Tech Spec

SQ Series Square Pattern Nozzles

Precise and efficient, low-volume spray nozzle for irrigation in small areas.

The SQ Series is the most efficient, low-volume spray solution for precision irrigation of small areas. The SQ Series' square spray pattern and pressure compensation offers increased efficiency and control, reducing overspray, property damage and liability.

Unique edge-to-edge capability reduces the number of nozzles needed, which decreases cost and dramatically reduces installation time. Simplify design and installation with the flexibility of applications: one nozzle throws 2.5' or 4' (0.8m or 1.2 m) and can be used on a variety of spray heads and risers. It even meets micro irrigation system requirement for less than 26 gph flow rate at 30 psi.

SQ Series nozzles provide up to 65% water savings, and are great for narrow planting beds, parking lot islands, walkways, parkways, street medians, and areas around trees and shrubs.

Features

Precision and Efficiency

- Designed to precisely irrigate small areas.
- Great for corners in narrow planting beds, parking lot islands, walkways, parkways, street medians, and around trees and shrubs
- Commercial grade nozzle is pressure compensating and virtually mist-free – even at the maximum operating pressure. This ensures optimum coverage for non-turf applications from 20 to 50 psi
- Meets micro irrigation system requirement with less than 26 gph flow rate at 30 psi

Versatile Installation

- Simplify design and installation with the flexibility of applications
- Patented design provides the designer and the installer with the option of 2.5' or 4' throws (0.8 m or 1.2 m)
- Can be installed on a variety of spray heads and risers

Savings on Material and Labor Costs

- Unique edge-to-edge capability reduces the number of nozzles needed, which decreases cost and dramatically reduces installation time.
- Square spray pattern and pressure com pensation offer increased efficiency and control, reducing overspray, property dam age, and liability

Operating Range

- **Pressure:** 20 to 50 psi (1.4 to 3.5 bar)
- **Flow rates:** 6, 12, 18, and 24 gph (22.7, 45.4, 68.1, and 90.8 l/hr)
- **Required Filtration:** 40 Mesh

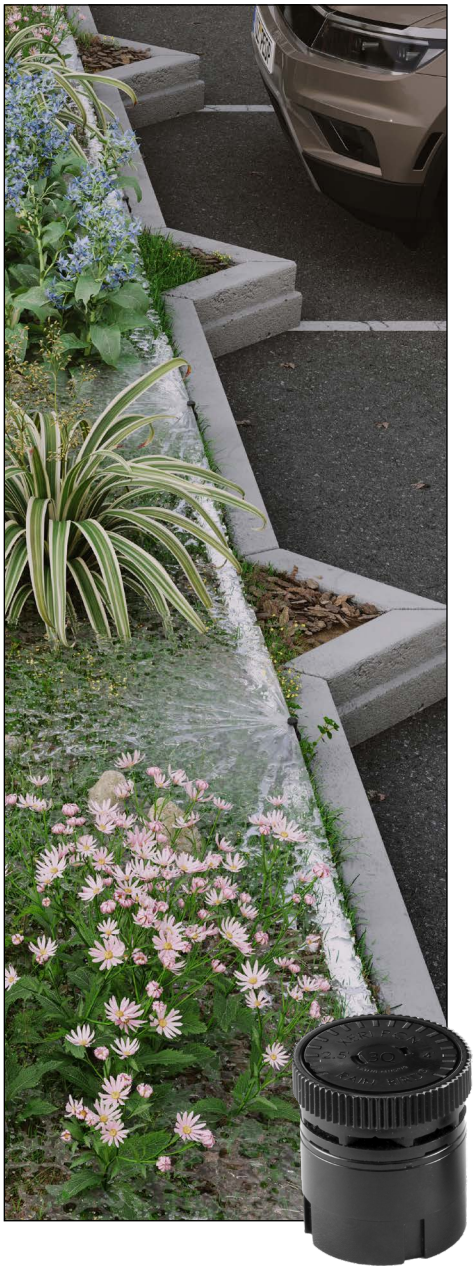
Models

- **SQ QTR:** SQ Nozzle, quarter pattern
- **SQ HLF:** SQ Nozzle, half pattern
- **SQ 3QTR:** SQ Nozzle, 3 quarter pattern
- **SQ FUL:** SQ Nozzle, full pattern

Specifications

SQ Series, Square Pattern Nozzle
The nozzle shall have matched precipitation rates for each model.The nozzle shall be capable of covering a _____(ft.)/ (meter) radius at _____(psi)/ (bar) with a discharge rate of _____(gpm)/ (m3/h). The SQ is intended for use with the 1800 Series, SQ Adapter with Poly Flex Riser, UNI-Spray Series or SCH 80 risers. The SQ is constructed of UV resistant ABS plastic. The SQ shall be pressure compensating and factory manufactured by Rain Bird Corporation, Azusa,CA.

The SQ Adapter
The SQ Adapter shall be molded of ABS plastic material. The SQ Adapter shall be designed to mount onto either a 12" or 24" Poly Flex Riser.



How To Specify

SQ – QTR

Nozzle Series/Pattern:
Quarter Pattern

Model:
Square Pattern Nozzles

SQ Series, Square Pattern Nozzles

2.5' throw @ 6" height above grade

SQ Nozzle Performance					U.S
Nozzle	Pressure psi	Throw Radius ft.	Flow gph	Flow gpm	Precip. Rate w/no overlap in/h
QTR	20	2.5	6.0	0.11	1.64
	30	2.5	7.0	0.12	1.90
	40	3.0	7.2	0.12	1.32
	50	3.0	7.2	0.12	1.32
HALF	20	2.5	10.2	0.17	1.31
	30	2.5	10.7	0.20	1.57
	40	3.0	10.7	0.23	1.22
	50	3.0	10.7	0.23	1.22
3QTR	20	2.5	16	0.27	1.37
	30	2.5	18	0.30	1.54
	40	3.0	21	0.35	1.25
	50	3.0	21	0.35	1.25
FUL	20	2.5	20.0	0.33	1.28
	30	2.5	24.2	0.40	1.55
	40	3.0	27.3	0.46	1.22
	50	3.0	27.3	0.46	1.22

0.8m throw @.15m height above grade

SQ Nozzle Performance					METRIC
Nozzle	Pressure bar	Throw Radius m	Flow lph	Flow lpm	Precip. Rate w/no overlap mm/h
QTR	1.4	0.8	24	0.38	41.66
	2.1	0.8	28	0.45	48.26
	2.8	0.9	28	0.45	33.53
	3.4	0.9	28	0.45	33.53
HALF	1.4	0.8	39	0.64	33.27
	2.1	0.8	46	0.68	39.88
	2.8	0.9	52	0.68	30.99
	3.4	0.9	52	0.68	30.99
3QTR	1.4	0.8	61	1.01	34.77
	2.1	0.8	68	1.14	39.12
	2.8	0.9	79	1.32	31.69
	3.4	0.9	79	1.32	31.69
FUL	1.4	0.8	76	1.25	32.51
	2.1	0.8	92	1.51	39.37
	2.8	0.9	103	1.74	30.99
	3.4	0.9	103	1.74	30.99

4' throw @ 6" height above grade

SQ Nozzle Performance					U.S
Nozzle	Pressure psi	Throw Radius ft.	Flow gph	Flow gpm	Precip. Rate w/no overlap in/h
QTR	20	4.0	6	0.10	0.64
	30	4.0	7	0.12	0.74
	40	4.5	7.2	0.12	0.59
	50	4.5	7.2	0.12	0.59
HALF	20	4.0	10.2	0.17	0.51
	30	4.0	10.7	0.18	0.61
	40	4.5	10.7	0.18	0.54
	50	4.5	10.7	0.18	0.54
3QTR	20	4.0	16	0.27	0.53
	30	4.0	18	0.30	0.60
	40	4.5	21	0.35	0.55
	50	4.5	21	0.35	0.55
FUL	20	4.0	20.0	0.33	0.50
	30	4.0	24.2	0.40	0.61
	40	4.5	27.3	0.46	0.54
	50	4.5	27.3	0.46	0.54

1.2m throw @.15m height above grade

SQ Nozzle Performance					METRIC
Nozzle	Pressure bar	Throw Radius m	Flow lph	Flow lpm	Precip. Rate w/no overlap mm/h
QTR	1.4	1.2	23	0.38	16.26
	2.1	1.2	26	0.45	18.80
	2.8	1.4	27	0.45	14.99
	3.4	1.4	27	0.45	14.99
H	1.4	1.2	39	0.64	12.95
	2.1	1.2	40	0.68	15.49
	2.8	1.4	40	0.68	13.72
	3.4	1.4	40	0.68	13.72
3QTR	1.4	0.8	61	1.01	13.58
	2.1	0.8	68	1.14	15.28
	2.8	0.9	79	1.32	14.08
	3.4	0.9	79	1.32	14.08
FUL	1.4	1.2	76	1.25	12.70
	2.1	1.2	92	1.51	15.49
	2.8	1.4	103	1.74	13.72
	3.4	1.4	103	1.74	13.72

Rain Bird Corporation
6991 E. Southpoint Road
Tucson, AZ 85756
Phone: (520) 741-6100
Fax: (520) 741-6522

Rain Bird Technical Services
(800) RAINBIRD (1-800-724-6247)
(U.S. and Canada)

Rain Bird Corporation
970 West Sierra Madre Avenue
Azusa, CA 91702
Phone: (626) 812-3400
Fax: (626) 812-3411

Specification Hotline
800-458-3005 (U.S. and Canada)

Rain Bird International, Inc.
1000 West Sierra Madre Ave.
Azusa, CA 91702
Phone: (626) 963-9311
Fax: (626) 852-7343

The Intelligent Use of Water™
www.rainbird.com

® Registered Trademark of Rain Bird Corporation
© 2021 Rain Bird Corporation 10/21