

V750 X-Sensor with Integral Damper AMCA Certification Rating

Model : V750-XX-X

Installation type : Air Measuring Station, X-Sensor with integral damper

Operational type : differential pressure

Manufacturer's conversion formula : $Q_{ams} = K \times \sqrt{P_{ams}}$

Optional appurtenances : VAV damper



Sizes tested are 6, 10 and 14, and certification applies to the following sizes:

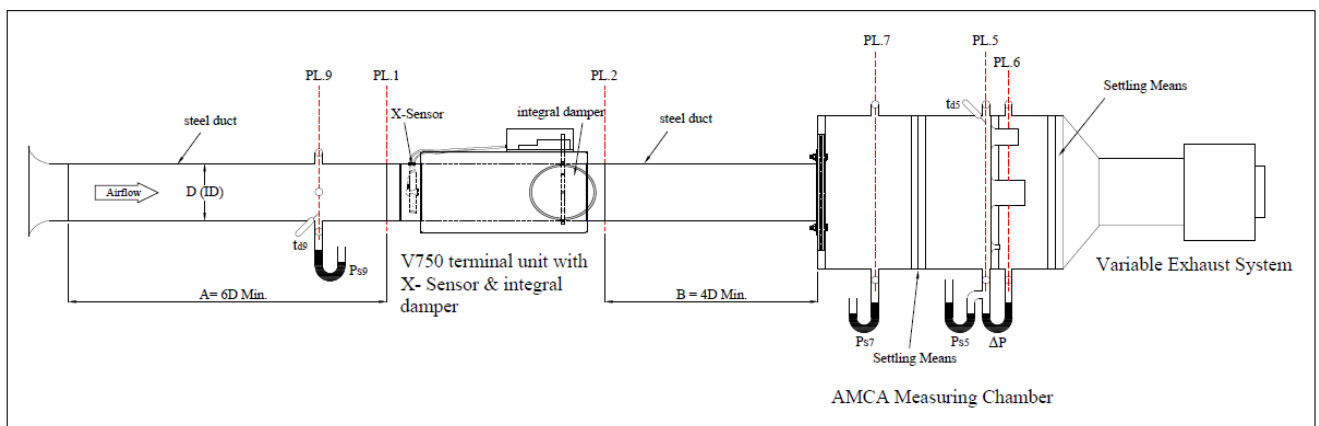
VAV terminal units that are AMCA 610 certified		
VAV Size	K	Model Number Example
		I: Pressure independent C: Constant Air Volume
5	35.1	V750-05-I and V750-05-C
6	54.15	V750-06-I and V750-06-C
7	78.5	V750-07-I and V750-07-C
8	109.1	V750-08-I and V750-08-C
10	175.8	V750-10-I and V750-10-C
12	255.6	V750-12-I and V750-12-C
14	348	V750-14-I and V750-14-C
16	443.1	V750-16-I and V750-16-C
18	563.8	V750-18-I and V750-18-C

OLS Manufacturing Co Pte Ltd. certifies that V750 X-Sensor with integral damper shown herein is licensed to bear the AMCA seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 611 and comply with the requirements of the AMCA Certified Ratings Program.

NOTES:

- Performance ratings include the effect of integral dampers in the air stream.
- The performance of V750 X-Sensor is AMCA certified to accuracy* of $\pm 3.7\%$ or better in the velocity range of 4m/s to 13m/s.

Performance Data According to AMCA 610-06 (R2012) Test Setup Figure 1



OLS MANUFACTURING CO. PTE LTD

Subsidiary Company: Connols-Air (S) Pte Ltd

Reference Airflow and Percent Accuracy of V750 X-Sensor

Size 6

Det.No.	$Q_{ams}(m^3/s)$	$Q_{ref}(m^3/s)$	Diff(m^3/s)	Diff (%)
1	0.226	0.229	-0.003	-1.44
2	0.195	0.198	-0.004	-1.80
3	0.155	0.159	-0.004	-2.58
4	0.120	0.124	-0.005	-3.70
5	0.091	0.090	0.001	1.11
6	0.073	0.070	0.003	3.74

Size 10

Det.No.	$Q_{ams}(m^3/s)$	$Q_{ref}(m^3/s)$	Diff(m^3/s)	Diff (%)
1	0.589	0.590	-0.001	-0.19
2	0.499	0.497	0.003	0.57
3	0.390	0.392	-0.002	-0.46
4	0.291	0.294	-0.003	-1.13
5	0.194	0.196	-0.002	-0.84
6	0.144	0.146	-0.002	-1.32

Size 14

Det.No.	$Q_{ams}(m^3/s)$	$Q_{ref}(m^3/s)$	Diff(m^3/s)	Diff (%)
1	1.281	1.265	0.016	1.23
2	1.066	1.069	-0.003	-0.32
3	0.865	0.877	-0.012	-1.37
4	0.684	0.684	0.000	0.05
5	0.481	0.486	-0.004	-0.86
6	0.381	0.385	-0.004	-1.03

Airflow Resistance Test

Size 6

Det.No.	$Q(m^3/s)$	$V(m/s)$	$\Delta P_D(Pa)$
1	0.229	12.96	55
2	0.198	11.22	40
3	0.159	9.03	26
4	0.124	7.05	15
5	0.090	5.1	7
6	0.070	3.97	4

Size 10

Det.No.	$Q(m^3/s)$	$V(m/s)$	$\Delta P_D(Pa)$
1	0.590	12.02	23
2	0.497	10.12	16
3	0.392	7.99	9
4	0.294	6.00	5
5	0.196	3.99	2
6	0.146	2.98	1

Size 14

Det.No.	$Q(m^3/s)$	$V(m/s)$	$\Delta P_D(Pa)$
1	1.265	13.15	22
2	1.069	11.11	15
3	0.877	9.11	9
4	0.684	7.11	5
5	0.486	5.05	2
6	0.385	4.00	1

STANDARD NOTATION

Q_{ams}	The air flow rate of unit under test	V	Flow rate
Q_{ref}	AMCA airflow rate at test condition use chamber test	ΔP_{DS}	Pressure differential (device + system) at standard air
Diff (%)	% error vs. reference airflow: $\frac{Q_{ams}-Q_{ref}}{Q_{ref}} \times 100\%$	ΔP_S	Pressure differential (system only) at standard air
Q	Volumetric flow rate	ΔP_D	Pressure differential (device only) at standard air