

## Description

The FIRE KILL™ Model low pressure water mist pump set is a complete assembled unit. Type MS-SJ-EL is an electrical pump station with one single pump and a jockey. The water pump can supply the required water capacity and water pressure, are built together and installed in a robust steel frame, making the pump station simple to install and transport.

The station comes with different pumps which can supply different water flows and water pressures.

## Application

Type MS-SJ-EL Pump Station is installed in VID Fire-Kill Fire Protection Water Mist systems. The type MS-SJ-EL Pump Station is designed for pumping clean water which is free from chlorides and impurities.

The MS-SJ-EL pump station is suitable for connection to water reservoirs with positive water supply pressures.

Type MS-SJ-EL pump stations are delivered fully assembled and ready for installation.

The Type MS-SJ-EL Pump station includes:

- 1 x Multistage Centrifugal pumps.
- 1 x Multistage jockey pump
- Painted Steel skid frame in robust quality,
- PN16 stainless steel pipe trim with Drain/bypass outlet with monitored Drain/By-pass Valve, and hose connection with monitored Hose Connection Valve, and pump pressure switches, liquid filled pressure gauge, and non-return valves on Pump inlets, and filter on pump station outlet port.
- Pump control panel in accordance with EN 12845

## Location

The MS-SJ-EL pump set must be installed in a closed room, which is only accessible to personnel with the proper qualifications. In this room several guidelines must be observed:

- the pump room should be sufficiently lit
- the pump room should be sufficiently ventilated
- in the pump room the temperature should be between 5 – 50 °C
- the pump room should be clean
- the pump room should be sufficiently spacious for maintenance and inspections

## Foundation

The MS-SJ-EL pump set is delivered on a robust chassis. The foundation, on which the low pressure water mist pump set is placed, must be flat and must have the proper dimensions and load ability. The chassis can be placed level on the foundation by means of (steel) filling sheets and must be poured up afterwards. After the concrete has hardened the foundation bolts must be accurately tightened.

## Hydraulic installation:

The MS-SJ-EL pump station is connected to water supply providing the valve station with a positive inlet water pressure at the maximum pump capacity.

The water supply shall be fresh clean water free of saltine and chloride, and free of particles larger than 0.5 mm.



The suction and pressure pipes must be fitted in such a way that no air locks can appear. The pumps on the low-pressure water mist pump set are centrifugal pumps, the suction pipe must always be filled with fluid. A centrifugal pump is not self-priming

For functional tests of the pump station the Bypass & drain port shall be connected to an open pipe returning the bypass water to the water reservoir.

The MS-SJ-EL Pump Station outlet should be connected to the nozzle system.

**Power connections:**

The MS-SJ-EL pump Station shall be connected to a power supply having the requested capacity to supply the two pumps during its start and working conditions. Special attentions should be taken to start currents of the pump motors.

The power installation shall be in accordance with applicable local requirements to electrical power systems, and applicable local requirements to power supplies for deluge sprinkler systems and other similar types of fire protection installations, and requirements of the authorities having the jurisdictions.

Connected Alarm and monitoring systems shall have separate power supply.

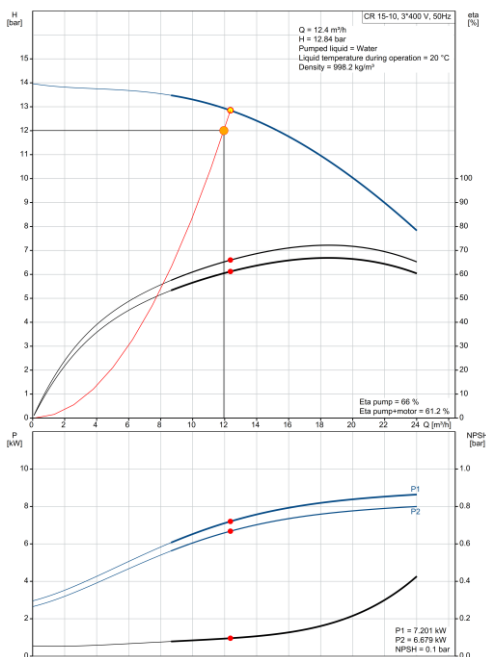
**Commission:**

Prior to commissioning the MS-SJ-EL pump station must be fully installed, and all hydraulic and electrical connections shall be made.

During commission both pumps shall be primed prior to activating the pump station, to check pump flow and alarms.

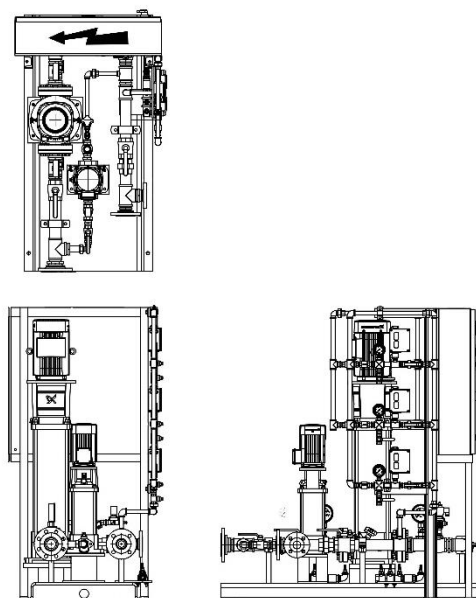
The first time the MS-EJ-EL pump station is activated, the by-pass valve shall be open not to cause an intended pressure circuits to the system. Hereafter the by-pass valve is slowly closed, and it is checked that all alarms and pressure build up performs as intended.

**Typical pump curve**



**Typical lay-out.**

Dimension depends on pump size



**Contact**

For further information on FIREKILL™ products, please contact our sales department at [Sales@vidaps.dk](mailto:Sales@vidaps.dk)