

ST-1600

Synthetic Turf Rotor

Hunter®



Hunter's synthetic turf rotors are designed specifically to satisfy the unique needs of cooling and cleaning synthetic turf sports fields. Robust, reliable and engineered for longevity in high-flow and high-pressure conditions, the new ST-1600 compliments the ST-90 and STG-900 ST Rotors by adding long-range capabilities. These enhanced radius rotors are perfect for football fields, where smaller radius rotors might fall a little short. They are even better for extra-wide field applications like soccer. ST-1600 rotors are available in two configurations:

ST-1600B

This model is a 5-inch (13 cm) pop-up with adjustable-arc and full-circle capabilities in one rotor. All internal components of this rotor are accessible from the top without disturbing the synthetic surface. It is ideally suited for installation within Hunter's ST243636B enclosure, or in the natural turf that is sometimes adjacent to the synthetic field to be irrigated.

ST-1600BR

This model is a compact and unobtrusive riser-mounted rotor with adjustable-arc and full-circle capabilities. This model is perfect for those installations where it is preferable to keep all irrigation piping and equipment away from the synthetic surface. The riser-mounted configuration also allows existing synthetic sports fields to be retrofitted for irrigation without disturbing the playing surface. Riser-mounted configurations are typically installed at elevations that promote safety and protection from the rotor's high-flow water stream.

Features & Benefits

- **Long-Range Performance Up To 160 Feet (48 metres)** Five nozzles developed specifically for synthetic turf sports fields
- **Short-Range Performance At 135 Feet (41 metres)** Perfect for football fields needing that little extra distance
- **Proven Heavy-Duty Gear-Drive** Multiple sealed ball bearings throughout
- **Full-Circle and Adjustable-Arc in One Model** 40° - 360° adjustable anytime; un-installed, installed or while in operation
- **Ratcheting Riser Assembly** Easy arc-setting check and vandal resistant
- **Large and Flat Rubber Cover Assembly** Promotes safety and protects internal components
- **Stainless Steel Pop-Up Riser Assembly** Extra heavy-duty to meet the most demanding needs
- **Telescoping Rubber Boot On Riser Assembly** Protects pop-up assembly from infill contamination
- **Adjustable Speed of Rotation** Simple adjusting knob modifies speed to your requirements

ST-1600 Synthetic Turf Rotor

Dimensions:

- **POP-UP HEIGHT:** 5" (13 cm)
 - **FEMALE INLET:** 2" Pipe*, 2" BSP
 - **POP-UP DIAMETER:** 12" (30 cm)
 - **EXPOSED DIAMETER:** 14" (36 cm)
 - **OVERALL HEIGHT:** 22.5" (57 cm)
 - **NOZZLE TRAJECTORY:** 23°
- * Use 2" pipe adapter PN 241499

Operating Specification:

- **DISCHARGE RATE:** 96.2 to 286.4 GPM
21.8 to 65.0 m³/hr.
364 to 1084 l/min.
- **RADIUS RANGE:** 107' to 160'
32.5 m to 48.7 m
- **PRESSURE RANGE:** 60 to 120 PSI
4.0 to 8.0 Bar
400 to 800 kPa

ST-1600 Nozzle Performance Data

Nozzle	Pressure PSI	Radius ft.	Flow GPM	Precip in/hr ■ ▲	
16	60	107	96.2	1.63	1.88
	75	115	107.3	1.57	1.81
	90	121	117.8	1.54	1.78
	105	128	127.3	1.50	1.73
	120	135	137.4	1.46	1.69
18	60	112	107.0	1.66	1.91
	75	121	119.4	1.56	1.80
	90	128	131.0	1.54	1.78
	105	133	141.3	1.54	1.78
20	120	141	153.2	1.48	1.71
	60	115	144.0	2.10	2.43
	75	128	160.9	1.89	2.18
	90	141	176.5	1.71	1.97
22	105	144	190.5	1.76	2.03
	120	148	204.2	1.80	2.08
	60	118	171.5	2.37	2.73
	75	130	191.8	2.20	2.54
24	90	144	210.0	1.94	2.24
	105	154	226.9	1.84	2.12
	120	157	243.1	1.89	2.18
	60	121	202.1	2.64	3.05
24	75	133	225.9	2.46	2.84
	90	148	247.6	2.19	2.52
	105	156	267.4	2.12	2.45
	120	160	286.4	2.16	2.49

ST-1600 Nozzle Performance Data – Metric

Nozzle	Pressure Bar	Radius m	Flow m ³ /hr	Flow l/min	Precip mm/hr ■ ▲	
16	4.0	400	32.5	21.8	364	41.4
	5.0	500	35.0	24.4	406	39.8
	6.0	600	37.0	26.8	446	39.1
	7.0	700	39.0	28.9	482	38.0
	8.0	800	41.0	31.2	520	37.1
18	8.0	400	34.0	24.3	405	42.0
	5.0	500	37.0	27.1	452	39.6
	6.0	600	39.0	29.8	496	39.1
	7.0	700	40.5	32.1	535	39.1
20	8.0	800	43.0	34.8	580	37.6
	4.0	400	35.0	32.7	545	53.4
	5.0	500	39.0	36.5	609	48.1
	6.0	600	43.0	40.1	668	43.4
22	7.0	700	44.0	43.3	721	44.7
	8.0	800	45.0	46.4	773	45.8
	4.0	400	36.0	38.9	649	60.1
	5.0	500	39.5	43.6	726	55.8
24	6.0	600	44.0	47.7	795	49.3
	7.0	700	47.0	51.5	859	46.7
	8.0	800	48.0	55.2	920	47.9
	4.0	400	37.0	45.9	765	67.1
24	5.0	500	40.5	51.3	855	62.6
	6.0	600	45.0	56.2	937	55.5
	7.0	700	47.5	60.7	1012	53.8
	8.0	800	48.7	65.0	1084	54.9

Note: All precipitation rates calculated for 180 degree operation. For the precipitation rate for a 360 degree sprinkler, divide by 2.

MODELS	STANDARD FEATURES
ST-1600B = 5" (13 cm) pop-up	Pop-up synthetic turf rotor, adjustable-arc and full circle, BSP inlet threads, 5 nozzles
ST-1600BR = Riser mounted	Riser-mounted synthetic turf rotor, adjustable-arc and full circle, BSP inlet threads, 5 nozzles

