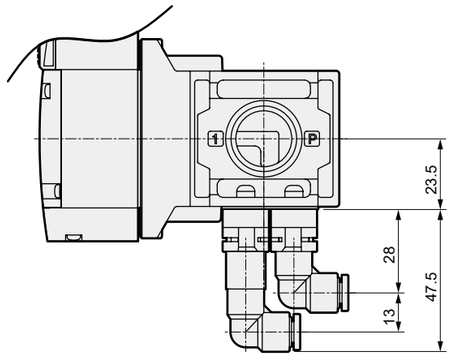


● DIN terminal box (B)
Cartridge Fitting : Straight type



Note) DIN terminal box assembly is shipped facing inward.

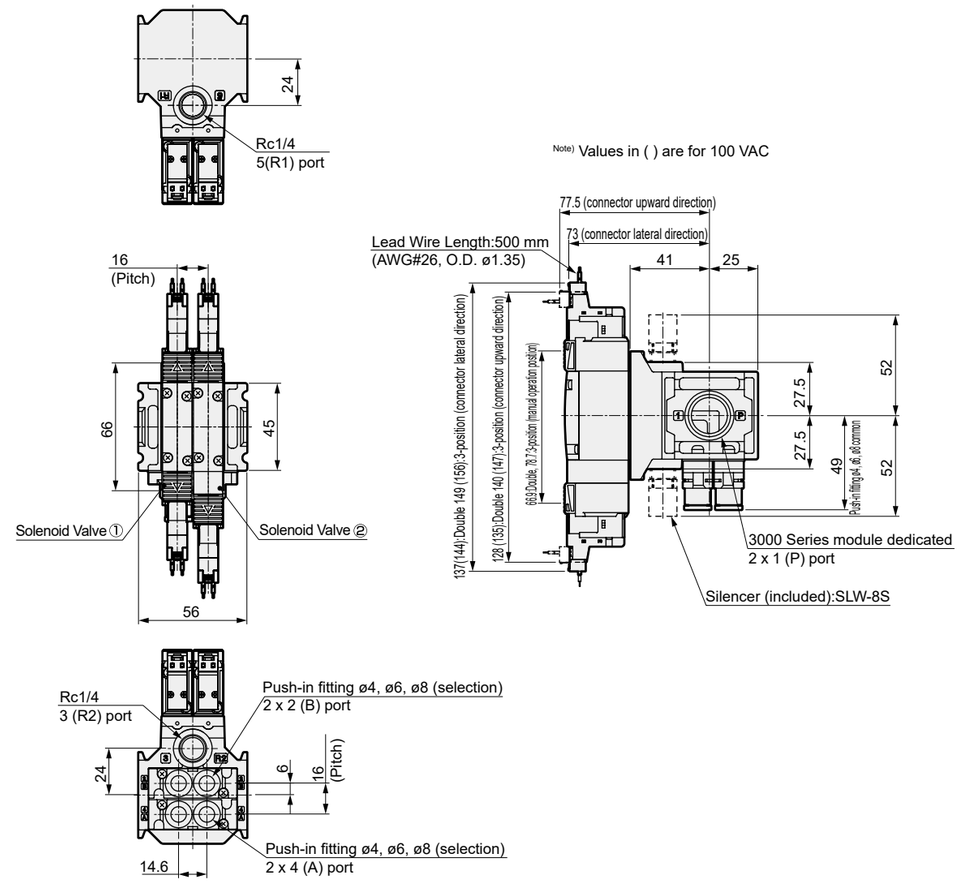
● ø6 push-in L fitting (facing rear)



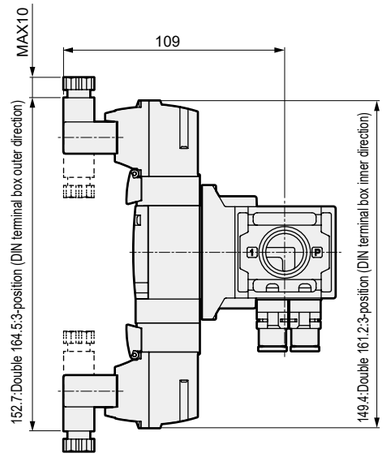
External Dimension Drawings

CXU30-4G2R-$^{2}_{3\,4\,5}$

● E-connector (E)
Cartridge Fitting : Straight type

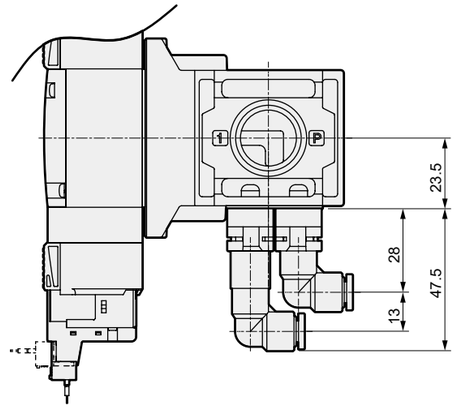


● DIN terminal box (B)
Cartridge Fitting : Straight type



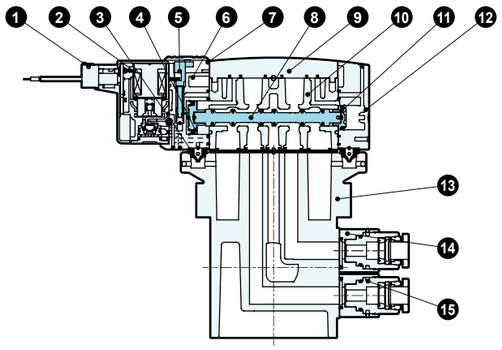
Note) DIN terminal box assembly is shipped facing inward.

● ø6 push-in L fitting (facing rear)



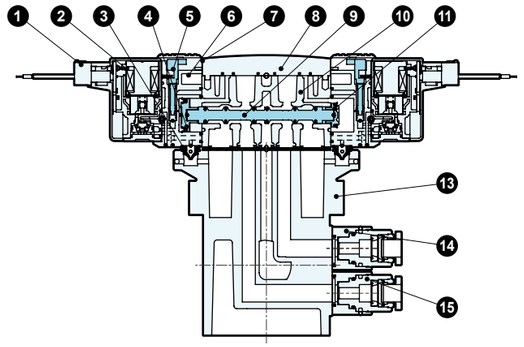
Internal Structure Diagram/Material

● 2-position single
E-connector (E)

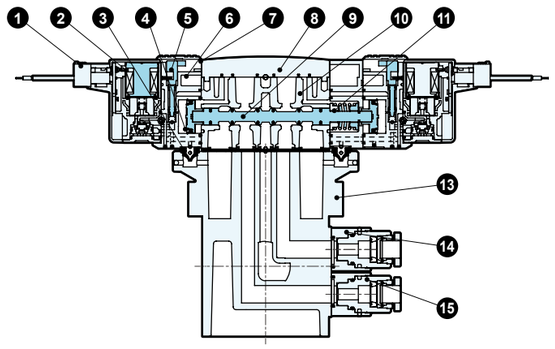


No.	Part Name	Material
1	E-connector socket assembly	-
2	Coil Assembly	-
3	Pilot exhaust check valve	Hydrogenated Nitrile Rubber
4	Piston D assembly	-
5	Manual Override	Resin
6	Piston chamber	Resin
7	Manual Protective Cover	Resin
8	Spool Assembly	-
9	Plate	Resin
10	Body	Aluminum Alloy Die-casting
11	Piston S assembly	-
12	Cap	Resin
13	Module sub-base	Aluminum Alloy Die-casting
14	Fitting adapter	Resin
15	Cartridge push-in fitting	-
16	DIN terminal box assembly	-

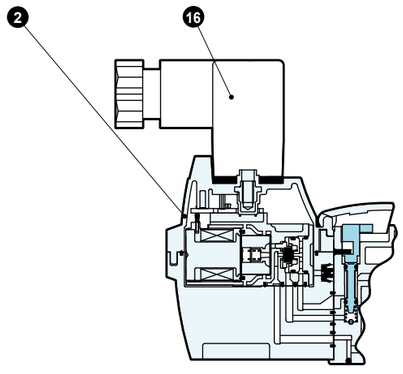
● 2-position double
E-connector (E)



● 3-position
E-connector (E)



● DIN terminal box (B)



Solenoid valve model No. table

Option			Solenoid valve model No.
①② Solenoid valve switching position	④ Electrical connections	⑥ Rated voltage	
0			4G2R-MP
1	B	1	4GB219R-00-BH-1-ST
		3	4GB219R-00-BH-3-ST
	E20	1	4GB219R-00-E20H-1
		3	4GB219R-00-E20H-3-ST
2	B	1	4GB229R-00-BH-1-ST
		3	4GB229R-00-BH-3-ST
	E20	1	4GB229R-00-E20H-1
		3	4GB229R-00-E20H-3-ST
3	B	1	4GB239R-00-B-1-ST
		3	4GB239R-00-B-3-ST
	E20	1	4GB239R-00-E20-1
		3	4GB239R-00-E20-3-ST
4	B	1	4GB249R-00-BH-1-ST
		3	4GB249R-00-BH-3-ST
	E20	1	4GB249R-00-E20H-1
		3	4GB249R-00-E20H-3-ST
5	B	1	4GB259R-00-B-1-ST
		3	4GB259R-00-B-3-ST
	E20	1	4GB259R-00-E20-1
		3	4GB259R-00-E20-3-ST

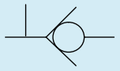


Module check valve

CXU10-CHV Series

Completely prevents backflow of fluids such as compressed air.
Modular connection with F.R.L. 1000 Series enabled
Intermediate extraction of air with branching port

Circuit Diagram Symbol



No thread Open
IN Side Gasket
RoHS

Model No. Notation

CXU10 - CHV - 00 - 6 - A

- CXU10: Model No.
- 6: ❶ Port Size
- A: ❷ Option

❶Port Size

	Code	Content
*1	Blank	Without pipe adaptor
*2	6	Pipe adaptor (Rc1/8") included
*2	8	Pipe adaptor (Rc1/4") included
*2	10	Pipe adaptor (Rc3/8") included
*3	MA	Masking adaptor included

❷Option

Code	Content
Blank	No Option
A	Fluoro rubber specifications

*1 : The joiner set (joiner, bolt, O-ring) and one gasket are included.
*2 : One pipe adaptor, a joiner set (joiner, bolt, O-ring) and two gaskets are attached.
*3 : A masking adaptor, the joiner set (joiner, bolt, O-ring), and one gasket are attached.

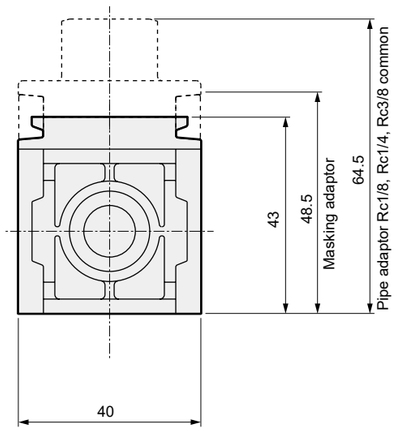
Specifications

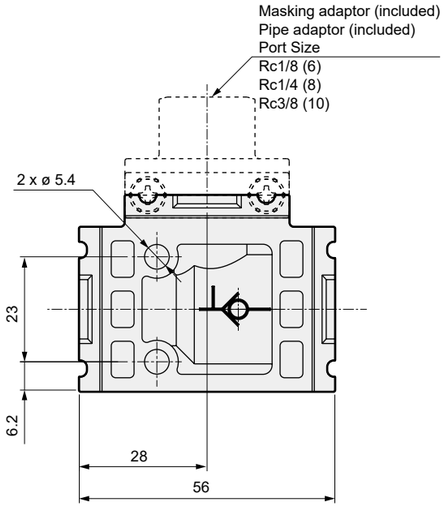
Item			Content
Operating Fluid			Compressed Air
Max operating pressure		MPa	1.0
Min. Operating Pressure		MPa	0.03
Proof pressure		MPa	1.5
Port Size			None
Ambient/Fluid Temperatures		°C	5 to 60
Weight		kg	0.08
Effective Area	(IN → branching port)	mm^2	28
	(IN → OUT)	mm^2	28

Usage

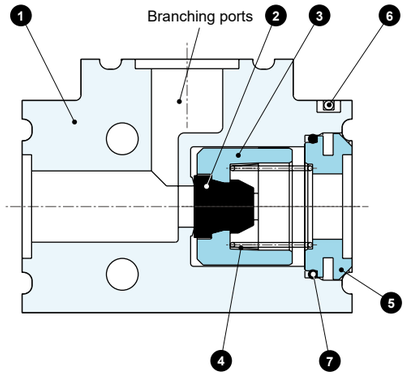


External Dimension Drawings





Internal Structure Diagram/Material



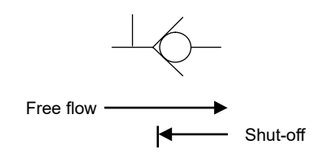
Part No.	Part Name	Material
1	Body	Polyamide
2	Valve Element	Nitrile rubber (Fluoro rubber)
3	Valve guide	Polyacetal
4	Coil Spring	Stainless Steel
5	Cover	Aluminum Alloy
6	Stopper Pin	Stainless Steel
7	O-ring	Nitrile rubber (Fluoro rubber)

Note) ( ) indicates when option "A" (Fluoro rubber specification) is specified.

Precautions for Use

⚠ CAUTION

● Check the Circuit Diagram Symbol on the body before connecting the piping.





4-way distributor

CXU10-D4/CXU30-D4 Series

Module fitting section branches in 4 directions.
Fitting section can be mounted and removed from 1 direction.
With pressure gauge mounting port.

No thread Open

RoHS

IN Side Gasket

Model No. Notation

CXU10 -D4-00- T6

Model No. / ❶ Option

*1 : CXU30-D4 can be connected to 2000 Series, 3000 Series, and 4000 Series.
*2 : There are four connection sections. The joiner sets and gaskets should be purchased and assembled accordingly.
*3 : The joiner set (joiner, bolt, O-ring) and one gasket are included.

Circuit Diagram Symbol



❶Option

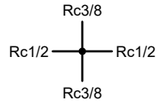
Code	Content	
Blank	No pressure gauge port (blanking plug mounted)	
T6	Pressure gauge port Rc1/8	
T8	Pressure gauge port Rc1/4	
G401	With pressure gauge (G401)	
RN-RP	Pressure Switch with Display PPR Assembled	

CXU30 -D4-15- T6

Model No. / ❶ Option

*1 : CXU30-D4 can be connected to 2000 Series, 3000 Series, and 4000 Series.
*2 : There are four connection sections. The joiner sets and gaskets should be purchased and assembled accordingly.
*3 : The joiner set (joiner, bolt, O-ring) and one gasket are included.

Circuit Diagram Symbol



❶Option

Code	Content	
Blank	No pressure gauge port (blanking plug mounted)	
T6	Pressure gauge port Rc1/8	
T8	Pressure gauge port Rc1/4	
G401	With pressure gauge (G401)	
RN-RP	Pressure Switch with Display PPR Assembled	

Specifications

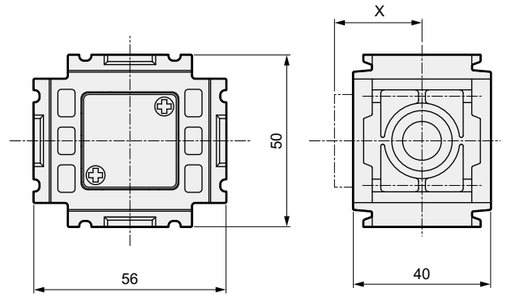
Item	CXU10-D4	CXU30-D4
Operating Fluid	Compressed Air	
Max operating pressure MPa	1.0	
Proof pressure MPa	1.5	
Number of branch joints	4	
Port Size	None	Rc3/8, Rc1/2
Ambient/Fluid Temperatures °C	5 to 60	
Weight kg	0.1	0.3

Usage



External Dimension Drawings

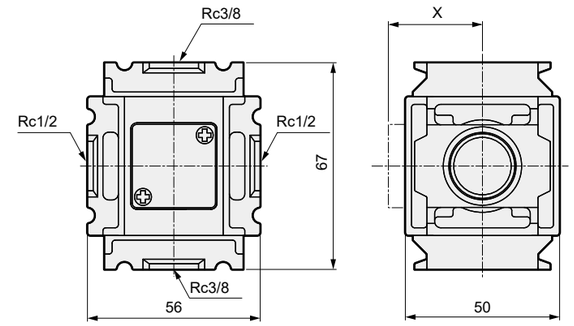
● CXU10-D4



Optional dimensions table

Option	X
T6	25.5
T8	25.5
G401	25.5
R1	40

● CXU30-D4

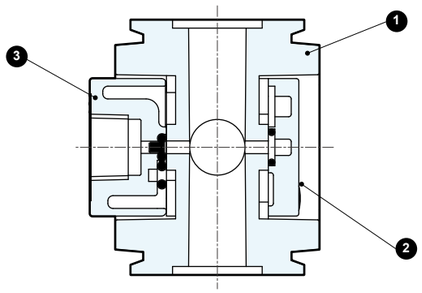


Optional dimensions table

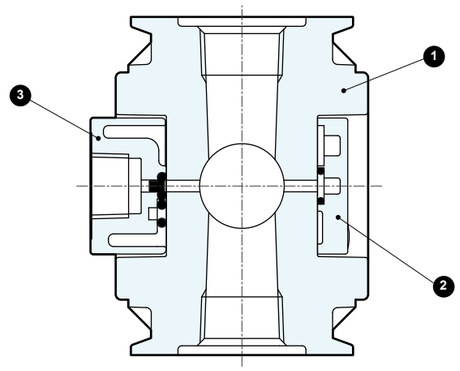
Option	X
T6	30.5
T8	30.5
G401	30.5
R1	45

Internal Structure Diagram/Material

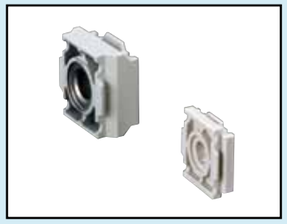
● CXU10-D4



● CXU30-D4



No.	Part Name	Material	
		CXU10-D4	CXU30-D4
1	Body	Polyamide resin	Aluminum alloy die-cast
2	Blank Plug Assembly	PBT Resin, Nitrile Rubber, Steel	
3	Gauge Plug Assembly	Polyamide Resin, Nitrile Rubber, Steel	
	Pressure gauge (G401)	PBT resin, nitrile rubber, polyacetal resin, polycarbonate resin, brass, steel	



Turn adaptor

CXU10-TA/CXU30-TA Series

Rotates module fitting section by 90 degrees.
Direction of module components can be changed.

No thread Open

RoHS

IN gasket

Model No. Notation

CXU10 -TA-00

❶ Model No.

❶Model No.

Code	Content
CXU10	1000 Series
CXU30	3000 Series

*1 : CXU30-TA can be connected to 2000 Series, 3000 Series, and 4000 Series.
*2 : The joiner set (joiner, bolt, O-ring) and one gasket are included.

Specifications

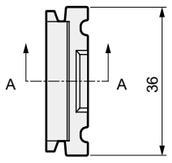
Item	CXU10-TA	CXU30-TA
Operating Fluid	Compressed Air	
Max operating pressure MPa	1.0	
Proof pressure MPa	1.5	
Port Size	None	
Ambient/Fluid Temperatures °C	5 to 60	
Weight kg	0.03	0.12

Usage

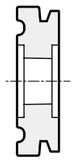


Dimensions diagram/material

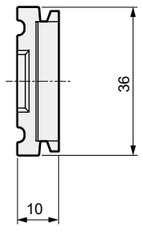
● CXU10-TA



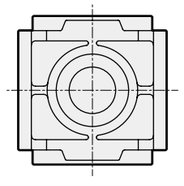
Top Surface



Section A-A

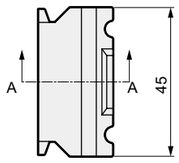


Front

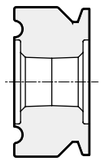


Side

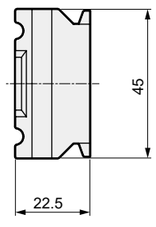
● CXU30-TA



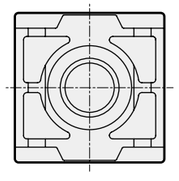
Top Surface



Section A-A

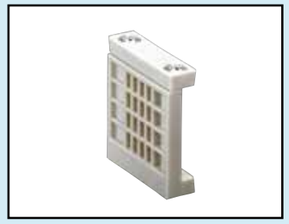


Front



Side

No.	Part Name	Material	
		CXU10-TA	CXU30-TA
1	Body	Polyamide resin	Aluminum alloy die-cast



Masking adaptor

CXU10-MA Series

Used for masking the fitting section of the 1000 Series.

RoHS

Model No. Notation

CXU10 -MA-00- B

Model No. ❶ Option

*1 : One O-ring is included.

❶Option

	Code	Content
	Blank	Joiner
*1	B	T-bracket (B110-W)
*1	BH	T-bracket (B110-H-W)

*1 : A hex nut for fixing the T-bracket is included with the T type bracket.

Specifications

Item	CXU10-MA
Operating Fluid	Compressed Air
Max operating pressure MPa	1.0
Proof pressure MPa	1.5
Port Size	None
Ambient/Fluid Temperatures °C	5 to 60
Weight kg	0.02

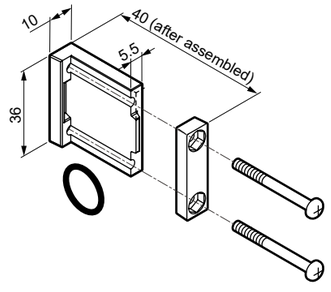
Usage



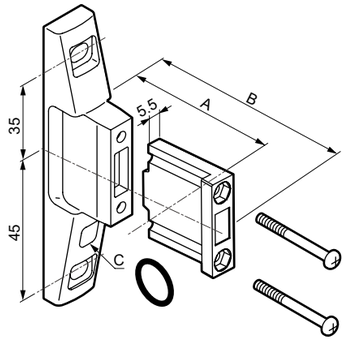
External Dimension Drawings

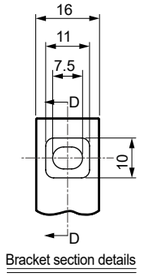
● CXU10-MA

Option : Blank

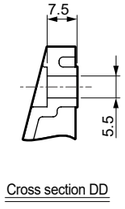


Option : B, BH





Bracket section details



Cross section DD

Optional dimensions table

Option	A	B	C
B	40	60	-
BH	45	65	Identification "H"



Module conversion adaptor

CXU13-CA/CXU48-CA Series

Capable of connecting 1000 Series with 2000, 3000, 4000 Series and 2000, 3000, 4000 Series with 6000/8000 Series.

No thread Open

RoHS

IN gasket

Model No. Notation

CXU10 -CA-00

❶ Model No.

❶Model No.

Code	Content
CXU13	1000 to 3000 Series conversion
CXU48	4000 to 8000 Series conversion

*1 : CXU13-CA can be connected to 2000 Series, 3000 Series, and 4000 Series.
The C1000-J100, C4000-J400 joiner set (joiner, bolt, O-ring), and one gasket are included.
*2 : CXU48-CA can be connected to 2000, 3000, 4000 Series and 6000, 8000 Series.
The C4000-J400-W, C8000-J800-W joiner set (joiner, bolt, O-ring), and one gasket are included.

Specifications

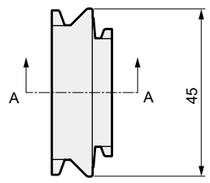
Item	CXU13-CA	CXU48-CA
Operating Fluid	Compressed Air	
Max operating pressure MPa	1.0	
Proof pressure MPa	1.5	
Port Size	None	
Ambient/Fluid Temperatures °C	5 to 60	
Weight kg	0.04	0.13

Usage

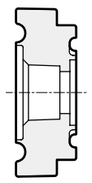


External Dimension Drawings

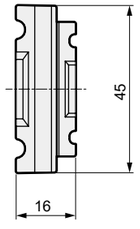
● CXU13-CA



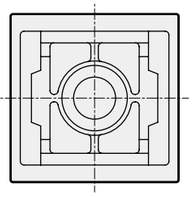
Top Surface



Section A-A

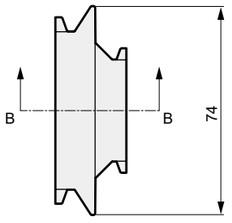


Front

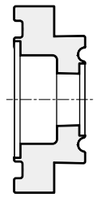


Side

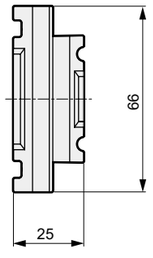
● CXU48-CA



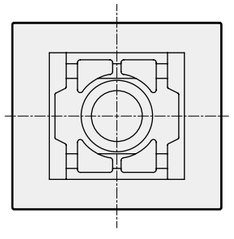
Top Surface



Section B-B

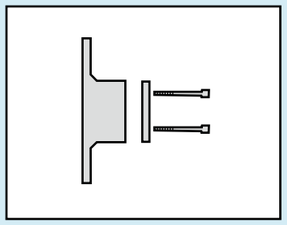


Front



Side

No.	Part Name	Material
1	Body	Aluminum alloy die-cast



Bracket : Joiner

B-W/J-W Series

O-ring / gasket / pipe plug

O-RING/GASKET/CXU-PP Series

RoHS

T-bracket set

Model No. Notation

B110-W

B110-H-W

B310-W

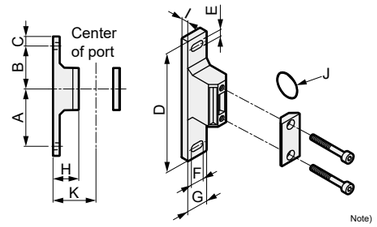
B410-W

B810-W

● Applications



Outline Dimensions



Note) By using B110-H-W, the 1000 Series can be adjusted to the same height as the 3000 Series.

Model No.	Applicable Model	A	B	C	D	E	F	G	H	I	J	K
B110-W	1000 Series	45	35	10	100	5.5	7.5	16	25	7.5	JAS0-2013	40
B110-H-W	1000 Series	45	35	10	100	5.5	7.5	16	30	7.5	JAS0-2013	45
B310-W	2000 Series 3000 Series	60	45	10	125	7	14	22	27	7	JISB2401-P21	45
B410-W	4000 Series	60	45	10	125	7	14	22	37	7	JISB2401-P21	55
B810-W	6000 Series 8000 Series	70	50	15	150	9	14	27	37	8	AS568-127	65

Joiner Set

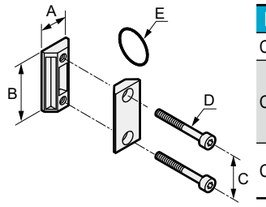
Model No. Notation

C1000-J100-W

C4000-J400-W

C8000-J800-W

Outline Dimensions

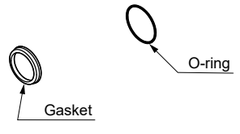


Model No.	Applicable Model	A	B	C	D	E
C1000-J100-W	1000 Series	10	36	26	M 3.5	JAS0-2013
C4000-J400-W	2000 Series 3000 Series 4000 Series	21	44	32	M5	JIS B2401-P21
C8000-J800-W	6000 Series 8000 Series	26	65	50	M6	AS568-127

● Applications



O-ring, gasket

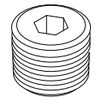


Material : NBR

Model No.	Applicable Model	Standard
C1000-ORING	1000 Series	JASO-2013
C1000-GASKET		For CKD use only.
C4000-ORING	2000 Series 3000 Series 4000 Series	JIS B2401-P21
C4000-GASKET		For CKD use only.
C8000-ORING	6000 Series 8000 Series	AS568-127
C8000-GASKET		For CKD use only.

The sales unit is 5 pieces/set.

Pipe plug



Material : Steel

Model No.	Thread standards
CXU-PP-6	R1/8
CXU-PP-8	R1/4
CXU-PP-10	R3/8
CXU-PP-15	R1/2

Note) Five pipe plugs are included in one set.

To Use This Product Safely

Please read before use.
Refer to "Fluid Control Valves (No. RJ-013AA)" for general precautions for the control components.

Individual Precautions : Direct acting 2-port solenoid valve CXU10-FAB3, CXU30-FAB4U Series
Pilot kick 2-port solenoid valve CXU30-ADK Series

At Design / Selection

⚠ WARNING

■ Operating fluids

① When using this valve for dry air or inert gas, the life can be shortened considerably due to wear. Use a valve intended for dry air.
② This valve cannot be used for maintaining vacuum.
③ Cannot be used with combustion gas.

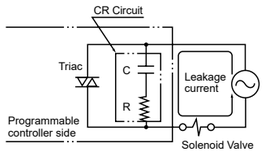
⚠ CAUTION

■ Fluid viscosity

The fluid viscosity must be 50 mm²/s or less. Malfunctions could occur if the viscosity is higher than 50 mm²/s.

■ Leakage current from other control components

When operating the solenoid valve with a programmable controller etc., please verify that the leakage current of the programmable controller output is within the following specifications.



Model No. \ Voltage	100 VAC	200 VAC	12 VDC	24 VDC
CXU10-FAB3 CXU30-FAB4U	6 mA or less	3 mA or less	1 mA or less	2 mA or less
CXU30-ADK	6 mA or less	3 mA or less	2 mA or less	1 mA or less

For precautions regarding mounting, installation, adjustment, operation, and maintenance, please refer to the CKD Component Products site (https://www.ckd.co.jp/kiki/en/) → 'model No.' → Instruction Manual.

To Use This Product Safely

Please read before use.
Refer to "Fluid Control Valves (No. RJ-013AA)" for general precautions for the control components.

Individual Precautions : Pilot Operated 2-Port Solenoid Valves for Compressed Air CXU10-EXA Series

At Design / Selection

1. Confirmation of Specifications

⚠ WARNING

■ Use within the product's specific specification range. Do not use at pressures or temperatures outside the specification range, as this may cause damage or malfunction.
(See specifications). Fluids other than air are not guaranteed.

■ Operating fluids
Dedicated for compressed air.
Active gases cannot be used.

■ This product is a pilot operated solenoid valve that opens and closes the valve using the pressure difference before and after the solenoid, so a pressure difference (⊿P = P1 - P2) of 0.01 MPa or more must be secured when the valve is opened to ensure valve opening operation. In the following cases, the pressure difference ⊿P and flow rate may not be attained.

- When the flow rate is reduced before/after the solenoid valve with a throttling section, nozzle, or long piping.
- When air supply on the primary side of the solenoid valve is low (insufficient Regulators capacity, a throttling section, long piping, etc.)
- When air consumption of a components sharing the air supply source (Regulators, etc.) on the primary side of the solenoid valve increases constantly or temporarily.
- When the flow rate changes/decreases due to the fluctuation of the source pressure of the air supply on the primary side of the solenoid valve.
- When multiple solenoid valves connected in parallel piping are opened simultaneously (The drop in solenoid valve source pressure causes the pressure difference between the primary side and the secondary side to diminish.)

⚠ CAUTION

■ When the Regulators and solenoid valve are directly coupled, the parts could mutually vibrate, causing resonance and chattering.

■ If the piping cross-sectional area on the fluid inlet is reduced, the operation may become unstable due to differential pressure failure during valve operation. For the fluid supply side, use a piping size that matches the port size of the valve.

2. Design for Safety

⚠ WARNING

■ Take measures to prevent physical harm or property damage in the event of breakdown of this product.

■ Protection characteristics (IPX5) of DIN terminal box connection

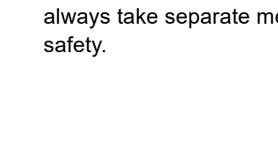
- IPX5 (IEC60529 [IEC529 : 1989-11]) standards are applied to the test. Avoid use in conditions where water or cutting oil directly contacts the valve.

⚠ CAUTION

■ Check for leakage current to avoid malfunction due to leakage current from other control devices.

- When using a programmable controller, leakage current may affect the solenoid valve and cause malfunction. Note that the values that are affected by leakage current depend on the solenoid valve.

Programmable controller



For 100 VAC	2.0 mA or less
For 12 VDC	1.5 mA or less
For 24 VDC	1.8 mA or less

■ Observe the following precautions when using nylon or Urethane Tubing tubes as the piping material.

- Use flame-resistant tubes where they could come in contact with spatter.
- When using the standard push-in fitting on the spiral tube, fix the base of the tube with a hose clamp. Rotation may occur, reducing holding capacity.

3. Operating Environment

■ Use clean air.

- Do not use the compressed air if it contains chemicals, synthetic oils containing organic solvents, salt, or corrosive gas, as it can cause damage and/or operation failure.
- The ozone content in the compressed air should be 0.1 ppm or less. A higher ozone content may cause malfunction and leakage.

4. Durability

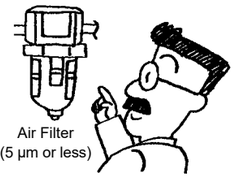
⚠ WARNING

■ Continuous energizing during use may accelerate degradation of the solenoid valve, but it differs depending on the Operating conditions. Set an appropriate replacement time. It is not designed to function as a safety valve, such as an emergency shut-off valve. When using in such a system, always take separate measures that will ensure safety.

5. Pneumatic Air Source

⚠CAUTION

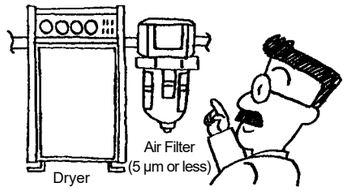
■ Install a pneumatic filter just before the pneumatic components circuit.



■ Do not supply anything other than compressed air.

■ Use clean compressed air that does not contain corrosive gases.

■ Use dry compressed air that does not cause moisture inside the piping.



- Drain will occur if there is a temperature drop inside the pneumatic piping or pneumatic equipment.
- Drain enters the air passage inside the pneumatic equipment, instantaneously blocking the passage and causing malfunction.
- Rust occurs due to drain, causing malfunction of pneumatic equipment.

■ Use compressed air that does not contain oxidized oil, tar, carbon, etc. from the air compressor.

- Oxidized oil, tar, carbon, etc. enter and adhere inside the pneumatic equipment, increasing the resistance of sliding parts and causing malfunction.

■ Use compressed air that does not contain solid foreign matter.

- Any solid foreign matter in the compressed air can enter the pneumatic components and cause wear, locking, or internal leakage in the sliding parts.

6. Surge suppressor

⚠CAUTION

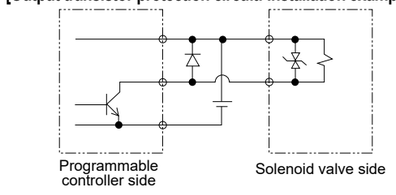
■ The surge suppressor included with the solenoid valve aims to protect the output contact for driving the solenoid valve. There is no protection for other peripheral devices, and those devices may be damaged or malfunction by a surge. The suppressor absorbs a surge voltage generated by other devices, and burns itself out protecting the output contact. Note the following points.

- The surge suppressor functions to limit a voltage surge in the solenoid valve, which can reach several hundred volts, to a low voltage level that the output contact can withstand. Depending on the output circuit used, this may be insufficient and could result in damage or malfunction. Confirm in advance whether the surge suppressor is suitable for the withstand voltage of both the solenoid valve in use and the output device, circuit structure and the degree of return delay time. When necessary, provide other surge countermeasures. CKD's solenoid valve with surge suppressor can counter inverse voltage surge which occurs when the valve is turned OFF to the level shown in the table below.

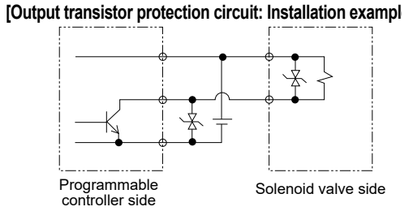
Specification voltage	Inverse voltage when OFF
12 VDC	Approx. 27 V
24 VDC	Approx. 47 V

- If the output unit is an NPN type, a surge voltage equaling the voltage shown in the table above plus the power supply voltage may be applied to the output transistor. Make sure to implement a contact protection circuit to avoid the risk.

[Output transistor protection circuit: Installation example 1]



[Output transistor protection circuit: Installation example 2]



For precautions regarding mounting, installation, adjustment, operation, and maintenance, please refer to the CKD Component Products site (https://www.ckd.co.jp/kiki/en/) → 'model No.' → Instruction Manual.

Pneumatic Equipment

To Use This Product Safely

Please read before use.
Refer to "Directional control valve ② (No.RJ-012AA)" for general precautions for valves.

Individual Precautions:Pilot operated 5-port valve CXU30-4G2R Series / residual pressure exhaust 3-port solenoid valve CXU30-VE

At Design / Selection

1. Surge suppressor

⚠CAUTION

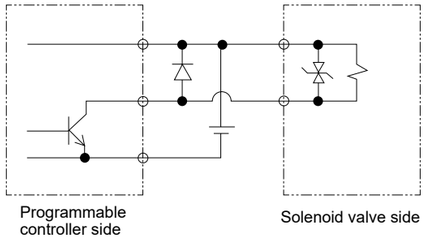
■ The surge suppressor included with the solenoid valve aims to protect the output contact for driving the solenoid valve. There is no protection for other peripheral devices, and those devices may be damaged or malfunction by a surge. The suppressor absorbs a surge voltage generated by other devices, and burns itself out protecting the output contact. The following points must be taken into consideration.

- The surge suppressor functions to limit a voltage surge in the solenoid valve, which can reach several hundred volts, to a low voltage level that the output contact can withstand. Depending on the output circuit used, this may be insufficient and could result in damage or malfunction. Confirm in advance whether the surge suppressor is suitable for the withstand voltage of both the solenoid valve in use and the output device, circuit structure and the degree of return delay time. When necessary, provide other surge countermeasures. CKD's solenoid valve with surge suppressor can counter inverse voltage surge which occurs when the valve is turned OFF to the level shown in the table below.

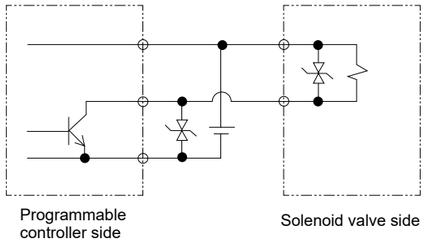
Specification voltage	Inverse voltage when OFF
24 VDC	Approx. 47 V

- If the output unit is an NPN type, a surge voltage equaling the voltage shown in the table above plus the power supply voltage may be applied to the output transistor. Make sure to implement a contact protection circuit to avoid the risk.

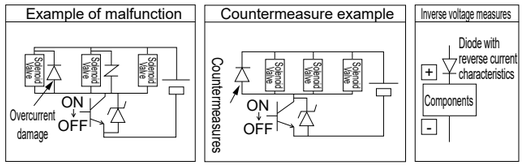
[Output transistor protection circuit : Installation example 1]



[Output transistor protection circuit : Installation example 2]



- If another components or solenoid valve is connected in parallel to the solenoid valves, the inverse voltage surge generated when the valve is turned OFF would apply to those components. Even in the case of a solenoid valve with 24 VDC surge suppressor, a surge voltage may reach negative tens of volts for some models. This inverse voltage may cause damage or malfunction to other parallel connected components. A components that is susceptible to inverse polarity voltages (example : Avoid parallel connection with the LED indicator lamp. When driving several solenoid valves in parallel, the surge from other solenoid valves could enter the surge suppressor of one solenoid valve and cause it to burn. When driving several solenoid valves with surge suppressors in parallel, surge current could concentrate at the surge suppressor with the lowest voltage limit and cause similar burning. Even if the solenoid valve is the same, the surge suppressor's voltage limit can be inconsistent, and in the worst case, could result in burning. Avoid driving multiple solenoid valves in parallel.



- The surge suppressor incorporated in the solenoid valve will often be short-circuited if it is damaged by overvoltage or overcurrent from other solenoid valves. Where there is a failed surge suppressor, if a large current flows when the output is ON, in the worst case scenario, the output circuit or solenoid valve could be damaged or ignited. Do not continue energizing the solenoid valve if the surge suppressor becomes faulty. Additionally, to prevent large currents from continuing to flow, connect an overcurrent protection circuit to the power supply and drive circuit, or use a power supply with overcurrent protection.

2. 100 VAC specifications

⚠CAUTION

■ The models with 100 VAC specifications have a built-in full-wave rectifier circuit.
Depending on the type of SSR used to turn ON/OFF the solenoid valve, recovery failure of the valve may result.
Use caution when selecting SSRs. (Consulting the manufacturer of the relay or PLC is recommended.)

Air Preparation Components
F.R.L.
Filter Regulator
Filter
Regulator
Lubricator
Drain Separator
Mechanical Pressure SW
Residual Pressure Exhaust Valve
Slow Start Valve
Antibacterial/ Bacteria Removing Filter
Ozone FR
Siloxane/ OzoneRemover
Flame Resistant FR
Oil-free Regulator
Medium Pressure FR
No copper/ PTFEv Specification
Air Unit Equipment
Adapter Joiner
Pressure Gauge
Compact F.R.L.
Large F.R.L.
Precision Regulator
Clean FR
Electro-Pneumatic Regulator
Air Booster
Ending

3. Exhaust check valve

⚠CAUTION

■ The exhaust check valve is a check valve. Note that when operating the cylinder rod directly without pressurization, the check valve opens and the cylinder rod does not move. (CXU30-4G2R)

- The solenoid valve for 2-position single, 2-position double, and 3-position ABR connection mounted to CXU30-4G2R is provided with the "exhaust check valve" as standard.
- With components that are affected by a small amount of leakage or pressure of low friction cylinders, etc., the functions may not operate properly.
- If you do not need the release check valve, contact CKD. Otherwise, choose a gasket "4G2R-GASKET" which is not equipped with a release check valve.

4. Manual override

⚠WARNING

■ CXU30-4G2R and CXU30-VE Series are internal pilot operated solenoid valves. If air is not supplied to port P, the main valve will not be switched even if the manual override is operated.

■ A manual protective cover is provided as standard. The manual protective cover is closed when the valve is shipped to protect it, which cannot be seen when delivered. Open the protective cover and operate the manual override. Note that the protective cover will not close unless the locking manual override is released.

■ The manual override is used for both non-locking and locking. The lock is applied by pressing down and turning the manual override. For locking, be sure to press down and turn. If manual override is turned without being pressed down, it could be damaged or air could leak.

5. Other precautions

⚠CAUTION

■ CXU30-4G2R Series

- Continuous energizing for long periods may accelerate degradation of the solenoid valve. Furthermore, use caution under the following Operating conditions, as with continuous energization.
  · When the energized time exceeds non-energized time in intermittent operation
  · When one energizing session exceeds 30min in intermittent energizing
  Consider heat dissipation when installing the product.
- When using the AC voltage type in a continuously energized state, the temperature of the coil's outer surface will be high. It may burn, so do not touch it when it is energized.

■ CXU30-VE Series

- This valve is specifically designed to start and stop a device. This valve should not be used for cylinder repeat operation or as a normal 3-way valve.
- Provide heat removal measures when you use the products with continuous current application for an extended period of time.

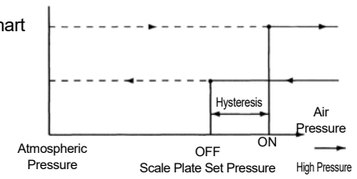
6. Pressure switch

⚠CAUTION

■ Setting pressure

- Pressure displayed on the scale plate is used as a guideline. When setting the pressure, please set it while checking with a separate pressure gauge.
- Pressure displayed on the scale plate is the value when the contact is OFF. When setting to the value when the contact turns ON, set the pressure display on the scale plate smaller than the value obtained by subtracting the hysteresis. (Refer to the chart below) If not set, it may not operate at the set value. (Hysteresis refers to the pressure range from when the switch operates once with the set pressure to when the pressure drops and the switch turns OFF.)

Operation Chart

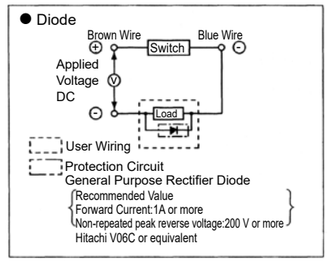


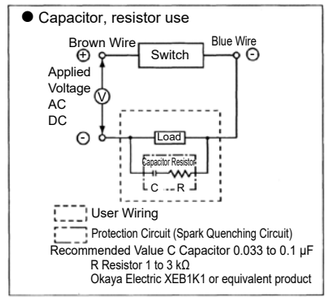
■ Installation

- Do not drop or bump the product when handling it.
- Wire such that repeated bending or tension are not applied to the lead wires. Otherwise, this could lead to disconnection.
- Do not use the product near a strong magnetic field or large current (large magnet or spot welding machine, etc.). This may cause malfunction.
- To ensure the IP65 equivalent degree of protection for the pressure switch, install the included M3 fitting and extend the tube to a location where water will not enter. The tightening torque of M3 is 0.3 to 0.6 Fittings N·m. Do not plug the atmospheric pressure inlet port. Plugging could cause malfunctions to occur. Cannot be used outdoors.
- Do not pressurize the atmospheric release port or blow it with compressed air. Product performance could decrease or the product could be damaged.

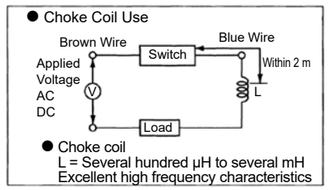
■ Wiring

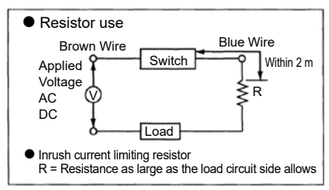
- Connecting the lead wire
  ① **Do not connect the lead directly to the power supply. Connect the load serially. Failure to do so may result in burning out the lamp or melting the contact.**
  ② When using for DC, connect so that the brown wire is on the + side and the blue wire is on the - side. If connected in reverse, the lamp will not light up.
  ③ When connecting to an AC relay or PC input, if half-wave rectification is performed in those circuits, the switch lamp may not light up. In that case, reversing the polarity of the switch lead wire connection will light up the lamp.
- Contact capacity
  Do not use outside the specified range of load voltage and load current. It may cause failure such as lamp burnout or contact welding. Also, if it falls below the rated current value, the lamp may not light up.
- Contact protection
  ① When you use the product with a conductive load such as a relay, provide a contact protection circuit as shown below. If a protection circuit is not installed, it may cause contact welding.





② If DC wiring exceeds 50m or AC wiring exceeds 10m, the wiring capacity will be reached, and a rush current will occur, damaging the switch or shortening the service life. If the wiring length exceeds the limit, install a contact protection circuit.





For precautions regarding mounting, installation, adjustment, operation, and maintenance, please refer to the CKD Component Products site (https://www.ckd.co.jp/kiki/en/) → 'model No.' → Instruction Manual.

To Use This Product Safely

Please read before use. For general pneumatic components precautions, see Intro 27 for details.

Individual Precautions : F.R.L. components (modular design)

At Design / Selection

1. Common

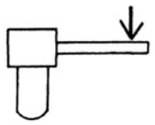
⚠ WARNING

■ This product is designed for industrial use. Do not use for medical purposes, or in any equipment or circuit that concerns human life.

■ Air Filters, lubricator, Drain Separators plastic bowl, lubricator drip window, and pressure gauge lens. Material is polycarbonate. It cannot be used in environments containing synthetic oil, organic solvents, chemicals, cutting oil, screw locking agent, leakage detection solutions, or hot water, etc., or where these substances may come in contact with the product. Refer to P. 516 for details on plastic bowl chemical resistance.

■ Piping Load Torque
Do not apply piping load or torque to the body and piping parts.

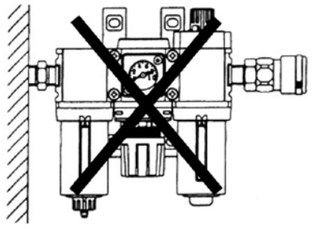
Series Name	1000-W	2000-W	3000-W	4000-W	6000-W	8000-W
Maximum Torque N·m	15	15	50	50	100	100



With the 1000-W Series in particular, application of a torque of 30 N·m or more on the piping is "hazardous" as the piping could be damaged. Use the product within the specified torque, even when using the pipe adaptor.

Avoid the manner of piping shown below.

Avoid cantilever fixed piping, as excessive force can easily cause damage. With the 1000-W Series in particular, application of a torque of 30 N·m or more on the piping is "hazardous" as the piping could be damaged. Use the product within the specified torque, even when using the pipe adaptor.



■ Each product has an O-link groove for modular connection on its OUT side. Select piping that can be sealed at or below the O-link groove diameter.

Series Name	1000-W	2000-W	3000-W	4000-W	6000-W	8000-W
Groove Diameter	ø17.6	ø25.4	ø25.4	ø25.4	ø41.2	ø41.2

⚠ CAUTION

■ High moisture levels
Install the air dryer and drain separator before the air filter. If there is a lot of moisture from the compressor, hot and highly humid air could shorten the device's life or result in corrosion.

■ Dry air
Rubber parts for the regulator could deteriorate quickly, so use of a fluoro rubber valve assembly is recommended. Contact CKD when required.

■ Water-lubricated compressor circuit
Be careful not to mix chlorine-based substances into the compressed air.

■ Use the auto-drain under the Operating conditions below. It may cause malfunction.

NO auto-drain (exhaust when not pressurized) : For "F" and "FF"
- Use a compressor with a capacity of 0.75 kw {90 l/min [ANR]} or more.
- Set the Operating pressure to 0.1 MPa or more. (Until 0.1 MPa is reached, air is purged together with the initial drainage.)

NC auto-drain (no exhaust when not pressurized) : For "F1", "FF1"
- A compressor with a capacity of 0.75 kw or less can also be used.
- Set the Operating pressure to 0.15 MPa or more. For 1000 Series NC auto-drain
- Set the Operating flow rate to less than or equal to the max. Operating flow rate.
- Avoid use of this in places with high vibration, such as where a compressor is installed, because air could leak from the drain outlet when the float vibrates.
- Avoid drain overflow. It will cause operation faults.

2. Regulator, filter/regulator

⚠ WARNING

■ Output pressure exceeding the Regulators' set pressure could result in damage or faulty operation of the secondary side devices. Be sure to install a safety device.

■ The Regulators cannot process residual pressure (release secondary pressure) when the primary pressure is released. Use a regulator with a check valve when residual pressure must be processed. If the product is not equipped with a check valve, residual pressure may or may not be possible.

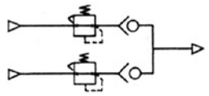
■ As the Regulators may not always be usable when used with a secondary side sealed circuit or balance circuit, consult with CKD.

⚠ CAUTION

■ Vibrations may occur depending on the usage and piping conditions.
Lower the primary pressure if vibrations occur. Select the proper size as pulsation can occur easily if the flow rate is extremely small in respect to the max. flow rate.

■ The setting range for the Regulators' secondary pressure should bewithin 85 % of that of the primary side. Otherwise, the pressure drop may increase.

■ When using Regulators in parallel as below, do not use the OUT side as a closed circuit. If a closed circuit is required, install a check valve on the OUT side of each regulator.



3. Lubricator

⚠ WARNING

■ Do not use as lubrication for air motor or bearings. Lubrication may not be possible when used very frequently, such as in a press machine.

⚠ CAUTION

■ If the Operating air quantity is low for the lubricator, oil may not drip. Check the min. air quantity required for dripping oil.

4. Pressure switch

⚠ CAUTION

■ When using a pressure switch PPR or Digital Pressure Sensors PPX, avoid using it together with the lubricator. These are not splash-proof and so they may become inoperable if oil comes into contact with them.

5. Residual pressure exhaust valve

⚠ WARNING

■ Precautions for the residual pressure exhaust valve
- The EXH port is dedicated for installation of the silencer. Tighten with a torque of 3N·m or less (manual tightening). Do not connect pipes where their loads or torque, etc., may be applied to the EXH port.
- When the exhaust operation is incomplete due to air quality, manually operate the exhaust of the knob (turn→ pull up).

⚠ CAUTION

■ Pressure and flow characteristics and relief start pressure may be less than the standard Regulators (R3000 Series, etc.).
Depending on use, such as when back pressure rises, the set pressure may increase 0.2 MPa. It is recommended to use a pressure gauge compatible with a set pressure of +0.2 MPa.

■ Set the primary pressure to 0.1 MPa or more than the set pressure. Pressure adjustment faults or leaks from the relief valve could result depending on use.

■ When used in applications where the primary pressure is 0.7 MPa or more, keep the difference in primary and set pressure within 0.4 MPa.
Pulsation could occur if the difference in pressures is large or if secondary piping is large. If so, lower the primary side pressure or restrict the secondary line. If vibrations continue, contact CKD.

■ When the primary pressure is released, the secondary pressure flows to the primary side.
If a problem occurs in another device due to the inflow of secondary side fluid to the primary side, provide a circuit to retain the pressure. When the product is left with the primary pressure released for long periods, return the set pressure to 0. Pulsation could occur if the bottom rubber is deformed.

■ Do not use in locations where ultraviolet rays are directly irradiated.

■ The set pressure changes from the initial set point due to the Operating environment and conditions, as well as aging of part materials. Check the pressure periodically and reset if it has changed.

For precautions regarding mounting, installation, adjustment, operation, and maintenance, please refer to the CKD Component Products site (https://www.ckd.co.jp/kiki/en/) → 'model No.' → Instruction Manual.

About Chemical Resistance of Plastics

⚠WARNING

- The chemical resistance of plastic parts is shown below.
- Avoid using products in an atmosphere where chemicals are contained in compressed air or atmosphere, or where they could adhere to parts.
- Use in the above state could lead to bowl damage and accidents.
- Avoid using with these chemicals or in an atmosphere containing these chemicals.
- A metal bowl is available if these chemicals must be used.

Chemical resistance of plastic bowl/body

Use a metal bowl in an atmosphere containing the following chemicals. Also, since some inspection liquids, sealants, and adhesives contain the following chemical components, please confirm when selecting.

Type of Chemical	Classification of Chemical	Main Products of Chemical	General Usage Examples	Polycarbonate Bowl	Nylon Bowl	Nylon body
Inorganic Chemicals	Acid	Hydrochloric acid, sulfuric acid, hydrofluoric acid, phosphoric acid, chromic acid, etc.	Acid washing of metals, acidic degreasing solutions, coating treatment solutions, etc.	x	x	x
	Alkali	Alkali substances such as caustic soda, caustic potash, calcium hydroxide, aqueous ammonia, and sodium carbonate	Alkaline degreasing liquid for metals Water-soluble cutting fluid, leak detection agent	x	○	○
	Inorganic Salt	Sodium sulfide, sodium nitrate, potassium dichromate, sodium sulfate, etc.		x	○	○
Organic Chemicals	Aromatic Hydrocarbons	Benzene, toluene, xylene, ethylbenzene, styrene, etc.	Contained in paint thinner (benzene, toluene, xylene)	x	x	x
	Chlorinated Aliphatic Hydrocarbon	Methyl chloride, ethylene chloride, methylene chloride, acetylene chloride, chloroform, trichlorethylene, perchlorethylene, carbon tetrachloride	Organic solvent-based cleaning liquid for metals (trichlorethylene, perchlorethylene, carbon tetrachloride, etc.)	x	○	○
	Chlorinated Aromatic Hydrocarbon	Chlorobenzene, dichlorobenzene, hexachlorobenzene (B.H.C), etc.	Pesticide	x	○	○
	Petroleum Component	Solvent naphtha, gasoline, kerosene		x	○	○
	Alcohol	Methyl alcohol, ethyl alcohol, cyclohexanol, benzyl alcohol	Used as antifreeze agent Leak detection agent	x	x	x
	Phenol	Carbolic acid, cresol, naphthol, etc.	Disinfectant	x	x	x
	Ether	Methyl ether, methyl ethyl ether, ethyl ether	Brake fluid additive	x	○	○
	Ketone	Acetone, methyl ethyl ketone, cyclohexanone, acetophenone, etc.		x	x	x
	Carboxylic Acid	Formic acid, acetic acid, butyric acid, acrylic acid, oxalic acid, phthalic acid, etc.	Dyes and oxalic acid are used as aluminum treatment agents, and phthalic acid is used as a base material for paints. Used as leakage detection agent	x	x	x
	Ester	Dimethyl phthalate (DMP), diethyl phthalate (DEP), dibutyl phthalate (DBP), dioctyl phthalate (DOP)	Lubricant, synthetic oil, rust preventing agent additives Used as plasticizer for synthetic resin	x	○	○
	Oxyacid	Glycolic acid, lactic acid, malic acid, citric acid, tartaric acid		x	x	x
	Nitro Compounds	Nitromethane, nitroethane, nitroethylene, nitrobenzene, etc.		x	○	○
	Amine	Methylamine, dimethylamine, ethylamine, aniline, acetanilide, etc.	Brake fluid additive	x	x	x
	Nitrile	Acetonitrile, acrylonitrile, benzonitrile, acetoisonitrile, etc.	Raw material for nitrile rubber	x	○	○

○ Mark : Usable x : Not available (Plastic will become damaged.)

To Use This Product Safely

Please read before use.
For general pneumatic components precautions, see Intro 27 for details.

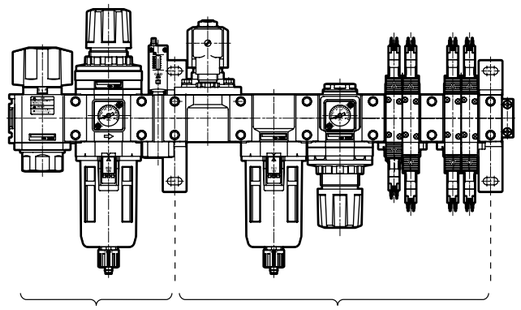
Individual Precautions : Air unit CXU Series

At Design / Selection

⚠CAUTION

■ Use the T type brackets at regular intervals.

Joiners cantilevered on one end should have no more than 3 stations, and on both ends should have no more than 5 stations.

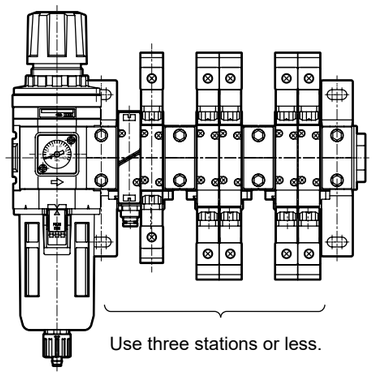


Up to three stations when supported on one end.

Up to five stations when supported on both ends.

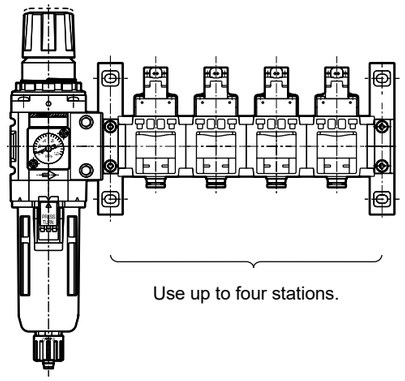
■ When a pilot operated 5-port valve (CXU30-4G2R) is used at max. flow rate, use with up to three stations.

One station consists of two solenoid valves. Up to six solenoid valves can be used.



Use three stations or less.

■ When using the pilot operated 2-port solenoid valve (CXU10-EXA) at the maximum flow rate
As a guideline, use one station when a 1000 Series Regulators is connected, and up to four stations when a 3000 Series Regulators is connected.



Use up to four stations.

■ With the 1000 Series combined unit, the bracket may twist up on one side. In this case, tighten and fix the bracket with screws so that it is mounted stably and so no problems will arise with use.

■ Notes on selecting CXU13-UN
If the 1000 Series and 3000 Series are combined together with a single support, the joiner may be damaged by the load. Handle with support at both ends.

■ Tighten the fixing screw for the 1000 Series joiner with N·m 1 to 1.2, and the fixing screw for the 3000 Series joiner with N·m 3 to 4.

For precautions regarding mounting, installation, adjustment, operation, and maintenance, please refer to the CKD Component Products site (https://www.ckd.co.jp/kiki/en/) → 'model No.' → Instruction Manual.