



Sprinklers Accessories

Introduction:

To achieve a correct use of the sprinkler, there are some accessories which improve its performance fulfilling the needs of the farmer. With them, any specific use is achieved without any need to change the type of sprinkler.

Advantages:

- Ease of use of the sprinkler (different functions).
- In the case of bayonet assembly, manual calibration is easy.
- Perforated guard roads avoid the formation of puddles , stopping the water action.
- Easy and quick assembly of irrigation systems using set feedtube assembly (no necessary use of clamps)

Recommended uses :

Use of guard road in places next to roads or warehouses.
Use of bayonet nozzle for harsh water –or on sandy soils.
The installation of set feedtube assembly is necessary in fast growing crops and quick maturing crops (herbs type) where there is no need of a fixed installation of irrigation system.

Sprinkler accessories characteristics:

All models of sprinkler can be supplied with nozzles and plugs which determine the range of wet areas and there also exists different jet for a correct distribution of water.

There are brass and plastic nozzles and plugs.

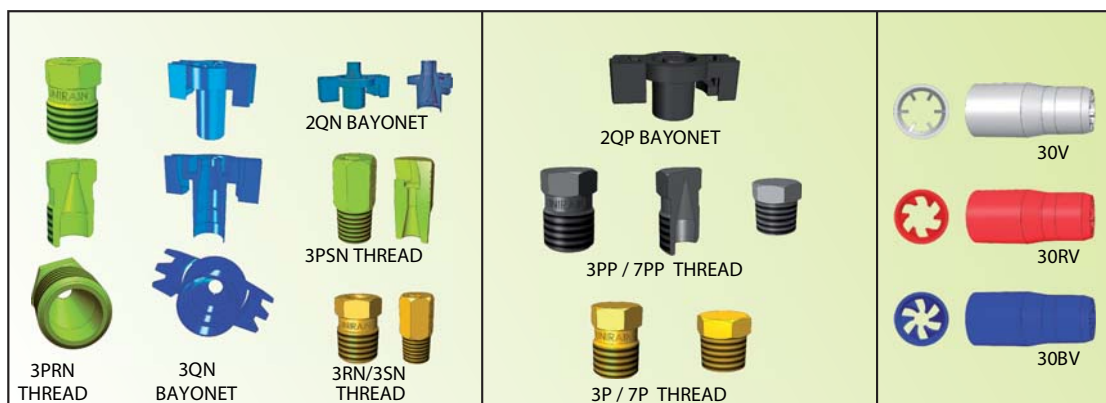
Threaded base sprinkler is commonly used, nevertheless there are plastic bayonet sprinklers.

There are vanes too which amplify the range and improve the repartition of droplets water.

Guardsroad are part of sprinkler, they can be perforated or without holes to avoid irrigation in undesired areas.

Set feedtube assemblies are part of sprinkler and they contribute to obtain better irrigation results.They are easy to install.



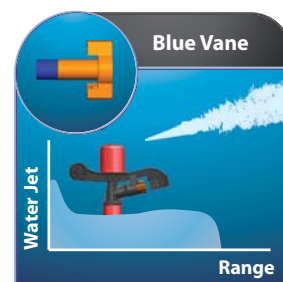
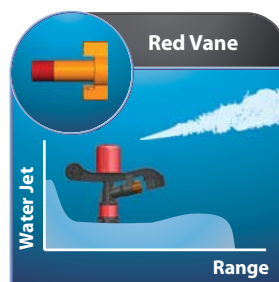


SPRINKLERS	NOZZLES						PLUGS					VANES		
	3RN Latón	3SN Latón	3PRN Plast.	3PSN Plast.	3QN Plast.	2QN Plast.	7P Latón	3P Latón	7PP Plast.	3PP Plast.	2QP Plast.	30V Plast.	30RV Plast.	30BV Plast.
F26	-	-	-	-	P	-	-	-	-	-	-	P	P	P
F26W	-	-	-	-	P	-	-	-	-	-	-	P	P	P
F2614	-	-	-	-	P	-	-	-	-	-	-	P	P	P
F2614W	-	-	-	-	P	-	-	-	-	-	-	P	P	P
F30	P	S	P	S	-	-	-	S	-	S	-	P	P	P
F40	P	S	P	S	-	-	-	S	-	S	-	P	P	P
F3030	P/S	-	P/S	-	-	-	S	-	S	-	-	P/S	P/S	P/S
P35	P	S	P	S	-	-	-	S	-	S	-	P	P	P
F44	P	S	P	S	P	S	-	S	-	S	S	P	P	P
F4444	P/S	-	P/S	-	P/S	-	S	-	S	-	-	P/S	P/S	P/S
F46/F46L	P	S	P	S	P	S	-	S	-	S	S	P	P	P
P45L/P45	P	S	P	S	P	S	-	S	-	S	S	P	P	P

P: Main sprinkler outlet.

S: Secondary sprinkler outlet.

Vanes



NOZZLES & PLUGS

Brass



Application

Nozzles and plugs are essential elements of sprinklers if the farmer wants to improve yield of crops, indeed they offer different possibilities to them.

They help choosing the flow morphology and extent of water without changing the type of sprinkler.

They fulfill the different needs of the farmer who elects them according to the soil, climate and the type of crop.

Advantages

- Made of brass, their precision machining grants their correct fitting into the sprinkler.
- They feature their outlet size carved in inches.
- The slotted design of the hole in secondary nozzle improves the watering near the sprinkler and increases the irrigation uniformity.

Technical specifications

- 3RN Principal Nozzle: 1/4"-18 NPSI Male thread.
(To sprinklers with 3/4" thread).
- 3SN Secondary Nozzle: 3/8"-24 UNF Male thread.
(To sprinklers with 3/4" thread).
- 3T Secondary plug: 3/8" - 24 UNF Male thread
(To use instead of secondary nozzle in sprinklers with 3/4" thread).
- 7T Secondary plug: 1/4" - 18 NPSI Male thread
(To use instead of principal nozzle in sprinklers with 1", 1-1/4" thread).



3RN



3SN 1/8"-20"



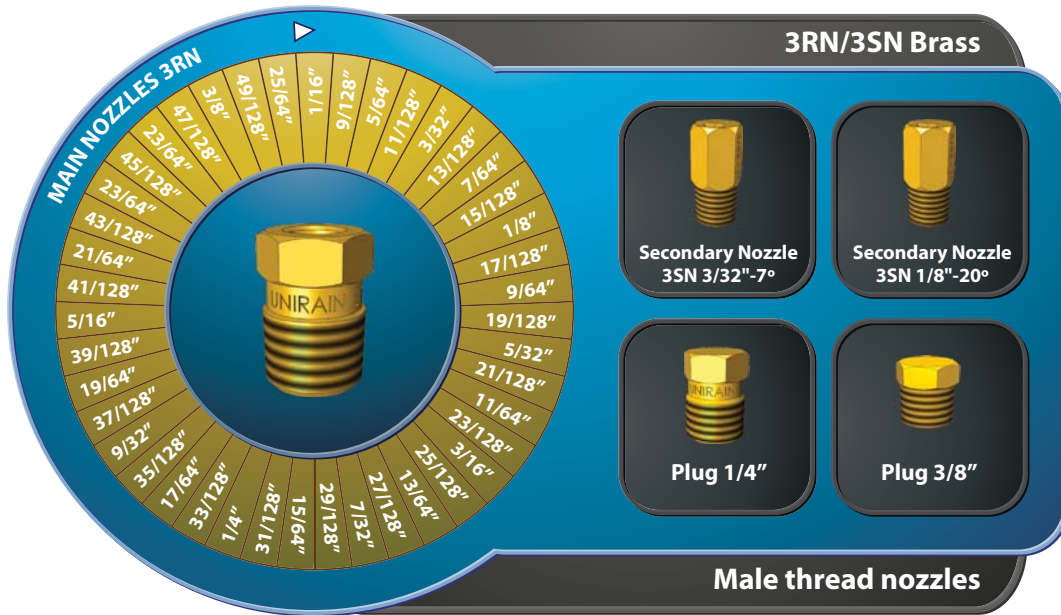
3SN 3/32"-7"



7T



3T



WARRANTY AND EXCLUSIONS

The manufacturer guarantees its products for direct customer against any defects in materials or manufacture for a period of two years from the original date of purchase, when the products have been used under normal operating conditions. The manufacturer assumes no responsibility for installation, removal or repairs carried out by unauthorised personnel. The manufacturer's liability under this warranty is limited to the replacement or repair of defective parts and the manufacturer does not accept responsibility for damages to crops or any other consequential damages deriving from defects in the products covered by this warranty.

THE PRESENT WARRANTY SUPERCEDES AND VOIDS ALL OTHER WARRANTIES, WHETHER EXPRESS OR IMPLIED, INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSES OR ANY OTHER ATTRIBUTING LIABILITY TO THE MANUFACTURER.

No agent, employee or representative of the manufacturer is authorised to void, alter or add to the conditions contained in this warranty, nor to take responsibility for, nor to make guarantees not specified herein.

NOZZLES & PLUGS

Plastic



Application

Nozzles and plugs are essential elements of sprinklers if the farmer wants to improve yield of crops, indeed they offer different possibilities to them.

They help choosing the flow morphology and extent of water without changing the type of sprinkler .

They fulfill the different needs of the farmer who elects them according to the soil , climate and the type of crop.

Advantages

- Made of antiabrasive acetalic resin, their high wearing resistance makes them perfect for long working periods.
- Due to their color code, it's easy to identify them at a glance. Outlet size carved in inches and millimetres.
- The slotted design of the secondary spreader nozzle (3PSN) improves the watering of the sprinkler close-in area, increasing uniformity.
- The bayonet nozzle wears a coupling system which facilitates easy assembly and disassembly.

Technical specifications

- 3PRN Principal Nozzle: 1/4"-18 NPSI Male thread.
(To sprinklers with 3/4" thread).
- 3PRN+V Principal Nozzle: 1/4"-18 NPSI Male thread.
(To sprinklers with 3/4" thread). Includes 30V vane. It will increase the sprinkler coverage radius to its maximum.
To obtain a right grade of pulverisation, the system pressure must be high (4.14 Bar).
- 3PSN Secondary Nozzle: 3/8"-24 UNF Male thread.
(To sprinklers with 3/4" thread).
- 3PT Secondary plug: 3/8"- 24 UNF Male thread
(To use instead of secondary nozzle in sprinklers with 3/4" thread).

Technical specifications (bayonet)

- 3Q Principal Nozzle. To sprinklers with 3/4" thread.
- 2Q Secondary Nozzle. To sprinklers with 3/4" thread.
- 2Q-P Secondary Plug. To sprinklers with 3/4" thread.



3PRN



3Q



7PT

3PT

2QP

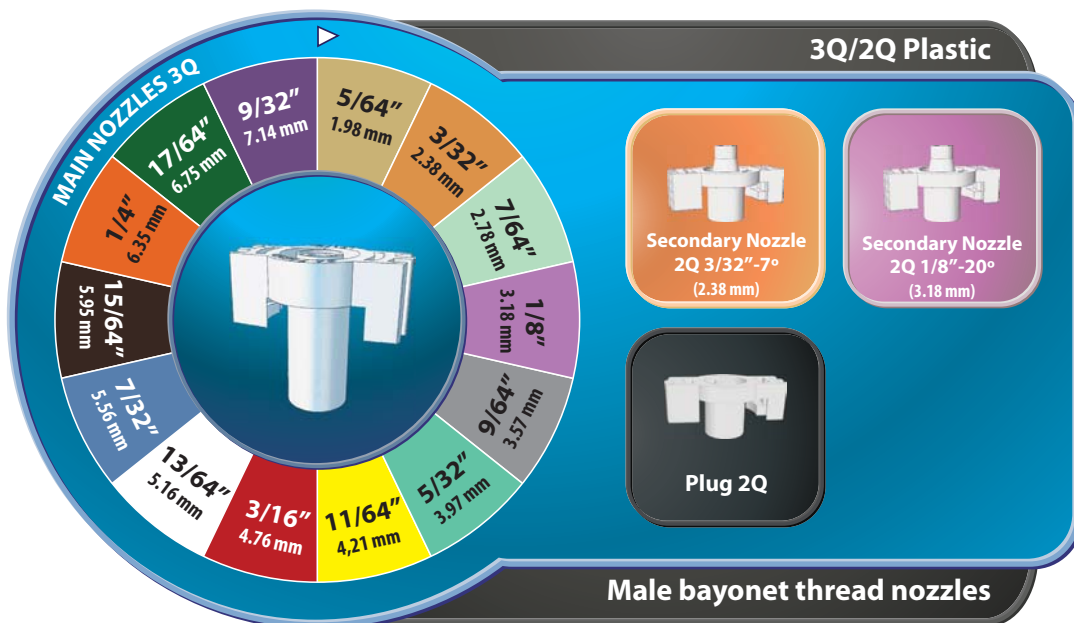
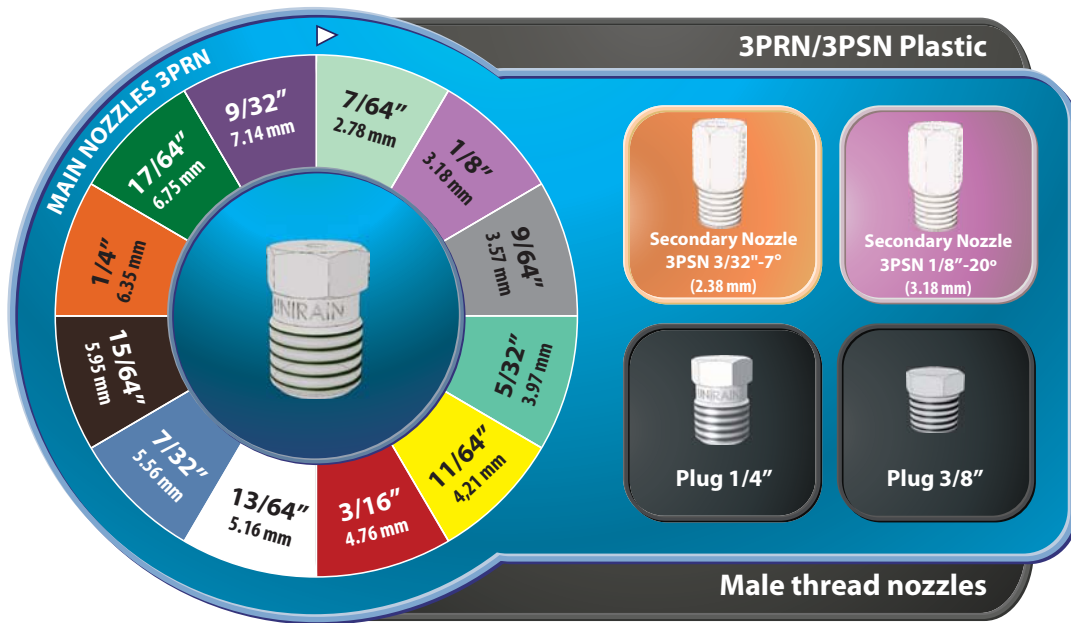
3PRN+V

3PSN 1/8" 20°

3PSN 3/32" 7°

2Q 1/8"-20°

2Q 3/32"-7°



WARRANTY AND EXCLUSIONS

The manufacturer guarantees its products for direct customer against any defects in materials or manufacture for a period of two years from the original date of purchase, when the products have been used under normal operating conditions. The manufacturer assumes no responsibility for installation, removal or repairs carried out by unauthorised personnel. The manufacturer's liability under this warranty is limited to the replacement or repair of defective parts and the manufacturer does not accept responsibility for damages to crops or any other consequential damages deriving from defects in the products covered by this warranty.

THE PRESENT WARRANTY SUPERCEDES AND VOIDS ALL OTHER WARRANTIES, WHETHER EXPRESS OR IMPLIED, INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSES OR ANY OTHER ATTRIBUTING LIABILITY TO THE MANUFACTURER.

No agent, employee or representative of the manufacturer is authorised to void, alter or add to the conditions contained in this warranty, nor to take responsibility for, nor to make guarantees not specified herein.



Application

Every model of Unirain sprinkler allows using three different kinds of vanes to achieve the desired coverage and pulverisation balance according to the available system pressure. The Unirain exclusive system provides high uniformity coefficients.

Advantages

- Resin antiabrasive acetal (POM) vanes are particularly suitable for prolonged operations as they are highly resistant to erosion.
- Thanks to their color coding: red, white and blue, they can be easily identified .
- The design of the different vanes facilitates the change of morphology of water, improving the water distribution.
- Easy assembly.

Technical specifications

30V vane (White)

It will increase the sprinkler coverage radius to its maximum. To obtain a right grade of pulverisation, the system pressure must be high (4.14 Bar)

30RV vane (Red)

Its inner structure creates a slight water rotation inside the nozzle, bringing a good pulverisation grade but the throw distance will decrease. To be used under low pressure conditions (2.07 Bar)

30BV vane (Blue)

This combination will achieve the highest pulverisation grade available, but will provide the minimum coverage radius. It's used under extremely low pressures (1.38 Bar)

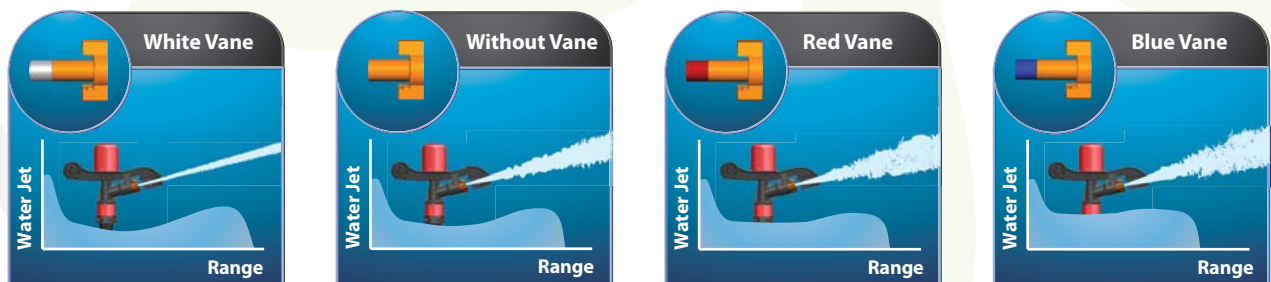


30BV

30RV

30V

Vaness





Notes

WARRANTY AND EXCLUSIONS

The manufacturer guarantees its products for direct customer against any defects in materials or manufacture for a period of two years from the original date of purchase, when the products have been used under normal operating conditions. The manufacturer assumes no responsibility for installation, removal or repairs carried out by unauthorised personnel. The manufacturer's liability under this warranty is limited to the replacement or repair of defective parts and the manufacturer does not accept responsibility for damages to crops or any other consequential damages deriving from defects in the products covered by this warranty.

THE PRESENT WARRANTY SUPERCEDES AND VOIDS ALL OTHER WARRANTIES, WHETHER EXPRESS OR IMPLIED, INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSES OR ANY OTHER ATTRIBUTING LIABILITY TO THE MANUFACTURER.

No agent, employee or representative of the manufacturer is authorised to void, alter or add to the conditions contained in this warranty, nor to take responsibility for, nor to make guarantees not specified herein.

ROAD GUARD

Plastic



Application

The plastic Unirain road guard stands as an easy cheap and definitive solution for irrigation from the end line sprinklers, it reduces or eliminates the amount of water falling behind it.

Advantages

- The P4 surface holes diameter, density and thickness have been carefully studied to achieve the easiest water soil infiltration, what reduces considerably the amount of water falling under the road guard, it also provides an excellent water distribution behind it.
- The covered area behind the road guard will change according to the sprinkler main nozzle and the work pressure.
- The road guard angle, 140°, provides a correct irrigation on both sprinkler sides.
- The plastic unholed 140° Unirain P5 road guard prevents water from reaching behind.

Technical specification

- P4 Road Guard: 140° angle, holed.
- P5 Road Guard: 140° angle, unholed.
- Nylon 6 constructed to obtain better yield and durability.
- Made of stainless steel, and fitting made of galvanized iron.
- A light and tough design makes easy coupling the road guard onto 1/2", 3/4" and 1" sprinklers.




Notes

WARRANTY AND EXCLUSIONS

The manufacturer guarantees its products for direct customer against any defects in materials or manufacture for a period of two years from the original date of purchase, when the products have been used under normal operating conditions. The manufacturer assumes no responsibility for installation, removal or repairs carried out by unauthorised personnel. The manufacturer's liability under this warranty is limited to the replacement or repair of defective parts and the manufacturer does not accept responsibility for damages to crops or any other consequential damages deriving from defects in the products covered by this warranty.

THE PRESENT WARRANTY SUPERCEDES AND VOIDS ALL OTHER WARRANTIES, WHETHER EXPRESS OR IMPLIED, INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSES OR ANY OTHER ATTRIBUTING LIABILITY TO THE MANUFACTURER.

No agent, employee or representative of the manufacturer is authorised to void, alter or add to the conditions contained in this warranty, nor to take responsibility for, nor to make guarantees not specified herein.



COMPONENT NUMBER	CODE	DESCRIPTION	MATERIAL	QUANTITY
1	-	P4 - Perforated Plastic Road Guard	PA6 + Fiber Glass	1
2	-	U-Bolt	Galvanized Steel	1
3	-	M8 Hex Nut		2

Process/Manufacturer

UNIRAIN

Size

A3

Material

Code

00330


Scale

Name

P4 Plastic Road Guard

14/05/09

J.N.E.




unirain

INNOVATION PRODUCTS

PRIVATE AND CONFIDENTIAL

THE INFORMATION CONTAINED ON THIS PLAN IS FOR UNIRAIN USE ONLY. IT IS FORBIDDEN TO REPRODUCE, COPY, OR AMEND THIS DOCUMENT WITHOUT A CONSENT IN WRITING.



COMPONENT NUMBER	CODE	DESCRIPTION	MATERIAL	QUANTITY
1	-	P4 - Unerforated Plastic Road Guard	PA6 + Fiber Glass	1
2	-	U-Bolt	Galvanized Steel	1
3	-	M8 Hex Nut		2

Process/Manufacturer

UNIRAIN

Size

A3

Material

Code

00331


Scale

Name

P5 Plastic Road Guard

14/05/09

J.N.E.



unirain

INNOVATION PRODUCTS

PRIVATE AND CONFIDENTIAL

THE INFORMATION CONTAINED ON THIS PLAN IS FOR UNIRAIN USE ONLY. IT IS FORBIDDEN TO REPRODUCE, COPY, OR AMEND THIS DOCUMENT WITHOUT A CONSENT IN WRITING.

Unirain FT102

Feedtube Assembly



Application

Because of its resistant and rugged design, it is specially suitable for irrigation coverage, either high or low crop. It can be adapted to the height required between 1, 1.2 or 1.5 meters. This adjustment allows adaptation to the growth of the crop. Built in solid material, it can remain a long time in the field or rather, because of its light weight, it can be mobilized on the ground.

Advantages

- Tough and reliable design feedtube assembly.
- Flexible PVC tube and zinc steel stake with both ends bevelled
- Its Lateral Takeoff fittings (LTO), with a minimum inner diameter of 0.315" (8mm), duplicates the section of any other of its kind, allowing a much higher flow per sprinkler, eliminating the need for higher water pressure, therefore saving energy.
- Owing to the three barbs that grip the tube, one internal and two external, its fittings need no ties, as undesired disassembling is virtually impossible. This will allow unplugging the assembly from the line just by pulling the tube.
- The red color of its female LTO fitting helps locating it on the pipe easily, and its flat and slim head design does not make winding the line back into the coil difficult after season use.

Technical specifications

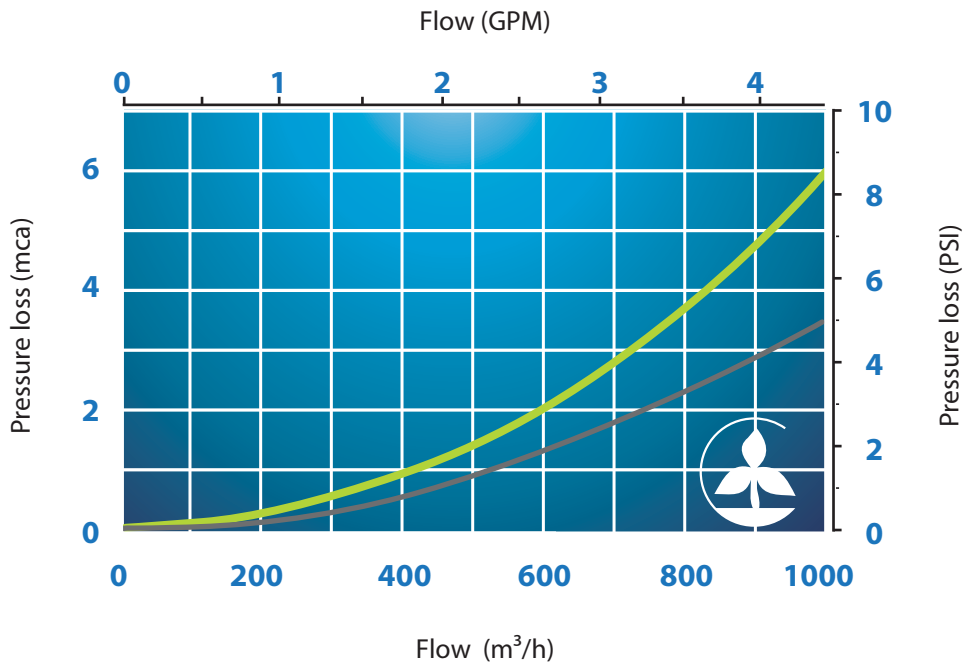
- Composed by three UV radiation protected polypropylene part plus a:
 - o 1/2"- Ø10mm x 8mm Female Adapter.
 - o Ø 10mm Male LTO fitting.
 - o Ø 10mm Female LTO fitting.
- Ø 13mm x 9.4mm flexible PVC tube, sizes: 1m, 1.2m, 1.5m.
- Ø 8mm zinc steel stake, sizes: 1m, 1.2m, 1.5m.
- Minimum inner diameter of LTO fittings or adapter is 0.315" (8mm).
- No ties needed. Tube gripped by one internal and two external barbs.
- Red color of female LTO fitting to make finding it on the line easy, and flat and slim head design to grant pipe winding back into coil.
- Ø10 mm plug (Optional).



new product

New adapter 3/4" H Ø10mm x 8mm specially indicated for spray Pivot MP5 assembly.

FT102 ASSEMBLY PRESSURE LOSS



- Pressure loss in a 47.2" (1.2 m) complete assembly with female and male fittings, flexible tube and 1/2" female adapter.
- Pressure loss per meter of feedtube (w/o fittings).

Notes

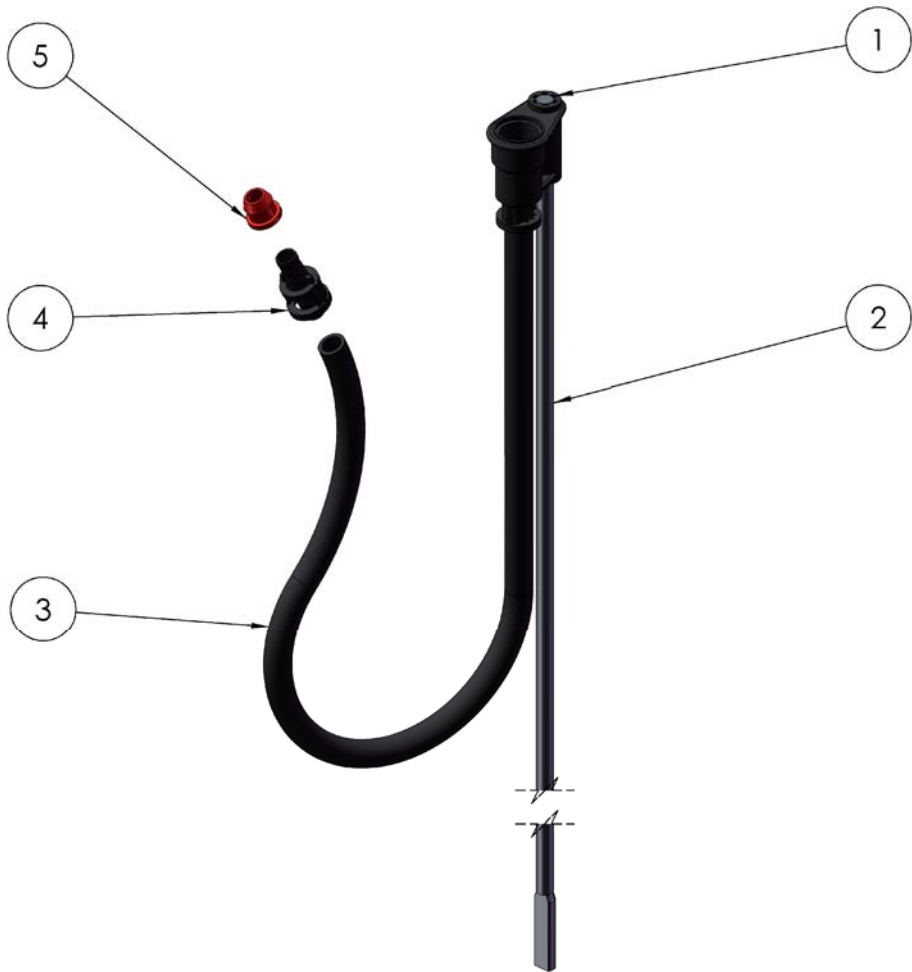
WARRANTY AND EXCLUSIONS

The manufacturer guarantees its products for direct customer against any defects in materials or manufacture for a period of two years from the original date of purchase, when the products have been used under normal operating conditions. The manufacturer assumes no responsibility for installation, removal or repairs carried out by unauthorised personnel. The manufacturer's liability under this warranty is limited to the replacement or repair of defective parts and the manufacturer does not accept responsibility for damages to crops or any other consequential damages deriving from defects in the products covered by this warranty.

THE PRESENT WARRANTY SUPERCEDES AND VOIDS ALL OTHER WARRANTIES, WHETHER EXPRESS OR IMPLIED, INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSES OR ANY OTHER ATTRIBUTING LIABILITY TO THE MANUFACTURER.

No agent, employee or representative of the manufacturer is authorised to void, alter or add to the conditions contained in this warranty, nor to take responsibility for, nor to make guarantees not specified herein.

COMPONENT NUMBER	MATERIAL	CODE	DESCRIPTION	QUANTITY
1	Polypropylene	03051	1/2"H-Ø10x8mm Adapter	1
2	Galvanized Steel	03057	Ø8 x 1000 mm Stake	1
3	PVC	03067	Ø13x9.4x1000mm Flexible Tube	1
4	Polypropylene	03050	Ø10 mm Male Fitting	1
5	Polypropylene + Fiber Glass	03052	Ø10 mm Female Fitting	1



Adapter options

Material	Code	Description
Polypropylene	03054	3/4" H - Ø10 x 8 mm Adapter


Stake options

Material	Code	Description
Galvanized Steel	03058	Ø8 x 1200 mm Stake
Galvanized Steel	03059	Ø8 x 1500 mm Stake

Tube options

Material	Code	Description
PVC	03068	13 x 9,4 x 1200 mm Flexible Tube
PVC	03069	13 x 9,4 x 1500 mm Flexible Tube
PVC	03070	13 x 9,4 x 100000 mm Flexible Tube

Notes

Process/Manufacturer UNIRAIN	Size A4	Material	Code 03071
	Scale 1:3	Name FT102 1m. Feed Tube Assembly	
	12/03/09 J.N.E.		

PRIVATE AND CONFIDENTIAL
THE INFORMATION CONTAINED ON THIS PLAN
IS FOR UNIRAIN USE ONLY.
FORBIDDEN CHANGE OR AMENDMENT
OF VALUES OF THE PLAN
WITHOUT A CONSENT IN WRITING.

UNIRAIN PRESSURE GAUGE

Pressure Gauges



Application

Professional pressure gauge allows the system manager to monitor the performance of the system and pinpoint any problems as soon as they occur. Drop in pressure at the inlet may indicate a broken pipe, too many zones running at the same time, or excessive discharge from the nozzles.

Advantages

- Reliable in most of its visible scale, the middle third is the most accurate area.
- It features two measuring scales, kg/cm² (black scale) and PSI (red scale).

Technical specifications

- 1.6 glycerine buffered pressure gauge.
- 2.5" (63mm) diameter.
- 1/4" male thread.
- Heavy duty stainless steel case suitable for adverse work conditions where pulsation or vibration exists.
- A needle intake available to make measuring easier in sprinkler nozzles. Supplied separately.
- The following scale range is available:
 - 2.5 kg/cm² - 3.56 PSI
 - 4 kg/cm² - 5.69 PSI
 - 6 kg/cm² - 8.53 PSI
 - 10 kg/cm² - 14.22 PSI
 - 16 kg/cm² - 22.76 PSI
 - 25 kg/cm² - 35.56 PSI



**PRESSURE
GAUGE**



Notes

WARRANTY AND EXCLUSIONS

The manufacturer guarantees its products for direct customer against any defects in materials or manufacture for a period of two years from the original date of purchase, when the products have been used under normal operating conditions. The manufacturer assumes no responsibility for installation, removal or repairs carried out by unauthorised personnel. The manufacturer's liability under this warranty is limited to the replacement or repair of defective parts and the manufacturer does not accept responsibility for damages to crops or any other consequential damages deriving from defects in the products covered by this warranty.

THE PRESENT WARRANTY SUPERCEDES AND VOIDS ALL OTHER WARRANTIES, WHETHER EXPRESS OR IMPLIED, INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSES OR ANY OTHER ATTRIBUTING LIABILITY TO THE MANUFACTURER.

No agent, employee or representative of the manufacturer is authorised to void, alter or add to the conditions contained in this warranty, nor to take responsibility for, nor to make guarantees not specified herein.