

Unirain F46L- F46 PROTECTED

Full Circle Impact Sprinkler
Low and Medium flow Plastic



Application

Like 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.
- 3/4" base thread male or female(F46F)
- Dual nozzle, Main and secondary nozzle
- 23° nozzle trajectory angle
- Pressure range: 20-80 PSI
- Nozzle range: 7/64"-7/32"
- 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 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.
- Bearing body protective cap made of HDPE between the sprinkler body and the compression spring.
- F46L (Low pressure model)



F46PRO

F46FPRO

	Pressure (psi)	Nozzles	Vanes
HIGH	60	3PRN 6 3FCN	30 V
MEDIUM	40	3PRN 6 3FCN	WITHOUT VANE
LOW	30	3PRN	30RV
VERY LOW	20	3PRN	30BV

F46LPRO F46FPRO	PRESSURE (PSI)	NOZZLES 7/64" + 3/32" GPM R(ft)	NOZZLES 1/8" + 3/32" GPM R(ft)	NOZZLES 9/64" + 3/32" GPM R(ft)	NOZZLES 5/32" + 3/32" GPM (+) R(ft)	NOZZLES 11/64" + 3/32" GPM R(ft)	NOZZLES 3/16" + 3/32" GPM R(ft)	NOZZLES 3/16" + 1/8" GPM R(ft)	NOZZLES 13/64" + 1/8" GPM R(ft)	NOZZLES 7/32" + 1/8" GPM R(ft)
TWO NOZZLES	20	2.71 37.1	3.18 38.1	3.74 39.0	4.31 40.7	4.96 42.0	5.66 43.3	6.65 45.3	7.47 44.9	8.33 45.9
	25	3.03 38.1	3.55 39.0	4.18 40.4	4.83 42.7	5.55 44.0	6.31 45.6	7.40 45.6	8.30 46.9	9.25 48.6
	30	3.32 38.4	3.90 40.4	4.58 42.7	5.28 44.6	6.07 45.9	6.93 47.6	8.15 47.6	9.15 48.9	10.20 50.5
	35	3.60 39.0	4.23 41.3	4.95 43.6	5.71 45.9	6.57 47.6	7.51 48.9	8.83 48.9	9.93 50.5	11.10 51.8
	40	3.85 39.4	4.53 42.0	5.29 44.6	6.11 46.9	7.03 48.6	8.03 49.9	9.46 49.9	10.65 51.5	11.90 53.1
	45	4.08 40.0	4.81 42.7	5.61 44.9	6.48 47.6	7.46 49.5	8.53 50.9	10.05 50.9	11.30 52.5	12.65 54.1
	50	4.30 40.4	5.07 43.0	5.91 45.6	6.82 47.9	7.87 49.9	9.00 51.8	10.60 51.8	11.90 53.5	13.35 55.1
	55	4.51 41.0	5.32 43.6	6.20 45.9	7.15 48.6	8.25 50.5	9.45 52.5	11.10 52.5	12.50 54.5	14.00 56.1
	60	4.71 41.3	5.56 44.0	6.48 46.6	7.47 48.9	8.60 50.9	9.86 53.1	11.60 53.1	13.00 55.1	14.50 56.4
	65	4.90 42.0	5.79 44.6	6.75 46.9	7.78 49.5	8.93 51.5	10.27 53.5	12.10 53.5	13.50 55.4	-----
	70	5.09 42.7	6.01 44.9	7.00 47.6	8.08 49.9	9.25 51.8	10.66 54.1	12.50 54.1	14.00 56.1	-----
75	5.26 43.0	6.22 45.6	7.25 47.9	8.37 50.5	9.56 52.5	11.02 54.5	12.90 54.5	-----	-----	
80	5.43 43.0	6.42 45.9	7.49 48.6	8.65 50.9	9.87 53.1	11.36 55.1	13.25 55.1	-----	-----	

F46LPPRO F46FPRO	PRESSURE (PSI)	NOZZLES 7/64" GPM R(ft)	NOZZLES 1/8" GPM R(ft)	NOZZLES 9/64" GPM R(ft)	NOZZLES 5/32" (+) GPM R(ft)	NOZZLES 11/64" GPM R(ft)	NOZZLES 3/16" GPM R(ft)	NOZZLES 13/64" GPM R(ft)	NOZZLES 7/32" GPM R(ft)
ONE NOZZLE AND PLUG	20	1.54 37.1	2.02 38.1	2.57 39.0	3.14 40.7	3.79 42.0	4.49 43.3	5.31 44.9	6.16 45.9
	25	1.73 38.1	2.25 39.0	2.88 40.4	3.52 42.7	4.24 44.0	5.00 45.6	5.90 46.9	6.85 48.6
	30	1.89 38.4	2.47 40.4	3.15 42.7	3.85 44.6	4.64 45.9	5.50 47.6	6.50 48.9	7.55 50.5
	35	2.05 39.0	2.68 41.3	3.40 43.6	4.16 45.9	5.02 47.6	5.96 48.9	7.05 50.5	8.20 51.8
	40	2.19 39.4	2.87 42.0	3.64 44.6	4.45 46.9	5.37 48.6	6.38 49.9	7.55 51.5	8.80 53.1
	45	2.32 40.0	3.05 42.7	3.86 44.9	4.72 47.6	5.70 49.5	6.78 50.9	8.00 52.5	9.35 54.1
	50	2.45 40.4	3.22 43.0	4.07 44.9	4.98 47.9	6.01 49.9	7.16 51.8	8.45 53.5	9.90 55.1
	55	2.57 41.0	3.38 43.6	4.27 45.9	5.22 48.6	6.30 50.5	7.52 52.5	8.85 54.5	10.40 56.1
	60	2.68 41.3	3.53 44.0	4.46 46.6	5.45 48.9	6.57 50.9	7.85 53.1	9.25 55.1	10.75 56.4
	65	2.79 42.0	3.68 44.6	4.65 46.9	5.68 49.5	6.83 51.5	8.18 53.5	9.60 55.4	-----
	70	2.90 42.7	3.82 44.9	4.83 47.6	5.90 49.9	7.09 51.8	8.50 54.1	9.95 56.1	-----
75	3.00 43.0	3.96 45.6	5.00 47.9	6.11 50.5	7.34 52.5	8.80 54.5	-----	-----	
80	3.10 43.0	4.09 45.9	5.17 48.6	6.30 50.9	7.58 53.1	9.09 55.1	-----	-----	

F46LVPRO F46FPRO	PRESSURE (PSI)	NOZZLES 7/64" + 3/32" GPM R(ft)	NOZZLES 1/8" + 3/32" GPM R(ft)	NOZZLES 9/64" + 3/32" GPM R(ft)	NOZZLES 5/32" + 3/32" GPM (+) R(ft)	NOZZLES 11/64" + 3/32" GPM R(ft)	NOZZLES 3/16" + 3/32" GPM R(ft)	NOZZLES 3/16" + 1/8" GPM R(ft)	NOZZLES 13/64" + 1/8" GPM R(ft)	NOZZLES 7/32" + 1/8" GPM R(ft)
TWO NOZZLES, AND VANE TO HIGH RANGE	35	3.60 40.4	4.23 42.3	4.95 44.3	5.71 46.6	6.57 48.2	7.51 50.2	8.83 50.2	9.93 52.2	11.10 54.1
	40	3.85 41.3	4.53 44.0	5.29 46.6	6.11 49.5	7.03 50.9	8.03 52.5	9.46 52.5	10.65 54.1	11.90 55.4
	45	4.08 42.0	4.81 44.6	5.61 46.9	6.48 49.9	7.46 51.8	8.53 53.5	10.05 53.5	11.30 55.1	12.65 57.1
	50	4.30 42.7	5.07 44.9	5.91 47.6	6.82 50.5	7.87 52.5	9.00 54.1	10.60 54.1	11.90 56.1	13.35 58.4
	55	4.51 43.0	5.32 45.6	6.20 47.6	7.15 50.9	8.25 53.1	9.45 54.5	11.10 54.5	12.50 57.1	14.00 59.4
	60	4.71 43.6	5.56 45.9	6.48 48.6	7.47 51.5	8.60 53.5	9.86 55.1	11.60 55.1	13.00 57.4	-----
	65	4.90 44.0	5.79 46.6	6.75 48.9	7.78 51.8	8.93 54.1	10.27 55.4	12.10 55.4	-----	-----
	70	5.09 44.6	6.01 46.9	7.00 49.5	8.08 52.5	9.25 54.5	10.66 56.1	12.50 56.1	-----	-----
	75	5.26 44.9	6.22 47.6	7.25 49.9	8.37 53.1	9.56 55.1	11.02 56.4	12.90 56.4	-----	-----
	80	5.43 45.6	6.42 47.9	7.49 50.5	8.65 53.5	9.87 55.4	11.36 57.1	13.25 57.1	-----	-----

F46LPVPRO F46FVPRO	PRESSURE (PSI)	NOZZLES 7/64" GPM R(ft)	NOZZLES 1/8" GPM R(ft)	NOZZLES 9/64" GPM R(ft)	NOZZLES 5/32" (+) GPM R(ft)	NOZZLES 11/64" GPM R(ft)	NOZZLES 3/16" GPM R(ft)	NOZZLES 13/64" GPM R(ft)	NOZZLES 7/32" GPM R(ft)
ONE NOZZLE, PLUG AND VANE TO HIGH RANGE	35	2.05 40.4	2.68 42.3	3.40 44.3	4.16 46.6	5.02 48.2	5.96 50.2	7.05 52.2	8.20 54.1
	40	2.19 41.3	2.87 44.0	3.64 46.6	4.45 49.5	5.37 50.9	6.38 52.5	7.55 54.1	8.80 55.4
	45	2.32 42.0	3.05 44.6	3.86 46.9	4.72 49.9	5.70 51.8	6.78 53.5	8.00 55.1	9.35 57.1
	50	2.45 42.7	3.22 44.9	4.07 47.6	4.98 50.5	6.01 52.5	7.16 54.1	8.45 56.1	9.90 58.4
	55	2.57 43.0	3.38 45.6	4.27 47.9	5.22 50.9	6.30 53.1	7.52 54.5	8.85 57.1	10.40 59.4
	60	2.68 43.6	3.53 45.9	4.46 48.6	5.45 51.5	6.57 53.5	7.85 55.1	9.25 57.4	-----
	65	2.79 44.0	3.68 46.6	4.65 48.9	5.68 51.8	6.83 54.1	8.18 55.4	-----	-----
	70	2.90 44.6	3.82 46.9	4.83 49.5	5.90 52.5	7.09 54.5	8.50 56.1	-----	-----
	75	3.00 44.9	3.96 47.6	5.00 49.9	6.11 53.1	7.34 55.1	8.80 56.4	-----	-----
	80	3.10 45.6	4.09 47.9	5.17 50.5	6.30 53.5	7.58 55.4	9.09 57.1	-----	-----

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" to 35.2 MCA)
Throw radius achieved with the 0.9m lift. Shaded areas not recommended.
(* Standard Nozzle.

PSI: Pounds per Square Inch
GPM: Gallons Per Minute
R(ft): Throw Radius in feet

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.

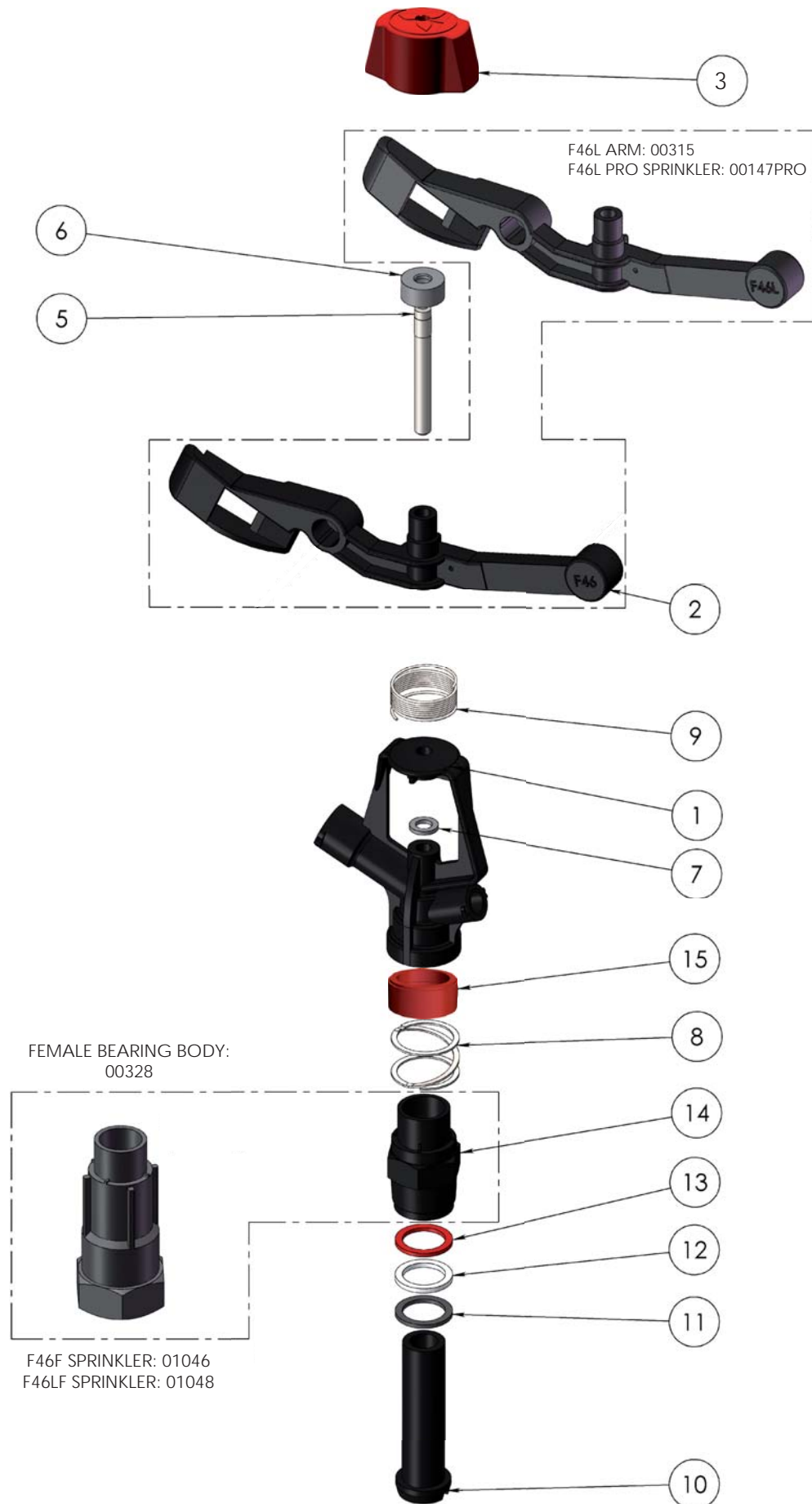


WARRANTY AND EXCLUSIONS

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	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	Size A3	Material	Code 00146PRO
<i>Assembly</i>	Scale 1: 2	Name F46 Sprinkler	
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