

CWM Modular Container Irrigation

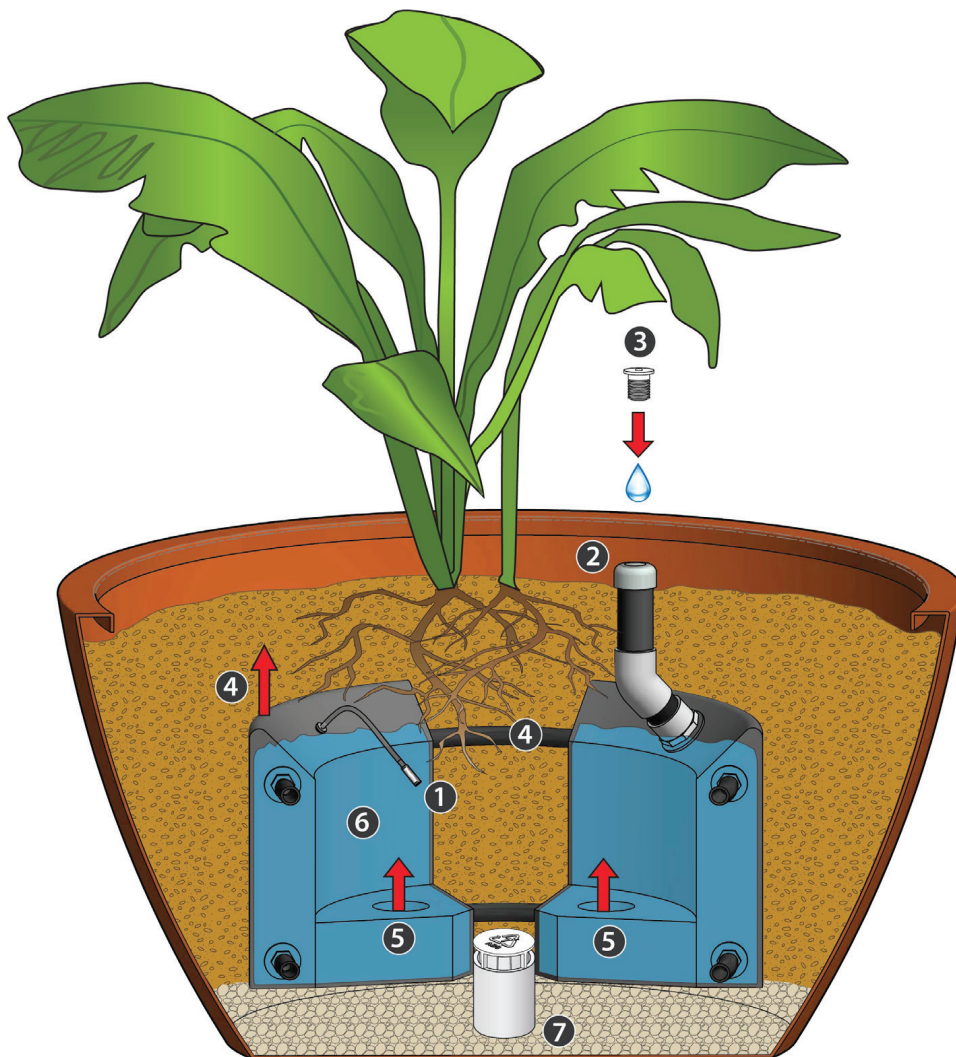
The most flexibility for planters, large and small

CWM Modular is a versatile self-watering system designed for use in any large planter, freestanding or otherwise. Reservoir modules are linked together and buried within the pot. The hand-filled reservoir utilizes Tournesol Siteworks' vacuum-sensor system to precisely monitor the soil moisture in the container, giving plants exactly the amount of water they need. The CWM Modular provides optimal flexibility for use in virtually any shape planter, will not interfere with lighting or other electrical connections, and requires no plumbing.



- Both round-back and square-back modules for cylindrical, square and rectangular pots
- Keeps plants healthy, strong and stress free by balancing moisture and oxygen in the soil
- Largest reservoir and longest maintenance interval of any self-watering system
- Virtually invisible, disappears under the soil when installed

CWM™ Modular Irrigation Systems - How it Works



1. The key to the system – A micro-porous sensor tube acts as a simple valve. It allows air to pass when the soil is dry, closes when soil is moist.

2. Reservoir modules are filled through a hole at the top of a fill pipe, which extends above the soil – the amount of water is dependent on the size and number of the modules. Water flows from the fill module to the others via a tube connecting them at the bottom.

3. Once the modules are full, the fill pipe is closed with a tamper-resistant stopper, which creates an airtight seal (and prevents curious fingers from removing it).

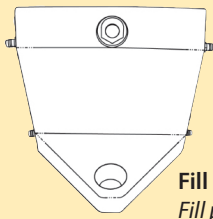
4. When the soil is moist (the plant has water), the sensor tube is closed and a vacuum is created above the water, preventing it from flowing. The vacuum is shared by a tube connecting the tops of the modules.

5. When the soil dries, air is allowed through the sensor tube and breaks the vacuum. Water flows into the soil from holes in the bottom of each module, and wicks up into the soil like a sponge.

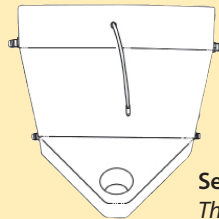
6. When the roots become moist, the sensor closes and the vacuum is created – stopping the flow until the plant uses the water and the process starts again.

7. When it rains, excess water builds up in the bottom of the container. The modular system includes an overflow drain adapter over the drain hole. Excess water flows out, preventing oversaturation.

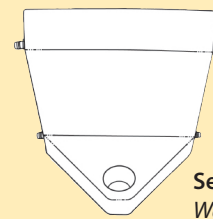
Parts of the CWM™ Modular Irrigation System



Fill Module -
Fill pipe not shown



Sensor Module -
The brains of the system



Secondary Module
Water storage only

CWM Modular irrigation consists of multiple rigid modules linked together, buried under the soil of the planter. Each system will have one fill module, and be linked to one sensor module. Up to three secondary modules may be added, depending upon the size of the pot. Modules are available in multiple size and height combinations to fit nearly any pot or planter.

Typical CWM™ Modular Irrigation Configurations

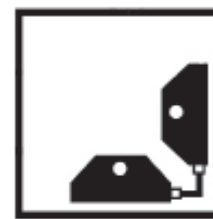


CRT Configuration
Round or Square



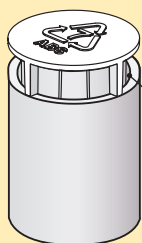
LIN Configuration square only

ADJ Configuration
Square only

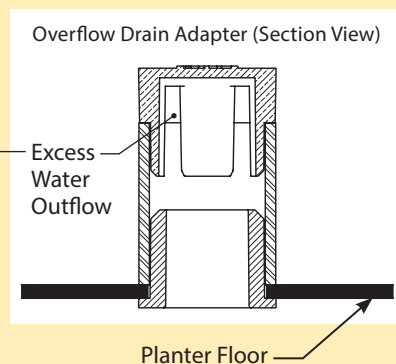


Depending upon the shape and size of the container, the CWM Modular system may be used in any number of configurations. The CRT configuration connects all modules together. The LIN and ADJ configurations are typically used with rectangles and squares. The fill and sensor modules can be used anywhere, but we typically recommend that they be toward the middle for even filling.

Drainage in CWM™ Modular Irrigation Systems



Overflow Drain Adapter (installed at drain holes)



To raise the drain level, trapping irrigation water but allowing overflow, the CWM system relies on an overflow adapter cemented at the drain hole(s) of the pot. The overflow drain works best when located several inches above the level of the water source. We recommend a staging material that wicks water from the bottom of the container. The Overflow Drainage Adapter is delivered at a length that assumes the system is planted directly on the bottom of the pot. For more information see the Overflow Drainage Adapter Installation Instructions included with the kit.

CWM Nomenclature

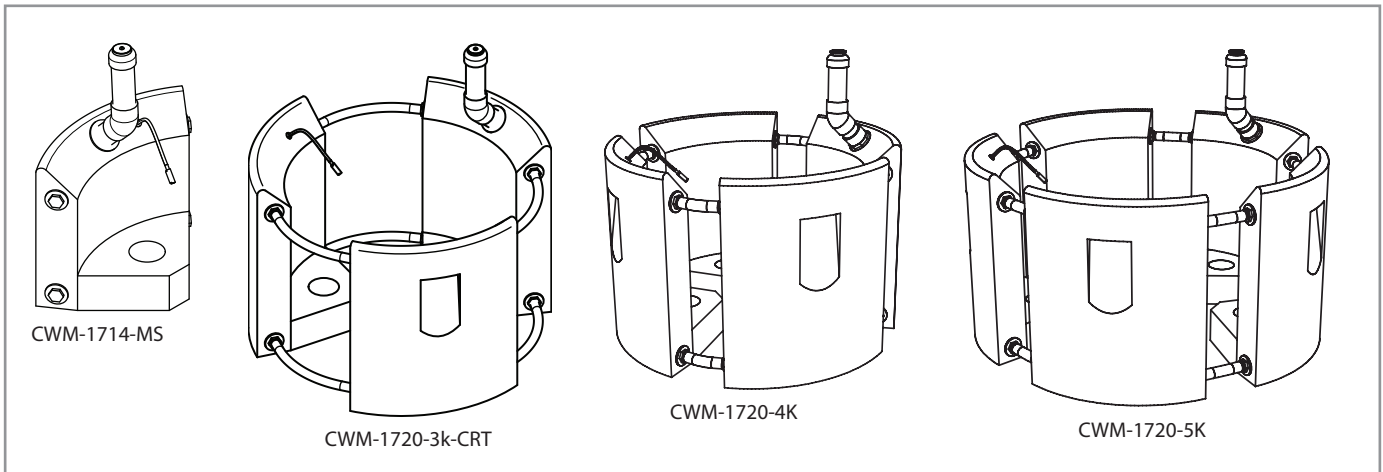
CWM-R2020-4k-LIN

Shape Code
R = flat-back
No letter = curve back

Size Code
Approx. width x height of module, in inches

Module Count
From 2 (2k) to 5 (5k).
Additional "E" (5kE) adds one extension module to system

Configuration Code
CRT = Circuit
LIN = Linear
ADJ = Adjacent



CWM™ Round Systems

Part. No.	Description	Height	Depth	Water Capacity	Container Size Range
CWM-1109-MS	Solo module, small w/round-back,11" w/9"Rad	9"	7.5"	.8 gal	15" – 20"
CWM-1109-2k	2-module small 11" round-back	9"	7.5"	1.6 gal	20" – 24"
CWM-1109-3k	3-module small 11" round-back	9"	7.5"	2.4 gal	22" – 26"
CWM-1109-4k	4-module small 11" round-back	9"	7.5"	3.2 gal	26" – 30"
CWM-1114-MS	Solo module, small w/round-back,11" w/9"Rad	14"	7.5"	1.2 gal	15" – 20"
CWM-1114-2k	2-module small 11" round-back	14"	7.5"	2.4 gal	20" – 24"
CWM-1114-3k	3-module small 11" round-back	14"	7.5"	3.6 gal	22" – 26"
CWM-1114-4k	4-module small 11" curve-back	14"	7.5"	4.8 gal	26" – 30"
CWM-1120-MS	Solo module, small w/round-back,11" w/9"Rad	20"	7.5"	1.8 gal	15" – 20"
CWM-1120-2k	2-module small 11" round-back	20"	7.5"	3.6 gal	20" – 24"
CWM-1120-3k	3-module small 11" round-back	20"	7.5"	5.4 gal	22" – 26"
CWM-1120-4k	4-module small 11" round-back	20"	7.5"	7.2 gal	26" – 30"
CWM-1714-MS	Solo module, medium w/round-back,17" w/15"Rad	14"	10.9"	3.0 gal	21" – 26"
CWM-1714-2k	2-module medium 17" round-back	14"	10.9"	6 gal	27" – 30"
CWM-1714-3k	3-module medium 17" round-back	14"	10.9"	9 gal	30" – 36"
CWM-1714-4k	4-module medium 17" round-back	14"	10.9"	12 gal	36" – 42"
CWM-1714-5k	5-module medium 17" round-back	14"	10.9"	18 gal	42" – 48"
CWM-1720-MS	Solo module, medium w/round-back,17" w/15"Rad	20"	11.6"	4.25 gal	21" – 26"
CWM-1720-2k	2-module medium 17" round-back	20"	11.6"	8.5 gal	27" – 30"
CWM-1720-3k	3-module medium 17" round-back	20"	11.6"	12.7 gal	30" – 36"
CWM-1720-4k	4-module medium 17" round-back	20"	11.6"	17 gal	36" – 42"
CWM-1720-5k	5-module medium 17" round-back	20"	11.6"	21.2 gal	42" – 48"
CWM-2914-MS	Solo module w/round-back, 29" w/26"Rad	14"	18.5"	7.5 gal	34" – 45"
CWM-2914-2k	2-module large 29" round-back	14"	18.5"	15 gal	45" – 48"
CWM-2914-3k	3-module large 29" round-back	14"	18.5"	22.5 gal	48" – 54"
CWM-2914-4k	4-module large 29" round-back	14"	18.5"	30 gal	54" – 64"
CWM-2914-5k	5-module large 29" round-back	14"	18.5"	37.5 gal	64" – 76"
CWM-2914-5kE	5-module large 29" round-back & extension	14"	18.5"	38.5 gal	76" +
CWM-2920-MS	Solo module w/round-back, 29" w/26"Rad	20"	18.5"	9.5 gal	34" – 45"
CWM-2920-2k	2-module large 29" round-back	20"	18.5"	19.5 gal	45" – 48"
CWM-2920-3k	3-module large 29" round-back	20"	18.5"	29.25 gal	48" – 54"
CWM-2920-4k	4-module large 29" round-back	20"	18.5"	39 gal	54" – 64"
CWM-2920-5k	5-module large 29" round-back	20"	18.5"	48.75 gal	64" – 76"
CWM-2920-5kE	5-module large 29" round-back & extension	20"	18.5"	50.75 gal	76" +



Check with your salesperson for modular irrigation sizing needs.

CWM™ Rectangular and Square Systems

Part. No.	Description	Height	Depth	Water Capacity	Container Size Range
CWM-R1109-MS	Solo module w/square-back, 11"W	9"	8.75"	1.3 gal	15" – 20"
CWM-R1109-2k	2-module small 11" square-back	9"	8.75"	2.6 gal	20" – 24"
CWM-R1109-3k	3-module small 11" square-back	9"	8.75"	3.9 gal	24" – 28"
CWM-R1109-4k	4-module small 11" square-back	9"	8.75"	5.2 gal	28" – 32"
CWM-R1114-MS	Solo module w/square-back, 11"W	14"	8.75"	1.8 gal	15" – 20"
CWM-R1114-2k	2-module small 11" square-back	14"	8.75"	3.6 gal	20" – 24"
CWM-R1114-3k	3-module small 11" square-back	14"	8.75"	5.4 gal	24" – 28"
CWM-R1114-4k	4-module small 11" square-back	14"	8.75"	7.2 gal	28" – 32"
CWM-R1120-MS	Solo module w/square-back, 11"W	20"	8.75"	2.5 gal	15" – 20"
CWM-R1120-2k	2-module small 11" square-back	20"	8.75"	5.0 gal	20" – 24"
CWM-R1120-3k	3-module small 11" square-back	20"	8.75"	7.5 gal	24" – 28"
CWM-R1120-4k	4-module small 11" square-back	20"	8.75"	10 gal	28" – 32"
CWM-R1614-MS	Solo module w/square-back, 16"W	14"	12.8"	3.25 gal	20" – 30"
CWM-R1614-2k	2 medium 16" square-back	14"	12.8"	6.5 gal	30" – 36"
CWM-R1614-3k	3 medium 16" square-back	14"	12.8"	9.75 gal	36" – 40"
CWM-R1614-4k	4 medium 16" square-back	14"	12.8"	13 gal	40" – 48"
CWM-R1614-5k	5 medium 16" square-back	14"	12.8"	16.25 gal	48" – 54"
CWM-R1620-MS	Solo module w/square-back, 16"W	20"	12.8"	4.5 gal	20" – 30"
CWM-R1620-2k	2 medium 16" square-back	20"	12.8"	9 gal	30" – 36"
CWM-R1620-3k	3 medium 16" square-back	20"	12.8"	13.5 gal	36" – 40"
CWM-R1620-4k	4 medium 16" square-back	20"	12.8"	18 gal	40" – 48"
CWM-R1620-5k	5 medium 16" square-back	20"	12.8"	22.25 gal	48" – 54"
CWM-R2014-MS	Solo module w/square-back, 20"W	14"	12.9"	4.5 gal	24" – 32"
CWM-R2014-2k	2 medium 20" square-back	14"	12.9"	9 gal	32" – 38"
CWM-R2014-3k	3 medium 20" square-back	14"	12.9"	13.5 gal	38" – 46"
CWM-R2014-4k	4 medium 20" square-back	14"	12.9"	18 gal	44" – 52"
CWM-R2014-5k	5 medium 20" square-back	14"	12.9"	22.5 gal	52" – 58"
CWM-R2020-MS	Solo module w/square-back, 20"W	20"	12.9"	5.75 gal	24" – 32"
CWM-R2020-2k	2 medium 20" square-back	20"	12.9"	11.5 gal	32" – 38"
CWM-R2020-3k	3 medium 20" square-back	20"	12.9"	17.25 gal	38" – 46"
CWM-R2020-4k	4 medium 20" square-back	20"	12.9"	23 gal	44" – 52"
CWM-R2020-5k	5 medium 20" square-back	20"	12.9"	28.75 gal	52" – 58"



Check with your salesperson for modular irrigation sizing needs.

CWM™ Rectangular and Square Systems (continued)

Part No.	Description	Height	Depth	Water Capacity	Container Size Range
CWM-R2914-MS	Solo module w/square-back, 29"W	14"	18.5"	8.5 gal	34" – 42"
CWM-R2914-2k	2 large 29" square-back	14"	18.5"	17 gal	42" – 48"
CWM-R2914-3k	3 large 29" square-back	14"	18.5"	25.5 gal	48" – 56"
CWM-R2914-4k	4 large 29" square-back	14"	18.5"	34 gal	56" – 66"
CWM-R2914-5k	5 large 29" square-back	14"	18.5"	42.5 gal	66" – 74"
CWM-R2914-5kE	5 large 29" square-back & extension module	14"	18.5"	44.5 gal	74" +
CWM-R2920-MS	Solo module w/square-back, 29"W	20"	18.5"	10.4 gal	34" – 42"
CWM-R2920-2k	2 large 29" square-back	20"	18.5"	20.8 gal	42" – 48"
CWM-R2920-3k	3 large 29" square-back	20"	18.5"	31.2 gal	48" – 56"
CWM-R2920-4k	4 large 29" square-back	20"	18.5"	41.6 gal	56" – 66"
CWM-R2920-5k	5 large 29" square-back	20"	18.5"	52 gal	66" – 74"
CWM-R2920-5kE	5 large 29" square-back & extension module	20"	18.5"	54 gal	74" +

