

UniGray™ CNL & HCNL

Integral pressure-compensated, continuously self-flushing, anti-siphon and anti-drain mechanism dripper, ideal for greenhouses, and permanent applications (10 or more seasons) that require intensive irrigation scheduling. Dripline colored light gray for minimal solar radiation absorption.

→ 16010 - 16012 - 17012 - 20010 - 20012



Pressure-compensated



Anti-Drain mechanism



Self-flushing mechanism

/ Benefits & Features

- **Pressure-compensated**
Precise and equal amounts of water delivered over a broad pressure range, ensuring 100% uniformity of water and nutrient distribution along the laterals.
- **Anti-Siphon mechanism**
Prevents contaminants from being drawn into the dripper, making it ideal for sub surface applications.
- **Anti-Drain (CNL & HCNL) mechanism**
Eliminates drainage and refill effect, and improves efficiency in pulse irrigation even in steep topography.
- **Continuously self-flushing**
Flushes debris throughout operation, while ensuring constant dripper operation even in challenging water quality.
- **Physical root barrier**
Better protection against root intrusion, utilizing unique dripper design that creates physical barriers protecting the dripper from root growth into its labyrinth.
- **Wide filtration area**
Ensures optimal performance even under harsh water conditions, preventing the entrance of sediment into the labyrinths.
- **TurboNet™**
Labyrinth ensures wide water passages, to increase flushing efficiency. The water is drawn into the dripper from the stream center, preventing the entrance of sediment into the drippers.
- **Light gray Colored coded**
Light gray on the outer surface, makes it absorb less energy and utilize most of the radiation in the greenhouse.

/ Specifications

- ✓ Pressure-compensated range according to table below.
- ✓ Largest filter in the industry. Recommended filtration: 130 micron / 120 mesh. Filtration method selected based on the kind and concentration of dirt particles contained in the water. Wherever sand exceeding 2 ppm exists in the water, a Hydrocyclone shall be installed before the main filter. Where sand/silt/clay solids exceed 100 ppm, pre treatment shall be applied following Netafim expert instructions.
- ✓ Double TurboNet™ labyrinth with large water passage.
- ✓ Weldable into thick wall driplines (1.00, 1.20 mm).
- ✓ Injected dripper, very low CV with injected silicon diaphragm.
- ✓ High UV resistant. Resistant to standard nutrients used in agriculture.
- ✓ Meets ISO 9261 Standards with Israel Standard Institute (SII)-certified production.

→ DRIPPERS TECHNICAL DATA - CNL MODEL

FLOW RATE* (L/H)	WORKING PRESSURE RANGE (BAR)	WATER PASSAGES DIMENSIONS WIDTH-DEPTH-LENGTH (MM)	FILTRATION AREA (MM ²)	CONSTANT K	EXPONENT * X	RECOMMENDED FILTRATION (MICRON)/(MESH)	SHUT OFF PRESSURE (BAR)
0.70	1.0 - 4.0	0.70 x 0.65 x 40	110	0.70	0	130/120	0.14
1.00	1.0 - 4.0	0.83 x 0.74 x 40	130	1.00	0	130/120	0.14
1.60	1.0 - 4.0	1.07 x 0.79 x 40	130	1.60	0	130/120	0.14
2.30	1.0 - 4.0	1.26 x 0.95 x 40	130	2.30	0	130/120	0.14
3.50	1.0 - 4.0	1.59 x 1.10 x 40	150	3.50	0	130/120	0.14

* Within working pressure range

→ DRIPLINES TECHNICAL DATA - CNL MODEL

MODEL	INSIDE DIAMETER (MM)	WALL THICKNESS (MM)	OUTSIDE DIAMETER (MM)	MAX. WORKING PRESSURE (BAR)	MAXIMUM FLUSHING PRESSURE (BAR)	KD
16010	14.20	1.00	16.20	3.5	4.6	1.30
16012	14.20	1.20	16.60	4.0	5.2	1.30
17012	14.60	1.20	17.00	4.0	5.2	1.10
20010	17.50	1.00	19.50	3.5	4.6	0.40
20012	17.50	1.20	19.90	4.0	5.2	0.40

→ DRIPLINES PACKAGE DATA (ON BUNDLED COIL) - CNL MODEL

MODEL	WALL THICKNESS (MM)	COIL LENGTH (M)	DISTANCE BETWEEN DRIPPERS (M)	AVERAGE* COIL WEIGHT (KG)	COILS IN A 40 FEET CONTAINER (UNITS)	TOTAL IN A 40 FEET CONTAINER (M)
16010	1.00	500	0.15 to 1.00	22.1	330	165000
16012	1.20	400	0.15 to 1.00	21.2	352	140800
17012	1.20	400	0.15 to 1.00	22.4	352	140800
20010	1.00	300	0.15 to 1.00	17.4	330	99000
20012	1.20	300	0.15 to 1.00	20.2	330	99000

* Calculated weight average. For further details see "Average Coil Weight Disclaimer"

→ DRIPPERS TECHNICAL DATA - HCNL MODEL

FLOW RATE* (L/H)	WORKING PRESSURE RANGE (BAR)	WATER PASSAGES DIMENSIONS WIDTH-DEPTH-LENGTH (MM)	FILTRATION AREA (MM ²)	CONSTANT K	EXPONENT * X	RECOMMENDED FILTRATION (MICRON)/(MESH)	SHUT OFF PRESSURE (BAR)
0.85	1.5 - 4.0	0.70 x 0.65 x 40	110	0.85	0	130/120	0.25
1.25	1.5 - 4.0	0.83 x 0.74 x 40	130	1.25	0	130/120	0.25
2.00	1.5 - 4.0	1.07 x 0.79 x 40	130	2.00	0	130/120	0.25
2.90	1.5 - 4.0	1.26 x 0.95 x 40	130	2.90	0	130/120	0.25
4.40	1.5 - 4.0	1.59 x 1.10 x 40	150	4.40	0	130/120	0.25

* Within working pressure range

→ DRIPLINES TECHNICAL DATA - HCNL MODEL

MODEL	INSIDE DIAMETER (MM)	WALL THICKNESS (MM)	OUTSIDE DIAMETER (MM)	MAX. WORKING PRESSURE (BAR)	MAXIMUM FLUSHING PRESSURE (BAR)	KD
16010	14.20	1.00	16.20	3.5	4.6	1.30
16012	14.20	1.20	16.60	4.0	5.2	1.30
17012	14.60	1.20	17.00	4.0	5.2	1.10

→ DRIPLINES PACKAGE DATA (ON BUNDLED COIL) - HCNL MODEL

MODEL	WALL THICKNESS (MM)	COIL LENGTH (M)	DISTANCE BETWEEN DRIPPERS (M)	AVERAGE* COIL WEIGHT (KG)	COILS IN A 40 FEET CONTAINER (UNITS)	TOTAL IN A 40 FEET CONTAINER (M)
16010	1.00	500	0.15 to 1.00	22.1	330	165000
16012	1.20	400	0.15 to 1.00	21.2	352	140800
17012	1.20	400	0.15 to 1.00	22.4	352	140800

* Calculated weight average. For further details see "Average Coil Weight Disclaimer"