

# UniGray™ CNL & HCNL

Integral pressure-compensated, continuously self-flushing, anti-siphon & anti-drain mechanism dripper, dripline colored light gray for protected crops applications

→ 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) 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.
- **Wide filtration area** Makes UniGray™ highly resistant to clogging with poor quality water, thus increasing filtration efficiency.
- **Physical root barrier** Better protection against root intrusion without reliance on chemicals.
- **TurboNet™** Labyrinth ensures wide water passages, to increase flushing efficiency.
- **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 the product model, 1.0-4.0 for the CNL model and 1.5-4.0 for the HCNL. Anti-Siphon and Anti-Drain mechanism.
- ✓ 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.
- ✓ UniGray™ driplines meet 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 <sup>2</sup> )	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 <sup>2</sup> )	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"