Coverage
Irrigation Sprinkler

Introduction:

We must use water correctly, to optimize the harvest as well as to maintain the structure of the soil to cultivate.
This kind of irrigation is to reduce the water jet droplet in order to have a suitable one for the crop.
For this, it is necessary a sprinkler which gives fine droplets of water.
Its mission is to distribute homogeneously the water, avoiding unwanted water areas or too much water in a field.
That means a controlled use and profitable use of water, reducing unnecessary costs.

Advantages:

- Possibility to use fertilizers or cure diseases with fertigation.
- Homogeneous use of water, only the desired quantity to reduce costs.
- No deterioration of the ground as there are no more puddles or landslide.
- It is the best way to struggle against frost.
- It allows the washing of toxic bacterial leaf layer of the crop.
- It can be used from one crop to another.

Recommended uses:

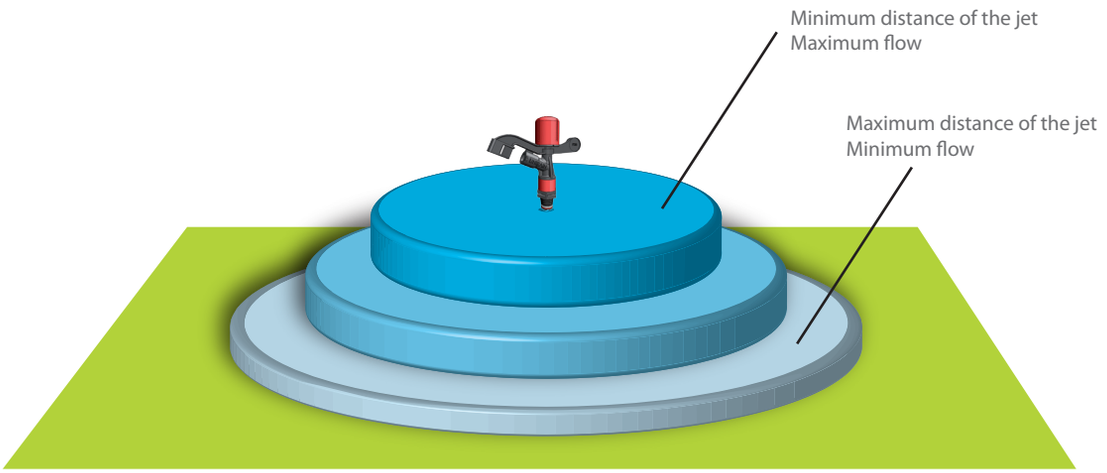
Useful in tropical fields like in coffee or cocoa crops, which are very sensitive to low temperatures.
It is proven that it is efficient in field crops and industrial crops like sugar beet, tobacco and cotton) or legumes crops such as beans and lentils.

Characteristics of sprinklers:

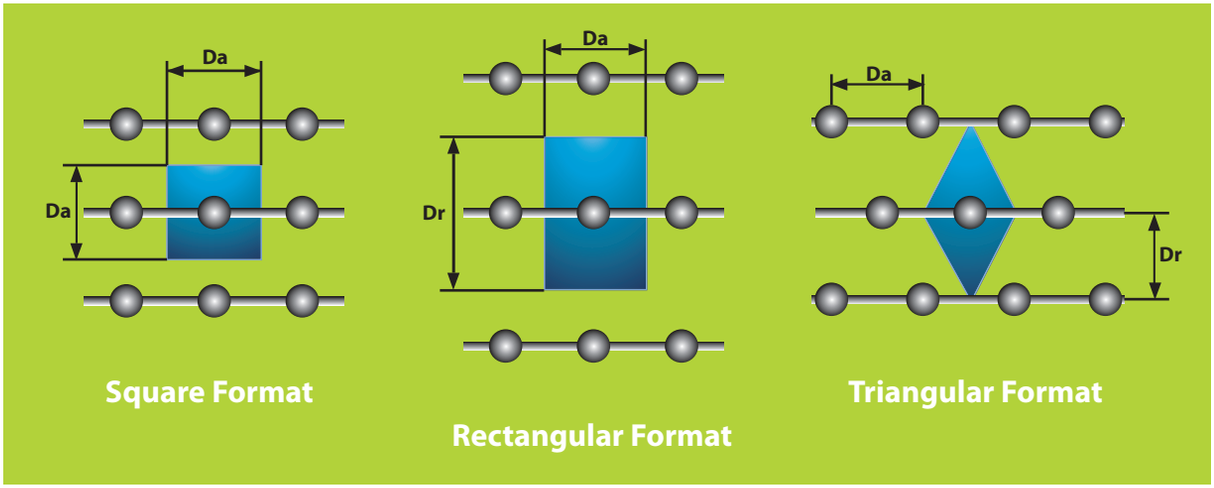
We differentiate sprinkler according to the dispersion angle , flow delivered (low-medium-high), scope of the droplet , the pressure and also the characteristics of the crop. Made in plastic and /or brass.

Flow: quantity of water that a sprinkler throws(l/h)
Water jet angle: the distance between the ground and the point from which water jet start flowing.
Scope: maximum extent of water distribution (m)
Pressure: pressure of the water jet (BAR, PSI)

Distribution of water in soils



Sprinkler Format



SPRINKLER IRRIGATED AREA
DISTANCE BETWEEN THE SPRINKLER x DISTANCE BETWEEN PIPES = Da x Dr

Maintenance

- **External Objects in the irrigation water:** Do not use wires to eliminate possible clogging.
- **Oil:** The sprinklers are lubricated with water, don't use any other element to lubricate.
- **Erroneous Pressure:** only use the pressure within the range of each sprinkler. Use of Pressure gauge recommended.

AIMPLAS
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EMPRESA ASOCIADA

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Unirain F30 - F30F

Full Circle Impact Sprinkler
Low and Medium flow Brass

Application

Recommended for agricultural use, and medium flows, it is very suitable for removable pipe systems. It can be assembled with one or two nozzles. It is ideal for farmers, as it is a strong and durable product that reduces evaporation loss and wind effect thanks to its water jet throw radius. It can be assembled with female base thread in order to avoid waste of material.

Advantages

- Made of brass, its arm and body have a wide impact area that provides longer life.
- Its counterweighted arm provides a steady turn speed.
- It can be assembled with one or two nozzles.
- Three different vanes can be used to achieve the desired coverage and spray balance according to the available system pressure.

Technical specifications

- Full circle impact sprinkler
- ¾" base thread male or female(F30F)
- Main and secondary nozzle
- 25º nozzle trajectory angle.
- Pressure range: 1.38 - 5.52 Bar
- Nozzle range: 9/64" (3,57mm) - 7/32" (5,56mm)
- Body, arm and bearing assembly made of brass.
- Fulcrum pin and springs made of stainless steel.
- Color-coded anti abrasive acetal resin nozzles carved in millimetres and inches for a better identification (brass nozzles to be optionally assembled).
- Backturn lock between the sprinkler body and the bearing spring.

F30

F30F

	Pressure (bar)	Nozzles	Vanes
HIGH	4.14	3PRN ó 3FCN	30 V
MEDIUM	2.76	3PRN ó 3FCN	WITHOUT VANE
LOW	2.07	3PRN	30RV
VERY LOW	1.38	3PRN	30BV

F30	PRESSURE (Bar)	NOZZLES 9/64" + 3/32" L/H	R(m)	NOZZLES 5/32" + 3/32" L/H	R(m)	NOZZLES 11/64" + 3/32" L/H	R(m)	NOZZLES 3/16" + 3/32" L/H (*)	R(m)	NOZZLES 3/16" + 1/8" L/H	R(m)	NOZZLES 13/64" + 1/8" L/H	R(m)	NOZZLES 7/32" + 1/8" L/H	R(m)
TWO NOZZLES	1.38			979	12.0	1126	12.2	1285	12.4	1511	12.4	1697	12.5	1892	12.6
	1.72	949	12.2	1097	12.5	1261	12.6	1433	13.0	1681	13.0	1885	13.1	2101	13.4
	2,07	1040	12.3	1199	13.0	1379	13.4	1574	13.9	1851	13.9	2078	14.3	2317	14.6
	2.41	1124	12.5	1297	13.3	1492	13.7	1706	14.3	2005	14.3	2255	14.8	2521	15.2
	2.76	1201	12.6	1388	13.4	1597	14.0	1824	14.6	2149	14.6	2419	15.1	2703	15.5
	3.10	1274	12.8	1472	13.6	1694	14.3	1937	14.9	2283	14.9	2566	15.4	2873	15.8
	3.45	1342	13.0	1549	13.7	1787	14.5	2044	15.2	2407	15.2	2703	15.7	3032	16.2
	3.79	1408	13.1	1624	13.9	1874	14.6	2146	15.4	2521	15.4	2839	15.8	3180	16.3
	4.14	1472	13.3	1697	14.0	1953	14.8	2239	15.5	2635	15.5	2953	16.0	3293	16.5
	4.48	1533	13.4	1767	14.2	2028	14.9	2333	15.7	2748	15.7	3066	16.2	3407	16.6
	4.83	1590	13.6	1835	14.3	2101	15.1	2421	15.8	2839	15.8	3180	16.3	3509	16.8
	5.17	1647	13.7	1901	14.5	2171	15.2	2503	16.0	2930	16.0	3271	16.5	3611	16.9
	5.52	1701	13.9	1965	14.6	2242	15.4	2580	16.2	3009	16.2	3361	16.6	3702	17.1

F30P	PRESSURE (Bar)	NOZZLES 9/64" L/H	R(m)	NOZZLES 5/32" L/H	R(m)	NOZZLES 11/64" L/H	R(m)	NOZZLES 3/16" L/H (*)	R(m)	NOZZLES 13/64" L/H	R(m)	NOZZLES 7/32" L/H	R(m)
ONE NOZZLE AND PLUG	1.38	584		714	12.0	861	12.2	1020	12.4	1205	12.5	1400	12.6
	1.72	654	12.2	799	12.5	963	12.6	1136	13.0	1340	13.1	1556	13.4
	2,07	715	12.3	874	13.0	1054	13.4	1249	13.9	1476	14.3	1715	14.6
	2.41	772	12.5	945	13.3	1140	13.7	1354	14.3	1601	14.8	1862	15.2
	2.76	827	12.6	1011	13.4	1220	14.0	1449	14.6	1715	15.1	1999	15.5
	3.10	877	12.8	1072	13.6	1295	14.3	1540	14.9	1817	15.4	2124	15.8
	3.45	924	13.0	1131	13.7	1365	14.5	1626	15.2	1919	15.7	2248	16.2
	3.79	970	13.1	1186	13.9	1431	14.6	1708	15.4	2010	15.8	2362	16.3
	4.14	1013	13.3	1238	14.0	1492	14.8	1783	15.5	2101	16.0	2442	16.5
	4.48	1056	13.4	1290	14.2	1551	14.9	1858	15.7	2180	16.2	2521	16.6
	4.83	1097	13.6	1340	14.3	1610	15.1	1931	15.8	2260	16.3	2589	16.8
	5.17	1136	13.7	1388	14.5	1667	15.2	1999	16.0	2328	16.5	2657	16.9
	5.52	1174	13.9	1431	14.6	1722	15.4	2065	16.2	2385	16.6	2725	17.1

F30V	PRESSURE (Bar)	NOZZLES 9/64" + 3/32" L/H	R(m)	NOZZLES 5/32" + 3/32" L/H	R(m)	NOZZLES 11/64" + 3/32" L/H	R(m)	NOZZLES 3/16" + 3/32" L/H (*)	R(m)	NOZZLES 3/16" + 1/8" L/H	R(m)	NOZZLES 13/64" + 1/8" L/H	R(m)	NOZZLES 7/32" + 1/8" L/H	R(m)
TWO NOZZLES AND VANE TO HIGH RANGE	2.41	1123	13.5	1298	14.1	1494	14.5	1706	15.1	2010	15.1	2263	15.7	2528	16.0
	2.76	1201	13.9	1388	14.3	1597	14.6	1824	15.4	2149	15.4	2419	16.0	2703	16.2
	3.10	1274	14.0	1472	14.6	1694	14.9	1937	15.8	2283	15.8	2566	16.2	2873	16.5
	3.45	1342	14.2	1549	14.9	1787	15.2	2044	16.2	2407	16.2	2703	16.3	3032	16.8
	3.79	1408	14.3	1624	15.3	1874	15.5	2146	16.5	2521	16.5	2839	16.5	3180	17.1
	4.14	1472	14.5	1697	15.4	1953	15.7	2239	16.6	2635	16.6	2953	16.8	3293	17.4
	4.48	1533	14.6	1767	15.5	2028	15.8	2333	16.8	2748	16.8	3066	17.1	3407	17.7
	4.83	1590	14.8	1835	15.7	2101	16.2	2421	16.9	2839	16.9	3180	17.4	3509	18.0
	5.17	1647	14.9	1901	15.8	2171	16.5	2503	17.1	2930	17.1	3271	17.7	3611	18.3
	5.52	1701	15.2	1965	16.0	2242	16.8	2580	17.2	3009	17.2	3361	18.0	3702	18.6

F30PV	PRESSURE (Bar)	NOZZLES 9/64" L/H	R(m)	NOZZLES 5/32" L/H	R(m)	NOZZLES 11/64" L/H	R(m)	NOZZLES 3/16" L/H (*)	R(m)	NOZZLES 13/64" L/H	R(m)	NOZZLES 7/32" L/H	R(m)
ONE NOZZLE, PLUG AND VANE TO HIGH RANGE	2.41	774	13.5	946	14.1	1141	14.5	1355	15.1	1604	15.7	1870	16.0
	2.76	827	13.9	1011	14.3	1220	14.6	1449	15.4	1715	16.0	1999	16.2
	3.10	877	14.0	1072	14.6	1295	14.9	1540	15.8	1817	16.2	2124	16.5
	3.45	924	14.2	1131	14.9	1365	15.2	1626	16.2	1919	16.3	2248	16.8
	3.79	970	14.3	1186	15.3	1431	15.5	1708	16.5	2010	16.5	2362	17.1
	4.14	1013	14.5	1238	15.4	1492	15.7	1783	16.6	2101	16.8	2442	17.4
	4.48	1056	14.6	1290	15.5	1551	15.8	1858	16.8	2180	17.1	2521	17.7
	4.83	1097	14.8	1340	15.7	1610	16.2	1931	16.9	2260	17.4	2589	18.0
	5.17	1136	14.9	1388	15.8	1667	16.5	1999	17.1	2328	17.7	2657	18.3
	5.52	1174	15.2	1431	16.0	1722	16.8	2065	17.2	2385	18.0	2725	18.6

Data obtained under ideal test conditions. It can be affected by wind, bad hydraulic conditions or other adverse factors.
Highest point of the jet above the nozzle: 2.8 m (using standard nozzle 5/32 " and a pressure of 3.45 Bar)
Throw radius jets achieved with the 0.9m lift. Shaded areas not recommended.
(*) Standard Nozzle.

Due to the large number of possible combinations of nozzles, only the most common ones are represented.
To find information relating to other combinations , please advise factory.

L/H: Liters Per Minute
R(m): Throw Radius (meter)

WARRANTY AND EXCLUSIONS

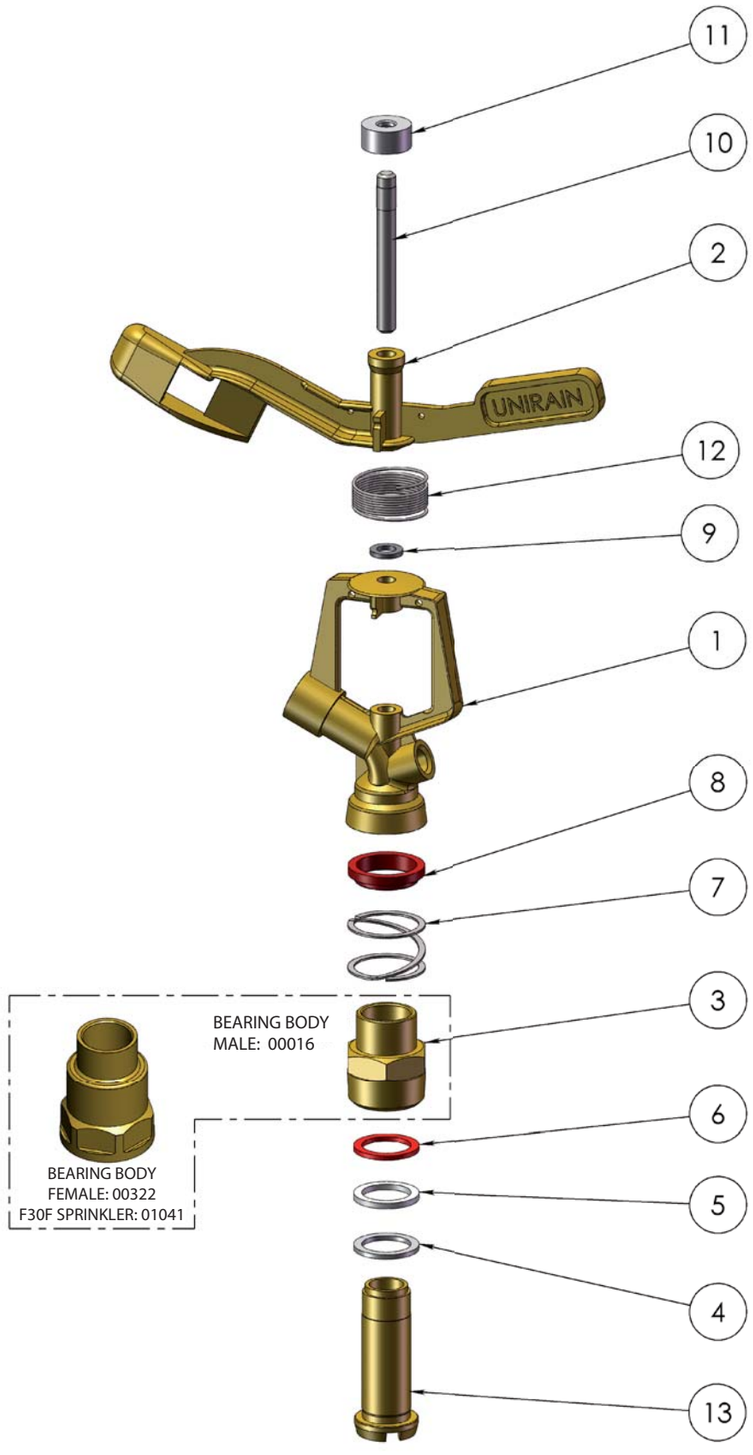
The manufacturer guarantees its products for direct customer against any defects in materials or manufacture for a period of two years from the original date of purchase, when the products have been used under normal operating conditions. The manufacturer assumes no responsibility for installation, removal 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.

F30

ASSEMBLY



COMPONENT NUMBER	PART NUMBER	DESCRIPTION	MATERIAL	QUANTITY
1	00031	F30 Sprinkler Body	Brass	1
2	00029	F30 Sprinkler Arm	Brass	1
3	00016	F30 Bearing Body	Brass	1
4	07459	Bearing Lower Washer	NBR	1
5	06736	Bearing Intermediate Washer	High Density PE	1
6	00252	Bearing Upper Washer	Anti Hydrolysis PU	1
7	00018	Bearing Spring	Stainless Steel	1
8	00255	Bearing Body Lock	High Density PE	1
9	06162	Arm Support Washer	NBR	1
10	06163	Arm Shaft	Stainless Steel	1
11	06161	Arm Hat	Low/Medium Density PE	1
12	06183	3/4” Series Arm Spring	Stainless Steel	1
13	00017	F30 Bearing Shaft	Brass	1

Notes

Process/Manufacturer	Size	Material	Code
UNIRAIN	A3	--	00150
	Scale 1:2	Name F30 Sprinkler	
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Unirain F40 - F40F

Full Circle Impact Sprinkler
Low and Medium flow Brass

Application

Ideal for agricultural use, medium flows, and suitable for removable pipe systems. It can be assembled with one or two nozzles. Sturdy design confers resistance and a longer wear life.
Suitable for farmers who look for a sturdy and durable product. Its angle water jet assures perfectly balanced performance of the sprinkler reducing evaporation losses and wind effect. It can be assembled with female base thread in order to avoid waste of material.

Advantages

- Made of brass, its arm and body share a wide impact area provides longer life.
- Its counterweighted arm provides a steady turn speed.
- It can be assembled with one or two nozzles.
- Three different vanes can be used to achieve the desired coverage and spray balance according to the available system pressure.

Technical specifications

- Full circle impact sprinkler
- ¾" base thread male or female(F30F)
- Main and secondary nozzle
- 25º nozzle trajectory angle.
- Pressure range: 1,38 - 5.52 Bar
- Nozzle range: 9/64" (3,57mm)-7/32" (5,56mm)
- Body, arm and bearing assembly made of brass.
- Fulcrum pin and springs made of stainless steel.
- Color-coded anti abrasive acetal resin nozzles carved in millimetres and inches for a better identification (brass nozzles to be optionally assembled)
- Backturn lock between the sprinkler body and the bearing spring.

F40 F40F

	Pressure (bar)	Nozzles	Vanes
HIGH	4.14	3PRN ó 3FCN	30 V
MEDIUM	2.76	3PRN ó 3FCN	WITHOUT VANE
LOW	2.10	3PRN	30RV
VERY LOW	1.38	3PRN	30BV

TECHNICAL SHEET 0902

F40	PRESSURE	NOZZLES 5/32" + 3/32"		NOZZLES 11/64" + 3/32"		NOZZLES 3/16" + 3/32"		NOZZLES 3/16" + 1/8"		NOZZLES 13/64" + 1/8"		NOZZLES 7/32" + 1/8"		NOZZLES 15/64" + 1/8"		NOZZLES 1/4" + 1/8"		NOZZLES 17/64" + 1/8"		NOZZLES 9/32" + 1/8"	
	(Bar)	L/H	R(m)	L/H	R(m)	L/H	R(m)	L/H (*)	R(m)	L/H	R(m)	L/H	R(m)	L/H	R(m)	L/H	R(m)	L/H	R(m)	L/H	R(m)
TWO NOZZLES	1.38			1126	12.6	1285	12.8	1511	12.8	1697	12.9	1892	13.1	2072	13.2	2295	13.4	2539	13.5	2763	13.6
	1.72	1097	13.0	1261	13.4	1433	13.7	1681	13.7	1885	13.9	2101	14.2	2317	14.3	2566	14.5	2839	14.6	3089	14.8
	2,07	1199	13.6	1379	14.0	1574	14.5	1851	14.5	2078	14.9	2317	15.2	2544	15.4	2816	15.5	3112	15.7	3384	15.8
	2.41	1297	14.0	1492	14.5	1706	14.9	2005	14.9	2255	15.4	2521	15.7	2748	16.0	3043	16.2	3361	16.3	3679	16.5
	2.76	1388	14.3	1597	14.8	1824	15.2	2149	15.2	2419	15.7	2703	16.2	2953	16.3	3271	16.6	3611	16.9	3952	17.1
	3.10	1472	14.5	1694	15.1	1937	15.5	2283	15.5	2566	16.0	2873	16.5	3134	16.8	3475	17.1	3816	17.4	4202	17.7
	3.45	1549	14.6	1787	15.2	2044	15.8	2407	15.8	2703	16.3	3032	16.8	3316	17.1	3657	17.4	4020	17.7	4429	18.1
	3.79	1624	14.8	1874	15.4	2146	16.2	2521	16.2	2839	16.6	3180	17.1	3475	17.4	3838	17.7	4224	18.0	4633	18.6
	4.14	1697	14.9	1953	15.5	2239	16.3	2635	16.3	2953	16.8	3293	17.2	3634	17.7	4020	18.0	4406	18.3	4838	18.9
	4.48	1767	15.1	2028	15.7	2333	16.5	2748	16.5	3066	16.9	3407	17.4	3770	17.8	4179	18.3	4565	18.6	5042	19.2
	4.83	1835	15.2	2101	15.8	2421	16.6	2839	16.6	3180	17.1	3509	17.5	3906	18.0	4315	18.4	4724	18.9	5201	19.5
	5.17	1901	15.4	2171	16.0	2503	16.8	2930	16.8	3271	17.2	3611	17.7	4020	18.1	4452	18.6	4883	19.1	5360	19.7
	5.52	1965	15.5	2242	16.2	2580	16.9	3009	16.9	3361	17.4	3702	17.8	4134	18.3	4588	18.7	5019	19.2	5519	19.8

F40P	PRESSURE	NOZZLES 5/32"		NOZZLES 11/64"		NOZZLES 3/16"		NOZZLES 13/64"		NOZZLES 7/32"		NOZZLES 15/64"		NOZZLES 1/4"		NOZZLES 17/64"		NOZZLES 9/32"	
	(Bar)	L/H	R(m)	L/H	R(m)	L/H	R(m)	L/H (*)	R(m)	L/H	R(m)	L/H	R(m)	L/H	R(m)	L/H	R(m)	L/H	R(m)
ONE NOZZLE AND PLUG	1.38			861	12.6	1020	12.8	1205	12.9	1400	13.1	1585	13.2	1808	13.4	2031	13.5	2275	13.6
	1.72	799	13.0	963	13.4	1136	13.7	1340	13.9	1556	14.2	1772	14.3	2021	14.5	2271	14.6	2544	14.8
	2,07	874	13.6	1054	14.0	1249	14.5	1476	14.9	1715	15.2	1953	15.4	2226	15.5	2498	15.7	2794	15.8
	2.41	945	14.0	1140	14.5	1354	14.9	1601	15.4	1862	15.7	2112	16.0	2407	16.2	2703	16.3	3021	16.5
	2.76	1011	14.3	1220	14.8	1449	15.2	1715	15.7	1999	16.2	2271	16.3	2589	16.6	2907	16.9	3248	17.1
	3.10	1072	14.5	1295	15.1	1540	15.5	1817	16.0	2124	16.5	2407	16.8	2748	17.1	3089	17.4	3452	17.7
	3.45	1131	14.6	1365	15.2	1626	15.8	1919	16.3	2248	16.8	2544	17.1	2907	17.4	3248	17.7	3634	18.1
	3.79	1186	14.8	1431	15.4	1708	16.2	2010	16.6	2362	17.1	2657	17.4	3043	17.7	3407	18.0	3816	18.6
	4.14	1238	14.9	1492	15.5	1783	16.3	2101	16.8	2442	17.2	2771	17.7	3157	18.0	3543	18.3	3975	18.9
	4.48	1290	15.1	1551	15.7	1858	16.5	2180	16.9	2521	17.4	2884	17.8	3293	18.3	3679	18.6	4111	19.2
	4.83	1340	15.2	1610	15.8	1931	16.6	2260	17.1	2589	17.5	2998	18.0	3407	18.4	3816	18.9	4247	19.5
	5.17	1388	15.4	1667	16.0	1999	16.8	2328	17.2	2657	17.7	3089	18.1	3520	18.6	3929	19.1	4361	19.7
	5.52	1431	15.5	1722	16.2	2065	16.9	2385	17.4	2725	17.8	3180	18.3	3634	18.7	4043	19.2	4474	19.8

F40V	PRESSURE	NOZZLES 5/32" + 3/32"		NOZZLES 11/64" + 3/32"		NOZZLES 3/16" + 3/32"		NOZZLES 3/16" + 1/8"		NOZZLES 13/64" + 1/8"		NOZZLES 7/32" + 1/8"		NOZZLES 15/64" + 1/8"		NOZZLES 1/4" + 1/8"		NOZZLES 17/64" + 1/8"		NOZZLES 9/32" + 1/8"	
	(Bar)	L/H	R(m)	L/H	R(m)	L/H	R(m)	L/H (*)	R(m)	L/H	R(m)	L/H	R(m)	L/H	R(m)	L/H	R(m)	L/H	R(m)	L/H	R(m)
TWO NOZZLES AND VANE TO HIGH RANGE	2.41	1297	14.7	1492	15.0	1706	15.1	2005	15.1	2255	15.7	2521	15.9	2748	16.4	3043	16.7	3361	16.9	3679	17.1
	2.76	1388	15.1	1597	15.7	1824	15.8	2149	15.8	2419	16.0	2703	16.9	2953	17.4	3271	17.8	3611	18.0	3952	18.3
	3.10	1472	15.2	1694	15.8	1937	16.2	2283	16.2	2566	16.2	2873	17.4	3134	17.8	3475	18.4	3816	18.6	4202	18.9
	3.45	1549	15.4	1787	16.0	2044	16.3	2407	16.3	2703	16.3	3032	17.8	3316	18.3	3657	18.9	4020	19.2	4429	19.5
	3.79	1624	15.5	1874	16.2	2146	16.5	2521	16.5	2839	16.5	3180	18.1	3475	18.6	3838	19.2	4224	19.7	4633	20.1
	4.14	1697	15.7	1953	16.3	2239	16.6	2635	16.6	2953	16.8	3293	18.4	3634	18.9	4020	19.5	4406	20.1	4838	20.7
	4.48	1767	15.8	2028	16.5	2333	16.8	2748	16.8	3066	17.1	3407	18.6	3770	19.2	4179	19.8	4565	20.6	5042	21.2
	4.83	1835	16.0	2101	16.6	2421	16.9	2839	16.9	3180	17.4	3509	18.7	3906	19.5	4315	20.1	4724	20.9	5201	21.6
	5.17	1901	16.2	2171	16.8	2503	17.1	2930	17.1	3271	17.7	3611	18.9	4020	19.7	4452	20.4	4883	21.2	5360	21.9
	5.52	1965	16.3	2242	16.9	2580	17.2	3009	17.2	3361	18.0	3702	19.1	4134	19.8	4588	20.7	5019	21.5	5519	22.3

F40PV	PRESSURE	NOZZLES 5/32"		NOZZLES 11/64"		NOZZLES 3/16"		NOZZLES 13/64"		NOZZLES 7/32"		NOZZLES 15/64"		NOZZLES 1/4"		NOZZLES 17/64"		NOZZLES 9/32"	
	(Bar)	L/H	R(m)	L/H	R(m)	L/H	R(m)	L/H (*)	R(m)	L/H	R(m)	L/H	R(m)	L/H	R(m)	L/H	R(m)	L/H	R(m)
ONE NOZZLE, PLUG AND VANE TO HGH RANGE	2.41	945	14.7	1140	15.0	1354	15.1	1601	15.4	1862	15.9	2112	16.4	2407	16.7	2703	16.9	3021	17.1
	2.76	1011	15.2	1220	15.7	1449	16.0	1715	16.6	1999	17.1	2271	17.5	2589	18.1	2907	18.3	3248	18.6
	3.10	1072	15.4	1295	16.0	1540	16.3	1817	16.9	2124	17.7	2407	18.1	2748	18.7	3089	18.9	3452	19.2
	3.45	1131	15.5	1365	16.2	1626	16.6	1919	17.2	2248	18.1	2544	18.6	2907	19.2	3248	19.5	3634	19.8
	3.79	1186	15.7	1431	16.3	1708	16.8	2010	17.5	2362	18.4	2657	18.9	3043	19.5	3407	20.0	3816	20.4
	4.14	1238	15.8	1492	16.5	1783	16.9	2101	17.7	2442	18.7	2771	19.2	3157	19.8	3543	20.4	3975	21.0
	4.48	1290	16.0	1551	16.6	1858	17.1	2180	17.8	2521	18.9	2884	19.5	3293	20.1	3679	20.9	4111	21.5
	4.83	1340	16.2	1610	16.8	1931	17.2	2260	18.0	2589	19.1	2998	19.8	3407	20.4	3816	21.2	4247	21.9
	5.17	1388	16.3	1667	16.9	1999	17.4	2328	18.1	2657	19.2	3089	20.0	3520	20.7	3929	21.5	4361	22.3
	5.52	1431	16.5	1722	17.1	2065	17.5	2385	18.3	2725	19.4	3180	20.1	3634	21.0	4043	21.8	4474	22.6

Data obtained under ideal test conditions. It can be affected by wind, bad hydraulic conditions or other adverse factors.
Highest point of the jet above the nozzle: 3 m (using standard nozzle 3/16 " and a pressure of 3.45 Bar)
Throw radius jets achieved with the 0.9 m lift. Shaded areas not recommended.
(*) Standard Nozzle.

Due to the large number of possible combinations of nozzles, only the most common ones are represented.
To find information relating to other combinations , please advise factory.

L/H: Liters Per Minute
R(m): Throw Radius (meter)

WARRANTY AND EXCLUSIONS

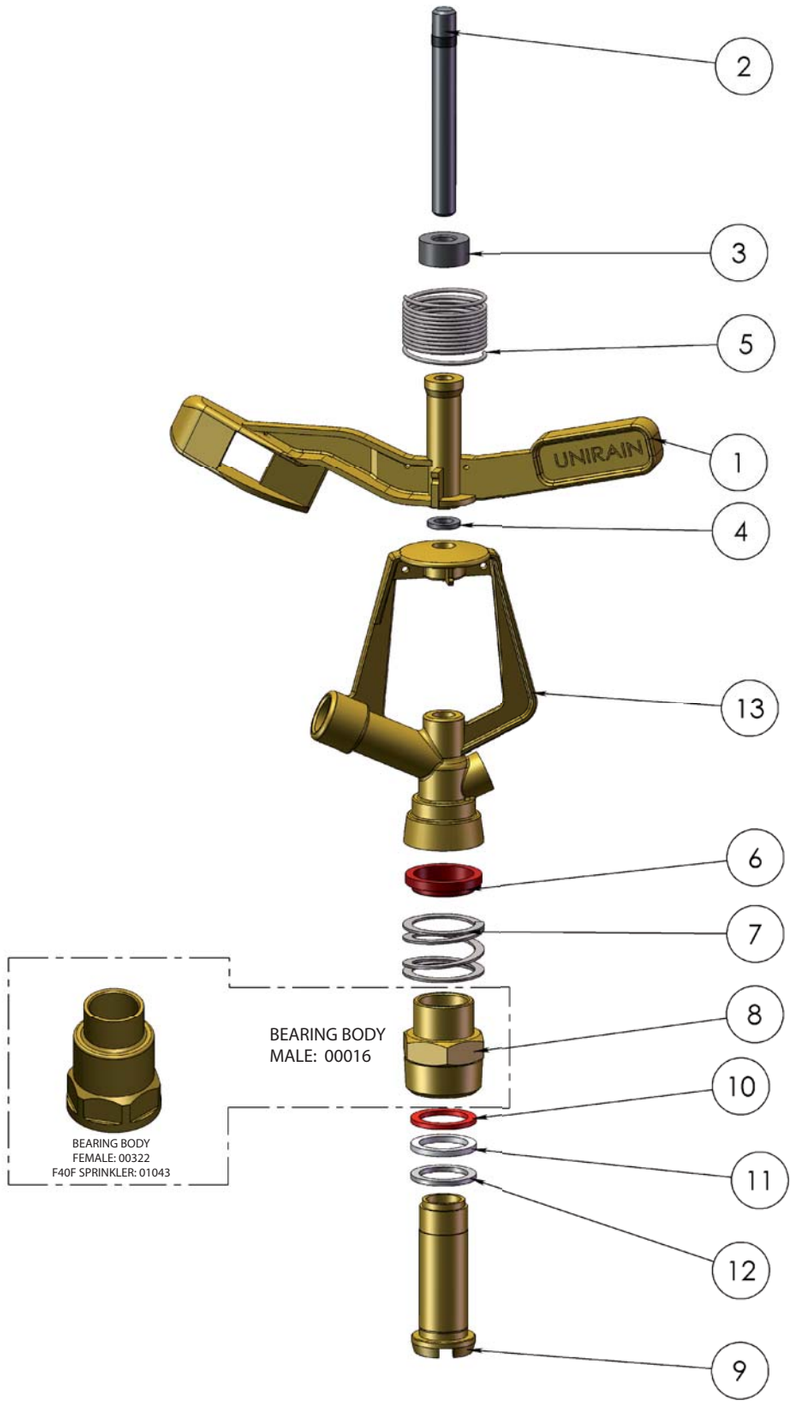
The manufacturer guarantees its products for direct customer against any defects in materials or manufacture for a period of two years from the original date of purchase, when the products have been used under normal operating conditions. The manufacturer assumes no responsibility for installation, removal 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.

F40

ASSEMBLY



COMPONENT NUMBER	PART NUMBER	DESCRIPTION	MATERIAL	QUANTITY
1	00036	F40 Sprinkler Arm	Brass	1
2	06496	Arm Shaft	Stainless Steel	1
3	06494	Arm Hat	PE	1
4	06162	Arm Support Washer	NBR	1
5	06493	F40 Arm Spring	Satinless Steel.	1
6	00255	Bearing Body Lock	High Density PE	1
7	06151	Bearing Spring	Stainless Steel.	1
8	00016	F40 Bearing Body	Brass	1
9	00017	F40 Bearing Shaft	Brass	1
10	00252	Bearing upper Washer	Anti Hydrolysis PU	1
11	06736	Bearing Intermediate Washer	High Density PE	1
12	07459	Bearing Lower Washer	NBR	1
13	00034	F40 Sprinkler Body	Brass	1

Notes

Process/Manufacturer: Unirain *ASSEMBLY*	Size: A3 Scale: 1:2	Material	Code: 00151 Name: F40 Sprinkler
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Unirain P35

Part Circle Impact Sprinkler
Low and Medium Flow Brass

Application

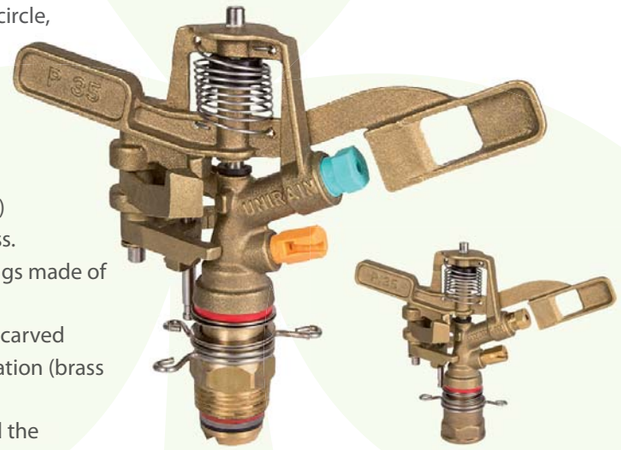
For agricultural use with medium flows, it has a sand-proof bearing system and can be assembled with one or two nozzles. High resistance with a compact design, its reversing system allows it to be changed in seconds into a full circle sprinkler. Suitable for areas bordering or near elements that should not get wet.

Advantages

- Made of brass, its arm and body share a wide impact area that provides longer life.
- Its counterweighted arm will provide a steady turn speed.
- Its exclusive reversing system is also sand-proof and can be easily disassembled for cleaning or mainte nance when needed.
- It can be assembled with one or two nozzles.
- Three different vanes can be used to achieve the desired coverage and spray balance according to the available system pressure.

Technical specifications

- Double use impact sprinkler: 30º to 300ª part circle, or full circle.
- ¾" base thread male.
- Main and secondary nozzle
- 25º nozzle trajectory angle.
- Pressure range: 1.38 - 5.52 Bar
- Nozzle range: 9/64" (3,57mm) - 7/32" (5,56mm)
- Body, arm and bearing assembly made of brass.
- Fulcrum pin and cams, reversing pin and springs made of stainless steel.
- Color-coded anti abrasive acetal resin nozzles carved in millimetres and inches for a better identification (brass nozzles to be optionally assembled).
- Backturn lock between the sprinkler body and the bearing spring.



	Pressure (bar)	Nozzles	Vanes
HIGH	4.14	3PRN ó 3FCN	30 V
MEDIUM	2.76	3PRN ó 3FCN	WITHOUT VANE
LOW	2.10	3PRN	30RV
VERY LOW	1.38	3PRN	30BV

P35	PRESSURE (Bar)	NOZZLES 9/64" + 3/32" L/H	R(m)	NOZZLES 5/32" + 3/32" L/H	R(m)	NOZZLES 11/64" + 3/32" L/H	R(m)	NOZZLES 3/16" + 3/32" L/H	R(m)	NOZZLES 3/16" + 1/8" L/H	R(m)	NOZZLES 13/64" + 1/8" L/H	R(m)	NOZZLES 7/32" + 1/8" L/H	R(m)
TWO NOZZLES	1.38					1126	12.2	1285	12.4	1511	12.4	1697	12.5	1892	12.6
	1.72			1097	12.5	1261	12.6	1433	13.0	1681	13.0	1885	13.1	2101	13.4
	2,07			1199	13.0	1379	13.4	1574	13.9	1851	13.9	2078	14.3	2317	14.6
	2.41	1124	12.5	1297	13.3	1492	13.7	1706	14.3	2005	14.3	2255	14.8	2521	15.2
	2.76	1201	12.6	1388	13.4	1597	14.0	1824	14.6	2149	14.6	2419	15.1	2703	15.5
	3.10	1274	12.8	1472	13.6	1694	14.3	1937	14.9	2283	14.9	2566	15.4	2873	15.8
	3.45	1342	13.0	1549	13.7	1787	14.5	2044	15.2	2407	15.2	2703	15.7	3032	16.2
	3.79	1408	13.1	1624	13.9	1874	14.6	2146	15.4	2521	15.4	2839	15.8	3180	16.3
	4.14	1472	13.3	1697	14.0	1953	14.8	2239	15.5	2635	15.5	2953	16.0	3293	16.5
	4.48	1533	13.4	1767	14.2	2028	14.9	2333	15.7	2748	15.7	3066	16.2	3407	16.6
	4.83	1590	13.6	1835	14.3	2101	15.1	2421	15.8	2839	15.8	3180	16.3	3509	16.8
	5.17	1647	13.7	1901	14.5	2171	15.2	2503	16.0	2930	16.0	3271	16.5	3611	16.9
	5.52	1701	13.9	1965	14.6	2242	15.4	2580	16.2	3009	16.2	3361	16.6	3702	17.1

P35P	PRESSURE (Bar)	NOZZLES 9/64" L/H	R(m)	NOZZLES 5/32" L/H	R(m)	NOZZLES 11/64" L/H	R(m)	NOZZLES 3/16" L/H	R(m)	NOZZLES 13/64" L/H	R(m)	NOZZLES 7/32" L/H	R(m)
ONE NOZZLE AND PLUG	1.38					861	12.2	1020	12.4	1205	12.5	1400	12.6
	1.72			799	12.5	963	12.6	1136	13.0	1340	13.1	1556	13.4
	2,07			874	13.0	1054	13.4	1249	13.9	1476	14.3	1715	14.6
	2.41	772	12.5	945	13.3	1140	13.7	1354	14.3	1601	14.8	1862	15.2
	2.76	827	12.6	1011	13.4	1220	14.0	1449	14.6	1715	15.1	1999	15.5
	3.10	877	12.8	1072	13.6	1295	14.3	1540	14.9	1817	15.4	2124	15.8
	3.45	924	13.0	1131	13.7	1365	14.5	1626	15.2	1919	15.7	2248	16.2
	3.79	970	13.1	1186	13.9	1431	14.6	1708	15.4	2010	15.8	2362	16.3
	4.14	1013	13.3	1238	14.0	1492	14.8	1783	15.5	2101	16.0	2442	16.5
	4.48	1056	13.4	1290	14.2	1551	14.9	1858	15.7	2180	16.2	2521	16.6
	4.83	1097	13.6	1340	14.3	1610	15.1	1931	15.8	2260	16.3	2589	16.8
	5.17	1136	13.7	1388	14.5	1667	15.2	1999	16.0	2328	16.5	2657	16.9
	5.52	1174	13.9	1431	14.6	1722	15.4	2065	16.2	2385	16.6	2725	17.1

P35V	PRESSURE (Bar)	NOZZLES 9/64" + 3/32" L/H	R(m)	NOZZLES 5/32" + 3/32" L/H	R(m)	NOZZLES 11/64" + 3/32" L/H	R(m)	NOZZLES 3/16" + 3/32" L/H	R(m)	NOZZLES 3/16" + 1/8" L/H	R(m)	NOZZLES 13/64" + 1/8" L/H	R(m)	NOZZLES 7/32" + 1/8" L/H	R(m)
TWO NOZZLES AND VANE TO HIGH RANGE	2.41	1124	13.5	1298	14.1	1494	14.5	1706	15.1	2010	15.1	2263	15.7	2528	16.0
	2.76	1201	13.9	1388	14.3	1597	14.6	1824	15.4	2149	15.4	2419	16.0	2703	16.2
	3.10	1274	14.0	1472	14.6	1694	14.9	1937	15.8	2283	15.8	2566	16.2	2873	16.5
	3.45	1342	14.2	1549	14.9	1787	15.2	2044	16.2	2407	16.2	2703	16.3	3032	16.8
	3.79	1408	14.3	1624	15.3	1874	15.5	2146	16.5	2521	16.5	2839	16.5	3180	17.1
	4.14	1472	14.5	1697	15.4	1953	15.7	2239	16.6	2635	16.6	2953	16.8	3293	17.4
	4.48	1533	14.6	1767	15.5	2028	15.8	2333	16.8	2748	16.8	3066	17.1	3407	17.7
	4.83	1590	14.8	1835	15.7	2101	16.2	2421	16.9	2839	16.9	3180	17.4	3509	18.0
	5.17	1647	14.9	1901	15.8	2171	16.5	2503	17.1	2930	17.1	3271	17.7	3611	18.3
	5.52	1701	15.2	1965	16.0	2242	16.8	2580	17.2	3009	17.2	3361	18.0	3702	18.6

P35PV	PRESSURE (Bar)	NOZZLES 9/64" L/H	R(m)	NOZZLES 5/32" L/H	R(m)	NOZZLES 11/64" L/H	R(m)	NOZZLES 3/16" L/H	R(m)	NOZZLES 13/64" L/H	R(m)	NOZZLES 7/32" L/H	R(m)
ONE NOZZLE, PLUG AND VANE TO HIGH RANGE	2.41	772	13.5	945	14.1	1140	14.5	1354	15.1	1601	15.7	1862	16.0
	2.76	827	13.9	1011	14.3	1220	14.6	1449	15.4	1715	16.0	1999	16.2
	3.10	877	14.0	1072	14.6	1295	14.9	1540	15.8	1817	16.2	2124	16.5
	3.45	924	14.2	1131	14.9	1365	15.2	1626	16.2	1919	16.3	2248	16.8
	3.79	970	14.3	1186	15.3	1431	15.5	1708	16.5	2010	16.5	2362	17.1
	4.14	1013	14.5	1238	15.4	1492	15.7	1783	16.6	2101	16.8	2442	17.4
	4.48	1056	14.6	1290	15.5	1551	15.8	1858	16.8	2180	17.1	2521	17.7
	4.83	1097	14.8	1340	15.7	1610	16.2	1931	16.9	2260	17.4	2589	18.0
	5.17	1136	14.9	1388	15.8	1667	16.5	1999	17.1	2328	17.7	2657	18.3
	5.52	1174	15.2	1431	16.0	1722	16.8	2065	17.2	2385	18.0	2725	18.6

Data obtained under ideal test conditions. It can be affected by wind, bad hydraulic conditions or other adverse factors.
Highest point of the jet above the nozzle: 2.8 m (using standard nozzle 5 / 32 "to 3.45 Bar)
Throw radius jets achieved with the 0.9m lift. Shaded areas not recommended.
(*) Standard Nozzle.

L/H: Liters Per Minute
R(m): Throw Radius (meter)

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.

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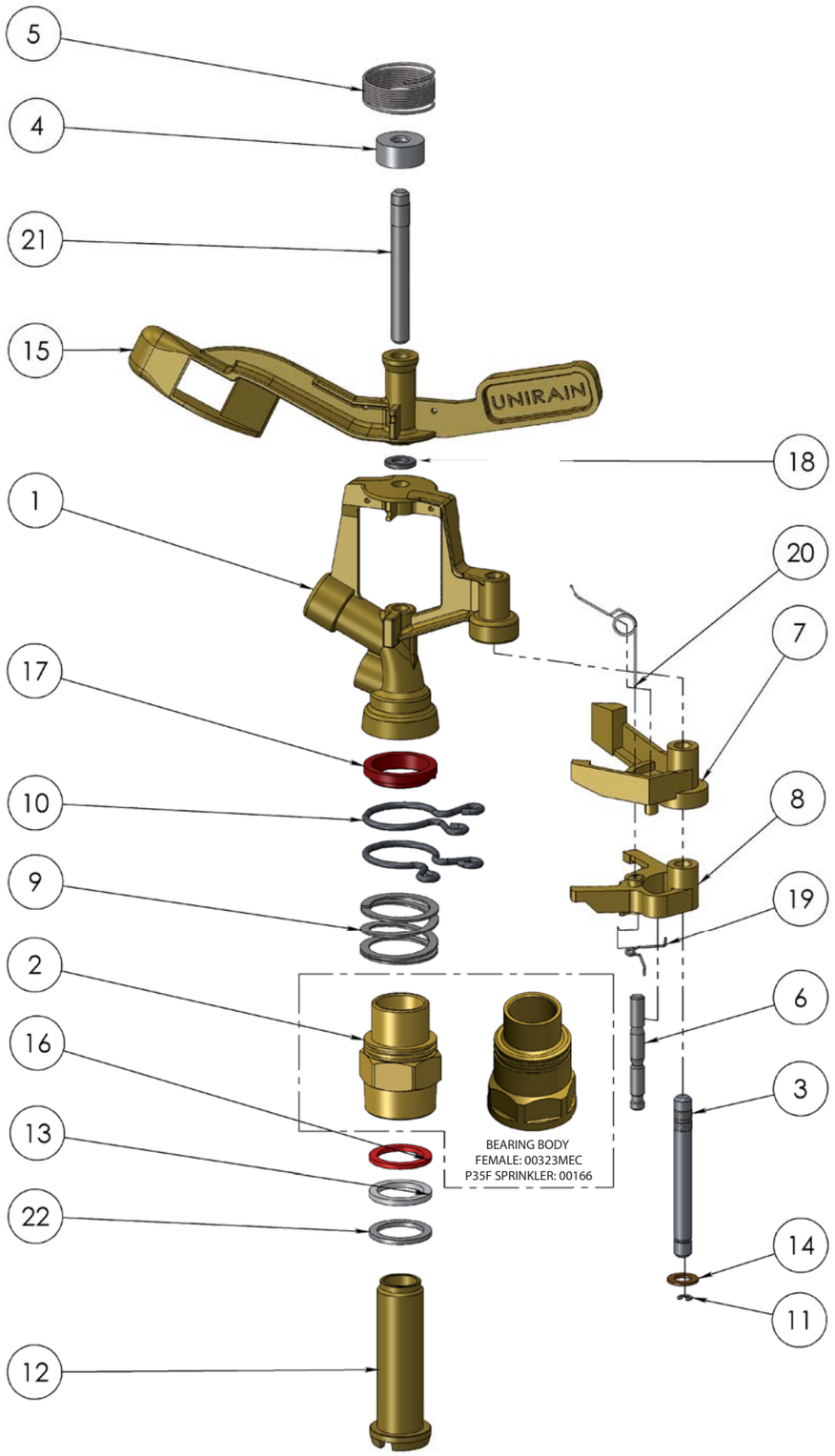
P35

ASSEMBLY



COMPONENT NUMBER	PART NUMBER	DESCRIPTION	MATERIAL	QUANTITY
1	00813	P35 Sprinkler Body	Brass	1
2	06150	F35 Bearing Body	Brass	1
3	00817	Cams Shaft	Stainless Steel	1
4	06161	Arm Hat	PE	1
5	06183	3/4” Series Arm Spring	Stainless Steel	1
6	00816	P35 Inverter Shaft	Stainless Steel	1
7	00819	P35 Upper Cam	Brass	1
8	00821	P35 Lower Cam	Brass	1
9	06151	Bearing Spring	Stainless Steel	1
10	00815	Inverter Limit Spring	Stainless Steel	2
11	00824	Seal Clip	Stainless Steel	1
12	06147	Bearing Shaft	Brass	1
13	06736	Bearing Intermediate Washer	High Density PE	1
14	00822	Cams Washer	Brass	1
15	00811	P35 Sprinkler Arm	Brass	1
16	00252	Bearing Upper Washer	Anti Hydrolysis PU	1
17	00255	Bearing Body Lock	High Density PE	1
18	06162	Arm Support Washer	NBR	1
19	00823	Inverter Shaft Spring	Stainless Steel	1
20	01687	Inverter Spring	Stainless Steel	1
21	06163	Arm Shaft	Stainless Steel	1
22	07459	Bearing Lower Washer	NBR	1

Process/Manufacturer UNIRAIN	Size A3	Material	Code 00165
	Scale 1:2	Name P35 Sprinkler	
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Unirain F26 - F26W

Full Circle Impact Sprinkler
Low and Medium flow Plastic

Application

Full circle impact sprinkler. Output water jet : 23º. Very suitable for for low (F26W) and medium flow (F26), for low growing corps, minimize evaporation losses and wind effect. The F26 model is also recommended for frost-proof irrigation thanks to its configuration and quality of materials. The F26W model is not recommended for frost-proof irrigation.
Sturdy in design, it features significant improvements, notably its durability and its protected bearing sleeve thread, eliminating the possibility of breakage after impact.
Its bearing sleeve thread is protected against breakage after impacts.
The protection of springs reduces the negative effects of ice.

Advantages

- Sturdy design. Protection cap for shock, dirt and ice.
- Due to an innovative system, the crown that holds the arm spring allows tension variation to adjust the sprinkler to extreme pressure or flow conditions.
- Bearing spring protector guided by the bearing to grant a correct sliding of the sprinkler body on the protector itself.
- Thanks to their bayonet coupling system, it is easy to change and clean the 3Q nozzles.
- Three different vanes can be used to achieve the desired coverage and pulverisation balance according to the available system pressure.

Technical specifications

- Full circle impact sprinkler.
- Frost protection irrigation (F26W not recommended).
- 1/2" Male base threaded.
- 23º Nozzle trajectory angle.
- Pressure range: 1.03 - 4.14 Bar.
- Nozzle range: 5/64" (2,98mm)-9/64" (3,57mm).
- High-resistance thermoplastics protected against UV radiation, and stainless steel.
- Color-coded anti abrasive acetal resin nozzles carved in millimetres and inches for a better identification.
- F26W (low pressure model)

F26W F26

Typical curves of range and distribution of water depending of the model of vane used

Units Conversion	
FLOW	**PRESSURE**
m³ / h *(metro cúbico por hora)* **l / h** *(litro por hora)* **GPM** *(Gallons per Minute)* **CFM** *(Cubic Feet per Minute)*	**mca** *(metro de columna de agua)* **PSI** *(Pounds per Square Inch)* **kg / cm²** *(Kilogramo por centímetro cuadrado)*
1 CFM = 1.699 m³ / h **1 GPM = 227.1192 l / h**	**1 PSI = 0.70307 mca** **1 kg / cm² = 14,22 PSI**

F26	PRESSURE	NOZZLE 7/64"					NOZZLE 1/8"					NOZZLE 9/64"				
	(Bar)	Throw radius depending on vane (m)					Throw radius depending on vane (m)					Throw radius depending on vane (m)				
		L/H	30V	sin	30RV	30BV	L/H	30V	sin	30RV	30BV	L/H	30V	sin	30RV	30BV
ONE NOZZLE AND VANE TO HIGH RANGE	1.03	307	10.3	9.4	9.1	8.6	398	10.5	9.4	9.2	8.5	498	10.6	9.5	9.2	8.3
	1.38	354	11.2	10.0	9.8	9.1	460	11.5	10.0	9.8	9.0	576	11.6	10.1	9.9	8.7
	1.72	397	11.8	10.5	10.3	9.5	515	12.2	10.5	10.3	9.3	644	12.4	10.5	10.4	9.1
	2.07	435	12.2	10.8	10.7	9.8	565	12.7	10.9	10.7	9.6	706	13.0	10.9	10.7	9.4
	2.41	471	12.5	11.1	10.9	10.0	610	13.0	11.1	10.9	9.8	763	13.4	11.2	11.0	9.6
	2.76	504	12.8	11.3	11.2	10.2	653	13.4	11.4	11.2	10.0	816	13.8	11.5	11.3	9.8
	3.10	534	13.0	11.4	11.3	10.3	693	13.6	11.5	11.3	10.1	866	14.1	11.7	11.4	9.9
	3.45	564	13.2	11.5	11.4	10.4	731	13.8	11.7	11.5	10.2	913	14.4	11.9	11.6	10.0
	3.79	591	13.3	11.7	11.6	10.5	767	14.0	11.8	11.6	10.3	958				
	4.14	618	13.5	11.8	11.7	10.6	801	14.2	12.0	11.8	10.4	1001				

F26W	PRESSURE	NOZZLE 5/64"					NOZZLE 3/32"				
	(Bar)	Throw radius depending on vane (m)					Throw radius depending on vane (m)				
		L/H	30V	without	30RV	30BV	L/H	30V	without	30RV	30BV
ONE NOZZLE AND VANE TO HIGH RANGE	1.03	152					227	33.1	30.8	29.5	28.2
	1.38	177	35.4	32.8	31.8	30.8	261	36.1	32.8	31.8	30.5
	1.72	200	37.1	34.1	33.1	32.2	293	38.1	34.5	33.5	32.2
	2.07	218	38.4	35.1	34.4	32.8	320	39.4	35.4	34.8	32.8
	2.41	236	39.0	35.8	35.1	33.5	347	40.4	36.1	35.8	33.5
	2.76	252	39.7	36.4	35.8	34.1	370	41.0	36.7	36.4	34.1
	3.10	268	40.4	36.7	36.1	34.4	393	41.3	37.1	36.7	34.4
	3.45	284					416	41.7	37.4	37.1	34.5
	3.79	298					436	42.0	37.7	37.7	34.8
	4.14	331					454				

Shaded areas not recommended to obtain a right distribution.

Throw distance obtained with sprinkler on a 0.9m lift.

Tested under ideal conditions. Results can be affected by wind, bad hydraulic conditions or any other adverse factors.

Three different kinds of vanes can be used to achieve the desired throw radius and pulverisation balance depending on the available system pressure. This Unirain exclusive system provides high uniformity.

Vane 30V (white)	It increases the sprinkler coverage radius to its maximum. To obtain a good grade of pulverisation, the system pressure must be high (from 4.14. Bar).
Without vane	Using the nozzle without any vane, the throw radius will be slightly reduced compared to the previous option, but it will improve the water distribution. Recommended for medium system pressures (2.76 Bar).
Vane 30RV (Red)	Its inner structure creates a slight rotation inside the nozzle, obtaining a good pulverisation grade, but reducing the throw distance. To be used under low pressure conditions (2.07 Bar).
Vane 30BV (Blue)	This combination will achieve the highest pulverisation grade , but will also provide the minimum coverage radius. It's used under extreme low pressures (1.38 Bar).

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, only 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	03001	Sprinkler Body F26	POM	1
2	03003	Sprinkler Arm F26	POM	1
3	03007	Spring Arm F26	Stainless Steel	1
4	03019	Castellated turnbuckle F26	POM	1
5	03027	Arm Pin F26	POM	1
6	03005	Arm Cap F26	POM	1
7	03011	1/2" Series Bearing Spring	Stainless Steel	1
8	03010	1/2" Series Bearing Body Lock	High Density PE	1
9	03012	Bearing Body F26	POM	1
10	03014	1/2" PE Bearing Washer	High Density PE	1
11	03013	1/2" Red PU Bearing Washer	Anti Hydrolysis PU	1
12	03016	Bearing Nut F26	POM	1
13	03018	1/2" PTFE Bearing Washer	PTFE	1

Process/Manufacturer	Size	Material	Code
UNIRAIN	A3		03901
	Scale	Name	F26 Sprinkler
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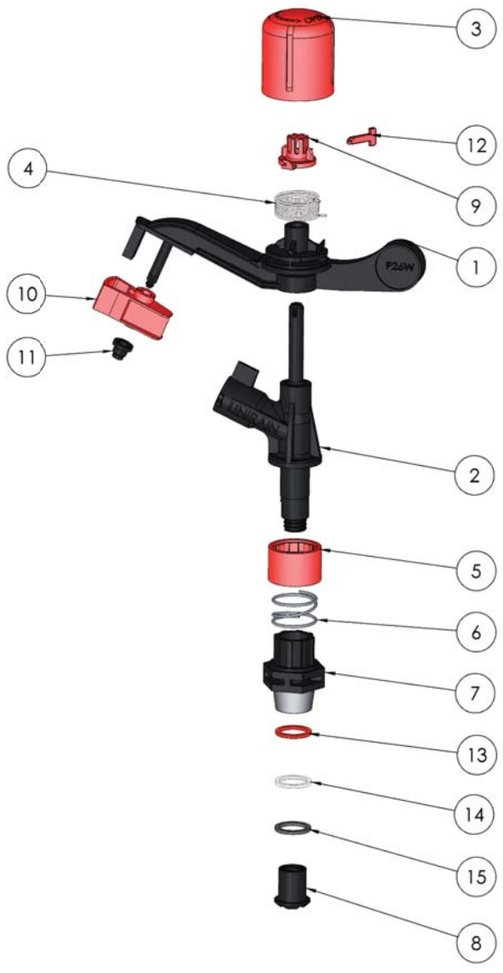

COMPONENT NUMBER	CODE	DESCRIPTION	MATERIAL	QUANTITY
1	03002	Sprinkler Arm F26W	POM	1
2	03001	Sprinkler BodyF26	POM	1
3	03005	Arm Cap F26	POM	1
4	03007	Spring Arm F26	Stainless Steel	1
5	03010	1/2" Series Bearing Body Lock	High Density PE	1
6	03011	1/2" Series Bearing Spring	Stainless Steel	1
7	03012	Bearing Body F26	POM	1
8	03016	F26 Bearing Nut F26	POM	1
9	03019	Castellated turnbuckle F26	POM	1
10	03024	Arm Triangle F26W	POM	1
11	03025	F26W Triangle clamp	POM	1
12	03027	Arm Pin F26	POM	1
13	03013	1/2" Red PU Bearing Washer	Anti Hydrolysis PU	1
14	03014	1/2" PE Bearing Washer	High Density PE	1
15	03015	1/2" NBR Bearing Washer	NBR	1

Process/Manufacturer	Size	Material	Code
UNIRAIN	A3		03900
	Scale	Name	F26W Sprinkler
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Unirain F2614 - F2614W

Full Circle Impact Sprinkler
Low and Medium flow Plastic

Application

Suitable for low and medium flow irrigation under trees.
Its lower jet radius doesn't directly reach foliage, avoiding fruit deterioration. Indicated also for nurseries and greenhouses.
Sturdy in design, it features significant improvements, notably its durability and its protected bearing sleeve thread, eliminating the possibility of breakage after impact.
Highly recommended for banana plantations for its angle of incidence, anti-UV treatment for exposed parts, protection of delicate parts and accessories, in particular the feed-tube.
available in three formats and suitable for rapid installation anywhere.

Advantages

- Sturdy design. Protective cap against impact and dirt.
- Due to an innovative system, the crown that holds the arm spring allows tension variation to adjust the sprinkler performance to extreme pressure or flow conditions.
- Compression spring protector guided by the bearing to ensure correct sliding between the protector and the sprinkler body.
- Thanks to their bayonet coupling system, the nozzles are easy to change and clean.
- Three different types of water guide vane can be used to achieve the desired coverage and spray balance according to the available pressure.

Technical specifications

- Full circle impact sprinkler
- 1/2" male thread.
- 14º Nozzle trajectory angle
- Pressure range: 1,03-4,14 Bar
- Nozzle range: 5/64" (1,98mm)) - 9/64" (3,57mm)
- High-resistance thermoplastics protected against UV radiation, and stainless steel.
- Color-coded anti abrasive acetal resin nozzles carved in millimetres and inches for a better identification.
- F2614W (low pressure model)

Typical curves of range and distribution of water depending on the model of vane used

Units Conversion	
FLOW	**PRESSURE**
m³ / h *(metro cúbico por hora)* **l / h** *(litro por hora)* **GPM** *(Gallons per Minute)* **CFM** *(Cubic Feet per Minute)*	**mca** *(metro de columna de agua)* **PSI** *(Pounds per Square Inch)* **kg / cm²** *(Kilogramo por centímetro cuadrado)*
1 CFM = 1.699 m³ / h **1 GPM = 227.1192 l / h**	**1 PSI = 0.70307 mca** **1 kg / cm² = 14,22 PSI**

F2614	PRESSURE (Bar)	NOZZLE 7/64" Throw radius depending on vane (m)					NOZZLE 1/8" Throw radius depending on vane (m)					NOZZLE 9/64" Throw radius depending on vane (m)				
		L/H	30V	sin	30RV	30BV	L/H	30V	sin	30RV	30BV	L/H	30V	sin	30RV	30BV
ONE NOZZLE AND VANE TO HIGH RANGE	1.03	307	8.7	8.0	7.7	7.3	398	8.9	8.0	7.8	7.2	498	10.6	9.5	9.2	8.3
	1.38	354	9.6	8.6	8.4	7.8	460	9.9	8.6	8.5	7.8	576	11.6	10.1	9.9	8.7
	1.72	397	10.3	9.2	9.0	8.3	515	10.7	9.2	9.0	8.1	644	12.4	10.5	10.4	9.1
	2.07	435	10.9	9.6	9.5	8.7	565	11.3	9.7	9.5	8.6	706	13.0	10.9	10.7	9.4
	2.41	471	11.3	10.0	9.9	9.0	610	11.8	10.0	9.9	8.9	763	13.4	11.2	11.0	9.6
	2.76	504	11.8	10.4	10.3	9.4	653	12.3	10.5	10.3	9.2	816	12.9	10.7	10.6	9.1
	3.10	534	12.1	10.6	10.5	9.6	693	12.7	10.7	10.5	9.4	866	13.2	10.9	10.7	9.2
	3.45	564	12.3	10.7	10.6	9.7	731	12.9	10.9	10.7	9.5	913	13.5	11.1	10.8	9.3
	3.79	591	12.5	11.0	10.9	9.9	767	13.2	11.0	11.0	9.7	958				
	4.14	618	12.8	11.2	11.1	10.1	801	13.5	11.4	11.2	9.9	1001				

F2614W	PRESSURE (Bar)	NOZZLE 5/64" Throw radius depending on vane (m)					NOZZLE 3/32" Throw radius depending on vane (m)				
		L/H	30V	sin	30RV	30BV	L/H	30V	sin	30RV	30BV
ONE NOZZLE AND VANE TO HIGH RANGE	1.03	153					227	8.6	8.0	7.6	7.3
	1.38	177	9.2	8.5	8.3	8.0	262	9.4	8.6	8.3	8.0
	1.72	199	9.8	9.0	8.8	8.5	293	10.1	9.2	8.9	8.6
	2.07	218	10.3	9.5	9.3	8.8	321	10.7	9.6	9.4	8.9
	2.41	237	10.7	9.8	9.6	9.2	347	11.1	9.9	9.8	9.2
	2.76	253	11.0	10.1	9.9	9.5	371	11.5	10.3	10.2	9.5
	3.10	269	11.4	10.4	10.2	9.7	394	11.7	10.5	10.4	9.8
	3.45	284					415	12.0	10.8	10.7	9.9
	3.79	298					435	12.2	10.9	10.9	10.1
	4.14	312					455				

Shaded areas not recommended to obtain a correct distribution.

Throw distance obtained with sprinkler on a 0.9 m lift.

Tested under ideal conditions. Results can be affected by wind, bad hydraulic conditions or any other adverse factors.

Every model of Unirain sprinkler allows using three different kinds of vanes to achieve the desired throw radius and pulverisation balance depending on the available system pressure. This system, exclusively provided by Unirain, allows obtaining high uniformity.

Vane 30V (white)	It increases the sprinkler coverage radius to its maximum. To obtain a good grade of pulverisation, the system pressure must be high (from 2.76 Bar).
Without vane	Using the nozzle without any vane, the throw radius will be slightly reduced compared to the previous option, but it will improve the water distribution. Recommended for medium system pressures (2.07 Bar).
Vane 30RV (Red)	Its inner structure creates a slight rotation inside the nozzle, obtaining a good pulverisation grade, but reducing the throw distance. To be used under low pressure conditions (2.07 Bar).
Vane 30BV (Blue)	This combination will achieve the highest pulverisation grade , but will also provide the minimum coverage radius. It's used under extreme low pressures (1.38 Bar).

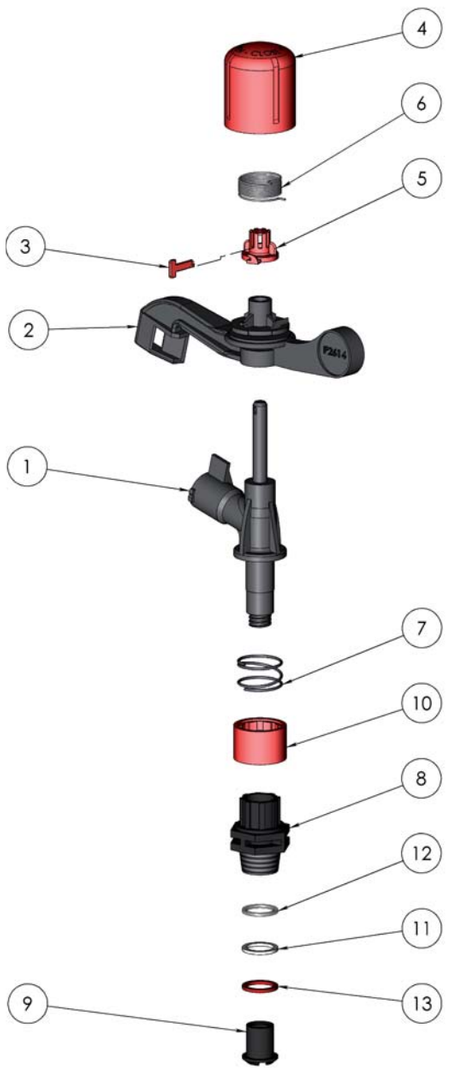
WARRANTY AND EXCLUSIONS

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, only 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.

F2614 - F2614W



COMPONENT NUMBER	CODE	DESCRIPTION	MATERIAL	QUANTITY
1	03020	Sprinkler Body F2614	POM + UV	1
2	03022	Sprinkler Arm F2614	POM + UV	1
3	03027	Arm Pin F2614	POM + UV	1
4	03005	Arm Cap F2614	POM + UV	1
5	03019	Castellated Turnbuckle	POM	1
6	03007	Spring Arm F2614	Stainless Steel	1
7	03011	Bearing Spring F2614	Stainless Steel	1
8	03012	Bearing Body F2614	POM + UV	1
9	03016	Bearing Nut F2614	POM + UV	1
10	03010	Bearing Body Lock	High Density PE	1
11	03018	1/2" PTFE Bearing Washer	PTFE	1
12	03014	1/2" PE Bearing Washer	High Density PE	1
13	03013	1/2" Red PU Bearing Washer	PU	1

Process/Manufacturer	Size	Material	Code
UNIRAIN	A3		03904UNI
	Scale	Name	F2614 Sprinkler
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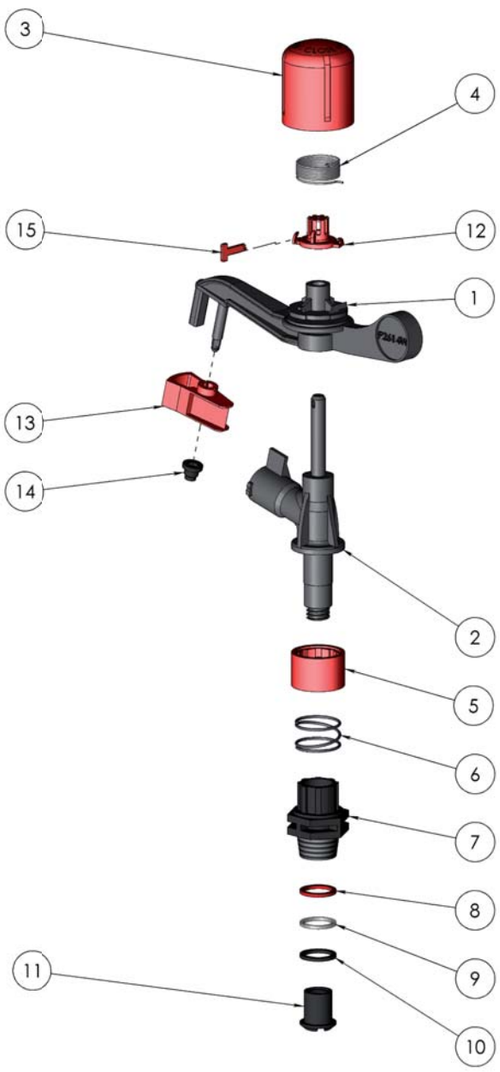
ASSEMBLY



COMPONENT NUMBER	CODE	DESCRIPTION	MATERIAL	QUANTITY
1	03021	Sprinkler Arm F2614W	POM + UV	1
2	03020	Sprinkler Body F2614	POM + UV	1
3	03005	Arm Cap F2614	POM + UV	1
4	03007	Spring Arm F2614	Stainless Steel	1
5	03010	1/2" Series Bearing Body Lock	High Density PE	1
6	03011	Bearing Spring F2614	Stainless Steel	1
7	03012	Bearing Body F2614	POM + UV	1
8	03013	1/2" Red PU Bearing Washer	PU	1
9	03014	1/2" PE Bearing Washer	High Density PE	1
10	03015	1/2" NBR Bearing Washer	NBR	1
11	03016	Bearing Nut F2614	POM	1
12	03019	Castellated Turnbuckle	POM + UV	1
13	03024	triangle F2614W	POM + UV	1
14	03025	triangular clamp	POM + UV	1
15	03027	Arm Pin F2614	POM + UV	1

Process/Manufacturer	Size	Material	Code
UNIRAIN	A3		03903
	Scale	Name	F2614W Sprinkler
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Unirain F44 - F44F

Full Circle Impact Sprinkler
Low and Medium flow Plastic

Application

For general agricultural use on movable or fixed solid sets. This model is very suitable where working conditions are specially hard for plastic sprinklers. Balanced and strong sprinkler; Its swing arm is made of a material different from the body and the bearing, which, along with the counterweights, provides homogeneous and smooth circular movement.

Advantages

- Very strong sprinkler, reinforcing ribs on the body, a fibreglass added polyamide arm and bearings made of a mixture of acetal resins turning on the stainless steel pin.
- Sand-proof bearing set.
- Can be assembled with one or two nozzles. Sprinkler body adapted to two different model nozzle models: 3Q Bayonet & thread nozzle.
- This model allows using three different type of vane to achieve the desired coverage and spray balance according to the available system pressure.

Technical specifications

- Full circle impact sprinkler.
- Male or female(F44F) ¾" base thread.
- Dual nozzle, main and secondary nozzle.
- 23º nozzle trajectory angle.
- Pressure range: 1,38 - 5,52 Bar.
- Nozzle range: 1/8" (3,18mm) - 7/32" (5,56mm).
- Acetal resin body and bearing. Polyamide fibreglass arm.
- Protective treatment against UV radiation.
- Fulcrum pin and springs made of stainless steel.
- Expanded fulcrum pin upper end diameter for a better fitting into the sprinkler body.
- Color-coded anti abrasive acetal resin nozzles carved in millimetres and inches for clear identification.
- Backturn lock between the sprinkler body and the compresion spring,
- Acetal resins bearing in arm.

F44F F44

	Pressure (bar)	Nozzles	Vanes
HIGH	4.14	3PRN ó 3FCN	30 V
MEDIUM	2.76	3PRN ó 3FCN	WITHOUT VANE
LOW	2.10	3PRN	30RV
VERY LOW	1.38	3PRN	30BV

F44	PRESSURE	NOZZLES 1/8" + 3/32"		NOZZLES 9/64" + 3/32"		NOZZLES 5/32" + 3/32"		NOZZLES 11/64" + 3/32"		NOZZLES 3/16" + 3/32"		NOZZLES 3/16" + 1/8"		NOZZLES 13/64" + 1/8"		NOZZLES 7/32" + 1/8"	
	(Bar)	L/H	R(m)	L/H	R(m)	L/H (*)	R(m)	L/H	R(m)	L/H	R(m)	L/H	R(m)	L/H	R(m)	L/H	R(m)
TWO NOZZLES	1.38	723	11.6	849	11.9	979	12.4	1126	12.8	1285	13.2	1511	13.2	1697	13.7	1892	14.0
	1.72	806	11.9	949	12.3	1097	13.0	1261	13.4	1433	13.9	1681	13.9	1885	14.3	2101	14.8
	2,07	886	12.3	1040	13.0	1199	13.6	1379	14.0	1574	14.5	1851	14.5	2078	14.9	2317	15.4
	2.41	961	12.6	1124	13.3	1297	14.0	1492	14.5	1706	14.9	2005	14.9	2255	15.4	2521	15.8
	2.76	1029	12.8	1201	13.6	1388	14.3	1597	14.8	1824	15.2	2149	15.2	2419	15.7	2703	16.2
	3.10	1092	13.0	1274	13.7	1472	14.5	1694	15.1	1937	15.5	2283	15.5	2566	16.0	2873	16.5
	3.45	1151	13.1	1342	13.9	1549	14.6	1787	15.2	2044	15.8	2407	15.8	2703	16.3	3032	16.8
	3.79	1208	13.3	1408	14.0	1624	14.8	1874	15.4	2146	16.0	2521	16.0	2839	16.6	3180	17.1
	4.14	1263	13.4	1472	14.2	1697	14.9	1953	15.5	2239	16.2	2635	16.2	2953	16.8	3293	17.2
	4.48	1315	13.6	1533	14.3	1767	15.1	2028	15.7	2333	16.3	2748	16.3	3066	16.9	3407	17.4
	4.83	1365	13.7	1590	14.5	1835	15.2	2101	15.8	2421	16.5	2839	16.5	3180	17.1	3509	17.5
	5.17	1413	13.9	1647	14.6	1901	15.4	2171	16.0	2503	16.6	2930	16.6	3271	17.2	3611	17.7
	5.52	1458	14.0	1701	14.8	1965	15.5	2242	16.2	2580	16.8	3009	16.8	3361	17.4	3702	17.8

F44P	PRESSURE	NOZZLES 1/8"		NOZZLES 9/64"		NOZZLES 5/32"		NOZZLES 11/64"		NOZZLES 3/16"		NOZZLES 13/64"		NOZZLES 7/32"	
	(Bar)	L/H	R(m)	L/H	R(m)	L/H (*)	R(m)	L/H	R(m)	L/H	R(m)	L/H	R(m)	L/H	R(m)
ONE NOZZLE AND PLUG	1.38	458	11.6	584	11.9	714	12.4	861	12.8	1020	13.2	1205	13.7	1400	14.0
	1.72	511	11.9	654	12.3	799	13.0	963	13.4	1136	13.9	1340	14.3	1556	14.8
	2,07	561	12.3	715	13.0	874	13.6	1054	14.0	1249	14.5	1476	14.9	1715	15.4
	2.41	609	12.6	772	13.3	945	14.0	1140	14.5	1354	14.9	1601	15.4	1862	15.8
	2.76	652	12.8	827	13.6	1011	14.3	1220	14.8	1449	15.2	1715	15.7	1999	16.2
	3.10	693	13.0	877	13.7	1072	14.5	1295	15.1	1540	15.5	1817	16.0	2124	16.5
	3.45	731	13.1	924	13.9	1131	14.6	1365	15.2	1626	15.8	1919	16.3	2248	16.8
	3.79	768	13.3	970	14.0	1186	14.8	1431	15.4	1708	16.0	2010	16.6	2362	17.1
	4.14	802	13.4	1013	14.2	1238	14.9	1492	15.5	1783	16.2	2101	16.8	2442	17.2
	4.48	836	13.6	1056	14.3	1290	15.1	1551	15.7	1858	16.3	2180	16.9	2521	17.4
	4.83	868	13.7	1097	14.5	1340	15.2	1610	15.8	1931	16.5	2260	17.1	2589	17.5
	5.17	899	13.9	1136	14.6	1388	15.4	1667	16.0	1999	16.6	2328	17.2	2657	17.7
	5.52	929	14.0	1174	14.8	1431	15.5	1722	16.2	2065	16.8	2385	17.4	2725	17.8

F44V	PRESSURE	NOZZLES 1/8" + 3/32"		NOZZLES 9/64" + 3/32"		NOZZLES 5/32" + 3/32"		NOZZLES 11/64" + 3/32"		NOZZLES 3/16" + 3/32"		NOZZLES 3/16" + 1/8"		NOZZLES 13/64" + 1/8"		NOZZLES 7/32" + 1/8"	
	(Bar)	L/H	R(m)	L/H	R(m)	L/H (*)	R(m)	L/H	R(m)	L/H	R(m)	L/H	R(m)	L/H	R(m)	L/H	R(m)
TWO NOZZLES, AND VANE TO HIGH RANGE	2.41	961	12.9	1124	13.5	1297	14.2	1492	14.7	1706	15.3	2005	15.3	2255	15.9	2521	16.5
	2.76	1029	13.4	1201	14.2	1388	15.1	1597	15.5	1824	16.0	2149	16.0	2419	16.5	2703	16.9
	3.10	1092	13.6	1274	14.3	1472	15.2	1694	15.8	1937	16.3	2283	16.3	2566	16.8	2873	17.4
	3.45	1151	13.7	1342	14.5	1549	15.4	1787	16.0	2044	16.5	2407	16.5	2703	17.1	3032	17.8
	3.79	1208	13.9	1408	14.6	1624	15.5	1874	16.2	2146	16.6	2521	16.6	2839	17.4	3180	18.1
	4.14	1263	14.0	1472	14.8	1697	15.7	1953	16.3	2239	16.8	2635	16.8	2953	17.5	3293	18.4
	4.48	1315	1C.2	1533	14.9	1767	15.8	2028	16.5	2333	16.9	2748	16.9	3066	17.7	3407	18.6
	4.83	1365	14.3	1590	15.1	1835	16.0	2101	16.6	2421	17.1	2839	17.1	3180	17.8	3509	18.7
	5.17	1413	14.5	1647	15.2	1901	16.2	2171	16.8	2503	17.2	2930	17.2	3271	18.0	3611	18.9
	5.52	1458	14.6	1701	15.4	1965	16.3	2242	16.9	2580	17.4	3009	17.4	3361	18.1	3702	19.1

F44PV	PRESSURE	NOZZLES 1/8"		NOZZLES 9/64"		NOZZLES 5/32"		NOZZLES 11/64"		NOZZLES 3/16"		NOZZLES 13/64"		NOZZLES 7/32"	
	(Bar)	L/H	R(m)	L/H	R(m)	L/H (*)	R(m)	L/H	R(m)	L/H	R(m)	L/H	R(m)	L/H	R(m)
ONE NOZZLE, PLUG AND VANE TO HIGH RANGE	2.41	609	12.9	772	13.5	945	14.2	1140	14.7	1354	15.3	1601	15.9	1862	16.5
	2.76	652	13.6	827	14.3	1011	15.2	1220	15.8	1449	16.2	1715	16.6	1999	17.2
	3.10	693	13.7	877	14.5	1072	15.4	1295	16.0	1540	16.5	1817	17.1	2124	17.7
	3.45	731	13.9	924	14.6	1131	15.5	1365	16.2	1626	16.8	1919	17.4	2248	18.1
	3.79	768	14.0	970	14.8	1186	15.7	1431	16.3	1708	16.9	2010	17.7	2362	18.4
	4.14	802	14.2	1013	14.9	1238	15.8	1492	16.5	1783	17.1	2101	17.8	2442	18.7
	4.48	836	14.3	1056	15.1	1290	16.0	1551	16.6	1858	17.2	2180	18.0	2521	18.9
	4.83	868	14.5	1097	15.2	1340	16.2	1610	16.8	1931	17.4	2260	18.1	2589	19.1
	5.17	899	14.6	1136	15.4	1388	16.3	1667	16.9	1999	17.5	2328	18.3	2657	19.2
	5.52	929	14.8	1174	15.5	1431	16.5	1722	17.1	2065	17.7	2385	18.4	2725	19.4

Data obtained under ideal test conditions. It can be affected by wind, bad hydraulic conditions or other adverse factors.
Highest point of the jet above the nozzle: 2.5 m (using standard nozzle 11 / 64 " and a pressure of 3.45 Bar)
Throw radius jets achieved with the 0.9m lift. Shaded areas not recommended.
(*) Standard Nozzle.

Due to the large number of possible combinations of nozzles, only the most common ones are represented.
To find information relating to other combinations , please advise factory.

L/H: Liters Per Minute
R(m): Throw Radius (meter)

WARRANTY AND EXCLUSIONS

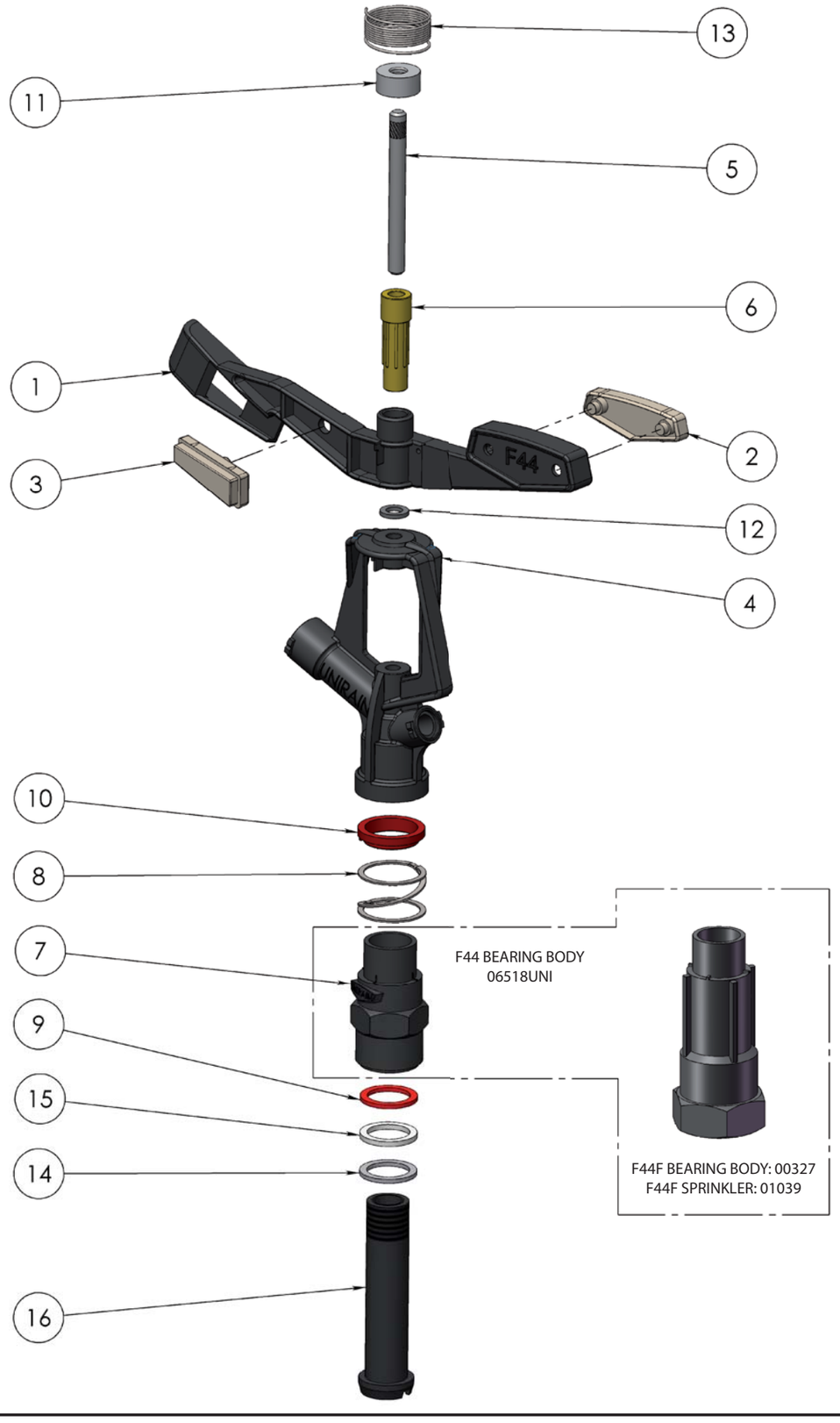
The manufacturer guarantees its products for direct customer against any defects in materials or manufacture for a period of two years from the original date of purchase, only when the products have been used under normal operating conditions. The manufacturer assumes no responsibility for installation, 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.

F44

ASSEMBLY



COMPONENT NUMBER	CODE	DESCRIPTION	MATERIAL	QUANTITY
1	06514	Sprinkler Arm F44	PA6 + Fiber Glass	1
2	06516UNI	Unirain Back Counterweight	ZAMAK	1
3	06515	Front Counterweight	ZAMAK	1
4	06513UNI	Sprinkler Body F44	POM	1
5	06519	Swing Arm Pin	Stainless Steel	1
6	06636	Swing Arm Bearing	POM	1
7	06518UNI	Bearing body F44	POM	1
8	00018	Bearing Spring	Stainless Steel	1
9	00252	Bearing Upper Washer	Anti Hydrolisis PU	1
10	00255	Bearing Body Lock	Anti Hydrolisis PU	1
11	06161	Swing Arm Cap	PE	1
12	06162	Swing Arm Support Washer	NBR	1
13	06183	Arm Spring Series 3/4”	Stainless Steel	1
14	07459	Bearing Lower Washer	NBR	1
15	06736	Bearing Intermediate Washer	High Density PE	1
16	06517	Bearing Pin P45 / F44	POM	1

Notes

Process/Manufacturer	Size	Material	Code
UNIRAIN	A3		00094UNI
	Scale 1:2	Name: UNIRAIN F44 Sprinkler	
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Unirain F46L- F46

Full Circle Impact Sprinkler
Low and Medium flow Plastic

Application

Designed for general agricultural use and, because of its low cost, it is particularly suitable for solid sets where the amount of sprinklers per hectare is high.

Advantages

- It features a sand-proof bearing system and reinforcing ribs on its body.
- Perfect inner finishing.
- It can be assembled with one or two nozzles. Sprinkler body accepts two different model nozzles: 3Q Bayonet & thread nozzle.
- This model allows using three different vanes can be used to achieve the desired coverage and spray balance according to the available system pressure.

Technical specification

- Full circle impact sprinkler.
- ¾" base thread male or female(F46F)
- Main and secondary nozzle
- 23º nozzle trajectory angle
- Pressure range: 1.38 - 5.52 Bar
- Nozzle range: 7/64" (2,78mm) - 7/32" (5,56mm)
- Made of acetal resin with UV-protection treatment.
- Fulcrum pin and springs made of stainless steel.
- Expanded fulcrum pin upper end diameter for a better fitting into the sprinkler body.
- Color-coded anti abrasive acetal resin nozzles carved in millimetres and inches for a better identification.
- Backturn lock between the sprinkler body and the bearing spring.
- F46L (Low flow model)

F46 F46F

	Pressure (bar)	Nozzles	Vanes
HIGH	4.14	3PRN ó 3FCN	30 V
MEDIUM	2.76	3PRN ó 3FCN	WITHOUT VANE
LOW	2.10	3PRN	30RV
VERY LOW	1.38	3PRN	30BV

F46L F46	PRESSURE (Bar)	NOZZLES 7/64" + 3/32" L/H	R(m)	NOZZLES 1/8" + 3/32" L/H	R(m)	NOZZLES 9/64" + 3/32" L/H	R(m)	NOZZLES 5/32" + 3/32" L/H (*)	R(m)	NOZZLES 11/64" + 3/32" L/H	R(m)	NOZZLES 3/16" + 3/32" L/H	R(m)	NOZZLES 3/16" + 1/8" L/H	R(m)	NOZZLES 13/64" + 1/8" L/H	R(m)	NOZZLES 7/32" + 1/8" L/H	R(m)
TWO NOZZLES	1.38	615	11.3	723	11.6	849	11.9	979	12.4	1126	12.8	1285	13.2	1511	13.2	1697	13.7	1892	14.0
	1.72	688	11.6	806	11.9	949	12.3	1097	13.0	1261	13.4	1433	13.9	1681	13.9	1885	14.3	2101	14.8
	2,07	754	11.7	886	12.3	1040	13.0	1199	13.6	1379	14.0	1574	14.5	1851	14.5	2078	14.9	2317	15.4
	2.41	818	11.9	961	12.6	1124	13.3	1297	14.0	1492	14.5	1706	14.9	2005	14.9	2255	15.4	2521	15.8
	2.76	874	12.0	1029	12.8	1201	13.6	1388	14.3	1597	14.8	1824	15.2	2149	15.2	2419	15.7	2703	16.2
	3.10	927	12.2	1092	13.0	1274	13.7	1472	14.5	1694	15.1	1937	15.5	2283	15.5	2566	16.0	2873	16.5
	3.45	977	12.3	1151	13.1	1342	13.9	1549	14.6	1787	15.2	2044	15.8	2407	15.8	2703	16.3	3032	16.8
	3.79	1024	12.5	1208	13.3	1408	14.0	1624	14.8	1874	15.4	2146	16.0	2521	16.0	2839	16.6	3180	17.1
	4.14	1070	12.6	1263	13.4	1472	14.2	1697	14.9	1953	15.5	2239	16.2	2635	16.2	2953	16.8	3293	17.2
	4.48	1113	12.8	1315	13.6	1533	14.3	1767	15.1	2028	15.7	2333	16.3	2748	16.3	3066	16.9	3407	17.4
	4.83	1156	13.0	1365	13.7	1590	14.5	1835	15.2	2101	15.8	2421	16.5	2839	16.5	3180	17.1	3509	17.5
	5.17	1195	13.1	1413	13.9	1647	14.6	1901	15.4	2171	16.0	2503	16.6	2930	16.6	3271	17.2	3611	17.7
	5.52	1233	13.1	1458	14.0	1701	14.8	1965	15.5	2242	16.2	2580	16.8	3009	16.8	3361	17.4	3702	17.8

F46LP F46P	PRESSURE (Bar)	NOZZLES 7/64" L/H	R(m)	NOZZLES 1/8" L/H	R(m)	NOZZLES 9/64" L/H	R(m)	NOZZLES 5/32" L/H (*)	R(m)	NOZZLES 11/64" L/H	R(m)	NOZZLES 3/16" L/H	R(m)	NOZZLES 13/64" L/H	R(m)	NOZZLES 7/32" L/H	R(m)
ONE NOZZLE AND PLUG	1.38	350	11.3	458	11.6	584	11.9	714	12.4	861	12.8	1020	13.2	1205	13.7	1400	14.0
	1.72	393	11.6	511	11.9	654	12.3	799	13.0	963	13.4	1136	13.9	1340	14.3	1556	14.8
	2,07	429	11.7	561	12.3	715	13.0	874	13.6	1054	14.0	1249	14.5	1476	14.9	1715	15.4
	2.41	466	11.9	609	12.6	772	13.3	945	14.0	1140	14.5	1354	14.9	1601	15.4	1862	15.8
	2.76	497	12.0	652	12.8	827	13.6	1011	14.3	1220	14.8	1449	15.2	1715	15.7	1999	16.2
	3.10	527	12.2	693	13.0	877	13.7	1072	14.5	1295	15.1	1540	15.5	1817	16.0	2124	16.5
	3.45	556	12.3	731	13.1	924	13.9	1131	14.6	1365	15.2	1626	15.8	1919	16.3	2248	16.8
	3.79	584	12.5	768	13.3	970	14.0	1186	14.8	1431	15.4	1708	16.0	2010	16.6	2362	17.1
	4.14	609	12.6	802	13.4	1013	14.2	1238	14.9	1492	15.5	1783	16.2	2101	16.8	2442	17.2
	4.48	634	12.8	836	13.6	1056	14.3	1290	15.1	1551	15.7	1858	16.3	2180	16.9	2521	17.4
	4.83	659	13.0	868	13.7	1097	14.5	1340	15.2	1610	15.8	1931	16.5	2260	17.1	2589	17.5
	5.17	681	13.1	899	13.9	1136	14.6	1388	15.4	1667	16.0	1999	16.6	2328	17.2	2657	17.7
	5.52	704	13.1	929	14.0	1174	14.8	1431	15.5	1722	16.2	2065	16.8	2385	17.4	2725	17.8

F46LV F46V	PRESSURE (Bar)	NOZZLES 7/64" + 3/32" L/H	R(m)	NOZZLES 1/8" + 3/32" L/H	R(m)	NOZZLES 9/64" + 3/32" L/H	R(m)	NOZZLES 5/32" + 3/32" L/H (*)	R(m)	NOZZLES 11/64" + 3/32" L/H	R(m)	NOZZLES 3/16" + 3/32" L/H	R(m)	NOZZLES 3/16" + 1/8" L/H	R(m)	NOZZLES 13/64" + 1/8" L/H	R(m)	NOZZLES 7/32" + 1/8" L/H	R(m)
TWO NOZZLES, AND VANE TO HIGH RANGE	2.41	818	12.3	961	12.9	1124	13.5	1297	14.2	1492	14.7	1706	15.3	2005	15.3	2255	15.9	2521	16.5
	2.76	874	12.6	1029	13.4	1201	14.2	1388	15.1	1597	15.5	1824	16.0	2149	16.0	2419	16.5	2703	16.9
	3.10	927	12.8	1092	13.6	1274	14.3	1472	15.2	1694	15.8	1937	16.3	2283	16.3	2566	16.8	2873	17.4
	3.45	977	13.0	1151	13.7	1342	14.5	1549	15.4	1787	16.0	2044	16.5	2407	16.5	2703	17.1	3032	17.8
	3.79	1024	13.1	1208	13.9	1408	14.6	1624	15.5	1874	16.2	2146	16.6	2521	16.6	2839	17.4	3180	18.1
	4.14	1070	13.3	1263	14.0	1472	14.8	1697	15.7	1953	16.3	2239	16.8	2635	16.8	2953	17.5	3293	18.4
	4.48	1113	13.4	1315	1C.2	1533	14.9	1767	15.8	2028	16.5	2333	16.9	2748	16.9	3066	17.7	3407	18.6
	4.83	1156	13.6	1365	14.3	1590	15.1	1835	16.0	2101	16.6	2421	17.1	2839	17.1	3180	17.8	3509	18.7
	5.17	1195	13.7	1413	14.5	1647	15.2	1901	16.2	2171	16.8	2503	17.2	2930	17.2	3271	18.0	3611	18.9
	5.52	1233	13.9	1458	14.6	1701	15.4	1965	16.3	2242	16.9	2580	17.4	3009	17.4	3361	18.1	3702	19.1

F46LPV F46PV	PRESSURE (Bar)	NOZZLES 7/64" L/H	R(m)	NOZZLES 1/8" L/H	R(m)	NOZZLES 9/64" L/H	R(m)	NOZZLES 5/32" L/H (*)	R(m)	NOZZLES 11/64" L/H	R(m)	NOZZLES 3/16" L/H	R(m)	NOZZLES 13/64" L/H	R(m)	NOZZLES 7/32" L/H	R(m)
ONE NOZZLE, PLUG AND VANE TO HIGH RANGE	2.41	466	12.3	609	12.9	772	13.5	945	14.2	1140	14.7	1354	15.3	1601	15.9	1862	16.5
	2.76	497	12.6	652	13.6	827	14.3	1011	15.2	1220	15.8	1449	16.2	1715	16.6	1999	17.2
	3.10	527	12.8	693	13.7	877	14.5	1072	15.4	1295	16.0	1540	16.5	1817	17.1	2124	17.7
	3.45	556	13.0	731	13.9	924	14.6	1131	15.5	1365	16.2	1626	16.8	1919	17.4	2248	18.1
	3.79	584	13.1	768	14.0	970	14.8	1186	15.7	1431	16.3	1708	16.9	2010	17.7	2362	18.4
	4.14	609	13.3	802	14.2	1013	14.9	1238	15.8	1492	16.5	1783	17.1	2101	17.8	2442	18.7
	4.48	634	13.4	836	14.3	1056	15.1	1290	16.0	1551	16.6	1858	17.2	2180	18.0	2521	18.9
	4.83	659	13.6	868	14.5	1097	15.2	1340	16.2	1610	16.8	1931	17.4	2260	18.1	2589	19.1
	5.17	681	13.7	899	14.6	1136	15.4	1388	16.3	1667	16.9	1999	17.5	2328	18.3	2657	19.2
	5.52	704	13.9	929	14.8	1174	15.5	1431	16.5	1722	17.1	2065	17.7	2385	18.4	2725	19.4

Data obtained under ideal test conditions. It can be affected by wind, bad hydraulic conditions or other adverse factors.
Highest point of the jet above the nozzle: 2.5 m (using standard nozzle 11 / 64 " and a pressure of 3.45 Bar)
Throw radius jets achieved with the 0.9m lift. Shaded areas not recommended.
(*) Standard Nozzle.

Due to the large number of possible combinations of nozzles, only the most common ones are represented.
To find information relating to other combinations , please advise factory.

L/H: Liters Per Minute
R(m): Throw Radius (meter)

F46L F46

WARRANTY AND EXCLUSIONS

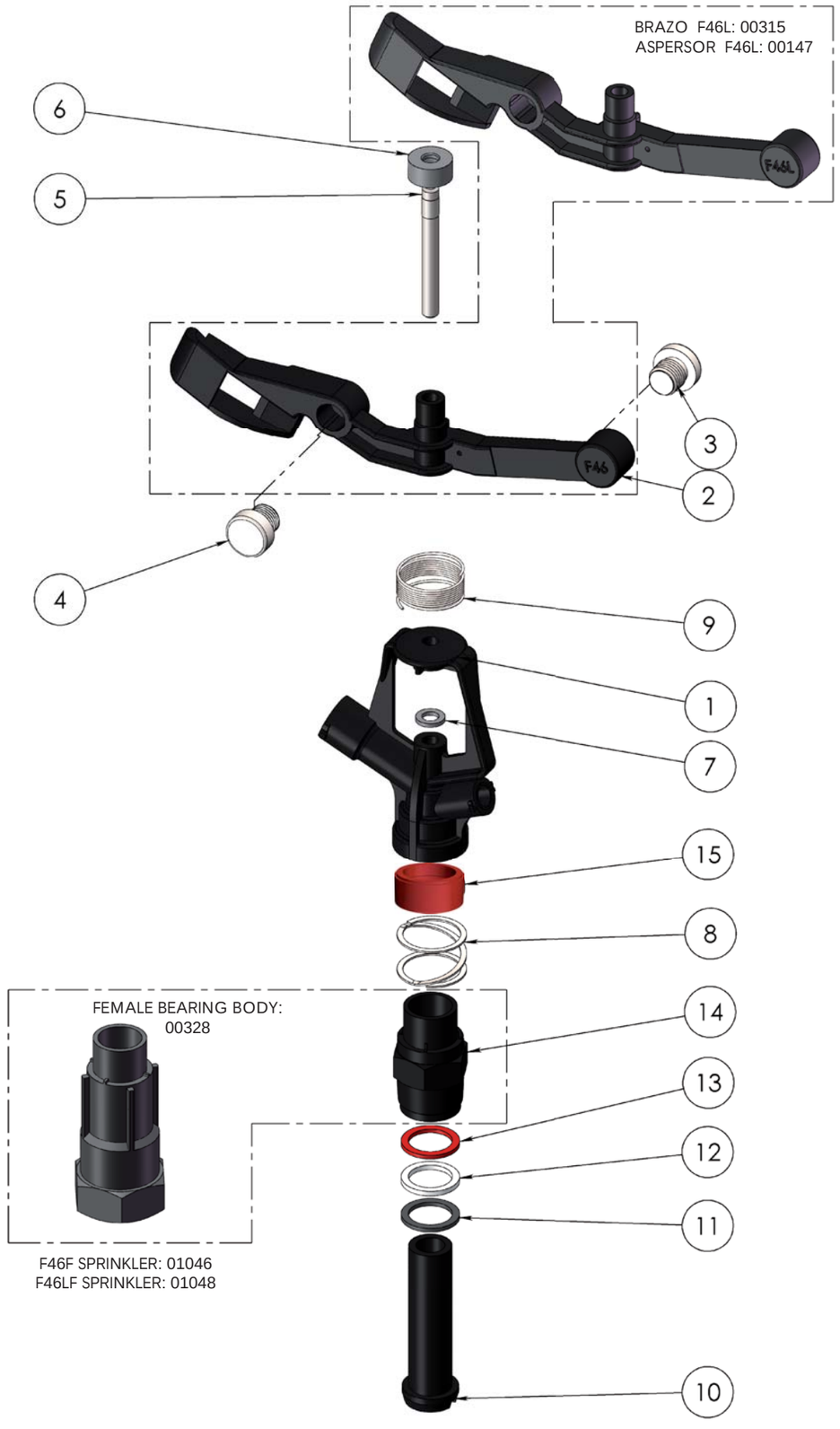
The manufacturer guarantees its products for direct customer against any defects in materials or manufacture for a period of two years from the original date of purchase, only when the products have been used under normal operating conditions. The manufacturer assumes no responsibility for installation, 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.

F46

ASSEMBLY



COMPONENT NUMBER	CODE	DESCRIPTION	MATERIAL	QUANTITY
1	00310	F46 Sprinkler Body	POM	1
2	00311	F46 Sprinkler Arm	POM	1
3	00316	Back Counterweight	ZAMAK	1
4	00314	Front Counterweight	ZAMAK	1
5	06163	Fulcrum Pin	Stainless Steel	1
6	06161	Swing Arm Cap	PE	1
7	06162	Swing Arm Support Washer	NBR	1
8	00018	Bearing Spring	Stainless Steel	1
9	06183	3/4” Series Arm Spring	Stainless Steel	1
10	00313	Bearing Pin F46	POM	1
11	07459	Bearing Lower Washer	NBR	1
12	06736	Bearing Intermediate Washer	High Density PE	1
13	00252	Bearing Upper Washer	Anti Hydrolisis PU	1
14	00312	F46 Bearing Body	POM	1
15	00256	Bearing Body Lock	High Density PE	1

Notes

Process/Manufacturer	Size	Material	Code
Unirain	A3		00146
Assembly	Scale 1: 2	Name F46 Sprinkler	
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Unirain F46L- F46 PROTECTED

Full Circle Impact Sprinkler
Low and Medium flow Plastic

Application

Like the F46, this sprinkler was designed for general agricultural use and, because of its low cost, it is suitable for solid sets where the amount of sprinklers per hectare is high.

Suitable for frost-proof irrigation. There are two key differences from F46: absence of counterweights in the swing arm and protection of the most sensitive areas of the sprinkler, making it more robust and durable.

Advantages

- Maximum protection of springs against impacts , dirt, foreign bodies, insects and animals, frost, etc.
- Increased frequency / speed of arm swing, improving irrigation uniformity.
- Suitable for frost-proof irrigation.
- It features a sand-proof bearing system and reinforcing ribs on its body.
- Perfect interior finishing.
- It can be assembled with one or two nozzles. Sprinkler body adapted to accept the 3Q bayonet nozzle and the thread nozzle
- This model allows using three different vanes can be used to achieve the desired coverage and spray balance according to the available system pressure.

Technical specification

- Full circle impact sprinkler.
- ¾" base thread male or female(F46F)
- Dual nozzle, Main and secondary nozzle
- 23º nozzle trajectory angle
- Pressure range: 1,38 - 5,52 Bar
- Nozzle range: 7/64" (2,78mm) - 7/32 (5,56mm)"
- Made of acetal resin with UV-protection treatment.
- Body and spring protective cap made of HDPE.
- fulcrum pin and springs made of stainless steel.
- Expanded fulcrium pin upper end diameter for a better fitting into the sprinkler body.
- Color-coded anti abrasive acetalic resin nozzles carved in millimetres and inches for a better identification.
- Bearing body protective cap made of HDPE between the sprinkler body and the compression spring.
- F46L (Low pressure model)

F46PRO F46FPRO

	Pressure (bar)	Nozzles	Vanes
HIGH	4.14	3PRN ó 3FCN	30 V
MEDIUM	2.76	3PRN ó 3FCN	WITHOUT VANE
LOW	2.10	3PRN	30RV
VERY LOW	1.38	3PRN	30BV

F46LPRO F46PRO	PRESSURE	NOZZLES 7/64" + 3/32"		NOZZLES 1/8" + 3/32"		NOZZLES 9/64" + 3/32"		NOZZLES 5/32" + 3/32"		NOZZLES 11/64" + 3/32"		NOZZLES 3/16" + 3/32"		NOZZLES 3/16" + 1/8"		NOZZLES 13/64" + 1/8"		NOZZLES 7/32" + 1/8"	
	(Bar)	L/H	R(m)	L/H	R(m)	L/H	R(m)	L/H (*)	R(m)	L/H	R(m)	L/H	R(m)	L/H	R(m)	L/H	R(m)	L/H	R(m)
TWO NOZZLES	1.38	615	11.3	723	11.6	849	11.9	979	12.4	1126	12.8	1285	13.2	1511	13.2	1697	13.7	1892	14.0
	1.72	688	11.6	806	11.9	949	12.3	1097	13.0	1261	13.4	1433	13.9	1681	13.9	1885	14.3	2101	14.8
	2,07	754	11.7	886	12.3	1040	13.0	1199	13.6	1379	14.0	1574	14.5	1851	14.5	2078	14.9	2317	15.4
	2.41	818	11.9	961	12.6	1124	13.3	1297	14.0	1492	14.5	1706	14.9	2005	14.9	2255	15.4	2521	15.8
	2.76	874	12.0	1029	12.8	1201	13.6	1388	14.3	1597	14.8	1824	15.2	2149	15.2	2419	15.7	2703	16.2
	3.10	927	12.2	1092	13.0	1274	13.7	1472	14.5	1694	15.1	1937	15.5	2283	15.5	2566	16.0	2873	16.5
	3.45	977	12.3	1151	13.1	1342	13.9	1549	14.6	1787	15.2	2044	15.8	2407	15.8	2703	16.3	3032	16.8
	3.79	1024	12.5	1208	13.3	1408	14.0	1624	14.8	1874	15.4	2146	16.0	2521	16.0	2839	16.6	3180	17.1
	4.14	1070	12.6	1263	13.4	1472	14.2	1697	14.9	1953	15.5	2239	16.2	2635	16.2	2953	16.8	3293	17.2
	4.48	1113	12.8	1315	13.6	1533	14.3	1767	15.1	2028	15.7	2333	16.3	2748	16.3	3066	16.9	-----	-----
	4.83	1156	13.0	1365	13.7	1590	14.5	1835	15.2	2101	15.8	2421	16.5	2839	16.5	3180	17.1	-----	-----
	5.17	1195	13.1	1413	13.9	1647	14.6	1901	15.4	2171	16.0	2503	16.6	2930	16.6	-----	-----	-----	-----
	5.52	1233	13.1	1458	14.0	1701	14.8	1965	15.5	2242	16.2	2580	16.8	3009	16.8	-----	-----	-----	-----

F46LPPRO F46PPRO	PRESSURE	NOZZLES 7/64"		NOZZLES 1/8"		NOZZLES 9/64"		NOZZLES 5/32"		NOZZLES 11/64"		NOZZLES 3/16"		NOZZLES 13/64"		NOZZLES 7/32"	
	(Bar)	L/H	R(m)	L/H	R(m)	L/H	R(m)	L/H (*)	R(m)	L/H	R(m)	L/H	R(m)	L/H	R(m)	L/H	R(m)
ONE NOZZLE AND PLUG	1.38	350	11.3	458	11.6	584	11.9	714	12.4	861	12.8	1020	13.2	1205	13.7	1400	14.0
	1.72	393	11.6	511	11.9	654	12.3	799	13.0	963	13.4	1136	13.9	1340	14.3	1556	14.8
	2,07	429	11.7	561	12.3	715	13.0	874	13.6	1054	14.0	1249	14.5	1476	14.9	1715	15.4
	2.41	466	11.9	609	12.6	772	13.3	945	14.0	1140	14.5	1354	14.9	1601	15.4	1862	15.8
	2.76	497	12.0	652	12.8	827	13.6	1011	14.3	1220	14.8	1449	15.2	1715	15.7	1999	16.2
	3.10	527	12.2	693	13.0	877	13.7	1072	14.5	1295	15.1	1540	15.5	1817	16.0	2124	16.5
	3.45	556	12.3	731	13.1	924	13.9	1131	14.6	1365	15.2	1626	15.8	1919	16.3	2248	16.8
	3.79	584	12.5	768	13.3	970	14.0	1186	14.8	1431	15.4	1708	16.0	2010	16.6	2362	17.1
	4.14	609	12.6	802	13.4	1013	14.2	1238	14.9	1492	15.5	1783	16.2	2101	16.8	2442	17.2
	4.48	634	12.8	836	13.6	1056	14.3	1290	15.1	1551	15.7	1858	16.3	2180	16.9	-----	-----
	4.83	659	13.0	868	13.7	1097	14.5	1340	15.2	1610	15.8	1931	16.5	2260	17.1	-----	-----
	5.17	681	13.1	899	13.9	1136	14.6	1388	15.4	1667	16.0	1999	16.6	-----	-----	-----	-----
	5.52	704	13.1	929	14.0	1174	14.8	1431	15.5	1722	16.2	2065	16.8	-----	-----	-----	-----

F46LVPRO F46VPRO	PRESSURE	NOZZLES 7/64" + 3/32"		NOZZLES 1/8" + 3/32"		NOZZLES 9/64" + 3/32"		NOZZLES 5/32" + 3/32"		NOZZLES 11/64" + 3/32"		NOZZLES 3/16" + 3/32"		NOZZLES 3/16" + 1/8"		NOZZLES 13/64" + 1/8"		NOZZLES 7/32" + 1/8"	
	(Bar)	L/H	R(m)	L/H	R(m)	L/H	R(m)	L/H (*)	R(m)	L/H	R(m)	L/H	R(m)	L/H	R(m)	L/H	R(m)	L/H	R(m)
TWO NOZZLES, AND VANE TO HIGH RANGE	2.41	818	12.3	961	12.9	1124	13.5	1297	14.2	1492	14.7	1706	15.3	2005	15.3	2255	15.9	2521	16.5
	2.76	874	12.6	1029	13.4	1201	14.2	1388	15.1	1597	15.5	1824	16.0	2149	16.0	2419	16.5	2703	16.9
	3.10	927	12.8	1092	13.6	1274	14.3	1472	15.2	1694	15.8	1937	16.3	2283	16.3	2566	16.8	2873	17.4
	3.45	977	13.0	1151	13.7	1342	14.5	1549	15.4	1787	16.0	2044	16.5	2407	16.5	2703	17.1	3032	17.8
	3.79	1024	13.1	1208	13.9	1408	14.6	1624	15.5	1874	16.2	2146	16.6	2521	16.6	2839	17.4	3180	18.1
	4.14	1070	13.3	1263	14.0	1472	14.8	1697	15.7	1953	16.3	2239	16.8	2635	16.8	2953	17.5	-----	-----
	4.48	1113	13.4	1315	1C.2	1533	14.9	1767	15.8	2028	16.5	2333	16.9	2748	16.9	-----	-----	-----	-----
	4.83	1156	13.6	1365	14.3	1590	15.1	1835	16.0	2101	16.6	2421	17.1	2839	17.1	-----	-----	-----	-----
	5.17	1195	13.7	1413	14.5	1647	15.2	1901	16.2	2171	16.8	2503	17.2	2930	17.2	-----	-----	-----	-----
	5.52	1233	13.9	1458	14.6	1701	15.4	1965	16.3	2242	16.9	2580	17.4	3009	17.4	-----	-----	-----	-----

F46LPVPRO F46PVPRO	PRESSURE	NOZZLES 7/64"		NOZZLES 1/8"		NOZZLES 9/64"		NOZZLES 5/32"		NOZZLES 11/64"		NOZZLES 3/16"		NOZZLES 13/64"		NOZZLES 7/32"	
	(Bar)	L/H	R(m)	L/H	R(m)	L/H	R(m)	L/H (*)	R(m)	L/H	R(m)	L/H	R(m)	L/H	R(m)	L/H	R(m)
ONE NOZZLE, PLUG AND VANE TO HIGH RANGE	2.41	466	12.3	609	12.9	772	13.5	945	14.2	1140	14.7	1354	15.3	1601	15.9	1862	16.5
	2.76	497	12.6	652	13.6	827	14.3	1011	15.2	1220	15.8	1449	16.2	1715	16.6	1999	17.2
	3.10	527	12.8	693	13.7	877	14.5	1072	15.4	1295	16.0	1540	16.5	1817	17.1	2124	17.7
	3.45	556	13.0	731	13.9	924	14.6	1131	15.5	1365	16.2	1626	16.8	1919	17.4	2248	18.1
	3.79	584	13.1	768	14.0	970	14.8	1186	15.7	1431	16.3	1708	16.9	2010	17.7	2362	18.4
	4.14	609	13.3	802	14.2	1013	14.9	1238	15.8	1492	16.5	1783	17.1	2101	17.8	-----	-----
	4.48	634	13.4	836	14.3	1056	15.1	1290	16.0	1551	16.6	1858	17.2	-----	-----	-----	-----
	4.83	659	13.6	868	14.5	1097	15.2	1340	16.2	1610	16.8	1931	17.4	-----	-----	-----	-----
	5.17	681	13.7	899	14.6	1136	15.4	1388	16.3	1667	16.9	1999	17.5	-----	-----	-----	-----
	5.52	704	13.9	929	14.8	1174	15.5	1431	16.5	1722	17.1	2065	17.7	-----	-----	-----	-----

Data obtained under ideal test conditions. It can be affected by wind, bad hydraulic conditions or other adverse factors.
Highest point of the jet above the nozzle: 2.5 m (using standard nozzle 11 / 64 " and a pressure of 3.45 Bar)
Throw radius jets achieved with the 0.9m lift. Shaded areas not recommended.
(*) Standard Nozzle.

Due to the large number of possible combinations of nozzles, only the most common ones are represented.
To find information relating to other combinations , please advise factory.

L/H: Liters Per Minute
R(m): Throw Radius (meter)

F46L F46

WARRANTY AND EXCLUSIONS

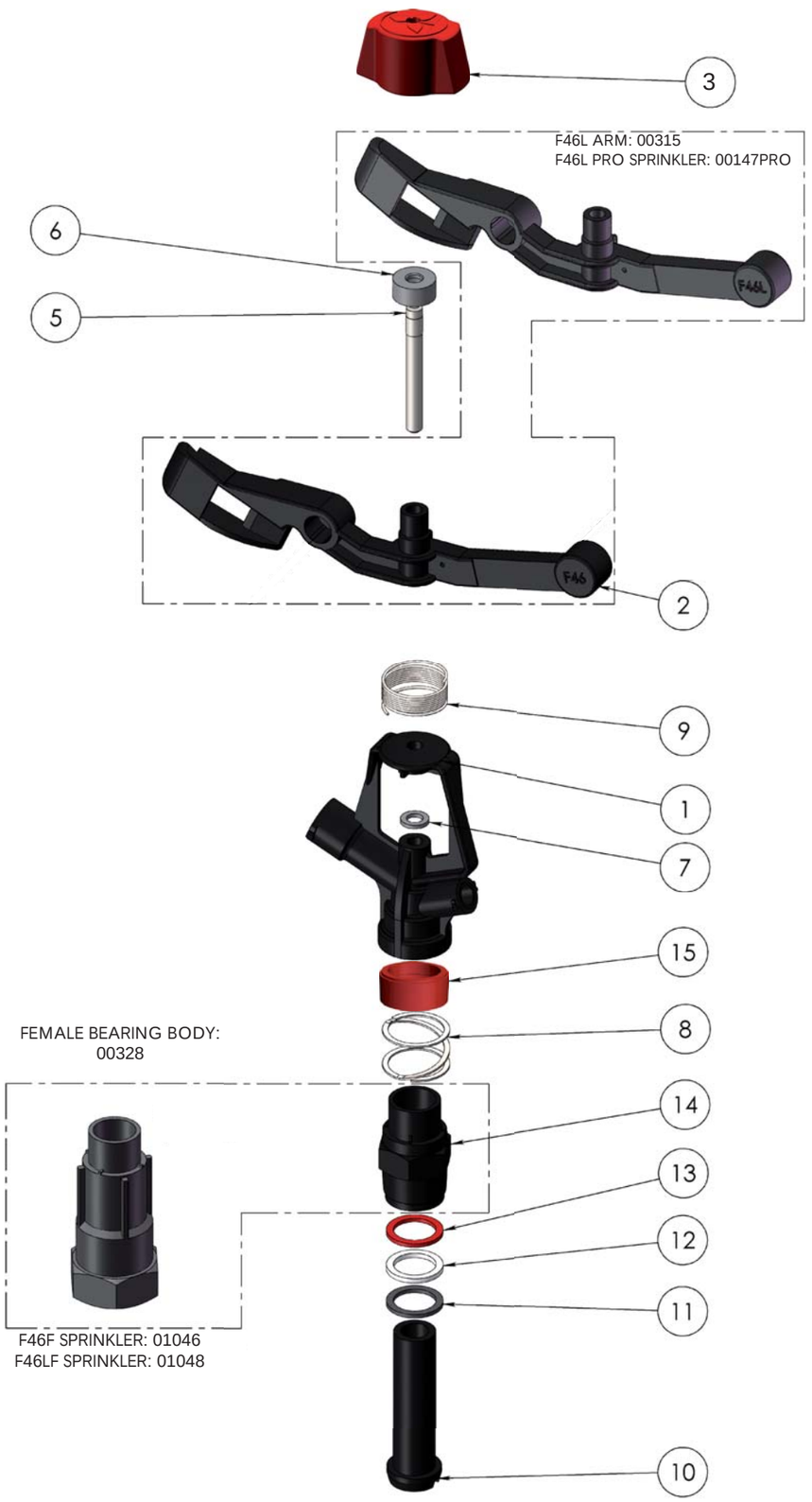
The manufacturer guarantees its products for direct customer against any defects in materials or manufacture for a period of two years from the original date of purchase, only when the products have been used under normal operating conditions. The manufacturer assumes no responsibility for installation, 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.

F46 PRO

ASSEMBLY



COMPONENT NUMBER	CODE	DESCRIPTION	MATERIAL	QUANTITY
1	00310	Sprinkler Body F46	POM	1
2	00311	Sprinkler Arm F46	POM	1
3	00318	Protective Cap	High Density PE	1
5	06163	Fulcrum Pin	Stainless Steel	1
6	06161	Swing Arm Cap	PE	1
7	06162	Swing Arm Support Washer	NBR	1
8	00018	Bearing Spring	Stainless Steel	1
9	06183	Arm Spring Series 3/4	Stainless Steel	1
10	00313	Bearing pin F46	POM	1
11	07459	Bearing Lower Washer	NBR	1
12	06736	Bearing Intermediate Washer	High Density PE	1
13	00252	Bearing Upper Washer	Anti Hydrolisis PU	1
14	00312	Bearing Body F46	POM	1
15	00256	Bearing Body Protective Cap	High Density PE	1

Notes

Process/Manufacturer Unirain *Assembly*	Size A3 Scale 1: 2	Material	Code 00146PRO Name F46 Sprinkler
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 WRITTING.	21/05/09 E.G.B.	unirain IRRIGATION PRODUCTS	

Unirain P45 - P45L

Part Circle Impact Sprinkler
Low and Medium Flow Plastic

Application

Suitable for general agricultural use. Compact in design, it includes a sand-proof bearing system and reinforcing ribs on the sprinkler body. High resistance and durability, made of plastics and treated against the UV radiation. It is a very versatile sprinkler because of its reversing system and clip which allow the sprinkler switch from part to full circle and vice versa. Ideal for areas bordering or near elements that should not get wet.

Advantages

- Sand-proof bearing system and reinforcing ribs on its body.
- Perfect iinterior finish
- Its exclusive reversing system is protected against sand and can be disassembled in seconds without any tools.
- It can be assembled with one or two nozzles. sprinkler body adapted to be coupled to 3Q/2Q bayonet nozzle as well as 3PRN/3PSN thread nozzles.
- Three different types of water guide vane can be used to achieve the desired coverage and spray balance according to the available system pressure.

Technical specifications

- Double purpose impact sprinkler: part circle ranging from 25º to 325º with 10º steps, or full circle.
- ¾" Male base thread
- MDual nozzle, main and secondary
- 23º nozzle trajectory angle.
- Pressure range: 1,38 - 5,52 Bar
- Nozzle range: 1/8" (3,18mm) - 1/4" (6,35mm).
- Made of acetal resin with UV-protection treatment.
- Fulcrum pin and springs made of stainless steel.
- Expanded fulcrum pin upper end diameter for a better fitting into the sprinkler body.
- Color-coded anti abrasive acetal resin nozzles carved in millimetres and inches for clear identification.
- Reverse system protected
- Female thread adapter made of fiber glass reinforced PA.

P45/P45L

P45F/P45LF

	Pressure (bar)	Nozzles	Vanes
HIGH	4.14	3PRN ó 3FCN	30 V
MEDIUM	2.76	3PRN ó 3FCN	WITHOUT VANE
LOW	2.10	3PRN	30RV
VERY LOW	1.38	3PRN	30BV

P45 P45L	PRESSURE	NOZZLES 1/8" + 3/32"		NOZZLES 9/64" + 3/32"		NOZZLES 5/32" + 3/32"		NOZZLES 11/64" + 3/32"		NOZZLES 3/16" + 3/32"		NOZZLES 3/16" + 1/8"		NOZZLES 13/64" + 1/8"		NOZZLES 7/32" + 1/8"	
	(Bar)	L/H	R(m)	L/H	R(m)	L/H (*)	R(m)	L/H	R(m)	L/H	R(m)	L/H	R(m)	L/H	R(m)	L/H	R(m)
TWO NOZZLES	1.38	723	11.6	849	11.9	979	12.4	1126	12.8	1285	13.2	1511	13.2	1697	13.7	1892	14.0
	1.72	806	11.9	949	12.3	1097	13.0	1261	13.4	1433	13.9	1681	13.9	1885	14.3	2101	14.8
	2.07	886	12.3	1040	13.0	1199	13.6	1379	14.0	1574	14.5	1851	14.5	2078	14.9	2317	15.4
	2.41	961	12.6	1124	13.3	1297	14.0	1492	14.5	1706	14.9	2005	14.9	2255	15.4	2521	15.8
	2.76	1029	12.8	1201	13.6	1388	14.3	1597	14.8	1824	15.2	2149	15.2	2419	15.7	2703	16.2
	3.10	1092	13.0	1274	13.7	1472	14.5	1694	15.1	1937	15.5	2283	15.5	2566	16.0	2873	16.5
	3.45	1151	13.1	1342	13.9	1549	14.6	1787	15.2	2044	15.8	2407	15.8	2703	16.3	3032	16.8
	3.79	1208	13.3	1408	14.0	1624	14.8	1874	15.4	2146	16.0	2521	16.0	2839	16.6	3180	17.1
	4.14	1263	13.4	1472	14.2	1697	14.9	1953	15.5	2239	16.2	2635	16.2	2953	16.8	3293	17.2
	4.48	1315	13.6	1533	14.3	1767	15.1	2028	15.7	2333	16.3	2748	16.3	3066	16.9	3407	17.4
	4.83	1365	13.7	1590	14.5	1835	15.2	2101	15.8	2421	16.5	2839	16.5	3180	17.1	3509	17.5
	5.17	1413	13.9	1647	14.6	1901	15.4	2171	16.0	2503	16.6	2930	16.6	3271	17.2	3611	17.7
	5.52	1458	14.0	1701	14.8	1965	15.5	2242	16.2	2580	16.8	3009	16.8	3361	17.4	3702	17.8

P45P P45LP	PRESSURE	NOZZLES 1/8"		NOZZLES 9/64"		NOZZLES 5/32"		NOZZLES 11/64"		NOZZLES 3/16"		NOZZLES 13/64"		NOZZLES 7/32"		NOZZLES 15/64"		NOZZLES 1/4"	
	(Bar)	L/H	R(m)	L/H	R(m)	L/H (*)	R(m)	L/H	R(m)	L/H	R(m)	L/H	R(m)	L/H	R(m)	L/H	R(m)	L/H	R(m)
ONE NOZZLE AND PLUG	1.38			585	11.9	714	12.6	855	13.1	1013	13.5	1200	13.6	1397	13.8	1584	13.9	1806	14.0
	1.72			654	12.3	799	13.0	963	13.4	1136	13.9	1340	13.9	1556	14.2	1772	14.3	2021	14.5
	2.07			715	13.0	874	13.6	1054	14.0	1249	14.5	1476	14.9	1715	15.2	1953	15.4	2226	15.5
	2.41	609	12.6	772	13.3	945	14.0	1140	14.5	1354	14.9	1601	15.4	1862	15.8	2112	16.0	2407	16.2
	2.76	652	12.8	827	13.6	1011	14.3	1220	14.8	1449	15.2	1715	15.7	1999	16.2	2271	16.3	2589	16.6
	3.10	693	13.0	877	13.7	1072	14.5	1295	15.1	1540	15.5	1817	16.0	2124	16.5	2407	16.8	2748	17.1
	3.45	731	13.1	924	13.9	1131	14.6	1365	15.2	1626	15.8	1919	16.3	2248	16.8	2544	17.1	2907	17.4
	3.79	768	13.3	970	14.0	1186	14.8	1431	15.4	1708	16.0	2010	16.6	2362	17.1	2657	17.4	3043	17.7
	4.14	802	13.4	1013	14.2	1238	14.9	1492	15.5	1783	16.2	2101	16.8	2442	17.2	2771	17.7	3157	18.0
	4.48	836	13.6	1056	14.3	1290	15.1	1551	15.7	1858	16.3	2180	16.9	2521	17.4	2884	17.8	3293	18.3
	4.83	868	13.7	1097	14.5	1340	15.2	1610	15.8	1931	16.5	2260	17.1	2589	17.5	2998	18.0	3407	18.4
	5.17	899	13.9	1136	14.6	1388	15.4	1667	16.0	1999	16.6	2328	17.2	2657	17.7	3089	18.1		
	5.52	929	14.0	1174	14.8	1431	15.5	1722	16.2	2065	16.8	2385	17.4	2725	17.8				

P45V P45LV	PRESSURE	NOZZLES 1/8" + 3/32"		NOZZLES 9/64" + 3/32"		NOZZLES 5/32" + 3/32"		NOZZLES 11/64" + 3/32"		NOZZLES 3/16" + 3/32"		NOZZLES 3/16" + 1/8"		NOZZLES 13/64" + 1/8"		NOZZLES 7/32" + 1/8"	
	(Bar)	L/H	R(m)	L/H	R(m)	L/H (*)	R(m)	L/H	R(m)	L/H	R(m)	L/H	R(m)	L/H	R(m)	L/H	R(m)
TWO NOZZLES AND VANE TO HIGH RANGE	2.41	961	12.9	1124	13.5	1297	14.2	1492	14.7	1706	15.3	2005	15.3	2255	15.9	2521	16.5
	2.76	1029	13.4	1201	14.2	1388	15.1	1597	15.5	1824	16.0	2149	16.0	2419	16.5	2703	16.9
	3.10	1092	13.6	1274	14.3	1472	15.2	1694	15.8	1937	16.3	2283	16.3	2566	16.8	2873	17.4
	3.45	1151	13.7	1342	14.5	1549	15.4	1787	16.0	2044	16.5	2407	16.5	2703	17.1	3032	17.8
	3.79	1208	13.9	1408	14.6	1624	15.5	1874	16.2	2146	16.6	2521	16.6	2839	17.4	3180	18.1
	4.14	1263	14.0	1472	14.8	1697	15.7	1953	16.3	2239	16.8	2635	16.8	2953	17.5	3293	18.4
	4.48	1315	14.2	1533	14.9	1767	15.8	2028	16.5	2333	16.9	2748	16.9	3066	17.7	3407	18.6
	4.83	1365	14.3	1590	15.1	1835	16.0	2101	16.6	2421	17.1	2839	17.1	3180	17.8	3509	18.7
	5.17	1413	14.5	1647	15.2	1901	16.2	2171	16.8	2503	17.2	2930	17.2	3271	18.0	3611	18.9
	5.52	1458	14.6	1701	15.4	1965	16.3	2242	16.9	2580	17.4	3009	17.4	3361	18.1	3702	19.1

P45PV P45PLV	PRESSURE	NOZZLES 1/8"		NOZZLES 9/64"		NOZZLES 5/32"		NOZZLES 11/64"		NOZZLES 3/16"		NOZZLES 13/64"		NOZZLES 7/32"		NOZZLES 15/64"		NOZZLES 1/4"	
	(Bar)	L/H	R(m)	L/H	R(m)	L/H (*)	R(m)	L/H	R(m)	L/H	R(m)	L/H	R(m)	L/H	R(m)	L/H	R(m)	L/H	R(m)
ONE NOZZLE, PLUG AND VANE TO HIGH RANGE	2.41	609	13.4	772	14.1	945	15.0	1140	15.5	1354	15.9	1601	16.3	1862	16.7	2112	16.9	2407	17.5
	2.76	652	13.6	827	14.3	1011	15.2	1220	15.7	1449	16.2	1715	16.6	1999	17.1	2271	17.5	2589	18.1
	3.10	693	13.7	877	14.5	1072	15.4	1295	16.0	1540	16.5	1817	16.9	2124	17.7	2407	18.1	2748	18.7
	3.45	731	13.9	924	14.6	1131	15.5	1365	16.2	1626	16.8	1919	17.2	2248	18.1	2544	18.6	2907	19.2
	3.79	768	14.0	970	14.8	1186	15.7	1431	16.3	1708	16.9	2010	17.5	2362	18.4	2657	18.9	3043	19.5
	4.14	802	14.2	1013	14.9	1238	15.8	1492	16.5	1783	17.1	2101	17.7	2442	18.7	2771	19.2	3157	19.8
	4.48	836	14.3	1056	15.1	1290	16.0	1551	16.6	1858	17.2	2180	17.8	2521	18.9	2884	19.5	3293	20.1
	4.83	868	14.5	1097	15.2	1340	16.2	1610	16.8	1931	17.4	2260	18.0	2589	19.1	2998	19.8	3407	20.4
	5.17	899	14.6	1136	15.4	1388	16.3	1667	16.9	1999	17.5	2328	18.1	2657	19.2	3089	20.0		
	5.52	929	14.8	1174	15.5	1431	16.5	1722	17.1	2065	17.7	2385	18.3	2725	19.4				

Data obtained under ideal test conditions. It can be affected by wind, bad hydraulic conditions or other adverse factors.
Highest point of the jet above the nozzle: 2.5 m (using standard nozzle 5/32 " and a pressure of 3.45 Bar)
Throw radius jets achieved with the 0.9m lift. Shaded areas not recommended.
(*) Standard Nozzle.

Due to the large number of possible combinations of nozzles, only the most common ones are represented.
To find information relating to other combinations , please advise factory.

L/H: Liters Per Minute
R(m): Throw Radius (meter)

P45L P45

WARRANTY AND EXCLUSIONS

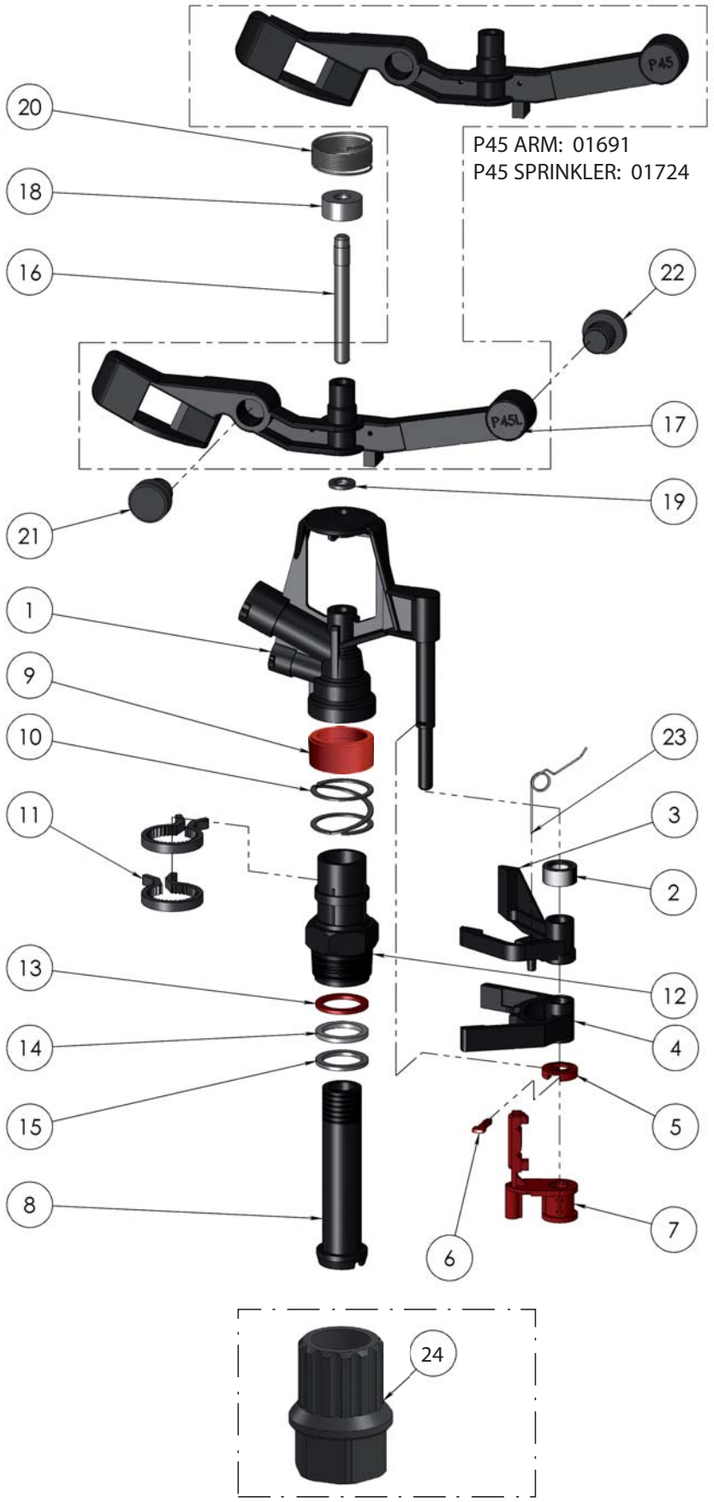
The manufacturer guarantees its products for direct customer against any defects in materials or manufacture for a period of two years from the original date of purchase, only when the products have been used under normal operating conditions. The manufacturer assumes no responsibility for installation, 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.

P45

ASSEMBLY



COMPONENT NUMBER	CODE	DESCRIPTION	MATERIAL	QUANTITY
1	01681	Sprinkler Body P45	POM	1
2	01695	Reversing Cap	High Density PE	1
3	01685	Upper Yoke	POM	1
4	01686	Lower Yoke	POM	1
5	01688	Pin Washer	POM	1
6	01689	Pin	POM	1
7	01690	Inverter Latch	POM	1
8	06517	Bearing Pin P45 / F44	POM	1
9	00256	Bearing Body Lock	High Density PE	1
10	00018	Bearing Spring	Stainless Steel	1
11	01684	Cogged Sector	POM	2
12	01683	Bearing Body P45	POM	1
13	00252	Bearing Upper Washer	Anti Hydrolisis PU	1
14	06736	Bearing Intermediate Washer	High Density PE	1
15	07459	Bearing Lower Washer	NBR	1
16	06163	Fulcrum Pin	Stainless Steel	1
17	01692	Sprinkler Arm P45L	POM	1
18	06161	Swing Arm Cap	PE	1
19	06162	Arm Support Washer	NBR	1
20	06183	Series Arm Spring 3/4"	Stainless Steel	1
21	00314	Front Counterweight	ZAMAK	1
22	00316	Back Counterweight	ZAMAK	1
23	01687	Reversing Spring	Stainless Steel	1
24	70603	3/4" F-F Coupling	PA66 + Fiber glass	1

Process/Manufacturer: UNIRAIN	Size: A3	Material:	Code: 01725
	Scale: 1:2	Name: P45L Sprinkler	
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 WRITTING.	26/06/09 E.G.B.	unirain IRRIGATION PRODUCTS	

Unirain P45 - P45L PROTECTED

Part Circle Impact Sprinkler
Low and Medium Flow Plastic

Application

Suitable for general agricultural use. Compact in design, it includes a sand-proof bearing system and reinforcing ribs on the sprinkler body. High resistance and durability, made of plastics and treated against the UV radiation. It is a very versatile sprinkler because of its reversing system and clip which allow the sprinkler switch from part to full circle and vice versa. Ideal for areas bordering or near elements that should not get wet.

There are 2 key differences from F45: absence of counterweights in the arm and protection of the most sensitive areas of the sprinkler, making it more robust and durable.

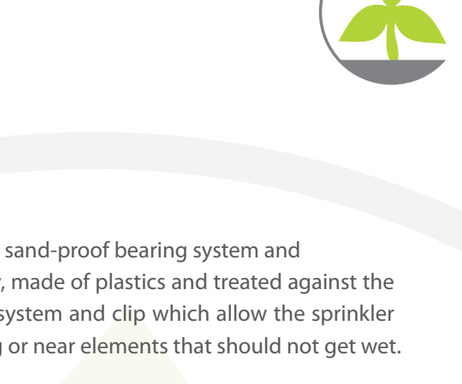
Advantages

- Maximum protection of the spring against impacts , dirt, foreign bodies, insects and animals, frost ...
- Increased frequency / speed of arm swing, improving irrigation uniformity.
- Sand-proof bearing system and reinforcing ribs on its body.
- Perfect inner finish
- Its exclusive reversing system is protected against sand and can be disassembled in seconds without any tools.
- It can be assembled with one or two nozzles. Sprinkler body adapted to be coupled to 3Q/2Q bayonet nozzle as well as 3PRN/3PSN thread nozzle.
- Three different types of water guide vane can be used to achieve the desired coverage and spray balance according to the available water pressure.

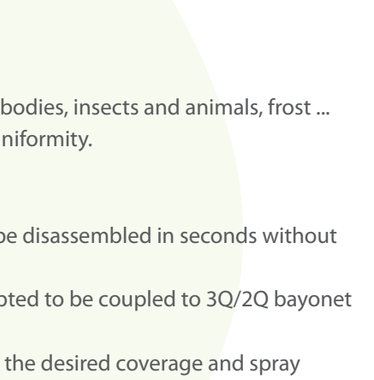
Technical specifications

- Double purpose impact sprinkler: part circle ranging from 25º to 325º with 10º steps, or full circle.
- ¾" Male base thread
- Dual nozzles, Main and secondary.
- 23º nozzle trajectory angle.
- Pressure range: 1,38 - 5,52 Bar
- Nozzle range: 1/8" (3,18mm) - 1/4" (6,35mm)
- made of acetal resin with UV-protection treatment.
- Body and spring protective cap made of HDPE.
- Protective backturn lock for bearing made of HDPE between the sprinkler body and the compression spring.
- Fulcrum pin and springs made of stainless steel.
- Expanded fulcrum,pin upper end diameter for a better fitting into the sprinkler body.
- Color-coded anti abrasive acetal resin nozzles carved in millimetres and inches for a clear identification.
- Reversing system protected.
- Female thread adapter made of fiber glass reinforced PA.

	Pressure (bar)	Nozzles	Vanes
HIGH	4.14	3PRN ó 3FCN	30 V
MEDIUM	2.76	3PRN ó 3FCN	WITHOUT VANE
LOW	2.10	3PRN	30RV
VERY LOW	1.38	3PRN	30BV



P45PRO/P45LPRO



P45FPRO/P45LFPRO

TECHNICAL SHEET1303

P45PRO P45LPRO	PRESSURE	NOZZLES 1/8" + 3/32"		NOZZLES 9/64" + 3/32"		NOZZLES 5/32" + 3/32"		NOZZLES 11/64" + 3/32"		NOZZLES 3/16" + 3/32"		NOZZLES 3/16" + 1/8"		NOZZLES 13/64" + 1/8"		NOZZLES 7/32" + 1/8"	
	(Bar)	L/H	R(m)	L/H	R(m)	L/H (*)	R(m)	L/H	R(m)	L/H	R(m)	L/H	R(m)	L/H	R(m)	L/H	R(m)
TWO NOZZLES	1.38	723	11.6	849	11.9	979	12.4	1126	12.8	1285	13.2	1511	13.2	1697	13.7	1892	14.0
	1.72	806	11.9	949	12.3	1097	13.0	1261	13.4	1433	13.9	1681	13.9	1885	14.3	2101	14.8
	2.07	886	12.3	1040	13.0	1199	13.6	1379	14.0	1574	14.5	1851	14.5	2078	14.9	2317	15.4
	2.41	961	12.6	1124	13.3	1297	14.0	1492	14.5	1706	14.9	2005	14.9	2255	15.4	2521	15.8
	2.76	1029	12.8	1201	13.6	1388	14.3	1597	14.8	1824	15.2	2149	15.2	2419	15.7	2703	16.2
	3.10	1092	13.0	1274	13.7	1472	14.5	1694	15.1	1937	15.5	2283	15.5	2566	16.0	2873	16.5
	3.45	1151	13.1	1342	13.9	1549	14.6	1787	15.2	2044	15.8	2407	15.8	2703	16.3	3032	16.8
	3.79	1208	13.3	1408	14.0	1624	14.8	1874	15.4	2146	16.0	2521	16.0	2839	16.6	3180	17.1
	4.14	1263	13.4	1472	14.2	1697	14.9	1953	15.5	2239	16.2	2635	16.2	2953	16.8	3293	17.2
	4.48	1315	13.6	1533	14.3	1767	15.1	2028	15.7	2333	16.3	2748	16.3	3066	16.9		
	4.83	1365	13.7	1590	14.5	1835	15.2	2101	15.8	2421	16.5	2839	16.5	3180	17.1		
	5.17	1413	13.9	1647	14.6	1901	15.4	2171	16.0	2503	16.6	2930	16.6				
	5.52	1458	14.0	1701	14.8	1965	15.5	2242	16.2	2580	16.8	3009	16.8				

P45PPRO P45LPPRO	PRESSURE	NOZZLES 1/8"		NOZZLES 9/64"		NOZZLES 5/32"		NOZZLES 11/64"		NOZZLES 3/16"		NOZZLES 13/64"		NOZZLES 7/32"		NOZZLES 15/64"		NOZZLES 1/4"	
	(Bar)	L/H	R(m)	L/H	R(m)	L/H (*)	R(m)	L/H	R(m)	L/H	R(m)	L/H	R(m)	L/H	R(m)	L/H	R(m)	L/H	R(m)
ONE NOZZLE AND PLUG	1.38			585	11.9	714	12.6	855	13.1	1013	13.5	1200	13.6	1397	13.8	1584	13.9	1806	14.0
	1.72			654	12.3	799	13.0	963	13.4	1136	13.9	1340	13.9	1556	14.2	1772	14.3	2021	14.5
	2.07			715	13.0	874	13.6	1054	14.0	1249	14.5	1476	14.9	1715	15.2	1953	15.4	2226	15.5
	2.41	609	12.6	772	13.3	945	14.0	1140	14.5	1354	14.9	1601	15.4	1862	15.8	2112	16.0	2407	16.2
	2.76	652	12.8	827	13.6	1011	14.3	1220	14.8	1449	15.2	1715	15.7	1999	16.2	2271	16.3	2589	16.6
	3.10	693	13.0	877	13.7	1072	14.5	1295	15.1	1540	15.5	1817	16.0	2124	16.5	2407	16.8	2748	17.1
	3.45	731	13.1	924	13.9	1131	14.6	1365	15.2	1626	15.8	1919	16.3	2248	16.8	2544	17.1	2907	17.4
	3.79	768	13.3	970	14.0	1186	14.8	1431	15.4	1708	16.0	2010	16.6	2362	17.1	2657	17.4	3043	17.7
	4.14	802	13.4	1013	14.2	1238	14.9	1492	15.5	1783	16.2	2101	16.8	2442	17.2	2771	17.7	3157	18.0
	4.48	836	13.6	1056	14.3	1290	15.1	1551	15.7	1858	16.3	2180	16.9	2521	17.4	2884	17.8	3293	18.3
	4.83	868	13.7	1097	14.5	1340	15.2	1610	15.8	1931	16.5	2260	17.1	2589	17.5	2998	18.0	3407	18.4
	5.17	899	13.9	1136	14.6	1388	15.4	1667	16.0	1999	16.6	2328	17.2	2657	17.7	3089	18.1		
	5.52	929	14.0	1174	14.8	1431	15.5	1722	16.2	2065	16.8	2385	17.4	2725	17.8				

P45VPRO P45LVPRO	PRESSURE	NOZZLES 1/8" + 3/32"		NOZZLES 9/64" + 3/32"		NOZZLES 5/32" + 3/32"		NOZZLES 11/64" + 3/32"		NOZZLES 3/16" + 3/32"		NOZZLES 3/16" + 1/8"		NOZZLES 13/64" + 1/8"		NOZZLES 7/32" + 1/8"	
	(Bar)	L/H	R(m)	L/H	R(m)	L/H (*)	R(m)	L/H	R(m)	L/H	R(m)	L/H	R(m)	L/H	R(m)	L/H	R(m)
TWO NOZZLES AND VANE TO HIGH RANGE	2.41	961	12.9	1124	13.5	1297	14.2	1492	14.7	1706	15.3	2005	15.3	2255	15.9	2521	16.5
	2.76	1029	13.4	1201	14.2	1388	15.1	1597	15.5	1824	16.0	2149	16.0	2419	16.5	2703	16.9
	3.10	1092	13.6	1274	14.3	1472	15.2	1694	15.8	1937	16.3	2283	16.3	2566	16.8	2873	17.4
	3.45	1151	13.7	1342	14.5	1549	15.4	1787	16.0	2044	16.5	2407	16.5	2703	17.1	3032	17.8
	3.79	1208	13.9	1408	14.6	1624	15.5	1874	16.2	2146	16.6	2521	16.6	2839	17.4	3180	18.1
	4.14	1263	14.0	1472	14.8	1697	15.7	1953	16.3	2239	16.8	2635	16.8	2953	17.5	3293	
	4.48	1315	14.2	1533	14.9	1767	15.8	2028	16.5	2333	16.9	2748	16.9				
	4.83	1365	14.3	1590	15.1	1835	16.0	2101	16.6	2421	17.1	2839	17.1				
	5.17	1413	14.5	1647	15.2	1901	16.2	2171	16.8	2503	17.2	2930	17.2				
	5.52	1458	14.6	1701	15.4	1965	16.3	2242	16.9	2580	17.4	3009	17.4				

P45PVPRO P45PLVPRO	PRESSURE	NOZZLES 1/8"		NOZZLES 9/64"		NOZZLES 5/32"		NOZZLES 11/64"		NOZZLES 3/16"		NOZZLES 13/64"		NOZZLES 7/32"		NOZZLES 15/64"		NOZZLES 1/4"	
	(Bar)	L/H	R(m)	L/H	R(m)	L/H (*)	R(m)	L/H	R(m)	L/H	R(m)	L/H	R(m)	L/H	R(m)	L/H	R(m)	L/H	R(m)
ONE NOZZLE, PLUG AND VANE TO HIGH RANGE	2.41	609	13.4	772	14.1	945	15.0	1140	15.5	1354	15.9	1601	16.3	1862	16.7	2112	16.9	2407	17.5
	2.76	652	13.6	827	14.3	1011	15.2	1220	15.7	1449	16.2	1715	16.6	1999	17.1	2271	17.5	2589	18.1
	3.10	693	13.7	877	14.5	1072	15.4	1295	16.0	1540	16.5	1817	16.9	2124	17.7	2407	18.1	2748	18.7
	3.45	731	13.9	924	14.6	1131	15.5	1365	16.2	1626	16.8	1919	17.2	2248	18.1	2544	18.6	2907	19.2
	3.79	768	14.0	970	14.8	1186	15.7	1431	16.3	1708	16.9	2010	17.5	2362	18.4	2657	18.9	3043	19.5
	4.14	802	14.2	1013	14.9	1238	15.8	1492	16.5	1783	17.1	2101	17.7	2442	18.7	2771	19.2	3157	19.8
	4.48	836	14.3	1056	15.1	1290	16.0	1551	16.6	1858	17.2	2180	17.8	2521	18.9	2884	19.5	3293	20.1
	4.83	868	14.5	1097	15.2	1340	16.2	1610	16.8	1931	17.4	2260	18.0	2589	19.1	2998	19.8	3407	20.4
	5.17	899	14.6	1136	15.4	1388	16.3	1667	16.9	1999	17.5	2328	18.1	2657	19.2	3089	20.0		
	5.52	929	14.8	1174	15.5	1431	16.5	1722	17.1	2065	17.7	2385	18.3	2725	19.4				

Data obtained under ideal test conditions. It can be affected by wind, bad hydraulic conditions or other adverse factors.
Highest point of the jet above the nozzle: 2.5 m (using standard nozzle 5/32 " and a pressure of 3.45 Bar)
Throw radius jets achieved with the 0.9m lift. Shaded areas not recommended.
(*) Standard Nozzle.

L/H: Liters Per Minute
R(m): Throw Radius (meter)

Due to the large number of possible combinations of nozzles, only the most common ones are represented.
To find information relating to other combinations , please advise factory.

P45L P45

WARRANTY AND EXCLUSIONS

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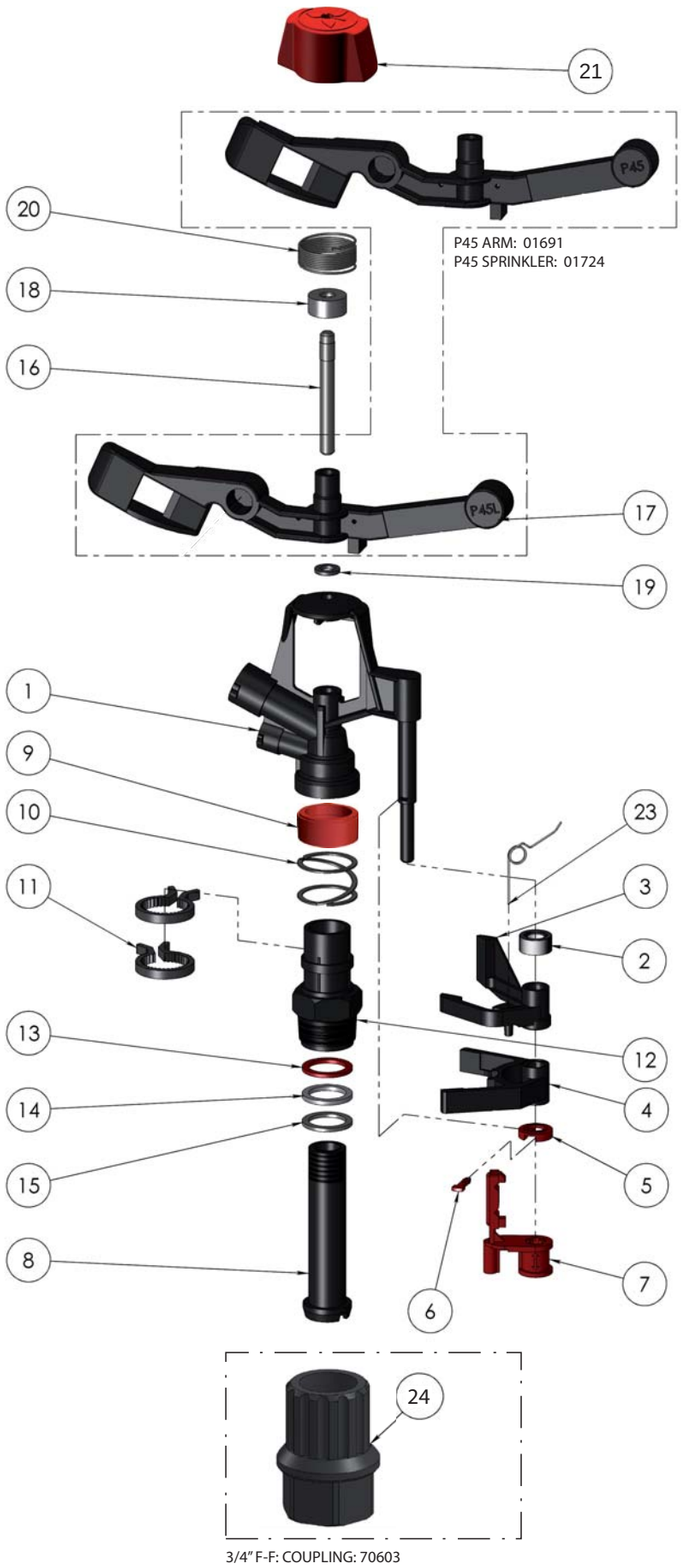
P45 PRO

ASSEMBLY



COMPONENT NUMBER	CODE	DESCRIPTION	MATERIAL	QUANTITY
1	01681	Sprinkler Body P45	POM	1
2	01695	Reversing Cap	High Density PE	1
3	01685	Upper Yoke	POM	1
4	01686	Lower Yoke	POM	1
5	01688	Pin Washer	POM	1
6	01689	Pin	POM	1
7	01690	Reversing Latch	POM	1
8	06517	Bearing Pin P45 / F44	POM	1
9	00256	Protective Bearing Body Lock	High Density PE	1
10	00018	Bearing Spring	Stainless Steel	1
11	01684	Cogged Sector	POM	2
12	01683	Bearing Body P45	POM	1
13	00252	Bearing Upper Washer	Anti Hydrolisis PU	1
14	06736	Bearing Intermediate Washer	High Density PE	1
15	07459	Bearing Lower Washer	NBR	1
16	06163	Fulcrum Pin	Stainless Steel	1
17	01692	Sprinkler Arm P45L	POM	1
18	06161	Swing Arm Hat	PE	1
19	06162	Swing Arm Support Washer	NBR	1
20	06183	Series Arm Spring 3/4"	Stainless Steel	1
21	00318	Protective Cap	High Density PE	1
23	01687	Protective Spring	Stainless Steel	1
24	70603	3/4" F-F Coupling	PA66 + Fiber Glass	1

Process/Manufacturer: UNIRAIN	Size: A3	Material:	Code: 01725PRO
	Scale: 1:2	Name: P45/45L Sprinkler	
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