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 25° to 325° with 10° steps, or full circle.
- 34" Male base thread
- Dual nozzles, Main and secondary.
- 23° nozzle trajectory angle.
- Pressure range: 20-80 PSI
- Nozzle range: 1/8"-1/4"
- 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 (psi)	Nozzles	Vanes
HIGH	60	3PRN ó 3FCN	30 V
MEDIUM	40	3PRN ó 3FCN	WITHOUT VANE
LOW	30	3PRN	30RV
VERY LOW	20	3PRN	30BV



P45PRO/P45LPRO



P45FPRO/P45LFPRO





P45PRO P45LPRO	PRESSURE (PSI)		ZLES - 3/32" 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)	
T1110	20			3.74	39.0	4.31	40.7	4.96	42.0	5.66	43.3	6.65	43.3	7.47	44.9	8.33	45.9	
TWO	25			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	
NOZZLES	30			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	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	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	4.81	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	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	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	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	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	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	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	6.42	45.9	7.49	48.6	8.65	50.9	9.87	53.1	11.36	55.1	13.25	55.1					

P45PPRO P45LPPRO	PRESSURE	1/	-	NOZ	4"	NOZ:	32"	NOZ 11/	64"	3/1		NOZ:	64"	NOZ:	32"	15/	ZLES 64"	NOZ	4"
P43LPPNU	(PSI)	GPM	R(ft)	GPM	R(ft)	GPM (+) K(TT)	GPM	R(ft)	GPM	R(ft)	GPM	R(ft)	GPM	R(ft)	GPM	R(ft)	GPM	R(ft)
	20			2.58	39.0	3.14	40.7	3.76	42.0	4.46	43.3	5.28	44.9	6.15	45.9	6.97	45.6	7.95	45.9
ONE NOZZLE	25			2.88	40.4	3.52	42.7	4.24	44.0	5.00	45.6	5.90	46.9	6.85	48.6	7.80	46.9	8.90	47.6
AND PLUG	30			3.15	42.7	3.85	44.6	4.64	45.9	5.50	47.6	6.50	48.9	7.55	50.5	8.60	50.5	9.80	50.9
	35	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	9.30	52.5	10.60	53.1
	40	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	10.00	53.5	11.40	54.5
	45	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	10.60	55.1	12.10	56.1
	50	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	11.20	56.1	12.80	57.1
	55	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	11.70	57.1	13.40	58.1
	60	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	12.20	58.1	13.90	59.1
	65	3.68	44.6	4.65	46.9	5.68	49.5	6.83	51.5	8.18	53.5	9.60	55.4	11.10	57.1	12.70	58.4	14.50	60.0
	70	3.82	44.9	4.83	47.6	5.90	49.9	7.09	51.8	8.50	54.1	9.95	56.1	11.40	57.4	13.20	59.1	15.00	60.4
	75	3.96	45.6	5.00	47.9	6.11	50.5	7.34	52.5	8.80	54.5	10.25	56.4	11.70	58.1	13.60	59.4		
	80	4.09	45.9	5.17	48.6	6.30	50.9	7.58	53.1	9.09	55.1	10.50	57.1	12.00	58.4				

P45VPRO P45LVPRO	PRESSURE (PSI)	NOZ 1/8"+ GPM	ZLES 3/32" 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)		ZLES ' + 1/8" R(ft)	NOZZLES 7/32" + 1/8" GPM R(ft)	
	35	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
TWO NOZZLES	40	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
AND VANE TO	45	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
HIGH RANGE	50	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	5.32	45.6	6.20	47.9	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	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	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	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	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	6.42	47.9	7.49	50.5	8.65	53.5	9.87	55.4	11.36	57.1	13.25	57.1				

P45PVPRO	PRESSURE	NOZ	ZLES 8"	NOZ 9/6		NOZ 5/3	ZLES 32"	NOZ 11/		NOZ: 3/1		NOZ:		NOZ:		NOZ: 15/		NOZ	ZLES '4"
P45PLVPRO	(PSI)	GPM	R(ft)	GPM	R(ft)	GPM (•) R(ft)	GPM	R(ft)	GPM	R(ft)	GPM	R(ft)	GPM	R(ft)	GPM	R(ft)	GPM	R(ft)
01151107715	35	2.68	44.0	3.40	46.3	4.16	49.2	5.02	50.9	5.96	52.2	7.05	53.5	8.20	54.8	9.30	55.4	10.60	57.4
ONE NOZZLE,	40	2.87	44.6	3.64	46.9	4.45	49.9	5.37	51.8	6.38	53.5	7.55	54.5	8.80	56.1	10.00	57.4	11.40	59.4
PLUG AND	45	3.05	44.9	3.86	47.6	4.72	50.5	5.70	52.5	6.78	54.1	8.00	55.5	9.35	58.1	10.60	59.4	12.10	61.4
VANE TO	50	3.22	45.6	4.07	47.9	4.98	50.9	6.01	53.1	7.16	54.5	8.45	56.4	9.90	59.4	11.20	61.0	12.80	63.0
HIGH RANGE	55	3.38	45.9	4.27	48.6	5.22	51.5	6.30	53.5	7.52	55.1	8.85	57.4	10.40	60.4	11.70	62.0	13.40	64.0
	60	3.53	46.6	4.46	48.9	5.45	51.8	6.57	54.1	7.85	55.4	9.25	58.1	10.75	61.4	12.20	63.0	13.90	65.0
	65	3.68	46.9	4.65	49.5	5.68	52.5	6.83	54.5	8.18	56.1	9.60	58.4	11.10	62.0	12.70	64.0	14.50	65.9
	70	3.82	47.6	4.83	49.9	5.90	53.1	7.09	55.1	8.50	56.4	9.95	59.1	11.40	62.7	13.20	65.0	15.00	66.9
	75	3.96	47.9	5.00	50.5	6.11	53.5	7.34	55.4	8.80	57.1	10.25	59.4	11.70	63.0	13.60	65.6		
	80	4.09	48.6	5.17	50.9	6.30	54.1	7.58	56.4	9.09	58.1	10.50	60.0	12.00	63.6				

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 35.2 MCA) Throw radius jets 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



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.

ASSEMBLY



COMPONENT NUMBER	CODE	DESCRIPTION	MATERIAL	QUANTITY
1	01681	Sprinkler Body P45	РОМ	1
2	01695	Reversing Cap	High Density PE	1
3	01685	Upper Cam	РОМ	1
4	01686	Lower Cam	РОМ	1
5	01688	Pin Washer	РОМ	1
6	01689	Pin	РОМ	1
7	01690	Reversing Latch	РОМ	1
8	06517	Bearing Pin P45 / F44	РОМ	1
9	00256	Protective Bearing Body Lock	High Density PE	1
10	00018	Bearing Spring	Stainless Steel	1
11	01684	Cogged Sector	РОМ	2
12	01683	Bearing Body P45	РОМ	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	РОМ	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	Size	Material	Code			
UNIRAIN	A3		01725PRO			
ONITAIN	Scale 1.0	Name PAF/AFI Sprin	klor			
	1:2	P45/45L Sprinkler				
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