



IRRISTAND SYSTEMS

Innovative irrigation technologies, based on **efficient irrigation principles**, result in smart and efficient use of every drop of water, nutrient and pesticide. This contributes to **high quality crops and peak yields**, while complying with sustainable agriculture principles.

NAANDANJAIN
Irrigation

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Introduction

IrriStand Systems - The ultimate sprinkler irrigation system for high-quality vegetable crops in open fields and nurseries.

NaanDanJain develops, manufactures and markets the largest selection of comprehensive irrigation technologies, designed for economical and efficient water management. With over seventy years of experience, the company operates in over 80 countries on all continents, meeting all the requirements of efficient modern irrigation. NaanDanJain's broad range of sprinkler and dripline technologies provides efficient, flexible and cost-effective solutions for a wide range of crops in diverse conditions, tailored to varied customer needs.

NaanDanJain's 800-hectare farm includes open fields, citrus orchards and avocado plantations that serve as a large scale testing site for the company's intensive R&D. NaanDanJain's state-of-the-art laboratory operates according to the international ISO 9001:2008 standard.

The IrriStand family incorporates impact, turbo hammer and ball-driven sprinklers, providing comprehensive solutions for irrigation of vegetable crops in open fields and nurseries. IrriStand systems are ideal for bulb, root and leaf crops. They can be adapted to individual requirements and varying field, climate and crop conditions.

IrriStand sprinkler systems:

- Ensure accurate and reliable performance
- Are resistant to wear and tear, UV radiation and chemicals
- Facilitate maximum control and monitoring of continuously wetted and aerated soil, ensuring optimal growing conditions

IrriStand sprinkler systems meet the highest standards of effective irrigation and enable increased profitability, based on the following principles:

- **High distribution uniformity**
- **Low droplet impact on soil:** Preserves soil structure and prevents crust formation, ensuring high distribution uniformity. Each and every droplet penetrates directly into the root zone, facilitating perfect germination and development. The fine, low droplet impact velocity prevents splashing of sand and fertilizers onto the seedlings.
- **Low application rate (3-5 mm/h):** Allows optimal absorption of water and nutrients into the soil and plants, with better control of the wetted and aerated depth.
- **Irrigation frequency:** Prevents stress from surplus or shortage of water and provides optimal growing conditions with highly accessible water and nutrients in a controlled, wetted and aerated soil profile. There is no pollutive leakage into the groundwater.

Our IrriStand Product Range

2005 AquaMaster: for spacing up to 7 m

501-U: for spacing up to 8 m

Mamkad 16: for spacing up to 9 m

502-H: for spacing up to 10 m

5022-U, Super 10, 5022 SD-U: for spacing up to 12 m (with optional flow regulator)

5022, 5022 SD, 427B AG-U, 427B AG, 427B GAG: for spacing up to 14 m

6025 SD: for spacing up to 16 m



Comparison of sprinkler irrigation systems

	Center pivots and spray lines	Hose reels (sprinkler)	Giant sprinklers (spacings up to 50 m)	3/4" sprinklers (spacings up to 20 m)	1/2" IrriStand sprinklers (spacing up to 15 m)
Distribution uniformity (CU)	excellent 90%	good 85%	poor 80%	good 88%	excellent 90%
Factors influencing distribution uniformity					
Pressure (bar)	4-5	6-8	5-6	4-5	3-4
Wind	medium	high	high	high	medium
Water penetration uniformity	low	low	low	medium	high
Factors influencing penetration uniformity					
Application rate (mm/h)	60-70	30-40	15	8-12	3-5
Droplet impact	medium	very high	very high	medium	low
Crust/runoff	high	very high	very high	high	low
Benefits					
Saving in water and nutrients	none	none	none	none	up to 20%
Saving in energy	moderate	none	none	none	up to 30%
Pollutive leakage	yes	yes	yes	yes	none
Environment friendly	none	none	none	none	yes
Quantity/quality yield	good	poor	poor	good	excellent
Costs					
Equipment \$/ha	1,000-1,200	1,000-1,200	1,000	2,000 (aluminum pipes)	1,000 IrriStands 1,200 Amirit
Labor	one salary/vehicle year round	one salary/vehicle year round	laying out and collection 4 workers/30 ha/day	laying out and collection 4 workers/8 ha/day	laying out and collection 4 workers/16 ha/day

Operational and Economic Advantages IrriStand

- Closed irrigation system – all system components are protected from external dirt
- Savings in system costs
- Savings in labor costs – light, easy and convenient to transport, install, collect and store
- Savings in energy – low-pressure, high-performance irrigation
- Savings in water, nutrients and pesticides – contributes to better public health and environmental quality
- Significant increase in yields (up to 20%) - both in quality and quantity (plant uniformity and health)
- Reduced marginal fields = increased yielding area
- Higher cost-benefit ratio

Amirit

The Amirit system has the same irrigation qualities as sprinkler stands, with the added flexibility and convenience of sprinkler systems with aluminum pipes.

- Riser with a wide water passage leading to the sprinkler – for larger flow rate and wider sprinkler spacing
- High operation reliability
- Flexibility in lateral lengths
- Quick installation and collection of the equipment

All distribution uniformity data relates to windless conditions. For irrigation in windy conditions, reduce the sprinkler spacing.

2005 AquaMaster



IrriStand systems

Jet-drive, low-volume sprinkler mounted on IrriStand 55 or riser

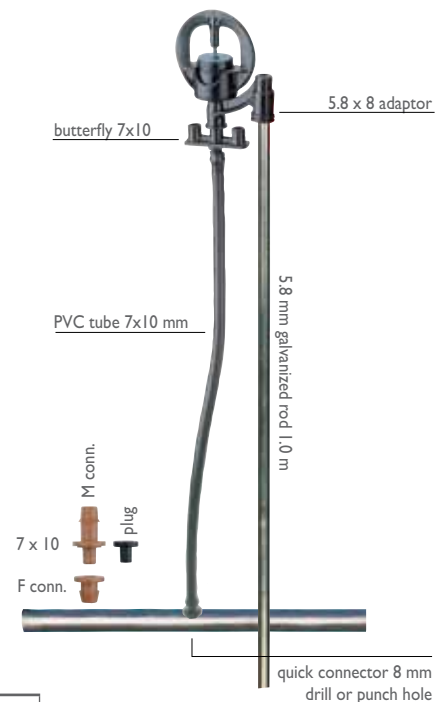
Applications: field crops, greenhouses, orchards, residential and landscaping

- For extra-range spacing up to 7 m
- Improved performance
- Innovative insect-resistant structure
- Improved durability to wear and tear, radiation and chemicals
- Unique water spreader for optimum distribution, maximum range and fine droplets
- Stable irrigation stand with minimum pressure loss
- Recommended pressure: 1.5-2.5 bar
- Flow rates: 120-300 l/h

2005 Performance Table

Precipitation rates (mm/hr) and uniformity (CU) at various spacing

Swivel Color	Nozzle Color	P (bar)	Q (l/h)	D (m)	Spacing (m)									
					4x4	4x5	4x6	4x7	5x5	5x6	5x7	6x6	6x7	7x7
Green	Orange	1.5	104	9.5	6.5	5.2	4.3	3.7	4.2	3.5	3.0	2.9	2.5	2.1
		2.0	120	9.5	7.5	6.0	5.0	4.3	4.8	4.0	3.4	3.3	2.8	2.4
		2.5	134	9.5	8.4	6.7	5.6	4.8	5.3	4.5	3.8	3.7	3.2	2.7
	Black	1.5	138	9.5	8.5	6.8	5.7	4.9	5.4	4.5	3.9	3.8	3.2	2.8
		2.0	160	10.0	10.0	8.0	6.7	5.7	6.4	5.3	4.6	4.5	3.8	3.3
		2.5	179	10.5	11.3	9.1	7.5	6.5	7.2	6.0	5.2	5.0	4.3	3.7
	Blue	1.5	173	10.5	10.7	8.6	7.2	6.1	6.9	5.7	4.9	4.8	4.1	3.5
		2.0	200	11.0	12.6	10.1	8.4	7.2	8.0	6.7	5.7	5.6	4.8	4.1
		2.5	223	11.0	14.0	11.2	9.3	8.0	8.9	7.4	6.4	6.2	5.3	4.6
Yellow	1.5	215	10.5	13.3	10.7	8.9	7.6	8.5	7.1	6.1	5.9	5.1	4.4	
	2.0	250	11.5	15.7	12.5	10.4	8.9	10.0	8.3	7.2	7.0	6.0	5.1	
	2.5	305	12.0	19.0	15.2	12.6	10.8	12.1	10.1	8.7	8.4	7.2	6.2	
Red	1.5	260	12.0	16.4	13.1	10.9	9.4	10.5	8.7	7.5	7.3	6.2	5.3	
	2.0	300	12.5	18.5	14.8	12.3	10.6	11.8	9.9	8.5	8.2	7.1	6.0	
	2.5	335	13.0	21.0	16.8	14.0	12.0	13.4	11.2	9.6	9.3	8.0	6.8	



Color code - Distribution uniformity

CU < 85%	CU 85-88%	CU 88-92%	CU > 92%
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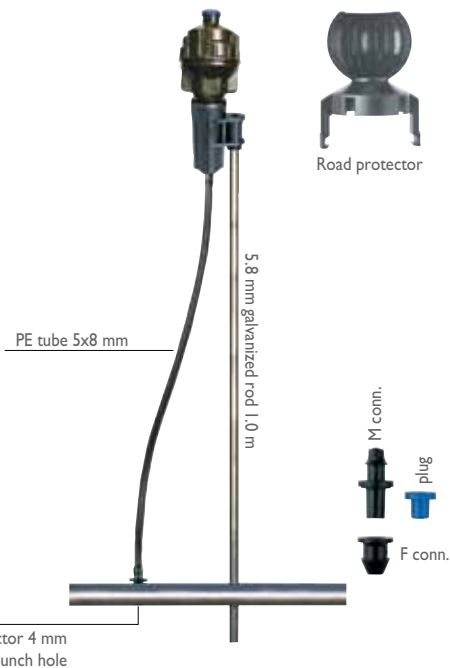
Tested at 60 cm height

Mamkad I 6



Applications: vegetables, flowers, nurseries and greenhouses

- Compact, sturdy closed protected ball engine
- Uniform water distribution at low pressure and precipitation rate
- Color-coded, plastic, high-trajectory nozzles for easy operation and service
- Extra-strong plastic compounds and ceramic washers reduce wear and tear
- Insect-resistant, pop-up pop-down nozzle
- Optional Flow Regulator (F.R.)
- Optional road protector
- Operating pressure: 2.0-4.0 bar w/o regulator
2.5-5.0 bar with regulator



IrriStand systems

Low-volume, ball-driven sprinkler 1/2" male, mounted on irristand 5l or riser



Mamkad I 6 Performance Table

Precipitation rates (mm/hr) and uniformity (CU) at various spacing

Nozzle Color	P (bar)	Q (l/h)	D (m)	Spacing (m)					
				6x6	6x7	7x7	7x8	8x8	8x9
Blue	2.0	135	14	3.8	3.2	2.8	2.4	2.1	
	2.5	151	14	4.1	3.5	3.0	2.7	2.3	
	3.0	165	14	4.6	3.9	3.4	2.9	2.6	
	3.5	178	13	5.0	4.3	3.7	3.2	2.8	
	4.0	192	13	5.3	4.5	3.9	3.4	3.0	
F.R.	2.5-5.0	135	13	3.6	3.1	2.7	2.3	2.0	
Yellow	2.0	180	15	4.8	4.1	3.5	3.1	2.7	
	2.5	201	14	5.6	4.8	4.1	3.6	3.1	
	3.0	220	14	6.1	5.2	4.5	3.9	3.4	
	3.5	238	14	6.7	5.7	4.9	4.3	3.7	
	4.0	255	14	7.0	6.0	5.1	4.5	3.9	
F.R.	2.5-5.0	180	14	5.0	4.3	3.7	3.2	2.8	
Violet	2.0	225	15	6.2	5.3	4.6	4.0	3.5	3.1
	2.5	252	15	7.0	6.0	5.1	4.5	3.9	3.5
	3.0	275	15	7.6	6.5	5.6	4.9	4.3	3.8
	3.5	297	15	8.3	7.1	6.1	5.3	4.6	4.1
	4.0	320	15	8.9	7.6	6.5	5.7	5.0	4.4
F.R.	2.5-5.0	225	15	6.1	5.3	4.5	3.9	3.4	3.1
Black	2.0	270	16	7.4	6.4	5.4	4.8	4.2	3.7
	2.5	302	16	8.4	7.2	6.2	5.4	4.7	4.2
	3.0	330	16	9.2	7.9	6.7	5.9	5.2	4.6
	3.5	356	16	9.9	8.5	7.3	6.4	5.6	5.0
	4.0	383	16	10.6	9.1	7.8	6.8	6.0	5.3
F.R.	2.5-5.0	270	16	7.4	6.3	5.4	4.7	4.1	3.7

Color code - Distribution uniformity CU < 85% CU 85-88% CU 88-92% CU > 92%

Tested at 60 cm height

501-U

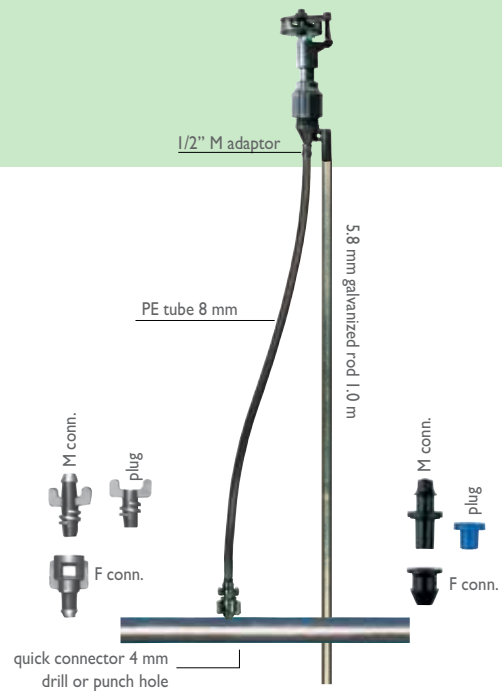


IrriStand systems

Turbo hammer low-volume sprinkler mounted on IrriStand 50 or riser

Applications: vegetables, greenhouses, residential and landscaping

- For spacing up to 8 m
- Excellent water distribution
- Fine water droplets for delicate irrigation of all crops



501-U Performance Table

Precipitation rates (mm/hr) and uniformity (CU) at various spacing

Nozzle Color (mm)	P (bar)	Q (l/h)	D (m)	Spacing (m)				
				6x6	6x7	7x7	7x8	8x8
1.6 Red	1.5	100	12.0	2.8	2.4	2.0	1.8	1.6
	2.0	110	12.0	3.1	2.6	2.2	2.0	1.7
	2.5	130	12.0	3.6	3.1	2.7	2.3	2.0
	3.0	150	12.0	4.2	3.6	3.1	2.7	2.3
	3.5	165	12.5	4.6	3.9	3.4	2.9	2.6
1.8* Green	1.5	150	12.0	4.2	3.6	3.1	2.7	2.3
	2.0	170	13.0	4.7	4.0	3.5	3.0	2.7
	2.5	190	13.0	5.0	4.5	3.9	3.4	3.0
	3.0	210	14.0	5.8	5.0	4.3	3.8	3.3
	3.5	230	14.0	6.4	5.5	4.7	4.1	3.6
2.0 Blue	1.5	160	12.0	4.4	3.8	3.3	2.9	2.5
	2.0	180	13.0	5.0	4.3	3.7	3.2	2.8
	2.5	200	13.0	5.6	4.8	4.1	3.6	3.1
	3.0	220	14.0	6.1	5.2	4.5	3.9	3.4
	3.5	240	14.0	6.7	5.7	4.9	4.3	3.8
2.2 Yellow	1.5	170	13.5	4.7	4.0	3.5	3.0	2.7
	2.0	200	15.0	5.6	4.8	4.1	3.6	3.1
	2.5	215	15.0	6.0	5.1	4.4	3.8	3.4
	3.0	235	15.5	6.5	5.6	4.8	4.2	3.7
	3.5	250	15.5	6.9	6.0	5.1	4.5	3.9

*Standart nozzle

Color code - Distribution uniformity	CU < 85%	CU 85-88%	CU 88-92%	CU > 92%
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502-H



IrriStand systems

Turbo hammer low-volume sprinkler mounted on IrriStand 52 or riser

Applications: vegetables, greenhouses, residential and landscaping

- For extra-range spacing up to 10 m

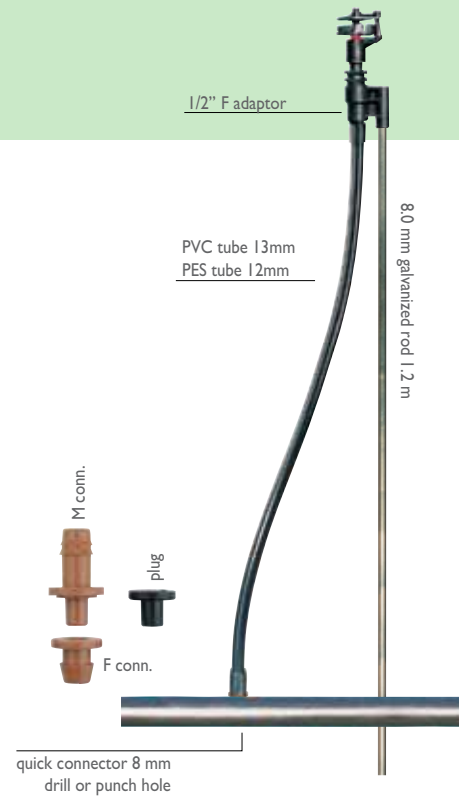
502-H Performance Table

Precipitation rates (mm/hr) and uniformity (CU) at various spacing

Nozzle Color (mm)	P (bar)	Q (l/h)	D (m)	Spacing (m)				
				8x8	8x9	9x9	9x10	10x10
2.5 Red	1.5	226	13.0	3.5	3.1	2.8	2.5	2.3
	2.0	263	15.0	4.1	3.5	3.2	2.9	2.6
	2.5	292	15.5	4.6	4.0	3.6	3.2	2.9
	3.0	318	16.5	5.0	4.4	3.9	3.5	3.2
	3.5	345	17.0	5.4	4.8	4.2	3.8	3.4

Color code - Distribution uniformity

CU < 85%	CU 85-88%	CU 88-92%	CU > 92%
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Super 10



IrriStand systems

Extra-range, ball-driven
sprinkler mounted on
IrriStand 52 or riser

Applications: field crops, greenhouses,
residential and landscaping
For extra-range spacing up to 12 m

- Compact, sturdy, closed and protected ball engine
- Bayonet nozzle for easy service
- Optional Flow Regulator (F.R.)
- High water distribution
- Brown nozzle for road protector only

Super10 Performance Table

Precipitation rates (mm/hr) and uniformity (CU) at various spacing

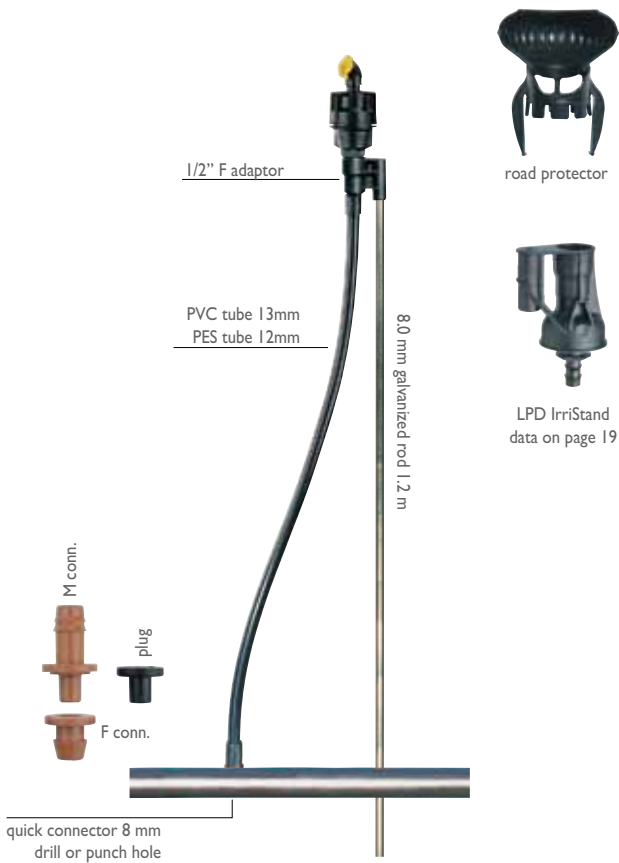
Nozzle Color	P (bar)	Q (l/h)	D (m)	Precipitation rates (mm/hr) Spacing (m)					
				9x9	9x10	10x10	9x12	10x12	12x12
Blue	2.5	360	18	4.5	4.0	3.6			
	3.0	395	17.5	4.9	4.4	3.9			
	3.5	425	17	5.3	4.8	4.3			
	4.0	455	17	5.6	5.1	4.6			
F.R.	3.0-5.0	360	18	4.5	4.1	3.7			
Yellow	2.5	450	20	5.7	5.1	4.6	4.3	3.8	3.2
	3.0	495	20	6.1	5.5	4.9	4.6	4.1	3.4
	3.5	530	20	6.6	5.9	5.3	4.9	4.4	3.7
	4.0	570	20	7.1	6.4	5.7	5.3	4.8	4.0
F.R.	3.0-5.0	450	20	5.5	5.0	4.5	4.2	3.7	3.1
Green	2.5	550	20	6.7	6.0	5.4	5.0	4.5	3.8
	3.0	600	20	7.4	6.7	6.0	5.5	5.0	4.2
	3.5	650	20	8.0	7.2	6.5	6.0	5.4	4.5
	4.0	695	20	8.6	7.8	7.0	6.5	5.8	4.8
F.R.	3.0-5.0	550	20	6.9	6.2	5.6	5.2	4.3	3.9
Red	2.5	670	21	8.3	7.4	6.7	6.2	5.6	4.6
	3.0	735	21	9.0	8.1	7.3	6.8	6.1	5.1
	3.5	790	21	9.6	8.7	7.8	7.2	6.5	5.4
	4.0	850	21	10.5	9.4	8.5	7.9	7.1	5.9
F.R.	3.0-5.0	670	21	8.3	7.5	6.7	6.2	5.6	4.7

Color code - Distribution uniformity	CU < 85%	CU 85-88%	CU 88-92%	CU > 92%
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F.R. = Flow Regulator



Super 10



Brown nozzle for Road Protector only

Nozzle Color	P (bar)	Q (l/h)	D (m)
Brown*	2.5	320	19
	3.0	350	19
	3.5	380	19
	4.0	405	19
F.R.	3.0-5.0	320	19

5022-U



IrriStand systems

Plastic impact sprinkler mounted on IrriStand 52, 53 or riser

Application: irrigation and germination of vegetables, flowers and row crops

- Bayonet nozzle for easy service
- High water distribution
- Optional Flow Regulator (F.R.)

5022-U Performance Table

Precipitation rates (mm/hr) and uniformity (CU) at various spacing

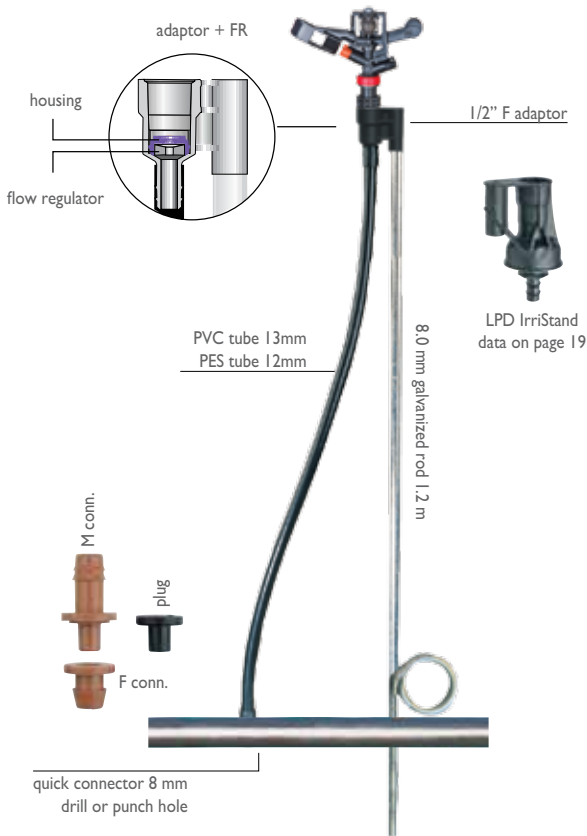
Nozzle Color (mm)	P (bar)	Q (l/h)	D (m)	Spacing (m)					
				9x9	9x10	10x10	9x12	10x12	12x12
2.3x1.8 Silver	2.0	450	22.0	5.6	5.0	4.5	4.2	3.8	
	2.5	500	22.0	6.2	5.6	5.0	4.6	4.2	
	3.0	550	22.0	6.8	6.1	5.5	5.1	4.6	
	3.5	595	22.0	7.3	6.6	6.0	5.5	5.0	
	4.0	640	22.0	7.9	7.1	6.4	5.9	5.3	
2.4x1.8 Yellow	2.0	455	18.5	5.6	5.1	4.6	4.2	3.8	3.2
	2.5	510	19.0	6.3	5.7	5.1	4.7	4.3	3.5
	3.0	555	19.0	6.9	6.2	5.6	5.1	4.6	3.9
	3.5	600	19.0	7.4	6.7	6.0	5.6	5.0	4.2
	4.0	640	18.8	7.9	7.1	6.4	5.9	5.3	4.4
2.5x1.8 Purple	2.0	480	20.5	5.9	5.3	4.8	4.4	4.0	3.3
	2.5	535	20.5	6.6	5.9	5.4	5.0	4.5	3.7
	3.0	590	21.0	7.3	6.6	5.9	5.5	4.9	4.1
	3.5	635	21.0	7.8	7.1	6.4	5.9	5.3	4.4
	4.0	685	21.2	8.5	7.6	6.9	6.3	5.7	4.8
F.R.	3.0-5.0	590	21.0	7.3	6.5	5.9	5.5	4.9	4.1
2.8x1.8 Orange	2.0	620	22.4	7.7	6.9	6.2	5.7	5.2	4.3
	2.5	690	23.2	8.5	7.7	6.9	6.4	5.8	4.8
	3.0	760	23.2	9.4	8.4	7.6	7.0	6.3	5.3
	3.5	820	23.2	10.1	9.1	8.2	7.6	6.8	5.7
	4.0	860	23.2	10.6	9.6	8.6	8.0	7.2	6.0

Color code - Distribution uniformity	CU < 85%	CU 85-88%	CU 88-92%	CU > 92%
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Rear nozzle color : 1.8 mm - Light Green



5022-U



5022-U Performance Table

Precipitation rates (mm/hr) and uniformity (CU) at various spacing

Nozzle Color (mm)	P (bar)	Q (l/h)	D (m)	Spacing (m)			
				9x9	9x10	10x10	10x12
2.4 Yellow	2.0	330	18.2	4.1	3.7	3.3	2.8
	2.5	365	18.2	4.5	4.1	3.7	3.0
	3.0	405	18.2	5.0	4.5	4.1	3.4
	3.5	435	18.0	5.4	4.8	4.4	3.6
	4.0	465	17.8	5.7	5.2	4.7	3.9
F.R.	3.0-5.0	365	19.0	4.5	4.0	3.6	3.0

5022 SD-U



IrriStand systems

Plastic impact sprinkler, 1/2" male or 3/4" female.

Mounted on IrriStand 52, 53 or riser

Applications: irrigation and germination of vegetables, flowers and nursery crops

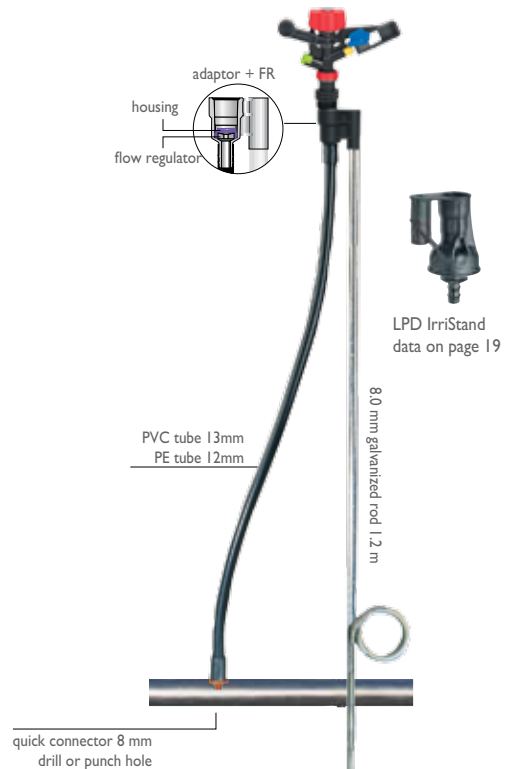
- Unique hammer-sprinkler SD (super-diffuser) design for extrarange coverage
- SD - Designed for an optimal performance and stream shape for low pressures. A unique answer to the late diffuser screw.
- High distribution uniformity, up to 12m
- Higher resistance to wind
- Designed for short irrigation cycles for germination
- Color-coded bayonet nozzles for easy service
- High impact, heavy-duty plastic materials for resistance to corrosion, chemicals and radiation

5022 SD-U PERFORMANCE TABLE, Dual nozzle, Short SD
Precipitation rates (mm/hr) and uniformity (CU) at various spacing

Nozzle Color (mm)	P (bar)	Q (m ³ /h)	D (m)	Spacing (m)				
				9x9	9x10	10x10	10x12	12x12
2.5x1.8 Purple	1.5	0.440	18.5	5.4	4.9	4.4	3.7	3.1
	2.0	0.480	19.5	5.9	5.3	4.8	4.0	3.3
	2.5	0.535	21.0	6.6	5.9	5.4	4.5	3.7
	3.0	0.590	21.5	7.3	6.6	5.9	4.9	4.1
	3.5	0.635	22.0	7.8	7.1	6.4	5.3	4.4
F.R.	30-50	0.590	21.0	7.3	6.5	5.0	4.9	4.1
2.8x1.8 Orange	1.5	0.510	19.0	6.3	5.7	5.1	4.3	3.5
	2.0	0.620	20.0	6.9	6.2	5.6	4.7	3.9
	2.5	0.690	21.5	7.8	7.1	6.4	5.3	4.4
	3.0	0.760	22.0	8.5	7.7	6.9	5.8	4.8
	3.5	0.820	23.0	9.3	8.3	7.5	6.3	5.2
	4.0	0.860	22.5	9.9	8.9	8.0	6.7	5.6

Rear nozzle: 1.8 - Light Green

Color code - Distribution uniformity	CU < 85%	CU 85-88%	CU 88-92%	CU > 92%
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5022

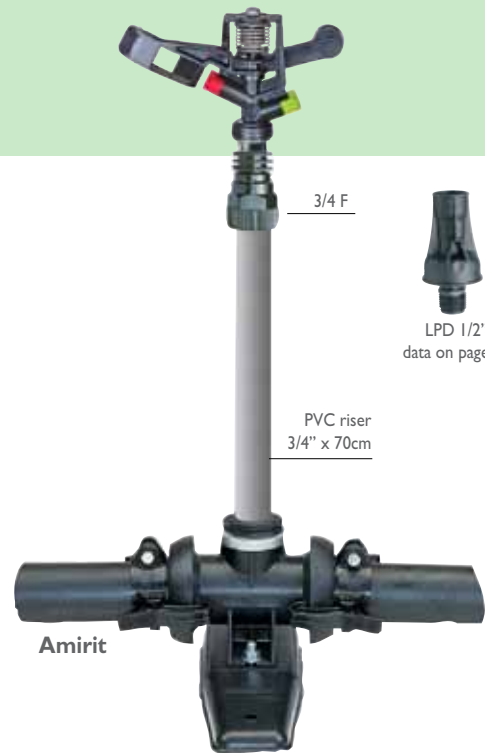


IrriStand systems

Plastic impact sprinkler
1/2" male or 3/4" female
Mounted on riser

Applications: irrigation and germination of vegetables, flowers and nursery crops

- High water distribution with spacing up to 14 m
- Color-coded bayonet nozzles for easy service
- Integrated stream-straightening vane for maximum range
- High-impact, heavy-duty plastic materials provide resistance to corrosion, chemicals and UV radiation



5022 PerformanceTable

Precipitation rates (mm/hr) and uniformity (CU) at various spacing

Nozzle Color (mm)	P (bar)	Q (m ³ /h)	D (m)	Spacing (m)				
				10x10	10x12	12x12	12x14	14x14
3.0x1.8 Red	2.5	0.760	21.5	7.6	6.3	5.3	4.5	3.9
	3.0	0.840	23.0	8.4	7.0	5.8	5.0	4.3
	3.5	0.900	23.0	9.0	7.5	6.3	5.4	4.6
	4.0	0.970	23.0	9.7	8.1	6.7	5.8	4.9
3.2x1.8 Green	2.5	0.820	23.5	8.2	6.8	5.7	4.9	4.2
	3.0	0.900	24.0	9.0	7.5	6.3	5.4	4.6
	3.5	0.980	24.0	9.8	8.2	6.8	5.8	5.0
	4.0	1.040	24.0	10.4	8.7	7.2	6.2	5.3
3.5x2.5L Blue	2.5	1.115	24.0	11.2	9.3	7.7	6.6	5.7
	3.0	1.230	24.2	12.3	10.3	8.5	7.3	6.3
	3.5	1.320	24.4	13.2	11.0	9.2	7.9	6.7
	4.0	1.430	24.4	14.3	11.9	9.9	8.5	7.3
4.0x2.5L Black	2.5	1.300	24.4	13.0	10.8	9.0	7.7	6.6
	3.0	1.455	25.0	14.6	12.1	10.1	8.7	7.4
	3.5	1.575	25.4	15.8	13.1	10.9	9.4	8.0
	4.0	1.680	26.0	16.8	14.0	11.7	10.0	8.6

5022 PerformanceTable

Nozzle Color (mm)	P (bar)	Q (m ³ /h)	D (m)
3.0 Red	2.0	0.510	22.5
	3.0	0.630	24.0
	4.0	0.720	24.0
3.2 Green	2.0	0.570	23.0
	3.0	0.700	23.0
	4.0	0.810	24.5
3.5 Blue	2.0	0.660	22.0
	3.0	0.810	24.0
	4.0	0.930	26.0
4.0 Black	2.0	0.850	23.0
	3.0	1.030	26.0
	4.0	1.180	25.0

Color code - Distribution uniformity CU < 85% CU 85-88% CU 88-92% CU > 92%

Rear nozzle: 1.8 - Light Green
2.5L - Grey

5022 SD

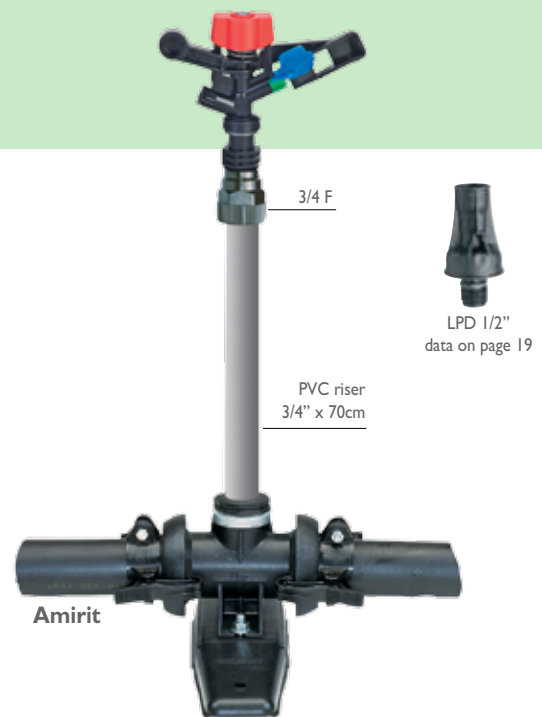


IrriStand systems

Plastic impact sprinkler, 1/2" male or 3/4" female.
Mounted on riser

Applications: irrigation and germination of vegetables, flowers and nursery crops

- Unique hammer-sprinkler SD (super-diffuser) design for extra range coverage
- SD - Designed for an optimal performance and stream shape for low pressures. A unique answer to the late diffuser screw.
- High distribution uniformity, up to 14 m
- Higher resistance to wind
- Designed for short irrigation cycles for germination
- Color-coded bayonet nozzles for easy service
- High impact, heavy-duty plastic materials for resistance to corrosion, chemicals and radiation



5022 SD PerformanceTable - Single nozzle, Long SD

Precipitation rates (mm/hr) and uniformity (CU) at various spacing

Nozzle Color (mm)	P (bar)	Q (m ³ /h)	D (m)	Spacing (m)				
				10x10	10x12	12x12	12x14	14x14
3.0 Red	2.5	0.570	21.0	5.7	4.8	4.0	3.4	2.9
	3.0	0.630	22.0	6.3	5.3	4.4	3.8	3.2
	3.5	0.680	23.0	6.8	5.7	4.7	4.1	3.5
	4.0	0.720	23.0	7.2	6.0	5.0	4.3	3.7
3.2 Green	2.5	0.640	21.2	6.4	5.3	4.4	3.8	3.3
	3.0	0.700	22.2	7.0	5.8	4.9	4.2	3.6
	3.5	0.760	23.0	7.6	6.3	5.3	4.5	3.9
	4.0	0.810	23.0	8.1	6.8	5.6	4.8	4.1
3.5 Blue	2.5	0.740	23.0	7.4	6.2	5.1	4.4	3.8
	3.0	0.810	23.0	8.1	6.8	5.6	4.8	4.1
	3.5	0.870	24.0	8.7	7.3	6.0	5.2	4.4
	4.0	0.930	25.0	9.3	7.8	6.5	5.5	4.7
4.0 Black	2.5	0.950	23.2	9.5	7.9	6.6	5.7	4.8
	3.0	1.030	24.2	10.3	8.6	7.2	6.1	5.3
	3.5	1.110	25.0	11.1	9.3	7.7	6.6	5.7
	4.0	1.180	26.0	11.8	9.8	8.2	7.0	6.0

5022 SD PerformanceTable - Dual nozzle, Short SD

Nozzle Color (mm)	P (bar)	Q (m ³ /h)	D (m)	Spacing [m]				
				10x10	10x12	12x12	12x14	14x14
3.0x1.8 Red	2.5	0.760	21.0	7.6	6.3	5.3		
	3.0	0.840	22.0	8.4	7.0	5.8		
	3.5	0.900	23.0	9.0	7.5	6.3		
	4.0	0.970	22.0	9.7	8.1	6.7		
3.2x1.8 Green	2.5	0.820	21.0	8.2	6.8	5.7		
	3.0	0.900	22.0	9.0	7.5	6.3		
	3.5	0.980	23.0	9.8	8.2	6.8		
	4.0	1.040	23.0	10.4	8.7	7.2		
3.5x1.8 Blue	2.5	0.890	23.0	8.9	7.4	6.2	5.3	
	3.0	0.990	23.0	9.9	8.3	6.9	5.9	
	3.5	1.060	24.0	10.6	8.8	7.4	6.3	
	4.0	1.150	24.0	11.5	9.6	8.0	6.8	
4.0x1.8 Black	2.5	1.100	24.0	11.0	9.2	7.6	6.5	5.6
	3.0	1.220	25.0	12.2	10.2	8.5	7.3	6.2
	3.5	1.330	25.0	13.3	11.1	9.2	7.9	6.8
	4.0	1.430	26.0	14.3	11.9	9.9	8.5	7.3

Rear nozzle: 1.8 - Light Green

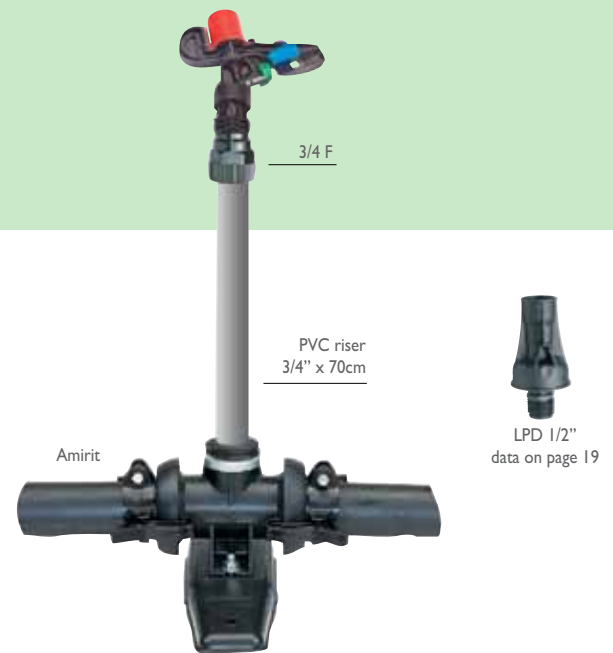
Color code - Distribution uniformity	CU < 85%	CU 85-88%	CU 88-92%	CU > 92%
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6025 SD



IrriStand systems

Plastic impact sprinkler, 1/2" male or 3/4" female on riser.



Applications: irrigation and germination of vegetables, field crops, flowers.

- Unique hammer-sprinkler SD (super-diffuser) design for extra-range coverage
- SD - Designed for an optimal performance and stream shape for low pressures. A unique answer to the late diffuser screw.
- Special water path, improves coverage diameter
- High distribution uniformity, up to 16 m
- Higher resistance to wind
- Designed for short irrigation-cycles for germination
- Color-coded bayonet nozzles for easy service
- Solid construction with full protection of spring end axle area
- High impact, heavy-duty plastic materials for resistance to corrosion, chemicals and radiation



6025-SD PERFORMANCE TABLE

Precipitation rates (mm/hr) and uniformity (CU) at various spacing

Nozzle Color (mm)	P (bar)	Q (l/h)	D (m)	Spacing (m)					
				12x12	12x14	12x15	14x14	15x15	16x16
2.8 Orange	2.5	540	19	3.8	3.2	3.0			
	3.0	595	21	4.1	3.5	3.3	3.0		
	3.5	640	21	4.4	3.8	3.6	3.3		
	4.0	685	22	4.8	4.1	3.8	3.5		
3.0 Red	2.5	585	21	4.1	3.5	3.3	3.0		
	3.0	640	23	4.4	3.8	3.6	3.3		
	3.5	690	23	4.8	4.1	1.3	3.5		
	4.0	735	23	5.1	4.4	4.1	3.8		
3.2 Green	2.5	670	23	4.7	4.0	3.7	3.4	3.0	
	3.0	730	23	5.1	4.3	4.1	3.7	3.2	
	3.5	790	24	5.5	4.7	4.4	4.0	3.5	
	4.0	840	24	5.8	5.0	4.7	4.3	3.7	
3.5 Blue	2.5	780	24	5.4	4.6	4.3	4.0	3.5	3.0
	3.0	850	24	5.9	5.1	4.7	4.3	3.8	3.3
	3.5	920	24	6.4	5.5	5.1	4.7	4.1	3.6
	4.0	980	25	6.8	5.8	5.4	5.0	4.4	3.8
4.0 Black	2.5	1005	26	7.0	6.0	5.6	5.1	4.5	3.9
	3.0	1100	26	7.6	6.5	6.1	5.6	4.9	4.3
	3.5	1185	27	8.2	7.1	6.6	6.1	5.3	4.6
	4.0	1270	27	8.8	7.6	7.1	6.5	5.6	5.0

Color code - Distribution uniformity CU < 85% CU 85-88% CU 88-92% CU > 92%

427B AG-U



IrriStand systems

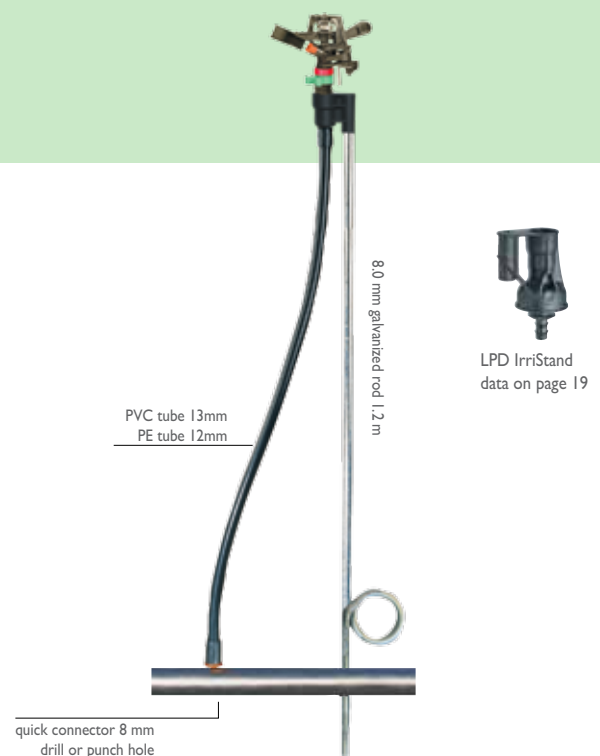
Plastic impact sprinkler
1/2" male or 3/4" female
mounted on IrriStand 52 or riser

Applications: Specifically designed for irrigation of field edges

- Spacing up to 14 m
- Color-coded bayonet nozzles for easy service
- Integrated stream-straightening vane for maximum range
- High-impact, heavy-duty plastic materials provide resistance to corrosion, chemicals and UV radiation
- WP - Hammer ensures all water inside pattern and prevents irrigating roads and neighbors.

427B AG U Performance Table

Nozzle Color (mm)	P (bar)	Q (m ³ /h)	D (m)
2.8 Orange	2.0	0.450	22
	3.0	0.550	23
	4.0	0.630	24



427B AG, 427B GAG

IrriStand systems

Plastic impact sprinkler
1/2" male or 3/4" female
mounted on riser



427B GAG



427BAG

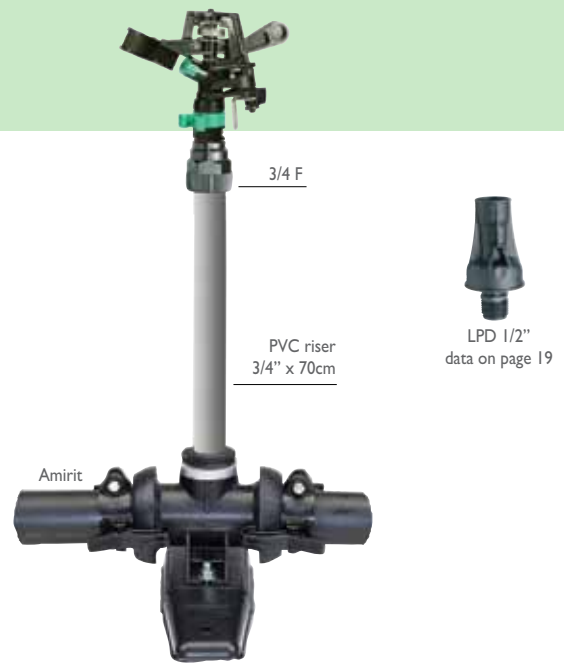
Applications: Specifically designed for irrigation of field edges

- Spacing up to 14 m
- Color-coded bayonet nozzles for easy service
- Integrated stream-straightening vane for maximum range
- High-impact, heavy-duty plastic materials provide resistance to corrosion, chemicals and UV radiation
- WP - Hammer ensures all water inside pattern and prevents irrigating roads and neighbors.

427B AG & 427B GAG Performance Table

Nozzle Color (mm)	P (bar)	Q (m ³ /h)	D (m)
3.0 Red	2.0	0.510	23
	3.0	0.630	24
	4.0	0.720	25
3.2 Green	2.0	0.570	23
	3.0	0.700	24
	4.0	0.810	26
3.5 Blue	2.0	0.660	23
	3.0	0.810	24
	4.0	0.930	26
4.0* Black	2.0	0.850	24
	3.0	1.030	26
	4.0	1.180	26

*Standard nozzle



LPD FOR IRRISTAND



IrriStand Leakage Prevention Device



Applications:

- Prevents drainage from the irrigation system on start up and shut down
- Maintains a full irrigation system and ensures uniform irrigation in each area at a given time
- Contributes to efficient irrigation, high-quality peak yields and significant savings of water and fertilizers
- Prevents destruction of crop rows (raised beds) and damage to bulb and root crops caused by exposure to light

Structure and features

- High flow design at minimum head losses
- Durable plastic, resistant to breakage, radiation and fertilizers
- Used as an adaptor for Stand 52 (F $\frac{1}{2}$ x 12 barb) and Stand 56 (F $\frac{1}{2}$ x 16 barb)
- Connects to Amirit stands and $\frac{1}{2}$ " and $\frac{3}{4}$ " risers
- Recommended working pressure: 2-4 bar

Technical data

Discharge (l/h)	Opening pressure (m)	Closing pressure (m)	Head loss (m)
up to 750	11.0	6.0	0.8
750-1500	14.0	8.0	2.6

Product range

Description	Catalog no.	
IrriStand 52 LPD barb 12 mm	790512	
IrriStand 56 LPD barb 16 mm	790516	
Universal 1/2" LPD (for Amirit)	790601	
Universal 3/4" x 1/2" LPD (for Amirit)	790602	

Installation & Dismantle of IrriStand System

IrriStand Systems components:

- Sprinklers based on the information in this catalog
- Lightweight user-friendly irrigation stands for fixed systems installed for growing seasons
- Continuous PE tubes, wound on drums, for mechanized laying out and rewinding
- 50 mm tube: 700 m/drum; 40 mm tube: 1,000 m/drum
- Transport systems: tractor with laying out/winding equipment, punch and push tool, PE tube welder
- Transportation and storage facilities for stands

Laying out and installation in the field

- Lay out the tubes and install the stands along rows that have been prepared, cultivated and sown
- The rows are prepared for installation of the irrigation system, according to a plan (distance between lines and between sprinklers on the line)



Laying out new tubes (without holes and start connectors)

- Mark and anchor pegs at the points where the tube will be laid out, to determine the end of the tube with mechanized laying out (the tubes are usually installed between two raised beds/furrows)
- Tie the tube end to the peg and drive the tractor slowly towards the end of the row. Cut the tube.

Important!

When the drum runs out of tube before reaching the end of the row, it is recommended to weld the end of the tube with the tube from the new drum and to continue laying out the tube. Proper welding ensures tube strength, smoothness, continuity and quality.

After laying out the tubes in the field, wait one or two days until the tube straightens out from the coiled position before the next stage: punching and inserting the start connector in a straight line on the upper part of the tube.

Once the tubes settle, remove the anchor pegs and connect the tube to the irrigation lateral (on the valve line).

Leave the end lines open until the system has been flushed.

Marking punch and push position for start connectors

Use a measuring tool (usually a piece of string) of a suitable length to mark the position of the sprinklers on the tube and for proper punch and push operation.

Mark the position of the first sprinkler, punch a hole and insert the first start connector. Use the measuring tool to continue punching and inserting the connectors until reaching the position of the last sprinkler on the tube.

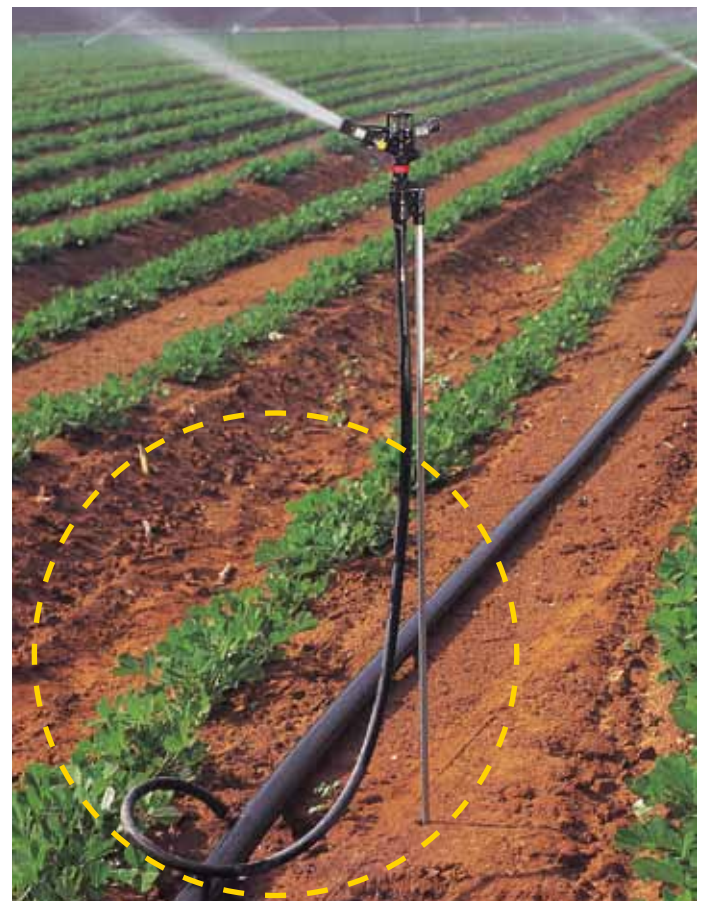
Two workers are required for this operation.

Important!

It is important that the position of the first sprinkler on the tube in each row is uniform, to maintain the structure of sprinklers in the field.

Use a standard punch only. (Designated punches appear on the Installation Accessories page).

Proper use of the punch ensures a clean and round hole of a suitable diameter, to prevent leakage and release from the start connectors.



The stand positioned close to the start connector

Installation & Dismantle of IrriStand System

Distribution and assembly of sprinkler stands in the field

Distribute the sprinkler stands in the field, along the tube and next to the start connectors.

Install the sprinkler stand near the start connector outlet in the tube (usually between the raised beds).

Stand adaptor: It is recommended to assemble the stand adaptor at the top of the stand (according to attached instructions page) to allow insertion of the rod into the soil and for proper longterm operation of the sprinkler. Insert the stand 40 cm into the ground (in hard ground, repeat the operation after initial wetting).

Insert the rod with the stabilizer ring up to the upper point of the ring.

It is important to install this rod correctly and to insert it up to a fixed mark, to ensure stability (no rotation) and an upright position.

Make sure that the sprinkler stand is always stable and upright in the ground.

This is essential for optimal operation and irrigation performance.

Connect the stand tube (male barb) to the female quick connector in the tube by pressing firmly (up to 1.0 mm from the female barb) to prevent disconnection when irrigation starts.

Flushing to clean the system

At this stage, the entire irrigation system is connected to the water source and is ready for removal of sediments and suspensions (plastic remnants, sand and stones) It is essential for flushing to be thorough, for complete cleaning of the irrigation system.

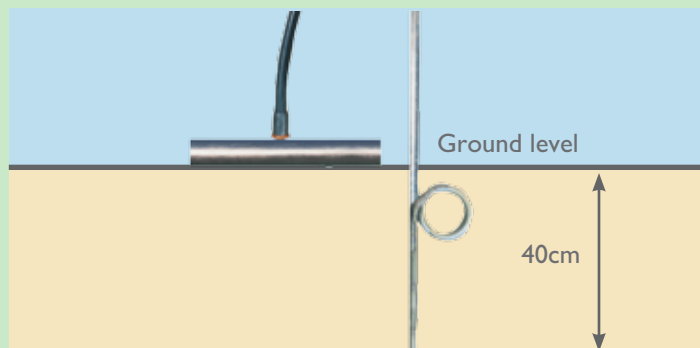
To produce the required flushing pressure, open the valves gradually, so that there will be a flow of clean water at the line ends in each sub-plot, before closing the lines (with an end line or by bending the tube).

It is important to leave 2 m of tube from the last irrigation stand, to collect dirt. This will prevent clogging in the last sprinklers.

Checking system operation

Test the operation of the system after completing installation.

Test the operation of the control system (if relevant), valves, tube connections, operating pressures, and sprinkler operation. Check for leaks and release of start connectors.



The sprinkler stand should always be stable and upright in the ground

Collection of sprinkler stands after the growing season

Disconnect the sprinkler stands from the tubes and collect them in the storage containers.

Wind the tubes onto the empty drums. Weld the tube ends until the drum is full.

Collect irrigation laterals, valves, and accessories.

Store all system components.

Carry out maintenance, preparation, and completion of the equipment for the next growing season.

Stands with adaptors: It is recommended to disconnect the rod (with the stand adaptor) from the sprinkler system, for transportation and storage of the rods and components separately, to preserve the equipment for many years of use.



Installation & Dismantle of Amirit

Lightweight irrigation stand for fixed sprinkler systems installed for the growing season Standard PE 50 mm pipe sections (9 m, 10 m, and 12 m) with quick connectors for the Amirit stand.

Sprinkler stand components

- Sprinklers based on the information in this catalog
- PVC riser, grey, 3/4", standard length - 70 cm
- Amirit coupling with stabilizer reinforced with two screws
- Standard plastic bushing - 1 x 3/4 (M x F)
- Rods - rigid PE tube, 50 mm, 9 m, 10 m, 12 m smooth, full phase (diagram) and clean tube ends, to prevent damage to the seal coupling when assembling the system.
- Plastic sealing ring, with two flexible locking clips (two sealing rings for each tube)
- PVC sleeve to support tube end (for soft tube sleeve with different diameter)

- Connect the sprinkler lines to the mainline and flush. Close the end lines.
- Test that the system operates according to the plan, check for leaks, and examine sprinkler performance

Collection and storage

- Disconnect the laterals from the mainline and allow the water to drain out of the tubes
- Disconnect the PE tube sections from the Amirit stand couplings, collect the tubes and stands and place them on the wagon

Note: The tube sections will be placed in layers on the wagon. Two workers will carry the sections to prevent bending.

Make sure the stands are collected carefully, to prevent damage to the equipment.

- Store the equipment carefully, emphasizing prevention of damage.



On-site assembly of the system by the customer:

- Insert the support sleeve into the tube until it reaches the end
- Connect the sealing rings to the tube, 5 cm from the end and close firmly (excessive force will damage the sealing ring)
- Connect the stabilizer to the Amirit coupling and close the two screws
- Connect the 1 x 3/4" bushing to the Amirit coupling
- Important! Ensure that the bushing has standard screws. Use Teflon sealing tape to assemble.
- Attach the riser to the coupling (use Teflon tape to seal the screws) before attaching the sprinkler.
- Load the tubes and stands on a wagon adapted for the purpose (more supports for the tubes and room for the stands) before installing the system in the field.
- Laying out and installation in the field
- Lay out the tubes and connect them to the Amirit stand. Leave the end lines open for flushing.
- Make sure that the stands are stable and upright!

Compliance with operation, transport, and storage instructions will ensure an efficient, convenient, and userfriendly system that can be used for many years.



Accessories

4 mm Punch for IrriStand 50/51

Catalog no: 6130210426



8 mm Punch & Push for IrriStand 52

Catalog no: 613021424



8 mm Super Punch & Push for IrriStand 52

Catalog no: 6130200200



Spanner for Super 10

Catalog no: 830050



**Spanner for: 5022, 5022-U,
5022 SD, 5022 SD-U, 5024,
427B AG, 427B AG-U,
427B GAG**

Catalog no: 5196338



Special 8 mm drill for IrriStand 52

Catalog no: 6130210420



Connector tightener for IrriStand 52

Catalog no:



Sleeve assemble tool for Stand 52, 53

Catalog no: 6120992800





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