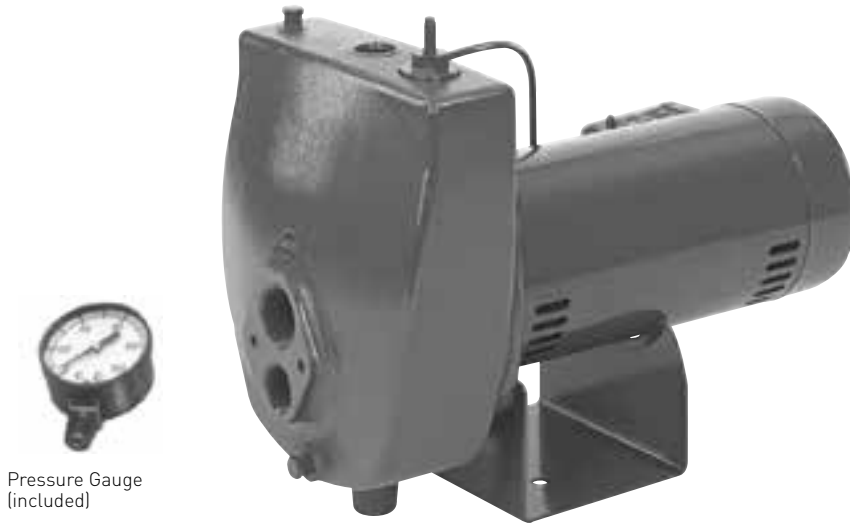


STA-RITE® ProJet™ HL Series

Cast iron self-priming convertible jet pumps



Pressure Gauge (included)



FEATURES

Quality Construction: Close-grained cast iron pump body is a rugged one-piece unit, specially treated to resist corrosion. Drain port provided for easy winterizing.

Noryl Impeller: Precision-molded for perfect balance...ultra-smooth for highest performance and efficiency.

Precision-Molded Diffuser: Pump primes faster, handles more air, with multi-port, precision-molded, reinforced polypropylene diffuser.

Pressure Switch: High quality, cut-in and differential pressure setting are adjustable.

Mechanical Shaft Seal: Precision lapped and highly polished carbon-ceramic, stainless steel construction. Internal design guarantees continuous water lubrication for maximum protection.

Motor Windings: Superior insulation materials protect against excessive moisture and contaminants...assures prolonged motor life.

Balanced Rotor: Diecast under high pressures for uniform performance and greater efficiency...dynamically balanced.

Heavy-Duty Ball Bearings: Shielded, permanently lubricated bearings, extensively tested to ensure extended life and smooth, quiet operation.

Pump and Motor Shaft: 416 stainless steel for maximum corrosion resistance; one-piece threaded shaft for positive impeller drive and alignment.

The ProJet HL convertible jet pumps offer a proven cast iron self-priming design available in 1/2 – 1 HP models. The ProJet HL convertible jets utilize built-in regulators offering easier priming and better range of performance from a complete line of shallow well, 4" double pipe, 2" and 3" single pipe jet packages.

APPLICATIONS

Water systems and sprinkling... for homes, farms and cottages.

SPECIFICATIONS

Body and Seal Plate: Close-grained cast iron

Impeller: High-strength Noryl®

Diffuser: Reinforced polypropylene with brass wear ring

Shaft: One-piece threaded 416 stainless steel

Base: Steel, 12 gauge

Max. Liquid Temperature: 140°F

Max. Inlet Pressure: 50 PSI

Pressure Switch Pre-Set: 30-50 PSI

Suction Ports: "Suction-over-Drive"

Pressure Gauge: 0-100 PSI

ORDERING INFORMATION

| CATALOG NUMBER | HP | DESCRIPTION | PIPE TAPPING SIZES | | | MOTOR VOLTAGE | APPROX. WT. LBS. |
|----------------|-----|---------------|--------------------|-------|-----------|---------------|------------------|
| | | | SUCTION | DRIVE | DISCHARGE | | |
| HLC | 1/2 | Deep Well Jet | 1-1/4" | 1" | 1" | 115/230 | 42 |
| HLD | 3/4 | Deep Well Jet | 1-1/4" | 1" | 1" | 115/230 | 60 |
| HLE | 1 | Deep Well Jet | 1-1/4" | 1" | 1" | 115/230 | 65 |

A Jet Package should be ordered with every Series HL Pump.

NOTE: Pumps installed with a Pro-Source® tank require a 100 PSI relief valve. Pumps installed with a conventional tank require a 75 PSI relief valve. Relief valve must be capable of relieving flow of pump at relief pressure.

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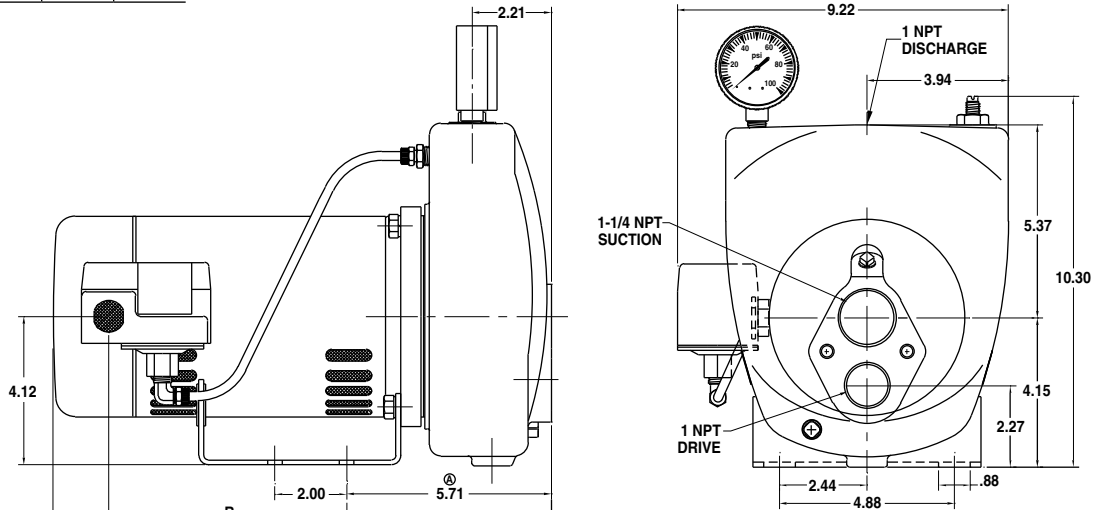
STA-RITE® ProJet™ HL Series

Cast iron self-priming convertible jet pumps

OUTLINE DIMENSIONS

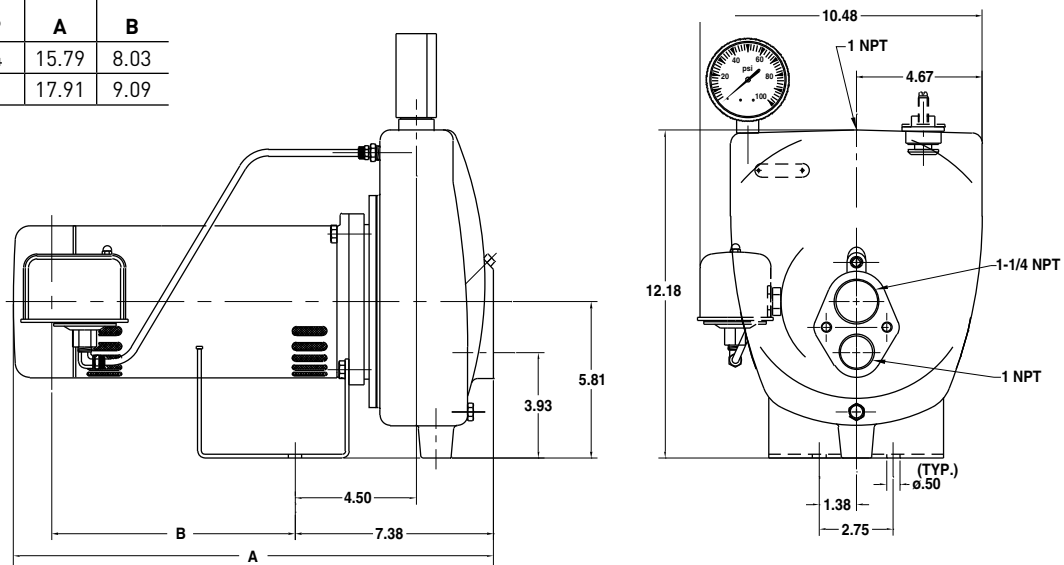
| CATALOG NUMBER | HP | A | B |
|----------------|-----|-------|------|
| HLC | 1/2 | 14.25 | 7.09 |

HLC



| CATALOG NUMBER | HP | A | B |
|----------------|-----|-------|------|
| HLD | 3/4 | 15.79 | 8.03 |
| HLE | 1 | 17.91 | 9.09 |

HLD and HLE



Dimensions (in inches) are for estimating purposes only.

NOTE: 1/4 NPT, 0-100 PSI pressure gauge supplied uninstalled to prevent shipping damage.

STA-RITE® ProJet™ HL Series

Cast iron self-priming convertible jet pumps

PUMP PERFORMANCE (CAPACITY IN GALLONS PER MINUTE) SHALLOW WELL – 5', 10', 15', 20' AND 25' PUMPING DEPTHS

| CAT. NO. | HP | DISCH. PRESS. | PUMPING DEPTH TO WATER IN FEET | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------|-----|--------------------|--------------------------------|------|------|------|-------------|------|------|------|-------------|------|------|------|-------------|------|------|------|-------------|------|------|------|------|------|------|------|-----|
| | | | 5 FT. LIFT | | | | 10 FT. LIFT | | | | 15 FT. LIFT | | | | 20 FT. LIFT | | | | 25 FT. LIFT | | | | | | | | |
| HLC | 1/2 | JET PACKAGE | 11SD | 10SD | 29SD | CK5 | 11SD | 10SD | 29SD | CK5 | 11SD | 10SD | 29SD | CK5 | 11SD | 10SD | 29SD | CK5 | 11SD | 10SD | 29SD | CK5 | | | | | |
| | | Venturi N32P- | -68B | -67B | -66B | -66B | -68B | -67B | -66B | -66B | -68B | -67B | -66B | -66B | -68B | -67B | -66B | -66B | -68B | -67B | -66B | -66B | | | | | |
| | | Nozzle J43P- | -44 | -44 | -41 | -45 | -44 | -44 | -41 | -45 | -44 | -44 | -41 | -45 | -44 | -44 | -41 | -45 | -44 | -44 | -41 | -45 | | | | | |
| | | 20 PSI | 20.6 | 14.4 | 10.1 | 6.6 | 19.0 | 13.2 | 9.3 | 6.1 | 16.5 | 11.5 | 8.1 | 5.3 | 13.3 | 9.5 | 6.9 | 4.5 | 9.8 | 6.9 | 5.3 | 3.4 | | | | | |
| | | 30 PSI | 19.6 | 14.3 | 9.9 | 6.5 | 18.1 | 13.1 | 9.1 | 6.0 | 15.7 | 11.4 | 7.9 | 5.2 | 13.3 | 9.5 | 6.7 | 4.4 | 9.8 | 6.9 | 5.1 | 3.4 | | | | | |
| | | 40 PSI | 10.3 | 12.1 | 9.8 | 6.4 | 9.4 | 11.2 | 9.0 | 5.9 | 8.2 | 9.7 | 7.8 | 5.1 | 6.4 | 8.3 | 6.6 | 4.3 | 3.1 | 6.3 | 5.1 | 3.3 | | | | | |
| | | 50 PSI | | 4.6 | 7.3 | 6.3 | | 4.3 | 6.7 | 5.8 | | 3.7 | 5.8 | 5.0 | | 2.6 | 4.9 | 4.3 | | 1.0 | 3.8 | 3.3 | | | | | |
| | | 60 PSI | | | 3.5 | 5.8 | | | 3.2 | 5.3 | | | 2.8 | 4.6 | | | 2.4 | 3.9 | | | | 3.0 | | | | | |
| Shut-off-PSI | 55 | 59 | 70 | 72 | 53 | 57 | 66 | 67 | 50 | 55 | 64 | 65 | 48 | 53 | 61 | 63 | 46 | 51 | 59 | 61 | | | | | | | |
| HLD | 3/4 | JET PACKAGE | 12SD | 11SD | CK1 | CK5 | CK1 | 12SD | 11SD | CK1 | CK5 | CK1 | 12SD | 11SD | CK1 | CK5 | CK1 | 12SD | 11SD | CK1 | CK5 | CK1 | 12SD | 11SD | CK1 | CK5 | CK1 |
| | | Venturi N32P- | -65 | -68B | -72E | -67B | -72 | -65 | -68B | -72E | -67B | -72 | -65 | -68B | -72E | -67B | -72 | -65 | -68B | -72E | -67B | -72 | -65 | -68B | -72E | -67B | -72 |
| | | Nozzle J34P- | -44 | -44 | -43 | -45 | -43 | -44 | -44 | -43 | -45 | -43 | -44 | -44 | -43 | -45 | -43 | -44 | -44 | -43 | -45 | -43 | -44 | -44 | -43 | -45 | -43 |
| | | 20 PSI | 24.2 | 20.3 | 14.5 | 12.6 | 8.6 | 23.2 | 19.4 | 13.9 | 12.1 | 8.3 | 20.2 | 16.9 | 12.1 | 10.5 | 7.2 | 17.7 | 13.6 | 10.3 | 8.2 | 6.1 | 12.5 | 10.4 | 7.9 | 6.2 | 4.7 |
| | | 30 PSI | 24.0 | 20.3 | 14.4 | 12.4 | 8.5 | 23.0 | 19.4 | 13.8 | 11.8 | 8.2 | 20.0 | 16.9 | 12.0 | 10.3 | 7.1 | 17.7 | 13.6 | 10.2 | 8.0 | 6.0 | 12.5 | 10.4 | 7.8 | 6.0 | 4.6 |
| | | 40 PSI | 16.7 | 16.4 | 13.7 | 12.2 | 8.3 | 16.0 | 15.8 | 13.1 | 11.7 | 7.9 | 13.9 | 13.7 | 11.4 | 10.2 | 6.9 | 16.0 | 11.5 | 9.7 | 7.8 | 5.9 | 10.3 | 8.3 | 7.4 | 5.8 | 4.5 |
| | | 50 PSI | | | 12.6 | 12.0 | 8.2 | | | 12.1 | 11.5 | 7.8 | | | 10.5 | 10.0 | 6.8 | | | 8.9 | 7.7 | 5.8 | | | 6.8 | 5.7 | 4.4 |
| | | 60 PSI | | | 6.0 | 8.2 | 6.1 | | | 5.8 | 7.8 | 5.9 | | | 5.0 | 6.8 | 5.1 | | | 4.3 | 5.8 | 4.3 | | | 3.3 | 4.8 | 3.3 |
| 70 PSI | | | | 4.2 | 2.9 | | | | 4.0 | 2.8 | | | | 3.5 | 2.4 | | | | 2.8 | 2.0 | | | | 2.0 | 1.6 | | |
| Shut-off-PSI | 61 | 62 | 71 | 80 | 82 | 59 | 60 | 69 | 78 | 79 | 57 | 58 | 67 | 76 | 77 | 54 | 55 | 65 | 74 | 75 | 52 | 53 | 63 | 72 | 73 | | |
| HLE | 1 | JET PACKAGE | 12SD | CK2 | 60SD | 12SD | CK2 | 60SD | 12SD | CK2 | 60SD | 12SD | CK2 | 60SD | 12SD | CK2 | 60SD | 12SD | CK2 | 60SD | | | | | | | |
| | | Venturi N32P- | -65 | -64 | -64 | -65 | -64 | -64 | -65 | -64 | -64 | -65 | -64 | -64 | -65 | -64 | -64 | -65 | -64 | -64 | | | | | | | |
| | | Nozzle J34P- | -44 | -44 | -45 | -44 | -44 | -45 | -44 | -44 | -45 | -44 | -44 | -45 | -44 | -44 | -45 | -44 | -44 | -45 | | | | | | | |
| | | 20 PSI | 26.8 | 21.6 | 18.4 | 24.6 | 19.9 | 16.9 | 21.4 | 17.3 | 14.7 | 18.2 | 14.7 | 12.5 | 13.9 | 11.2 | 9.6 | | | | | | | | | | |
| | | 30 PSI | 26.5 | 21.5 | 18.1 | 24.4 | 19.8 | 16.7 | 21.2 | 17.2 | 14.5 | 18.0 | 14.6 | 12.3 | 13.8 | 11.2 | 9.4 | | | | | | | | | | |
| | | 40 PSI | 22.9 | 21.3 | 17.5 | 21.0 | 19.6 | 16.1 | 18.3 | 17.0 | 14.0 | 15.6 | 14.5 | 11.9 | 11.9 | 11.1 | 9.1 | | | | | | | | | | |
| | | 50 PSI | 15.1 | 16.8 | 17.3 | 13.9 | 15.4 | 15.9 | 12.1 | 13.4 | 13.8 | 10.3 | 11.4 | 11.7 | 7.9 | 8.7 | 9.0 | | | | | | | | | | |
| | | 60 PSI | | 4.0 | 15.6 | | 3.7 | 14.4 | | 3.2 | 12.5 | | 2.7 | 10.6 | | 2.1 | 8.1 | | | | | | | | | | |
| 70 PSI | | | 4.1 | | | 3.8 | | | 3.3 | | | 2.8 | | | | | | | | | | | | | | | |
| Shut-off-PSI | 61 | 71 | 77 | 59 | 69 | 75 | 57 | 67 | 73 | 55 | 65 | 71 | 53 | 63 | 68 | | | | | | | | | | | | |

NOTE: Pumps are supplied with 30-50 pressure switch setting. Cut-in/Cut-out pressure settings are adjustable.

STA-RITE® ProJet™ HL Series

Cast iron self-priming convertible jet pumps

PUMP PERFORMANCE (CAPACITY IN GALLONS PER MINUTE) DEEP WELL (40 PSI) 4" DOUBLE PIPE

| CAT. NO. | HP | JET NO. | USES VENTURI | USES NOZZLE | PUMPING DEPTH IN FEET | | | | | | | | | | | | MAX. PUMP SHUT-OFF PRESSURE PSI | |
|----------|-----|---------|--------------|-------------|-----------------------|------|-----|-----|-----|-----|-----|-----|------|------|------|---------------------|---------------------------------|----|
| | | | | | 20' | 30' | 40' | 50' | 60' | 70' | 80' | 90' | 100' | 110' | 120' | JET AT 20 FT. DEPTH | JET AT MAX. DEPTH | |
| HLC | 1/2 | CK3 | J32P-26 | J34P-41 | 9.4 | 8.0 | 6.6 | | | | | | | | | | 77 | 68 |
| | | 54SD | J32P-22 | J34P-44 | 8.0 | 6.9 | 5.7 | 4.8 | 3.8 | 3.2 | | | | | | | 94 | 70 |
| | | CK5 | N32P-66B | J34P-45 | 7.3 | 6.2 | 5.0 | 4.0 | | | | | | | | | 83 | 69 |
| | | 55SD | J32P-18 | J34P-43 | 5.0 | 4.3 | 3.7 | 3.2 | 2.6 | 2.2 | 1.8 | 1.5 | | | | | 96 | 63 |
| HLD | 3/4 | CK1 | N32P-72 | J34P-43 | 13.2 | 10.8 | 8.4 | 6.3 | 4.2 | | | | | | | | 74 | 56 |
| | | CK2 | J32P-24 | J34P-44 | 13.0 | 11.5 | 9.9 | 8.7 | 7.5 | 6.6 | 5.4 | | | | | | 105 | 80 |
| | | 54SD | J32P-22 | J34P-44 | 8.2 | 7.7 | 6.7 | 6.3 | 5.8 | 5.4 | 4.8 | 4.0 | 3.7 | 3.4 | 2.7 | | 122 | 73 |
| HLE | 1 | 54SD | J32P-22 | J34P-44 | 9.5 | 8.5 | 7.4 | 6.9 | 6.5 | 6.0 | 5.4 | 4.8 | 4.2 | 3.6 | 2.9 | | 127 | 76 |

NOTE: Tank body on HLE pump tapped 1-1/4" x 1". On HLE pump, drop pipe should be increased to 1-1/2" x 1-1/4" to ensure adequate capacity from pump.

PUMP PERFORMANCE (CAPACITY IN GALLONS PER MINUTE) DEEP WELL (40 PSI) 2" SINGLE PIPE

| CAT. NO. | HP | JET NO. | USES VENTURI | USES NOZZLE | PUMPING DEPTH IN FEET | | | | | | | | | | | | MAX. PUMP SHUT-OFF PRESSURE PSI | |
|----------|-----|---------|--------------|-------------|-----------------------|------|-----|-----|-----|-----|-----|-----|------|------|------|---------------------|---------------------------------|----|
| | | | | | 20' | 30' | 40' | 50' | 60' | 70' | 80' | 90' | 100' | 110' | 120' | JET AT 20 FT. DEPTH | JET AT MAX. DEPTH | |
| HLC | 1/2 | 54AP | J32P-22 | J34P-44 | 7.4 | 6.3 | 5.2 | 3.9 | 2.5 | 2.0 | | | | | | | 82 | 54 |
| HLD | 3/4 | 10AP | J32P-24 | J34P-44 | 10.5 | 10.0 | 8.1 | 6.2 | | | | | | | | | 96 | 79 |
| | | 54AP | J32P-22 | J34P-44 | 6.0 | 5.3 | 4.8 | 4.2 | 4.1 | 3.7 | 3.5 | 2.8 | 2.1 | 1.6 | | | 95 | 53 |
| HLE | 1 | 9AP | J32P-29 | J34P-44 | 11.7 | 11.1 | 9.8 | 6.8 | | | | | | | | | 69 | 57 |
| | | 8AP | J32P-18 | J34P-42 | 6.7 | 5.8 | 5.3 | 4.7 | 4.5 | 4.1 | 3.8 | 3.1 | 2.6 | 2.0 | 1.6 | | 129 | 72 |

DEEP WELL (40 PSI) 3" SINGLE PIPE

| | | | | | | | | | | | | | | | | | | |
|-----|-----|------|---------|----------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|--|-----|----|
| HLC | 1/2 | 9CP | J32P-26 | J34P-41 | 9.4 | 8.0 | 6.6 | | | | | | | | | | 77 | 68 |
| | | 54CP | J32P-22 | J34P-44 | 8.0 | 6.9 | 5.7 | 4.8 | 3.8 | 3.2 | | | | | | | 94 | 70 |
| HLD | 3/4 | 18CP | J32P-24 | J34P-44 | 13.0 | 11.5 | 9.9 | 8.7 | 7.5 | 6.6 | 5.4 | | | | | | 106 | 80 |
| | | 54CP | J32P-22 | J34P-44 | 8.5 | 7.7 | 6.7 | 6.3 | 5.8 | 5.4 | 4.8 | 4.0 | 3.7 | 3.4 | 2.7 | | 122 | 73 |
| | | 57CP | J32P-33 | P122-108 | 18.0 | 15.4 | 12.8 | 10.8 | | | | | | | | | 81 | 68 |
| HLE | 1 | 54CP | J32P-22 | J34P-44 | 9.5 | 8.5 | 7.4 | 6.9 | 6.5 | 6.0 | 5.4 | 4.8 | 4.2 | 3.6 | 2.9 | | 127 | 76 |

Tank body on HLE pump tapped 1-1/4" x 1". Drop pipe should be increased to 1-1/2" x 1-1/4" to ensure adequate capacity from pump. Tested and rated in accordance with Water Systems Council Standards.

NOTE: Pumps installed with a Pro-Source® tank require a 100 PSI relief valve. Pumps installed with a conventional tank require a 75 PSI relief valve. Relief valve must be capable of relieving entire flow of pump at relief pressure.

