

# STARTERPAQ 13D RESIDENTIAL FIRE PUMP SPECIFICATIONS



## STARTERPAQ PERFORMANCE

### STARTERPAQ ES2 PERFORMANCE

- ▶ 0 gpm (churn) @ 90 psi
- ▶ 10 gpm @ 81 psi
- ▶ 12 gpm @ 79 psi
- ▶ 20 gpm @ 69 psi
- ▶ 24 gpm @ 62 psi
- ▶ 26 gpm @ 58 psi
- ▶ 30 gpm @ 53 psi
- ▶ 32 gpm @ 51 psi
- ▶ Max Flow @ 34 gpm

### STARTERPAQ ES3 PERFORMANCE

- ▶ 0 gpm (churn) @ 72 psi
- ▶ 10 gpm @ 65 psi
- ▶ 20 gpm @ 58 psi
- ▶ 25 gpm @ 55 psi
- ▶ 30 gpm @ 51 psi
- ▶ 35 gpm @ 47 psi
- ▶ 40 gpm @ 45 psi
- ▶ 45 gpm @ 40 psi
- ▶ 50 gpm @ 25 psi

## STARTERPAQ

This specification covers the manufacturing and supplying of a packaged 13D RESIDENTIAL FIRE PUMP SYSTEM including a self-priming, closed coupled, end suction pump and basic manifold system. Pump system can be supplied with complete control panel as defined below. Panel is optional, but is factory recommended. Full skid mount is optional, but factory recommended.

## STARTERPAQ PUMP & MOTOR

- ▶ The pump shall be either an ES2 (11amp) or ES3 (12amp)
- ▶ Pump shall be a self-priming centrifugal jet pump
- ▶ Pump shall be of single stage design
- ▶ Pump shall have a casing construction of cast iron and a technopolymer impeller
- ▶ Pump casing shall include a priming plug for ease of priming and air elimination
- ▶ Pump Motor shall be 230V based and the ES2 will have a FLA rating of 11 amps and the ES3 will have a FLA rating of 12 amps
- ▶ Pump Motor shall be Totally Enclosed and Fan Cooled (TEFC)
- ▶ Pump Motor shaft shall be Stainless Steel
- ▶ Pump Motor shall make use of oversized grease ball bearings that are designed to be maintenance-free; sealed for life
- ▶ Pump Motor shall have an integrated pressure switch pre-set to start when pressure drops to below 40psi and reset when pressure increases to above 60psi. *If a control panel as defined below is not provided it is up to the designer or installing contractor to confirm that the demand of a single sprinkler head creates enough demand to keeps system pressure below 60psi. If this is not possible then the pressure switch should be adjusted so the start and reset points are increased to a point the demand of single head does not reset the pressure switch.*





2HP Skid Mounted System. Manufacturer's design subject to change.

## PRE-ASSEMBLED DISCHARGE MANIFOLD

Factory assembled and pressure tested manifold shall be included with the StarterPaq ES2 or ES3 Manifold shall feature:

- ▶ Grooved Lock style coupling, standard pipe couplings are not allowed
- ▶ Brass Spring Loaded Check Valve
- ▶ 1" Female NPT port for Flow Switch, Flow Switch optional and if used shall be provided by others
- ▶ Test Drain Ball Valve (Brass)
- ▶ ¼" Pressure Gauge Liquid Filled with ¼" Isolation Valve
- ▶ ¼" Pressure Sensing Line pre-connected to Integrated Pressure Switch and shall include an isolation valve
- ▶ 1¼" Female NPT System Connection
- ▶ When a Self – Testing Control Panel is selected the discharge manifold system shall include a ½" N.C. solenoid valve

## SKID MOUNT

StarterPaq Pump and Panel can mount to the compact Skid Mount, including electrical and sensing line connections. The skid base is 14" x 28" and the panel mount is 36" tall.

## CONTROLLER

Controller shall be an NFPA 13D panel designed to start and stop an NFPA 13D Fire Pump based on system pressure. The Controller shall be specifically designed to work with pump motors that include an integrated pressure switch. The controller shall not require its own pressure sensing device.

Controller shall be either a Darley Standard StarterPaq Controller or a Darley Self-Testing Starterpaq Controller.

## STANDARD CONTROL PANEL

- ▶ NEMA 2 Red Enclosure
- ▶ Motor HP rated Disconnect
- ▶ Integrated Minimum Run Timer
- ▶ Integrated Restart Time Delay
- ▶ Power Available Light located on panel exterior
- ▶ Failure to start audible and visual alarm
- ▶ Shall include contract for remote start (flow switch or push button)
- ▶ Dry contact shall be provided to initiate an audible alarm, typically used with leak detection sensor

## SELF TESTING CONTROL PANEL

Darley Self-Testing Control Includes same characteristics as Standard Control plus:

- ▶ Additional test timer and terminals for an external test solenoid valve
- ▶ Panel will be set so to conduct a weekly automatic test on the system



LEARN MORE

ON STARTERPAQ.COM

1.800.4.DARLEY • DARLEY.COM •   



#DemandDarley