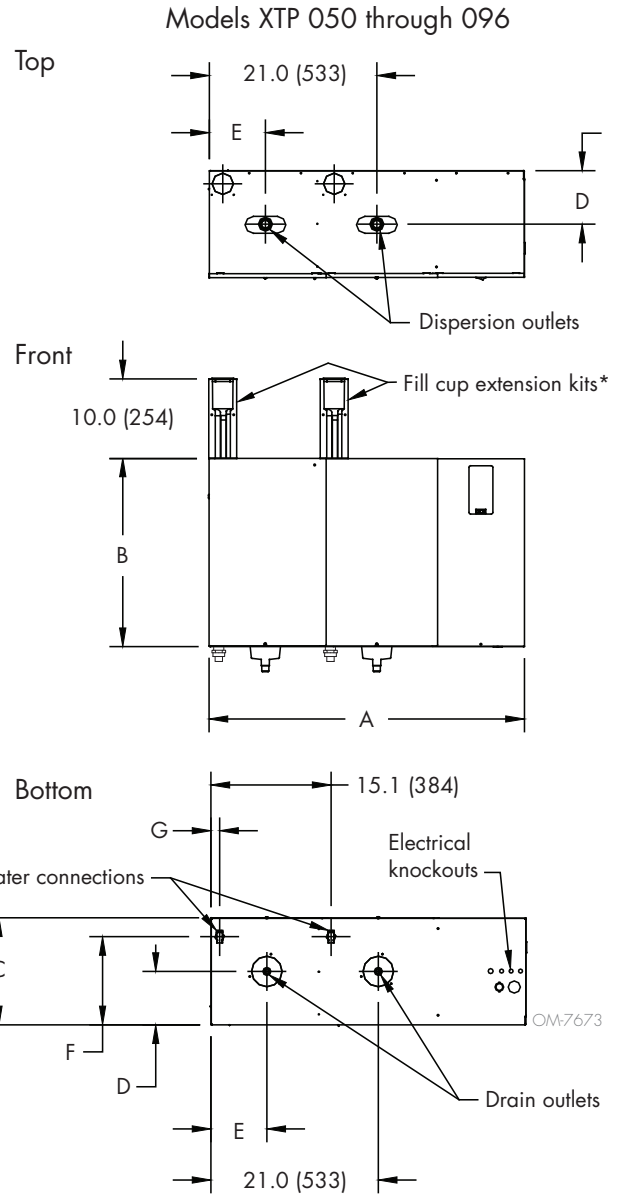
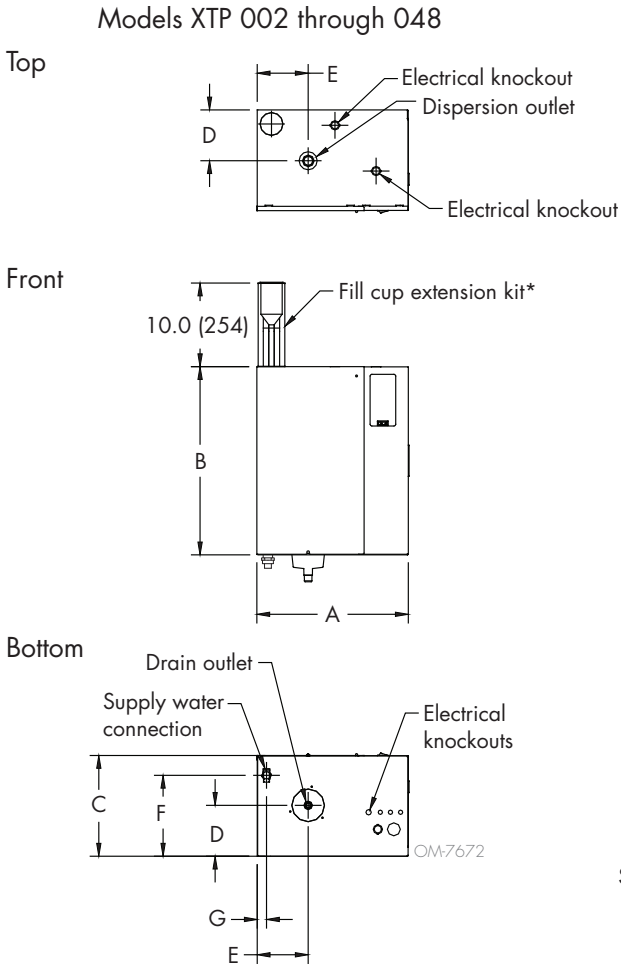


XT Series humidifier dimensions

See dimensions by model number in Table 4-1

FIGURE 1-1: XT SERIES HUMIDIFIER DIMENSIONAL DRAWINGS



- Notes:
- * Fill cup extension (Figure 1-1) is required for the following:
 - All XT Series humidifiers using Ultra-sorb or Rapid-sorb dispersion
 - When developed length of steam tubing is more than 20' (6 m) or duct static pressure exceeds 2" wc (498 Pa)
 - Labeled dimensions: inches (millimeters).
 - See mounting dimensions in Figure 9-1.

XT Series humidifier dimensions

See dimensional drawings in Figure 1-1

Table 2-1:
XT Series humidifier dimensions by model number

Dimension	Description	Model XTP							
		002, 003, 006		010, 017		025, 033, 042, 048		050, 067, 083, 096	
		inches	mm	inches	mm	inches	mm	inches	mm
A	Cabinet width	14.6	370	17.7	450	19.9	504	39.6	1005
B	Cabinet height	20.6	523	24.1	612	25.6	650	25.6	650
C	Cabinet depth	8.7	221	11.8	300	13.4	340	13.4	340
D	Cabinet back edge to steam/drain outlet centers	4.5	114	6.0	152	6.7	170	6.7	170
E	Cabinet left edge to steam/drain outlet centers	4.4	112	6.0	152	7.0	178	7.0	178
F	Cabinet back edge to supply water connection center	6.7	170	9.5	241	11.1	282	11.1	282
G	Cabinet left edge to supply water connection center	1.0	25	1.0	25	1.1	28	1.1	28

Table 2-2:
XT Series humidifier weights by model number

	Model XTP									
	002, 003		006		010, 017		025, 033, 042, 048		050, 067, 083, 096	
	lbs	kg	lbs	kg	lbs	kg	lbs	kg	lbs	kg
Shipping weight	37	17	37	17	50	23	64	29	139	63
Maximum operating weight	38	17	46	21	79	36	115	52	219	99

XT Series humidifier mounting dimensions

FIGURE 3-1: XT SERIES HUMIDIFIER MOUNTING KEYHOLE LOCATIONS

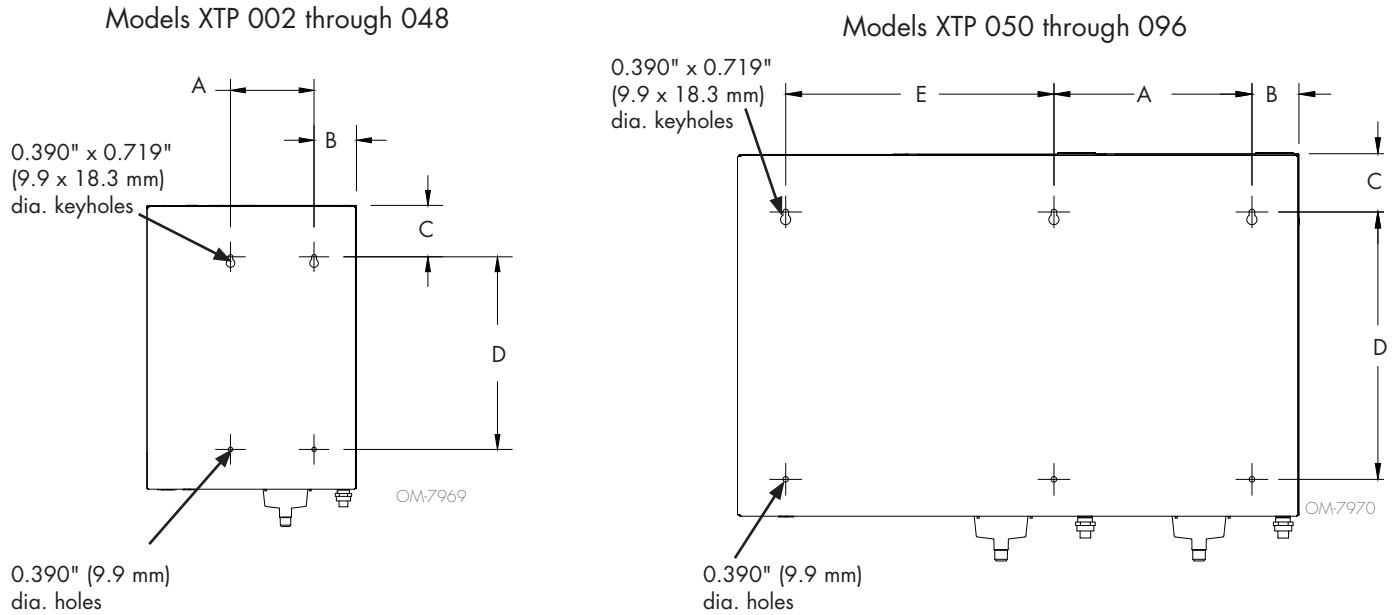
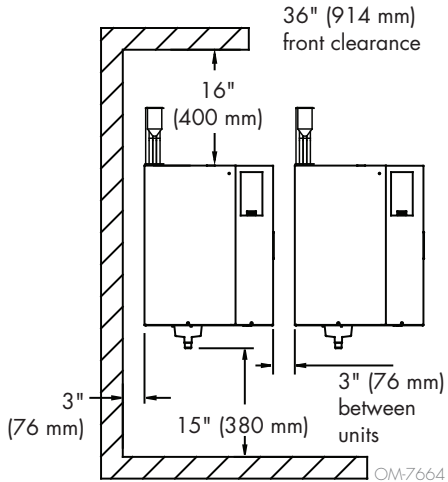


Table 3-1:
XT Series humidifier mounting keyhole dimensions

Dimension	Model XTP							
	002, 003, 006		010, 017		025, 033, 042, 048		050, 067, 083, 096	
	inches	mm	inches	mm	inches	mm	inches	mm
A	3.9	100	7.1	180	7.5	190	14.0	356
B	3.0	75	3.6	92	3.4	86	3.3	84
C	3.2	81	4.4	112	4.1	104	4.1	104
D	14.0	355	16.3	414	18.9	480	18.9	480
E	—	—	—	—	—	—	19.0	483

XT Series humidifier clearances and fill cup extension kit

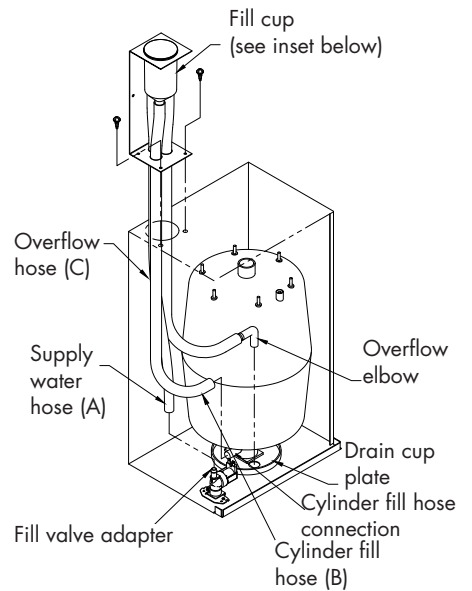
FIGURE 4-1: XT SERIES HUMIDIFIER RECOMMENDED MINIMUM CLEARANCES



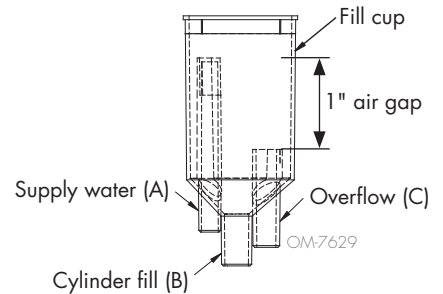
A fill cup extension (Figure 4-2) is required for the following:

- All XT Series humidifiers using Ultra-sorb or Rapid-sorb dispersion
- When developed length of steam tubing is more than 20' (6 m) and duct static pressure exceeds 2" wc (498 Pa)

FIGURE 4-2: FILL CUP EXTENSION KIT



OM7971-XT



XT Series humidifier fusing and line currents

Table 5-1:
Line currents and recommended fusing for XT Series humidifiers

Model	Nominal steam capacity		kW	Phase	Volts	Maximum line current (amps)	Recommended fusing (amps)	
	lbs/hr	kg/h						
002	5	2	1.7	1	120	17	25	
					208	10	15	
					230	8	15	
					240	8	15	
003	10	5	3.3	1	208	19	25	
					230	17	25	
					240	17	25	
					277	14	20	
					400	10	13	
					480	8	15	
				600	7	10		
				3	208	11	15	
					240	10	15	
					400	6	10	
480	5	10						
006	18	8	6.0	1	600	4	10	
					208	35	45	
					230	31	40	
					240	30	40	
					277	26	35	
					400	18	25	
					480	15	20	
				600	12	15		
				3	208	20	25	
					240	17	25	
					400	10	13	
					480	9	15	
					600	7	10	
					010	30	14	10.0
240	29	40						
400	17	25						
480	14	20						
600	12	15						
017	50	22	16.5	3				
					240	48	60	
					400	29	40	
					480	24	35	
					600	19	25	
025	75	34	25.0	3	400	43	63	
					480	36	50	
					600	29	40	
033	100	45	33.3	3	400	58	80	
					480	48	70	
					600	39	50	
042	125	57	41.7	3	400	72	100	
					480	60	80	
					600	48	70	
048	143	65	47.8	3	400	80	100	
					480	69	90	
					600	55	70	
050*	150	68	50.0	3	400	2 x 43	2 x 63	
					480	2 x 36	2 x 50	
					600	2 x 29	2 x 40	
067*	198	90	66.7	3	400	2 x 58	2 x 80	
					480	2 x 48	2 x 70	
					600	2 x 39	2 x 50	
083*	250	113	83.3	3	400	2 x 72	2 x 100	
					480	2 x 60	2 x 80	
					600	2 x 48	2 x 70	
096*	287	130	95.7	3	400	2 x 80	2 x 100	
					480	2 x 69	2 x 90	
					600	2 x 55	2 x 70	

* These models have two steam cylinders and require independent service connections.

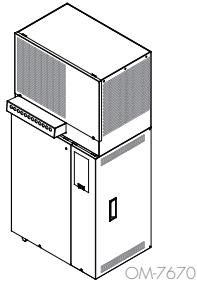
XT steam blower

FIGURE 6-1: TOP- AND REMOTE-MOUNTED XT STEAM BLOWER

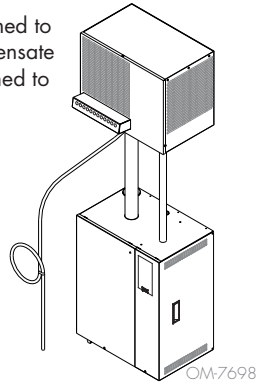
Mounted on top of humidifier

Mounted remotely from humidifier

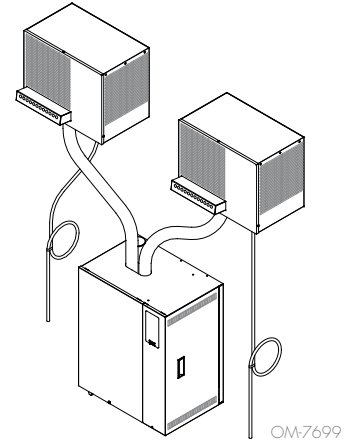
Condensate returned to steam cylinder fill hose



Condensate returned to open drain (condensate can also be returned to humidifier fill cup)



One XTP humidifier with two XT steam blowers



XT steam blowers

XT steam blowers, designed to disperse steam directly into large open spaces, are particularly useful in finished spaces and rooms where there are no air-handling ducts.

There are two XT steam blower models:

- SDU-006, for capacities up to 20 lbs/hr (9.1 kg/h), can be directly mounted on Models XTP 002 through 006.
- SDU-017, for capacities up to 50 lbs/hr (22.7 kg/h), can be directly mounted on Models XTP 010 and 017.
- XT Series humidifiers can be configured to operate with one or two steam blowers. Multiple SDU-017 are used remotely with Model XTP 025 or 033. See Table 6-1.

Table 6-1:
Single or multiple XT steam blowers for XT Series humidifiers*

Model	SDU-006 per kit	SDU-017 per kit
XTP		
002	1	—
003	1	—
006	1	—
010	—	1
017	—	1
025	—	2
033	—	2
042 through 096	n/a	n/a

* XT steam blowers are sold as kits to match the associated XT Series humidifier. The number of XT steam blowers per kit are shown in this table.

XT steam blower rise, spread, throw

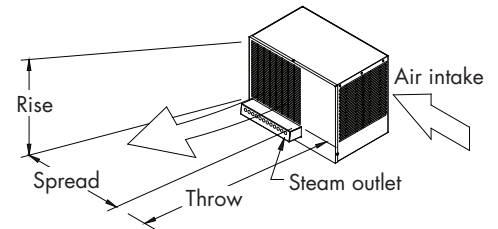
On a call for humidity, the controller closes the contactors to energize the humidifier electrodes and the XT steam blower. When the call for humidity is satisfied, the controller opens the humidifier contactor, which stops the steam blower.

As steam is discharged from the XT steam blower, it quickly cools and turns to a visible fog that is lighter than air. As this fog is carried away from the XT steam blower by the airstream, it tends to rise toward the ceiling. If the fog contacts solid surfaces (columns, beams, ceiling, pipes, etc.) before it disappears, it can condense and drip. The greater the space relative humidity, the further the fog will rise, spread, and throw.

Table 7-1 lists the maximum rise, spread, and throw non-wetting distances for XT Series humidifiers with XT steam blowers. Surfaces cooler than ambient temperature, or objects located within this minimum dimension, can cause condensation and dripping. To avoid steam impingement on surrounding areas, observe the minimum non-wetting distances in the table.

XT steam blowers are field wired to the XT Series humidifier blower terminals. A wiring diagram is included with the XT steam blower.

FIGURE 7-1: XT STEAM BLOWER RISE, SPREAD, THROW



OM-7686

Table 7-1:
XT steam blower minimum non-wetting distances

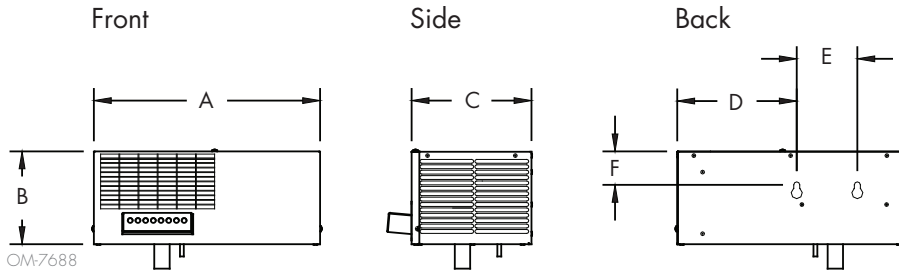
Model	Nominal steam capacity		30% RH @ 70 °F (21 °C)						40% RH @ 70 °F (21 °C)						50% RH @ 70 °F (21 °C)						60% RH @ 70 °F (21 °C)					
			Rise		Spread		Throw		Rise		Spread		Throw		Rise		Spread		Throw		Rise		Spread		Throw	
XTP	lbs/hr	kg/h	ft	m	ft	m	ft	m	ft	m	ft	m	ft	m	ft	m	ft	m	ft	m	ft	m	ft	m	ft	m
002	5	2	0.7	0.2	0.9	0.3	1.9	0.6	0.8	0.2	1.2	0.4	2.1	0.6	1.1	0.3	1.5	0.5	2.5	0.8	1.5	0.5	1.5	0.5	3.2	1.0
003	10	5	1.4	0.4	1.9	0.6	3.8	1.2	1.7	0.5	2.4	0.7	4.3	1.3	2.3	0.7	3.0	0.9	5.0	1.5	3.0	0.9	3.0	0.9	6.5	2.0
006	20	8	2.5	0.8	2.8	0.9	6.5	2.0	3.0	0.9	3.3	1.0	7.4	2.3	3.8	1.2	4.0	1.2	8.5	2.6	4.0	1.2	4.0	1.2	10.0	3.0
010	30	14	3.1	0.9	3.0	0.9	7.5	2.3	3.6	1.1	3.4	1.0	8.7	2.7	4.3	1.3	4.0	1.2	9.5	2.9	4.2	1.3	3.5	1.1	11.0	3.4
017	50	22	3.3	1.0	3.1	0.9	9.6	2.9	3.8	1.2	3.5	1.1	10.7	3.3	4.4	1.3	4.0	1.2	12.0	3.7	4.8	1.5	4.7	1.4	14.0	4.3
025*	75	34	3.3	1.0	3.1	0.9	9.6	2.9	3.8	1.2	3.5	1.1	10.7	3.3	4.4	1.3	4.0	1.2	12.0	3.7	4.8	1.5	4.7	1.4	14.0	4.3
033*	100	45	3.3	1.0	3.1	0.9	9.6	2.9	3.8	1.2	3.5	1.1	10.7	3.3	4.4	1.3	4.0	1.2	12.0	3.7	4.8	1.5	4.7	1.4	14.0	4.3

Rise: Minimum non-wetting height above the steam outlet of the XT steam blower
 Spread: Minimum non-wetting width from the steam outlet of the XT steam blower
 Throw: Minimum non-wetting horizontal distance from the steam outlet of the XT steam blower
 * These XT Series humidifier models use two XT steam blowers.

XT steam blower dimensions

FIGURE 8-1: XT STEAM BLOWER DIMENSIONS

SDU-006E shown



OM-7688

The XT steam blower can be mounted on top of an XT Series humidifier cabinet, or wall-mounted remotely from the humidifier. See Figure 8-1.

SDU-006E, for capacities up to 20 lbs/hr (9.1 kg/h), can be directly mounted on Models XTP 002 through 006.

SDU-017E, for capacities up to 50 lbs/hr (22.7 kg/h), can be directly mounted on Models XTP 010 and 017.

XT Series humidifiers can be configured to operate with one or two steam blowers. Multiple SDU-017 are used remotely with Model XTP 025 or 033. See Table 8-2.

Note: XT steam blower installation must comply with governing codes.

Dimension	SDU-006E		SDU-017E	
	inches	mm	inches	mm
A	14.7	373	17.9	455
B	6.0	152	13.8	350
C	7.8	198	11.0	279
D	3.0	76	3.6	91
E	3.9	99	7.1	180
F	2.7	69	4.2	107

Model	SDU-006 per kit	SDU-017 per kit
XTP 002	1	—
003	1	—
006	1	—
010	—	1
017	—	1
025	—	2
033	—	2
042 through 096	n/a	n/a

* XT steam blowers are sold as kits to match the associated XT Series humidifier. The number of XT steam blowers per kit are shown in this table.

Model	Maximum capacity		Shipping weight		Operating weight		Volume airflow		Current draw at 115V (50/60 Hz)	Input power	Noise
	lbs/hr	kg/h	lbs	kg	lbs	kg	cfm	m ³ /min			
SDU-006E	20	9.1	14.0	6.4	11.0	5.0	106	3.0	0.16 A	17 W	49 dBA
SDU-017E	50	22.7	29.0	13.2	24.0	10.9	665	18.8	0.23 A	23 W	53 dBA

Notes:

- XT steam blowers ship separately from XT Series humidifiers.
- Noise measurements taken 6.5' (2 m) in front of XT steam blower cabinet.

Interconnecting steam hose and tubing

Table 9-1:
Insulated 1½" (DN40) steam tubing maximum lengths for Models XTP 002 through 017

Model XTP	Maximum developed length*	
	ft	m
002	13	4.0
003	25	7.6
006	50	15.2
010**	50	15.2
017**	50	15.2

Notes:

- For larger XT Series humidifier models, see Table 9-2.
- Values in this table are based on condensate flowing with steam (steam tubing pitched toward dispersion device).
- * Maximum developed lengths are based on 5% steam loss in tubing. Developed length equals measured length plus 50% of measured length to account for fittings.
- ** Values in this table are based on duct static pressure of 2" wc (498 Pa). If maximum developed length is more than 20' (6 m) or duct static pressure exceeds 2" wc (498 Pa), a fill cup extension kit (Figure 4-2) is required.

CONDENSATE CONTROL AND COLLECTION

Controlling condensate flow and collection in an XT Series humidifier system is critical to performance. To maximize humidifier performance:

- See Tables 9-1 and Table 9-2.
- Follow all installation recommendations for your specific humidifier and dispersion assembly in the *XT Series Installation, Operation, and Maintenance Manual (IOM)*, available at www.dristeem.com.

Table 9-2:
Maximum steam carrying capacity and length of interconnecting steam hose and tubing for Models XXTP 025 through XTP096

Model XTP	DriSteem steam hose*						Copper or stainless steel tubing (Insulate tubing to minimize loss of capacity and efficiency.)					
	Hose I.D.		Maximum capacity per cylinder [†]		Maximum length ^{††}		Tube size		Maximum capacity per cylinder [†]		Maximum developed length ^{†††}	
	inches	DN	lbs/hr	kg/h	ft	m	inches	DN	lbs/hr	kg/h	ft	m
025, 050**	1½	40	75	34.0	10	3	1½	40	75	34.0	100	30
033, 067**	2	50	100	45.4	10	3	2	50	100	45.4	100	30
042, 083**	2	50	125	56.7	10	3	2	50	125	56.7	100	30
048, 096**	2	50	143	65.0	10	3	2	50	143	65.0	100	30

Notes:

- See Table 9-1 for XT Series humidifiers with lower capacities using 1½" steam tubing.
- Values in this table are based on XT Series humidifiers with fill cup extensions, and condensate flowing in direction of steam (steam hose or tubing pitched toward dispersion device).
- * When using steam hose, use DriSteem steam hose for best results. Field-supplied hose may have shorter life and may cause foaming in cylinder, resulting in condensate discharge at dispersion assembly. Do not use steam hose for outdoor applications.
- ** These models have two steam cylinders.
- [†] For Models XTP 050 through XTP096, capacities listed are maximum steam carrying capacity per tube attached to each cylinder, with separate steam tubing from each cylinder to connection on dispersion device. See the XT Series IOM (available at www.dristeem.com).
- ^{††} DriSteem recommends 10' (3 m) maximum steam hose length pitched at 2"/ft (1.5%). Steam hose can sag if not supported for its full length. Sagging leads to collecting condensate and system pressure issues. Tubing is less prone to sagging and can allow for 1/8"/ft (1%) pitch minimum and longer runs.
- ^{†††} Developed length equals measured length plus 50% of measured length to account for fittings.