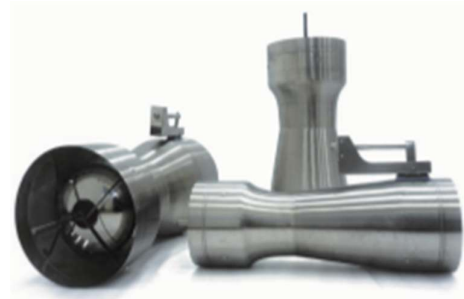


## General Description

The **Smart Valve** is a factory calibrated, easy to install and commission venturi air flow control valve. It provides fast-acting, stable and precise airflow control of equipment exhaust, general exhaust and supply air for labs, vivaria and cleanroom applications.

**Smart** Constant Venturi Valve uses a mechanical pressure independent regulator that decouples the pressure independence function from the air flow control function. As long as the differential pressure across the valve is in the range of 150 to 750 Pa, the valve will respond to any duct static pressure fluctuation within less than 1 second with an accuracy of  $\pm 5\%$ .

The **Smart** Valve is orientation sensitive. The valve must be ordered for horizontal, vertical UP, vertical DOWN orientation.

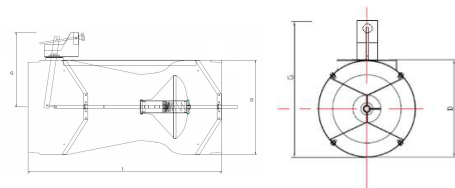


CAV Venturi Valve

Every **Smart Valve** is factory calibrated using 0.5% accuracy instrumentation traceable to NIST using a 3 points characterization curve. Every **Smart** valve is identified by a unique serial number and its minimum and maximum capacity

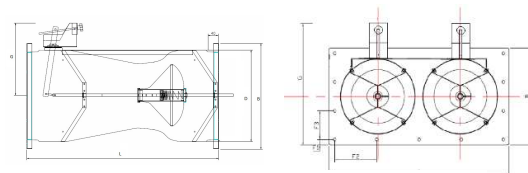
## Specifications & Dimensions

Table 1: Valve					
Designation		Description	Size	Flow range (m³/h)	Weight (kg)
Material	Body & Cone	Stainless Steel 304, 316, Heresite or PFA coating optional	108	60 - 1,150	10.00
	Shaft	SS316, PFA coating optional	110	85 - 1700	11.00
	Bracket	SS316, PFA coating optional	210	170 - 3,400	20.00
	Spring	Stainless steel spring	112	150 - 2,500	12.00
Operating pressure range		150 to 750 Pa	212	300 - 5,000	23.00
Accuracy		±5% command signal	114	340 - 4,250	14.00
Operating range	Temperature	0°C to 50°C	214	680 - 8,500	29.00
	R.H.	10% to 90% non-condensing			



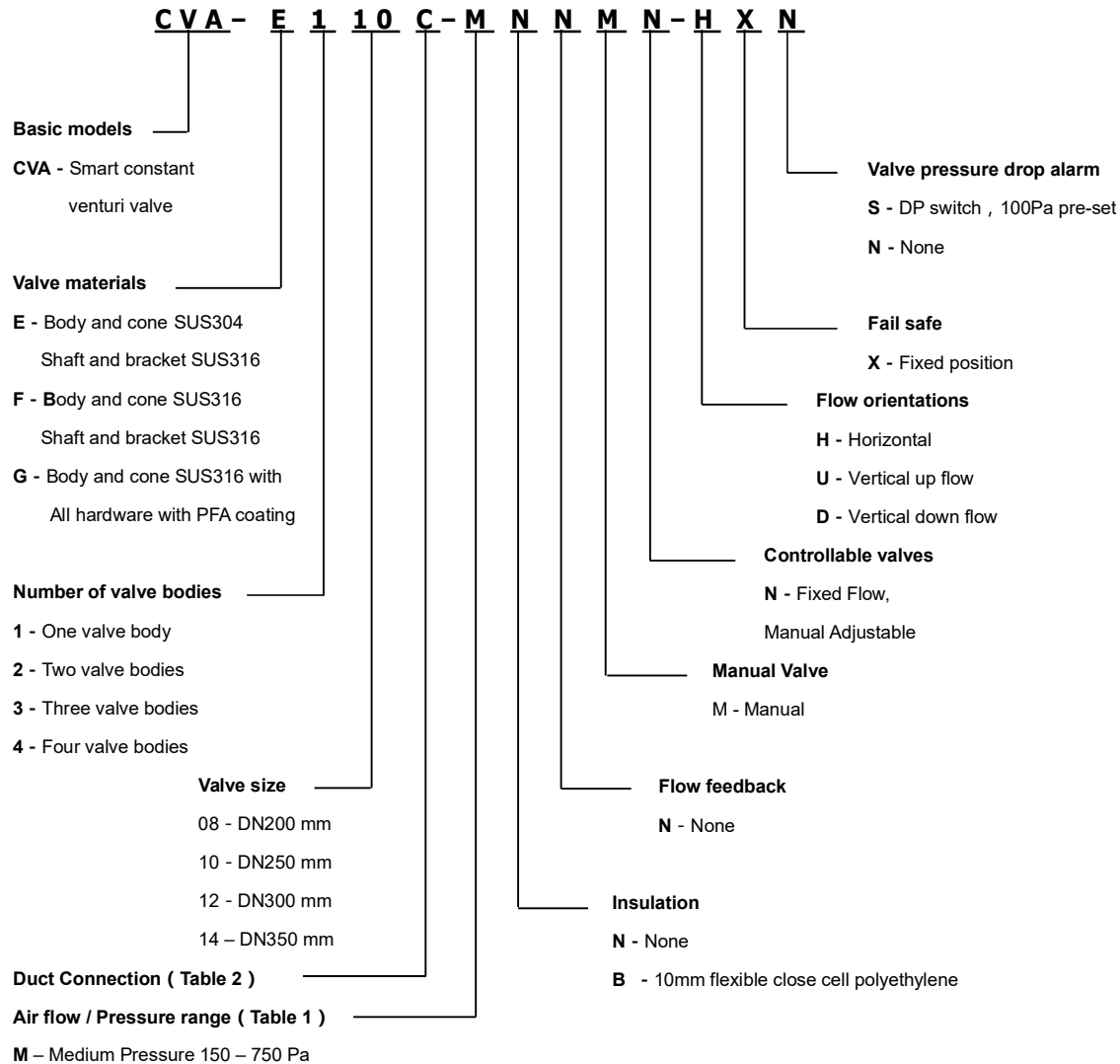
Single body Round slip-fit

Table 2									
Valve code	Duct mounting	Dimensions (mm)							
		D	A	B	L	G	F1	F2	F3
108 - C30	Round slip-fit	200	X	X	596	330	X	X	X
110 - C40	Round slip-fit	250	X	X	554	378	X	X	X
210 - R42	Rectangular flange	X	580	310	554	416	15	110	94
112 - C50	Round slip-fit	300	X	X	680	435	X	X	X
212 - R52	Rectangular flange	X	680	360	680	455	15	130	110
114 - C60	Round slip-fit	365	X	X	763	471	X	X	X
214 - R62	Rectangular flange	X	801	422	763	500	17	192	97



Dual bodies Rectangular flanged

## Models Code



**Note: CAV Stainless Steel *Smart* Venturi Air Valve additional features.**



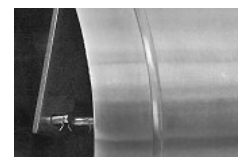
New SS316 Material Venturi Valve



Improved CAV Airflow  
Adjuster with factory  
calibrated airflow vs scale



Improved CAV locking and  
adjustment mechanism for  
airflow



Additional groove for valve  
body strengthening and  
ease in installation.