# TECHNICAL GUIDANCE

### TO MAINTAIN LIQUID FLOW RATE **CX-1510 Series** FLOW SET VALVE

FOR LIQUID APPLICATION

#### OUTLINE

CX-1510 FLOW SET VALVE is a constant flow valve for liquids of water or equivalent for water.

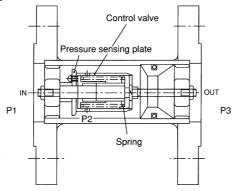
Even inlet or outlet pressure of process changes, CX-1510 maintains constant flow of liquid. CX-1510 is suitable for the stable supply of the water supply line of various facilities.

#### **OPERATION PRINCIPLE**

Water flow is introduced from inlet with pressure of P1.

The Inlet pressure P1 actuates the pressure sensing plate. The pressure sensing plate is connected to valve needle. A spring is assembled onto this valve needle unit.

The assembled spring acts so as to keep the differential pressure P2 constant and to keep constant flow even when outlet pressure P3 changes.

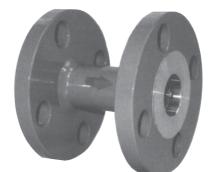


#### MODELCODE

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MODEL CODE				DESCRIPTION	
CX-1510-					
				MATERIAL CLASS 0 *1	
	1			MATERIAL CLASS 1	
	2			MATERIAL CLASS 2	
	Ζ			Others, Special	
0				15mm (1/2")	
				20mm ( <sup>3</sup> / <sub>4</sub> ")	
CONNECTION SIZE		2		25mm (1")	
		3		32mm (1 <sup>1</sup> / <sub>4</sub> ")	
		4		40mm (1 <sup>1</sup> / <sub>2</sub> ")	
		5		50mm (2")	
		6		65mm (2 <sup>1</sup> / <sub>2</sub> ")	
		7		80mm (3")	
		8		100mm (4")	
		Ζ		Others, Special	
CONNECTION RATING			1	Rc Screw *2	
			2	NPT Screw *2	
			3	JIS 10K Flange	
			Ζ	Others, Special	

\*1: Material class 1 (SUS304) or Material class 2 (SUS316) are available for screw connection versions.

\*2: Screw connection is available only for 15mm to 50mm. All sizes are available for flange version.



#### STANDARD SPECIFICATION

- Measuring fluid
- Available size : 15, 20, 25, 32, 40, 50, 65, 80, and 100
- Fluid Temp. : Max. 100°C
- Fluid Press. : Max. 1.2MPa
  - Note) Do not give the differential pressure beyond 0.05MPa rapidly.

: Water or Low viscosity liquids

- Control differential pressure range : 49 to 250kPa
- Process connection : Rc thread, NPT thread, JIS10K flange,
  - Others
- Possible setting range:

Meter size	Possible setting range (m <sup>3</sup> /h)			
15	0.7 to 1.1			
20	0.7 to 1.1			
25	0.9 to 2			
32	1.5 to 3.5			
40	3 to 6			
50	5.5 to 12			
65	12 to 20			
80	15 to 25			
100	22 to 30			

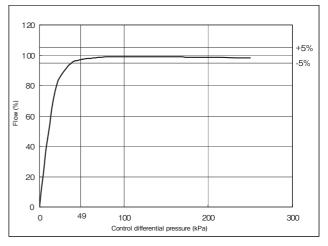
\*: Setting is factory set and not field adjustable

Control accracy

acy : ±5% (Against set value)

- Painting
- : Munsell 7.5 BG 4/1.5 (Body made of SUS
  - not painted)

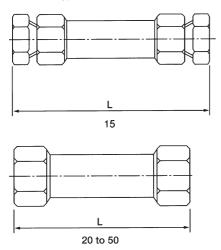
Control characteristics



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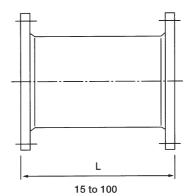
#### **MODEL CODE**

□ Screw connection type



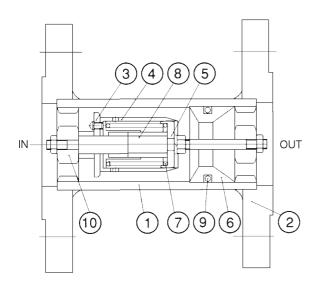
Mass (Approx.) Meter size L (mm) 15 150 0.9 20 110 0.6 25 140 1.0 32 150 1.3 40 170 1.6 50 200 3

□ Flange connection type



Meter size	L (mm)	Mass (Approx.)
15	80	1.3
20	80	1.6
25	110	3
32	110	3.5
40	130	4
50	160	5.5
65	200	8
80	230	10
100	270	14

#### MATERIAL CONSTRUCTION



No.	PART NAME	MATERIAL CLASS 0*	MATERIAL CLASS 1	MATERIAL CLASS 2
1	Body	SUS304	SUS304	SUS316
2	Flange	SS400	SUS304	SUS316
3	Press. sensing plate	SUS304	SUS304	SUS316
4	Valve	SUS304	SUS304	SUS316
5	Valve guide	SUS304	SUS304	SUS316
6	Valve sheet	SUS304	SUS304	SUS316
7	Spring	SUS304	SUS304	SUS316
8	Guide rod	SUS304	SUS304	SUS316
9	O ring	EPDM	EPDM	FPM
10	10 Shaft guide SCS13 (Less than 80, SCS14 (More than 100		SCS13 (Less than 80A) SCS14 (More than 100A)	SCS14

\*Material class 1 (SUS304) or Material class 2 (SUS316) are available for Screw connection versions.

\* Specification is subject to change without notice.

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