



# Electro-Pneumatic Control Valve for Steam **CV-COS**

**An Innovative Control Valve for  
Improving Steam Quality**

Control  
Valve

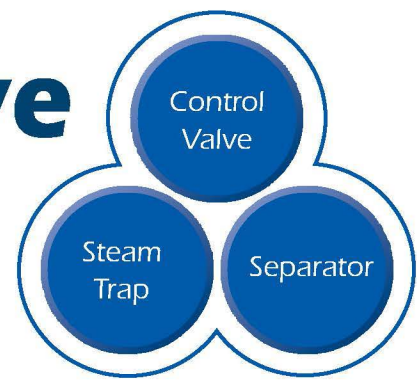


Steam  
Trap

Separator

# 3-in-1 Control Valve

TLV's CV-COS is a new type of compact electro-pneumatic control valve with an integrated cyclone separator and steam trap to improve steam quality.



## Actuator



### Compact and Easy to Use

Actuator with built-in I/P positioner saves space and simplifies system layout, piping, and maintenance. Zero/span adjustment can be performed by simple dial rotation.

## Steam Trap



### Prevents Water Hammer by Eliminating Condensate

Self-modulating free float steam trap continuously discharges condensate as it is separated.

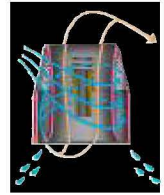
Usable with pressure/temperature sensors, flowmeters, and controllers.



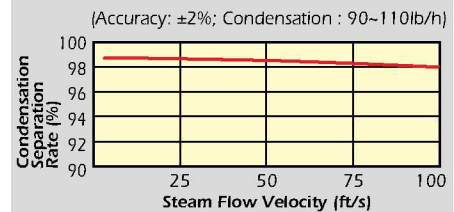
## Cyclone Separator

### Supplies Dry Steam and Prevents Scale Adhesion / Valve Erosion

Built-in cyclone separator eliminates condensate, achieving separation efficiency as high as 98%. Built-in screen with large surface area prevents scale adhesion, ensuring trouble-free operation.



### ● Flow Velocity and Efficiency

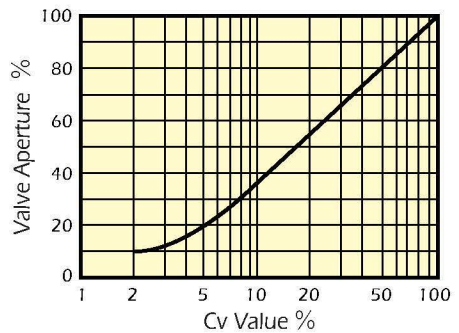


Separation rate (%) is given as:  

$$\frac{\text{quantity of condensate discharged}}{\text{quantity of incoming condensate}} \times 100$$

## Electro-Pneumatic Control Valve For Steam CV-COS

### ● Equal Percentage



## Specifications

Size (in)	Connection (Flange)	Body Material	Max. Operating Pressure PMO	Max. Operating Temp. TMO	Valve Characteristic	Rangeability	Fail-Safe Position
1/2, 3/4, 1, 1 1/2, 2	ASME	Cast Stainless Steel Cast Iron*	230 psig (1/2" - 1 1/2") 150 psig (2")	428 °F	Equal Percentage	50 : 1	Valve CLOSED

Note: Air for actuator must be oil-free, filtered to 5 μm

\* Option



To avoid abnormal operation, accidents or serious injury, DO NOT use this product outside the specification range. Local regulations may restrict this product below the conditions quoted.

## Cv Values

Size (in)	1/2	3/4	1	1 1/2	2
Cv	3.5	6.0	9.0	27	40
Seat Diameter (in)	1 1/32	1 1/16	1 1/2	1 1/2	1 7/8



DO NOT DISASSEMBLE OR REMOVE THIS PRODUCT WHILE IT IS UNDER PRESSURE. Allow internal pressure of this product to equal atmospheric pressure and its surface to cool to room temperature before disassembling or removing. Failure to do so could cause burns or other injury. READ INSTRUCTION MANUAL CAREFULLY.

## TLV CORPORATION

13901 South Lakes Drive, Charlotte, NC 28273-6790

Phone: 704-597-9070 Fax: 704-583-1610

E-mail: [tlv@tlvengineering.com](mailto:tlv@tlvengineering.com)

For Technical Service 1-800 "TLV TRAP"



Manufacturer

**TLV CO., LTD.**

Kakogawa, Japan

is approved by LRQA Ltd. to ISO 9001/14001

ISO 9001/ISO 14001

