

Series 86X

Mini Compact No Bridge Mini Sprinklers



These emitters are the most advanced and time proven mini sprinklers with unique patented mechanism, firm construction without a bridge for uniform distribution and excellent performance even in difficult conditions.

The 86X series includes the following models:

- Model 861** Large wetting diameter. Can also be used in inverted position
- Model 862** Medium wetting diameter. Optional RJC - removable jet converter to reduce the wetting diameter for young plants/trees
- Model 863** Small wetting diameter with low flow rates, from 20L/h (0.09gpm) and large droplets. Optional RJC - removable jet converter to reduce the wetting diameter for young plants/trees
- Model 866** Flat angle with Large wetting diameter for inverted position

Features

- ✓ Unique patented mechanism with strong propulsion-Smooth operation even in harsh conditions
- ✓ Firm construction without a bridge-Uniform water distribution
- ✓ Anti-insect design - swivel seals the nozzle once the water is shut off
- ✓ Integral nozzle filter - Protects the nozzle from debris in the water
- ✓ Special engineering raw materials for long life and durability
- ✓ Large drops for added wind resistance.
- ✓ Special design prevents sprays and water runoff
- ✓ **86X series can be supplied as pressure compensated emitters**
- ✓ **Energy & water saving: Emitters can operate at low pressure of 1bar (14.5psi) and low flow rates**

Technical Specifications

- ✓ Wide range of nozzles to meet all applications 20-160liters per hour (0.09-0.70gpm)
- ✓ **Nominal Flow Rate:** at 2.0bar (29psi)
- ✓ **Optimal Operating Pressure Range:** 1.0-2.2bar (14.5-32.0psi)
- ✓ **Working Pressure Maximum Range:** 1-3bar (14.5-43.5psi)
- ✓ **Optimal Working Pressure Range:** 1.0-2.2bar (14.5-32.0psi)
- ✓ **Wetting Diameter:** 5.5-9.0m (18-30ft)
- ✓ **Recommended Filtration:**
 - 100 mesh for flow rates up to 40lph (0.17gpm)
 - 80 mesh for flows up to 90lph (0.39gpm)
 - 60 mesh for flows up to 160lph (0.07gpm)

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86X Wetting Diameter at 2.0bars (29psi)

Nozzle Diameter		Nozzle Color	Flow Rate		861		862		863		866	
mm	inch		lph	gpm	m	ft	m	ft	m	ft	m	ft
0.9*	0.031*	●	20	0.09					3.8	12		
0.8	0.035	●	35	0.15	5.5	18	3.8	12			5.5	18
0.9	0.039	●	40	0.18	5.5	18	4.6	15	4.6	15	5.5	18
1.0	0.043	●	50	0.22	6.3	21	5.5	18			6.3	21
1.2*	0.050*	●	50	0.22					5.0	18		
1.1	0.047	●	60	0.26	6.9	23	5.7	19			6.9	23
1.2	0.050	●	70	0.31	7.0	23	6.0	20			7.0	23
1.3	0.055	●	90	0.39	7.0	23	6.5	21			7.0	23
1.4	0.058	●	105	0.46	7.5	25	6.5	21			7.5	25
1.5	0.066	●	120	0.53	8.1	27	6.5	21			8.1	27
1.7	0.070	●	140	0.62	8.5	28	7.0	23			8.5	28
1.8	0.071	●	160	0.70	9.0	30	7.2	24			9.0	30

*with NFR



Model 861

Large Wetting Diameter

Applications

- ✓ The product is designed for irrigation of mature trees with large root zone
- ✓ Product can be used for low precipitation rate and high uniformity overlapping irrigation in greenhouses
- ✓ Product can be used for upside down irrigation in greenhouses and nurseries in places where a lower angle of throw is required
- ✓ Applicable for landscape, cooling and frost protection systems

Technical Specifications

- ✓ **Wide range of nozzles to meet all applications:** 35-160liters per hour (0.15-0.70gpm)
- ✓ **Nominal Flow Rate:** at 2.0bar (29psi)
- ✓ **Working Pressure Maximum Range:** 1-3bar (14.5-43.5psi)
- ✓ **Optimal Working Pressure Range:** 1.4-2.2bar (20-32psi)
- ✓ **Large Wetting Diameter:** 5.5-9.0m (18-30ft)
- ✓ **Recommended Overlapping Spacing In Wind Protected Areas:**
 - Upright position up to 6 x 6m (20 x 20ft)
 - Inverted: Rectangular overlapping up to 5x5m (16 x 16ft)
 - One row of emitters up to 6.0m (20ft) hot house width
 - Two rows of emitters up to 12m (39ft) hot house width
- ✓ **861 series can be supplied as PC (pressure compensated) emitter**



862 Mini Compact Small / Medium Wetting Diameter

Applications

- ✓ The product is designed for irrigation of young or mature trees with medium or small root zone
- ✓ Product can be used for low precipitation rate and high uniformity overlapping irrigation in greenhouses
- ✓ Applicable for landscape and home gardening

Special Features

- ✓ The 862 mini-sprinkler can be supplied with **RJC** (Removable Jet Converter) - a device that converts the water jet into large droplets spread evenly on a small diameter and is intended for irrigation of young plantations
- ✓ This RJC can be removed easily once the tree grows and a larger wetting diameter is required

Technical Specifications

- ✓ **Wide range of nozzles to meet all applications:** 35-160liters per hour (0.15-0.70gpm)
- ✓ **Nominal Flow rate:** at 2.0bar (29psi)
- ✓ **Working pressure maximum range:** 0.8-2.5bar (11.5-36.5psi)
- ✓ **Optimal pressure range:** 1.0-2.0bar (14.5-29.0psi)
- ✓ **Large/Medium wetting diameter:** 3.8-7.2m (12-24ft)
- ✓ **Recommended overlapping spacing:** up to 4 x 4m (13 x 13ft) in wind protected areas
- ✓ 862 series can be supplied as PC (pressure compensated) model



863 Mini Compact Small Wetting Diameter

Applications

- ✓ The product is designed for irrigation of young or mature trees with small root zone
- ✓ Applicable for landscape and home gardening

Special Features

- ✓ The product combines very low flow rates, from 20L/h (0.09gpm) with relatively large droplets.
- ✓ The 863 mini-sprinkler can be supplied with RJC (Removable Jet Converter), a device that converts the water jet into large droplets spread evenly on a small diameter and is intended for irrigation of young plantation
This device can be removed easily once the tree grows and a larger wetting diameter is required.
- ✓ Product nozzle is equipped with NFR (nozzle flow reducer), enabling low flow with a relatively large nozzle that prevents clogging

Technical Specifications

- ✓ Product can be supplied with 20, 40, 50 lph, (0.09, 0.18, 0.26gpm), nozzle
- ✓ Nominal Flow Rate: at 2.0bar (29psi)
- ✓ Working Pressure Maximum Range: 1.5-3.0bar (22-43psi)
- ✓ Medium Wetting Diameter: 3.8m (12ft)
- ✓ 863 series can be supplied as PC (pressure compensated) model



866 Mini Compact Large Wetting Diameter for Inverted Position

Applications

- ✓ The product is designed for overlapping irrigation at upside down position
- ✓ The product combines low precipitation rate and high uniformity overlapping irrigation
- ✓ Product can be used in greenhouses, and nurseries for germination and seedling
- ✓ Product can be used for cooling and micro climate systems in chicken coops, animal houses and greenhouses
- ✓ The use of the NDV is highly recommended in order to keep the laterals full of water, preventing dripping from the emitters and saving water

Technical Specifications

- ✓ **Wide range of nozzles to meet all applications:** 35-160 liters per hour (0.15-0.70gpm)
- ✓ **Nominal Flow Rate:** 2.0bar (29psi)
- ✓ **Working Pressure Maximum Range:** 1-3bar (14.5-43.5)
- ✓ **Optimal Working Pressure Range:** 2.0-2.2bar (29-32psi)
- ✓ **Large Wetting Diameter** up to 9.0m (30ft)
- ✓ **Recommended Overlapping Spacing, Inverted:**
 - Rectangular up to 6 x 6m (20 x 20ft)
 - Single row up to 6.5m (21ft) hothouse width
 - Two rows up to 12m (39ft) hothouse width