PCJ-PRO Elbow dripper



The PCJ-PRO Elbow dripper is the new pressure-compensating, non-drain dripper with an elbow outlet. Thanks to its elbow design, the risk of kinking or snagging of the (shorter) microtube is significantly reduced, which is highly beneficial for maintaining good irrigation water flow.

Long life span and long-lasting high uniformity
The PCJ-PRO Elbow Dripper is the successor to the well-known Kameleon (-High) dripper and is the most advanced dripper in the Netafim range. It incorporates all the advantages of the Kameleon (-High), along with several design improvements that support a longer life span and more consistent performance over time.

Thanks to its higher dirt tolerance, redesigned labyrinth, and larger flow passage, the PCJ-PRO Elbow dripper delivers long-lasting high uniformity. The pressure-compensating mechanism ensures highly uniform water distribution, even with long lateral lengths and short dripper spacing.

The non-drain (CNL) feature prevents the dripperline from emptying when system pressure drops. This also prevents drainage on normal greenhouse slopes. As a result, short irrigation cycles can be applied without compromising irrigation uniformity.

The PCJ-PRO Elbow dripper is available in both a Low Compensated Non-Leakage (LCNL) and a High Compensated Non-Leakage (HCNL) version. LCNL and HCNL drippers each have their own flow rate color coding, matching that of the Kameleon (-High) range.

Flushing and water refreshment
The PCJ-PRO Elbow HCNL is ideally suited for the regular refreshing and flushing of irrigation water. Due to its high opening pressure, the dripper remains closed during flushing operations. This offers several technical benefits, including the easy removal of dirt from the system, while also providing agronomic advantages.

Research has shown that dissolved oxygen levels in irrigation water can decrease over time, partly due to the conversion of ammonium into nitrite. This process can lower the pH of the water, potentially affecting crop growth. The PCJ-PRO makes it possible to replace oxygen-depleted water before an irrigation cycle.

Likewise, when a different fertilizer formulation is required, or when water in the dripperline has become excessively warm, the growing system can be flushed easily without water being discharged from the drippers.

In addition, the PCJ-PRO Elbow dripper enables the concentrated application of crop protection additives.

Advanced silicone RS diaphragm
The pressure-regulating RS diaphragm of the PCJ-PRO Elbow dripper is injection-molded from silicone. This increases dripper uniformity and allows cleaning with chlorine-based products.

Combination with stakes
The drippers can be supplied with the elbow Rapier stake. When combined with a short microtube, the Rapier stake keeps the microtube positioned low to the ground or substrate.

The risk of cutting, kinking, or snagging the microtube is greatly reduced, particularly in combination with the elbow outlet design.

CHARACTERISTICS

- Pressure-compensated for highly uniform water distribution.
- Elbow design minimizes the risk of microtube kinking.
- Extended life span thanks to a larger flow passage and improved labyrinth design.
- The non-leakage function keeps the tubing full of water when the valve is closed. On slopes of up to 2.5 meters, this prevents the line from draining at the lowest point.
- The high opening pressure (HCNL) makes it particularly suitable for flushing dirt, warm water, oxygen-depleted water, or water with an undesired fertilizer composition from the system.
- Enables precise application of crop protection additives.
- Highly suitable for large irrigation zones.
- Dedicated color coding, identical to the Kameleon (-High) range.
- Equipped with a 40% larger inlet filter.
- Features an RS silicone diaphragm with improved chemical resistance (since 2019).
- Supplied with an elbow Rapier Stake in either blue

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APPLICATION

The PCJ-PRO Elbow dripper is designed for modern greenhouse vegetable and flower production, where growers aim to further optimize growing conditions and require maximum precision in irrigation. In addition, the HCNL version is used in applications where periodic flushing of the drip system is desirable.



TECHNICAL DATA

Flow rate	: see table
Opening pressure	: see table
Maximum pressure for flushing	: 0.7 bar
Closing pressure	: 0.15 bar (LCNL)
	: 0.25 bar (HCNL)
Filtration	: 80 micron (main filtration)
	: 130 micron (valve section)
Material	: silicone (RS diaphragm)
Inlet filter passage	: 2.8 mm²
	: shaped by 2 half-moon
Punch diameter	: 2,5 mm
Standard	: ISO 9261

Flow rate and pressure overview for PCJ-PRO Elbow

Type	Flow rate (l/h)	Color	Minimal pressure (bar)	Maximal pressure (bar)	Max. flushing pressure (bar)	Closing pressure (bar)	Water passage WxHxL (mm)
LCNL	1.2	brown	0.7	4.0	n.v.t.	0.15	0.70 x 0.84 x 39
	2.0	red	0.7	4.0	n.v.t.	0.15	0.95 x 0.84 x 39
	3.0	blue	0.7	4.0	n.v.t.	0.15	1.13 x 0.98 x 39
	4.0	grey	0.7	4.0	n.v.t.	0.15	1.31 x 0.98 x 39
HCNL	1.2	khaki	1.5	4.0	0.7	0.25	0.70 x 0.84 x 39
	2.0	pink	1.5	4.0	0.7	0.25	0.95 x 0.84 x 39
	3.0	light blue	1.5	4.0	0.7	0.25	1.13 x 0.98 x 39
	4.0	light grey	1.5	4.0	0.7	0.25	1.31 x 0.98 x 39



1,2 l/h | 2,0 l/h | 3,0 l/h | 4,0 l/h | 1,2 l/h | 2,0 l/h | 3,0 l/h | 4,0 l/h

INSTALLATION & MAINTENANCE

- Read the 'General instructions for dripper systems' for storage, installation and use.
- The PCJ-PRO Elbow is particularly suitable for installations that are regularly flushed. A short flushing cycle every day before the first irrigation cycle will remove any contaminants.
- The PCJ-PRO Elbow drippers may be flushed with acid, peroxide and/or chlorine-based agents (see 'Cleaning and important points for dripper systems').
- On request, used drippers can be inspected at Netafim Netherlands for flow rate, opening and closing pressure and quality of the diaphragm.
- For outdoor applications: in case of freezing conditions we recommend to drain the drip system to remove moisture in pipes and drippers, to prevent frost damage.

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