

Specifications
SUGGESTED SPECIFICATION
DUPLEX SP SYSTEM

Furnish and install as shown on plans, a factory-assembled duplex water pressure system equal to Federal Pump Corp. Model SP- _____. The system shall include two close-coupled, bronze-fitted, end-suction centrifugal pumps, each rated _____ GPM at _____ ft. TDH. The pumps are to be of the back pull-out design, with center-line discharge, bronze shaft sleeve, enclosed bronze impeller and mechanical shaft seal. Each pump shall be driven by a drip-proof motor, _____ HP, _____ phase, _____ cycle, _____ volts, _____ RPM.

The system shall include a control valve for each pump which will act as a pressure reducing valve and a check valve. The system shall include a control panel in a NEMA-1 general purpose enclosure, factory mounted and wired on the unit, comprising a fusible disconnect switch for each motor with thru-door operating handles, a magnetic starter for each motor, HOA selector switches, pilot lights, a lead-lag manual transfer switch, required transformers, holding circuits and time delays, a lag pump control pressure switch and a terminal strip.

The system shall be factory assembled on a steel base and shall include copper suction and discharge headers, a pressure gauge for each header, an isolation valve on the suction and discharge of each pump and a temperature sensing purge valve.

The lead pump shall operate continuously and its control valve shall maintain the system pressure. As water demand in the building increases beyond the ability of the lead pump to satisfy it, the system pressure will drop, causing the lag pump to start. Both pumps will operate in parallel for a set minimum time or until the demand in the building drops sufficiently to allow the lead pump to satisfy it alone at which time the lag pump will shut down. The lead and lag pumps shall be manually alternated.

CUSHION-STOP OPTION (add the following to the end of the specification):

When the building water demand reaches a low level, the system pressure will rise, causing a pressure switch to shut off the lead pump. A Cushion-Stop tank will be integrally assembled on the system base; 80 gallon nominal capacity, rated for 150# (or 250#) maximum working pressure. The tank draw-down capacity will satisfy the small demand plus fixture leakage. When the demand increases, the lead pump will start again, supplying the building demand, and returning the tank to full draw-down capacity for use on the next low demand cycle.

SUGGESTED SPECIFICATION
TRIPLEX (TYPE B) SP SYSTEM

Furnish and install as shown on plans, a factory-assembled triplex (Type B) water pressure system equal to Federal Pump Corp. Model SP - _____. The system shall include three close-coupled, bronze-fitted, end-suction centrifugal pumps. The jockey pump shall be rated _____ GPM at _____ ft. TDH, and each of the main pumps shall be rated _____ GPM at _____ ft. TDH. The pumps are to be of the back pull-out design, with center-line discharge, bronze shaft sleeve, enclosed bronze impeller and mechanical shaft seal. Each pump shall be driven by a drip-proof motor, _____ phase, _____ cycle, _____ volts, _____ RPM. Jockey pump _____ H.P. Main pumps _____ H.P. each.

The system shall include a control valve for each pump which will act as a pressure reducing valve and a check valve. The system shall include a control panel in a NEMA-1 general purpose enclosure, factory mounted and wired on the unit, comprising a fusible disconnect switch for each motor with thru-door operating handles, a magnetic starter for each motor, HOA selector switches, pilot lights, a lead-lag manual transfer switch, required transformers, holding circuits and time delays, a main pump control pressure switch and a terminal strip.

The system shall be factory assembled on a steel base and shall include copper suction and discharge headers, a pressure gauge for each header, an isolation valve on the suction and discharge of each pump and a temperature sensing purge valve.

The jockey pump shall operate continuously and its control valve shall maintain the system pressure. As water demand in the building increases beyond the ability of the jockey pump to satisfy it, the system pressure will drop, causing the first main pump to start and operate in parallel with the jockey pump. After a set time delay period, the second main pump will start and operate in parallel with the other two pumps. After a set minimum time or when the demand in the building drops sufficiently to allow the jockey pump to satisfy it alone, the main pumps will shut down. The operating sequence of the main pumps shall be manually alternated.

CUSHION -STOP OPTION (add the following to the end of the specification)

When the building water demand reaches a low level, the system pressure will rise, causing a pressure switch to shut off the jockey pump. A Cushion-Stop tank will be integrally assembled on the system base; 80 gallon nominal capacity, rated for 150# (or 250#) maximum working pressure. The tank draw-down capacity will satisfy the small demand plus fixture leakage. when the demand increases, the jockey pump will start again, supplying the building demand, and returning the tank to full draw-down capacity for use on the next low demand cycle.

