

System Specification

Client:		Date:	12 November 2020
Project:	Pitch 68m x 110m	Quote:	
Description	Travelling Sprinkler System	Rev:	2

Description of system

A Rainmobile Turbo self-travelling sprinkler will allow an application of 24mm of water to the pitch within a 6-day period.

The machine can cover an area up to 34m x 183m at each setting. Running at a speed of 11m/h, the machine will cover 110m in 10 hours and apply around 8mm of water. The pitch will be covered with two 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 30m³/day. To enable the tank to fill over a 24 hour period, a mains water supply delivering not less than 1.25m³/hour will be required.

The system includes a 22m³ tank with Type AB air gap to prevent backflow into the public mains.

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

The tank is 3.45m diameter x 2.75m high and needs to be sited on a smooth, level, reinforced concrete base, at least 600mm larger than the tank (provided by the client). Please refer to tank manufacturer's specification regarding the base.

The tank will be fitted with a ¾" 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..P Series pump with stainless steel body and motor shaft 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 1.1kW single phase motor with a 6.8A 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

50m x 50mm black MDPE pipe is included to run from the pump to the middle of one 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 Point

A hose point, for connection to the travelling sprinkler, will be installed at the edge of the pitch. This will comprise a 1" valve with 'Geka' hose coupling, to be installed in a Carson valve box with 230mm diameter, green plastic cover.

Travelling Sprinkler

The Rainmobile Turbo has four wheels for stability and pulls itself along 135m of steel cable, switching off automatically when its final position is reached or if traction is obstructed. The machine is simple to handle with approximately 15 minutes required for set-up. The turbine and gearbox are maintenance free. The machine is reasonably compact at 770mm long x 450mm wide x 440mm high and weighs 18kg.

Hose and Trolley

The Rainmobile Turbo will be supplied with 100m of 1" Tricoflex hose. Tricoflex has a multi-layer construction with knitted reinforcement, allowing operating pressures up to 8 bar and giving excellent handling characteristics and kink resistance. The yellow outer layer is UV and abrasion resistant.

The system includes a heavy-duty hose trolley on which to store and move the hose. The trolley has a coated tubular steel frame with pneumatic tyres and long, rubber sleeved handles for easy manoeuvrability. The trolley holds 100m of 1" hose.

29/08/19

E&OE