

System Specification

Client:		Date:	03 September 2019
Project:	One Pitch 66m x 100m	Quote:	
Description	Speedy Rain 32-90 Hosereel Irrigator System	Rev:	1

Description of system

A Speedy Rain 32-90 hosereel irrigator will allow an application of 7.6mm of water to a single pitch within an 3-day period.

The machine can cover an area up to 22m x 100m at each setting. Running at a speed of 10m/h, the machine will cover 90m in 9 hours and apply around 7.6mm of water. The pitch will be covered with three passes of the machine.

The system includes a water storage tank and automatic pump set to provide the pressurised water supply to the system.

Water Tank

During periods of peak demand, the system will use approximately 15m³/day.

The system includes a 5m³ tank with Type AB air gap to prevent backflow into the public mains. A mains water supply delivering not less than 1.15m³/hour will be required to ensure enough water for the irrigation. If the flow is below this, a 10m³ tank can be substituted which will cope with inflows as little as 0.63 m³/hour.

The tank is made from maintenance free black HDPE. The tank is a WRAS approved product and supplied with a 10 year guarantee.

The 5m³ tank is 3.45m diameter x 3.65m high and needs to be sited on a smooth, level, reinforced concrete base, at least 4.1m in diameter x 150mm thick, provided by the client.

The tank will be fitted with a 3/4" ball float valve inlet and 2" outlet with isolation valve. 1" suction hose will connect the tank to the pump.

The tank will be delivered direct from the manufacturer. Access for a large lorry will be required. Off-loading of the tank is the responsibility of the client. The tank has 4 no. moulded lifting lugs equally spaced around the top.

Pump with Genyo Auto-Start

The pressurised supply to the system is provided by a compact Lowara e-HM...S Series pump with stainless steel body, motor shaft and impellers for long life. The e-HM range is designed for heavy-duty industrial applications, are quiet running and supplied with highly efficient motors to keep energy consumption to a minimum.

A Lowara Genyo controller will start the pump automatically as soon as the hose point is opened. The controller includes a built-in non-return valve and dry running protection.

The pump has a 0.75kW single phase motor with a 4.8A full load current.

The pump must be protected from the elements, either in an existing building or a ventilated enclosure provided by the client. The pump must be protected from frost damage.

Due to the nature of the equipment, some drainage of water onto the floor is to be expected, during routine maintenance or should a fault develop. It is the responsibility of the client to check the suitability of the proposed equipment and its proposed location before installation.

Distribution Pipework

The system is designed to operate with a maximum supply pipe run of 100m. 50mm black MDPE pipe will run from the pump and across the end of the pitch. MDPE pipe has excellent resistance to frost and stone damage. All pipe fittings are WRC approved compression fittings, by Plassim.

Hose Points

Three hose points, for connection to the hosereel irrigator, will be installed at the edge of the pitches. Each will comprise a 1" uPVC lever valve with 'Geka' hose coupling, to be installed in a Carson valve box with 230mm diameter, green plastic cover.

Speedy Rain 32-90 Hosereel Irrigator

The machine offers a simple and cost effective solution to watering sports fields. An efficient piston drive ensures minimal pressure loss and the sprinkler is sled mounted, enabling reliable operation on uneven ground.

To operate, the unit is wheeled into position, connected to the water supply and the sprinkler sled pulled out. When operating, the drive mechanism diverts some of the water to slowly rewind the hose and retrieve the sprinkler. When the trolley reaches the reel it automatically switches off the supply and the sprinkler stops.

Sprinkler nozzle choices:	6mm, 7mm
Hose diameter/length:	32mm/90m
Hose material:	PET
Output range:	1.68 – 3.6 m ³ /h
Operating pressure:	3.5 – 7.2 bar
Wetted width:	26 - 37 m
Rewind speed:	10 – 30 m/h (note: larger pump required for faster rewind speeds)
Application (based on 10m/h rewind):	7.6 – 11.4 mm/h
Weight:	85kg
Approximate dimensions:	960mm (L) x 800mm (W) x 760mm (H)

Rev:0 12/02/19
Rev:1 02/09/2019

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