

STK-1 / STK-2

ST SYSTEM FOR COOLING AND CLEANING SYNTHETIC TURF

Radius: **31.4 to 36.6 m**
 Flow: **16.9 to 20.9 m³/hr; 282.0 to 348 l/min**
 Inlet: **1½" BSP (ST-90), 1½" ACME (STG-900)**

FEATURES

- Standard installed nozzle: #83
- Arc setting: 40° to 360°
- QuickCheck™ arc mechanism
- Through-the-top arc adjustment
- Water lubricated gear-drive
- Factory installed rubber logo cap
- Nozzle trajectory: 22.5°
- Warranty period: 5 year component part

OPERATING SPECIFICATIONS

- Radius: 31.4 m to 36.6 m
- Flow: 16.9 to 20.9 m³/hr; 282 to 348 l/min
- Operating pressure range: 6.9 to 8.3 bar; 690 to 830 kPa
- Precipitation rate: 35 mm/hr approximately

USER INSTALLED OPTIONS

- Rubber Cover Kit ST-90: P/N 234200
- Rubber Cover Kit STG-900: P/N 473900

ST ROTOR	
Model	Description
ST-90-B-83	8 cm pop-up, jar top cap, adjustable arc, plastic riser, and BSP inlet threads
STG-900-83	8 cm pop-up, top service, adjustable arc, plastic riser, and ACME inlet threads



ST-90*

Overall height: 29 cm
 Pop-up height: 8 cm
 Diameter: 14 cm
 Inlet size: 1½" (40 mm) BSP

* not for use with the ST Vault



STG-900*

Overall height: 36 cm
 Pop-up height: 8 cm
 Diameter: 20 cm
 Inlet size: 1½" (40 mm) ACME

* for use with the ST173026B Vault

KIT CONFIGURATIONS

STK-1 / STK-2 COMPONENTS		
Kit Descriptions For specification ease and to ensure the correct product is installed, the ST System is available in kit configurations below.	STK-1 STG-900 Block System (remotely located valve)	STK-2 STG-900 VAH System (valve adjacent to head)
ST Rotor: Synthetic Turf Rotor without rubber cover kit	STG-900	STG-900
ST Vault: Vault with 3-piece polymer-concrete cover	ST-173026B	ST-173026B
ST Swing Joint: "VA" 2" (50mm) PVC swing joint with 7 pivot points	ST-2008VA	ST-2008VA
ST Valve & Fitting Kit: ICV-151 valve, high pressure rated ball valve & fitting kit	—	ST-VBVK
ST Adapter Elbow Fitting*	239800	239800
ST Rotor Adapter Fitting**	239300	—
Rubber Cover Kit: STG-900 Rubber Cover Kit	473900	473900
Quick-Coupler Valve: 1" (25mm) inlet with 1¼" (32 mm) outlet for key	HQ5RC-BSP	HQ5RC-BSP
BSP Inlet Adapter: Converts swing joint to 2" (50 mm) male BSP threads	241400	241400

Notes:

*ST Adapter Elbow Fitting connects ST-2008VA swing joint to rotor adapter fitting (STK-1B) also connects ST-VBVK to STG-900 rotor (STK-2B)

**ST Rotor Adapter Fitting connects 239800 adapter elbow fitting to STG-900 rotor's ACME inlet (STK-1B)

ROTORS

ST-90 / STG-900 NOZZLE PERFORMANCE DATA

Nozzle	Pressure		Radius m	Flow		Precip mm/hr	
	bar	kPa		m ³ /hr	l/min	■	▲
73 ●	7.0	700	31.4	16.9	282	34.3	39.6
	7.5	750	33.2	17.5	291	31.7	36.6
Orange	8.0	800	35.1	18.1	301	29.4	34.0
83 ●	7.0	700	34.1	19.1	319	32.8	37.9
	7.5	750	35.4	20.0	333	32.0	37.0
Tan	8.0	800	36.6	20.9	348	31.2	36.1

Notes:

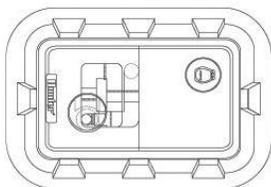
All precipitation rates calculated for 180° operation.
For precipitation rate of a 360° sprinkler, divide by 2.

Requires minimum 7.0 bar; 700 kPa dynamic pressure supplied to swing joint inlet.

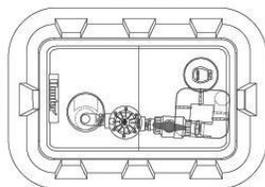
INSTALLATION DETAILS

STK-1

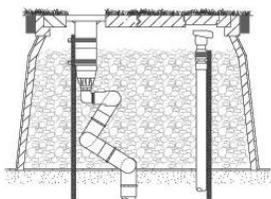
STK-2



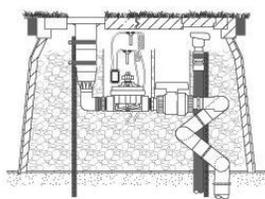
ON FIELD SIDE



ON FIELD SIDE



VIEW FROM ON FIELD SIDE



VIEW FROM ON FIELD SIDE

ST Rotor



ST SWING JOINTS

Multi-axis 22 bar; 2,200 kPa rated vertical alignment PVC swing joints with seven O-Ring sealed pivot points allow the rotor to be perfectly placed within the ST Vault's cover set opening.

ST2008VA: 2" (50 mm) for ST-90, STG-900

Inlet: 2" (50 mm) Slip*
Outlet: 1½" ACME

* Use P/N 241400 adapter to male BSP threads



ROTORS

ST VALVE SETS

Heavy-duty control valves configured to complement the ST Rotors and ST Vaults.

STVBVFK: for STG-900 in STK-2 Kit

Valve: 1½" (40 mm) NPT ICV
Ball Valve: 22 bar (2,200 kPa) rating
Inlet: 1½" (40 mm) ACME
Outlet: 1½" (40 mm) ACME

Low Pressure Loss Design: 0.7 bar; 70 kPa at 22.7 m³/hr; 378 l/min from swing joint inlet through to rotor
Includes: 1½" (40 mm) connection fittings



ST VAULTS

Heavy-duty tapered fiberglass and polymer-concrete construction with pre-cast holes for rotor and quick coupler valve.

ST173026B for STG-900 includes 51 mm thick 3-piece PC cover set

Main Cover: 43 cm x 76 cm
Overall Height: 66 cm
Body Weight: 47 kg
Total Weight: 73 kg
Base Pad: 68 cm x 104 cm
Quick Access Ports: 1



① Quick-Coupler

All ST Vaults include convenient quick access ports. Quick-couplers provide a convenient source of water for washing down spills and water-soluble paint. Integrated in-vault design eliminates the need for additional quick-coupler enclosures.