

# Dechlorinator specifications

## DECHLORINATOR

The dechlorinator removes chlorine from the water that degrades the reverse osmosis membranes.

120V, single-phase, 60 Hz, 5A electrical service is required for all dechlorinator models, except for the DC-CB dechlorinator (requires no electrical service).

**FIGURE 1-1: DECHLORINATOR**



**FIGURE 1-2: WALL MOUNT DECHLORINATOR**



**Table 1-1:  
Dechlorinator specifications**

Dechlorinator model*	Media volume	Dimensions, diameter x height	Connections, in / out	Drain connection	Backwash flow**	Operating weight	Shipping weight***
DC-CB	Carbon black filter	4" x 20" (102 x 508 mm)	1" Female NPT 1" Socket	—	—	20 lbs (9.0 kg)	13 lbs (5.9 kg)
DC-844	0.75 ft <sup>3</sup> (0.021 m <sup>3</sup> )	8" x 44" (203 x 1118 mm)	1" Male NPT	¾" Male NPT	3.2 gpm (12.1 L/m)	139 lbs (64.0 kg)	115 lbs (52.2 kg)
DC-948	1.00 ft <sup>3</sup> (0.028 m <sup>3</sup> )	9" x 48" (229 x 1219 mm)	1" Male NPT	¾" Male NPT	4.2 gpm (15.9 L/m)	167 lbs (76.0 kg)	130 lbs (59.0 kg)
DC-1054	1.50 ft <sup>3</sup> (0.042 m <sup>3</sup> )	10" x 54" (254 x 1372 mm)	1" Male NPT	¾" Male NPT	5.3 gpm (20.1 L/m)	194 lbs (88.0 kg)	150 lbs (68.0 kg)
DC-1252	2.00 ft <sup>3</sup> (0.050 m <sup>3</sup> )	12" x 52" (305 x 1321 mm)	1" Male NPT	¾" Male NPT	7.5 gpm (28.4 L/m)	245 lbs (112.0 kg)	190 lbs (86.2 kg)
DC-1354	2.50 ft <sup>3</sup> (0.071 m <sup>3</sup> )	13" x 54" (330 x 1372 mm)	1" Male NPT	¾" Male NPT	10.0 gpm (37.9 L/m)	257 lbs (117.0 kg)	225 lbs (102.1 kg)
DC-1465	3.00 ft <sup>3</sup> (0.085 m <sup>3</sup> )	14" x 65" (356 x 1651 mm)	1" Male NPT	¾" Male NPT	12.0 gpm (45.4 L/m)	475 lbs (216.0 kg)	335 lbs (152.0 kg)
DC-1665	4.00 ft <sup>3</sup> (0.113 m <sup>3</sup> )	16" x 65" (406 x 1651 mm)	1" Male NPT	¾" Male NPT	15.0 gpm (56.8 L/m)	564 lbs (256.0 kg)	385 lbs (174.6 kg)
DC-2162	6.00 ft <sup>3</sup> (0.170 m <sup>3</sup> )	21" x 62" (533 x 1575 mm)	1.5" Male NPT	1" Male NPT	25.0 gpm (94.6 L/m)	999 lbs (454.0 kg)	645 lbs (292.6 kg)
DC-2472	8.00 ft <sup>3</sup> (0.227 m <sup>3</sup> )	24" x 72" (610 x 1829 mm)	1.5" Male NPT	1" Male NPT	33.0 gpm (124.9 L/m)	1494 lbs (678.0 kg)	950 lbs (430.9 kg)
DC-3072	12.00 ft <sup>3</sup> (0.340 m <sup>3</sup> )	30" x 72" (762 x 1829 mm)	2" Male NPT	1" Male NPT	50.0 gpm (189.3 L/m)	2315 lbs (1051.0 kg)	1535 lbs (696.3 kg)

\* DC-CB is wall mounted; all other models are floor mounted.

\*\* Based on 60 to 90 psi (415 to 620 kPa) inlet pressure.

\*\*\* DC-2162, DC-2472, and DC-3072 gravel and media shipped separate, but included in shipping weight total.

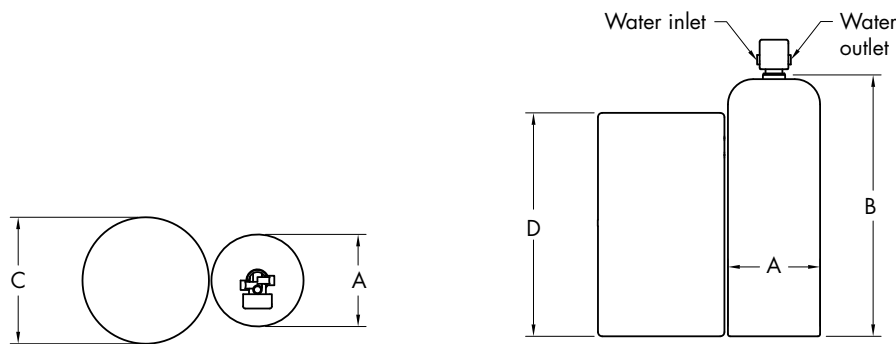
# Single water softener specifications

## WATER SOFTENER AND BRINE TANK

The water softener and brine tank are floor-mounted and exchange water hardness for sodium.

120V, single-phase, 60 Hz, 5A electrical service is required for all water softener models.

**FIGURE 2-1: SINGLE WATER SOFTENER AND BRINE TANK**



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**Table 2-1:  
Single softener and brine tank specifications**

Softener model	Media volume per tank	Resin tank diameter (A) x height (B) (per tank)	Connections, in/out	Drain connection	Backwash flow *	Brine tank** diameter (C) x height (D)	Softener operating weight	Softener shipping weight***
WS-844	0.75 ft <sup>3</sup> (0.021 m <sup>3</sup> )	8" x 44" (203 x 1118 mm)	1" Male NPT	3/4" Male NPT	1.70 gpm (6.4 L/m)	18" x 40" (457 x 1016 mm)	139 lbs (64.0 kg)	125 lbs (56.7 kg)
WS-948	1.00 ft <sup>3</sup> (0.028 m <sup>3</sup> )	9" x 48" (229 x 1219 mm)	1" Male NPT	3/4" Male NPT	2.2 gpm (8.3 L/m)	18" x 40" (457 x 1016 mm)	167 lbs (76.0 kg)	140 lbs (63.5 kg)
WS-1054	1.50 ft <sup>3</sup> (0.042 m <sup>3</sup> )	10" x 54" (254 x 1372 mm)	1" Male NPT	3/4" Male NPT	2.7 gpm (10.2 L/m)	18" x 40" (457 x 1016 mm)	194 lbs (88.0 kg)	160 lbs (72.6 kg)
WS-1252	2.00 ft <sup>3</sup> (0.050 m <sup>3</sup> )	12" x 52" (305 x 1321 mm)	1" Male NPT	3/4" Male NPT	3.2 gpm (12.1 L/m)	18" x 40" (457 x 1016 mm)	245 lbs (112.0 kg)	200 lbs (90.7 kg)
WS-1354	2.50 ft <sup>3</sup> (0.071 m <sup>3</sup> )	13" x 54" (330 x 1372 mm)	1" Male NPT	3/4" Male NPT	4.2 gpm (15.9 L/m)	18" x 40" (457 x 1016 mm)	257 lbs (117.0 kg)	235 lbs (106.6 kg)
WS-1465	3.00 ft <sup>3</sup> (0.085 m <sup>3</sup> )	14" x 65" (356 x 1651 mm)	1" Male NPT	3/4" Male NPT	5.3 gpm (20.1 L/m)	24" x 41" (610 x 1041 mm)	475 lbs (216.0 kg)	345 lbs (156.5 kg)
WS-1665	4.00 ft <sup>3</sup> (0.113 m <sup>3</sup> )	16" x 65" (406 x 1651 mm)	1" Male NPT	3/4" Male NPT	6.5 gpm (24.6 L/m)	24" x 41" (610 x 1041 mm)	564 lbs (256.0 kg)	395 lbs (179.2 kg)
WS-2162	6.00 ft <sup>3</sup> (0.170 m <sup>3</sup> )	21" x 62" (533 x 1575 mm)	1.5" Male NPT	1" Male NPT	12.0 gpm (45.4 L/m)	30" x 48" (762 x 1219 mm)	999 lbs (454.0 kg)	655 lbs (297.1 kg)
WS-2472	8.00 ft <sup>3</sup> (0.227 m <sup>3</sup> )	24" x 72" (610 x 1829 mm)	1.5" Male NPT	1" Male NPT	15.0 gpm (56.8 L/m)	39" x 48" (991 x 1219 mm)	1494 lbs (678.0 kg)	960 lbs (435.4 kg)
WS-3072	13.00 ft <sup>3</sup> (0.368 m <sup>3</sup> )	30" x 72" (762 x 1829 mm)	2" Male NPT	1" Male NPT	25.0 gpm (94.6 L/m)	39" x 48" (991 x 1219 mm)	2315 lbs (1051.0 kg)	1545 lbs (701.0 kg)

\* Based on 60 to 90 psi (415 to 620 kPa) inlet pressure.

\*\* See Table 4-1 for estimated brine tank weights.

\*\*\* WS-2162, WS-2472, and WS-3072 gravel and media shipped separate, but included in shipping weight total.

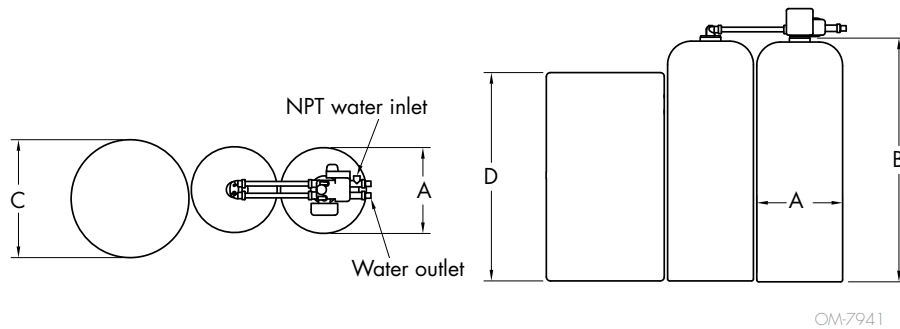
# Twin-alternating water softener specifications

## WATER SOFTENER AND BRINE TANK

The water softener and brine tank are floor-mounted and exchange water hardness for sodium.

120V, single-phase, 60 Hz, 5A electrical service is required for all water softener models.

**FIGURE 3-1: TWIN-ALTERNATING WATER SOFTENER AND BRINE TANK**



**Table 3-1:**  
Twin-alternating softener and brine tank specifications

Softener model	Media volume per tank	Resin tank diameter (A) x height (B) (per tank)	Connections, in/out	Drain connection	Backwash flow*	Brine tank** diameter (C) x height (D)	Softeners operating weight	Softeners shipping weight***
WD-844	0.75 ft <sup>3</sup> (0.021 m <sup>3</sup> )	8" x 44" (203 x 1118 mm)	1" Male NPT	¾" Male NPT	1.7 gpm (6.4 L/m)	18" x 40" (457 x 1016 mm)	298 lbs (136.0 kg)	250 lbs (113.4kg)
WD-948	1.00 ft <sup>3</sup> (0.028 m <sup>3</sup> )	9" x 48" (229 x 1219 mm)	1" Male NPT	¾" Male NPT	2.2 gpm (8.3 L/m)	18" x 40" (457 x 1016 mm)	333 lbs (152.0 kg)	270 lbs (122.5 kg)
WD-1054	1.50 ft <sup>3</sup> (0.042 m <sup>3</sup> )	10" x 54" (254 x 1372 mm)	1" Male NPT	¾" Male NPT	2.7 gpm (10.2 L/m)	18" x 40" (457 x 1016 mm)	388 lbs (176.0 kg)	310 lbs (140.6 kg)
WD-1252	2.00 ft <sup>3</sup> (0.050 m <sup>3</sup> )	12" x 52" (305 x 1321 mm)	1" Male NPT	¾" Male NPT	3.2 gpm (12.1 L/m)	18" x 40" (457 x 1016 mm)	492 lbs (224.0 kg)	390 lbs (176.9 kg)
WD-1354	2.50 ft <sup>3</sup> (0.071 m <sup>3</sup> )	13" x 54" (330 x 1372 mm)	1" Male NPT	¾" Male NPT	4.2 gpm (15.9 L/m)	18" x 40" (457 x 1016 mm)	513 lbs (233.0 kg)	460 lbs (208.7 kg)
WD-1465	3.00 ft <sup>3</sup> (0.085 m <sup>3</sup> )	14" x 65" (356 x 1651 mm)	1" Male NPT	¾" Male NPT	5.3 gpm (20.1 L/m)	24" x 41" (610 x 1041 mm)	949 lbs (431.0 kg)	680 lbs (308.4 kg)
WD-1665	4.00 ft <sup>3</sup> (0.113 m <sup>3</sup> )	16" x 65" (406 x 1651 mm)	1" Male NPT	¾" Male NPT	6.5 gpm (24.6 L/m)	24" x 41" (610 x 1041 mm)	1123 lbs (510.0 kg)	778 lbs (352.9 kg)
WD-2162	6.00 ft <sup>3</sup> (0.170 m <sup>3</sup> )	21" x 62" (533 x 1575 mm)	1.5" Male NPT	1" Male NPT	12.0 gpm (45.4 L/m)	30" x 48" (762 x 1219 mm)	1997 lbs (906.0 kg)	1300 lbs (589.7 kg)
WD-2472	8.00 ft <sup>3</sup> (0.227 m <sup>3</sup> )	24" x 72" (610 x 1829 mm)	1.5" Male NPT	1" Male NPT	15.0 gpm (56.8 L/m)	39" x 48" (991 x 1219 mm)	2987 lbs (1355.0 kg)	1910 lbs (866.4 kg)
WD-3072	13.00 ft <sup>3</sup> (0.368 m <sup>3</sup> )	30" x 72" (762 x 1829 mm)	1.5" Male NPT	1" Male NPT	25.0 gpm (94.6 L/m)	39" x 48" (991 x 1219 mm)	4630 lbs (2101.0 kg)	3080 lbs (1397.1 kg)

\* Based on 60 to 90 psi (415 to 620 kPa) inlet pressure.

\*\* See Table 4-1 for estimated brine tank weights.

\*\*\* WD-2162, WD-2472, and WD-3072 gravel and media shipped separate, but included in shipping weight total.

# Brine tank specifications

**Table 4-1:  
Brine tank specifications**

Brine tank* diameter x height	Estimated salt weight**	Maximum estimated operating weight	Shipping weight
18" x 40" (457 x 1016 mm)	290 lbs (134 kg)	440 lbs (200 kg)	15 lbs (7 kg)
24" x 41" (610 x 1041 mm)	540 lbs (243 kg)	790 lbs (360 kg)	23.5 lbs (11 kg)
30" x 48" (762 x 1219 mm)	980 lbs (445 kg)	1440 lbs (650 kg)	49 lbs (22 kg)
39" x 48" (991 x 1219 mm)	1660 lbs (753 kg)	2430 lbs (1100 kg)	75 lbs (34 kg)

\* See Tables 2-1 and 3-1 to determine brine tank size based on softener size.  
\*\* Salt is not provided by DriSteem.

**FIGURE 4-1: BRINE TANK WITH TWIN-ALTERNATING WATER SOFTENER**



# Optional pretreatment skid mounting

## SELECT PRETREATMENT SKID MOUNTING FOR EASE OF INSTALLATION

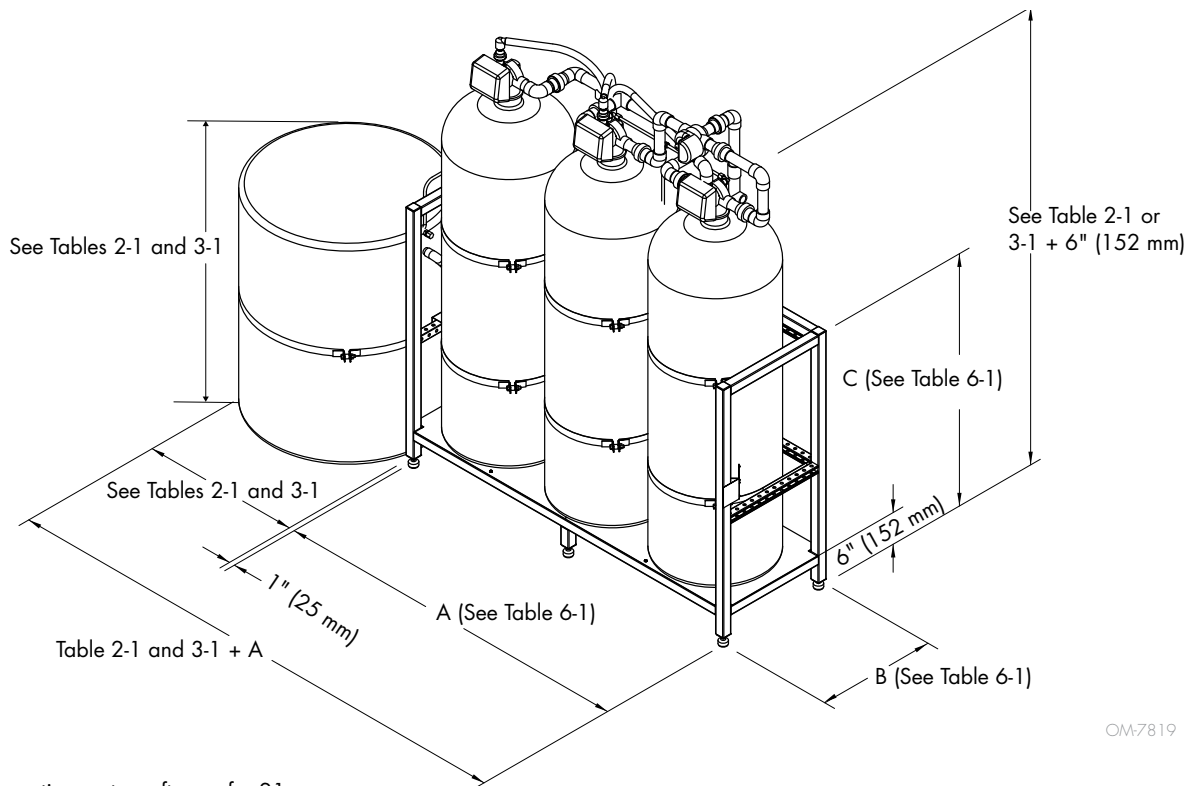
Reduce installation cost and time by having pretreatment components come pre-assembled. The DriSteem water softener(s), brine tank, and dechlorinator have a single point water inlet, water outlet, and power for all components.

- Save time and cost on installation
- Maximize clearance
- Ensure proper installation and operation

## GENERAL SKID FEATURES

- Single inlet water connection.
- Common drain connection.
- 120V single-phase connections (2) to connect to components.
- Factory installed component plumbing, including sampling valves, bypass, and gauges.

**FIGURE 5-1: WATER TREATMENT SKID WITH BRINE TANK**



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Note: Twin-alternating water softeners for 21-inch diameter and larger must have media installed in the field.

# Skid specifications

**Table 6-1:**  
Water treatment skid specifications

Skid size (outside dimensions)*			Outlet quantity on skid	Voltage to receptacle	Shipping weight** (skid only)
Length (A)****	Width (B)	Height (C)***			
44" (1118 mm)	28" (711 mm)	47" (1194 mm)	2	120 VAC	135 lbs (61.2 kg)
56" (1423 mm)	28" (711 mm)	47" (1194 mm)			150 lbs (68.1 kg)
66" (1676 mm)	28" (711 mm)	54" (1372 mm)			201 lbs (91.2 kg)
82" (2083 mm)	28" (711 mm)	54" (1372 mm)			255 lbs (115.7 kg)
104" (2642 mm)	34" (864 mm)	54" (1372 mm)			320 lbs (145.2 kg)

\* Skid does not include brine tank. The brine tank is floor mounted.  
 \*\* Skid weight only. Add components (DC/WS/WD) for entire system shipping weight.  
 \*\*\* Height does not include leveling feet (provided uninstalled).  
 \*\*\*\* Length (A) of skid does not include 6" (153 mm) deep electrical assembly.

### System shipping weight:

NOTE: The brine tank is not skid mounted and must be added separately to determine the overall shipping weight of the system. Add the shipping weight from Table 4-1 to the water system skid shipping weight calculated here:

Dechlorinator + Softener + Skid = Water system skid weight

Water system skid weight + Brine tank shipping weight = Total system shipping weight

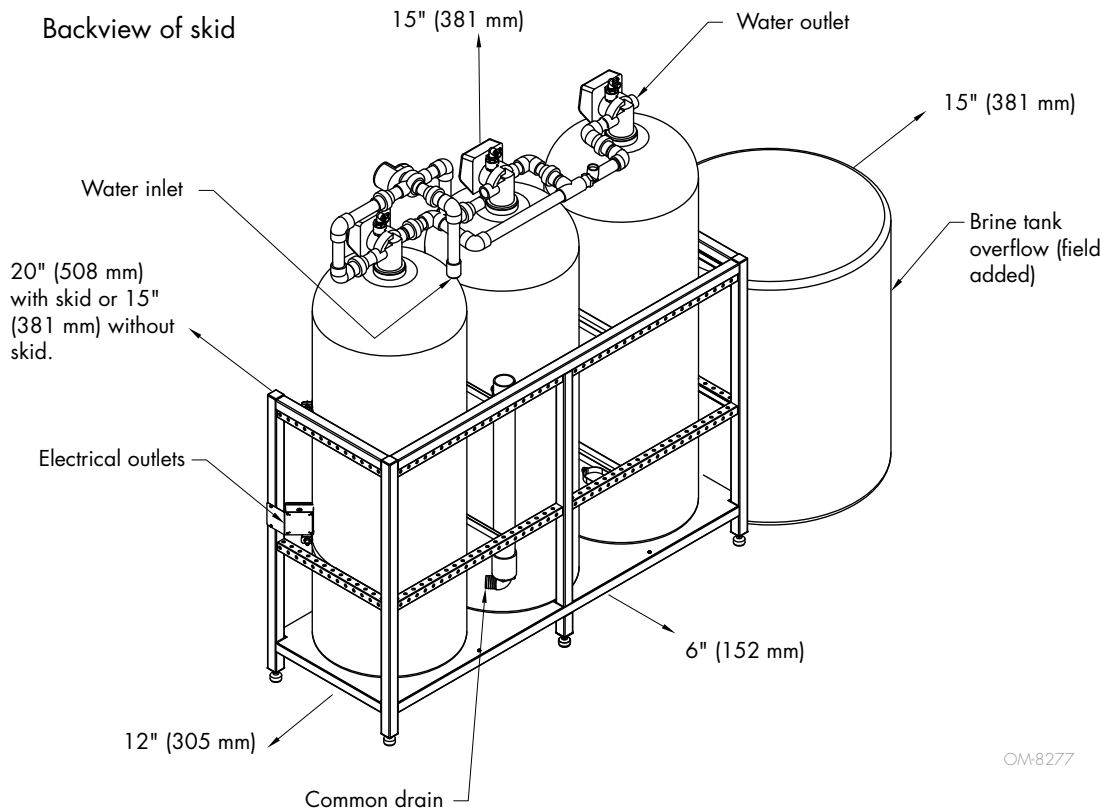
### Example (See Figure 5-1)

DC-1252 + WD-1665 + 66" (1676 mm) Skid = Water System Skid weight

190 lbs (86.2 kg) + 778 lbs (352.9 kg) + 201 lbs (91.2 kg) = 1,169 lbs (530.3 kg)

Total system shipping weight: 1,169 lbs (530.3 kg) + 23.5 lbs (11 kg) = 1192.5 lbs (541.3 kg)

**FIGURE 6-1: WATER TREATMENT SKID CONNECTIONS AND CLEARANCES**



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# Interconnecting tubing requirements

**Table 7-1:**  
Maximum length of interconnecting tubing between pump station and RO holding tank

Capacity (pph)	Volume		Tubing nominal diameter	Minimum tube I.D.		Maximum developed length*	
	gpm	L/m		in.	mm	ft	m
250	0.5	1.9	1/2"	0.375	10	>100	>30
			3/4"	0.625	16	>100	>30
			1"	0.875	23	>100	>30
500	1.0	3.0	1/2"	0.375	10	64	>20
			3/4"	0.625	16	>100	>30
			1"	0.875	23	>100	>30
1000	2.0	7.6	1/2"	0.375	10	18	5.5
			3/4"	0.625	16	>100	>30
			1"	0.875	23	>100	>30
1750	3.5	13.2	1/2"	0.375	10	—	—
			3/4"	0.625	16	>100	>30
			1"	0.875	23	>100	>30
2500	5.0	18.9	1/2"	0.375	10	—	—
			3/4"	0.625	16	95	29
			1"	0.875	23	>100	>30
3500	7.0	26.5	1/2"	0.375	10	—	—
			3/4"	0.625	16	51	16
			1"	0.875	23	>100	>30
5500	11	41.6	1/2"	0.375	10	—	—
			3/4"	0.625	16	22	7
			1"	0.875	23	89	27

\* Calculations are based on pipe finish factor of 130 and low-pressure piping length of 1' (0.3 m).