

## 2port pilot operated solenoid valve for compressed air Compact air blow valve EXA Series

2 PORT PILOT OPERATED SOLENOID VALVE FOR COMPRESSED AIR EXA SERIES



**New**

Modular connection type  
air unit CXU Series appeared!!



2 port pilot operated solenoid valve for compressed air

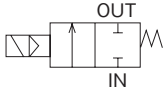
# EXA Series

- NC (normally closed) type
- Port size: Push-in joint  $\Phi 6$ ,  $\Phi 8$ ,  $\Phi 10$ ,  $\Phi 12$
- Diaphragm structure



## JIS symbol

● NC (normally closed) type



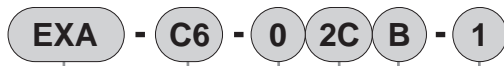
## Specifications

Descriptions	EXA-C6	EXA-C8	EXA-C10	EXA-C12
Working fluid	Compressed air			
Working pressure differential	MPa 0.01 to 0.7			
Max. working pressure	MPa 0.7			
Withstanding pressure (water)	MPa 1.05			
Fluid temperature	°C 0 to 55 (to be unfrozen)			
Ambient temperature	°C -5 to 55			
Atmosphere	Does not contact water, corrosive or flammable gas.			
Valve structure	Pilot operated diaphragm structure			
Internal leakage	cm <sup>3</sup> /min 2 or less			
External leakage	cm <sup>3</sup> /min 2 or less			
Mounting attitude	Free			
Port size	Push-in joint $\Phi 6$	Push-in joint $\Phi 8$	Push-in joint $\Phi 10$	Push-in joint $\Phi 12$
C (dm <sup>3</sup> / (s/bar))	1.6	3.0	3.3	3.6
b	0.45	0.33	0.26	0.20
Weight *2	g 56	57	68	69
Electric specifications				
Rated voltage	100VAC(50/60Hz), 24VDC, 12VDC Note 1			
Apparent power	VA 1.2			
Power consumption	W DC 0.6			
Heat proof class	B			
Protective structure (IEC standards: 529)	Lead wire type: IPX0, with DIN terminal box: IPX5			

Note 1: Voltage fluctuation range is  $\pm 10\%$

Note 2: Plus 20g for DIN terminal box.

## How to order



Model no.

**A** Applicable tube outer diameter

**B** Sealant

**C** Coil option

<Example of model number>

EXA-C6-02CB-1

Model: Compact air blow valve EXA

**A** Applicable tube outer diameter :  $\Phi 6$

**B** Sealant: H-NBR

**C** Coil option: Lead wire

**D** Other options: Mounting plate

**E** Voltage: 100 VAC

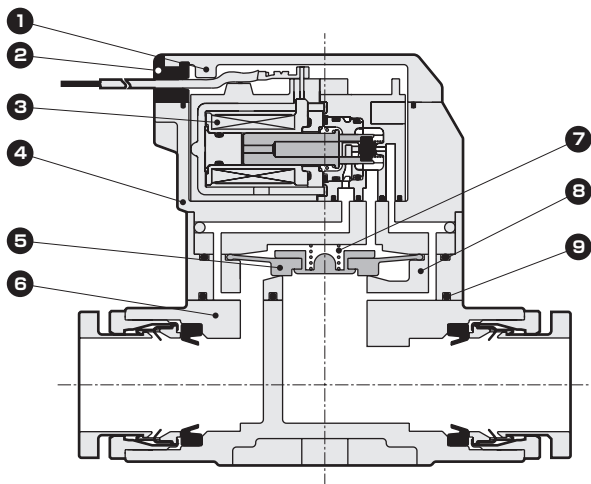
Coil option	Voltage		
	1	3	4
2C	●	●	●
2G	●		
2GS		●	●
2H	●		
2HS		●	●
2KS		●	

Select from the circle mark above.

Symbol	Descriptions
<b>A Applicable tube outer diameter</b>	
C6	$\Phi 6$
C8	$\Phi 8$
C10	$\Phi 10$
C12	$\Phi 12$
<b>B Sealant</b>	
0	H-NBR
<b>C Coil option Note 1</b>	
2C	<b>Standard</b> Lead wire (without light and surge suppressor)
2G	DIN terminal box (Pg7), without indicator light
2GS	DIN terminal box (Pg7), with/without indicator light
2H	DIN terminal box (Pg7), with indicator light inside terminal box
2HS	<b>Option</b> DIN terminal box (Pg7), with indicator light and surge suppressor inside terminal box
2KS	DIN terminal box with indicator light and surge suppressor inside terminal box
<b>D Other options</b>	
Blank	None
B	Mounting plate
<b>E Voltage Note 1</b>	
1	100VAC
3	24VDC
4	12VDC

Refer to the table on the left for available combinations of coil options and voltage.

### Internal structure and parts list

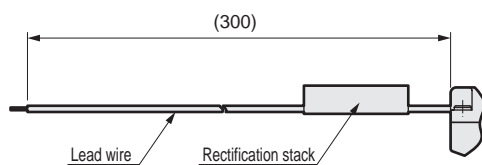
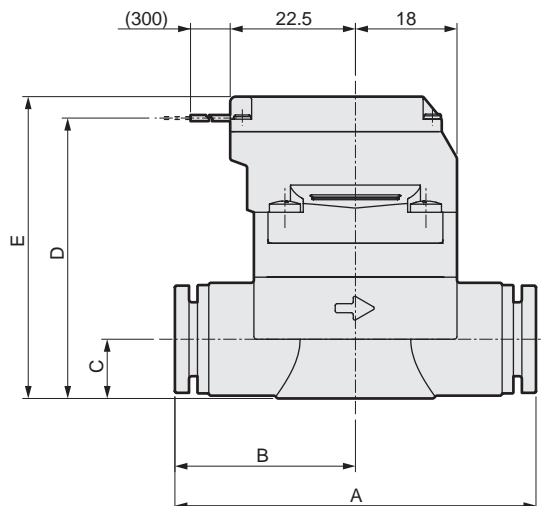
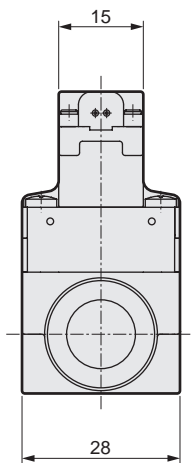


No.	Parts name	Material	
1	Guard (Note 1)	PBT	PBT
2	Bush	NBR	Nitrile rubber
3	Coil assembly	-	-
4	Stuffing	PPS	Polyphenylene sulfide
5	Diaphragm assembly	H-NBR/PPS	Hydrogenated nitrile rubber/ polyphenylene sulfide
6	Main body	PBT	PBT
7	Spring	SUS	Stainless steel
8	Valve body	PBT	PBT
9	Gasket	H-NBR	Hydrogenated nitrile rubber

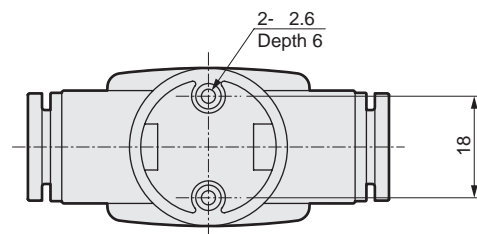
Note 1: PA66, polyamide will be used if DIN terminal box is attached.

### Dimensions

- Lead wire type  
EXA-\*-\*2C



Rectification stack is built in the lead-wire for only AC voltage.



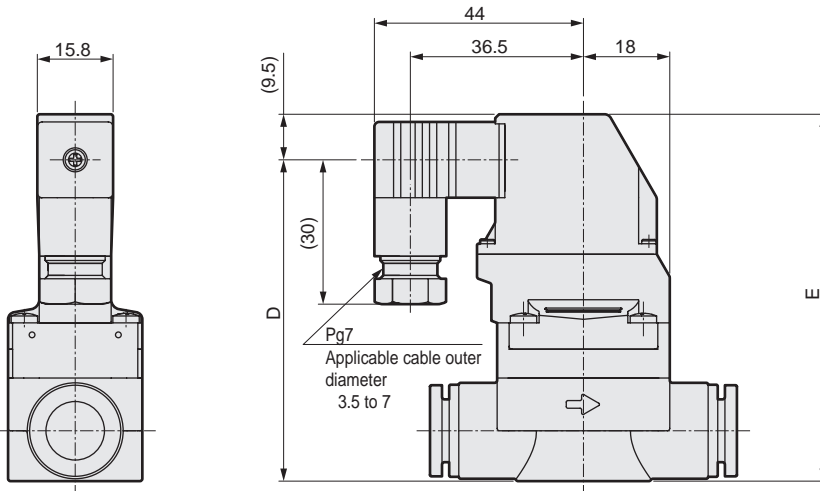
Model no.	A	B	C	D	E
EXA-C6	52	28	8	45	48.5
EXA-C8	53	28.5	8	45	48.5
EXA-C10	62	31	11.5	51	54.5
EXA-C12	64	32	11.5	51	54.5

\* This drawing shows the exterior dimensions for  $\Phi 10$

## Optional dimensions

### ● DIN terminal box (Pg7)

EXA-\*-\*  
 2G  
 2GS  
 2H  
 2HS

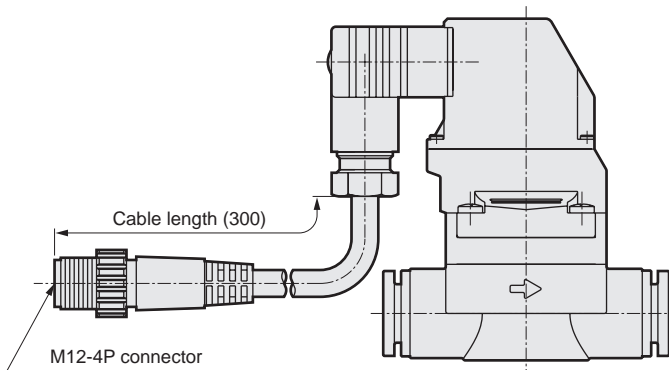


Model no.	D	E
EXA-C6	62	71.5
EXA-C8	62	71.5
EXA-C10	68	77.5
EXA-C12	68	77.5

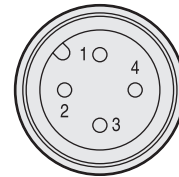
\* This drawing shows the exterior dimensions for  $\Phi 10$

### ● With indicator light with DIN terminal box M12 connector lead

EXA-\*-\*2KS



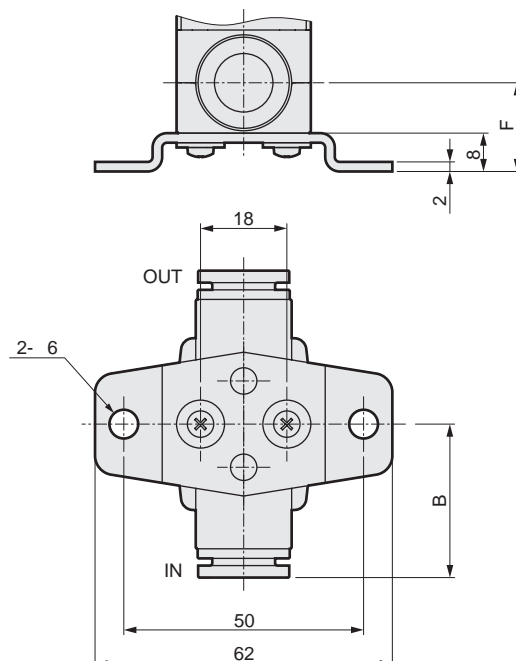
Connector pin array



PIN No.	Applications
1PIN	(Does not use.)
2PIN	(Does not use.)
3PIN	Power supply-
4PIN	Power supply +

### ● Mounting plate

EXA-\*-\*B



Model no.	B	F
EXA-C6	28	16
EXA-C8	28.5	16
EXA-C10	31	19.5
EXA-C12	32	19.5

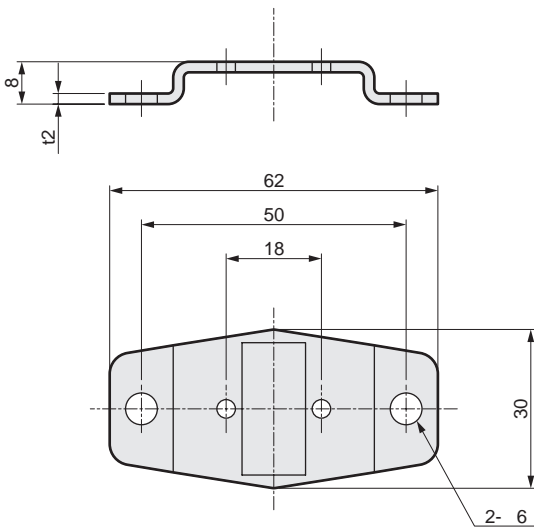
\* This drawing shows the exterior dimensions for  $\Phi 10$

## Optional dimensions

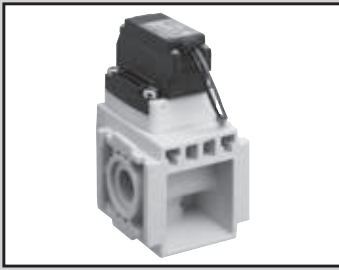
- Mounting plate kit  
Model no.: EXA-MOUNT-PLATE-KIT

Below parts is provided as set.

- Mounting plate (below): 1 piece
- Plain washer: 2 pieces
- Set screw: 2 pieces



- Use the specified tightening torque mounting plate.  
Tightening torque: 0.54 to 0.66N·m



2 port pilot operated solenoid valve for compressed air

# CXU10-EXA Series

- N.C. (normally closed) type, diaphragm structure type
- Modular connection with 1000 Series
- Ideal for modular component blow valves

No screw  
Open type

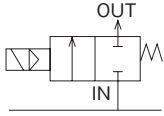
IN side  
Gasket

RoHS

Expanding  
manifold  
Possible

## JIS symbol

● NC (normally closed) type



## Specifications

Descriptions		CXU10-EXA			
Working fluid		Compressed air			
Working pressure differential range	MPa	0.01 to 0.7			
Max. working pressure	MPa	0.7			
Withstanding pressure	MPa	1.05			
Fluid temperature	°C	0 to 55			
Ambient temperature	°C	-5 to 55			
Atmosphere		Does not contact water, corrosive or flammable gas.			
Valve structure		Pilot operated diaphragm structure			
Valve leakage	cm <sup>3</sup> /min	10 or less			
Mounting attitude		Free			
Port size (IN)		None			
Port size (OUT)		Push-in joint Φ6	Push-in joint Φ6L type	Push-in joint Φ8	Push-in joint Φ8L type
C (dm <sup>3</sup> / (s/bar)) Note 2		1.6		3.0	
b		0.37		0.32	
Weight	g Note 3	98	95	98	100
Electric specifications					
Rated voltage		100 VAC (50/60Hz), 24 VDC Note 1			
Apparent power	VA	1.2			
Power consumption	W   DC	0.6			
Heat proof class		B			
Protective structure (IEC standards: 529)		Lead wire type: IPX0, with DIN terminal box: IPX5			

Note 1: Voltage fluctuation range is ±10%

Note 2: Effective sectional area S and sonic conductance C are converted as  $S \approx 5.0 \times C$ .

Note 3: Models with DIN terminal box weighs +20g more.

## How to order

**CXU10-EXA- C6 - 2C - 1**

Model no.

A Port size (OUT)

B Coil option

C Voltage

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

Select from the circle mark above.

Symbol	Descriptions	
A Port size		
C6	Φ6 push-in joint	
CL6	Φ6 push-in joint L type	
C8	Φ8 push-in joint	
CL8	Φ8 push-in joint L type	
B Coil option Note 1, 2		
2C	Standard	Lead wire (without light and surge suppressor)
2H	Option	DIN terminal box (Pg7). with indicator light inside terminal box
2HS		DIN terminal box (Pg7). with indicator light and surge suppressor inside terminal box
C Voltage Note 1		
1	100VAC	
3	24VDC	

## ⚠ Note on model no. selection

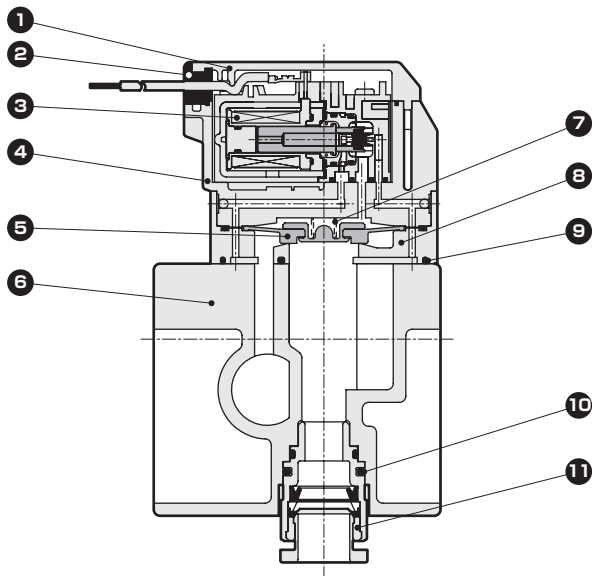
Refer to the above table for available combinations of coil options and voltage.

Contact CKD for models with M12 connector cable.

Refer to "Air unit CXU Series (No.CC-901)". Because this product is a valve air unit of CXU Series.

## Internal structure and parts list

### ● CXU10-EXA



No.	Parts name	Material	
1	Guard (Note 1)	PBT	PBT
2	Bush	NBR	Nitrile rubber
3	Coil assembly	-	-
4	Stuffing	PPS	Polyphenylene sulfide
5	Diaphragm assembly	H-NBR/PPS	Hydrogenated nitrile rubber/ polyphenylene sulfide
6	Body	PA66	Polyamide resin
7	Spring	SUS	Stainless steel
8	Valve body	PBT	PBT
9	Gasket	H-NBR	Hydrogenated nitrile rubber
10	Pin	SUS	Stainless steel
11	Fitting		

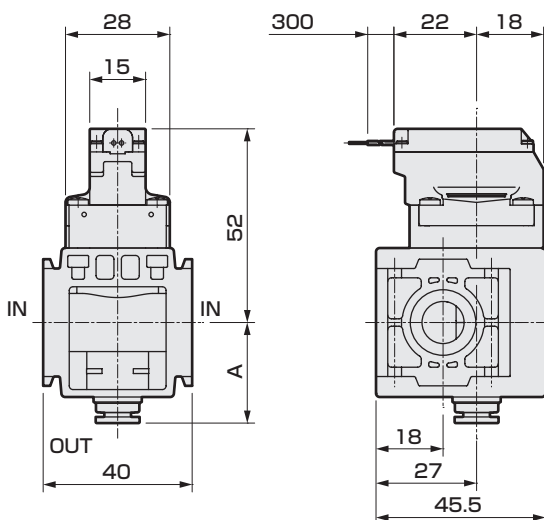
Note 1: PA66, polyamide will be used if DIN terminal box is attached.

## Dimensions

### ● Grommet lead wire type

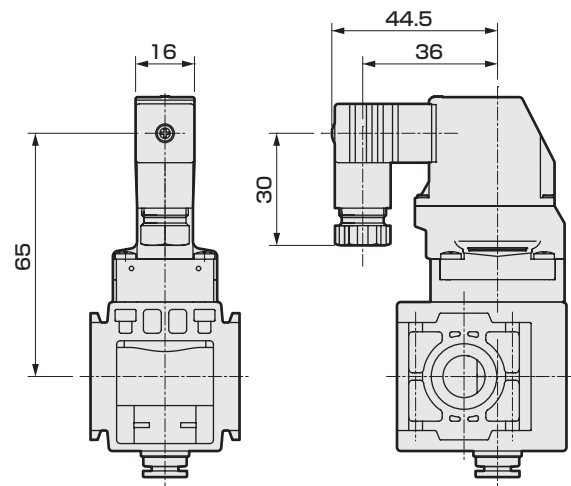
CXU10-EXA-\*-2C-\*

Cartridge fitting: straight type

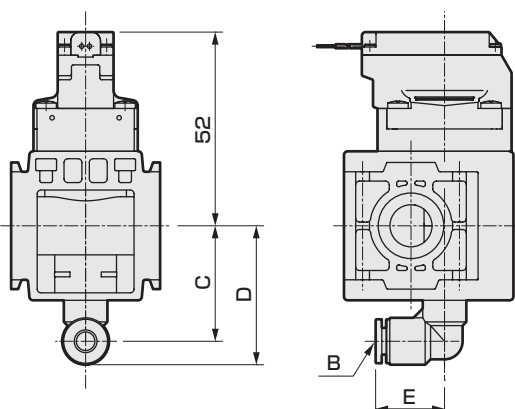


### ● With DIN terminal box (Pg11) type

CXU10-EXA-\*-2HS-\*

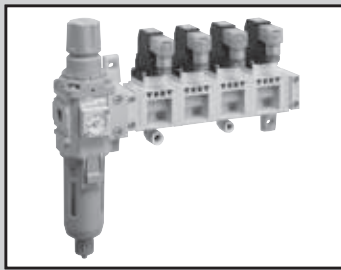


### Elbow type fitting



### Option dimensions

Option	A	B	C	D	E
C6	27	Push-in joint $\Phi 6$	-	-	-
CL6	-	Push-in joint $\Phi 6$	31	37	18.5
C8	27	Push-in joint $\Phi 8$	-	-	-
CL8	-	Push-in joint $\Phi 8$	32	39	21



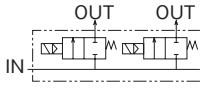
2 port pilot operated solenoid valve for compressed air  
Manifold model no.

# CXU10-GEXA Series

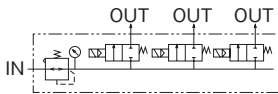
- NC (normally closed) type
- Order in manifolds with a regulator connected

Easy  
Manifold

## JIS symbol



(example) CXU10-EXA-C6-R-3-2C-3



## Specifications

Descriptions		CXU10-GEXA3			
Working fluid		Compressed air			
Working pressure differential	MPa	0.01 to 0.7			
Max. working pressure	MPa	0.7			
Withstanding pressure	MPa	1.05			
Fluid temperature	°C	0 to 55			
Ambient temperature	°C	-5 to 55			
Atmosphere		Does not contact water, corrosive or flammable gas.			
Valve structure		Pilot operated diaphragm structure			
Valve leakage	cm <sup>3</sup> /min. (ANR)	10 or less			
Mounting attitude		Free			
Port size (IN)		IN: Rc3/8			
Port size (OUT)		Push-in joint Φ6	Push-in joint Φ6L type	Push-in joint Φ8	Push-in joint Φ8L type
C (dm <sup>3</sup> / (s/bar)) Note 2		1.6		3.0	
b		0.37		0.32	
Electric specifications					
Rated voltage		100VAC, 24VDC			
Rated electric power	VA	1.2			
Power consumption	W DC	0.6			
Heat proof class		B			
Protective structure (IEC standards: 529)		Lead wire type: IPX0, with DIN terminal box: IPX5			

Note 1: Voltage fluctuation range is ±10%

Note 2: Effective sectional area S and sonic conductance C are converted as  $S \cong 5.0 \times C$ .

### Regulator specifications

Set pressure range	MPa	0.05 to 0.7 Note 3		
Relief		With relief mechanism		
Port size		Rc1/4		

### Filter specifications

Filtration rating	μm	5		
Drain capacity	cm <sup>3</sup>	12.0		
Port size		Rc1/4		

Note 3: Set pressure range will be limited by the working pressure of CXU10-EXA.

## Weight

(Unit: kg)

Descriptions	Descriptions
FR component (T type bracket, joiner, etc., , including)	
A: piping adapter	0.21
R: regulator	0.58
RT8: regulator (without pressure gauge)	0.57
W: Filter•regulator	0.70
WT8: Filter•regulator (without pressure gauge)	0.69
2 port solenoid valve	
CXU10-EXA (discrete valve + joiner) Note 4	0.11

Note 4: Models with DIN terminal box weighs +20g more.

Weight is calculable from  
FR unit and total number of  
2 port valves.

Refer to "Air unit CXU Series (No.CC-901)". Because this product is a valve air unit of CXU Series.



### How to order

CXU10-GEXA-

**C6** - **R** - **3** - **2C** - **3**

Model no.

**A** Port size (OUT)

**B** FR component options

**C** Solenoid valve station qty.

**D** Coil option

**E** Rated voltage

Symbol	Descriptions	
<b>A Port size (OUT)</b>		
<b>C6</b>	Φ6	push-in joint
<b>CL6</b>	Φ6	push-in joint L type
<b>C8</b>	Φ8	push-in joint
<b>CL8</b>	Φ8	push-in joint L type
<b>B FR component options</b>		
Component options Note 1	<b>A</b>	Piping adapter (Rc3/8)
	<b>R</b>	Regulator (R2000-10-W-X2, Note 2)
	<b>RT8</b>	Regulator (R2000-10-W-T8X2, Note 2) Without pressure gauge (port Rc1/4 open)
	<b>W</b>	Filter regulator (W2000-10-W-F1, Note 2)
Direction	<b>WT8</b>	Filter regulator (W2000-10-W-F1T8, Note 2) Without pressure gauge (port Rc1/4 open)
	<b>Blank</b>	IN side left
	<b>X</b>	IN side right
<b>C Solenoid valve station qty.</b>		
<b>1 to 4</b>	1 station to 4 station	
<b>D Coil option Note 3, 4</b>		
<b>2C</b>	Standard	Lead wire (without light and surge suppressor)
<b>2H</b>	Option	DIN terminal box(Pg7). with indicator light inside terminal box
<b>2HS</b>		DIN terminal box(Pg7). with indicator light and surge suppressor inside terminal box
<b>E Rated voltage</b>		
<b>1</b>	100VAC	
<b>3</b>	24VDC	

### Note on model no. selection

Note 1: Standard filter•regulator is NC automatic drain type.  
Select A unless component option R, RT8, W, WT8 is selected.

Multiple FR device options cannot be selected.

Note 2: Model no. for IN side Left (FR device direction option "No symbol").

Note 3: Refer to the table on the right for available combinations of coil options and voltage.

Note 4: Contact CKD for models with M12 connector cable.

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

Select from the circle mark above.

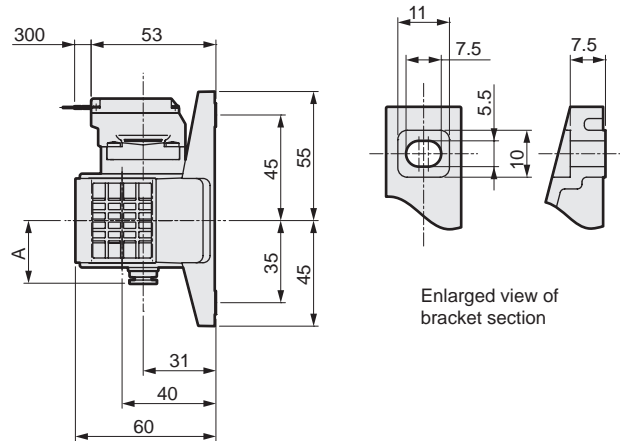
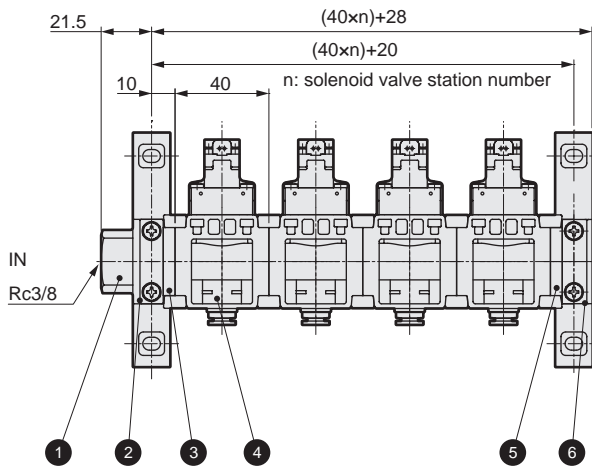
### Internal structure

Model	Listed catalog and page no.
CXU10-EXA	Page 6
CXU10-TA	Catalog No. CC-901
CXU10-MA	Catalog No. CC-901
R2000	Catalog No. CB-024S
W2000	Catalog No. CB-024S

# CXU10-GEXA Series

## Dimensions

- Grommet lead wire type  
CXU10-GEXA-\*-A-\*-2C-\*
- Cartridge fitting: straight type



## Configuration table

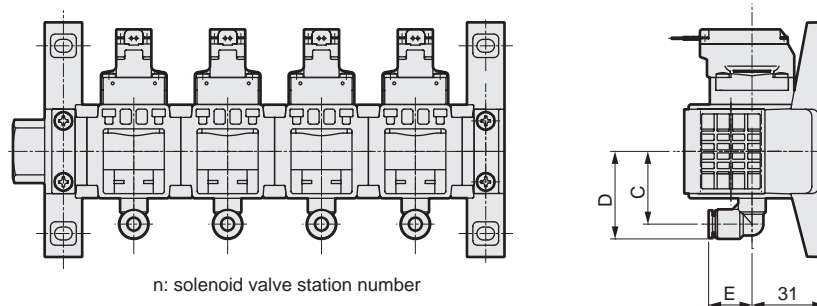
No.	Product name	Model no.
1	Piping adapter Note 1	(FR component options -A)
2	T type bracket	B110-W
3	Turn adapter	CXU10-TA-00
4	2 port pilot operated solenoid valve	CXU10-EXA-*
5	Turn adapter	CXU10-TA-00
6	Masking adapter	CXU10-MA-00-B

Note 1: The final product may differ depending on FR component options.

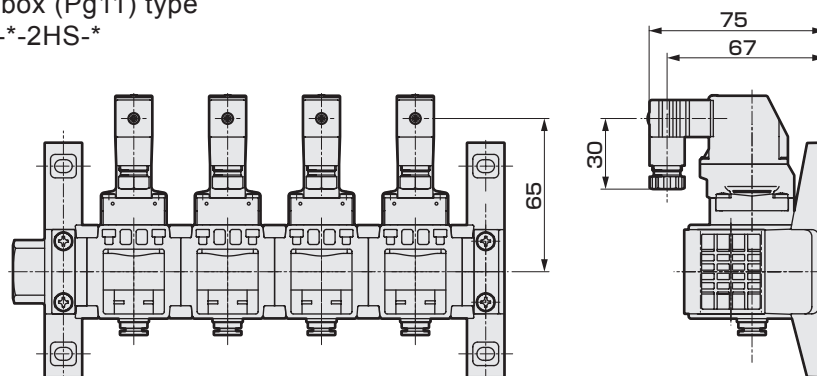
## Option dimensions

Model no.	A	B	C	D	E
C6	27	Push-in joint $\Phi 6$	-	-	-
CL6	-	Push-in joint $\Phi 6$	31	37	18.5
C8	27	Push-in joint $\Phi 8$	-	-	-
CL8	-	Push-in joint $\Phi 8$	32	39	21

## Elbow type fitting



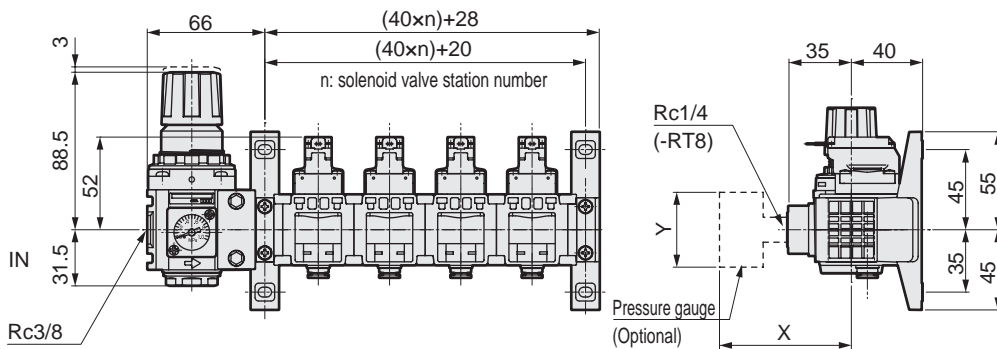
- With DIN terminal box (Pg11) type  
CXU10-GEXA-\*-A-\*-2HS-\*



### Dimensions

- F.R. component option: regulator type

CXU10-GEXA-<sup>R</sup><sub>RT8</sub>-\*-\*\*

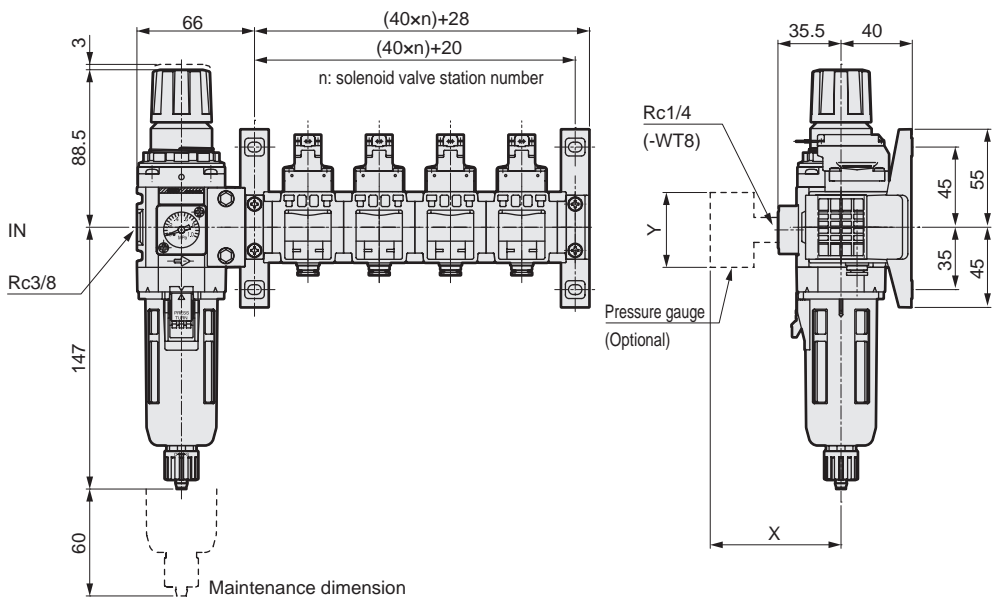


### Pressure gauge dimensions

Pressure gauge (Optional)	X	Y
G49D	(73.5)	Φ43.5
G59D	(76)	Φ52
G40D	(75.5)	Φ42.5
G50D	(75.5)	Φ52.5
G41D	(74)	Φ42
G52D	(79)	Φ52.5

- F.R. component option: filter regulator type

CXU10-GEXA-<sup>W</sup><sub>WT8</sub>-\*-\*\*

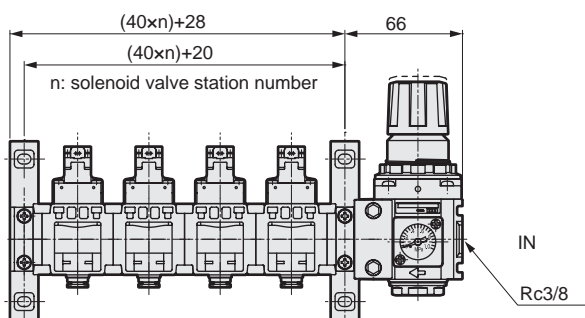


### Pressure gauge dimensions

Pressure gauge (Optional)	X	Y
G49D	(73.5)	Φ43.5
G59D	(76)	Φ52
G40D	(75.5)	Φ42.5
G50D	(75.5)	Φ52.5
G41D	(74)	Φ42
G52D	(79)	Φ52.5

- F.R. components option: reverse flow

CXU10-GEXA-<sup>R</sup><sub>RT8</sub>X-\*\*-\*



When reverse flow option X is selected, the IN side and FR device are on the right. The drawing at left is for the regulator.