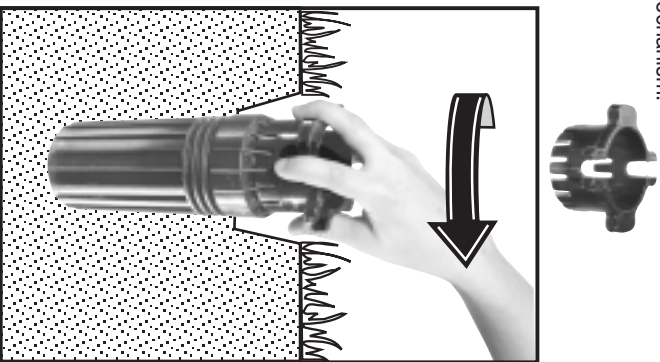


Service wrench

Special service wrench for use by professionals for easy removal of the PopStar mechanism after its installation **without digging**.

The wrench allows easy and efficient maintenance: nozzle replacement, rinsing of filter or replacement of mechanism.



Features

- Easy tool-free arc memory adjustment
- Effective close-to-sprinkler watering with no dry spots
- Sand protection for reliable operation
- Turbo-gear drive
- Unique rib structure prevents vandalism and enables quick and simple maintenance due to canister anchoring
- Unique wide water passages in nozzle prevent clogging
- Diffuser screw adjusts watering range and drop size with up to 25% radius reduction
- Three interchangeable nozzles with matched precipitation rate at 90°, 180° & 360°
- Vandalism resistant, nozzle housing with slip clutch
- Full two year warranty

Technical Specifications

- Operating pressure: 2.0-4.5 bar
- Pop-up clearance: 10 cm
- Irrigation arc: 30°-360°
- **PopStar Plus** 40°-360°
- Flow rate: 140-1400 l/h
- Nozzles: 2,3,4,6, 8,9
- Maximum spacing between sprinklers: 12 m

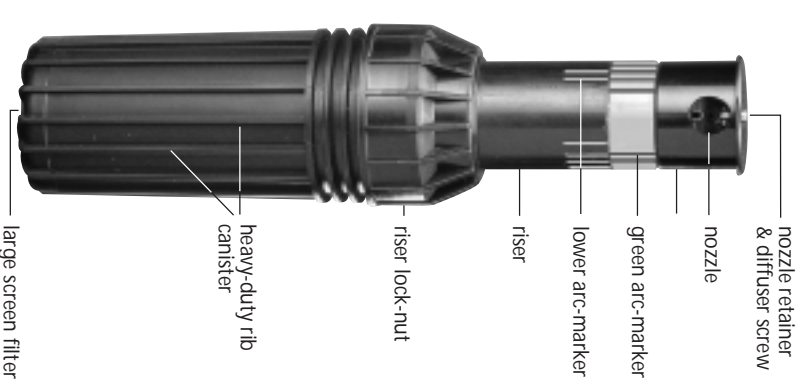
Performance Tables

Nozzle	Pressure* bar	Discharge m³/h	Radius (m)		Precipitation mm/h
			Max.	Min. **	
2	1.5	0.14	8.5	5.5	5-8
	2.0	0.17	9.5	6.0	
	2.5	0.19	9.5	6.0	
	3.0	0.20	9.5	7.0	
	3.5	0.22	10.0	7.0	
3	1.5	0.20	9.0	5.5	5-8
	2.0	0.24	9.5	6.5	
	2.5	0.27	10.0	6.5	
	3.0	0.30	10.0	6.5	
	3.5	0.33	10.0	6.5	
	4.0	0.36	10.0	6.5	
4	4.5	0.39	10.0	6.5	5.5-10
	1.5	0.26	9.5	5.0	
	2.0	0.31	10.0	5.0	
	2.5	0.35	10.2	5.5	
	3.0	0.39	10.5	5.5	
6	3.5	0.42	10.5	6.0	8-12
	4.0	0.45	10.5	6.0	
	4.5	0.47	10.5	6.0	
	1.5	0.44	9.5	6.5	
	2.0	0.52	11.0	7.5	
	2.5	0.60	11.1	7.5	
8	3.0	0.67	11.5	8.0	10-12
	3.5	0.72	11.5	8.0	
	4.0	0.78	11.5	8.0	
	4.5	0.83	11.5	8.0	
	1.5	0.50	10.0	8.0	
	2.0	0.62	11.0	8.5	
9	2.5	0.70	11.5	8.5	10-14
	3.0	0.80	12.0	9.0	
	3.5	0.87	12.0	9.0	
	4.0	0.93	12.5	9.0	
	4.5	0.99	12.5	9.0	
	1.5	0.70	10.0	6.5	

* Recommended operating pressure in shaded area

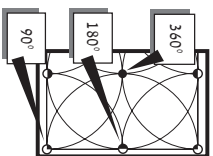
pop star
Plus
pop star

Installation, Operation and Maintenance Instructions



Installation, Operation and Maintenance Instructions

Installation



Positioning

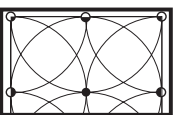
Make sure that you are using the right nozzle, (see performance chart) full or part circle.

Select right nozzle size to match precipitation.

Note! All nozzles can be used for any watering pattern (1/4 circle, 1/2 circle, etc.)

Spacing

Sprinkler spacing is flexible and can vary between 5 m - 12 m



Digging and Installation

Dig a 30 cm hole.

Connect **PopStar** to distribution line with a 20 mm x 0.5 m PE lateral or any swing joint. Teflon is not necessary, just hand-tighten connector to threaded inlet.

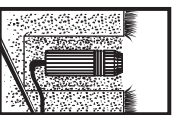
For existing pipe system, use 3/4" threaded cut off-riser to connect **PopStar** at the right level.



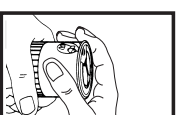
Surface Height

The **PopStar** has no limitations as to prior left-right setting.

Place the **PopStar** upright at surface level. Fill in hole and press surrounding earth firmly. For best performance, ensure the sprinkler is exactly upright.

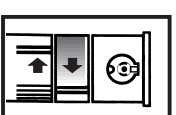


Arc Adjustment



Nozzle Adjustment

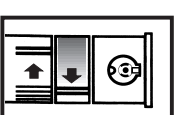
Aim nozzle at center of required irrigation area by rotating sprinkler head.



Adjustment of Arc-Markers

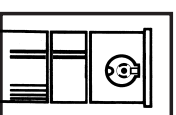
PopStar

Line up **lower arc-marker** to border of required irrigation area (left or right). Rotate **green arc-marker** to the opposite border of required irrigation area. Ensure that nozzle is between the two arc-markers.



PopStar Plus

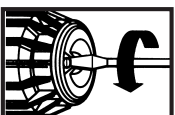
Aim nozzle at center of required irrigation area. Rotate lower arc-marker **to the right border** of required irrigation area, and green arc-markers to the left ensuring that nozzle is between them. From now on sprinklers will "remember" required arc.



Full-Circle Irrigation

Align **green arc marker** with the **lower arc marker**.

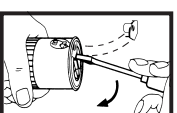
Note!! The nozzle must be outside arc-markers and not above them. The sprinkler will water 360° back and forth.



Diffuser Screw

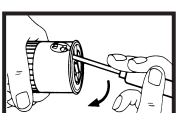
The diffuser screw is used to decrease watering range and to break up the water into fine droplets.

Changing Nozzles



Nozzle Retainer Removal

Insert a small flathead screwdriver into slot between the nozzle clip and cover, and remove the clip.

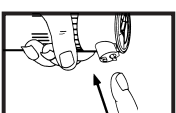


Removal of Nozzle

Press the screwdriver against nozzle step and remove nozzle.

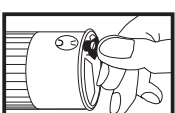


Nozzle step



Nozzle Replacement

Push new nozzle into place, and guide nozzle step into niche in nozzle housing.



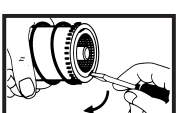
Replace nozzle clip by pressing lightly.

Cleaning The Filter



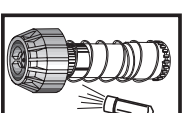
Rotate to Open

Open riser lock nut and remove internal mechanism.



Remove and Rinse Filter

Use a screwdriver to remove filter. Rinse the filter with water. Press filter back in place

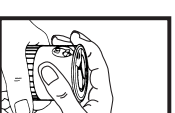


Rinse seal



Rotate to Close

Return internal mechanism and close lock nut firmly.



Check Arc Adjustment

Check that **PopStar** is adjusted to required arc.