PRODUCT DATA SHEET

Storm Water Management Single Pit Diversion System

water | wastewater | sewage

OVERVIEW

MAK Water's Clearmake[™] storm water diversion systems allow wash-down, first-flush, and other contaminant fluids to be captured from un-roofed hard-stand areas for disposal, or pre-treatment prior to sewer discharge. Typically a diversion system would work in conjunction with a wastewater treatment system such as an <u>Oil Water Separator</u> (OWS), <u>Gravity Clarifier</u> (GC) or <u>Dissolved Air Flotation</u> (DAF) system. During a rain event, diversion systems allow clean rainwater to be harvested or discharged to the storm water system.

MAK Water's Clearmake[™] single pit diversion valves utilise a proprietary hydraulically (water pressure) actuated diaphragm valve ensuring maximum reliability and fail-safe operation. Where required, control systems are PLC driven, customisable, and can be designed to meet intrinsically safe circuit requirements for hazardous areas.

| Peak Flow (L/s) | Outlet Height from Base of Pit (mm) | | |
|-----------------|-------------------------------------|--|--|
| 20 | 300 | | |
| 16 | 200 | | |
| 11.5 | 100 | | |



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PROCESS DESCRIPTION

Demand Driven

MAK Water's Demand Driven diversion systems are a simple system using only a hydraulic demand valve without a controller. Located in the washer feed line, the demand valve uses hydraulic pressure to open the diversion valve when the washer feed line is opened and a wash down is occurring. When the wash down activity has stopped, the diversion valve will close allowing rainwater falling on the designated area to divert to the storm water system.

First Flush

MAK Water's First Flush diversion systems use a PLC controller in conjunction with a first flush manifold located in the washer feed line to open/close the diversion valve. Further to this basic function, this system is designed to take a 10mm first flush from the wash pad area at the beginning of a rain event. The first flush is captured in a holding tank for treatment prior to release to the sewer system. Once the first flush has been taken, the diversion valve will close allowing all subsequent rainwater falling on the designated area to divert to the storm water system.

Wash-Down Shutdown

MAK Water's Wash-Down Shutdown diversion systems incorporate the same features of the first flush system with the addition of a shutdown feature in a rain event. A rain sensor is used to signal a rain event to the controller, which then shuts off supply to the washer for the duration of the rain event. This feature stops any cross contamination between the sewer and storm water connections and is a requirement in some localities.

STANDARD INCLUSIONS + OPTIONS

| = Standard Supply o = Optional Supply - = Not App | | | |
|--|-----------|--------------|--------------|
| Equipment | CM-SPD-DD | CM-SPD-FF | CM-SPD-WDSD |
| 600x600mm Pit w/- Valve & Silt Tray | ✓ | ✓ | ✓ |
| Proprietary Diaphragm Diversion Valve w/ 100mm PE connection | 1 | ✓ | ✓ |
| 25mm Demand Valve | 1 | - | - |
| First Flush Manifold w/ 1" BSP inlet/outlet connections | ctions | | - |
| > 1/2" 24V NC Solenoid Valve | | | |
| > 1" Demand Valve | | ✓ | |
| > 1" Flow Switch | | | |
| WDSD Manifold w/ 1" BSP inlet/outlet connections | | - | ~ |
| > 1/2" 24V NC Solenoid Valve | | | |
| > 1" Demand Valve | | | |
| > 1" Flow Switch | | | |
| > 1" 24V NO shutdown solenoid valve | | | |
| Rain Sensor | - | 0 | 1 |
| 240V PLC Control System | - | \checkmark | \checkmark |

MODEL SELECTION



NEED A QUOTE?

COMPLETE THIS TABLE AND EMAIL TO...

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