

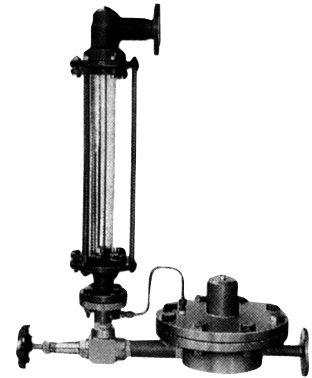
GENERAL

C series Constant Flow Valves keep flow rate of gases or liquids even when the supply or load pressure changes. Diaphragm controlled valve automatically acts following the change of pressure.

They are normally delivered together with glass tube or metal tube type flowmeter as a "Purge set".

Besides this line-up, smaller sized Purge sets (CP type and CM-900 type) are also available.

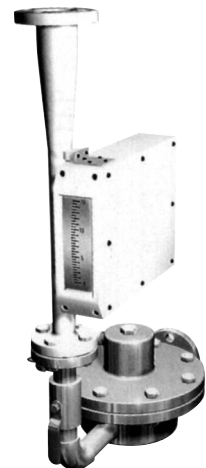
Refer to separate Technical Guidance for details.



CR series



CM series



CAM series

LINE UP

* 1 : Water (Density 1.0, Viscosity 1.0 cP)

* 2 : Air (0°C, 1atm)

MODEL	SCALE RANGE		STANDARD PROCESS CONNECTION
	LIQUIDS*1	GASES*2	
C-500	MIN. 30~300 ℓ /h MAX. 70~700 ℓ /h	MIN. 0.9~9m³/h(nor) MAX. 2.1~21m³/h(nor)	15A
C-600	MIN. 70~700 ℓ /h MAX. 120~1200 ℓ /h	MIN. 2.1~21m³/h(nor) MAX. 3.6~36m³/h(nor)	20A
C-700	MIN. 120~1200 ℓ /h MAX. 180~1800 ℓ /h	MIN. 3.6~36m³/h(nor) MAX. 5.4~54m³/h(nor)	20A
C-800	MIN. 180~1800 ℓ /h MAX. 300~3000 ℓ /h	MIN. 5.4~54m³/h(nor) MAX. 9~90m³/h(nor)	25A
C-900	MIN. 300~3000 ℓ /h MAX. 1000~10000 ℓ /h	MIN. 5.4~54m³/h(nor) MAX. 23~230m³/h(nor)	50A

C-500

STANDARD SPECIFICATION

POSSIBLE SCALE RENG

LIQUID	MIN. 30 ~ 300	ℓ /h
	MAX. 70 ~ 700	ℓ /h
GAS	MIN. 0.9 ~ 9	m³/h(nor)
(Air, 0℃, 1atm)	MAX. 2.1 ~ 21	m³/h(nor)

MAX. OP. PRESS 1MPa

ACCEPTABLE DIFFERENTIAL PRESSURE 0.1~ 0.6MPa
BETWEEN INLET AND OUTLET

CONTROL ACCURACY ± 5%F.S.

MAX. OP. TENP. 80℃

PAINTING Munsell 7.5BG4/1.5

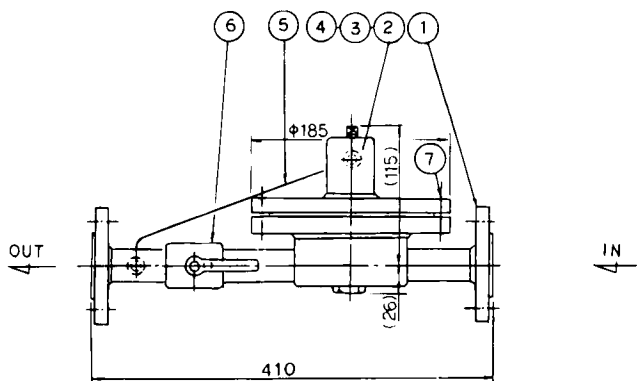
STANDARD PROCESS CONNECTION 15A JIS10K FLANGE

MASS
INLET PRESSURE VARIATION CONTROL TYPE C-510-V APPROX. 12kg
OUTLET PRESSURE VARIATION CONTROL TYPE C-520-V APPROX. 10kg

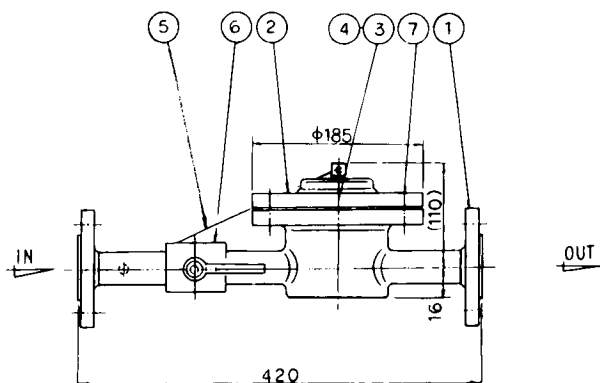
MATERIAL CONSTRUCTION

PART No.	PART NAME	AVAILABE MATERIAL
①	FLANGE	C.S, SUS304, SUS316
②	VALVE BODY	C.S, SUS304, SUS316
③	SPRING	SUS304、SUS316
④	DIAPHRAGM	CR, FPM, PTFE
⑤	TUBE, UNION	SUS304, SUS316
⑥	VALVE	SUS316
⑦	BOLT&NUT	C.S, SUS304

DIMENSION OF CONSTANT FLOW VALVE UNIT



INLET PRESSURE VARIATION CONTROL TYPE C-510-V

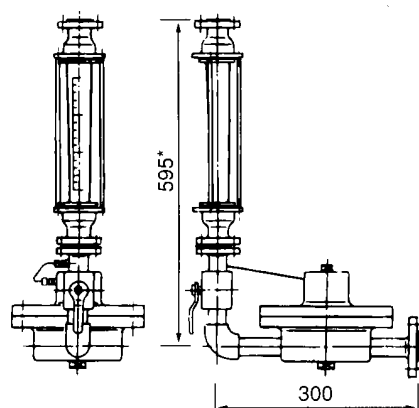


OUTLET PRESSURE VARIATION CONTROL TYPE C-520-V

EXAMPLE OF COMBINATION WITH FLOWMETER

INLET PRESSURE VARIATION CONTROL TYPE (Also used for OUTLET PRESSURE VARIATION in liquid applications.)

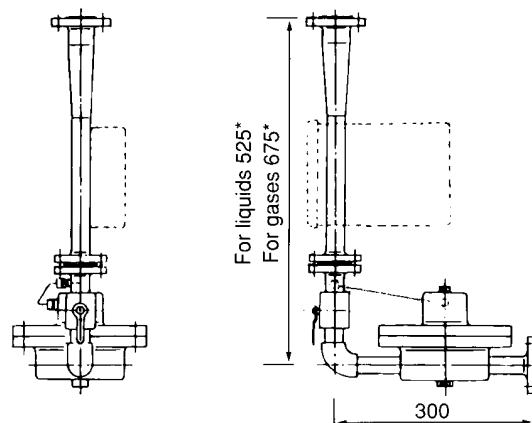
COMBINATION WITH GLASS TUBE FLOWMETER



*Dimension of standard types. Confirm the final dimension in Approval drawing.

- CR-510-101-V**
- POSSIBLE SCALE RANGE
LIQUID MIN. 30 ~ 300 ℓ /h
(WATER) MAX. 70 ~ 700 ℓ /h
GAS MIN. 0.9 ~ 9 m³/h(nor)
(AIR, 0°C, 1atm) MAX. 1.8 ~ 18 m³/h(nor)
 - STANDARD CONNECTION
15A or 20A JIS10K FLANGE

COMBINATION WITH METAL TUBE FLOWMETER



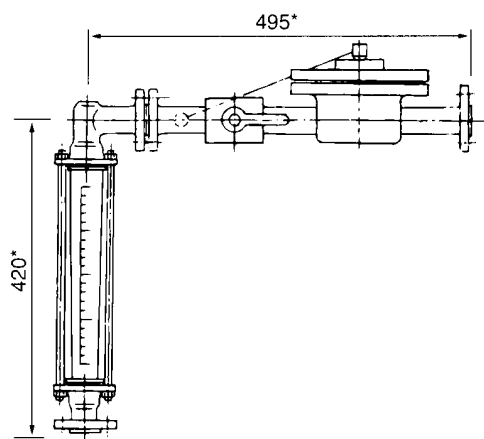
*Dimension of standard types. Confirm the final dimension in Approval drawing.

- CAM-510-1401-V (FOR LIQUID)**
- POSSIBLE SCALE RANGE
LIQUID (WATER) MIN. 30 ~ 300 ℓ /h
MAX. 70 ~ 700 ℓ /h
 - STANDARD CONNECTION
15A or 20A JIS10K FLANGE

- CAM-510-1401-Du-V (FOR GAS)**
- POSSIBLE SCALE RANGE
GAS MIN. 0.9 ~ 9 m³/h(nor)
(AIR, 0°C, 1atm) MAX. 2.1 ~ 21 m³/h(nor)
 - STANDARD CONNECTION
15A or 20A JIS10K FLANGE

OUTLET PRESSURE VARIATION CONTROL TYPE

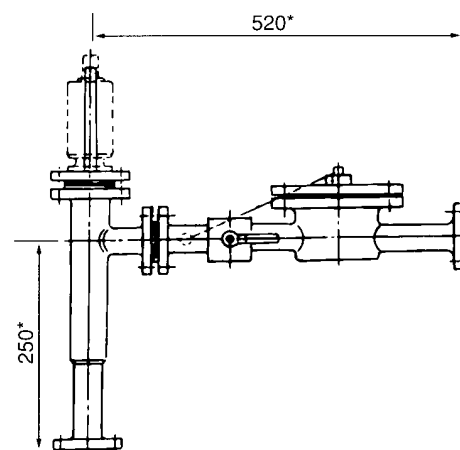
COMBINATION WITH GLASS TUBE FLOWMETER



*Dimension of standard types. Confirm the final dimension in Approval drawing.

- CR-520-102-V**
- POSSIBLE SCALE RANGE
GAS MIN. 0.9 ~ 9 m³/h(nor)
(AIR, 0°C, 1atm) MAX. 1.8 ~ 18 m³/h(nor)
 - STANDARD CONNECTION
15A or 20A JIS10K FLANGE

COMBINATION WITH METAL TUBE FLOWMETER



*Dimension of standard types. Confirm the final dimension in Approval drawing.

- CAM-520-1402-Du-V**
- POSSIBLE SCALE RANGE
GAS MIN. 0.9 ~ 9 m³/h(nor)
(AIR, 0°C, 1atm) MAX. 2.1 ~ 21 m³/h(nor)
 - STANDARD CONNECTION
15A or 20A JIS10K FLANGE

C-600

STANDARD SPECIFICATION

POSSIBLE SCALE RENG

LIQUID	MIN. 70 ~ 700	ℓ /h
	MAX. 120 ~ 1200	ℓ /h
GAS	MIN. 2.1 ~ 21	m³/h(nor)
(Air, 0°C, 1atm)	MAX. 3.6 ~ 36	m³/h(nor)

MAX. OP. PRESS 1MPa

ACCEPTABLE DIFFERENTIAL PRESSURE
BETWEEN INLET AND OUTLET 0.1 ~ 0.6MPa

CONTROL ACCURACY ± 5%F.S.

MAX. OP. TENP. 80°C

PAINTING Munsell 7.5BG4/1.5

STANDARD PROCESS CONNECTION 20A JIS10K FLANGE

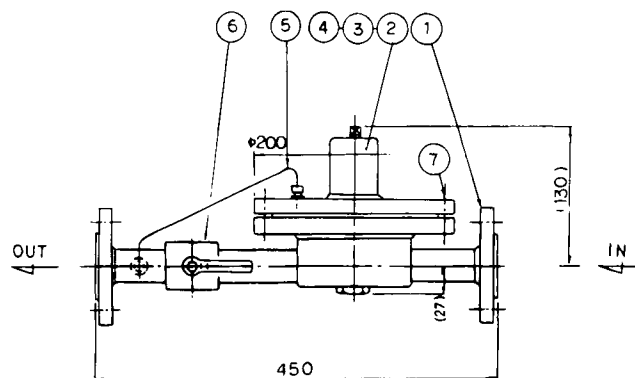
MASS

INLET PRESSURE VARIATION CONTROL TYPE C-610-V APPROX. 14kg
OUTLET PRESSURE VARIATION CONTROL TYPE C-620-V APPROX. 10kg

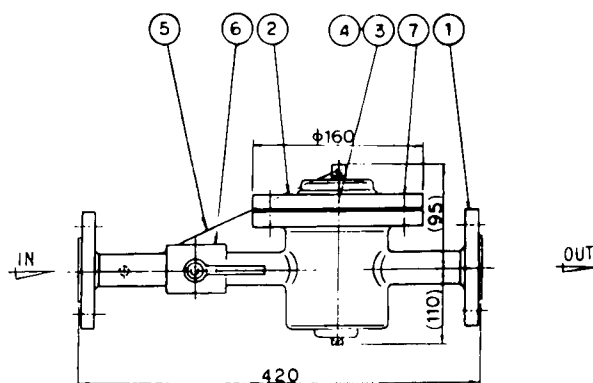
MATERIAL CONSTRUCTION

PART No.	PART NAME	AVAILABE MATERIAL
①	FLANGE	C.S, SUS304, SUS316
②	VALVE BODY	C.S, SUS304, SUS316
③	SPRING	SUS304, SUS316
④	DIAPHRAGM	CR, FPM, PTFE
⑤	TUBE, UNION	SUS304, SUS316
⑥	VALVE	SUS316
⑦	BOLT&NUT	C.S, SUS304

DIMENSION OF CONSTANT FLOW VALVE UNIT



INLET PRESSURE VARIATION CONTROL TYPE C-610-V

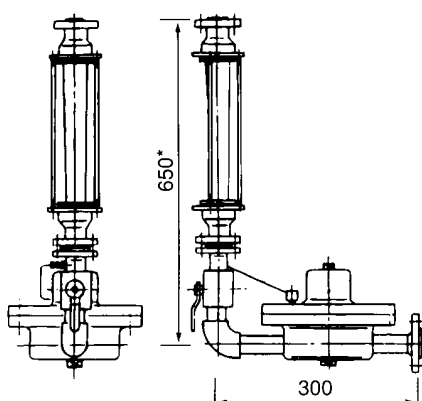


OUTLET PRESSURE VARIATION CONTROL TYPE C-620-V

EXAMPLE OF COMBINATION WITH FLOWMETER

INLET PRESSURE VARIATION CONTROL TYPE (Also used for OUTLET PRESSURE VARIATION in liquid applications.)

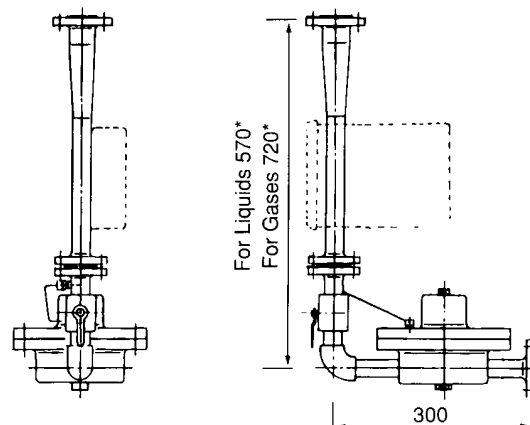
COMBINATION WITH GLASS TUBE FLOWMETER



*Dimension of standard types. Confirm the final dimension in Approval drawing.

- CR-610-101-V**
- POSSIBLE SCALE RANGE
LIQUID MIN. 70 ~ 700 ℓ/h
(WATER) MAX. 120 ~ 1200 ℓ/h
GAS MIN. 2.1 ~ 21m³/h(nor)
(AIR, 0°C, 1atm) MAX. 3 ~ 30m³/h(nor)
 - STANDARD CONNECTION
20A or 25A JIS10K FLANGE

COMBINATION WITH METAL TUBE FLOWMETER



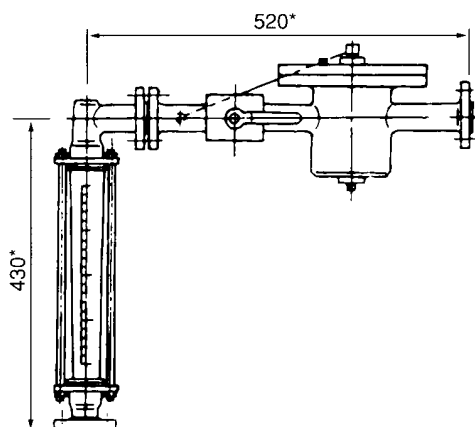
*Dimension of standard types. Confirm the final dimension in Approval drawing.

- CAM-610-1401-V (FOR LIQUID)**
- POSSIBLE SCALE RANGE
LIQUID MIN. 70 ~ 700 ℓ/h
(WATER) MAX. 120 ~ 1200 ℓ/h
 - STANDARD CONNECTION
20A or 25A JIS10K FLANGE

- CAM-610-1401-Du-V (FOR GAS)**
- POSSIBLE SCALE RANGE
GAS MIN. 2.1 ~ 21m³/h(nor)
(AIR, 0°C, 1atm) MAX. 3.6 ~ 36m³/h(nor)
 - STANDARD CONNECTION
20A or 25A JIS10K FLANGE

OUTLET PRESSURE VARIATION CONTROL TYPE

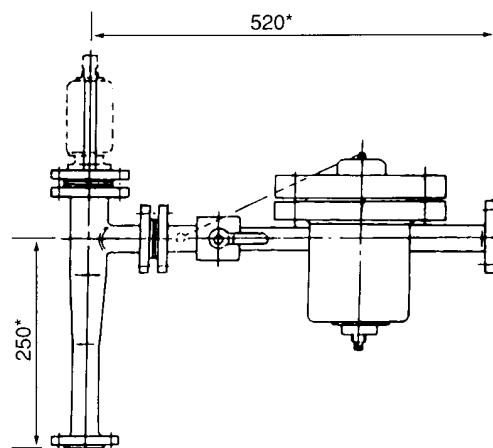
COMBINATION WITH GLASS TUBE FLOWMETER



*Dimension of standard types. Confirm the final dimension in Approval drawing.

- CR-620-102-V**
- POSSIBLE SCALE RANGE
GAS MIN. 2.1 ~ 21m³/h(nor)
(AIR, 0°C, 1atm) MAX. 3 ~ 30m³/h(nor)
 - STANDARD CONNECTION
20A or 25A JIS10K FLANGE

COMBINATION WITH METAL TUBE FLOWMETER



*Dimension of standard types. Confirm the final dimension in Approval drawing.

- CAM-620-1402-Du-V**
- POSSIBLE SCALE RANGE
GAS MIN. 2.1 ~ 21m³/h(nor)
(AIR, 0°C, 1atm) MAX. 3.6 ~ 36m³/h(nor)
 - STANDARD CONNECTION
20A or 25A JIS10K FLANGE

C-700

STANDARD SPECIFICATION

POSSIBLE SCALE RANGE

LIQUID	MIN. 120 ~ 1200	ℓ /h
	MAX. 180 ~ 1800	ℓ /h
GAS (Air, 0°C, 1atm)	MIN. 3.6 ~ 36	m³/h(nor)
	MAX. 5.4 ~ 54	m³/h(nor)

MAX. OP. PRESS 1MPa

ACCEPTABLE DIFFERENTIAL PRESSURE
BETWEEN INLET AND OUTLET 0.1 ~ 0.6MPa

CONTROL ACCURACY ± 5%F.S.

MAX. OP. TENP. 80°C

PAINTING Munsell 7.5BG4/1.5

STANDARD PROCESS CONNECTION 20A JIS10K FLANGE

MASS

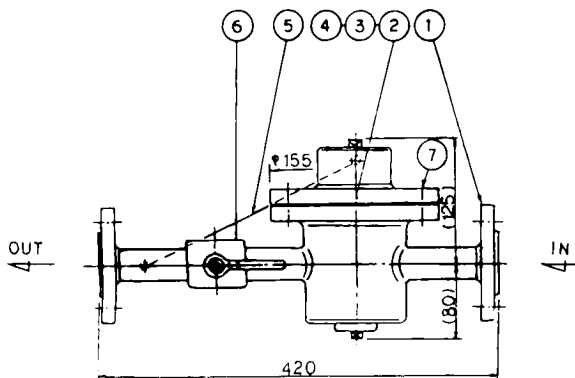
INLET PRESSURE VARIATION CONTROL TYPE C-710-V APPROX. 10kg

OUTLET PRESSURE VARIATION CONTROL TYPE C-720-V APPROX. 10kg

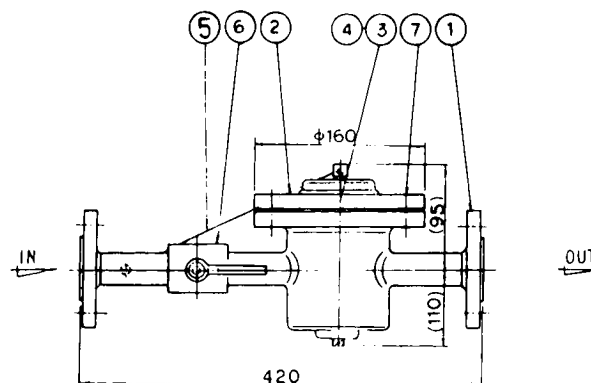
MATERIAL CONSTRUCTION

PART No.	PART NAME	AVAILABE MATERIAL
①	FLANGE	C.S, SUS304, SUS316
②	VALVE BODY	C.S, SUS304, SUS316
③	SPRING	SUS304、SUS316
④	DIAPHRAGM	CR, FPM, PTFE
⑤	TUBE, UNION	SUS304, SUS316
⑥	VALVE	SUS316
⑦	BOLT&NUT	C.S, SUS304

DIMENSION OF CONSTANT FLOW VALVE UNIT



INLET PRESSURE VARIATION CONTROL TYPE C-710-V

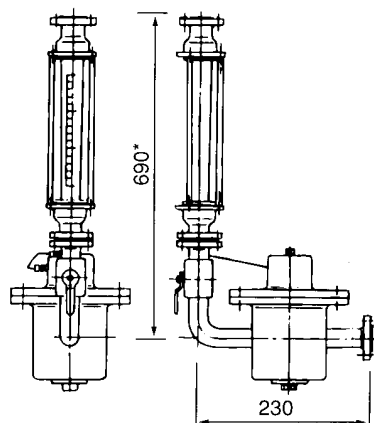


OUTLET PRESSURE VARIATION CONTROL TYPE C-720-V

EXAMPLE OF COMBINATION WITH FLOWMETER

INLET PRESSURE VARIATION CONTROL TYPE (Also used for OUTLET PRESSURE VARIATION in liquid applications.)

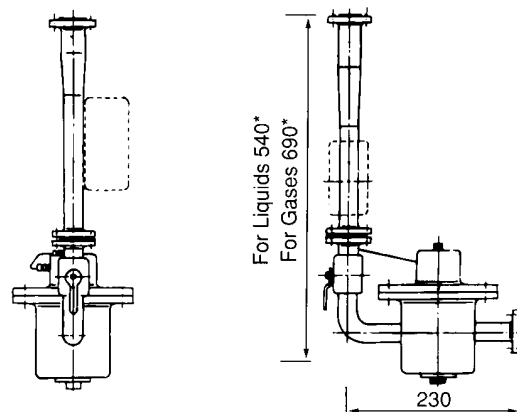
COMBINATION WITH GLASS TUBE FLOWMETER



*Dimension of standard types. Confirm the final dimension in Approval drawing.

- CR-710-101-V**
- POSSIBLE SCALE RANGE
LIQUID MIN. 120 ~ 1200 ℓ/h
(WATER) MAX. 180 ~ 1800 ℓ/h
GAS MIN. 3.6 ~ 36m³/h(nor)
(AIR, 0°C, 1atm) MAX. 4 ~ 40m³/h(nor)
 - STANDARD CONNECTION
25A JIS10K FLANGE

COMBINATION WITH METAL TUBE FLOWMETER



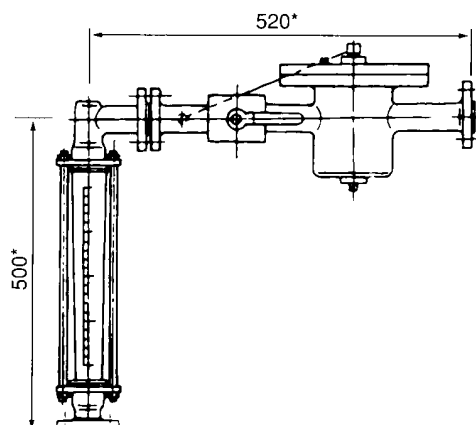
*Dimension of standard types. Confirm the final dimension in Approval drawing.

- CAM-710-1401-V (FOR LIQUID)**
- POSSIBLE SCALE RANGE
LIQUID MIN. 120 ~ 1200 ℓ/h
(WATER) MAX. 180 ~ 1800 ℓ/h
 - STANDARD CONNECTION
20A or 25A JIS10K FLANGE

- CAM-710-1401-Du-V (FOR GAS)**
- POSSIBLE SCALE RANGE
GAS MIN. 3.6 ~ 36m³/h(nor)
(AIR, 0°C, 1atm) MAX. 5.4 ~ 54m³/h(nor)
 - STANDARD CONNECTION
20A or 25A JIS10K FLANGE

OUTLET PRESSURE VARIATION CONTROL TYPE

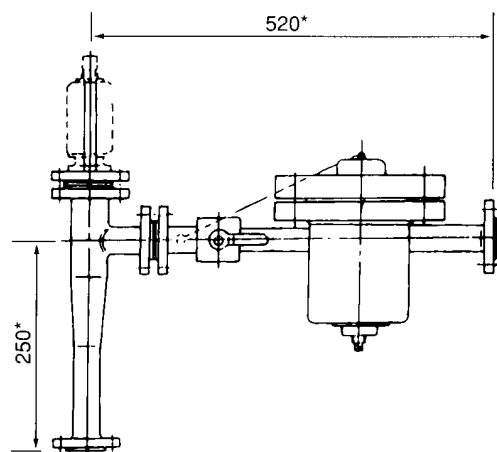
COMBINATION WITH GLASS TUBE FLOWMETER



*Dimension of standard types. Confirm the final dimension in Approval drawing.

- CR-720-102-V**
- POSSIBLE SCALE RANGE
GAS MIN. 3.6 ~ 36m³/h(nor)
(AIR, 0°C, 1atm) MAX. 4 ~ 40m³/h(nor)
 - STANDARD CONNECTION
25A JIS10K FLANGE

COMBINATION WITH METAL TUBE FLOWMETER



*Dimension of standard types. Confirm the final dimension in Approval drawing.

- CAM-720-1402-Du-V**
- POSSIBLE SCALE RANGE
GAS MIN. 3.6 ~ 36m³/h(nor)
(AIR, 0°C, 1atm) MAX. 5.4 ~ 54m³/h(nor)
 - STANDARD CONNECTION
20A or 25A JIS10K FLANGE

C-800

STANDARD SPECIFICATION

POSSIBLE SCALE RENG

LIQUID	MIN. 180 ~ 1800	ℓ /h
	MAX. 300 ~ 3000	ℓ /h
GAS	MIN. 5.4 ~ 54	m³/h(nor)
(Air, 0℃, 1atm)	MAX. 9 ~ 90	m³/h(nor)

MAX. OP. PRESS 1MPa

ACCEPTABLE DIFFERENTIAL PRESSURE 0.1 ~ 0.6MPa
BETWEEN INLET AND OUTLET

CONTROL ACCURACY ± 5%F.S.

MAX. OP. TENP. 80℃

PAINTING Munsell 7.5BG4/1.5

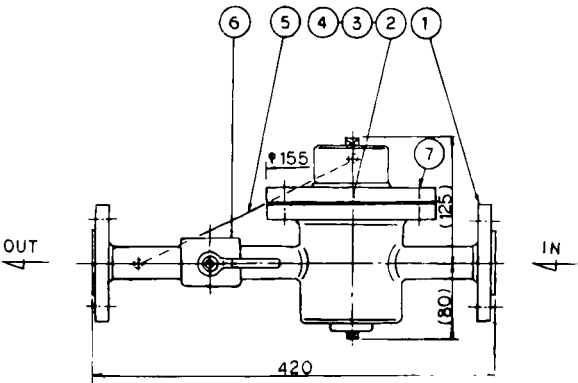
STANDARD PROCESS CONNECTION 25A JIS10K FLANGE

MASS
INLET PRESSURE VARIATION CONTROL TYPE C-510-V APPROX. 11kg
OUTLET PRESSURE VARIATION CONTROL TYPE C-520-V APPROX. 11kg

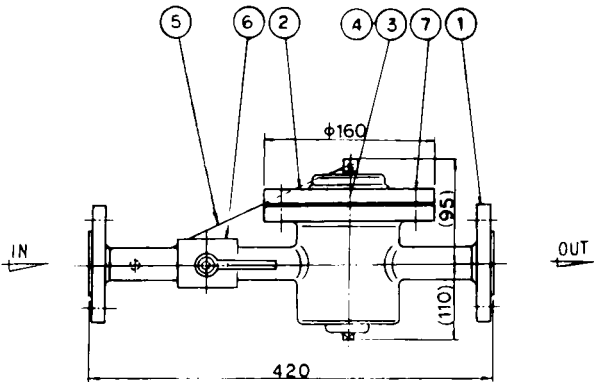
MATERIAL CONSTRUCTION

PART No.	PART NAME	AVAILABE MATERIAL
①	FLANGE	C.S, SUS304, SUS316
②	VALVE BODY	C.S, SUS304, SUS316
③	SPRING	SUS304、SUS316
④	DIAPHRAGM	CR, FPM, PTFE
⑤	TUBE, UNION	SUS304, SUS316
⑥	VALVE	SUS316
⑦	BOLT&NUT	C.S, SUS304

DIMENSION OF CONSTANT FLOW VALVE UNIT



INLET PRESSURE VARIATION CONTROL TYPE C-810-V

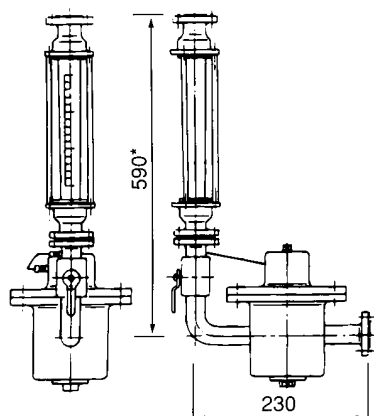


OUTLET PRESSURE VARIATION CONTROL TYPE C-820-V

EXAMPLE OF COMBINATION WITH FLOWMETER

INLET PRESSURE VARIATION CONTROL TYPE (Also used for OUTLET PRESSURE VARIATION in liquid applications.)

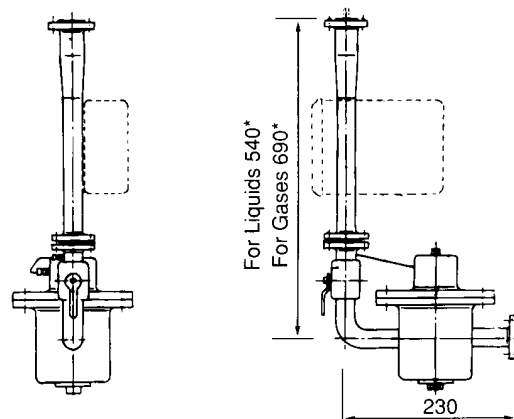
COMBINATION WITH GLASS TUBE FLOWMETER



*Dimension of standard types. Confirm the final dimension in Approval drawing.

- CR-810-101-V**
- POSSIBLE SCALE RANGE
LIQUID MIN. 180 ~ 1800 ℓ / h
(WATER) MAX. 300 ~ 3000 ℓ / h
GAS MIN. 5.4 ~ 54 m³/h(nor)
(AIR, 0°C, 1atm) MAX. 8 ~ 80 m³/h(nor)
 - STANDARD CONNECTION
40A JIS10K FLANGE

COMBINATION WITH METAL TUBE FLOWMETER



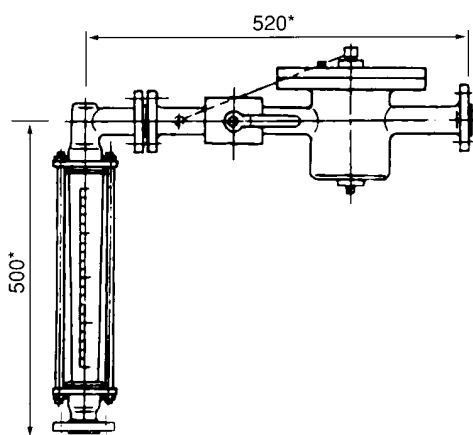
*Dimension of standard types. Confirm the final dimension in Approval drawing.

- CAM-810-1401-V (FOR LIQUID)**
- POSSIBLE SCALE RANGE
LIQUID (WATER)
MIN. 180 ~ 1800 ℓ / h
MAX. 300 ~ 3000 ℓ / h
 - STANDARD CONNECTION
25A or 40A JIS10K FLANGE

- CAM-810-1401-Du-V (FOR GAS)**
- POSSIBLE SCALE RANGE
GAS MIN. 5.4 ~ 54 m³/h(nor)
(AIR, 0°C, 1atm) MAX. 9 ~ 90 m³/h(nor)
 - STANDARD CONNECTION
25A or 40A JIS10K FLANGE

OUTLET PRESSURE VARIATION CONTROL TYPE

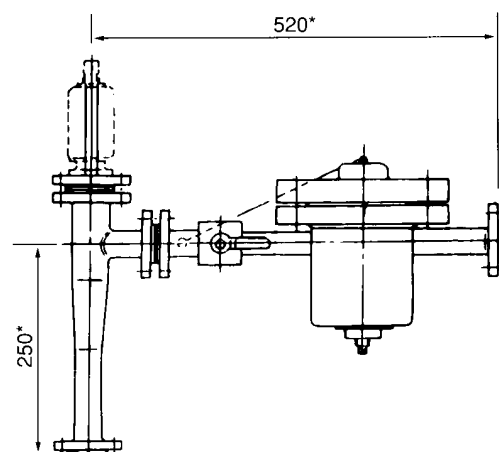
COMBINATION WITH GLASS TUBE FLOWMETER



*Dimension of standard types. Confirm the final dimension in Approval drawing.

- CR-820-102-V**
- POSSIBLE SCALE RANGE
GAS MIN. 5.4 ~ 54 m³/h(nor)
(AIR, 0°C, 1atm) MAX. 8 ~ 80 m³/h(nor)
 - STANDARD CONNECTION
40A JIS10K FLANGE

COMBINATION WITH METAL TUBE FLOWMETER



*Dimension of standard types. Confirm the final dimension in Approval drawing.

- CAM-820-1402-Du-V**
- POSSIBLE SCALE RANGE
GAS MIN. 5.4 ~ 54 m³/h(nor)
(AIR, 0°C, 1atm) MAX. 9 ~ 90 m³/h(nor)
 - STANDARD CONNECTION
25A or 40A JIS10K FLANGE

C-900

STANDARD SPECIFICATION

POSSIBLE SCALE RANGE

LIQUID	MIN. 300 ~ 3000	ℓ /h
	MAX. 1000 ~ 10000	ℓ /h (1~10m³/h)
GAS	MIN. 5.4 ~ 54	m³/h(nor)
(Air, 0°C, 1atm)	MAX.23 ~ 230	m³/h(nor)

MAX. OP. PRESS 1MPa

ACCEPTABLE DIFFERENTIAL PRESSURE BETWEEN INLET AND OUTLET 0.1~0.6MPa

CONTROL ACCURACY $\pm 10\%$ F.S.

MAX. OP. TENP. 80°C

PAINTING Munsell 7.5BG4/1.5

STANDARD PROCESS CONNECTION 50A JIS10K FLANGE

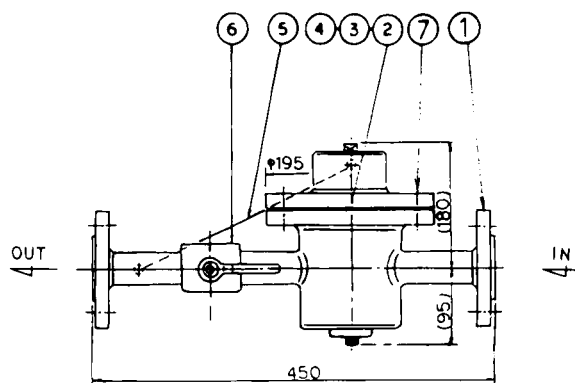
MASS

INLET PRESSURE VARIATION CONTROL TYPE C-910-V	APPROX. 22kg
OUTLET PRESSURE VARIATION CONTROL TYPE C-920-V	APPROX. 32kg

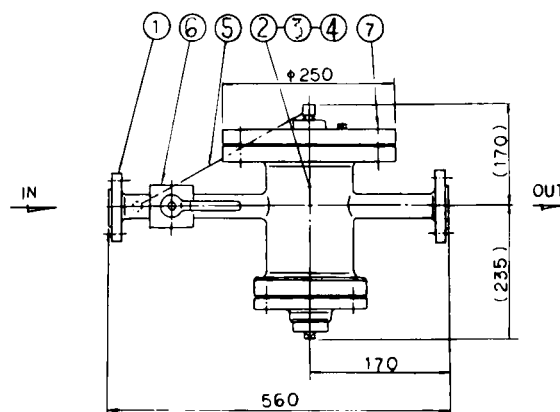
MATERIAL CONSTRUCTION

PART No.	PART NAME	AVAILABE MATERIAL
①	FLANGE	C.S, SUS304, SUS316
②	VALVE BODY	C.S, SUS304, SUS316
③	SPRING	SUS304、SUS316
④	DIAPHRAGM	CR, FPM, PTFE
⑤	TUBE, UNION	SUS304, SUS316
⑥	VALVE	SUS316
⑦	BOLT&NUT	C.S, SUS304

DIMENSION OF CONSTANT FLOW VALVE UNIT



INLET PRESSURE VARIATION CONTROL TYPE C-910-V

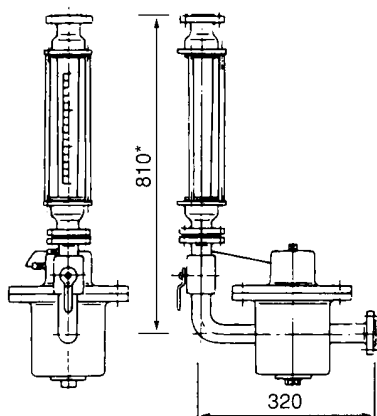


OUTLET PRESSURE VARIATION CONTROL TYPE C-920-V

EXAMPLE OF COMBINATION WITH FLOWMETER

INLET PRESSURE VARIATION CONTROL TYPE (Also used for OUTLET PRESSURE VARIATION in liquid applications.)

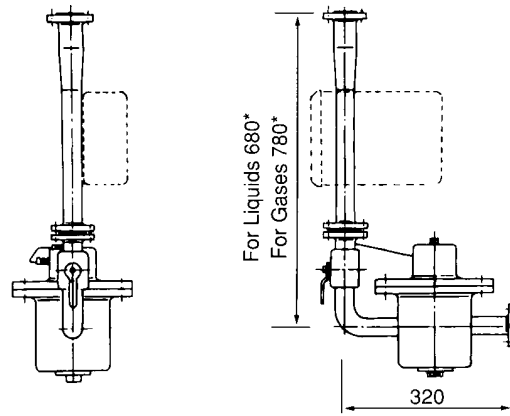
COMBINATION WITH GLASS TUBE FLOWMETER



*Dimension of standard types. Confirm the final dimension in Approval drawing.

- CR-910-101-V**
- POSSIBLE SCALE RANGE
LIQUID MIN. 300 ~ 3000 ℓ /h
(WATER) MAX. 1 ~ 10m³/h
GAS MIN. 5.4 ~ 54m³/h(nor)
(AIR, 0°C, 1atm) MAX. 21 ~ 210m³/h(nor)
 - STANDARD CONNECTION
40A, 50A or 65A JIS10K FLANGE

COMBINATION WITH METAL TUBE FLOWMETER



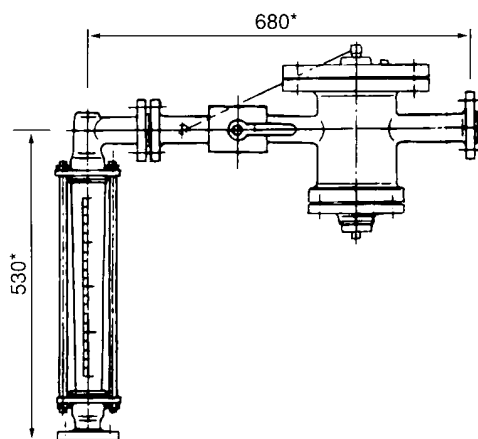
*Dimension of standard types. Confirm the final dimension in Approval drawing.

- CAM-910-1401-V (FOR LIQUID)**
- POSSIBLE SCALE RANGE
LIQUID (WATER) MIN. 300 ~ 3000 ℓ /h
MAX. 1 ~ 10m³/h
 - STANDARD CONNECTION
40A, 50A or 65A JIS10K FLANGE

- CAM-910-1401-Du-V (FOR GAS)**
- POSSIBLE SCALE RANGE
GAS MIN. 5.4 ~ 54m³/h(nor)
(AIR, 0°C, 1atm) MAX. 23 ~ 230m³/h(nor)
 - STANDARD CONNECTION
40A, 50A or 65A JIS10K FLANGE

OUTLET PRESSURE VARIATION CONTROL TYPE

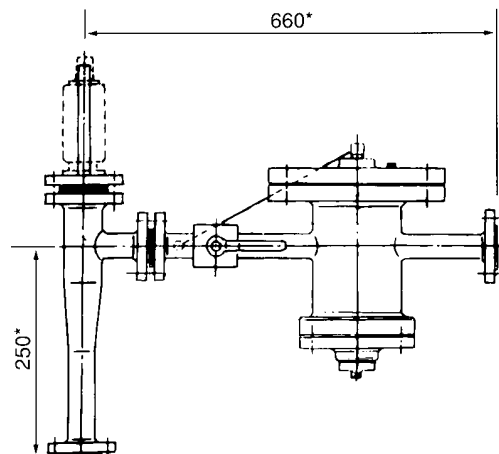
COMBINATION WITH GLASS TUBE FLOWMETER



*Dimension of standard types. Confirm the final dimension in Approval drawing.

- CR-920-102-V**
- POSSIBLE SCALE RANGE
GAS MIN. 5.4 ~ 54m³/h(nor)
(AIR, 0°C, 1atm) MAX. 21 ~ 210m³/h(nor)
 - STANDARD CONNECTION
40A, 50A or 65A JIS10K FLANGE

COMBINATION WITH METAL TUBE FLOWMETER



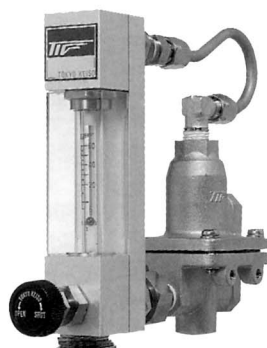
*Dimension of standard types. Confirm the final dimension in Approval drawing.

- CAM-920-1402-Du-V**
- POSSIBLE SCALE RANGE
GAS MIN. 5.4 ~ 54m³/h(nor)
(AIR, 0°C, 1atm) MAX. 23 ~ 230m³/h(nor)
 - STANDARD CONNECTION
40A, 50A or 65A JIS10K FLANGE

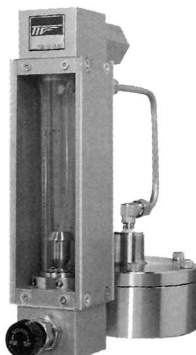
OTHER TYPES PURGE SETS

CP and CM series Purge sets

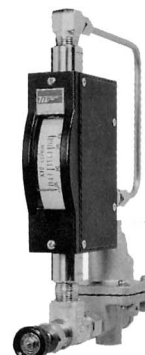
These are the combinations of constant flow valve and small size flowmeters for small ~ medium lines.



CP-21-100



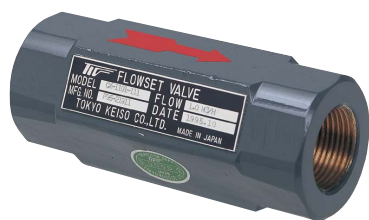
CP-31-500



CM-21-900

CX series In-Line type Flow Set valves

These are direct in-line installation type flow control valves to keep set flow.



CX-1101
For liquids, Fixed flow



CX-2000
For liquids, Adjustable flow



CX-1500
For gases, Fixed flow

* Specification is subject to change without notice.

TIV TOKYO KEISO CO., LTD.

Head Office : Shiba Toho Building, 1-7-24 Shibakoen, Minato-ku, Tokyo 105-8558

Tel : +81-3-3431-1625 (KEY) ; Fax : +81-3-3433-4922

e-mail : overseas.sales@tokyokeiso.co.jp ; URL : <http://www.tokyokeiso.co.jp>

