

DT fluid cooler

engineering data
and specifications



MARLEY 

Finned Heat Exchange Coil

Finned coil models provide enhanced thermal performance and boost dry capacity, allowing dry operation at ambient temperatures up to 20° higher than with the bare tube coil.

Access Platforms

Fluid cooler-supported mechanical access platforms are available on the fluid cooler face where the mechanical access door is located. Platform surfaces are surrounded by a guardrail, kneerail and toeboard designed according to OSHA guidelines. Partial factory assembled platforms are available to simplify field installation. Available platform accessories include ladder(s), ladder extension(s), safety cage(s) and safety gate(s).

Remote Sump Application

For applications with remote sump, the fluid cooler recirculating water pump and piping are removed and an outlet connection is added in the collection basin.

Belt Drive

The standard mechanical drive system consists of a Marley Geareducer coupled to a NEMA premium efficiency, TEFC inverter duty motor. A drive system consisting of belts and pulleys may alternatively be selected based on user preference.

Vibration Switch

A mechanical vibration switch may be factory mounted for wiring to the shutdown circuit of the fan motor starter or VFD. The switch is designed to interrupt control power voltage to a safety circuit in the event of excessive vibration causing the starter or VFD equipment to de-energize the motor.

Quiet Fans

Standard low sound fans are designed to maximize air movement efficiency at low sound levels. Quiet fans provide lower sound levels with minimal cost impact by increasing blade count and/or reducing fan speed.

Ultra Quiet Fans

For applications requiring a significant reduction in fluid cooler sound levels, Ultra Quiet fans may be employed to reduce above fan sound levels up to 16 dBA. Fans are propeller-type, incorporating wide-chord acoustic geometry, individually adjustable, corrosion and fire resistant marine grade aluminum blades resiliently mounted to an aluminum hub.

Lube Line and Dipstick

An external oil level dipstick can be selected on fluid coolers.

Davit Crane

To simplify the removal of mechanical components, fluid cooler-mounted portable davit cranes are available in 500 lb and 1000 lb capacities.

Stainless Steel Construction

When an enhanced level of corrosion protection is desired, fluid coolers may be configured with varying levels of stainless steel construction. Stainless steel collection basins, welded and factory water tested to reduce the potential for leaks, are a commonly selected upgrade. Units with stainless steel collection basin and casing are also available.

Electronic Water Level Control

An electronic water level control system consisting of a NEMA 4X control panel, water level probes and probe stilling chamber may be selected to monitor the water level in the collection basin to determine level events used for makeup, high/low alarm(s), and/or pump shutdown.

Water Level Standpipe

An external water level standpipe is available to allow visual determination of the basin water level from the exterior of the unit while in operation.

Pump Heat Trace

When an electric basin heater package is selected, the recirculating pump(s) may be fitted with electric heat trace cable and insulated to protect the water retained in the pump from freezing during periods of shutdown or standby operation.

Basin Sweeper Piping

As an option to augment an external filtration system, the collection basin may be equipped with a factory installed corrosion resistant sweeper piping system designed to force dirt and debris towards a dedicated drain in the depressed section of the collection basin.

Splash Attenuation

Fluid coolers may be selected with optional polypropylene splash attenuation media, factory installed in the collection basin to reduce falling water noise at the air inlet.

STRONG GALVANIZED STEEL CONSTRUCTION

The high quality mechanical components and refrigeration coils are safely housed in heavy-duty galvanized steel to ensure corrosion protection, low maintenance and long life. Submerged areas are bolted or welded to minimize potential for leaks; tap screws are not used in submerged areas.

STAINLESS STEEL OPTIONS

When environmental and design conditions dictate, heavy gauge stainless steel water collection basins and other structural components may be specified.

DUAL U-BOLT FAN HUB

The hub design reduces fan de-pitching and vibration potential.

CLOG-RESISTANT WATER DISTRIBUTION SYSTEM

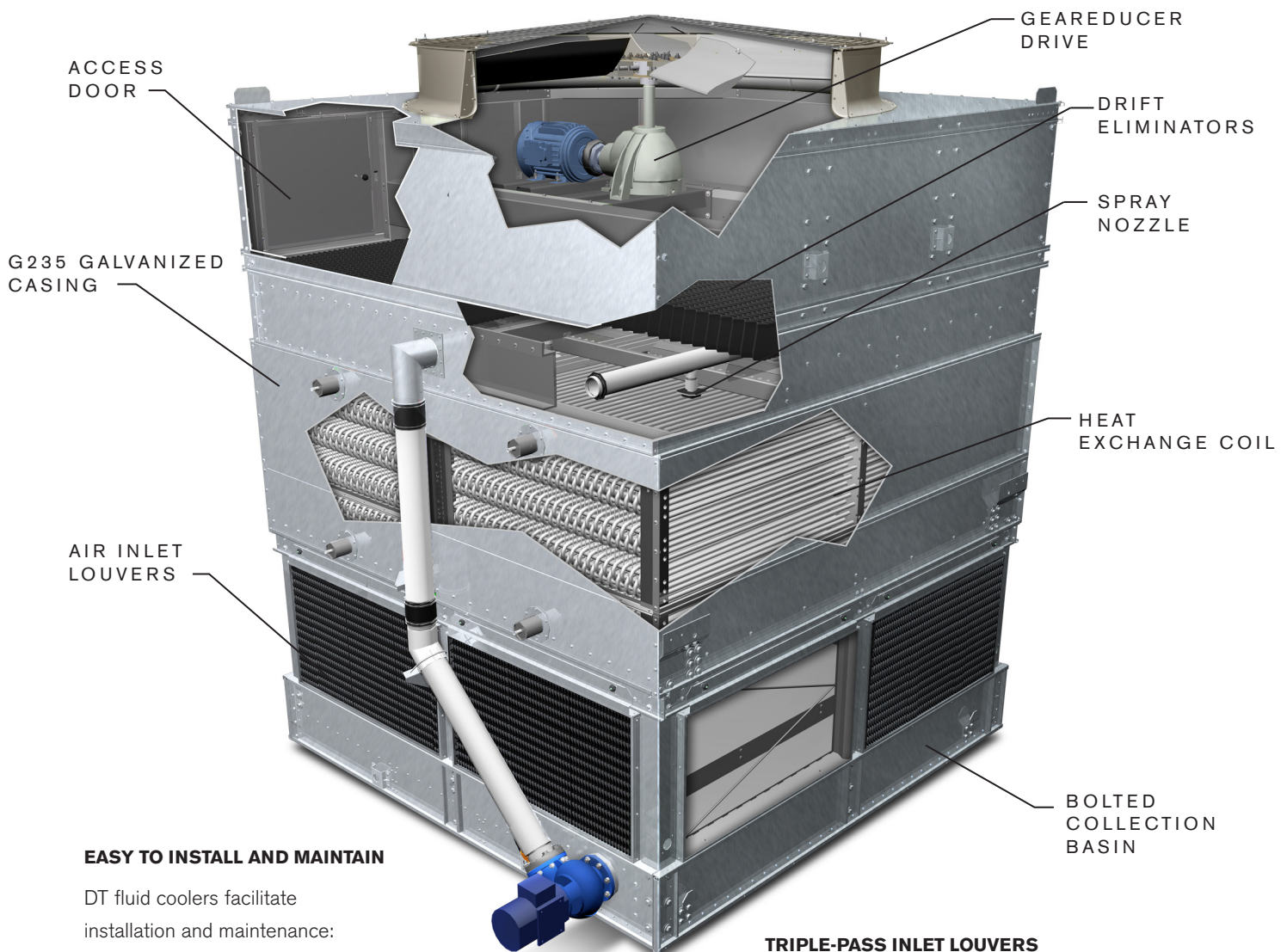
Self-draining spray headers and large orifice spray nozzles help prevent debris build-up and clogging. Self-draining spray headers limit potential ice buildup when not operational; spray nozzles mount to the bottom of the spray pipes.

SOUND REDUCTION

Quiet operation is increasingly an important part of product specifications. Sound reduction options enable selections with up to 15+ dbA lower sound levels.

MARLEY GEAREDUCER® DRIVE

Genuine Marley mechanical system offers lowest maintenance costs and most reliable performance with 5-year warranty. Belt drive optional.

**EASY TO INSTALL AND MAINTAIN**

DT fluid coolers facilitate installation and maintenance:

- Module connections require minimal fasteners
- Pre-assembled platform options have welded guardrails

TRIPLE-PASS INLET LOUVERS

Removable louvers control splash-out and sunlight exposure to limit algae growth.

[illegible]

8.5' x 9' Single Cell

| Model note 1 | Internal Coil Volume gal | Fan Motor hp | Airflow Rate cfm | Shipping Weight lb | | Design Operating Weight lb | Dimensions note 2 | | Recirculating Flow Rate gpm | Pump Motor hp |
|----------------------|--------------------------------|-----------------|---------------------|-----------------------|---------------------|-------------------------------------|----------------------|------------|-----------------------------------|---------------------|
| | | | | Weight/Cell | Heaviest Section | | H | C | | |
| DTW-8509-MAB1, -MAM1 | 180 | 7.5 | 37,281 | 8,700 | 7,100 | 12,600 | 12'-7 3/8" | 2'-8 1/8" | 355 | 2 |
| DTW-8509-NAB1, -NAM1 | 180 | 10 | 40,199 | 8,700 | 7,100 | 12,600 | | | | |
| DTW-8509-PAB1, -PAM1 | 180 | 15 | 44,724 | 8,800 | 7,200 | 12,700 | | | | |
| DTW-8509-QAB1, -QAM1 | 180 | 20 | 46,656 | 8,800 | 7,200 | 12,800 | 13'-4 3/8" | 3'-5 1/8" | | |
| DTW-8509-MAC1, -MAN1 | 222 | 7.5 | 36,941 | 9,600 | 8,000 | 13,900 | | | | |
| DTW-8509-NAC1, -NAN1 | 222 | 10 | 39,938 | 9,600 | 8,000 | 13,900 | | | | |
| DTW-8509-PAC1, -PAN1 | 222 | 15 | 44,556 | 9,700 | 8,100 | 14,000 | | | | |
| DTW-8509-QAC1, -QAN1 | 222 | 20 | 46,500 | 9,700 | 8,100 | 14,000 | 14'-1 3/8" | 4'-2 1/8" | | |
| DTW-8509-MAD1, -MAP1 | 263 | 7.5 | 36,580 | 10,400 | 7,000 | 15,100 | | | | |
| DTW-8509-NAD1, -NAP1 | 263 | 10 | 39,668 | 10,500 | 7,000 | 15,100 | | | | |
| DTW-8509-PAD1, -PAP1 | 263 | 15 | 44,375 | 10,600 | 7,100 | 15,200 | | | | |
| DTW-8509-QAD1, -QAP1 | 263 | 20 | 46,334 | 10,600 | 7,200 | 15,300 | | | | |
| DTW-8509-MAJ1, -MAR1 | 291 | 7.5 | 35,629 | 11,100 | 7,600 | 16,000 | | | | |
| DTW-8509-NAJ1, -NAR1 | 291 | 10 | 38,977 | 11,100 | 7,700 | 16,000 | | | | |
| DTW-8509-PAJ1, -PAR1 | 291 | 15 | 44,159 | 11,200 | 7,800 | 16,100 | | | | |
| DTW-8509-QAJ1, -QAR1 | 291 | 20 | 46,312 | 11,300 | 7,800 | 16,200 | 14'-10 3/8" | 4'-11 1/8" | | |
| DTW-8509-MAE1, -MAQ1 | 305 | 7.5 | 36,201 | 11,400 | 7,900 | 16,400 | | | | |
| DTW-8509-NAE1, -NAQ1 | 305 | 10 | 39,379 | 11,400 | 8,000 | 16,400 | | | | |
| DTW-8509-PAE1, -PAQ1 | 305 | 15 | 44,189 | 11,500 | 8,100 | 16,600 | | | | |
| DTW-8509-QAE1, -QAQ1 | 305 | 20 | 46,167 | 11,600 | 8,100 | 16,600 | | | | |
| DTW-8509-MAK1, -MAS1 | 337 | 7.5 | 34,979 | 12,000 | 8,600 | 17,300 | | | | |
| DTW-8509-NAK1, -NAS1 | 337 | 10 | 38,457 | 12,000 | 8,600 | 17,300 | | | | |
| DTW-8509-PAK1, -PAS1 | 337 | 15 | 43,819 | 12,200 | 8,700 | 17,400 | | | | |
| DTW-8509-QAK1, -QAS1 | 337 | 20 | 46,016 | 12,200 | 8,700 | 17,500 | | | | |

NOTE

1. The last digit of the model number(s) shown represents the number of cells. Multiple models shown on same line differ in external coil connection piping -reference factory drawings.
2. Inlet and outlet connection quantity and dimensions vary with design flowrate - reference factory drawings.
3. **Use this bulletin for preliminary layouts only.** Obtain current drawings from your sales representative.

Use this data for preliminary layouts only. Obtain current drawing from your sales representative.

specific design requirements.

8'-6"

4'-0³/₄"

FLUID IN 4" BFW

FLUID OUT 4" BFW

C

5'-2⁷/₁₆"

PUMP

1'-11⁵/₈"

H
INSTALLED
HEIGHT

PLAN

12'-0¹/₄"

ACCESS
DOOR

2'-3¹³/₁₆"

SIDE ELEVATION

SIDE ELEVATION

8.5' x 12' Single Cell

| Model note 1 | Internal Coil Volume gal | Fan Motor hp | Airflow Rate cfm | Shipping Weight lb | | Design Operating Weight lb | Dimensions note 2 | | Recirculating Flow Rate gpm | Pump Motor hp |
|----------------------|--------------------------------|-----------------|---------------------|-----------------------|---------------------|-------------------------------------|----------------------|------------|-----------------------------------|---------------------|
| | | | | Weight/Cell | Heaviest Section | | H | C | | |
| DTW-8512-NAB1, -NAM1 | 239 | 10 | 48,342 | 10,200 | 8,300 | 15,500 | 13'-0" | 2'-8 1/8" | 530 | 3 |
| DTW-8512-PAB1, -PAM1 | 239 | 15 | 55,322 | 10,300 | 8,400 | 15,600 | | | | |
| DTW-8512-QAB1, -QAM1 | 239 | 20 | 58,675 | 10,400 | 8,500 | 15,600 | | | | |
| DTW-8512-RAB1, -RAM1 | 239 | 25 | 60,761 | 10,500 | 8,600 | 15,800 | 13'-9" | 3'-5 1/8" | | |
| DTW-8512-NAC1, -NAN1 | 296 | 10 | 47,886 | 11,400 | 9,400 | 17,100 | | | | |
| DTW-8512-PAC1, -PAN1 | 296 | 15 | 55,068 | 11,500 | 9,600 | 17,200 | | | | |
| DTW-8512-QAC1, -QAN1 | 296 | 20 | 58,461 | 11,500 | 9,600 | 17,200 | | | | |
| DTW-8512-RAC1, -RAN1 | 296 | 25 | 60,567 | 11,700 | 9,800 | 17,400 | 14'-6" | 4'-2 1/8" | | |
| DTW-8512-NAD1, -NAP1 | 352 | 10 | 47,402 | 12,500 | 8,600 | 18,700 | | | | |
| DTW-8512-PAD1, -PAP1 | 352 | 15 | 54,804 | 12,600 | 8,700 | 18,800 | | | | |
| DTW-8512-QAD1, -QAP1 | 352 | 20 | 58,237 | 12,600 | 8,800 | 18,900 | | | | |
| DTW-8512-RAD1, -RAP1 | 352 | 25 | 60,364 | 12,800 | 8,900 | 19,000 | | | | |
| DTW-8512-SAD1, -SAP1 | 352 | 30 | 62,800 | 12,800 | 9,000 | 19,100 | | | | |
| DTW-8512-NAJ1, -NAR1 | 390 | 10 | 46,039 | 13,200 | 9,300 | 19,700 | | | | |
| DTW-8512-PAJ1, -PAR1 | 390 | 15 | 54,070 | 13,300 | 9,400 | 19,800 | | | | |
| DTW-8512-QAJ1, -QAR1 | 390 | 20 | 57,754 | 13,300 | 9,400 | 19,900 | | | | |
| DTW-8512-RAJ1, -RAR1 | 390 | 25 | 60,065 | 13,500 | 9,600 | 20,000 | | | | |
| DTW-8512-SAJ1, -SAR1 | 390 | 30 | 62,736 | 13,500 | 9,700 | 20,100 | | | | |
| DTW-8512-NAE1, -NAQ1 | 409 | 10 | 46,889 | 13,700 | 9,800 | 20,400 | 15'-3" | 4'-11 1/8" | | |
| DTW-8512-PAE1, -PAQ1 | 409 | 15 | 54,528 | 13,800 | 9,900 | 20,500 | | | | |
| DTW-8512-QAE1, -QAQ1 | 409 | 20 | 58,004 | 13,900 | 10,000 | 20,500 | | | | |
| DTW-8512-RAE1, -RAQ1 | 409 | 25 | 60,154 | 14,000 | 10,100 | 20,700 | | | | |
| DTW-8512-SAE1, -SAQ1 | 409 | 30 | 62,627 | 14,100 | 10,200 | 20,700 | | | | |
| DTW-8512-NAK1, -NAS1 | 452 | 10 | 45,172 | 14,500 | 10,600 | 21,500 | | | | |
| DTW-8512-PAK1, -PAS1 | 452 | 15 | 53,537 | 14,600 | 10,700 | 21,700 | | | | |
| DTW-8512-QAK1, -QAS1 | 452 | 20 | 57,290 | 14,700 | 10,800 | 21,700 | | | | |
| DTW-8512-RAK1, -RAS1 | 452 | 25 | 59,645 | 14,800 | 10,900 | 21,900 | | | | |
| DTW-8512-SAK1, -SAS1 | 452 | 30 | 62,394 | 14,900 | 11,000 | 21,900 | | | | |

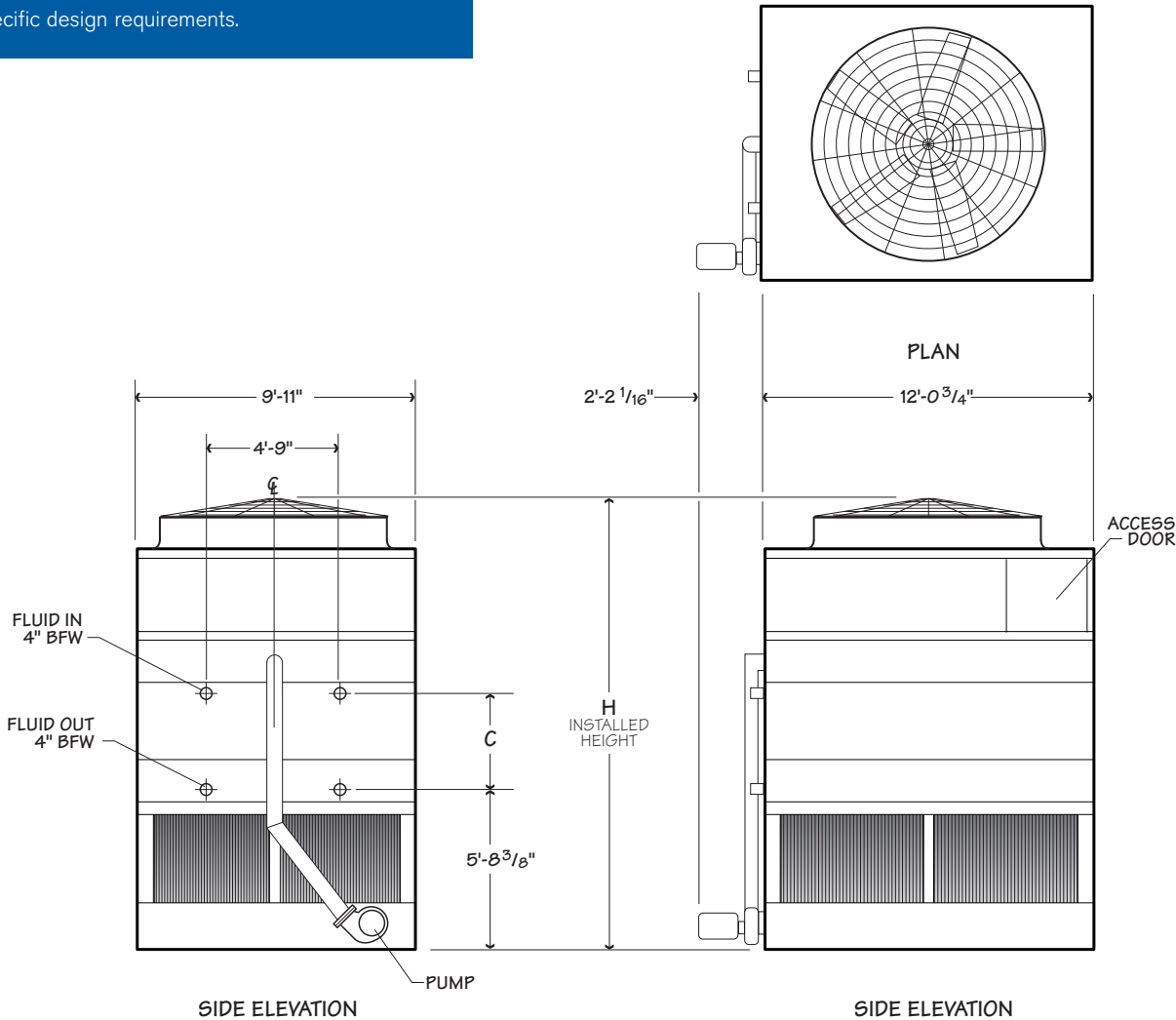
NOTE

1. The last digit of the model number(s) shown represents the number of cells. Multiple models shown on same line differ in external coil connection piping -reference factory drawings.
2. Inlet and outlet connection quantity and dimensions vary with design flowrate - reference factory drawings.
3. **Use this bulletin for preliminary layouts only.** Obtain current drawings from your sales representative.

10' x 12' Single Cell

Use this data for preliminary layouts only. Obtain current drawing from your sales representative.

UPDATE™ web-based selection software, available at spxcooling.com/update provides DT fluid cooler model recommendations based on customer's specific design requirements.



10' x 12' Single Cell

| Model note 1 | Internal Coil Volume gal | Fan Motor hp | Airflow Rate cfm | Shipping Weight lb | | Design Operating Weight lb | Dimensions note 2 | | Recirculating Flow Rate gpm | Pump Motor hp |
|----------------------|--------------------------------|-----------------|---------------------|-----------------------|---------------------|-------------------------------------|---------------------------------------|-------------------------------------|-----------------------------------|---------------------|
| | | | | Weight/Cell | Heaviest Section | | H | C | | |
| DTW-1012-NAB1, -NAM1 | 285 | 10 | 53,674 | 12,700 | 10,400 | 19,100 | 15'-2 ⁷ / ₁₆ " | 2'-8 ¹ / ₈ " | 600 | 5 |
| DTW-1012-PAB1, -PAM1 | 285 | 15 | 59,083 | 12,800 | 10,500 | 19,200 | | | | |
| DTW-1012-QAB1, -QAM1 | 285 | 20 | 63,841 | 12,900 | 10,500 | 19,200 | | | | |
| DTW-1012-RAB1, -RAM1 | 285 | 25 | 67,118 | 13,000 | 10,700 | 19,400 | 15'-11 ¹ / ₁₆ " | 3'-5 ¹ / ₈ " | | |
| DTW-1012-NAC1, -NAN1 | 353 | 10 | 53,006 | 14,100 | 11,700 | 21,000 | | | | |
| DTW-1012-PAC1, -PAN1 | 353 | 15 | 58,566 | 14,200 | 11,900 | 21,100 | | | | |
| DTW-1012-QAC1, -QAN1 | 353 | 20 | 63,458 | 14,200 | 11,900 | 21,100 | 16'-8 ⁷ / ₁₆ " | 4'-2 ¹ / ₈ " | | |
| DTW-1012-RAC1, -RAN1 | 353 | 25 | 66,809 | 14,400 | 12,000 | 21,300 | | | | |
| DTW-1012-NAD1, -NAP1 | 420 | 10 | 52,301 | 15,400 | 10,400 | 22,900 | | | | |
| DTW-1012-PAD1, -PAP1 | 420 | 15 | 58,011 | 15,500 | 10,400 | 23,000 | | | | |
| DTW-1012-QAD1, -QAP1 | 420 | 20 | 63,053 | 15,600 | 10,400 | 23,000 | | | | |
| DTW-1012-RAD1, -RAP1 | 420 | 25 | 66,483 | 15,700 | 10,400 | 23,200 | | | | |
| DTW-1012-SAD1, -SAP1 | 420 | 30 | 71,213 | 15,800 | 10,400 | 23,200 | | | | |
| DTW-1012-NAJ1, -NAR1 | 467 | 10 | 50,643 | 16,300 | 11,300 | 24,100 | | | | |
| DTW-1012-PAJ1, -PAR1 | 467 | 15 | 56,635 | 16,400 | 11,300 | 24,300 | | | | |
| DTW-1012-QAJ1, -QAR1 | 467 | 20 | 62,112 | 16,400 | 11,300 | 24,300 | 17'-5 ⁷ / ₁₆ " | 4'-11 ¹ / ₈ " | | |
| DTW-1012-RAJ1, -RAR1 | 467 | 25 | 65,870 | 16,600 | 11,300 | 24,400 | | | | |
| DTW-1012-SAJ1, -SAR1 | 467 | 30 | 71,088 | 16,600 | 11,300 | 24,500 | | | | |
| DTW-1012-PAE1, -PAQ1 | 488 | 15 | 57,428 | 17,000 | 11,900 | 25,000 | | | | |
| DTW-1012-QAE1, -QAQ1 | 488 | 20 | 62,625 | 17,000 | 11,900 | 25,000 | | | | |
| DTW-1012-RAE1, -RAQ1 | 488 | 25 | 66,140 | 17,200 | 11,900 | 25,200 | | | | |
| DTW-1012-SAE1, -SAQ1 | 488 | 30 | 70,970 | 17,200 | 11,900 | 25,200 | | | | |
| DTW-1012-PAK1, -PAS1 | 542 | 15 | 55,592 | 18,000 | 12,900 | 26,500 | | | | |
| DTW-1012-QAK1, -QAS1 | 542 | 20 | 61,275 | 18,000 | 12,900 | 26,500 | | | | |
| DTW-1012-RAK1, -RAS1 | 542 | 25 | 65,163 | 18,200 | 12,900 | 26,700 | | | | |
| DTW-1012-SAK1, -SAS1 | 542 | 30 | 70,570 | 18,200 | 12,900 | 26,700 | | | | |

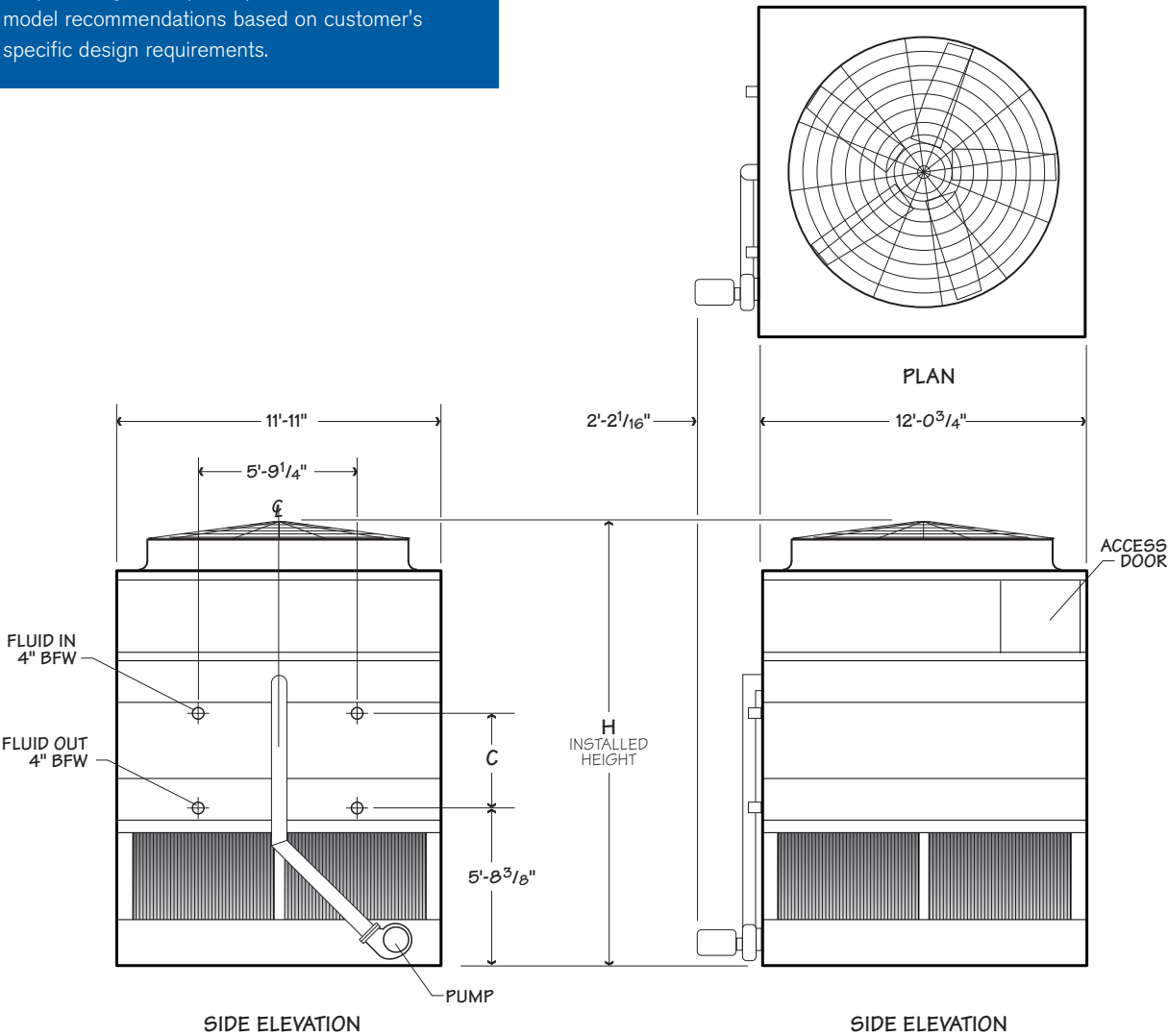
NOTE

1. The last digit of the model number(s) shown represents the number of cells. Multiple models shown on same line differ in external coil connection piping -reference factory drawings.
2. Inlet and outlet connection quantity and dimensions vary with design flowrate - reference factory drawings.
3. **Use this bulletin for preliminary layouts only.** Obtain current drawings from your sales representative.

12' x 12' Single Cell

Use this data for preliminary layouts only. Obtain current drawing from your sales representative.

UPDATE™ web-based selection software, available at spxcooling.com/update provides DT fluid cooler model recommendations based on customer's specific design requirements.



12' x 12' Single Cell

| Model note 1 | Internal Coil Volume gal | Fan Motor hp | Airflow Rate cfm | Shipping Weight lb | | Design Operating Weight lb | Dimensions note 2 | | Recirculating Flow Rate gpm | Pump Motor hp |
|----------------------|--------------------------------|-----------------|---------------------|-----------------------|---------------------|-------------------------------------|---------------------------------------|-------------------------------------|-----------------------------------|---------------------|
| | | | | Weight/Cell | Heaviest Section | | H | C | | |
| DTW-1212-NAB1, -NAM1 | 345 | 10 | 63,642 | 14,500 | 11,900 | 22,000 | 15'-2 ⁷ / ₁₆ " | 2'-8 ¹ / ₈ " | 700 | 5 |
| DTW-1212-PAB1, -PAM1 | 345 | 15 | 70,875 | 14,600 | 12,000 | 22,100 | | | | |
| DTW-1212-QAB1, -QAM1 | 345 | 20 | 76,735 | 14,600 | 12,000 | 22,100 | | | | |
| DTW-1212-RAB1, -RAM1 | 345 | 25 | 80,964 | 14,800 | 12,200 | 22,300 | | | | |
| DTW-1212-SAB1, -SAM1 | 345 | 30 | 86,041 | 14,800 | 12,200 | 22,300 | 15'-11 ¹ / ₁₆ " | 3'-5 ¹ / ₈ " | | |
| DTW-1212-NAC1, -NAN1 | 426 | 10 | 62,809 | 16,100 | 13,500 | 24,300 | | | | |
| DTW-1212-PAC1, -PAN1 | 426 | 15 | 70,205 | 16,200 | 13,600 | 24,400 | | | | |
| DTW-1212-QAC1, -QAN1 | 426 | 20 | 76,223 | 16,200 | 13,600 | 24,400 | | | | |
| DTW-1212-RAC1, -RAN1 | 426 | 25 | 80,532 | 16,400 | 13,800 | 24,600 | | | | |
| DTW-1212-SAC1, -SAN1 | 426 | 30 | 85,709 | 16,400 | 13,800 | 24,600 | 16'-8 ⁷ / ₁₆ " | 4'-2 ¹ / ₈ " | | |
| DTW-1212-NAD1, -NAP1 | 508 | 10 | 61,930 | 17,700 | 12,200 | 26,500 | | | | |
| DTW-1212-PAD1, -PAP1 | 508 | 15 | 69,498 | 17,800 | 12,200 | 26,700 | | | | |
| DTW-1212-QAD1, -QAP1 | 508 | 20 | 75,679 | 17,800 | 12,200 | 26,700 | | | | |
| DTW-1212-RAD1, -RAP1 | 508 | 25 | 80,087 | 18,000 | 12,200 | 26,900 | | | | |
| DTW-1212-SAD1, -SAP1 | 508 | 30 | 85,370 | 18,000 | 12,200 | 26,900 | | | | |
| DTW-1212-PAJ1, -PAR1 | 564 | 15 | 67,863 | 18,800 | 13,200 | 28,200 | | | | |
| DTW-1212-QAJ1, -QAR1 | 564 | 20 | 74,530 | 18,900 | 13,200 | 28,200 | | | | |
| DTW-1212-RAJ1, -RAR1 | 564 | 25 | 79,331 | 19,000 | 13,200 | 28,400 | | | | |
| DTW-1212-SAJ1, -SAR1 | 564 | 30 | 85,138 | 19,100 | 13,200 | 28,400 | | | | |
| DTW-1212-TAJ1, -TAR1 | 564 | 40 | 90,507 | 19,200 | 13,200 | 28,500 | 17'-5 ⁷ / ₁₆ " | 4'-11 ¹ / ₈ " | | |
| DTW-1212-PAE1, -PAQ1 | 589 | 15 | 68,753 | 19,500 | 13,900 | 29,000 | | | | |
| DTW-1212-QAE1, -QAQ1 | 589 | 20 | 75,119 | 19,500 | 13,900 | 29,100 | | | | |
| DTW-1212-RAE1, -RAQ1 | 589 | 25 | 79,628 | 19,700 | 13,900 | 29,200 | | | | |
| DTW-1212-SAE1, -SAQ1 | 589 | 30 | 85,026 | 19,700 | 13,900 | 29,300 | | | | |
| DTW-1212-PAK1, -PAS1 | 655 | 15 | 66,626 | 20,700 | 15,100 | 30,800 | | | | |
| DTW-1212-QAK1, -QAS1 | 655 | 20 | 73,528 | 20,700 | 15,100 | 30,800 | | | | |
| DTW-1212-RAK1, -RAS1 | 655 | 25 | 78,481 | 20,900 | 15,100 | 31,000 | | | | |
| DTW-1212-SAK1, -SAS1 | 655 | 30 | 84,499 | 20,900 | 15,100 | 31,000 | | | | |
| DTW-1212-TAK1, -TAS1 | 655 | 40 | 89,974 | 21,100 | 15,100 | 31,100 | | | | |

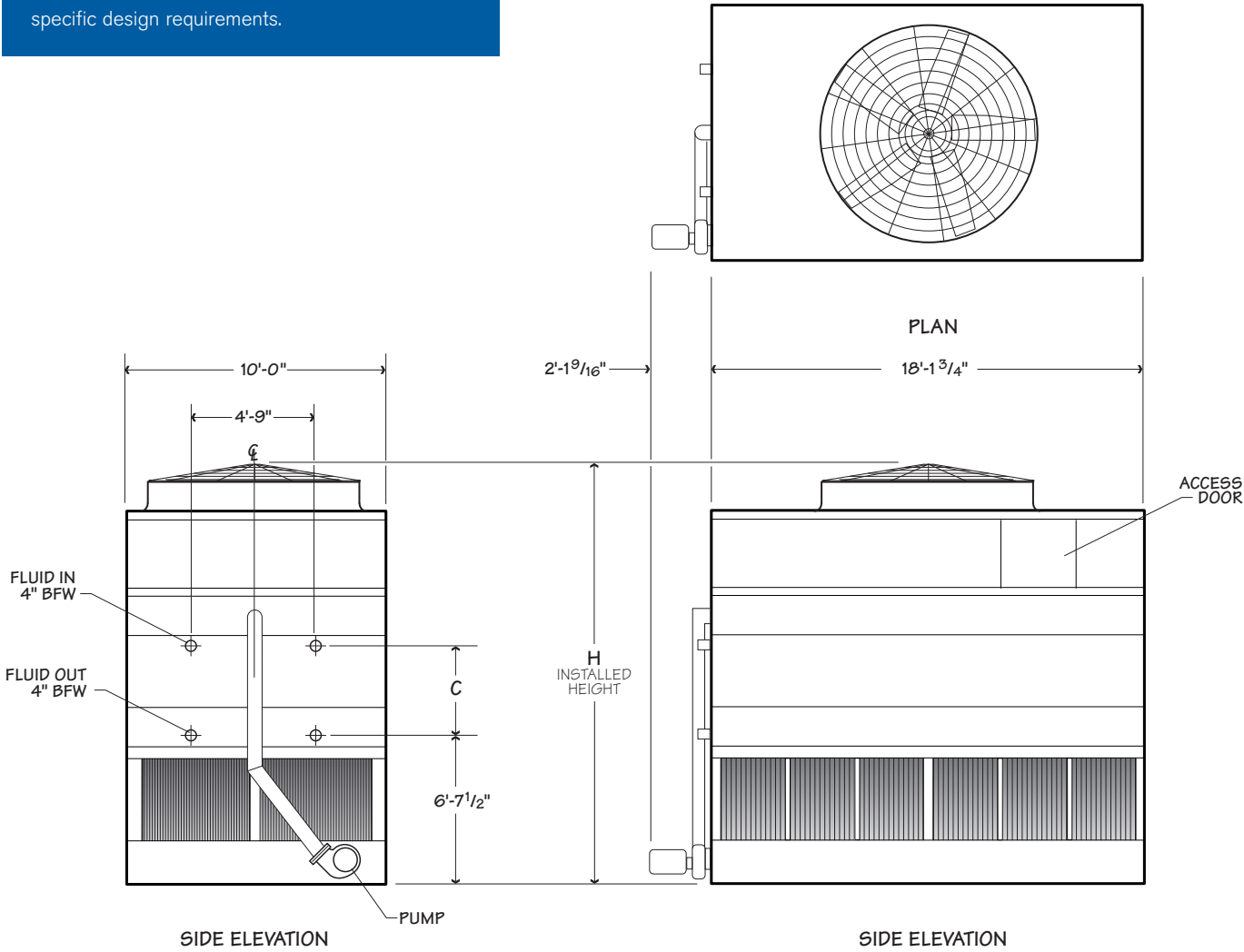
NOTE

1. The last digit of the model number(s) shown represents the number of cells. Multiple models shown on same line differ in external coil connection piping -reference factory drawings.
2. Inlet and outlet connection quantity and dimensions vary with design flowrate - reference factory drawings.
3. **Use this bulletin for preliminary layouts only.** Obtain current drawings from your sales representative.

10' x 18' Single Cell

Use this data for preliminary layouts only. Obtain current drawing from your sales representative.

UPDATE™ web-based selection software, available at spxcooling.com/update provides DT fluid cooler model recommendations based on customer's specific design requirements.



10' x 18' Single Cell

| Model note 1 | Internal Coil Volume gal | Fan Motor hp | Airflow Rate cfm | Shipping Weight lb | | Design Operating Weight lb | Dimensions note 2 | | Recirculating Flow Rate gpm | Pump Motor hp |
|----------------------|--------------------------------|-----------------|---------------------|-----------------------|---------------------|-------------------------------------|---------------------------------------|------------------------------------|-----------------------------------|---------------------|
| | | | | Weight/Cell | Heaviest Section | | H | C | | |
| DTW-1018-NAB1, -NAM1 | 422 | 10 | 70,962 | 17,700 | 14,100 | 27,200 | 16'-1 ⁹ / ₁₆ " | 2'-8 ¹ / ₈ " | 830 | 7.5 |
| DTW-1018-PAB1, -PAM1 | 422 | 15 | 80,646 | 17,800 | 14,200 | 27,400 | | | | |
| DTW-1018-QAB1, -QAM1 | 422 | 20 | 88,176 | 17,900 | 14,300 | 27,400 | | | | |
| DTW-1018-RAB1, -RAM1 | 422 | 25 | 93,807 | 18,000 | 14,400 | 27,600 | | | | |
| DTW-1018-SAB1, -SAM1 | 422 | 30 | 99,842 | 18,100 | 14,500 | 27,600 | | | | |
| DTW-1018-NAC1, -NAN1 | 524 | 10 | 69,894 | 19,700 | 16,100 | 30,100 | 16'-10 ⁹ / ₁₆ " | 3'-5 ¹ / ₈ " | | |
| DTW-1018-PAC1, -PAN1 | 524 | 15 | 79,727 | 19,800 | 16,200 | 30,200 | | | | |
| DTW-1018-QAC1, -QAN1 | 524 | 20 | 87,439 | 19,800 | 16,200 | 30,200 | | | | |
| DTW-1018-RAC1, -RAN1 | 524 | 25 | 93,180 | 20,000 | 16,400 | 30,400 | | | | |
| DTW-1018-SAC1, -SAN1 | 524 | 30 | 99,360 | 20,000 | 16,400 | 30,400 | | | | |
| DTW-1018-NAD1, -NAP1 | 626 | 10 | 68,797 | 21,600 | 14,800 | 32,900 | 17'-7 ⁹ / ₁₆ " | 4'-2 ¹ / ₈ " | | |
| DTW-1018-PAD1, -PAP1 | 626 | 15 | 78,764 | 21,800 | 14,800 | 33,000 | | | | |
| DTW-1018-QAD1, -QAP1 | 626 | 20 | 86,668 | 21,800 | 14,800 | 33,000 | | | | |
| DTW-1018-RAD1, -RAP1 | 626 | 25 | 92,523 | 22,000 | 14,800 | 33,200 | | | | |
| DTW-1018-SAD1, -SAP1 | 626 | 30 | 98,861 | 22,000 | 14,800 | 33,200 | | | | |
| DTW-1018-TAD1, -TAP1 | 626 | 40 | 105,986 | 22,100 | 14,800 | 33,300 | | | | |
| DTW-1018-PAJ1, -PAR1 | 696 | 15 | 76,762 | 23,000 | 16,100 | 34,800 | | | | |
| DTW-1018-QAJ1, -QAR1 | 696 | 20 | 85,015 | 23,100 | 16,100 | 34,900 | | | | |
| DTW-1018-RAJ1, -RAR1 | 696 | 25 | 91,203 | 23,200 | 16,100 | 35,000 | | | | |
| DTW-1018-SAJ1, -SAR1 | 696 | 30 | 98,055 | 23,300 | 16,100 | 35,100 | | | | |
| DTW-1018-TAJ1, -TAR1 | 696 | 40 | 105,717 | 23,400 | 16,100 | 35,200 | | | | |
| DTW-1018-PAE1, -PAQ1 | 727 | 15 | 77,767 | 23,800 | 16,900 | 35,900 | | | | |
| DTW-1018-QAE1, -QAO1 | 727 | 20 | 85,861 | 23,900 | 16,900 | 35,900 | | | | |
| DTW-1018-RAE1, -RAQ1 | 727 | 25 | 91,848 | 24,000 | 16,900 | 36,100 | | | | |
| DTW-1018-SAE1, -SAQ1 | 727 | 30 | 98,350 | 24,100 | 16,900 | 36,100 | | | | |
| DTW-1018-TAE1, -TAQ1 | 727 | 40 | 105,562 | 24,200 | 16,900 | 36,300 | | | | |
| DTW-1018-PAK1, -PAS1 | 810 | 15 | 75,277 | 25,300 | 18,300 | 38,100 | | | | |
| DTW-1018-QAK1, -QAS1 | 810 | 20 | 83,718 | 25,400 | 18,300 | 38,100 | | | | |
| DTW-1018-RAK1, -RAS1 | 810 | 25 | 90,056 | 25,500 | 18,300 | 38,300 | | | | |
| DTW-1018-SAK1, -SAS1 | 810 | 30 | 97,156 | 25,600 | 18,300 | 38,300 | | | | |
| DTW-1018-TAK1, -TAS1 | 810 | 40 | 104,961 | 25,700 | 18,300 | 38,400 | | | | |

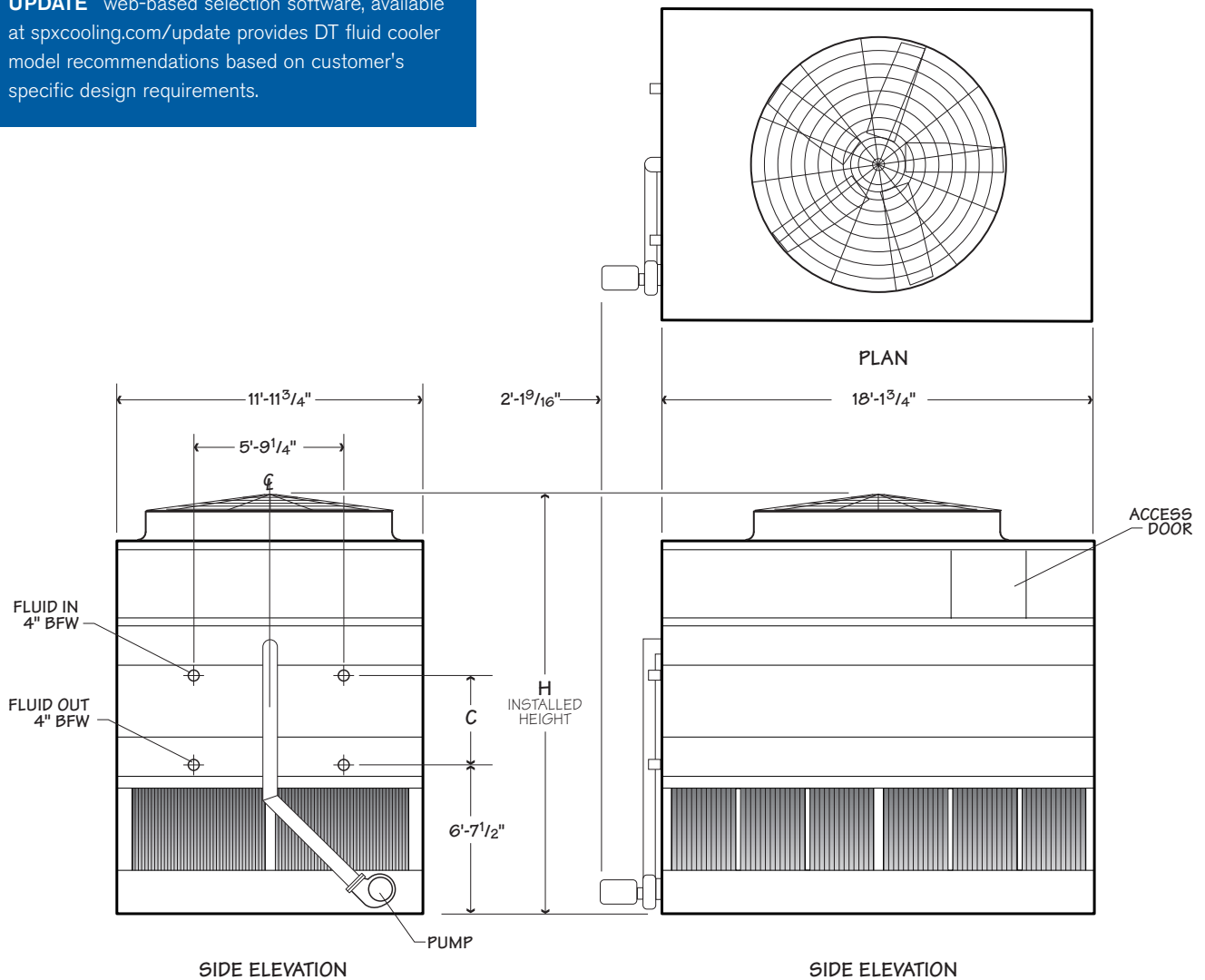
NOTE

1. The last digit of the model number(s) shown represents the number of cells. Multiple models shown on same line differ in external coil connection piping -reference factory drawings.
2. Inlet and outlet connection quantity and dimensions vary with design flowrate - reference factory drawings.
3. **Use this bulletin for preliminary layouts only.** Obtain current drawings from your sales representative.

12' x 18' Single Cell

Use this data for preliminary layouts only. Obtain current drawing from your sales representative.

UPDATE™ web-based selection software, available at spxcooling.com/update provides DT fluid cooler model recommendations based on customer's specific design requirements.



12' x 18' Single Cell

| Model note 1 | Internal Coil Volume gal | Fan Motor hp | Airflow Rate cfm | Shipping Weight lb | | Design Operating Weight lb | Dimensions note 2 | | Recirculating Flow Rate gpm | Pump Motor hp |
|----------------------|--------------------------------|-----------------|---------------------|-----------------------|---------------------|-------------------------------------|----------------------|------------|-----------------------------------|---------------------|
| | | | | Weight/Cell | Heaviest Section | | H | C | | |
| DTW-1218-PAB1, -PAM1 | 510 | 15 | 95,104 | 20,800 | 16,600 | 32,000 | 16'-6 1/8" | 2'-8 1/8" | 940 | 7.5 |
| DTW-1218-QAB1, -QAM1 | 510 | 20 | 104,279 | 20,800 | 16,700 | 32,100 | | | | |
| DTW-1218-RAB1, -RAM1 | 510 | 25 | 110,314 | 21,000 | 16,800 | 32,200 | | | | |
| DTW-1218-SAB1, -SAM1 | 510 | 30 | 116,871 | 21,000 | 16,900 | 32,300 | | | | |
| DTW-1218-PAC1, -PAN1 | 633 | 15 | 93,940 | 23,100 | 18,900 | 35,400 | 17'-3 1/8" | 3'-5 1/8" | | |
| DTW-1218-QAC1, -QAN1 | 633 | 20 | 103,346 | 23,100 | 19,000 | 35,400 | | | | |
| DTW-1218-RAC1, -RAN1 | 633 | 25 | 109,496 | 23,300 | 19,100 | 35,600 | | | | |
| DTW-1218-SAC1, -SAN1 | 633 | 30 | 116,201 | 23,300 | 19,200 | 35,600 | | | | |
| DTW-1218-PAD1, -PAP1 | 756 | 15 | 92,737 | 25,400 | 17,400 | 38,700 | 18'-0 1/8" | 4'-2 1/8" | | |
| DTW-1218-QAD1, -QAP1 | 756 | 20 | 102,378 | 25,400 | 17,400 | 38,800 | | | | |
| DTW-1218-RAD1, -RAP1 | 756 | 25 | 108,647 | 25,600 | 17,400 | 38,900 | | | | |
| DTW-1218-SAD1, -SAP1 | 756 | 30 | 115,501 | 25,600 | 17,400 | 39,000 | | | | |
| DTW-1218-TAD1, -TAP1 | 756 | 40 | 126,058 | 25,800 | 17,400 | 39,100 | | | | |
| DTW-1218-UAD1, -UAP1 | 756 | 50 | 132,526 | 25,800 | 17,400 | 39,100 | | | | |
| DTW-1218-QAJ1, -QAR1 | 841 | 20 | 100,405 | 27,000 | 18,900 | 41,000 | | | | |
| DTW-1218-RAJ1, -RAR1 | 841 | 25 | 106,977 | 27,100 | 18,900 | 41,200 | | | | |
| DTW-1218-SAJ1, -SAR1 | 841 | 30 | 114,306 | 27,200 | 18,900 | 41,200 | | | | |
| DTW-1218-TAJ1, -TAR1 | 841 | 40 | 125,658 | 27,300 | 18,900 | 41,300 | | | | |
| DTW-1218-UAJ1, -UAR1 | 841 | 50 | 132,650 | 27,300 | 18,900 | 41,300 | | | | |
| DTW-1218-VAJ1, -VAR1 | 841 | 60 | 137,882 | 27,700 | 18,900 | 41,700 | | | | |
| DTW-1218-QAE1, -QAO1 | 879 | 20 | 101,367 | 27,900 | 19,900 | 42,300 | 18'-9 1/8" | 4'-11 1/8" | | |
| DTW-1218-RAE1, -RAQ1 | 879 | 25 | 107,768 | 28,100 | 19,900 | 42,400 | | | | |
| DTW-1218-SAE1, -SAQ1 | 879 | 30 | 114,783 | 28,100 | 19,900 | 42,500 | | | | |
| DTW-1218-TAE1, -TAQ1 | 879 | 40 | 125,529 | 28,200 | 19,900 | 42,600 | | | | |
| DTW-1218-UAE1, -UAQ1 | 879 | 50 | 132,065 | 28,300 | 19,900 | 42,600 | | | | |
| DTW-1218-QAK1, -QAS1 | 978 | 20 | 98,868 | 29,700 | 21,600 | 44,900 | | | | |
| DTW-1218-RAK1, -RAS1 | 978 | 25 | 105,575 | 29,900 | 21,600 | 45,000 | | | | |
| DTW-1218-SAK1, -SAS1 | 978 | 30 | 113,116 | 29,900 | 21,600 | 45,100 | | | | |
| DTW-1218-TAK1, -TAS1 | 978 | 40 | 124,772 | 30,000 | 21,600 | 45,200 | | | | |
| DTW-1218-UAK1, -UAS1 | 978 | 50 | 131,899 | 30,000 | 21,600 | 45,200 | | | | |
| DTW-1218-VAK1, -VAS1 | 978 | 60 | 137,212 | 30,400 | 21,600 | 45,600 | | | | |

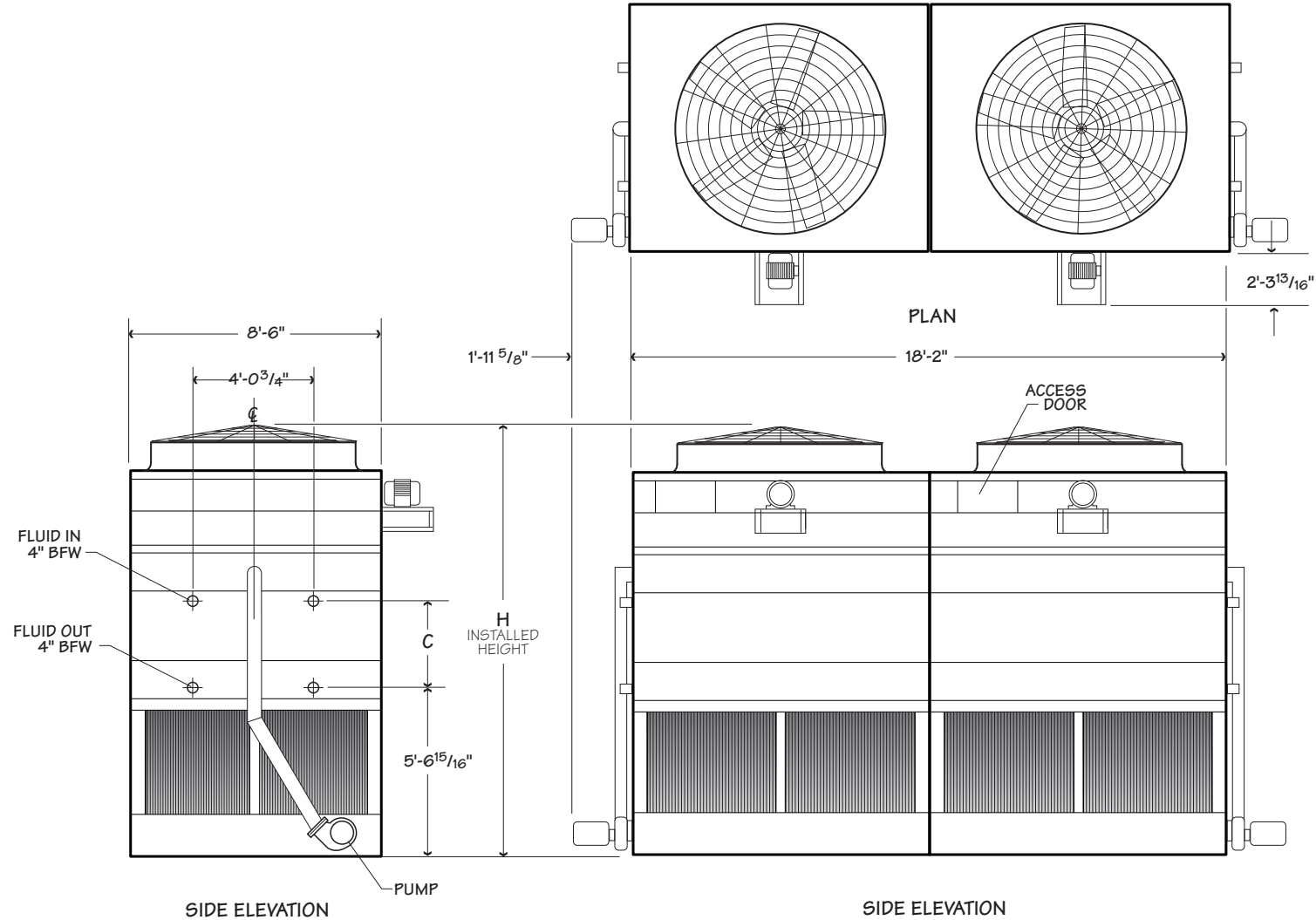
NOTE

- The last digit of the model number(s) shown represents the number of cells. Multiple models shown on same line differ in external coil connection piping -reference factory drawings.
- Inlet and outlet connection quantity and dimensions vary with design flowrate - reference factory drawings.
- Use this bulletin for preliminary layouts only.** Obtain current drawings from your sales representative.

8.5' x 18' Two Cell

Use this data for preliminary layouts only. Obtain current drawing from your sales representative.

UPDATE™ web-based selection software, available at spxcooling.com/update provides DT fluid cooler model recommendations based on customer's specific design requirements.



8.5' x 18' Two Cell

| Model note 1 | Internal Coil Volume gal | Fan Motor hp | Airflow Rate cfm | Shipping Weight lb | | Design Operating Weight lb | Dimensions note 2 | | Recirculating Flow Rate gpm | Pump Motor hp |
|----------------------|--------------------------------|-----------------|---------------------|-----------------------|---------------------|-------------------------------------|----------------------|------------|-----------------------------------|---------------------|
| | | | | Weight/Cell | Heaviest Section | | H | C | | |
| DTW-8509-MAB2, -MAM2 | 360 | 2 x 7.5 | 74,562 | 8,700 | 7,100 | 25,200 | 13'-4 1/2" | 2'-8 1/8" | 710 | 2 x 2 |
| DTW-8509-NAB2, -NAM2 | 360 | 2 x 10 | 80,399 | 8,700 | 7,100 | 25,200 | | | | |
| DTW-8509-PAB2, -PAM2 | 360 | 2 x 15 | 89,448 | 8,800 | 7,200 | 25,400 | | | | |
| DTW-8509-QAB2, -QAM2 | 360 | 2 x 20 | 93,313 | 8,800 | 7,200 | 25,600 | 14'-1 1/2" | 3'-5 1/8" | | |
| DTW-8509-MAC2, -MAN2 | 444 | 2 x 7.5 | 73,883 | 9,600 | 8,000 | 27,800 | | | | |
| DTW-8509-NAC2, -NAN2 | 444 | 2 x 10 | 79,876 | 9,600 | 8,000 | 27,800 | | | | |
| DTW-8509-PAC2, -PAN2 | 444 | 2 x 15 | 89,112 | 9,700 | 8,100 | 28,000 | 14'-10 1/2" | 4'-2 1/8" | | |
| DTW-8509-QAC2, -QAN2 | 444 | 2 x 20 | 93,001 | 9,700 | 8,100 | 28,000 | | | | |
| DTW-8509-MAD2, -MAP2 | 526 | 2 x 7.5 | 73,160 | 10,400 | 7,000 | 30,200 | | | | |
| DTW-8509-NAD2, -NAP2 | 526 | 2 x 10 | 79,336 | 10,500 | 7,000 | 30,200 | 15'-7 1/2" | 4'-11 1/8" | | |
| DTW-8509-PAD2, -PAP2 | 526 | 2 x 15 | 88,750 | 10,600 | 7,100 | 30,400 | | | | |
| DTW-8509-QAD2, -QAP2 | 526 | 2 x 20 | 92,669 | 10,600 | 7,200 | 30,600 | | | | |
| DTW-8509-MAJ2, -MAR2 | 582 | 2 x 7.5 | 71,258 | 11,100 | 7,600 | 32,000 | 15'-7 1/2" | 4'-11 1/8" | | |
| DTW-8509-NAJ2, -NAR2 | 582 | 2 x 10 | 77,955 | 11,100 | 7,700 | 32,000 | | | | |
| DTW-8509-PAJ2, -PAR2 | 582 | 2 x 15 | 88,317 | 11,200 | 7,800 | 32,200 | | | | |
| DTW-8509-QAJ2, -QAR2 | 582 | 2 x 20 | 92,625 | 11,300 | 7,800 | 32,400 | 15'-7 1/2" | 4'-11 1/8" | | |
| DTW-8509-MAE2, -MAQ2 | 610 | 2 x 7.5 | 72,401 | 11,400 | 7,900 | 32,800 | | | | |
| DTW-8509-NAE2, -NAQ2 | 610 | 2 x 10 | 78,758 | 11,400 | 8,000 | 32,800 | | | | |
| DTW-8509-PAE2, -PAQ2 | 610 | 2 x 15 | 88,379 | 11,500 | 8,100 | 33,200 | 15'-7 1/2" | 4'-11 1/8" | | |
| DTW-8509-QAE2, -QAO2 | 610 | 2 x 20 | 92,334 | 11,600 | 8,100 | 33,200 | | | | |
| DTW-8509-MAK2, -MAS2 | 674 | 2 x 7.5 | 69,958 | 12,000 | 8,600 | 34,600 | | | | |
| DTW-8509-NAK2, -NAS2 | 674 | 2 x 10 | 76,914 | 12,000 | 8,600 | 34,600 | 15'-7 1/2" | 4'-11 1/8" | | |
| DTW-8509-PAK2, -PAS2 | 674 | 2 x 15 | 87,638 | 12,200 | 8,700 | 34,800 | | | | |
| DTW-8509-QAK2, -QAS2 | 674 | 2 x 20 | 92,033 | 12,200 | 8,700 | 35,000 | | | | |

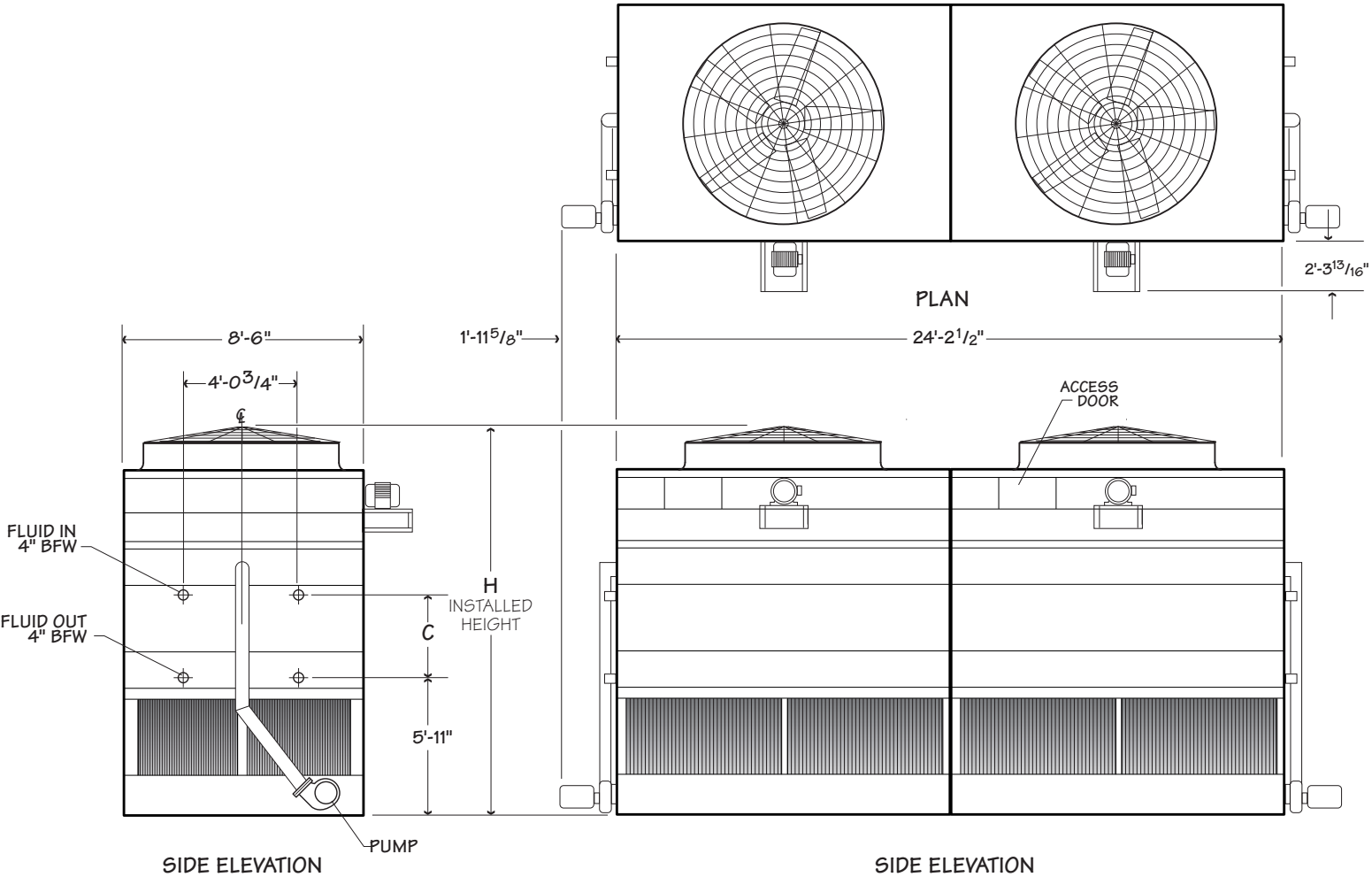
NOTE

1. The last digit of the model number(s) shown represents the number of cells. Multiple models shown on same line differ in external coil connection piping -reference factory drawings.
2. Inlet and outlet connection quantity and dimensions vary with design flowrate - reference factory drawings.
3. **Use this bulletin for preliminary layouts only.** Obtain current drawings from your sales representative.

8.5' x 24' Two Cell

Use this data for preliminary layouts only. Obtain current drawing from your sales representative.

UPDATE™ web-based selection software, available at spxcooling.com/update provides DT fluid cooler model recommendations based on customer's specific design requirements.



8.5' x 24' Two Cell

| Model note 1 | Internal Coil Volume gal | Fan Motor hp | Airflow Rate cfm | Shipping Weight lb | | Design Operating Weight lb | Dimensions note 2 | | Recirculating Flow Rate gpm | Pump Motor hp |
|----------------------|--------------------------------|-----------------|---------------------|-----------------------|---------------------|-------------------------------------|----------------------|------------|-----------------------------------|---------------------|
| | | | | Weight/Cell | Heaviest Section | | H | C | | |
| DTW-8512-NAB2, -NAM2 | 239 | 2 x 10 | 96,684 | 10,200 | 8,300 | 31,000 | 13'-8 1/2" | 2'-8 1/8" | 1,060 | 2 x 3 |
| DTW-8512-PAB2, -PAM2 | 239 | 2 x 15 | 110,644 | 10,300 | 8,400 | 31,200 | | | | |
| DTW-8512-QAB2, -QAM2 | 239 | 2 x 20 | 117,351 | 10,400 | 8,500 | 31,200 | | | | |
| DTW-8512-RAB2, -RAM2 | 239 | 2 x 25 | 121,523 | 10,500 | 8,600 | 31,600 | 14'-5 1/2" | 3'-5 1/8" | | |
| DTW-8512-NAC2, -NAN2 | 296 | 2 x 10 | 95,773 | 11,400 | 9,400 | 34,200 | | | | |
| DTW-8512-PAC2, -PAN2 | 296 | 2 x 15 | 110,136 | 11,500 | 9,600 | 34,400 | | | | |
| DTW-8512-QAC2, -QAN2 | 296 | 2 x 20 | 116,922 | 11,500 | 9,600 | 34,400 | | | | |
| DTW-8512-RAC2, -RAN2 | 296 | 2 x 25 | 121,134 | 11,700 | 9,800 | 34,800 | 15'-2 1/2" | 4'-2 1/8" | | |
| DTW-8512-NAD2, -NAP2 | 352 | 2 x 10 | 94,805 | 12,500 | 8,600 | 37,400 | | | | |
| DTW-8512-PAD2, -PAP2 | 352 | 2 x 15 | 109,608 | 12,600 | 8,700 | 37,600 | | | | |
| DTW-8512-QAD2, -QAP2 | 352 | 2 x 20 | 116,474 | 12,600 | 8,800 | 37,800 | | | | |
| DTW-8512-RAD2, -RAP2 | 352 | 2 x 25 | 120,727 | 12,800 | 8,900 | 38,000 | | | | |
| DTW-8512-SAD2, -SAP2 | 352 | 2 x 30 | 125,601 | 12,800 | 9,000 | 38,200 | | | | |
| DTW-8512-NAJ2, -NAR2 | 390 | 2 x 10 | 92,078 | 13,200 | 9,300 | 39,400 | | | | |
| DTW-8512-PAJ2, -PAR2 | 390 | 2 x 15 | 108,139 | 13,300 | 9,400 | 39,600 | | | | |
| DTW-8512-QAJ2, -QAR2 | 390 | 2 x 20 | 115,508 | 13,300 | 9,400 | 39,800 | 15'-11 1/2" | 4'-11 1/8" | | |
| DTW-8512-RAJ2, -RAR2 | 390 | 2 x 25 | 120,130 | 13,500 | 9,600 | 40,000 | | | | |
| DTW-8512-SAJ2, -SAR2 | 390 | 2 x 30 | 125,472 | 13,500 | 9,700 | 40,200 | | | | |
| DTW-8512-NAE2, -NAQ2 | 409 | 2 x 10 | 93,778 | 13,700 | 9,800 | 40,800 | | | | |
| DTW-8512-PAE2, -PAQ2 | 409 | 2 x 15 | 109,055 | 13,800 | 9,900 | 41,000 | | | | |
| DTW-8512-QAE2, -QAO2 | 409 | 2 x 20 | 116,009 | 13,900 | 10,000 | 41,000 | | | | |
| DTW-8512-RAE2, -RAQ2 | 409 | 2 x 25 | 120,307 | 14,000 | 10,100 | 41,400 | | | | |
| DTW-8512-SAE2, -SAQ2 | 409 | 2 x 30 | 125,254 | 14,100 | 10,200 | 41,400 | | | | |
| DTW-8512-NAK2, -NAS2 | 452 | 2 x 10 | 90,345 | 14,500 | 10,600 | 43,000 | | | | |
| DTW-8512-PAK2, -PAS2 | 452 | 2 x 15 | 107,074 | 14,600 | 10,700 | 43,400 | | | | |
| DTW-8512-QAK2, -QAS2 | 452 | 2 x 20 | 114,581 | 14,700 | 10,800 | 43,400 | | | | |
| DTW-8512-RAK2, -RAS2 | 452 | 2 x 25 | 119,291 | 14,800 | 10,900 | 43,800 | | | | |
| DTW-8512-SAK2, -SAS2 | 452 | 2 x 30 | 124,788 | 14,900 | 11,000 | 43,800 | | | | |

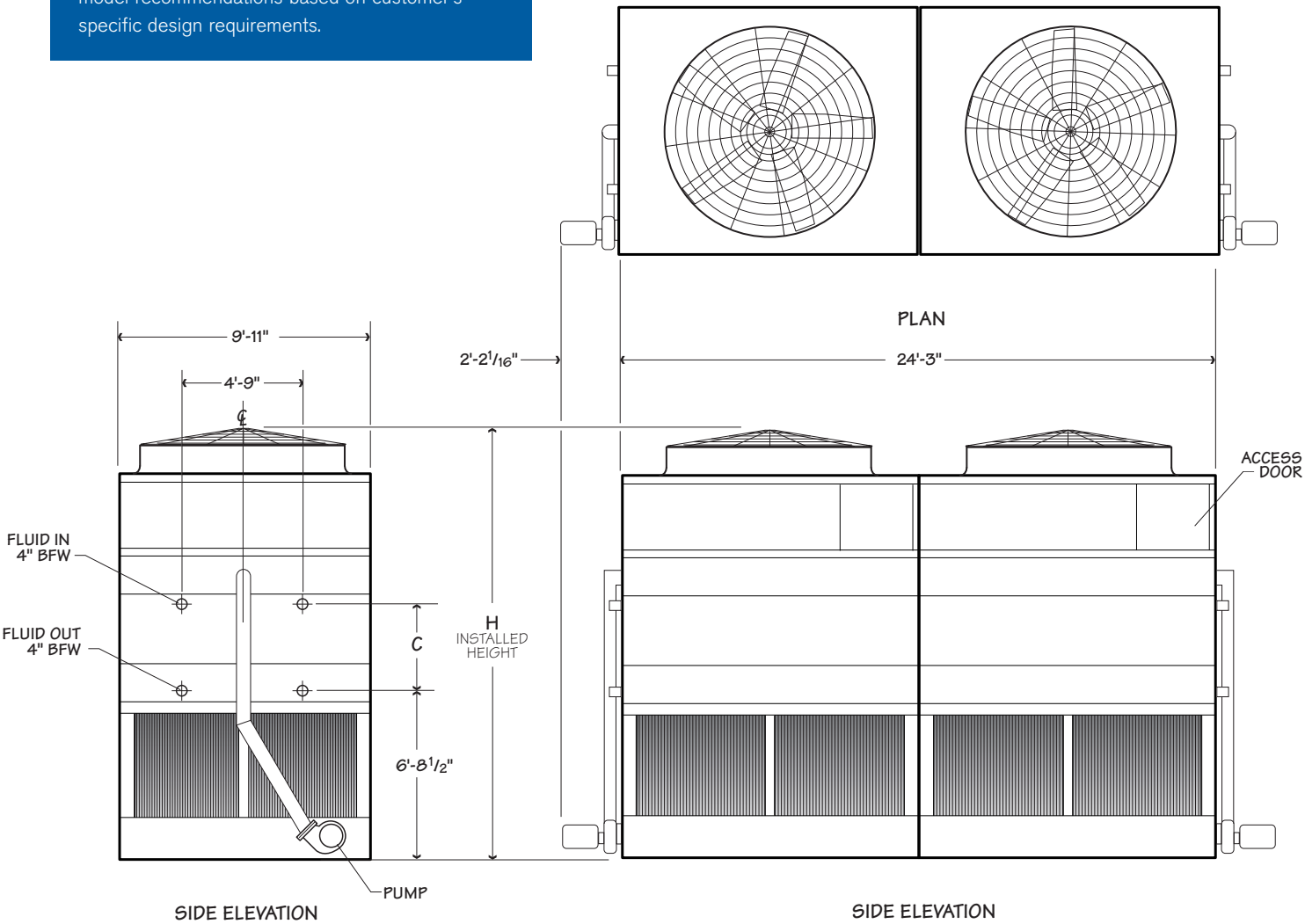
NOTE

1. The last digit of the model number(s) shown represents the number of cells. Multiple models shown on same line differ in external coil connection piping -reference factory drawings.
2. Inlet and outlet connection quantity and dimensions vary with design flowrate - reference factory drawings.
3. **Use this bulletin for preliminary layouts only.** Obtain current drawings from your sales representative.

10' x 24' Two Cell

Use this data for preliminary layouts only. Obtain current drawing from your sales representative.

UPDATE™ web-based selection software, available at spxcooling.com/update provides DT fluid cooler model recommendations based on customer's specific design requirements.



10' x 24' Two Cell

| Model note 1 | Internal Coil Volume gal | Fan Motor hp | Airflow Rate cfm | Shipping Weight lb | | Design Operating Weight lb | Dimensions note 2 | | Recirculating Flow Rate gpm | Pump Motor hp |
|----------------------|--------------------------------|-----------------|---------------------|-----------------------|---------------------|-------------------------------------|---------------------------------------|-------------------------------------|-----------------------------------|---------------------|
| | | | | Weight/Cell | Heaviest Section | | H | C | | |
| DTW-1012-NAB2, -NAM2 | 570 | 2 x 10 | 107,348 | 12,700 | 10,400 | 38,200 | 16'-2 ⁹ / ₁₆ " | 2'-8 ¹ / ₈ " | 1,200 | 2 x 5 |
| DTW-1012-PAB2, -PAM2 | 570 | 2 x 15 | 118,165 | 12,800 | 10,500 | 38,400 | | | | |
| DTW-1012-QAB2, -QAM2 | 570 | 2 x 20 | 127,682 | 12,900 | 10,500 | 38,400 | | | | |
| DTW-1012-RAB2, -RAM2 | 570 | 2 x 25 | 134,236 | 13,000 | 10,700 | 38,800 | | | | |
| DTW-1012-NAC2, -NAN2 | 706 | 2 x 10 | 106,011 | 14,100 | 11,700 | 42,000 | 16'-11 ¹ / ₁₆ " | 3'-5 ¹ / ₈ " | | |
| DTW-1012-PAC2, -PAN2 | 706 | 2 x 15 | 117,132 | 14,200 | 11,900 | 42,200 | | | | |
| DTW-1012-QAC2, -QAN2 | 706 | 2 x 20 | 126,916 | 14,200 | 11,900 | 42,200 | | | | |
| DTW-1012-RAC2, -RAN2 | 706 | 2 x 25 | 133,619 | 14,400 | 12,000 | 42,600 | | | | |
| DTW-1012-NAD2, -NAP2 | 840 | 2 x 10 | 104,601 | 15,400 | 10,400 | 45,800 | 17'-8 ⁹ / ₁₆ " | 4'-2 ¹ / ₈ " | | |
| DTW-1012-PAD2, -PAP2 | 840 | 2 x 15 | 116,021 | 15,500 | 10,400 | 46,000 | | | | |
| DTW-1012-QAD2, -QAP2 | 840 | 2 x 20 | 126,105 | 15,600 | 10,400 | 46,000 | | | | |
| DTW-1012-RAD2, -RAP2 | 840 | 2 x 25 | 132,965 | 15,700 | 10,400 | 46,400 | | | | |
| DTW-1012-SAD2, -SAP2 | 840 | 2 x 30 | 142,425 | 15,800 | 10,400 | 46,400 | | | | |
| DTW-1012-NAJ2, -NAR2 | 934 | 2 x 10 | 101,286 | 16,300 | 11,300 | 48,200 | | | | |
| DTW-1012-PAJ2, -PAR2 | 934 | 2 x 15 | 113,269 | 16,400 | 11,300 | 48,600 | | | | |
| DTW-1012-QAJ2, -QAR2 | 934 | 2 x 20 | 124,223 | 16,400 | 11,300 | 48,600 | | | | |
| DTW-1012-RAJ2, -RAR2 | 934 | 2 x 25 | 131,740 | 16,600 | 11,300 | 48,800 | | | | |
| DTW-1012-SAJ2, -SAR2 | 934 | 2 x 30 | 142,175 | 16,600 | 11,300 | 49,000 | | | | |
| DTW-1012-PAE2, -PAQ2 | 976 | 2 x 15 | 114,856 | 17,000 | 11,900 | 50,000 | 18'-5 ⁹ / ₁₆ " | 4'-11 ¹ / ₈ " | | |
| DTW-1012-QAE2, -QAQ2 | 976 | 2 x 20 | 125,250 | 17,000 | 11,900 | 50,000 | | | | |
| DTW-1012-RAE2, -RAQ2 | 976 | 2 x 25 | 132,280 | 17,200 | 11,900 | 50,400 | | | | |
| DTW-1012-SAE2, -SAQ2 | 976 | 2 x 30 | 141,941 | 17,200 | 11,900 | 50,400 | | | | |
| DTW-1012-PAK2, -PAS2 | 1,084 | 2 x 15 | 111,184 | 18,000 | 12,900 | 53,000 | | | | |
| DTW-1012-QAK2, -QAS2 | 1,084 | 2 x 20 | 122,550 | 18,000 | 12,900 | 53,000 | | | | |
| DTW-1012-RAK2, -RAS2 | 1,084 | 2 x 25 | 130,326 | 18,200 | 12,900 | 53,400 | | | | |
| DTW-1012-SAK2, -SAS2 | 1,084 | 2 x 30 | 141,140 | 18,200 | 12,900 | 53,400 | | | | |

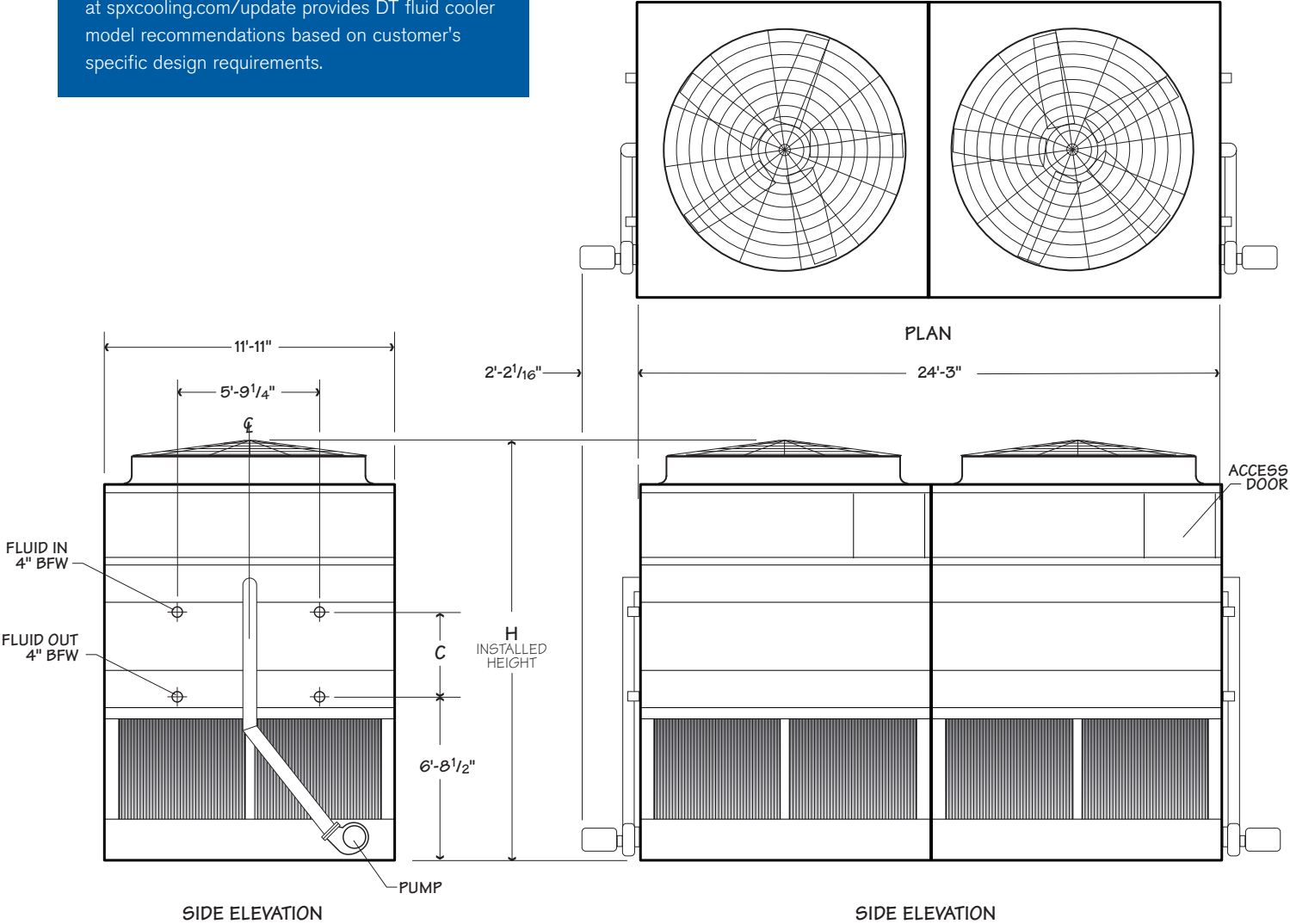
NOTE

- The last digit of the model number(s) shown represents the number of cells. Multiple models shown on same line differ in external coil connection piping -reference factory drawings.
- Inlet and outlet connection quantity and dimensions vary with design flowrate - reference factory drawings.
- Use this bulletin for preliminary layouts only.** Obtain current drawings from your sales representative.

12' x 24' Two Cell

Use this data for preliminary layouts only. Obtain current drawing from your sales representative.

UPDATE™ web-based selection software, available at spxcooling.com/update provides DT fluid cooler model recommendations based on customer's specific design requirements.



12' x 24' Two Cell

| Model note 1 | Internal Coil Volume gal | Fan Motor hp | Airflow Rate cfm | Shipping Weight lb | | Design Operating Weight lb | Dimensions note 2 | | Recirculating Flow Rate gpm | Pump Motor hp | | | | | | |
|----------------------|--------------------------------|-----------------|---------------------|-----------------------|---------------------|-------------------------------------|---------------------------------------|--------------------------------------|-----------------------------------|---------------------|-------|-------|-------|-------|-------|-------|
| | | | | Weight/Cell | Heaviest Section | | H | C | | | | | | | | |
| DTW-1212-NAB2, -NAM2 | 690 | 2 x 10 | 127,283 | 14,500 | 11,900 | 44,000 | 16'-2 ⁹ / ₁₆ " | 2'-8 ¹ / ₁₆ " | 1,400 | 2 x 5 | | | | | | |
| DTW-1212-PAB2, -PAM2 | 690 | 2 x 15 | 141,750 | 14,600 | 12,000 | 44,200 | | | | | | | | | | |
| DTW-1212-QAB2, -QAM2 | 690 | 2 x 20 | 153,469 | 14,600 | 12,000 | 44,200 | | | | | | | | | | |
| DTW-1212-RAB2, -RAM2 | 690 | 2 x 25 | 161,927 | 14,800 | 12,200 | 44,600 | | | | | | | | | | |
| DTW-1212-SAB2, -SAM2 | 690 | 2 x 30 | 172,081 | 14,800 | 12,200 | 44,600 | | | | | | | | | | |
| DTW-1212-NAC2, -NAN2 | 852 | 2 x 10 | 125,617 | 16,100 | 13,500 | 48,600 | 16'-11 ¹ / ₁₆ " | 3'-5 ¹ / ₁₆ " | | | 1,400 | 2 x 5 | | | | |
| DTW-1212-PAC2, -PAN2 | 852 | 2 x 15 | 140,410 | 16,200 | 13,600 | 48,800 | | | | | | | | | | |
| DTW-1212-QAC2, -QAN2 | 852 | 2 x 20 | 152,447 | 16,200 | 13,600 | 48,800 | | | | | | | | | | |
| DTW-1212-RAC2, -RAN2 | 852 | 2 x 25 | 161,065 | 16,400 | 13,800 | 49,200 | | | | | | | | | | |
| DTW-1212-SAC2, -SAN2 | 852 | 2 x 30 | 171,418 | 16,400 | 13,800 | 49,200 | | | | | | | | | | |
| DTW-1212-NAD2, -NAP2 | 1,016 | 2 x 10 | 123,861 | 17,700 | 12,200 | 53,000 | 17'-8 ³ / ₁₆ " | 4'-2 ¹ / ₁₆ " | | | | | 1,400 | 2 x 5 | | |
| DTW-1212-PAD2, -PAP2 | 1,016 | 2 x 15 | 138,997 | 17,800 | 12,200 | 53,400 | | | | | | | | | | |
| DTW-1212-QAD2, -QAP2 | 1,016 | 2 x 20 | 151,358 | 17,800 | 12,200 | 53,400 | | | | | | | | | | |
| DTW-1212-RAD2, -RAP2 | 1,016 | 2 x 25 | 160,174 | 18,000 | 12,200 | 53,800 | | | | | | | | | | |
| DTW-1212-SAD2, -SAP2 | 1,016 | 2 x 30 | 170,740 | 18,000 | 12,200 | 53,800 | | | | | | | | | | |
| DTW-1212-PAJ2, -PAR2 | 1,128 | 2 x 15 | 135,726 | 18,800 | 13,200 | 56,400 | | | | | | | | | | |
| DTW-1212-QAJ2, -QAR2 | 1,128 | 2 x 20 | 149,060 | 18,900 | 13,200 | 56,400 | | | | | | | | | | |
| DTW-1212-RAJ2, -RAR2 | 1,128 | 2 x 25 | 158,663 | 19,000 | 13,200 | 56,800 | | | | | | | | | | |
| DTW-1212-SAJ2, -SAR2 | 1,128 | 2 x 30 | 170,275 | 19,100 | 13,200 | 56,800 | | | | | | | | | | |
| DTW-1212-TAJ2, -TAR2 | 1,128 | 2 x 40 | 181,015 | 19,200 | 13,200 | 57,000 | | | | | | | | | | |
| DTW-1212-PAE2, -PAQ2 | 1,178 | 2 x 15 | 137,506 | 19,500 | 13,900 | 58,000 | 18'-8 ³ / ₁₆ " | 4'-11 ¹ / ₁₆ " | | | | | | | 1,400 | 2 x 5 |
| DTW-1212-QAE2, -QAO2 | 1,178 | 2 x 20 | 150,238 | 19,500 | 13,900 | 58,200 | | | | | | | | | | |
| DTW-1212-RAE2, -RAQ2 | 1,178 | 2 x 25 | 159,256 | 19,700 | 13,900 | 58,400 | | | | | | | | | | |
| DTW-1212-SAE2, -SAQ2 | 1,178 | 2 x 30 | 170,052 | 19,700 | 13,900 | 58,600 | | | | | | | | | | |
| DTW-1212-PAK2, -PAS2 | 1,310 | 2 x 15 | 133,253 | 20,700 | 15,100 | 61,600 | | | | | | | | | | |
| DTW-1212-QAK2, -QAS2 | 1,310 | 2 x 20 | 147,057 | 20,700 | 15,100 | 61,600 | | | | | | | | | | |
| DTW-1212-RAK2, -RAS2 | 1,310 | 2 x 25 | 156,962 | 20,900 | 15,100 | 62,000 | | | | | | | | | | |
| DTW-1212-SAK2, -SAS2 | 1,310 | 2 x 30 | 168,999 | 20,900 | 15,100 | 62,000 | | | | | | | | | | |
| DTW-1212-TAK2, -TAS2 | 1,310 | 2 x 40 | 179,948 | 21,100 | 15,100 | 62,200 | | | | | | | | | | |

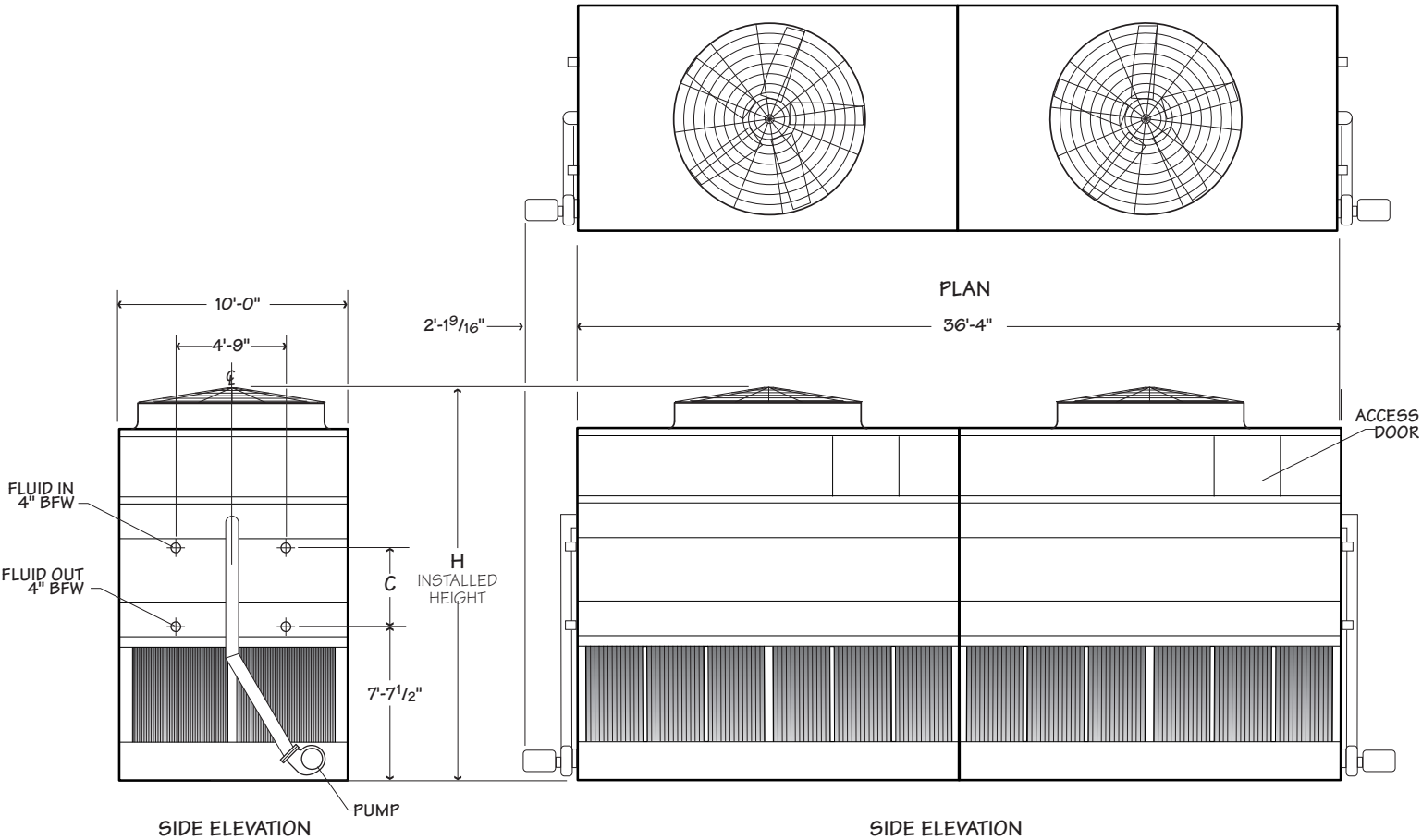
NOTE

- The last digit of the model number(s) shown represents the number of cells. Multiple models shown on same line differ in external coil connection piping -reference factory drawings.
- Inlet and outlet connection quantity and dimensions vary with design flowrate - reference factory drawings.
- Use this bulletin for preliminary layouts only.** Obtain current drawings from your sales representative.

10' x 36' Two Cell

Use this data for preliminary layouts only. Obtain current drawing from your sales representative.

UPDATE™ web-based selection software, available at spxcooling.com/update provides DT fluid cooler model recommendations based on customer's specific design requirements.



10' x 36' Two Cell

| Model note 1 | Internal Coil Volume gal | Fan Motor hp | Airflow Rate cfm | Shipping Weight lb | | Design Operating Weight lb | Dimensions note 2 | | Recirculating Flow Rate gpm | Pump Motor hp | | |
|----------------------|--------------------------------|-----------------|---------------------|-----------------------|---------------------|-------------------------------------|--------------------------------------|-------------------------------------|-----------------------------------|---------------------|--|--|
| | | | | Weight/Cell | Heaviest Section | | H | C | | | | |
| DTW-1018-NAB2, -NAM2 | 844 | 2 x 10 | 141,923 | 17,700 | 14,100 | 54,400 | 17'-1 ¹ / ₈ " | 2'-8 ¹ / ₈ " | 1,660 | 2 x 7.5 | | |
| DTW-1018-PAB2, -PAM2 | 844 | 2 x 15 | 161,292 | 17,800 | 14,200 | 54,800 | | | | | | |
| DTW-1018-QAB2, -QAM2 | 844 | 2 x 20 | 176,351 | 17,900 | 14,300 | 54,800 | | | | | | |
| DTW-1018-RAB2, -RAM2 | 844 | 2 x 25 | 187,614 | 18,000 | 14,400 | 55,200 | | | | | | |
| DTW-1018-SAB2, -SAM2 | 844 | 2 x 30 | 199,684 | 18,100 | 14,500 | 55,200 | | | | | | |
| DTW-1018-NAC2, -NAN2 | 1,048 | 2 x 10 | 139,788 | 19,700 | 16,100 | 60,200 | 17'-10 ³ / ₈ " | 3'-5 ¹ / ₈ " | | | | |
| DTW-1018-PAC2, -PAN2 | 1,048 | 2 x 15 | 159,454 | 19,800 | 16,200 | 60,400 | | | | | | |
| DTW-1018-QAC2, -QAN2 | 1,048 | 2 x 20 | 174,879 | 19,800 | 16,200 | 60,400 | | | | | | |
| DTW-1018-RAC2, -RAN2 | 1,048 | 2 x 25 | 186,359 | 20,000 | 16,400 | 60,800 | | | | | | |
| DTW-1018-SAC2, -SAN2 | 1,048 | 2 x 30 | 198,721 | 20,000 | 16,400 | 60,800 | | | | | | |
| DTW-1018-NAD2, -NAP2 | 1,252 | 2 x 10 | 137,593 | 21,600 | 14,800 | 65,800 | 18'-7 ³ / ₈ " | 4'-2 ¹ / ₈ " | | | | |
| DTW-1018-PAD2, -PAP2 | 1,252 | 2 x 15 | 157,529 | 21,800 | 14,800 | 66,000 | | | | | | |
| DTW-1018-QAD2, -QAP2 | 1,252 | 2 x 20 | 173,335 | 21,800 | 14,800 | 66,000 | | | | | | |
| DTW-1018-RAD2, -RAP2 | 1,252 | 2 x 25 | 185,046 | 22,000 | 14,800 | 66,400 | | | | | | |
| DTW-1018-SAD2, -SAP2 | 1,252 | 2 x 30 | 197,721 | 22,000 | 14,800 | 66,400 | | | | | | |
| DTW-1018-TAD2, -TAP2 | 1,252 | 2 x 40 | 211,972 | 22,100 | 14,800 | 66,600 | | | | | | |
| DTW-1018-PAJ2, -PAR2 | 1,392 | 2 x 15 | 153,524 | 23,000 | 16,100 | 69,600 | | | | | | |
| DTW-1018-QAJ2, -QAR2 | 1,392 | 2 x 20 | 170,030 | 23,100 | 16,100 | 69,800 | | | | | | |
| DTW-1018-RAJ2, -RAR2 | 1,392 | 2 x 25 | 182,407 | 23,200 | 16,100 | 70,000 | | | | | | |
| DTW-1018-SAJ2, -SAR2 | 1,392 | 2 x 30 | 196,110 | 23,300 | 16,100 | 70,200 | | | | | | |
| DTW-1018-TAJ2, -TAR2 | 1,392 | 2 x 40 | 211,434 | 23,400 | 16,100 | 70,400 | | | | | | |
| DTW-1018-PAE2, -PAQ2 | 1,454 | 2 x 15 | 155,534 | 23,800 | 16,900 | 71,800 | 19'-4 ³ / ₈ " | 4'-11 ¹ / ₈ " | | | | |
| DTW-1018-QAE2, -QAO2 | 1,454 | 2 x 20 | 171,722 | 23,900 | 16,900 | 71,800 | | | | | | |
| DTW-1018-RAE2, -RAQ2 | 1,454 | 2 x 25 | 183,695 | 24,000 | 16,900 | 72,200 | | | | | | |
| DTW-1018-SAE2, -SAQ2 | 1,454 | 2 x 30 | 196,700 | 24,100 | 16,900 | 72,200 | | | | | | |
| DTW-1018-TAE2, -TAQ2 | 1,454 | 2 x 40 | 211,123 | 24,200 | 16,900 | 72,600 | | | | | | |
| DTW-1018-PAK2, -PAS2 | 1,620 | 2 x 15 | 150,554 | 25,300 | 18,300 | 76,200 | | | | | | |
| DTW-1018-QAK2, -QAS2 | 1,620 | 2 x 20 | 167,436 | 25,400 | 18,300 | 76,200 | | | | | | |
| DTW-1018-RAK2, -RAS2 | 1,620 | 2 x 25 | 180,112 | 25,500 | 18,300 | 76,600 | | | | | | |
| DTW-1018-SAK2, -SAS2 | 1,620 | 2 x 30 | 194,312 | 25,600 | 18,300 | 76,600 | | | | | | |
| DTW-1018-TAK2, -TAS2 | 1,620 | 2 x 40 | 209,922 | 25,700 | 18,300 | 76,800 | | | | | | |

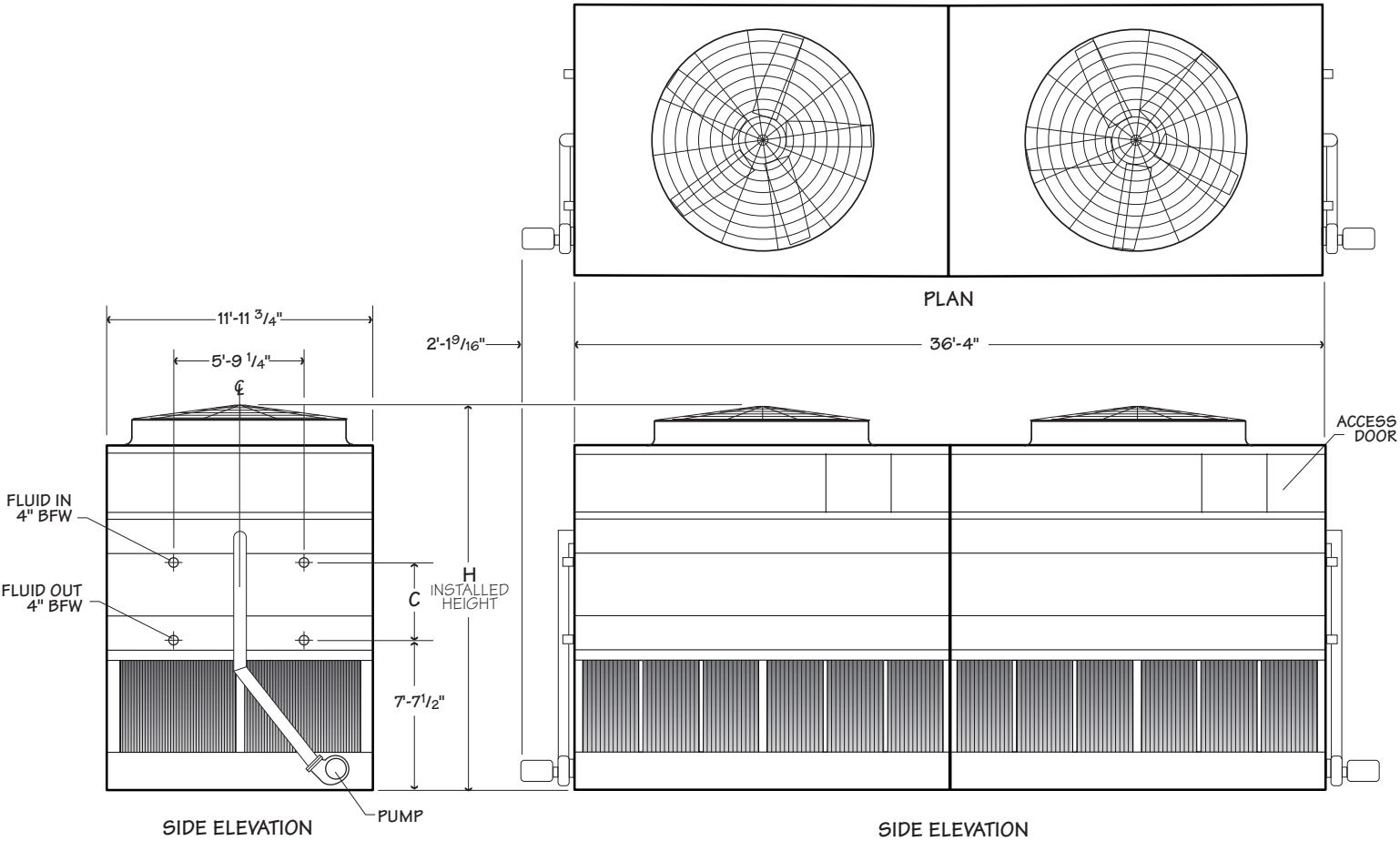
NOTE

1. The last digit of the model number(s) shown represents the number of cells. Multiple models shown on same line differ in external coil connection piping -reference factory drawings.
2. Inlet and outlet connection quantity and dimensions vary with design flowrate - reference factory drawings.
3. **Use this bulletin for preliminary layouts only.** Obtain current drawings from your sales representative.

12' x 36' Two Cell

Use this data for preliminary layouts only. Obtain current drawing from your sales representative.

UPDATE™ web-based selection software, available at spxcooling.com/update provides DT fluid cooler model recommendations based on customer's specific design requirements.

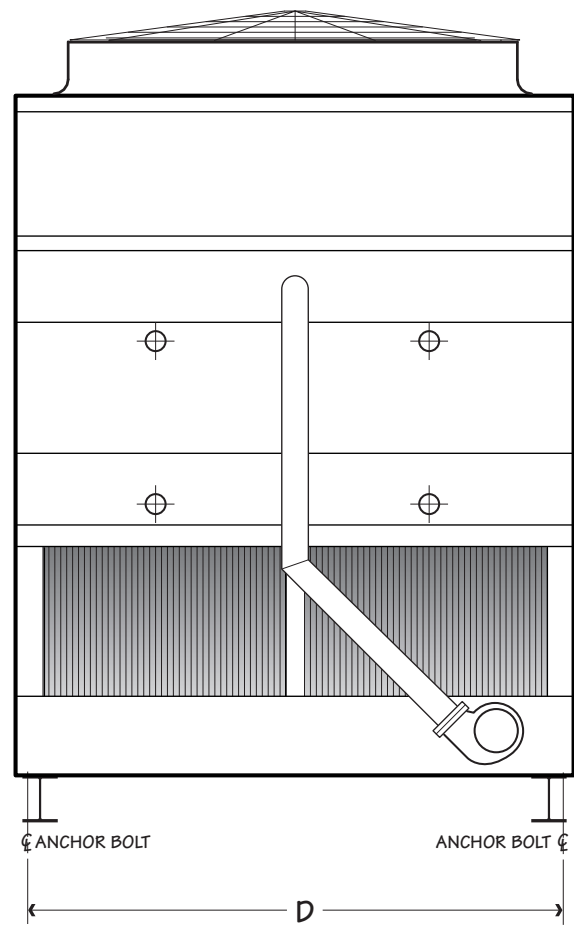


12' x 36' Two Cell

| Model note1 | Internal Coil Volume gal | Fan Motor hp | Airflow Rate cfm | Shipping Weight lb | | Design Operating Weight lb | Dimensions note 2 | | Recirculating Flow Rate gpm | Pump Motor hp |
|----------------------|--------------------------------|-----------------|---------------------|-----------------------|---------------------|-------------------------------------|----------------------|------------|-----------------------------------|---------------------|
| | | | | Weight/Cell | Heaviest Section | | H | C | | |
| DTW-1218-PAB2, -PAM2 | 1,020 | 2 x 15 | 190,208 | 20,800 | 16,600 | 64,000 | 17'-8 1/8" | 2'-8 1/8" | 1,880 | 2 x 7.5 |
| DTW-1218-QAB2, -QAM2 | 1,020 | 2 x 20 | 208,558 | 20,800 | 16,700 | 64,200 | | | | |
| DTW-1218-RAB2, -RAM2 | 1,020 | 2 x 25 | 220,627 | 21,000 | 16,800 | 64,400 | | | | |
| DTW-1218-SAB2, -SAM2 | 1,020 | 2 x 30 | 233,741 | 21,000 | 16,900 | 64,600 | 18'-3 1/8" | 3'-5 1/8" | | |
| DTW-1218-PAC2, -PAN2 | 1,266 | 2 x 15 | 187,881 | 23,100 | 18,900 | 70,800 | | | | |
| DTW-1218-QAC2, -QAN2 | 1,266 | 2 x 20 | 206,692 | 23,100 | 19,000 | 70,800 | | | | |
| DTW-1218-RAC2, -RAN2 | 1,266 | 2 x 25 | 218,992 | 23,300 | 19,100 | 71,200 | 19'-0 1/8" | 4'-2 1/8" | | |
| DTW-1218-SAC2, -SAN2 | 1,266 | 2 x 30 | 232,402 | 23,300 | 19,200 | 71,200 | | | | |
| DTW-1218-PAD2, -PAP2 | 1,512 | 2 x 15 | 185,474 | 25,400 | 17,400 | 77,400 | | | | |
| DTW-1218-QAD2, -QAP2 | 1,512 | 2 x 20 | 204,755 | 25,400 | 17,400 | 77,600 | | | | |
| DTW-1218-RAD2, -RAP2 | 1,512 | 2 x 25 | 217,294 | 25,600 | 17,400 | 77,800 | | | | |
| DTW-1218-SAD2, -SAP2 | 1,512 | 2 x 30 | 231,003 | 25,600 | 17,400 | 78,000 | | | | |
| DTW-1218-TAD2, -TAP2 | 1,512 | 2 x 40 | 252,116 | 25,800 | 17,400 | 78,200 | | | | |
| DTW-1218-UAD2, -UAP2 | 1,512 | 2 x 50 | 265,052 | 25,800 | 17,400 | 78,200 | | | | |
| DTW-1218-QAJ2, -QAR2 | 1,682 | 2 x 20 | 200,810 | 27,000 | 18,900 | 82,000 | | | | |
| DTW-1218-RAJ2, -RAR2 | 1,682 | 2 x 25 | 213,953 | 27,100 | 18,900 | 82,400 | | | | |
| DTW-1218-SAJ2, -SAR2 | 1,682 | 2 x 30 | 228,613 | 27,200 | 18,900 | 82,400 | | | | |
| DTW-1218-TAJ2, -TAR2 | 1,682 | 2 x 40 | 251,316 | 27,300 | 18,900 | 82,600 | | | | |
| DTW-1218-UAJ2, -UAR2 | 1,682 | 2 x 50 | 265,300 | 27,300 | 18,900 | 82,600 | | | | |
| DTW-1218-VAJ2, -VAR2 | 1,682 | 2 x 60 | 275,764 | 27,700 | 18,900 | 83,400 | 19'-9 1/8" | 4'-11 1/8" | | |
| DTW-1218-QAE2, -QAO2 | 1,758 | 2 x 20 | 202,735 | 27,900 | 19,900 | 84,600 | | | | |
| DTW-1218-RAE2, -RAO2 | 1,758 | 2 x 25 | 215,535 | 28,100 | 19,900 | 84,800 | | | | |
| DTW-1218-SAE2, -SAO2 | 1,758 | 2 x 30 | 229,566 | 28,100 | 19,900 | 85,000 | | | | |
| DTW-1218-TAE2, -TAO2 | 1,758 | 2 x 40 | 251,058 | 28,200 | 19,900 | 85,200 | | | | |
| DTW-1218-UAE2, -UAO2 | 1,758 | 2 x 50 | 264,131 | 28,300 | 19,900 | 85,200 | | | | |
| DTW-1218-QAK2, -QAS2 | 1,956 | 2 x 20 | 197,736 | 29,700 | 21,600 | 89,800 | | | | |
| DTW-1218-RAK2, -RAS2 | 1,956 | 2 x 25 | 211,151 | 29,900 | 21,600 | 90,000 | | | | |
| DTW-1218-SAK2, -SAS2 | 1,956 | 2 x 30 | 226,232 | 29,900 | 21,600 | 90,200 | | | | |
| DTW-1218-TAK2, -TAS2 | 1,956 | 2 x 40 | 249,544 | 30,000 | 21,600 | 90,400 | | | | |
| DTW-1218-UAK2, -UAS2 | 1,956 | 2 x 50 | 263,797 | 30,000 | 21,600 | 90,400 | | | | |
| DTW-1218-VAK2, -VAS2 | 1,956 | 2 x 60 | 274,425 | 30,400 | 21,600 | 91,200 | | | | |

NOTE

1. The last digit of the model number(s) shown represents the number of cells. Multiple models shown on same line differ in external coil connection piping -reference factory drawings.
2. Inlet and outlet connection quantity and dimensions vary with design flowrate - reference factory drawings.
3. **Use this bulletin for preliminary layouts only.** Obtain current drawings from your sales representative.



| Model | D | Maximum Deflection |
|----------|-------------------------------------|--------------------|
| DTW-8509 | 8'-3 ⁷ / ₈ " | 1/2" |
| DTW-8512 | 8'-3 ⁷ / ₈ " | 1/2" |
| DTW-1012 | 9'-8 ¹ / ₈ " | 1/2" |
| DTW-1018 | 9'-8 ¹ / ₈ " | 1/2" |
| DTW-1212 | 11'-8 ³ / ₈ " | 1/2" |
| DTW-1218 | 11'-8 ³ / ₈ " | 1/2" |

NOTE

1. The recommended supporting steel arrangement for the DT fluid cooler consists of parallel I-beams running the full length of the unit.
2. Supporting steel is to be designed, constructed and furnished by others.
3. The top surface of the supporting steel must be framed flush and level.
4. If vibration isolators are used, they must be placed underneath the supporting steel beams.
5. Consider provisions for access to the fluid cooler if the supporting steel is elevated above grade.
6. **Use this bulletin for preliminary layouts only.** Obtain current drawings from your sales representative.

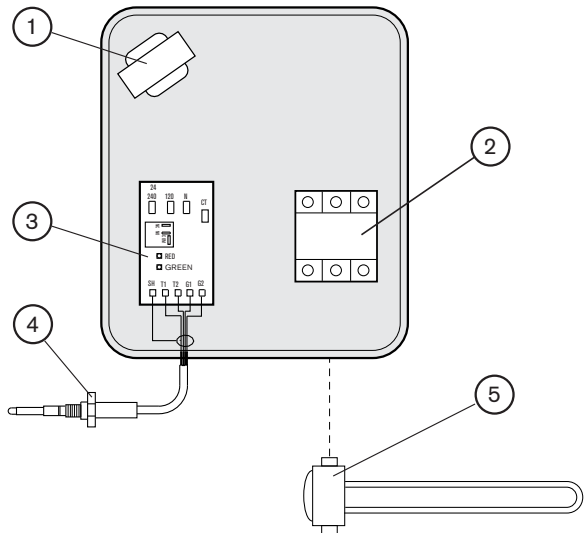
The purpose of a basin heater is to prevent recirculating water from freezing in the collection basin during periods of shutdown or standby operation. Heater systems are sized according to tower model and ambient temperature to give maximum protection against freezing in the collection basin. They are not intended to protect the coil and other components from icing.

An automatic basin water heater system consists of the following components:

- Stainless steel electric immersion heater(s). Threaded couplings are provided in the side of the collection basin.
- NEMA 4 enclosure containing:
 - Transformer to convert power supply to 24 volts for control circuit.
 - Magnetic contactor to energize heater.
 - Solid state circuit board for temperature and low-water cutoff.
 - The enclosure may be mounted on the side of the fluid cooler.
- Control probe in the collection basin to monitor water temperature and level.

Heater components are typically shipped separately for installation by others.

Heat trace and insulation of the pump may be optionally selected.



- 1. Transformer
- 2. Contactor
- 3. Solid State Relay Card
- 4. Sensor Probe
- 5. Heater Element(s)

| Model | Heater Size kW | | |
|----------|----------------|---------------|---------------|
| | 0°F Ambient | -20°F Ambient | -40°F Ambient |
| DTW-8509 | 6 | 7.5 | 12 |
| DTW-8512 | 7.5 | 12 | 2 x 7.5 |
| DTW-1012 | 9 | 12 | 2 x 7.5 |
| DTW-1018 | 12 | 2 x 9 | 2 x 12 |
| DTW-1212 | 12 | 2 x 7.5 | 2 x 9 |
| DTW-1218 | 2 x 7.5 | 2 x 12 | 2 x 12 |

Fluid Cooler Recirculating Water

When the ambient air temperature falls below 32°F, the recirculating water within the fluid cooler can freeze. *Marley Technical Report #H-003 “Cooling Towers and Freezing Weather”* describes how to prevent freezing during operation. Ask your sales representative for a copy or download a copy at spxcooling.com. During shutdown, water collects in the basin and may freeze solid. You can prevent freezing by adding heat to the water left in the basin or, you can drain the fluid cooler basin and all exposed pipework at shutdown.

Remote Sump Application

With this type of system, recirculating water used by the fluid cooler for evaporative heat rejection is pumped to the fluid cooler spray system from a remote tank and flows by gravity from the fluid cooler back to the tank. At shutdown, all exposed water drains into the tank, located in a heated space, where it is safe from freezing. The amount of water needed to successfully operate the system depends on fluid cooler size and volume of water contained in the piping system to and from the fluid cooler. Select a tank large enough to contain those combined volumes, plus a level sufficient to maintain a flooded suction on the pump. Control makeup water according to the level where the tank stabilizes during operation.

System Cleanliness

The DT Fluid Cooler can be a very effective air washer. Atmospheric dust and particulates able to pass through the relatively small louver or screen openings will enter the recirculating water system. Increased concentrations can intensify systems maintenance by clogging screens and strainers—and smaller particulates can coat system heat transfer surfaces. In areas of low flow velocity, such as the collection basin, sedimentary deposits can provide a breeding ground for bacteria. In areas prone to dust and particulates, consider installing some means for keeping the collection basin clean. Typical devices include basin sweeper piping in conjunction with side stream filters and a variety of filtration media.

Blowdown

Blowdown or bleed-off is the continuous removal of a small portion of the water from the open recirculating system. Blowdown is used to prevent the dissolved solids from concentrating to the point where they will form scale. The amount of blowdown required depends on the heat load and the composition of the makeup water. The DT fluid cooler is equipped with a blowdown line with metering valve connected directly to the overflow. Specific blowdown adjustment instructions and additional blowdown information can be found in the applicable *DT Fluid Cooler User Manual*.

Water Treatment

To control the buildup of dissolved solids resulting from water evaporation, as well as airborne impurities and biological contaminants including Legionella, an effective, consistent water treatment program is required. Simple blowdown may be adequate to control corrosion and scale, but biological contamination can only be controlled with biocides. An acceptable water treatment program must be compatible with the variety of materials incorporated in the fluid cooler. Ideally the pH of the recirculating water should fall between 6.5 and 9.0. Batch feeding of the chemicals directly into the fluid cooler is not recommended since localized damage is possible. Specific startup instructions and additional water quality recommendations can be found in the *DT Fluid Cooler User Manual* which accompanies the fluid cooler and also is available from your sales representative.

Air Circulation

Considering the air path entering and exiting the fluid cooler is critical to ensure the fluid cooler operates as designed. Obstructions near the air inlet(s) and discharge should be located a sufficient distance away so as not to impede airflow. If the fluid cooler is to be located in an enclosure or near tall barriers, the air discharge should be positioned at an elevation higher than the top of the barriers to discourage recirculation of the hot discharge air. The fluid cooler must be located at such distance and direction to avoid the possibility of contaminated discharge air being drawn into building fresh air intake ducts.

Piping

Always follow accepted engineering practices during design and installation of fluid cooler piping. All piping must be supported independent of the fluid cooler—no loads are to be supported by the fluid cooler coil connections or fluid cooler structure. Precautions must be taken to protect the fluid cooler from excess heat generated during welding.

Furnish an induced-draft, counterflow, factory assembled, galvanized steel, closed circuit fluid cooler. Unit shall consist of _____ cell(s), as shown on plans. The limiting overall dimensions of the fluid cooler shall be _____ wide, _____ long, and _____ high to the top of the fan guard. Total operating horsepower of all fans shall not exceed _____ hp. Fluid Cooler shall be similar and equal in all aspects to DT Fluid Cooler Model _____.

Collection Basin and Casing: The collection basin and casing shall be heavy-gauge G-235 galvanized steel. To reduce potential for leaks, bolts shall be used in all submerged areas; self-tapping screws are not permitted. A factory-installed, float operated, mechanical make-up valve shall be included. An overflow and drain connection shall be provided in each cell. The basin floor shall slope towards the drain to allow complete flushing of debris. The collection basin shall be tested for leaks at the factory.

Fan Motor: Fan motor(s) shall be NEMA Premium Efficiency, TEFC, 1.15 service factor, variable torque, inverter ready and insulated for cooling tower duty, with each motor serving a single fan drive assembly. Motors shall be name plated for 3 phase, 60 Hz, _____ volt operation.

Fan: Fan(s) shall be propeller-type, incorporating aluminum alloy blades attached to galvanized hubs with U-bolts. Blades shall be individually adjustable. Fan(s) shall be driven through a right angle, industrial duty, oil lubricated, geared speed reducer that requires no oil changes for the first five (5) years of operation. All gearbox bearings shall be rated at an L_{10A} service life of 100,000 hours or greater and the gear sets shall have AGMA Quality Class of 9 or greater. The top of the fan cylinder shall be equipped with a conical, non-sagging, removable fan guard, fabricated of welded 5/16" and 7 gauge rods, and hot dip galvanized after fabrication.

Pump: Recirculation pump(s) shall be centrifugal with mechanical seal, mounted to the collection basin in conjunction with a suction assembly, and close-coupled with a _____hp TEFC pump motor name plated for 3 phase, 60 Hz, _____volt operation. Recirculation piping shall be schedule 40 PVC. A blowdown line with metering valve shall be connected directly to the fluid cooler overflow.

Heat Transfer Coil: Coil(s) shall be constructed of continuous serpentine circuits assembled into fully welded headers and hot dip galvanized after fabrication. Each coil shall be tested at 375 psig air pressure under water. Coil tubes shall be sloped for free drainage of fluid.

Water Distribution: A pressurized spray system shall distribute water evenly over the coil surface with large-orifice, clog resistant spray nozzles that are threaded for easy removal. The distribution header shall be self-draining, with removable corrosion resistant PVC branch arms.

Drift Eliminators: Drift eliminators shall be 17 mil thick PVC with a minimum of three changes in air direction, and shall limit drift losses to 0.001% or less of the design recirculating water flow rate. Eliminators shall be easily removable for inspection.

Louvers: Air inlet louvers shall be a minimum of 5" air travel, triple pass PVC to limit water splash-out and prevent direct sunlight from entering the collection basin. For ease of service and long life, PVC louvers shall be enclosed in a removable frame that attaches to the air inlet without tools. Louvers with less than three changes in air direction are unacceptable.

DT fluid cooler

ENGINEERING DATA AND SPECIFICATIONS

SPX COOLING TECHNOLOGIES, INC.

7401 WEST 129 STREET
OVERLAND PARK, KS 66213 USA
913 664 7400 | spxcooling@spx.com
spxcooling.com

DT-TS-19 | ISSUED 1/2019

©2016-2019 SPX COOLING TECHNOLOGIES, INC | ALL RIGHTS RESERVED

In the interest of technological progress, all products are subject to design
and/or material change without notice.

