

Sprinkling Catalogue



irritec[®] Sprinkling
don't wait for rain[®] Catalogue



Through its direct presence and widespread international sales network, Irritec[®] follows retailers and fitters around the world, assisting them in the choice, design, installation and use of the most appropriate irrigation systems.



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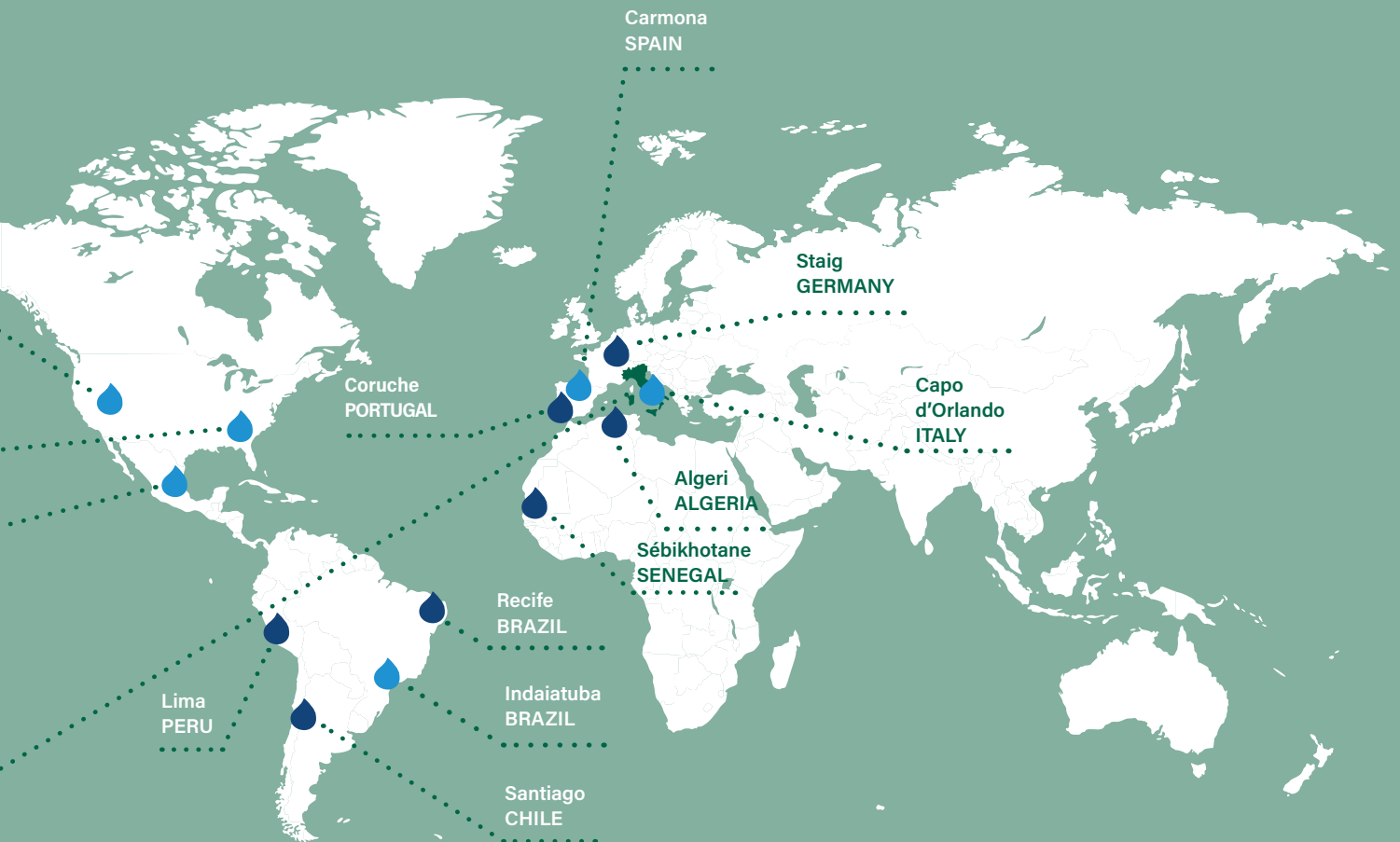
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*A global brand
established in Sicily*

16



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>950



Professionals worldwide

We want to simplify the life of those caring for plants, for work and for passion. We work so that every drop is used wisely, reducing the ecological footprint and resource waste to a minimum

- 4 Medium and long radius impact sprinklers
 - 5 ▪ **F22** 1/2" M circle
 - 6 ▪ **F24** 1/2" M circle undertree 12°
 - 7 ▪ **F35** 3/4" M circle
 - 8 ▪ **F33** 3/4" M metal full circle
 - 9 ▪ **P34** 3/4" M brass adjustable
 - 10 ▪ **P35** 3/4" M adjustable
 - 11 ▪ **P27** 1/2" M adjustable
 - 12 ▪ **P23** 1/2" M metal adjustable

- 13 Minisprinklers on stands
 - 15 ▪ **961** Anti-insect turbine sprinkler
 - 16 ▪ **961P** Anti-insect turbine adjustable sprinkler
 - 17 ▪ **920/940** Anti-insect turbine double jet sprinkler
 - 18 ▪ **F22** 1/2" M full circle on stands
 - 19 ▪ **SX/SX PC** 1/2" M spherical movement *(PC with flow regulator)*

- 21 Microsprinklers
 - 22 ▪ **861/861PC** Dynamic microsprinkler without bridge *(PC with flow regulator)*
 - 23 ▪ **862/862PC** Dynamic microsprinkler without bridge *(PC with flow regulator)*
 - 24 ▪ **863/863PC** Dynamic microsprinkler without bridge *(PC with flow regulator)*
 - 25 ▪ **866/866PC** Dynamic microsprinkler with downward head *(PC with flow regulator)*
 - 26 ▪ **831/831PC** Dynamic microsprinkler with bridge *(PC with flow regulator)*
 - 27 ▪ **841/841PC** Dynamic microsprinkler with bridge *(PC with flow regulator)*
 - 28 ▪ **700** Anti-insect vibration full circle sprayer
 - 29 ▪ **44xx** Sprayer with bridge

- 30 Static foggers
 - 32 ▪ **EXL** Fogger
 - 33 ▪ **4191** 320° fogger with bridge

- 34 Accessories

The vast range of medium and long radius impact sprinklers is ideal for open field, orchard and greenhouse overhead and undertree applications. Available in a full circle and adjustable version, they are manufactured in plastic or metal with high quality materials; resistant to UV rays, fertilisers typically used in agriculture and adverse weather conditions. Characterised by excellent water distribution at low pressure, they enable considerable water savings.



F22 - 1/2" M FULL CIRCLE

Overhead plastic sprinkler

Applications

Irrigation and germination of vegetable and nursery crops.

Characteristics

- Plastic sprinkler.
- 1/2" male thread.
- Trajectory: 25° front, 25° rear.
- Stainless steel pin and spring, effective sand protection.
- Plastic bayonet nozzles in different colours according to the diameter.
- Spacing between sprinklers: up to 14 metres on stand application and up to 15 metres for fixed installation.
- Recommended filtration: 75mesh=200micron.



Performance table

NOZZLE colour - ø mm ref.	P (bar)	Q (m³/h)	D (m)	Precipitation (mm/h)				
				Spacing (m)				
				10x10	10x12	12x12	12x14	14x14
grey 2,3 x 1,8 IDF22B0MP2318	2,5	0,51	22,0	5,1	4,3	-	-	-
	3,0	0,58	22,0	5,6	4,7	3,9	-	-
	3,5	0,60	22,0	6,0	5,0	4,2	-	-
	4,0	0,64	22,0	6,4	5,3	4,4	-	-
purple 2,5 x 1,8 IDF22B0MP2518	2,5	0,58	21,0	5,8	4,8	-	-	-
	3,0	0,63	21,0	6,3	5,3	4,4	3,8	-
	3,5	0,67	21,0	6,7	5,6	4,7	4,0	-
	4,0	0,72	21,5	7,2	6,0	5,0	4,3	-
orange 2,8 x 1,8 IDF22B0MP2818	2,5	0,69	22,0	6,9	5,8	4,8	-	-
	3,0	0,76	22,0	7,6	6,3	5,3	4,5	3,9
	3,5	0,82	22,0	8,2	6,8	5,7	4,9	4,2
	4,0	0,86	22,0	8,6	7,2	6,0	5,1	4,4
red 3,0 x 1,8 IDF22B0MP3018	2,5	0,76	22,0	7,6	6,3	5,3	-	-
	3,0	0,84	23,0	8,4	7,0	5,8	5,0	4,3
	3,5	0,90	23,0	9,0	7,5	6,3	5,4	4,6
	4,0	0,97	23,0	9,7	8,1	6,7	5,8	4,9
green 3,2 x 1,8 IDF22B0MP3525	2,5	0,82	23,0	8,2	6,8	5,7	-	-
	3,0	0,90	24,0	9,0	7,5	6,8	5,8	5,0
	3,5	0,98	24,0	9,8	8,2	6,3	5,4	4,6
	4,0	1,04	24,0	10,4	8,7	7,2	6,2	5,3
blue 3,5 x 2,5 IDF22B0MP3525	2,5	1,06	24,5	10,6	8,8	7,4	-	-
	3,0	1,16	25,0	11,6	9,7	8,1	6,9	5,9
	3,5	1,24	25,5	12,4	10,3	8,6	7,4	6,3
	4,0	1,33	26,0	13,3	11,1	9,2	7,9	6,8
black 4,0 x 2,5 IDF22B0MP4025	2,5	1,26	25,0	12,6	10,5	8,7	-	-
	3,0	1,38	25,5	13,8	11,5	9,6	8,2	7,0
	3,5	1,48	26,0	14,8	12,3	10,3	8,8	7,5
	4,0	1,58	26,5	15,8	13,2	11,0	9,4	8,1

USE ON STANDS IS NOT RECOMMENDED

Data detected in laboratory conditions
Adjustments apply according to field conditions



F24 - 1/2" M FULL CIRCLE LOW TRAJECTORY 12°

Undertree plastic sprinkler

Applications

Undertree irrigation in orchards and plantations, especially table grapes and bananas and any other open field irrigation in orchards.

Characteristics

- Plastic sprinkler.
- 1/2" male thread.
- Trajectory: 12°.
- Stainless steel pin and spring, effective sand protection.
- Plastic bayonet nozzles in different colours according to the diameter.
- Recommended filtration: 75mesh=200micron.



Performance table

NOZZLE colour - ø mm ref.	P (bar)	Q (m ³ /h)	D (m)	MSH* (cm)
purple 2,5 IDF24B0MP2500	2,0	0,35	16,5	100
	3,0	0,43	18,5	
	4,0	0,49	20,0	
orange 2,8 IDF24B0MP2800	2,0	0,45	18,5	110
	3,0	0,55	20,0	
	4,0	0,63	21,0	
red 3,0 IDF24B0MP3000	2,0	0,51	18,5	120
	3,0	0,63	20,5	
	4,0	0,72	21,5	
green 3,2 IDF24B0MP3200	2,0	0,57	18,5	122
	3,0	0,70	20,5	
	4,0	0,81	22,0	
blue 3,5 IDF24B0MP3500	2,0	0,66	18,5	125
	3,0	0,81	20,5	
	4,0	0,93	22,0	

*MSH: Maximum height of jet over nozzle
 Data detected in laboratory conditions
 Adjustments apply according to field conditions



F35 - 3/4" M FULL CIRCLE

Overhead plastic sprinkler

Applications

For overhead general use.

Characteristics

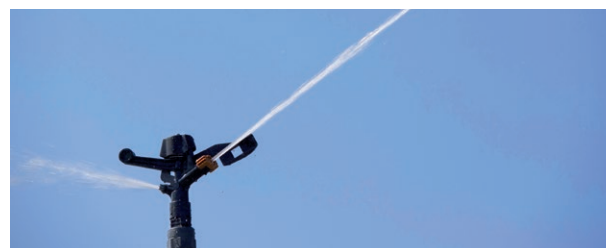
- Plastic sprinkler.
- 3/4" male thread.
- Trajectory: 25° front, 25° rear.
- Stainless steel pin and spring, effective sand protection.
- Plastic bayonet nozzles in different colours according to the diameter.
- Spacing between sprinklers: up to 20 metres.
- Recommended filtration: 75mesh=200micron.



Performance table

NOZZLE colour - ø mm ref.	P (bar)	Q (m³/h)	D (m)	Precipitation (mm/h)			
				Spacing (m)			
				12x15	12x18	18x18	20x20
blue 3,5 x 2,5 IDF35C0MP3525	3,0	1,16	26,5	6,4	5,4	-	-
	4,0	1,33	27,5	7,4	6,2	-	-
	5,0	1,47	28,0	8,2	6,8	-	-
black 4,0 x 2,5 IDF35C0MP4025	3,0	1,41	28,0	7,8	6,5	-	-
	4,0	1,62	29,0	9,0	7,5	-	-
	5,0	1,80	29,5	10,0	8,3	5,5	-
brown 4,5 x 2,5 IDF35C0MP45255	3,0	1,64	28,5	9,1	7,6	-	-
	4,0	1,90	30,0	10,6	8,8	5,9	-
	5,0	2,10	33,0	11,7	9,7	6,5	-
purple 5,0 x 2,5 IDF35C0MP5025	3,0	1,95	30,0	10,8	9,0	-	-
	4,0	2,25	33,5	12,5	10,4	6,9	-
	5,0	2,55	34,0	14,2	11,8	7,8	6,4
orange 5,5 x 2,5 IDF35C0MP5525	3,0	2,30	32,0	12,8	10,6	7,1	-
	4,0	2,65	34,5	14,7	12,3	8,2	6,6
	5,0	2,95	36,0	16,4	13,7	9,1	7,4
red 6,0 x 2,5 IDF35C0MP6025	3,0	2,65	33,0	14,7	12,3	8,2	6,6
	4,0	3,10	35,5	17,2	14,4	9,6	7,8
	5,0	3,45	36,0	19,2	16,0	10,6	8,6
grey 6,5 x 2,5 IDF35C0MP6525	3,0	3,00	34,0	-	13,9	9,3	7,5
	4,0	3,45	36,0	-	16,0	10,6	8,6
	5,0	3,85	38,0	-	17,8	11,9	9,6
grey 6,5 x 3,2 IDF35C0MP6532	3,0	3,20	34,0	-	14,8	9,9	8,0
	4,0	3,70	36,0	-	17,1	11,4	9,3
	5,0	4,15	38,0	-	19,2	12,8	10,4
green 7,0 x 2,5 IDF35C0MP7025	3,0	3,40	34,0	-	15,7	10,5	8,5
	4,0	3,90	35,0	-	18,1	12,0	9,8
	5,0	4,35	36,0	-	20,1	13,4	10,9
green 7,0 x 3,2 IDF35C0MP7032	3,0	3,55	34,2	-	16,4	11,0	8,9
	4,0	4,10	35,6	-	19,0	12,7	10,3
	5,0	4,60	36,0	-	21,3	14,2	11,5

Data detected in laboratory conditions
Adjustments apply according to field conditions



F33 - 1/2" M FULL CIRCLE

Overhead metal sprinkler

Applications

For overhead general use.

Characteristics

- Metal sprinkler.
- Solid manufacturing in brass and zinc alloy.
- 3/4" male thread.
- Trajectory: 25° front, 23° rear.
- Stainless steel pin and spring, effective sand protection.
- Plastic bayonet nozzles in different colours according to the diameter.
- Spacing between sprinklers: up to 20 metres.
- Recommended filtration: 75mesh=200micron.



Performance table

NOZZLE colour - ø mm ref.	P (bar)	Q (m ³ /h)	D (m)	Precipitation (mm/h)			
				Spacing (m)			
				12x12	12x15	12x18	18x18
blue 3,2 x 2,5 IDF33C0MP3525	3,0	1,16	27,0	8,1	6,4	5,4	3,6
	4,0	1,33	28,0	9,2	7,4	6,2	4,1
	5,0	1,47	28,5	10,2	8,2	6,8	4,6
black 4,0 x 2,5 IDF33C0MP4025	3,0	1,41	28,5	9,8	7,8	6,5	4,4
	4,0	1,62	29,0	11,3	9,0	7,5	5,0
	5,0	1,80	30,0	12,5	10,0	8,3	5,6
brown 4,5 x 2,5 IDF33C0MP4525	3,0	1,64	30,0	11,4	9,1	7,6	5,1
	4,0	1,90	32,0	13,2	10,6	8,8	5,9
	5,0	2,10	33,0	14,3	11,7	9,7	6,5
purple 5,0 x 2,5 IDF33C0MP5025	3,0	1,95	32,5	13,5	10,8	9,0	6,0
	4,0	2,25	34,5	15,6	12,5	10,4	6,9
	5,0	2,55	36,0	17,7	14,2	11,8	7,9
orange 5,5 x 2,5 IDF33C0MP5525	3,0	2,30	32,0	16,0	12,8	10,6	7,1
	4,0	2,65	34,5	18,4	14,7	12,3	8,2
	5,0	2,95	36,0	20,5	16,4	13,7	9,1
red 6,0 x 2,5 IDF33C0MP6025	3,0	2,65	33,0	18,4	14,7	12,3	8,2
	4,0	3,10	35,5	21,5	17,2	14,4	9,6
	5,0	3,45	36,0	24,0	19,2	16,0	10,6
grey 6,5 x 2,5 IDF33C0MP6525	3,0	3,00	34,0	20,8	16,7	13,9	9,3
	4,0	3,45	36,0	24,0	19,2	16,0	10,6
	5,0	3,85	38,0	26,7	21,4	17,8	11,9
grey 6,5 x 3,2 IDF33C0MP6532	3,0	3,20	34,0	22,2	17,8	14,8	9,9
	4,0	3,70	36,0	25,7	20,6	17,1	11,4
	5,0	4,15	38,0	28,8	23,1	19,2	12,8
green 7,0 x 2,5 IDF33C0MP7025	3,0	3,40	34,0	23,6	18,9	15,7	10,5
	4,0	3,90	35,0	27,1	21,7	18,1	12,0
	5,0	4,35	36,0	30,2	24,2	20,1	13,4
green 7,0 x 3,2 IDF33C0MP7032	3,0	3,55	34,2	24,7	19,7	16,4	11,0
	4,0	4,10	36,6	28,5	22,8	19,0	12,7
	5,0	4,60	39,0	31,9	25,6	21,3	14,2

Data detected in laboratory conditions
Adjustments apply according to field conditions



P34 - 3/4" M ADJUSTABLE

Overhead brass sprinkler

Applications

For overhead general use.

Characteristics

- Brass sprinkler.
- 3/4" male thread.
- Trajectory: 27°.
- Stainless steel pin and spring, effective sand protection.
- Spacing between sprinklers: up to 17 metres.
- Recommended filtration: 75mesh=200micron.



Performance table

NOZZLE ø inch - ø mm ref.	P (bar)	Q (m³/h)	D (m)
9/64" 3,57 mm IDP34C0MM0G00	1,75	0,79	24,4
	2,10	0,89	25,0
	2,46	0,95	25,6
	2,81	1,02	26,2
	3,16	1,09	26,8
	3,51	1,16	27,4
	3,86	1,20	27,4
	4,21	1,25	28,0
5/32" 3,96 mm IDP34C0MM0H00	1,75	0,98	25,0
	2,10	1,07	25,6
	2,46	1,16	26,2
	2,81	1,23	26,8
	3,16	1,29	27,4
	3,51	1,36	28,0
	3,86	1,43	28,6
	4,21	1,48	28,6
11/64" 4,36 mm IDP34C0MM0I00	1,75	1,14	25,6
	2,10	1,25	26,2
	2,46	1,36	26,8
	2,81	1,45	27,4
	3,16	1,54	28,0
	3,51	1,64	28,6
	3,86	1,70	28,6
	4,21	1,77	29,2
3/16" 4,76 mm IDP34C0MM0L00	1,75	1,32	26,2
	2,10	1,45	26,8
	2,46	1,57	27,4
	2,81	1,68	28,0
	3,16	1,79	28,6
	3,51	1,91	28,6
	3,86	2,00	29,2
	4,21	2,09	29,8
13/64" 5,15 mm IDP34C0MM0M00	1,75	1,57	26,8
	2,10	1,73	27,4
	2,46	1,88	28,0
	2,81	2,02	28,6
	3,16	2,13	29,2
	3,51	2,25	29,8
	3,86	2,34	29,8
	4,21	2,43	30,5



Data detected in laboratory conditions
Adjustments apply according to field conditions

P35 - 3/4" M ADJUSTABLE

Overhead plastic sprinkler

Applications

For overhead general use.

Characteristics

- Plastic sprinkler.
- 3/4" male thread.
- Trajectory: 25°.
- Stainless steel pin and spring, effective sand protection.
- Plastic bayonet nozzles in different colours according to the diameter.
- Spacing between sprinklers: up to 20 metres.
- Recommended filtration: 75mesh=200micron.



Performance table

NOZZLE colour - ø mm ref.	P (bar)	Q (m³/h)	D (m)
blue 3,5 IDP35C0MP3500	3,0	0,81	26,5
	4,0	0,93	27,5
	5,0	1,02	28,0
black 4,0 IDP35C0MP4000	3,0	1,06	28,0
	4,0	1,22	29,0
	5,0	1,35	29,5
brown 4,5 IDP35C0MP4500	3,0	1,29	28,5
	4,0	1,50	30,0
	5,0	1,65	33,0
purple 5,0 IDP35C0MP5000	3,0	1,60	30,0
	4,0	1,85	33,5
	5,0	2,10	34,0
orange 5,5 IDP35C0MP5500	3,0	1,95	32,0
	4,0	2,25	34,5
	5,0	2,50	36,0
red 6,0 IDP35C0MP6000	3,0	2,30	33,0
	4,0	2,70	35,5
	5,0	3,00	36,0

*Data detected in laboratory conditions
Adjustments apply according to field conditions*



P27 - 1/2" M ADJUSTABLE

Overhead plastic sprinkler

Applications

For residential and small public area use, can also be installed on spike or sled bases.

Characteristics

- Plastic sprinkler.
- No-splash hammer.
- Deflector vane and diffuser allow control of radius and distribution.
- 1/2" male thread.
- Trajectory: 25°.
- Stainless steel pin and spring, effective sand protection.
- Plastic bayonet nozzles in different colours according to the diameter.
- Spacing between sprinklers: up to 14 metres.
- Recommended filtration: 75mesh=200micron.



Performance table

NOZZLE colour - ø mm ref.	P (bar)	Q (m³/h)	D (m)
orange 2,8 IDP27B0MP2800	2,0	0,45	22,0
	3,0	0,55	23,0
	4,0	0,63	24,0
red 3,0 IDP27B0MP3000	1,0	0,36	19,0
	2,0	0,51	23,0
	3,0	0,63	24,0
green 3,2 IDP27B0MP3200	1,0	0,41	20,0
	2,0	0,57	23,0
	3,0	0,70	24,0
blue 3,5 IDP27B0MP3500	1,0	0,49	20,0
	2,0	0,66	23,0
	3,0	0,81	24,0
black 4,0 IDP27B0MP4000	1,0	0,60	21,0
	2,0	0,85	24,0
	3,0	1,03	26,0

*Data detected in laboratory conditions
Adjustments apply according to field conditions*



P23 - 1/2" M ADJUSTABLE

Overhead metal sprinkler

Applications

For residential and small public area use, can also be installed on spike or sled bases.

Characteristics

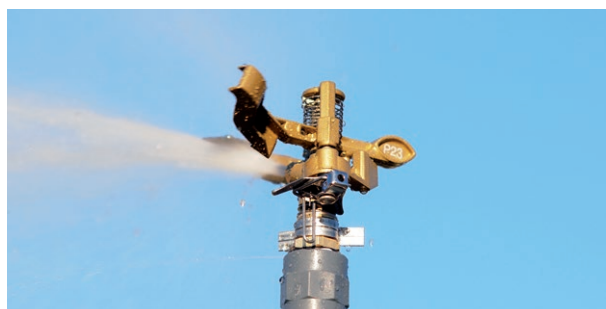
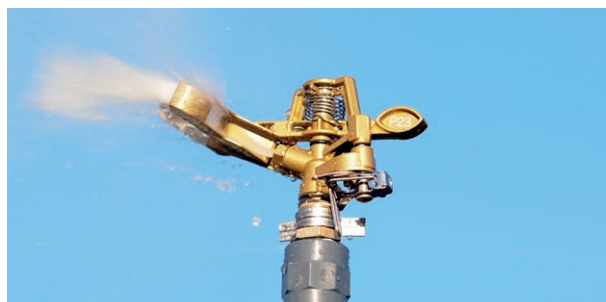
- Metal sprinkler.
- Solid manufacturing in brass and zinc alloy.
- No-splash hammer.
- Deflector vane and diffuser allow control of radius and distribution.
- 1/2" male thread.
- Trajectory: 25°.
- Spacing between sprinklers: up to 16 metres.
- Recommended filtration: 75mesh=200micron.



Performance table

NOZZLE ø inch - ø mm ref.	P (bar)	Q (m³/h)	D (m)
9/64" 3,57 mm IDP23B0MM000G	1,72	0,63	20,0
	2,07	0,71	22,6
	2,41	0,79	23,8
	2,76	0,85	25,6
	3,10	0,92	26,4
	3,45	0,94	27,4
	3,79	1,07	28,0
5/32" 3,96 mm IDP23B0MM000H	1,72	0,80	21,4
	2,07	0,90	23,8
	2,41	0,99	25,6
	2,76	1,05	26,2
	3,10	1,11	26,8
	3,45	1,17	28,6
	3,79	1,24	29,2
11/64" 4,36 mm IDP23B0MM000I	1,72	0,96	22,6
	2,07	1,05	25,0
	2,41	1,14	26,2
	2,76	1,22	27,4
	3,10	1,28	28,0
	3,45	1,37	29,2
	3,79	1,45	29,2
3/16" 4,76 mm IDP23B0MM000L	1,72	1,13	22,6
	2,07	1,20	24,4
	2,41	1,32	26,8
	2,76	1,43	27,4
	3,10	1,51	27,4
	3,45	1,59	29,2
	3,79	1,67	29,2

Data detected in laboratory conditions
Adjustments apply according to field conditions



Minisprinklers on stand assembly allow implementation of mobile or semi-fixed sprinkler systems, ideal for low volume irrigation of vegetables, potatoes, sugar beet, tomatoes, intensive and extensive crops in the open field.

Stand assembly

Assembly of sprinklers on stands allow rapid installation systems and easy removal, recovery and storage.

Low volume

Low volume irrigation with sprinklers on stands represents the evolution of traditional systems with large, high flow rate and long radius sprinklers; due to high energy costs and poor distribution uniformity they are replaced with more efficient systems.

Low volume irrigation is based on two principles:

1. Low precipitation (2.0 to 5.0 mm/h) with high distribution uniformity ($\geq 90\%$).
2. Low working pressure (2.0 to 5.0 bar).

The high uniformity allows irrigation of each area of the plot without over-watering the unfavourable areas, while the low precipitation allows quick entry in the field.

Advantages

- The high distribution uniformity and the low flow rate allow savings in water and fertiliser thanks to infiltration depth control.
- They also allow easier control of the water/air ratio on the ground and prevent percolation in the groundwater.
- The low working pressure together with the distribution uniformity allow reduced pumping energy costs.
- The small diameter drops promote lowering the temperature and do not compact the ground.
- Uniform distribution allows fertigation intervention.
- System can easily adapt to different crops and plots.

General instructions on maximum spacing

Sprinklers on Stand								Minisprinklers											
961		920		SX		F22		861		831		866		803					
Spacing (m)								Spacing (m)											
6x6	7x7	8x8	9x9	10x10	12x12	10x10	14x14	4x4	5x5	-	4x4	5x5	6x6	4x4	5x5	-	4x4	5x5	6x6

Approximate and general comparison between the different sprinkling systems in the open field

	SELF-PROPELLED (Ø COVERED 60÷100M)	LARGE SPRINKLERS (SPAZIATURA 40÷80M)	SPRINKLERS (SPAZIATURA 20÷30M)	SPRINKLERS ON STAND (SPAZIATURA MAX. 14X14)
precipitation (mm/h)	20,0÷30,0	10,0÷16,0	4,0÷7,0	2,0÷5,0
working pressure (bar)	6,0÷10,0	5,0÷9,0	4,0÷7,0	2,0÷5,0
distribution uniformity	poor 60÷80%	average 70÷80%	good 88%	excellent $\geq 90\%$
Aspects that influence distribution uniformity				
sensitivity to wind	high	high	average	average
penetration uniformity	low	low	average	high
Aspects of precipitation				
beating effect	high	high	average	average
possible crust formation/run-off	low	low	average	high
Advantages				
water and fertiliser savings	absent	absent	absent	15÷20%
energy savings	absent	absent	absent	30÷40%
possible pollution of the deep layers and groundwater	yes	yes	low	no
micro-climate control	no	no	no	yes
harvest quality/quantity ratio	moderate	moderate	low	excellent



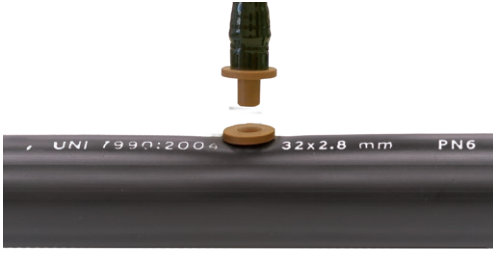
IDSTD920120
STD920 for sprinkler 920 with: base ID920080F + ID10364 + rod reduction \varnothing 6 mm. ID10461+ m. 1.2 pipe in PVC 5x8 + male coupling ID10364 + female adaptor ID10351 - WITHOUT rod \varnothing 6 mm. 1.2 m.



IDSTDA1120
STDA1 for sprinklers 961 - 961P - 861 - 700 with: base ID10500 + reduction ID10461+ m. 1.2 pipe in PVC 5x8 + male coupling ID10364 + female adaptor ID10351 -WITHOUT rod \varnothing 6 mm. 1.2 m.



IDSTD52
STD52 for sprinklers AR044 - SX with: base IMIRCADB + m. 1.2 pipe in PVC 9x13 + male coupling IMIRCMC13 + female adaptor IMIRCFC00 - WITHOUT rod \varnothing 8 mm. 1.2 m.



Stand coupling composition on lay flat: base IMIRCADB + m. 1.2 pipe in PVC 9x13 + male coupling IMIRCMC13 + connection for lay flat pipe IIDLP60D0N120 - WITHOUT rod \varnothing 8 mm. 1.2 m.



Connection fittings for layflat pipe



For further information, please consult the technical catalogue or the general pricelist, sect. "Low pressure fittings and valves"

Connecto fittings



For further information, please consult the technical catalogue or the general pricelist, sect. "High pressure fittings and valves"

961 - ANTI-INSECT TURBINE SPRINKLER

This series of low flow rate sprinklers extends the rate with flow rates of 120 and 160 litres/hour, allowing a reduced precipitation rate while maintaining the level of uniformity.

These sprinklers work thanks to a patented turbine mechanism that allows smooth and equilibrated rotation. The single-jet design maintains uniform distribution even with a low flow rate.

Applications:

- For general use, for open field or overhead, fixed or semi-fixed (stand) systems, (fig 1-2-3).
- Ideal for crops sensitive to water distribution uniformity, such as vegetables, carrots, potatoes, onions, etc.
- Ideal for cooling and frost-free protection of greenhouses and nurseries.
- Suitable for complete coverage of plantations (bananas, avocados, kiwis, mature trees, etc.).

Characteristics:

- Anti-insect, sprinkler closes at the end of the work.
- Integrated filter.
- Available for flow rates; 120 and 160 litres/hour.
- Optimal working pressure from 2.0 to 2.5 bar.
- Spacing: up to 7x7 m.
- Sprinkling diameter; up to 12.5 m.
- Recommended filtration: 60mesh=250micron.
- Raw materials selected to be long lasting.
- Conical plunger m.
- Assembly on stand STDA1 with rod Ø 6mm.



Performance table

NOZZLE colour - ø mm ref.	P (bar)	Q (l/h)	D (m)	Precipitation (mm/h)	
				Spacing (m)	
				6x6	7x7
red 1,5 ID961120	2,0	120	12,0	3,3	2,4
	2,5	135	12,0	3,8	2,8
	3,0	150	12,0	4,2	3,1
brown* 1,8 ID961160	2,0	160	12,5	4,4	3,3
	2,5	180	12,5	5,0	3,7
	3,0	200	12,5	5,6	4,1

* standard nozzle

Branch length**

The maximum number of sprinklers on the branch on the flat land is calculated with a flow rate loss of approx. 10%, at the branch start pressure of 2.5 bar minimum.

Model	Nozzle	Q (l/h) 2,0 bar	Branch			Max. number sprinklers	
			Pipe	ø external	ø internal	Spacing on branch (m)	
						6	7
961	1,5	120	PE bd Pn4	25 mm	21,6 mm	17 = 102 m	16 = 112 m
			PE bd Pn4	32 mm	28,2 mm	27 = 162 m	26 = 182 m
	1,8	160	PE bd Pn4	25 mm	21,6 mm	14 = 84 m	13 = 91 m
			PE bd Pn4	32 mm	28,2 mm	22 = 132 m	21 = 147 m

** all data are theoretical

Stand STDA1

Load loss for 1.2 m pipe 5x8 mm

Q - l/h	120	140	150	160	180	200
Load loss (bar)	0,10	0,13	0,15	0,17	0,22	0,26

961-P - ANTI-INSECT TURBINE ADJUSTABLE SPRINKLER

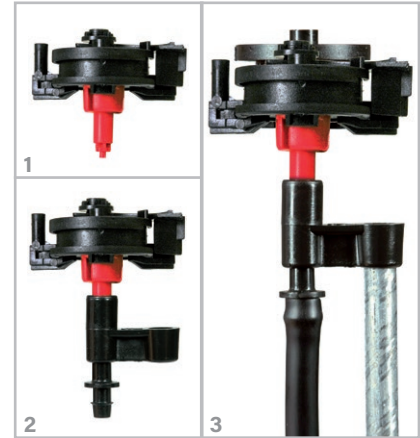
This adjustable sprinkler, available with a flow rate of 120 litres/hour, can be easily adjusted to irrigate a 90° or 270° section

Applications:

- Ideal for the edges of irrigated plots with circular sprinklers, allowing not to wet the road and water savings.
- Suitable for irrigation of strips, positioning the sprinklers on the sides with a spacing up to 8X8 m.

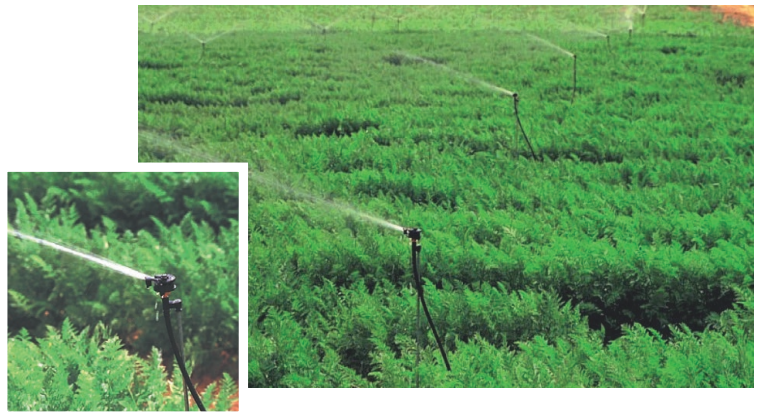
Characteristics:

- Anti-insect, sprinkler closes at the end of the work.
- Integrated filter.
- Available with the flow rate; 120 litres/hour.
- Optimal working pressure from 2.0 to 2.5 bar.
- Spacing: up to 8X8 m.
- Sprinkling diameter; up to 7 m.
- Recommended filtration: 60mesh=250micron.
- Raw materials selected to be long lasting.
- Conical plunger m.
- Assembly on stand STDA1 with rod Ø 6mm.



Performance table

NOZZLE colour - ø mm ref.	P (bar)	Q (l/h)	D (m)
red 1,5 ID961120P	2,0	120	12,0
	2,5	135	12,0
	3,0	150	12,0



Branch length*

The maximum number of sprinklers on the branch on the flat land is calculated with a flow rate loss of approx. 10%, at the branch start pressure of 2.5 bar minimum.

Model	Nozzle	Q (l/h) 2,0 bar	Branch			Max. number sprinklers	
			Pipe	ø external	ø internal	Spacing on branch (m)	
						6	7
961-P	1,5	120	PE bd Pn4	25 mm	21,6 mm	17 = 102 m	16 = 112 m
			PE bd Pn4	32 mm	28,2 mm	27 = 162 m	26 = 182 m

* all data are theoretical

Stand STDA1

Load loss for 1.2 m pipe 5x8 mm

Q - l/h	120	140	150	160	180	200
Load loss (bar)	0,10	0,13	0,15	0,17	0,22	0,26

920/940 - ANTI-INSECT TURBINE DOUBLE JET SPRINKLER

This series of double jet sprinklers is ideal for overlapping installation in the open field. It combines low flow rate, ample sprinkling diameter and uniform distribution.

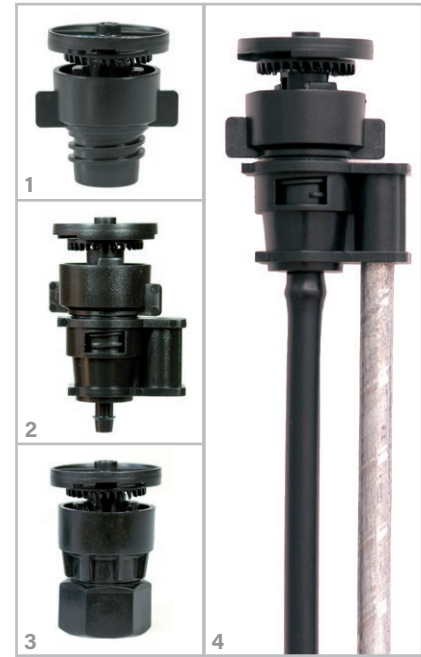
These sprinklers work thanks to a patented turbine mechanism that allows smooth and equilibrated rotation. The two-jet design offers better resistance to wind and more uniform distribution. The vast irrigated surface allows spacings up to 10X10 m.

Applications:

- Ideal for crops sensitive to water distribution uniformity, such as vegetables, carrots, potatoes, onions, etc.
- Ideal for cooling and frost-free protection of greenhouses and nurseries.
- Suitable for complete coverage of plantations (bananas, avocados, kiwis, mature trees, etc.).

Characteristics:

- Anti-insect, sprinkler closes at the end of the work.
- Integrated filter.
- Vast range of nozzles available; 180, 200, 240, 300, 400 and 450 l/h.
- Working pressure; from 2 to 3 bar.
- Optimal working pressure; from 2.0 to 3.0 bar.
- Spacing: up to 10X10 m.
- Ample sprinkling diameter; up to 14-16 m.
- Trajectory angle: 12 °.
- Recommended filtration: 60mesh=250micron.
- Raw materials selected to be long lasting.
- Conical plunger m.
- Assembly on proprietary stand STD920, with rod Ø 8mm.
- Available with thread. coupling 1/2" f. mod. 940 (Pic.3).



Performance table

NOZZLE colour - ø mm ref.	P (bar)	Q (l/h)	D (m)	Precipitation (mm/h)					
				Spacing (m)					
				6x6	7x7	7x8	8x8	8x9	9x9
grey 1,9 ID920180	2,0	180	13,0	5,0	3,7	3,2	2,8	-	-
	2,5	200	13,5	5,5	4,8	3,5	3,1	-	-
	3,0	220	14,0	6,1	4,5	3,9	3,4	-	-
purple 2,0 ID920200	2,0	200	14,0	5,6	4,1	3,6	3,1	-	-
	2,5	220	15,5	6,1	4,5	3,9	3,4	3,0	-
	3,0	240	15,5	6,7	4,9	4,3	3,7	3,3	-
olive 2,2 ID920240	2,0	240	15,0	6,7	4,9	4,3	3,7	3,3	-
	2,5	270	15,5	7,5	5,5	4,8	4,2	3,7	3,3
	3,0	300	15,5	8,3	6,1	5,4	4,7	4,2	3,7
turquoise 2,4 ID920300	2,0	300	15,5	8,3	6,1	5,4	4,7	4,2	3,7
	2,5	335	15,5	9,8	6,3	6,0	5,2	4,7	4,1
	3,0	360	16,0	10,0	7,3	6,4	5,6	5,0	4,4



Stand STD920

Load loss for 1.2 m pipe 5x8 mm

Q - l/h	120	140	150	160	180	200
Load loss (bar)	0,10	0,13	0,15	0,17	0,22	0,26

Distribution uniformity

CU < 83%	CU = 83% - 85%	CU = 86% - 91%	CU > 93%
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Branch length*

The maximum number of sprinklers on the branch on the flat land is calculated with a flow rate loss of approx. 10%, at the branch start pressure of 2.5 bar minimum.

Model	Nozzle	Q (l/h) 2,0 bar	Branch			Max. number sprinklers			
			Pipe	ø external	ø internal	Spacing on branch (m)			
						6	7	8	9
920	1,9	180	PE bd Pn4	25 mm	21,6 mm	13 = 78 m	12 = 84 m	12 = 96 m	-
			PE bd Pn4	32 mm	28,2 mm	21 = 126 m	20 = 140 m	19 = 152 m	-
	2,0	200	PE bd Pn4	25 mm	21,6 mm	12 = 72 m	11 = 77 m	11 = 88 m	10 = 90 m
			PE bd Pn4	32 mm	28,2 mm	20 = 120 m	18 = 126 m	17 = 136 m	17 = 90 m
	2,2	240	PE bd Pn4	25 mm	21,6 mm	11 = 66 m	10 = 70 m	10 = 80 m	9 = 81 m
			PE bd Pn4	32 mm	28,2 mm	17 = 102 m	16 = 112 m	15 = 120 m	15 = 135 m
	2,4	300	PE bd Pn4	25 mm	21,6 mm	9 = 54 m	9 = 63 m	8 = 64 m	8 = 72 m
			PE bd Pn4	32 mm	28,2 mm	15 = 90 m	14 = 98 m	13 = 104 m	13 = 117 m



* all data are theoretical

F22 - 1/2" M FULL CIRCLE ON STANDS

Overhead plastic sprinkler

Applications

Irrigation and germination of vegetable and nursery crops.

Characteristics

- Plastic sprinkler.
- 1/2" male thread.
- Trajectory: 25° front, 25° rear.
- Stainless steel pin and spring, effective sand protection.
- Plastic bayonet nozzles in different colours according to the diameter.
- Spacing between sprinklers: up to 14 metres on stand application and up to 15 metres for fixed installation.
- Recommended filtration: 75mesh=200micron.
- Assembly on stand STD52 with rod Ø 8mm.



Performance table

NOZZLE colour - ø mm ref.	P (bar)	Q (m³/h)	D (m)	Precipitation (mm/h)				
				Spacing (m)				
				10x10	10x12	12x12	12x14	14x14
grey 2,3 x 1,8 IDF22B0MP2318	2,5	0,51	22,0	5,1	4,3	-	-	-
	3,0	0,58	22,0	5,6	4,7	3,9	-	-
	3,5	0,60	22,0	6,0	5,0	4,2	-	-
	4,0	0,64	22,0	6,4	5,3	4,4	-	-
purple 2,5 x 1,8 IDF22B0MP2518	2,5	0,58	21,0	5,8	4,8	-	-	-
	3,0	0,63	21,0	6,3	5,3	4,4	3,8	-
	3,5	0,67	21,0	6,7	5,6	4,7	4,0	-
	4,0	0,72	21,5	7,2	6,0	5,0	4,3	-
orange 2,8 x 1,8 IDF22B0MP2818	2,5	0,69	22,0	6,9	5,8	4,8	-	-
	3,0	0,76	22,0	7,6	6,3	5,3	4,5	3,9
	3,5	0,82	22,0	8,2	6,8	5,7	4,9	4,2
	4,0	0,86	22,0	8,6	7,2	6,0	5,1	4,4

Data detected in laboratory conditions
Adjustments apply according to field conditions

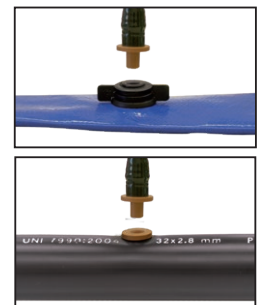
INSTALLATION ON STAND - Maximum length branch pipes

The maximum number of sprinklers is calculated based on the flat land with a supply pressure of 3.0 bar and a flow rate loss of approx. 10% on the least favourable sprinkler

Model	Nozzle	Q (m³/h) 2,5 bar	Branch			Max. number sprinklers		
			Pipe	ø external	ø internal	Spacing on branch (m)		
						9	10	12
F22	2,3x1,8	0,51	LDPE Pn4	40 mm	35,2 mm	13 = 117 m	13 = 130 m	12 = 144 m
			LDPE Pn4	50 mm	44,0 mm	20 = 180 m	19 = 190 m	18 = 216 m
			Flat Hose HI	1-1/2"	40,0 mm	17 = 153 m	16 = 160 m	15 = 180 m
			Flat Hose HI	2"	52,0 mm	26 = 234 m	25 = 250 m	24 = 288 m
	2,5x1,8	0,58	LDPE Pn4	40 mm	35,2 mm	12 = 108 m	12 = 120 m	11 = 132 m
			LDPE Pn4	50 mm	44,0 mm	18 = 162 m	17 = 170 m	16 = 192 m
			Flat Hose HI	1-1/2"	40,0 mm	16 = 144 m	15 = 150 m	14 = 168 m
			Flat Hose HI	2"	52,0 mm	24 = 216 m	23 = 230 m	22 = 264 m
	2,8x1,8	0,69	LDPE Pn4	40 mm	35,2 mm	11 = 99 m	10 = 100 m	10 = 120 m
			LDPE Pn4	50 mm	44,0 mm	16 = 144 m	15 = 150 m	14 = 168 m
			Flat Hose HI	1-1/2"	40,0 mm	14 = 126 m	13 = 130 m	12 = 144 m
			Flat Hose HI	2"	52,0 mm	22 = 198 m	21 = 210 m	19 = 228 m

Stand STD52
Load loss for 1.2 m pipe 9x13 mm

Q - m³/h	0,50	0,55	0,60	0,65	0,69	0,76	0,88
Load loss (bar)	0,30	0,42	0,48	0,54	0,58	0,64	0,84



SX/SX PC - 1/2" M SPHERICAL MOVEMENT (PC with flow regulator)

Overhead plastic sprinkler with spherical movement

Applications

Ideal for: vegetables, artichokes, tobacco, seedbeds, nurseries, parks and gardens.

Characteristics

- Full circle plastic sprinkler, for traditional assembly or on stands.
- PC with flow regulator.
- Male threading 1/2"
- Trajectory: 25°, low trajectory model 10° available on request.
- Bayonet nozzles with flow rectifier, special multi-hole technology.
- Colour-coded per flow rate.
- Spacing between sprinklers: up to 12 metres.
- Assembly on stand STD52 with rod Ø 8mm (pic.1).
- Road guard on request (IDSXRG) (pic.2).
- Optimal working pressure; from 2.5 to 4.5 bar.
- Recommended filtration: 75mesh=200micron.



Performance table

NOZZLE colour - ref.	P (bar)	Q (m³/h)	D (m)
blue IDSXN25360	2,5	0,42	17,0
	3,0	0,45	17,0
	3,5	0,50	16,5
	4,0	0,52	16,5
PC IDSXA25360	item available in 2019		
yellow IDSXN25450	2,5	0,50	19,6
	3,0	0,55	20,0
	3,5	0,60	20,0
	4,0	0,65	19,5
PC IDSXA25450	item available in 2019		
green IDSXN25550	2,5	0,58	20,0
	3,0	0,62	20,5
	3,5	0,68	21,6
	4,0	0,72	21,0
PC IDSXA25550	item available in 2019		
red IDSXN25650	2,5	0,75	20,0
	3,0	0,80	21,0
	3,5	0,88	22,0
	4,0	0,92	21,4
PC IDSXA25650	item available in 2019		

PC= Flow control

Only for road guard
Use with 180° Road Guard deflector

NOZZLE colour - ref.	P (bar)	Q (m³/h)	D (m)
brown IDSXN25320	2,5	0,35	17,0
	3,0	0,38	17,0
	3,5	0,40	18,0
	4,0	0,42	17,8
PC IDSXA25320	item available in 2019		

Stand STD52

Load loss for 1.2 m pipe 9x13 mm

Q - m³/h	0,32	0,36	0,45	0,50	0,55	0,60	0,65
Load loss (bar)	0,12	0,17	0,26	0,30	0,42	0,48	0,54

Branch length*

The maximum number of sprinklers on the branch on the flat land.

The maximum number is calculated by considering the load loss not exceeding 10% of the nominal working pressure (3Bar).

Model	Nozzle	Q (m ³ /h) 3,0 bar	Branch			Max. number sprinklers		
			Pipe	ø external	ø internal	Spacing on branch (m)		
						9	10	12
SX	blue	0,45	PE bd Pn4	40 mm	35,2 mm	14 = 126 m	14 = 140 m	13 = 156 m
			PE bd Pn4	50 mm	44,0 mm	21 = 189 m	20 = 200 m	19 = 228 m
			Flat Hose Hi	1-1/2"	40,0 mm	19 = 171 m	18 = 180 m	17 = 204 m
			Flat Hose Hi	2"	52,0 mm	28 = 252 m	27 = 270 m	26 = 310 m
	yellow	0,55	PE bd Pn4	40 mm	35,2 mm	13 = 117 m	12 = 120 m	11 = 132 m
			PE bd Pn4	50 mm	44,0 mm	19 = 171 m	18 = 180 m	17 = 204 m
			Flat Hose Hi	1-1/2"	40,0 mm	16 = 144 m	16 = 160 m	15 = 180 m
			Flat Hose Hi	2"	52,0 mm	25 = 225 m	24 = 240 m	23 = 276 m
	green	0,62	PE bd Pn4	40 mm	35,2 mm	11 = 99 m	10 = 100 m	10 = 120 m
			PE bd Pn4	50 mm	44,0 mm	16 = 144 m	16 = 160 m	15 = 180 m
			Flat Hose Hi	1-1/2"	40,0 mm	15 = 135 m	14 = 140 m	13 = 156 m
			Flat Hose Hi	2"	52,0 mm	22 = 198 m	21 = 210 m	20 = 240 m
	red	0,80	PE bd Pn4	40 mm	35,2 mm	8 = 72 m	8 = 80 m	7 = 84 m
			PE bd Pn4	50 mm	44,0 mm	12 = 108 m	11 = 110 m	10 = 120 m
			Flat Hose Hi	1-1/2"	40,0 mm	10 = 90 m	10 = 100 m	9 = 108 m
			Flat Hose Hi	2"	52,0 mm	16 = 144 m	15 = 150 m	14 = 168 m

* all data are theoretical



MICROSPRINKLERS

The microsprinklers allow us to create localised sprinkling systems, i.e. only sprinkling where the crop is developing, ignoring spaces between the rows and the non-productive zones.

This technique is mainly used in orchards, greenhouses and protected crops. Thanks to development of production technologies, it is now possible to have precise and reliable drippers in a vast range of flow rates.

The main applications of micro-irrigation are:

- Undertree and overhead sprinkling in orchards.
- Irrigation and spraying in greenhouses, nurseries and protected crops.
- Frost-free protection systems in orchards and vineyards.
- Lowering the temperature of the orchards and vineyards.
- Fertigation.
- Diffusion of pesticide products; especially in the greenhouse or on protected crops.
- Climatic control of farms (Poultry farming).



**861/861PC - DYNAMIC MICROSPRINKLER WITHOUT BRIDGE
(PC with flow regulator)**

Manufactured with a solid patented mechanism with strong propulsion, ensuring operation also in difficult conditions. Without bridge, they offer a vast sprinkling diameter, uniform distribution and excellent performance. They can also be used overturned.

Applications:

- Designed to irrigate mature trees with a vast root system.
- Ideal for overlapping use in the greenhouse, allowing high uniformity and low precipitation.
- Can be used overturned in greenhouses and nurseries and where a low trajectory angle is required.
- Suitable for cooling systems and frost-free protection.

Characteristics:

- Vast range of nozzles to meet all applications; from 35 to 160 l/h.
- Nominal flow rate at 2.0 bar.
- Working pressure; from 1 to 3 bar.
- Optimal working pressure; from 1.4 to 2.2 bar.
- Ample sprinkling diameter; from 5.5 to 9 m.
(Minimum height off ground 75cm, 30cm if overturned).
- Recommended spacing in areas protected from wind:
Standard installation: up to 6x6 m.
Overturned: up to 5x5 metres.
- Arranged on a row up to 6 m wide in the greenhouse.
- Arranged over two rows up to 12 m wide in the greenhouse.
- 861PC with flow regulator.
- Conical plunger m.
- Assembly on stand STDA1 with rod Ø 6mm or wedge 35cm ID10157 (pic.5).
- Recommended filtration:
100mesh=150micron for flow rates up to 40 l/h
80mesh=180micron for flow rates up to 90 l/h
60mesh=250micron for flow rates up to 160 l/h.
- All the components added to the standard model are supplied disassembled.



Characteristics table

TYPE		NOZZLE (colour - ø mm)									
		light blue 0,8	blue 0,9	purple 1,0	grey 1,1	black 1,2	green 1,3	navy 1,4	red 1,5	bronze 1,7	brown 1,8
head upwards and anti-insect	flow rate l/h	35	40	50	60	70	90	105	120	140	160
	ø covered	5,5	5,5	6,3	6,9	7,0	7,0	7,5	8,1	8,5	9,0
head downwards without spring no anti-insect	flow rate l/h	35	40	50	60	70	90	105	120	140	160
	ø covered	5,0	5,0	5,6	6,2	6,3	6,3	6,7	7,3	7,3	7,3
REF. normal model		ID861035	ID861040	ID861050	ID861060	ID861070	ID861090	ID861105	ID861120	ID861140	ID861160
REF. PC model		ID861035PC	-	ID861060PC	ID861070PC	ID861090PC	ID861105PC	-	-	-	-

Performance table

NOZZLE colour ø mm	P (bar)	Q (l/h)	D (m)	Precipitation (mm/h)	
				Spacing (m)	
				4x4	5x5
blue 0,9	2,0	40	5,5	2,5	-
black 1,2	2,0	70	7,0	4,3	-
red 1,5	2,0	120	8,1	-	4,8
brown 1,8	2,0	160	9,0	-	6,4

Distribution uniformity

CU = 86% - 91%

Stand STDA1 - Load loss for 1.2 m pipe 5x8 mm

Q - l/h	90	105	120	140	150	160	200	240
Load loss (bar)	0,06	0,08	0,10	0,13	0,15	0,17	0,26	0,37



For information on flow rate performance not covered in this catalogue, contact the Irritec technical office

862/862PC - DYNAMIC MICROSPRINKLER WITHOUT BRIDGE (PC with flow regulator)

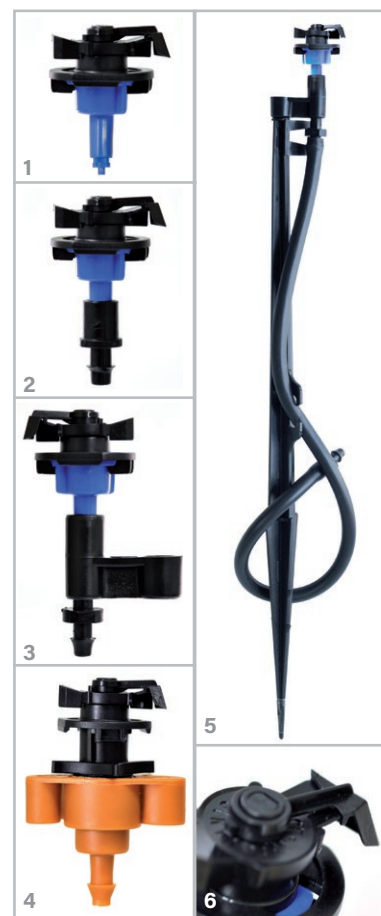
Manufactured with a solid patented mechanism with strong propulsion, ensuring operation also in difficult conditions. They offer a medium sprinkling diameter. The RJC (Removable Jet Converter) accessory reduces the sprinkling diameter for young plants.

Applications:

- Designed to irrigate young or mature trees with a small or medium root system.
- Ideal for overlapping use in the greenhouse, allowing high uniformity and low precipitation.

Characteristics:

- Model 862 can be supplied with the RJC (Removable Jet Converter) option. This device converts the water jet in large sized drops distributed uniformly over a small diameter. Ideal for reducing irrigation of young plants.
- The RJC accessory can be removed when the plants grow and a wider sprinkling diameter is required and a low trajectory angle.
- Suitable for cooling systems and frost-free protection.
- Vast range of nozzles to meet all applications; from 35 to 160 l/h.
- Nominal flow rate at 2.0 bar.
- Working pressure; from 0.8 to 2.5 bar.
- Optimal working pressure; from 1.0 to 2.0 bar.
- Average medium sprinkling diameter; from 3.8 to 7.2 m.
- Recommended spacing in areas protected from wind: up to 4X4 m.
- 862PC with flow regulator.
- Conical plunger m.
- Assembly on stand STDA1 with rod Ø 6mm or wedge 35cm ID10157 (pic.5).
- Recommended filtration:
 - 100mesh=150micron for flow rates up to 40 l/h
 - 80mesh=180micron for flow rates up to 90 l/h
 - 60mesh=250micron for flow rates up to 160 l/h.
- All the components added to the standard model are supplied disassembled



Characteristics table

	NOZZLE (colour - ø mm)									
	light blue 0,8	light blue 0,9	purple 1,0	grey 1,1	black 1,2	green 1,3	blue 1,4	red 1,5	yellow 1,7	brown 1,8
flow rate l/h	35	40	50	60	70	90	105	120	140	160
ø covered m	3,8	4,6	5,5	5,7	6,0	6,5	6,5	6,5	7,0	7,2
REF. normal model	ID862035	ID862040	ID862050	ID862060	ID862070	ID862090	ID862105	ID862120	ID862140	ID862160
REF. PC model	ID862035PC	-	ID862050PC	-	ID862070PC	ID862090PC	ID862105PC	-	-	-

1- The flow rate values are detected at 2.0 bar and are approximate Working pressure 1.0 - 3.0 bar
 2- diameter covered to minimum height of 180±200 cm in greenhouses

Performance table

NOZZLE colour ø mm	P (bar)	Q (l/h)	D (m)	Precipitation (mm/h)		
				Spacing (m)		
				2x2	3x3	4x4
blue 0,9	2,0	40	4,6	10,0	-	-
black 1,2	2,0	70	5,6	-	7,8	-
red 1,5	2,0	120	6,4	-	13,30	-
brown 1,8	2,0	160	7,2	-	-	10,0

Distribution uniformity

CU = 86% - 91%



**863/863PC - DYNAMIC MICROSPRINKLER WITHOUT BRIDGE
(PC with flow regulator)**

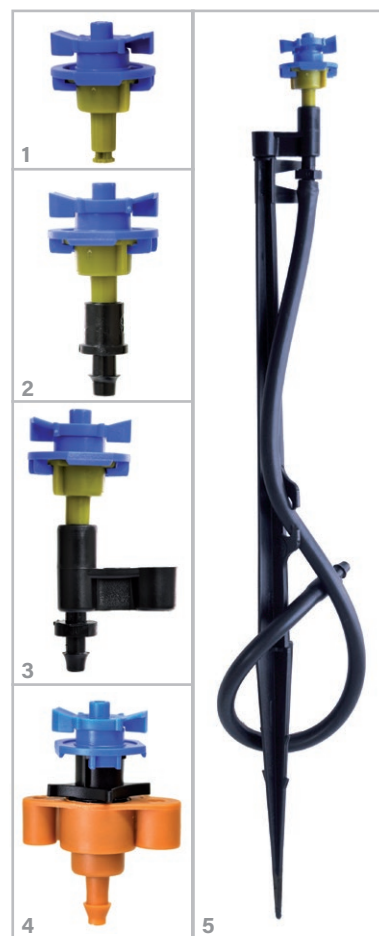
Manufactured using a patented, solid mechanism with strong propulsion, ensuring operation even in difficult conditions. They offer a reduced sprinkling diameter with low flow rate (20 l/h). The RJC (Removable Jet Converter) accessory reduces the sprinkling diameter for young plants.

Applications:

- Designed to irrigate young or mature trees with a small root system.
- Suitable for flowerbeds and gardens.

Characteristics:

- Combines a very low flow rate (20 l/h) with relatively large drops.
- Model 863 can be supplied with the RJC (Removable Jet Converter) option. This device converts the water jet in large sized drops distributed uniformly over a small diameter. Ideal for reducing irrigation of young plants.
- The RJC accessory can be removed when the plants grow and a wider sprinkling diameter is required.
- The nozzle, equipped with a NFR (Nozzle Flow Reducer) allows a low flow with a relatively large nozzle that prevents clogging.
- Available with nozzles for 20, 40 and 50 litres/hour.
- Nominal flow rate at 2.0 bar.
- Working pressure; from 1.5 to 3.0 bar.
- Medium sprinkling diameter; 3.8 m.
- 863PC with flow regulator.
- Conical plunger m.
- Assembly on stand STDA1 with rod Ø 6 mm or wedge 35 cm ID10157 (pic.5).
- Recommended filtration:
100mesh=150micron for flow rates up to 40 l/h
80mesh=180micron for flow rates up to 90 l/h.
- All the components added to the standard model are supplied disassembled.



Characteristics table

TYPE		NOZZLE (colour - ø mm)		
		bronze 0,9	light blue 0,9	purple 1,2
-	flow rate l/h	20	40	50
	ø covered m	3,8	4,6	5,0
REF.		ID863020	ID863040	ID863050

1- The flow rate values are detected at 2.0 bar and are approximate Working pressure 1.0 - 3.0 bar
2- diameter covered to minimum height of 180÷200 cm in greenhouses

866/866PC - DYNAMIC MICROSPRINKLER WITH DOWNWARD HEAD (PC with flow regulator)

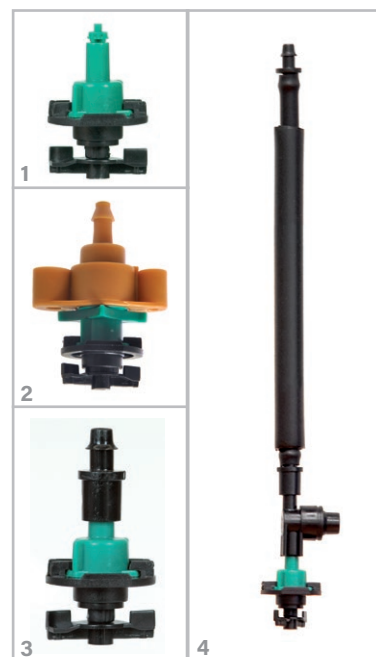
Manufactured with a solid patented mechanism with strong propulsion, ensuring operation also in difficult conditions. The horizontal trajectory of the jet allows a vast sprinkling diameter in the overturned position.

Applications:

- Designed for overlapped use in greenhouses, in the overturned position.
- Combined with low precipitation with vast distribution uniformity.
- Ideal for use in greenhouses or nurseries for germination and seedbeds.
- Suitable for cooling greenhouses and farms.
- Installed with the NDV (Non Drip Valve) it enables the side lines of water to be kept full, avoiding dripping from the sprinklers and water savings.

Characteristics:

- Vast range of nozzles to meet all applications; from 35 to 160 l/h.
- Nominal flow rate at 2.0 bar.
- Working pressure; from 1 to 3 bar.
- Optimal working pressure from 2.0 to 2.2 bar.
- Ample sprinkling diameter; up to 9.0 m.
- Recommended spacing in areas protected from wind: up to 6X6 m. Arranged on a row up to 6,5 m wide in the greenhouse. Arranged over two rows up to 12 m wide in the greenhouse.
- 866PC with flow regulator.
- Conical plunger m.
- Assembly with 60 cm stabiliser with or without non-drip valve 530.
- Available on request, threaded, female connector 3/8" w.m. with supplement.
- Recommended filtration:
 - 100mesh=150micron for flow rates up to 40 l/h
 - 80mesh=180micron for flow rates up to 90 l/h
 - 60mesh=250micron for flow rates up to 160 l/h.
- All the components added to the standard model are supplied disassembled.



Characteristics table

TYPE		NOZZLE (colour - ø mm)									
		light blue 0,8	blue 0,9	purple 1,0	grey 1,1	black 1,2	green 1,3	navy 1,4	red 1,5	bronze 1,7	brown 1,8
head downwards	flow rate l/h	35	40	50	60	70	90	105	120	140	160
	ø covered	6,6	6,6	6,6	7,9	7,9	7,9	8,0	8,0	8,0	8,6
REF. modello normale		ID866035	ID866040	ID866050	ID866060	ID866070	ID866090	ID866105	ID866120	ID866140	ID866160
REF. modello PC		ID866035PC	-	ID861050PC	-	ID866070PC	ID866090PC	ID866105PC	-	-	-

1- The flow rate values are detected at 2.0 bar and are approximate Working pressure 2.0 -3.0 bar
 2- diameter covered to minimum height of 60+90 cm on orchards and 180 cm in greenhouses

Performance table

NOZZLE colour ø mm	P (bar)	Q (l/h)	D (m)	Precipitation (mm/h)	
				Spacing (m)	
				4x4	5x5
blue 0,9	2,0	40	6,6	2,5	-
black 1,2	2,0	70	7,9	4,3	-
navy 1,4	2,0	105	8,0	-	4,2
brown 1,8	2,0	160	8,6	-	6,4



Distribution uniformity

CU = 86% - 91%

For information on flow rate performance not covered in this catalogue, contact the Irritec technical office

**831/831PC - DYNAMIC MICROSPRINKLER WITH BRIDGE
(PC with flow regulator)**

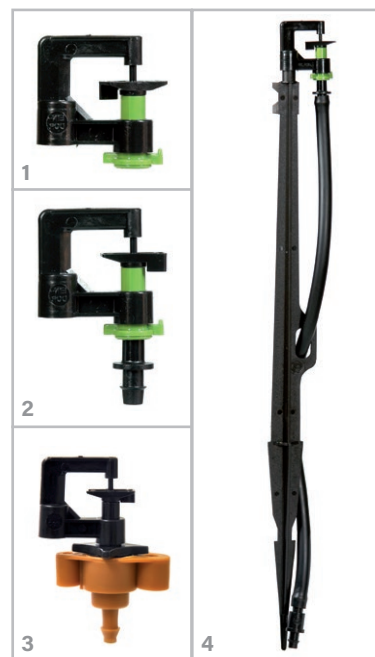
This series of minisprinklers “with a single bridge” and high performance is characterised by a robust design and an anti-insect protection device that closes the sprinkler at the end of the work. It offers a vast sprinkling diameter.

Applications:

- Designed to irrigate mature trees with a vast root system, ideal for vineyards and orchards.
- Thanks to the high uniformity and large sprinkling diameter, the sprinkler can be installed between two trees.
- Ideal for overlapping use in greenhouses or on vegetable, allowing high uniformity and low precipitation.
- Suitable for cooling and frost-free protection of greenhouses and nurseries.

Characteristics:

- Vast range of nozzles to meet all applications; from 16 to 240 l/h.
- Nominal flow rate at 2.0 bar.
- Optimal working pressure; from 1.0 to 2.5 bar.
- Anti-insect, sprinkler closes at the end of the work.
- Single-jet rotor with strong propulsion; works without setbacks even in difficult conditions.
- Ample sprinkling diameter: 5.5-10.4 m.
- Recommended spacing in areas protected from wind: up to 6X6 m. Arranged on a row up to 6 m wide in the greenhouse. Arranged over two rows up to 12 m wide in the greenhouse.
- 831PC with flow regulator.
- Water and energy savings: the sprinklers can work at low pressure (up to 1 bar) and low capacity.
- Conical plunger f.
- Assembly on stand STDA1 with rod Ø 6mm or wedge 35cm ID10157 (pic.4).
- Recommended filtration:
100mesh=150micron for flow rates up to 40 l/h
80mesh=180micron for flow rates up to 90 l/h
60mesh=250micron for flow rates up to 160 l/h.



Characteristics table

-	NOZZLE (colour - ø mm)										
	white 0,8	white 1,0	white 0,8	light blue 0,8	light blue 0,9	purple 1,0	grey 1,1	black 1,2	green 1,3	blue 1,4	red 1,5
flow rate l/h	14	21	25	35	40	50	60	70	90	105	120
ø covered m	2,5	4,0	5,5	5,7	6,1	6,8	6,9	8,0	8,0	8,5	8,9
REF. normal model	ID831014	ID831021	ID831025	ID831035	ID831040	ID831050	ID831060	ID831070	ID831090	ID831105	ID831120
REF. PC model	-	-	-	ID831035PC	-	ID831050PC	-	ID831070PC	ID831090PC	ID831105PC	-

-	NOZZLE (colour - ø mm)			
	yellow 1,7	brown 1,8	navy 2,0	olive 2,2
flow rate l/h	140	160	200	240
ø covered m	9,8	10,0	10,2	10,4
REF. normal model	ID831140	ID831160	ID831200	ID831240
REF. PC model	-	-	-	-

Stand STDA1

Load loss for 1.2 m pipe 5x8 mm

Q - l/h	90	105	120	140	150	160	200	240
Load loss (bar)	0,06	0,08	0,10	0,13	0,15	0,17	0,26	0,37

**841/841PC - DYNAMIC MICROSPRINKLER WITH BRIDGE
(PC with flow regulator)**

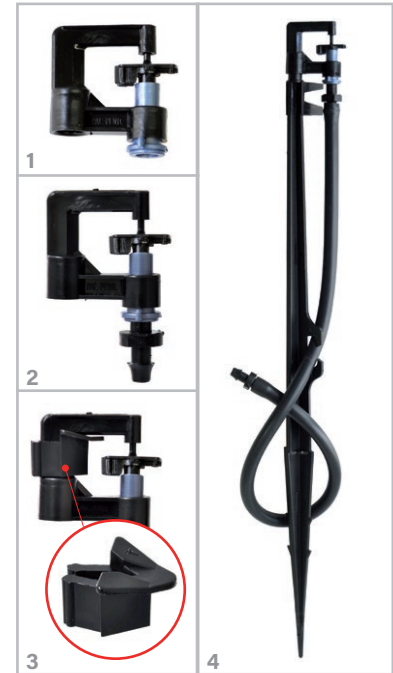
This series of minisprinklers “with a single bridge” and high performance is characterised by a robust design and an anti-insect protection device that closes the sprinkler at the end of the work. It offers a medium-large sprinkling diameter.

Applications:

- Designed for irrigation of orchards, avocados, mangos, kiwis, etc.
- Suitable for use at low pressure.

Characteristics:

- Vast range of nozzles to meet all applications; from 14 to 240 l/h.
- Nominal flow rate at 2.0 bar.
- Optimal working pressure; from 1.0 to 2.5 bar.
- Anti-insect, sprinkler closes at the end of the work.
- Single-jet rotor with strong propulsion; works without setbacks even in difficult conditions.
- Sprinkling diameter: medium/large. 4.9-8.0 m.
- Recommended spacing in areas protected from wind: up to 5X5 m.
Arranged on a row up to 6 m wide in the greenhouse.
Arranged over two rows up to 12 m wide in the greenhouse.
- 841PC with flow regulator.
- Water and energy savings: the sprinklers can work at low pressure (up to 1 bar) and low capacity.
- Conical plunger f.
- Assembly on stand STDA1 with rod Ø 6mm or wedge 35cm ID10157 (pic.4).
- Recommended filtration:
100mesh=150micron for flow rates up to 40 l/h
80mesh=180micron for flow rates up to 90 l/h
60mesh=250micron for flow rates up to 160 l/h.



Characteristics table

-	NOZZLE (colour - ø mm)											
	white 0,8	white 0,8	light blue 0,8	light blue 0,9	purple 1,0	grey 1,1	black 1,2	green 1,3	blue 1,4	red 1,5	yellow 1,7	brown 1,8
flow rate l/h	16	18	35	40	50	60	70	90	105	120	140	160
ø covered m	4,1	3,9	4,9	5,3	6,0	6,1	6,8	6,9	7,1	7,9	7,9	8,0
REF. normal model	ID841016	ID841018	ID841035	ID841040	ID841050	ID841060	ID841070	ID841090	ID841105	ID841120	ID841140	ID841160
REF. PC model	-	-	ID841035PC	-	ID841050PC	-	ID841070PC	ID841090PC	ID841105PC	-	-	-

Performance table

NOZZLE colour ø mm	P (bar)	Q (l/h)	D (m)	Precipitation (mm/h)		
				Spacing (m)		
				3x3	4x4	5x5
blue 0,9	2,0	40	5,3	4,4	-	-
black 1,2	2,0	70	6,8	7,8	4,4	-
blue 1,4	2,0	105	7,1	11,7	6,6	-
red 1,5	2,0	120	7,9	13,3	6,0	4,8
brown 1,8	2,0	160	7,8	17,8	10,0	-

Distribution uniformity

CU = 86% - 91%

Stand STDA1

Load loss for 1.2 m pipe 5x8 mm

Q - l/h	90	105	120	140	150	160	200	240
Load loss (bar)	0,06	0,08	0,10	0,13	0,15	0,17	0,26	0,37

700 - ANTI-INSECT VIBRATION SPRAYER

The 700 series dynamic sprayers are equipped with a light vibrating needle situated inside the cavity to allow uniform distribution in medium sized areas. The vibrating needle keeps the cavity clean and prevents dirt accumulation and closes the nozzle at the end of work.

Applications:

- Designed for irrigation of trees with a small or medium root system, ideal for use on vineyards and orchards.
- It can be installed overturned to reduce the sprinkling diameter.
- Ideal for young plantations, allowing irrigation only of the root system by saving water. When the plant grows, the sprayer can be positioned with head upwards to irrigate a wider zone.
- Suitable for greenhouse irrigation.

Characteristics:

- Available for flow rates; 40 and 160 litres/hour.
- Nominal flow rate at 2.0 bar.
- Optimal working pressure; from 1.5 to 2.2 bar.
- Sprinkling diameter; from 3.0 to 5.4 m.
- Conical plunger m.
- Assembly on stand STDA1 with rod Ø 6mm or wedge 35cm ID10157 (pic.4).
- Recommended filtration:
 100mesh=150micron for flow rates up to 40 l/h
 80mesh=180micron for flow rates up to 90 l/h
 60mesh=250micron for flow rates up to 160 l/h.
- All the components added to the standard model are supplied disassembled.



Characteristics table

TYPE		NOZZLE (colour - ø mm)						
		blue 0,9	grey 1,1	black 1,2	green 1,3	navy 1,4	red 1,5	brown 1,8
normal	flow rate l/h	40	60	70	90	105	120	160
	ø covered	3,0	4,0	4,4	4,6	5,0	5,2	5,4
REF.		ID700040	ID700060	ID700070	ID700090	ID700105	ID700120	ID700160

1- The flow rate values are detected at 2.0 bar and are approximate
 2- diameter covered for the minisprinkler at a minimum height of 25+30 cm per head upwards

44xx - SPRAYER WITH BRIDGE

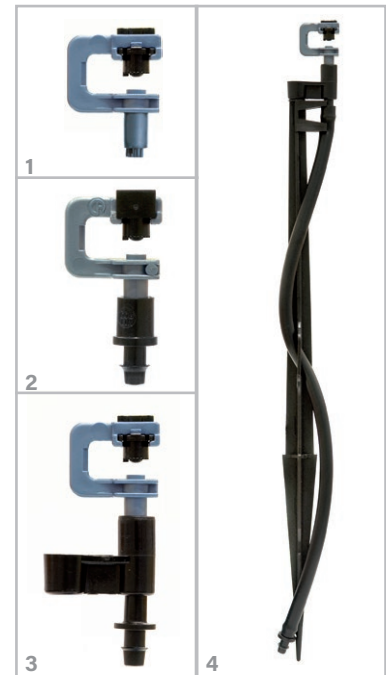
This series of static sprayers includes a vast range of nozzles and heads to meet wide-ranging needs.

Applications:

- Ideal for use on vineyards and orchards.
- Usable for narrow beds, strips, small areas and plants in pots.
- Suitable for flowerbeds and gardens.
- Usable frost-free protection systems.

Characteristics:

- The nozzle, equipped with a NFR (Nozzle Flow Reducer) allows a low flow with a relatively large nozzle that prevents clogging.
- Solid structure - For rigid use conditions.
- Static operation: no part in movement for problem-free operation.
- Excellent performance - Irrigation with small diameter drops without misting.
- Vast range of nozzles to meet all applications; from 12 to 180 l/h. Consult the manufacturer for further flow rates.
- Nominal flow rate at 2.0 bar.
- Optimal working pressure; from 1.5 to 3.5 bar.
- Colour code for easy identification of the heads.
- The 4XXX series sprayers can be supplied with flow regulator.
- Water and energy savings: the sprayers can work at low pressure (up to 1 bar) and low capacity.
- Conical plunger m.
- Assembly on stand STDA1 with rod Ø 6mm or wedge 35cm ID10157.
- Recommended filtration:
 - 100mesh=150micron for flow rates up to 40 l/h
 - 80mesh=180micron for flow rates up to 90 l/h
 - 60mesh=250micron for flow rates up to 160 l/h.
- All the components added to the standard model are supplied disassembled.



Technical data

NOZZLE colour - ø mm	Flow rate l/h at 2.0 ATM.	Model - Configuration							
		4460	4461	4462	4463	4452	4454	4442*	4444**
		ø covered							
dark green 1,0	20	-	-	2,4	0,7	-	-	0,5x0,8 DIST. 1,5M	-
blue 1,3	40	3,2	3,2	3,5	0,9	1,8 RADIUS	2,2 RADIUS	0,6x0,9 DIST. 2,4M	3,8x1,5 STRIP
grey 1,3	60	4,0	4,0	3,6	0,9	2,0	2,9 RADIUS	-	5,6x1,8 STRIP
black 1,8	70	3,8	3,8	3,2	0,9	2,0 RADIUS	-	0,8x1,2 DIST. 2,8M	4,0x2,8 STRIP
green 2,0	90	4,0	4,0	3,3	0,9	2,4 RADIUS	-	1,0x1,8 DIST. 3,2M	5,0x2,8 ELLIPTIC
Working pressure bar		1,5-3,5	1,5-3,5	1,0-3,5	1,5-3,5	1,5-3,5	1,5-3,5	1,5-3,5	1,5-3,5
REF.		ID + XXXX (model) + 0 + XX (flow rate)						es.: ID4460020	

1- The flow rate values are detected at 2.0 bar and are approximate
 2- diameter covered for the minisprinkler at a minimum height of 25÷30 cm per head upwards

* DIST = Distance from center to center of 2 ellipses
 ** STRIP = Strip irrigation (overlapping)

OUTLINE OF CLIMATE CONTROL, TEMPERATURE AND HUMIDITY IN GREENHOUSES WITH EXL FOGGERS

Cooling - Humidification - Treatments

Climate or micro-climate control in greenhouses is based on the principle of energy exchange between the air and water mist. One calorie is the amount to heat needed to increase the temperature of 1 cm³ of water by 1°C.

Evaporation of nebulised water absorbs heat from the air at a rate of 560 calories/1 g (1 cm³) of water evaporated. This conversion lowers the air temperature.

An efficient misting system can reduce the temperature in a greenhouse by 4° to 6° C, based on the outdoor climatic conditions, or rather: outdoor temperature and outdoor humidity.

For efficient cooling with EXL foggers, the following conditions are essential:

- With efficient ventilation that continuously introduces into the greenhouse drier air to replace the internal humid air.
- Mister system with short intervals (impulses), to avoid saturation of the air and minimise the quantity of water which could fall on the crops.

The misting system with EXL foggers is a complete system: based on a suitable pump (and water quality research) to achieve a programmer equipped with temperature and humidity sensors.

How much water is necessary to cool/humidify a greenhouse? In most cases, misting with a 1.5 to 3.0 mm/h rainfall will suffice with a maximum indication of 1 litre of misted water per 1 m² of greenhouse.

What are the suggested durations and intervals for misting? Mist at the shortest possible impulses, with an interval of at least 10÷15 sec. between mists. The duration of misting depends on the speed of the air produced by the ventilation system.

Why is the size of the water droplets produced by the EXL foggers so important?

Using special EXL mister nozzles with 3-4-6 l/h (nominal) with pressure ≥ 4.0 bar to the nozzle, you obtain between 60 and 90 micron, this dimension enables suspension of drops in the air and their rapid evaporation with minimum humidification of the crops beneath.

Cooling

Air speed	Interval between misting	Mist duration
0,10 m/s	10÷15 sec	3÷5 sec
0,50 m/s	10÷15 sec	5÷7 sec
1,00 m/s	10÷15 sec	7÷10 sec

Automation is fundamental and implemented using a specific programmer for greenhouses to control impulse misting, which should always be connected to both temperature (cooling) and humidity (humidification) sensors to achieve the right balance.

To avoid saturation of the air, very short impulses are necessary at adequate intervals, therefore the EXL fogger must always be installed with a non-drip valve with opening as near as possible to optimal working pressure ≥ 4.0 bar and fast closure as pressure drops in the piping, to allow simultaneous opening and closure while also keeping the tubing pressurised. The EXL fogger unit is composed of a small, 30 cm pipe with a stabiliser and non-drip valve + single nozzle, T or cross-shaped.

General spacing recommended for EXL foggers for cooling and humidification and treatments.

The spacing varies as the flow rate varies of the nozzle and the configuration:

- single fogger: spacing of 1.0m on the branch and 1.0÷1.5m between branches.
- T-shaped fogger (two nozzles) laid perpendicular to the brand: spacing of 1.50m on branch and 2.0÷3.0m between branches.
- cross-shaped fogger (4 nozzles): spacing of 3.0m on the branch and 3.0÷3.5m between branches.

You are advised to install the EXL fogger as high as possible and preferably at approx. 2.5÷3.0m.

Remember that cooling and humidification cannot work simultaneously.

Cooling - Humidification

Configuration	Nozzle l/h	Total l/h	Spacing		Precipitation mm/h
			between branches	on branch	
single	3,0	3,0	1,5	1,0	2,00
T	3,0 x 2	6,0	2,0	1,5	2,00
cross	3,0 x 4	12,0	3,0	2,5	1,60
single	4,0	4,0	1,5	1,0	2,67
T	4,0 x 2	8,0	2,0	1,5	2,67
cross	4,0 x 4	16,0	3,0	3,0	1,78
single	6,0	6,0	2,0	1,0	3,00
T	6,0 x 2	12,0	3,0	1,5	2,67
cross	6,0 x 4	24,0	3,0	3,0	2,67

Humidification

To increase humidity in the green based on signalling of the specific sensor, switch off the ventilation and mist at impulses. The duration of misting should be as short as possible. The interval between mists varies based on the minimum relative humidity required. The humidity sensor will normally activate the misting system automatically in the morning when the temperature increases and humidity decreases.

Interval between mists for humidification

Humidity	Interval	Mist duration
30÷40%	60 sec	2÷5 sec
40÷50%	90 sec	2÷5 sec
50÷60%	120 sec	2÷5 sec

Water quality

The quality of the water is as important as quantity. To avoid obstruction of the EXL misting nozzles by calcium carbonates and/or accumulation of salt deposits on the crops, you are advised not to mist hard water or salt water. For this reason, before deciding the type of misting system to install, it is essential to carry out water analysis at least for EC, pH and carbonates. You are advised to treat low quality water.

You are advised to use rainwater or similar or osmosis-treated water.

Recommended minimum filtration at 120 micron=120 mesh, better at 100 micron=150 mesh for 3-4 l/h nozzles.

Treatments

Misting is a useful method also for pesticide or chemical treatments applicable to a large variety of crops and conditions, as a replacement of the traditional spraying system. Switch off ventilation during treatments. Advantages: savings in labour, greater safety (no need for staff in greenhouse during application) and less consumption of chemical products.

The EXL single or T fogger is recommended for "treatments" use. In any case, the chemical treatments should always be carried out under the control of specialist staff.

The chemical products misting system must be isolated from the normal irrigation system.

The tank and the air compressor/pump for pesticides/chemicals must be separate and not directly connected to the water source. After misting, any residual chemical products must be removed from the piping.

The concentration of chemical products must be prepared in compliance with the manufacturer's recommendations.

You are advised to spray chemical products in the late afternoon or evening.

Rooting - Germination

EXL foggers are widely and successfully used on rooting benches. Both possible installations (single and T) are in this order of efficiency. For this use, a flow rate of 8 or 12 l/h is recommended. Differing from climatic control, here, longer impulses of 10-15 seconds at intervals of 10-15 minutes are recommended. Use of a humidity sensor and electronic leaf sensor is recommended.

Height of foggers 1.0÷1.5 m. over rooting.

Rooting

Configuration	Nozzle l/h	Total l/h	Spacing		Precipitation mm/h
			between branches	on branch	
single	8,0	8,0	1,0	1,0	8,00
T	8,0 x 2	16,0	1,5	1,5	7,11
cross	8,0 x 4	32,0	1,5	1,5	14,22
single	12,0	12,0	1,0	1,0	12,00
T	12,0 x 2	24,0	1,5	1,5	10,67
cross	12,0 x 4	48,0	1,5	1,5	21,33

Other uses

The misting system with EXL can be installed in packaging and boxing industrial buildings to reduce working temperature during hot summer days.

Installation of air conditioning in such large areas would be prohibitively expensive, while the foggers perform the task at a fraction of the cost.

The misting system with EXL is often used in the summer to cool animals on poultry, pig and bovine farms. The system is more generally used on poultry farms, where it greatly reduces the mortality rate during heat waves. Another benefit is the request for low water quantities, i.e. to ensure the soil does not become muddy. Furthermore, the installation, operation and maintenance of a misting system is highly economical.

EXL - FOGGER

Applications:

- Mainly used for climate control: temperature reduction and increase in air humidity.
- Used for germination and rooting.
- Suitable for temperature control in greenhouses, poultry farms and farms.

Characteristics:

- The tiny drops allow evaporation in the air, reducing ground wetting.
- The vortex design breaks the drop of water into a light mist.
- Modular, light and easy to install.
- Construction in three parts with sealing O-Ring.
- Raw materials selected to be long lasting:
 Body: Polyester (PBT),
 O-Ring: EPDM.
- Nominal flow rate at 3.5 bar.
- Working pressure from 2.5 to 5.5 bar.
- Coverage diameter: 60-120 cm.
- 360° jet.
- Trajectory angle: 80° to 100°.
- Average size of drops: 60 to 100 micron.
- Spacing: based on application. Consult the specific section or contact your dealer.
- Conical plunger f.
- Single nozzle or assembly on cross-shaped fitting for T (2 heads) and cross-shaped (4 heads) use.
- Use with a 15-30 cm stabiliser and always with a non-drip valve 530-Y, at high pressure (opens at 3.5 and closes at 2.0 bar).
- Installed with the NDV (Non Drip Valve) it enables the side lines of water to be kept full, avoiding dripping from the foggers and water savings.
- Recommended filtration: 200mesh=75micron.
- All the components added to the standard model are supplied disassembled.



EXL flow rates l/h for pressures indicated. Single head data

NOZZLE colour	Ø nozzle μ (micron)	Nominal flow rate l/h	Ref.	Pressure (bar)							
				2,5	2,8	3,2	3,5	3,9	4,2	4,6	4,9
purple	26	3	IDEXL03	2,9	3,1	3,2	3,3	3,3	3,4	3,4	3,6
black	33	4	IDEXL04	3,3	3,5	3,8	3,9	4,1	4,3	4,4	4,6
green	51	6	IDEXL06	5,2	5,7	5,8	6,0	6,2	6,5	6,5	6,9
brown	63	8	IDEXL08	6,4	6,9	7,3	7,7	7,9	8,3	8,6	8,8
grey	89	12	IDEXL12	9,2	9,9	10,6	11,1	11,5	12,0	12,4	13,0

4191 - FOGGER WITH 320° BRIDGE

Applications:

- Ideal for germination and rooting.
- Can be used for environments at controlled humidity.
- Suitable for temperature control in greenhouses, poultry farms and farms.

Characteristics:

- The INF - Integral Nozzle Filter, protects the nozzle from dirt.
- Solid structure - For rigid use conditions.
- Static operation: no part in movement for problem-free operation.
- Excellent performance - The mister nozzles generate small diameter drops (0.15 mm to 3 bar). The size of the drops reduces by increasing pressure.
- Available for flow rates; 12 and 180 litres/hour.
- All the nozzles are black, the flow rate is etched on the bridge.
- Nominal flow rate at 2.0 bar.
- Maximum working pressure; 1.5 bar.
- Optimal working pressure from 2.0 to 3.5 bar.
- Conical plunger m.
- Use with a 60cm stabiliser and always with a non-drip valve 530X at high pressure that opens at 2.5 and closes at 1.4 bar.
- It can be used with a NDV (non-drip device) valve to avoid unwanted dripping at the start and stoppage of the irrigation cycle. Furthermore, keeping the tubes full reduces button cycle times.
- Recommended filtration:
100mesh=150micron for flow rates up to 40 l/h
80mesh=180micron for flow rates up to 90 l/h.
- All the components added to the standard model are supplied disassembled.



Characteristics table

TYPE		NOZZLE (colour - ø mm)				
		olive 0,6	light blue 0,8	purple 1,0	black 1,2	green 1,3
head downwards standard	flow rate l/h	20	35	50	70	90
	ø covered	2,2	2,5	2,8	3,0	3,2
REF.		ID4191020	ID4191035	ID4191050	ID4191070	ID4191090

N.B.: The flow rate values are detected at 2.0 bar and are approximate

530
non-drip valve



Ref.	Description	Model	Box
ID53005	opening/closure 1,0/0,4 bar	L*	100
ID53010	opening/closure 1,5/0,7 bar	H*	100
ID53025	opening/closure 2,5/1,5 bar	X*	100
ID53035	opening/closure 3,5/2,5 bar	Y*	100

* mod L/H two-directional
mod X/Y one-directional

Technical data

FUNCTION	MODEL			
	L low pressure	H medium pressure	X high pressure	Y high pressure
opening bar approx.	1,0	1,5	2,5	3,5
closure bar approx.	0,4	0,9	1,4	2,0



example of application
on stabiliser with 866

560
flow rate regulator



Ref.	Description	l/h	Box
ID560F020	female coupling	20	100
ID560F025	female coupling	25	100
ID560F040	female coupling	40	100
ID560F050	female coupling	50	100
ID560M020	male coupling	20	100
ID560M025	male coupling	25	100
ID560M040	male coupling	40	100
ID560M060	male coupling	60	100

Technical data

FUNCTION	Flow rate l/h			
	20	25	40	50
working pressure	560F 1.5 ÷ 4.5 bar with sprayers 44xx and 86x			
	560 F with female plunger			



example of application
with 861 on rod

500
pre-calibrated pressure regulator



Ref.	Description	Box
ID50014	m-f 35 to 160 l/h coupling	100
ID50201	m-f 35 to 160 l/h coupling	100
ID5020H	m-f 160 to 300 l/h coupling	100

Technical data

FUNCTION	MODEL		
	500-14 1,4 bar	500-20 2,0 bar	500-20H 2,0 bar
pressure range l/h	35 ÷ 160	35 ÷ 160	160 ÷ 300



example of application
with 700 on rod

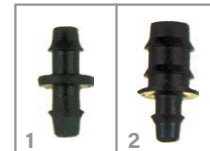
Couplings

Ref.	Description	Box
ID10351	Female plunger - 5x8 pipe insert (picture 1)	100
ID10364	Male plunger - 5x8 pipe insert (picture 2)	100
ID10319	Male collar - 5x8 pipe insert (picture 3)	100
ID10306	Male plunger - 9x12 pipe insert (picture 4)	100
IMIRCFC00	Maxi female plunger - PE pipe offtake (picture 5)	100
IMIRCMC13	Maxi male plunger - Insert 9/12 (picture 6)	100
IIDL60D0N120	Layflat offtake - 9x12 insert (picture 7)	100



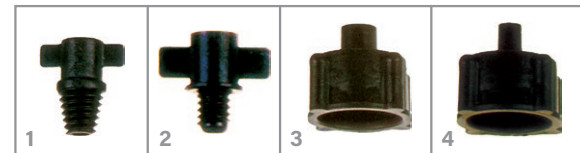
Double plungers

Ref.	Description	Box
ID10335	Double plungers 5x8 pipe (picture 1)	100
ID10377	Double plungers 9x12 pipe (picture 2)	100



Adaptors

Ref.	Description	Box
ID12096	Female plunger male thread 3/8" (picture 1)	100
ID10348	1X4" W. thread head (picture 2)	100
ID10827	Female connector 1/2" (picture 3)	100
ID10814	Male connector thread 1/2" (picture 4)	100



Caps

Ref.	Description	Box
ID10393	Offtake plug (picture 1)	100
ID10380	Female plug (picture 2)	100
IMIRCTC00	Maxi plug (picture 3)	100



Bases

Ref.	Description	Box
ID920080M	920 adaptor 8 mm - 5x8 pipe insert (picture 1)	100
ID920080M13	920 adaptor 8 mm - 9x12 pipe insert (picture 1)	100
ID10555	1/2" Thread head (picture 2)	100
ID10500	Coupling (picture 3)	100
ID10445	Reducer for stand 4 mm (picture 4)	100
ID10461	Reducer for stand 6 mm (picture 5)	100
IMIRCADB	Female connector 1/2" - Insert 9/12 (picture 6)	100
IDASS2000N080	Rod adaptor 8mm for STD52 (picture 7)	100
IDAF838P	3/8" adaptor for 831PC-841PC-861PC-866PC for 8 mm stand - 5x8 pipe insert (picture 8)	100



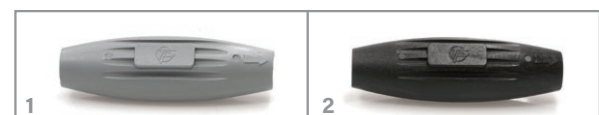
Road guard deflector

Ref.	Description	Box
IDSXRG	180° road guard deflector for SX	70



Stabilisers weight

Ref.	Description	Box
IDSTAB25	Stabilizer 25 grams	100
IDSTAB38	Stabilizer 38 grams	100



TCP

polyethylene counter-weight pipe bd 9 x 12

Ref.	Description	Box
FMB12090P030	Stabilizer pipe 300 mm	100
FMB12090P050	Stabilizer pipe 500 mm	100
FMB12090P100	Stabilizer pipe 1000 mm	100



CLT

stabiliser for minisprinklers

Ref.	Description	Box
IDCLTA1015	CLTA1 suitable for 861 - 866 - 700 - 4191 with: female coupling 5x8 ID10351 + m. 0.15 pipe in PVC 5x8 + stabiliser + double plunger 5x8 ID10335 (pic.1)	100
IDCLTA1030	CLTA1 suitable for 861 - 866 - 700 - 4191 with: female coupling 5x8 ID10351 + m. 0.30 pipe in PVC 5x8 + stabiliser + double plunger 5x8 ID10335 (pic.1)	100
IDCLTA1060	CLTA1 suitable for 861 - 866 - 700 - 4191 with: female coupling 5x8 ID10351 + m. 0.60 pipe in PVC 5x8 + stabiliser + double plunger 5x8 ID10335 (pic.1)	100
IDCLTA2015	CLTA2 suitable for 803 - EXL with: male coupling 5x8 ID10364 + m. 0.15 pipe in PVC 5x8 + stabiliser + double plunger 5x8 ID10335 (pic.2)	100
IDCLTA2030	CLTA2 suitable for 803 - EXL with: male coupling 5x8 ID10364 + m. 0.30 pipe in PVC 5x8 + stabiliser + double plunger 5x8 ID10335 (pic.2)	100
IDCLTA2060	CLTA2 suitable for 803 - EXL with: male coupling 5x8 ID10364 + m. 0.60 pipe in PVC 5x8 + stabiliser + double plunger 5x8 ID10335 (pic.2)	100



STD

stand for sprinkler support

Ref.	Description	Box
IDSTD920120	STD920 for sprinkler 920 with: base ID920080F + ID10364 + reduction rod ø 6 mm. ID10461+ m. 1.2 PVC pipe 5x8 + male coupling ID10364 + female adaptor ID10351 - WITHOUT rod ø 6 mm. 1.2 m. (pic.1)	100
IDSTDA1120	STDA1 for sprinklers 961 - 961P - 861 - 700 with: base ID10500 + reduction ID10461+ m. 1.2 PVC pipe 5x8 + male coupling ID10364 + female adaptor ID10351 - WITHOUT rod ø 6 mm. 1.2 m. (pic.1)	100
IMSTD52	STD52 for sprinklers AR044 - SX with: base IMIRCADB + m. 1.2 PVC pipe 9x13 + male coupling IMIRCMC13 + female adaptor IMIRFCFC00 - WITHOUT rod ø 8 mm. 1.2 m. (pic.3)	50



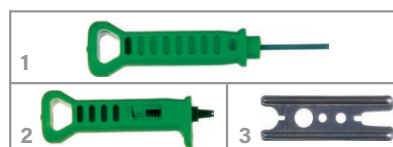
Rods




Ref.	Description	Box
ID10157	plastic wedge 35 cm. (pic.1)	100
IDAML0612	metal rod ø 6 mm. height 1.2 m. (pic.2)	100
IDAML0812	metal rod ø 8 mm. height 1.2 m. (pic.2)	100










Tools

Ref.	Description	Box
ID13015	insertor (pic. 1)	100
ID13060	3,5 mm. puncher (pic. 2)	100
ID13206	key (pic. 3)	100



System	Brand	Standard / Regulation	Description	Body	Certificate no.
	 	UNI EN ISO 9001:2015	Quality Management System	Kiwa	19303 - A
		UNI EN ISO 14001:2015	Environmental Management System	Kiwa	19303 - E
		UNI EN ISO 45001:2018	Occupational Health and Safety Management System	Kiwa	19303 - I
	UE 952/2013	Authorised Economic Operator	Customs Agency and State Monopolies	IT AEOF 16 1155	

Product	Country	Brand	Standard	Description	Body	Certificate no.
	ITALY		UNI 9561:2006	Connecto™ +Ultra	Kiwa	KIP-107560
			UNI 7990:2015	Irritec® BD Genlene® BD drinkable	Kiwa	KIP-107561 KIP-107562
			UNI EN ISO 9261:2010	Drip line Tandem® - Multibar™ C Multibar™ C Rootguard	Kiwa	KIP-107564
				Drip line D5™	Kiwa	KIP-107564
				Drip line Junior®	Kiwa	KIP-107564
				Drip line P1*	Kiwa	KIP-107564
			UNI EN 12201-2:2013	Irritec® - Genlene®	Kiwa	KIP-107557
			UNI EN 1622:2006			
			Italian Ministerial Decree 174:2004			
	UNI EN 15494:2021	Irritec® - Genlene®	Kiwa	KIP-107559		
			ISO 8779:2020	Gpipe® - Irripipe®	Kiwa	KIP-107563
	GERMANY		GW 335-B3:2011	Connecto™ +Ultra	DVGW	DW-8616BT0102
	SOUTH AFRICA		SANS 14236:2003	Connecto™ +Ultra	SABS	8357/13262
	SWITZERLAND		TPW 157	Connecto™ +Ultra	SVGW	1103-K 298
	AUSTRALIA		AS/NZS 4129:2008	Connecto™ +Ultra	SAI GLOBAL	WMKA21524
	UNITED KINGDOM		BS 6920-1:2000	Connecto™ +Ultra	WRAS	1712054



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