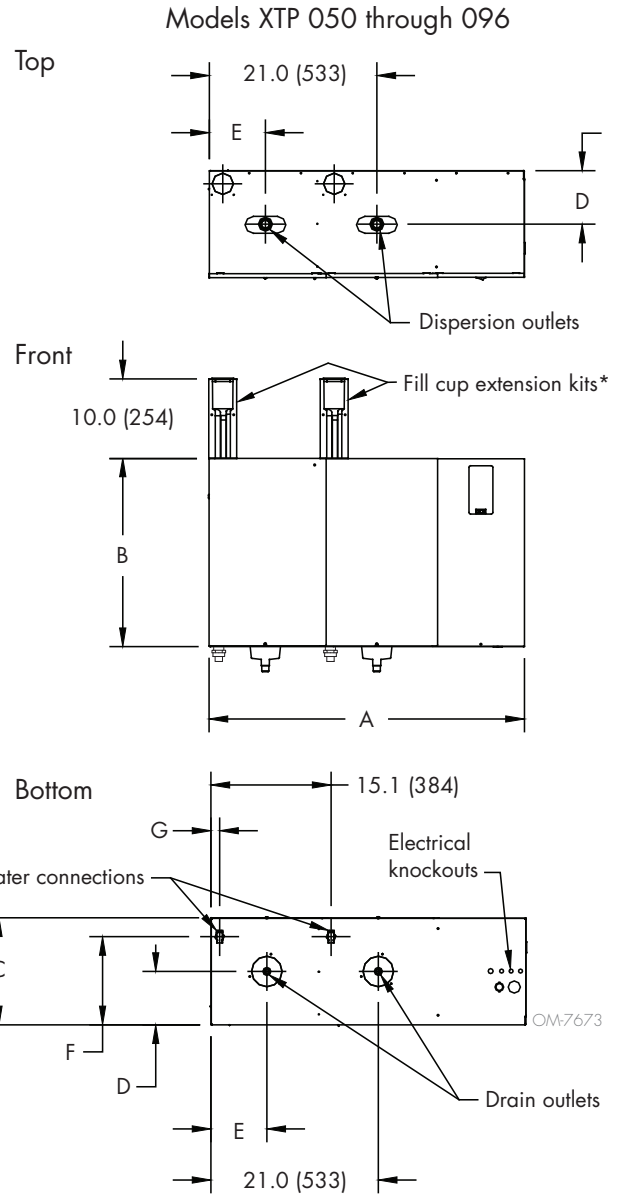
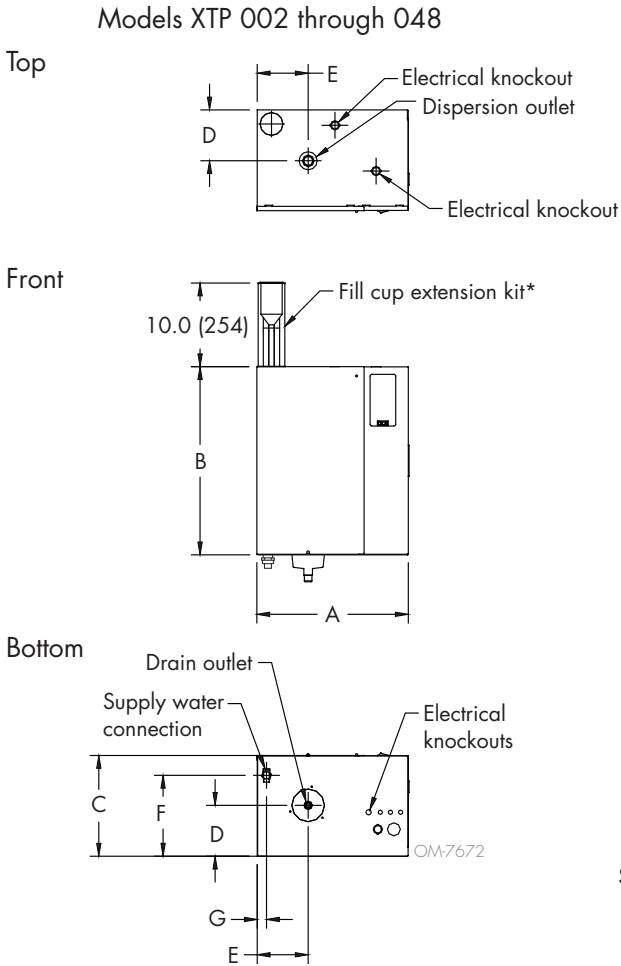


# XT Series humidifier dimensions

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

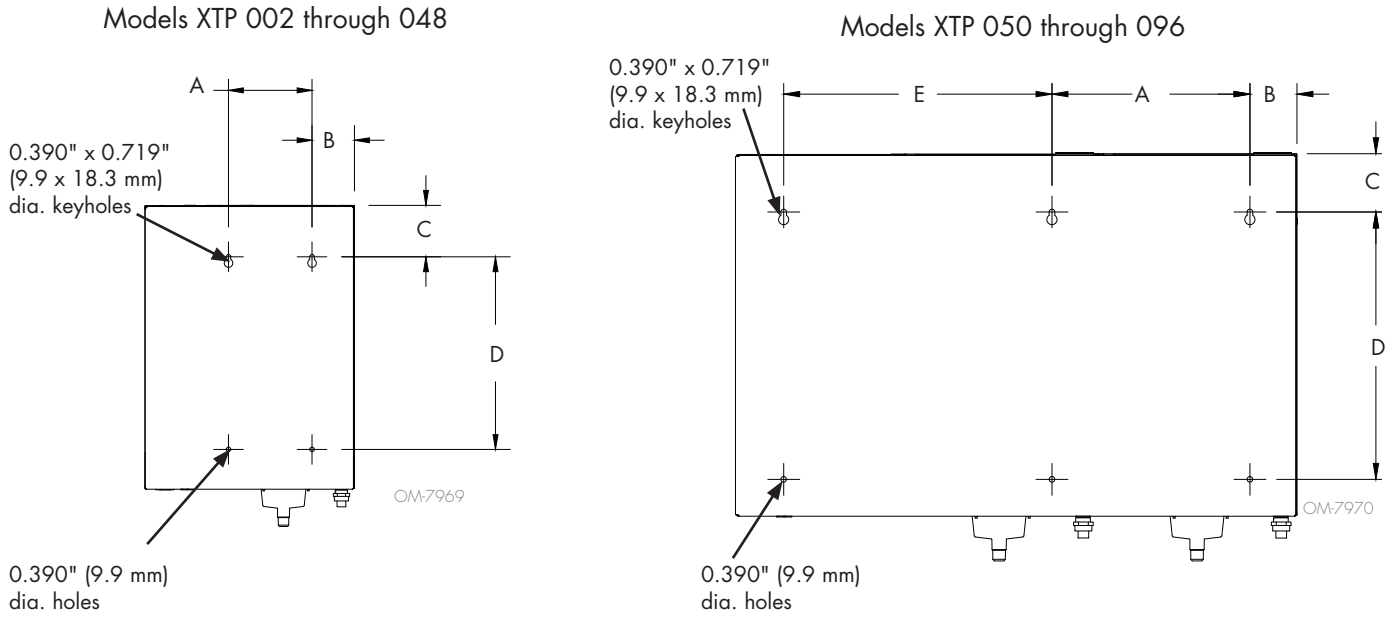
| Dimension | Description   | Model XTP     |     |          |     |                    |     |                    |      |
|-----------|---|---------------|-----|----------|-----|--------------------|-----|--------------------|------|
|           |   | 002, 003, 006 |     | 010, 017 |     | 025, 033, 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**

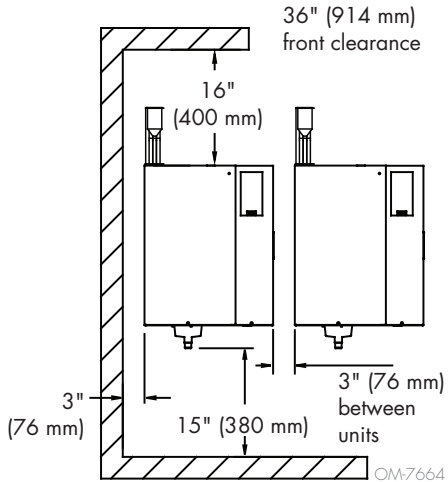


**Table 3-1:**  
XT Series humidifier mounting keyhole dimensions

| 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

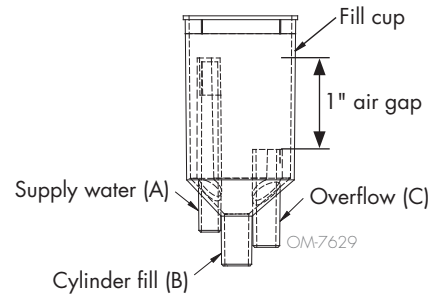
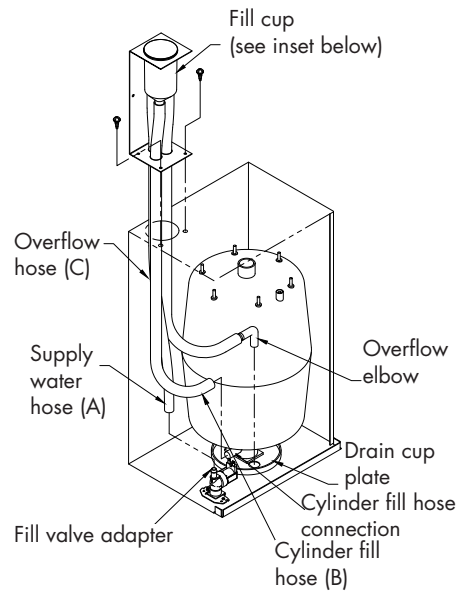
**FIGURE 4-1: XT SERIES HUMIDIFIER RECOMMENDED MINIMUM CLEARANCES**



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**



# 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.

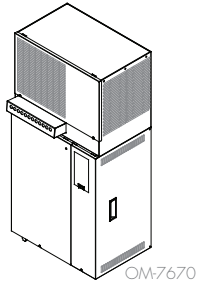
# XT steam blower

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

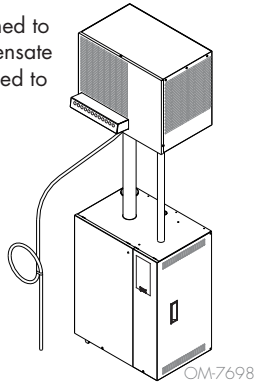
Mounted on top of humidifier

Mounted remotely from humidifier

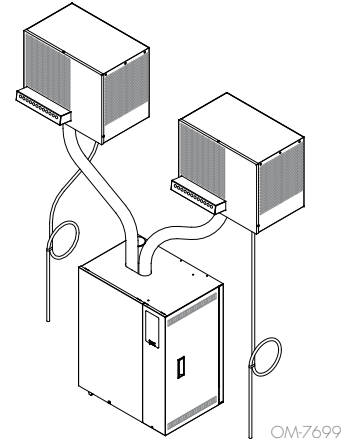
Condensate returned to steam cylinder fill hose



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

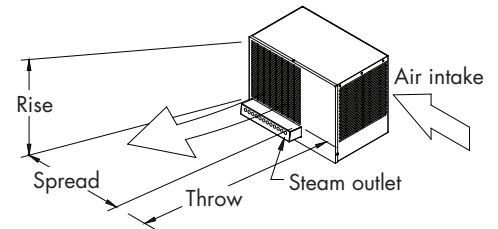
On a call for humidity, the controller closes the contactors to energize the humidifier electrodes and the XT steam blower. When the call for humidity is satisfied, the controller opens the humidifier contactor, which stops the steam blower.

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

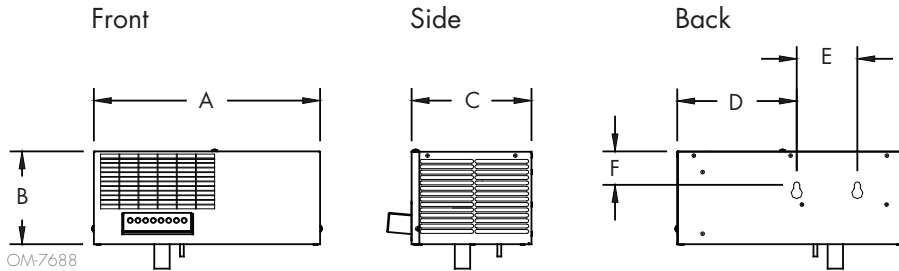
| Model | Nominal steam capacity |      | 30% RH @ 70 °F (21 °C) |     |        |     |       |     | 40% RH @ 70 °F (21 °C) |     |        |     |       |     | 50% RH @ 70 °F (21 °C) |     |        |     |       |     | 60% RH @ 70 °F (21 °C) |     |        |     |       |     |
|-------|------------------------|------|------------------------|-----|--------|-----|-------|-----|------------------------|-----|--------|-----|-------|-----|------------------------|-----|--------|-----|-------|-----|------------------------|-----|--------|-----|-------|-----|
|       |                        |      | 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 <sup>3</sup> /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 | Maximum developed length* |      |
|-------|---------------------------|------|
|       | ft                        | m    |
| XTP   |                           |      |
| 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](http://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      | DriSteem steam hose* |    |  |      |                              |   | Copper or stainless steel tubing<br>(Insulate tubing to minimize loss of capacity and efficiency.) |    |  |      |   |    |
|------------|----------------------|----|--|------|------------------------------|---|--|----|--|------|---|----|
|            | Hose I.D.            |    | Maximum capacity per cylinder <sup>†</sup> |      | Maximum length <sup>††</sup> |   | Tube size  |    | Maximum capacity per cylinder <sup>†</sup> |      | Maximum developed length <sup>†††</sup> |    |
| XTP        | 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.
- <sup>†</sup> 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](http://www.dristeem.com)).
- <sup>††</sup> 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.
- <sup>†††</sup> Developed length equals measured length plus 50% of measured length to account for fittings.