AnCAT® 058D-24SD

The **NORCHEM AnCAT Model 058D-24SD** automatic liquid polymer system is designed to process up to 1.0 GPH of a neat liquid polymer and deliver 1.0 to 16.0 GPM (60 to 960 GPH) of a nominal 0.1 to 2.0% aqueous polymer solution. The 058D-24SD system is modular in design consisting of a liquid polymer injection module and booster module assembly.

ANCAT MODEL 058D-24SD LIQUID POLYMER SYSTEM SPECIFICATIONS

FRAME: BASE: 24" W x 24" L x 24" H

CONSTRUCTION: 304SS BASE

INJECTION MODULE: PUMP: DIAPHRAGM-TYPE, HIGH VISCOSITY

DRIVE: ENCAPSULATED SOLENOID PULSE DRIVE

CAPACITY: NEAT POLYMER FLOWRATE 0.0 – 1.0 GPH (108 GPD)

BOOSTER MODULE: PUMP: CENTRIFUGAL-TYPE, CAST IRON, MODIFIED FOR POLYMERS

DRIVE: CLOSE-COUPLED

MOTOR: .75 HP, 3450 RPM, CONTINUOUS DUTY, ODP

DISCHARGE: 10 - 60 PSI 1.0 - 16.0 GPM

SOLUTION OUTPUT: PRIMARY FLOW: 3.0 – 8.0 GPM (480 GPH)

SECONDARY FLOW: 0.0 – 8.0 GPM (480 GPH) TOTAL FLOW: 3.0 – 16.0 GPM (960 GPH)

CONCENTRATION: SOLUTION: PRIMARY 0.2 – 2.0% VOLUME ON VOLUME

TOTAL 0.1 – 1.0% VOLUME ON VOLUME

UTILITIES: ELECTRICAL: 120/1/60 20 AMPS

WATER: 40 – 100 PSI 25 GPM CLEAN SOURCE

CONTROLS: CONTROLLER: (OPTIONAL) NEMA 4X W/ TOUCHPAD, POLYMER RATIO, REMOTE

START/STOP, POLYMER PUMP READOUT, WATER RATIO, PRIMARY AND SECONDARY FLOW READOUTS, REMOTE SETPOINT AND DOSING CONTROL, AUTO CALIBRATION AND

ALARMS

LOW WATER: (OPTIONAL) PISTON FLOW SENSOR WITH AUTO RESTART OR

MANUAL RÉSET

LOW POLYMER: (OPTIONAL) OPTICAL SENSORS WITH ADJUSTABLE RANGE

0.15 - 2.0% CONCENTRATION

ENGINEERING SPECIFICATIONS:

AnCAT Model 058D-24SD shall be provided to rapidly dilute, activate and feed emulsion, dispersion and solution polymers at 960 GPH of polymer solution at concentrations to 2%. The system shall contain a four step controlled energy hydraulic circuit which instantaneously dilutes and blends the polymer to it's most efficient state for use in the process. The unit shall be designed with full pressure-controlled, inline inversion capability and shall not be limited by a minimum retention time restriction. The polymer system shall be capable of providing a 15 – 20 PSI pressure boost and shall not rely on available inlet water pressure to discharge the polymer solution product. The system shall be modular in design and shall consist of a polymer injection module, booster module, premix manifold assembly, inlet water solenoid valve, primary and secondary inlet water flowmeter, primary and secondary inlet water flow controllers, proportioning pressure regulator to balance primary and secondary flow circuits, mixing pressure regulator adjustable from 10 to 70 PSI, mixing circuit pressure gauge and inlet water throttling valve.

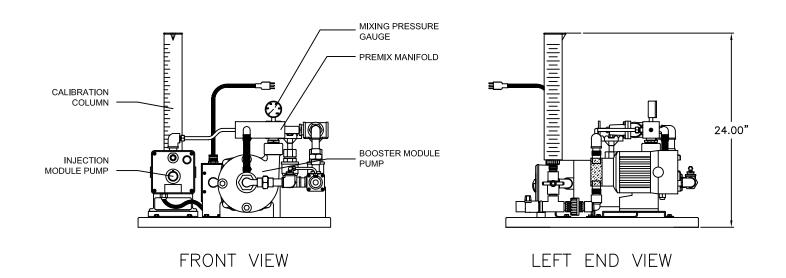
NORCHEM

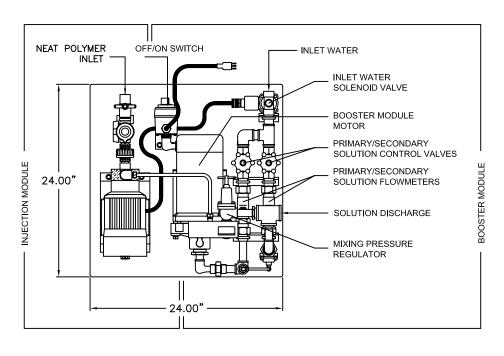
PLAN & ELEVATION

05DSD_DIM

AnCAT 05DSD-SERIES

(TYPICAL FOR ALL 054DSD AND 058SDS SYSTEMS)





PLAN VIEW

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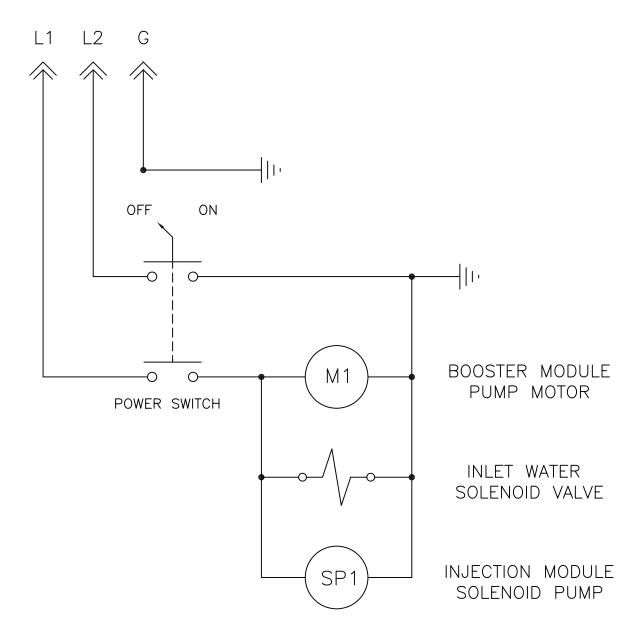
ELECTRICAL SCHEMATIC

05DSD_ELE

AnCAT 05DSD-SERIES

(TYPICAL TO ALL 054DSD AND 058DSD SYSTEMS)

INCOMING POWER 115 VAC/1 PH/60 HZ

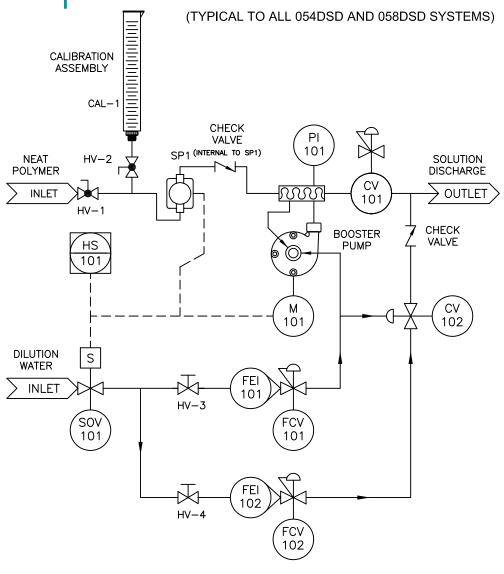


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PIPING & INSTRUMENT

AnCAT 05DSD-SERIES

05DSD_PID



LEGEND

HV-1	POLYMER SUPPLY SHUTOFF HAND VALVE
HV-2	CALIBRATION ASSEMBLY ISOLATION HAND VALVE
HV-3	PRIMARY DILUTION WATER THROTTLING VALVE
HV-4	SECONDARY DILUTION WATER THROTTLING VALVE
CAL-1	CALIBRATION CYLINDER
SP1	INJECTION MODULE SOLENOID PUMP w/INTERNAL CEHCK VALVE
PI-101	MIXING PRESSURE GAUGE
M-101	BOOSTER PUMP MOTOR
SOV-1	DILUTION WATER INLET SOLENOID VALVE
CV-101	MIXING PRESSURE CONTROL VALVE
CV-102	SECONDARY DILUTION EQUAIZATION VALVE
FE I- 101	PRIMARY DILUTION WATER INDICATING FLOW METER
FE I- 102	SECONDARY DILUTION WATER INDICATING FLOWMETER
FCV-101	PRIMARY DILUTION FLOW CONTROL REGULATOR
FCV-102	SECONDARY DILUTION FLOW CONTROL REGULATOR
HS-101	OFF/ON SWITCH

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