

# Modular Adapter

## E210/310/410 Series

### Easy connection to current products!

#### Flexible mounting

- Can be connected to current products such as 2 port valves as well as F.R.L. Unit
- Can be freely rotated, thus allowing a wide selection of mounting directions
- Can be connected to current products of different size  
Ex.: AF30+ARG20

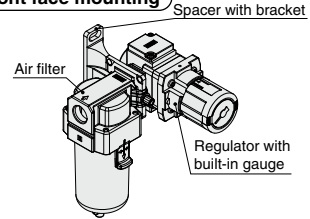
#### Reduced space/piping maintenance cost

- Can be connected/disconnected without rotation
- Fittings, tube, etc. not required for connection

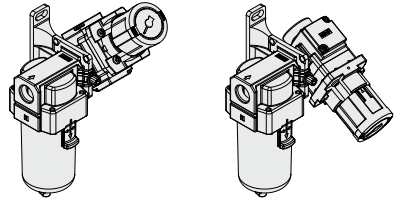


- Location of pressure gauge can be fixed depending on the installation location.

#### Ex. 1: Front face mounting



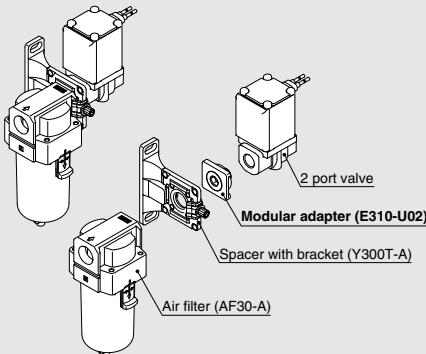
#### Ex. 2: Tilted position mounting



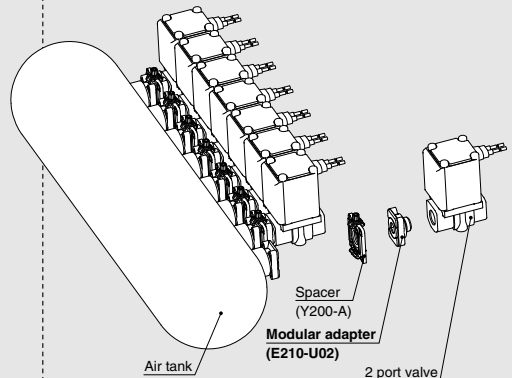
AC-A
AF-A
AF□-A
AR-A
AL-A
AW-A
AC-B
AF-A
AF□-A
AR-A
AL-A
AW-B
AW□
A□G
E□
AV
AF

### Application Examples

#### Ex. 1 Filter + 2 port valve

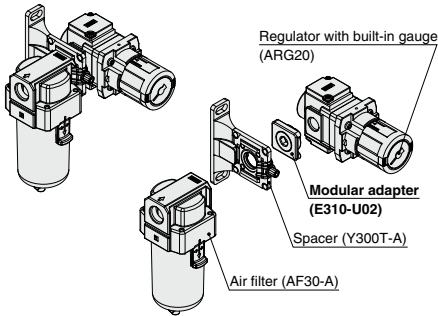


#### Ex. 2 2 port valve connection to air tank

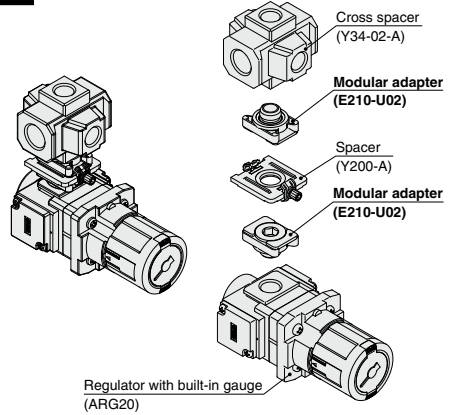


# Application Examples

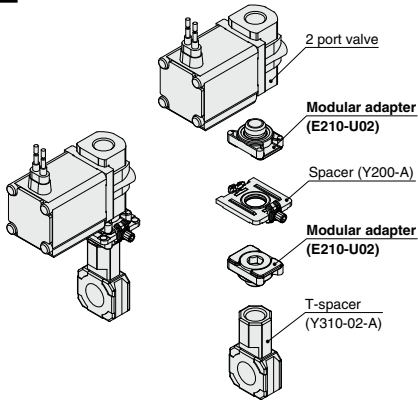
## Ex. 3 Front face mounting of regulator with built-in gauge



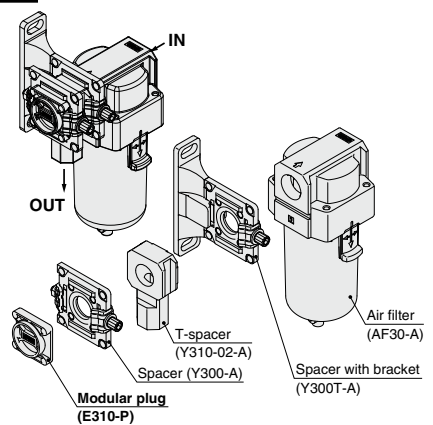
## Ex. 4 Cross spacer to branch mounting



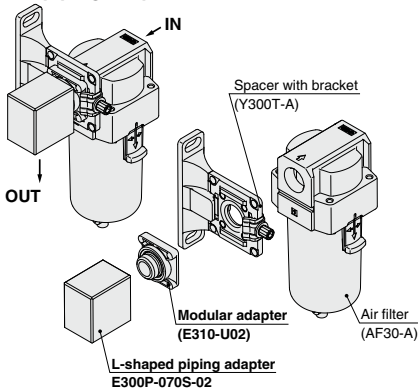
## Ex. 5 T-spacer to branch mounting (1)



## Ex. 6 T-spacer to downward face mounting (2)



## Ex. 7 Downward face mounting for L-shaped piping adapter



# Modular Adapter

# E210/310/410 Series

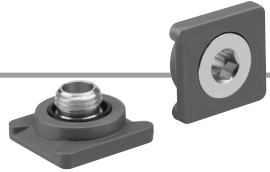
## How to Order

**E310** - **U** **03**

Size	
210	
310	
410	
Thread	
<b>U</b>	Uni thread

### Piping port size

Symbol	Port size Uni thread	Size		
		210	310	410
01	1/8	●	—	—
02	1/4	●	●	—
03	3/8	—	●	●
04	1/2	—	—	●



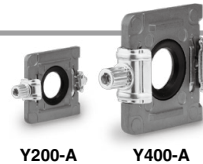
## Specifications

Model	E210		E310		E410		
Port size	1/8	1/4	1/4	3/8	1/4	3/8	1/2
Piping I.D.	ø6	ø8	ø8	ø10	ø8	ø10	ø12
Fluid	Air						
Ambient and fluid temperature	-5 to 60°C (No freezing)						
Proof pressure	1.5 MPa						
Maximum operating pressure	1.0 MPa						
Weight (g)	26	25	38	38	60	62	68

## Applicable Attachment Part Number

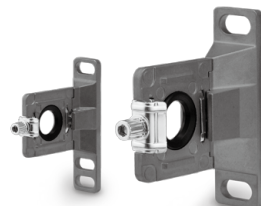
Applicable models	E210	E310	E410
Spacer	Y200-A	Y300-A	Y400-A
Spacer with bracket	Y200T-A	Y300T-A	Y400T-A

\* Refer to page 648 for detailed dimensions.



Y200-A

Y400-A



Y200T-A

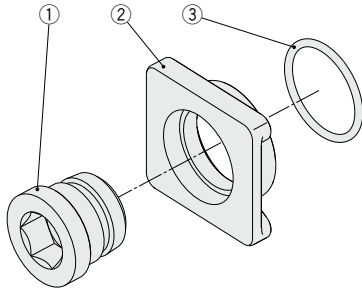
Y400T-A

AC-A  
AF-A  
AF□-A  
AR-A  
AL-A  
AW-A  
AC-B  
AF-A  
AF□-A  
AR-B  
AL-A  
AW-B  
AW□  
A□G  
E□  
AV  
AF

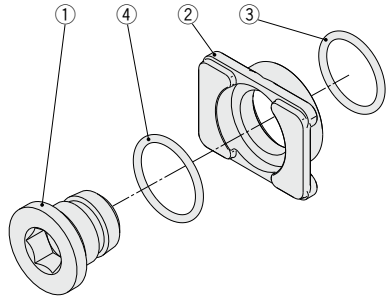
# E210/310/410 Series

## Construction

E210-U01  
E310-U02, U03  
E410-U02, U03, U04



E210-U02



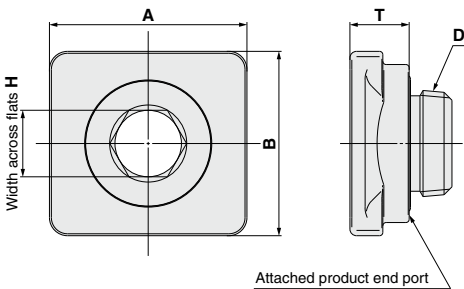
### Component parts

No.	Description	Material
1	Joint nipple	Brass
2	Adapter	Zinc die-cast

### Replacement parts

No.	Description	Material	Part no.				
			E210-U01	E210-U02	E310-U02 E410-U02	E310-U03 E410-U03	E410-U04
3	O-ring	NBR	E210P-040S	E210P-030S	E210P-030S	E310P-030S	E410P-030S
4	O-ring	NBR	—	E210P-050S	—	—	—

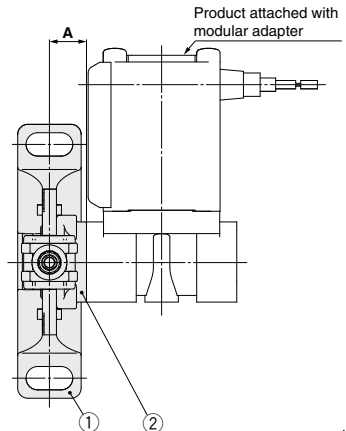
## Dimensions



Unit: mm

Part no.	D Uni thread	A	B	T	Width across flats H
E210-U01	1/8	28	21		6
E210-U02	1/4				8
E310-U02	1/4	30	28		8
E310-U03	3/8			9	10
E410-U02	1/4				8
E410-U03	3/8	36	36		10
E410-U04	1/2				12

## Mounting Dimensions



Unit: mm

① Spacer with bracket	② Modular adapter	A
Y200T-A	E210-U01 to U02	10.6
Y300T-A	E310-U02 to U03	11.1
Y400T-A	E410-U02 to U04	11.6

Note) Y200 to Y400 spacers share the same dimensions.

## Option

### Modular Plug

#### How to Order

**E310 - P**

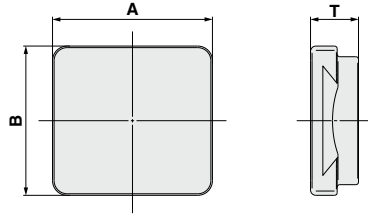
Size

210
310
410

Modular plug



#### Dimensions



Unit: mm

Part no.	A	B	T	Applicable spacer	
				Spacer	Spacer with bracket
E210-P	28	21	9	Y200-A	Y200T-A
E310-P	30	28		Y300-A	Y300T-A
E410-P	36	36		Y400-A	Y400T-A

### L-Shaped Piping Adapter

#### How to Order

**E300P - 070S - 03**

Size

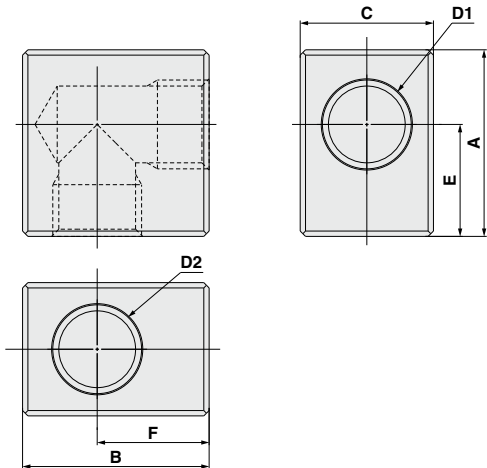
300
400

Port size

Symbol	Port size Rc	Size	
		300	400
02	1/4	●	—
03	3/8	●	●
04	1/2	—	●



#### Dimensions



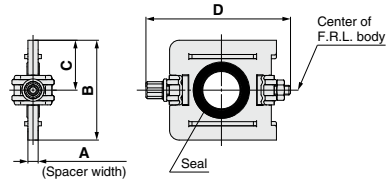
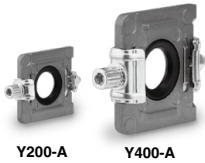
(mm)

Pert no.	D1	D2	A	B	C	E	F
E300P-070S-02	Rc1/4	Rc1/4	32	32	20	21	21
E300P-070S-03	Rc3/8	Rc3/8	35	35	25	21	21
E400P-070S-03	Rc3/8	Rc3/8	45	45	25	27.5	27.5
E400P-070S-04	Rc1/2	Rc1/2	45	45	30	27.5	27.5

- AC-A
- AF-A
- AF□-A
- AR-A
- AL-A
- AW-A
- AC-B
- AF-A
- AF□-A
- AR- $\frac{A}{B}$
- AL-A
- AW- $\frac{A}{B}$
- AW□
- A□G
- E□
- AV
- AF

# E210/310/410 Series

## Spacer

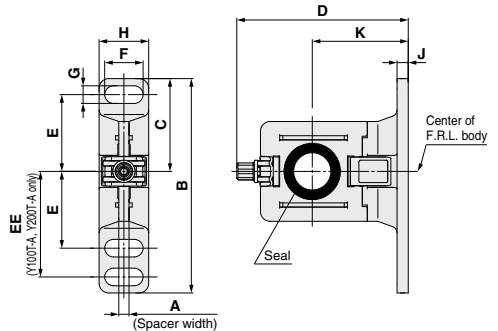
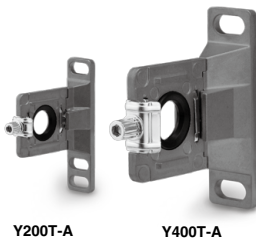


Model	A	B	C	D	Applicable model
Y200-A	3.2	31.2	15.6	44.9	E210
Y300-A	4.2	43.4	21.7	57.9	E310
Y400-A	5.2	53	26.5	68.5	E410

### Replacement parts

Description	Material	Part no.		
		Y200-A	Y300-A	Y400-A
Seal	HNBR	Y220P-050S	Y320P-050S	Y420P-050S

## Spacer with Bracket



Model	A	B	C	D	E	EE	F	G	H	J	K	Applicable model
Y200T-A	3.2	67	29	53.4	24	33	12	5.5	15.5	3.5	30	E210
Y300T-A	4.2	82	41	71.5	35	—	14	7	19	4	41	E310
Y400T-A	5.2	96	48	86.1	40	—	18	9	26	5	50	E410

### Replacement parts

Description	Material	Part no.		
		Y200T-A	Y300T-A	Y400T-A
Seal	HNBR	Y220P-050S	Y320P-050S	Y420P-050S



# E210/310/410 Series Specific Product Precautions

Be sure to read this before handling the products.  
Refer to back page 50 for Safety Instructions.

## Mounting

### ⚠ Caution

The seal surface of the product to be attached requires the modular adapter O-ring seal surface as shown in Table 1.

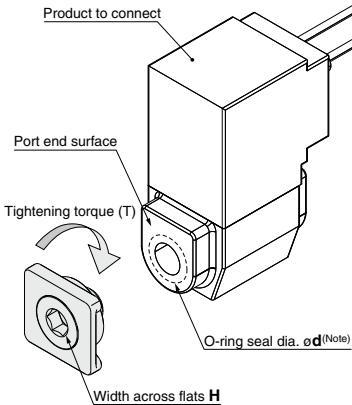
In addition, when tightening the modular adapter please refer to table 2 for the proper tightening torque.

Table 1: Required O-ring seal diameter for the mating product

Part no.	Port size	ød
E210-U01	1/8	Over 14.5
E210-U02	1/4	Over 18
E310-U02	1/4	Over 18
E310-U03	3/8	Over 22
E410-U02	1/4	Over 18
E410-U03	3/8	Over 22
E410-U04	1/2	Over 27

Table 2: Hexagonal hole dim. & tightening torque

Part no.	Port size	Width across flats H	Recommended tightening torque (N·m)
E210-U01	1/8	6	9 to 11
E210-U02	1/4	8	14 to 16
E310-U02	1/4	8	14 to 16
E310-U03	3/8	10	24 to 26
E410-U02	1/4	8	14 to 16
E410-U03	3/8	10	24 to 26
E410-U04	1/2	12	30 to 32

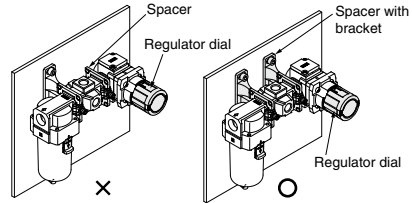


(Note) The surface roughness of the seal surface of the product to be mated to the modular adapter must be less than Rz25.

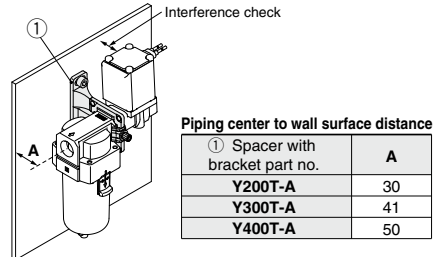
## Selection

### ⚠ Warning

- When utilizing a regulator or a pressure relief 3 port valve with an operator (dial, etc), assure that a large moment is not exerted on the bracket spacer when placing the product. Be sure to utilize a T-Bracket (Y200T-A/Y300T-A/Y400T-A) in the appropriate space in order to alleviate this.

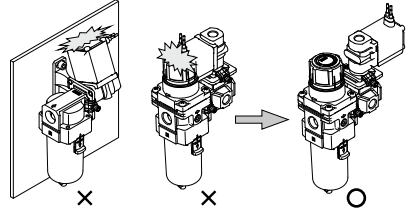


- When making the product selection and mounting to a wall, determine the distance to the wall from the center of pipe (A dimension) and make your selection of the product so that, when attached, the product selected does not run into the wall.



- Give careful thought to the attachment angle, and assure that the attached product does not run into the wall mount prior to product selection.

In addition, assure that the product selected will not interfere with other products nearby.



- In the event that the customer is unable to determine the interference prior to product selection, please contact SMC.

### ⚠ Caution

- If products of brands other than SMC's are connected, this product is no longer guaranteed.

AC-A

AF-A

AF-A

AR-A

AL-A

AW-A

AC-B

AF-A

AF-A

AR-B

AL-A

AW-B

AW

A/G

E

AV

AF