

SUBMERSIBLE PUMPS

4" TRI-SEAL HIGH CAPACITY PUMPS

FEATURES

- Four performance ranges: 35, 45, 60, and 90 gpm
- 2" NPT discharge, with and without an internal stainless steel wafer-style check valve
- Stainless steel discharge head and motor bracket
- High flow hydraulic staging allows for maximum pump output, exceeds all energy efficiency standards, and provides increased product longevity
- Ceramic shaft sleeve and rubber discharge bearing eliminates sand wear
- Intermediate bearing for increased shaft stability when pump lengths dictate on high horse, high performance constructions
- Impeller eye and hub seals for improved performance and efficiency
- Stainless steel hex pump shaft, shell, and shaft coupling
- High capacity upthrust assembly for protection during start-up and operation (35, 45, 60, and 90 gpm models)
- Designed for optimal performance when powered by Franklin's corrosion-resistant 4" submersible motors

MODEL NO. EXPLANATION

Example: 60FH10S4-PE

- 60 = gpm
- FH = Franklin Electric Brand
- 10 = 10 hp
- S = Stainless
- 4 = 4" Submersible
- PE = Pump End



CSA CERTIFIED
PUMP END ONLY



151236
US
NSF/ANSI 61
Drinking Water

SUBMERSIBLE PUMPS

4" TRI-SEAL HIGH CAPACITY PUMPS



ORDER INFORMATION

35-90 GPM PUMP ENDS

| 1 - 10 HP 4" High Capacity Pump Ends | | | | | | | | | | | | |
|--------------------------------------|-----|---------------|---------------|-----------|---------------------------------|-------------|--------------------------|-------------------------------|-----------|------|------|----|
| GPM | HP | Stages | Model | Order No. | Check Valve in 2" NPT Discharge | Basic Model | PEI _{CL} Number | Dimensions (in) Pump End Only | Wt. (lbs) | | | |
| 35 | 1 | 5 | 35FHIS4-PE | 93653505 | No | 35S4 | 0.83 | 11.9 | 8 | | | |
| | 1.5 | 7 | 35FHIS4-PE | 93653507 | | | | 14.5 | 9 | | | |
| | 2 | 9 | 35FH2S4-PE | 93653509 | | | | 17 | 10 | | | |
| | 3 | 12 | 35FH3S4-PE | 93653512 | | | | 20.9 | 11 | | | |
| | 5 | 20 | 35FH5S4-PE | 93653520 | | | | 22.2 | 16 | | | |
| | 7.5 | 29 | 35FH7S4-PE | 93653529 | | | | 44.5 | 23 | | | |
| | 10 | 38 | 35FH10S4-PE | 93653538 | | | | 58.5 | 29 | | | |
| | 1 | 5 | 35FHIS4-PECV | 93663505 | | | | 14.1 | 9 | | | |
| | 1.5 | 7 | 35FHIS4-PECV | 93663507 | | | | 16.7 | 10 | | | |
| | 2 | 9 | 35FH2S4-PECV | 93663509 | | | | 19.2 | 11 | | | |
| 45 | 3 | 12 | 35FH3S4-PECV | 93663512 | Yes | 45S4 | 0.89 | 23 | 12 | | | |
| | 5 | 20 | 35FH5S4-PECV | 93663520 | | | | 35.5 | 17 | | | |
| | 7.5 | 29 | 35FH7S4-PECV | 93663529 | | | | 47 | 24 | | | |
| | 10 | 38 | 35FH10S4-PECV | 93663538 | | | | 60.7 | 30 | | | |
| | 1.5 | 5 | 45FHIS4-PE | 93654505 | | | | No | 45S4 | 0.89 | 14.2 | 8 |
| | 2 | 7 | 45FH2S4-PE | 93654507 | | | | | | | 17.6 | 9 |
| | 3 | 10 | 45FH3S4-PE | 93654510 | | | | | | | 22.8 | 10 |
| | 5 | 16 | 45FH5S4-PE | 93654516 | | | | | | | 35.3 | 14 |
| | 7.5 | 23 | 45FH7S4-PE | 93654523 | | | | | | | 47.4 | 22 |
| | 10 | 31 | 45FH10S4-PE | 93654531 | | | | | | | 63.3 | 28 |
| 1.5 | 5 | 45FHIS4-PECV | 93664505 | 16.3 | 9 | | | | | | | |
| 2 | 7 | 45FH2S4-PECV | 93664507 | 19.8 | 10 | | | | | | | |
| 3 | 10 | 45FH3S4-PECV | 93664510 | 25 | 11 | | | | | | | |
| 5 | 16 | 45FH5S4-PECV | 93664516 | 37.4 | 15 | | | | | | | |
| 60 | 7.5 | 23 | 45FH7S4-PECV | 93664523 | Yes | 60S4 | 0.94 | 49.5 | 23 | | | |
| | 10 | 31 | 45FH10S4-PECV | 93664531 | | | | 65.5 | 29 | | | |
| | 2 | 7 | 60FH2S4-PE | 93656007 | | | | No | 60S4 | 0.94 | 23.5 | 10 |
| | 3 | 10 | 60FH3S4-PE | 93656010 | | | | | | | 33.3 | 12 |
| | 5 | 16 | 60FH5S4-PE | 93656016 | | | | | | | 48.8 | 18 |
| | 7.5 | 23 | 60FH7S4-PE | 93656023 | | | | | | | 68.8 | 25 |
| | 10 | 30 | 60FH10S4-PE | 93656030 | | | | | | | 86.9 | 31 |
| | 2 | 7 | 60FH2S4-PECV | 93666007 | | | | | | | 25.7 | 11 |
| | 3 | 10 | 60FH3S4-PECV | 93666010 | | | | | | | 35.4 | 13 |
| | 5 | 16 | 60FH5S4-PECV | 93666016 | | | | | | | 50.9 | 19 |
| 7.5 | 23 | 60FH7S4-PECV | 93666023 | 71 | 26 | | | | | | | |
| 10 | 30 | 60FH10S4-PECV | 93666030 | 89 | 32 | | | | | | | |
| 90 | 2 | 6 | 90FH2S4-PE | 93659006 | No | 90S4 | 0.92 | 23.4 | 10 | | | |
| | 3 | 8 | 90FH3S4-PE | 93659008 | | | | 31.4 | 12 | | | |
| | 5 | 13 | 90FH5S4-PE | 93659013 | | | | 46.3 | 17 | | | |
| | 7.5 | 19 | 90FH7S4-PE | 93659019 | | | | 66.2 | 23 | | | |
| | 10 | 25 | 90FH10S4-PE | 93659025 | | | | 84.2 | 29 | | | |
| | 2 | 6 | 90FH2S4-PECV | 93669006 | | | | 25.6 | 11 | | | |
| | 3 | 8 | 90FH3S4-PECV | 93669008 | | | | 33.6 | 13 | | | |
| | 5 | 13 | 90FH5S4-PECV | 93669013 | | | | 48.5 | 18 | | | |
| | 7.5 | 19 | 90FH7S4-PECV | 93669019 | | | | 68.4 | 24 | | | |
| | 10 | 25 | 90FH10S4-PECV | 93669025 | | | | 86.3 | 30 | | | |

NOTES: Maximum diameter across cable guard is 3.90" on all models.

ORDER INFORMATION

35-90 GPM PUMP & MOTOR

| 1 - 1.5 HP Single-Phase Units (2-Wire PMA) | | | | | | | | | |
|--|-----|--------|-------|------------------|-----------|---------------------------------|-------------|--------------------------|-----------|
| GPM | HP | Stages | Volts | Model | Order No. | Check Valve in 2" NPT Discharge | Basic Model | PEI _{CL} Number | Wt. (lbs) |
| 35 | 1 | 5 | 230 | 35FHIS4-2W230 | 93673505 | No | 35S4 | 0.83 | 32 |
| | 1.5 | 7 | | 35FHIS4-2W230 | 93673507 | | | | 40 |
| | 1 | 5 | | 35FHIS4-2W230-CV | 93693505 | Yes | | | 33 |
| | 1.5 | 7 | | 35FHIS4-2W230-CV | 93693507 | | | | 41 |
| 45 | 1.5 | 5 | 230 | 45FHIS4-2W230 | 93674505 | No | 45S4 | 0.89 | 40 |
| | 1.5 | 5 | | 45FHIS4-2W230-CV | 93694505 | Yes | | | 41 |
| 1 - 1.5 HP Single-Phase Units (3-Wire PMA) | | | | | | | | | |
| 35 | 1 | 5 | 230 | 35FHIS4-3W230 | 93703505 | No | 35S4 | 0.83 | 32 |
| | 1.5 | 7 | | 35FHIS4-3W230 | 93703507 | | | | 40 |
| | 1 | 5 | | 35FHIS4-3W230-CV | 93713505 | Yes | | | 33 |
| | 1.5 | 7 | | 35FHIS4-3W230-CV | 93713507 | | | | 41 |
| 45 | 1.5 | 5 | 230 | 45FHIS4-3W230 | 93704505 | No | 45S4 | 0.89 | 40 |
| | 1.5 | 5 | | 45FHIS4-3W230-CV | 93714505 | Yes | | | 41 |

SUBMERSIBLE PUMPS

4" TRI-SEAL HIGH CAPACITY PUMPS



MODEL CROSS REFERENCE

DOE COMPLIANT VS ORIGINAL FPS PUMP ENDS

| 1 - 10 HP 4" High Capacity Pump Ends | | | | | | | |
|--------------------------------------|---------------------------------|---|-----------|---|-----------|---------------------------|----------|
| GPM | Check Valve in 2" NPT Discharge | Tri-Seal High Capacity, DOE PEI _{CL} Rated | | Original FPS (Discontinued, replaced by Tri-Seal High Capacity) | | | |
| | | Model | Order No. | Model | Order No. | | |
| 35 | No | 35FH1S4-PE | 93653505 | 35FA1S4-PE | 93613506 | | |
| | | 35FH1S4-PE | 93653507 | 35FA1S4-PE | 93613508 | | |
| | | 35FH2S4-PE | 93653509 | 35FA2S4-PE | 93613510 | | |
| | | 35FH3S4-PE | 93653512 | 35FA3S4-PE | 93613514 | | |
| | | 35FH5S4-PE | 93653520 | 35FA5S4-PE | 93613522 | | |
| | | 35FH7S4-PE | 93653529 | 35FA7S4-PE | 93613534 | | |
| | | 35FH10S4-PE | 93653538 | 35FA10S4-PE | 93613542 | | |
| | Yes | 35FH1S4-PECV | 93663505 | 35FA1S4-PE W/ Check Valve | 90653506 | | |
| | | 35FH1S4-PECV | 93663507 | 35FA1S4-PE W/ Check Valve | 90653508 | | |
| | | 35FH2S4-PECV | 93663509 | 35FA2S4-PE W/ Check Valve | 90653510 | | |
| | | 35FH3S4-PECV | 93663512 | 35FA3S4-PE W/ Check Valve | 90653514 | | |
| | | 35FH5S4-PECV | 93663520 | 35FA5S4-PE W/ Check Valve | 90653522 | | |
| | | 35FH7S4-PECV | 93663529 | 35FA7S4-PE W/ Check Valve | 90653534 | | |
| | | 35FH10S4-PECV | 93663538 | 35FA10S4-PE W/ Check Valve | 90653542 | | |
| 45 | No | 45FH1S4-PE | 93654505 | 45FA1S4-PE | 93614506 | | |
| | | 45FH2S4-PE | 93654507 | 45FA2S4-PE | 93614508 | | |
| | | 45FH3S4-PE | 93654510 | 45FA3S4-PE | 93614511 | | |
| | | 45FH5S4-PE | 93654516 | 45FA5S4-PE | 93614518 | | |
| | | 45FH7S4-PE | 93654523 | 45FA7S4-PE | 93614526 | | |
| | | 45FH10S4-PE | 93654531 | 45FA10S4-PE | 93614531 | | |
| | | 45FH1S4-PECV | 93664505 | 45FA1S4-PE W/ Check Valve | 90654506 | | |
| | Yes | 45FH2S4-PECV | 93664507 | 45FA2S4-PE W/ Check Valve | 90654508 | | |
| | | 45FH3S4-PECV | 93664510 | 45FA3S4-PE W/ Check Valve | 90654511 | | |
| | | 45FH5S4-PECV | 93664516 | 45FA5S4-PE W/ Check Valve | 90654518 | | |
| | | 45FH7S4-PECV | 93664523 | 45FA7S4-PE W/ Check Valve | 90654526 | | |
| | | 45FH10S4-PECV | 93664531 | 45FA10S4-PE W/ Check Valve | 90654531 | | |
| | | 60FH2S4-PE | 93656007 | 60FA2S4-PE | 93616006 | | |
| | | 60FH3S4-PE | 93656010 | 60FA3S4-PE | 93616008 | | |
| 60 | No | 60FH5S4-PE | 93656016 | 60FA5S4-PE | 93616013 | | |
| | | 60FH7S4-PE | 93656023 | 60FA7S4-PE | 93616017 | | |
| | | 60FH10S4-PE | 93656030 | 60FA10S4-PE | 93616024 | | |
| | | 60FH2S4-PECV | 93666007 | 60FA2S4-PE W/ Check Valve | 90656006 | | |
| | | 60FH3S4-PECV | 93666010 | 60FA3S4-PE W/ Check Valve | 90656008 | | |
| | | 60FH5S4-PECV | 93666016 | 60FA5S4-PE W/ Check Valve | 90656013 | | |
| | | 60FH7S4-PECV | 93666023 | 60FA7S4-PE W/ Check Valve | 90656017 | | |
| | Yes | 60FH10S4-PECV | 93666030 | 60FA10S4-PE W/ Check Valve | 90656024 | | |
| | | 90FH2S4-PE | 93659006 | 90FA2S4-PE | 93619005 | | |
| | | 90FH3S4-PE | 93659008 | 90FA3S4-PE | 93619007 | | |
| | | 90 | No | 90FH5S4-PE | 93659013 | 90FA5S4-PE | 93619012 |
| | | | | 90FH7S4-PE | 93659019 | 90FA7S4-PE | 93619019 |
| | | | | 90FH10S4-PE | 93659025 | 90FA10S4-PE | 93619020 |
| | | | | 90FH2S4-PECV | 93669006 | 90FA2S4-PE W/ Check Valve | 90659005 |
| 90FH3S4-PECV | 93669008 | | | 90FA3S4-PE W/ Check Valve | 90659007 | | |
| 90FH5S4-PECV | 93669013 | | | 90FA5S4-PE W/ Check Valve | 90659012 | | |
| 90FH7S4-PECV | 93669019 | | | 90FA7S4-PE W/ Check Valve | 90659019 | | |
| Yes | 90FH10S4-PECV | | 93669025 | 90FA10S4-PE W/ Check Valve | 90659020 | | |

MODEL CROSS REFERENCE

DOE COMPLIANT VS ORIGINAL FPS PUMP & MOTOR

| 1 - 1.5 HP Single-Phase Units (2-Wire PMA) | | | | | |
|--|---------------------------------|---|-----------|---|-----------|
| GPM | Check Valve in 2" NPT Discharge | Tri-Seal High Capacity, DOE PEI _{CL} Rated | | Original FPS (Discontinued, replaced by Tri-Seal High Capacity) | |
| | | Model | Order No. | Model | Order No. |
| 35 | No | 35FH1S4-2W230 | 93673505 | 35FA1S4-2W230 | 93613606 |
| | | 35FH1S4-2W230 | 93673507 | 35FA1S4-2W230 | 93613608 |
| | Yes | 35FH1S4-2W230-CV | 93693505 | 35FA1S4-2W230 W/ CV | 90653606 |
| | | 35FH1S4-2W230-CV | 93693507 | 35FA1S4-2W230 W/ CV | 90653608 |
| 45 | No | 45FH1S4-2W230 | 93674505 | 45FA1S4-2W230 | 93614606 |
| | Yes | 45FH1S4-2W230-CV | 93694505 | 45FA1S4-2W230 W/ CV | 90654606 |
| 1 - 1.5 HP Single-Phase Units (3-Wire PMA) | | | | | |
| 35 | No | 35FH1S4-3W230 | 93703505 | 35FA1S4-3W230 | 93613706 |
| | | 35FH1S4-3W230 | 93703507 | 35FA1S4-3W230 | 93613708 |
| | Yes | 35FH1S4-3W230-CV | 93713505 | 35FA1S4-3W230 W/ CV | 90653706 |
| | | 35FH1S4-3W230-CV | 93713507 | 35FA1S4-3W230 W/ CV | 90653708 |
| 45 | No | 45FH1S4-3W230 | 93704505 | 45FA1S4-3W230 | 93614706 |
| | Yes | 45FH1S4-3W230-CV | 93714505 | 45FA1S4-3W230 W/ CV | 90654706 |

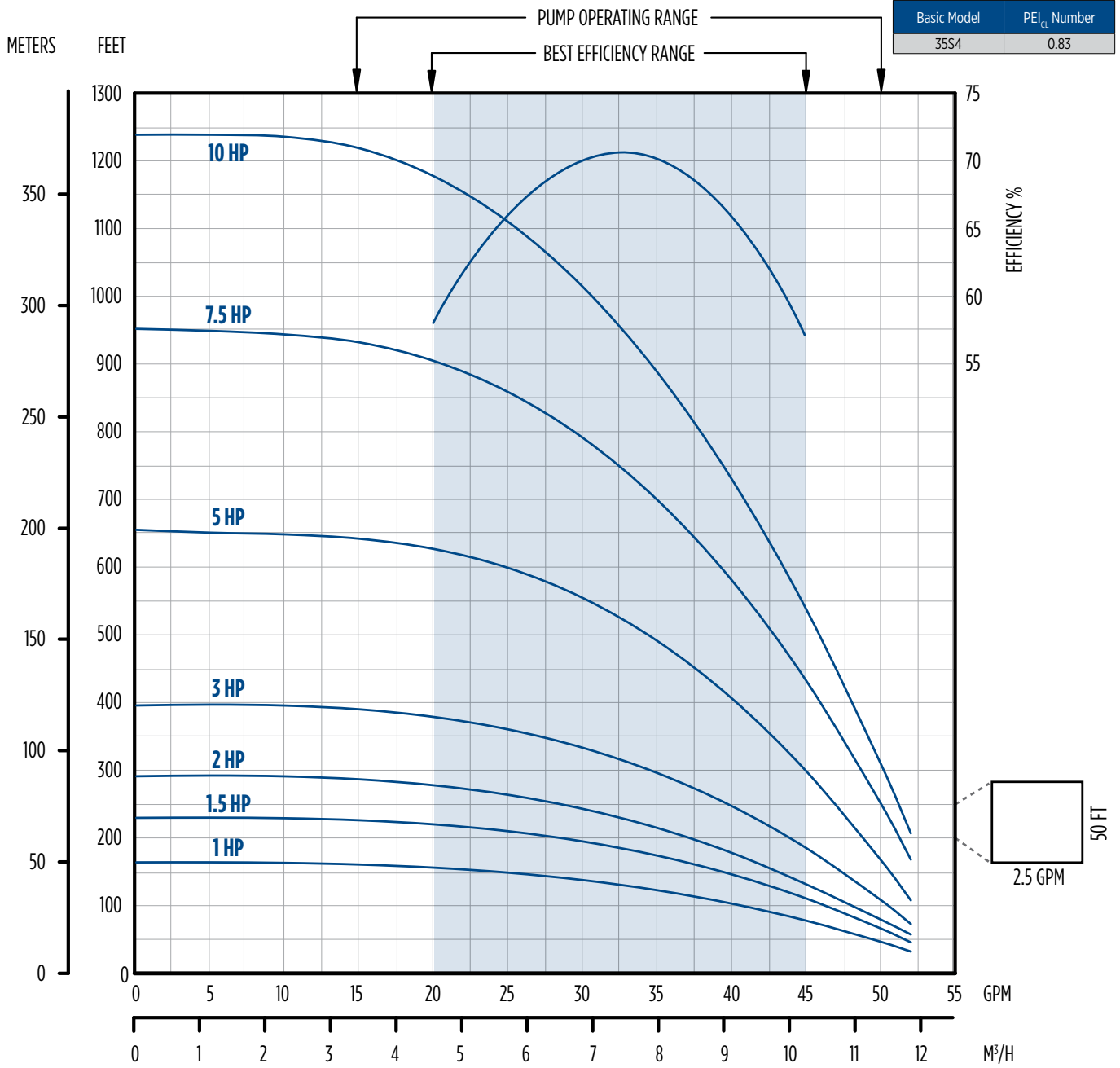
SUBMERSIBLE PUMPS

4" TRI-SEAL HIGH CAPACITY PUMPS



PERFORMANCE

35 GPM



SUBMERSIBLE PUMPS

4" TRI-SEAL HIGH CAPACITY PUMPS



PERFORMANCE

35 GPM

| HP | PSI | Depth to Pumping Water Level (Lift) in Feet. Shaded Areas Indicate Most Efficient Performance. | | | | | | | | | | | | | | | | Shut-Off (ft) | |
|--------------|-----|--|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------------|-----|
| | | 0 | 20 | 40 | 60 | 80 | 100 | 120 | 140 | 160 | 180 | 200 | 240 | 280 | 320 | 360 | 400 | | 440 |
| 1 | 0 | | | | | 44 | 40 | 35 | 28 | | | | | | | | | | |
| | 10 | | | | 44 | 39 | 34 | 27 | | | | | | | | | | | |
| | 20 | | | 43 | 39 | 33 | 25 | | | | | | | | | | | | |
| | 30 | | 42 | 38 | 32 | 23 | | | | | | | | | | | | | |
| | 40 | 42 | 37 | 31 | | | | | | | | | | | | | | | |
| | 50 | 36 | 30 | | | | | | | | | | | | | | | | |
| | 60 | 29 | | | | | | | | | | | | | | | | | |
| | 70 | | | | | | | | | | | | | | | | | | |
| | 80 | | | | | | | | | | | | | | | | | | |
| Shut-off PSI | | 70 | 61 | 52 | 44 | 35 | 26 | 18 | 9 | | | | | | | | | | |
| 1.5 | 0 | | | | | 46 | 43 | 40 | 37 | 33 | 28 | | | | | | | | |
| | 10 | | | | | 45 | 43 | 40 | 36 | 32 | 26 | | | | | | | | |
| | 20 | | | | 45 | 42 | 39 | 35 | 31 | 24 | | | | | | | | | |
| | 30 | | | 44 | 42 | 39 | 35 | 30 | 23 | | | | | | | | | | |
| | 40 | | 44 | 42 | 39 | 35 | 30 | 23 | | | | | | | | | | | |
| | 50 | 44 | 41 | 38 | 34 | 29 | 21 | | | | | | | | | | | | |
| | 60 | 41 | 37 | 33 | 28 | | | | | | | | | | | | | | |
| | 70 | 37 | 33 | 27 | | | | | | | | | | | | | | | |
| | 80 | 32 | 26 | | | | | | | | | | | | | | | | |
| Shut-off PSI | | 100 | 91 | 82 | 74 | 65 | 56 | 48 | 39 | 30 | 22 | 13 | | | | | | | |
| 2 | 0 | | | | | | | 44 | 42 | 40 | 37 | 30 | | | | | | | |
| | 10 | | | | | | | 44 | 42 | 39 | 36 | 33 | 25 | | | | | | |
| | 20 | | | | | 46 | 43 | 41 | 39 | 36 | 33 | 29 | | | | | | | |
| | 30 | | | | 45 | 43 | 41 | 38 | 35 | 32 | 28 | 23 | | | | | | | |
| | 40 | | | 45 | 43 | 40 | 38 | 35 | 32 | 27 | 22 | | | | | | | | |
| | 50 | | 45 | 42 | 40 | 37 | 34 | 31 | 27 | 20 | | | | | | | | | |
| | 60 | 44 | 42 | 40 | 37 | 34 | 30 | 26 | | | | | | | | | | | |
| | 70 | 42 | 39 | 37 | 33 | 30 | 25 | | | | | | | | | | | | |
| | 80 | 39 | 36 | 33 | 29 | 24 | | | | | | | | | | | | | |
| Shut-off PSI | | 130 | 121 | 113 | 104 | 95 | 87 | 78 | 69 | 61 | 52 | 43 | 26 | | | | | | |
| 3 | 0 | | | | | | | | 45 | 43 | 42 | 40 | 37 | 32 | 25 | | | | |
| | 10 | | | | | | | | 45 | 43 | 42 | 38 | 34 | 28 | | | | | |
| | 20 | | | | | | | | 45 | 43 | 42 | 40 | 36 | 31 | 23 | | | | |
| | 30 | | | | | 44 | 43 | 41 | 39 | 37 | 35 | 30 | | | | | | | |
| | 40 | | | | | 44 | 43 | 41 | 39 | 37 | 35 | 30 | | | | | | | |
| | 50 | | | | 45 | 44 | 42 | 41 | 39 | 37 | 35 | 32 | 26 | | | | | | |
| | 60 | | | 45 | 44 | 42 | 41 | 39 | 37 | 34 | 32 | 29 | | | | | | | |
| | 70 | | 45 | 44 | 42 | 40 | 38 | 36 | 34 | 31 | 28 | 24 | | | | | | | |
| | 80 | 45 | 43 | 42 | 40 | 38 | 36 | 34 | 31 | 28 | 23 | | | | | | | | |
| Shut-off PSI | | 173 | 165 | 156 | 147 | 139 | 130 | 121 | 113 | 104 | 95 | 87 | 69 | 52 | 35 | 17 | | | |

| HP | PSI | 120 | 140 | 160 | 180 | 200 | 240 | 280 | 320 | 360 | 400 | 440 | 480 | 500 | 550 | 600 | 650 | 700 | 750 | 800 | Shut-Off (ft) |
|--------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------------|
| 5 | 0 | | | | | | | | 44 | 42 | 40 | 38 | 36 | 34 | 30 | 24 | | | | | |
| | 10 | | | | | | | 45 | 43 | 41 | 39 | 37 | 34 | 32 | 28 | 20 | | | | | |
| | 20 | | | | | | | 44 | 42 | 40 | 38 | 35 | 32 | 30 | 25 | | | | | | |
| | 30 | | | | | | 45 | 43 | 41 | 39 | 36 | 33 | 30 | 28 | 21 | | | | | | |
| | 40 | | | | | 45 | 44 | 42 | 40 | 37 | 35 | 32 | 28 | 25 | | | | | | | |
| | 50 | | | | 45 | 44 | 42 | 41 | 38 | 36 | 33 | 29 | 25 | 22 | | | | | | | |
| | 60 | | | 45 | 44 | 43 | 41 | 39 | 37 | 34 | 31 | 27 | 21 | | | | | | | | |
| | 70 | | 45 | 44 | 43 | 42 | 40 | 38 | 35 | 32 | 29 | 24 | | | | | | | | | |
| | 80 | 45 | 44 | 43 | 42 | 41 | 39 | 37 | 34 | 30 | 26 | | | | | | | | | | |
| Shut-off PSI | | 229 | 221 | 212 | 203 | 195 | 177 | 160 | 143 | 126 | 108 | 91 | 74 | 65 | 43 | 22 | | | | | |

| HP | PSI | 240 | 280 | 320 | 360 | 400 | 440 | 480 | 500 | 550 | 600 | 650 | 700 | 750 | 800 | 850 | 900 | 950 | 1000 | 1050 | 1100 | 1150 | Shut-Off (ft) |
|--------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|---------------|
| 7.5 | 0 | | | | | 45 | 43 | 43 | 41 | 39 | 37 | 35 | 32 | 29 | 25 | 20 | | | | | | | |
| | 10 | | | | | 44 | 43 | 42 | 40 | 38 | 36 | 34 | 31 | 28 | 23 | | | | | | | | |
| | 20 | | | | | 45 | 43 | 42 | 41 | 39 | 37 | 35 | 33 | 30 | 26 | 21 | | | | | | | |
| | 30 | | | | 45 | 44 | 43 | 41 | 40 | 38 | 36 | 34 | 31 | 28 | 24 | | | | | | | | |
| | 40 | | | 46 | 44 | 43 | 42 | 40 | 40 | 38 | 35 | 33 | 30 | 26 | 21 | | | | | | | | |
| | 50 | | | 45 | 44 | 42 | 41 | 39 | 39 | 37 | 34 | 31 | 28 | 24 | | | | | | | | | |
| | 60 | | 45 | 44 | 43 | 42 | 40 | 39 | 38 | 35 | 33 | 30 | 26 | 22 | | | | | | | | | |
| | 70 | | 45 | 43 | 42 | 41 | 39 | 38 | 37 | 34 | 32 | 28 | 24 | | | | | | | | | | |
| | 80 | 45 | 44 | 43 | 41 | 40 | 38 | 37 | 36 | 33 | 30 | 27 | 22 | | | | | | | | | | |
| Shut-off PSI | | 307 | 290 | 273 | 255 | 238 | 221 | 203 | 195 | 173 | 152 | 130 | 108 | 87 | 65 | 43 | 22 | | | | | | |
| 10 | 0 | | | | | | | | 45 | 43 | 42 | 41 | 39 | 38 | 36 | 35 | 33 | 31 | 28 | 25 | 22 | 20 | |
| | 10 | | | | | | | | 45 | 44 | 43 | 42 | 40 | 39 | 37 | 35 | 34 | 32 | 29 | 27 | 24 | 20 | |
| | 20 | | | | | | | | 45 | 45 | 44 | 42 | 41 | 40 | 38 | 36 | 35 | 33 | 31 | 28 | 26 | 22 | |
| | 30 | | | | | | | | 45 | 44 | 43 | 42 | 40 | 39 | 37 | 36 | 34 | 32 | 30 | 27 | 24 | 20 | |
| | 40 | | | | | | 45 | 44 | 44 | 42 | 41 | 40 | 38 | 37 | 35 | 33 | 31 | 28 | 26 | 22 | | | |
| | 50 | | | | | 46 | 45 | 44 | 43 | 42 | 40 | 39 | 37 | 36 | 34 | 32 | 30 | 27 | 24 | 21 | | | |
| | 60 | | | | 46 | 45 | 44 | 43 | 42 | 41 | 40 | 38 | 37 | 35 | 33 | 31 | 29 | 26 | 23 | | | | |
| | 70 | | | | 45 | 44 | 43 | 42 | 42 | 41 | 39 | 38 | 36 | 34 | 32 | 30 | 28 | 25 | 21 | | | | |
| | 80 | | | | 46 | 45 | 44 | 43 | 42 | 41 | 40 | 38 | 37 | 35 | 33 | 31 | 29 | 26 | 23 | | | | |
| Shut-off PSI | | | | 403 | 385 | 368 | 351 | 333 | 325 | 303 | 281 | 260 | 238 | 216 | 195 | 173 | 152 | 130 | 108 | 87 | 65 | 43 | |

NOTES: Performance shown does not include friction loss in the drop pipe. All performance data is based on rated motor nameplate voltage. Performance shown is based on a pump without check valve.

SUBMERSIBLE PUMPS

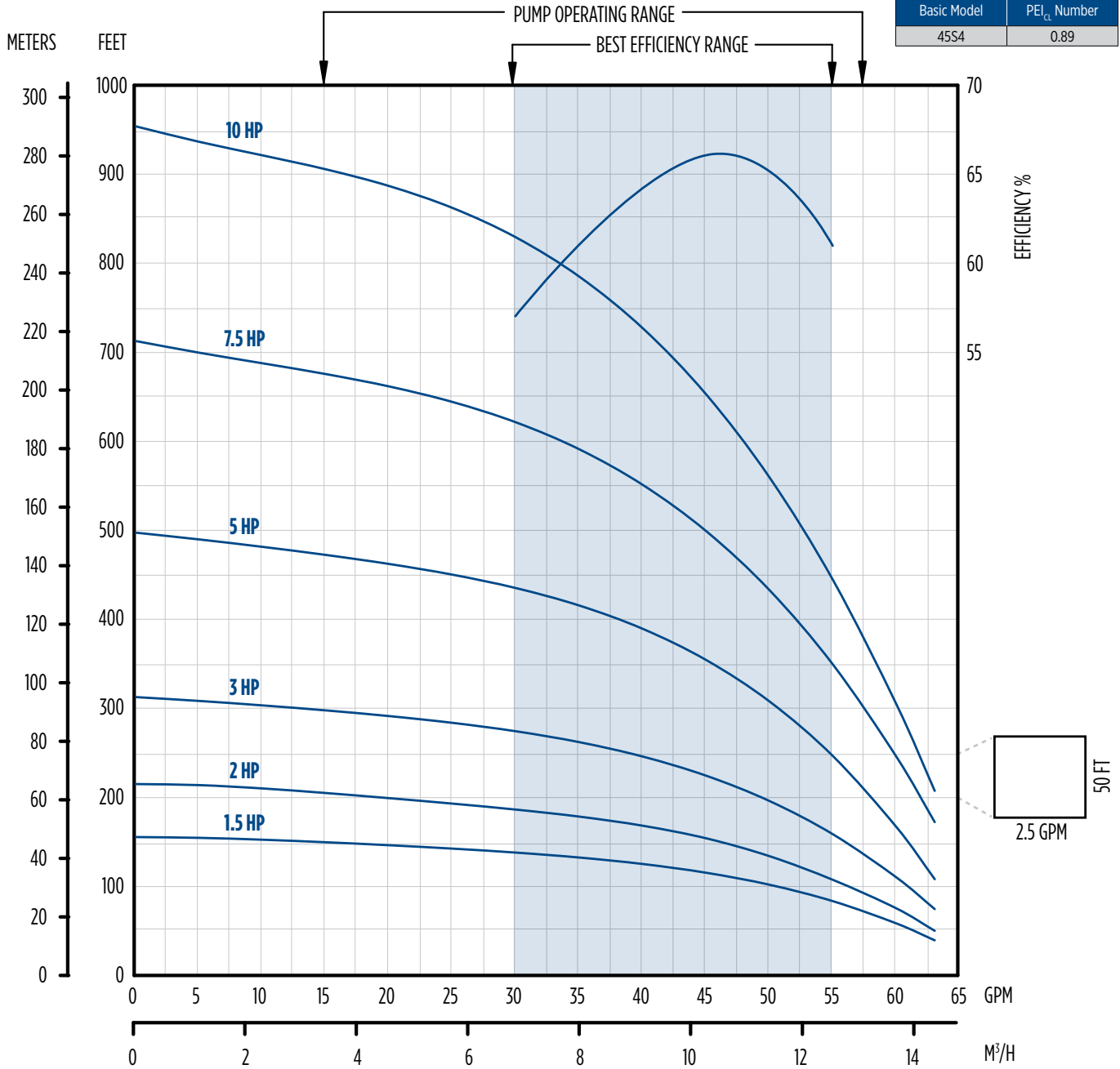
4" TRI-SEAL HIGH CAPACITY PUMPS



PERFORMANCE

45 GPM

| Basic Model | PEI _{CL} Number |
|-------------|--------------------------|
| 45S4 | 0.89 |



SUBMERSIBLE PUMPS

4" TRI-SEAL HIGH CAPACITY PUMPS



PERFORMANCE

45 GPM

| HP | PSI | Depth to Pumping Water Level (Lift) in Feet. Shaded Areas Indicate Most Efficient Performance. | | | | | | | | | | | | | | | | | | Shut-Off (ft) |
|--------------|-----|--|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------------|
| | | 0 | 20 | 40 | 60 | 80 | 100 | 120 | 140 | 160 | 180 | 200 | 240 | 280 | 320 | 360 | 400 | 440 | 480 | |
| 1.5 | 0 | | | | | 55 | 50 | 43 | | | | | | | | | | | | |
| | 10 | | | | 54 | 49 | 41 | | | | | | | | | | | | | |
| | 20 | | | 54 | 48 | 39 | | | | | | | | | | | | | | |
| | 30 | | 53 | 47 | 38 | | | | | | | | | | | | | | | |
| | 40 | 52 | 46 | 36 | | | | | | | | | | | | | | | | |
| | 50 | 44 | 33 | | | | | | | | | | | | | | | | | |
| | 60 | 30 | | | | | | | | | | | | | | | | | | |
| Shut-off PSI | | 68 | 59 | 50 | 42 | 33 | 24 | 16 | | | | | | | | | | | | |
| 2 | 0 | | | | | 55 | 50 | 43 | | | | | | | | | | | | |
| | 10 | | | | 54 | 49 | 41 | | | | | | | | | | | | | |
| | 20 | | | 54 | 48 | 39 | | | | | | | | | | | | | | |
| | 30 | | | 54 | 47 | 38 | | | | | | | | | | | | | | |
| | 40 | 52 | 46 | 36 | | | | | | | | | | | | | | | | |
| | 50 | 44 | 33 | | | | | | | | | | | | | | | | | |
| | 60 | 30 | | | | | | | | | | | | | | | | | | |
| Shut-off PSI | | 94 | 85 | 76 | 68 | 59 | 50 | 42 | 33 | 24 | 16 | | | | | | | | | |
| 3 | 0 | | | | | 55 | 50 | 43 | | | | | | | | | | | | |
| | 10 | | | | 54 | 49 | 41 | | | | | | | | | | | | | |
| | 20 | | | 54 | 48 | 39 | | | | | | | | | | | | | | |
| | 30 | | | 54 | 47 | 38 | | | | | | | | | | | | | | |
| | 40 | 52 | 46 | 36 | | | | | | | | | | | | | | | | |
| | 50 | 44 | 33 | | | | | | | | | | | | | | | | | |
| | 60 | 30 | | | | | | | | | | | | | | | | | | |
| Shut-off PSI | | 135 | 126 | 118 | 109 | 100 | 92 | 83 | 74 | 66 | 57 | 48 | 31 | | | | | | | |
| 5 | 0 | | | | | 55 | 50 | 43 | | | | | | | | | | | | |
| | 10 | | | | 54 | 49 | 41 | | | | | | | | | | | | | |
| | 20 | | | 54 | 48 | 39 | | | | | | | | | | | | | | |
| | 30 | | | 54 | 47 | 38 | | | | | | | | | | | | | | |
| | 40 | 52 | 46 | 36 | | | | | | | | | | | | | | | | |
| | 50 | 44 | 33 | | | | | | | | | | | | | | | | | |
| | 60 | 30 | | | | | | | | | | | | | | | | | | |
| Shut-off PSI | | 182 | 173 | 165 | 156 | 147 | 139 | 130 | 113 | 95 | 78 | 61 | 43 | | | | | | | |

| HP | PSI | 160 | 180 | 200 | 240 | 280 | 320 | 360 | 400 | 440 | 480 | 500 | 550 | 600 | 650 | 700 | 750 | 800 | 850 | 900 | Shut-Off (ft) |
|--------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------------|
| 7.5 | 0 | | | | | | | 54 | 52 | 49 | 46 | 45 | 40 | 34 | | | | | | | |
| | 10 | | | | | | | 55 | 53 | 50 | 48 | 44 | 43 | 37 | 30 | | | | | | |
| | 20 | | | | | | | 54 | 52 | 49 | 46 | 42 | 40 | 34 | | | | | | | |
| | 30 | | | | | | 55 | 53 | 50 | 47 | 44 | 40 | 38 | 30 | | | | | | | |
| | 40 | | | | | 56 | 54 | 51 | 48 | 45 | 42 | 37 | 35 | | | | | | | | |
| | 50 | | | | | 54 | 52 | 50 | 47 | 43 | 39 | 34 | 31 | | | | | | | | |
| | 60 | | | | 55 | 53 | 51 | 48 | 45 | 41 | 37 | 30 | | | | | | | | | |
| Shut-off PSI | | 237 | 228 | 219 | 202 | 185 | 168 | 150 | 133 | 116 | 98 | 90 | 68 | 46 | | | | | | | |
| 10 | 0 | | | | | | | | | 56 | 54 | 52 | 50 | 48 | 45 | 42 | 38 | 33 | | | |
| | 10 | | | | | | | | | 55 | 53 | 51 | 51 | 48 | 45 | 42 | 38 | 34 | | | |
| | 20 | | | | | | | | | 56 | 54 | 52 | 50 | 49 | 47 | 44 | 40 | 36 | 31 | | |
| | 30 | | | | | | | | 56 | 54 | 52 | 50 | 49 | 47 | 44 | 40 | 36 | 31 | | | |
| | 40 | | | | | | | | 55 | 53 | 51 | 49 | 48 | 46 | 42 | 39 | 34 | | | | |
| | 50 | | | | | | | | 55 | 54 | 52 | 50 | 48 | 47 | 44 | 41 | 37 | 31 | | | |
| | 60 | | | | | | 56 | 54 | 53 | 51 | 49 | 47 | 46 | 43 | 39 | 34 | | | | | |
| Shut-off PSI | | | | | 307 | 290 | 273 | 255 | 238 | 221 | 203 | 195 | 173 | 152 | 130 | 108 | 87 | 65 | | | |

NOTES: Performance shown does not include friction loss in the drop pipe. All performance data is based on rated motor nameplate voltage. Performances for former XP models are the same as 45 gpm models. Performance shown is based on a pump without check valve.

SUBMERSIBLE PUMPS

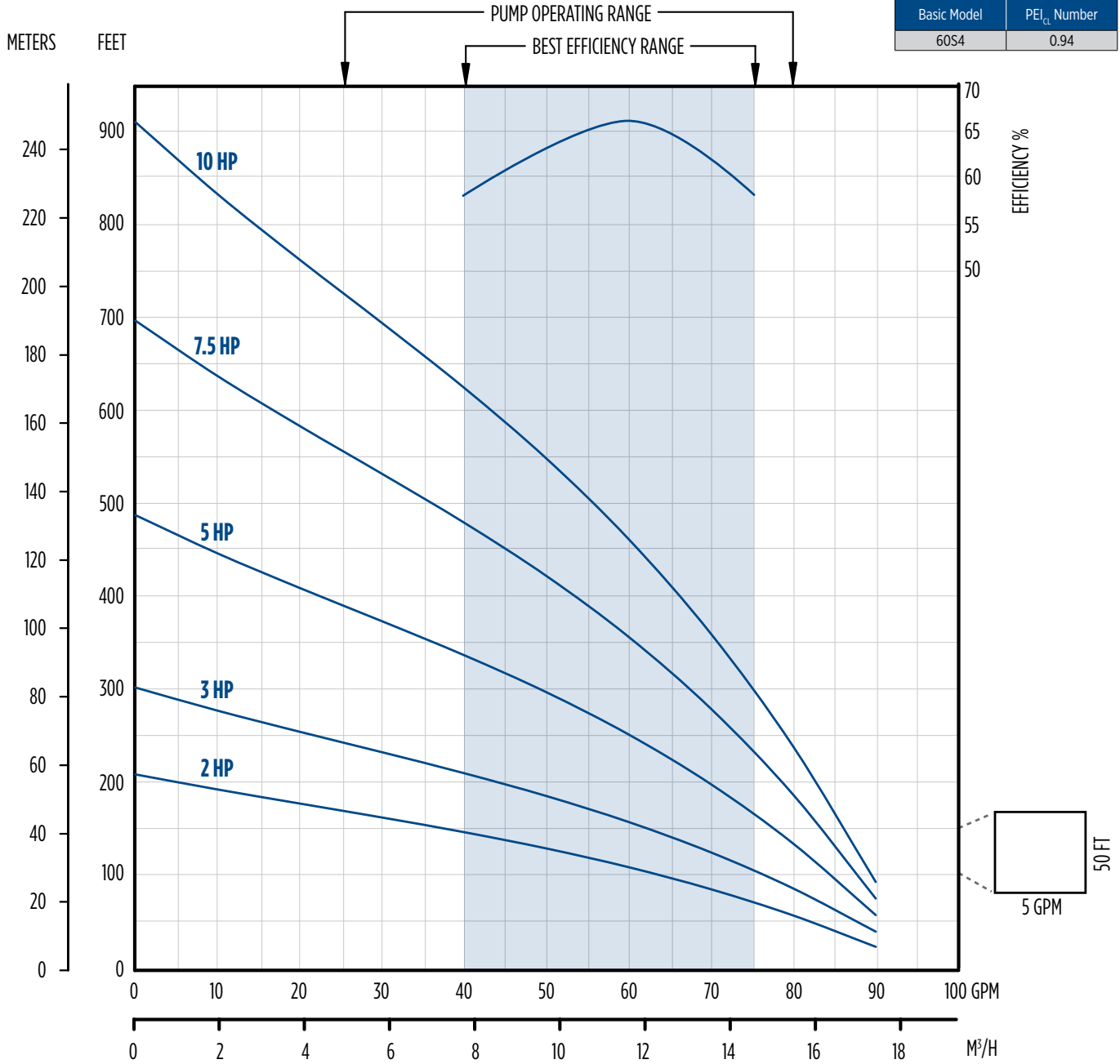
4" TRI-SEAL HIGH CAPACITY PUMPS



PERFORMANCE

60 GPM

| Basic Model | PEI _{CL} Number |
|-------------|--------------------------|
| 60S4 | 0.94 |



SUBMERSIBLE PUMPS

4" TRI-SEAL HIGH CAPACITY PUMPS



PERFORMANCE

60 GPM

| HP | PSI | Depth to Pumping Water Level (Lift) in Feet. Shaded Areas Indicate Most Efficient Performance. | | | | | | | | | | | | | | | | | Shut-Off (ft) |
|--------------|-----|--|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------------|
| | | 0 | 20 | 40 | 60 | 80 | 100 | 120 | 140 | 160 | 180 | 200 | 240 | 280 | 320 | 360 | 400 | 440 | |
| 2 | 0 | | | | 79 | 72 | 64 | 55 | 45 | | | | | | | | | | |
| | 10 | | | 78 | 71 | 63 | 54 | 43 | | | | | | | | | | | |
| | 20 | | 77 | 70 | 62 | 52 | 41 | | | | | | | | | | | | |
| | 30 | 76 | 69 | 60 | 51 | | | | | | | | | | | | | | |
| | 40 | 68 | 59 | 49 | | | | | | | | | | | | | | | |
| | 50 | 57 | 47 | | | | | | | | | | | | | | | | |
| | 60 | 45 | | | | | | | | | | | | | | | | | |
| Shut-off PSI | | 89 | 81 | 72 | 63 | 55 | 46 | 37 | 29 | | | | | | | | | | |
| 3 | 0 | | | | | 82 | 77 | 71 | 66 | 59 | 52 | 44 | | | | | | | |
| | 10 | | | | 81 | 76 | 71 | 65 | 58 | 51 | 43 | | | | | | | | |
| | 20 | | | 80 | 75 | 70 | 64 | 57 | 50 | 42 | | | | | | | | | |
| | 30 | | 79 | 74 | 69 | 63 | 56 | 49 | 40 | | | | | | | | | | |
| | 40 | 79 | 74 | 68 | 62 | 55 | 47 | 39 | | | | | | | | | | | |
| | 50 | 73 | 67 | 61 | 54 | 46 | 38 | 29 | | | | | | | | | | | |
| | 60 | 66 | 60 | 53 | 45 | | | | | | | | | | | | | | |
| | 70 | 59 | 52 | 44 | | | | | | | | | | | | | | | |
| 80 | 50 | 42 | | | | | | | | | | | | | | | | | |
| Shut-off PSI | | 130 | 121 | 113 | 104 | 95 | 87 | 78 | 69 | 61 | 52 | 43 | | | | | | | |
| 5 | 0 | | | | | | | 82 | 79 | 76 | 73 | 70 | 62 | 54 | 44 | | | | |
| | 10 | | | | | | 82 | 79 | 76 | 73 | 69 | 66 | 58 | 49 | | | | | |
| | 20 | | | | | 81 | 78 | 75 | 72 | 69 | 65 | 61 | 53 | 43 | | | | | |
| | 30 | | | | 81 | 78 | 75 | 72 | 68 | 64 | 60 | 56 | 47 | | | | | | |
| | 40 | | | 80 | 77 | 74 | 71 | 68 | 64 | 60 | 56 | 51 | 41 | | | | | | |
| | 50 | | 80 | 77 | 74 | 71 | 67 | 63 | 59 | 55 | 50 | 45 | | | | | | | |
| | 60 | 79 | 76 | 73 | 70 | 66 | 63 | 59 | 54 | 50 | 45 | 40 | | | | | | | |
| | 70 | 76 | 73 | 69 | 66 | 62 | 58 | 54 | 49 | 44 | 39 | | | | | | | | |
| 80 | 72 | 69 | 65 | 61 | 57 | 53 | 48 | 43 | | | | | | | | | | | |
| Shut-off PSI | | 210 | 201 | 193 | 184 | 175 | 167 | 158 | 149 | 141 | 132 | 123 | 106 | 89 | 71 | | | | |
| 7.5 | 0 | | | | | | | | | 81 | 79 | 75 | 70 | 65 | 60 | 54 | 47 | 40 | |
| | 10 | | | | | | | | | 80 | 78 | 76 | 72 | 67 | 62 | 56 | 50 | 43 | |
| | 20 | | | | | | | | | 80 | 78 | 76 | 74 | 69 | 64 | 59 | 53 | 46 | |
| | 30 | | | | | | | | 80 | 78 | 76 | 74 | 71 | 66 | 61 | 55 | 49 | 42 | |
| | 40 | | | | | | | 80 | 78 | 75 | 73 | 71 | 69 | 63 | 58 | 52 | 45 | | |
| | 50 | | | | 81 | 79 | 77 | 75 | 73 | 71 | 68 | 66 | 60 | 54 | 48 | 41 | | | |
| | 60 | | | 81 | 79 | 77 | 75 | 72 | 70 | 68 | 65 | 63 | 57 | 51 | 44 | | | | |
| | 70 | | 81 | 79 | 77 | 74 | 72 | 70 | 67 | 65 | 62 | 59 | 53 | 47 | 40 | | | | |
| 80 | 80 | 78 | 76 | 74 | 72 | 69 | 67 | 64 | 62 | 59 | 56 | 50 | 43 | | | | | | |
| Shut-off PSI | | 303 | 294 | 286 | 277 | 268 | 260 | 251 | 242 | 234 | 225 | 216 | 199 | 182 | 165 | 147 | 130 | 113 | 95 |

| HP | PSI | 40 | 60 | 80 | 100 | 120 | 140 | 160 | 180 | 200 | 240 | 280 | 320 | 360 | 400 | 440 | 480 | 500 | 550 | 600 | Shut-Off (ft) |
|--------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------------|
| 10 | 0 | | | | | | | | | | 80 | 77 | 74 | 70 | 66 | 62 | 58 | 56 | 50 | 43 | 905 |
| | 10 | | | | | | | | | 81 | 78 | 75 | 72 | 68 | 64 | 60 | 55 | 53 | 47 | 40 | |
| | 20 | | | | | | | | | 81 | 79 | 76 | 73 | 69 | 66 | 62 | 57 | 53 | 50 | 44 | |
| | 30 | | | | | | | | 81 | 79 | 78 | 74 | 71 | 67 | 63 | 59 | 55 | 50 | 47 | 41 | |
| | 40 | | | | | | | 81 | 79 | 77 | 76 | 72 | 69 | 65 | 61 | 57 | 52 | 47 | 44 | | |
| | 50 | | | | | | 80 | 79 | 77 | 76 | 74 | 70 | 67 | 63 | 58 | 54 | 49 | 44 | 41 | | |
| | 60 | | | | | 80 | 79 | 77 | 75 | 74 | 72 | 68 | 64 | 60 | 56 | 51 | 46 | 41 | | | |
| | 70 | | | 81 | 80 | 78 | 77 | 75 | 73 | 72 | 70 | 66 | 62 | 58 | 53 | 48 | 43 | | | | |
| 80 | 81 | 80 | 78 | 76 | 75 | 73 | 71 | 70 | 68 | 64 | 60 | 55 | 50 | 45 | 40 | | | | | | |
| Shut-off PSI | | 374 | 366 | 357 | 348 | 340 | 331 | 323 | 314 | 305 | 288 | 271 | 253 | 236 | 219 | 201 | 184 | 175 | 154 | 132 | |

NOTES: Performance shown does not include friction loss in the drop pipe. All performance data is based on rated motor nameplate voltage. Performances for former XP models are the same as 45 gpm models. Performance shown is based on a pump without check valve.

SUBMERSIBLE PUMPS

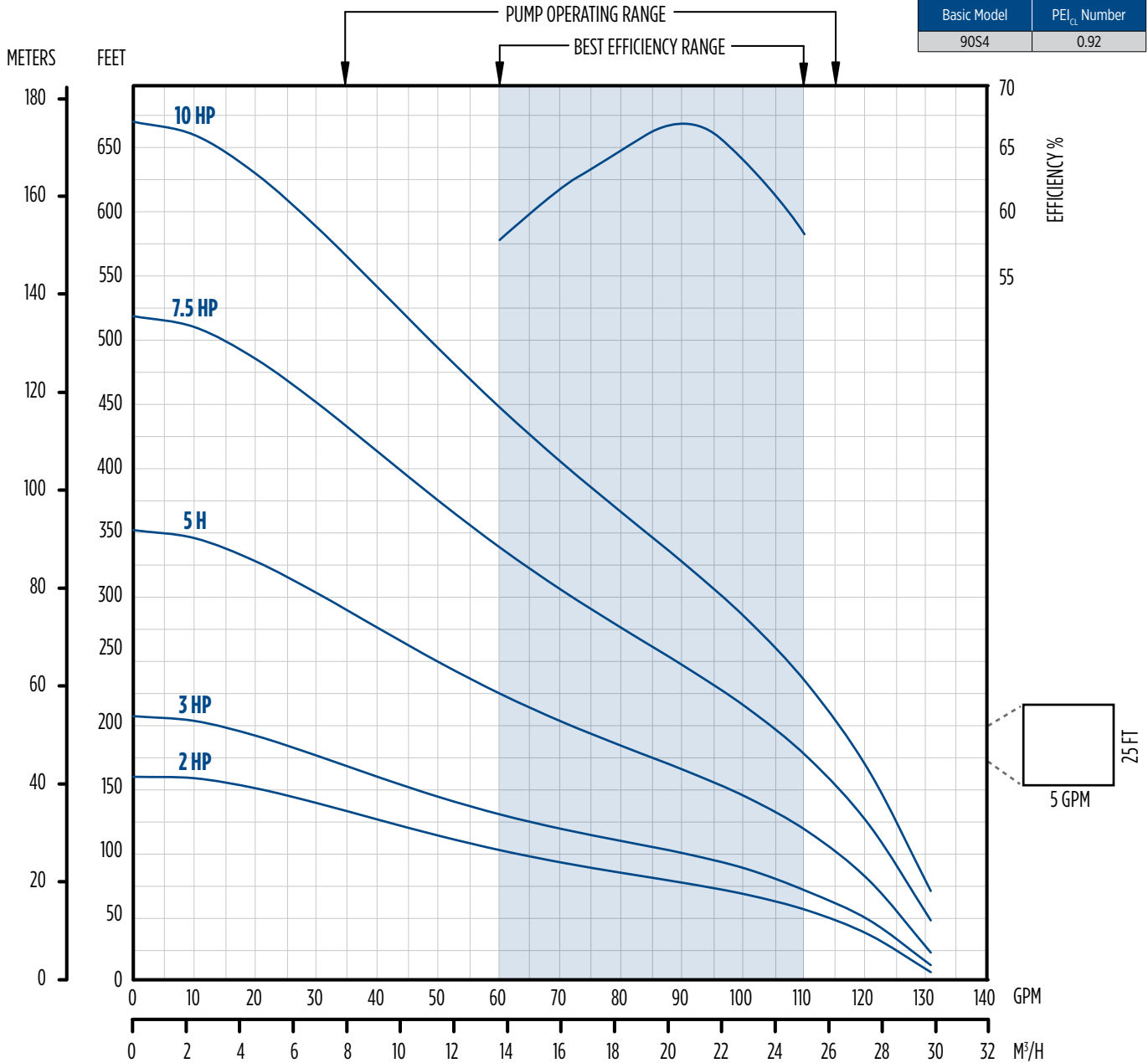
4" TRI-SEAL HIGH CAPACITY PUMPS



PERFORMANCE

90 GPM

| Basic Model | PE _{CL} Number |
|-------------|-------------------------|
| 90S4 | 0.92 |



SUBMERSIBLE PUMPS

4" TRI-SEAL HIGH CAPACITY PUMPS



| PERFORMANCE | | 90 GPM | | | | | | | | | | | | | | | | | |
|--------------|-----|--|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------------|
| HP | PSI | Depth to Pumping Water Level (Lift) in Feet. Shaded Areas Indicate Most Efficient Performance. | | | | | | | | | | | | | | | | | |
| | | 0 | 20 | 40 | 60 | 80 | 100 | 120 | 140 | 160 | 180 | 200 | 240 | 280 | 320 | 360 | 400 | 440 | Shut-Off (ft) |
| 2 | 0 | | | | 104 | 89 | | | | | | | | | | | | | 170 |
| | 10 | | | 102 | 86 | 67 | | | | | | | | | | | | | |
| | 20 | | 100 | 83 | 64 | | | | | | | | | | | | | | |
| | 30 | 97 | 80 | 60 | | | | | | | | | | | | | | | |
| | 40 | 77 | | | | | | | | | | | | | | | | | |
| Shut-off PSI | | 74 | 65 | 56 | 48 | 39 | | | | | | | | | | | | | |
| 3 | 0 | | | | | 103 | 90 | 76 | | | | | | | | | | | 220 |
| | 10 | | | | 101 | 88 | 73 | | | | | | | | | | | | |
| | 20 | | 110 | 99 | 86 | 71 | | | | | | | | | | | | | |
| | 30 | 109 | 97 | 84 | 68 | | | | | | | | | | | | | | |
| | 40 | 95 | 81 | 65 | | | | | | | | | | | | | | | |
| | 50 | 79 | 63 | | | | | | | | | | | | | | | | |
| Shut-off PSI | | 95 | 87 | 78 | 69 | 61 | 52 | 43 | | | | | | | | | | | |
| 5 | 0 | | | | | | | 106 | 99 | 92 | 84 | 76 | | | | | | | 365 |
| | 10 | | | | | | 105 | 98 | 91 | 83 | 74 | 65 | | | | | | | |
| | 20 | | | | 110 | 104 | 97 | 90 | 82 | 73 | 64 | | | | | | | | |
| | 30 | | | 109 | 103 | 96 | 88 | 80 | 72 | 62 | | | | | | | | | |
| | 40 | | 108 | 102 | 95 | 87 | 79 | 70 | 61 | | | | | | | | | | |
| | 50 | 107 | 101 | 94 | 86 | 78 | 69 | 60 | | | | | | | | | | | |
| | 60 | 100 | 92 | 85 | 76 | 67 | | | | | | | | | | | | | |
| | 70 | 91 | 83 | 75 | 66 | | | | | | | | | | | | | | |
| Shut-off PSI | | 158 | 149 | 141 | 132 | 123 | 115 | 106 | 97 | 89 | 80 | 71 | | | | | | | |
| 7.5 | 0 | | | | | | | | | 111 | 106 | 101 | 91 | 81 | 69 | | | | 535 |
| | 10 | | | | | | | | 110 | 105 | 101 | 96 | 85 | 74 | 62 | | | | |
| | 20 | | | | | | | 109 | 105 | 100 | 95 | 90 | 79 | 68 | | | | | |
| | 30 | | | | | 108 | 104 | 99 | 94 | 89 | 84 | 73 | 60 | | | | | | |
| | 40 | | | | 108 | 103 | 98 | 93 | 88 | 83 | 77 | 66 | | | | | | | |
| | 50 | | | 107 | 102 | 98 | 93 | 87 | 82 | 76 | 71 | | | | | | | | |
| | 60 | | 111 | 106 | 102 | 97 | 92 | 87 | 81 | 76 | 70 | 64 | | | | | | | |
| | 70 | 110 | 106 | 101 | 96 | 91 | 86 | 80 | 75 | 69 | 63 | | | | | | | | |
| Shut-off PSI | | 232 | 223 | 214 | 206 | 197 | 188 | 180 | 171 | 162 | 154 | 145 | 128 | 110 | 93 | | | | |
| 10 | 0 | | | | | | | | | 111 | 106 | 101 | 91 | 81 | 69 | | | | 690 |
| | 10 | | | | | | | | 110 | 105 | 101 | 96 | 85 | 74 | 62 | | | | |
| | 20 | | | | | | | 109 | 105 | 100 | 95 | 90 | 79 | 68 | | | | | |
| | 30 | | | | | 108 | 104 | 99 | 94 | 89 | 84 | 73 | 60 | | | | | | |
| | 40 | | | | 108 | 103 | 98 | 93 | 88 | 83 | 77 | 66 | | | | | | | |
| | 50 | | | 107 | 102 | 98 | 93 | 87 | 82 | 76 | 71 | | | | | | | | |
| | 60 | | 106 | 102 | 97 | 92 | 87 | 81 | 76 | 70 | 64 | | | | | | | | |
| | 70 | 110 | 106 | 101 | 96 | 91 | 86 | 80 | 75 | 69 | 63 | | | | | | | | |
| Shut-off PSI | | 299 | 290 | 281 | 273 | 264 | 255 | 247 | 238 | 229 | 221 | 212 | 195 | 177 | 160 | | | | |

NOTES: Performance shown does not include friction loss in the drop pipe. All performance data is based on rated motor nameplate voltage. Performance shown is based on a pump without check valve.



Franklin Electric