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Hi-Lo "N" SERIES PUMPS

| | Model | HP | Stages | Discharge | Length (PEO) | Weight (PEO) | List Price |
|---------------------------------------|---------|----|--------|-----------|--------------|--------------|------------|
| 5 GPM N-SERIES 4" PEO | 5HL05N | ½ | 12 | 1¼" | 14.1" | 7.9 | \$ - |
| | 5HL07N | ¾ | 15 | 1¼" | 16.2" | 9.1 | \$ - |
| | 5HL10N | 1 | 20 | 1¼" | 19.6" | 10.8 | \$ - |
| | 5HL15N | 1½ | 26 | 1¼" | 25.3" | 12.8 | \$ - |
| | 5HL20N | 2 | 33 | 1¼" | 29.8" | 16.1 | \$ - |
| 7 GPM N-SERIES 4" PEO | 7HL05N | ½ | 10 | 1¼" | 13.4" | 7.2 | \$ - |
| | 7HL07N | ¾ | 13 | 1¼" | 15.6" | 9.1 | \$ - |
| | 7HL10N | 1 | 17 | 1¼" | 18.4" | 10.2 | \$ - |
| | 7HL15N | 1½ | 22 | 1¼" | 22" | 12.3 | \$ - |
| | 7HL20N | 2 | 27 | 1¼" | 26.5" | 15.2 | \$ - |
| | 7HL30N | 3 | 34 | 1¼" | 31.7" | 18.1 | \$ - |
| 10 GPM N-SERIES 4" PEO | 10HL05N | ½ | 7 | 1¼" | 10.7" | 6.2 | \$ - |
| | 10HL07N | ¾ | 10 | 1¼" | 12.8" | 7.3 | \$ - |
| | 10HL10N | 1 | 12 | 1¼" | 14.1" | 7.9 | \$ - |
| | 10HL15N | 1½ | 17 | 1¼" | 17.6" | 9.7 | \$ - |
| | 10HL20N | 2 | 20 | 1¼" | 19.6" | 10.8 | \$ - |
| | 10HL30N | 3 | 27 | 1¼" | 26.1" | 13.2 | \$ - |
| | 10HL50N | 5 | 42 | 1¼" | 36.1" | 19.4 | \$ - |
| 13 GPM N-SERIES 4" PEO | 13HL07N | ¾ | 7 | 1¼" | 10.7" | 6.2 | \$ - |
| | 13HL10N | 1 | 10 | 1¼" | 12.8" | 7.1 | \$ - |
| | 13HL15N | 1½ | 12 | 1¼" | 14.1" | 7.7 | \$ - |
| | 13HL20N | 2 | 17 | 1¼" | 17.6" | 9.5 | \$ - |
| | 13HL30N | 3 | 21 | 1¼" | 20.4" | 11 | \$ - |
| | 13HL50N | 5 | 35 | 1¼" | 34.4" | 19 | \$ - |
| 18 GPM N-SERIES 4" PEO | 18HL05N | ½ | 5 | 1¼" | 10.5" | 6 | \$ - |
| | 18HL07N | ¾ | 6 | 1¼" | 11" | 6.2 | \$ - |
| | 18HL10N | 1 | 8 | 1¼" | 12.7" | 6.8 | \$ - |
| | 18HL15N | 1½ | 11 | 1¼" | 15.2" | 7.9 | \$ - |
| | 18HL20N | 2 | 14 | 1¼" | 17.8" | 9 | \$ - |
| | 18HL30N | 3 | 19 | 1¼" | 22" | 10.8 | \$ - |
| | 18HL50N | 5 | 30 | 1¼" | 32.6" | 15.6 | \$ - |
| 25 GPM N-SERIES 4" PEO | 25HL10N | 1 | 7 | 1½" | 12.6" | 6.9 | \$ - |
| | 25HL15N | 1½ | 9 | 1½" | 14.6" | 7.7 | \$ - |
| | 25HL20N | 2 | 11 | 1½" | 16.5" | 8.6 | \$ - |
| | 25HL30N | 3 | 15 | 1½" | 20.4" | 10.3 | \$ - |
| | 25HL30N | 5 | 26 | 1½" | 32.5" | 15.6 | \$ - |



Hi-Lo "N" SERIES HI CAP PUMPS

| | Model | HP | Stages | Discharge | Length (PEO) | Weight (PEO) | List Price |
|---------------------------------------|----------|----|--------|-----------|--------------|--------------|------------|
| 35 GPM N-SERIES 4" PEO | 35HL10N | 1 | 6 | 2" | 14.1" | 7.5 | \$ - |
| | 35HL15N | 1½ | 8 | 2" | 16.6" | 8.8 | \$ - |
| | 35HL20N | 2 | 10 | 2" | 19" | 10.1 | \$ - |
| | 35HL30N | 3 | 14 | 2" | 23.9" | 12.5 | \$ - |
| | 35HL50N | 5 | 24 | 2" | 35.2" | 17.8 | \$ - |
| | 35HL75N | 7½ | 34 | 2" | 49.5" | 25.5 | \$ - |
| | 35HL100N | 10 | 43 | 2" | 51.9" | 31.2 | \$ - |
| 55 GPM N-SERIES 4" PEO | 55HL15N | 1½ | 5 | 2" | 17" | 9.5 | \$ - |
| | 55HL20N | 2 | 7 | 2" | 21.1" | 11.7 | \$ - |
| | 55HL30N | 3 | 9 | 2" | 25.2" | 13.6 | \$ - |
| | 55HL50N | 5 | 15 | 2" | 37.5" | 19.5 | \$ - |
| | 55HL75N | 7½ | 22 | 2" | 53" | 27 | \$ - |
| | 55HL100N | 10 | 29 | 2" | 67.2" | 34.3 | \$ - |
| 80 GPM N-SERIES 4" PEO | 80HL30N | 3 | 5 | 2" | 18.6" | 9.7 | \$ - |
| | 80HL50N | 5 | 9 | 2" | 29.3" | 15.2 | \$ - |
| | 80HL75N | 7½ | 14 | 2" | 42.6" | 21.8 | \$ - |
| | 80HL100N | 10 | 16 | 2" | 55.5" | 27 | \$ - |



SIMFLO



N SERIES

- Stainless steel discharge with built-in check valve
- Stainless steel motor adapter, strainer & pump casing
- Stainless steel bowls
- Stainless steel pump shaft and coupling
- Noryl floating impellers
- Durable urethane bearings
- Available in 4" diameters
- Capacities available from 5 GPM to 80 GPM



Hi-Lo "S" SERIES PUMPS

| | Model | HP | Stages | Discharge | Length (PEO) | Weight (PEO) | List Price |
|---------------------------------------|----------|----|--------|-----------|--------------|--------------|------------|
| 5 GPM S-SERIES 4" PEO | 5HL05S | ½ | 13 | 1¼" | 17.3" | 8 | \$ - |
| | 5HL07S | ¾ | 18 | 1¼" | 21.5" | 10 | \$ - |
| | 5HL10S | 1 | 22 | 1¼" | 24.8" | 12 | \$ - |
| | 5HL15S | 1½ | 26 | 1¼" | 28.1" | 13 | \$ - |
| | 5HL15SH | 1½ | 31 | 1¼" | 33.1" | 20 | \$ - |
| 7 GPM S-SERIES 4" PEO | 7HL05S | ½ | 11 | 1¼" | 15.2" | 10 | \$ - |
| | 7HL07S | ¾ | 15 | 1¼" | 18.5" | 11 | \$ - |
| | 7HL10S | 1 | 19 | 1¼" | 21.8" | 12 | \$ - |
| | 7HL15S | 1½ | 26 | 1¼" | 27.6" | 16 | \$ - |
| | 7HL20S | 2 | 32 | 1¼" | 34.5" | 27 | \$ - |
| 10 GPM S-SERIES 4" PEO | 10HL05S | ½ | 9 | 1¼" | 14" | 7 | \$ - |
| | 10HL07S | ¾ | 12 | 1¼" | 16.5" | 8 | \$ - |
| | 10HL10S | 1 | 15 | 1¼" | 19" | 9 | \$ - |
| | 10HL15S | 1½ | 21 | 1¼" | 23.9" | 12 | \$ - |
| | 10HL20S | 2 | 27 | 1¼" | 28.9" | 14 | \$ - |
| | 10HL30S | 3 | 34 | 1¼" | 35.6" | 22 | \$ - |
| | 10HL50S | 5 | 48 | 1¼" | 47.7" | 38 | \$ - |
| | 10HL50SH | 5 | 58 | 1¼" | 64.5" | 42 | \$ - |
| 18 GPM S-SERIES 4" PEO | 18HL05S | ½ | 5 | 1¼" | 10.7" | 5 | \$ - |
| | 18HL07S | ¾ | 7 | 1¼" | 12.4" | 6 | \$ - |
| | 18HL10S | 1 | 9 | 1¼" | 14" | 7 | \$ - |
| | 18HL15S | 1½ | 13 | 1¼" | 17.3" | 9 | \$ - |
| | 18HL20S | 2 | 17 | 1¼" | 20.6" | 10 | \$ - |
| | 18HL30S | 3 | 23 | 1¼" | 25.6" | 13 | \$ - |
| | 18HL50S | 5 | 36 | 1¼" | 37.2" | 23 | \$ - |
| | 18HL75S | 7½ | 56 | 1¼" | 68.8" | 45 | \$ - |
| | 18HL100S | 10 | 75 | 1¼" | 84.5" | 60 | \$ - |
| 25 GPM S-SERIES 4" PEO | 25HL05S | ½ | 4 | * 1½" * | 9.9" | 5 | \$ - |
| | 25HL07S | ¾ | 5 | * 1½" * | 10.7" | 5 | \$ - |
| | 25HL10S | 1 | 7 | * 1½" * | 12.4" | 6 | \$ - |
| | 25HL15S | 1½ | 9 | * 1½" * | 14" | 7 | \$ - |
| | 25HL20S | 2 | 11 | * 1½" * | 15.6" | 8 | \$ - |
| | 25HL30S | 3 | 15 | * 1½" * | 19" | 9 | \$ - |
| | 25HL50S | 5 | 26 | * 1½" * | 28.3" | 14 | \$ - |
| | 25HL75S | 7½ | 39 | * 1½" * | 39.1" | 25 | \$ - |
| | 25HL100S | 10 | 52 | * 1½" * | 65.5" | 47 | \$ - |



Hi-Lo "S" SERIES Hi Cap PUMPS

| | Model | HP | Stages | Top | Length | Weight | List Price |
|---------------------------------------|----------|----|--------|-----|--------|--------|------------|
| 40 GPM S-SERIES 4" PEO | 40HL10S | 1 | 4 | 2" | 14.6" | 8 | \$ - |
| | 40HL15S | 1½ | 5 | 2" | 16.2" | 9 | \$ - |
| | 40HL20S | 2 | 7 | 2" | 19.5" | 12 | \$ - |
| | 40HL30S | 3 | 9 | 2" | 22.8" | 14 | \$ - |
| | 40HL50S | 5 | 15 | 2" | 32.8" | 21 | \$ - |
| | 40HL75S | 7½ | 25 | 2" | 49.3" | 32 | \$ - |
| | 40SL100S | 10 | 30 | 2" | 57.5" | 37 | \$ - |
| 70 GPM S-SERIES 4" PEO | 70HL20S | 2 | 3 | 2" | 14.8" | 8 | \$ - |
| | 70HL30S | 3 | 5 | 2" | 19.9" | 12 | \$ - |
| | 70HL50S | 5 | 8 | 2" | 27.6" | 16 | \$ - |
| | 70HL75S | 7½ | 12 | 2" | 37.8" | 21 | \$ - |
| | 70HL100S | 10 | 16 | 2" | 48" | 27 | \$ - |



SIMFLO



S SERIES

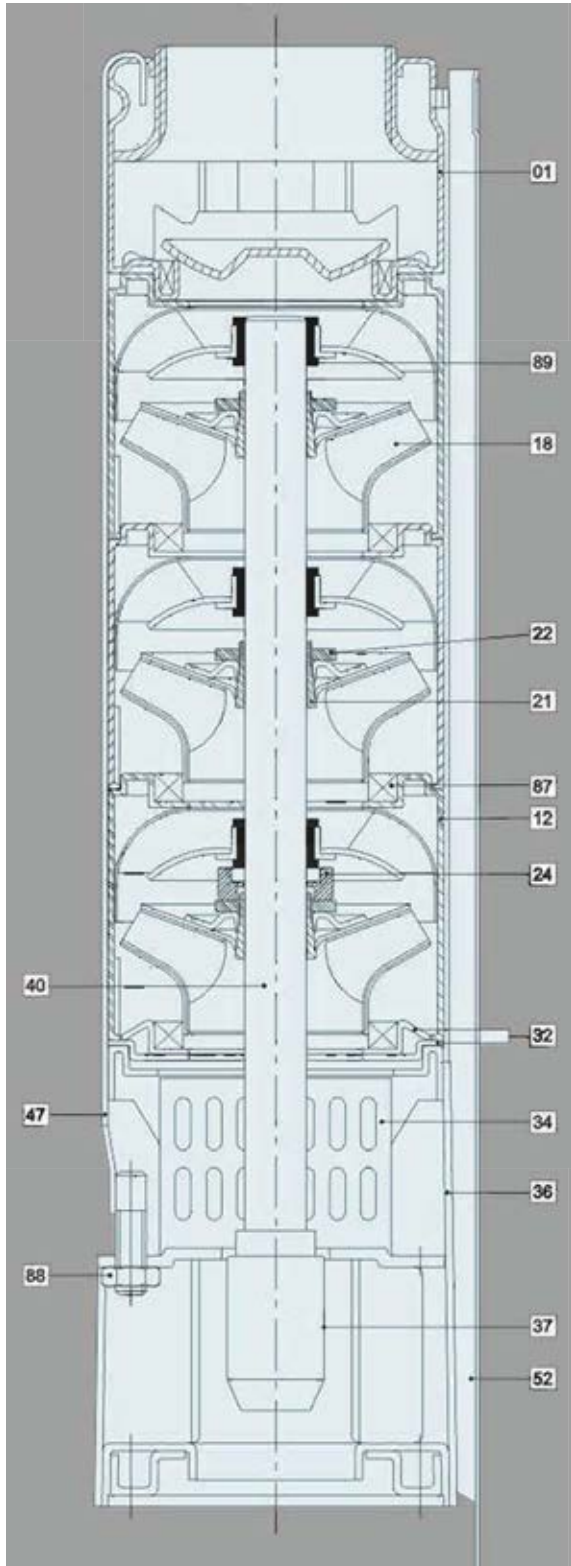
- Stainless steel construction
- Stainless steel discharge with built-in check valve
- High-efficiency stainless steel impellers and diffusers
- Stainless steel suction screen
- Stainless steel shaft and coupling
- Stainless steel NEMA faced mounting bracket
- Capacities available from 5 GPM to 70 GPM

SIMFLO 4" Hi/Lo Data Booklet



General Material Data

Hi/Lo "S" Series

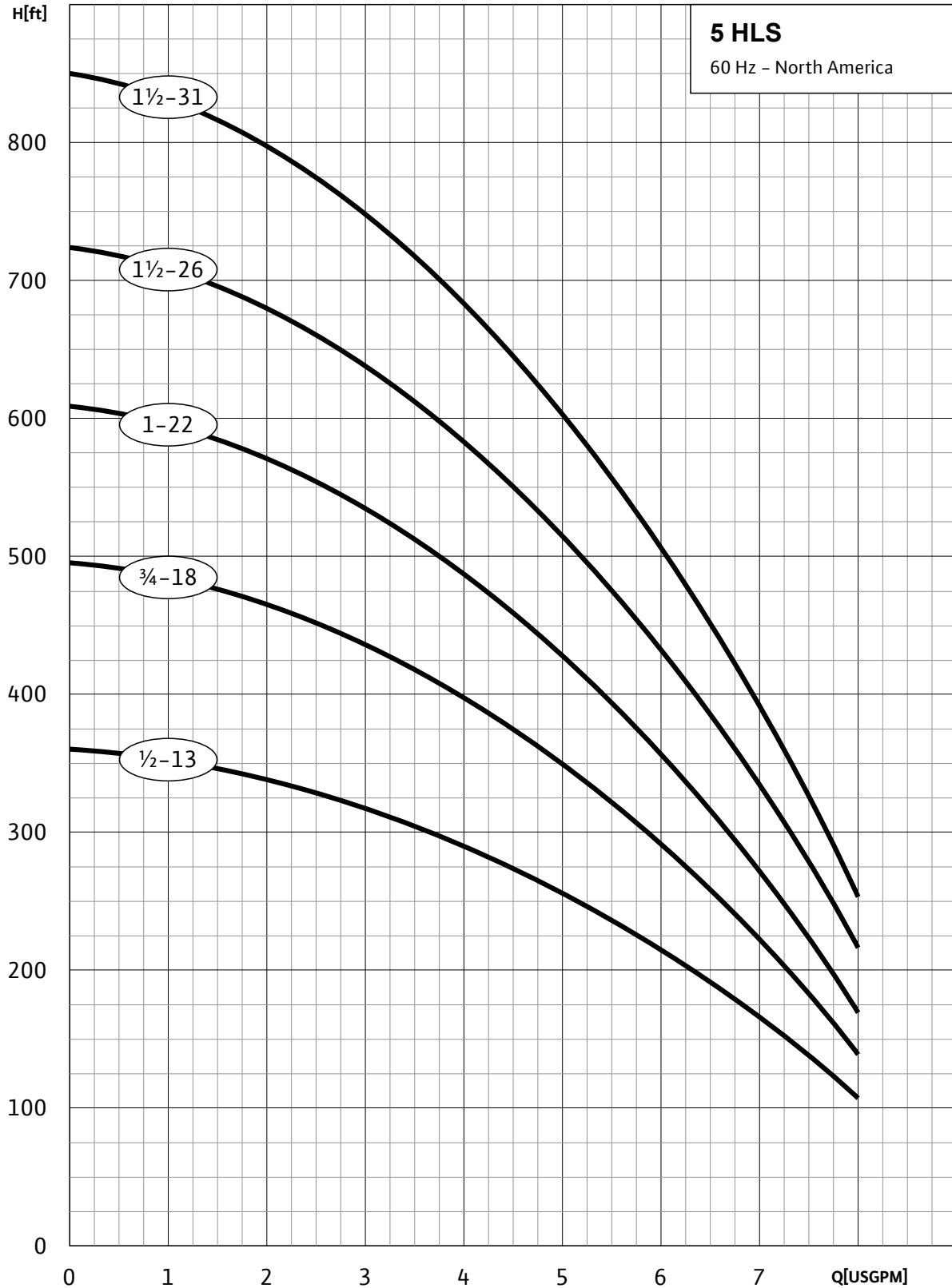


| Pos. | Components | Material | Standard |
|------|------------------------|--------------------------|----------|
| 01 | Discharge | Stainless Steel | 304 |
| 12 | Diffuser | Stainless Steel | 304 |
| 18 | Impeller | Stainless Steel | 304 |
| 21 | Split Cone | Stainless Steel | 304 |
| 22 | Split Cone Nut | Stainless Steel | 304 |
| 24 | Stop Ring | Carbon/ Graphite/PTFE | |
| 32 | Neck Ring Retainer | Stainless Steel | 304 |
| 24 | Strainer | Stainless Steel | 304 |
| 26 | Suction Interconnector | Stainless Steel | 304 |
| 40 | Pump Shaft | Stainless Steel | 304 |
| 37 | Coupling | Stainless Steel | 304 |
| 47 | Strap | Stainless Steel | 304 |
| 52 | Cable Guard | Stainless Steel | 304 |
| 87 | Neck Ring | Stainless Steel | 304 |
| 88 | Nut | Stainless Steel | 304 |
| 89 | Bearing | NBR | |

Hi/Lo "S" Series – 5 HLS

Stainless Steel Submersible Well Pumps

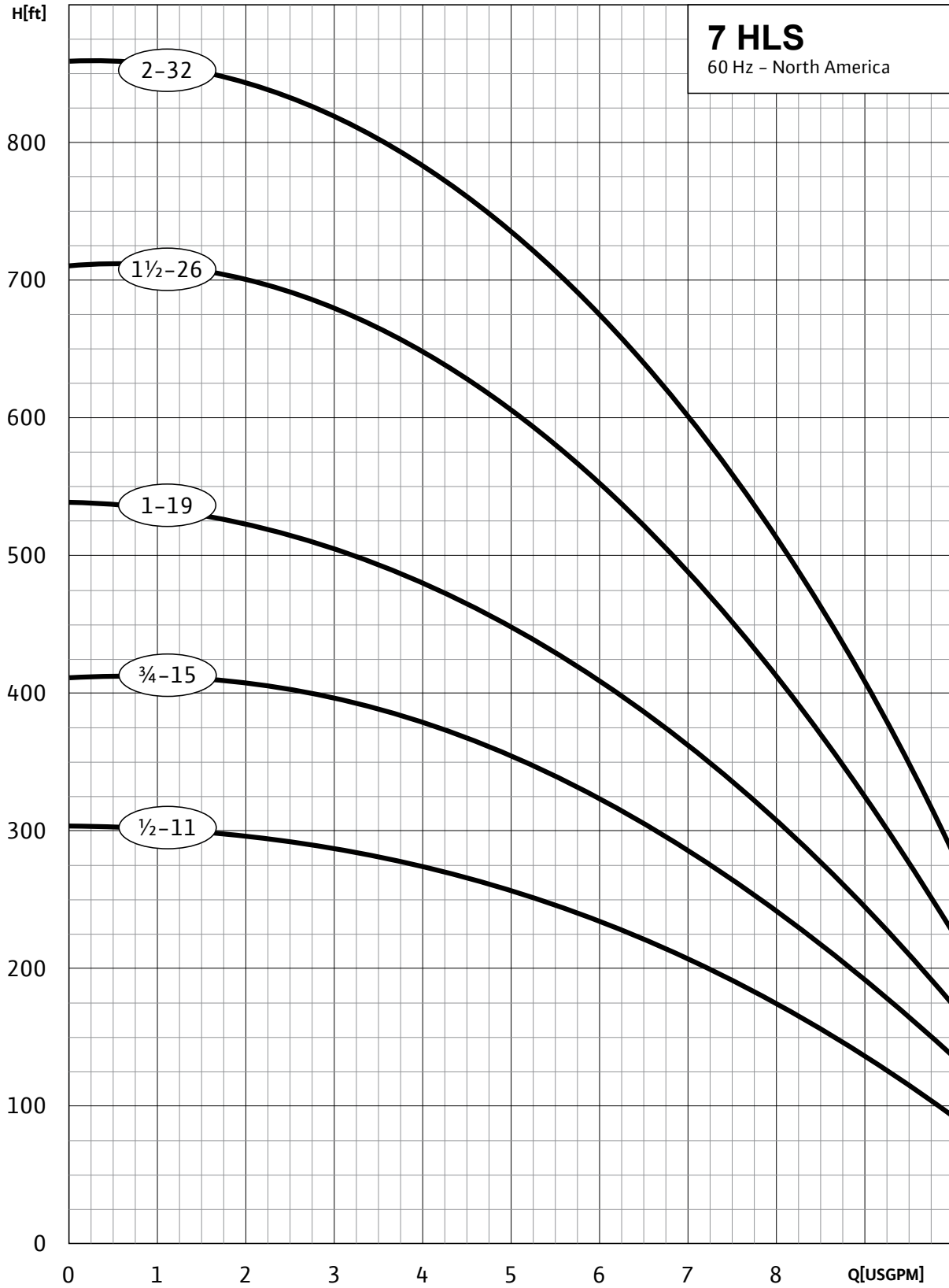
5 GPM



Hi/Lo "S" Series – 7 HLS

Stainless Steel Submersible Well Pumps

7 GPM

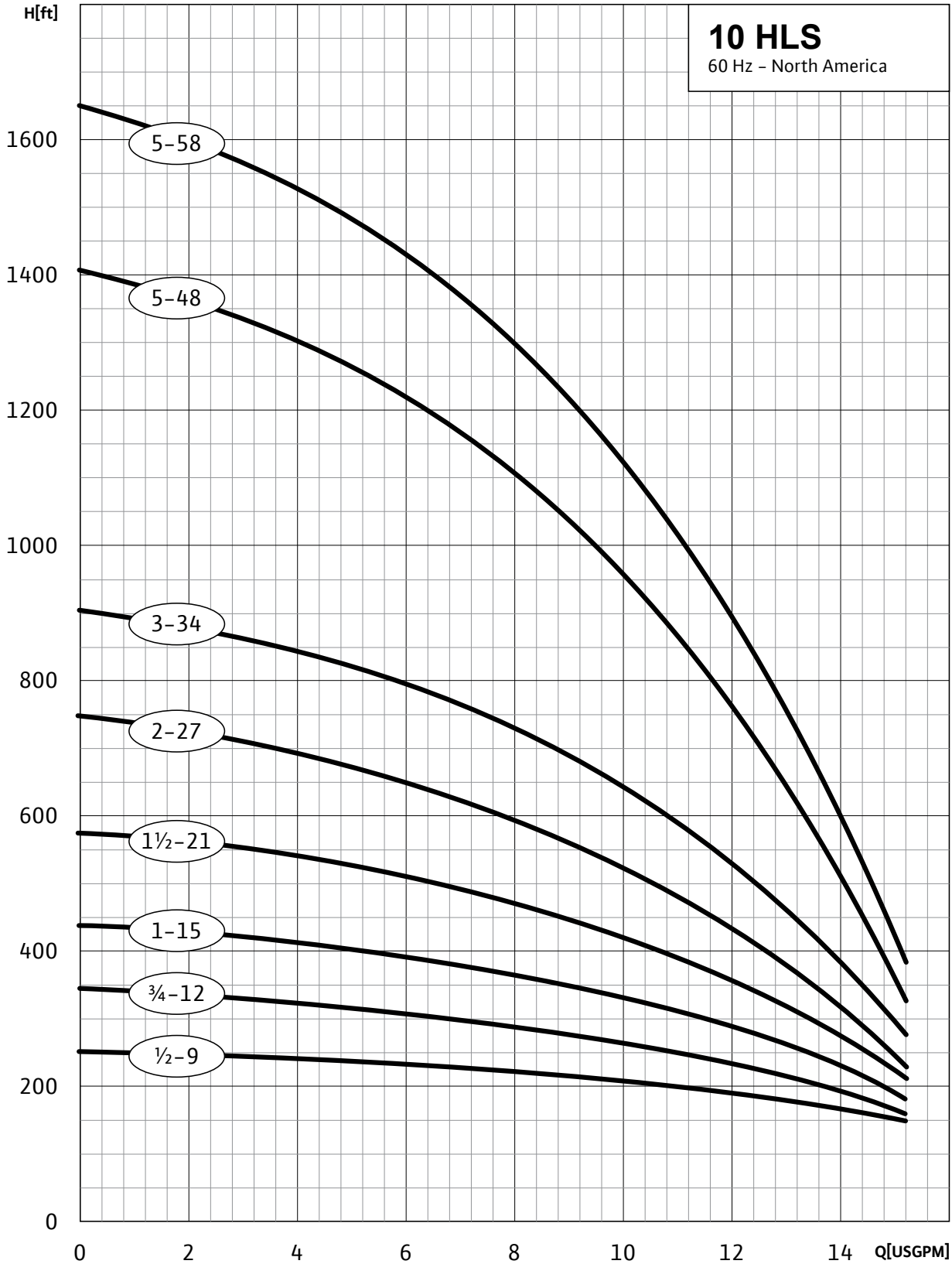


| MODEL | HP | PSI | Depth to Water in Feet | | | | | | | | | | | | | | | | | | | | | | |
|--------------|----|-----|------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|
| | | | 20 | 40 | 60 | 80 | 100 | 120 | 140 | 160 | 180 | 200 | 220 | 240 | 260 | 280 | 300 | 340 | 400 | 460 | 520 | 600 | 700 | | |
| 7HL05S | ½ | 0 | | | | | 9.9 | 9.5 | 8.9 | 8.4 | 7.8 | 7.3 | 6.7 | 6.0 | 5.0 | 4.0 | | | | | | | | | |
| | | 20 | | | 9.8 | 9.3 | 8.8 | 8.2 | 7.7 | 7.1 | 6.5 | 5.8 | 4.7 | 3.5 | 1.8 | | | | | | | | | | |
| | | 30 | 10.1 | 9.7 | 9.2 | 8.7 | 8.1 | 7.6 | 7.0 | 6.4 | 5.6 | 4.7 | 2.9 | | | | | | | | | | | | |
| | | 40 | 9.6 | 9.2 | 8.6 | 8.1 | 7.5 | 6.9 | 6.2 | 5.6 | 4.3 | 3.0 | 1.5 | | | | | | | | | | | | |
| | | 50 | 9.1 | 8.5 | 8.0 | 7.4 | 6.8 | 6.2 | 5.3 | 4.3 | 2.2 | | | | | | | | | | | | | | |
| | | 60 | 8.4 | 7.9 | 7.3 | 6.8 | 6.0 | 5.3 | 3.8 | 2.3 | | | | | | | | | | | | | | | |
| Shut-off PSI | | | 122 | 113 | 105 | 96 | 87 | 79 | 70 | 61 | 53 | 44 | 35 | 27 | 18 | 10 | | | | | | | | | |
| 7HL07S | ¾ | 0 | | | | | | 10.2 | 9.9 | 9.5 | 9.2 | 8.8 | 8.4 | 8.0 | 7.6 | 7.1 | 6.7 | 5.6 | 2.9 | | | | | | |
| | | 20 | | | | 10.1 | 9.8 | 9.4 | 9.0 | 8.6 | 8.2 | 7.8 | 7.4 | 7.0 | 6.5 | 6.1 | 5.4 | 3.6 | | | | | | | |
| | | 30 | | | 10.0 | 9.7 | 9.4 | 9.0 | 8.6 | 8.2 | 7.8 | 7.4 | 6.9 | 6.5 | 5.9 | 5.4 | 4.5 | 1.8 | | | | | | | |
| | | 40 | | 10.0 | 9.7 | 9.3 | 8.9 | 8.5 | 8.1 | 7.7 | 7.3 | 6.9 | 6.4 | 5.9 | 5.2 | 4.5 | 3.2 | 1.0 | | | | | | | |
| | | 50 | 9.9 | 9.6 | 9.2 | 8.9 | 8.5 | 8.1 | 7.6 | 7.2 | 6.8 | 6.4 | 5.8 | 5.2 | 4.2 | 3.2 | 1.6 | | | | | | | | |
| | | 60 | 9.5 | 9.2 | 8.8 | 8.4 | 8.0 | 7.6 | 7.2 | 6.7 | 6.2 | 5.7 | 4.9 | 4.2 | 2.8 | 1.4 | | | | | | | | | |
| Shut-off PSI | | | 170 | 101 | 153 | 144 | 135 | 127 | 118 | 110 | 101 | 92 | 84 | 75 | 66 | 58 | 49 | 32 | 6 | | | | | | |
| 7HL10S | 1 | 0 | | | | | | | | 10.1 | 9.8 | 9.6 | 9.3 | 9.0 | 8.7 | 8.4 | 8.0 | 7.4 | 6.4 | 4.8 | | | | | |
| | | 20 | | | | | | 10.0 | 9.8 | 9.5 | 9.2 | 8.9 | 8.6 | 8.3 | 7.9 | 7.6 | 7.3 | 6.6 | 5.3 | 2.8 | | | | | |
| | | 30 | | | | | 10.0 | 9.7 | 9.5 | 9.2 | 8.9 | 8.5 | 8.2 | 7.9 | 7.6 | 7.3 | 6.9 | 6.2 | 4.6 | 1.4 | | | | | |
| | | 40 | | | | 10.0 | 9.7 | 9.4 | 9.1 | 8.8 | 8.5 | 8.2 | 7.8 | 7.5 | 7.2 | 6.9 | 6.5 | 5.6 | 3.7 | | | | | | |
| | | 50 | | 10.2 | 9.9 | 9.7 | 9.4 | 9.1 | 8.8 | 8.4 | 8.1 | 7.8 | 7.5 | 7.2 | 6.8 | 6.5 | 6.0 | 5.0 | 2.4 | | | | | | |
| | | 60 | 10.1 | 9.9 | 9.6 | 9.3 | 9.0 | 8.7 | 8.4 | 8.1 | 7.8 | 7.4 | 7.1 | 6.8 | 6.4 | 6.0 | 5.5 | 4.2 | | | | | | | |
| Shut-off PSI | | | 218 | 209 | 200 | 192 | 183 | 174 | 166 | 157 | 148 | 140 | 131 | 123 | 114 | 105 | 97 | 79 | 53 | 27 | | | | | |
| 7HL15S | 1½ | 0 | | | | | | | | | | | 10.1 | 9.9 | 9.7 | 9.5 | 9.3 | 8.8 | 8.1 | 7.4 | 6.7 | 5.5 | | | |
| | | 20 | | | | | | | | | | 10.0 | 9.8 | 9.6 | 9.4 | 9.2 | 9.0 | 8.8 | 8.3 | 7.6 | 6.9 | 6.1 | 4.4 | | |
| | | 30 | | | | | | | | | | 10.0 | 9.8 | 9.6 | 9.4 | 9.2 | 9.0 | 8.7 | 8.5 | 8.0 | 7.3 | 6.6 | 5.7 | 3.7 | |
| | | 40 | | | | | | 10.1 | 10.0 | 9.8 | 9.6 | 9.4 | 9.1 | 8.9 | 8.7 | 8.5 | 8.2 | 7.8 | 7.1 | 6.3 | 5.2 | 2.9 | | | |
| | | 50 | | | | | 10.1 | 9.9 | 9.7 | 9.6 | 9.3 | 9.1 | 8.9 | 8.7 | 8.4 | 8.2 | 8.0 | 7.5 | 6.8 | 5.9 | 4.7 | 1.9 | | | |
| | | 60 | | | | 10.1 | 9.9 | 9.7 | 9.5 | 9.3 | 9.1 | 8.9 | 8.6 | 8.4 | 8.2 | 7.9 | 7.7 | 7.2 | 6.5 | 5.5 | 4.1 | | | | |
| Shut-off PSI | | | | | | 274 | 265 | 257 | 248 | 239 | 231 | 222 | 213 | 205 | 196 | 187 | 179 | 161 | 135 | 110 | 84 | 49 | | | |
| 7HL20S | 2 | 0 | | | | | | | | | | | 10.6 | 10.5 | 10.4 | 10.4 | 10.3 | 10.1 | 9.6 | 9.1 | 8.4 | 7.3 | 5.7 | | |
| | | 20 | | | | | | | | | | 10.5 | 10.5 | 10.4 | 10.3 | 10.2 | 10.1 | 10.0 | 9.8 | 9.2 | 8.6 | 7.8 | 6.6 | 4.8 | |
| | | 30 | | | | | | | | | | 10.5 | 10.5 | 10.4 | 10.3 | 10.2 | 10.1 | 10.0 | 9.9 | 9.6 | 9.0 | 8.3 | 7.5 | 6.2 | 4.3 |
| | | 40 | | | | | | | | | 10.5 | 10.5 | 10.4 | 10.3 | 10.2 | 10.1 | 10.0 | 9.9 | 9.7 | 9.4 | 8.8 | 8.0 | 7.2 | 5.8 | 3.9 |
| | | 50 | | | | | | | | 10.5 | 10.4 | 10.3 | 10.2 | 10.1 | 10.0 | 9.8 | 9.7 | 9.5 | 9.1 | 8.5 | 7.7 | 6.8 | 5.4 | 3.3 | |
| | | 60 | | | | | | 10.5 | 10.4 | 10.3 | 10.2 | 10.1 | 10.0 | 9.8 | 9.7 | 9.5 | 9.3 | 8.9 | 8.2 | 7.4 | 6.4 | 5.0 | | | |
| Shut-off PSI | | | | | | 343 | 334 | 326 | 317 | 308 | 300 | 291 | 282 | 274 | 265 | 256 | 239 | 213 | 187 | 161 | 126 | 83 | | | |

Hi/Lo "S" Series – 10 HLS

Stainless Steel Submersible Well Pumps

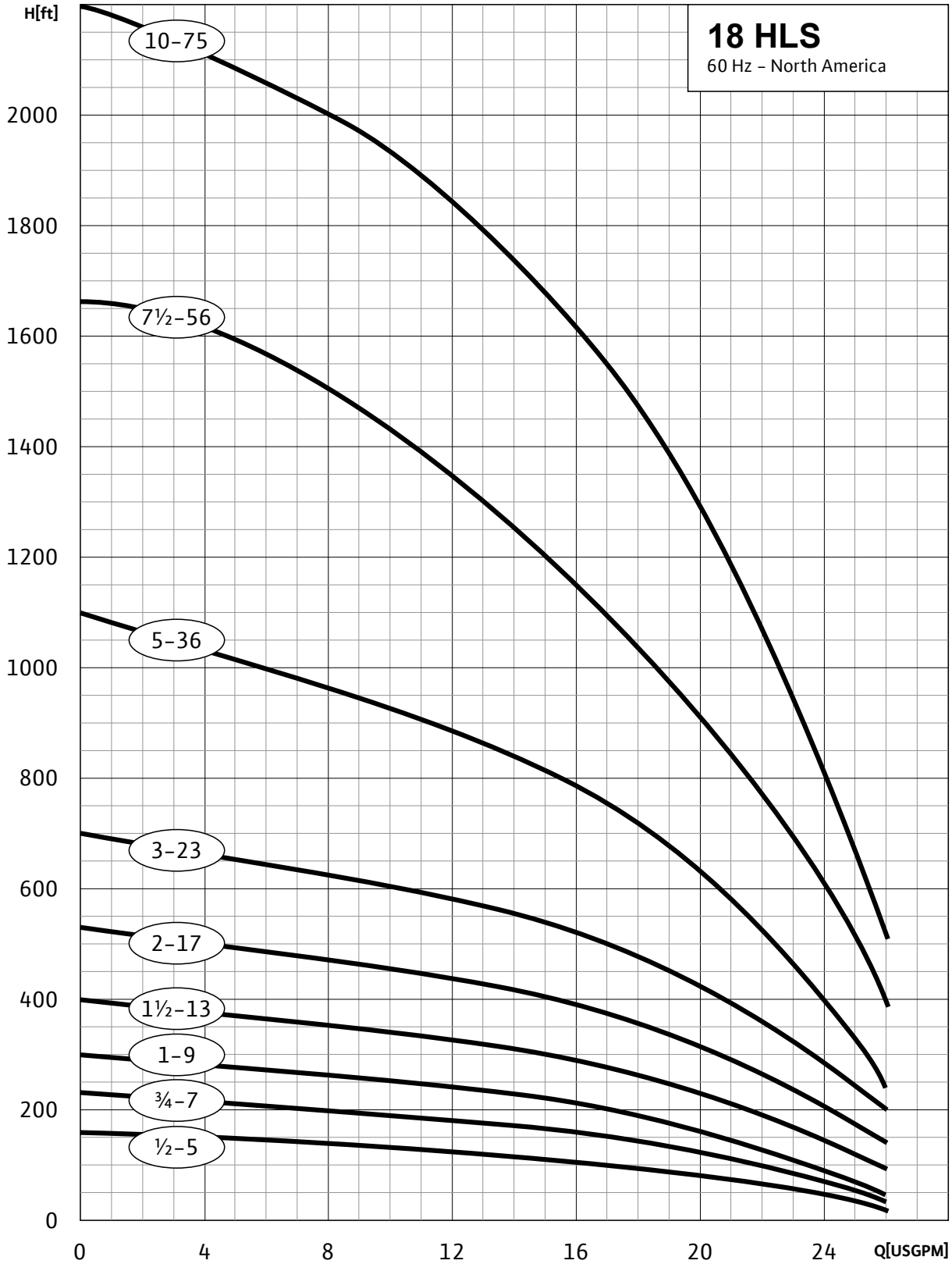
10 GPM



Hi/Lo "S" Series – 18 HLS

Stainless Steel Submersible Well Pumps

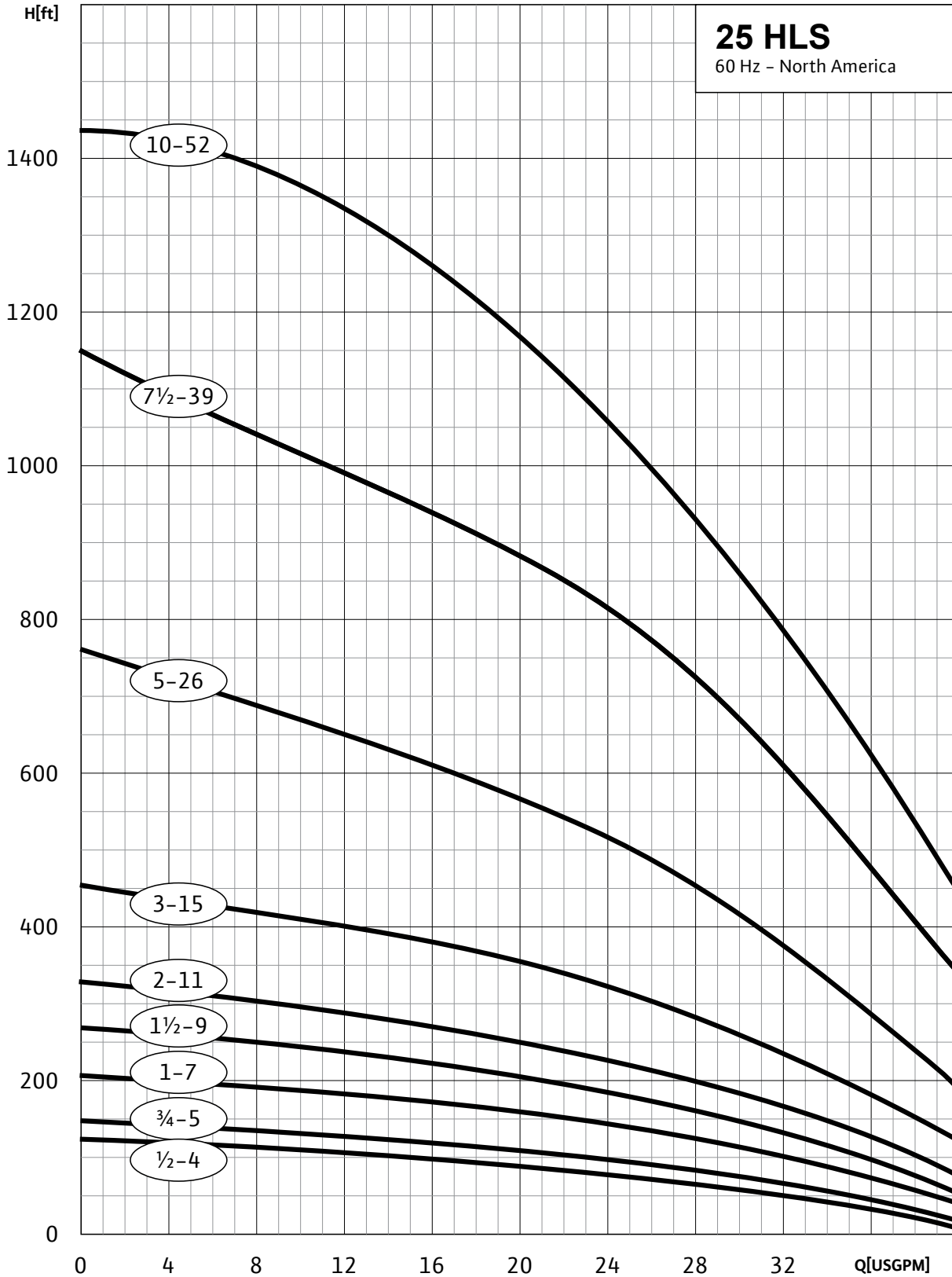
18 GPM



Hi/Lo "S" Series – 25 HLS

Stainless Steel Submersible Well Pumps

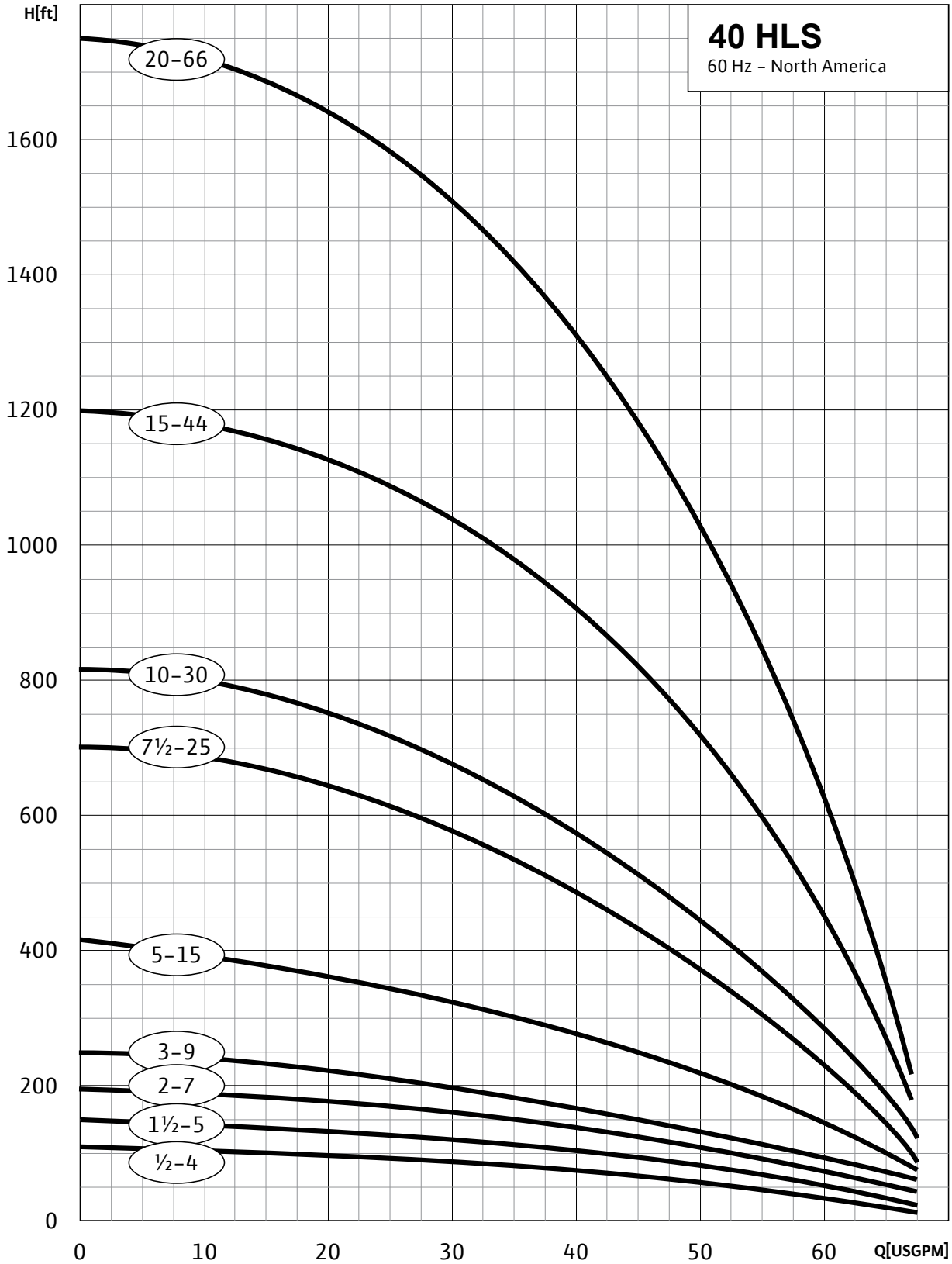
25 GPM



Hi/Lo "S" Series – 40 HLS

Stainless Steel Submersible Well Pumps

40 GPM

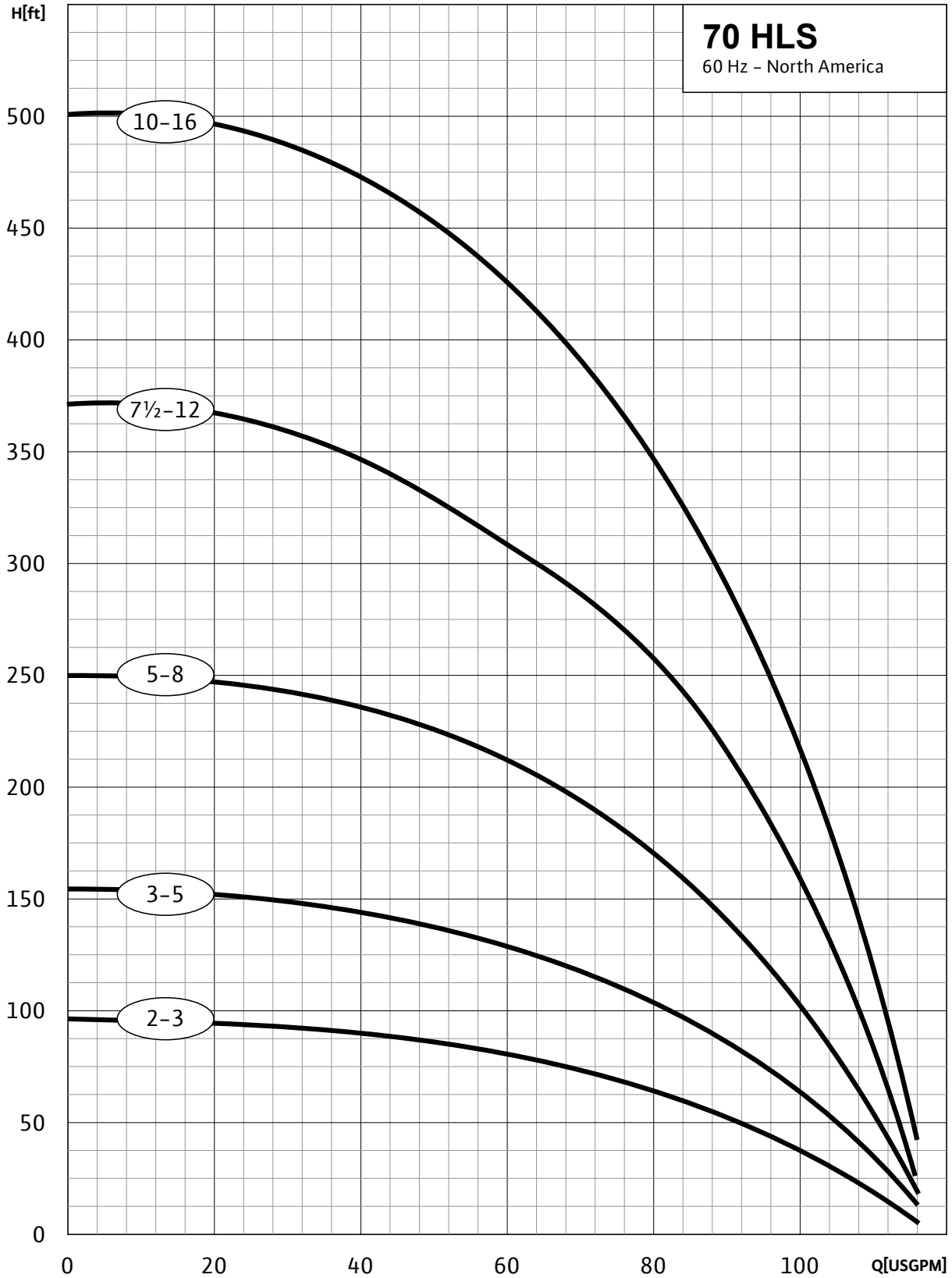


| MODEL | HP | PSI | Depth to Water in Feet | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------|----|-----|------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|-----|--|--|--|
| | | | 20 | 40 | 60 | 80 | 100 | 120 | 140 | 160 | 180 | 200 | 220 | 240 | 260 | 280 | 300 | 340 | 380 | 420 | 460 | 500 | 540 | 580 | 620 | 660 | 700 | 740 | 780 | 800 | | | |
| 40HL10S | 1 | 0 | | 63.5 | 55.7 | 43.2 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 20 | 53.0 | 36.5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 30 | 32.7 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 40 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 50 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 60 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Shut-off PSI | | | 40 | 32 | 23 | 14 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 40HL15S | 1½ | 0 | | | 60.1 | 54.0 | 43.2 | 23.4 | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 20 | 58.2 | 51.5 | 38.0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 30 | 50.0 | 35.0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 40 | 31.9 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 50 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 60 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Shut-off PSI | | | 52 | 44 | 35 | 27 | 18 | 9 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 40HL20S | 2 | 0 | | | | 61.0 | 56.7 | 51.7 | 43.2 | 29.9 | | | | | | | | | | | | | | | | | | | | | | | |
| | | 20 | 64.5 | 59.6 | 55.4 | 49.6 | 39.6 | 24.9 | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 30 | 58.9 | 54.7 | 48.3 | 37.6 | 22.3 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 40 | 53.9 | 47.0 | 35.5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 50 | 45.5 | 33.2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 60 | 30.9 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Shut-off PSI | | | 77 | 68 | 60 | 51 | 42 | 34 | 25 | 16 | | | | | | | | | | | | | | | | | | | | | | | |
| 40HL30S | 3 | 0 | | | | 65.6 | 61.5 | 58.1 | 54.8 | 50.2 | 43.2 | 33.2 | 20.8 | | | | | | | | | | | | | | | | | | | | |
| | | 20 | | 64.3 | 60.4 | 57.1 | 53.6 | 48.4 | 40.4 | 29.6 | | | | | | | | | | | | | | | | | | | | | | | |
| | | 30 | 63.6 | 59.8 | 56.6 | 52.9 | 47.3 | 38.9 | 27.7 | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 40 | 59.3 | 56.1 | 52.2 | 46.2 | 37.4 | 25.7 | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 50 | 55.6 | 51.4 | 45.0 | 35.7 | 23.7 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 60 | 50.6 | 43.8 | 34.0 | 21.7 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Shut-off PSI | | | 101 | 93 | 84 | 75 | 67 | 58 | 49 | 41 | 32 | 23 | 15 | | | | | | | | | | | | | | | | | | | | |
| 40HL50SH | 5 | 0 | | | | | | | 64.4 | 62.1 | 60.1 | 58.3 | 56.3 | 54.0 | 51.0 | 47.1 | 42.2 | 29.4 | | | | | | | | | | | | | | | |
| | | 20 | | | | | 63.6 | 61.5 | 59.5 | 57.7 | 55.7 | 53.2 | 49.9 | 45.7 | 40.5 | 34.2 | 27.1 | | | | | | | | | | | | | | | | |
| | | 30 | | | | | 63.3 | 61.2 | 59.3 | 57.4 | 55.3 | 52.7 | 49.3 | 45.0 | 39.6 | 33.2 | 26.9 | | | | | | | | | | | | | | | | |
| | | 40 | | | | | 62.9 | 60.9 | 59.0 | 57.1 | 54.9 | 52.2 | 48.7 | 44.2 | 38.6 | 32.1 | 24.7 | | | | | | | | | | | | | | | | |
| | | 50 | 64.9 | 62.6 | 60.6 | 58.7 | 56.8 | 54.6 | 51.8 | 48.1 | 43.4 | 37.7 | 31.0 | 23.5 | | | | | | | | | | | | | | | | | | | |
| | | 60 | 62.3 | 60.3 | 58.4 | 56.5 | 54.2 | 51.3 | 47.4 | 42.6 | 36.7 | 29.9 | 22.4 | | | | | | | | | | | | | | | | | | | | |
| Shut-off PSI | | | 173 | 164 | 156 | 147 | 138 | 130 | 121 | 112 | 104 | 95 | 86 | 78 | 69 | 60 | 52 | 34 | | | | | | | | | | | | | | | |
| 40HL75S | 7½ | 0 | | | | | | | | | | | 65.3 | 63.9 | 62.5 | 61.3 | 60.1 | 57.9 | 55.5 | 52.3 | 48.0 | 42.2 | 34.9 | 26.4 | | | | | | | | | |
| | | 20 | | | | | | | | | | | 64.9 | 63.5 | 62.2 | 60.9 | 59.8 | 58.7 | 57.5 | 55.0 | 51.7 | 47.2 | 41.2 | 33.7 | 25.0 | | | | | | | | |
| | | 30 | | | | | | | | | | | 64.7 | 63.3 | 62.0 | 60.7 | 59.6 | 58.5 | 57.4 | 56.2 | 53.2 | 49.3 | 43.9 | 37.0 | 28.8 | | | | | | | | |
| | | 40 | | | | | | | | | | | 64.4 | 63.1 | 61.8 | 60.6 | 59.4 | 58.3 | 57.2 | 56.0 | 54.6 | 51.1 | 46.4 | 40.1 | 32.4 | 23.6 | | | | | | | |
| | | 50 | | | | | | | | | | | 65.6 | 64.2 | 62.8 | 61.6 | 61.8 | 59.3 | 58.2 | 57.0 | 55.8 | 54.3 | 52.7 | 48.5 | 42.9 | 35.8 | 27.4 | | | | | | |
| | | 60 | | | | | | | | | | | 65.4 | 64.0 | 62.6 | 61.4 | 60.2 | 59.1 | 58.0 | 56.8 | 55.6 | 54.1 | 52.4 | 50.5 | 45.5 | 39.0 | 31.1 | 22.1 | | | | | |
| Shut-off PSI | | | | | | 288 | 259 | 251 | 242 | 233 | 225 | 216 | 207 | 199 | 190 | 181 | 173 | 155 | 138 | 121 | 103 | 86 | 69 | 51 | | | | | | | | | |
| 40HL100S | 10 | 0 | | | | | | | | | | | | | | | | | | | 53.0 | 50.0 | 45.0 | 43.0 | 36.0 | 32.0 | 27.0 | | | | | | |
| | | 20 | | | | | | | | | | | | | | | | | | | 50.0 | 48.0 | 41.0 | 35.0 | 30.0 | 24.0 | 20.0 | | | | | | |
| | | 30 | | | | | | | | | | | | | | | | | | | 50.0 | 48.0 | 46.0 | 38.0 | 32.0 | 27.0 | 21.0 | 16.0 | | | | | |
| | | 40 | | | | | | | | | | | | | | | | | | | 48.0 | 46.0 | 42.0 | 36.0 | 32.0 | 26.0 | 21.0 | 12.0 | | | | | |
| | | 50 | | | | | | | | | | | | | | | | | | | 47.0 | 45.0 | 43.0 | 39.0 | 33.0 | 27.0 | 20.0 | 16.0 | 8.0 | | | | |
| | | 60 | | | | | | | | | | | | | | | | | | | 52.0 | 48.0 | 44.0 | 41.0 | 38.0 | 32.0 | | | | | | | |
| Shut-off PSI | | | | | | | | | | | | | | | | | | | | 222 | 210 | 182 | 170 | 155 | 130 | 112 | 98 | 78 | 66 | | | | |

Hi/Lo "S" Series – 70 HLS

Stainless Steel Submersible Well Pumps

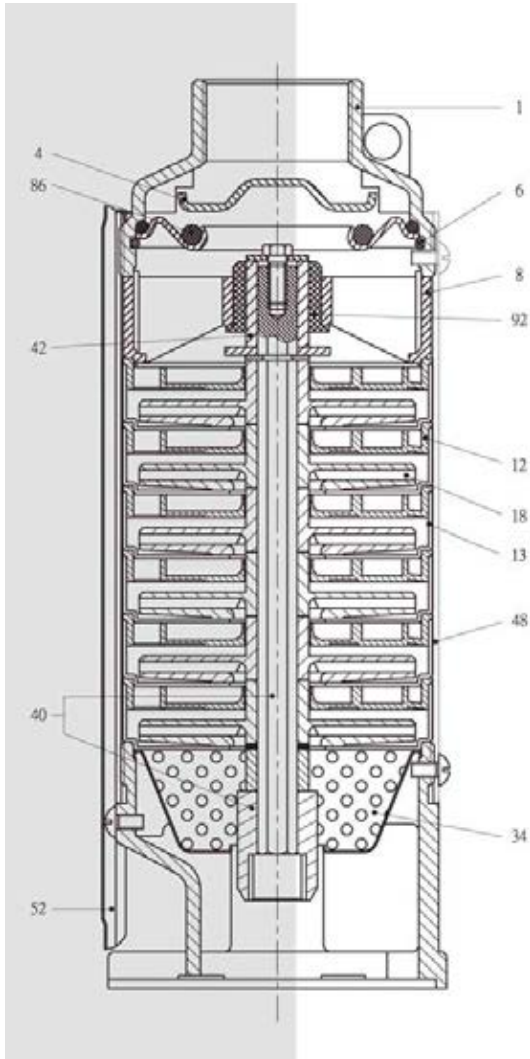
70 GPM



| MODEL | HP | PSI | Depth to Water in Feet | | | | | | | | | | | | | | | | | | |
|--------------|----|-----|------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|--|
| | | | 20 | 40 | 60 | 80 | 100 | 120 | 140 | 160 | 180 | 200 | 220 | 240 | 260 | 280 | 300 | 340 | 380 | 420 | |
| 70HL20S | 2 | 0 | | 89.1 | 68.9 | 38.8 | | | | | | | | | | | | | | | |
| | | 20 | 60.8 | | | | | | | | | | | | | | | | | | |
| | | 30 | | | | | | | | | | | | | | | | | | | |
| | | 40 | | | | | | | | | | | | | | | | | | | |
| | | 50 | | | | | | | | | | | | | | | | | | | |
| | | 60 | | | | | | | | | | | | | | | | | | | |
| Shut-off PSI | | | 31 | 23 | 14 | 5 | | | | | | | | | | | | | | | |
| 70HL30S | 3 | 0 | | | 91.1 | 78.8 | 68.9 | 51.0 | | | | | | | | | | | | | |
| | | 20 | 89.4 | 75.5 | 64.4 | 44.9 | | | | | | | | | | | | | | | |
| | | 30 | 74.1 | 61.8 | 41.1 | | | | | | | | | | | | | | | | |
| | | 40 | 58.8 | 39.6 | | | | | | | | | | | | | | | | | |
| | | 50 | 37.1 | | | | | | | | | | | | | | | | | | |
| | | 60 | | | | | | | | | | | | | | | | | | | |
| Shut-off PSI | | | 58 | 49 | 40 | 32 | 23 | 14 | | | | | | | | | | | | | |
| 70HL50S | 5 | 0 | | | | | 88.9 | 84.8 | 78.5 | 69.4 | 59.4 | 49.7 | | | | | | | | | |
| | | 20 | | | 87.8 | 83.2 | 75.9 | 66.3 | 65.4 | 46.3 | | | | | | | | | | | |
| | | 30 | 91.0 | 87.2 | 82.3 | 74.6 | 64.7 | 54.9 | 44.4 | | | | | | | | | | | | |
| | | 40 | 86.5 | 81.3 | 73.1 | 63.2 | 53.4 | 52.2 | | | | | | | | | | | | | |
| | | 50 | 80.2 | 71.6 | 61.6 | 51.9 | 39.8 | | | | | | | | | | | | | | |
| | | 60 | 70.1 | 60.1 | 50.4 | | | | | | | | | | | | | | | | |
| Shut-off PSI | | | 94 | 86 | 77 | 68 | 60 | 51 | 42 | 34 | 25 | 16 | | | | | | | | | |
| 70HL75S | 7½ | 0 | | | | | | | 90.2 | 87.7 | 84.8 | 81.0 | 75.7 | 69.4 | 62.7 | 56.1 | 49.7 | | | | |
| | | 20 | | | | | 89.4 | 86.9 | 83.8 | 79.5 | 73.9 | 67.4 | 60.6 | 54.2 | 47.5 | | | | | | |
| | | 30 | | | | 89.0 | 86.4 | 83.2 | 78.7 | 72.9 | 66.3 | 59.6 | 53.2 | 46.3 | | | | | | | |
| | | 40 | | | 88.6 | 86.0 | 82.6 | 77.9 | 71.9 | 65.3 | 58.6 | 52.2 | 45.0 | 33.0 | 11.3 | | | | | | |
| | | 50 | | 88.2 | 85.5 | 81.9 | 77.0 | 70.9 | 64.2 | 57.6 | 51.2 | 43.7 | | | | | | | | | |
| | | 60 | 87.8 | 85.1 | 82.3 | 76.1 | 69.9 | 63.2 | 56.6 | 50.2 | 42.2 | | | | | | | | | | |
| Shut-off PSI | | | 146 | 137 | 128 | 120 | 111 | 102 | 94 | 85 | 76 | 68 | 59 | 50 | 42 | 33 | 24 | | | | |
| 70HL100S | 10 | 0 | | | | | | | 88.5 | 86.4 | 85.2 | 84.3 | 83.2 | 81.3 | 78.4 | 74.5 | 64.5 | 54.2 | 43.8 | | |
| | | 20 | | | | | 90.7 | 87.7 | 85.9 | 84.0 | 82.7 | 80.5 | 77.3 | 73.1 | 68.2 | 62.9 | 52.7 | 41.7 | | | |
| | | 30 | | | | 90.7 | 87.4 | 85.7 | 84.7 | 83.8 | 82.4 | 80.1 | 76.7 | 72.4 | 67.4 | 62.1 | 56.9 | 47.0 | | | |
| | | 40 | | | 89.6 | 87.1 | 85.6 | 84.6 | 83.6 | 82.1 | 79.7 | 76.1 | 71.6 | 66.5 | 61.2 | 56.1 | 51.2 | | | | |
| | | 50 | | 89.2 | 86.8 | 85.4 | 83.5 | 81.8 | 79.2 | 75.5 | 70.9 | 65.7 | 60.4 | 55.4 | 50.5 | 45.2 | | | | | |
| | | 60 | 88.7 | 86.5 | 85.2 | 84.3 | 83.3 | 81.5 | 78.7 | 74.8 | 70.0 | 64.9 | 59.6 | 54.6 | 49.7 | 44.3 | | | | | |
| Shut-off PSI | | | 197 | 188 | 180 | 171 | 162 | 154 | 145 | 136 | 128 | 119 | 110 | 102 | 93 | 84 | 76 | 59 | 41 | 24 | |

General Material Data

Hi/Lo "N" Series

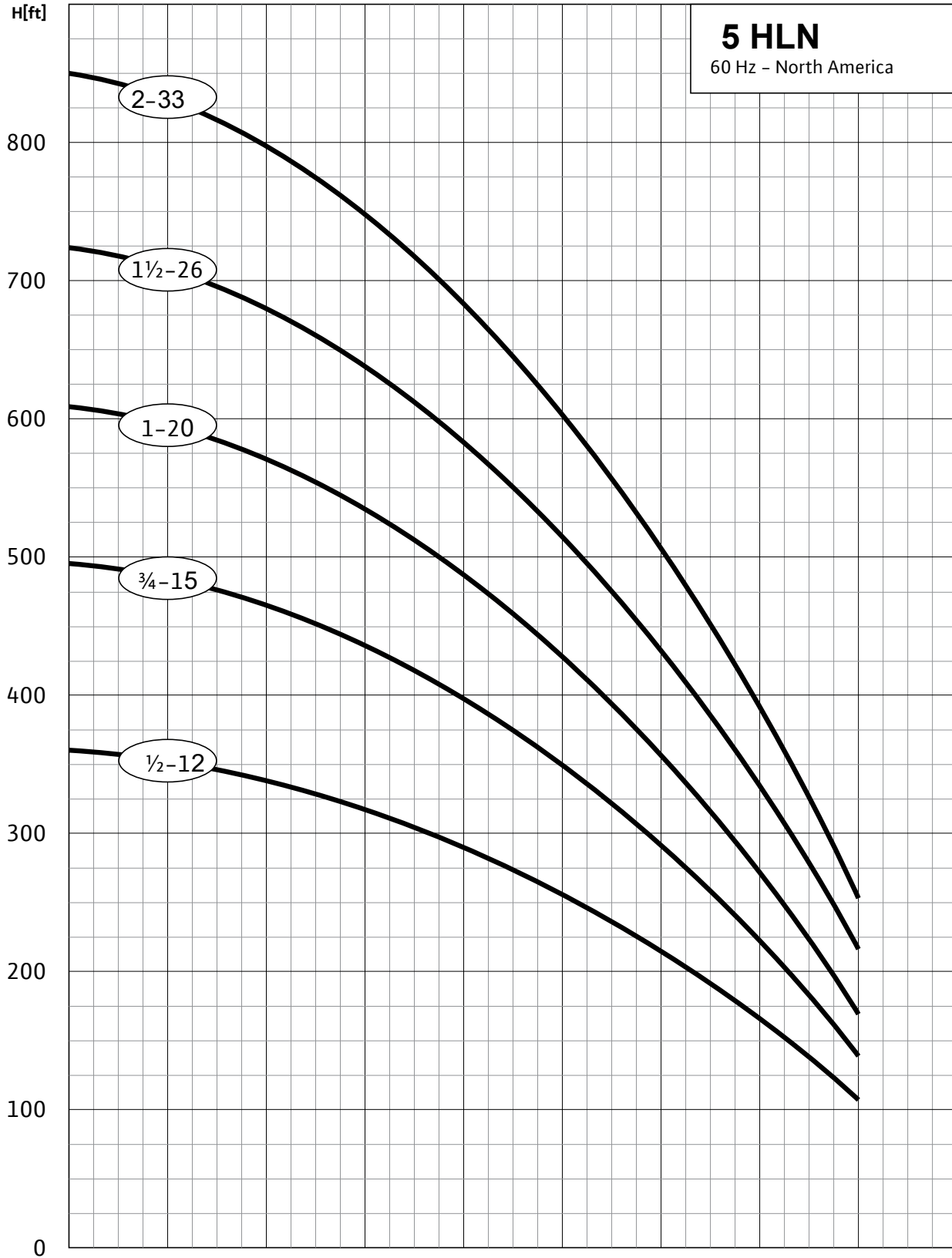


| Pos. | Components | Material | Standard |
|------|----------------------------|-----------------------------|----------|
| 01 | Discharge Head | Stainless Steel | 304 |
| 04 | Check Valve Cone | Stainless Steel | 304 |
| 06 | Check Valve retaining Ring | Stainless Steel | 304 |
| 08 | Bearing Spider | Glass Filled Poly-carbonate | |
| 12 | Diffuser | Glass Filled Poly-carbonate | |
| 13 | Bowl | Stainless Steel | 304 |
| 18 | Impeller | Noryl | |
| 34 | Strainer | Stainless Steel | 304 |
| 40 | Pump Shaft / Coupling | Stainless Steel | 304 |
| 42 | Shaft Sleeve | Stainless Steel or Noryl | 304 |
| 48 | Pump Casing | Stainless Steel | 304 |
| 52 | Cable Guard | Stainless Steel | 304 |
| 86 | O-Ring | NBR | |
| 92 | Bearing | Polyacetal | |

Hi/Lo "N" Series – 5 HLN

Submersible Well Pumps with Noryl Impeller

5 GPM

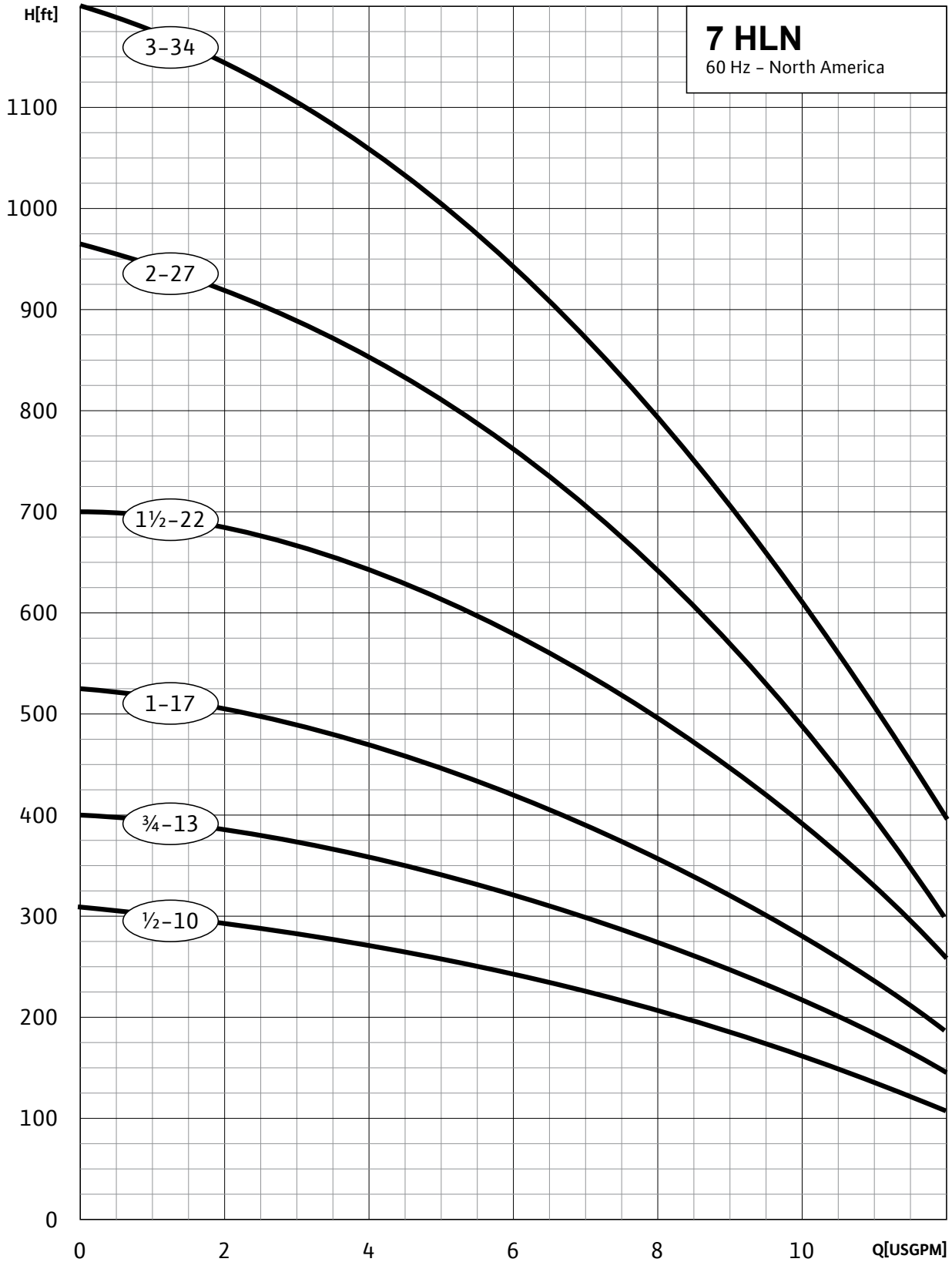


| MODEL | HP | PSI | Depth to Water in Feet | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------|-----|-----|------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|--|--|--|--|--|--|
| | | | 20 | 40 | 60 | 80 | 100 | 120 | 140 | 160 | 180 | 200 | 220 | 240 | 260 | 280 | 300 | 340 | 380 | 420 | 460 | 500 | 540 | 580 | 620 | 660 | 700 | 740 | 780 | 820 | 860 | 900 | 940 | 980 | 1020 | | | | | | | |
| 5HL05N | ½ | 0 | | | | | | | | 7.7 | 7.3 | 6.9 | 6.4 | 6.0 | 5.6 | 5.1 | 4.7 | 4.1 | 2.6 | | | | | | | | | | | | | | | | | | | | | | | |
| | | 20 | | | | | | 7.5 | 7.1 | 6.7 | 6.3 | 5.9 | 5.4 | 5.0 | 4.5 | 3.9 | 3.2 | 2.3 | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 30 | | | | 7.5 | 7.1 | 6.7 | 6.2 | 5.8 | 5.4 | 4.9 | 4.4 | 3.8 | 3.1 | 2.1 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 40 | | | 7.4 | 7.0 | 6.6 | 6.2 | 5.7 | 5.3 | 4.9 | 4.3 | 3.7 | 2.9 | 1.9 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 50 | 7.7 | 7.4 | 6.9 | 6.5 | 6.1 | 5.7 | 5.2 | 4.8 | 4.2 | 3.6 | 2.8 | 1.8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 60 | 7.3 | 6.9 | 6.5 | 6.0 | 5.6 | 5.2 | 4.7 | 4.2 | 3.5 | 2.6 | 1.6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Shut-off PSI | | | 156 | 147 | 138 | 130 | 121 | 112 | 104 | 95 | 86 | 78 | 69 | 60 | 52 | 43 | 34 | 17 | | | | | | | | | | | | | | | | | | | | | | | | |
| 5HL07N | ¾ | 0 | | | | | | | | | | | | | 7.6 | 7.3 | 7.0 | 6.6 | 6.3 | 5.9 | 5.2 | 4.4 | 3.3 | 1.6 | | | | | | | | | | | | | | | | | | |
| | | 20 | | | | | | | | 7.5 | 7.2 | 6.9 | 6.5 | 6.2 | 5.8 | 5.5 | 5.1 | 4.2 | 3.1 | 1.3 | | | | | | | | | | | | | | | | | | | | | | |
| | | 30 | | | | | | | | 7.5 | 7.2 | 6.8 | 6.5 | 6.1 | 5.8 | 5.4 | 5.0 | 4.6 | 3.6 | 2.1 | | | | | | | | | | | | | | | | | | | | | | |
| | | 40 | | | | | | 7.4 | 7.1 | 6.8 | 6.4 | 6.1 | 5.7 | 5.4 | 5.0 | 4.6 | 4.1 | 2.8 | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 50 | | | | 7.4 | 7.1 | 6.7 | 6.4 | 6.0 | 5.7 | 5.3 | 4.9 | 4.5 | 4.0 | 3.4 | 1.8 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 60 | | | 7.6 | 7.3 | 7.0 | 6.7 | 6.3 | 6.0 | 5.6 | 5.3 | 4.9 | 4.4 | 3.9 | 3.3 | 2.6 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Shut-off PSI | | | 184 | 175 | 167 | 158 | 149 | 141 | 132 | 123 | 115 | 106 | 97 | 89 | 80 | 63 | 45 | 28 | 11 | | | | | | | | | | | | | | | | | | | | | | | |
| 5HL10N | 1 | 0 | | | | | | | | | | | | | | | | | | | 7.5 | 7.0 | 6.5 | 5.9 | 5.3 | 4.6 | 3.8 | 2.8 | 1.6 | | | | | | | | | | | | | |
| | | 20 | | | | | | | | | | | | | | 7.6 | 7.4 | 7.2 | 7.0 | 6.4 | 5.9 | 5.2 | 4.5 | 3.7 | 2.6 | | | | | | | | | | | | | | | | | |
| | | 30 | | | | | | | | | | | | | | 7.6 | 7.4 | 7.2 | 6.9 | 6.7 | 6.1 | 5.5 | 4.8 | 4.0 | 3.1 | 1.9 | | | | | | | | | | | | | | | | |
| | | 40 | | | | | | | | | | | | | | 7.6 | 7.4 | 7.1 | 6.9 | 6.6 | 6.3 | 5.8 | 5.1 | 4.4 | 3.5 | 2.5 | | | | | | | | | | | | | | | | |
| | | 50 | | | | | | | | | | | | | | 7.5 | 7.3 | 7.1 | 6.8 | 6.6 | 6.3 | 6.0 | 5.4 | 4.7 | 3.9 | 2.9 | 1.7 | | | | | | | | | | | | | | | |
| 60 | | | | | | | | | | | | | | 7.5 | 7.3 | 7.1 | 6.8 | 6.5 | 6.3 | 6.0 | 5.7 | 5.0 | 4.3 | 3.4 | 2.3 | | | | | | | | | | | | | | | | | |
| Shut-off PSI | | | 214 | 206 | 197 | 188 | 180 | 171 | 162 | 154 | 136 | 119 | 102 | 84 | 67 | 50 | 32 | 15 | | | | | | | | | | | | | | | | | | | | | | | | |
| 5HL15N | 1½ | 0 | | | | | | | | | | | | | | | | | | | 7.5 | 7.2 | 6.8 | 6.3 | 5.9 | 5.5 | 5.1 | 4.6 | 4.1 | 3.5 | 2.8 | 1.8 | | | | | | | | | | |
| | | 20 | | | | | | | | | | | | | | | | | | | 7.6 | 7.5 | 7.1 | 6.7 | 6.3 | 5.8 | 5.4 | 5.0 | 4.5 | 4.0 | 3.4 | 2.6 | 1.6 | | | | | | | | | |
| | | 30 | | | | | | | | | | | | | | | | | | | 7.6 | 7.5 | 7.3 | 6.9 | 6.5 | 6.0 | 5.6 | 5.2 | 4.7 | 4.2 | 3.7 | 3.0 | 2.1 | | | | | | | | | |
| | | 40 | | | | | | | | | | | | | | | | | | | 7.6 | 7.4 | 7.3 | 7.1 | 6.6 | 6.2 | 5.8 | 5.3 | 4.9 | 4.5 | 3.9 | 3.3 | 2.5 | 1.4 | | | | | | | | |
| | | 50 | | | | | | | | | | | | | | | | | | | 7.6 | 7.4 | 7.2 | 7.0 | 6.8 | 6.4 | 6.0 | 5.5 | 5.1 | 4.7 | 4.2 | 3.6 | 2.9 | 1.9 | | | | | | | | |
| 60 | | | | | | | | | | | | | | | | | | | 7.6 | 7.4 | 7.2 | 7.0 | 6.8 | 6.6 | 6.1 | 5.7 | 5.3 | 4.8 | 4.4 | 3.8 | 3.2 | 2.4 | | | | | | | | | | |
| Shut-off PSI | | | 274 | 265 | 257 | 248 | 239 | 231 | 213 | 196 | 179 | 162 | 144 | 127 | 110 | 92 | 75 | 58 | 40 | 23 | | | | | | | | | | | | | | | | | | | | | | |
| 5HL20N | 2 | 0 | | | | | | | | | | | | | | | | | | | | 7.4 | 7.1 | 6.8 | 6.4 | 6.1 | 5.7 | 5.4 | 5.0 | 4.7 | 4.3 | 3.9 | 3.3 | 2.7 | | | | | | | | |
| | | 20 | | | | | | | | | | | | | | | | | | | | | 7.4 | 7.1 | 6.7 | 6.4 | 6.0 | 5.7 | 5.3 | 5.0 | 4.6 | 4.2 | 3.8 | 3.3 | 2.6 | 1.9 | | | | | | |
| | | 30 | | | | | | | | | | | | | | | | | | | | | 7.5 | 7.2 | 6.9 | 6.5 | 6.2 | 5.8 | 5.5 | 5.1 | 4.8 | 4.4 | 4.0 | 3.5 | 2.9 | 2.2 | | | | | | |
| | | 40 | | | | | | | | | | | | | | | | | | | | | 7.3 | 7.0 | 6.7 | 6.3 | 6.0 | 5.6 | 5.3 | 4.9 | 4.6 | 4.2 | 3.7 | 3.2 | 2.5 | 1.7 | | | | | | |
| | | 50 | | | | | | | | | | | | | | | | | | | | | 7.5 | 7.2 | 6.8 | 6.5 | 6.1 | 5.8 | 5.4 | 5.1 | 4.7 | 4.3 | 3.9 | 3.4 | 2.8 | 2.1 | | | | | | |
| 60 | | | | | | | | | | | | | | | | | | | | | 7.6 | 7.3 | 7.0 | 6.6 | 6.3 | 5.9 | 5.6 | 5.2 | 4.9 | 4.5 | 4.1 | 3.6 | 3.1 | 2.4 | 1.6 | | | | | | | |
| Shut-off PSI | | | 328 | 311 | 293 | 276 | 259 | 242 | 224 | 207 | 190 | 172 | 155 | 138 | 120 | 103 | 86 | 68 | 51 | | | | | | | | | | | | | | | | | | | | | | | |

Hi/Lo "N" Series – 7 HLN

Submersible Well Pumps with Noryl Impeller

7 GPM



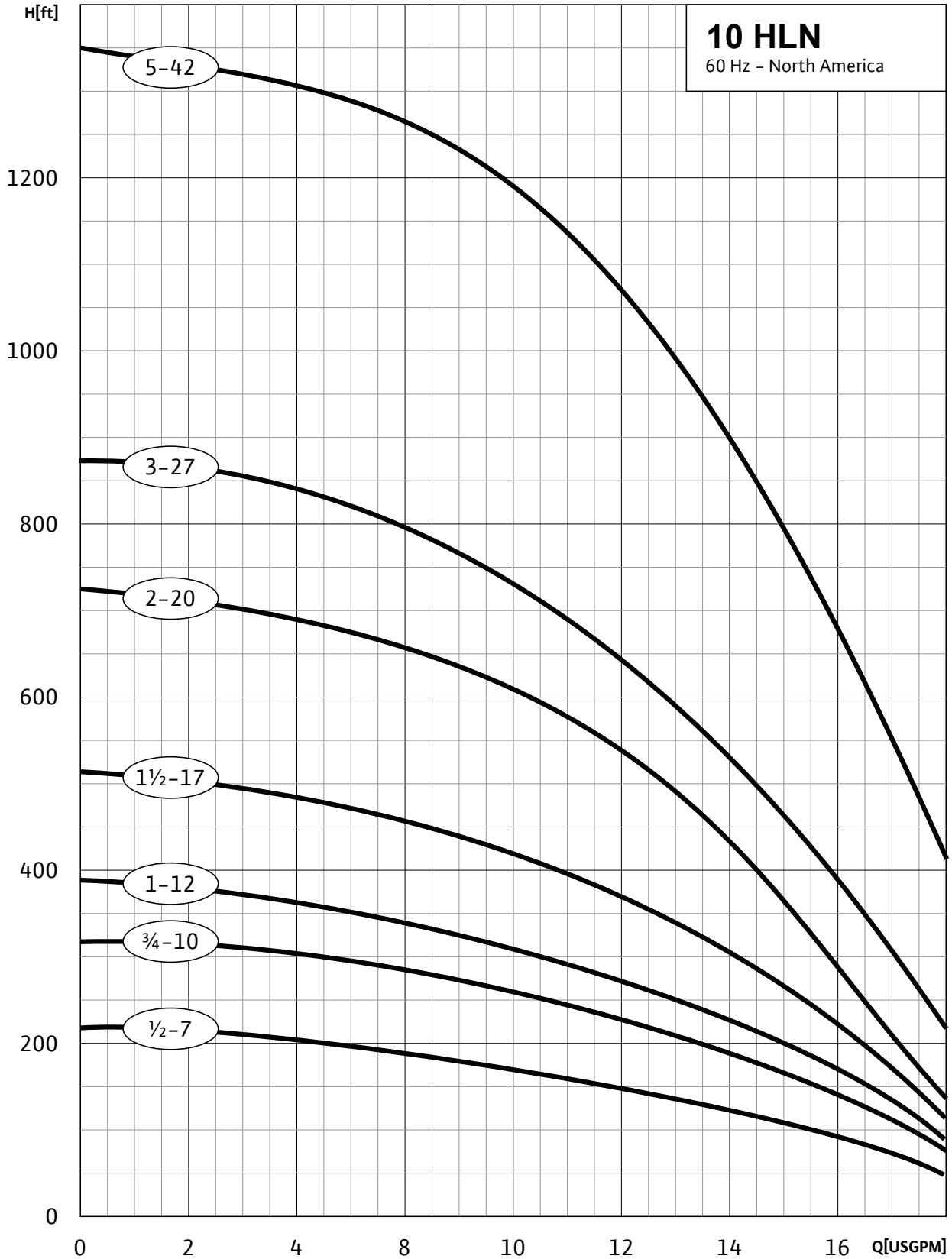
| MODEL | HP | PSI | Depth to Water in Feet | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------|----|-----|------------------------|------|------|------|-----|------|------|------|------|-----|------|------|-----|-----|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|
| | | | 20 | 40 | 60 | 80 | 100 | 120 | 140 | 160 | 180 | 200 | 220 | 240 | 260 | 280 | 300 | 320 | 340 | 360 | 380 | 400 | 420 | 440 | 460 | 480 | 500 | 540 | 580 | 620 | |
| 7HL05N | ½ | 0 | | | | | | | | | 10.1 | 9.2 | 8.3 | 7.4 | 6.3 | 5.0 | 3.4 | | | | | | | | | | | | | | |
| | | 20 | | | | | | 9.8 | 9.0 | 8.1 | 7.1 | 6.0 | 4.6 | 2.7 | | | | | | | | | | | | | | | | | |
| | | 30 | | | | | | 9.7 | 8.8 | 7.9 | 6.9 | 5.8 | 4.3 | 2.4 | | | | | | | | | | | | | | | | | |
| | | 40 | | | 10.4 | 9.6 | 8.7 | 7.8 | 6.7 | 5.6 | 4.1 | 2.0 | | | | | | | | | | | | | | | | | | | |
| | | 50 | | 10.3 | 9.4 | 8.5 | 7.6 | 6.6 | 5.4 | 3.8 | 1.7 | | | | | | | | | | | | | | | | | | | | |
| | | 60 | 10.2 | 9.3 | 8.4 | 7.5 | 6.4 | 5.1 | 3.5 | | | | | | | | | | | | | | | | | | | | | | |
| Shut-off PSI | | | 125 | 116 | 107 | 99 | 90 | 81 | 73 | 64 | 55 | 47 | 38 | 29 | 21 | 12 | | | | | | | | | | | | | | | |
| 7HL07N | ¾ | 0 | | | | | | | | | | | | 10.0 | 9.3 | 8.6 | 7.9 | 7.1 | 6.2 | 5.2 | 4.0 | 2.4 | | | | | | | | | |
| | | 20 | | | | | | | | | 10.4 | 9.8 | 9.1 | 8.4 | 7.7 | 6.9 | 6.0 | 4.9 | 3.5 | 1.8 | | | | | | | | | | | |
| | | 30 | | | | | | | | | 10.3 | 9.7 | 9.0 | 8.3 | 7.5 | 6.7 | 5.8 | 4.7 | 3.3 | 1.5 | | | | | | | | | | | |
| | | 40 | | | | | | | 10.2 | 9.5 | 8.9 | 8.2 | 7.4 | 6.6 | 5.6 | 4.5 | 3.1 | | | | | | | | | | | | | | |
| | | 50 | | | | | | 10.1 | 9.4 | 8.8 | 8.1 | 7.3 | 6.5 | 5.5 | 4.3 | 2.8 | | | | | | | | | | | | | | | |
| | | 60 | | | | 10.0 | 9.3 | 8.7 | 7.9 | 7.2 | 6.3 | 5.3 | 4.1 | 2.5 | | | | | | | | | | | | | | | | | |
| Shut-off PSI | | | | | | 140 | 131 | 122 | 114 | 105 | 96 | 88 | 79 | 70 | 62 | 53 | 44 | 36 | 27 | 18 | 10 | | | | | | | | | | |
| 7HL10N | 1 | 0 | | | | | | | | | | | | | | | 10.1 | 9.6 | 9.0 | 8.5 | 7.9 | 7.3 | 6.7 | 6.0 | 5.3 | 4.4 | 3.4 | 2.1 | | | |
| | | 20 | | | | | | | | | | | | 10.4 | 9.9 | 9.4 | 8.9 | 8.3 | 7.7 | 7.1 | 6.5 | 5.8 | 5.0 | 4.1 | 3.0 | 1.6 | | | | | |
| | | 30 | | | | | | | | | | | | 10.3 | 9.9 | 9.3 | 8.8 | 8.2 | 7.6 | 7.0 | 6.4 | 5.7 | 4.9 | 4.0 | 2.8 | | | | | | |
| | | 40 | | | | | | | | | | | 10.3 | 9.8 | 9.2 | 8.7 | 8.1 | 7.5 | 6.9 | 6.3 | 5.6 | 4.8 | 3.8 | 2.6 | | | | | | | |
| | | 50 | | | | | | | | 10.2 | 9.7 | 9.2 | 8.6 | 8.0 | 7.4 | 6.8 | 6.2 | 5.4 | 4.6 | 3.7 | 2.4 | | | | | | | | | | |
| | | 60 | | | | | | | 10.1 | 9.6 | 9.1 | 8.5 | 7.9 | 7.3 | 6.7 | 6.0 | 5.3 | 4.5 | 3.5 | 2.2 | | | | | | | | | | | |
| Shut-off PSI | | | | | | | | 166 | 158 | 149 | 140 | 132 | 123 | 114 | 106 | 97 | 88 | 80 | 71 | 62 | 54 | 45 | 36 | 28 | 19 | 10 | | | | | |

| MODEL | HP | PSI | Depth to Water in Feet | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------|----|-----|------------------------|-----|------|------|-----|------|------|------|------|-----|-----|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|-----|-----|----|----|
| | | | 200 | 220 | 240 | 260 | 280 | 300 | 340 | 380 | 420 | 460 | 500 | 540 | 580 | 620 | 660 | 700 | 740 | 780 | 820 | 860 | 900 | 940 | 980 | 1020 | 1060 | 1100 | 1140 | | | | |
| 7HL15N | 1½ | 0 | | | | | | | | | 10.2 | 9.3 | 8.5 | 7.6 | 6.8 | 5.9 | 4.7 | 2.6 | | | | | | | | | | | | | | | |
| | | 20 | | | | | | | | | 10.1 | 9.2 | 8.3 | 7.5 | 6.7 | 5.8 | 4.5 | 2.1 | | | | | | | | | | | | | | | |
| | | 30 | | | | | | | | 10.4 | 9.6 | 8.7 | 7.8 | 7.0 | 6.2 | 5.1 | 3.3 | | | | | | | | | | | | | | | | |
| | | 40 | | | | | | 10.3 | 9.9 | 9.1 | 8.2 | 7.4 | 6.6 | 5.6 | 4.2 | 1.6 | | | | | | | | | | | | | | | | | |
| | | 50 | | | | 10.3 | 9.9 | 9.4 | 8.6 | 7.7 | 6.9 | 6.0 | 4.9 | 2.9 | | | | | | | | | | | | | | | | | | | |
| | | 60 | | | 10.2 | 9.8 | 9.4 | 8.9 | 8.1 | 7.2 | 6.4 | 5.4 | 3.9 | | | | | | | | | | | | | | | | | | | | |
| Shut-off PSI | | | | | 194 | 186 | 177 | 168 | 151 | 134 | 116 | 99 | 82 | 64 | 47 | 30 | 12 | | | | | | | | | | | | | | | | |
| 7HL20N | 2 | 0 | | | | | | | | | | | | 9.8 | 9.3 | 8.7 | 8.4 | 7.8 | 7.1 | 6.3 | 5.4 | 4.5 | 3.5 | 2.2 | | | | | | | | | |
| | | 20 | | | | | | | | | | | | 9.8 | 9.3 | 8.7 | 8.4 | 7.7 | 6.9 | 6.2 | 5.3 | 4.3 | 3.2 | 2.8 | | | | | | | | | |
| | | 30 | | | | | | | | | | | | 9.9 | 9.5 | 9.0 | 8.5 | 7.9 | 7.2 | 6.4 | 5.7 | 4.4 | 3.7 | | | | | | | | | | |
| | | 40 | | | | | | | | | 10.0 | 9.7 | 9.2 | 8.7 | 8.3 | 7.5 | 6.7 | 6.0 | 5.2 | 4.1 | 3.0 | | | | | | | | | | | | |
| | | 50 | | | | | | | | | 9.9 | 9.4 | 8.9 | 8.5 | 7.8 | 7.2 | 6.3 | 5.5 | 4.7 | 3.5 | | | | | | | | | | | | | |
| | | 60 | | | | | | | 10.0 | 9.6 | 9.1 | 8.7 | 8.2 | 7.4 | 6.6 | 5.8 | 5.0 | 4.0 | | | | | | | | | | | | | | | |
| Shut-off PSI | | | | | | | | 268 | 251 | 234 | 216 | 199 | 182 | 165 | 147 | 130 | 113 | 95 | 80 | 61 | 43 | 26 | | | | | | | | | | | |
| 7HL30N | 3 | 0 | | | | | | | | | | | | | | | 9.8 | 9.5 | 9.2 | 8.7 | 8.3 | 7.9 | 7.4 | 6.8 | 6.2 | 5.4 | 4.7 | 3.9 | 3.0 | 2.0 | | | |
| | | 20 | | | | | | | | | | | | | | | 9.8 | 9.4 | 9.2 | 8.7 | 8.3 | 7.8 | 7.2 | 6.7 | 6.2 | 5.3 | 4.5 | 3.7 | 3.3 | 1.7 | | | |
| | | 30 | | | | | | | | | | | | | | | 10.0 | 9.6 | 9.2 | 8.8 | 8.5 | 8.0 | 7.5 | 6.9 | 6.3 | 5.7 | 4.8 | 4.1 | 3.2 | 2.3 | | | |
| | | 40 | | | | | | | | | | | | | | | 10.0 | 9.7 | 9.4 | 9.0 | 8.6 | 8.2 | 7.7 | 7.2 | 6.6 | 5.9 | 5.2 | 4.4 | 3.6 | 2.7 | 1.7 | | |
| | | 50 | | | | | | | | | | | | | | | 9.9 | 9.5 | 9.2 | 8.7 | 8.4 | 7.9 | 7.4 | 6.8 | 6.3 | 5.5 | 4.8 | 3.9 | 3.1 | 2.2 | | | |
| | | 60 | | | | | | | | | | | | | | | 10.0 | 9.7 | 9.3 | 9.0 | 8.6 | 8.1 | 7.6 | 7.0 | 6.5 | 5.8 | 5.1 | 4.2 | 3.4 | 2.5 | 1.5 | | |
| Shut-off PSI | | | | | | | | | | | | | | | | 320 | 303 | 286 | 268 | 251 | 234 | 216 | 199 | 182 | 165 | 147 | 130 | 113 | 95 | 78 | 61 | 43 | 27 |

Hi/Lo "N" Series – 10 HLN

Submersible Well Pumps with Noryl Impeller

10 GPM

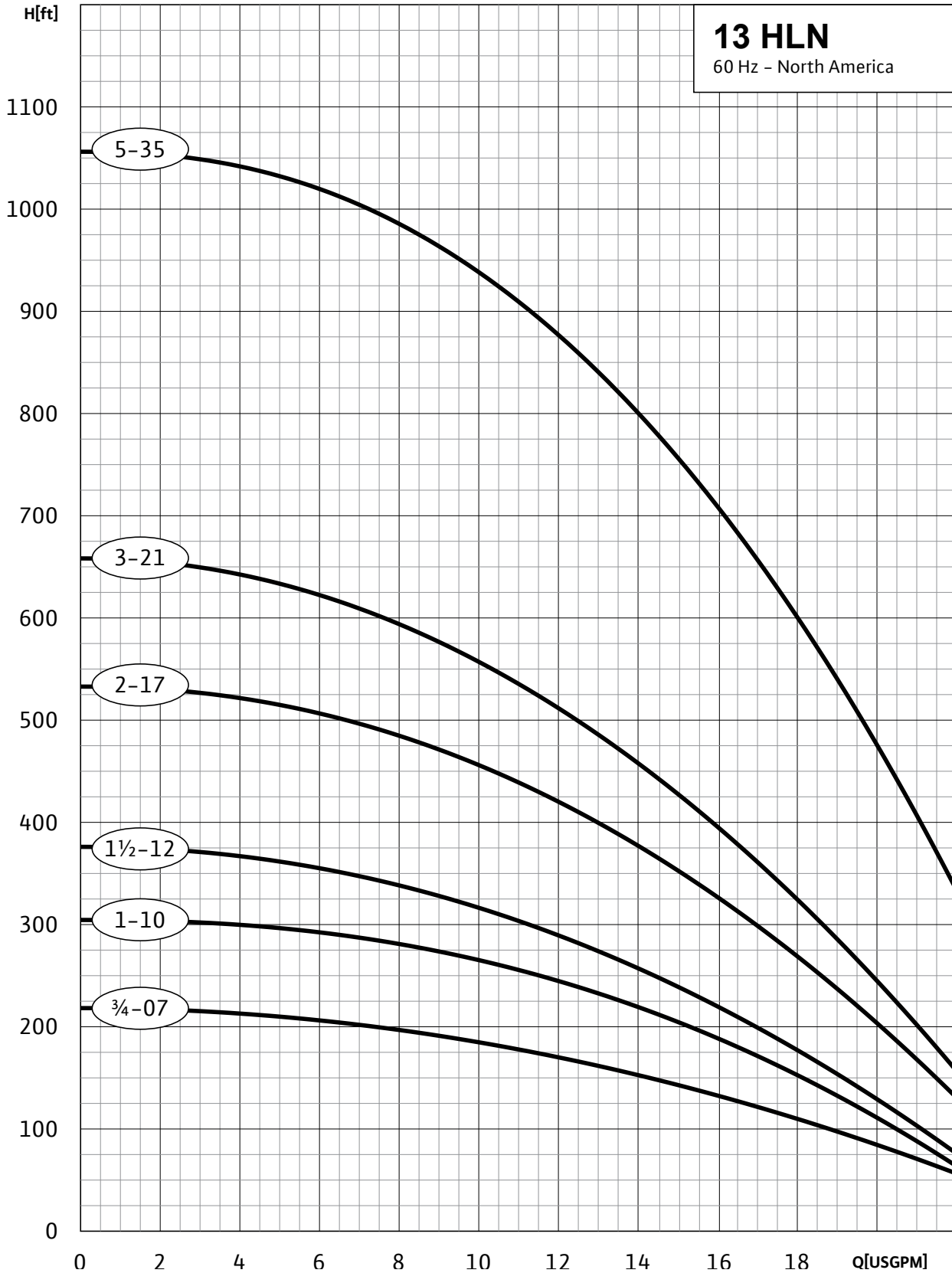


| MODEL | HP | PSI | Depth to Water in Feet | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------|----|-----|------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|--|
| | | | 20 | 40 | 60 | 80 | 100 | 120 | 140 | 160 | 180 | 200 | 220 | 240 | 260 | 280 | 300 | 340 | 380 | 420 | 460 | 500 | 540 | 580 | 620 | 660 | 700 | 740 | 780 | 820 | |
| 10HL05N | ½ | 0 | | | | 16.0 | 15.3 | 14.3 | 12.8 | 11.3 | 9.0 | 6.4 | | | | | | | | | | | | | | | | | | | |
| | | 20 | | 15.9 | 14.9 | 13.8 | 12.5 | 10.8 | 8.3 | 4.8 | | | | | | | | | | | | | | | | | | | | | |
| | | 30 | 15.7 | 14.6 | 13.5 | 12.3 | 10.5 | 7.8 | 4.0 | | | | | | | | | | | | | | | | | | | | | | |
| | | 40 | 14.5 | 13.4 | 12.0 | 10.3 | 7.5 | 3.0 | | | | | | | | | | | | | | | | | | | | | | | |
| | | 50 | 13.0 | 11.5 | 9.8 | 7.2 | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 60 | 11.3 | 9.0 | 6.4 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Shut-off PSI | | | 89 | 81 | 72 | 63 | 55 | 46 | 37 | 29 | 20 | 11 | | | | | | | | | | | | | | | | | | | |
| 10HL07N | ¾ | 0 | | | | | 16.0 | 15.2 | 14.3 | 13.4 | 12.5 | 11.5 | 10.3 | 9.0 | 7.0 | 4.0 | | | | | | | | | | | | | | | |
| | | 20 | | | | 15.8 | 15.0 | 14.0 | 13.0 | 12.3 | 11.2 | 10.2 | 8.5 | 6.0 | | | | | | | | | | | | | | | | | |
| | | 30 | | | 15.7 | 14.8 | 13.9 | 12.8 | 12.0 | 11.0 | 9.8 | 8.2 | 5.5 | | | | | | | | | | | | | | | | | | |
| | | 40 | | 15.6 | 14.7 | 13.8 | 12.7 | 11.9 | 10.8 | 9.7 | 8.1 | 5.2 | | | | | | | | | | | | | | | | | | | |
| | | 50 | 15.3 | 14.4 | 13.5 | 12.6 | 11.6 | 10.5 | 9.4 | 7.5 | 4.8 | | | | | | | | | | | | | | | | | | | | |
| | | 60 | 14.3 | 13.4 | 12.5 | 11.5 | 10.3 | 9.0 | 7.0 | 4.0 | | | | | | | | | | | | | | | | | | | | | |
| Shut-off PSI | | | 130 | 121 | 113 | 104 | 95 | 87 | 78 | 69 | 61 | 52 | 43 | 35 | 26 | 17 | 9 | | | | | | | | | | | | | | |
| 10HL10N | 1 | 0 | | | | | | | | 15.8 | 15.2 | 14.5 | 13.7 | 12.8 | 12.0 | 11.0 | 10.0 | 6.7 | | | | | | | | | | | | | |
| | | 20 | | | | | | 15.7 | 14.9 | 14.3 | 13.5 | 12.7 | 11.7 | 10.6 | 9.6 | 8.1 | 6.5 | | | | | | | | | | | | | | |
| | | 30 | | | | | 16.0 | 15.6 | 14.8 | 14.2 | 13.3 | 12.5 | 11.6 | 10.4 | 9.4 | 7.8 | 5.5 | 3.0 | | | | | | | | | | | | | |
| | | 40 | | | | 16.0 | 15.5 | 14.7 | 14.1 | 13.2 | 12.4 | 11.5 | 10.3 | 9.1 | 7.4 | 5.0 | 3.0 | | | | | | | | | | | | | | |
| | | 50 | | | 15.3 | 14.6 | 13.9 | 13.0 | 12.3 | 11.3 | 10.1 | 8.9 | 7.0 | 4.3 | | | | | | | | | | | | | | | | | |
| | | 60 | 15.8 | 15.2 | 14.5 | 13.7 | 12.8 | 12.0 | 11.0 | 10.0 | 8.6 | 6.7 | 4.0 | | | | | | | | | | | | | | | | | | |
| Shut-off PSI | | | 158 | 150 | 141 | 132 | 124 | 115 | 106 | 98 | 89 | 81 | 72 | 63 | 55 | 46 | 37 | 20 | | | | | | | | | | | | | |
| 10HL15N | 1½ | 0 | | | | | | | | | | | 15.7 | 15.3 | 14.8 | 14.4 | 13.3 | 12.2 | 10.9 | 9.3 | 7.1 | 3.0 | | | | | | | | | |
| | | 20 | | | | | | | | | | 16.0 | 15.6 | 15.2 | 14.7 | 14.3 | 13.7 | 13.2 | 11.9 | 10.6 | 9.0 | 6.5 | | | | | | | | | |
| | | 30 | | | | | | | | | 15.9 | 15.5 | 15.2 | 14.6 | 14.2 | 13.5 | 13.1 | 12.6 | 11.3 | 9.7 | 7.6 | 4.0 | | | | | | | | | |
| | | 40 | | | | | | | 15.8 | 15.5 | 15.1 | 14.6 | 14.2 | 13.5 | 13.0 | 12.5 | 11.8 | 10.3 | 8.8 | 6.0 | | | | | | | | | | | |
| | | 50 | | | | | 15.7 | 15.4 | 14.9 | 14.5 | 14.0 | 13.4 | 12.8 | 12.3 | 11.7 | 11.0 | 9.4 | 7.4 | 3.4 | | | | | | | | | | | | |
| | | 60 | | | | 15.7 | 15.3 | 14.8 | 14.4 | 13.9 | 13.3 | 12.8 | 12.2 | 11.6 | 10.9 | 10.1 | 8.1 | 5.6 | | | | | | | | | | | | | |
| Shut-off PSI | | | | | | | 197 | 188 | 180 | 171 | 162 | 154 | 144 | 136 | 128 | 119 | 110 | 93 | 76 | 58 | 41 | 24 | 6 | | | | | | | | |
| 10HL20N | 2 | 0 | | | | | | | | | | | | | 16.0 | 15.7 | 14.9 | 14.2 | 13.4 | 12.4 | 11.4 | | | | | | | | | | |
| | | 20 | | | | | | | | | | | | 15.9 | 15.5 | 15.3 | 14.8 | 14.1 | 13.2 | 12.2 | 11.0 | 9.9 | | | | | | | | | |
| | | 30 | | | | | | | | | | | 15.8 | 15.4 | 15.1 | 14.7 | 10.1 | 13.5 | 12.7 | 11.7 | 10.3 | 8.8 | | | | | | | | | |
| | | 40 | | | | | | | | | | 15.8 | 15.4 | 15.1 | 14.7 | 14.4 | 14.0 | 12.9 | 12.2 | 10.9 | 9.5 | 7.8 | | | | | | | | | |
| | | 50 | | | | | | | | 16.1 | 15.7 | 15.3 | 15.0 | 14.6 | 14.2 | 14.0 | 13.4 | 12.5 | 11.5 | 10.1 | 8.5 | 6.0 | | | | | | | | | |
| | | 60 | | | | | 16.0 | 15.7 | 15.3 | 14.9 | 14.5 | 14.2 | 13.8 | 13.4 | 12.8 | 11.8 | 10.7 | 9.1 | 7.2 | 3.4 | | | | | | | | | | | |
| Shut-off PSI | | | | | | | | 225 | 216 | 208 | 199 | 190 | 182 | 173 | 164 | 156 | 139 | 121 | 104 | 87 | 69 | | | | | | | | | | |
| 10HL30□ | 3 | 0 | | | | | | | | | | | | | | | | 15.8 | 15.2 | 14.6 | 14.0 | | | | | | | | | | |
| | | 20 | | | | | | | | | | | | | | | | 15.7 | 15.1 | 14.5 | 13.9 | 13.2 | | | | | | | | | |
| | | 30 | | | | | | | | | | | | | | | | 15.9 | 15.4 | 14.8 | 14.2 | 13.4 | 12.8 | | | | | | | | |
| | | 40 | | | | | | | | | | | | | | | | 15.9 | 15.6 | 15.0 | 14.4 | 13.8 | 13.1 | 12.4 | | | | | | | |
| | | 50 | | | | | | | | | | | | | 16.0 | 15.8 | 15.6 | 15.3 | 14.7 | 14.1 | 13.3 | 12.7 | 11.9 | | | | | | | | |
| | | 60 | | | | | | | | | | | | 16.0 | 15.8 | 15.5 | 15.2 | 14.8 | 14.3 | 13.7 | 12.9 | 12.3 | 11.4 | | | | | | | | |
| Shut-off PSI | | | | | | | | | | | | | 284 | 275 | 267 | 258 | 249 | 232 | 215 | 197 | 180 | 163 | | | | | | | | | |
| | | | 440 | 480 | 520 | 560 | 600 | 640 | 680 | 720 | 760 | 800 | 840 | 880 | 920 | 960 | 1000 | 1040 | 1080 | 1120 | 1160 | 1200 | | | | | | | | | |
| 10HL50N | 5 | 0 | | | | | 16 | 15.5 | 15.2 | 14.9 | 14.5 | 14 | 13.5 | 13 | 12.5 | 12 | 11.5 | 10.8 | 10.2 | 9.5 | 8.5 | | | | | | | | | | |
| | | 20 | | | | | 15.9 | 15.4 | 15.1 | 14.8 | 14.5 | 13.9 | 13.4 | 12.9 | 12.4 | 11.9 | 11.3 | 10.7 | 10.1 | 9.4 | 8.2 | 6.8 | | | | | | | | | |
| | | 30 | | | | | 15.6 | 15.2 | 14.9 | 14.6 | 14.2 | 13.7 | 13.1 | 12.6 | 12.1 | 11.6 | 11.0 | 10.4 | 9.8 | 8.8 | 7.5 | 6.0 | | | | | | | | | |
| | | 40 | | | | 15.8 | 15.3 | 15.1 | 14.7 | 14.4 | 13.8 | 13.3 | 12.8 | 12.3 | 11.8 | 11.2 | 10.6 | 10.0 | 9.2 | 7.9 | 6.6 | 4.1 | | | | | | | | | |
| | | 50 | | | | 15.5 | 15.2 | 14.9 | 14.6 | 14.1 | 13.6 | 13.0 | 12.5 | 12.1 | 11.5 | 10.9 | 10.3 | 9.7 | 8.6 | 7.3 | 5.6 | | | | | | | | | | |
| | | 60 | | | 15.7 | 15.3 | 15.0 | 14.7 | 14.3 | 13.7 | 13.2 | 12.7 | 12.2 | 11.7 | 11.1 | 10.5 | 9.9 | 9.0 | 7.7 | 6.5 | 3.2 | | | | | | | | | | |
| Shut-off PSI | | | | | 346 | 329 | 312 | 294 | 277 | 260 | 242 | 225 | 208 | 191 | 173 | 156 | 139 | 121 | 104 | 87 | 69 | 52 | | | | | | | | | |

Hi/Lo "N" Series – 13 HLN

Submersible Well Pumps with Noryl Impeller

13 GPM



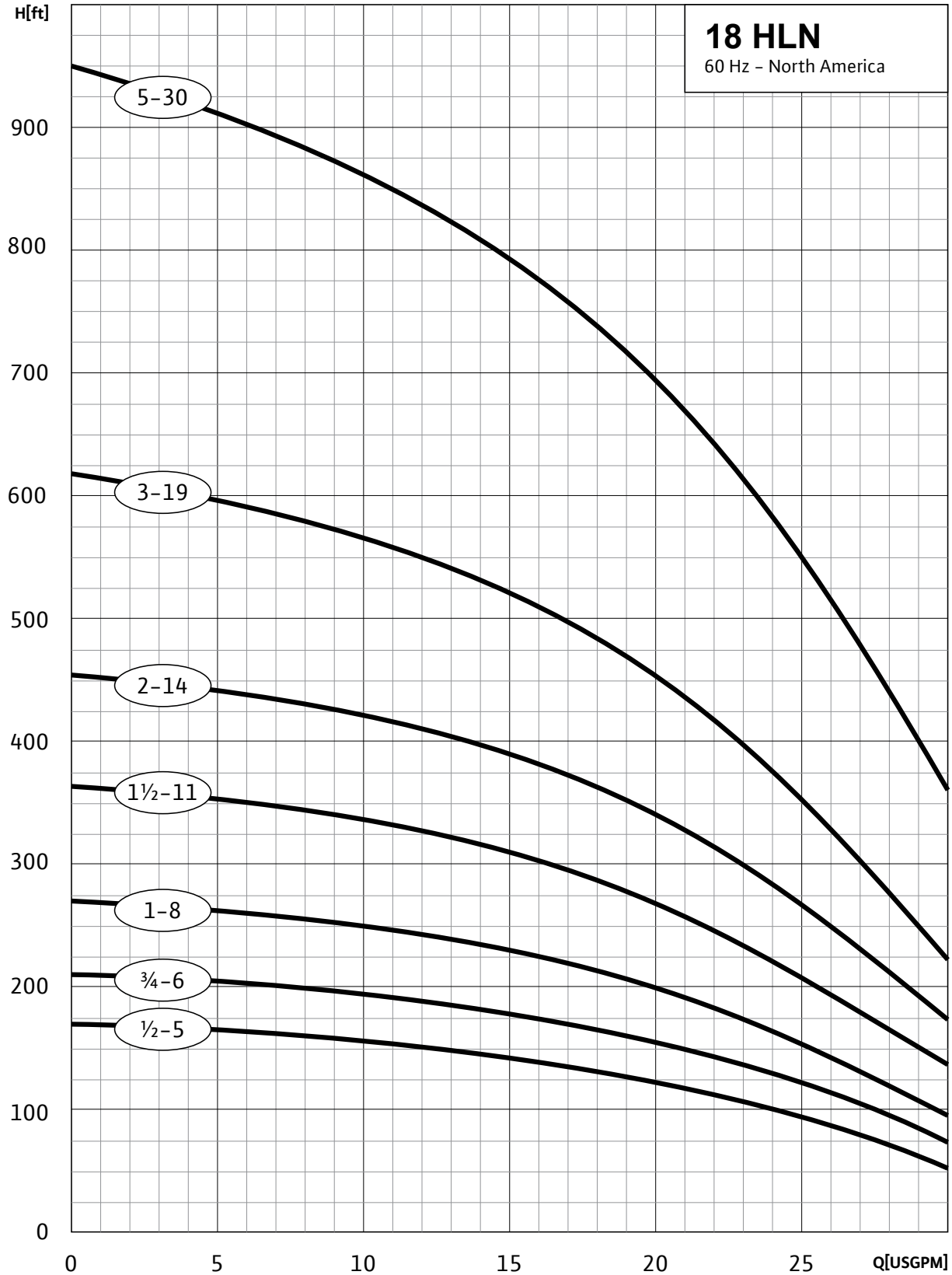
| MODEL | HP | PSI | Depth to Water in Feet | | | | | | | | | | | | | | | | | | | | | | |
|--------------|----|-----|------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|-----|
| | | | 20 | 40 | 60 | 80 | 100 | 120 | 140 | 160 | 180 | 200 | 240 | 260 | 280 | 300 | 340 | 380 | 420 | 460 | 500 | 540 | 580 | 620 | 660 |
| 13HL07N | ¾ | 0 | | | | 17.7 | 16.5 | 15.0 | 13.0 | 11.2 | 9.5 | 6.5 | | | | | | | | | | | | | |
| | | 20 | | 17.4 | 16.0 | 14.4 | 12.8 | 10.9 | 8.5 | 4.0 | | | | | | | | | | | | | | | |
| | | 30 | 16.9 | 15.5 | 14.0 | 12.6 | 10.5 | 8.0 | 3.0 | | | | | | | | | | | | | | | | |
| | | 40 | 15.4 | 13.9 | 12.4 | 10.4 | 7.7 | 2.0 | | | | | | | | | | | | | | | | | |
| | | 50 | 13.4 | 11.8 | 10.0 | 7.5 | | | | | | | | | | | | | | | | | | | |
| | | 60 | 11.2 | 9.5 | 6.5 | | | | | | | | | | | | | | | | | | | | |
| Shut-off PSI | | | 86 | 78 | 69 | 61 | 52 | 43 | 35 | 26 | 17 | 8 | | | | | | | | | | | | | |
| 13HL10N | 1 | 0 | | | | | | 17.6 | 16.4 | 15.6 | 14.6 | 13.4 | 12.1 | 10.8 | 9.4 | 7.5 | 4.0 | | | | | | | | |
| | | 20 | | | 18.0 | 17.4 | 16.5 | 15.2 | 14.3 | 13.0 | 11.8 | 10.5 | 9.0 | 6.5 | 2.0 | | | | | | | | | | |
| | | 30 | | 18.0 | 17.2 | 16.2 | 15.1 | 13.8 | 12.7 | 11.6 | 10.2 | 8.5 | 5.5 | | | | | | | | | | | | |
| | | 40 | 17.9 | 17.0 | 16.0 | 15.0 | 13.7 | 12.6 | 11.5 | 10.0 | 8.1 | 5.3 | | | | | | | | | | | | | |
| | | 50 | 16.8 | 15.8 | 14.8 | 13.5 | 12.5 | 11.0 | 9.6 | 7.9 | 5.0 | | | | | | | | | | | | | | |
| | | 60 | 15.6 | 14.6 | 13.4 | 12.1 | 10.8 | 9.4 | 7.5 | 4.0 | | | | | | | | | | | | | | | |
| Shut-off PSI | | | 128 | 119 | 110 | 102 | 93 | 84 | 76 | 67 | 58 | 50 | 41 | 32 | 24 | 15 | 6 | | | | | | | | |
| 13HL15N | 1½ | 0 | | | | | | | 21.7 | 20.9 | 20.2 | 19.3 | 18.3 | 17.2 | 16.2 | 15.2 | 14.1 | 10.7 | | | | | | | |
| | | 20 | | | | | 21.5 | 20.4 | 19.9 | 19.0 | 18.0 | 17.1 | 16.1 | 14.9 | 13.8 | 12.2 | 10.8 | | | | | | | | |
| | | 30 | | | 22.2 | 21.4 | 20.6 | 19.6 | 18.8 | 17.8 | 16.9 | 16.0 | 14.6 | 13.5 | 11.9 | 9.9 | 6.0 | | | | | | | | |
| | | 40 | 22.0 | 21.3 | 20.5 | 19.5 | 18.6 | 17.7 | 16.8 | 15.9 | 14.5 | 13.4 | 11.5 | 9.3 | 6.0 | | | | | | | | | | |
| | | 50 | 22.0 | 21.1 | 20.3 | 19.4 | 18.4 | 17.5 | 16.5 | 15.6 | 14.3 | 13.0 | 11.2 | 8.3 | | | | | | | | | | | |
| | | 60 | 20.9 | 20.2 | 19.3 | 18.3 | 17.2 | 15.3 | 14.1 | 13.0 | 10.7 | 7.6 | | | | | | | | | | | | | |
| Shut-off PSI | | | 156 | 147 | 139 | 130 | 121 | 113 | 104 | 95 | 87 | 78 | 69 | 61 | 52 | 43 | 35 | 17 | | | | | | | |
| 13HL20N | 2 | 0 | | | | | | | | | | 21.0 | 20.5 | 20.0 | 19.3 | 18.9 | 18.2 | 16.8 | 15.4 | 13.6 | 11.5 | 8.7 | | | |
| | | 20 | | | | | | | | 20.8 | 20.4 | 19.8 | 19.2 | 18.6 | 18.0 | 17.3 | 16.6 | 15.1 | 13.4 | 11.2 | 7.8 | | | | |
| | | 30 | | | | | | | 20.7 | 20.3 | 19.7 | 19.2 | 18.4 | 17.8 | 17.2 | 16.5 | 15.8 | 14.1 | 12.1 | 9.8 | | | | | |
| | | 40 | | | | | 20.6 | 20.2 | 19.6 | 19.1 | 18.3 | 17.7 | 17.1 | 16.4 | 15.7 | 14.8 | 13.0 | 10.8 | 7.0 | | | | | | |
| | | 50 | | | 21.1 | 20.5 | 20.1 | 19.4 | 19.0 | 18.2 | 17.6 | 17.0 | 16.2 | 15.6 | 14.7 | 13.9 | 11.8 | 9.5 | | | | | | | |
| | | 60 | | 21.0 | 20.5 | 19.3 | 18.9 | 18.2 | 17.5 | 16.8 | 16.1 | 15.4 | 14.6 | 13.6 | 12.5 | 10.2 | 6.0 | | | | | | | | |
| Shut-off PSI | | | | | 206 | 198 | 180 | 172 | 163 | 155 | 146 | 137 | 129 | 120 | 111 | 103 | 85 | 68 | 51 | 33 | 16 | | | | |
| 13HL30N | 3 | 0 | | | | | | | | | | | | 21.8 | 21.4 | 20.9 | 20.0 | 19.1 | 18.0 | 16.6 | 15.5 | 13.9 | 12.0 | 9.3 | |
| | | 20 | | | | | | | | | | 21.6 | 21.2 | 20.9 | 20.3 | 19.9 | 19.0 | 17.9 | 16.7 | 15.3 | 13.8 | 11.7 | 8.9 | | |
| | | 30 | | | | | | | | 22.0 | 21.5 | 21.1 | 20.8 | 19.8 | 19.4 | 18.4 | 17.2 | 15.9 | 14.3 | 12.5 | 10.3 | 6.0 | | | |
| | | 40 | | | | | | | 22.0 | 21.4 | 21.1 | 20.7 | 20.2 | 19.8 | 19.3 | 18.8 | 17.6 | 16.5 | 15.0 | 13.4 | 11.5 | 8.0 | | | |
| | | 50 | | | | | | 21.9 | 21.5 | 21.0 | 20.6 | 20.1 | 19.7 | 19.2 | 18.7 | 18.1 | 16.9 | 15.7 | 14.0 | 12.1 | 9.9 | | | | |
| | | 60 | | | | | 21.8 | 21.4 | 20.9 | 20.5 | 20.0 | 19.5 | 19.1 | 18.6 | 18.0 | 17.4 | 16.2 | 14.9 | 13.0 | 11.0 | 7.0 | | | | |
| Shut-off PSI | | | | | | 235 | 226 | 217 | 209 | 200 | 191 | 183 | 174 | 165 | 157 | 139 | 122 | 104 | 87 | 70 | 53 | 35 | 18 | | |

| MODEL | HP | PSI | Depth to Water in Feet | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------|----|-----|------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | | 200 | 240 | 260 | 300 | 340 | 380 | 420 | 460 | 480 | 520 | 560 | 600 | 700 | 800 | 900 | | | | | | | | | | | |
| 13HL50N | 5 | 0 | | | | | | | | | | | | 23.0 | 22.0 | 21.0 | 20.5 | 19.7 | 19.5 | 19.0 | 18.7 | 18.0 | 16.2 | 14.5 | 12.2 | | | |
| | | 20 | | | | | | | | | | | | | 21.5 | 21.0 | 20.5 | 20.0 | 19.4 | 19.1 | 18.5 | 18.0 | 17.3 | 15.5 | 13.6 | 11.0 | | |
| | | 30 | | | | | | | | | | | | | 21.8 | 20.9 | 20.3 | 20.0 | 19.5 | 18.9 | 18.6 | 18.1 | 17.5 | 17.0 | 15.2 | 13.0 | 10.0 | |
| | | 40 | | | | | | | | | | | | | 21.5 | 21.3 | 20.7 | 20.3 | 19.8 | 19.5 | 18.8 | 18.5 | 17.9 | 17.1 | 16.6 | 14.7 | 12.7 | 9.2 |
| | | 50 | | | | | | | | | | | | | 21.3 | 21.0 | 20.5 | 20.0 | 19.5 | 19.0 | 18.4 | 18.4 | 17.5 | 16.8 | 16.2 | 14.2 | 11.9 | 8.5 |
| | | 60 | | | | | | | | | | | | | 21.2 | 20.9 | 20.6 | 20.2 | 19.2 | 19.2 | 18.7 | 18.0 | 17.7 | 17.0 | 16.4 | 15.8 | 13.7 | 11.2 |
| Shut-off PSI | | | | | | | | | | | | | 381 | 363 | 354 | 337 | 320 | 303 | 285 | 268 | 260 | 242 | 225 | 208 | 165 | 121 | 78 | |

Hi/Lo "N" Series – 18 HLN

Submersible Well Pumps with Noryl Impeller

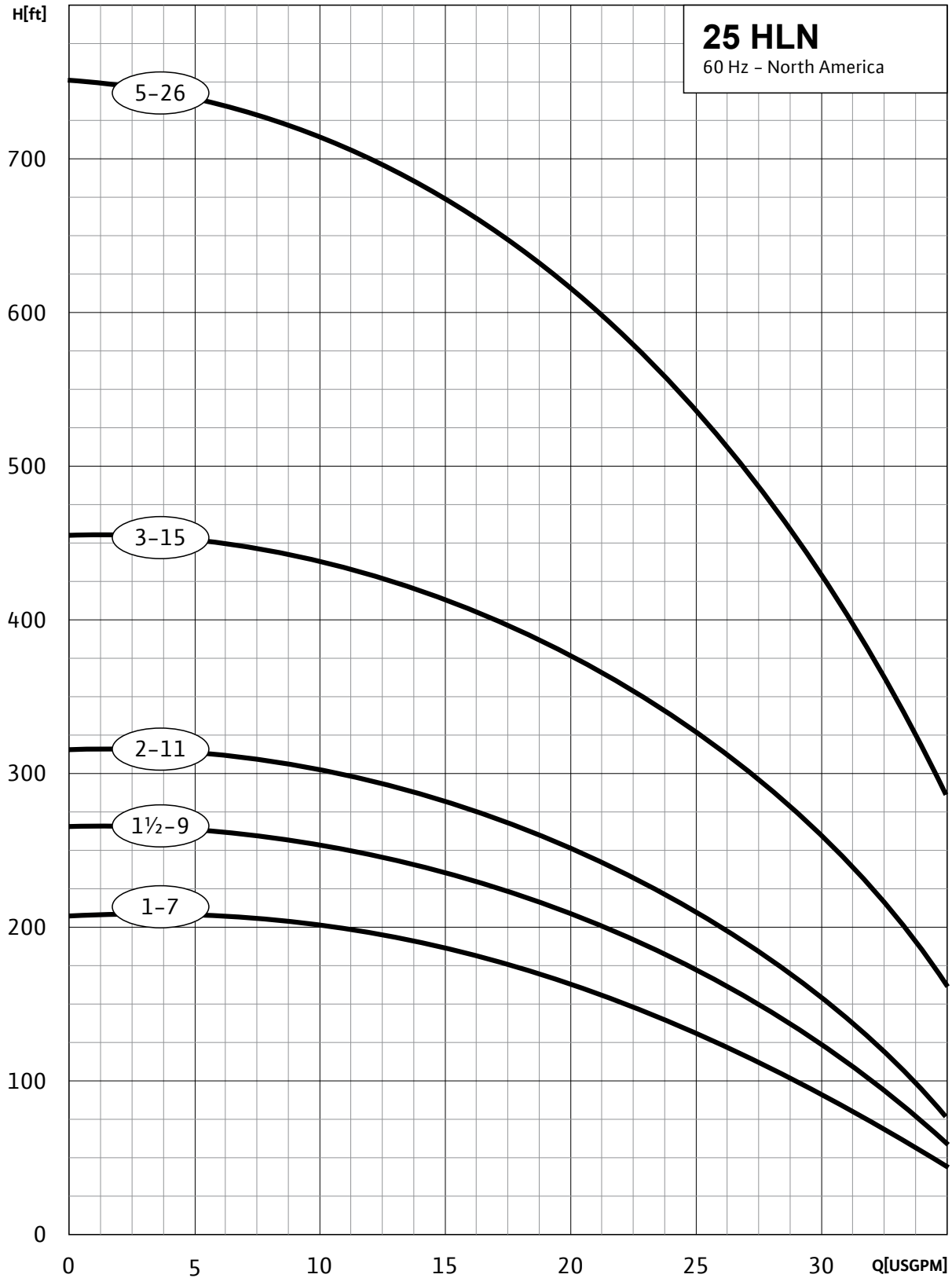
18 GPM



Hi/Lo "N" Series – 25 HLN

Submersible Well Pumps with Noryl Impeller

25 GPM

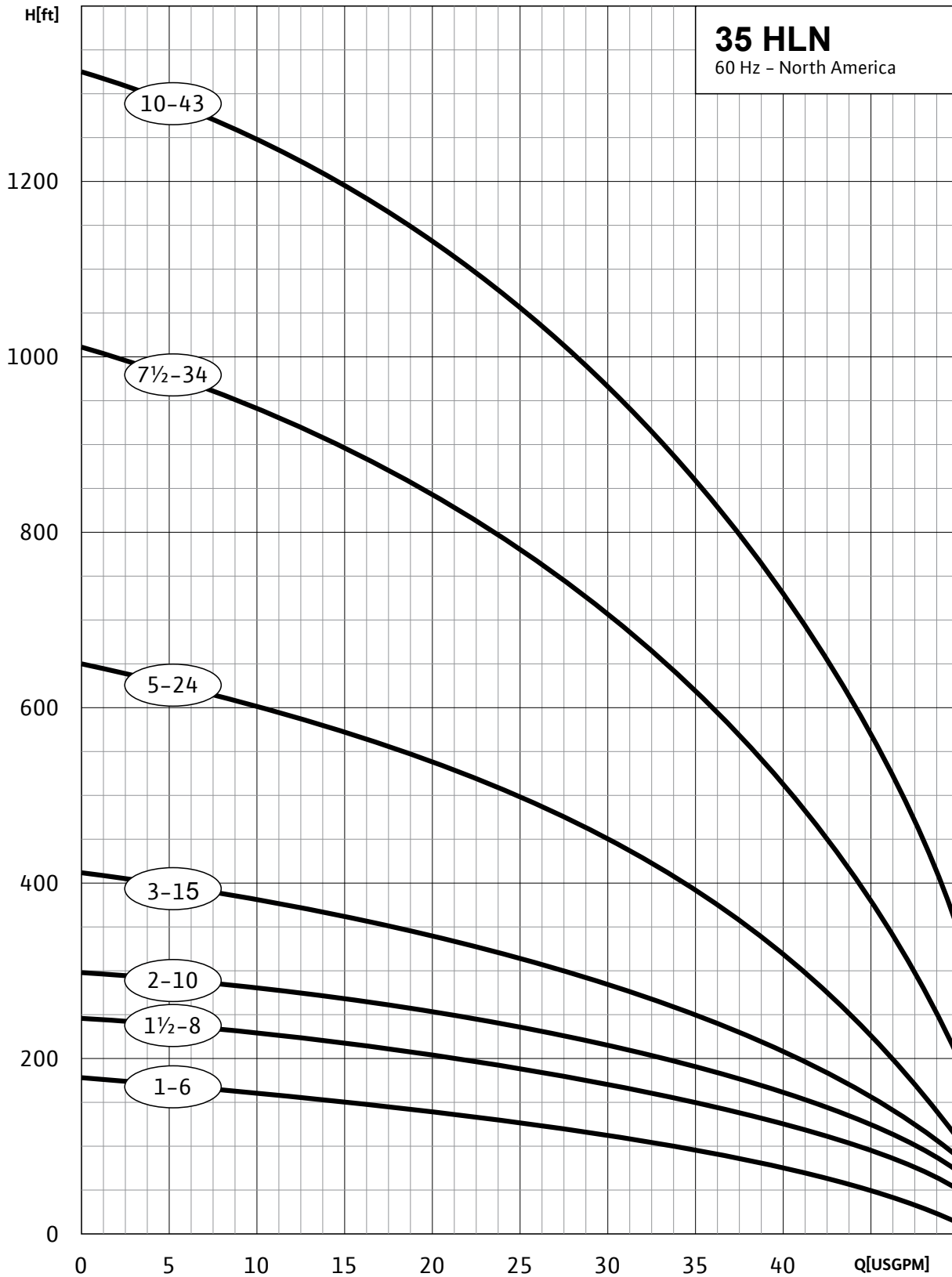


| MODEL | HP | PSI | Depth to Water in Feet | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------|----|-----|------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--|
| | | | 20 | 40 | 60 | 80 | 100 | 120 | 140 | 160 | 180 | 200 | 220 | 240 | 260 | 280 | 300 | 340 | 380 | 420 | 460 | 500 | 540 | 580 | 620 | 660 | 700 | 740 | | | |
| 25HL10N | 1 | 0 | | | 32.8 | 30.8 | 28.6 | 26.2 | 23.5 | 20.0 | 16.2 | 11.0 | | | | | | | | | | | | | | | | | | | |
| | | 20 | 31.8 | 30.0 | 27.5 | 25.2 | 22.0 | 19.0 | 15.0 | 8.0 | | | | | | | | | | | | | | | | | | | | | |
| | | 30 | 29.6 | 27.2 | 25.0 | 21.6 | 18.0 | 14.0 | | | | | | | | | | | | | | | | | | | | | | | |
| | | 40 | 27.1 | 24.9 | 21.5 | 17.9 | 13.9 | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 50 | 24.3 | 21.0 | 17.5 | 13.0 | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 60 | 20.0 | 16.2 | 11.0 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Shut-off PSI | | | 82 | 74 | 65 | 56 | 48 | 39 | 30 | 22 | 13 | 4 | | | | | | | | | | | | | | | | | | | |
| 25HL15N | 1½ | 0 | | | | 33.0 | 31.8 | 30.3 | 28.8 | 26.9 | 24.8 | 22.0 | 19.8 | 16.5 | 11.0 | | | | | | | | | | | | | | | | |
| | | 20 | | 32.6 | 31.2 | 29.6 | 28.0 | 26.0 | 23.8 | 21.0 | 18.1 | 14.8 | 8.0 | | | | | | | | | | | | | | | | | | |
| | | 30 | 32.5 | 31.0 | 29.5 | 27.6 | 25.6 | 23.2 | 20.9 | 17.9 | 14.0 | | | | | | | | | | | | | | | | | | | | |
| | | 40 | 30.9 | 29.4 | 27.5 | 25.5 | 23.1 | 20.8 | 17.7 | 13.6 | | | | | | | | | | | | | | | | | | | | | |
| | | 50 | 29.0 | 27.2 | 25.1 | 22.9 | 20.4 | 17.2 | 13.0 | | | | | | | | | | | | | | | | | | | | | | |
| | | 60 | 26.9 | 24.8 | 22.0 | 19.8 | 16.5 | 11.0 | | | | | | | | | | | | | | | | | | | | | | | |
| Shut-off PSI | | | 111 | 103 | 94 | 85 | 77 | 68 | 59 | 51 | 42 | 33 | 25 | 16 | 7 | | | | | | | | | | | | | | | | |
| 25HL20N | 2 | 0 | | | | | 33.0 | 31.8 | 30.4 | 29.0 | 27.4 | 25.7 | 22.6 | 21.5 | 19.3 | 15.4 | | | | | | | | | | | | | | | |
| | | 20 | | | | 32.7 | 31.3 | 30.0 | 28.6 | 26.8 | 25.0 | 22.9 | 20.9 | 18.3 | 14.3 | 9.0 | | | | | | | | | | | | | | | |
| | | 30 | | | 32.3 | 31.0 | 29.6 | 28.5 | 26.4 | 24.5 | 22.6 | 20.5 | 18.0 | 14.0 | 8.0 | | | | | | | | | | | | | | | | |
| | | 40 | | | 30.9 | 29.5 | 28.2 | 26.3 | 24.3 | 22.4 | 20.4 | 17.8 | 13.6 | 8.0 | | | | | | | | | | | | | | | | | |
| | | 50 | | 30.5 | 29.4 | 28.0 | 26.0 | 24.1 | 22.1 | 20.0 | 17.2 | 13.2 | | | | | | | | | | | | | | | | | | | |
| | | 60 | 30.4 | 29.0 | 27.4 | 25.7 | 22.6 | 21.5 | 19.3 | 15.4 | 12.2 | | | | | | | | | | | | | | | | | | | | |
| Shut-off PSI | | | 139 | 130 | 121 | 113 | 104 | 95 | 87 | 78 | 69 | 61 | 52 | 43 | 35 | 26 | 17 | | | | | | | | | | | | | | |
| 25HL30N | 3 | 0 | | | | | | | 33.0 | 32.2 | 31.5 | 30.5 | 29.6 | 28.3 | 27.1 | 25.8 | 22.6 | 19.0 | 14.0 | | | | | | | | | | | | |
| | | 20 | | | | | | 32.8 | 32.0 | 31.0 | 30.0 | 29.0 | 27.9 | 26.6 | 25.0 | 23.8 | 21.9 | 20.0 | 12.6 | | | | | | | | | | | | |
| | | 30 | | | | | 32.6 | 31.8 | 30.9 | 30.0 | 28.8 | 27.6 | 25.5 | 24.9 | 23.4 | 21.6 | 19.9 | 15.2 | 8.0 | | | | | | | | | | | | |
| | | 40 | | | | 32.5 | 31.7 | 30.9 | 29.9 | 28.8 | 27.5 | 26.2 | 24.7 | 23.3 | 21.5 | 19.9 | 17.8 | 11.9 | | | | | | | | | | | | | |
| | | 50 | | | 32.3 | 31.6 | 30.8 | 29.8 | 28.5 | 27.3 | 26.0 | 24.5 | 23.0 | 21.2 | 19.5 | 17.4 | 11.5 | | | | | | | | | | | | | | |
| | | 60 | 33.0 | 32.2 | 31.5 | 30.5 | 29.6 | 28.3 | 27.1 | 25.8 | 24.1 | 22.6 | 20.9 | 19.0 | 16.9 | 14.0 | 10.0 | | | | | | | | | | | | | | |
| Shut-off PSI | | | 191 | 183 | 174 | 165 | 157 | 148 | 139 | 131 | 122 | 113 | 105 | 96 | 87 | 79 | 70 | 53 | 35 | 18 | | | | | | | | | | | |
| 25HL50N | 5 | 0 | | | | | | | | | | | | | | 33.0 | 32.5 | 31.5 | 30.2 | 29.0 | 27.6 | 26.0 | 24.2 | 22.4 | 20.5 | 18.3 | 15.8 | 12.0 | | | |
| | | 20 | | | | | | | | | | | | | | 32.9 | 32.3 | 31.8 | 31.3 | 30.0 | 28.8 | 27.2 | 25.8 | 23.9 | 22.0 | 20.0 | 17.8 | 15.0 | 11.0 | | |
| | | 30 | | | | | | | | | | | | | | 32.8 | 32.2 | 31.8 | 31.2 | 30.5 | 29.3 | 27.9 | 26.4 | 24.8 | 22.9 | 21.0 | 18.9 | 16.2 | 13.0 | 8.0 | |
| | | 40 | | | | | | | | | | | | | | 32.7 | 32.1 | 31.7 | 31.1 | 30.4 | 29.9 | 28.5 | 27.1 | 25.4 | 23.7 | 21.9 | 19.9 | 17.5 | 14.5 | 10.5 | |
| | | 50 | | | | | | | | | | | | | | 32.6 | 32.1 | 31.6 | 31.0 | 30.3 | 29.9 | 29.2 | 27.8 | 26.3 | 24.5 | 22.6 | 21.8 | 18.7 | 16.0 | 12.7 | |
| | | 60 | | | | | | | | | 33.0 | 32.5 | 32.0 | 31.5 | 30.8 | 30.2 | 29.8 | 29.0 | 28.3 | 26.9 | 25.1 | 23.3 | 21.5 | 19.5 | 17.0 | 14.0 | 9.5 | | | | |
| Shut-off PSI | | | | | | | | | 286 | 277 | 268 | 260 | 251 | 242 | 234 | 225 | 216 | 199 | 182 | 165 | 147 | 130 | 113 | 95 | 78 | 61 | 43 | 26 | | | |

Hi/Lo "N" Series – 35 HLN

Submersible Well Pumps with Noryl Impeller

35 GPM



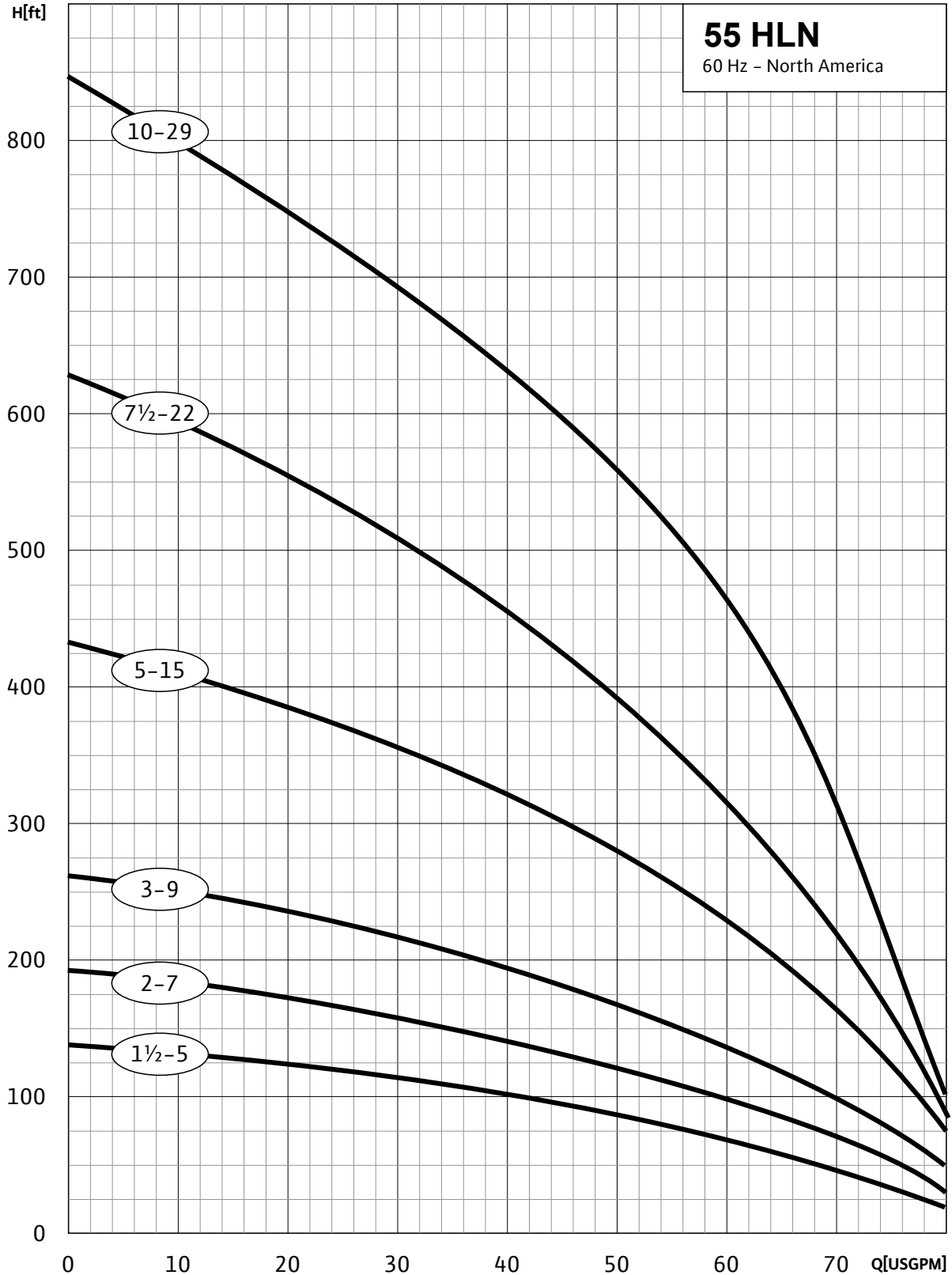
| MODEL | HP | PSI | Depth to Water in Feet | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------|----|-----|------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | | | 20 | 40 | 60 | 80 | 100 | 120 | 140 | 160 | 180 | 200 | 220 | 240 | 260 | 280 | 300 | 320 | 340 | 360 | 380 | 400 | 420 | 440 | 460 | 480 | 520 | 560 | 600 |
| 35HL10N | 1 | 0 | | 48 | 45 | 41 | 36 | 30 | 22 | 11 | | | | | | | | | | | | | | | | | | | |
| | | 20 | 44 | 39 | 34 | 28 | 19 | | | | | | | | | | | | | | | | | | | | | | |
| | | 30 | 39 | 33 | 27 | 17 | | | | | | | | | | | | | | | | | | | | | | | |
| | | 40 | 32 | 25 | 15 | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 50 | 24 | 14 | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 60 | 12 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Shut-off PSI | | | 67 | 58 | 50 | 41 | 32 | 24 | 15 | 6 | | | | | | | | | | | | | | | | | | | |
| 35HL15N | 1½ | 0 | | 50 | 48 | 46 | 43 | 40 | 37 | 32 | 26 | 19 | | | | | | | | | | | | | | | | | |
| | | 20 | 48 | 45 | 43 | 39 | 35 | 31 | 24 | 17 | | | | | | | | | | | | | | | | | | | |
| | | 30 | 45 | 42 | 39 | 35 | 30 | 23 | 15 | | | | | | | | | | | | | | | | | | | | |
| | | 40 | 42 | 38 | 34 | 29 | 22 | 14 | | | | | | | | | | | | | | | | | | | | | |
| | | 50 | 38 | 33 | 28 | 21 | 12 | | | | | | | | | | | | | | | | | | | | | | |
| | | 60 | 33 | 27 | 20 | 11 | | | | | | | | | | | | | | | | | | | | | | | |
| Shut-off PSI | | | 95 | 86 | 78 | 69 | 60 | 52 | 43 | 34 | 26 | 17 | | | | | | | | | | | | | | | | | |
| 35HL20N | 2 | 0 | | | 49 | 48 | 46 | 44 | 41 | 38 | 35 | 32 | 28 | 22 | | | | | | | | | | | | | | | |
| | | 20 | 49 | 47 | 45 | 43 | 40 | 38 | 34 | 31 | 26 | 21 | 14 | | | | | | | | | | | | | | | | |
| | | 30 | 47 | 45 | 42 | 40 | 37 | 34 | 30 | 25 | 20 | 13 | | | | | | | | | | | | | | | | | |
| | | 40 | 44 | 42 | 40 | 37 | 33 | 29 | 24 | 19 | 11 | | | | | | | | | | | | | | | | | | |
| | | 50 | 42 | 39 | 36 | 33 | 29 | 24 | 18 | | | | | | | | | | | | | | | | | | | | |
| | | 60 | 39 | 36 | 32 | 28 | 23 | 16 | | | | | | | | | | | | | | | | | | | | | |
| Shut-off PSI | | | 121 | 112 | 103 | 95 | 86 | 77 | 69 | 60 | 51 | 43 | 34 | 26 | | | | | | | | | | | | | | | |
| 35HL30N | 3 | 0 | | | | 49 | 48 | 46 | 45 | 43 | 41 | 40 | 38 | 35 | 33 | 31 | 28 | 24 | 20 | 15 | | | | | | | | | |
| | | 20 | 50 | 49 | 47 | 46 | 44 | 43 | 41 | 39 | 37 | 35 | 32 | 30 | 27 | 23 | 19 | 13 | | | | | | | | | | | |
| | | 30 | 49 | 47 | 46 | 44 | 42 | 41 | 39 | 37 | 34 | 32 | 29 | 26 | 22 | 18 | 12 | | | | | | | | | | | | |
| | | 40 | 47 | 45 | 44 | 42 | 40 | 38 | 36 | 34 | 32 | 29 | 25 | 22 | 17 | 11 | | | | | | | | | | | | | |
| | | 50 | 45 | 44 | 42 | 40 | 38 | 36 | 34 | 31 | 28 | 25 | 21 | 16 | | | | | | | | | | | | | | | |
| | | 60 | 43 | 42 | 40 | 38 | 36 | 33 | 31 | 28 | 24 | 20 | 15 | | | | | | | | | | | | | | | | |
| Shut-off PSI | | | 170 | 161 | 152 | 144 | 135 | 126 | 118 | 109 | 100 | 92 | 83 | 74 | 66 | 57 | 48 | 40 | 31 | 23 | | | | | | | | | |

| MODEL | HP | PSI | Depth to Water in Feet | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------|----|-----|------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|
| | | | 50 | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 750 | 800 | 850 | 900 | 950 | 1000 | 1050 | 1100 | 1150 | 1200 | 1250 | 1300 |
| 35HL50N | 5 | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 20 | 50 | 48 | 46 | 44 | 41 | 38 | 35 | 31 | 27 | 20 | 11 | | | | | | | | | | | | | | | |
| | | 30 | 49 | 47 | 45 | 43 | 40 | 37 | 34 | 30 | 25 | 17 | | | | | | | | | | | | | | | | |
| | | 40 | 48 | 46 | 44 | 41 | 39 | 36 | 32 | 27 | 21 | 12 | | | | | | | | | | | | | | | | |
| | | 50 | 47 | 45 | 43 | 40 | 37 | 34 | 30 | 25 | 18 | | | | | | | | | | | | | | | | | |
| | | 60 | 46 | 44 | 42 | 39 | 36 | 32 | 28 | 22 | 13 | | | | | | | | | | | | | | | | | |
| Shut-off PSI | | | 264 | 242 | 220 | 199 | 177 | 156 | 134 | 112 | 91 | 69 | 47 | 26 | | | | | | | | | | | | | | |
| 35HL75N | 7½ | 0 | | | | 50 | 48 | 47 | 46 | 44 | 42 | 40 | 38 | 36 | 33 | 31 | 27 | 23 | 19 | 14 | | | | | | | | |
| | | 20 | | | 50 | 49 | 47 | 46 | 44 | 42 | 41 | 38 | 36 | 34 | 31 | 28 | 24 | 19 | 14 | | | | | | | | | |
| | | 30 | | 50 | 49 | 48 | 46 | 45 | 43 | 42 | 40 | 37 | 35 | 32 | 29 | 26 | 22 | 17 | 12 | | | | | | | | | |
| | | 40 | | 50 | 49 | 47 | 46 | 44 | 43 | 41 | 39 | 36 | 34 | 31 | 28 | 24 | 20 | 15 | | | | | | | | | | |
| | | 50 | | | 49 | 48 | 47 | 45 | 43 | 42 | 40 | 38 | 35 | 33 | 30 | 26 | 22 | 17 | 12 | | | | | | | | | |
| | | 60 | 50 | 49 | 47 | 46 | 44 | 43 | 41 | 39 | 37 | 34 | 31 | 28 | 24 | 20 | 15 | | | | | | | | | | | |
| Shut-off PSI | | | 415 | 393 | 371 | 350 | 328 | 306 | 285 | 263 | 241 | 220 | 198 | 176 | 155 | 133 | 111 | 90 | 68 | 47 | | | | | | | | |
| 35HL100N | 10 | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 20 | | | | | | | 50 | 48 | 46 | 45 | 43 | 42 | 41 | 40 | 39 | 38 | 36 | 34 | 31 | 29 | 25 | 22 | 18 | 14 | | |
| | | 30 | | | | | | | 49 | 47 | 45 | 44 | 43 | 42 | 41 | 40 | 38 | 37 | 35 | 33 | 30 | 27 | 24 | 20 | 16 | 12 | | |
| | | 40 | | | | | | 50 | 48 | 46 | 45 | 44 | 43 | 42 | 40 | 39 | 38 | 36 | 34 | 32 | 29 | 26 | 22 | 18 | 14 | | | |
| | | 50 | | | | | | 49 | 47 | 45 | 44 | 43 | 42 | 41 | 40 | 39 | 37 | 35 | 33 | 30 | 27 | 24 | 20 | 16 | 12 | | | |
| | | 60 | | | | | 50 | 48 | 46 | 45 | 44 | 43 | 42 | 41 | 39 | 38 | 36 | 34 | 32 | 29 | 26 | 22 | 19 | 14 | | | | |
| Shut-off PSI | | | 551 | 529 | 508 | 486 | 464 | 443 | 421 | 399 | 378 | 356 | 334 | 313 | 291 | 269 | 248 | 226 | 205 | 183 | 161 | 140 | 118 | 96 | 75 | 53 | | |

Hi/Lo "N" Series – 55 HLN

Submersible Well Pumps with Noryl Impeller

55 GPM



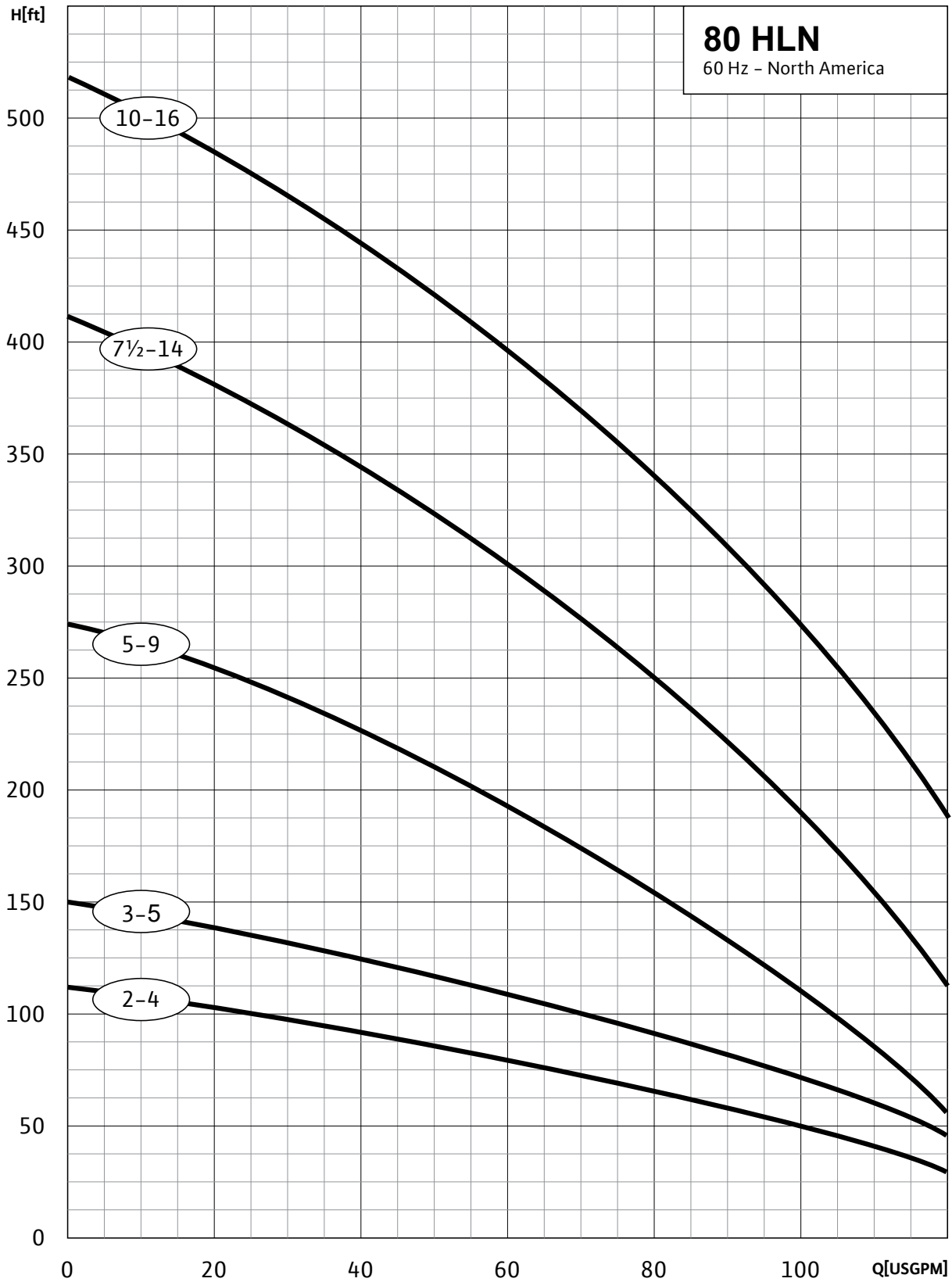
| MODEL | HP | PSI | Depth to Water in Feet | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------|----|-----|------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|
| | | | 20 | 40 | 60 | 80 | 100 | 120 | 140 | 160 | 180 | 200 | 220 | 240 | 260 | 280 | 300 | 320 | 340 | 360 | 380 | 400 | 420 | 440 | 460 | 480 | 500 | |
| 55HL15N | 1½ | 0 | 78 | 71 | 64 | 54 | 42 | 24 | | | | | | | | | | | | | | | | | | | | |
| | | 20 | 61 | 51 | 37 | | | | | | | | | | | | | | | | | | | | | | | |
| | | 30 | 49 | 35 | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 40 | 32 | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 50 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 60 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Shut-off PSI | | | 52 | 43 | 35 | 26 | 17 | 9 | | | | | | | | | | | | | | | | | | | | |
| 55HL20N | 2 | 0 | | 76 | 71 | 65 | 58 | 50 | 41 | 28 | | | | | | | | | | | | | | | | | | |
| | | 20 | 69 | 63 | 56 | 48 | 37 | 24 | | | | | | | | | | | | | | | | | | | | |
| | | 30 | 62 | 55 | 46 | 35 | 21 | | | | | | | | | | | | | | | | | | | | | |
| | | 40 | 54 | 45 | 34 | | | | | | | | | | | | | | | | | | | | | | | |
| | | 50 | 43 | 32 | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 60 | 29 | | | | | | | | | | | | | | | | | | | | | | | | | |
| Shut-off PSI | | | 76 | 67 | 58 | 50 | 41 | 32 | 24 | 15 | | | | | | | | | | | | | | | | | | |
| 55HL30N | 3 | 0 | | 80 | 76 | 72 | 68 | 63 | 58 | 52 | 44 | 35 | | | | | | | | | | | | | | | | |
| | | 20 | 75 | 71 | 67 | 62 | 56 | 49 | 42 | 32 | | | | | | | | | | | | | | | | | | |
| | | 30 | 70 | 66 | 61 | 55 | 48 | 40 | 30 | | | | | | | | | | | | | | | | | | | |
| | | 40 | 65 | 60 | 54 | 47 | 39 | 28 | | | | | | | | | | | | | | | | | | | | |
| | | 50 | 59 | 53 | 46 | 37 | 26 | | | | | | | | | | | | | | | | | | | | | |
| | | 60 | 52 | 45 | 36 | 25 | | | | | | | | | | | | | | | | | | | | | | |
| Shut-off PSI | | | 102 | 94 | 85 | 76 | 68 | 59 | 50 | 42 | 33 | 24 | | | | | | | | | | | | | | | | |
| 55HL50N | 5 | 0 | | | 80 | 78 | 76 | 73 | 71 | 68 | 65 | 62 | 58 | 55 | 50 | 46 | 40 | 34 | 27 | | | | | | | | | |
| | | 20 | | 80 | 77 | 75 | 73 | 70 | 67 | 64 | 61 | 57 | 53 | 49 | 44 | 39 | 32 | 25 | | | | | | | | | | |
| | | 30 | 79 | 77 | 75 | 72 | 70 | 67 | 64 | 60 | 57 | 53 | 48 | 43 | 38 | 31 | 24 | | | | | | | | | | | |
| | | 40 | 77 | 74 | 72 | 69 | 66 | 63 | 60 | 56 | 52 | 47 | 42 | 37 | 30 | 23 | | | | | | | | | | | | |
| | | 50 | 74 | 71 | 69 | 66 | 63 | 59 | 55 | 51 | 47 | 42 | 36 | 29 | 22 | | | | | | | | | | | | | |
| | | 60 | 71 | 68 | 65 | 62 | 59 | 55 | 51 | 46 | 41 | 35 | 28 | 20 | | | | | | | | | | | | | | |
| Shut-off PSI | | | 178 | 169 | 161 | 152 | 143 | 135 | 126 | 117 | 109 | 100 | 91 | 83 | 74 | 65 | 57 | 48 | 39 | 31 | | | | | | | | |

| MODEL | HP | PSI | Depth to Water in Feet | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------|----|-----|------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|
| | | | 20 | 60 | 100 | 140 | 180 | 220 | 260 | 300 | 340 | 380 | 420 | 460 | 500 | 540 | 580 | 620 | 660 | 700 | 740 | 780 | 820 | 860 | 900 | 940 | 980 | |
| 55HL75N | 7½ | 0 | | | 79 | 76 | 73 | 70 | 66 | 62 | 58 | 52 | 46 | 39 | 31 | 22 | | | | | | | | | | | | |
| | | 20 | | 78 | 76 | 73 | 69 | 66 | 61 | 57 | 52 | 45 | 38 | 30 | 20 | | | | | | | | | | | | | |
| | | 30 | 80 | 77 | 74 | 71 | 67 | 63 | 59 | 54 | 48 | 41 | 33 | 24 | | | | | | | | | | | | | | |
| | | 40 | 78 | 75 | 72 | 69 | 65 | 61 | 56 | 51 | 44 | 37 | 28 | | | | | | | | | | | | | | | |
| | | 50 | 76 | 73 | 70 | 67 | 63 | 58 | 53 | 47 | 40 | 32 | 23 | | | | | | | | | | | | | | | |
| | | 60 | 75 | 72 | 68 | 64 | 60 | 55 | 50 | 43 | 36 | 27 | | | | | | | | | | | | | | | | |
| Shut-off PSI | | | 261 | 243 | 226 | 209 | 191 | 174 | 157 | 139 | 122 | 105 | 88 | 70 | 53 | 36 | | | | | | | | | | | | |
| 55HL100N | 10 | 0 | | | 80 | 78 | 76 | 75 | 73 | 71 | 68 | 66 | 63 | 60 | 56 | 51 | 47 | 41 | 35 | 28 | | | | | | | | |
| | | 20 | | 80 | 78 | 76 | 74 | 73 | 70 | 68 | 65 | 62 | 59 | 55 | 51 | 46 | 40 | 33 | 26 | | | | | | | | | |
| | | 30 | | 79 | 77 | 75 | 73 | 71 | 69 | 67 | 64 | 61 | 57 | 53 | 48 | 42 | 36 | 29 | 22 | | | | | | | | | |
| | | 40 | 79 | 78 | 76 | 74 | 72 | 70 | 68 | 65 | 62 | 59 | 55 | 50 | 45 | 39 | 32 | 25 | | | | | | | | | | |
| | | 50 | 78 | 77 | 75 | 73 | 71 | 69 | 66 | 63 | 60 | 56 | 52 | 47 | 42 | 35 | 28 | 21 | | | | | | | | | | |
| | | 60 | 77 | 76 | 74 | 72 | 70 | 67 | 65 | 61 | 58 | 54 | 49 | 44 | 38 | 31 | 24 | | | | | | | | | | | |
| Shut-off PSI | | | 353 | 336 | 319 | 301 | 284 | 267 | 250 | 232 | 215 | 198 | 180 | 163 | 146 | 128 | 111 | 94 | 76 | 59 | | | | | | | | |

Hi/Lo "N" Series – 80 HLN

Submersible Well Pumps with Noryl Impeller

80 GPM



| MODEL | HP | PSI | Depth to Water in Feet | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------|----|-----|------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|
| | | | 20 | 40 | 60 | 80 | 100 | 120 | 140 | 160 | 180 | 200 | 220 | 240 | 260 | 280 | 300 | 320 | 340 | 360 | 380 | 400 | 420 | 440 | 460 | | |
| 80HL20N | 2 | 0 | 97 | 87 | 77 | 66 | 49 | 33 | | | | | | | | | | | | | | | | | | | |
| | | 20 | 87 | 60 | 46 | 26 | | | | | | | | | | | | | | | | | | | | | |
| | | 30 | 63 | 42 | 26 | | | | | | | | | | | | | | | | | | | | | | |
| | | 40 | 45 | 25 | | | | | | | | | | | | | | | | | | | | | | | |
| | | 50 | 22 | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 60 | | | | | | | | | | | | | | | | | | | | | | | | | |
| Shut-off PSI | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 80HL30N | 3 | 0 | | 119 | 105 | 87 | 68 | | | | | | | | | | | | | | | | | | | | |
| | | 20 | 99 | 82 | 62 | | | | | | | | | | | | | | | | | | | | | | |
| | | 30 | 79 | 58 | | | | | | | | | | | | | | | | | | | | | | | |
| | | 40 | 55 | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 50 | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 60 | | | | | | | | | | | | | | | | | | | | | | | | | |
| Shut-off PSI | | | 55 | 46 | 38 | 29 | 20 | | | | | | | | | | | | | | | | | | | | |
| 80HL50N | 5 | 0 | | | | 118 | 109 | 101 | 92 | 71 | 58 | | | | | | | | | | | | | | | | |
| | | 20 | 123 | 115 | 107 | 98 | 89 | 78 | 67 | 54 | | | | | | | | | | | | | | | | | |
| | | 30 | 114 | 105 | 97 | 87 | 77 | 65 | | | | | | | | | | | | | | | | | | | |
| | | 40 | 104 | 95 | 86 | 75 | 63 | | | | | | | | | | | | | | | | | | | | |
| | | 50 | 93 | 84 | 73 | 61 | | | | | | | | | | | | | | | | | | | | | |
| | | 60 | 82 | 72 | 59 | | | | | | | | | | | | | | | | | | | | | | |
| Shut-off PSI | | | 107 | 98 | 90 | 81 | 72 | 64 | 55 | 46 | 38 | 29 | | | | | | | | | | | | | | | |
| 80HL75N | 7½ | 0 | | | | | | 115 | 110 | 104 | 98 | 82 | 86 | 79 | 72 | 65 | 57 | | | | | | | | | | |
| | | 20 | | | 119 | 114 | 108 | 102 | 97 | 90 | 84 | 77 | 69 | 63 | | | | | | | | | | | | | |
| | | 30 | | 118 | 113 | 107 | 102 | 96 | 89 | 83 | 76 | 69 | 62 | | | | | | | | | | | | | | |
| | | 40 | 117 | 112 | 106 | 101 | 95 | 88 | 82 | 75 | 68 | 60 | | | | | | | | | | | | | | | |
| | | 50 | 111 | 106 | 99 | 94 | 87 | 81 | 74 | 67 | 59 | | | | | | | | | | | | | | | | |
| | | 60 | 105 | 99 | 93 | 86 | 80 | 73 | 66 | 58 | | | | | | | | | | | | | | | | | |
| Shut-off PSI | | | 171 | 162 | 153 | 145 | 136 | 127 | 119 | 110 | 101 | 93 | 84 | 75 | 67 | 58 | 49 | | | | | | | | | | |
| 80HL100N | 10 | 0 | | | | | | | | 120 | 117 | 111 | 107 | 101 | 95 | 90 | 85 | 79 | 74 | 67 | 57 | 53 | 43 | 37 | 28 | | |
| | | 20 | | | | | | | | 118 | 112 | 106 | 102 | 96 | 90 | 85 | 79 | 73 | 55 | 58 | 52 | 44 | 36 | 26 | | | |
| | | 30 | | | | | 115 | 112 | 110 | 106 | 99 | 94 | 88 | 83 | 77 | 71 | 63 | 56 | 50 | 40 | 32 | 25 | | | | | |
| | | 40 | | | | | 115 | 113 | 109 | 103 | 97 | 92 | 87 | 82 | 76 | 69 | 63 | 55 | 48 | 38 | 32 | | | | | | |
| | | 50 | | | | | 116 | 113 | 108 | 103 | 97 | 92 | 87 | 80 | 75 | 68 | 63 | 55 | 48 | 39 | 32 | | | | | | |
| | | 60 | 120 | 116 | 112 | 107 | 103 | 97 | 92 | 85 | 79 | 74 | 68 | 62 | 56 | 45 | 38 | 28 | | | | | | | | | |
| Shut-off PSI | | | 216 | 208 | 199 | 190 | 181 | 173 | 164 | 156 | 147 | 138 | 130 | 121 | 112 | 104 | 95 | 86 | 78 | 69 | 61 | 52 | 43 | 35 | | | |

A.Y. McDonald 23000 Series - 5 GPM

***** 2-Wire 1ph Pump End & Motor Complete**

| <u>Model</u> | <u>HP</u> | <u>Stages</u> | <u>Voltage</u> | <u>Weight</u> | <u>List Price</u> |
|--------------|-----------|---------------|----------------|---------------|-------------------|
| 23050J2A | 1/2 | 13 | 115 | 30 | \$ - |
| 23050J2 | 1/2 | 13 | 230 | 30 | \$ - |
| 23075J2 | 3/4 | 18 | 230 | 36 | \$ - |
| 23100J2 | 1 | 23 | 230 | 41 | \$ - |
| 23150J2 | 1 1/2 | 30 | 230 | 49 | \$ - |

3-Wire 1ph Pump End & Motor Complete

| <u>Model</u> | <u>HP</u> | <u>Stages</u> | <u>Voltage</u> | <u>Weight</u> | <u>List Price</u> |
|--------------|-----------|---------------|----------------|---------------|-------------------|
| 23050J3A | 1/2 | 13 | 115 | 30 | \$ - |
| 23050J3 | 1/2 | 13 | 230 | 30 | \$ - |
| 23075J3 | 3/4 | 18 | 230 | 36 | \$ - |
| 23100J3 | 1 | 23 | 230 | 41 | \$ - |
| 23150J3 | 1 1/2 | 30 | 230 | 41 | \$ - |

Pump End Only

| <u>Model</u> | <u>HP</u> | <u>Stages</u> | <u>Weight</u> | <u>List Price</u> |
|--------------|-----------|---------------|---------------|-------------------|
| 23050J | 1/2 | 13 | 10 | \$ - |
| 23075J | 3/4 | 18 | 12 | \$ - |
| 23100J | 1 | 23 | 13 | \$ - |
| 23150J | 1 1/2 | 30 | 18 | \$ - |



A.Y. McDonald 23000 Series - 7 GPM
***** 2-Wire 1ph Pump End & Motor Complete**

| <u>Model</u> | <u>HP</u> | <u>Stages</u> | <u>Voltage</u> | <u>Weight</u> | <u>List Price</u> |
|--------------|-----------|---------------|----------------|---------------|-------------------|
| 23050V2A | 1/2 | 9 | 115 | 26 | \$ - |
| 23050V2 | 1/2 | 9 | 230 | 26 | \$ - |
| 23075V2 | 3/4 | 12 | 230 | 30 | \$ - |
| 23100V2 | 1 | 16 | 230 | 34 | \$ - |
| 23150V2 | 1 1/2 | 21 | 230 | 46 | \$ - |

3-Wire 1ph Pump End & Motor Complete

| <u>Model</u> | <u>HP</u> | <u>Stages</u> | <u>Voltage</u> | <u>Weight</u> | <u>List Price</u> |
|--------------|-----------|---------------|----------------|---------------|-------------------|
| 23050V3A | 1/2 | 9 | 115 | 26 | \$ - |
| 23050V3 | 1/2 | 9 | 230 | 26 | \$ - |
| 23075V3 | 3/4 | 12 | 230 | 30 | \$ - |
| 23100V3 | 1 | 16 | 230 | 35 | \$ - |
| 23150V3 | 1 1/2 | 21 | 230 | 41 | \$ - |
| 23200V3 | 2 | 26 | 230 | 49 | \$ - |

Pump End Only

| <u>Model</u> | <u>HP</u> | <u>Stages</u> | <u>Weight</u> | <u>List Price</u> |
|--------------|-----------|---------------|---------------|-------------------|
| 23050V | 1/2 | 9 | 10 | \$ - |
| 23075V | 3/4 | 12 | 13 | \$ - |
| 23100V | 1 | 16 | 11 | \$ - |
| 23150V | 1 1/2 | 21 | 16 | \$ - |
| 23200V | 2 | 26 | 18 | \$ - |



A.Y. McDonald 23000 Series - 10 GPM

***** 2-Wire 1ph Pump End & Motor Complete**

| <u>Model</u> | <u>HP</u> | <u>Stages</u> | <u>Voltage</u> | <u>Weight</u> | <u>List Price</u> |
|--------------|-----------|---------------|----------------|---------------|-------------------|
| 23050K2A | 1/2 | 7 | 115 | 25 | \$ - |
| 23050K2 | 1/2 | 7 | 230 | 25 | \$ - |
| 23075K2 | 3/4 | 9 | 230 | 28 | \$ - |
| 23100K2 | 1 | 12 | 230 | 32 | \$ - |
| 23150K2 | 1 1/2 | 16 | 230 | 40 | \$ - |

3-Wire 1ph Pump End & Motor Complete

| <u>Model</u> | <u>HP</u> | <u>Stages</u> | <u>Voltage</u> | <u>Weight</u> | <u>List Price</u> |
|--------------|-----------|---------------|----------------|---------------|-------------------|
| 23050K3A | 1/2 | 7 | 115 | 28 | \$ - |
| 23050K3 | 1/2 | 7 | 230 | 28 | \$ - |
| 23075K3 | 3/4 | 9 | 230 | 31 | \$ - |
| 23100K3 | 1 | 12 | 230 | 35 | \$ - |
| 23150K3 | 1 1/2 | 16 | 230 | 44 | \$ - |
| 23200K3 | 2 | 20 | 230 | 46 | \$ - |
| 23300K3 | 3 | 26 | 230 | 70 | \$ - |
| 23500K3 | 5 | 33 | 230 | 89 | \$ - |

Pump End Only

| <u>Model</u> | <u>HP</u> | <u>Stages</u> | <u>Weight</u> | <u>List Price</u> |
|--------------|-----------|---------------|---------------|-------------------|
| 23050K | 1/2 | 7 | 7 | \$ - |
| 23075K | 3/4 | 9 | 8 | \$ - |
| 23100K | 1 | 12 | 9 | \$ - |
| 23150K | 1 1/2 | 16 | 11 | \$ - |
| 23200K | 2 | 20 | 14 | \$ - |
| 23300K | 3 | 26 | 16 | \$ - |
| 23500K | 5 | 33 | 18 | \$ - |



A.Y. McDonald 23000 Series - 15 GPM
***** 2-Wire 1ph Pump End & Motor Complete**

| <u>Model</u> | <u>HP</u> | <u>Stages</u> | <u>Voltage</u> | <u>Weight</u> | <u>List Price</u> |
|--------------|-----------|---------------|----------------|---------------|-------------------|
| 23050L2A | 1/2 | 6 | 115 | 24 | \$ - |
| 23050L2 | 1/2 | 6 | 230 | 24 | \$ - |
| 23075L2 | 3/4 | 8 | 230 | 28 | \$ - |
| 23100L2 | 1 | 10 | 230 | 32 | \$ - |
| 23150L2 | 1 1/2 | 13 | 230 | 40 | \$ - |

3-Wire 1ph Pump End & Motor Complete

| <u>Model</u> | <u>HP</u> | <u>Stages</u> | <u>Voltage</u> | <u>Weight</u> | <u>List Price</u> |
|--------------|-----------|---------------|----------------|---------------|-------------------|
| 23050L3A | 1/2 | 6 | 115 | 24 | \$ - |
| 23050L3 | 1/2 | 6 | 230 | 24 | \$ - |
| 23075L3 | 3/4 | 8 | 230 | 28 | \$ - |
| 23100L3 | 1 | 10 | 230 | 32 | \$ - |
| 23150L3 | 1 1/2 | 13 | 230 | 37 | \$ - |
| 23200L3 | 2 | 17 | 230 | 44 | \$ - |
| 23300L3 | 3 | 23 | 230 | 58 | \$ - |
| 23500L3 | 5 | 35 | 230 | 85 | \$ - |

Pump End Only

| <u>Model</u> | <u>HP</u> | <u>Stages</u> | <u>Weight</u> | <u>List Price</u> |
|--------------|-----------|---------------|---------------|-------------------|
| 23050L | 1/2 | 6 | 7 | \$ - |
| 23075L | 3/4 | 8 | 8 | \$ - |
| 23100L | 1 | 10 | 9 | \$ - |
| 23150L | 1 1/2 | 13 | 10 | \$ - |
| 23200L | 2 | 17 | 12 | \$ - |
| 23300L | 3 | 23 | 15 | \$ - |
| 23500L | 5 | 35 | 22 | \$ - |



A.Y. McDonald 23000 Series - 20 GPM

***** 2-Wire 1ph Pump End & Motor Complete**

| <u>Model</u> | <u>HP</u> | <u>Stages</u> | <u>Voltage</u> | <u>Weight</u> | <u>List Price</u> |
|--------------|-----------|---------------|----------------|---------------|-------------------|
| 23050P2A | 1/2 | 5 | 115 | 24 | \$ - |
| 23050P2 | 1/2 | 5 | 230 | 24 | \$ - |
| 23075P2 | 3/4 | 7 | 230 | 28 | \$ - |
| 23100P2 | 1 | 9 | 230 | 32 | \$ - |
| 23150P2 | 1 1/2 | 12 | 230 | 42 | \$ - |

3-Wire 1ph Pump End & Motor Complete

| <u>Model</u> | <u>HP</u> | <u>Stages</u> | <u>Voltage</u> | <u>Weight</u> | <u>List Price</u> |
|--------------|-----------|---------------|----------------|---------------|-------------------|
| 23050P3A | 1/2 | 5 | 115 | 24 | \$ - |
| 23050P3 | 1/2 | 5 | 230 | 24 | \$ - |
| 23075P3 | 3/4 | 7 | 230 | 27 | \$ - |
| 23100P3 | 1 | 9 | 230 | 32 | \$ - |
| 23150P3 | 1 1/2 | 12 | 230 | 38 | \$ - |
| 23200P3 | 2 | 14 | 230 | 43 | \$ - |
| 23300P3 | 3 | 20 | 230 | 56 | \$ - |
| 23500P3 | 5 | 32 | 230 | 84 | \$ - |

Pump End Only

| <u>Model</u> | <u>HP</u> | <u>Stages</u> | <u>Weight</u> | <u>List Price</u> |
|--------------|-----------|---------------|---------------|-------------------|
| 23050P | 1/2 | 5 | 6 | \$ - |
| 23075P | 3/4 | 7 | 8 | \$ - |
| 23100P | 1 | 9 | 9 | \$ - |
| 23150P | 1 1/2 | 12 | 10 | \$ - |
| 23200P | 2 | 14 | 11 | \$ - |
| 23300P | 3 | 20 | 14 | \$ - |
| 23500P | 5 | 32 | 22 | \$ - |



A.Y. McDonald 23000 Series - 25 GPM

***** 2-Wire 1ph Pump End & Motor Complete**

| <u>Model</u> | <u>HP</u> | <u>Stages</u> | <u>Voltage</u> | <u>Weight</u> | <u>List Price</u> |
|--------------|-----------|---------------|----------------|---------------|-------------------|
| 23050M2A | 1/2 | 4 | 115 | 24 | \$ - |
| 23050M2 | 1/2 | 4 | 230 | 24 | \$ - |
| 23075M2 | 3/4 | 5 | 230 | 26 | \$ - |
| 23100M2 | 1 | 7 | 230 | 31 | \$ - |
| 23150M2 | 1 1/2 | 9 | 230 | 40 | \$ - |

3-Wire 1ph Pump End & Motor Complete

| <u>Model</u> | <u>HP</u> | <u>Stages</u> | <u>Voltage</u> | <u>Weight</u> | <u>List Price</u> |
|--------------|-----------|---------------|----------------|---------------|-------------------|
| 23050M3A | 1/2 | 4 | 115 | 24 | \$ - |
| 23050M3 | 1/2 | 4 | 230 | 24 | \$ - |
| 23075M3 | 3/4 | 5 | 230 | 26 | \$ - |
| 23100M3 | 1 | 7 | 230 | 30 | \$ - |
| 23150M3 | 1 1/2 | 9 | 230 | 36 | \$ - |
| 23200M3 | 2 | 12 | 230 | 41 | \$ - |
| 23300M3 | 3 | 16 | 230 | 53 | \$ - |
| 23500M3 | 5 | 25 | 230 | 83 | \$ - |

Pump End Only

| <u>Model</u> | <u>HP</u> | <u>Stages</u> | <u>Weight</u> | <u>List Price</u> |
|--------------|-----------|---------------|---------------|-------------------|
| 23050M | 1/2 | 4 | 7 | \$ - |
| 23075M | 3/4 | 5 | 7 | \$ - |
| 23100M | 1 | 7 | 8 | \$ - |
| 23150M | 1 1/2 | 9 | 9 | \$ - |
| 23200M | 2 | 12 | 10 | \$ - |
| 23300M | 3 | 16 | 11 | \$ - |
| 23500M | 5 | 25 | 18 | \$ - |





Submersible Pumps



Submersible Pumps

Pump Catalog - January 2020

MORE THAN A BRAND. WE'RE A FAMILY.

23000 Series Domestic Stainless Steel

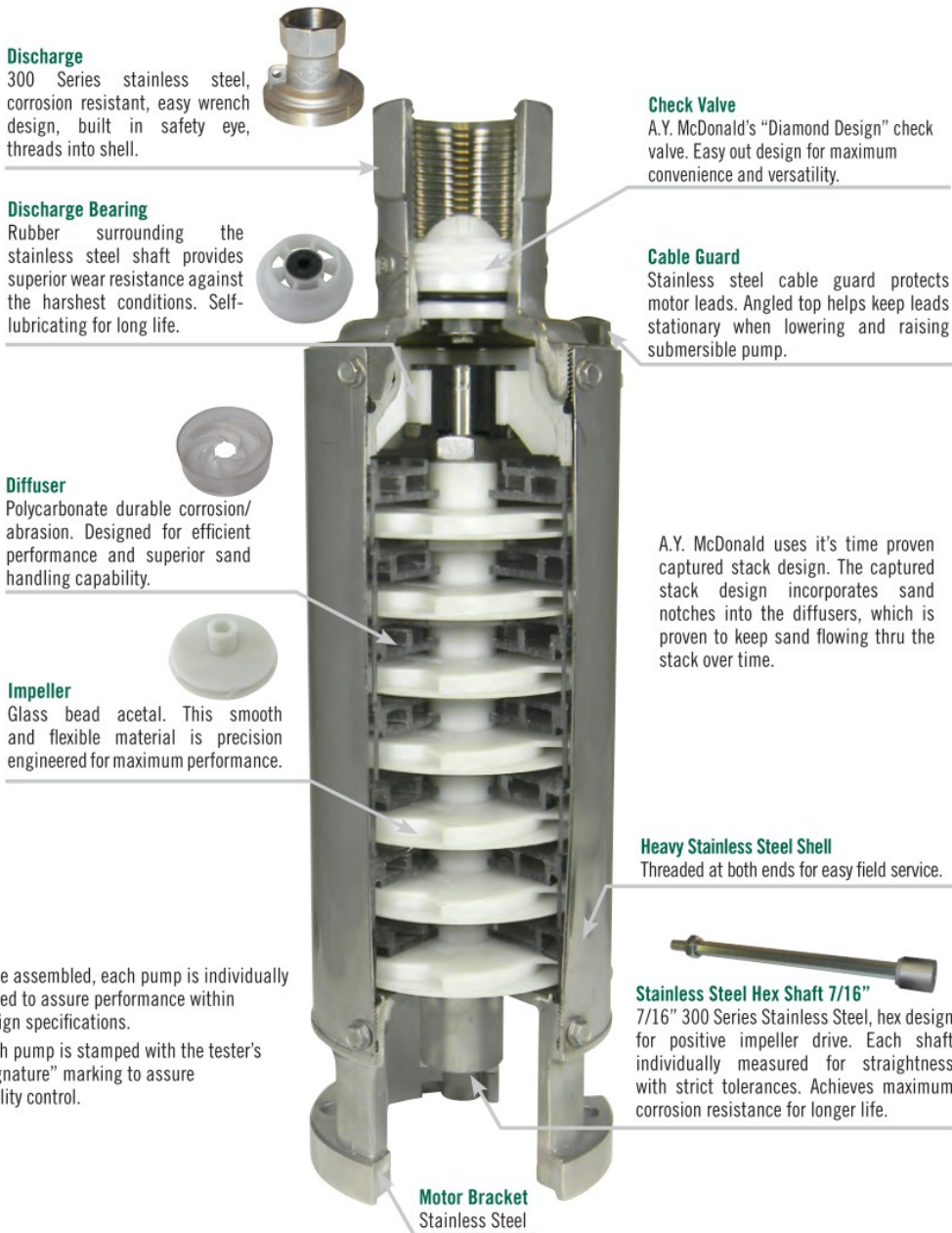
A.Y. McDonald offers a full line of four-inch submersibles ranging from 1/3 through 5 horsepower, with flow rates ranging from 5 through 25 GPM. Our 23000 submersibles offer peak capacity performance in 5, 7, 10, 15, 20, and 25 gallons per minute (GPM) models.

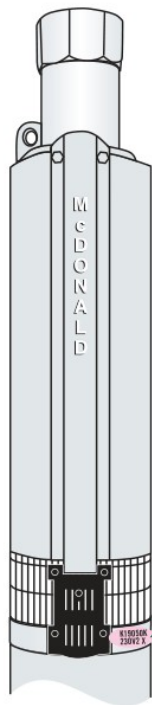
Powered by NEMA approved A.Y. McDonald stainless steel motors.

The charts on the following page will assist you in choosing the pump that meets your needs.



Submersible Pumps





Locating the code number on the pump

EXAMPLE

| Date Code | Motor HP | Pump Series |
|-----------|--------------------|------------------|
| K19 | 050 | K |
| Voltage | No. of Power Leads | Assembler's Code |
| 230V | 2 | X |

A code is stamped on each A.Y. McDonald 23000 series submersible pump. Contained in this code is the following information:

- Date of manufacture
- Motor HP
- Pump Series
- Voltage
- Number of power leads
- Assembler's code

NOTES

- Standard is 230V, Single Phase, 60 HZ (no suffix letter required)
- **Two-Wire Single phase** models include; pump, motor, leads.
- **Three-Wire Single phase** models include; pump, motor, leads, and control box.
- **Three-Wire Three phase** models include; pump, motor, leads, and starter kit.
- All submersible pumps include **internal check valves and grounded lead on motor.**

23000 Series - Domestic Stainless Steel

J - 5 GPM

A.Y. McDonald offers a full line of stainless steel submersible pumps built for years of trouble free operation, with high-efficiency impellers and diffusers. These submersibles offer peak capacity performance in 5, 7, 10, 15, 20, and 25 gallons per minute (GPM). Other features include stainless steel discharge head with a built-in check valve, and stainless steel shaft and coupling.

All Stainless Steel Pumps come with a 1 1/4" discharge and sizes range from 1/3 to 1 1/2 horsepower (HP). Two or three wire models up to 1 1/2 horsepower (HP).

Submersible Pumps

Two Wire Single Phase

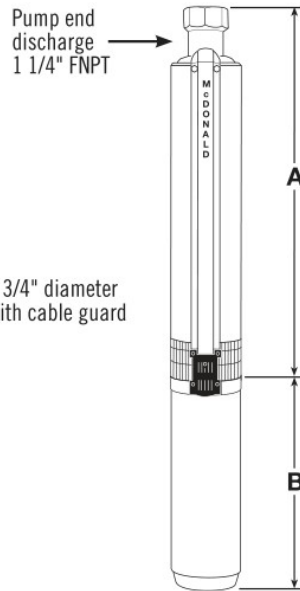
| Model No. | HP | Stages | Volt | A | B | Wt. |
|-----------|-------|--------|------|--------|--------|-----|
| 23030J2A* | 1/3 | 9 | 115 | 13.48" | 9.53" | 26 |
| 23030J2* | 1/3 | 9 | 230 | 13.48" | 9.53" | 26 |
| 23050J2A | 1/2 | 13 | 115 | 16.68" | 9.53" | 30 |
| 23050J2 | 1/2 | 13 | 230 | 16.68" | 9.53" | 30 |
| 23075J2 | 3/4 | 18 | 230 | 20.67" | 10.66" | 36 |
| 23100J2 | 1 | 23 | 230 | 25.93" | 11.75" | 41 |
| 23150J2 | 1 1/2 | 30 | 230 | 31.45" | 15.12" | 49 |

Three Wire** Single Phase

| Model No. | HP | Stages | Volt | A | B | Wt. |
|-----------|-------|--------|------|--------|--------|-----|
| 23030J3A* | 1/3 | 9 | 115 | 13.48" | 9.53" | 26 |
| 23030J3* | 1/3 | 9 | 230 | 13.48" | 9.53" | 26 |
| 23050J3A | 1/2 | 13 | 115 | 16.68" | 9.53" | 30 |
| 23050J3 | 1/2 | 13 | 230 | 16.68" | 9.53" | 30 |
| 23075J3 | 3/4 | 18 | 230 | 20.67" | 10.66" | 36 |
| 23100J3 | 1 | 23 | 230 | 25.93" | 11.75" | 41 |
| 23150J3 | 1 1/2 | 30 | 230 | 31.45" | 13.62" | 41 |

Three Wire** Three Phase

| Model No. | HP | Stages | Volt | A | B | Wt. |
|-----------|-------|--------|------|--------|--------|-----|
| 23150J3Z | 1 1/2 | 30 | 230 | 31.45" | 15.82" | 45 |



4" Stainless Steel Pump Ends

| Model No. | HP | Wt. |
|-----------|-------|-----|
| 23030J | 1/3 | 9 |
| 23050J | 1/2 | 10 |
| 23075J | 3/4 | 12 |
| 23100J | 1 | 13 |
| 23150J | 1 1/2 | 18 |

* All one-third horsepower pumps are furnished with one-half horsepower motors (and control boxes where applicable).

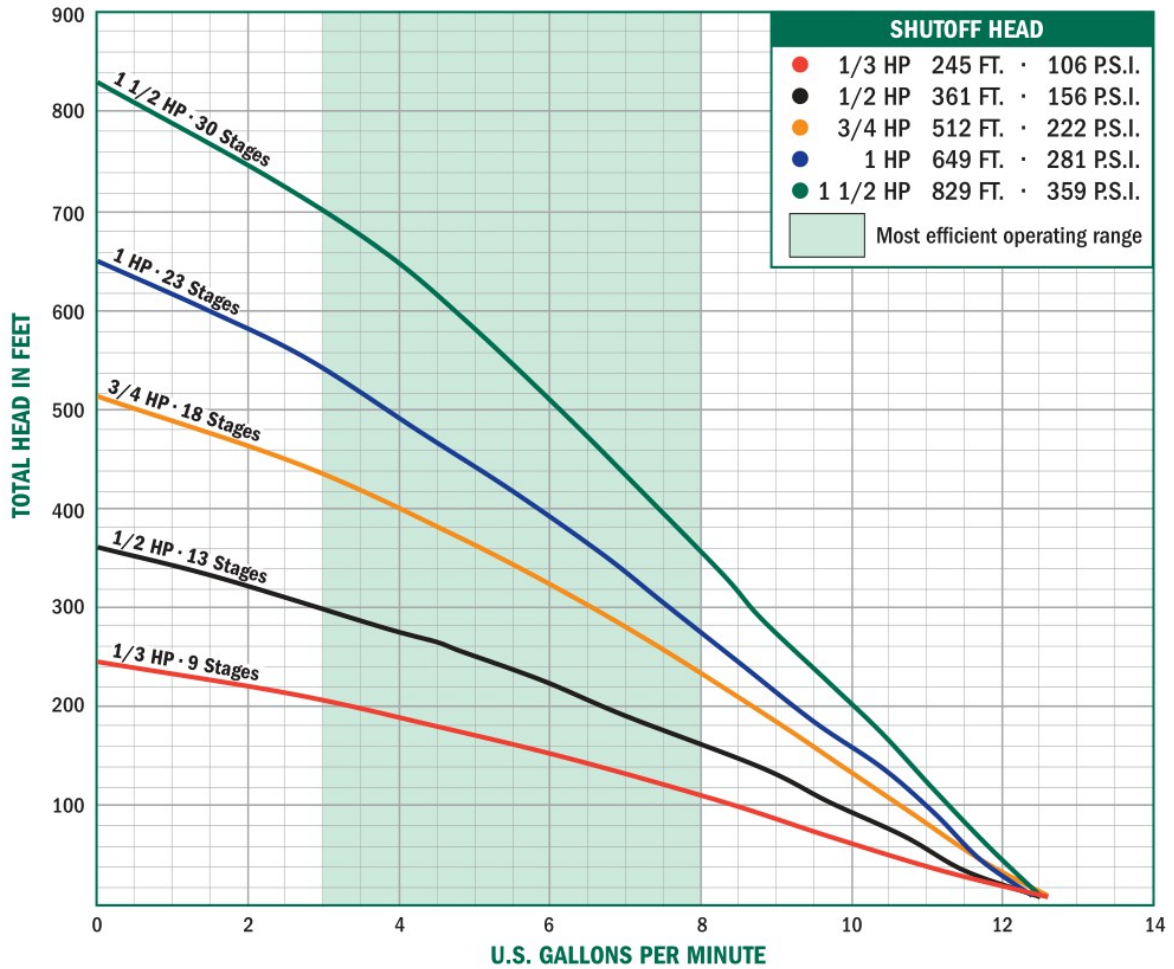
** All three wire pumps are available in three phase by selecting pump end and appropriate motor and starter kit (see pages 108-118).

Output - in Gallons Per Minute (Depth to Water)

| HP | PSI | 25' | 50' | 75' | 100' | 125' | 150' | 175' | 200' | 225' | | | | | | | | | |
|-----|-----|------|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | 1/3 | 0 | 11.7 | 10.6 | 9.5 | 8.4 | 7.3 | 6.1 | 4.8 | 3.4 | 1.8 | | | | | | | | |
| 1/2 | 30 | 8.6 | 7.5 | 6.4 | 5.1 | 3.8 | 2.2 | | | | | | | | | | | | |
| | 40 | 7.6 | 6.4 | 5.2 | 3.9 | 2.3 | | | | | | | | | | | | | |
| | 50 | 6.5 | 5.3 | 4.0 | 2.5 | | | | | | | | | | | | | | |
| | 60 | | | | | | | | | | | | | | | | | | |
| 3/4 | 30 | 10.8 | 10.3 | 9.8 | 9.3 | 8.8 | 8.3 | 7.7 | 7.2 | 6.6 | 6.1 | 5.5 | 4.9 | 4.2 | 3.5 | 2.7 | 1.9 | | |
| | 40 | 9.3 | 8.6 | 7.8 | 7.0 | 6.2 | 5.3 | 4.4 | 3.3 | 2.2 | | | | | | | | | |
| | 50 | 8.6 | 7.9 | 7.1 | 6.3 | 5.4 | 4.4 | 3.4 | 2.3 | | | | | | | | | | |
| | 60 | 7.9 | 7.2 | 6.3 | 5.5 | 4.5 | 3.5 | 2.3 | | | | | | | | | | | |
| 1 | 30 | 12.2 | 11.7 | 11.2 | 10.7 | 10.2 | 9.7 | 9.2 | 8.7 | 8.1 | 7.6 | 7.1 | 6.5 | 5.9 | 5.3 | 4.7 | 4.0 | 3.3 | 2.6 |
| | 40 | 10.3 | 9.8 | 9.3 | 8.8 | 8.3 | 7.8 | 7.2 | 6.7 | 6.1 | 5.5 | 4.9 | 4.3 | 3.6 | 2.8 | 2.0 | | | |
| | 50 | 9.9 | 9.4 | 8.9 | 8.3 | 7.8 | 7.3 | 6.7 | 6.2 | 5.6 | 4.9 | 4.3 | 3.6 | 2.9 | 2.0 | | | | |
| | 60 | 9.4 | 8.9 | 8.4 | 7.9 | 7.3 | 6.8 | 6.2 | 5.6 | 5.0 | 4.4 | 3.7 | 2.9 | 2.1 | | | | | |

FRICITION LOSSES IN RISER PIPE
HAVE NOT BEEN CALCULATED

J - 5 GPM



Submersible Pumps

| | PSI | 50' | 100' | 150' | 200' | 250' | 300' | 350' | 400' | 450' | 500' | 550' | 600' | |
|-----------------|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1 HP | 0 | 11.7 | 10.9 | 10.1 | 9.3 | 8.4 | 7.6 | 6.7 | 5.8 | 4.9 | 3.9 | 2.7 | 1.5 | |
| | 30 | 10.6 | 9.8 | 9.0 | 8.1 | 7.3 | 6.4 | 5.5 | 4.5 | 3.4 | 2.3 | | | |
| | 40 | 10.2 | 9.4 | 8.6 | 7.7 | 6.9 | 6.0 | 5.0 | 4.0 | 2.9 | 1.7 | | | |
| | 50 | 9.9 | 9.0 | 8.2 | 7.3 | 6.4 | 5.5 | 4.6 | 3.5 | 2.4 | | | | |
| | 60 | 9.5 | 8.6 | 7.8 | 6.9 | 6.0 | 5.1 | 4.1 | 3.0 | 1.8 | | | | |
| | | | | | | | | | | | | | | |
| | PSI | 50' | 100' | 150' | 200' | 250' | 300' | 350' | 400' | 450' | 500' | 550' | 600' | 650' |
| 1 1/2 HP | 0 | 15.9 | 15.1 | 14.3 | 13.4 | 12.4 | 11.4 | 10.4 | 9.2 | 7.9 | 6.5 | 5.0 | 3.4 | 1.6 |
| | 30 | 14.8 | 13.9 | 13.0 | 12.1 | 11.0 | 9.9 | 8.7 | 7.4 | 5.9 | 4.4 | 2.7 | | |
| | 40 | 14.4 | 13.5 | 12.6 | 11.6 | 10.5 | 9.4 | 8.1 | 6.7 | 5.2 | 3.6 | 1.9 | | |
| | 50 | 14.0 | 13.1 | 12.1 | 11.1 | 10.0 | 8.8 | 7.5 | 6.0 | 4.5 | 2.8 | | | |
| | 60 | 13.6 | 12.7 | 11.7 | 10.6 | 9.5 | 8.2 | 6.8 | 5.3 | 3.7 | 2.0 | | | |
| | | | | | | | | | | | | | | |

FRICITION LOSSES IN RISER PIPE HAVE NOT BEEN CALCULATED

23000 Series - Domestic Stainless Steel

V - 7 GPM

A.Y. McDonald offers a full line of stainless steel submersible pumps built for years of trouble free operation, with high-efficiency impellers and diffusers. These submersibles offer peak capacity performance in 5, 7, 10, 15, 20, and 25 gallons per minute (GPM). Other features include stainless steel discharge head with a built-in check valve, and stainless steel shaft and coupling.

All Stainless Steel Pumps come with a 1 1/4" discharge and sizes range from 1/3 to 2 horsepower (HP). Two wire models up to 1 1/2 and three wire models up to 2 horsepower (HP).

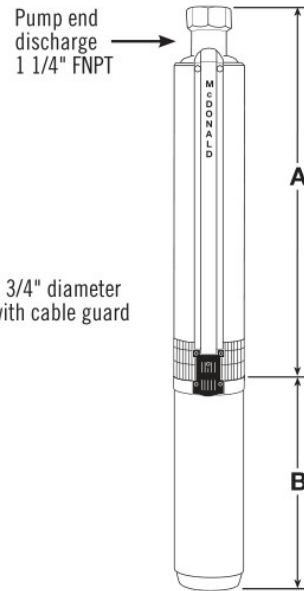
Submersible Pumps

Two Wire Single Phase

| Model No. | HP | Stages | Volt | A | B | WT. |
|-----------|-------|--------|------|--------|--------|-----|
| 23030V2A* | 1/3 | 6 | 115 | 11.1" | 9.53" | 24 |
| 23030V2* | 1/3 | 6 | 230 | 11.1" | 9.53" | 25 |
| 23050V2A | 1/2 | 9 | 115 | 13.48" | 9.53" | 26 |
| 23050V2 | 1/2 | 9 | 230 | 13.48" | 9.53" | 26 |
| 23075V2 | 3/4 | 12 | 230 | 15.92" | 10.66" | 30 |
| 23100V2 | 1 | 16 | 230 | 19.11" | 11.75" | 34 |
| 23150V2 | 1 1/2 | 21 | 230 | 23.58" | 15.12" | 46 |

Three Wire** Single Phase

| Model No. | HP | Stages | Volt | A | B | WT. |
|-----------|-------|--------|------|--------|--------|-----|
| 23030V3A* | 1/3 | 6 | 115 | 11.1" | 9.53" | 25 |
| 23030V3* | 1/3 | 6 | 230 | 11.1" | 9.53" | 25 |
| 23050V3A | 1/2 | 9 | 115 | 13.48" | 9.53" | 26 |
| 23050V3 | 1/2 | 9 | 230 | 13.48" | 9.53" | 26 |
| 23075V3 | 3/4 | 12 | 230 | 15.92" | 10.66" | 30 |
| 23100V3 | 1 | 16 | 230 | 19.11" | 11.75" | 35 |
| 23150V3 | 1 1/2 | 21 | 230 | 23.58" | 13.62" | 41 |
| 23200V3 | 2 | 26 | 230 | 28.34" | 15.12" | 49 |



4" Stainless Steel Pump Ends

| Model No. | HP | WT. |
|-----------|-------|-----|
| 23030V | 1/3 | 9 |
| 23050V | 1/2 | 10 |
| 23075V | 3/4 | 13 |
| 23100V | 1 | 11 |
| 23150V | 1 1/2 | 16 |
| 23200V | 2 | 18 |

* All one-third horsepower pumps are furnished with one-half horsepower motors (and control boxes where applicable).

** All three wire pumps are available in three phase by selecting pump end and appropriate motor and starter kit (see pages 108-118).

Output - in Gallons Per Minute (Depth to Water)

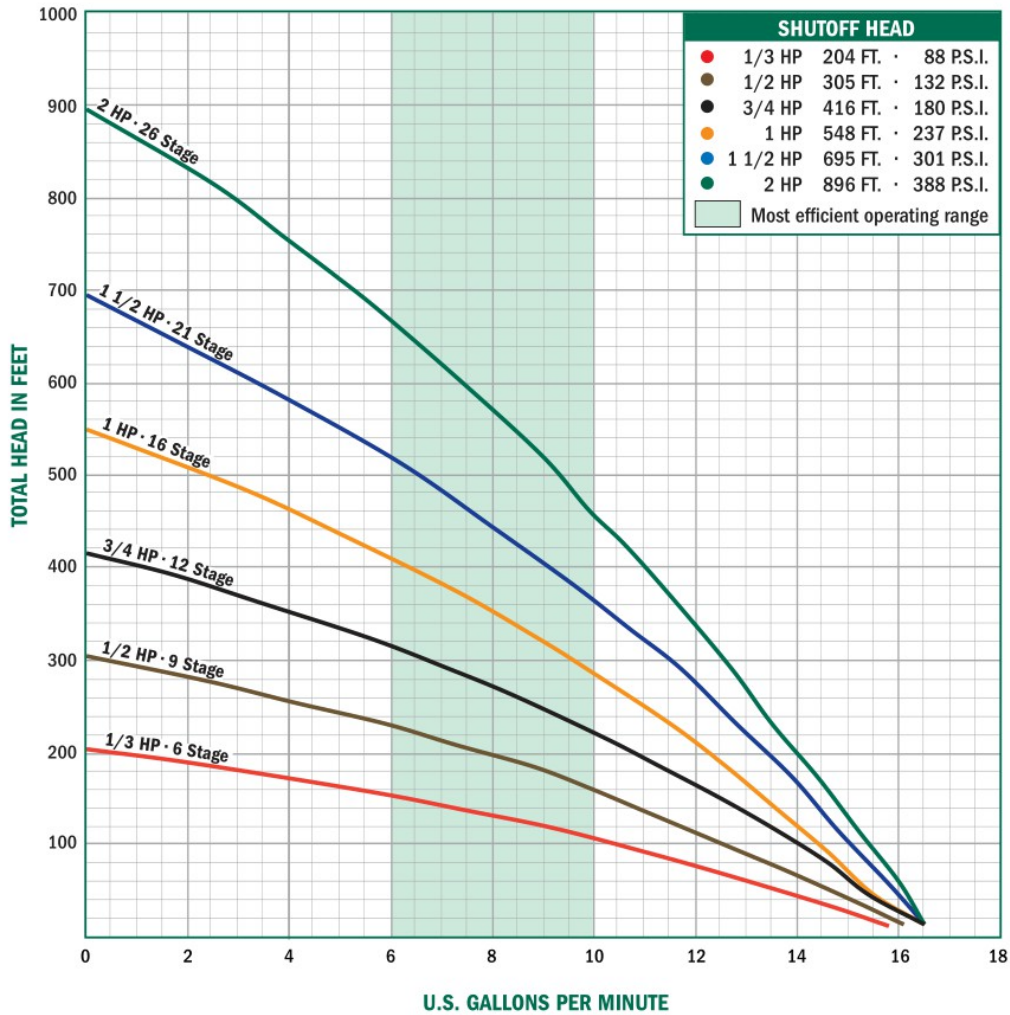
| 1/3 HP | PSI | 25' | 50' | 75' | 100' | 125' | 150' | 175' |
|--------|------|------|------|------|------|------|------|------|
| | 0 | 15.1 | 13.7 | 12.2 | 10.5 | 8.6 | 6.4 | 3.8 |
| 30 | 10.9 | 9.0 | 6.9 | 4.4 | 1.3 | | | |
| 40 | 9.2 | 7.1 | 4.6 | 1.6 | | | | |
| 50 | 7.2 | 4.8 | 1.9 | | | | | |

| 1/2 HP | PSI | 25' | 50' | 75' | 100' | 125' | 150' | 175' | 200' | 225' | 250' | 275' |
|--------|------|------|------|------|------|------|------|------|------|------|------|------|
| | 0 | 15.6 | 14.6 | 13.6 | 12.6 | 11.5 | 10.4 | 9.2 | 7.8 | 6.3 | 4.5 | 2.5 |
| 30 | 12.8 | 11.8 | 10.7 | 9.5 | 8.2 | 6.7 | 5.0 | 3.0 | | | | |
| 40 | 11.9 | 10.8 | 9.6 | 8.3 | 6.8 | 5.1 | 3.1 | | | | | |
| 50 | 10.9 | 9.7 | 8.4 | 6.9 | 5.2 | 3.3 | | | | | | |
| 60 | 9.8 | 8.5 | 7.0 | 5.4 | 3.4 | 1.3 | | | | | | |

| 3/4 HP | PSI | 25' | 50' | 75' | 100' | 125' | 150' | 175' | 200' | 225' | 250' | 275' | 300' | 325' | 350' | 375' |
|--------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | 0 | 16.1 | 15.5 | 14.8 | 14.0 | 13.3 | 12.5 | 11.6 | 10.8 | 9.9 | 8.9 | 7.8 | 6.7 | 5.5 | 4.2 | 2.8 |
| 30 | 14.2 | 13.4 | 12.7 | 11.8 | 11.0 | 10.1 | 9.1 | 8.1 | 7.0 | 5.8 | 4.5 | 3.1 | 1.5 | | | |
| 40 | 13.5 | 12.7 | 11.9 | 11.0 | 10.1 | 9.2 | 8.2 | 7.1 | 5.9 | 4.6 | 3.2 | 1.7 | | | | |
| 50 | 12.8 | 12.0 | 11.1 | 10.2 | 9.3 | 8.2 | 7.2 | 6.0 | 4.7 | 3.3 | 1.8 | | | | | |
| 60 | 12.0 | 11.2 | 10.3 | 9.3 | 8.3 | 7.2 | 6.1 | 4.8 | 3.4 | 1.9 | | | | | | |

FRICITION LOSSES IN RISER PIPE HAVE NOT BEEN CALCULATED

V - 7 GPM



Submersible Pumps

| 1 HP | PSI | 25' | 50' | 75' | 100' | 125' | 150' | 175' | 200' | 225' | 250' | 275' | 300' | 325' | 350' | 375' | 400' | 425' | 450' | 475' |
|---------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | 0 | 16.1 | 15.5 | 15.0 | 14.4 | 13.9 | 13.3 | 12.8 | 12.2 | 11.6 | 11.0 | 10.3 | 9.6 | 8.9 | 8.1 | 7.2 | 6.3 | 5.4 | 4.5 | 3.5 |
| 30 | 14.5 | 14.0 | 13.5 | 12.9 | 12.3 | 11.8 | 11.1 | 10.5 | 9.8 | 9.1 | 8.3 | 7.4 | 6.6 | 5.6 | 4.7 | 3.7 | 2.7 | | | |
| 40 | 14.0 | 13.5 | 12.9 | 12.4 | 11.8 | 11.2 | 10.5 | 9.9 | 9.1 | 8.3 | 7.5 | 6.6 | 5.7 | 4.7 | 3.8 | 2.8 | | | | |
| 50 | 13.5 | 13.0 | 12.4 | 11.8 | 11.2 | 10.6 | 9.9 | 9.2 | 8.4 | 7.6 | 6.7 | 5.8 | 4.8 | 3.8 | 2.8 | | | | | |
| 60 | 13.0 | 12.5 | 11.9 | 11.3 | 10.6 | 10.0 | 9.2 | 8.5 | 7.6 | 6.8 | 5.8 | 4.9 | 3.9 | 2.9 | 1.9 | | | | | |

| 1 1/2 HP | PSI | 50' | 100' | 150' | 200' | 250' | 300' | 350' | 400' | 450' | 500' | 550' | 600' | 650' |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | 0 | 15.9 | 15.1 | 14.3 | 13.4 | 12.4 | 11.4 | 10.4 | 9.2 | 7.9 | 6.5 | 5.0 | 3.4 | 1.6 |
| 30 | 14.8 | 13.9 | 13.0 | 12.1 | 11.0 | 9.9 | 8.7 | 7.4 | 5.9 | 4.4 | 2.7 | | | |
| 40 | 14.4 | 13.5 | 12.6 | 11.6 | 10.5 | 9.4 | 8.1 | 6.7 | 5.2 | 3.6 | 1.9 | | | |
| 50 | 14.0 | 13.1 | 12.1 | 11.1 | 10.0 | 8.8 | 7.5 | 6.0 | 4.5 | 2.8 | | | | |
| 60 | 13.6 | 12.7 | 11.7 | 10.6 | 9.5 | 8.2 | 6.8 | 5.3 | 3.7 | 2.0 | | | | |

| 2 HP | PSI | 50' | 100' | 150' | 200' | 250' | 300' | 350' | 400' | 450' | 500' | 550' | 600' | 650' | 700' | 750' | 800' | 850' |
|---------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | 0 | 16.1 | 15.4 | 14.7 | 14.0 | 13.3 | 12.6 | 11.8 | 11.0 | 10.2 | 9.3 | 8.4 | 7.4 | 6.4 | 5.3 | 4.1 | 2.9 | 1.5 |
| 30 | 15.1 | 14.5 | 13.8 | 13.0 | 12.3 | 11.5 | 10.7 | 9.8 | 8.9 | 8.0 | 7.0 | 6.0 | 4.9 | 3.7 | 2.3 | | | |
| 40 | 14.8 | 14.1 | 13.4 | 12.7 | 11.9 | 11.1 | 10.3 | 9.4 | 8.5 | 7.6 | 6.5 | 5.5 | 4.3 | 3.1 | 1.7 | | | |
| 50 | 14.5 | 13.8 | 13.1 | 12.3 | 11.5 | 10.7 | 9.9 | 9.0 | 8.1 | 7.1 | 6.1 | 4.9 | 3.8 | 2.4 | | | | |
| 60 | 14.2 | 13.5 | 12.7 | 12.0 | 11.2 | 10.3 | 9.5 | 8.6 | 7.6 | 6.6 | 5.6 | 4.4 | 3.2 | 1.8 | | | | |

FRICITION LOSSES IN RISER PIPE HAVE NOT BEEN CALCULATED

23000 Series - Domestic Stainless Steel

K - 10 GPM

A.Y. McDonald offers a full line of stainless steel submersible pumps built for years of trouble free operation, with high-efficiency impellers and diffusers. These submersibles offer peak capacity performance in 5, 7, 10, 15, 20, and 25 gallons per minute (GPM). Other features include stainless steel discharge head with a built-in check valve, and stainless steel shaft and coupling.

All Stainless Steel Pumps come with a 1 1/4" discharge and sizes range from 1/3 to 5 horsepower (HP). Two wire models up to 1 1/2 and three wire models up to 5 horsepower (HP).

Submersible Pumps

Two Wire Single Phase

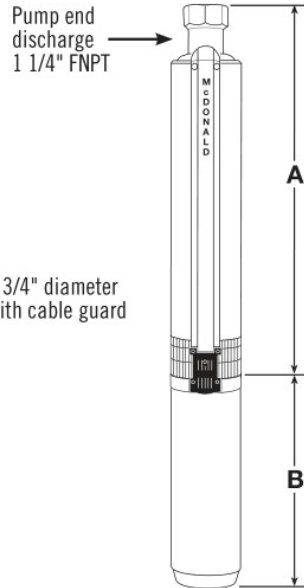
| Model No. | HP | Stages | Volt | A | B | WT. |
|-----------|-------|--------|------|--------|--------|-----|
| 23030K2A* | 1/3 | 5 | 115 | 10.51" | 9.53" | 18 |
| 23030K2* | 1/3 | 5 | 230 | 10.51" | 9.53" | 18 |
| 23050K2A | 1/2 | 7 | 115 | 12.15" | 9.53" | 25 |
| 23050K2 | 1/2 | 7 | 230 | 12.15" | 9.53" | 25 |
| 23075K2 | 3/4 | 9 | 230 | 13.84" | 10.66" | 28 |
| 23100K2 | 1 | 12 | 230 | 16.39" | 11.75" | 32 |
| 23150K2 | 1 1/2 | 16 | 230 | 21.05" | 15.12" | 40 |

Three Wire** Single Phase

| Model No. | HP | Stages | Volt | A | B | WT. |
|-----------|-------|--------|------|--------|--------|-----|
| 23030K3A* | 1/3 | 5 | 115 | 10.51" | 9.53" | 21 |
| 23030K3* | 1/3 | 5 | 230 | 10.51" | 9.53" | 21 |
| 23050K3A | 1/2 | 7 | 115 | 12.15" | 9.53" | 28 |
| 23050K3 | 1/2 | 7 | 230 | 12.15" | 9.53" | 28 |
| 23075K3 | 3/4 | 9 | 230 | 13.84" | 10.66" | 31 |
| 23100K3 | 1 | 12 | 230 | 16.39" | 11.75" | 35 |
| 23150K3 | 1 1/2 | 16 | 230 | 21.05" | 13.62" | 44 |
| 23200K3 | 2 | 20 | 230 | 24.48" | 15.12" | 46 |
| 23300K3 | 3 | 26 | 230 | 29.56" | 19.06" | 70 |
| 23500K3 | 5 | 33 | 230 | 35.49" | 29.62" | 89 |

Three Wire** Three Phase

| Model No. | HP | Stages | Volt | A | B | WT. |
|-----------|-------|--------|------|--------|--------|-----|
| 23150K3Z | 1 1/2 | 16 | 230 | 21.05" | 15.82" | 41 |
| 23150K3Y | 1 1/2 | 16 | 460 | 21.05" | 15.82" | 41 |
| 23200K3Z | 2 | 20 | 230 | 24.48" | 17.69" | 43 |
| 23300K3Z | 3 | 26 | 230 | 29.56" | 19.20" | 60 |
| 23500K3Z | 5 | 33 | 230 | 35.49" | 23.62" | 74 |



4" Stainless Steel Pump Ends

| Model No. | HP | WT. |
|-----------|-------|-----|
| 23030K | 1/3 | 7 |
| 23050K | 1/2 | 7 |
| 23075K | 3/4 | 8 |
| 23100K | 1 | 9 |
| 23150K | 1 1/2 | 11 |
| 23200K | 2 | 14 |
| 23300K | 3 | 16 |
| 23500K | 5 | 18 |

* All one-third horsepower pumps are furnished with one-half horsepower motors (and control boxes where applicable).

** All three wire pumps are available in three phase by selecting pump end and appropriate motor and starter kit (see pages 108-118).

Output - in Gallons Per Minute (Depth to Water)

| 1/3 HP | PSI | 25' | 50' | 75' | 100' | 125' | 150' | 175' |
|--------|-------|-------|-------|-------|-------|------|------|------|
| | 0 | 18.78 | 16.62 | 14.27 | 11.68 | 8.75 | 5.31 | 0.93 |
| 30 | 12.29 | 9.45 | 6.16 | 2.06 | | | | |
| 40 | 9.68 | 6.43 | 2.42 | | | | | |
| 50 | 6.70 | 2.76 | | | | | | |
| 60 | 3.10 | | | | | | | |

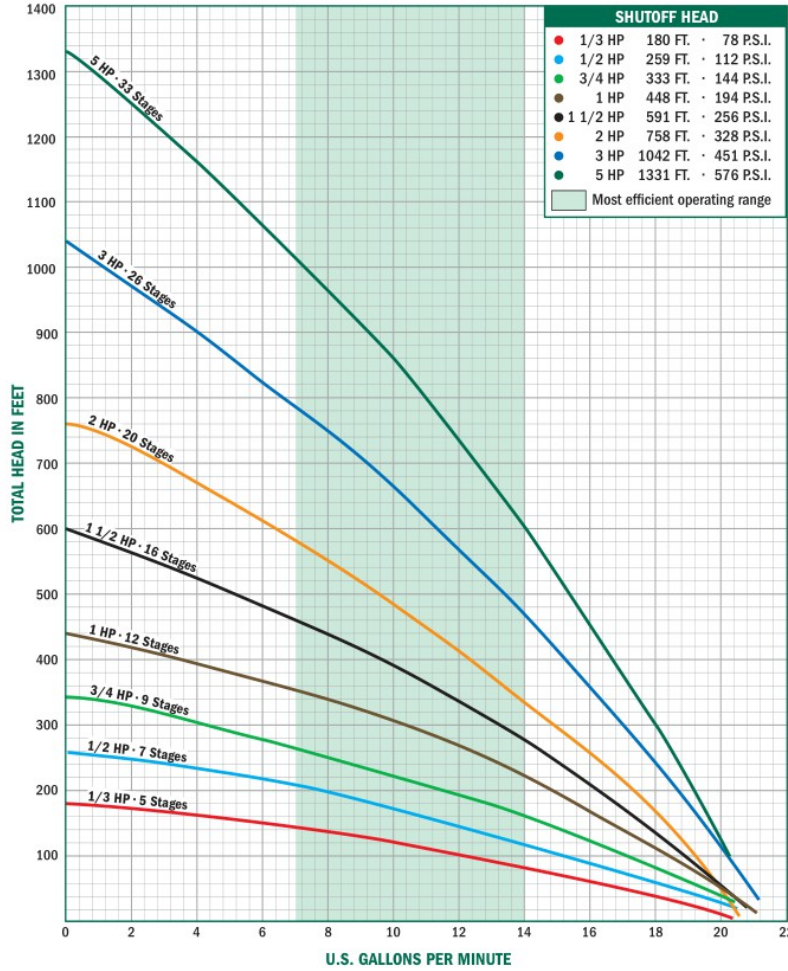
| 1/2 HP | PSI | 25' | 50' | 75' | 100' | 125' | 150' | 175' | 200' | 225' | 250' |
|--------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|
| | 0 | 19.90 | 18.49 | 16.99 | 15.40 | 13.69 | 11.84 | 9.79 | 7.49 | 4.78 | 1.32 |
| 30 | 15.77 | 14.09 | 12.27 | 10.28 | 8.04 | 5.44 | 2.21 | | | | |
| 40 | 14.22 | 12.42 | 10.44 | 8.22 | 5.66 | 2.49 | | | | | |
| 50 | 12.56 | 10.60 | 8.40 | 5.87 | 2.76 | | | | | | |
| 60 | 10.75 | 8.58 | 6.08 | 3.03 | | | | | | | |

| 3/4 HP | PSI | 25' | 50' | 75' | 100' | 125' | 150' | 175' | 200' | 225' | 250' | 275' | 300' | 325' |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|------|
| | 0 | 20.36 | 19.26 | 18.12 | 16.93 | 15.67 | 14.35 | 12.95 | 11.45 | 9.83 | 8.05 | 6.06 | 3.75 | 0.89 |
| 30 | 17.20 | 15.97 | 14.66 | 13.28 | 11.80 | 10.21 | 8.47 | 6.54 | 4.31 | 1.61 | | | | |
| 40 | 16.06 | 14.76 | 13.39 | 11.92 | 10.34 | 8.61 | 6.69 | 4.49 | 1.84 | | | | | |
| 50 | 14.86 | 13.49 | 12.03 | 10.46 | 8.75 | 6.85 | 4.67 | 2.07 | | | | | | |
| 60 | 13.60 | 12.15 | 10.59 | 8.89 | 7.00 | 4.85 | 2.29 | | | | | | | |

FRICITION LOSSES IN RISER PIPE HAVE NOT BEEN CALCULATED

| 1 HP | PSI | 25' | 50' | 75' | 100' | 125' | 150' | 175' | 200' | 225' | 250' | 275' | 300' | 325' | 350' | 375' | 400' | 425' |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|------|
| | 0 | 20.86 | 20.05 | 19.22 | 18.36 | 17.47 | 16.55 | 15.60 | 14.61 | 13.57 | 12.48 | 11.33 | 10.10 | 8.79 | 7.37 | 5.81 | 4.06 | 2.00 |
| 30 | 18.56 | 17.68 | 16.77 | 15.82 | 14.84 | 13.81 | 12.73 | 11.59 | 10.39 | 9.10 | 7.71 | 6.18 | 4.48 | 2.51 | 0.09 | | | |
| 40 | 17.75 | 16.84 | 15.89 | 14.91 | 13.89 | 12.81 | 11.68 | 10.48 | 9.20 | 7.82 | 6.30 | 4.61 | 2.67 | 0.29 | | | | |
| 50 | 16.91 | 15.97 | 14.99 | 13.97 | 12.90 | 11.77 | 10.58 | 9.30 | 7.93 | 6.42 | 4.75 | 2.83 | 0.50 | | | | | |
| 60 | 16.04 | 15.06 | 14.05 | 12.98 | 11.86 | 10.67 | 9.40 | 8.04 | 6.54 | 4.89 | 2.99 | 0.70 | | | | | | |

K - 10 GPM



Submersible Pumps

Output - in Gallons Per Minute (Depth to Water) - Continued

| PSI | 50' | 100' | 150' | 200' | 250' | 300' | 350' | 400' | 450' | 500' | 550' | | | | | | | | | | | | | | | | |
|-----------------|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|------|
| 1 1/2 HP | 0 | 20.18 | 18.95 | 17.66 | 16.31 | 14.87 | 13.34 | 11.69 | 9.89 | 7.88 | 5.58 | 2.80 | | | | | | | | | | | | | | | |
| | 30 | 18.46 | 17.15 | 15.76 | 14.29 | 12.72 | 11.01 | 9.14 | 7.03 | 4.58 | 1.51 | | | | | | | | | | | | | | | | |
| | 40 | 17.86 | 16.52 | 15.09 | 13.58 | 11.95 | 10.17 | 8.20 | 5.95 | 3.27 | | | | | | | | | | | | | | | | | |
| | 50 | 17.25 | 15.87 | 14.41 | 12.84 | 11.15 | 9.29 | 7.20 | 4.78 | 1.78 | | | | | | | | | | | | | | | | | |
| | 60 | 16.62 | 15.21 | 13.70 | 12.08 | 10.31 | 8.36 | 6.14 | 3.49 | 0.02 | | | | | | | | | | | | | | | | | |
| PSI | 50' | 100' | 150' | 200' | 250' | 300' | 350' | 400' | 450' | 500' | 550' | 600' | 650' | 700' | 750' | | | | | | | | | | | | |
| 2 HP | 0 | 19.85 | 18.89 | 17.89 | 16.85 | 15.78 | 14.66 | 13.49 | 12.26 | 10.96 | 9.59 | 8.11 | 6.51 | 4.75 | 2.77 | 0.46 | | | | | | | | | | | |
| | 30 | 18.51 | 17.49 | 16.44 | 15.35 | 14.21 | 13.02 | 11.77 | 10.44 | 9.03 | 7.51 | 5.85 | 4.02 | 1.93 | | | | | | | | | | | | | |
| | 40 | 18.04 | 17.01 | 15.94 | 14.83 | 13.67 | 12.45 | 11.17 | 9.80 | 8.34 | 6.76 | 5.03 | 3.09 | 0.84 | | | | | | | | | | | | | |
| | 50 | 17.57 | 16.52 | 15.44 | 14.30 | 13.11 | 11.87 | 10.55 | 9.14 | 7.63 | 5.98 | 4.16 | 2.10 | | | | | | | | | | | | | | |
| | 60 | 17.09 | 16.03 | 14.92 | 13.76 | 12.55 | 11.27 | 9.91 | 8.46 | 6.89 | 5.17 | 3.25 | 1.02 | | | | | | | | | | | | | | |
| PSI | 50' | 100' | 150' | 200' | 250' | 300' | 350' | 400' | 450' | 500' | 550' | 600' | 650' | 700' | 750' | 800' | 850' | 900' | 950' | 1000' | | | | | | | |
| 3 HP | 0 | 21.05 | 20.27 | 19.48 | 18.67 | 17.84 | 16.99 | 16.11 | 15.22 | 14.30 | 13.35 | 12.36 | 11.35 | 10.30 | 9.20 | 8.05 | 6.85 | 5.59 | 4.24 | 2.81 | 0.62 | | | | | | |
| | 30 | 19.97 | 19.17 | 18.35 | 17.51 | 16.65 | 15.77 | 14.87 | 13.93 | 12.97 | 11.98 | 10.95 | 9.88 | 8.76 | 7.60 | 6.37 | 5.08 | 3.70 | 2.23 | | | | | | | | |
| | 40 | 19.60 | 18.79 | 17.96 | 17.12 | 16.25 | 15.36 | 14.44 | 13.49 | 12.52 | 11.51 | 10.46 | 9.37 | 8.23 | 7.04 | 5.78 | 4.45 | 3.03 | 1.50 | | | | | | | | |
| | 50 | 19.23 | 18.41 | 17.58 | 16.72 | 15.84 | 14.94 | 14.01 | 13.05 | 12.05 | 11.03 | 9.96 | 8.85 | 7.69 | 6.47 | 5.18 | 3.81 | 2.34 | 0.75 | | | | | | | | |
| | 60 | 18.85 | 18.03 | 17.18 | 16.32 | 15.43 | 14.51 | 13.57 | 12.59 | 11.58 | 10.54 | 9.45 | 8.32 | 7.13 | 5.88 | 4.56 | 3.14 | 1.62 | | | | | | | | | |
| PSI | 50' | 100' | 150' | 200' | 250' | 300' | 350' | 400' | 450' | 500' | 550' | 600' | 650' | 700' | 750' | 800' | 850' | 900' | 950' | 1000' | 1050' | 1100' | 1150' | 1200' | 1250' | 1300' | |
| 5 HP | 0 | 20.96 | 20.39 | 19.81 | 19.22 | 18.62 | 18.01 | 17.38 | 16.74 | 16.09 | 15.42 | 14.74 | 14.04 | 13.32 | 12.58 | 11.82 | 11.04 | 10.22 | 9.38 | 8.51 | 7.60 | 6.64 | 5.64 | 4.58 | 3.45 | 2.24 | 0.93 |
| | 30 | 20.17 | 19.59 | 18.99 | 18.39 | 17.77 | 17.14 | 16.49 | 15.84 | 15.16 | 14.47 | 13.77 | 13.04 | 12.29 | 11.52 | 10.73 | 9.90 | 9.05 | 8.16 | 7.23 | 6.26 | 5.24 | 4.15 | 3.00 | 1.75 | 0.39 | |
| | 40 | 19.90 | 19.31 | 18.71 | 18.10 | 17.48 | 16.84 | 16.19 | 15.53 | 14.85 | 14.15 | 13.43 | 12.70 | 11.94 | 11.16 | 10.35 | 9.51 | 8.64 | 7.74 | 6.79 | 5.80 | 4.75 | 3.63 | 2.43 | 1.14 | | |
| | 50 | 19.63 | 19.04 | 18.43 | 17.82 | 17.19 | 16.54 | 15.89 | 15.21 | 14.53 | 13.82 | 13.09 | 12.35 | 11.58 | 10.79 | 9.97 | 9.11 | 8.23 | 7.31 | 6.34 | 5.32 | 4.24 | 3.09 | 1.85 | 0.50 | | |
| | 60 | 19.36 | 18.76 | 18.15 | 17.53 | 16.89 | 16.24 | 15.58 | 14.90 | 14.20 | 13.49 | 12.75 | 12.00 | 11.22 | 10.41 | 9.58 | 8.71 | 7.81 | 6.86 | 5.87 | 4.83 | 3.72 | 2.53 | 1.24 | | | |

FRICITION LOSSES IN RISER PIPE HAVE NOT BEEN CALCULATED

23000 Series - Domestic Stainless Steel

L - 15 GPM

A.Y. McDonald offers a full line of stainless steel submersible pumps built for years of trouble free operation, with high-efficiency impellers and diffusers. These submersibles offer peak capacity performance in 5, 7, 10, 15, 20, and 25 gallons per minute (GPM). Other features include stainless steel discharge head with a built-in check valve, and stainless steel shaft and coupling.

All Stainless Steel Pumps come with a 1 1/4" discharge and sizes range from 1/3 to 5 horsepower (HP). Two wire models up to 1 1/2 and three wire models up to 5 horsepower (HP).

Submersible Pumps

Two Wire Single Phase

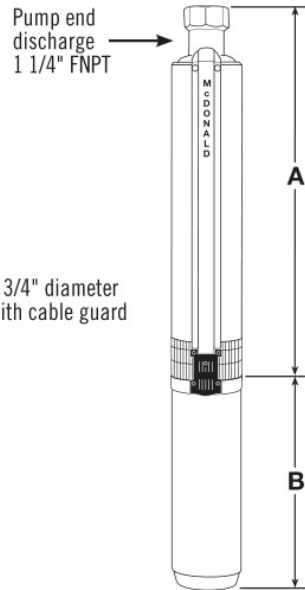
| Model No. | HP | Stages | Volt | A | B | WT. |
|-----------|-------|--------|------|--------|--------|-----|
| 23030L2A* | 1/3 | 5 | 115 | 12.02" | 9.53" | 24 |
| 23030L2* | 1/3 | 5 | 230 | 12.02" | 9.53" | 24 |
| 23050L2A | 1/2 | 6 | 115 | 13.09" | 9.53" | 24 |
| 23050L2 | 1/2 | 6 | 230 | 13.09" | 9.53" | 24 |
| 23075L2 | 3/4 | 8 | 230 | 15.25" | 10.66" | 28 |
| 23100L2 | 1 | 10 | 230 | 17.39" | 11.75" | 32 |
| 23150L2 | 1 1/2 | 13 | 230 | 20.61" | 15.12" | 40 |

Three Wire** Single Phase

| Model No. | HP | Stages | Volt | A | B | WT. |
|-----------|-------|--------|------|--------|--------|-----|
| 23030L3A* | 1/3 | 5 | 115 | 12.02" | 9.53" | 24 |
| 23030L3* | 1/3 | 5 | 230 | 12.02" | 9.53" | 24 |
| 23050L3A | 1/2 | 6 | 115 | 13.09" | 9.53" | 24 |
| 23050L3 | 1/2 | 6 | 230 | 13.09" | 9.53" | 24 |
| 23075L3 | 3/4 | 8 | 230 | 15.25" | 10.66" | 28 |
| 23100L3 | 1 | 10 | 230 | 17.39" | 11.75" | 32 |
| 23150L3 | 1 1/2 | 13 | 230 | 20.61" | 13.62" | 37 |
| 23200L3 | 2 | 17 | 230 | 24.91" | 15.12" | 44 |
| 23300L3 | 3 | 23 | 230 | 32.73" | 19.06" | 58 |
| 23500L3 | 5 | 35 | 230 | 45.60" | 29.62" | 85 |

Three Wire** Three Phase

| Model No. | HP | Stages | Volt | A | B | WT. |
|-----------|-------|--------|------|--------|--------|-----|
| 23150L3Z | 1 1/2 | 13 | 230 | 20.61" | 11.75" | 34 |
| 23200L3Z | 2 | 17 | 230 | 24.91" | 13.62" | 41 |
| 23300L3Z | 3 | 23 | 230 | 32.73" | 16.04" | 51 |
| 23500L3Z | 5 | 35 | 230 | 45.60" | 23.62" | 72 |



4" Stainless Steel Pump Ends

| Model No. | HP | WT. |
|-----------|-------|-----|
| 23030L | 1/3 | 7 |
| 23050L | 1/2 | 7 |
| 23075L | 3/4 | 8 |
| 23100L | 1 | 9 |
| 23150L | 1 1/2 | 10 |
| 23200L | 2 | 12 |
| 23300L | 3 | 15 |
| 23500L | 5 | 22 |

* All one-third horsepower pumps are furnished with one-half horsepower motors (and control boxes where applicable).

** All three wire pumps are available in three phase by selecting pump end and appropriate motor and starter kit (see pages 108-118).

Output - in Gallons Per Minute (Depth to Water)

| 1/3 HP | PSI | 25' | 50' | 75' | 100' | 125' |
|--------|-------|-------|-------|-------|-------|-------|
| | 0 | 27.82 | 24.66 | 21.05 | 16.70 | 10.79 |
| 30 | 17.79 | 12.38 | | | | |
| 40 | 12.86 | 2.69 | | | | |
| 50 | 4.29 | | | | | |

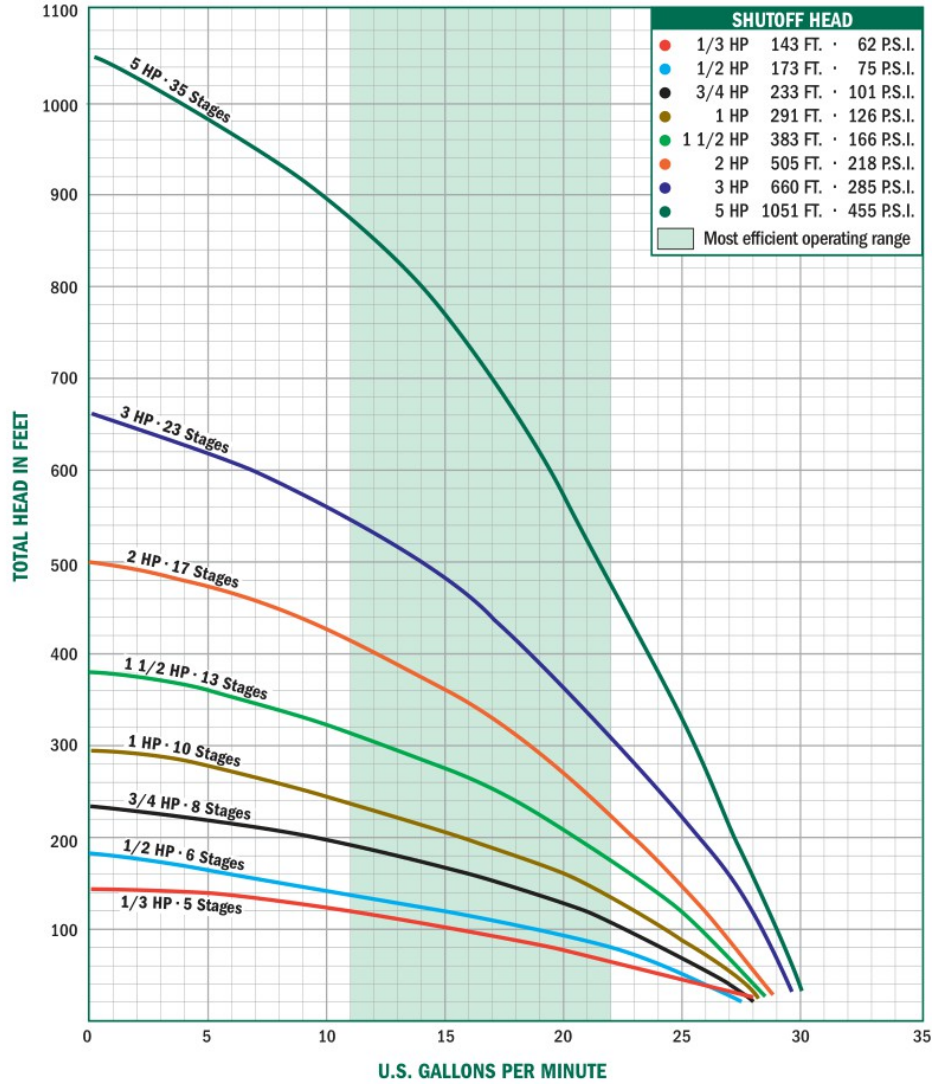
| 1/2 HP | PSI | 25' | 50' | 75' | 100' | 125' | 150' |
|--------|-------|-------|-------|-------|-------|-------|------|
| | 0 | 28.28 | 25.58 | 22.58 | 19.18 | 15.14 | 9.84 |
| 30 | 20.00 | 16.14 | 11.23 | 2.99 | | | |
| 40 | 16.46 | 11.66 | 3.99 | | | | |
| 50 | 12.08 | 4.85 | | | | | |
| 60 | 5.63 | | | | | | |

| 3/4 HP | PSI | 25' | 50' | 75' | 100' | 125' | 150' | 175' | 200' | 225' |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| | 0 | 28.58 | 26.69 | 24.66 | 22.46 | 20.05 | 17.33 | 14.17 | 10.21 | 4.08 |
| 30 | 22.98 | 20.62 | 17.98 | 14.94 | 11.22 | 5.91 | | | | |
| 40 | 20.81 | 18.19 | 15.19 | 11.54 | 6.43 | | | | | |
| 50 | 18.40 | 15.44 | 11.85 | 6.92 | | | | | | |
| 60 | 15.68 | 12.15 | 7.38 | | | | | | | |

| 1 HP | PSI | 25' | 50' | 75' | 100' | 125' | 150' | 175' | 200' | 225' | 250' | 300' |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|
| | 0 | 28.92 | 27.42 | 25.84 | 24.16 | 22.37 | 20.44 | 18.33 | 15.97 | 13.26 | 9.96 | 5.33 |
| 30 | 24.55 | 22.79 | 20.89 | 18.83 | 16.53 | 13.92 | 10.78 | 6.60 | | | | |
| 40 | 22.93 | 21.04 | 18.99 | 16.72 | 14.13 | 11.05 | 6.99 | | | | | |
| 50 | 21.19 | 19.15 | 16.90 | 14.34 | 11.31 | 7.36 | | | | | | |
| 60 | 19.31 | 17.08 | 14.55 | 11.56 | 7.71 | 0.50 | | | | | | |

FRICITION LOSSES IN RISER PIPE HAVE NOT BEEN CALCULATED

L - 15 GPM



Submersible Pumps

| 1 1/2 HP | PSI | 50' | 100' | 150' | 200' | 250' | 300' | 350' |
|----------|-----|-------|-------|-------|-------|-------|-------|------|
| | 0 | 28.02 | 25.72 | 23.20 | 20.39 | 17.15 | 13.20 | 7.62 |
| | 30 | 24.78 | 22.16 | 19.20 | 15.74 | 11.35 | 4.06 | |
| | 40 | 23.60 | 20.84 | 17.68 | 13.87 | 8.68 | | |
| | 50 | 22.37 | 19.44 | 16.03 | 11.73 | 4.93 | | |
| | 60 | 21.06 | 17.94 | 14.19 | 9.16 | | | |

| 2 HP | PSI | 50' | 100' | 150' | 200' | 250' | 300' | 350' | 400' | 450' | 500' |
|------|-----|-------|-------|-------|-------|-------|-------|-------|-------|------|------|
| | 0 | 28.57 | 26.81 | 24.93 | 22.92 | 20.74 | 18.34 | 15.61 | 12.40 | 8.28 | 0.77 |
| | 30 | 26.10 | 24.18 | 22.11 | 19.84 | 17.33 | 14.44 | 10.96 | 6.18 | | |
| | 40 | 25.23 | 23.24 | 21.09 | 18.72 | 16.05 | 12.93 | 9.00 | 2.66 | | |
| | 50 | 24.33 | 22.27 | 20.02 | 17.53 | 14.68 | 11.25 | 6.63 | | | |
| | 60 | 23.40 | 21.26 | 18.91 | 16.27 | 13.19 | 9.34 | 3.38 | | | |

| 3 HP | PSI | 50' | 100' | 150' | 200' | 250' | 300' | 350' | 400' | 450' | 500' | 550' | 600' | 650' |
|------|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|
| | 0 | 29.55 | 28.24 | 26.88 | 25.45 | 23.93 | 22.33 | 20.60 | 18.73 | 16.67 | 14.34 | 11.60 | 8.12 | 2.19 |
| | 30 | 27.72 | 26.34 | 24.87 | 23.33 | 21.67 | 19.90 | 17.96 | 15.80 | 13.34 | 10.38 | 6.38 | | |
| | 40 | 27.09 | 25.67 | 24.17 | 22.58 | 20.87 | 19.02 | 16.99 | 14.71 | 12.05 | 8.72 | 3.56 | | |
| | 50 | 26.44 | 24.99 | 23.45 | 21.80 | 20.04 | 18.11 | 15.98 | 13.54 | 10.63 | 6.75 | | | |
| | 60 | 25.78 | 24.29 | 22.70 | 21.01 | 19.17 | 17.16 | 14.90 | 12.27 | 9.01 | 4.12 | | | |

FRICITION LOSSES IN RISER PIPE HAVE NOT BEEN CALCULATED

| 5 HP | PSI | 50' | 100' | 150' | 200' | 250' | 300' | 350' | 400' | 450' | 500' | 550' | 600' | 650' | 700' | 750' | 800' | 850' | 900' | 950' | 1000' |
|------|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|
| | 0 | 29.70 | 28.91 | 28.10 | 27.27 | 26.42 | 25.54 | 24.62 | 23.68 | 22.69 | 21.67 | 20.59 | 19.47 | 18.27 | 17.00 | 15.63 | 14.14 | 12.49 | 10.61 | 8.38 | 5.43 |
| | 30 | 28.60 | 27.79 | 26.95 | 26.08 | 25.19 | 24.26 | 23.30 | 22.30 | 21.26 | 20.17 | 19.01 | 17.79 | 16.48 | 15.07 | 13.53 | 11.80 | 9.80 | 7.36 | 3.85 | |
| | 40 | 28.23 | 27.40 | 26.55 | 25.67 | 24.76 | 23.82 | 22.85 | 21.83 | 20.76 | 19.64 | 18.46 | 17.20 | 15.85 | 14.38 | 12.75 | 10.92 | 8.75 | 5.95 | 0.69 | |
| | 50 | 27.85 | 27.01 | 26.15 | 25.26 | 24.33 | 23.38 | 22.38 | 21.34 | 20.25 | 19.10 | 17.89 | 16.59 | 15.18 | 13.65 | 11.94 | 9.97 | 7.57 | 4.20 | | |
| | 60 | 27.47 | 26.62 | 25.74 | 24.83 | 23.90 | 22.92 | 21.91 | 20.84 | 19.73 | 18.55 | 17.30 | 15.95 | 14.49 | 12.88 | 11.07 | 8.93 | 6.20 | 1.48 | | |

23000 Series - Domestic Stainless Steel

P - 20 GPM

A.Y. McDonald offers a full line of stainless steel submersible pumps built for years of trouble free operation, with high-efficiency impellers and diffusers. These submersibles offer peak capacity performance in 5, 7, 10, 15, 20, and 25 gallons per minute (GPM). Other features include stainless steel discharge head with a built-in check valve, and stainless steel shaft and coupling.

All Stainless Steel Pumps come with a 1 1/4" discharge and sizes range from 1/2 to 5 horsepower (HP). Two wire models up to 1 1/2 and three wire models up to 5 horsepower (HP).

Submersible Pumps

Two Wire Single Phase

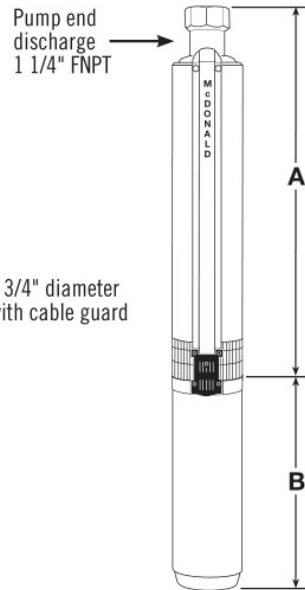
| Model No. | HP | Stages | Volt | A | B | WT. |
|-----------|-------|--------|------|--------|--------|-----|
| 23050P2A | 1/2 | 5 | 115 | 12.02" | 9.53" | 24 |
| 23050P2 | 1/2 | 5 | 230 | 12.02" | 9.53" | 24 |
| 23075P2 | 3/4 | 7 | 230 | 14.17" | 10.66" | 28 |
| 23100P2 | 1 | 9 | 230 | 16.32" | 11.75" | 32 |
| 23150P2 | 1 1/2 | 12 | 230 | 19.54" | 15.12" | 42 |

Three Wire** Single Phase

| Model No. | HP | Stages | Volt | A | B | WT. |
|-----------|-------|--------|------|--------|--------|-----|
| 23050P3A | 1/2 | 5 | 115 | 12.02" | 9.53" | 24 |
| 23050P3 | 1/2 | 5 | 230 | 12.02" | 9.53" | 24 |
| 23075P3 | 3/4 | 7 | 230 | 14.17" | 10.66" | 27 |
| 23100P3 | 1 | 9 | 230 | 16.32" | 11.75" | 32 |
| 23150P3 | 1 1/2 | 12 | 230 | 19.54" | 13.62" | 38 |
| 23200P3 | 2 | 14 | 230 | 21.69" | 15.12" | 43 |
| 23300P3 | 3 | 20 | 230 | 29.50" | 19.06" | 56 |
| 23500P3 | 5 | 32 | 230 | 42.38" | 29.62" | 84 |

Three Wire Three Phase

| Model No. | HP | Stages | Volt | A | B | WT. |
|-----------|-------|--------|------|--------|--------|-----|
| 23150P3Z | 1 1/2 | 12 | 230 | 19.54" | 11.75" | 35 |
| 23200P3Z | 2 | 14 | 230 | 21.69" | 13.62" | 40 |
| 23300P3Z | 3 | 20 | 230 | 29.50" | 16.04" | 49 |
| 23500P3Z | 5 | 32 | 230 | 42.38" | 23.62" | 72 |
| 23500P3Y | 5 | 32 | 460 | 42.38" | 23.62" | 72 |



4" Stainless Steel Pump Ends

| Model No. | HP | WT. |
|-----------|-------|-----|
| 23050P | 1/2 | 6 |
| 23075P | 3/4 | 8 |
| 23100P | 1 | 9 |
| 23150P | 1 1/2 | 10 |
| 23200P | 2 | 11 |
| 23300P | 3 | 14 |
| 23500P | 5 | 22 |

** All three wire pumps are available in three phase by selecting pump end and appropriate motor and starter kit (see pages 108-118).

Output - in Gallons Per Minute (Depth to Water)

| 1/2 HP | PSI | 25' | 50' | 75' | 100' | 125' |
|--------|-------|-------|-------|-------|-------|-------|
| | 0 | 32.34 | 28.61 | 24.35 | 19.26 | 12.48 |
| 30 | 20.53 | 14.28 | 2.68 | | | |
| 40 | 14.83 | 4.36 | | | | |
| 50 | 5.68 | | | | | |

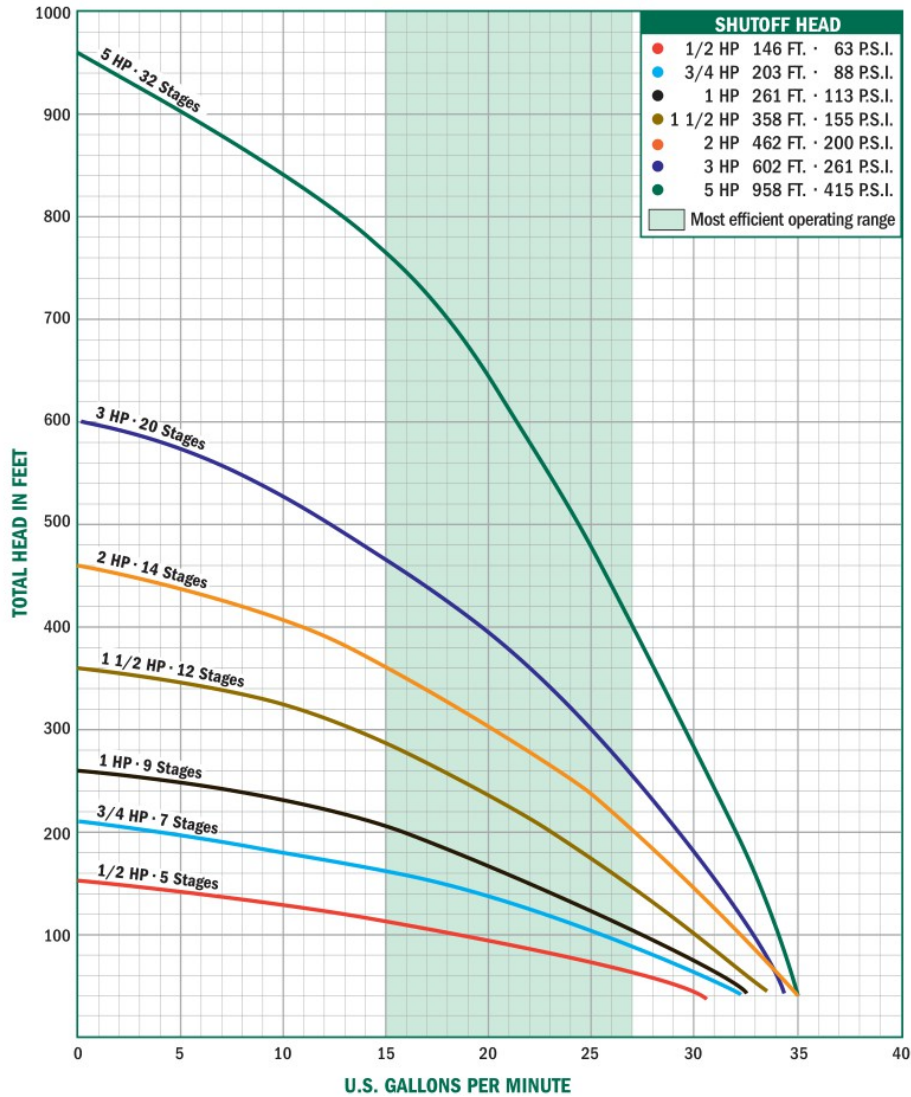
| 3/4 HP | PSI | 25' | 50' | 75' | 100' | 125' | 150' | 175' | 200' |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| | 0 | 32.36 | 29.82 | 27.06 | 24.01 | 20.58 | 16.54 | 11.39 | 2.53 |
| 30 | 24.74 | 21.40 | 17.53 | 12.71 | 5.44 | | | | |
| 40 | 21.67 | 17.85 | 13.13 | 6.20 | | | | | |
| 50 | 18.16 | 13.54 | 6.91 | | | | | | |
| 60 | 13.93 | 7.56 | | | | | | | |

| 1 HP | PSI | 25' | 50' | 75' | 100' | 125' | 150' | 175' | 200' | 225' | 250' |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| | 0 | 33.30 | 31.39 | 29.36 | 27.19 | 24.84 | 22.26 | 19.37 | 16.02 | 11.88 | 5.72 |
| 30 | 27.70 | 25.39 | 22.87 | 20.06 | 16.84 | 12.92 | 7.49 | | | | |
| 40 | 25.57 | 23.07 | 20.29 | 17.10 | 13.26 | 8.01 | | | | | |
| 50 | 23.27 | 20.51 | 17.36 | 13.58 | 8.50 | | | | | | |
| 60 | 20.73 | 17.62 | 13.90 | 8.97 | | | | | | | |

| 1 1/2 HP | PSI | 50' | 100' | 150' | 200' | 250' | 300' | 350' |
|----------|-------|-------|-------|-------|-------|-------|-------|------|
| | 0 | 32.95 | 29.95 | 26.64 | 22.90 | 18.50 | 12.88 | 3.03 |
| 30 | 28.71 | 25.26 | 21.30 | 16.53 | 10.04 | | | |
| 40 | 27.17 | 23.50 | 19.23 | 13.86 | 5.38 | | | |
| 50 | 25.53 | 21.62 | 16.93 | 10.65 | | | | |
| 60 | 23.80 | 19.58 | 14.33 | 6.32 | | | | |

FRICITION LOSSES IN RISER PIPE HAVE NOT BEEN CALCULATED

P - 20 GPM



Submersible Pumps

| PSI | 50' | 100' | 150' | 200' | 250' | 300' | 350' | 400' |
|-----|-------|-------|-------|-------|-------|-------|-------|-------|
| 0 | 34.88 | 32.45 | 29.85 | 27.04 | 23.94 | 20.46 | 16.41 | 11.33 |
| 30 | 31.47 | 28.79 | 25.88 | 22.65 | 18.98 | 14.61 | 8.85 | |
| 40 | 30.26 | 27.48 | 24.43 | 21.02 | 17.07 | 12.20 | 5.06 | |
| 50 | 29.00 | 26.11 | 22.91 | 19.28 | 14.97 | 9.38 | | |
| 60 | 27.70 | 24.68 | 21.30 | 17.40 | 12.62 | 5.79 | | |

| PSI | 50' | 100' | 150' | 200' | 250' | 300' | 350' | 400' | 450' | 500' | 550' |
|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| 0 | 34.31 | 32.64 | 30.88 | 29.03 | 27.05 | 24.92 | 22.61 | 20.06 | 17.16 | 13.72 | 9.23 |
| 30 | 31.97 | 30.18 | 28.28 | 26.25 | 24.06 | 21.66 | 18.99 | 15.91 | 12.16 | 6.88 | |
| 40 | 31.15 | 29.31 | 27.36 | 25.26 | 22.98 | 20.47 | 17.63 | 14.29 | 10.02 | 2.58 | |
| 50 | 30.32 | 28.43 | 26.41 | 24.23 | 21.85 | 19.20 | 16.16 | 12.48 | 7.39 | | |
| 60 | 29.46 | 27.51 | 25.42 | 23.16 | 20.67 | 17.86 | 14.57 | 10.40 | 3.55 | | |

FRICTION LOSSES IN RISER PIPE HAVE NOT BEEN CALCULATED

| PSI | 50' | 100' | 150' | 200' | 250' | 300' | 350' | 400' | 450' | 500' | 550' | 600' | 650' | 700' | 750' | 800' | 850' | 900' | 950' |
|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|
| 0 | 35.14 | 34.10 | 33.04 | 31.94 | 30.80 | 29.62 | 28.40 | 27.12 | 25.79 | 24.38 | 22.90 | 21.32 | 19.62 | 17.78 | 15.74 | 13.43 | 10.69 | 7.15 | .01 |
| 30 | 33.70 | 32.62 | 31.50 | 30.35 | 29.16 | 27.91 | 26.61 | 25.25 | 23.82 | 22.30 | 20.68 | 18.93 | 17.02 | 14.88 | 12.43 | 9.46 | 5.32 | | |
| 40 | 33.20 | 32.11 | 30.98 | 29.80 | 28.59 | 27.32 | 25.99 | 24.60 | 23.13 | 21.56 | 19.89 | 18.07 | 16.06 | 13.80 | 11.15 | 7.77 | 2.10 | | |
| 50 | 32.70 | 31.59 | 30.44 | 29.25 | 28.01 | 26.71 | 25.36 | 23.93 | 22.42 | 20.80 | 19.07 | 17.17 | 15.06 | 12.64 | 9.81 | 5.71 | | | |
| 60 | 32.19 | 31.06 | 29.89 | 28.68 | 27.42 | 26.10 | 24.71 | 23.24 | 21.69 | 20.02 | 18.21 | 16.22 | 13.98 | 11.37 | 8.07 | 2.79 | | | |

23000 Series - Domestic Stainless Steel

M - 25 GPM

A.Y. McDonald offers a full line of stainless steel submersible pumps built for years of trouble free operation, with high-efficiency impellers and diffusers. These submersibles offer peak capacity performance in 5, 7, 10, 15, 20, and 25 gallons per minute (GPM). Other features include stainless steel discharge head with a built-in check valve, and stainless steel shaft and coupling.

All Stainless Steel Pumps come with a 1 1/4" discharge and sizes range from 1/2 to 5 horsepower (HP). Two wire models up to 1 1/2 and three wire models up to 5 horsepower (HP).

Submersible Pumps

Two Wire Single Phase

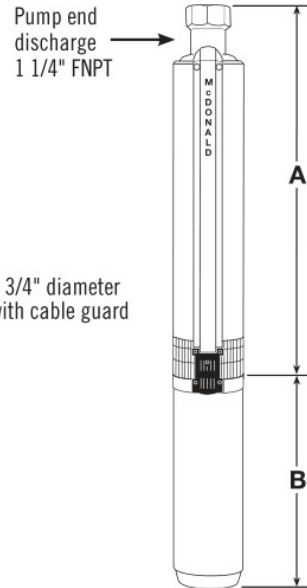
| Model No. | HP | Stages | Volt | A | B | WT. |
|-----------|-------|--------|------|--------|--------|-----|
| 23050M2A | 1/2 | 4 | 115 | 10.94" | 9.53" | 24 |
| 23050M2 | 1/2 | 4 | 230 | 10.94" | 9.53" | 24 |
| 23075M2 | 3/4 | 5 | 230 | 12.02" | 10.66" | 26 |
| 23100M2 | 1 | 7 | 230 | 14.17" | 11.75" | 31 |
| 23150M2 | 1 1/2 | 9 | 230 | 16.32" | 15.12" | 40 |

Three Wire** Single Phase

| Model No. | HP | Stages | Volt | A | B | WT. |
|-----------|-------|--------|------|--------|--------|-----|
| 23050M3A | 1/2 | 4 | 115 | 10.94" | 9.53" | 24 |
| 23050M3 | 1/2 | 4 | 230 | 10.94" | 9.53" | 24 |
| 23075M3 | 3/4 | 5 | 230 | 12.02" | 10.66" | 26 |
| 23100M3 | 1 | 7 | 230 | 14.17" | 11.75" | 30 |
| 23150M3 | 1 1/2 | 9 | 230 | 16.32" | 13.62" | 36 |
| 23200M3 | 2 | 12 | 230 | 19.54" | 15.12" | 41 |
| 23300M3 | 3 | 16 | 230 | 23.83" | 19.06" | 53 |
| 23500M3 | 5 | 25 | 230 | 34.88" | 29.62" | 83 |

Three Wire Three Phase

| Model No. | HP | Stages | Volt | A | B | WT. |
|-----------|-------|--------|------|--------|--------|-----|
| 23150M3Z | 1 1/2 | 9 | 230 | 16.32" | 11.75" | 32 |
| 23150M3Y | 1 1/2 | 9 | 460 | 16.32" | 11.75" | 33 |
| 23200M3Z | 2 | 12 | 230 | 19.54" | 13.62" | 38 |
| 23200M3Y | 2 | 12 | 460 | 19.54" | 13.62" | 38 |
| 23300M3Z | 3 | 16 | 230 | 23.83" | 16.04" | 46 |
| 23300M3Y | 3 | 16 | 460 | 23.83" | 16.04" | 46 |
| 23500M3Z | 5 | 25 | 230 | 34.88" | 23.62" | 69 |
| 23500M3Y | 5 | 25 | 460 | 34.88" | 23.62" | 69 |



4" Stainless Steel Pump Ends

| Model No. | HP | WT. |
|-----------|-------|-----|
| 23050M | 1/2 | 7 |
| 23075M | 3/4 | 7 |
| 23100M | 1 | 8 |
| 23150M | 1 1/2 | 9 |
| 23200M | 2 | 10 |
| 23300M | 3 | 11 |
| 23500M | 5 | 18 |

** All three wire pumps are available in three phase by selecting pump end and appropriate motor and starter kit (see pages 108-118).

Output - in Gallons Per Minute (Depth to Water)

| 1/2 HP | PSI | 25' | 50' | 75' | 100' |
|--------|-----|-------|-------|-------|-------|
| | 0 | 34.97 | 29.23 | 22.43 | 13.64 |
| | 30 | 15.93 | 2.93 | | |
| | 40 | 4.38 | | | |

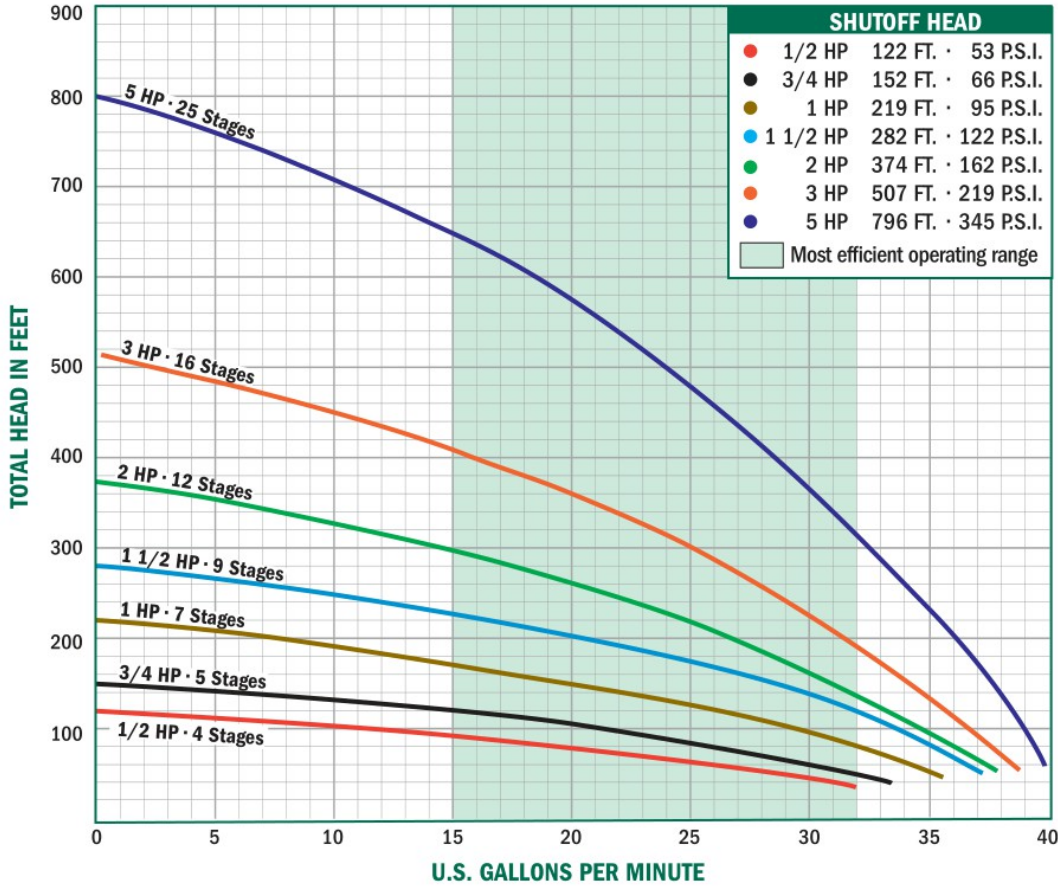
| 3/4 HP | PSI | 25' | 50' | 75' | 100' | 125' | 150' |
|--------|-----|-------|-------|-------|-------|-------|------|
| | 0 | 36.08 | 31.97 | 27.33 | 21.88 | 14.91 | 2.74 |
| | 30 | 23.22 | 16.71 | 6.80 | | | |
| | 40 | 17.27 | 7.85 | | | | |
| | 50 | 8.81 | | | | | |

| 1 HP | PSI | 25' | 50' | 75' | 100' | 125' | 150' | 175' | 200' |
|------|-----|-------|-------|-------|-------|-------|-------|-------|------|
| | 0 | 38.23 | 35.39 | 32.34 | 29.02 | 25.34 | 21.13 | 16.10 | 9.38 |
| | 30 | 29.81 | 26.22 | 22.15 | 17.35 | 11.16 | | | |
| | 40 | 26.50 | 22.48 | 17.75 | 11.71 | 1.28 | | | |
| | 50 | 22.80 | 18.14 | 12.24 | 2.61 | | | | |
| | 60 | 18.53 | | 3.73 | | | | | |

| 1 1/2 HP | PSI | 25' | 50' | 75' | 100' | 125' | 150' | 175' | 200' | 225' | 250' | 275' |
|----------|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| | 0 | 40.00 | 37.82 | 35.52 | 33.08 | 30.47 | 27.63 | 24.52 | 21.01 | 16.91 | 11.76 | 3.56 |
| | 30 | 33.65 | 31.08 | 28.30 | 25.26 | 21.85 | 17.91 | 13.07 | 6.06 | | | |
| | 40 | 31.28 | 28.52 | 25.50 | 22.13 | 18.24 | 13.49 | 6.76 | | | | |
| | 50 | 28.74 | 25.74 | 22.40 | 18.56 | 13.90 | 7.42 | | | | | |
| | 60 | 25.98 | | 18.87 | 14.29 | 8.04 | | | | | | |

FRICITION LOSSES IN RISER PIPE HAVE NOT BEEN CALCULATED

M - 25 GPM



Submersible Pumps

| PSI | 50' | 100' | 150' | 200' | 250' | 300' | 350' |
|-----|-------|-------|-------|-------|-------|-------|------|
| 0 | 38.07 | 34.66 | 30.92 | 26.74 | 21.91 | 15.98 | 7.38 |
| 30 | 33.26 | 29.37 | 24.97 | 19.79 | 13.16 | 1.33 | |
| 40 | 31.52 | 27.42 | 22.70 | 16.98 | 9.04 | | |
| 50 | 29.68 | 25.33 | 20.23 | 13.75 | 2.92 | | |
| 60 | 27.75 | 23.09 | 17.47 | 9.80 | | | |

| PSI | 50' | 100' | 150' | 200' | 250' | 300' | 350' | 400' | 450' | 500' |
|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| 0 | 39.30 | 36.84 | 34.22 | 31.42 | 28.38 | 25.02 | 21.23 | 16.75 | 11.09 | 1.27 |
| 30 | 35.85 | 33.16 | 30.28 | 27.12 | 23.62 | 19.61 | 14.78 | 8.24 | | |
| 40 | 34.63 | 31.86 | 28.86 | 25.55 | 21.84 | 17.51 | 12.08 | 3.58 | | |
| 50 | 33.38 | 30.50 | 27.37 | 23.90 | 19.94 | 15.19 | 8.85 | | | |
| 60 | 32.08 | 29.09 | 25.82 | 22.14 | 17.87 | 12.56 | 4.51 | | | |

FRICITION LOSSES IN RISER PIPE HAVE NOT BEEN CALCULATED

| PSI | 50' | 100' | 150' | 200' | 250' | 300' | 350' | 400' | 450' | 500' | 550' | 600' | 650' | 700' | 750' |
|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 0 | 40.4 | 38.9 | 37.4 | 35.8 | 34.1 | 32.4 | 30.6 | 28.6 | 26.5 | 24.2 | 21.6 | 18.7 | 15.2 | 11.0 | 5.8 |
| 30 | 38.3 | 36.8 | 35.2 | 33.5 | 31.7 | 29.8 | 27.8 | 25.6 | 23.2 | 20.5 | 17.4 | 13.7 | 9.2 | 3.5 | |
| 40 | 37.6 | 36.0 | 34.4 | 32.7 | 30.9 | 28.9 | 26.8 | 24.5 | 22.0 | 19.1 | 15.8 | 11.7 | 6.7 | | |
| 50 | 36.9 | 35.3 | 33.6 | 31.9 | 30.0 | 28.0 | 25.8 | 23.4 | 20.7 | 17.7 | 14.0 | 9.5 | | | |
| 60 | 36.2 | 34.5 | 32.8 | 31.0 | 29.1 | 27.0 | 24.7 | 22.2 | 19.4 | 16.1 | 12.1 | 7.1 | | | |

H SERIES STAINLESS STEEL PUMP ENDS

| | Model | HP | Stages | Discharge | Motor Size | Length (PEO) | Weight (PEO) | List Price |
|--|--------|----|--------|-----------|------------|--------------|--------------|------------|
| 50 GPM H-SERIES 6" PEO | 50H05 | 5 | 6 | 3" | 6" | 24.9" | 29 | \$ - |
| | 50H07 | 7½ | 10 | 3" | 6" | 34.4" | 40 | \$ - |
| | 50H10 | 10 | 13 | 3" | 6" | 41.6" | 51 | \$ - |
| | 50H15 | 15 | 20 | 3" | 6" | 58.2" | 73 | \$ - |
| 90 GPM H-SERIES 6" PEO | 90H03 | 3 | 2 | 3" | 4" | 16" | 14 | \$ - |
| | 90H05 | 5 | 4 | 3" | 4" | 21" | 21 | \$ - |
| | 90H07 | 7½ | 6 | 3" | 6" | 25" | 27 | \$ - |
| | 90H10 | 10 | 9 | 3" | 6" | 33" | 37 | \$ - |
| | 90H15 | 15 | 13 | 3" | 6" | 42" | 49 | \$ - |
| | 90H20 | 20 | 18 | 3" | 6" | 54" | 65 | \$ - |
| | 90H25 | 25 | 22 | 3" | 6" | 64" | 78 | \$ - |
| | 90H30 | 30 | 26 | 3" | 6" | 73" | 91 | \$ - |
| 90H40 | 40 | 30 | 3" | 6" | 82" | 104 | \$ - | |
| 150 GPM H-SERIES 6" PEO | 150H05 | 5 | 3 | 3" | 4" | 22" | 22 | \$ - |
| | 150H07 | 7½ | 4 | 3" | 6" | 26" | 26 | \$ - |
| | 150H10 | 10 | 5 | 3" | 6" | 30" | 31 | \$ - |
| | 150H15 | 15 | 8 | 3" | 6" | 41" | 42 | \$ - |
| | 150H20 | 20 | 11 | 3" | 6" | 52" | 53 | \$ - |
| | 150H25 | 25 | 14 | 3" | 6" | 60" | 63 | \$ - |
| | 150H30 | 30 | 17 | 3" | 6" | 75" | 74 | \$ - |
| | 150H40 | 40 | 23 | 3" | 6" | 98" | 97 | \$ - |
| | 150H50 | 50 | 28 | 3" | 6" | 117" | 116 | \$ - |
| 230 GPM H-SERIES 6" PEO | 230H05 | 5 | 2 | 3" | 4" | 20" | 20 | \$ - |
| | 230H07 | 7½ | 3 | 3" | 6" | 24" | 25 | \$ - |
| | 230H10 | 10 | 4 | 3" | 6" | 28" | 30 | \$ - |
| | 230H15 | 15 | 5 | 3" | 6" | 33" | 35 | \$ - |
| | 230H20 | 20 | 7 | 3" | 6" | 42" | 45 | \$ - |
| | 230H25 | 25 | 8 | 3" | 6" | 46" | 50 | \$ - |
| | 230H30 | 30 | 10 | 3" | 6" | 55" | 60 | \$ - |
| | 230H40 | 40 | 13 | 3" | 6" | 69" | 75 | \$ - |
| | 230H50 | 50 | 17 | 3" | 6" | 86" | 95 | \$ - |
| | 230H60 | 60 | 20 | 3" | 6" | 99" | 110 | \$ - |
| 300 GPM H-SERIES 6" PEO | 300H05 | 5 | 1 | 4" | 4" | 15" | 15 | \$ - |
| | 300H07 | 7½ | 2 | 4" | 6" | 20" | 20 | \$ - |
| | 300H10 | 10 | 3 | 4" | 6" | 24" | 24 | \$ - |
| | 300H15 | 15 | 4 | 4" | 6" | 29" | 30 | \$ - |
| | 300H20 | 20 | 6 | 4" | 6" | 37" | 40 | \$ - |
| | 300H25 | 25 | 7 | 4" | 6" | 42" | 45 | \$ - |
| | 300H30 | 30 | 9 | 4" | 6" | 51" | 55 | \$ - |
| | 300H40 | 40 | 11 | 4" | 6" | 60" | 65 | \$ - |
| | 300H50 | 50 | 14 | 4" | 6" | 73" | 80 | \$ - |
| | 300H60 | 60 | 17 | 4" | 6" | 86" | 95 | \$ - |

H SERIES STAINLESS STEEL PUMP ENDS

| | Model | HP | Stages | Discharge | Motor Size | Length (PEO) | Weight (PEO) | List Price |
|---|---------|-----|--------|-----------|------------|--------------|--------------|------------|
| 400 GPM H-SERIES 8" PEO | 400H05 | 5 | 1 | 5" | 4" | 24" | 55 | \$ - |
| | 400H07 | 7½ | 1 | 5" | 6" | 24" | 55 | \$ - |
| | 400H10 | 10 | 2 | 5" | 6" | 29" | 63 | \$ - |
| | 400H15 | 15 | 2 | 5" | 6" | 29" | 63 | \$ - |
| | 400H20 | 20 | 3 | 5" | 6" | 40" | 71 | \$ - |
| | 400H25 | 25 | 4 | 5" | 6" | 45" | 79 | \$ - |
| | 400H30 | 30 | 5 | 5" | 6" | 50" | 87 | \$ - |
| | 400H40 | 40 | 6 | 5" | 6" | 50" | 95 | \$ - |
| | 400H50 | 50 | 7 | 5" | 6" | 55" | 103 | \$ - |
| | 400H60 | 60 | 8 | 5" | 6" | 60" | 114 | \$ - |
| | 400H75 | 75 | 10 | 5" | 8" | 70" | 130 | \$ - |
| | 400H100 | 100 | 13 | 5" | 8" | 85" | 154 | \$ - |
| 500 GPM H-SERIES 8" PEO | 500H05 | 5 | 1 | 5" | 4" | 24" | 55 | \$ - |
| | 500H07 | 7½ | 1 | 5" | 6" | 24" | 55 | \$ - |
| | 500H10 | 10 | 1 | 5" | 6" | 24" | 55 | \$ - |
| | 500H15 | 15 | 2 | 5" | 6" | 29" | 63 | \$ - |
| | 500H20 | 20 | 3 | 5" | 6" | 34" | 71 | \$ - |
| | 500H25 | 25 | 3 | 5" | 6" | 34" | 71 | \$ - |
| | 500H30 | 30 | 4 | 5" | 6" | 40" | 79 | \$ - |
| | 500H40 | 40 | 5 | 5" | 6" | 45" | 87 | \$ - |
| | 500H50 | 50 | 6 | 5" | 6" | 50" | 95 | \$ - |
| | 500H60 | 60 | 7 | 5" | 6" | 55" | 406 | \$ - |
| | 500H75 | 75 | 8 | 5" | 8" | 60" | 114 | \$ - |
| | 500H100 | 100 | 11 | 5" | 8" | 75" | 138 | \$ - |
| | 500H125 | 125 | 13 | 5" | 8" | 85" | 153 | \$ - |
| 650 GPM H-SERIES 10" PEO | 650H15 | 15 | 1 | 5" | 6" | 26" | 67 | \$ - |
| | 650H25 | 25 | 1 | 5" | 6" | 26" | 67 | \$ - |
| | 650H30 | 30 | 2 | 5" | 6" | 32" | 81 | \$ - |
| | 650H40 | 40 | 2 | 5" | 6" | 32" | 81 | \$ - |
| | 650H50 | 50 | 3 | 5" | 6" | 38" | 98 | \$ - |
| | 650H60 | 60 | 3 | 5" | 6" | 38" | 98 | \$ - |
| | 650H75 | 75 | 4 | 5" | 8" | 44" | 112 | \$ - |
| | 650H100 | 100 | 6 | 5" | 8" | 56" | 141 | \$ - |
| | 650H125 | 125 | 7 | 5" | 8" | 62" | 184 | \$ - |
| | 650H150 | 150 | 7 | 5" | 8" | 62" | 184 | \$ - |
| 800 GPM H-SERIES 10" PEO | 800H20 | 20 | 1 | 5" | 6" | 26" | 67 | \$ - |
| | 800H25 | 25 | 1 | 5" | 6" | 26" | 67 | \$ - |
| | 800H30 | 30 | 1 | 5" | 6" | 26" | 67 | \$ - |
| | 800H40 | 40 | 2 | 5" | 6" | 32" | 82 | \$ - |
| | 800H50 | 50 | 2 | 5" | 6" | 32" | 82 | \$ - |
| | 800H60 | 60 | 3 | 5" | 6" | 38" | 98 | \$ - |
| | 800H75 | 75 | 3 | 5" | 8" | 38" | 98 | \$ - |
| | 800H100 | 100 | 4 | 5" | 8" | 44" | 112 | \$ - |
| | 800H125 | 125 | 5 | 5" | 8" | 50" | 126 | \$ - |
| | 800H150 | 150 | 6 | 5" | 8" | 56" | 141 | \$ - |

SP5

PUMP END WITH 6" MOTOR ADAPTER (BOWL OD = 5-1/4")

| | Weight | Length | Chrome Shaft List Price | Stainless Shaft List Price |
|--|--------|---------|----------------------------|-------------------------------|
| 1 STAGE | 50 | 18-1/4" | \$ - | \$ - |
| 2 STAGES | 64 | 22-7/8" | \$ - | \$ - |
| 3 STAGES | 78 | 27-1/2" | \$ - | \$ - |
| 4 STAGES | 92 | 32-1/8" | \$ - | \$ - |
| 5 STAGES | 106 | 36-3/4" | \$ - | \$ - |
| 6 STAGES | 120 | 41-3/8" | \$ - | \$ - |
| 7 STAGES | 134 | 46" | \$ - | \$ - |
| 8 STAGES | 148 | 50-5/8" | \$ - | \$ - |
| 9 STAGES | 162 | 55-1/4" | \$ - | \$ - |
| 10 STAGES | 176 | 59-7/8" | \$ - | \$ - |
| List Price Adder for 4" Motor Adapter & Coupling | | | | \$ - |
| List Price Adder for SS Collets / Per Stage | | | | \$ - |

SP5 - OPEN

PUMP END WITH 6" MOTOR ADAPTER (BOWL OD = 5-1/4")

| | Weight | Length | Chrome Shaft List Price | Stainless Shaft List Price |
|--|--------|-----------|----------------------------|-------------------------------|
| 1 STAGE | 50 | 17-15/16" | \$ - | \$ - |
| 2 STAGES | 64 | 22-1/4" | \$ - | \$ - |
| 3 STAGES | 78 | 26-9/16" | \$ - | \$ - |
| 4 STAGES | 92 | 30-7/8" | \$ - | \$ - |
| 5 STAGES | 106 | 35-3/16" | \$ - | \$ - |
| 6 STAGES | 120 | 39-1/2" | \$ - | \$ - |
| 7 STAGES | 134 | 43-13/16" | \$ - | \$ - |
| 8 STAGES | 148 | 48-1/8" | \$ - | \$ - |
| 9 STAGES | 162 | 52-7/16" | \$ - | \$ - |
| 10 STAGES | 176 | 56-3/4" | \$ - | \$ - |
| List Price Adder for 4" Motor Adapter & Coupling | | | | \$ - |
| List Price Adder For SS Collets / Per Stage | | | | \$ - |

SP6 / SM6

PUMP END WITH 6" MOTOR ADAPTER (BOWL OD = 6")

| | Weight | Length | Chrome Shaft List Price | Stainless Shaft List Price |
|-----------|--------|-----------|----------------------------|-------------------------------|
| 1 STAGE | 55 | 19-1/16" | \$ - | \$ - |
| 2 STAGES | 73.5 | 24" | \$ - | \$ - |
| 3 STAGES | 92 | 28-15/16" | \$ - | \$ - |
| 4 STAGES | 110.5 | 33-7/8" | \$ - | \$ - |
| 5 STAGES | 129 | 38-13/16" | \$ - | \$ - |
| 6 STAGES | 147.5 | 43-3/4" | \$ - | \$ - |
| 7 STAGES | 166 | 48-11/16" | \$ - | \$ - |
| 8 STAGES | 184.5 | 53-5/8" | \$ - | \$ - |
| 9 STAGES | 203 | 58-9/16" | \$ - | \$ - |
| 10 STAGES | 221.5 | 63-1/2" | \$ - | \$ - |

| | |
|--|------|
| List Price Adder for 8" Motor Adapter & Coupling | \$ - |
|--|------|

| | |
|---|------|
| List Price Adder for SS Collets / Per Stage | \$ - |
|---|------|

SP6 OPEN

PUMP END WITH 6" MOTOR ADAPTER (BOWL OD = 6")

| | Weight | Length | Chrome Shaft List Price | Stainless Shaft List Price |
|-----------|--------|-----------|----------------------------|-------------------------------|
| 1 STAGE | 53 | 18-15/16" | \$ - | \$ - |
| 2 STAGES | 70.7 | 23-3/4" | \$ - | \$ - |
| 3 STAGES | 88.4 | 28-9/16" | \$ - | \$ - |
| 4 STAGES | 106.1 | 33-3/8" | \$ - | \$ - |
| 5 STAGES | 123.8 | 38-3/16" | \$ - | \$ - |
| 6 STAGES | 141.5 | 43" | \$ - | \$ - |
| 7 STAGES | 159.2 | 47-13/16" | \$ - | \$ - |
| 8 STAGES | 176.9 | 52-5/8" | \$ - | \$ - |
| 9 STAGES | 194.6 | 57-7/16" | \$ - | \$ - |
| 10 STAGES | 212.3 | 62-1/4" | \$ - | \$ - |

| | |
|--|------|
| List Price Adder for 8" Motor Adapter & Coupling | \$ - |
|--|------|

| | |
|---|------|
| List Price Adder for SS Collets / Per Stage | \$ - |
|---|------|

SP7

PUMP END WITH 6" MOTOR ADAPTER (BOWL OD = 7-3/16")

| | Weight | Length | Chrome Shaft List Price | Stainless Shaft List Price |
|----------|--------|-----------|----------------------------|-------------------------------|
| 1 STAGE | 100 | 25-5/16" | \$ - | \$ - |
| 2 STAGES | 134 | 31-11/16" | \$ - | \$ - |
| 3 STAGES | 168 | 38-1/16" | \$ - | \$ - |
| 4 STAGES | 202 | 44-7/16" | \$ - | \$ - |
| 5 STAGES | 236 | 50-13/16" | \$ - | \$ - |
| 6 STAGES | 270 | 57-3/16" | \$ - | \$ - |
| 7 STAGES | 304 | 63-9/16" | \$ - | \$ - |

| | |
|--|------|
| List Price Adder for 8" Motor Adapter & Coupling | \$ - |
|--|------|

| | |
|---|------|
| List Price Adder for SS Collets / Per Stage | \$ - |
|---|------|

SK7

PUMP END WITH 6" MOTOR ADAPTER (BOWL OD = 6-9/16")

| | Weight | Length | Chrome Shaft List Price | Stainless Shaft List Price |
|-----------|--------|---------|----------------------------|-------------------------------|
| 1 STAGE | 61 | 20-7/8" | \$ - | \$ - |
| 2 STAGES | 83 | 27-1/4" | \$ - | \$ - |
| 3 STAGES | 105 | 33-5/8" | \$ - | \$ - |
| 4 STAGES | 127 | 40" | \$ - | \$ - |
| 5 STAGES | 149 | 46-3/8" | \$ - | \$ - |
| 6 STAGES | 171 | 52-3/4" | \$ - | \$ - |
| 7 STAGES | 193 | 59-1/8" | \$ - | \$ - |
| 8 STAGES | 215 | 65-1/2" | \$ - | \$ - |
| 9 STAGES | 237 | 71-7/8" | \$ - | \$ - |
| 10 STAGES | 259 | 78-1/4" | \$ - | \$ - |

| | |
|--|------|
| List Price Adder for 8" Motor Adapter & Coupling | \$ - |
|--|------|

| | |
|---|------|
| List Price Adder for SS Collets / Per Stage | \$ - |
|---|------|

SP8

PUMP END WITH 6" MOTOR ADAPTER (BOWL OD = 7-7/8")

| | Weight | Length | Chrome Shaft List Price | Stainless Shaft List Price |
|----------|--------|---------|----------------------------|-------------------------------|
| 1 STAGE | 100 | 23-7/8" | \$ - | \$ - |
| 2 STAGES | 140 | 30-1/4" | \$ - | \$ - |
| 3 STAGES | 180 | 36-5/8" | \$ - | \$ - |
| 4 STAGES | 220 | 43" | \$ - | \$ - |
| 5 STAGES | 260 | 49-3/8" | \$ - | \$ - |
| 6 STAGES | 300 | 55-3/4" | \$ - | \$ - |
| 7 STAGES | 340 | 62-1/8" | \$ - | \$ - |
| 8 STAGES | 380 | 68-1/2" | \$ - | \$ - |

| | |
|--|------|
| List Price Adder for 8" Motor Adapter & Coupling | \$ - |
|--|------|

| | |
|---|------|
| List Price Adder for SS Collets / Per Stage | \$ - |
|---|------|

MOTOR SHROUDS

| Pump Model | Skirt O.D. | Length | Material | Horsepower | List Price |
|------------|------------|--------|----------|------------|------------|
| SP5 | 7" | 36" | PVC | 5 to 10 | \$ - |
| | 7" | 48" | PVC | 15 to 30 | \$ - |
| | 7" | 54" | PVC | 40 | \$ - |
| | 7" | 74" | PVC | 50 to 60 | \$ - |
| SP6 / SM6 | 7" | 36" | PVC | 5 to 10 | \$ - |
| | 7" | 48" | PVC | 15 to 30 | \$ - |
| | 7" | 54" | PVC | 40 | \$ - |
| | 7" | 74" | PVC | 50 to 60 | \$ - |
| SP7/SP8 | 8" | 36" | PVC | 5 to 10 | \$ - |
| | 8" | 48" | PVC | 15 to 30 | \$ - |
| | 8" | 54" | PVC | 40 | \$ - |
| | 8" | 74" | PVC | 50 to 60 | \$ - |

STENNER PUMPS®

What is a peristaltic pump?

A peristaltic pump is a self-priming pump that achieves pumping action by moving a system of rollers against a flexible tube. The pumped fluids (e.g., chemical feeds) are never exposed to the air or to the mechanical moving parts. The roller design prevents siphoning by providing a constant seal on the pumping tube.

Why Choose A Stenner Pump?

The possibilities are endless with Stenner peristaltic metering pumps. Select from an array of pumps with different operating controls, flow rate outputs, and operating pressure for applications such as oxidation, disinfection, pH control, or for the accurate injection of additives for a manufacturing or industrial

Markets Served

- Water Conditioning
- Animal Health
- Pool & Spa
- Industrial Process
- Water & Wastewater
- Cooling Towers
- Irrigation
- Car Wash
- Food & Beverage
- Metal Finishing
- Specialty



Applications

- Sterilization
- pH Control
- Disinfection
- Flocculation
- Iron Control
- Waste Digestion
- Process Water
- Odor Control
- Corrosion Control
- Scale Reduction
- Sanitation



A.Y. McDonald 89000 Series Self Priming Sprinkler Pumps

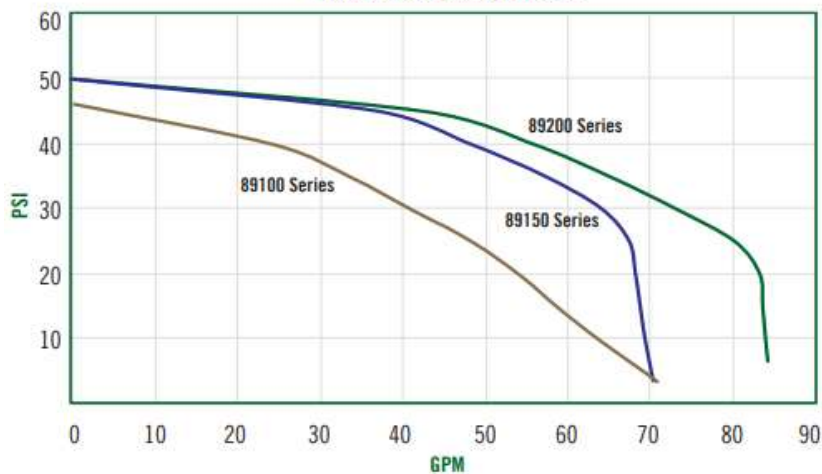
| <u>Model</u> | <u>HP</u> | <u>Voltage</u> | <u>Suction</u> | <u>Discharge</u> | <u>Weight</u> | <u>List Price</u> |
|--------------|-----------|----------------|----------------|------------------|---------------|-------------------|
| 89100 | 1 | 115 / 230 | 1 1/2" | 1 1/2" | 59 | \$ - |
| 89150 | 1 1/2 | 115 / 230 | 1 1/2" | 1 1/2" | 63 | \$ - |
| 89200 | 2 | 230.00 | 1 1/2" | 1 1/2" | 64 | \$ - |



Features:

- Up to 85 GPM
- 1 1/2" Inlet & outlet
- Reliable, robust, and tested motor
- Easy to switch between 115V & 230V (Factory preset to 230V)
- 2 HP Sprinkler pump - 230V Only
- 304 Stainless steel motor shaft with wrench flat
- All iron pump housing and seal plate
- 304 Stainless steel insert on impeller
- Stainless steel wear ring between the impeller & diffuser
- Stainless steel bolt hardware connecting pump to motor

Flow GPM vs. Pressure PSI Curve



Performance

| Model No. | HP | Suction Lift - FT. | Capacities in GPM at Discharge Pressure | | | | Max. Shut off PSI |
|-----------|-------|--------------------|---|----|----|----|-------------------|
| | | | 10 | 20 | 30 | 40 | |
| 89100 | 1 | 0 | 63 | 54 | 41 | 24 | 46.2 |
| | | 5 | 61 | 51 | 38 | 19 | 44 |
| | | 10 | 56 | 46 | 32 | | 41.9 |
| | | 15 | 51 | 44 | 28 | | 39.7 |
| | | 20 | 43 | 40 | 23 | | 38.3 |
| | | 25 | 35 | 34 | 18 | | 34.8 |
| 89150 | 1 1/2 | 0 | 69 | 68 | 64 | 48 | 49.9 |
| | | 5 | 62 | 61 | 58 | 42 | 46.7 |
| | | 10 | 55 | 53 | 51 | 35 | 45 |
| | | 15 | 48 | 48 | 46 | 26 | 44.2 |
| | | 20 | 42 | 40 | 39 | 15 | 43.8 |
| | | 25 | 34 | 34 | 30 | | 41.4 |
| 89200 | 2 | 0 | 83 | 83 | 73 | 54 | 50 |
| | | 5 | 73 | 73 | 69 | 49 | 48 |
| | | 10 | 57 | 57 | 56 | 39 | 48 |
| | | 15 | 50 | 50 | 50 | 34 | 43.8 |
| | | 20 | 42 | 42 | 42 | 22 | 45.1 |
| | | 25 | 34 | 34 | 34 | | 39.4 |

DAB WATER TECHNOLOGY E.SYSLINE

| Model | Max Flow | Max PSI | Voltage | Dimensions | List Price |
|---------------------------|----------|---------|-----------|-----------------------|------------|
| E.Sybox Mini ³ | 22 GPM | 80 PSI | 1 ph 115v | 17.4" x 10.7" x 9.5" | \$ - |
| E.Sybox | 32 GPM | 92 PSI | 1 ph 230v | 22.4" x 10.6" x 13.8" | \$ - |

The E.Syline from DAB is a constant pressure system that intergrates with existing systems for an immediate pressure boost. With applications ranging from small houses to multi unit apartment complexes, the E.Syline has a product that will fit every job.

Features:

- *Adjustable set point from 14 to 85psi
- *115v & 230v models
- *Quiet operation (45 dB A)
- *Wireless connection capabilites with D+Connect
- *½ gallon integrated pressure tank, precharged at 29psi
- *Maximum versatilty with 3 installation positions
- *1¼" inlet and outlet connections
- *Constant pressure
- *Self diagnosing
- *Expandable into booster set wirelessly
- *Can be used as a shallow well jet pump
- *Nema 3R rated with additional E.Sycover



E.Sybox Accessories

| | | |
|-----------|---|------|
| E.Sywall | Complete wall mounting kit for both E.sybox and Mini ³ | \$ - |
| E.Sydock | Quick Connect Docking station for E.Sybox | \$ - |
| E.Sytwin | Quick Connect Docking station to mount 2 E.Sybox's | \$ - |
| E.Sycover | Outdoor cover for E.Sybox Mini ³ for Nema 3R rating | \$ - |
| E.Sycover | Outdoor cover for E.Sybox for Nema 3R rating | \$ - |
| E.Sygrid | Insect Protection Screen Kit for E.Sybox Mini ³ | \$ - |
| E.Sygrid | Insect Protection Screen Kit for E.Sybox | \$ - |



E.Sydock



E.Sytwin



E.Sywall



E.Sycover



- **Utility & Pedestal Pumps**
- **Sump & Effluent Pumps**
- **Sewage & Dewatering Pumps**
- **Grinder Pumps**
- **Packaged Systems**
- **Controls**

A.Y. McDonald 8300 Series Jet Pumps

| Model | HP | Voltage | Suction | Discharge | Max Amps | Switch | Weight | List Price |
|--------|-------|-------------------------|---------|-----------|----------|--------|--------|------------|
| 8350 | 1/2 | 115 / 230 | 1 1/4" | 1" | 10.80 | 20/40 | 52 | \$ - |
| 8350HP | 1/2 | 115 / 230 | 1 1/4" | 1" | 10.80 | 40/60 | 52 | \$ - |
| 8370 | 3/4 | 115 / 230 | 1 1/4" | 1" | 7.10 | 30/50 | 53 | \$ - |
| 8310 | 1 | 115 / 230 | 1 1/4" | 1" | 8.30 | 30/50 | 63 | \$ - |
| 8315 | 1 1/2 | 115 / 230 | 1 1/4" | 1" | 10.50 | 40/60 | 65 | \$ - |

*Factory Voltage Setting Listed in Bold Type



Features:

- Up to 32 GPM
- 1" Outlet
- 1 1/4" Inlet
- Reliable, robust, and tested motor
- Easy to switch between 115V & 230V
- 304 Stainless steel motor shaft with wrench flat
- All iron pump housing and seal plate
- 304 Stainless steel insert on plastic impeller
- Stainless steel wear ring between the impeller & diffuser
- Stainless steel bolt hardware connecting pump to motor

Performance

| Model No. | HP | Suction Lift - FT. | Capacities in GPM at Discharge Pressure | | | | | Max. Shut off PSI |
|-----------|-------|--------------------|---|------|------|------|------|-------------------|
| | | | 20 | 30 | 40 | 50 | 60 | |
| 8350 | 1/2 | 5 | 17.4 | 12.6 | 8.0 | 2.7 | - | 58 |
| | | 10 | 15.8 | 11.9 | 6.6 | 1.6 | - | 56 |
| | | 15 | 12.9 | 10.9 | 5.6 | 0.8 | - | 52 |
| | | 20 | 10.7 | 9.4 | 4.4 | 0.2 | - | 51 |
| | | 25 | 8.5 | 8.3 | 3.6 | 0.1 | - | 51 |
| 8350HP | 1/2 | 5 | 10.6 | 10.6 | 9.3 | 6.5 | 3.4 | 80 |
| | | 10 | 9.4 | 9. | 9.2 | 6.1 | 3.1 | 77 |
| | | 15 | 8.2 | 8.1 | 8.0 | 5.3 | 2.3 | 74 |
| | | 20 | 6.6 | 6.7 | 6.7 | 4.6 | 1.9 | 73 |
| | | 25 | 4.9 | 5.0 | 5.0 | 4.1 | 0.0 | 70 |
| 8370 | 3/4 | 5 | - | 22.2 | 17.1 | 11.1 | 6.7 | 73 |
| | | 10 | - | 20.0 | 15.8 | 10.8 | 6.0 | 70 |
| | | 15 | - | 16.5 | 13.8 | 9.4 | 3.7 | 66 |
| | | 20 | - | 13.7 | 10.9 | 7.5 | 1.6 | 62 |
| | | 25 | - | 11.2 | 10.6 | 6.6 | 0.4 | 61 |
| 8310 | 1 | 5 | - | 25.9 | 21.3 | 13.8 | 7.0 | 70 |
| | | 10 | - | 23.3 | 19.0 | 12.4 | 6.0 | 69 |
| | | 15 | - | 19.5 | 17.1 | 10.1 | 3.1 | 66 |
| | | 20 | - | 16.3 | 15.2 | 9.6 | 2.2 | 63 |
| | | 25 | - | 13.4 | 12.9 | 7.8 | 0.2 | 60 |
| 8315 | 1 1/2 | 5 | - | 27.2 | 26.9 | 21.8 | 16.0 | 87 |
| | | 10 | - | 24.1 | 24.0 | 20.2 | 15.2 | 82 |
| | | 15 | - | 20.1 | 20.1 | 18.7 | 13.3 | 80 |
| | | 20 | - | 16.7 | 16.7 | 15.9 | 11.4 | 75 |
| | | 25 | - | 14.3 | 13.9 | 13.5 | 11.3 | 74 |

ELECTRICAL

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SIMFLO®

4" SIMFLO MOTORS

| HP Rating | Leads | Phase | Voltage | Thrust Rating | Length | Diameter | Weight | List Price |
|-----------|--------|-------|-----------|---------------|--------|----------|--------|------------|
| ½ | 2 Wire | 1 | 115 | 300 | 10" | 3.7" | 15.0 | \$ - |
| ½ | 2 Wire | 1 | 230 | 300 | 10" | 3.7" | 15.0 | \$ - |
| ¾ | 2 Wire | 1 | 230 | 300 | 10.5" | 3.7" | 17.8 | \$ - |
| 1 | 2 Wire | 1 | 230 | 650 | 12" | 3.7" | 23.3 | \$ - |
| 1½ | 2 Wire | 1 | 230 | 650 | 13.5" | 3.7" | 24.6 | \$ - |
| ½ | 3 Wire | 1 | 230 | 300 | 10" | 3.7" | 15.0 | \$ - |
| ¾ | 3 Wire | 1 | 230 | 300 | 10.5" | 3.7" | 17.8 | \$ - |
| 1 | 3 Wire | 1 | 230 | 650 | 12" | 3.7" | 23.3 | \$ - |
| 1½ | 3 Wire | 1 | 230 | 650 | 13.5" | 3.7" | 24.6 | \$ - |
| 2 | 3 Wire | 1 | 230 | 650 | 15" | 3.7" | 30.8 | \$ - |
| 3 | 3 Wire | 1 | 230 | 900 | 17" | 3.7" | 36.1 | \$ - |
| 5 | 3 Wire | 1 | 230 | 1500 | 27" | 3.7" | 64.5 | \$ - |
| 1½ | 3 Wire | 3 | 230 - 460 | 650 | 12" | 3.7" | 24.0 | \$ - |
| 2 | 3 Wire | 3 | 230 - 460 | 650 | 13.5" | 3.7" | 25.1 | \$ - |
| 3 | 3 Wire | 3 | 230 - 460 | 900 | 15" | 3.7" | 31.2 | \$ - |
| 5 | 3 Wire | 3 | 230 - 460 | 1500 | 22" | 3.7" | 51.5 | \$ - |
| 7½ | 3 Wire | 3 | 230 - 460 | 1500 | 27" | 3.7" | 64.7 | \$ - |
| 10 | 3 Wire | 3 | 460 | 1500 | 32" | 3.7" | 74.6 | \$ - |



NOTE: NATIONAL ELECTRICAL CODE REQUIRES THAT SUBMERSIBLE MOTORS BE GROUNDED.



4" AY MCDONALD MOTORS

| HP Rating | Leads | Phase | Voltage | Thrust Rating | Length | Diameter | Weight | List Price |
|-----------|--------|-------|-----------|---------------|---------|----------|--------|------------|
| ½ | 2 Wire | 1 | 115 | 500 | 13.425" | 3.662" | 21.4 | \$ - |
| ½ | 2 Wire | 1 | 230 | 500 | 13.031" | 3.662" | 21.0 | \$ - |
| ¾ | 2 Wire | 1 | 230 | 500 | 13.819" | 3.662" | 23.2 | \$ - |
| 1 | 2 Wire | 1 | 230 | 700 | 16.772" | 3.662" | 28.9 | \$ - |
| 1½ | 2 Wire | 1 | 230 | 700 | 18.543" | 3.662" | 33.3 | \$ - |
| ½ | 3 Wire | 1 | 115 | 500 | 10.472" | 3.662" | 19.4 | \$ - |
| ½ | 3 Wire | 1 | 230 | 500 | 10.472" | 3.662" | 19.4 | \$ - |
| ¾ | 3 Wire | 1 | 230 | 500 | 11.260" | 3.662" | 21.4 | \$ - |
| 1 | 3 Wire | 1 | 230 | 700 | 13.622" | 3.662" | 27.8 | \$ - |
| 1½ | 3 Wire | 1 | 230 | 700 | 16.181" | 3.662" | 32.5 | \$ - |
| 2 | 3 Wire | 1 | 230 | 700 | 16.181" | 3.662" | 32.7 | \$ - |
| 3 | 3 Wire | 1 | 230 | 1500 | 21.417" | 3.662" | 45.2 | \$ - |
| 5 | 3 Wire | 1 | 230 | 1500 | 26.929" | 3.662" | 59.8 | \$ - |
| 1½ | 3 Wire | 3 | 230 - 460 | 700 | 13.622" | 3.662" | 25.8 | \$ - |
| 2 | 3 Wire | 3 | 230 - 460 | 700 | 15.394" | 3.662" | 30.5 | \$ - |
| 3 | 3 Wire | 3 | 230 - 460 | 1500 | 19.843" | 3.662" | 40.8 | \$ - |
| 5 | 3 Wire | 3 | 230 - 460 | 1500 | 24.173" | 3.662" | 51.9 | \$ - |
| 7½ | 3 Wire | 3 | 230 - 460 | 1500 | 26.929" | 3.662" | 59.8 | \$ - |
| 10 | 3 Wire | 3 | 460 | 1500 | 30.079" | 3.662" | 68.7 | \$ - |



NOTE: NATIONAL ELECTRICAL CODE REQUIRES THAT SUBMERSIBLE MOTORS BE GROUNDED.

6" HITACHI MOTORS

| Horsepower | Phase | Voltage | Length | Diameter | Weight | List Price |
|------------|-------|-----------|--------|----------|--------|------------|
| 5 | 1 | 230 | 26.97" | 5.5" | 110 | \$ - |
| 7½ | 1 | 230 | 29.92" | 5.5" | 128 | \$ - |
| 10 | 1 | 230 | 29.92" | 5.5" | 128 | \$ - |
| 15 | 1 | 230 | 33.46" | 5.5" | 148 | \$ - |
| 5 | 3 | 230 - 460 | 22.95" | 5.5" | 95 | \$ - |
| 7½ | 3 | 230 - 460 | 24.80" | 5.5" | 99 | \$ - |
| 10 | 3 | 230 - 460 | 26.97" | 5.5" | 110 | \$ - |
| 15 | 3 | 230 - 460 | 29.92" | 5.5" | 128 | \$ - |
| 20 | 3 | 230 - 460 | 31.50" | 5.5" | 137 | \$ - |
| 25 | 3 | 230 - 460 | 36.22" | 5.5" | 161 | \$ - |
| 30 | 3 | 230 - 460 | 38.19" | 5.5" | 176 | \$ - |
| 40 | 3 | 460 | 40.55" | 5.5" | 187 | \$ - |
| 50 | 3 | 460 | 41.73" | 5.5" | 198 | \$ - |
| 60 | 3 | 460 | 41.73" | 5.5" | 198 | \$ - |

8" X 6" FLANGE HITACHI MOTORS

| | | | | | | |
|----|---|-----|--------|-------|-----|------|
| 50 | 3 | 460 | 45.28" | 7.52" | 346 | \$ - |
| 60 | 3 | 460 | 48.03" | 7.52" | 401 | \$ - |

8" HITACHI MOTORS

| | | | | | | |
|-----|---|-----|--------|-------|-----|------|
| 40 | 3 | 460 | 44.09" | 7.52" | 320 | \$ - |
| 50 | 3 | 460 | 46.44" | 7.52" | 353 | \$ - |
| 60 | 3 | 460 | 49.19" | 7.52" | 408 | \$ - |
| 75 | 3 | 460 | 53.15" | 7.52" | 463 | \$ - |
| 100 | 3 | 460 | 58.27" | 7.52" | 518 | \$ - |
| 125 | 3 | 460 | 66.14" | 7.52" | 595 | \$ - |
| 150 | 3 | 460 | 70.08" | 7.52" | 661 | \$ - |

10" HITACHI MOTORS

| | | | | | | |
|-----|---|-----|--------|-------|-----|------|
| 200 | 3 | 460 | 69.68" | 8.52" | 816 | \$ - |
| 250 | 3 | 460 | 79.53" | 8.52" | 948 | \$ - |

HITACHI MOTOR ACCESSORIES

| | |
|---|------|
| 6" Hitachi Motor Leads - #10 AWG (5-30HP) | \$ - |
| 6" Hitachi Motor Leads - #8 AWG (40-60HP) | \$ - |
| 230/460 Volt Hitachi Motor Plug | \$ - |



6" SME MOTORS

| Horsepower | Phase | Voltage | Length | Diameter | Weight | List Price |
|------------|-------|------------|--------|----------|--------|------------|
| 5 | 3 | 230 or 460 | 28.03" | 5.6" | 122 | \$ - |
| 7½ | 3 | 230 or 460 | 28.03" | 5.6" | 122 | \$ - |
| 10 | 3 | 230 or 460 | 30.00" | 5.6" | 133 | \$ - |
| 15 | 3 | 230 or 460 | 33.35" | 5.6" | 155 | \$ - |
| 20 | 3 | 230 or 460 | 36.89" | 5.6" | 175 | \$ - |
| 25 | 3 | 230 or 460 | 40.43" | 5.6" | 197 | \$ - |
| 30 | 3 | 230 or 460 | 43.78" | 5.6" | 217 | \$ - |
| 40 | 3 | 460 | 49.09" | 5.6" | 248 | \$ - |
| 50 | 3 | 460 | 49.09" | 5.6" | 248 | \$ - |
| 60 | 3 | 460 | 51.77" | 5.6" | 259 | \$ - |
| 70 | 3 | 460 | 54.13" | 5.6" | 276 | \$ - |

8" SME MOTORS

| | | | | | | |
|-----|---|-----|-------|------|-----|------|
| 40 | 3 | 460 | 44.8" | 7.6" | 375 | \$ - |
| 50 | 3 | 460 | 48.7" | 7.6" | 416 | \$ - |
| 60 | 3 | 460 | 51.9" | 7.6" | 451 | \$ - |
| 75 | 3 | 460 | 61.5" | 7.6" | 536 | \$ - |
| 100 | 3 | 460 | 68.0" | 7.6" | 609 | \$ - |
| 125 | 3 | 460 | 71.9" | 7.6" | 657 | \$ - |
| 150 | 3 | 460 | 75.9" | 7.6" | 701 | \$ - |
| 175 | 3 | 460 | 80.2" | 7.6" | 742 | \$ - |

10" SME MOTORS

| | | | | | | |
|-----|---|-----|-------|-------|------|------|
| 150 | 3 | 460 | 56.3" | 9.13" | 794 | \$ - |
| 200 | 3 | 460 | 64.2" | 9.13" | 1014 | \$ - |
| 250 | 3 | 460 | 72.1" | 9.13" | 1256 | \$ - |



SUBMERSIBLE MOTOR ENGINEERING USA



6" AY MCDONALD MOTORS

| Horsepower | Phase | Volts | Length | Diameter | Weight | List Price |
|------------|-------|------------|---------|----------|--------|------------|
| 5 | 3 | 230 or 460 | 23.661" | 5.551" | 91 | \$ - |
| 7½ | 3 | 230 or 460 | 24.843" | 5.551" | 98 | \$ - |
| 10 | 3 | 230 or 460 | 26.023" | 5.551" | 104 | \$ - |
| 15 | 3 | 230 or 460 | 28.779" | 5.551" | 120 | \$ - |
| 20 | 3 | 230 or 460 | 30.944" | 5.551" | 136 | \$ - |
| 25 | 3 | 230 or 460 | 33.897" | 5.551" | 151 | \$ - |
| 30 | 3 | 230 or 460 | 36.258" | 5.551" | 164 | \$ - |
| 40 | 3 | 460 | 41.377" | 5.551" | 196 | \$ - |
| 50 | 3 | 460 | 46.496" | 5.551" | 225 | \$ - |
| 60 | 3 | 460 | 53.582" | 5.551" | 262 | \$ - |

8" AY MCDONALD MOTORS

| | | | | | | |
|-----|---|-----|-----|--------|-----|------|
| 50 | 3 | 460 | 46" | 7.559" | 344 | \$ - |
| 60 | 3 | 460 | 50" | 7.559" | 390 | \$ - |
| 75 | 3 | 460 | 53" | 7.559" | 423 | \$ - |
| 100 | 3 | 460 | 63" | 7.559" | 522 | \$ - |
| 125 | 3 | 460 | 72" | 7.559" | 624 | \$ - |
| 150 | 3 | 460 | 81" | 7.559" | 734 | \$ - |

10" AY MCDONALD MOTORS

| | | | | | | |
|-----|---|-----|-----|--------|------|------|
| 200 | 3 | 460 | 81" | 9.134" | 1102 | \$ - |
| 230 | 3 | 460 | 87" | 9.134" | 1190 | \$ - |
| 260 | 3 | 460 | 94" | 9.134" | 1279 | \$ - |



MOTOR SHROUDS

| Pump O.D. | Skirt O.D. | Length | Material | Horsepower | List Price |
|-----------|------------|--------|----------|-------------|------------|
| 4" | 4.5" | 30" | PVC | 1-1/2 to 2 | \$ - |
| 4" | 4.5" | 36" | PVC | 3 to 5 | \$ - |
| 4" | 4.5" | 42" | PVC | 7-1/2 to 10 | \$ - |
| 5-1/4" | 7" | 36" | PVC | 5 to 10 | \$ - |
| 5-1/4" | 7" | 48" | PVC | 15 to 30 | \$ - |
| 5-1/4" | 7" | 54" | PVC | 40 | \$ - |
| 5-1/4" | 7" | 74" | PVC | 50 to 60 | \$ - |
| 6" | 7" | 36" | PVC | 5 to 10 | \$ - |
| 6" | 7" | 48" | PVC | 15 to 30 | \$ - |
| 6" | 7" | 54" | PVC | 40 | \$ - |
| 6" | 7" | 74" | PVC | 50 to 60 | \$ - |
| 7" | 8" | 36" | PVC | 5 - 15 | \$ - |
| 7" | 8" | 48" | PVC | 20 - 30 | \$ - |
| 7" | 8" | 54" | PVC | 40 | \$ - |
| 7" | 8" | 74" | PVC | 50 - 60 | \$ - |
| 8" | 10" | 42" | PVC | 5 to 10 | \$ - |
| 8" | 10" | 48" | PVC | 15 to 30 | \$ - |
| 8" | 10" | 54" | PVC | 40 | \$ - |
| 8" | 10" | 68" | PVC | 50 | \$ - |
| 8" | 10" | 74" | PVC | 60 | \$ - |
| 8" | 10" | 82" | PVC | 75 | \$ - |

COMPONENTS

| | |
|----------------------------|------|
| 4" PVC SHROUD HEAD | \$ - |
| 5" PVC SHROUD HEAD | \$ - |
| 6" PVC SHROUD HEAD | \$ - |
| 7" PVC SHROUD HEAD | \$ - |
| 8" PVC SHROUD HEAD | \$ - |
| SHROUD RIVETS | \$ - |
| #64 STAINLESS STEEL CLAMP | \$ - |
| #96 STAINLESS STEEL CLAMP | \$ - |
| #128 STAINLESS STEEL CLAMP | \$ - |

STAINLESS STEEL CLAMPS

| Mfg Number | Description | Size | Box Quantity | List Price |
|------------|-------------|-------------------|--------------|------------|
| 6308 | 8 | 7/16" x 1" | 10 | \$ - |
| 6310 | 10 | 1/2" x 1-1/16" | 10 | \$ - |
| 6312 | 12 | 1/2" x 1-1/4" | 10 | \$ - |
| 6316 | 16 | 11/16" x 1-1/2" | 10 | \$ - |
| 6320 | 20 | 3/4" x 1-3/4" | 10 | \$ - |
| 6324 | 24 | 1" x 2" | 10 | \$ - |
| 6328 | 28 | 1-15/16" x 2-1/2" | 10 | \$ - |
| 6332 | 32 | 1-1/2" x 2-1/2" | 10 | \$ - |
| 6336 | 36 | 1-3/4" x 2-3/4" | 10 | \$ - |
| 6340 | 40 | 2" x 3" | 10 | \$ - |
| 6352 | 52 | 2-3/4" x 3-3/4" | 10 | \$ - |
| 6364 | 64 | 2-1/2" x 4-1/2" | 10 | \$ - |
| 6372 | 72 | 3" x 5" | 10 | \$ - |
| 6380 | 80 | 3-1/2" x 5-1/2" | 10 | \$ - |
| 6396 | 96 | 4-1/2" x 6-1/2" | 10 | \$ - |
| 63104 | 104 | 5" x 7" | 10 | \$ - |
| 63128 | 128 | 6-1/2" x 8-1/2" | 10 | \$ - |
| 63152 | 152 | 8" x 10" | 10 | \$ - |





AY MCDONALD CONTROL BOXES

Standard

| HP | Phase | Voltage | List Price |
|----|-------|---------|------------|
| ½ | 1 | 115 | \$ - |
| ½ | 1 | 230 | \$ - |
| ¾ | 1 | 230 | \$ - |
| 1 | 1 | 230 | \$ - |
| 1½ | 1 | 230 | \$ - |
| 2 | 1 | 230 | \$ - |
| 3 | 1 | 230 | \$ - |
| 5 | 1 | 230 | \$ - |

*Use Heavy duty pressure switches on 1 ½ hp and above with a standard control box



Deluxe

| HP | Phase | Voltage | List Price |
|----|-------|---------|------------|
| 1½ | 1 | 230 | \$ - |
| 2 | 1 | 230 | \$ - |
| 3 | 1 | 230 | \$ - |
| 5 | 1 | 230 | \$ - |
| 7½ | 1 | 230 | \$ - |
| 10 | 1 | 230 | \$ - |
| 15 | 1 | 230 | \$ - |

*Deluxe control boxes allow the use of standard pressure switches

PRESSURE SWITCHES



| Model # | Pressure Setting | Description / Features | List Price |
|---------|------------------|-----------------------------------|------------|
| 1040 | 20/40 | Standard Water Pump Switch | \$ - |
| 1041 | 30/50 | Standard Water Pump Switch | \$ - |
| 1042 | 40/60 | Standard Water Pump Switch | \$ - |
| 1043 | 20/40 | Pump Switch With Low Cut-Off | \$ - |
| 1044 | 30/50 | Pump Switch With Low Cut-Off | \$ - |
| 1045 | 40/60 | Pump Switch With Low Cut-Off | \$ - |
| 1046 | 20/40 | Heavy Duty Commercial Pump Switch | \$ - |
| 1047 | 30/50 | Heavy Duty Commercial Pump Switch | \$ - |
| 1048 | 40/60 | Heavy Duty Commercial Pump Switch | \$ - |
| 1049 | 60/80 | Heavy Duty Commercial Pump Switch | \$ - |



- *Nema 1 Rated
- *1/4" FRT Connection
- *Suitable for all types of pumps
- *Standard, low pressure cutoff or HD switches available



| Model # | Pressure Setting | Description / Features | List Price |
|-------------|------------------|--|------------|
| FSG-2 | 20/40 | Standard Water Pump Switch | \$ - |
| FSG-2 | 30/50 | Standard Water Pump Switch | \$ - |
| FSG-2 | 40/60 | Standard Water Pump Switch | \$ - |
| FSG-2 (M-1) | 20/40 | Pump Switch With Manual Cut-Off | \$ - |
| FSG-2 (M-1) | 30/50 | Pump Switch With Manual Cut-Off | \$ - |
| FSG-2 (M-4) | 20/40 | Pump Switch With Low Cut-Off | \$ - |
| FSG-2 (M-4) | 30/50 | Pump Switch With Low Cut-Off | \$ - |
| GSG-2 | 20/40 | Heavy Duty Commercial Pump Switch | \$ - |
| GSG-2 | 30/50 | Heavy Duty Commercial Pump Switch | \$ - |
| GSG-2 | 40/60 | Heavy Duty Commercial Pump Switch | \$ - |
| GHG-2 | 40/60 | Heavy Duty Commercial Pump Switch (High Pressure) | \$ - |
| GHG-2 | 60/80 | Heavy Duty Commercial Pump Switch (High Pressure) | \$ - |



- *1/4" FRT Connection
- *FS Series for use in 1.5hp and smaller
- *GS Series for use in higher HP applications

| NEMA A Type 1 Enclosure | | Poles | Cut-Out PSI Range | Differ- ential | Electrical Ratings - Horsepower | | | | | | | |
|-------------------------|----------------------------|-------|-------------------------|-------------------|---------------------------------|------|--------------|------|------|----------------|------|------|
| Model No. | Special Features | | | | 1 Phase AC | | Polyphase AC | | | Direct Current | | |
| | | | | | 110V | 220V | 220V | 440V | 550V | 32V | 115V | 230V |
| FSG2 | Standard Pump Switch | 2 | 20-65 | 15-30 | 1 1/2 | 2 | 2 | - | - | 1/4 | - | - |
| FSG2 (M1) | Manual Cut-Off Lever | 2 | 20-65 | 15-30 | 1 1/2 | 2 | 2 | - | - | 1/4 | - | - |
| FSG2 (M4) | Low Pressure Cut-Off Lever | 2 | 20-65 | 15-30 | 1 1/2 | 2 | 2 | - | - | 1/4 | - | - |
| GSG2 | Heavy Duty Pump Switch | 2 | 20-80 | 14-43 | 2 | 3 | 5 | 5 | 5 | 1/2 | 1 | 1 |
| GHG2 | Heavy Duty Pump Switch | 2 | 65-200 | 25-60 | 2 | 3 | 5 | 5 | 5 | 1/2 | 1 | 1 |



SIEMENS
ESP200 Control Panel

| NEMA Size | Max HP | Overload Range | Fuse Clip Size | MFG Number | List Price |
|-----------------|--------|----------------|----------------|------------|------------|
| 230 Volt | | | | | |
| 1 | 3 | 5.5 - 22 | 30 | 87DUD6LC | \$ - |
| 1 | 5-7½ | 10-40 | 30 | 87DUE6LC | \$ - |
| 1-3/4 | 10 | 10-40 | 60 | 87EUE6LC | \$ - |
| 2 | 15 | 13-52 | 60 | 87FUF6LC | \$ - |
| 2-1/2 | 20 | 25-100 | 100 | 87GUG6PC | \$ - |
| 3 | 25-30 | 50-200 | 100 | 87HUG6LC | \$ - |

Slim Line 460 Volt

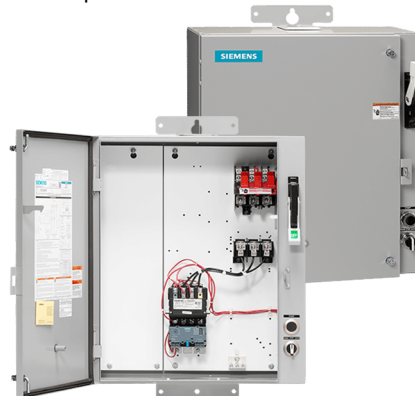
| | | | | | |
|---|-------|----------|----|-----------|------|
| 1 | 5-10 | 5.5 - 22 | 30 | 82ADD6FBH | \$ - |
| 2 | 15-25 | 13-52 | 60 | 82AFF6FDH | \$ - |

460 Volt

| | | | | | |
|-------|---------|----------|-----|----------|------|
| 1 | 5-10 | 5.5 - 22 | 30 | 87DUD6FC | \$ - |
| 1-3/4 | 15 | 10-40 | 30 | 87EUE6FC | \$ - |
| 2 | 20-25 | 13-52 | 60 | 87FUF6FC | \$ - |
| 2-1/2 | 30 | 25-100 | 60 | 87GUG6FC | \$ - |
| 3 | 40-50 | 25-100 | 100 | 87HUG6FC | \$ - |
| 3-1/2 | 60-75 | 50-200 | 200 | 87IUH6FC | \$ - |
| 4 | 100 | 50-200 | 200 | 87JUH6FC | \$ - |
| 5 | 125-200 | 55-250 | 400 | 87LPU6FH | \$ - |
| 6 | 250 | 160-630 | 600 | 87MSW6FH | \$ - |

- *Phase Loss Protection
- *Ambient Insensitive
- *FLA Adjustment Range
- *Heaterless Design
- *Trip Free Design
- *NEMA Class 10, 20, and 30 Trip Curves

- *+ or -2% Repeat Trip Accuracy
- *Manual Reset
- *-22° F to 159 ° F
- *Rated for both 50 & 60 Hz
- *UL Listed File # E22655
- *CSA Certified File #LR6535



SIEMENS STARTERS

| MFG Number | NEMA Size | Overload Range | Max HP Rating 230V | Max HP Rating 460V | List Price |
|------------|-----------|----------------|--------------------|--------------------|------------|
| 14DUD32AC | 1 | 5.5-22 Amp | 3 | 10 | \$ - |
| 14EUE32AC | 1½ | 10-40 Amp | 10 | 15 | \$ - |
| 14FUF32AC | 2 | 13-52 Amp | 15 | 25 | \$ - |
| 14GUG32AC | 2½ | 25-100 Amp | 20 | 30 | \$ - |



SIEMENS ESP200 OVERLOAD RELAY

| MFG Number | Overload Range | Max HP Rating 230V | Max HP Rating 460V | List Price |
|------------|----------------|--------------------|--------------------|------------|
| 48ATC3S00 | 3 to 12 | 2 | 5 | \$ - |
| 48ATD3S00 | 5.5 to 22 | 3 | 10 | \$ - |
| 48ATE3S00 | 10 to 40 | 10 | 15 | \$ - |
| 48BTF3S00 | 13 to 52 | 15 | 25 | \$ - |
| 48BTG3S00 | 25 to 100 | 30 | 50 | \$ - |
| 48BTH3S00 | 50 to 200 | 50 | 100 | \$ - |



SIEMENS PANEL PARTS

| Mfg Number | Description | List Price |
|-------------|-----------------------|------------|
| 49SASB1 | HOA SWITCH STARTER | \$ - |
| 52SB2CAB | HOA SELECTOR | \$ - |
| 52BAK | N/O CONTACT | \$ - |
| 53BAJ | N/C CONTACT | \$ - |
| 52PA8A1 | START BUTTON | \$ - |
| 52SA2CABA1P | BLISTER PACK WITH HOA | \$ - |
| 75D73070C | 00-2½ 240V/480V COIL | \$ - |
| 75D73251C | 3-3½ 240V/480V COIL | \$ - |



Service Disconnects

| Mfg Number | Description | List Price |
|------------|---------------------------------------|------------|
| D211N | 30A 240V NEMA 1 FUSED - SCREW IN TYPE | \$ - |
| GF221N | 30A 240V 2P NEMA 1 FUSED | \$ - |
| GF221NR | 30A 240V 2P NEMA 3R FUSED | \$ - |
| GF222NR | 60A 240V 3P NEMA 3R FUSED | \$ - |
| GF223NR | 100A 240V 2P NEMA 3R FUSED | \$ - |
| GF323NR | 100A 240V 3P NEMA 3R FUSED | \$ - |
| HF361R | 30A 600V 3P NEMA 3R FUSED | \$ - |
| HF362R | 60A 600V 3P NEMA 3R FUSED | \$ - |
| HF363R | 100A 600V 3P NEMA 3R FUSED | \$ - |
| HF364R | 200A 600V 3P NEMA 3R FUSED | \$ - |



FUSES

| Model | AMP Rating | HP Range 1 Phase | HP Range 3 Phase | Type | Box Quantity | List Price |
|-------|------------|---------------------|---------------------|------|--------------|------------|
| GT15 | 15 | ½ | | Plug | 4 | \$ - |
| GT20 | 20 | ¾ | | Plug | 4 | \$ - |
| GT25 | 25 | 1 | | Plug | 4 | \$ - |
| GT30 | 30 | 1½ | | Plug | 4 | \$ - |

125V

250V

| | | | | | | |
|---------|-----|--------|--------|-----------|----|------|
| TR-10R | 10 | 1 | 1½ - 2 | Cartridge | 10 | \$ - |
| TR-15R | 15 | 1½ - 2 | 3 | Cartridge | 10 | \$ - |
| TR-20R | 20 | 3 | 5 | Cartridge | 10 | \$ - |
| TR-30R | 30 | 5 | 7½ | Cartridge | 10 | \$ - |
| TR-35R | 35 | | 10 | Cartridge | 10 | \$ - |
| TR-40R | 40 | | | Cartridge | 10 | \$ - |
| TR-45R | 45 | 7½ | | Cartridge | 10 | \$ - |
| TR-60R | 60 | 10 | 15 | Cartridge | 10 | \$ - |
| TR-70R | 70 | | 20 | Cartridge | 5 | \$ - |
| TR-80R | 80 | 15 | | Cartridge | 5 | \$ - |
| TR-90R | 90 | | 25 | Cartridge | 5 | \$ - |
| TR-100R | 100 | | 30 | Cartridge | 5 | \$ - |

- * AC & DC rated
- * Time-delay for motor start-ups and transformer inrush currents without nuisance opening
- * Current-limiting for low peak let-thru current
- * Easy-to-read label for quick brand recognition and replacement
- * Metal-embossed date and catalog number for traceability and lasting identification
- * Fiberglass body provides dimensional stability in harsh industrial settings
- * High-grade silica filler ensures fast arc quenching and high current limitation
- * UL Listed / CSA Certified



FUSES

| Model | AMP Rating | HP Range 1 Phase | HP Range 3 Phase | Type | Box Quantity | List Price |
|--------------------|------------|---------------------|---------------------|-----------|--------------|------------|
| <u>600V</u> | | | | | | |
| TRS-5R | 5 | | 1½ - 2 | Cartridge | 10 | \$ - |
| TRS-7R | 7 | | 3 | Cartridge | 10 | \$ - |
| TRS-10R | 10 | | 5 | Cartridge | 10 | \$ - |
| TRS-15R | 15 | | 7½ | Cartridge | 10 | \$ - |
| TRS-20R | 20 | | 10 | Cartridge | 10 | \$ - |
| TRS-30R | 30 | | 15 | Cartridge | 10 | \$ - |
| TRS-35R | 35 | | 20 | Cartridge | 10 | \$ - |
| TRS-40R | 40 | | | Cartridge | 10 | \$ - |
| TRS-45R | 45 | | 25 | Cartridge | 10 | \$ - |
| TRS-50R | | | 30 | Cartridge | 10 | \$ - |
| TRS-60R | 60 | | | Cartridge | 10 | \$ - |
| TRS-70R | 70 | | 40 | Cartridge | 5 | \$ - |
| TRS-80R | 80 | | | Cartridge | 5 | \$ - |
| TRS-90R | 90 | | 50 | Cartridge | 5 | \$ - |
| TRS-100R | 100 | | | Cartridge | 5 | \$ - |
| TRS-110R | 110 | | 60 | Cartridge | 1 | \$ - |
| TRS-125R | 125 | | 75 | Cartridge | 1 | \$ - |
| TRS-150R | 150 | | | Cartridge | 1 | \$ - |
| TRS-175R | 175 | | 100 | Cartridge | 1 | \$ - |
| TRS-200R | 200 | | | Cartridge | 1 | \$ - |
| TRS-225R | 225 | | 125 | Cartridge | 1 | \$ - |



- * AC & DC rated
- * Time-delay for motor start-ups and transformer inrush currents without nuisance opening
- * Current-limiting for low peak let-thru current
- * Easy-to-read label for quick brand recognition and replacement
- * Metal-embossed date and catalog number for traceability and lasting identification
- * Fiberglass body provides dimensional stability in harsh industrial settings
- * High-grade silica filler ensures fast arc quenching and high current limitation
- * UL Listed / CSA Certified

FUSE REDUCERS

| Description | Manufacturer Number | List Price |
|---|---------------------|------------|
| 60A - 30A Fuse Reducer - Cartridge Type | 636 | \$ - |
| 100A - 30A Fuse Reducer - Cartridge Type | 162 | \$ - |
| 100A - 60A Fuse Reducer - Cartridge Type | 166 | \$ - |
| 200A - 60A Fuse Reducer - Cartridge Type | 266 | \$ - |
| 200A - 100A Fuse Reducer - Cartridge Type | 212 | \$ - |



PHASE PERFECT - SOLID STATE, DIGITAL PHASE CONVERTER

240V Output Phase Converters

| <u>Model Number</u> | <u>HP Rating</u> | <u>Voltage Input</u> | <u>Voltage Output</u> | <u>List Price</u> |
|---------------------|------------------|----------------------|-----------------------|-------------------|
| PTE007R | 7.5 | 240V 1PH | 240V 3PH | Call for Price |
| PTE010R | 10 | 240V 1PH | 240V 3PH | Call for Price |
| PTE015R | 15 | 240V 1PH | 240V 3PH | Call for Price |
| PTE020R | 20 | 240V 1PH | 240V 3PH | Call for Price |

Voltage Doubling Phase Converters

| <u>Model Number</u> | <u>HP Rating</u> | <u>Voltage Input</u> | <u>Voltage Output</u> | <u>List Price</u> |
|---------------------|------------------|----------------------|-----------------------|-------------------|
| PTE207RQT | 7.5 | 240V 1PH | 480V 3PH | Call for Price |
| PTE210RQT | 10 | 240V 1PH | 480V 3PH | Call for Price |
| PTE215RQT | 15 | 240V 1PH | 480V 3PH | Call for Price |
| PTE220RQT | 20 | 240V 1PH | 480V 3PH | Call for Price |



480V Output Phase Converters

| <u>Model Number</u> | <u>HP Rating</u> | <u>Voltage Input</u> | <u>Voltage Output</u> | <u>List Price</u> |
|---------------------|------------------|----------------------|-----------------------|-------------------|
| PTE407R | 7.5 | 480V 1PH | 480V 3PH | Call for Price |
| PTE410R | 10 | 480V 1PH | 480V 3PH | Call for Price |
| PTE415RQT | 15 | 480V 1PH | 480V 3PH | Call for Price |
| PTE420RQT | 20 | 480V 1PH | 480V 3PH | Call for Price |

Increased Efficiency

- Now 98.7% efficient at full load
- Lower standby losses

The Best Power Quality

- Voltage balance within 2%

Less Noise

- Compared to rotary phase converters, the Phase Perfect® is 82% quieter

Improved Starting Capability

- NEW! PERFECTStart™ - Proprietary control algorithm that prevents overcurrent tripping

Rugged & Reliable

- NEMA 1 indoor & NEMA 3R outdoor enclosures available

Higher Power Ratings

- 240 V models - now up to 75 HP
- 480 V Models - now up to 100 HP

PTE Series Features

- Compact Frame
- NEW! - Voltage Doubling™
- Best in-class value

**PHASE
PERFECT®**
DIGITAL PHASE CONVERTERS

PHASE TECHNOLOGIES VFDS

Essential Series - 115V / 240V Single Phase Input and Output

| <u>Model</u> | <u>HP</u> | <u>Voltage In</u> | <u>Voltage Out</u> | <u>Input Current</u> | <u>Output Current</u> | <u>List Price</u> |
|--|-----------|-------------------|--------------------|----------------------|-----------------------|-------------------|
| ES3R | 1/3 to 2 | 115v / 230v | 115v / 230v | 13A | 13A | \$ - |
| * .5 to 150 PSI Digital Pressure Switch W/ 10' Lead Included | | | | | | |

Additional Panel Shop Options

| <u>Description</u> | <u>List Price</u> |
|-----------------------------------|-------------------------------|
| 4-20mA Input Board and Transducer | Call For Price & Availability |
| Overpressure Switch | Call For Price & Availability |

Features and Benefits

- *Single phase in, single phase out capabilities
- *Both 2-wire and 3-wire motor compatibility
- *Large easy to read graphic display
- *Easy field servcability
- *Large wiring area
- *Auto restart setting
- *60 psi pre-set digital pressure switch included
- *Easy setup with perfect pressure
- *NEMA 3R enclosure with insect guards
- *122°F (50°C) Rated
- *Rugged reliability



ES
SERIES



PHASE TECHNOLOGIES VFDS

SD Series - 208V / 240V Single Phase Input - 240V Three Phase Output

| <u>Model</u> | <u>HP</u> | <u>Voltage In</u> | <u>Voltage Out</u> | <u>Input Current</u> | <u>Output Current</u> | <u>List Price</u> |
|--------------|-----------|-------------------|--------------------|----------------------|-----------------------|-------------------|
| SD002R | ½ - 2 | 240v, 1ph | 240v, 3ph | 20A | 8A | \$ - |
| SD003R | 3 | 240v, 1ph | 240v, 3ph | 30A | 10A | \$ - |
| SD005R | 5 | 240v, 1ph | 240v, 3ph | 42A | 18A | \$ - |
| SD007R | 7½ | 240v, 1ph | 240v, 3ph | 58A | 27A | \$ - |
| SD010R | 10 | 240v, 1ph | 240v, 3ph | 69A | 33A | \$ - |
| SD015R | 15 | 240v, 1ph | 240v, 3ph | 92A | 46A | \$ - |

* 0-150 psi Transducer with 15ft lead - included standard with all SD Series models

SD Series - 480V Single Phase Input - 480V Single Phase Output

| <u>Model</u> | <u>HP</u> | <u>Voltage In</u> | <u>Voltage Out</u> | <u>Input Current</u> | <u>Output Current</u> | <u>List Price</u> |
|--------------|-----------|-------------------|--------------------|----------------------|-----------------------|-------------------|
| SD405 | 5 | 480v, 1ph | 480v, 3ph | 30A | 10A | \$ - |
| SD407 | 7½ | 480v, 1ph | 480v, 3ph | 37A | 13A | \$ - |
| SD410 | 10 | 480v, 1ph | 480v, 3ph | 42A | 18A | \$ - |
| SD415R | 15 | 480v, 1ph | 480v, 3ph | 56A | 24A | \$ - |

* 0-150 psi Transducer with 15ft lead - included standard with all SD models

Additional Panel Shop Options

Description

List Price

| | |
|-----------------------------|-------------------------------|
| Sine Wave Output Filter | Call For Price & Availability |
| Strikesorb Surge Protection | Call For Price & Availability |



Features and Benefits

- *User Friendly constant pressure setup wizard.
- *Designed and housed in NEMA 3R enclosure for durability and installation flexibility.
- *Easily serviceable in the field.
- *LCD screen shines bright for easy reading, and displays real time information.
- *Metal door for keypad protection with optional lock for safety.
- *Able to withstand operating temperatures of up to 122 degrees Fahrenheit.

SD SERIES



PHASE TECHNOLOGIES VFDS

2XD Series - 240V Single Phase Input - 460V Three Phase Output

| <u>Model</u> | <u>HP</u> | <u>Voltage In</u> | <u>Voltage Out</u> | <u>Input Current</u> | <u>Output Current</u> | <u>List Price</u> |
|--------------|-----------|-------------------|--------------------|----------------------|-----------------------|-------------------|
| 2XD205R | 5 | 240v, 1ph | 460v, 3ph | 31A | 10A | Call for Price |
| 2XD207R | 7.5 | 240v, 1ph | 460v, 3ph | 52A | 13A | Call for Price |
| 2XD210R | 10 | 240v, 1ph | 460v, 3ph | 64A | 18A | Call for Price |

* 0-150 psi Transducer with 15ft lead - included standard with all 2XD models

Additional Panel Shop Options

| <u>Description</u> | <u>List Price</u> |
|------------------------------------|-------------------------------|
| 0-150 PSI Transducer w/ 15' Lead | Call For Price & Availability |
| 0-150 PSI Transducer w/ 25' Lead | Call For Price & Availability |
| 0-150 PSI Transducer w/ 50' Lead | Call For Price & Availability |
| 0-150 PSI Transducer w/ 100' Lead | Call For Price & Availability |
| Keypad Locking Cover | Call For Price & Availability |
| HOA Switch and Speed Potentiometer | Call For Price & Availability |
| Sine Wave Output Filter | Call For Price & Availability |
| Strikesorb Surge Protector | Call For Price & Availability |

Features and Benefits

- ***Voltage doubling capabilities** to bring 240V to 480V for better motor efficiency and savings on cable in deep set
- *Included single event surge protection
- *Easy set up with Perfect Pressure
- *NEMA 3R rated outdoor enclosure
- *Integrated output filter options
- *Large easy to read graphic display
- *Metal door for keypad protection with optional lock for safety.



2XD SERIES

PHASE TECHNOLOGIES VFDS

1LHE Series - 240V Single Phase Input - 240V Three Phase Output

| <u>Model</u> | <u>HP</u> | <u>Voltage In</u> | <u>Voltage Out</u> | <u>Input Current</u> | <u>Output Current</u> | <u>List Price</u> |
|--------------|-----------|-------------------|--------------------|----------------------|-----------------------|-------------------|
| 1LHE005R | 5 | 240v, 1ph | 240v, 3ph | 26A | 18A | Call for Price |
| 1LHE007R | 7.5 | 240v, 1ph | 240v, 3ph | 37A | 24A | Call for Price |
| 1LHE010R | 10 | 240v, 1ph | 240v, 3ph | 48A | 31A | Call for Price |
| 1LHE015R | 15 | 240v, 1ph | 240v, 3ph | 72A | 46A | Call for Price |
| 1LHE020R | 20 | 240v, 1ph | 240v, 3ph | 97A | 61A | Call for Price |

* See Page B-29 For Additional Panel Shop Options

1LHE Series - 240V Single Phase Input - 480V Three Phase Output

| <u>Model</u> | <u>HP</u> | <u>Voltage In</u> | <u>Voltage Out</u> | <u>Input Current</u> | <u>Output Current</u> | <u>List Price</u> |
|--------------|-----------|-------------------|--------------------|----------------------|-----------------------|-------------------|
| 1LHE205R | 5 | 240v, 1ph | 480v, 3ph | 26A | 9A | Call for Price |
| 1LHE207R | 7.5 | 240v, 1ph | 480v, 3ph | 37A | 13A | Call for Price |
| 1LHE210R | 10 | 240v, 1ph | 480v, 3ph | 50A | 18A | Call for Price |
| 1LHE215R | 15 | 240v, 1ph | 480v, 3ph | 67A | 24A | Call for Price |
| 1LHE220R | 20 | 240v, 1ph | 480v, 3ph | 97A | 31A | Call for Price |
| 1LHE225R | 25 | 240v, 1ph | 480v, 3ph | 115A | 40A | Call for Price |

* See Page B-29 For Additional Panel Shop Options

Features and Benefits

- ***Voltage doubling capabilities** to bring 240V to 480V for better motor efficiency and savings on cable in deep set
- *Guaranteed IEEE 519 compliant without additional harmonic filters.
- *Set up constant pressure in minutes.
- *Large backlit graphic display with intuitive menus.
- *NEMA 3R enclosure.
- *Compact and versatile enclosure for ease of installation.
- *Superior heat rejection and cooling capabilities.
- *Able to withstand temperatures up to 122° F.



1LH
SERIES



PHASE TECHNOLOGIES VFDS

1LHS Series - 480V Single Phase Input - 480V Three Phase Output

| <u>Model</u> | <u>HP</u> | <u>Voltage In</u> | <u>Voltage Out</u> | <u>Input Current</u> | <u>Output Current</u> | <u>List Price</u> |
|--------------|-----------|-------------------|--------------------|----------------------|-----------------------|-------------------|
| 1LHS420R | 20 | 480v, 1ph | 480v, 3ph | 48A | 31A | Call for Price |
| 1LHS430R | 30 | 480v, 1ph | 480v, 3ph | 72A | 46A | Call for Price |
| 1LHS440R | 40 | 480v, 1ph | 480v, 3ph | 98A | 61A | Call for Price |
| 1LHS450R | 50 | 480v, 1ph | 480v, 3ph | 121A | 77A | Call for Price |
| 1LHS460R | 60 | 480v, 1ph | 480v, 3ph | 143A | 91A | Call for Price |
| 1LHS475R | 75 | 480v, 1ph | 480v, 3ph | 170A | 107A | Call for Price |
| 1LHS4100R | 100 | 480v, 1ph | 480v, 3ph | 226A | 142A | Call for Price |

* See Page B-29 For Additional Panel Shop Options

Features and Benefits

- *Guaranteed IEEE 519 compliant without additional harmonic filters.
- *Set up constant pressure in minutes.
- *Large backlit graphic display with intuitive menus.
- *Phase changing.
- *NEMA 3R enclosure.
- *Slim, light design for larger applications.
- *Superior heat rejection and cooling capabilities.
- *Able to withstand temperatures up to 122° F.



1LH
SERIES

SIGNATURE



PHASE TECHNOLOGIES VFDS

LH Performance Series - 480V Single Phase Input - 480V Three Phase Output

| <u>Model</u> | <u>HP</u> | <u>Voltage In</u> | <u>Voltage Out</u> | <u>Input Current</u> | <u>Output Current</u> | <u>List Price</u> |
|--------------|-----------|-------------------|--------------------|----------------------|-----------------------|-------------------|
| 1LH420R | 20 | 480v, 1ph | 480v, 3ph | 48A | 31A | Call for Price |
| 1LH430R | 30 | 480v, 1ph | 480v, 3ph | 72A | 46A | Call for Price |
| 1LH440R | 40 | 480v, 1ph | 480v, 3ph | 98A | 61A | Call for Price |
| 1LH450R | 50 | 480v, 1ph | 480v, 3ph | 121A | 77A | Call for Price |
| 1LH460R | 60 | 480v, 1ph | 480v, 3ph | 143A | 91A | Call for Price |
| 1LH475R | 75 | 480v, 1ph | 480v, 3ph | 170A | 107A | Call for Price |
| 1LH4100R | 100 | 480v, 1ph | 480v, 3ph | 226A | 142A | Call for Price |
| 1LH4125R | 125 | 480v, 1ph | 480v, 3ph | 273A | 172A | Call for Price |

* See Page B-29 For Additional Panel Shop Options

Features and Benefits

- *Guaranteed IEEE 519 compliant without additional harmonic filters.
- *Set up constant pressure in minutes.
- *Large backlit graphic display with intuitive menus.
- *Phase changing.
- *NEMA 3R enclosure.
- *Large enclosure with ample space for additional options.
- *Superior heat rejection and cooling capabilities.
- * **AUXPOWER™** can be added to run pivot and pump system in one unit.



1LH
SERIES

PERFORMANCE



PHASE TECHNOLOGIES VFDS

3LH Series - 240V Three Phase Input - 240V Three Phase Output

| <u>Model</u> | <u>HP</u> | <u>Voltage In</u> | <u>Voltage Out</u> | <u>Input Current</u> | <u>Output Current</u> | <u>List Price</u> |
|--------------|-----------|-------------------|--------------------|----------------------|-----------------------|-------------------|
| 3LHE005R | 5 | 240v, 3ph | 240v, 3ph | 18A | 18A | Call for Price |
| 3LHE007R | 7.5 | 240v, 3ph | 240v, 3ph | 24A | 24A | Call for Price |
| 3LHE010R | 10 | 240v, 3ph | 240v, 3ph | 31A | 31A | Call for Price |
| 3LHE015R | 15 | 240v, 3ph | 240v, 3ph | 46A | 46A | Call for Price |
| 3LHE020R | 20 | 240v, 3ph | 240v, 3ph | 61A | 61A | Call for Price |
| 3LHE025R | 25 | 240v, 3ph | 240v, 3ph | 75A | 75A | Call for Price |
| 3LHE030R | 30 | 240v, 3ph | 240v, 3ph | 91A | 91A | Call for Price |

3LHE - 240V Three Phase Input - 480V Three Phase Output

| <u>Model</u> | <u>HP</u> | <u>Voltage In</u> | <u>Voltage Out</u> | <u>Input Current</u> | <u>Output Current</u> | <u>List Price</u> |
|--------------|-----------|-------------------|--------------------|----------------------|-----------------------|-------------------|
| 3LHE205R | 5 | 240v, 3ph | 480v, 3ph | 18A | 9A | Call for Price |
| 3LHE207R | 7.5 | 240v, 3ph | 480v, 3ph | 24A | 13A | Call for Price |
| 3LHE210R | 10 | 240v, 3ph | 480v, 3ph | 30A | 18A | Call for Price |
| 3LHE215R | 15 | 240v, 3ph | 480v, 3ph | 46A | 24A | Call for Price |
| 3LHE220R | 20 | 240v, 3ph | 480v, 3ph | 61A | 31A | Call for Price |
| 3LHE225R | 25 | 240v, 3ph | 480v, 3ph | 77A | 38A | Call for Price |

* See Page B-29 For Additional Panel Shop Options

Features and Benefits

- ***Voltage doubling capabilities** to bring 240V to 480V for better motor efficiency and savings on cable in deep set
- *Guaranteed IEEE 519 compliant without additional harmonic filters.
- *Set up constant pressure in minutes.
- *Large backlit graphic display with intuitive menus.
- * Voltage doubling eliminates need for transformer.
- *NEMA 3R enclosure.
- *Compact and versatile enclosure for ease of installation.
- *Superior heat rejection and cooling capabilities.



3LH
SERIES



PHASE TECHNOLOGIES VFDS

3LHE Series - 480V Three Phase Input - 480V Three Phase Output

| <u>Model</u> | <u>HP</u> | <u>Voltage In</u> | <u>Voltage Out</u> | <u>Input Current</u> | <u>Output Current</u> | <u>List Price</u> |
|--------------|-----------|-------------------|--------------------|----------------------|-----------------------|-------------------|
| 3LHE405R | 5 | 480v, 3ph | 480v, 3ph | 9A | 9A | Call for Price |
| 3LHE407R | 7.5 | 480v, 3ph | 480v, 3ph | 13A | 13A | Call for Price |
| 3LHE410R | 10 | 480v, 3ph | 480v, 3ph | 18A | 18A | Call for Price |
| 3LHE415R | 15 | 480v, 3ph | 480v, 3ph | 24A | 24A | Call for Price |
| 3LHE420R | 20 | 480v, 3ph | 480v, 3ph | 31A | 31A | Call for Price |
| 3LHE425R | 25 | 480v, 3ph | 480v, 3ph | 38A | 38A | Call for Price |
| 3LHE430R | 30 | 480v, 3ph | 480v, 3ph | 46A | 46A | Call for Price |
| 3LHE440R | 40 | 480v, 3ph | 480v, 3ph | 61A | 61A | Call for Price |
| 3LHE450R | 50 | 480v, 3ph | 480v, 3ph | 77A | 77A | Call for Price |

* See Page B-29 For Additional Panel Shop Options

Features and Benefits

- *Guaranteed IEEE 519 compliant without additional harmonic filters.
- *Set up constant pressure in minutes.
- *Large backlit graphic display with intuitive menus.
- *NEMA 3R enclosure.
- *Compact and versatile enclosure for ease of installation.
- *Superior heat rejection and cooling capabilities.



3LH
SERIES



PHASE TECHNOLOGIES VFDS

3LHS - 240V Three Phase Input - 480V Three Phase Output

| <u>Model</u> | <u>HP</u> | <u>Voltage In</u> | <u>Voltage Out</u> | <u>Input Current</u> | <u>Output Current</u> | <u>List Price</u> |
|--------------|-----------|-------------------|--------------------|----------------------|-----------------------|-------------------|
| 3LHS220R | 20 | 240v, 3ph | 480v, 3ph | 61A | 31A | Call for Price |
| 3LHS230R | 30 | 240v, 3ph | 480v, 3ph | 91A | 46A | Call for Price |
| 3LHS240R | 40 | 240v, 3ph | 480v, 3ph | 121A | 61A | Call for Price |
| 3LHS250R | 50 | 240v, 3ph | 480v, 3ph | 142A | 77A | Call for Price |
| 3LHS260R | 60 | 240v, 3ph | 480v, 3ph | 172A | 91A | Call for Price |

3LHS - 480V Three Phase Input - 480V Three Phase Output

| <u>Model</u> | <u>HP</u> | <u>Voltage In</u> | <u>Voltage Out</u> | <u>Input Current</u> | <u>Output Current</u> | <u>List Price</u> |
|--------------|-----------|-------------------|--------------------|----------------------|-----------------------|-------------------|
| 3LHS420R | 20 | 480v, 3ph | 480v, 3ph | 31A | 31A | Call for Price |
| 3LHS430R | 30 | 480v, 3ph | 480v, 3ph | 46A | 46A | Call for Price |
| 3LHS440R | 40 | 480v, 3ph | 480v, 3ph | 61A | 61A | Call for Price |
| 3LHS450R | 50 | 480v, 3ph | 480v, 3ph | 77A | 77A | Call for Price |
| 3LHS460R | 60 | 480v, 3ph | 480v, 3ph | 91A | 91A | Call for Price |
| 3LHS475R | 75 | 480v, 3ph | 480v, 3ph | 107A | 107A | Call for Price |
| 3LHS4100R | 100 | 480v, 3ph | 480v, 3ph | 142A | 142A | Call for Price |
| 3LHS4125R | 125 | 480v, 3ph | 480v, 3ph | 172A | 172A | Call for Price |
| 3LHS4150R | 150 | 480v, 3ph | 480v, 3ph | 198A | 198A | Call for Price |
| 3LHS4200R | 200 | 480v, 3ph | 480v, 3ph | 250A | 250A | Call for Price |

* See Page B-29 For Additional Panel Shop Options

Features and Benefits

- ***Voltage doubling capabilities** to bring 240V to 480V for better motor efficiency and savings on cable in deep set
- *Guaranteed IEEE 519 compliant without additional harmonic filters.
- *Set up constant pressure in minutes.
- *Large backlit graphic display with intuitive menus.
- *Voltage Doubling
- *NEMA 3R enclosure.
- *Slim, light design for larger applications.
- *Superior heat rejection and cooling capabilities.



3LH
SERIES



PHASE TECHNOLOGIES VFDS

3LH Performance Series - 240V Three Phase Input - 480V Three Phase Output

| <u>Model</u> | <u>HP</u> | <u>Voltage In</u> | <u>Voltage Out</u> | <u>Input Current</u> | <u>Output Current</u> | <u>List Price</u> |
|--------------|-----------|-------------------|--------------------|----------------------|-----------------------|-------------------|
| 3LH220R | 20 | 240v, 3ph | 480v, 3ph | 61A | 31A | Call for Price |
| 3LH230R | 30 | 240v, 3ph | 480v, 3ph | 91A | 46A | Call for Price |
| 3LH240R | 40 | 240v, 3ph | 480v, 3ph | 121A | 61A | Call for Price |
| 3LH250R | 50 | 240v, 3ph | 480v, 3ph | 142A | 77A | Call for Price |
| 3LH260R | 60 | 240v, 3ph | 480v, 3ph | 172A | 91A | Call for Price |

* See Page B-29 For Additional Panel Shop Options

3LH Performance Series - 480V Three Phase Input - 480V Three Phase Output

| <u>Model</u> | <u>HP</u> | <u>Voltage In</u> | <u>Voltage Out</u> | <u>Input Current</u> | <u>Output Current</u> | <u>List Price</u> |
|--------------|-----------|-------------------|--------------------|----------------------|-----------------------|-------------------|
| 3LH420R | 20 | 480v, 3ph | 480v, 3ph | 31A | 31A | Call for Price |
| 3LH430R | 30 | 480v, 3ph | 480v, 3ph | 46A | 46A | Call for Price |
| 3LH440R | 40 | 480v, 3ph | 480v, 3ph | 61A | 61A | Call for Price |
| 3LH450R | 50 | 480v, 3ph | 480v, 3ph | 77A | 77A | Call for Price |
| 3LH460R | 60 | 480v, 3ph | 480v, 3ph | 91A | 91A | Call for Price |
| 3LH475R | 75 | 480v, 3ph | 480v, 3ph | 107A | 107A | Call for Price |
| 3LH4100R | 100 | 480v, 3ph | 480v, 3ph | 142A | 142A | Call for Price |
| 3LH4125R | 125 | 480v, 3ph | 480v, 3ph | 172A | 172A | Call for Price |
| 3LH4150R | 150 | 480v, 3ph | 480v, 3ph | 198A | 198A | Call for Price |
| 3LH4200R | 200 | 480v, 3ph | 480v, 3ph | 250A | 250A | Call for Price |
| 3LH4250R | 250 | 480v, 3ph | 480v, 3ph | 304A | 304A | Call for Price |
| 3LH4300R | 300 | 480v, 3ph | 480v, 3ph | 362A | 362A | Call for Price |
| 3LH4350R | 350 | 480v, 3ph | 480v, 3ph | 415A | 415A | Call for Price |
| 3LH4400R | 400 | 480v, 3ph | 480v, 3ph | 478A | 478A | Call for Price |
| 3LH4450R | 450 | 480v, 3ph | 480v, 3ph | 515A | 515A | Call for Price |

* See Page B-29 For Additional Panel Shop Options

Features and Benefits

- ***Voltage doubling capabilities** to bring 240V to 480V for better motor efficiency and savings on cable in deep set
- *Guaranteed IEEE 519 compliant without additional harmonic filters.
- *Set up constant pressure in minutes.
- *Large backlit graphic display with intuitive menus.
- *Voltage Doubling
- *NEMA 3R enclosure.
- *Large enclosure with ample space for additional options.
- *Superior heat rejection and cooling capabilities.



PHASE TECHNOLOGIES VFDS

DXE Series - 240V Three Phase Input - 240V Three Phase Output

| <u>Model</u> | <u>HP</u> | <u>Voltage In</u> | <u>Voltage Out</u> | <u>Input Current</u> | <u>Output Current</u> | <u>List Price</u> |
|--------------|-----------|-------------------|--------------------|----------------------|-----------------------|-------------------|
| DXE005R | 5 | 240v, 3ph | 240v, 3ph | 18A | 18A | Call for Price |
| DXE007R | 7.5 | 240v, 3ph | 240v, 3ph | 24A | 24A | Call for Price |
| DXE010R | 10 | 240v, 3ph | 240v, 3ph | 31A | 31A | Call for Price |
| DXE015R | 15 | 240v, 3ph | 240v, 3ph | 46A | 46A | Call for Price |
| DXE020R | 20 | 240v, 3ph | 240v, 3ph | 61A | 61A | Call for Price |
| DXE025R | 25 | 240v, 3ph | 240v, 3ph | 75A | 75A | Call for Price |
| DXE030R | 30 | 240v, 3ph | 240v, 3ph | 91A | 91A | Call for Price |

* See Page B-29 For Additional Panel Shop Options

DXE Series - 480V Three Phase Input - 480V Three Phase Output

| <u>Model</u> | <u>HP</u> | <u>Voltage In</u> | <u>Voltage Out</u> | <u>Input Current</u> | <u>Output Current</u> | <u>List Price</u> |
|--------------|-----------|-------------------|--------------------|----------------------|-----------------------|-------------------|
| DXE405R | 5 | 480v, 3ph | 480v, 3ph | 9A | 9A | Call for Price |
| DXE407R | 7.5 | 480v, 3ph | 480v, 3ph | 13A | 13A | Call for Price |
| DXE410R | 10 | 480v, 3ph | 480v, 3ph | 18A | 18A | Call for Price |
| DXE415R | 15 | 480v, 3ph | 480v, 3ph | 24A | 24A | Call for Price |
| DXE420R | 20 | 480v, 3ph | 480v, 3ph | 31A | 31A | Call for Price |
| DXE425R | 25 | 480v, 3ph | 480v, 3ph | 38A | 38A | Call for Price |
| DXE430R | 30 | 480v, 3ph | 480v, 3ph | 46A | 46A | Call for Price |
| DXE440R | 40 | 480v, 3ph | 480v, 3ph | 61A | 61A | Call for Price |
| DXE450R | 50 | 480v, 3ph | 480v, 3ph | 77A | 77A | Call for Price |

* See Page B-29 For Additional Panel Shop Options

Features and Benefits

- *Three phase six pulse VFD.
- *Perfect Pressure setup for constant pressure in minutes.
- *Large backlit display with messages in clear english.
- *Advanced motor protection & PID control.
- *Sinewave filter integration.
- *Smallest enclosure for tight fitting applications.

DX
SERIES

ENTERPRISE



PHASE TECHNOLOGIES VFDS

DXS Series - 480V Three Phase Input - 480V Three Phase Output

| <u>Model</u> | <u>HP</u> | <u>Voltage In</u> | <u>Voltage Out</u> | <u>Input Current</u> | <u>Output Current</u> | <u>List Price</u> |
|--------------|-----------|-------------------|--------------------|----------------------|-----------------------|-------------------|
| DXS420R | 20 | 480v, 3ph | 480v, 3ph | 31A | 31A | Call for Price |
| DXS430R | 30 | 480v, 3ph | 480v, 3ph | 46A | 46A | Call for Price |
| DXS440R | 40 | 480v, 3ph | 480v, 3ph | 61A | 61A | Call for Price |
| DXS450R | 50 | 480v, 3ph | 480v, 3ph | 77A | 77A | Call for Price |
| DXS460R | 60 | 480v, 3ph | 480v, 3ph | 91A | 91A | Call for Price |
| DXS475R | 75 | 480v, 3ph | 480v, 3ph | 107A | 107A | Call for Price |
| DXS4100R | 100 | 480v, 3ph | 480v, 3ph | 142A | 142A | Call for Price |
| DXS4125R | 125 | 480v, 3ph | 480v, 3ph | 172A | 172A | Call for Price |
| DXS4150R | 150 | 480v, 3ph | 480v, 3ph | 198A | 198A | Call for Price |
| DXS4200R | 200 | 480v, 3ph | 480v, 3ph | 250A | 250A | Call for Price |

* See Page B-29 For Additional Panel Shop Options

Features and Benefits

- *Three phase six pulse VFD.
- *Perfect Pressure setup for constant pressure in minutes.
- *Large backlit display with messages in clear english.
- *Advanced motor protection & PID control.
- *Sinewave filter integration.
- *Superior heat rejection, able to operate in conditions up to 122° F.
- *Slim and light panel design.

DX
SERIES

SIGNATURE



PHASE TECHNOLOGIES VFDS

DX Performance Series - 480V Three Phase Input - 480V Three Phase Output

| <u>Model</u> | <u>HP</u> | <u>Voltage In</u> | <u>Voltage Out</u> | <u>Input Current</u> | <u>Output Current</u> | <u>List Price</u> |
|--------------|-----------|-------------------|--------------------|----------------------|-----------------------------------|-------------------|
| DX420R | 20 | 480v, 3ph | 480v, 3ph | 31A | 31A | Call for Price |
| DX430R | 30 | 480v, 3ph | 480v, 3ph | 46A | 46A | Call for Price |
| DX440R | 40 | 480v, 3ph | 480v, 3ph | 61A | 61A | Call for Price |
| DX450R | 50 | 480v, 3ph | 480v, 3ph | 77A | 77A | Call for Price |
| DX460R | 60 | 480v, 3ph | 480v, 3ph | 91A | 91A | Call for Price |
| DX475R | 75 | 480v, 3ph | 480v, 3ph | 107A | 107A | Call for Price |
| DX4100R | 100 | 480v, 3ph | 480v, 3ph | 142A | 142A | Call for Price |
| DX4125R | 125 | 480v, 3ph | 480v, 3ph | 172A | 172A | Call for Price |
| DX4150R | 150 | 480v, 3ph | 480v, 3ph | 198A | 198A | Call for Price |
| DX4200R | 200 | 480v, 3ph | 480v, 3ph | 250A | 250A | Call for Price |
| DX4250R | 250 | 480v, 3ph | 480v, 3ph | 304A | 304A | Call for Price |
| DX4300R | 300 | 480v, 3ph | 480v, 3ph | 362A | 362A </td <td>Call for Price</td> | Call for Price |
| DX4350R | 350 | 480v, 3ph | 480v, 3ph | 415A | 415A | Call for Price |
| DX4400R | 400 | 480v, 3ph | 480v, 3ph | 478A | 478A | Call for Price |
| DX4450R | 450 | 480v, 3ph | 480v, 3ph | 515A | 515A | Call for Price |

* See Page B-29 For Additional Panel Shop Options

Features and Benefits

- *Three phase six pulse VFD.
- *Perfect Pressure setup for constant pressure in minutes.
- *Large backlit display with messages in clear english.
- *Advanced motor protection & PID control.
- *Sinewave filter integration.
- *Superior heat rejection, able to operate in conditions up to 122° F.
- *Large enclosure with ample space for additional options.

DX
SERIES

PERFORMANCE



PHASE TECHNOLOGIES VFDS

LH & DX Series Additional Panel Shop Options

| <u>Option Code</u> | <u>Description</u> | <u>List</u> |
|--------------------|---|----------------|
| B | MCCB Service Disconnect | Call for Price |
| H | HOA Switch and Speed Potentiometer | Call for Price |
| H1 | HOA Switch | Call for Price |
| H2 | Speed Potentiometer | Call for Price |
| O | Sinewave Output Filter | Call for Price |
| ASPD013 | Three Phase Strikesorb Surge Protection | Call for Price |
| ASPD014 | Single Phase Strikesorb Surge Protection | Call for Price |
| S1 | Protac Surge Protection | Call for Price |
| S00150 | 0 - 150 PSI Pressure Transducer w/ 15' Lead | Call for Price |
| S00150-25 | 0 - 150 PSI Pressure Transducer w/ 25' Lead | Call for Price |
| S00150-50 | 0 - 150 PSI Pressure Transducer w/ 50' Lead | Call for Price |
| S00150-100 | 0 - 150 PSI Pressure Transducer w/ 100' Lead | Call for Price |
| PSI SNUB | Pressure Snubber for Transducers | Call for Price |
| CVR0002 | Keypad locking security cover for Enterprise Enclosures | Call for Price |
| CVR0001 | HOA Switch and Speed Pot Security Cover | Call for Price |
| LEGS | Pad Mount Leg Kit (Drive Specific) | Call for Price |

DX
SERIES

3LH
SERIES

1LH
SERIES

| SINGLE PHASE | | | | | | | | | | | | | | | |
|--------------------|-----------|---|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Motor Rating | | 75 °C INSULATION - AWG COPPER WIRE SIZE | | | | | | | | | | | | | |
| Volts | HP | 14 | 12 | 10 | 8 | 6 | 4 | 3 | 2 | 1 | 0 | 00 | 000 | 0000 | |
| 230 V Single-Phase | 115 V 1ph | 1/2 | 100 | 160 | 250 | 390 | 620 | 960 | 1190 | 1460 | 1780 | 2160 | 2630 | 3140 | 3770 |
| | | 3/4 | 400 | 650 | 1020 | 1610 | 2510 | 3880 | 4810 | 5880 | 7170 | 8720 | | | |
| | | 1 | 300 | 480 | 760 | 1200 | 1870 | 2890 | 3580 | 4370 | 5330 | 6470 | 7870 | 9380 | |
| | | 1.5 | 250 | 400 | 630 | 990 | 1540 | 2380 | 2960 | 3610 | 4410 | 5360 | 6520 | 7780 | 9350 |
| | | 2 | 190 | 310 | 480 | 770 | 1200 | 1870 | 2320 | 2850 | 3500 | 4280 | 5240 | 6300 | 7620 |
| | | 3 | 150 | 250 | 390 | 620 | 970 | 1530 | 1910 | 2360 | 2930 | 3620 | 4480 | 5470 | 6700 |
| | | 5 | 120* | 190 | 300 | 470 | 750 | 1190 | 1490 | 1850 | 2320 | 2890 | 3610 | 4470 | 5550 |
| | | 7.5 | 0 | 110* | 180 | 280 | 450 | 710 | 890 | 1110 | 1390 | 1740 | 2170 | 2680 | 3330 |
| | | 10 | 0 | 0 | 120* | 200 | 310 | 490 | 610 | 750 | 930 | 1140 | 1410 | 1720 | 2100 |
| | | 15 | 0 | 0 | 0 | 160* | 250 | 390 | 490 | 600 | 750 | 930 | 1160 | 1430 | 1760 |
| | 15 | 0 | 0 | 0 | 0 | 170* | 270 | 340 | 430 | 530 | 660 | 820 | 1020 | 1260 | |

| THREE PHASE | | | | | | | | | | | | | | | | | | | |
|--------------------------------|-----|---|------|------|------|------|------|------|------|------|------|------|------|------|----------------------|------|------|------|------|
| Motor Rating | | 75 °C INSULATION - AWG COPPER WIRE SIZE | | | | | | | | | | | | | MCM COPPER WIRE SIZE | | | | |
| Volts | HP | 14 | 12 | 10 | 8 | 6 | 4 | 3 | 2 | 1 | 0 | 00 | 000 | 0000 | 250 | 300 | 350 | 400 | 500 |
| 230 V 60 Hz Three-Phase 3-Lead | 1/2 | 930 | 1490 | 2350 | 3700 | 5760 | 8910 | | | | | | | | | | | | |
| | 3/4 | 670 | 1080 | 1700 | 2580 | 4190 | 6490 | 8060 | 9860 | | | | | | | | | | |
| | 1 | 560 | 910 | 1430 | 2260 | 3520 | 5460 | 6780 | 8290 | | | | | | | | | | |
| | 1.5 | 420 | 670 | 1060 | 1670 | 2610 | 4050 | 5030 | 6160 | 7530 | 9170 | | | | | | | | |
| | 2 | 320 | 510 | 810 | 1280 | 2010 | 3130 | 3890 | 4770 | 5860 | 7170 | 8780 | | | | | | | |
| | 3 | 240 | 390 | 620 | 990 | 1540 | 2400 | 2980 | 3660 | 4480 | 5470 | 6690 | 8020 | 9680 | | | | | |
| | 5 | 140* | 230 | 370 | 590 | 920 | 1430 | 1790 | 2190 | 2690 | 3290 | 4030 | 4850 | 5870 | 6650 | 7560 | 8460 | 9220 | |
| | 7.5 | 0 | 160* | 260 | 420 | 650 | 1020 | 1270 | 1560 | 1920 | 2340 | 2870 | 3440 | 4160 | 4710 | 5340 | 5970 | 6500 | 7510 |
| | 10 | 0 | 0 | 190* | 310 | 490 | 760 | 950 | 1170 | 1440 | 1760 | 2160 | 2610 | 3160 | 3590 | 4100 | 4600 | 5020 | 5840 |
| | 15 | 0 | 0 | 0 | 210* | 330 | 520 | 650 | 800 | 980 | 1200 | 1470 | 1780 | 2150 | 2440 | 2780 | 3110 | 3400 | 3940 |
| | 20 | 0 | 0 | 0 | 160* | 250* | 400 | 500 | 610 | 760 | 930 | 1140 | 1380 | 1680 | 1910 | 2180 | 2450 | 2680 | 3120 |
| | 25 | 0 | 0 | 0 | 0 | 200* | 320 | 400 | 500 | 610 | 750 | 920 | 1120 | 1360 | 1540 | 1760 | 1980 | 2160 | 2520 |
| | 30 | 0 | 0 | 0 | 0 | 0 | 260* | 330 | 410 | 510 | 620 | 760 | 930 | 1130 | 1280 | 1470 | 1650 | 1800 | 2110 |

| THREE PHASE | | | | | | | | | | | | | | | | | | | |
|--------------------------------|-----|---|------|------|------|------|------|------|------|------|------|------|------|------|----------------------|------|------|------|------|
| Motor Rating | | 75 °C INSULATION - AWG COPPER WIRE SIZE | | | | | | | | | | | | | MCM COPPER WIRE SIZE | | | | |
| Volts | HP | 14 | 12 | 10 | 8 | 6 | 4 | 3 | 2 | 1 | 0 | 00 | 000 | 0000 | 250 | 300 | 350 | 400 | 500 |
| 460 V 60 Hz Three-Phase 3-Lead | 1/2 | 3770 | 6020 | 9460 | | | | | | | | | | | | | | | |
| | 3/4 | 2730 | 4350 | 6850 | | | | | | | | | | | | | | | |
| | 1 | 2300 | 3670 | 5770 | 9070 | | | | | | | | | | | | | | |
| | 1.5 | 1700 | 2710 | 4270 | 6730 | | | | | | | | | | | | | | |
| | 2 | 1300 | 2070 | 3270 | 5150 | 8050 | | | | | | | | | | | | | |
| | 3 | 1000 | 1600 | 2520 | 3970 | 6200 | | | | | | | | | | | | | |
| | 5 | 590 | 950 | 1500 | 2360 | 3700 | 5750 | | | | | | | | | | | | |
| | 7.5 | 420 | 680 | 1070 | 1690 | 2640 | 4100 | 5100 | 6260 | 7680 | | | | | | | | | |
| | 10 | 310 | 500 | 790 | 1250 | 1960 | 3050 | 3800 | 4680 | 5750 | 7050 | | | | | | | | |
| | 15 | 0 | 340* | 540 | 850 | 1340 | 2090 | 2600 | 3200 | 3930 | 4810 | 5900 | 7110 | | | | | | |
| | 20 | 0 | 0 | 410 | 650 | 1030 | 1610 | 2000 | 2470 | 3040 | 3730 | 4580 | 5530 | | | | | | |
| | 25 | 0 | 0 | 330* | 530 | 830 | 1300 | 1620 | 1990 | 2450 | 3010 | 3700 | 4470 | 5430 | | | | | |
| | 30 | 0 | 0 | 270* | 430 | 680 | 1070 | 1330 | 1640 | 2030 | 2490 | 3060 | 3700 | 4500 | 5130 | 5860 | | | |
| | 40 | 0 | 0 | 0 | 320* | 500* | 790 | 980 | 1210 | 1490 | 1830 | 2250 | 2710 | 3290 | 3730 | 4250 | | | |
| | 50 | 0 | 0 | 0 | 0 | 410* | 640 | 800 | 980 | 1210 | 1480 | 1810 | 2190 | 2650 | 3010 | 3420 | 3830 | 4180 | 4850 |
| | 60 | 0 | 0 | 0 | 0 | 0 | 540* | 670* | 830 | 1020 | 1250 | 1540 | 1850 | 2240 | 2540 | 2890 | 3240 | 3540 | 4100 |
| | 75 | 0 | 0 | 0 | 0 | 0 | 440* | 550* | 680* | 840 | 1030 | 1260 | 1520 | 1850 | 2100 | 2400 | 2700 | 2950 | 3440 |
| | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 500* | 620* | 760* | 940 | 1130 | 1380 | 1560 | 1790 | 2010 | 2190 | 2550 |
| | 125 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 600* | 740* | 890* | 1000 | 1220 | 1390 | 1560 | 1700 | 1960 |
| | 150 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 630* | 760* | 920* | 1050 | 1190 | 1340 | 1460 | 1690 |
| 175 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 670* | 810* | 930* | 1060 | 1190 | 1300 | 1510 | |
| 200 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 590* | 710* | 810* | 920* | 1030 | 1130 | 1310 | |

Lengths with an asterik (*) meet the N.E.C. ampacity only for single conductor 75 degree Celsius cable.

FLAT JACKETED HEAVY DUTY CABLE

| Size | Weight Per 1000 Feet | List Price |
|-----------------------------|----------------------|--------------|
| #14/3 Flat JKTD W-Grnd | 151.6 | |
| #12/3 Flat JKTD W-Grnd | 199.6 | |
| #10/3 Flat JKTD W-Grnd | 268.5 | |
| #8/3 Flat JKTD W-Grnd | 383.7 | |
| #6/3 Flat JKTD W-Grnd | 531.9 | Call |
| #4/3 Flat JKTD W-Grnd | 733.0 | For |
| #2/3 Flat JKTD W-Grnd | 1048.3 | Price |
| #0/3 Flat JKTD W-Grnd | 1661.5 | |
| #00/3 Flat JKTD W-Grnd | 1904.0 | |
| #000/3 Flat JKTD W-Grnd | 2493.1 | |
| #0000/3 Flat JKTD W-Grnd | 2984.3 | |
| #350 MCM/3 Flat JKTD W-Grnd | 4592.3 | |



- Premium 600 volt cable featuring stranded copper conductors with a moisture resistant PVC insulation
- Conductors are individually colored black, red, and yellow with green ground
- Insulated conductors are assembled parallel in a flat configuration and covered with a tough, black thermoplastic jacket

TWISTED ROUND JACKETED

| Size | Weight Per 1000 Feet | List Price |
|-------------------------|----------------------|--------------|
| #12/3 Round JKTD W-Grnd | 159.7 | |
| #10/3 Round JKTD W-Grnd | 220.9 | Call |
| #8/3 Round JKTD W-Grnd | 322.5 | For |
| #6/3 Round JKTD W-Grnd | 464.9 | Price |
| #4/3 Round JKTD W-Grnd | 641.7 | |



- Premium 600 volt cable featuring stranded copper conductors with a moisture resistant PVC insulation
- Conductors are individually colored black, red, and yellow with green ground
- Insulated conductors are assembled parallel in a round configuration and covered with a tough, black thermoplastic jacket

SPLICE KITS

| Model | Size | Package Quantity | Master Quantity | List Price |
|-------|----------|------------------|-----------------|------------|
| A4C | 14-12-10 | 1 Kit | 50 | \$ - |
| K8C4 | 8 | 1 Kit | 50 | \$ - |
| K6C4 | 6 | 1 Kit | 50 | \$ - |
| K44 | 4 | 1 Kit | 10 | \$ - |
| K24 | 2 | 1 Kit | 10 | \$ - |

BUTT CONNECTORS

| Model | Size | Package Quantity | Master Quantity | List Price |
|-------|-------|------------------|-----------------|------------|
| B1210 | 12-10 | 50 | 500 | \$ - |
| B8 | 8 | 25 | 250 | \$ - |
| B6 | 6 | 20 | 100 | \$ - |
| B4 | 4 | 20 | 100 | \$ - |
| B2 | 2 | 10 | 50 | \$ - |

TAPE

| Description | Box Quantity | List Price |
|--|--------------|------------|
| 3M 1700 ELECTRICAL TAPE *General purpose vinyl tape | 10 | \$ - |
| 3M SUPER 33 VINYL ELECTRICAL TAPE *General purpose vinyl tape | 10 | \$ - |
| 3M SUPER 88 VINYL ELECTRICAL TAPE *Premium 8.5mil thick vinyl all weather tape | 10 | \$ - |
| LINERLESS RUBBER TAPE ¾" X 30' *Linerless ethylene proplene rubber based tape | 10 | \$ - |
| PLYMOUTH RUBBER TAPE ¾" X 22' *Low voltage rubber tape used to primary insolation for splices | 10 | \$ - |
| 2" CABLE WRAP TAPE - BLACK *General purpose PVC tape | 36 | \$ - |



METALLIC FLEXIBLE LIQUID TIGHT CONDUIT

| Diameter | Roll Size | List Price |
|-----------------------------------|-----------|------------|
| 1" METALLIC L/T FLEXIBLE CONDUIT | 100' | \$ - |
| 1½" METALLIC L/T FLEXIBLE CONDUIT | 50' | \$ - |
| 2" METALLIC L/T FLEXIBLE CONDUIT | 50' | \$ - |



LIQUID TIGHT CONDUIT CONNECTORS

| Description | Box Quantity | List Price |
|------------------------------------|--------------|------------|
| 1" STRAIGHT STEEL L/T CONNECTOR | 10 | \$ - |
| 1½" STRAIGHT STEEL L/T CONNECTOR | 5 | \$ - |
| 2" STRAIGHT STEEL L/T CONNECTOR | 5 | \$ - |
| 1" 90° STEEL L/T CONNECTOR | 10 | \$ - |
| 1½" 90° DEGREE STEEL L/T CONNECTOR | 5 | \$ - |
| 2" 90° DEGREE STEEL L/T CONNECTOR | 5 | \$ - |



Ground Rods

| Description | Box Quantity | List Price |
|----------------------------------|--------------|------------|
| 5/8" x 8' COPPER GROUND ROD | N/A | \$ - |
| 5/8" COPPER GROUND ROD CLAMP | 25 | \$ - |
| #6 BARE SOLID COPPER GROUND WIRE | 315' | \$ - |
| #4 BARE SOLID COPPER GROUND WIRE | 200' | \$ - |



TOOLS & METERS

| Description | List Price |
|------------------------------|------------|
| Simpson Model 372 Ohmeter | \$ - |
| Case for Simpson 372 Ohmeter | \$ - |



| | |
|---------------------------------|------|
| 400A True RMS AC/DC Clamp Meter | \$ - |
| 400A AC Clamp Meter | \$ - |



| | |
|--|------|
| 9" Terminal Crimper / Cutter with Dipped Handles | \$ - |
|--|------|

*For use on wire from no. 10 to 22AWG. Wire cutter in nose.



BADGER FLOW METERS

M5000 MAG Meter

| Size | GPM Flow Range | | Length | List Price |
|--------|----------------|-------|--------|------------|
| | MIN | MAX | | |
| 1/2" | 0.09 | 27 | 6.7" | |
| 3/4" | 0.15 | 49 | 6.7" | |
| 1" | 0.24 | 77 | 8.9" | |
| 1-1/4" | 0.39 | 127 | 8.9" | |
| 1-1/2" | 0.4 | 199 | 8.9" | Call |
| 2" | 0.94 | 311 | 8.9" | For |
| 2-1/2" | 1.58 | 525 | 11" | Current |
| 3" | 2.39 | 796 | 11" | Pricing |
| 4" | 3.74 | 1244 | 11" | |
| 5" | 5.84 | 1946 | 15.8" | |
| 6" | 8.4 | 2799 | 15.8" | |
| 8" | 15 | 4976 | 15.8" | |
| 10" | 23.4 | 7775 | 19.7" | |
| 12" | 33.6 | 11196 | 19.7" | |

- Available in sizes 0.50...24 in. (15...600 mm)
- Battery powered (10 year life)
- ± 0.4% of measured value ± 2 mm/s accuracy independent of fluid viscosity, density and temperature
- Unaffected by most solids contained in fluids
- Pulsed DC magnetic field for zero point stability
- No pressure loss for low operational costs
- Corrosion resistant liners for long life
- Calibrated in state-of-the art facilities
- Integral and remote signal converter availability
- Optional grounding rings or grounding electrode
- Measurement largely independent of flow profile
- Low-power digital microcontroller (16 bit)
- Simple programming procedure
- Digital and infrared outputs
- Automatic zero-point stability
- Non-volatile programming
- NSF listed
- Data logging
- Available with a hard rubber liner or PTFE liner
- Available with 150-lb and 300-lb flanges



TANKS

| Section | Page |
|-------------------------------------|-------------|
| Pressure Tanks | |
| Zilmet Pressure Tanks | C-1 |
| AO Smith ProMax Plus Pressure Tanks | C-2 |
| AO Smith Glass Lined Pressure Tanks | C-3 |
| Storage Tanks | |
| Poly Storage Tanks | C-4 |
| Sewage Tanks | C-5 |
| Tank Acc. | |
| Tank Tees & Accessories | C-6 |
| Pressure Switches | C-7 |
| Float Switches | C-8 |



ZILMET DIAPHRAGM TANKS

HYDRO PLUS SIDE CONNECTION PRESSURE TANKS

| MFG Number | Capacity (Gallons) | Diameter | Height | Connection Height | Outlet Size | System Drawdown | | List Price |
|------------|--------------------|----------|--------|-------------------|-------------|-----------------|-----------|------------|
| | | | | | | 30/50 PSI | 40/60 PSI | |
| ZHP12 | 4.8 | 10.6" | 13.7" | In-Line / Bottom | 3/4" | 1.6 | 1.4 | \$ - |
| ZHP200F | 13.2 | 15.0" | 19.9" | 6.0" | 1" | 4.5 | 3.9 | \$ - |
| ZHP202 | 21.1 | 17.7" | 17.7" | 5.9" | 1 | 7.2 | 6.2 | \$ - |
| ZHP203 | 27.7 | 19.7" | 26.2" | 6.5" | 1-1/4" | 9.5 | 8.2 | \$ - |
| ZHP204 | 39.6 | 19.7" | 35.3" | 8.5" | 1-1/4" | 13.5 | 11.7 | \$ - |
| ZHP250 | 52.8 | 23.6" | 32.0" | 8.9" | 1-1/4" | 18.0 | 15.6 | \$ - |
| ZHP251 | 66.0 | 24.8" | 37.7" | 9.6" | 1-1/4" | 22.5 | 19.5 | \$ - |
| ZHP302 | 79.3 | 24.8" | 43.5" | 9.6" | 1-1/4" | 27.0 | 23.4 | \$ - |
| ZHP351 | 119.0 | 29.5" | 42.8" | 11.4" | 1-1/4" | 40.6 | 35.1 | \$ - |

ZILMET SIDE CONNECTION PRESSURE TANK SIZING CHART

| GPM | 30/50 psig | | 40/60 psig | |
|-----|------------|------------|------------|------------|
| | 1 Min. | 2 Min. | 1 Min. | 2 Min. |
| 5 | ZHP202 | ZHP203 | ZHP202 | ZHP203 |
| 10 | ZHP203 | ZHP251 | ZHP204 | ZHP302 |
| 12 | ZHP204 | ZHP302 | ZHP250 | ZHP302 |
| 15 | ZHP250 | ZHP302 | ZHP251 | ZHP351 |
| 20 | ZHP251 | ZHP351 | ZHP302 | ZHP302 (2) |
| 25 | ZHP302 | ZHP302 (2) | ZHP350 | ZHP350 (2) |
| 30 | ZHP350 | ZHP350 (2) | ZHP351 | ZHP351 (2) |
| 35 | ZHP351 | ZHP351 (2) | ZHP351 | ZHP351 (2) |

***Use the above charts to properly size your well tank to prevent excessive wear and tear on your well pump and to reduce energy consumption.
(2) indicates two tanks required**



- Seamless NSF 61 certified low permeability butyl diaphragm creases and channels water directly to outlet, eliminating bacterial growth.
- MIG welding eliminates interior rough spots and sharp edges.
- Low profile tank design with full membrane depth eliminates stretching of diaphragm, providing increased life cycle.
- All diaphragms made by Zilmet specifically for each tanks dimensions.
- Powder coated carbon steel for a longer lasting, more durable tank.
- 5 year warranty on all models.
- Precharged from the factory at 38 psi.
- 150 max. operating pressure.
- 210° F max operating temperature.
- Stainless steel connection.



PRO MAX PLUS DIAPHRAGM TANKS

| MFG Number | Capacity (Gallons) | Diameter | Height | Connection Height | Outlet Size | System Drawdown (Gallons) | | List Price |
|------------|--------------------|----------|---------|-------------------|-------------|---------------------------|-----------|------------|
| | | | | | | 30/50 PSI | 40/60 PSI | |
| PMXP-20 | 20 | 15-3/8" | 32-3/4" | 2-1/4" | 1" | 6.2 | 5.4 | \$ - |
| PMXP-32 | 32 | 15-3/8" | 45-1/2" | 2-1/4" | 1" | 9.6 | 8.4 | \$ - |
| PMXP-36 | 36 | 20" | 32-5/8" | 2-1/4" | 1" | 11.2 | 9.7 | \$ - |
| PMXP-52 | 52 | 23-3/8" | 38-5/8" | 2-1/4" | 1-1/4" | 16.1 | 14 | \$ - |
| PMXP-65 | 65 | 23-3/8" | 46-3/5" | 2-1/4" | 1-1/4" | 20 | 17.5 | \$ - |
| PMXP-86 | 86 | 23-3/8" | 59" | 2-1/4" | 1-1/4" | 26.7 | 23.2 | \$ - |
| PMXP-119 | 119 | 26" | 61-1/4" | 2-1/4" | 1-1/4" | 37 | 32.3 | \$ - |

PROMAX PLUS PRESSURE TANK SIZING CHART

| GPM | 30/50 psig. | | 40/60 psig. | |
|-----|-------------|-------------|-------------|-------------|
| | 1 Min. | 2 Min. | 1 Min. | 2 Min. |
| 5 | PMXP-20 | PMXP-36 | PMXP-20 | PMXP-52 |
| 10 | PMXP-36 | PMXP-86 | PMXP-52 | PMXP-86 |
| 12 | PMXP-52 | PMXP-86 | PMXP-52 | PMXP-119 |
| 15 | PMXP-52 | PMXP-119 | PMXP-65 | PMXP-119 |
| 20 | PMXP-65 | PMXP-86(2) | PMXP-86 | PMXP-86(2) |
| 25 | PMXP-86 | PMXP-86(2) | PMXP-119 | PMXP-119(2) |
| 30 | PMXP-119 | PMXP-119(2) | PMXP-119 | PMXP-119(2) |
| 35 | PMXP-119 | PMXP-119(2) | PMXP-86(2) | PMXP-119(2) |

*Use the above chart to properly size your well tank to prevent excessive wear and tear on your well pump and to reduce energy consumption.
(2) Indicates two tanks required



ProMax® Plus

ProMax® Plus Series

- 125 PSI Working Pressure
- 304 Stainless Steel Connection
- Butyl Rubber Parabolic Diaphragm - Prevents rubbing on tank wall or rolling over on itself.
- Direct connect diaphragm seal prevents any leakage between water and air chambers.
- Powder coated water chamber provides maximum protection against corrosion.
- Projection welded air valve with "O" ring cap seal for double protection.
- Exclusive no-weld RUST-GUARD® base design assures proper paint coverage in the base area.
- Two-piece construction (on many models) creates only one weld on the tank - Uniweld design.
- Ultra-UV exterior powder finish offers the ultimate protection against the elements.
- 5 Year Limited Warranty

WATER SYSTEMS

An A. O. Smith Company



Perma Tank Glass Lined Tanks

| MFG Number | Capacity (Gallons) | Diameter (Inches) | Height (Inches) | Weight (Lbs) | List Price |
|------------|--------------------|-------------------|-----------------|--------------|------------|
| PL-42-T | 42 | 16-1/2 | 49 | 71 | \$ - |
| PL-42-S | 42 | 20 | 35-7/8 | 81 | \$ - |
| PL-82 | 82 | 20 | 62-1/4 | 154 | \$ - |
| PL-120 | 120 | 24 | 63 | 206 | \$ - |
| PL-220 | 220 | 30 | 75 | | \$ - |

- **Maximum Working Pressure 125 PSIG**
- **5-Year Limited Warranty**
- **Anodic Protection**
- **Fused Glass Lining** - The porcelain enamel coating added to the steel tank interior is the plumbing industry's time-tested and trusted system for tank protection. Every tank is made in the U.S.A.
- **Exterior Powder Coat** - Maximum resistance to powerful UV rays. The best exterior protection in the industry.
- **Rolled-Steel Construction** - All glass lined pump tanks feature rolled-steel construction to provide added structural strength.
- **Excellent for Retention Systems or Contact Tanks**
- **Replaces Standard Galvanized or Epoxy Tanks**



WATER SYSTEMS

An A. O. Smith Company



ABOVE GROUND POLY STORAGE TANKS

Snyder Industries Water Storage Tanks

| Size | Color | List Price |
|----------------------|-------|------------|
| 500 Gallon Vertical | Black | \$ - |
| 1000 Gallon Vertical | Black | \$ - |
| 1200 Gallon Vertical | Black | \$ - |
| 1600 Gallon Vertical | Black | \$ - |
| 2500 Gallon Vertical | Black | \$ - |
| 3000 Gallon Vertical | Black | \$ - |
| 5000 Gallon Vertical | Black | \$ - |

*NSF Certified, for water storage only.

*Also available in Mocha and Green

| Gallons | Diameter | Height | Opening |
|---------|----------|--------|---------|
| 500 | 48" | 76" | 20" |
| 1000 | 60" | 89" | 20" |
| 1200 | 86" | 56.5" | 20" |
| 1600 | 86" | 71" | 20" |
| 2500 | 96" | 90" | 26" |
| 3000 | 102" | 97" | 26" |
| 5000 | 102" | 159" | 26" |

*Standard with 2" bottom bulkhead and 1½" top bulkhead

Bulkhead Replacement Fittings

| Size | List Price |
|---------------------------|------------|
| ¾" Poly Bulkhead Fitting | \$ - |
| 1" Poly Bulkhead Fitting | \$ - |
| 1¼" Poly Bulkhead Fitting | \$ - |
| 1½" Poly Bulkhead Fitting | \$ - |
| 2" Poly Bulkhead Fitting | \$ - |
| 3" Poly Bulkhead Fitting | \$ - |
| 4" Poly Bulkhead Fitting | \$ - |



BELOW GROUND POLY SEPTIC TANKS

Snyder Industries Septic Tanks

| Size | Compartment | List Price |
|------------------------------------|-------------|------------|
| 500 Gallon Low Profile Septic Tank | Single | \$ - |
| 750 Gallon Septic Tank | Double | \$ - |
| 1000 Gallon Septic Tank | Double | \$ - |
| 1250 Gallon Septic Tank | Double | \$ - |
| 1500 Gallon Septic Tank | Double | \$ - |

| Gallons | Length | Width | Height | Opening |
|---------|--------|-------|--------|---------|
| 300 | 48½" | 48½" | 49½" | 1-20" |
| 750 | 92" | 60" | 51" | 2-20" |
| 1000 | 127" | 60" | 51" | 2-20" |
| 1250 | 157" | 60" | 51" | 2-20" |
| 1500 | 157" | 69" | 51" | 2-20" |

Snyder Septic Tank Parts

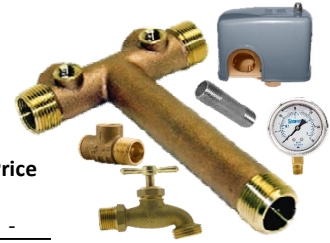
| Size | List Price |
|-----------------------------------|------------|
| 20" Septic Tank Lid (Less Screws) | \$ - |

| Size | Diameter | Height | List Price |
|--------------------------|----------|--------|------------|
| Septic Manhole Extension | 20" | 6" | \$ - |
| Septic Manhole Extension | 20" | 15" | \$ - |
| Septic Manhole Extension | 20" | 24" | \$ - |
| Offest Septic Tank Riser | 23" | 12" | \$ - |



TANK TEE KIT

Includes: (1) Brass tank tee - Long (1) 100# Steel Case Pressure gauge
 (1) Simmons pressure switch (1) Pressure relief Valve
 (1) Hose bibb (1) ¼" x 3" SS nipple



| Tank Tee Size | Length | Pressure Gauge | PRV | List Price |
|------------------|--------|----------------|-----------|------------|
| 1" Tank Tee Kit | 14" | ¼" x 100 psi | ½" 75 PSI | \$ - |
| 1¼" Tank Tee Kit | 14" | ¼" x 100 psi | ¾" 75 PSI | \$ - |

ACCESSORIES

| Type | Diameter | Length | List Price |
|---|----------|--------|------------|
| Brass Tank Tee - Short | 1" | 4½" | \$ - |
| Brass Tank Tee - Short with Swivel Nut | 1" | 4" | \$ - |
| Brass Tank Tee - Long | 1" | 14" | \$ - |
| Brass Tank Tee with Union | 1" | 11" | \$ - |
| Brass Tank Tee - Short with Swivel Nut | 1¼" | 4" | \$ - |
| Brass Tank Tee - Long | 1¼" | 14" | \$ - |
| Brass Tank Tee with Union | 1¼" | 14" | \$ - |
| 2" Dry Steel Case Pressure Gauge | ¼" | 100# | \$ - |
| 2" LF Stainless Case Pressure Gauge | ¼" | 100# | \$ - |
| 2" LF Stainless Case Pressure Gauge | ¼" | 200# | \$ - |
| 2 1/2" LF Stainless Case Pressure Gauge | ¼" | 60# | \$ - |
| 2 1/2" LF Stainless Case Pressure Gauge | ¼" | 100# | \$ - |
| ½" Brass Hose Bibb | | | \$ - |
| ¾" Brass Hose Bibb | | | \$ - |
| ½" Brass Hose Bibb (¼ Turn) | | | \$ - |
| ¾" Brass Hose Bibb (¼ Turn) | | | \$ - |
| ½" Pressure Relief Valve | | | \$ - |
| ¾" Pressure Relief Valve | | | \$ - |
| ¼" X 3" Brass Nipple | | | \$ - |
| ¼" X 3" Stainless Steel Nipple | | | \$ - |
| ½" Air Valve | | | \$ - |
| ¾" Air Valve | | | \$ - |
| ¾" Brass Bleeder Orifice | | | \$ - |
| 1" Rubber Bleeder Orifice | | | \$ - |
| Deep Well Air Volume Control | | | \$ - |



PRESSURE SWITCHES



| Model # | Pressure Setting | Description / Features | List Price |
|---------|------------------|-----------------------------------|------------|
| 1040 | 20/40 | Standard Water Pump Switch | \$ - |
| 1041 | 30/50 | Standard Water Pump Switch | \$ - |
| 1042 | 40/60 | Standard Water Pump Switch | \$ - |
| 1043 | 20/40 | Pump Switch With Low Cut-Off | \$ - |
| 1044 | 30/50 | Pump Switch With Low Cut-Off | \$ - |
| 1045 | 40/60 | Pump Switch With Low Cut-Off | \$ - |
| 1046 | 20/40 | Heavy Duty Commercial Pump Switch | \$ - |
| 1047 | 30/50 | Heavy Duty Commercial Pump Switch | \$ - |
| 1048 | 40/60 | Heavy Duty Commercial Pump Switch | \$ - |
| 1049 | 60/80 | Heavy Duty Commercial Pump Switch | \$ - |



- *Nema 1 Rated
- *1/4" FRT Connection
- *Suitable for all types of pumps
- *Standard, low pressure cutoff or HD switches available



| Model # | Pressure Setting | Description / Features | List Price |
|-------------|------------------|--|------------|
| FSG-2 | 20/40 | Standard Water Pump Switch | \$ - |
| FSG-2 | 30/50 | Standard Water Pump Switch | \$ - |
| FSG-2 | 40/60 | Standard Water Pump Switch | \$ - |
| FSG-2 (M-1) | 20/40 | Pump Switch With Manual Cut-Off | \$ - |
| FSG-2 (M-1) | 30/50 | Pump Switch With Manual Cut-Off | \$ - |
| FSG-2 (M-4) | 20/40 | Pump Switch With Low Cut-Off | \$ - |
| FSG-2 (M-4) | 30/50 | Pump Switch With Low Cut-Off | \$ - |
| GSG-2 | 20/40 | Heavy Duty Commercial Pump Switch | \$ - |
| GSG-2 | 30/50 | Heavy Duty Commercial Pump Switch | \$ - |
| GSG-2 | 40/60 | Heavy Duty Commercial Pump Switch | \$ - |
| GHG-2 | 40/60 | Heavy Duty Commercial Pump Switch (High Pressure) | \$ - |
| GHG-2 | 60/80 | Heavy Duty Commercial Pump Switch (High Pressure) | \$ - |



- *1/4" FRT Connection
- *FS Series for use in 1.5hp and smaller
- *GS Series for use in higher HP applications

| NEMA A Type 1 Enclosure | | Poles | Cut-Out PSI Range | Differ- ential | Electrical Ratings - Horsepower | | | | | | | |
|-------------------------|----------------------------|-------|-------------------------|-------------------|---------------------------------|------|--------------|------|------|----------------|------|------|
| Model No. | Special Features | | | | 1 Phase AC | | Polyphase AC | | | Direct Current | | |
| | | | | | 110V | 220V | 220V | 440V | 550V | 32V | 115V | 230V |
| FSG2 | Standard Pump Switch | 2 | 20-65 | 15-30 | 1 1/2 | 2 | 2 | - | - | 1/4 | - | - |
| FSG2 (M1) | Manual Cut-Off Lever | 2 | 20-65 | 15-30 | 1 1/2 | 2 | 2 | - | - | 1/4 | - | - |
| FSG2 (M4) | Low Pressure Cut-Off Lever | 2 | 20-65 | 15-30 | 1 1/2 | 2 | 2 | - | - | 1/4 | - | - |
| GSG2 | Heavy Duty Pump Switch | 2 | 20-80 | 14-43 | 2 | 3 | 5 | 5 | 5 | 1/2 | 1 | 1 |
| GHG2 | Heavy Duty Pump Switch | 2 | 65-200 | 25-60 | 2 | 3 | 5 | 5 | 5 | 1/2 | 1 | 1 |

SJE RHOMBUS FLOAT SWITCHES

| MFG Number | Type | Voltage | Cord | Plug | List Price |
|---------------------------|------|---------|------|------|------------|
| 15PMPU1WP | Up | 115 | 15' | Yes | \$ - |
| 15PMPU2WP | Up | 230 | 15' | Yes | \$ - |
| 15PMPD1WP | Down | 115 | 15' | Yes | \$ - |
| 15PMPD2WP | Down | 230 | 15' | Yes | \$ - |
| 15PMPUWOP | Up | 115/230 | 15' | No | \$ - |
| 15PMPDWOP | Down | 115/230 | 15' | No | \$ - |
| 30PMPUWOP | Up | 115/230 | 30' | No | \$ - |
| 30PMPDWOP | Down | 115/230 | 30' | No | \$ - |
| Float Switch Cable Weight | | | | | \$ - |

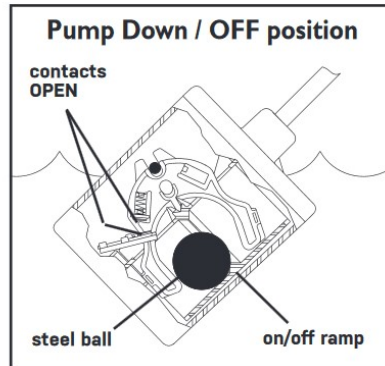
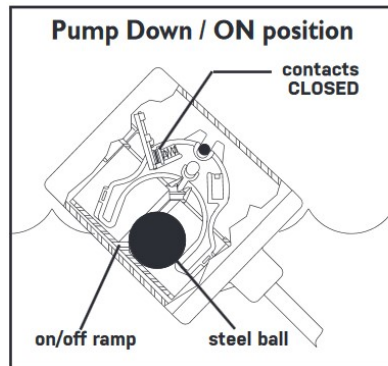
Features:

- * Heavy-duty contacts
- * Controls pumps up to 3/4 HP at 120 VAC and 2 HP at 230 VAC
- * Adjustable pumping range of 7 – 36 inches (18 -91 cm)
- * Includes standard mounting clamp and boxed packaging
- * SJE PumpMaster® pump switch on/off position diagram
- * UL Recognized, CSA Certified



Options:

- * For pump up or pump down applications as specified by part number
- * With a 120 VAC or 230 VAC piggy-back plug
- * Without a plug for direct wiring in 120 VAC or 230 VAC applications
- * In standard cable lengths of 10, 15, 20, or 30 feet (3, 5, 6, or 10 meters) – longer lengths available



SQUARE D FLOAT SWITCHES

List Price

| | |
|---|------|
| DG2-R Float Switch / Contacts Open On Liquid Rise | \$ - |
|---|------|



PIPE & FITTINGS

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**Sch 80
Threaded
PVC Pipe**

| Diameter | Length | Wall Thickness | Outside Diameter | Inside Diameter | Lift Qty (Feet) | List Price |
|----------|--------|----------------|------------------|-----------------|-----------------|--------------|
| 1" | 20' | .179" | 1.315" | .957" | 4000 | |
| 1 ¼" | 20' | .191" | 1.660" | 1.278" | 2760 | |
| 1 ½" | 20' | .200" | 1.900" | 1.500" | 1880 | Call |
| 2" | 20' | .218" | 2.375" | 1.939" | 2800 | For |
| 2 ½" | 20' | .276" | 2.875" | 2.323" | 1080 | Price |
| 3" | 20' | .300" | 3.500" | 2.900" | 920 | |
| 4" | 20' | .340" | 4.500" | 3.820" | 580 | |

| PVC THREADED SCHEDULE 80 PIPE HORSEPOWER RATINGS - DEPTH CHART | | | | | | |
|---|--------|--------------------------|--|--------|--------|-------------------------------|
| SIZE | MAX HP | RECOMMENDED FITTINGS | PUMPING LIMITATIONS - BASED ON SHUT-OFF SWITCH | | | TORQUE ARRESTOR USE OVER 150' |
| | | | 40 PSI | 50 PSI | 60 PSI | |
| 1" | 1.5 | EXTRUDED COUPLINGS | 610' | 590' | 570' | USE OVER 150' |
| 1 1/4" | 2 | EXTRUDED COUPLINGS | 475' | 455' | 435' | USE OVER 150' |
| 1 1/2" | 5 | STEEL OR BRASS COUPLINGS | 435' | 415' | 395' | USE OVER 150' |
| 2" | 7.5 | STEEL OR BRASS COUPLINGS | 350' | 325' | 300' | USE OVER 150' |

**Sch 120
Threaded
PVC Pipe**

| Diameter | Length | Wall Thickness | Outside Diameter | Inside Diameter | Lift Qty (Feet) | List Price |
|----------|--------|----------------|------------------|-----------------|-----------------|--------------|
| 1" | 20' | .200" | 1.315" | .915" | 4000 | |
| 1 ¼" | 20' | .215" | 1.660" | 1.230" | 2760 | Call |
| 1 ½" | 20' | .225" | 1.900" | 1.450" | 1880 | For |
| 2" | 20' | .250" | 2.375" | 1.875" | 2800 | Price |

| PVC THREADED SCHEDULE 120 PIPE HORSEPOWER RATINGS - DEPTH CHART | | | | | | |
|--|--------|--------------------------|--|--------|--------|-------------------------------|
| SIZE | MAX HP | RECOMMENDED FITTINGS | PUMPING LIMITATIONS - BASED ON SHUT-OFF SWITCH | | | TORQUE ARRESTOR USE OVER 150' |
| | | | 40 PSI | 50 PSI | 60 PSI | |
| 1" | 1.5 | EXTRUDED COUPLINGS | 700' | 675' | 650' | USE OVER 150' |
| 1 1/4" | 2 | EXTRUDED COUPLINGS | 570' | 545' | 520' | USE OVER 150' |
| 1 1/2" | 5 | STEEL OR BRASS COUPLINGS | 500' | 480' | 455' | USE OVER 150' |
| 2" | 7.5 | STEEL OR BRASS COUPLINGS | 435' | 415' | 395' | USE OVER 150' |



THREADED DROP PIPE COUPLINGS

**Threaded
Drop Pipe
Couplings**

| Diameter | Galvanized | | Black | | Stainless Steel | |
|----------|------------|---------|------------|---------|-----------------|---------|
| | Price Each | Box Qty | Price Each | Box Qty | Price Each | Box Qty |
| 1" | \$ - | 25 | \$ - | 25 | \$ - | 10 |
| 1 ¼" | \$ - | 25 | \$ - | 25 | \$ - | 10 |
| 1 ½" | \$ - | 25 | \$ - | 25 | \$ - | 10 |
| 2" | \$ - | 25 | \$ - | 25 | \$ - | 25 |
| 2 ½" | \$ - | 20 | \$ - | 20 | | |
| 3" | \$ - | 15 | \$ - | 15 | | |
| 4" | \$ - | 10 | \$ - | 10 | | |



BELLED END PVC PIPE

| | Diameter | Length | Outside Diameter | Inside Diameter | Wall Thickness | Lift Qty (Feet) | List Price |
|---|----------|--------|------------------|-----------------|----------------|-----------------|--------------|
| SDR26 160# Belled End PVC Pipe | 1 ¼" | 20' | 1.660" | 1.532" | .064" | 5620 | |
| | 1 ½" | 20' | 1.900" | 1.754" | .073" | 4060 | |
| | 2" | 20' | 2.375" | 2.193" | .091" | 2800 | |
| | 2 ½" | 20' | 2.875" | 2.655" | .110" | 1740 | |
| | 3" | 20' | 3.500" | 3.230" | .135" | 1200 | Call |
| | 4" | 20'+ | 4.500" | 4.154" | .173" | 720 | For |
| | 4 ½" | 20'+ | 4.950" | 4.570" | .190" | 480 | Price |
| | 5" | 20'+ | 5.563" | 5.135" | .214" | 420 | |
| | 6" | 20'+ | 6.625" | 6.115" | .255" | 600 | |
| | 8" | 20'+ | 8.625" | 7.961" | .332" | 360 | |
| | 10" | 20'+ | 10.750" | 9.924" | .413" | 220 | |
| SDR21 200# Belled End PVC Pipe | 1" | 20' | 1.315" | 1.189" | .063" | 8000 | |
| | 1 ¼" | 20' | 1.660" | 1.502" | .079" | 5620 | |
| | 1 ½" | 20' | 1.900" | 1.720" | .090" | 4060 | |
| | 2" | 20' | 2.375" | 2.149" | .113" | 2800 | |
| | 2 ½" | 20' | 2.875" | 2.601" | .137" | 1740 | Call |
| | 3" | 20' | 3.500" | 3.166" | .167" | 1200 | For |
| | 4" | 20'+ | 4.500" | 4.072" | .214" | 720 | Price |
| | 5" | 20'+ | 5.563" | 5.033" | .265" | 420 | |
| | 6" | 20'+ | 6.625" | 5.993" | .316" | 600 | |
| | 8" | 20'+ | 8.625" | 7.805" | .410" | 360 | |
| | 10" | 20'+ | 10.750" | 9.728" | .511" | 220 | |
| Sch 40 Belled End PVC Pipe | 1" | 20' | 1.315" | 1.049" | .133" | 4000 | |
| | 1 ¼" | 20' | 1.660" | 1.380" | .140" | 5620 | |
| | 1 ½" | 20' | 1.900" | 1.610" | .145" | 4060 | |
| | 2" | 20' | 2.375" | 2.067" | .154" | 2800 | |
| | 2 ½" | 20' | 2.875" | 2.469" | .203" | 1740 | Call |
| | 3" | 20' | 3.500" | 3.068" | .216" | 1200 | For |
| | 4" | 20'+ | 4.500" | 4.026" | .237" | 720 | Price |
| | 4 ½" | 20'+ | 4.950" | 4.454" | .248" | 480 | |
| | 5" | 20'+ | 5.563" | 5.047" | .258" | 420 | |
| | 6" | 20'+ | 6.625" | 6.065" | .280" | 600 | |
| | 8" | 20'+ | 8.625" | 7.981" | .322" | 360 | |

JET STREAM TWENTY+PLUS PVC WELL CASING



SLOTTED BELLED END PVC PIPE

| | Diameter | Slot | Length | C-C Slot Spacing | Number of Rows | Open Area Square Inch | Lift Qty (Feet) | List Price |
|---|----------|------|--------|------------------|----------------|-----------------------|-----------------|--------------|
| SDR 26 160# | 4" | .035 | 20'+ | .25 | 4 | 213 | 720 | |
| | 4 1/2" | .035 | 20'+ | .25 | 4 | 246 | 480 | |
| | 5" | .020 | 20'+ | .25 | 4 | 139 | 420 | |
| | 5" | .035 | 20'+ | .25 | 4 | 283 | 420 | |
| PVC Slotted Belled End Casing | 6" | .035 | 20'+ | .25 | 5 | 311 | 600 | Call |
| | 8" | .035 | 20'+ | .25 | 6 | 418 | 360 | For |
| | 8" | .050 | 20'+ | .25 | 6 | 554 | 360 | Price |
| | 8" | .085 | 20'+ | .25 | 6 | 834 | 360 | |
| | 10" | .085 | 20'+ | .25 | 7 | 1040 | 220 | |
| SDR 21 200# | 4" | .035 | 20'+ | .25 | 4 | 120 | 720 | |
| | 5" | .020 | 20'+ | .25 | 4 | 134 | 420 | |
| | 5" | .035 | 20'+ | .25 | 4 | 269 | 420 | |
| | 6" | .020 | 20'+ | .25 | 5 | 158 | 600 | |
| | 6" | .035 | 20'+ | .25 | 5 | 290 | 600 | Call |
| | 8" | .035 | 20'+ | .25 | 6 | 383 | 360 | For |
| | 8" | .050 | 20'+ | .25 | 6 | 507 | 360 | Price |
| | 8" | .085 | 20'+ | .25 | 6 | 763 | 360 | |
| Sch 40 PVC Slotted Belled End Casing | 4" | .020 | 20'+ | .25 | 4 | 116 | 720 | |
| | 4" | .035 | 20'+ | .25 | 4 | 218 | 720 | |
| | 4 1/2" | .035 | 20'+ | .25 | 4 | 224 | 480 | |
| | 5" | .020 | 20'+ | .25 | 4 | 134 | 420 | |
| | 5" | .035 | 20'+ | .25 | 4 | 269 | 420 | Call |
| | 6" | .035 | 20'+ | .25 | 5 | 311 | 600 | For |
| | 8" | .035 | 20'+ | .25 | 6 | 418 | 360 | Price |
| | 8" | .050 | 20'+ | .25 | 6 | 554 | 360 | |
| | 8" | .085 | 20'+ | .25 | 6 | 834 | 360 | |

JET STREAM TWENTY+PLUS PVC WELL CASING



JET STREAM TITELOC PVC WELL CASING

| | Diameter | Length | Outside Diameter | Inside Diameter | Wall Thickness | Lift Qty (Feet) | List Price |
|------------------------|----------|--------|------------------|-----------------|----------------|-----------------|--------------|
| SDR 21 200# | 5" | 20' | 5.563 | 5.033 | .265 | 420 | <i>Call</i> |
| | 6" | 20' | 6.625 | 5.993 | .316 | 600 | <i>For</i> |
| | 6 1/8" | 20' | 6.900 | 6.242 | .329 | | <i>Price</i> |
| SDR 17 250# | 4 1/2" | 20' | 4.950 | 4.368 | .291 | 480 | <i>Call</i> |
| | 5" | 20' | 5.563 | 4.909 | .327 | 420 | <i>For</i> |
| | 6" | 20' | 6.625 | 5.845 | .390 | 360 | <i>Price</i> |
| SCH 40 | 4" | 20' | 4.500 | 4.026 | .237 | 720 | <i>Call</i> |
| | 4 1/2" | 20' | 4.950 | 4.454 | .248 | 480 | <i>For</i> |
| | 6" | 20' | 6.625 | 6.065 | .280 | 600 | <i>Price</i> |

JET STREAM TITELOC PVC SLOTTED WELL CASING

| | Diameter | Slot | Length | Number of Rows | Open Area Square | Lift Qty (Feet) | List Price |
|------------------------|----------|------|--------|----------------|------------------|-----------------|--------------|
| SDR 21 200# | 5" | .020 | 20' | 4 | 134 | 420 | |
| | 5" | .035 | 20' | 4 | 269 | 420 | <i>Call</i> |
| | 6" | .020 | 20' | 5 | 158 | 600 | <i>For</i> |
| | 6" | .035 | 20' | 5 | 290 | 600 | <i>Price</i> |
| SDR 17 250# | 4 1/2" | .020 | 20' | 4 | 122 | 480 | |
| | 4 1/2" | .035 | 20' | 4 | 214 | 480 | <i>Call</i> |
| | 5" | .020 | 20' | 4 | 124 | 420 | <i>For</i> |
| | 5" | .035 | 20' | 4 | 251 | 420 | <i>Price</i> |
| SCH 40 | 4" | .020 | 20' | 4 | 435 | 720 | |
| | 4" | .035 | 20' | 4 | 218 | 720 | <i>Call</i> |
| | 4 1/2" | .020 | 20' | 4 | 447 | 480 | <i>For</i> |
| | 4 1/2" | .035 | 20' | 4 | 224 | 480 | <i>Price</i> |
| | 6" | .035 | 20' | 5 | 311 | 600 | |

SCH 40 PVC FITTINGS
PVC COUPLINGS - SxS

| Size | Box Qty | List Price |
|--------|---------|------------|
| 3/4" | 50 | \$ - |
| 1" | 50 | \$ - |
| 1 1/4" | 25 | \$ - |
| 1 1/2" | 25 | \$ - |
| 2" | 25 | \$ - |
| 2 1/2" | 10 | \$ - |
| 3" | 10 | \$ - |
| 4" | 5 | \$ - |
| 5" | 4 | \$ - |
| 6" | 5 | \$ - |
| 8" | 4 | \$ - |


PVC TEE - SxSxS

| Size | Box Qty | List Price |
|--------|---------|------------|
| 3/4" | 50 | \$ - |
| 1" | 50 | \$ - |
| 1 1/4" | 25 | \$ - |
| 1 1/2" | 25 | \$ - |
| 2" | 25 | \$ - |
| 2 1/2" | 10 | \$ - |
| 3" | 10 | \$ - |
| 4" | 5 | \$ - |
| 5" | 4 | \$ - |
| 6" | 4 | \$ - |
| 8" | 2 | \$ - |


PVC 90° ELBOW - SxS

| Size | Box Qty | List Price |
|--------|---------|------------|
| 3/4" | 50 | \$ - |
| 1" | 50 | \$ - |
| 1 1/4" | 25 | \$ - |
| 1 1/2" | 25 | \$ - |
| 2" | 25 | \$ - |
| 2 1/2" | 10 | \$ - |
| 3" | 10 | \$ - |
| 4" | 5 | \$ - |
| 5" | 5 | \$ - |
| 6" | 4 | \$ - |
| 8" | 3 | \$ - |


PVC 45° ELBOW - SxS

| Size | Box Qty | List Price |
|--------|---------|------------|
| 3/4" | 50 | \$ - |
| 1" | 50 | \$ - |
| 1 1/4" | 25 | \$ - |
| 1 1/2" | 25 | \$ - |
| 2" | 25 | \$ - |
| 2 1/2" | 10 | \$ - |
| 3" | 10 | \$ - |
| 4" | 5 | \$ - |
| 5" | 5 | \$ - |
| 6" | 4 | \$ - |
| 8" | 4 | \$ - |


PVC FEMALE ADAPTER

| Size | Box Qty | List Price |
|--------|---------|------------|
| 3/4" | 50 | \$ - |
| 1" | 50 | \$ - |
| 1 1/4" | 25 | \$ - |
| 1 1/2" | 25 | \$ - |
| 2" | 25 | \$ - |
| 2 1/2" | 10 | \$ - |
| 3" | 10 | \$ - |
| 4" | 5 | \$ - |
| 5" | 5 | \$ - |
| 6" | 4 | \$ - |
| 8" | 4 | \$ - |


PVC MALE ADAPTER

| Size | Box Qty | List Price |
|--------|---------|------------|
| 3/4" | 50 | \$ - |
| 1" | 50 | \$ - |
| 1 1/4" | 25 | \$ - |
| 1 1/2" | 25 | \$ - |
| 2" | 25 | \$ - |
| 2 1/2" | 10 | \$ - |
| 3" | 10 | \$ - |
| 4" | 5 | \$ - |
| 5" | 5 | \$ - |
| 6" | 4 | \$ - |
| 8" | 4 | \$ - |



SCH 40 PVC FITTINGS

PVC BUSHING - SxS

| Size | Box Qty | List Price |
|-----------------|---------|------------|
| 3/4" X 1/2" | 100 | \$ - |
| 1" x 1/2" | 100 | \$ - |
| 1" x 3/4" | 100 | \$ - |
| 1 1/4" x 1/2" | 25 | \$ - |
| 1 1/4" x 3/4" | 25 | \$ - |
| 1 1/4" x 1" | 25 | \$ - |
| 1 1/2" x 1/2" | 25 | \$ - |
| 1 1/2" x 3/4" | 25 | \$ - |
| 1 1/2" x 1" | 25 | \$ - |
| 1 1/2" x 1 1/4" | 25 | \$ - |
| 2" x 1/2" | 10 | \$ - |
| 2" x 3/4" | 10 | \$ - |
| 2" x 1" | 10 | \$ - |
| 2" x 1 1/4" | 10 | \$ - |
| 2" x 1 1/2" | 25 | \$ - |
| 2 1/2" x 1/2" | 10 | \$ - |
| 2 1/2" x 3/4" | 10 | \$ - |
| 2 1/2" x 1" | 10 | \$ - |
| 2 1/2" x 1 1/4" | 10 | \$ - |
| 2 1/2" x 1 1/2" | 10 | \$ - |
| 2 1/2" x 2" | 10 | \$ - |
| 3" x 1/2" | 10 | \$ - |
| 3" x 3/4" | 10 | \$ - |
| 3" x 1" | 10 | \$ - |
| 3" x 1 1/4" | 10 | \$ - |
| 3" x 1 1/2" | 10 | \$ - |
| 3" x 2" | 10 | \$ - |
| 3" x 2 1/2" | 10 | \$ - |
| 4" x 1" | 5 | \$ - |
| 4" x 1 1/4" | 5 | \$ - |
| 4" x 1 1/2" | 5 | \$ - |
| 4" x 2" | 5 | \$ - |
| 4" x 2 1/2" | 5 | \$ - |
| 4" x 3" | 5 | \$ - |
| 5" x 3" | 5 | \$ - |
| 5" x 4" | 4 | \$ - |
| 6" x 2" | 5 | \$ - |
| 6" x 3" | 5 | \$ - |
| 6" x 4" | 5 | \$ - |
| 6" x 5" | 5 | \$ - |
| 8" x 2" | 5 | \$ - |
| 8" x 3" | 5 | \$ - |
| 8" x 4" | 5 | \$ - |
| 8" x 5" | 4 | \$ - |
| 8" x 6" | 5 | \$ - |



PVC BUSHING - SxT

| Size | Box Qty | List Price |
|-----------------|---------|------------|
| 3/4" X 1/2" | 100 | \$ - |
| 1" x 1/2" | 100 | \$ - |
| 1" x 3/4" | 100 | \$ - |
| 1 1/4" x 1/2" | 25 | \$ - |
| 1 1/4" x 3/4" | 25 | \$ - |
| 1 1/4" x 1" | 25 | \$ - |
| 1 1/2" x 1/2" | 25 | \$ - |
| 1 1/2" x 3/4" | 25 | \$ - |
| 1 1/2" x 1" | 25 | \$ - |
| 1 1/2" x 1 1/4" | 25 | \$ - |
| 2" x 1/2" | 10 | \$ - |
| 2" x 3/4" | 10 | \$ - |
| 2" x 1" | 10 | \$ - |
| 2" x 1 1/4" | 10 | \$ - |
| 2" x 1 1/2" | 10 | \$ - |
| 2 1/2" x 1/2" | 10 | \$ - |
| 2 1/2" x 3/4" | 10 | \$ - |
| 2 1/2" x 1" | 10 | \$ - |
| 2 1/2" x 1 1/4" | 10 | \$ - |
| 2 1/2" x 1 1/2" | 10 | \$ - |
| 2 1/2" x 2" | 10 | \$ - |
| 3" x 3/4" | 10 | \$ - |
| 3" x 1" | 10 | \$ - |
| 3" x 1 1/4" | 10 | \$ - |
| 3" x 1 1/2" | 10 | \$ - |
| 3" x 2" | 10 | \$ - |
| 3" x 2 1/2" | 10 | \$ - |
| 4" x 2" | 5 | \$ - |
| 4" x 2 1/2" | 5 | \$ - |
| 4" x 3" | 5 | \$ - |
| 5" x 4" | 5 | \$ - |
| 6" x 2" | 5 | \$ - |
| 6" x 4" | 5 | \$ - |



PVC CROSS - SxSxSxS

| Size | Box Qty | List Price |
|--------|---------|------------|
| 1" | 50 | \$ - |
| 1 1/4" | 25 | \$ - |
| 1 1/2" | 25 | \$ - |
| 2" | 10 | \$ - |
| 2 1/2" | 8 | \$ - |
| 3" | 10 | \$ - |
| 4" | 5 | \$ - |



SCH 40 PVC FITTINGS

PVC CAP - SLIP

| Size | Box Qty | List Price |
|--------|---------|------------|
| 3/4" | 100 | \$ - |
| 1" | 50 | \$ - |
| 1 1/4" | 25 | \$ - |
| 1 1/2" | 25 | \$ - |
| 2" | 25 | \$ - |
| 2 1/2" | 10 | \$ - |
| 3" | 10 | \$ - |
| 4" | 5 | \$ - |
| 5" | 5 | \$ - |
| 6" | 5 | \$ - |
| 8" | 4 | \$ - |



PVC PLUG - THREADED

| Size | Box Qty | List Price |
|--------|---------|------------|
| 3/4" | 50 | \$ - |
| 1" | 50 | \$ - |
| 1 1/4" | 25 | \$ - |
| 1 1/2" | 25 | \$ - |
| 2" | 10 | \$ - |
| 2 1/2" | 10 | \$ - |
| 3" | 10 | \$ - |
| 4" | 5 | \$ - |



PVC COMPRESSION COUPLING

| Size | Box Qty | List Price |
|--------|---------|------------|
| 1" | 20 | \$ - |
| 1 1/4" | 10 | \$ - |
| 1 1/2" | 10 | \$ - |
| 2" | 10 | \$ - |
| 2 1/2" | 8 | \$ - |
| 3" | 5 | \$ - |
| 4" | 6 | \$ - |



EXPANDABLE PVC REPAIR COUPLING

| Size | Box Qty | List Price |
|--------|---------|------------|
| 1" | 18 | \$ - |
| 1 1/4" | 12 | \$ - |
| 1 1/2" | 12 | \$ - |
| 2" | 8 | \$ - |
| 2 1/2" | 4 | \$ - |
| 3" | 3 | \$ - |
| 4" | 2 | \$ - |



PVC INSERT FITTINGS

PVC INSERT COUPLING

| Size | Box Qty | List Price |
|--------|---------|------------|
| 1/2" | 50 | \$ - |
| 3/4" | 50 | \$ - |
| 1" | 50 | \$ - |
| 1 1/4" | 25 | \$ - |
| 1 1/2" | 25 | \$ - |
| 2" | 10 | \$ - |



PVC INSERT MALE ADAPTER

| Size | Box Qty | List Price |
|--------|---------|------------|
| 1/2" | 50 | \$ - |
| 3/4" | 50 | \$ - |
| 1" | 50 | \$ - |
| 1 1/4" | 20 | \$ - |
| 1 1/2" | 25 | \$ - |
| 2" | 10 | \$ - |



SCH 80 PVC FITTINGS

SCH 80 PVC UNION - SxS

| Size | Box Qty | List Price |
|--------|---------|------------|
| 1" | 10 | \$ - |
| 1 1/4" | 5 | \$ - |
| 1 1/2" | 5 | \$ - |
| 2" | 5 | \$ - |
| 3" | 5 | \$ - |
| 4" | 2 | \$ - |



SCH 80 PVC UNION - TxT

| Size | Box Qty | List Price |
|--------|---------|------------|
| 1" | 10 | \$ - |
| 1 1/4" | 5 | \$ - |
| 1 1/2" | 5 | \$ - |
| 2" | 5 | \$ - |
| 3" | 5 | \$ - |
| 4" | 4 | \$ - |



SCH 80 PVC FEMALE ADAPTER

| Size | Box Qty | List Price |
|--------|---------|------------|
| 1" | 10 | \$ - |
| 1 1/4" | 5 | \$ - |
| 1 1/2" | 5 | \$ - |
| 2" | 5 | \$ - |
| 3" | 5 | \$ - |
| 4" | 2 | \$ - |



SCH 80 PVC MALE ADAPTER

| Size | Box Qty | List Price |
|--------|---------|------------|
| 1" | 10 | \$ - |
| 1 1/4" | 5 | \$ - |
| 1 1/2" | 5 | \$ - |
| 2" | 5 | \$ - |
| 3" | 5 | \$ - |
| 4" | 4 | \$ - |



SCH 80 PVC NIPPLE - TxT

| Size | Box Qty | List Price |
|------------|---------|------------|
| 1" x Close | 50 | \$ - |
| 1" x 2" | 50 | \$ - |
| 1" x 4" | 50 | \$ - |
| 1" x 6" | 50 | \$ - |
| 1" x 8" | 50 | \$ - |
| 1" x 10" | 50 | \$ - |
| 1" x 12" | 50 | \$ - |



SCH 80 PVC NIPPLE - TxT

| Size | Box Qty | List Price |
|----------------|---------|------------|
| 1 1/4" x Close | 25 | \$ - |
| 1 1/4" x 2" | 25 | \$ - |
| 1 1/4" x 4" | 25 | \$ - |
| 1 1/4" x 6" | 25 | \$ - |
| 1 1/4" x 8" | 25 | \$ - |
| 1 1/4" x 10" | 25 | \$ - |
| 1 1/4" x 12" | 25 | \$ - |



SCH 80 PVC NIPPLE - TxT

| Size | Box Qty | List Price |
|----------------|---------|------------|
| 1 1/2" x Close | 25 | \$ - |
| 1 1/2" x 4" | 25 | \$ - |
| 1 1/2" x 6" | 25 | \$ - |
| 1 1/2" x 8" | 25 | \$ - |
| 1 1/2" x 10" | 25 | \$ - |
| 1 1/2" x 12" | 25 | \$ - |



SCH 80 PVC NIPPLE - TxT

| Size | Box Qty | List Price |
|------------|---------|------------|
| 2" x Close | 10 | \$ - |
| 2" x 4" | 10 | \$ - |
| 2" x 6" | 10 | \$ - |
| 2" x 8" | 10 | \$ - |
| 2" x 10" | 10 | \$ - |
| 2" x 12" | 15 | \$ - |



STAINLESS STEEL CLAMPS

| Mfg Number | Description | Size | Box Quantity | List Price |
|------------|-------------|-------------------|--------------|------------|
| 6308 | 8 | 7/16" x 1" | 10 | \$ - |
| 6310 | 10 | 1/2" x 1-1/16" | 10 | \$ - |
| 6312 | 12 | 1/2" x 1-1/4" | 10 | \$ - |
| 6316 | 16 | 11/16" x 1-1/2" | 10 | \$ - |
| 6320 | 20 | 3/4" x 1-3/4" | 10 | \$ - |
| 6324 | 24 | 1" x 2" | 10 | \$ - |
| 6328 | 28 | 1-15/16" x 2-1/2" | 10 | \$ - |
| 6332 | 32 | 1-1/2" x 2-1/2" | 10 | \$ - |
| 6336 | 36 | 1-3/4" x 2-3/4" | 10 | \$ - |
| 6340 | 40 | 2" x 3" | 10 | \$ - |
| 6352 | 52 | 2-3/4" x 3-3/4" | 10 | \$ - |
| 6364 | 64 | 2-1/2" x 4-1/2" | 10 | \$ - |
| 6372 | 72 | 3" x 5" | 10 | \$ - |
| 6380 | 80 | 3-1/2" x 5-1/2" | 10 | \$ - |
| 6396 | 96 | 4-1/2" x 6-1/2" | 10 | \$ - |
| 63104 | 104 | 5" x 7" | 10 | \$ - |
| 63128 | 128 | 6-1/2" x 8-1/2" | 10 | \$ - |
| 63152 | 152 | 8" x 10" | 10 | \$ - |



PVC Solvents

| PVC Cement - J.C. Whitlam | Item # | Size | Case Quantity | List Price |
|---|----------|----------|---------------|------------|
| PVC Clear Med Bodied / Med Set | PL4 | 1/4 Pint | 24 | \$ - |
| PVC Clear Med Bodied / Med Set | PL8 | 1/2 Pint | 24 | \$ - |
| PVC Clear Med Bodied / Med Set | PL16 | Pint | 12 | \$ - |
| PVC Clear Med Bodied / Med Set | PL32 | Quart | 12 | \$ - |
| PVC Clear Med Bodied / Med Set | PL1-CGW | Gallon | 6 | \$ - |
| | | | | |
| PVC Clear Heavy Duty / Med Set | HDP4 | 1/4 Pint | 24 | \$ - |
| PVC Clear Heavy Duty / Med Set | HDP8 | 1/2 Pint | 24 | \$ - |
| PVC Clear Heavy Duty / Med Set | HDP16 | Pint | 12 | \$ - |
| PVC Clear Heavy Duty / Med Set | HDP32 | Quart | 12 | \$ - |
| PVC Clear Heavy Duty / Med Set | HDP1-CGW | Gallon | 6 | \$ - |
| | | | | |
| "Weatherproof" Blue Wet/Dry Med Body / Fast Set | WET4 | 1/4 Pint | 24 | \$ - |
| "Weatherproof" Blue Wet/Dry Med Body / Fast Set | WET8 | 1/2 Pint | 24 | \$ - |
| "Weatherproof" Blue Wet/Dry Med Body / Fast Set | WET16 | Pint | 12 | \$ - |
| "Weatherproof" Blue Wet/Dry Med Body / Fast Set | WET32 | Quart | 12 | \$ - |
| "Weatherproof" Blue Wet/Dry Med Body / Fast Set | WET1-CGW | Gallon | 6 | \$ - |
| | | | | |
| PVC Gray SCH. 80 Heavy Bodied / Slow Set | PGL16 | Pint | 12 | \$ - |
| PVC Gray SCH. 80 Heavy Bodied / Slow Set | PGL32 | Quart | 12 | \$ - |
| PVC Gray SCH. 80 Heavy Bodied / Slow Set | PGL1-CGW | Gallon | 6 | \$ - |



Average Joint Cure Schedule For WHITLAM PVC/CPVC Solvent Cements**

| Relative Humidity 60% or Less | Cure Time Pipe Sizes 1/2" to 1 1/4" | | Cure Time Pipe Sizes 1 1/2" to 2" | | Cure Time Pipe Sizes 2 1/2" to 8" | | Cure Time Pipe Sizes 10" to 15" | Cure Time Pipe Sizes 15"+ |
|----------------------------------|--|-------------------|--------------------------------------|----------------------------|--------------------------------------|----------------------------|------------------------------------|------------------------------|
| | up to 160 psi | 160 to 370 psi | up to 160 psi | above 160 to 315 psi | up to 160 psi | above 160 to 315 psi | up to 100 psi | up to 100 psi |
| 60°- 100°F | 15 min | 6 hrs | 30 min | 12 hrs | 1 1/2 hrs | 24 hrs | 48 hrs | 72 hrs |
| 40°- 60°F | 20 min | 12 hrs | 45 min | 24 hrs | 4 hrs | 48 hrs | 96 hrs | 6 days |
| 0°- 40°F | 30 min | 48 hrs | 1 hour | 96 hrs | 72 hrs | 8 days | 8 days | 14 days |

Note-Joint cure schedule is the necessary time to allow before pressurizing system. In damp or humid weather allow 50% more cure time.

** These figures are estimates based on our laboratory tests; extended cure times are required for chemical applications. Due to the many variables in the field, these figures should be used as a general guide only.

PVC Solvents

Clear PVC Primer - J.C. Whitlam

| | Item # | Size | Case Quantity | List Price |
|----------------------|----------|----------|---------------|------------|
| Low Voc Clear Primer | PCL4 | 1/4 Pint | 24 | \$ - |
| Low Voc Clear Primer | PCL8 | 1/2 Pint | 24 | \$ - |
| Low Voc Clear Primer | PCL16 | Pint | 12 | \$ - |
| Low Voc Clear Primer | PCL32 | Quart | 12 | \$ - |
| Low Voc Clear Primer | PCL1-CGW | Gallon | 6 | \$ - |



Purple PVC Primer - J.C. Whitlam

| | | | | |
|-----------------------|----------|----------|----|------|
| Low Voc Purple Primer | PPL4 | 1/4 Pint | 24 | \$ - |
| Low Voc Purple Primer | PPL8 | 1/2 Pint | 24 | \$ - |
| Low Voc Purple Primer | PPL16 | Pint | 12 | \$ - |
| Low Voc Purple Primer | PPL32 | Quart | 12 | \$ - |
| Low Voc Purple Primer | PPL1-CGW | Gallon | 6 | \$ - |



PVC Cleaner - J.C. Whitlam

| | | | | |
|-----------------------|--------|----------|----|------|
| Low Voc Clear Cleaner | C4 | 1/4 Pint | 24 | \$ - |
| Low Voc Clear Cleaner | C8 | 1/2 Pint | 24 | \$ - |
| Low Voc Clear Cleaner | C16 | Pint | 12 | \$ - |
| Low Voc Clear Cleaner | C32 | Quart | 12 | \$ - |
| Low Voc Clear Cleaner | C1-CGW | Gallon | 6 | \$ - |



Pipe Gasket Lube - J.C. Whitlam

| | | | | |
|-------------------------|-------|----------|----|------|
| Blue Lube Polymer Based | GLP16 | Pint | 24 | \$ - |
| Blue Lube Polymer Based | GLP32 | Quart | 12 | \$ - |
| Blue Lube Polymer Based | GLP16 | Gallon | 4 | \$ - |
| Blue Lube Polymer Based | GLP5 | 5 Gallon | | \$ - |



| Accessories | Size | Case Quantity | List Price |
|--------------------------|------|---------------|------------|
| Gallon Can Swab with Cap | 12" | 12 | \$ - |



| | | | |
|---------------------------------------|----------|---|------|
| Talon Heavy Duty Hand Cleaning Towels | 9" x 12" | 6 | \$ - |
|---------------------------------------|----------|---|------|



| | | | |
|---|-------|----|------|
| DAP Quick Cure High Yield Polyurethane Foam | 11 oz | 12 | \$ - |
|---|-------|----|------|



POLY PIPE & FITTINGS

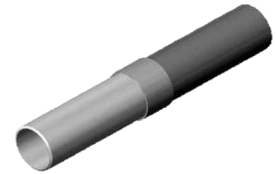
SDR 11 Poly Pipe

| Diameter | Pressure Rating | Length | List Price |
|----------|-----------------|--------------|--------------|
| 1" | SDR11 / 200 PSI | 500' | |
| 1-1/4" | SDR11 / 200 PSI | 500' | <i>Call</i> |
| 1-1/2" | SDR11 / 200 PSI | 500' | <i>For</i> |
| 2" | SDR11 / 200 PSI | 2000' | <i>Price</i> |
| 3" | SDR11 / 200 PSI | 1000' | |
| 4" | SDR11 / 200 PSI | 500' or 800' | |



SDR11 Fusible Poly Transitions

| Size | Description | Box Qty | List Price |
|--------|----------------------------------|---------|------------|
| 1-1/4" | MPT X IPS DR11 COATED TRANSITION | 16 | \$ - |
| 1-1/2" | MPT X IPS DR11 COATED TRANSITION | 12 | \$ - |
| 2" | MPT X IPS DR11 COATED TRANSITION | 16 | \$ - |
| 3" | MPT X IPS DR11 COATED TRANSITION | 4 | \$ - |
| 4" | MPT X IPS DR11 COATED TRANSITION | 4 | \$ - |



Threaded Hammer Unions

| Size | Description | List Price |
|------|----------------------------------|------------|
| 2" | Threaded Hammer Union / 1000 PSI | \$ - |
| 3" | Threaded Hammer Union / 1000 PSI | \$ - |
| 4" | Threaded Hammer Union / 1000 PSI | \$ - |



Polymate Threaded Adapters

| Size | Description | List Price |
|--------|---------------------------------|------------|
| 1" | 304SS Polymate Threaded Adapter | \$ - |
| 1-1/4" | 304SS Polymate Threaded Adapter | \$ - |
| 1-1/2" | 304SS Polymate Threaded Adapter | \$ - |
| 2" | 304SS Polymate Threaded Adapter | \$ - |
| 3" | 304SS Polymate Threaded Adapter | \$ - |
| 4" | 304SS Polymate Threaded Adapter | \$ - |



PEX TUBING

| Nominal Size | OD | Wall | Calculated ID | Length | Color | List Price |
|--------------|--------|-------|---------------|-----------|-------|------------|
| 3/4" | .875" | .097" | .681" | 10' Stick | White | \$ - |
| 3/4" | .875" | .097" | .681" | 20' Stick | White | \$ - |
| 3/4" | .875" | .097" | .681" | 100' Coil | White | \$ - |
| 1" | 1.125" | .125" | .875" | 10' Stick | White | \$ - |
| 1" | 1.125" | .125" | .875" | 20' Stick | White | \$ - |
| 1" | 1.125" | .125" | .875" | 100' Coil | White | \$ - |

PowerPEX is available in copper tube sizes (CTS) 1/2" through 2". Coils are available up to 1". Straight lengths are available for every size. 1/2" – 1" available in red, white or blue. 1 1/4" – 2" available in white only.



Proudly Made in America

Domestic materials. Domestic manufacture. Made in America using the best materials possible with the best people possible



1. Cut tube at 90-degrees. Do not crush OD of tubing with cutters. Hint: Slightly rotate cutter during blade engagement.



2. Install PEX Crimp Ring onto OD of tubing.



3. Install PEX fitting into tube end.



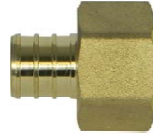
4. Position ring over sealing barbs of the fitting. The ring should be positioned approximately 1/8" to 1/4" from the end of the tube.



5. Compress tool perpendicular to tubing run. Compress only once. Remove defective connections. Use a gauge to assure a proper joint. Test completed joint.

PEX FITTINGS

| Configuration | Material | Size | Box Qty | List Price |
|--|----------|------------------|---------|------------|
| Crimp Ring | Copper | 3/4" | 100 | \$ - |
| Crimp Ring | Copper | 1" | 100 | \$ - |
| Female Adapter | Brass | 3/4" | 25 | \$ - |
| Female Adapter | Brass | 1" | 15 | \$ - |
| Female Adapter | Poly | 3/4" | - | \$ - |
| Female Adapter | Poly | 1" | 25 | \$ - |
| Male Adapter | Brass | 3/4" | 25 | \$ - |
| Male Adapter | Brass | 1" | 15 | \$ - |
| Male Adapter | Poly | 3/4" | - | \$ - |
| Male Adapter | Poly | 1" | 25 | \$ - |
| Reducing Male Adapter | Brass | 1" PEX x 3/4" MA | 15 | \$ - |
| 90 Deg Elbow | Brass | 3/4" | 25 | \$ - |
| 90 Deg Elbow | Brass | 1" | 15 | \$ - |
| 90 Deg Elbow | Poly | 3/4" | - | \$ - |
| 90 Deg Elbow | Poly | 1" | 10 | \$ - |
| Coupling | Brass | 3/4" | 25 | \$ - |
| Coupling | Brass | 1" | 15 | \$ - |
| Coupling | Poly | 3/4" | - | \$ - |
| Coupling | Poly | 1" | 25 | \$ - |
| Tee | Brass | 3/4" | 25 | \$ - |
| Tee | Brass | 1" | 15 | \$ - |
| Tee | Poly | 3/4" | - | \$ - |
| Tee | Poly | 1" | 10 | \$ - |
| PEX x PEX Ball Valve | Brass | 3/4" | 10 | \$ - |
| PEX x PEX Ball Valve | Brass | 1" | 6 | \$ - |
| 1" PEX Crimping Tool | | | | \$ - |
| 3/8" - 1 1/4" Ratcheting Tube Cutter | | | | \$ - |
| PEX Go/No-Go Gauge 3/8", 1/2", 3/4" & 1" | | | | \$ - |



STEEL PIPE

| | Diameter | Length | Outside Diameter | Inside Diameter | Wall Thickness | Lift Qty (Feet) | Weight Per Foot (lbs) | List Price |
|--|----------|--------|------------------|-----------------|----------------|-----------------|-----------------------|------------|
| Black T&C Steel Drop Pipe | 1/2" | 21' | .840" | .622" | .109" | 2520 | 0.85 | |
| | 3/4" | 21' | 1.050" | .824" | .113" | 1764 | 1.13 | |
| | 1" | 21' | 1.315" | 1.049" | .133" | 1260 | 1.68 | |
| | 1¼" | 21' | 1.660" | 1.380" | .140" | 882 | 2.27 | |
| | 1½" | 21' | 1.900" | 1.610" | .145" | 756 | 2.72 | Call |
| | 2" | 21' | 2.375" | 2.067" | .154" | 546 | 3.65 | For |
| | 2½" | 21' | 2.875" | 2.469" | .203" | 378 | 5.79 | Price |
| | 3" | 21' | 3.500" | 3.068" | .216" | 294 | 7.58 | |
| | 4" | 21' | 4.500" | 4.026" | .237" | 210 | 10.79 | |
| | 5" | 21' | 5.563" | 5.047" | .258" | 147 | 14.61 | |
| | 6" | 21' | 6.625" | 6.065" | .280" | 147 | 18.97 | |

| | Diameter | Length | Outside Diameter | Inside Diameter | Wall Thickness | Lift Qty (Feet) | Weight Per Foot (lb) | List Price |
|---|----------|--------|------------------|-----------------|----------------|-----------------|----------------------|------------|
| Galvanized T&C Steel Drop Pipe | 1/2" | 21' | .840" | .622" | .109" | 2520 | 0.85 | |
| | 3/4" | 21' | 1.050" | .824" | .113" | 1764 | 1.13 | |
| | 1" | 21' | 1.315" | 1.049" | .133" | 1260 | 1.68 | |
| | 1¼" | 21' | 1.660" | 1.380" | .140" | 882 | 2.27 | |
| | 1½" | 21' | 1.900" | 1.610" | .145" | 756 | 2.72 | Call |
| | 2" | 21' | 2.375" | 2.067" | .154" | 546 | 3.65 | For |
| | 2½" | 21' | 2.875" | 2.469" | .203" | 378 | 5.79 | Price |
| | 3" | 21' | 3.500" | 3.068" | .216" | 294 | 7.58 | |
| | 4" | 21' | 4.500" | 4.026" | .237" | 210 | 10.79 | |
| | 5" | 21' | 5.563" | 5.047" | .258" | 147 | 14.61 | |
| | 6" | 21' | 6.625" | 6.065" | .280" | 147 | 18.97 | |

90° Elbows - Class 150

| Black | | |
|--------|---------|------------|
| Size | Box Qty | List Price |
| 1/8" | 50 | \$ - |
| 1/4" | 35 | \$ - |
| 3/8" | 90 | \$ - |
| 1/2" | 50 | \$ - |
| 3/4" | 35 | \$ - |
| 1" | 20 | \$ - |
| 1 1/4" | 20 | \$ - |
| 1 1/2" | 10 | \$ - |
| 2" | 8 | \$ - |
| 2 1/2" | 12 | \$ - |
| 3" | 8 | \$ - |
| 4" | 2 | \$ - |
| 5" | 2 | \$ - |
| 6" | - | \$ - |



| Galvanized | | |
|------------|---------|------------|
| Size | Box Qty | List Price |
| 1/8" | 50 | \$ - |
| 1/4" | 35 | \$ - |
| 3/8" | 90 | \$ - |
| 1/2" | 50 | \$ - |
| 3/4" | 35 | \$ - |
| 1" | 20 | \$ - |
| 1 1/4" | 20 | \$ - |
| 1 1/2" | 15 | \$ - |
| 2" | 8 | \$ - |
| 2 1/2" | 12 | \$ - |
| 3" | 8 | \$ - |
| 4" | 2 | \$ - |
| 5" | - | \$ - |
| 6" | - | \$ - |

90° Street Elbows - Class 150

| Black | | |
|--------|---------|------------|
| Size | Box Qty | List Price |
| 1/8" | 60 | \$ - |
| 1/4" | 35 | \$ - |
| 3/8" | 40 | \$ - |
| 1/2" | 60 | \$ - |
| 3/4" | 35 | \$ - |
| 1" | 45 | \$ - |
| 1 1/4" | 25 | \$ - |
| 1 1/2" | 9 | \$ - |
| 2" | 8 | \$ - |
| 2 1/2" | 5 | \$ - |
| 3" | 8 | \$ - |
| 4" | 4 | \$ - |
| 6" | - | \$ - |



| Galvanized | | |
|------------|---------|------------|
| Size | Box Qty | List Price |
| 1/8" | 60 | \$ - |
| 1/4" | 35 | \$ - |
| 3/8" | 40 | \$ - |
| 1/2" | 60 | \$ - |
| 3/4" | 35 | \$ - |
| 1" | 45 | \$ - |
| 1 1/4" | 25 | \$ - |
| 1 1/2" | 9 | \$ - |
| 2" | 8 | \$ - |
| 2 1/2" | 5 | \$ - |
| 3" | 8 | \$ - |
| 4" | 4 | \$ - |
| 6" | - | \$ - |

45° Elbows - Class 150

| Black | | |
|--------|---------|------------|
| Size | Box Qty | List Price |
| 1/8" | 50 | \$ - |
| 1/4" | 30 | \$ - |
| 3/8" | 50 | \$ - |
| 1/2" | 50 | \$ - |
| 3/4" | 40 | \$ - |
| 1" | 20 | \$ - |
| 1 1/4" | 20 | \$ - |
| 1 1/2" | 10 | \$ - |
| 2" | 12 | \$ - |
| 2 1/2" | 12 | \$ - |
| 3" | 10 | \$ - |
| 4" | 4 | \$ - |
| 5" | - | \$ - |
| 6" | - | \$ - |



| Galvanized | | |
|------------|---------|------------|
| Size | Box Qty | List Price |
| 1/8" | 50 | \$ - |
| 1/4" | 35 | \$ - |
| 3/8" | 60 | \$ - |
| 1/2" | 50 | \$ - |
| 3/4" | 40 | \$ - |
| 1" | 20 | \$ - |
| 1 1/4" | 20 | \$ - |
| 1 1/2" | 10 | \$ - |
| 2" | 12 | \$ - |
| 2 1/2" | 12 | \$ - |
| 3" | 10 | \$ - |
| 4" | 4 | \$ - |
| 5" | - | \$ - |
| 6" | - | \$ - |

Tee - Class 150

| Black | | |
|--------|---------|------------|
| Size | Box Qty | List Price |
| 1/8" | 80 | \$ - |
| 1/4" | 50 | \$ - |
| 3/8" | 30 | \$ - |
| 1/2" | 40 | \$ - |
| 3/4" | 35 | \$ - |
| 1" | 20 | \$ - |
| 1 1/4" | 14 | \$ - |
| 1 1/2" | 12 | \$ - |
| 2" | 8 | \$ - |
| 2 1/2" | 8 | \$ - |
| 3" | 6 | \$ - |
| 4" | 2 | \$ - |
| 5" | - | \$ - |
| 6" | - | \$ - |



| Galvanized | | |
|------------|---------|------------|
| Size | Box Qty | List Price |
| 1/8" | 120 | \$ - |
| 1/4" | 50 | \$ - |
| 3/8" | 30 | \$ - |
| 1/2" | 40 | \$ - |
| 3/4" | 35 | \$ - |
| 1" | 20 | \$ - |
| 1 1/4" | 14 | \$ - |
| 1 1/2" | 12 | \$ - |
| 2" | 8 | \$ - |
| 2 1/2" | 8 | \$ - |
| 3" | 6 | \$ - |
| 4" | 2 | \$ - |
| 5" | - | \$ - |
| 6" | - | \$ - |

Reducing Tee - Class 150

| Black | | |  | Galvanized | | |
|---------------|---------|------------|---|------------|---------|------------|
| Size | Box Qty | List Price | | Size | Box Qty | List Price |
| 1 1/4" x 3/4" | 20 | \$ - | 1 1/4" x 3/4" | 20 | \$ - | |
| 1 1/4" x 1" | 20 | \$ - | 1 1/4" x 1" | 20 | \$ - | |

Cross - Class 150

| Black | | |  | Galvanized | | |
|--------|---------|------------|--|------------|---------|------------|
| Size | Box Qty | List Price | | Size | Box Qty | List Price |
| 1/4" | 40 | \$ - | 1/4" | 40 | \$ - | |
| 3/8" | 50 | \$ - | 3/8" | 50 | \$ - | |
| 1/2" | 30 | \$ - | 1/2" | 30 | \$ - | |
| 3/4" | 20 | \$ - | 3/4" | 20 | \$ - | |
| 1" | 15 | \$ - | 1" | 15 | \$ - | |
| 1 1/4" | 10 | \$ - | 1 1/4" | 10 | \$ - | |
| 1 1/2" | 8 | \$ - | 1 1/2" | 8 | \$ - | |
| 2" | 5 | \$ - | 2" | 5 | \$ - | |
| 2 1/2" | 6 | \$ - | 2 1/2" | 3 | \$ - | |
| 3" | 4 | \$ - | 3" | 2 | \$ - | |
| 4" | 2 | \$ - | 4" | 2 | \$ - | |

Square Head Plug - Class 150

| Black | | |  | Galvanized | | |
|--------|---------|------------|---|------------|---------|------------|
| Size | Box Qty | List Price | | Size | Box Qty | List Price |
| 1/8" | 100 | \$ - | 1/8" | 100 | \$ - | |
| 1/4" | 100 | \$ - | 1/4" | 100 | \$ - | |
| 3/8" | 100 | \$ - | 3/8" | 100 | \$ - | |
| 1/2" | 100 | \$ - | 1/2" | 100 | \$ - | |
| 3/4" | 30 | \$ - | 3/4" | 30 | \$ - | |
| 1" | 20 | \$ - | 1" | 20 | \$ - | |
| 1 1/4" | 40 | \$ - | 1 1/4" | 40 | \$ - | |
| 1 1/2" | 30 | \$ - | 1 1/2" | 30 | \$ - | |
| 2" | 20 | \$ - | 2" | 20 | \$ - | |
| 2 1/2" | 16 | \$ - | 2 1/2" | 16 | \$ - | |
| 3" | 16 | \$ - | 3" | 16 | \$ - | |
| 4" | 12 | \$ - | 4" | 6 | \$ - | |
| 5" | 10 | \$ - | 5" | - | \$ - | |
| 6" | 10 | \$ - | 6" | 5 | \$ - | |

Cap - Class 150

| Black | | | Galvanized | | |
|--------|---------|------------|------------|---------|------------|
| Size | Box Qty | List Price | Size | Box Qty | List Price |
| 1/8" | 120 | \$ - | 1/8" | 100 | \$ - |
| 1/4" | 80 | \$ - | 1/4" | 100 | \$ - |
| 3/8" | 60 | \$ - | 3/8" | 60 | \$ - |
| 1/2" | 75 | \$ - | 1/2" | 75 | \$ - |
| 3/4" | 40 | \$ - | 3/4" | 40 | \$ - |
| 1" | 25 | \$ - | 1" | 25 | \$ - |
| 1 1/4" | 20 | \$ - | 1 1/4" | 20 | \$ - |
| 1 1/2" | 18 | \$ - | 1 1/2" | 18 | \$ - |
| 2" | 12 | \$ - | 2" | 12 | \$ - |
| 2 1/2" | 20 | \$ - | 2 1/2" | 20 | \$ - |
| 3" | 24 | \$ - | 3" | 24 | \$ - |
| 4" | 12 | \$ - | 4" | 12 | \$ - |
| 5" | 10 | \$ - | 5" | 10 | \$ - |
| 6" | 4 | \$ - | 6" | 4 | \$ - |



Union - Class 150

| Black | | | Galvanized | | |
|--------|---------|------------|------------|---------|------------|
| Size | Box Qty | List Price | Size | Box Qty | List Price |
| 1/8" | 30 | \$ - | 1/8" | 30 | \$ - |
| 1/4" | 20 | \$ - | 1/4" | 20 | \$ - |
| 3/8" | 20 | \$ - | 3/8" | 20 | \$ - |
| 1/2" | 50 | \$ - | 1/2" | 50 | \$ - |
| 3/4" | 35 | \$ - | 3/4" | 35 | \$ - |
| 1" | 20 | \$ - | 1" | 20 | \$ - |
| 1 1/4" | 15 | \$ - | 1 1/4" | 15 | \$ - |
| 1 1/2" | 10 | \$ - | 1 1/2" | 10 | \$ - |
| 2" | 12 | \$ - | 2" | 12 | \$ - |
| 2 1/2" | 8 | \$ - | 2 1/2" | 8 | \$ - |
| 3" | 8 | \$ - | 3" | 8 | \$ - |
| 4" | 4 | \$ - | 4" | 4 | \$ - |



Reducer Couplings - Class 150

| Black | | | Galvanized | | |
|-----------------|---------|------------|-----------------|---------|------------|
| Size | Box Qty | List Price | Size | Box Qty | List Price |
| 3/4" x 1/2" | 60 | \$ - | 3/4" x 1/2" | 60 | \$ - |
| 1" x 1/2" | 30 | \$ - | 1" x 1/2" | 30 | \$ - |
| 1" x 3/4" | 25 | \$ - | 1" x 3/4" | 25 | \$ - |
| 1 1/4" x 1" | 15 | \$ - | 1 1/4" x 1" | 15 | \$ - |
| 1 1/2" x 1" | 25 | \$ - | 1 1/2" x 1" | 25 | \$ - |
| 1 1/2" x 1 1/4" | 12 | \$ - | 1 1/2" x 1 1/4" | 12 | \$ - |
| 2" x 1" | 12 | \$ - | 2" x 1" | 12 | \$ - |
| 2" x 1 1/4" | 9 | \$ - | 2" x 1 1/4" | 9 | \$ - |
| 2" x 1 1/2" | 9 | \$ - | 2" x 1 1/2" | 9 | \$ - |
| 2 1/2" x 2" | 7 | \$ - | 2 1/2" x 2" | 7 | \$ - |
| 3" x 2" | 6 | \$ - | 3" x 2" | 6 | \$ - |
| 3" x 2 1/2" | 5 | \$ - | 3" x 2 1/2" | 5 | \$ - |
| 4" x 2" | 3 | \$ - | 4" x 2" | 3 | \$ - |
| 4" x 2 1/2" | 3 | \$ - | 4" x 2 1/2" | 3 | \$ - |
| 4" x 3" | 3 | \$ - | 4" x 3" | 3 | \$ - |
| 5" x 4" | - | \$ - | 5" x 4" | - | \$ - |
| 6" x 4" | 2 | \$ - | 6" x 4" | 2 | \$ - |
| 6" x 5" | 2 | \$ - | 6" x 5" | - | \$ - |



Merchant Couplings - Sch 40

| Black | | | Galvanized | | |
|--------|---------|------------|------------|---------|------------|
| Size | Box Qty | List Price | Size | Box Qty | List Price |
| 1/8" | 100 | \$ - | 1/8" | 100 | \$ - |
| 1/4" | 100 | \$ - | 1/4" | 100 | \$ - |
| 3/8" | 100 | \$ - | 3/8" | 100 | \$ - |
| 1/2" | 100 | \$ - | 1/2" | 100 | \$ - |
| 3/4" | 50 | \$ - | 3/4" | 50 | \$ - |
| 1" | 30 | \$ - | 1" | 30 | \$ - |
| 1 1/4" | 25 | \$ - | 1 1/4" | 25 | \$ - |
| 1 1/2" | 25 | \$ - | 1 1/2" | 25 | \$ - |
| 2" | 20 | \$ - | 2" | 20 | \$ - |
| 2 1/2" | 24 | \$ - | 2 1/2" | 24 | \$ - |
| 3" | 18 | \$ - | 3" | 18 | \$ - |
| 4" | 12 | \$ - | 4" | 12 | \$ - |
| 5" | 6 | \$ - | 5" | 6 | \$ - |
| 6" | 4 | \$ - | 6" | 4 | \$ - |



Hex Bushings - Class 150

| Black | | | Galvanized | | |
|-----------------|---------|------------|-----------------|---------|------------|
| Size | Box Qty | List Price | Size | Box Qty | List Price |
| 1/4" x 1/8" | 100 | \$ - | 1/4" x 1/8" | 100 | \$ - |
| 3/8" x 1/8" | 100 | \$ - | 3/8" x 1/8" | 100 | \$ - |
| 3/8" x 1/4" | 100 | \$ - | 3/8" x 1/4" | 100 | \$ - |
| 1/2" x 1/4" | 100 | \$ - | 1/2" x 1/4" | 100 | \$ - |
| 1/2" x 3/8" | 100 | \$ - | 1/2" x 3/8" | 100 | \$ - |
| 3/4" x 1/4" | 75 | \$ - | 3/4" x 1/4" | 75 | \$ - |
| 3/4" x 3/8" | 75 | \$ - | 3/4" x 3/8" | 75 | \$ - |
| 3/4" x 1/2" | 75 | \$ - | 3/4" x 1/2" | 75 | \$ - |
| 1" x 1/4" | 50 | \$ - | 1" x 1/4" | 50 | \$ - |
| 1" x 3/8" | 50 | \$ - | 1" x 3/8" | 50 | \$ - |
| 1" x 1/2" | 50 | \$ - | 1" x 1/2" | 50 | \$ - |
| 1" x 3/4" | 50 | \$ - | 1" x 3/4" | 50 | \$ - |
| 1 1/4" x 1/4" | 30 | \$ - | 1 1/4" x 1/4" | 30 | \$ - |
| 1 1/4" x 3/4" | 30 | \$ - | 1 1/4" x 3/4" | 30 | \$ - |
| 1 1/4" x 1" | 30 | \$ - | 1 1/4" x 1" | 30 | \$ - |
| 1 1/2" x 3/4" | 25 | \$ - | 1 1/2" x 3/4" | 25 | \$ - |
| 1 1/2" x 1" | 25 | \$ - | 1 1/2" x 1" | 25 | \$ - |
| 1 1/2" x 1 1/4" | 25 | \$ - | 1 1/2" x 1 1/4" | 25 | \$ - |
| 2" x 1/4" | 20 | \$ - | 2" x 1/4" | 20 | \$ - |
| 2" x 3/4" | 20 | \$ - | 2" x 3/4" | 20 | \$ - |
| 2" x 1" | 20 | \$ - | 2" x 1" | 20 | \$ - |
| 2" x 1 1/4" | 20 | \$ - | 2" x 1 1/4" | 20 | \$ - |
| 2" x 1 1/2" | 20 | \$ - | 2" x 1 1/2" | 20 | \$ - |
| 2 1/2" x 1" | 15 | \$ - | 2 1/2" x 1" | 15 | \$ - |
| 2 1/2" x 1 1/4" | 15 | \$ - | 2 1/2" x 1 1/4" | 15 | \$ - |
| 2 1/2" x 1 1/2" | 15 | \$ - | 2 1/2" x 1 1/2" | 15 | \$ - |
| 2 1/2" x 2" | 15 | \$ - | 2 1/2" x 2" | 15 | \$ - |
| 3" x 1" | 12 | \$ - | 3" x 1" | 12 | \$ - |
| 3" x 1 1/4" | 12 | \$ - | 3" x 1 1/4" | 12 | \$ - |
| 3" x 1 1/2" | 12 | \$ - | 3" x 1 1/2" | 12 | \$ - |
| 3" x 2" | 12 | \$ - | 3" x 2" | 12 | \$ - |
| 3" x 2 1/2" | 12 | \$ - | 3" x 2 1/2" | 12 | \$ - |
| 4" x 2" | 5 | \$ - | 4" x 2" | 5 | \$ - |
| 4" x 2 1/2" | 5 | \$ - | 4" x 2 1/2" | 5 | \$ - |
| 4" x 3" | 5 | \$ - | 4" x 3" | 5 | \$ - |
| 5" x 3" | 2 | \$ - | 5" x 3" | 2 | \$ - |
| 5" x 4" | 2 | \$ - | 5" x 4" | 2 | \$ - |
| 6" x 4" | 2 | \$ - | 6" x 4" | 2 | \$ - |
| 6" x 5" | 2 | \$ - | 6" x 5" | 2 | \$ - |



Steel Pipe Nipples - Sch 40

| Black | | |
|---------------|---------|------------|
| Size | Box Qty | List Price |
| 1/8" x Close | 25 | \$ - |
| 1/8" x 1 1/2" | 25 | \$ - |
| 1/8" x 2" | 25 | \$ - |
| 1/8" x 2 1/2" | 25 | \$ - |
| 1/8" x 3" | 25 | \$ - |
| 1/8" x 3 1/2" | 25 | \$ - |
| 1/8" x 4" | 25 | \$ - |
| 1/8" x 4 1/2" | 25 | \$ - |
| 1/8" x 5" | 25 | \$ - |
| 1/8" x 5 1/2" | 25 | \$ - |
| 1/8" x 6" | 25 | \$ - |
| 1/8" x 7" | 25 | \$ - |
| 1/8" x 8" | 25 | \$ - |
| 1/8" x 9" | 25 | \$ - |
| 1/8" x 10" | 25 | \$ - |
| 1/8" x 11" | 25 | \$ - |
| 1/8" x 12" | 25 | \$ - |



| Galvanized | | |
|-------------------|---------|------------|
| Size | Box Qty | List Price |
| 1/8" x Close | 25 | \$ - |
| 1/8" x 1 1/2" | 25 | \$ - |
| 1/8" x 2" | 25 | \$ - |
| 1/8" x 2 1/2" | 25 | \$ - |
| 1/8" x 3" | 25 | \$ - |
| 1/8" x 3 1/2" | 25 | \$ - |
| 1/8" x 4" | 25 | \$ - |
| 1/8" x 4 1/2" | 25 | \$ - |
| 1/8" x 5" | 25 | \$ - |
| 1/8" x 5 1/2" | 25 | \$ - |
| 1/8" x 6" | 25 | \$ - |
| 1/8" x 7" | 25 | \$ - |
| 1/8" x 8" | 25 | \$ - |
| 1/8" x 9" | 25 | \$ - |
| 1/8" x 10" | 25 | \$ - |
| 1/8" x 11" | 25 | \$ - |
| 1/8" x 12" | 25 | \$ - |

| Black | | |
|---------------|---------|------------|
| Size | Box Qty | List Price |
| 1/4" x Close | 25 | \$ - |
| 1/4" x 1 1/2" | 25 | \$ - |
| 1/4" x 2" | 25 | \$ - |
| 1/4" x 2 1/2" | 25 | \$ - |
| 1/4" x 3" | 25 | \$ - |
| 1/4" x 3 1/2" | 25 | \$ - |
| 1/4" x 4" | 25 | \$ - |
| 1/4" x 4 1/2" | 25 | \$ - |
| 1/4" x 5" | 25 | \$ - |
| 1/4" x 5 1/2" | 25 | \$ - |
| 1/4" x 6" | 25 | \$ - |
| 1/4" x 7" | 25 | \$ - |
| 1/4" x 8" | 25 | \$ - |
| 1/4" x 9" | 25 | \$ - |
| 1/4" x 10" | 25 | \$ - |
| 1/4" x 11" | 25 | \$ - |
| 1/4" x 12" | 25 | \$ - |



| Galvanized | | |
|-------------------|---------|------------|
| Size | Box Qty | List Price |
| 1/4" x Close | 25 | \$ - |
| 1/4" x 1 1/2" | 25 | \$ - |
| 1/4" x 2" | 25 | \$ - |
| 1/4" x 2 1/2" | 25 | \$ - |
| 1/4" x 3" | 25 | \$ - |
| 1/4" x 3 1/2" | 25 | \$ - |
| 1/4" x 4" | 25 | \$ - |
| 1/4" x 4 1/2" | 25 | \$ - |
| 1/4" x 5" | 25 | \$ - |
| 1/4" x 5 1/2" | 25 | \$ - |
| 1/4" x 6" | 25 | \$ - |
| 1/4" x 7" | 25 | \$ - |
| 1/4" x 8" | 25 | \$ - |
| 1/4" x 9" | 25 | \$ - |
| 1/4" x 10" | 25 | \$ - |
| 1/4" x 11" | 25 | \$ - |
| 1/4" x 12" | 25 | \$ - |

Steel Pipe Nipples - Sch 40

| Black | | | Galvanized | | |
|---------------|---------|------------|---------------|---------|------------|
| Size | Box Qty | List Price | Size | Box Qty | List Price |
| 3/8" x Close | 25 | \$ - | 3/8" x Close | 25 | \$ - |
| 3/8" x 1 1/2" | 25 | \$ - | 3/8" x 1 1/2" | 25 | \$ - |
| 3/8" x 2" | 25 | \$ - | 3/8" x 2" | 25 | \$ - |
| 3/8" x 2 1/2" | 25 | \$ - | 3/8" x 2 1/2" | 25 | \$ - |
| 3/8" x 3" | 25 | \$ - | 3/8" x 3" | 25 | \$ - |
| 3/8" x 3 1/2" | 25 | \$ - | 3/8" x 3 1/2" | 25 | \$ - |
| 3/8" x 4" | 25 | \$ - | 3/8" x 4" | 25 | \$ - |
| 3/8" x 4 1/2" | 25 | \$ - | 3/8" x 4 1/2" | 25 | \$ - |
| 3/8" x 5" | 25 | \$ - | 3/8" x 5" | 25 | \$ - |
| 3/8" x 5 1/2" | 25 | \$ - | 3/8" x 5 1/2" | 25 | \$ - |
| 3/8" x 6" | 25 | \$ - | 3/8" x 6" | 25 | \$ - |
| 3/8" x 7" | 25 | \$ - | 3/8" x 7" | 25 | \$ - |
| 3/8" x 8" | 25 | \$ - | 3/8" x 8" | 25 | \$ - |
| 3/8" x 9" | 25 | \$ - | 3/8" x 9" | 25 | \$ - |
| 3/8" x 10" | 25 | \$ - | 3/8" x 10" | 25 | \$ - |
| 3/8" x 11" | 25 | \$ - | 3/8" x 11" | 25 | \$ - |
| 3/8" x 12" | 25 | \$ - | 3/8" x 12" | 25 | \$ - |



| Black | | | Galvanized | | |
|---------------|---------|------------|---------------|---------|------------|
| Size | Box Qty | List Price | Size | Box Qty | List Price |
| 1/2" x Close | 25 | \$ - | 1/2" x Close | 25 | \$ - |
| 1/2" x 1 1/2" | 25 | \$ - | 1/2" x 1 1/2" | 25 | \$ - |
| 1/2" x 2" | 25 | \$ - | 1/2" x 2" | 25 | \$ - |
| 1/2" x 2 1/2" | 25 | \$ - | 1/2" x 2 1/2" | 25 | \$ - |
| 1/2" x 3" | 25 | \$ - | 1/2" x 3" | 25 | \$ - |
| 1/2" x 3 1/2" | 25 | \$ - | 1/2" x 3 1/2" | 25 | \$ - |
| 1/2" x 4" | 25 | \$ - | 1/2" x 4" | 25 | \$ - |
| 1/2" x 4 1/2" | 25 | \$ - | 1/2" x 4 1/2" | 25 | \$ - |
| 1/2" x 5" | 25 | \$ - | 1/2" x 5" | 25 | \$ - |
| 1/2" x 5 1/2" | 25 | \$ - | 1/2" x 5 1/2" | 25 | \$ - |
| 1/2" x 6" | 25 | \$ - | 1/2" x 6" | 25 | \$ - |
| 1/2" x 7" | 25 | \$ - | 1/2" x 7" | 25 | \$ - |
| 1/2" x 8" | 25 | \$ - | 1/2" x 8" | 25 | \$ - |
| 1/2" x 9" | 25 | \$ - | 1/2" x 9" | 25 | \$ - |
| 1/2" x 10" | 25 | \$ - | 1/2" x 10" | 25 | \$ - |
| 1/2" x 11" | 25 | \$ - | 1/2" x 11" | 25 | \$ - |
| 1/2" x 12" | 25 | \$ - | 1/2" x 12" | 25 | \$ - |



Steel Pipe Nipples - Sch 40

| Black | | |
|---------------|---------|------------|
| Size | Box Qty | List Price |
| 3/4" x Close | 25 | \$ - |
| 3/4" x 1 1/2" | 25 | \$ - |
| 3/4" x 2" | 25 | \$ - |
| 3/4" x 2 1/2" | 25 | \$ - |
| 3/4" x 3" | 25 | \$ - |
| 3/4" x 3 1/2" | 25 | \$ - |
| 3/4" x 4" | 25 | \$ - |
| 3/4" x 4 1/2" | 25 | \$ - |
| 3/4" x 5" | 25 | \$ - |
| 3/4" x 5 1/2" | 25 | \$ - |
| 3/4" x 6" | 25 | \$ - |
| 3/4" x 7" | 25 | \$ - |
| 3/4" x 8" | 25 | \$ - |
| 3/4" x 9" | 25 | \$ - |
| 3/4" x 10" | 25 | \$ - |
| 3/4" x 11" | 25 | \$ - |
| 3/4" x 12" | 25 | \$ - |



| Galvanized | | |
|-------------------|---------|------------|
| Size | Box Qty | List Price |
| 3/4" x Close | 25 | \$ - |
| 3/4" x 1 1/2" | 25 | \$ - |
| 3/4" x 2" | 25 | \$ - |
| 3/4" x 2 1/2" | 25 | \$ - |
| 3/4" x 3" | 25 | \$ - |
| 3/4" x 3 1/2" | 25 | \$ - |
| 3/4" x 4" | 25 | \$ - |
| 3/4" x 4 1/2" | 25 | \$ - |
| 3/4" x 5" | 25 | \$ - |
| 3/4" x 5 1/2" | 25 | \$ - |
| 3/4" x 6" | 25 | \$ - |
| 3/4" x 7" | 25 | \$ - |
| 3/4" x 8" | 25 | \$ - |
| 3/4" x 9" | 25 | \$ - |
| 3/4" x 10" | 25 | \$ - |
| 3/4" x 11" | 25 | \$ - |
| 3/4" x 12" | 25 | \$ - |

| Black | | |
|--------------|---------|------------|
| Size | Box Qty | List Price |
| 1" x Close | 25 | \$ - |
| 1" x 2" | 25 | \$ - |
| 1" x 2 1/2" | 25 | \$ - |
| 1" x 3" | 25 | \$ - |
| 1" x 3 1/2" | 25 | \$ - |
| 1" x 4" | 25 | \$ - |
| 1" x 4 1/2" | 25 | \$ - |
| 1" x 5" | 25 | \$ - |
| 1" x 5 1/2" | 25 | \$ - |
| 1" x 6" | 25 | \$ - |
| 1" x 7" | 25 | \$ - |
| 1" x 8" | 25 | \$ - |
| 1" x 9" | 25 | \$ - |
| 1" x 10" | 25 | \$ - |
| 1" x 11" | 25 | \$ - |
| 1" x 12" | 25 | \$ - |



| Galvanized | | |
|-------------------|---------|------------|
| Size | Box Qty | List Price |
| 1" x Close | 25 | \$ - |
| 1" x 2" | 25 | \$ - |
| 1" x 2 1/2" | 25 | \$ - |
| 1" x 3" | 25 | \$ - |
| 1" x 3 1/2" | 25 | \$ - |
| 1" x 4" | 25 | \$ - |
| 1" x 4 1/2" | 25 | \$ - |
| 1" x 5" | 25 | \$ - |
| 1" x 5 1/2" | 25 | \$ - |
| 1" x 6" | 25 | \$ - |
| 1" x 7" | 25 | \$ - |
| 1" x 8" | 25 | \$ - |
| 1" x 9" | 25 | \$ - |
| 1" x 10" | 25 | \$ - |
| 1" x 11" | 25 | \$ - |
| 1" x 12" | 25 | \$ - |

Steel Pipe Nipples - Sch 40

| Black | | |
|-----------------|---------|------------|
| Size | Box Qty | List Price |
| 1 1/4" x Close | 5 | \$ - |
| 1 1/4" x 2" | 5 | \$ - |
| 1 1/4" x 2 1/2" | 5 | \$ - |
| 1 1/4" x 3" | 5 | \$ - |
| 1 1/4" x 3 1/2" | 5 | \$ - |
| 1 1/4" x 4" | 5 | \$ - |
| 1 1/4" x 4 1/2" | 5 | \$ - |
| 1 1/4" x 5" | 5 | \$ - |
| 1 1/4" x 5 1/2" | 5 | \$ - |
| 1 1/4" x 6" | 5 | \$ - |
| 1 1/4" x 7" | 5 | \$ - |
| 1 1/4" x 8" | 5 | \$ - |
| 1 1/4" x 9" | 5 | \$ - |
| 1 1/4" x 10" | 5 | \$ - |
| 1 1/4" x 11" | 5 | \$ - |
| 1 1/4" x 12" | 5 | \$ - |



| Galvanized | | |
|-------------------|---------|------------|
| Size | Box Qty | List Price |
| 1 1/4" x Close | 5 | \$ - |
| 1 1/4" x 2" | 5 | \$ - |
| 1 1/4" x 2 1/2" | 5 | \$ - |
| 1 1/4" x 3" | 5 | \$ - |
| 1 1/4" x 3 1/2" | 5 | \$ - |
| 1 1/4" x 4" | 5 | \$ - |
| 1 1/4" x 4 1/2" | 5 | \$ - |
| 1 1/4" x 5" | 5 | \$ - |
| 1 1/4" x 5 1/2" | 5 | \$ - |
| 1 1/4" x 6" | 5 | \$ - |
| 1 1/4" x 7" | 5 | \$ - |
| 1 1/4" x 8" | 5 | \$ - |
| 1 1/4" x 9" | 5 | \$ - |
| 1 1/4" x 10" | 5 | \$ - |
| 1 1/4" x 11" | 5 | \$ - |
| 1 1/4" x 12" | 5 | \$ - |

| Black | | |
|-----------------|---------|------------|
| Size | Box Qty | List Price |
| 1 1/2" x Close | 5 | \$ - |
| 1 1/2" x 2" | 5 | \$ - |
| 1 1/2" x 2 1/2" | 5 | \$ - |
| 1 1/2" x 3" | 5 | \$ - |
| 1 1/2" x 3 1/2" | 5 | \$ - |
| 1 1/2" x 4" | 5 | \$ - |
| 1 1/2" x 4 1/2" | 5 | \$ - |
| 1 1/2" x 5" | 5 | \$ - |
| 1 1/2" x 5 1/2" | 5 | \$ - |
| 1 1/2" x 6" | 5 | \$ - |
| 1 1/2" x 7" | 5 | \$ - |
| 1 1/2" x 8" | 5 | \$ - |
| 1 1/2" x 9" | 5 | \$ - |
| 1 1/2" x 10" | 5 | \$ - |
| 1 1/2" x 11" | 5 | \$ - |
| 1 1/2" x 12" | 5 | \$ - |



| Galvanized | | |
|-------------------|---------|------------|
| Size | Box Qty | List Price |
| 1 1/2" x Close | 5 | \$ - |
| 1 1/2" x 2" | 5 | \$ - |
| 1 1/2" x 2 1/2" | 5 | \$ - |
| 1 1/2" x 3" | 5 | \$ - |
| 1 1/2" x 3 1/2" | 5 | \$ - |
| 1 1/2" x 4" | 5 | \$ - |
| 1 1/2" x 4 1/2" | 5 | \$ - |
| 1 1/2" x 5" | 5 | \$ - |
| 1 1/2" x 5 1/2" | 5 | \$ - |
| 1 1/2" x 6" | 5 | \$ - |
| 1 1/2" x 7" | 5 | \$ - |
| 1 1/2" x 8" | 5 | \$ - |
| 1 1/2" x 9" | 5 | \$ - |
| 1 1/2" x 10" | 5 | \$ - |
| 1 1/2" x 11" | 5 | \$ - |
| 1 1/2" x 12" | 5 | \$ - |

Steel Pipe Nipples - Sch 40

| Black | | |
|--------------|---------|------------|
| Size | Box Qty | List Price |
| 2" x Close | 5 | \$ - |
| 2" x 2 1/2" | 5 | \$ - |
| 2" x 3" | 5 | \$ - |
| 2" x 3 1/2" | 5 | \$ - |
| 2" x 4" | 5 | \$ - |
| 2" x 4 1/2" | 5 | \$ - |
| 2" x 5" | 5 | \$ - |
| 2" x 5 1/2" | 5 | \$ - |
| 2" x 6" | 5 | \$ - |
| 2" x 7" | 5 | \$ - |
| 2" x 8" | 5 | \$ - |
| 2" x 9" | 5 | \$ - |
| 2" x 10" | 5 | \$ - |
| 2" x 11" | 5 | \$ - |
| 2" x 12" | 5 | \$ - |
| 2" x 24" | - | \$ - |
| 2" x 36" | - | \$ - |
| 2" x 48" | - | \$ - |
| 2" x 60" | - | \$ - |
| 2" x 72" | - | \$ - |



| Galvanized | | |
|-------------------|---------|------------|
| Size | Box Qty | List Price |
| 2" x Close | 5 | \$ - |
| 2" x 2 1/2" | 5 | \$ - |
| 2" x 3" | 5 | \$ - |
| 2" x 3 1/2" | 5 | \$ - |
| 2" x 4" | 5 | \$ - |
| 2" x 4 1/2" | 5 | \$ - |
| 2" x 5" | 5 | \$ - |
| 2" x 5 1/2" | 5 | \$ - |
| 2" x 6" | 5 | \$ - |
| 2" x 7" | 5 | \$ - |
| 2" x 8" | 5 | \$ - |
| 2" x 9" | 5 | \$ - |
| 2" x 10" | 5 | \$ - |
| 2" x 11" | 5 | \$ - |
| 2" x 12" | 5 | \$ - |
| 2" x 24" | - | \$ - |
| 2" x 36" | - | \$ - |
| 2" x 48" | - | \$ - |
| 2" x 60" | - | \$ - |
| 2" x 72" | - | \$ - |

| Black | | |
|-----------------|---------|------------|
| Size | Box Qty | List Price |
| 2 1/2" x Close | 5 | \$ - |
| 2 1/2" x 3" | 5 | \$ - |
| 2 1/2" x 3 1/2" | 5 | \$ - |
| 2 1/2" x 4" | 5 | \$ - |
| 2 1/2" x 4 1/2" | 5 | \$ - |
| 2 1/2" x 5" | 5 | \$ - |
| 2 1/2" x 5 1/2" | 5 | \$ - |
| 2 1/2" x 6" | 5 | \$ - |
| 2 1/2" x 7" | 5 | \$ - |
| 2 1/2" x 8" | 5 | \$ - |
| 2 1/2" x 9" | 5 | \$ - |
| 2 1/2" x 10" | 5 | \$ - |
| 2 1/2" x 11" | 5 | \$ - |
| 2 1/2" x 12" | 5 | \$ - |
| 2 1/2" x 24" | - | \$ - |
| 2 1/2" x 36" | - | \$ - |
| 2 1/2" x 48" | - | \$ - |



| Galvanized | | |
|-------------------|---------|------------|
| Size | Box Qty | List Price |
| 2 1/2" x Close | 5 | \$ - |
| 2 1/2" x 3" | 5 | \$ - |
| 2 1/2" x 3 1/2" | 5 | \$ - |
| 2 1/2" x 4" | 5 | \$ - |
| 2 1/2" x 4 1/2" | 5 | \$ - |
| 2 1/2" x 5" | 5 | \$ - |
| 2 1/2" x 5 1/2" | 5 | \$ - |
| 2 1/2" x 6" | 5 | \$ - |
| 2 1/2" x 7" | 5 | \$ - |
| 2 1/2" x 8" | 5 | \$ - |
| 2 1/2" x 9" | 5 | \$ - |
| 2 1/2" x 10" | 5 | \$ - |
| 2 1/2" x 11" | 5 | \$ - |
| 2 1/2" x 12" | 5 | \$ - |
| 2 1/2" x 24" | - | \$ - |
| 2 1/2" x 36" | - | \$ - |
| 2 1/2" x 48" | - | \$ - |

Steel Pipe Nipples - Sch 40

| Black | | |
|--------------|---------|------------|
| Size | Box Qty | List Price |
| 3" x Close | 5 | \$ - |
| 3" x 3" | - | \$ - |
| 3" x 3 1/2" | 5 | \$ - |
| 3" x 4" | 5 | \$ - |
| 3" x 4 1/2" | 5 | \$ - |
| 3" x 5" | 5 | \$ - |
| 3" x 5 1/2" | 5 | \$ - |
| 3" x 6" | 5 | \$ - |
| 3" x 7" | 5 | \$ - |
| 3" x 8" | 5 | \$ - |
| 3" x 9" | 5 | \$ - |
| 3" x 10" | 5 | \$ - |
| 3" x 11" | - | \$ - |
| 3" x 12" | - | \$ - |
| 3" x 24" | - | \$ - |
| 3" x 36" | - | \$ - |
| 3" x 48" | - | \$ - |
| 3" x 60" | - | \$ - |
| 3" x 72" | - | \$ - |



| Galvanized | | |
|-------------------|---------|------------|
| Size | Box Qty | List Price |
| 3" x Close | 5 | \$ - |
| 3" x 3" | 5 | \$ - |
| 3" x 3 1/2" | 5 | \$ - |
| 3" x 4" | 5 | \$ - |
| 3" x 4 1/2" | 5 | \$ - |
| 3" x 5" | 5 | \$ - |
| 3" x 5 1/2" | 5 | \$ - |
| 3" x 6" | 5 | \$ - |
| 3" x 7" | 5 | \$ - |
| 3" x 8" | 5 | \$ - |
| 3" x 9" | 5 | \$ - |
| 3" x 10" | 5 | \$ - |
| 3" x 11" | 5 | \$ - |
| 3" x 12" | 5 | \$ - |
| 3" x 24" | - | \$ - |
| 3" x 36" | - | \$ - |
| 3" x 48" | - | \$ - |
| 3" x 60" | - | \$ - |
| 3" x 72" | - | \$ - |

| Black | | |
|--------------|---------|------------|
| Size | Box Qty | List Price |
| 4" x Close | 5 | \$ - |
| 4" x 4" | 5 | \$ - |
| 4" x 4 1/2" | 5 | \$ - |
| 4" x 5" | 5 | \$ - |
| 4" x 5 1/2" | 5 | \$ - |
| 4" x 6" | 5 | \$ - |
| 4" x 7" | 5 | \$ - |
| 4" x 8" | 5 | \$ - |
| 4" x 9" | 5 | \$ - |
| 4" x 10" | 5 | \$ - |
| 4" x 11" | 5 | \$ - |
| 4" x 12" | 5 | \$ - |
| 4" x 24" | - | \$ - |
| 4" x 36" | - | \$ - |
| 4" x 48" | - | \$ - |
| 4" x 60" | - | \$ - |
| 4" x 72" | - | \$ - |



| Galvanized | | |
|-------------------|---------|------------|
| Size | Box Qty | List Price |
| 4" x Close | 5 | \$ - |
| 4" x 4" | 5 | \$ - |
| 4" x 4 1/2" | 5 | \$ - |
| 4" x 5" | 5 | \$ - |
| 4" x 5 1/2" | 5 | \$ - |
| 4" x 6" | 5 | \$ - |
| 4" x 7" | 5 | \$ - |
| 4" x 8" | 5 | \$ - |
| 4" x 9" | 5 | \$ - |
| 4" x 10" | 5 | \$ - |
| 4" x 11" | 5 | \$ - |
| 4" x 12" | 5 | \$ - |
| 4" x 24" | - | \$ - |
| 4" x 36" | - | \$ - |
| 4" x 48" | - | \$ - |
| 4" x 60" | - | \$ - |
| 4" x 72" | - | \$ - |

Steel Pipe Nipples - Sch 40

| Black | | |
|--------------|---------|------------|
| Size | Box Qty | List Price |
| 5" x Close | 10 | \$ - |
| 5" x 4" | 6 | \$ - |
| 5" x 5" | 4 | \$ - |
| 5" x 6" | 4 | \$ - |
| 5" x 8" | 3 | \$ - |
| 5" x 10" | 3 | \$ - |
| 5" x 11" | - | \$ - |
| 5" x 12" | - | \$ - |



| Galvanized | | |
|-------------------|---------|------------|
| Size | Box Qty | List Price |
| 5" x Close | 10 | \$ - |
| 5" x 4" | 6 | \$ - |
| 5" x 5" | - | \$ - |
| 5" x 6" | 4 | \$ - |
| 5" x 8" | 3 | \$ - |
| 5" x 10" | - | \$ - |
| 5" x 11" | - | \$ - |
| 5" x 12" | 3 | \$ - |

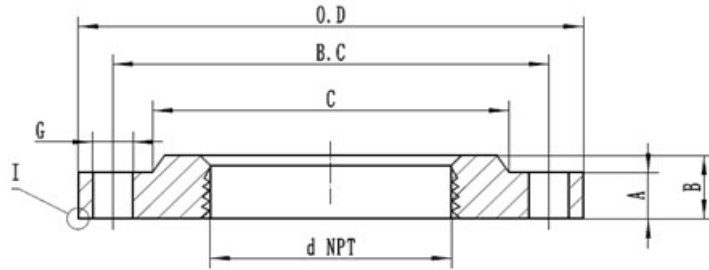
| Black | | |
|--------------|---------|------------|
| Size | Box Qty | List Price |
| 6" x Close | 9 | \$ - |
| 6" x 4" | 6 | \$ - |
| 6" x 5" | 4 | \$ - |
| 6" x 6" | 4 | \$ - |
| 6" x 7" | 2 | \$ - |
| 6" x 8" | 2 | \$ - |
| 6" x 9" | 2 | \$ - |
| 6" x 10" | 2 | \$ - |
| 6" x 12" | 2 | \$ - |



| Galvanized | | |
|-------------------|---------|------------|
| Size | Box Qty | List Price |
| 6" x Close | 9 | \$ - |
| 6" x 4" | 6 | \$ - |
| 6" x 5" | - | \$ - |
| 6" x 6" | 4 | \$ - |
| 6" x 7" | 2 | \$ - |
| 6" x 8" | 2 | \$ - |
| 6" x 9" | - | \$ - |
| 6" x 10" | 2 | \$ - |
| 6" x 12" | 2 | \$ - |

125# CAST IRON THREADED COMPANION FLANGES

| Size (NPT) | OD | Hole Count | Bolt Hole Diameter | A (Min) | B | C | B.C | List Price |
|------------|---------|------------|--------------------|---------|------|--------|--------|------------|
| 1-1/2" | 5" | 4 | 0.62" | 0.56" | 0.9" | 2.56" | 3.88" | \$ - |
| 2" | 6" | 4 | 0.75" | 0.62" | 1.0" | 3.06" | 4.75" | \$ - |
| 2-1/2" | 7" | 4 | 0.75" | 0.69" | 1.1" | 3.56" | 5.50" | \$ - |
| 3" | 7-1/2" | 4 | 0.75" | 0.75" | 1.2" | 4.25" | 6.00" | \$ - |
| 4" | 9" | 8 | 0.75" | 0.94" | 1.3" | 5.31" | 7.50" | \$ - |
| 5" | 10" | 8 | 0.88" | 0.94" | 1.4" | 6.44" | 8.50" | \$ - |
| 6" | 11" | 8 | 0.88" | 1.00" | 1.6" | 7.56" | 9.50" | \$ - |
| 8" | 13-1/2" | 8 | 0.88" | 1.12" | 1.8" | 9.69" | 11.80" | \$ - |
| 10" | 16" | 12 | 1.00" | 1.19" | 1.9" | 11.90" | 14.30" | \$ - |
| 12" | 19" | 12 | 1.00" | 1.25" | 2.2" | 14.10" | 17.00" | \$ - |



FULL FACE FLANGE GASKET

Non-Asbestos (Green)

| Size | Hole Count | List Price |
|--------------|------------|------------|
| 1-1/2" x 5" | 4 | \$ - |
| 2" x 6" | 4 | \$ - |
| 2-1/2" x 7" | 4 | \$ - |
| 3" x 7-1/2" | 4 | \$ - |
| 4" x 9" | 8 | \$ - |
| 5" x 10" | 8 | \$ - |
| 6" x 11" | 8 | \$ - |
| 8" x 13-1/2" | 8 | \$ - |
| 10" x 16" | 12 | \$ - |
| 12" x 19" | 12 | \$ - |

Red Rubber

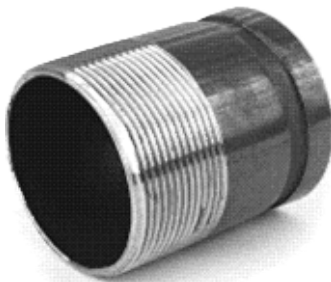
| Size | Hole Count | List Price |
|--------------|------------|------------|
| 1-1/2" x 5" | 4 | \$ - |
| 2" x 6" | 4 | \$ - |
| 2-1/2" x 7" | 4 | \$ - |
| 3" x 7-1/2" | 4 | \$ - |
| 4" x 9" | 8 | \$ - |
| 5" x 10" | 8 | \$ - |
| 6" x 11" | 8 | \$ - |
| 8" x 13-1/2" | 8 | \$ - |
| 10" x 16" | 12 | \$ - |
| 12" x 19" | 12 | \$ - |

GROOVED FITTINGS

| <u>MPN</u> | <u>DESCRIPTION</u> | <u>LIST</u> |
|--|--|-------------|
| Sch. 40 Groove X Groove Nipples | | |
| K570200-4.0 | 2" X 4" Groove X Groove Black Steel Nipple | \$ - |
| K570300-4.0 | 3" X 4" Groove X Groove Black Steel Nipple | \$ - |
| K570400-6.0 | 4" X 6" Groove X Groove Black Steel Nipple | \$ - |
| K570600-12.0 | 6" X 12" Groove X Groove Black Steel Nipple | \$ - |
| K570800-12.0 | 8" X 12" Groove X Groove Black Steel Nipple | \$ - |
| K571000-12.0 | 10" X 12" Groove X Groove Black Steel Nipple | \$ - |
| K571200-12.0 | 12" X 12" Groove X Groove Black Steel Nipple | \$ - |

| | | |
|--|--|------|
| Sch. 40 Groove X Thread Nipples | | |
| K590200-4.0 | 2" X 4" Groove X Thread Black Steel Nipple | \$ - |
| K590300-4.0 | 3" X 4" Groove X Thread Black Steel Nipple | \$ - |
| K590400-6.0 | 4" X 6" Groove X Thread Black Steel Nipple | \$ - |

| | | |
|-----------------------------------|--------------------------------|------|
| Grooved Pipe Flex Coupling | | |
| K050200PE | 2" Grooved Pipe Flex Coupling | \$ - |
| K050300PE | 3" Grooved Pipe Flex Coupling | \$ - |
| K050400PE | 4" Grooved Pipe Flex Coupling | \$ - |
| K050600PE | 6" Grooved Pipe Flex Coupling | \$ - |
| K050800PE | 8" Grooved Pipe Flex Coupling | \$ - |
| K051000PE | 10" Grooved Pipe Flex Coupling | \$ - |
| K051200PE | 12" Grooved Pipe Flex Coupling | \$ - |



STAINLESS STEEL FITTINGS
SS 90° ELBOW

| Size | Box Qty | List Price |
|--------|---------|------------|
| 1/4" | 100 | \$ - |
| 3/8" | 50 | \$ - |
| 1/2" | 30 | \$ - |
| 3/4" | 18 | \$ - |
| 1" | 10 | \$ - |
| 1 1/4" | 16 | \$ - |
| 1 1/2" | 12 | \$ - |
| 2" | 8 | \$ - |
| 2 1/2" | 6 | \$ - |
| 3" | 3 | \$ - |
| 4" | 2 | \$ - |


SS 90° STREET ELBOW

| Size | Box Qty | List Price |
|--------|---------|------------|
| 1/4" | 100 | \$ - |
| 3/8" | 50 | \$ - |
| 1/2" | 32 | \$ - |
| 3/4" | 12 | \$ - |
| 1" | 8 | \$ - |
| 1 1/4" | 16 | \$ - |
| 1 1/2" | 4 | \$ - |
| 2" | 8 | \$ - |
| 2 1/2" | 4 | \$ - |
| 3" | 3 | \$ - |
| 4" | 2 | \$ - |


SS 45° ELBOW

| Size | Box Qty | List Price |
|--------|---------|------------|
| 1/4" | 100 | \$ - |
| 3/8" | 60 | \$ - |
| 1/2" | 30 | \$ - |
| 3/4" | 20 | \$ - |
| 1" | 8 | \$ - |
| 1 1/4" | 6 | \$ - |
| 1 1/2" | 12 | \$ - |
| 2" | 8 | \$ - |
| 2 1/2" | 6 | \$ - |
| 3" | 4 | \$ - |
| 4" | 2 | \$ - |


SS TEE

| Size | Box Qty | List Price |
|--------|---------|------------|
| 1/4" | 70 | \$ - |
| 3/8" | 40 | \$ - |
| 1/2" | 15 | \$ - |
| 3/4" | 12 | \$ - |
| 1" | 24 | \$ - |
| 1 1/4" | 20 | \$ - |
| 1 1/2" | 12 | \$ - |
| 2" | 9 | \$ - |
| 2 1/2" | 5 | \$ - |
| 3" | 2 | \$ - |
| 4" | - | \$ - |


SS SQUARE HEAD PLUG

| Size | Box Qty | List Price |
|--------|---------|------------|
| 1/4" | 350 | \$ - |
| 3/8" | 250 | \$ - |
| 1/2" | 100 | \$ - |
| 3/4" | 60 | \$ - |
| 1" | 36 | \$ - |
| 1 1/4" | 28 | \$ - |
| 1 1/2" | 24 | \$ - |
| 2" | 36 | \$ - |
| 2 1/2" | 20 | \$ - |
| 3" | 12 | \$ - |
| 4" | 10 | \$ - |


SS CAP

| Size | Box Qty | List Price |
|--------|---------|------------|
| 1/4" | 150 | \$ - |
| 3/8" | 80 | \$ - |
| 1/2" | 60 | \$ - |
| 3/4" | 40 | \$ - |
| 1" | 18 | \$ - |
| 1 1/4" | 12 | \$ - |
| 1 1/2" | 9 | \$ - |
| 2" | 16 | \$ - |
| 2 1/2" | 15 | \$ - |
| 3" | 12 | \$ - |
| 4" | 4 | \$ - |



STAINLESS STEEL FITTINGS

SS BUSHING

| Size | Box Qty | List Price |
|-----------------|---------|------------|
| 1/4" x 1/8" | 300 | \$ - |
| 3/8" x 1/4" | 120 | \$ - |
| 1/2" x 1/4" | 100 | \$ - |
| 1/2" x 3/8" | 100 | \$ - |
| 3/4" x 1/4" | 60 | \$ - |
| 3/4" x 3/8" | 60 | \$ - |
| 3/4" x 1/2" | 60 | \$ - |
| 1" x 1/4" | 36 | \$ - |
| 1" x 3/8" | 36 | \$ - |
| 1" x 1/2" | 36 | \$ - |
| 1" x 3/4" | 36 | \$ - |
| 1 1/4" x 1/2" | 18 | \$ - |
| 1 1/4" x 3/4" | 18 | \$ - |
| 1 1/4" x 1" | 18 | \$ - |
| 1 1/2" x 1/2" | 18 | \$ - |
| 1 1/2" x 3/4" | 18 | \$ - |
| 1 1/2" x 1" | 18 | \$ - |
| 1 1/2" x 1 1/4" | 18 | \$ - |
| 2" x 1/2" | 9 | \$ - |
| 2" x 3/4" | 9 | \$ - |
| 2" x 1" | 9 | \$ - |
| 2" x 1 1/4" | 9 | \$ - |
| 2" x 1 1/2" | 9 | \$ - |
| 2 1/2" x 1" | 16 | \$ - |
| 2 1/2" x 1 1/4" | 16 | \$ - |
| 2 1/2" x 1 1/2" | 16 | \$ - |
| 2 1/2" x 2" | 16 | \$ - |
| 3" x 1" | 12 | \$ - |
| 3" x 1 1/2" | 12 | \$ - |
| 3" x 2" | 12 | \$ - |
| 3" x 2 1/2" | 12 | \$ - |
| 4" x 1 1/2" | 4 | \$ - |
| 4" x 2" | 4 | \$ - |
| 4" x 3" | 4 | \$ - |



SS REDUCER COUPLING

| Size | Box Qty | List Price |
|-----------------|---------|------------|
| 1/4" x 1/8" | 150 | \$ - |
| 3/8" x 1/4" | 60 | \$ - |
| 1/2" x 1/4" | 40 | \$ - |
| 1/2" x 3/8" | 40 | \$ - |
| 3/4" x 1/4" | 24 | \$ - |
| 3/4" x 3/8" | 24 | \$ - |
| 3/4" x 1/2" | 24 | \$ - |
| 1" x 1/4" | 12 | \$ - |
| 1" x 3/8" | 12 | \$ - |
| 1" x 1/2" | 12 | \$ - |
| 1" x 3/4" | 12 | \$ - |
| 1 1/4" x 1/2" | 12 | \$ - |
| 1 1/4" x 3/4" | 12 | \$ - |
| 1 1/4" x 1" | 12 | \$ - |
| 1 1/2" x 1/2" | 8 | \$ - |
| 1 1/2" x 3/4" | 8 | \$ - |
| 1 1/2" x 1" | 8 | \$ - |
| 1 1/2" x 1 1/4" | 8 | \$ - |
| 2" x 1/2" | 16 | \$ - |
| 2" x 3/4" | 16 | \$ - |
| 2" x 1" | 16 | \$ - |
| 2" x 1 1/4" | 16 | \$ - |
| 2" x 1 1/2" | 16 | \$ - |
| 2 1/2" x 1" | - | \$ - |
| 2 1/2" x 1 1/4" | - | \$ - |
| 2 1/2" x 1 1/2" | 16 | \$ - |
| 2 1/2" x 2" | 9 | \$ - |
| 3" x 1" | 9 | \$ - |
| 3" x 1 1/2" | 9 | \$ - |
| 3" x 2" | 9 | \$ - |
| 3" x 2 1/2" | - | \$ - |
| 4" x 1 1/2" | - | \$ - |
| 4" x 2" | 3 | \$ - |
| 4" x 3" | 3 | \$ - |



STAINLESS STEEL FITTINGS
SS UNION

| Size | Box Qty | List Price |
|--------|---------|------------|
| 1/4" | 45 | \$ - |
| 3/8" | 24 | \$ - |
| 1/2" | 16 | \$ - |
| 3/4" | 12 | \$ - |
| 1" | 8 | \$ - |
| 1 1/4" | 16 | \$ - |
| 1 1/2" | 8 | \$ - |
| 2" | 8 | \$ - |
| 2 1/2" | 8 | \$ - |
| 3" | 4 | \$ - |
| 4" | 2 | \$ - |


SS MERCHANT COUPLING

| Size | Box Qty | List Price |
|--------|---------|------------|
| 1/4" | 120 | \$ - |
| 3/8" | 100 | \$ - |
| 1/2" | 60 | \$ - |
| 3/4" | 30 | \$ - |
| 1" | 16 | \$ - |
| 1 1/4" | 12 | \$ - |
| 1 1/2" | 12 | \$ - |
| 2" | 16 | \$ - |
| 2 1/2" | 8 | \$ - |
| 3" | 6 | \$ - |
| 4" | 3 | \$ - |


SS DROP PIPE COUPLING

| Size | Box Qty | List Price |
|--------|---------|------------|
| 1" | 10 | \$ - |
| 1 1/4" | 10 | \$ - |
| 1 1/2" | 10 | \$ - |
| 2" | 5 | \$ - |


SS INSERT MALE ADAPTER

| Size | Box Qty | List Price |
|--------|---------|------------|
| 3/4" | 20 | \$ - |
| 1" | 20 | \$ - |
| 1 1/4" | 20 | \$ - |
| 1 1/2" | 10 | \$ - |
| 2" | 5 | \$ - |


1/8" SS NIPPLE

| Size | Box Qty | List Price |
|---------------|---------|------------|
| 1/8" x Close | 25 | \$ - |
| 1/8" x 1 1/2" | 25 | \$ - |
| 1/8" x 2" | 25 | \$ - |
| 1/8" x 2 1/2" | 25 | \$ - |
| 1/8" x 3" | 25 | \$ - |
| 1/8" x 3 1/2" | 25 | \$ - |
| 1/8" x 4" | 25 | \$ - |
| 1/8" x 4 1/2" | 25 | \$ - |
| 1/8" x 5" | 25 | \$ - |
| 1/8" x 5 1/2" | 25 | \$ - |
| 1/8" x 6" | 25 | \$ - |
| 1/8" x 8" | 25 | \$ - |
| 1/8" x 10" | 25 | \$ - |
| 1/8" x 12" | 25 | \$ - |


1/4" SS NIPPLE

| Size | Box Qty | List Price |
|---------------|---------|------------|
| 1/4" x Close | 25 | \$ - |
| 1/4" x 1 1/2" | 25 | \$ - |
| 1/4" x 2" | 25 | \$ - |
| 1/4" x 2 1/2" | 25 | \$ - |
| 1/4" x 3" | 25 | \$ - |
| 1/4" x 3 1/2" | 25 | \$ - |
| 1/4" x 4" | 25 | \$ - |
| 1/4" x 4 1/2" | 25 | \$ - |
| 1/4" x 5" | 25 | \$ - |
| 1/4" x 5 1/2" | 25 | \$ - |
| 1/4" x 6" | 25 | \$ - |
| 1/4" x 8" | 25 | \$ - |
| 1/4" x 10" | 25 | \$ - |
| 1/4" x 12" | 25 | \$ - |



STAINLESS STEEL FITTINGS
3/8" SS NIPPLE

| Size | Box Qty | List Price |
|---------------|---------|------------|
| 3/8" x Close | 25 | \$ - |
| 3/8" x 1 1/2" | 25 | \$ - |
| 3/8" x 2" | 25 | \$ - |
| 3/8" x 2 1/2" | 25 | \$ - |
| 3/8" x 3" | 25 | \$ - |
| 3/8" x 3 1/2" | 25 | \$ - |
| 3/8" x 4" | 25 | \$ - |
| 3/8" x 4 1/2" | 25 | \$ - |
| 3/8" x 5" | 25 | \$ - |
| 3/8" x 5 1/2" | 25 | \$ - |
| 3/8" x 6" | 25 | \$ - |
| 3/8" x 7" | - | \$ - |
| 3/8" x 8" | 25 | \$ - |
| 3/8" x 9" | - | \$ - |
| 3/8" x 10" | 25 | \$ - |
| 3/8" x 11" | - | \$ - |
| 3/8" x 12" | 25 | \$ - |


1/2" SS NIPPLE

| Size | Box Qty | List Price |
|---------------|---------|------------|
| 1/2" x Close | 25 | \$ - |
| 1/2" x 1 1/2" | 25 | \$ - |
| 1/2" x 2" | 25 | \$ - |
| 1/2" x 2 1/2" | 25 | \$ - |
| 1/2" x 3" | 25 | \$ - |
| 1/2" x 3 1/2" | 25 | \$ - |
| 1/2" x 4" | 25 | \$ - |
| 1/2" x 4 1/2" | 25 | \$ - |
| 1/2" x 5" | 25 | \$ - |
| 1/2" x 5 1/2" | 25 | \$ - |
| 1/2" x 6" | 25 | \$ - |
| 1/2" x 7" | 25 | \$ - |
| 1/2" x 8" | 25 | \$ - |
| 1/2" x 9" | 25 | \$ - |
| 1/2" x 10" | 25 | \$ - |
| 1/2" x 11" | 25 | \$ - |
| 1/2" x 12" | 25 | \$ - |


3/4" SS NIPPLE

| Size | Box Qty | List Price |
|---------------|---------|------------|
| 3/4" x Close | 25 | \$ - |
| 3/4" x 1 1/2" | 25 | \$ - |
| 3/4" x 2" | 25 | \$ - |
| 3/4" x 2 1/2" | 25 | \$ - |
| 3/4" x 3" | 25 | \$ - |
| 3/4" x 3 1/2" | 25 | \$ - |
| 3/4" x 4" | 25 | \$ - |
| 3/4" x 4 1/2" | 25 | \$ - |
| 3/4" x 5" | 25 | \$ - |
| 3/4" x 5 1/2" | 25 | \$ - |
| 3/4" x 6" | 25 | \$ - |
| 3/4" x 7" | 25 | \$ - |
| 3/4" x 8" | 25 | \$ - |
| 3/4" x 9" | 25 | \$ - |
| 3/4" x 10" | 25 | \$ - |
| 3/4" x 11" | 25 | \$ - |
| 3/4" x 12" | 25 | \$ - |


1" SS NIPPLE

| Size | Box Qty | List Price |
|-------------|---------|------------|
| 1" x Close | 25 | \$ - |
| 1" x 1 1/2" | - | \$ - |
| 1" x 2" | 25 | \$ - |
| 1" x 2 1/2" | 25 | \$ - |
| 1" x 3" | 25 | \$ - |
| 1" x 3 1/2" | 25 | \$ - |
| 1" x 4" | 25 | \$ - |
| 1" x 4 1/2" | 25 | \$ - |
| 1" x 5" | 25 | \$ - |
| 1" x 5 1/2" | 25 | \$ - |
| 1" x 6" | 25 | \$ - |
| 1" x 7" | 10 | \$ - |
| 1" x 8" | 10 | \$ - |
| 1" x 9" | 10 | \$ - |
| 1" x 10" | 10 | \$ - |
| 1" x 11" | 10 | \$ - |
| 1" x 12" | 10 | \$ - |



STAINLESS STEEL FITTINGS

1 1/4" SS NIPPLE

| Size | Box Qty | List Price |
|-----------------|---------|------------|
| 1 1/4" x Close | 5 | \$ - |
| 1 1/4" x 2" | 5 | \$ - |
| 1 1/4" x 2 1/2" | 5 | \$ - |
| 1 1/4" x 3" | 5 | \$ - |
| 1 1/4" x 3 1/2" | 5 | \$ - |
| 1 1/4" x 4" | 5 | \$ - |
| 1 1/4" x 4 1/2" | 5 | \$ - |
| 1 1/4" x 5" | 5 | \$ - |
| 1 1/4" x 5 1/2" | 5 | \$ - |
| 1 1/4" x 6" | 5 | \$ - |
| 1 1/4" x 7" | 5 | \$ - |
| 1 1/4" x 8" | 5 | \$ - |
| 1 1/4" x 9" | 5 | \$ - |
| 1 1/4" x 10" | 5 | \$ - |
| 1 1/4" x 11" | 5 | \$ - |
| 1 1/4" x 12" | 5 | \$ - |



1 1/2" SS NIPPLE

| Size | Box Qty | List Price |
|-----------------|---------|------------|
| 1 1/2" x Close | 5 | \$ - |
| 1 1/2" x 2" | 5 | \$ - |
| 1 1/2" x 2 1/2" | 5 | \$ - |
| 1 1/2" x 3" | 5 | \$ - |
| 1 1/2" x 3 1/2" | 5 | \$ - |
| 1 1/2" x 4" | 5 | \$ - |
| 1 1/2" x 4 1/2" | 5 | \$ - |
| 1 1/2" x 5" | 5 | \$ - |
| 1 1/2" x 5 1/2" | 5 | \$ - |
| 1 1/2" x 6" | 5 | \$ - |
| 1 1/2" x 7" | 5 | \$ - |
| 1 1/2" x 8" | 5 | \$ - |
| 1 1/2" x 9" | 5 | \$ - |
| 1 1/2" x 10" | 5 | \$ - |
| 1 1/2" x 11" | 5 | \$ - |
| 1 1/2" x 12" | 5 | \$ - |



2" SS NIPPLE

| Size | Box Qty | List Price |
|-------------|---------|------------|
| 2" x Close | 5 | \$ - |
| 2" x 2 1/2" | 5 | \$ - |
| 2" x 3" | 5 | \$ - |
| 2" x 3 1/2" | 5 | \$ - |
| 2" x 4" | 5 | \$ - |
| 2" x 4 1/2" | 5 | \$ - |
| 2" x 5" | 5 | \$ - |
| 2" x 5 1/2" | 5 | \$ - |
| 2" x 6" | 5 | \$ - |
| 2" x 7" | 5 | \$ - |
| 2" x 8" | 5 | \$ - |
| 2" x 9" | 5 | \$ - |
| 2" x 10" | 5 | \$ - |
| 2" x 11" | 5 | \$ - |
| 2" x 12" | 5 | \$ - |



2 1/2" SS NIPPLE

| Size | Box Qty | List Price |
|-----------------|---------|------------|
| 2 1/2" x Close | 35 | \$ - |
| 2 1/2" x 2 1/2" | - | \$ - |
| 2 1/2" x 3" | 35 | \$ - |
| 2 1/2" x 3 1/2" | 25 | \$ - |
| 2 1/2" x 4" | 25 | \$ - |
| 2 1/2" x 4 1/2" | 25 | \$ - |
| 2 1/2" x 5" | 20 | \$ - |
| 2 1/2" x 5 1/2" | 20 | \$ - |
| 2 1/2" x 6" | 20 | \$ - |
| 2 1/2" x 7" | - | \$ - |
| 2 1/2" x 8" | 15 | \$ - |
| 2 1/2" x 9" | - | \$ - |
| 2 1/2" x 10" | 10 | \$ - |
| 2 1/2" x 11" | - | \$ - |
| 2 1/2" x 12" | 10 | \$ - |



STAINLESS STEEL FITTINGS
3" SS NIPPLE

| Size | Box Qty | List Price |
|-------------|---------|------------|
| 3" x Close | 25 | \$ - |
| 3" x 3" | 25 | \$ - |
| 3" x 3 1/2" | 20 | \$ - |
| 3" x 4" | 20 | \$ - |
| 3" x 4 1/2" | 15 | \$ - |
| 3" x 5" | 15 | \$ - |
| 3" x 5 1/2" | 15 | \$ - |
| 3" x 6" | 15 | \$ - |
| 3" x 8" | 10 | \$ - |
| 3" x 10" | 10 | \$ - |
| 3" x 12" | 10 | \$ - |


4" SS NIPPLE

| Size | Box Qty | List Price |
|-------------|---------|------------|
| 4" x Close | 15 | \$ - |
| 4" x 3" | - | \$ - |
| 4" x 3 1/2" | - | \$ - |
| 4" x 4" | 15 | \$ - |
| 4" x 4 1/2" | 10 | \$ - |
| 4" x 5" | 10 | \$ - |
| 4" x 5 1/2" | - | \$ - |
| 4" x 6" | 10 | \$ - |
| 4" x 8" | 5 | \$ - |
| 4" x 10" | 5 | \$ - |
| 4" x 12" | 5 | \$ - |


BRASS FITTINGS
BRASS 90° ELBOW

| Size | Box Qty | List Price |
|--------|---------|------------|
| 1/4" | 35 | \$ - |
| 3/4" | 35 | \$ - |
| 1" | 20 | \$ - |
| 1 1/4" | 20 | \$ - |
| 2" | 8 | \$ - |


BRASS 90° STREET ELBOW

| Size | Box Qty | List Price |
|--------|---------|------------|
| 1/4" | 35 | \$ - |
| 3/4" | 35 | \$ - |
| 1" | 45 | \$ - |
| 1 1/4" | 25 | \$ - |
| 2" | 8 | \$ - |


BRASS TEE

| Size | Box Qty | List Price |
|--------|---------|------------|
| 1/4" | 75 | \$ - |
| 3/4" | 35 | \$ - |
| 1" | 20 | \$ - |
| 1 1/4" | 14 | \$ - |
| 2" | 8 | \$ - |


1/4" BRASS NIPPLE

| Size | Box Qty | List Price |
|--------------|---------|------------|
| 1/4" X CLOSE | 25 | \$ - |
| 1/4" X 3" | 25 | \$ - |
| 1/4" X 4" | 25 | \$ - |
| 1/4" X 6" | 25 | \$ - |
| 1/4" X 8" | 25 | \$ - |


1" BRASS NIPPLE

| Size | Box Qty | List Price |
|------------|---------|------------|
| 1" X CLOSE | 25 | \$ - |
| 1" X 4" | 25 | \$ - |
| 1" X 6" | 25 | \$ - |
| 1" X 8" | 10 | \$ - |
| 1" X 12" | 10 | \$ - |


1 1/4" BRASS NIPPLE

| Size | Box Qty | List Price |
|----------------|---------|------------|
| 1 1/4" X CLOSE | 5 | \$ - |
| 1 1/4" X 4" | 5 | \$ - |
| 1 1/4" X 6" | 5 | \$ - |
| 1 1/4" X 8" | 5 | \$ - |
| 1 1/4" X 12" | 5 | \$ - |



PIPE THREAD COMPOUND

| Product Description | Size | List Price |
|----------------------------|----------|------------|
| Talon PTFE Thread Compound | 1/4 Pint | \$ - |
| Talon PTFE Thread Compound | Pint | \$ - |
| Talon PTFE Thread Compound | Quart | \$ - |



TALON PTFE Pipe Thread Compound is a triple lubricating, all-purpose, non-seizing, industrial grade thread sealing compound that provides **Freedom from Leaks™** on all types of metal and plastic threaded connections (except ABS).*

| | | |
|----------------------------|----------|------|
| Blue Magic Thread Compound | 1/4 Pint | \$ - |
| Blue Magic Thread Compound | 1/2 Pint | \$ - |
| Blue Magic Thread Compound | Pint | \$ - |
| Blue Magic Thread Compound | Quart | \$ - |



BLUE MAGIC is an All Purpose, Non-seizing, Industrial Grade Pipe Thread Compound that produces a leakproof seal on all types of metal and plastic threaded connections. Suitable for ABS, PVC, and CPVC threaded connections. MADE IN THE U.S.A.

- Non-Separating
- Grit Free Paste
- Adheres to Oily Threads
- Non Combustible
- Safe for PVC & CPVC
- Nontoxic
- Superior Anti-Galling Properties
- Excellent for Stainless Connections

| Product Description | Size | List Price |
|---------------------------------|------------|------------|
| Stinger HDD White Non-Metalic | 1 Gallon | \$ - |
| Stinger HDD White Non-Metalic | 2 Gallon | \$ - |
| Stinger HDD White Non-Metalic | 5 Gallon | \$ - |
| Stinger Water Well Copper Based | 1 Gallon | \$ - |
| Stinger Water Well Copper Based | 3.5 Gallon | \$ - |
| Stinger Water Well Copper Based | 5 Gallon | \$ - |
| ZN-18 | 2 Gallon | \$ - |
| ZN-18 | 5 Gallon | \$ - |



| | |
|--------------------|------|
| Taper Dope Brush | \$ - |
| Beveled Dope Brush | \$ - |
| Mustache Brush | \$ - |



BESTOLIFE
PREMIUM COMPOUNDS

*Applies Like Honey.
Works Like a Bee.*

VALVES

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FLOMATIC ENVIRO CHECK VALVES

| | Mfg Part Number | Size | Connections | Taps | Tap Sizes | List Price |
|---|-----------------|---------------|-------------|--------|--------------|------------|
| 80E Brass Fromatic Check Valve | 4031E | 1" | FxF | No Tap | None | \$ - |
| | 4032E | 1¼" | FxF | No Tap | None | \$ - |
| | 4033E | 1½" | FxF | No Tap | None | \$ - |
| | 4034E | 2" | FxF | No Tap | None | \$ - |
| | 4035E | 2½" | FxF | No Tap | None | \$ - |
| | 4036E | 3" | FxF | No Tap | None | \$ - |
| | 4037E | 4" | FxF | No Tap | None | \$ - |
| 100E Brass Fromatic Check Valve | 4201LE* | 1" | FxF | No Tap | None | \$ - |
| | 4202E | 1¼" | FxF | No Tap | None | \$ - |
| <i>* Longer Threads</i> | | | | | | |
| 100ME Brass Fromatic Check Valve | 4221LE* | 1¼" M x 1" F | | No Tap | None | \$ - |
| | 4242E | 1¼" M x 1¼" F | | No Tap | None | \$ - |
| | 4079E | 2" M x 2" F | | No Tap | None | \$ - |
| <i>* Longer Threads</i> | | | | | | |
| 80BE Brass Fromatic Check Valve | 4051E | 1" | FxF | 2 Tap | ⅜" In ¼" Out | \$ - |
| | 4052E | 1¼" | FxF | 2 Tap | ⅜" In ¼" Out | \$ - |
| | 4053E | 1½" | FxF | 2 Tap | ⅜" In ¼" Out | \$ - |
| | 4054E | 2" | FxF | 2 Tap | ⅜" In ¼" Out | \$ - |





FLOMATIC ENVIRO CHECK VALVES

| | Mfg Part Number | Size | Connections | Taps | Tap Sizes | List Price |
|--|-----------------|---------------|-------------|--------|---------------|------------|
| 80EVFD Brass Flomatic Check Valve | 4031EVFD | 1" | FxF | No Tap | None | \$ - |
| | 4032EVFD | 1¼" | FxF | No Tap | None | \$ - |
| | 4033EVFD | 1½" | FxF | No Tap | None | \$ - |
| | 4034EVFD | 2" | FxF | No Tap | None | \$ - |
| | 4035EVFD | 2½" | FxF | No Tap | None | \$ - |
| | 4036EVFD | 3" | FxF | No Tap | None | \$ - |
| | 4037EVFD | 4" | FxF | No Tap | None | \$ - |
| 100EVFD Brass Flomatic Check Valve | 4201ESVFD | 1" | FxF | No Tap | None | \$ - |
| | 4202ESVFD | 1¼" | FxF | No Tap | None | \$ - |
| 100MEVFD Brass Flomatic Check Valve | 4071EVFD | 1" M x 1" F | | No Tap | None | \$ - |
| | 4221LEFVD | 1¼" M x 1" F | | No Tap | None | \$ - |
| | 4242EVFD | 1¼" M x 1¼" F | | No Tap | None | \$ - |
| 80BEVFD Brass Flomatic Check Valve | 4051EVFD | 1" | FxF | 2 Tap | ⅛" In ¼" Out | \$ - |
| | 4052EVFD | 1¼" | FxF | 2 Tap | ⅛" In ¼" Out | \$ - |
| | 4053EVFD | 1½" | FxF | 2 Tap | ⅛" In ¼" Out | \$ - |
| 80XBEVFD Brass Flomatic Check Valve | 7961EVFD | 1" | FxF | 2 Tap | ¼" Out ¼" Out | \$ - |
| | 7962EVFD | 1¼" | FxF | 2 Tap | ¼" Out ¼" Out | \$ - |
| | 7964EVFD | 1½" | FxF | 2 Tap | ¼" Out ¼" Out | \$ - |





FLOMATIC STAINLESS STEEL CHECK VALVES

| | Mfg Part Number | Size | Connections | Taps | Tap Sizes | List Price |
|------------------------|-----------------|------|-------------|--------|-----------|------------|
| 80SS | 4031SS2 | 1" | FxF | No Tap | None | \$ - |
| Stainless Steel | 4032SS2 | 1¼" | FxF | No Tap | None | \$ - |
| Flomatic Check | 4033SS2 | 1½" | FxF | No Tap | None | \$ - |
| Valve | 4034SS2 | 2" | FxF | No Tap | None | \$ - |



| | | | | | | |
|------------------------|------------|-----|-----|--------|------|------|
| 100SSVFD | 4201SS2VFD | 1" | FxF | No Tap | None | \$ - |
| Stainless Steel | 4202SS2VFD | 1¼" | FxF | No Tap | None | \$ - |
| Flomatic Check | 4203SS2VFD | 1½" | FxF | No Tap | None | \$ - |
| Valve | | | | | | |



| | | | | | | |
|------------------------|------------|---------------|--|--------|------|------|
| 100MSSVFD | 4220SS2VFD | 1" M x 1" F | | No Tap | None | \$ - |
| Stainless Steel | 4221SS2VFD | 1¼" M x 1" F | | No Tap | None | \$ - |
| Flomatic Check | 4242SS2VFD | 1¼" M x 1¼" F | | No Tap | None | \$ - |
| Valve | | | | | | |



| | | | | | | |
|------------------------|------------|-----|-----|-------|--------------|------|
| 80SSBVFD | 4051SS2VFD | 1" | FxF | 2 Tap | ¼" In ¼" Out | \$ - |
| Stainless Steel | 4052SS2VFD | 1¼" | FxF | 2 Tap | ¼" In ¼" Out | \$ - |
| Flomatic Check | 4053SS2VFD | 1½" | FxF | 2 Tap | ¼" In ¼" Out | \$ - |
| Valve | 4054SS2 | 2" | FxF | 2 Tap | ¼" In ¼" Out | \$ - |



| | | | | | | |
|------------------------|------------|-----|-----|-------|--------------|------|
| 80SSXBVFD | 7961SS2VFD | 1" | FxF | 2 Tap | ¼" In ¼" Out | \$ - |
| Stainless Steel | 7963SS2VFD | 1¼" | FxF | 2 Tap | ¼" In ¼" Out | \$ - |
| Flomatic Check | 7964SS2VFD | 1½" | FxF | 2 Tap | ¼" In ¼" Out | \$ - |
| Valve | | | | | | |



FLOMATIC CHECK VALVES

| | Mfg Part Number | Description | List Price |
|----------------------------|-----------------|--|------------|
| 80MDIVFD | 4083VFD | 3" MxF 80MDIVFD Check Valve - Ductile Iron | \$ - |
| Ductile Iron | 4077VFD | 4" MxF 80MDIVFD Check Valve - Ductile Iron | \$ - |
| Flomatic | 4075VFD | 5" MxF 80MDIVFD Check Valve - Ductile Iron | \$ - |
| Check Valve | 4081VFD | 6" MxF 80MDIVFD Check Valve - Ductile Iron | \$ - |
| | 7936 | 2½" FxF 80DI Check Valve - Ductile Iron | \$ - |
| 80DI | 7938 | 3" FxF 80DI Check Valve - Ductile Iron | \$ - |
| Ductile Iron | 7939 | 4" FxF 80DI Check Valve - Ductile Iron | \$ - |
| Flomatic | 4088 | 5" FxF 80DI Check Valve - Ductile Iron | \$ - |
| Check Valve | 4089 | 6" FxF 80DI Check Valve - Ductile Iron | \$ - |
| | 4090 | 8" FxF 80DI Check Valve - Ductile Iron | \$ - |
| 80DI | 7936PLG | 2½" FxF 80DI Check Valve - Ductile Iron W-Break-Off Plug | \$ - |
| Ductile Iron | 7938PLG | 3" FxF 80DI Check Valve - Ductile Iron W-Break-Off Plug | \$ - |
| Flomatic | 7939PLG | 4" FxF 80DI Check Valve - Ductile Iron W-Break-Off Plug | \$ - |
| Check Valve | 4088PLG | 5" FxF 80DI Check Valve - Ductile Iron W-Break-Off Plug | \$ - |
| With Break-Off Plug | 4089PLG | 6" FxF 80DI Check Valve - Ductile Iron W-Break-Off Plug | \$ - |
| | 4090PLG | 8" FxF 80DI Check Valve - Ductile Iron W-Break-Off Plug | \$ - |



FLOMATIC REPLACEMENT BREAK-OFF PLUGS

| Mfg Part Number | Valve Size | Break-Off Plug Size | Construction | List Price |
|-----------------|------------|---------------------|-----------------|------------|
| 76098P | 3" - 6" | 3/8" | Composite | \$ - |
| 76098P | 2" | 1/8" | Stainless Steel | \$ - |
| 76098-2 | 2½" | 3/8" | Stainless Steel | \$ - |
| 76098-3 | 3" | 3/8" | Stainless Steel | \$ - |
| 76098-6 | 4" | 3/8" | Stainless Steel | \$ - |
| 76098-7 | 5"-6" | 3/8" | Stainless Steel | \$ - |
| 76098* | 8" | 1/2" | Stainless Steel | \$ - |
| 76098-8 | 10" & 12" | 1/2" | Stainless Steel | \$ - |





SIMMONS MFG CHECK VALVES

| | Mfg Part Number | Size | Connections | Taps | Tap Sizes | List Price |
|---|-----------------|------|-------------|--------|-----------|------------|
| 500SB Series Simmons Mfg Check Valve | 513SB | 1" | FxF | No Tap | None | \$ - |
| | 514SB | 1¼" | FxF | No Tap | None | \$ - |
| | 505SB | 1½" | FxF | No Tap | None | \$ - |
| | 506SB | 2" | FxF | No Tap | None | \$ - |



| | | | | | | |
|---|-------|-----|-----|-------|--------------|------|
| 500SB Series Simmons Mfg 2 Tap Check Valve | 542SB | 1" | MxF | 2 Tap | ⅝" In ¼" Out | \$ - |
| | 543SB | 1¼" | MxF | 2 Tap | ⅝" In ¼" Out | \$ - |
| | 544SB | 1½" | MxF | 2 Tap | ⅝" In ¼" Out | \$ - |
| | 545SB | 2" | MxF | 2 Tap | ⅝" In ¼" Out | \$ - |



SIMMONS MFG CHECK VALVES - DUCTILE IRON

| Mfg Part Number | Description | List Price |
|-----------------|--|------------|
| 669SB | 2½" FxF Simmons MFG Check Valve - Ductile Iron | \$ - |
| 670SB | 3" FxF Simmons MFG Check Valve - Ductile Iron | \$ - |
| 671SB | 4" FxF Simmons MFG Check Valve - Ductile Iron | \$ - |
| 674SB | 5" FxF Simmons MFG Check Valve - Ductile Iron | \$ - |
| 672SB | 6" FxF Simmons MFG Check Valve - Ductile Iron | \$ - |
| 673SB | 8" FxF Simmons MFG Check Valve - Ductile Iron | \$ - |



| | | |
|-------|--|------|
| 668SB | 2½" FxF Simmons MFG DI Check Valve - W/Breakoff Plug | \$ - |
| 675SB | 3" FxF Simmons MFG DI Check Valve - W/Breakoff Plug | \$ - |
| 676SB | 4" FxF Simmons MFG DI Check Valve - W/Breakoff Plug | \$ - |
| 679SB | 5" FxF Simmons MFG DI Check Valve - W/Breakoff Plug | \$ - |
| 677SB | 6" FxF Simmons MFG DI Check Valve - W/Breakoff Plug | \$ - |
| 678SB | 8" FxF Simmons MFG DI Check Valve - W/Breakoff Plug | \$ - |



| | | |
|-------|---|------|
| 658SB | 2" MxF Simmons MFG Check Valve - Ductile Iron | \$ - |
| 660SB | 3" MxF Simmons MFG Check Valve - Ductile Iron | \$ - |
| 661SB | 4" MxF Simmons MFG Check Valve - Ductile Iron | \$ - |
| 662SB | 6" MxF Simmons MFG Check Valve - Ductile Iron | \$ - |



BRASS GATE VALVES

| Size | Description | List Price |
|------|------------------|------------|
| ½" | Brass Gate Valve | \$ 7.80 |
| ¾" | Brass Gate Valve | \$ 11.00 |
| 1" | Brass Gate Valve | \$ 16.20 |
| 1¼" | Brass Gate Valve | \$ 22.80 |
| 1½" | Brass Gate Valve | \$ 28.90 |
| 2" | Brass Gate Valve | \$ 43.20 |
| 2½" | Brass Gate Valve | \$ 76.50 |
| 3" | Brass Gate Valve | \$ 96.00 |
| 4" | Brass Gate Valve | \$ 174.00 |



BRASS BALL VALVES

| Size | Description | List Price |
|------|------------------|------------|
| ½" | Brass Ball Valve | \$ - |
| ¾" | Brass Ball Valve | \$ - |
| 1" | Brass Ball Valve | \$ - |
| 1¼" | Brass Ball Valve | \$ - |
| 1½" | Brass Ball Valve | \$ - |
| 2" | Brass Ball Valve | \$ - |
| 2½" | Brass Ball Valve | \$ - |
| 3" | Brass Ball Valve | \$ - |
| 4" | Brass Ball Valve | \$ - |



BRASS SWING CHECK VALVES

| Size | Description | List Price |
|------|-------------------|------------|
| 1" | Brass Swing Check | \$ - |
| 1¼" | Brass Swing Check | \$ - |
| 1½" | Brass Swing Check | \$ - |
| 2" | Brass Swing Check | \$ - |
| 2½" | Brass Swing Check | \$ - |
| 3" | Brass Swing Check | \$ - |
| 4" | Brass Swing Check | \$ - |



PVC BALL VALVES

| Size | Description | List Price |
|------|----------------|------------|
| ½" | PVC Ball Valve | \$ - |
| ¾" | PVC Ball Valve | \$ - |
| 1" | PVC Ball Valve | \$ - |
| 1¼" | PVC Ball Valve | \$ - |
| 1½" | PVC Ball Valve | \$ - |
| 2" | PVC Ball Valve | \$ - |
| 2½" | PVC Ball Valve | \$ - |
| 3" | PVC Ball Valve | \$ - |
| 4" | PVC Ball Valve | \$ - |



DI HIGH PRESSURE SWING CHECK VALVES

| Size | Description | List Price |
|------|--------------------------|------------|
| 2" | Ductile Iron Swing Check | \$ - |
| 3" | Ductile Iron Swing Check | \$ - |
| 4" | Ductile Iron Swing Check | \$ - |



DI HIGH PRESSURE BALL VALVES

| Size | Description | List Price |
|------|-------------------------|------------|
| 2" | Ductile Iron Ball Valve | \$ - |
| 3" | Ductile Iron Ball Valve | \$ - |
| 4" | Ductile Iron Ball Valve | \$ - |



BUTTERFLY VALVES - LEVER

| Size | Description | List Price |
|------|-------------------------|------------|
| 2" | Lever - Butterfly Valve | \$ - |
| 2½" | Lever - Butterfly Valve | \$ - |
| 3" | Lever - Butterfly Valve | \$ - |
| 4" | Lever - Butterfly Valve | \$ - |
| 5" | Lever - Butterfly Valve | \$ - |
| 6" | Lever - Butterfly Valve | \$ - |
| 8" | Lever - Butterfly Valve | \$ - |
| 10" | Lever - Butterfly Valve | \$ - |
| 12" | Lever - Butterfly Valve | \$ - |



BUTTERFLY VALVES - GEAR

| Size | Description | List Price |
|------|------------------------|------------|
| 2" | Gear - Butterfly Valve | \$ - |
| 2½" | Gear - Butterfly Valve | \$ - |
| 3" | Gear - Butterfly Valve | \$ - |
| 4" | Gear - Butterfly Valve | \$ - |
| 5" | Gear - Butterfly Valve | \$ - |
| 6" | Gear - Butterfly Valve | \$ - |
| 8" | Gear - Butterfly Valve | \$ - |
| 10" | Gear - Butterfly Valve | \$ - |
| 12" | Gear - Butterfly Valve | \$ - |



FLOW CONTROL VALVES

FLOMATIC FLO-TROL

| Model | Size | Connection | GPM | List Price |
|--------|------|------------|-----|------------|
| CDX1.0 | 1" | FxF | 1 | \$ - |
| CDX1.5 | 1" | FxF | 1.5 | \$ - |
| CDX2.0 | 1" | FxF | 2 | \$ - |
| CDX2.5 | 1" | FxF | 2.5 | \$ - |
| CDX3.0 | 1" | FxF | 3 | \$ - |
| CDX3.5 | 1" | FxF | 3.5 | \$ - |
| CDX4.0 | 1" | FxF | 4 | \$ - |
| CDX4.5 | 1" | FxF | 4.5 | \$ - |
| CDX5.0 | 1" | FxF | 5 | \$ - |
| CDX6.0 | 1" | FxF | 6 | \$ - |
| CDX7.0 | 1" | FxF | 7 | \$ - |
| CDX8.0 | 1" | FxF | 8 | \$ - |
| CDX9.0 | 1" | FxF | 9 | \$ - |
| CDX10 | 1" | FxF | 10 | \$ - |
| CDX12 | 1" | FxF | 12 | \$ - |
| CDX15 | 1" | FxF | 15 | \$ - |
| CDX17 | 1" | FxF | 17 | \$ - |
| CDX20 | 1" | FxF | 20 | \$ - |
| CDX25 | 1" | FxF | 25 | \$ - |
| CDX30 | 1" | FxF | 30 | \$ - |

- *Constant flow rates
- *Booster pump systems
- *Domestic water systems
- *Sizes 3/8" thru 1-1/2" (.25 - 30 GPM)
- *NSF/ANSI 61 and 372 Certified
- *Stainless steel construction
- *Laser engraved flow rate and size



FLOMATIC® VALVES
High Quality Valves Built to Last...

FLOMATIC CYCLE GARD VALVES

C153S6 Cycle Gard Constant Pressure Control Valve

| Description | GPM | PSI | List Price |
|---------------------------------------|------|-----|------------|
| 1"F & 1¼"M Stainless Steel Cycle Gard | 1-20 | 50 | \$ - |
| 1"F & 1¼"M Stainless Steel Cycle Gard | 1-20 | 60 | \$ - |
| 1¼"F Stainless Steel Cycle Gard | 1-50 | 50 | \$ - |
| 1¼"F Stainless Steel Cycle Gard | 1-50 | 60 | \$ - |



CB152ET Cycle Gard Constant Pressure Control Valve With Tappings

| Description | GPM | PSI | List Price |
|---------------------------------------|------|--------|------------|
| 1"F & 1¼"M Unleaded Bronze Cycle Gard | 1-25 | 15-75 | \$ - |
| 1"F & 1¼"M Unleaded Bronze Cycle Gard | 1-25 | 15-150 | \$ - |



CB152EHF Hy-Flow Cycle Gard Constant Pressure Control Valve

| Description | GPM | PSI | List Price |
|---------------------------------|------|--------|------------|
| 1¼"F Unleaded Bronze Cycle Gard | 5-70 | 15-75 | \$ - |
| 1¼"F Unleaded Bronze Cycle Gard | 5-70 | 15-150 | \$ - |



CIN101 Cycle Gard Constant Pressure Control Valve

| Description | GPM | PSI | List Price |
|-----------------------------|------|-----------------|------------|
| 2"F Ductile Iron Cycle Gard | 5-70 | 50 (Adjustable) | \$ - |



CIN101 Cycle Gard Constant Pressure Control Valve

| Description | GPM | PSI | List Price |
|-----------------------------|-------|-----------------|------------|
| 3"F Ductile Iron Cycle Gard | 5-300 | 60 (Adjustable) | \$ - |



The Cycle Gard®, Constant Pressure Pump Control Valve provides "City Like Pressure", which helps reduce rapid pump cycling and maintains a pre-set operating pressure. The Cycle Gard® provides proven pump cycling protection for water well systems, irrigation and booster systems and is designed to stop rapid pump cycling, save electricity, eliminate water hammer while providing a constant pressure regardless of water flow.



BURY HYDRANT

| Mfg Number. | Bury Depth | List Price |
|-------------|------------|------------|
| 4802LF | 2' | \$ - |
| 4803LF | 3' | \$ - |

- *3/4" NPT Female Inlet
- *3/4" Male Hose Thread Outlet
- *Plunger can be replaced without digging the hydrant up
- *Polyester Powder Coat Finish



HOSE BIBS

| Description | List Price |
|--------------------------|------------|
| 1/2" Hose Bib | \$ - |
| 1/2" Hose Bib (1/4 Turn) | \$ - |
| 3/4" Hose Bib | \$ - |
| 3/4" Hose Bib (1/4 Turn) | \$ - |

*Certified Lead Free



AIR VENTS

| Description | List Price |
|----------------------|------------|
| 1" Plastic Air Vent | \$ - |
| 2" Aluminum Air Vent | \$ - |
| 3" Aluminum Air Vent | \$ - |
| 4" Aluminum Air Vent | \$ - |



| | |
|------------------------|------|
| 3/4" Screened Air Vent | \$ - |
|------------------------|------|



| | |
|----------------|------|
| 1/2" Vent Pipe | \$ - |
|----------------|------|



D&K Manufacturing

| Description | List Price |
|--------------------------------|------------|
| 2" x 4" Clearview Coupling | \$ - |
| 2" x 6" Clearview Coupling | \$ - |
| 2-1/2" x 4" Clearview Coupling | \$ - |
| 2-1/2" x 6" Clearview Coupling | \$ - |
| 3" x 4" Clearview Coupling | \$ - |
| 3" x 6" Clearview Coupling | \$ - |
| 4" x 4" Clearview Coupling | \$ - |
| 4" x 6" Clearview Coupling | \$ - |
| 5" x 4" Clearview Coupling | \$ - |
| 5" x 6" Clearview Coupling | \$ - |
| 6" x 4" Clearview Coupling | \$ - |
| 6" x 6" Clearview Coupling | \$ - |
| 8" x 4" Clearview Coupling | \$ - |
| 8" x 6" Clearview Coupling | \$ - |



| Description | List Price |
|-------------------------|------------|
| 2" x 4" Sight Check | \$ - |
| 2" x 6" Sight Check | \$ - |
| 2-1/2" x 4" Sight Check | \$ - |
| 2-1/2" x 6" Sight Check | \$ - |
| 3" x 4" Sight Check | \$ - |
| 3" x 6" Sight Check | \$ - |
| 4" x 4" Sight Check | \$ - |
| 4" x 6" Sight Check | \$ - |
| 5" x 4" Sight Check | \$ - |
| 5" x 6" Sight Check | \$ - |
| 6" x 4" Sight Check | \$ - |
| 6" x 6" Sight Check | \$ - |
| 8" x 4" Sight Check | \$ - |
| 8" x 6" Sight Check | \$ - |



| Description | List Price |
|--------------------------------|------------|
| 2" x 4" Steel Dresser Cplg | \$ - |
| 2" x 6" Steel Dresser Cplg | \$ - |
| 2-1/2" x 4" Steel Dresser Cplg | \$ - |
| 2-1/2" x 6" Steel Dresser Cplg | \$ - |
| 3" x 4" Steel Dresser Cplg | \$ - |
| 3" x 6" Steel Dresser Cplg | \$ - |
| 4" x 4" Steel Dresser Cplg | \$ - |
| 4" x 6" Steel Dresser Cplg | \$ - |
| 5" x 4" Steel Dresser Cplg | \$ - |
| 5" x 6" Steel Dresser Cplg | \$ - |
| 6" x 4" Steel Dresser Cplg | \$ - |
| 6" x 6" Steel Dresser Cplg | \$ - |
| 8" x 4" Steel Dresser Cplg | \$ - |



| Description | List Price |
|------------------------------|------------|
| 2" x 4" Clearview Sleeve | \$ - |
| 2" x 6" Clearview Sleeve | \$ - |
| 2 1/2" x 4" Clearview Sleeve | \$ - |
| 2 1/2" x 6" Clearview Sleeve | \$ - |
| 3" x 4" Clearview Sleeve | \$ - |
| 3" x 6" Clearview Sleeve | \$ - |
| 4" x 4" Clearview Sleeve | \$ - |
| 4" x 6" Clearview Sleeve | \$ - |
| 5" x 4" Clearview Sleeve | \$ - |
| 5" x 6" Clearview Sleeve | \$ - |
| 6" x 4" Clearview Sleeve | \$ - |
| 6" x 6" Clearview Sleeve | \$ - |
| 8" x 4" Clearview Sleeve | \$ - |



| Description | List Price |
|----------------------|------------|
| 2" Rubber Gasket | \$ - |
| 2 1/2" Rubber Gasket | \$ - |
| 3" Rubber Gasket | \$ - |
| 4" Rubber Gasket | \$ - |
| 5" Rubber Gasket | \$ - |
| 6" Rubber Gasket | \$ - |
| 8" Rubber Gasket | \$ - |



| Description | List Price |
|-----------------------|------------|
| 2" Steel End Ring | \$ - |
| 2 1/2" Steel End Ring | \$ - |
| 3" Steel End Ring | \$ - |
| 4" Steel End Ring | \$ - |
| 5" Steel End Ring | \$ - |
| 6" Steel End Ring | \$ - |
| 8" Steel End Ring | \$ - |



WELL SUPPLIES

| Section | Page |
|-------------------------|-------------|
| Badger Flow Meters | F-1 |
| Pitless Adapters | F-2 |
| Centralizers | F-3 |
| Well Caps | F-4 |
| Well Seals | F-5 |
| Steel Well Plates | F-6 |
| Water Filters | F-7 |
| Lakos Sand Separators | F-8 |
| Cetco Drilling Products | F-9 |

BADGER FLOW METERS

M5000 MAG Meter

| Size | GPM Flow Range | | Length | List Price |
|--------|----------------|-------|--------|------------|
| | MIN | MAX | | |
| 1/2" | 0.09 | 27 | 6.7" | |
| 3/4" | 0.15 | 49 | 6.7" | |
| 1" | 0.24 | 77 | 8.9" | |
| 1-1/4" | 0.39 | 127 | 8.9" | |
| 1-1/2" | 0.4 | 199 | 8.9" | Call |
| 2" | 0.94 | 311 | 8.9" | For |
| 2-1/2" | 1.58 | 525 | 11" | Current |
| 3" | 2.39 | 796 | 11" | Pricing |
| 4" | 3.74 | 1244 | 11" | |
| 5" | 5.84 | 1946 | 15.8" | |
| 6" | 8.4 | 2799 | 15.8" | |
| 8" | 15 | 4976 | 15.8" | |
| 10" | 23.4 | 7775 | 19.7" | |
| 12" | 33.6 | 11196 | 19.7" | |

- Available in sizes 0.50...24 in. (15...600 mm)
- Battery powered (10 year life)
- $\pm 0.4\%$ of measured value ± 2 mm/s accuracy independent of fluid viscosity, density and temperature
- Unaffected by most solids contained in fluids
- Pulsed DC magnetic field for zero point stability
- No pressure loss for low operational costs
- Corrosion resistant liners for long life
- Calibrated in state-of-the art facilities
- Integral and remote signal converter availability
- Optional grounding rings or grounding electrode
- Measurement largely independent of flow profile
- Low-power digital microcontroller (16 bit)
- Simple programming procedure
- Digital and infrared outputs
- Automatic zero-point stability
- Non-volatile programming
- NSF listed
- Data logging
- Available with a hard rubber liner or PTFE liner
- Available with 150-lb and 300-lb flanges



BRONZE PITLESS ADAPTERS

| Model | Discharge Pipe | Drop Pipe | I.D. Casing | Working Load | List Price |
|--------|----------------|-----------|-------------|--------------|------------|
| 1850LF | 1" | 1" | 5" to 8" | 800lbs | \$ - |
| 1851LF | 1½" | 1½" | 5" to 8" | 2000lbs | \$ - |



STAINLESS STEEL PITLESS ADAPTERS

| Model | Discharge Pipe | Drop Pipe | I.D. Casing | Working Load | List Price |
|--------|----------------|-----------|-------------|--------------|------------|
| 1850SS | 1" | 1" | 5" to 8" | 800lbs | \$ - |
| 1851SS | 1½" | 1½" | 5" to 8" | 2000lbs | \$ - |



MAASS DICKEN PITLESS ADAPTERS

| Model | Discharge Pipe | Drop Pipe | I.D. Casing | Working Load | List Price |
|---------|----------------|-----------|-------------|--------------|------------|
| LD-S-10 | 1" | 1" | 5" to 12" | 2000lbs | \$ - |
| LD-S-12 | 1½" | 1½" | 5" to 12" | 2000lbs | \$ - |
| S-10 | 1" | 1" | 5" to 12" | 5000lbs | \$ - |
| S-12 | 1½" | 1½" | 5" to 12" | 5000lbs | \$ - |
| S-15 | 1½" | 1½" | 5" to 12" | 5000lbs | \$ - |
| S-20 | 2" | 2" | 5" to 12" | 5000lbs | \$ - |



MAASS MIDWEST WELD-ON PITLESS ADAPTERS

| Model | Discharge Pipe | Drop Pipe | I.D. Casing | Working Load | List Price |
|-------|----------------|-----------|-------------|--------------|------------|
| J41 | 1" | 1" | 4-5" | 4000lbs | \$ - |
| 4J1 ¼ | 1¼" | 1¼" | 4-5" | 5000lbs | \$ - |
| 4J1 ½ | 1½" | 1½" | 4-5" | 5000lbs | \$ - |
| 5J2 | 2" | 2" | 5" | 6000lbs | \$ - |
| 6J1 | 1" | 1" | 6-7-8"+ | 4000lbs | \$ - |
| 6J1 ¼ | 1¼" | 1¼" | 6-7-8"+ | 5000lbs | \$ - |
| 6J1 ½ | 1½" | 1½" | 6-7-8"+ | 5000lbs | \$ - |
| 6J2 | 2" | 2" | 6-7-8"+ | 6000lbs | \$ - |
| 6J2 ½ | 2½" | 2½" | 6-7-8"+ | 8000lbs | \$ - |
| 8J3 | 3" | 3" | 8-10-12"+ | 10000lbs | \$ - |
| 10J4 | 4" | 4" | 10-12-14"+ | 15000lbs | \$ - |



STEEL PITLESS COLUMNS

| Description | List Price |
|--|------------|
| 5" x 5' Blank Steel Column - Threaded on One End | \$ - |
| 6" x 5' Blank Steel Column - Threaded on One End | \$ - |



TORQUE ARRESTOR

| MFG Part Number | Pipe Size | Material | Casing Size | List Price |
|-----------------|-----------|----------|-------------|------------|
| 1350 | 1"-1¼" | Rubber | 4"- 8" | \$ - |

*Supplied with 2 stainless steel clamps
*NSF Approved



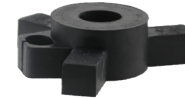
CABLE PROTECTORS

| MFG Part Number | Pipe Size | Material | Casing Size | List Price |
|-----------------|-----------|----------|-------------|------------|
| 1358 | 1"-1¼" | Plastic | 4"- 8" | \$ - |



CENTERING SPIDERS

| MFG Part Number | Pipe Size | Material | Casing Size | List Price |
|-----------------|-----------|----------|-------------|------------|
| TAS46-10 | 1" | Rubber | 4"- 6" | \$ - |
| TAS46-12 | 1¼" | Rubber | 4"- 6" | \$ - |
| TAS46-15 | 1½" | Rubber | 4"- 6" | \$ - |
| TAS46-20 | 2" | Rubber | 4"- 6" | \$ - |



KWIK-ZIP HD SERIES CENTRALIZERS

| Model | Runner Height | Recommended Pipe | | Carton Quantity | List Price |
|--------|----------------|------------------|----------|-----------------|------------|
| | | Runner Height | Diameter | | |
| HD 30 | 30mm / 1-3/16" | 4" & Greater | 30 | \$ - | |
| HD 50 | 50mm / 2" | 4" & Greater | 30 | \$ - | |
| HD 75 | 75mm / 3" | 4" & Greater | 30 | \$ - | |
| HD 100 | 100mm / 4" | 4" & Greater | 30 | \$ - | |



Sizing Table - HD Series - Vertical

| Nominal Pipe Size (NPS) | OD of Pipe (mm) | OD of Pipe (Inches) | Suggested Number of Segments | Approx Setting Guide Position |
|-------------------------|-----------------|---------------------|------------------------------|-------------------------------|
| | 110 | 4.33 | 2 | 0 |
| 4 | 114.30 | 4.50 | 2 | 15 |
| 4.5 | 127.00 | 5.00 | 2 | 30 |
| 5 | 141.30 | 5.563 | 2 | 55 |
| | 160 | 6.30 | 3 | 0 |
| 6 | 168.27 | 6.625 | 3 | 5 |
| | 180 | 7.09 | 3 | 20 |
| | 200 | 7.87 | 3 | 40 |
| 8 | 219.08 | 8.625 | 3 | 65 |
| | 250 | 9.84 | 4 | 25 |
| 10 | 273.05 | 10.75 | 4 | 45 |
| 12 | 323.85 | 12.75 | 4 | 80 |
| 14 | 355.60 | 14.00 | 5 | 50 |
| 16 | 406.40 | 16.00 | 6 | 35 |
| 18 | 457.20 | 18.00 | 6 | 65 |
| 20 | 508.00 | 20.00 | 7 | 55 |
| 24 | 609.60 | 24.00 | 8 | 65 |
| | 650 | 25.59 | 9 | 50 |
| | 710 | 27.95 | 9 | 70 |
| | 800 | 31.50 | 10 | 75 |
| | 900 | 35.43 | 12 | 60 |
| | 1000 | 39.37 | 13 | 65 |
| | 1100 | 43.30 | 14 | 70 |
| | 1200 | 47.24 | 17 | 45 |

Please refer to the relevant product series installation guide for additional information

WELL CAPS

Aluminum Well Caps

| Model | Description | O.D. Casing | Conduit Fitting | List Price |
|-------|-----------------------|-------------|-----------------|------------|
| CC-5 | 5" Aluminum Well Caps | 5-9/16" | 1" | \$ - |
| CC-6 | 6" Aluminum Well Caps | 6-5/8" | 1" | \$ - |
| CC-8 | 8" Aluminum Well Caps | 8-5/8" | 1" | \$ - |

- Can be personalized, 50 piece minimum
- Cast aluminum alloy 319 - will not crack or warp
- Fitted for 1" conduit
- Three square head stainless steel cup point set screws
- Designed for 1/64" clearance fit to prevent foreign matter intrusion
- Model CC-ID cap 1-1/4" conduit as standard



Water Tight Aluminum Well Caps

| Model | Description | O.D. Casing | Conduit Fitting | List Price |
|--------|-----------------------------------|-------------|-----------------|------------|
| WTCC-4 | 4" Water Tight Aluminum Well Caps | 4-1/2" | 1" | \$ - |
| WTCC-5 | 5" Water Tight Aluminum Well Caps | 5-9/16" | 1" | \$ - |
| WTCC-6 | 6" Water Tight Aluminum Well Caps | 6-5/8" | 1 1/4" | \$ - |
| WTCC-8 | 8" Water Tight Aluminum Well Caps | 8-5/8" | 1 1/4" | \$ - |

- WTCC caps Water Systems Council - PAS-2 listed
- Cast aluminum with stainless steel bolts
- WTCC models are vented to meet state codes
- Can be personalized, 50 piece minimum
- Five bolt pulldown for sure seal and tamper resistance
- Heavy Buna-N Seal prevents foreign matter intrusion
- Buna-N rubber seal is internal to cap assembly and is not exposed to outside environment



Baker Premium Water Tight Cast Iron Well Caps

| Model | Description | O.D. Casing | Conduit Fitting | List Price |
|-------|--|-------------|-----------------|------------|
| 4W | Cast Iron Premium Water Tight Well Cap | 4-1/2" | 1 1/2" | \$ - |
| 5W | Cast Iron Premium Water Tight Well Cap | 5-9/16" | 1 1/2" | \$ - |
| 6W | Cast Iron Premium Water Tight Well Cap | 6-5/8" | 1 1/2" | \$ - |
| 6.6W | Cast Iron Premium Water Tight Well Cap | 7" | 1 1/2" | \$ - |
| 7W | Cast Iron Premium Water Tight Well Cap | 7-5/8" | 1 1/2" | \$ - |
| 8W | Cast Iron Premium Water Tight Well Cap | 8-5/8" | 1 1/2" | \$ - |
| 10W | Cast Iron Premium Water Tight Well Cap | 10-3/4" | 3" | \$ - |
| 12W | Cast Iron Premium Water Tight Well Cap | 12-3/4" | 3" | \$ - |

- The top of the cap can be removed without effecting the seal, conduit or wiring.
- The Premium Watertight Cap is made of high quality grey cast iron.
- Painted green and oven dried to produce a durable high quality finish.
- All our high quality hardware is plated.
- Conforms to Water System Council PAS-97 (04) Standards.
- Premium Watertight Cap can be used as a vacuum seal when conduit is plugged.



ABS Well Seals

| Well Size I.D. | Drop Pipe Size | Cable Hole Tapping | Vent Tapping | List Price |
|----------------|----------------|--------------------|--------------|------------|
| 5" | 1" | 3/4" | 1/2" | \$ - |
| 5" | 1 1/4" | 3/4" | 1/2" | \$ - |
| 5" | 1 1/2" | 3/4" | 1/2" | \$ - |
| 5" | 2" | 3/4" | 1/2" | \$ - |
| 6" | 1" | 3/4" | 1/2" | \$ - |
| 6" | 1 1/4" | 3/4" | 1/2" | \$ - |
| 6" | 1 1/2" | 3/4" | 1/2" | \$ - |
| 6" | 2" | 3/4" | 1/2" | \$ - |



- *Hi Impact ABS Material
- *Zinc plated steel bolts
- *Extra thick molded rubber packer

Steel Well Seal - Single Drop Pipe

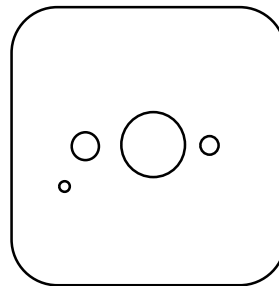
| Well Size I.D. | Drop Pipe Size | Cable Hole Tapping | Vent Tapping | List Price |
|----------------|----------------|--------------------|--------------|------------|
| 5" | 1" | 1" | 1/2" | \$ - |
| 5" | 1 1/4" | 1" | 1/2" | \$ - |
| 5" | 1 1/2" | 3/4" | 1/2" | \$ - |
| 5" | 2" | 3/4" | 1/2" | \$ - |
| 6" | 1" | 1" | 1/2" | \$ - |
| 6" | 1 1/4" | 1" | 1/2" | \$ - |
| 6" | 1 1/2" | 1" | 1/2" | \$ - |
| 6" | 2" | 3/4" | 1/2" | \$ - |
| 8" | 1" | 1" | 1/2" | \$ - |
| 8" | 1 1/4" | 1" | 1/2" | \$ - |
| 8" | 1 1/2" | 1" | 1/2" | \$ - |
| 8" | 2" | 1" | 1/2" | \$ - |
| 8" | 2 1/2" | 1" | 1/2" | \$ - |
| 8" | 3" | 1" | 1/2" | \$ - |
| 8" | 4" | 1" | 1/2" | \$ - |



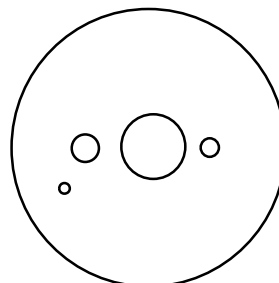
- *A36 hot roll steel
- *Galvanized steel bolts
- *3/4" molded rubber, 35 durometer
- *Powder coated polyester finish

STEEL WELL PLATES

| Size | Thickness | Pipe Size | Shape | List Price |
|------|-----------|-----------|--------|------------|
| 24" | 3/8" | 2" | Square | \$ - |
| 24" | 3/8" | 2-1/2" | Square | \$ - |
| 24" | 3/8" | 3" | Square | \$ - |
| 24" | 3/8" | 4" | Square | \$ - |
| 24" | 1/2" | 2" | Square | \$ - |
| 24" | 1/2" | 2-1/2" | Square | \$ - |
| 24" | 1/2" | 3" | Square | \$ - |
| 24" | 1/2" | 4" | Square | \$ - |
| 24" | 1/2" | 5" | Square | \$ - |
| 24" | 1/2" | 6" | Square | \$ - |



| SIZE | Thickness | Pipe Size | Shape | List Price |
|------|-----------|-----------|-------|------------|
| 16" | 3/8" | 2" | Round | \$ - |
| 16" | 3/8" | 2-1/2" | Round | \$ - |
| 16" | 3/8" | 3" | Round | \$ - |
| 16" | 3/8" | 4" | Round | \$ - |
| 16" | 1/2" | 2" | Round | \$ - |
| 16" | 1/2" | 2-1/2" | Round | \$ - |
| 16" | 1/2" | 3" | Round | \$ - |
| 16" | 1/2" | 4" | Round | \$ - |



Filtration

Filter Housings

| Inlet/ Outlet | Sump Color | Max Pressure Rating | Dimensions Width x Length | List Price |
|---------------|------------|---------------------|---------------------------|------------|
| 3/4" | Clear | 125 PSI | 4.61" x 11.65" | \$ - |
| 1" | Blue | 125 PSI | 7.38" x 13.51" | \$ - |
| 1-1/2" | Blue | 125 PSI | 7.38" x 13.51" | \$ - |



Sediment Filter Cartridges

| Filter Type | Material | Micron | Dimensions Width x Length | List Price |
|-------------|---------------|--------|---------------------------|------------|
| Wound | Polypropylene | 5 | 2.50" x 10" | \$ - |
| Wound | Polypropylene | 10 | 2.50" x 10" | \$ - |
| Wound | Polypropylene | 25 | 2.50" x 10" | \$ - |
| Pleated | Polyester | 20 | 4.50" x 10" | \$ - |
| Pleated | Polyester | 50 | 4.50" x 10" | \$ - |



Taste & Odor Filter Cartridges

| Filter Type | Material | Micron | Dimensions Width x Length | List Price |
|--------------|----------|--------|---------------------------|------------|
| Taste & Odor | GAC | 5 | 2.50" x 10" | \$ - |
| Taste & Odor | GAC | 5 | 4.50" x 10" | \$ - |



Twist II Clean Filters

| Model | Max Flow Rate | Inlet/Outlet Size | Screen Mesh Size | List Price |
|---------|---------------|-------------------|-----------------------|------------|
| T2C-100 | 39 GPM | 1" Male NPT | 100 Mesh / 150 Micron | \$ - |
| T2C-150 | 78 GPM | 1 1/2" Male NPT | 100 Mesh / 150 Micron | \$ - |



Twist II Clean Repair Parts

| Description | List Price |
|---|------------|
| 1" Twist II Clean Filter Element Kit | \$ - |
| 1" Twist II Clean Repair Kit - O-Rings / Pin / Red Pull Tab | \$ - |
| 1 1/2" Twist II Clean Filter Element Kit | \$ - |
| 1 1/2" Twist II Clean Repair Kit - O-Rings / Red Pull Tab | \$ - |



LAKOS SAND SEPARATORS

Sandmaster Plus (SMP) Series

| Model | Flow Range U.S. gpm | Inlet/Outlet Size Male, N.P.T | Dry Weight Lbs. | List Price |
|--------|------------------------|----------------------------------|--------------------|------------|
| SMP-05 | 5-10 | 1/2" | 7 | \$ - |
| SMP-10 | 10-20 | 3/4" | 8 | \$ - |
| SMP-20 | 20-32 | 1" | 13 | \$ - |
| SMP-30 | 30-48 | 1-1/4" | 13 | \$ - |
| SMP-45 | 45-70 | 1-1/2" | 13 | \$ - |

*Purge pipe size for all models is 3/4"

*100psi pressure rating



ILB Series

| Model | Flow Range U.S. gpm | Inlet/Outlet Size Male, N.P.T | Dry Weight Lbs. | List Price |
|----------|------------------------|----------------------------------|--------------------|------------|
| ILB-0050 | 4-10 | 1/2" | 14 | \$ - |
| ILB-0075 | 10-20 | 3/4" | 15 | \$ - |
| ILB-0100 | 19-32 | 1" | 27 | \$ - |
| ILB-0125 | 28-48 | 1-1/4" | 27 | \$ - |
| ILB-0150 | 45-70 | 1-1/2" | 27 | \$ - |
| ILB-0200 | 65-108 | 2" | 52 | \$ - |
| ILB-0250 | 98-155 | 2-1/2" | 60 | \$ - |
| ILB-0300 | 148-290 | 3" | 101 | \$ - |

*Purge pipe size for all models is 3/4"

*150psi pressure rating



LAKOS ACCESSORIES

| Model | Description | List Price |
|-----------|---|------------|
| MBCK-0510 | Mounting Bracket Clamp Kit For SMP-05 thru SMP-10 | \$ - |
| MBCK-2045 | Mounting Bracket Clamp Kit For SMP-20 thru SMP-45 | \$ - |
| MBCK-015 | Mounting Bracket Clamp Kit For ILB-0050 | \$ - |
| MBCK-022 | Mounting Bracket Clamp Kit For ILB-0075 | \$ - |
| MBCK-033 | Mounting Bracket Clamp Kit For ILB-0100 thru ILB-0150 | \$ - |
| MBCK-052 | Mounting Bracket Clamp Kit For ILB-0200 thru ILB-0250 | \$ - |
| MBCK-062 | Mounting Bracket Clamp Kit For ILB-0300 | \$ - |
| AP-75-MBV | 3/4" AccuPurge Automatic Valve (110 or 220 VAC) | \$ - |



Cetco Drilling Products

PREMIUM GEL® is a 200 mesh, 90 bbl yield sodium bentonite for freshwater drilling, slurry walls, and tunnel boring. PREMIUM GEL complies with API 13A Section 9, Specifications for Drilling Fluid Materials. NSF/ANSI Standard 60 Certified.



SUPER GEL-X® is an easy mixing, high viscosity 200 bbl yield freshwater drilling fluid produced from the highest grade Wyoming sodium bentonite. May be used for all types of freshwater mud rotary drilling. NSF/ANSI Standard 60 Certified.



ACCU-VIS® (PHPA, 50% Active) is a liquid copolymer designed for fast field mixing, viscosity building, and clay/shale stabilization in aqueous drilling fluids. NSF/ANSI Standard 60 Certified.



SUPER THIN™ is a highly concentrated additive engineered to reduce drilling fluid viscosity. It offers immediate thinning action, reduces gel strength, and is more cost-effective than traditional thinners. NSF/ANSI Standard 60 Certified.



INSTA-VIS™ LOW VISCOSITY is an easy-mixing, watersoluble, polymer used in horizontal and vertical drilling applications. Ideal for use in recycling systems. NSF/ANSI Standard 60 Certified.



MAGMA FIBER is a specially formulated, extrusion spun mineral fiber loss circulation material. This coarse, long, and flexible fiber will give increased circulation by bridging and plugging off voids, fractures, and all types of permeable formations.



REL-PAC® (PAC, Dry) is a non-fermenting granular polymer designed for building a low solids drilling fluid with increased borehole stability. REL-PAC is a highly dispersible polymer, that improves drilling fluid efficiency.



VERSAFOAM® PLUS is an ultra high-yielding, biodegradable, liquid foaming agent for use in fresh and saltwater air rotary drilling. Dry air rotary drilling or mixed with water for foam drilling. NSF/ANSI Standard 60 Certified.



C/S GRANULAR and CETCO CRUMBLES are granular bentonite products composed of polymer-free, dried bentonite in various mesh sizes. CETCO CRUMBLES are coarser in size than C/S GRANULAR. C/S GRANULAR and CETCO CRUMBLES are certified to NSF/ANSI Standard 60.



CETCO COATED TABLETS are coated using an aqueous carrier to apply the coating. The coating allows the tablets to reach a discrete depth within the waterwell, piezometer, monitoring well, or annular space. These untreated organic tablets are compressed into 1/4" (0.64 cm) and 3/8" (0.95 cm) sizes. CETCO COATED TABLETS are certified to NSF/ANSI Standard 60.



CETCO COARSE CHIPS are natural sodium bentonite screened to 3/8 inch (0.95 cm) to 3/4 inch (1.90 cm) in size. PUREGOLD MEDIUM CHIPS are natural sodium bentonite screened to 1/4 inch (0.64 cm) to 3/8 inch (0.95 cm) in size. CETCO COARSE CHIPS and PUREGOLD MEDIUM CHIPS are certified to NSF/ANSI Standard 60.



CETCO GROUT is a 20% solids, polymer-free, single-component, easy-to use sodium bentonite grout available in powdered form. CETCO GROUT allows placement in a low viscosity state. CETCO GROUT is certified to NSF/ANSI Standard 60.



Cetco Drilling Products

Drilling Fluids

| Description | Function | Packaging | Pallet Qty | List Price |
|-------------|-------------------------------------|------------|------------|------------|
| Hydraul-EZ | Drilling Fluid - HDD | 50 lb Bags | 48 | \$ - |
| Premium Gel | Drilling Fluid - API 13A, Section 9 | 50 lb Bags | 48 | \$ - |
| Super Gel-X | Drilling Fluid - High Yield | 50 lb Bags | 48 | \$ - |

Grouts & Sealants

| Description | Function | Packaging | Pallet Qty | List Price |
|-----------------------|----------------------------|-------------|------------|------------|
| Cetco Crumbles | Sealant - 8/20 Mesh | 50 lb Bags | 48 | \$ - |
| Cetco Grout | Grout - 20% Solids | 50 lb Bags | 48 | \$ - |
| Cetco Tablets | Sealant - 1/2", 1/4", 3/8" | 50 lb Pails | 36 | \$ - |
| Puregold Medium Chips | Sealant - 1/4" - 3/8" | 50 lb Bags | 48 | \$ - |

Loss Circulation Material (LCM)

| Description | Function | Packaging | Pallet Qty | List Price |
|-------------|--------------------|------------|------------|------------|
| Magma Fiber | LCM - Acid Soluble | 25 lb Bags | 48 | \$ - |

Polymers & Additives

| Description | Function | Packaging | Pallet Qty | List Price |
|-------------------------|--------------------------------|-------------|------------|------------|
| Accu-Vis | Viscosifier / Clay Inhibitor | 44 lb Pails | 32 | \$ - |
| Insta-Vis Low Viscosity | Low Viscosity / Clay Inhibitor | 36 lb Pails | 36 | \$ - |
| Rel-Pac | Fluid Loss Control | 25 lb Pails | 36 | \$ - |
| Rel-Pac | Fluid Loss Control | 50 lb Bags | 40 | \$ - |
| Super Thin | Dispersant | 45 lb Pails | 32 | \$ - |
| Versafoam Plus | Drilling Foam | 43 lb Pails | 32 | \$ - |



Technical Data



FRICITION LOSS IN WATER PIPES PER 100 FEET OF NEW WROUGHT IRON OR STEEL PIPE

| Pipe Size | Friction Velocity Loss | | Friction Velocity Loss | | Friction Velocity Loss | | Friction Velocity Loss | | Friction Velocity Loss | | Friction Velocity Loss | |
|-----------|-------------------------------------|-------|------------------------|-------|--|-------|------------------------|-------|------------------------|-------|------------------------|-------|
| | 3/4" | | 1" | | 1-1/4" | | 1-1/2" | | 2" | | 2-1/2" | |
| G.P.M. | Velocity - Velocity Feet Per Second | | | | Friction - Friction Loss in Feet Per 100 Feet of Standard Pipe | | | | | | | |
| 3 | 1.81 | 2.50 | 1.11 | 0.77 | | | | | | | | |
| 5 | 3.01 | 6.32 | 1.86 | 1.93 | | | | | | | | |
| 7 | 4.21 | 11.80 | 2.60 | 3.56 | | | | | | | | |
| 10 | 6.02 | 23.00 | 3.71 | 7.86 | 2.15 | 1.77 | | | | | | |
| 16 | 9.63 | 56.03 | 5.44 | 16.50 | 3.43 | 4.20 | 2.52 | 1.96 | | | | |
| 20 | | | 7.42 | 25.10 | 4.29 | 6.34 | 3.15 | 2.94 | 1.91 | 0.87 | | |
| 26 | 3" | | 9.65 | 41.60 | 5.58 | 10.37 | 4.10 | 4.81 | 2.49 | 1.39 | | |
| 30 | | | 11.10 | 54.60 | 6.44 | 13.60 | 4.73 | 6.26 | 2.87 | 1.82 | 2.01 | 0.75 |
| 40 | | | | | 8.58 | 23.50 | 6.30 | 10.79 | 3.82 | 3.10 | 2.68 | 1.28 |
| 50 | 2.17 | 0.60 | 4" | | | | 7.88 | 16.40 | 4.78 | 4.67 | 3.35 | 1.94 |
| 60 | 2.60 | 0.90 | | | 5" | | 9.46 | 23.20 | 5.74 | 6.59 | 4.02 | 2.72 |
| 80 | 3.47 | 1.57 | | | | | 12.60 | 40.50 | 7.65 | 11.40 | 5.36 | 4.66 |
| 100 | 4.34 | 2.39 | 2.52 | 0.62 | | | | | 9.56 | 17.40 | 6.70 | 7.11 |
| 120 | 5.21 | 3.37 | 3.02 | 0.88 | | | 6" | | 11.50 | 24.70 | 8.04 | 10.00 |
| 140 | 6.08 | 4.51 | 3.53 | 1.66 | 2.25 | 0.38 | | | | | 10.05 | 15.40 |
| 200 | 8.68 | 8.90 | 5.04 | 2.27 | 3.21 | 0.74 | | | 8" | | 13.40 | 26.70 |
| 240 | 10.04 | 12.06 | 6.05 | 3.21 | 3.85 | 1.03 | 2.66 | 0.41 | | | | |
| 300 | 13.00 | 19.20 | 7.56 | 4.89 | 4.81 | 1.58 | 3.33 | 0.64 | 1.92 | 0.16 | | 10" |
| 340 | 14.08 | 24.08 | 8.57 | 6.19 | 5.45 | 2.00 | 3.78 | 0.81 | 2.18 | 0.20 | | |
| 400 | 17.40 | 33.90 | 10.10 | 8.47 | 6.41 | 2.72 | 4.44 | 1.09 | 2.57 | 0.28 | | |
| 440 | | | 11.01 | 10.02 | 7.06 | 3.26 | 4.89 | 1.31 | 2.81 | 0.33 | | |
| 500 | 12" | | 12.60 | 13.00 | 8.02 | 4.16 | 5.55 | 1.66 | 3.21 | 0.42 | 2.03 | 0.14 |
| 600 | | | 15.10 | 18.60 | 9.62 | 5.88 | 6.66 | 2.34 | 3.85 | 0.60 | 2.44 | 0.19 |
| 700 | | | | | 11.20 | 7.93 | 7.77 | 3.13 | 4.49 | 0.80 | 2.85 | 0.26 |
| 800 | | | | | 12.80 | 10.22 | 8.88 | 4.03 | 5.13 | 1.02 | 3.25 | 0.33 |
| 850 | | | | | | | 9.44 | 4.53 | 5.45 | 1.15 | 3.46 | 0.37 |
| 900 | 2.58 | 0.17 | | | | | 9.99 | 5.05 | 5.77 | 1.27 | 3.66 | 0.41 |
| 950 | 2.72 | 0.19 | | | | | 10.50 | 5.60 | 6.09 | 1.41 | 3.87 | 0.46 |
| 1000 | 2.87 | 0.21 | | | | | 11.10 | 6.17 | 6.41 | 1.56 | 4.07 | 0.50 |
| 1100 | 3.15 | 0.25 | | | | | | | 7.05 | 1.87 | 4.48 | 0.60 |
| 1200 | 3.44 | 0.30 | | | | | | | 7.70 | 2.20 | 4.88 | 0.70 |
| 1300 | 3.73 | 0.34 | | | | | | | 8.34 | 2.56 | 5.29 | 0.82 |
| 1500 | 4.30 | 0.45 | | | | | | | 9.62 | 3.37 | 6.10 | 1.07 |
| 1700 | 4.87 | 0.57 | | | | | | | 10.90 | 4.29 | 6.92 | 1.36 |
| 2000 | 5.73 | 0.78 | | | | | | | 12.80 | 5.86 | 8.14 | 1.86 |
| 2200 | 6.31 | 0.93 | | | | | | | | | 8.95 | 2.23 |
| 2400 | 6.88 | 1.09 | | | | | | | | | 9.76 | 2.64 |
| 2800 | 8.03 | 1.47 | | | | | | | | | 11.40 | 3.56 |
| 3000 | 8.60 | 1.68 | | | | | | | | | 12.20 | 4.06 |

- 1) Table shows loss in New pipe only. Allowance must be made for valves, fittings, etc., & for deterioration. If other than new, multiply Friction Loss Values by 1.90
- 2) When capacity is in gph divide by 80 to determine equivalent gpm.
- 3) To find loss in riser pipe of any specific length divide riser pipe length by 100, multiply the results with the friction loss figure in the table.
- 4) Try to always use a pipe size that gives AT LEAST 4.0 velocity feet per second.



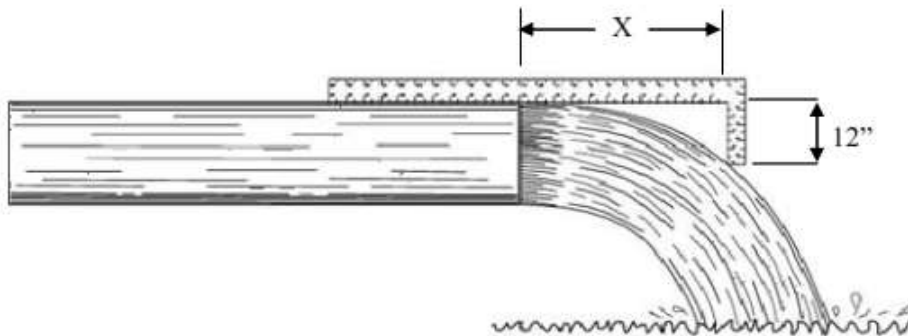
FRICTION LOSSES IN ALUMINUM PIPE

LOSS OF HEAD IN FEET PER 100 FEET OF ALUMINUM PIPE

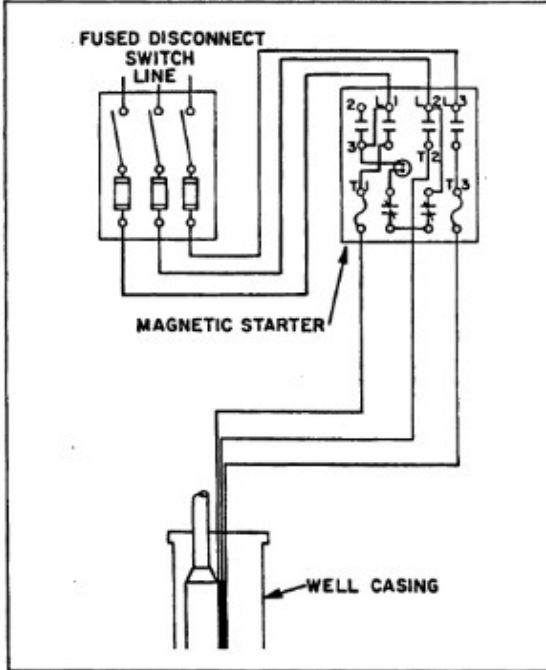
| GALLONS PER MINUTE | PIPE SIZE | | | | | | |
|--------------------------|-----------|-------|-------|-------|------|------|------|
| | 2" | 3" | 4" | 5" | 6" | 7" | 8" |
| 20 | 1.27 | 0.15 | 0.04 | | | | |
| 30 | 2.58 | 0.38 | 0.08 | | | | |
| 40 | 4.49 | 0.56 | 0.13 | 0.04 | | | |
| 50 | 6.85 | 0.85 | 0.20 | 0.07 | 0.03 | | |
| 60 | 9.67 | 1.21 | 0.28 | 0.09 | 0.04 | | |
| 70 | 12.95 | 1.67 | 0.38 | 0.12 | 0.05 | | |
| 80 | 16.70 | 2.06 | 0.49 | 0.19 | 0.06 | 0.03 | |
| 90 | 20.80 | 2.58 | 0.60 | 0.20 | 0.08 | 0.04 | |
| 100 | 25.40 | 3.18 | 0.74 | 0.24 | 0.10 | 0.05 | 0.03 |
| 120 | | 4.51 | 1.06 | 0.34 | 0.14 | 0.07 | 0.04 |
| 140 | | 6.00 | 1.41 | 0.46 | 0.19 | 0.07 | 0.05 |
| 160 | | 7.76 | 1.82 | 0.59 | 0.24 | 0.11 | 0.06 |
| 180 | | 9.67 | 2.27 | 0.73 | 0.30 | 0.14 | 0.07 |
| 200 | | 11.83 | 2.78 | 0.89 | 0.36 | 0.17 | 0.09 |
| 220 | | 14.12 | 3.31 | 1.07 | 0.44 | 0.20 | 0.11 |
| 240 | | 16.72 | 3.91 | 1.27 | 0.52 | 0.24 | 0.13 |
| 260 | | 19.42 | 4.56 | 1.47 | 0.60 | 0.28 | 0.15 |
| 280 | | 22.40 | 5.26 | 1.71 | 0.69 | 0.33 | 0.17 |
| 300 | | 25.45 | 5.98 | 1.95 | 0.79 | 0.37 | 0.19 |
| 350 | | | 8.03 | 2.59 | 1.05 | 0.50 | 0.26 |
| 400 | | | 10.36 | 3.33 | 1.35 | 0.64 | 0.33 |
| 450 | | | 12.90 | 4.15 | 1.69 | 0.80 | 0.41 |
| 500 | | | 15.73 | 5.07 | 2.06 | 0.97 | 0.50 |
| 550 | | | | 6.16 | 2.50 | 1.18 | 0.62 |
| 600 | | | | 7.24 | 2.94 | 1.38 | 0.72 |
| 650 | | | | 8.42 | 3.41 | 1.62 | 0.84 |
| 700 | | | | 9.98 | 3.92 | 1.86 | 0.97 |
| 750 | | | | 11.05 | 4.46 | 2.11 | 1.10 |
| 800 | | | | 12.48 | 5.03 | 2.38 | 1.24 |

GALLONS PER MINUTE

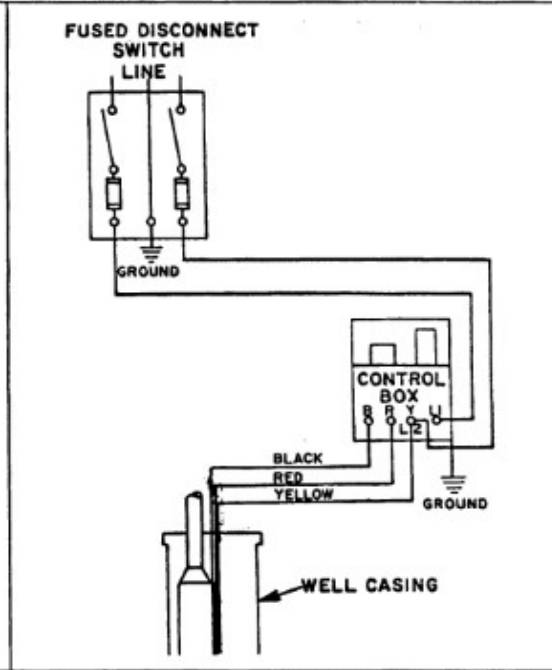
| Horizontal Distance X | 2" Pipe | 2-1/2" Pipe | 3" Pipe | 4" Pipe | 5" Pipe |
|-----------------------|---------|-------------|---------|---------|---------|
| 12" | 42 | 60 | 93 | 159 | 250 |
| 14" | 49 | 70 | 108 | 186 | 292 |
| 16" | 56 | 80 | 123 | 212 | 334 |
| 18" | 63 | 90 | 139 | 239 | 376 |
| 20" | 70 | 100 | 154 | 266 | 417 |
| 22" | 77 | 110 | 169 | 292 | 459 |
| 24" | 84 | 120 | 185 | 318 | 501 |
| 26" | 91 | 130 | 200 | 345 | 543 |
| 28" | 98 | 140 | 216 | 372 | 585 |
| 30" | 105 | 150 | 231 | 398 | 627 |



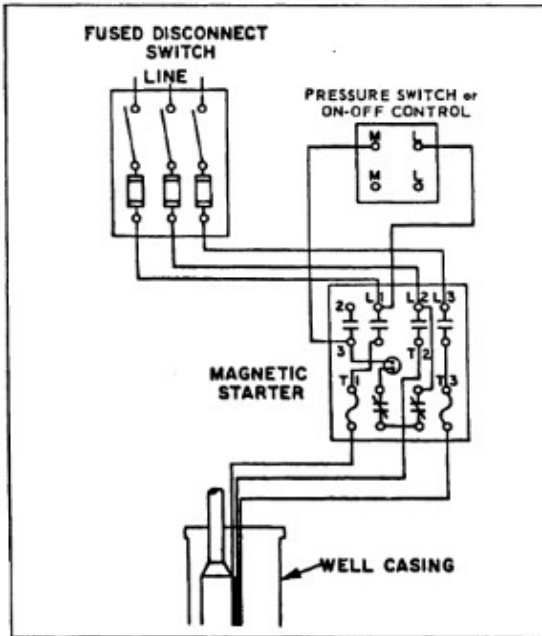
Open System - Three Phase



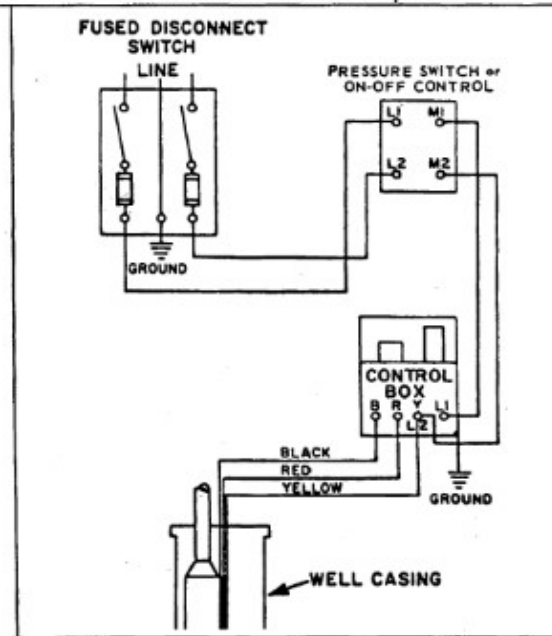
Open System - Single Phase
1/4 Horsepower - 5 Horsepower



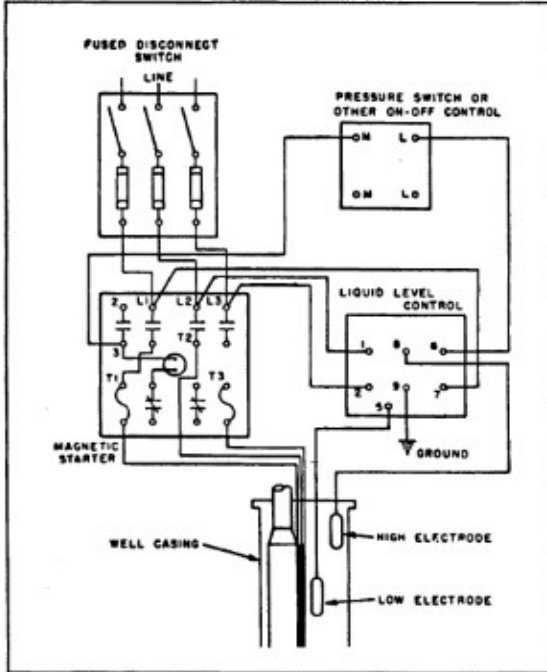
Three Phase - With Pressure Switch



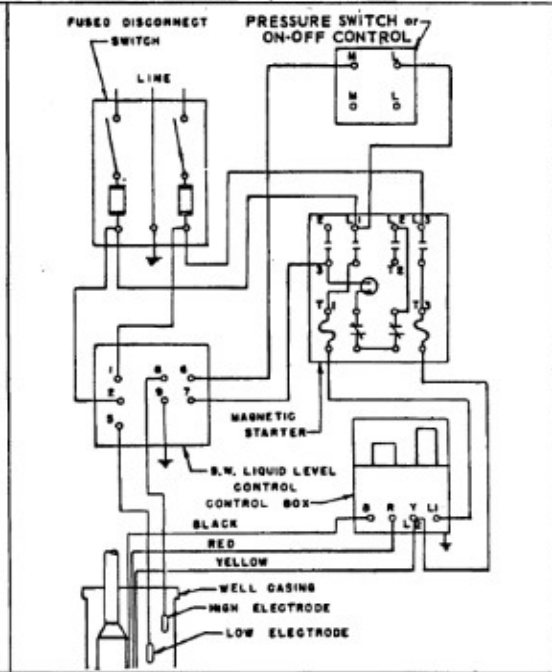
Single Phase - With Pressure Switch. Magnetic Starter
Recommended Above 3 Horsepower



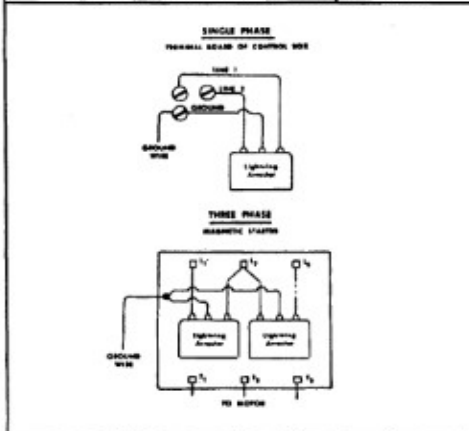
Three Phase With Pressure Switch
and Liquid Level Control



Single Phase With Pressure
Switch and Liquid Level Control



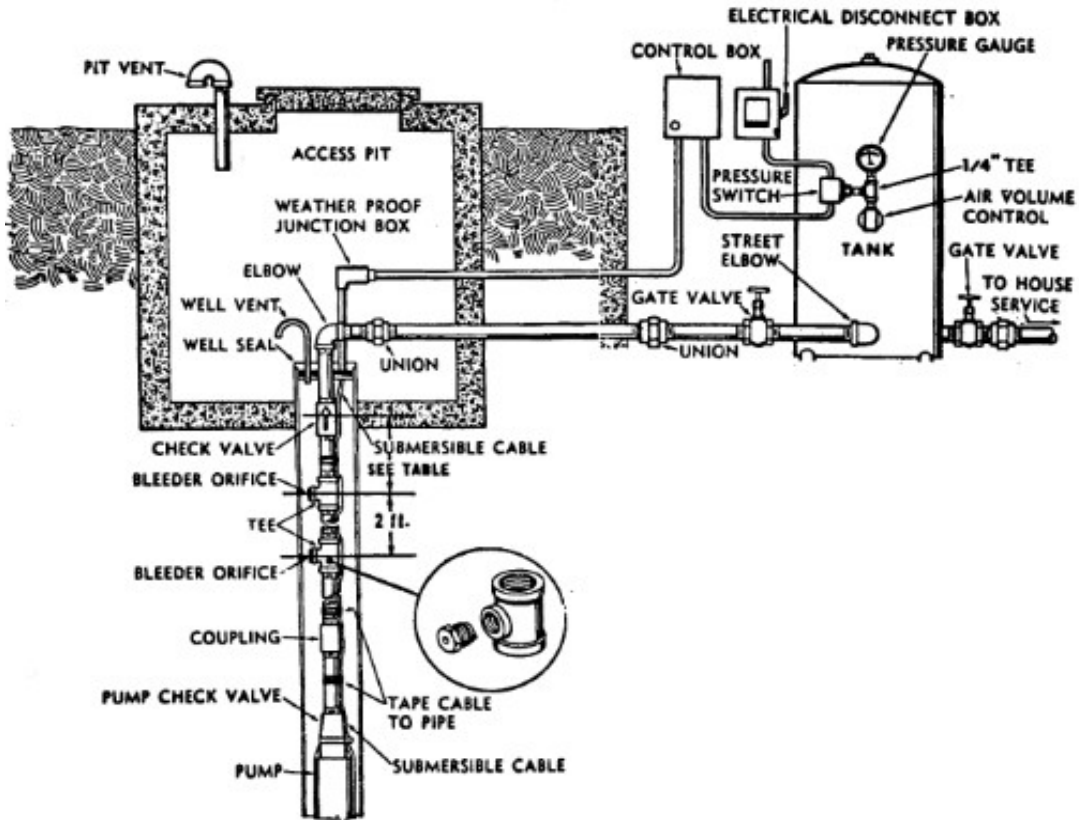
The sketches below show method of attaching lightning
arresters to the submersible motor power line.



Ground All systems to metal well casing, metal drop pipe,
metal ground rod or grounded water pipe.

Consult your local electrical code for wire size.

PRESSURE SYSTEM INSTALLATION



FOR YOUR RECORD

| | | | |
|-----------------------|--------|--------------|------|
| Pump Model No. | | | |
| Pump Serial No. | | | |
| Motor Horsepower | Phase | Volts | |
| Date of Installation: | Month | Day | Year |
| Well Depth: | Feet | Casing Size: | |
| Drop Pipe Size: | Inches | Pipe Set At | Feet |

NOTE: Refer to your State Water Well code for installation regulations within your state.

USEFUL INFORMATION

VOLUME

| | | | | |
|-------------------|----------------------|---------|---|----------------------------|
| | 231 cu.in. | 1 Inch | - | 2.54 centimeters |
| | 0.137 cu. ft. | | | |
| | 3.785 litres | 1 Meter | - | 3.28 feet |
| 1 U.S. Gallon | .00379 cu. meters | | | 39.37 inches |
| | 0.833 Imp. gal. | | | |
| | .0238 42-gal. barrel | 1 Rod | - | 18.5 feet |
| 1 Imperial Gallon | 1.2 U.S. gal. | 1 Mile | - | 5280 ft. (1.61 Kilometers) |
| 1 Cubic Foot | 7.48 U.S. gal. | | | |
| | 0.0283 cu. meter | | | |
| 1 Litre | 0.2642 U.S. gal. | | | |
| 1 Cubic Meter | 35.314 cu. ft. | | | |
| | 264.2 U.S. gal. | | | |
| 1 Acre Foot | 43,560 cu.ft. | | | |
| 1 Acre Inch | 3,630 cu. ft. | | | |
| | 27,100 U.S. gal. | | | |

LENGTH

HORSEPOWER

1 H.P. Equals . . .
 .746 kilowatts or 746 watts
 33,000 ft. lbs. per minute
 550 ft. lbs. per second

WATER HORSEPOWER

$\frac{\text{GPM} \times 8.33 \times \text{Head}}{33,000}$ $\frac{\text{GPM} \times \text{Head}}{3960}$

LABORATORY BHP

$\frac{\text{Head} \times \text{GPM} \times \text{Sp. Gr.}}{3960 \times \text{Eff.}}$

GPM - Gallons per Minute
 Head - Laboratory head (inc. Column Loss)
 Eff. - Pump Only Efficiency

MOTOR INPUT HP

$\frac{\text{Laboratory BHP}}{\text{Motor Eff.}}$
 Total BHP from above
 Motor Eff. from manufacturer

WEIGHT

| | | |
|------------------------|---|-----------|
| 1 U.S. Gallon of Water | - | 8.33 lb. |
| 1 Cubic Foot of Water | - | 62.35 lb. |
| 1 Kilogram or Litre | - | 2.2 lb. |
| 1 Imperial Gallon | - | 10.0 lb. |

CAPACITY

| | |
|--|-----------|
| 1 Cubic Foot Per Second (2d foot) (c.f.s.) | 449 GPM |
| 1 Acre Foot Per Day | 227 GPM |
| 1 Acre Inch Per Hour | 454 GPM |
| 1 cubic Meter Per Minute | 264.2 GPM |
| 1,000,000 Gallons Per Day | 595 GPM |

UNIT EFFICIENCY

$\frac{\text{Water Horsepower}}{\text{Motor Input Horsepower}}$

HEAD

| | | |
|----------------------------------|---|------------------------|
| 1 Pound Per Square Inch (p.s.i.) | - | 2.31 ft. head of water |
| | | 2.04 in. mercury |
| | | 0.07 kg. per sq. cm |
| 1 Foot of Water | - | 0.433 lb. per sq. in. |
| | | .885 in. mercury |
| 1 Inch of Mercury (or vacuum) | - | 1.132 ft. of water |
| 1 Kilogram Per Square Cmi. | - | 14.22 lb. per sq. in. |
| 1 Atmosphere (at sea level) | - | 14.7 lb. per sq. in. |
| | | 34.0 ft. of water |
| | | 10.35 meters of water |
| 1 Meter of Water | - | 3.28 feet of water |

Electric Power

AC - Alternating current power
 DC - Direct current
 E - Volts - Electrical Pressure (similar to head)
 I - Amperes - electrical current (similar to rate of flow)
 W - Watts - Electrical power (similar to head capacity)
 KW - Kilowatts - 1000 watts
 Apparent power - volts x amperes = voltamperes
 Apparent Power - EI
 Useful Power W - P.F.
 Power factor - ratio of useful power to apparent power
 $\frac{W}{EI}$
 Power factor - PF - EI
 KW Hr. - Kilowatt hour
 Single phase power W - E x I x PF
 Three Phase Power W - 1.73 x I x PF
 Where E - Average voltage between phases
 I - Average current in each phase

To FIND CAPACITY OF A TANK OR A CISTERN:

Diameter of Tank In Feet Squared x .7854 x Height of Tank In Feet x 7.48 = Capacity in U.S. Gallon

WIRE - TO - WATER EFFICIENCY SUBMERSIBLE PUMPS

A 75 HP, 460/3/60 Submersible Pump Model SSP9L-3 has been chosen for duty providing 500 GPM at a total head of 480 ft. The installation utilizes 390 feet of #4-3 individual copper submersible cable, a 75 HP Franklin 8" 460/3/60 Submersible Motor, a 3 stage SSP9L Pump with impellers trimmed for the duty condition, and 375 feet of 6" Schedule 40 Column Pipe.

In order to calculate the wire-to-water efficiency (also known as overall or plant efficiency), the following data must be known.

- | | |
|----------------------|---------------------------|
| 1. Pump Efficiency | 5. Field Head |
| 2. Motor Efficiency | 6. Total Head |
| 3. Cable Power Loss | 7. Field Water Horsepower |
| 4. Motor Thrust Loss | 8. Motor Input Horsepower |

From the Pump Performance Curve, the pump efficiency at the duty point of 500 GPM is 83.5% for a 3 stage unit. From the Franklin Motor Performance Curves, the full load motor efficiency is 85.0%, and the full load motor current is 97.0 amps. The cable power loss in horsepower per 100 feet of #4-3 cable carrying 97 amps at 460 volts is 1.20 horsepower, as shown in the Submersible Cable Horsepower Loss Chart. The Cable Power Loss for the 390 feet of cable in this application will be 1.20 x 3.90, or 4.68 HP.

Motor Thrust Loss may be calculated by multiplying the thrust factor of the SSP9L pump by the total head to obtain the total thrust on the motor thrust bearing, or 4.5 x 480 feet = 2160 lbs. From the Franklin Motor Performance Curve, the additional input in watts due to 2160 lbs. thrust is 200 watts, or 0.27 HP.

Field Head may be found by subtracting the total friction losses from the Total Head. For the application, the column friction loss from the Column Pipe Friction Loss Chart is 1.66 feet per 100 feet of pipe, so 1.66 x 3.75 = 6.23 feet of column loss. From the Submersible Surface Plate Friction Loss Chart, the friction loss in a 6" surface elbow is 0.19 feet. From the Check Valve Friction Loss Chart, the loss in a 6" Vertical Check Valve is 2.5 feet at 500 GPM. The total friction loss in this application is then 6.23 feet plus 0.19 feet plus 2.5 feet, or 8.92 feet. The Field Head is 480 feet – 8.92 feet or 471 feet.

We now have all the data required to calculate the wire-to-water efficiency.

$$\begin{aligned}
 \text{Field Water HP} &= (\text{GPM} \times \text{Field Head}) / 3960 \\
 &= (500 \times 471) / 3960 \\
 &= 59.47 \text{ HP}
 \end{aligned}$$

$$\begin{aligned}
 \text{Laboratory HP} &= (\text{GPM} \times \text{Total Head}) / (3960 \times \text{Pump Efficiency}) \\
 &= (500 \times 480) / (3960 \times 0.835) \\
 &= 72.58 \text{ HP}
 \end{aligned}$$

**WIRE - TO - WATER EFFICIENCY
SUBMERSIBLE PUMPS**

$$\begin{aligned}
 \text{Electrical Input} \\
 \text{HP to Motor in} &= (\text{Laboratory HP} + \text{Thrust Loss}) / \text{Motor Efficiency} \\
 \text{Well} &= (72.58 \text{ HP} + 0.27 \text{ HP}) / 0.85 \\
 &= 85.70 \text{ HP}
 \end{aligned}$$

$$\begin{aligned}
 \text{Electrical Input} \\
 \text{HP to Motor at} &= (\text{Lab HP} + \text{Thrust Loss}) / \text{Motor Efficiency} + \text{Cable Loss} \\
 \text{the Surface} &= (72.58 \text{ HP} + 0.27 \text{ HP}) / 0.85 + 4.68 \text{ HP} \\
 &= 90.39 \text{ HP}
 \end{aligned}$$

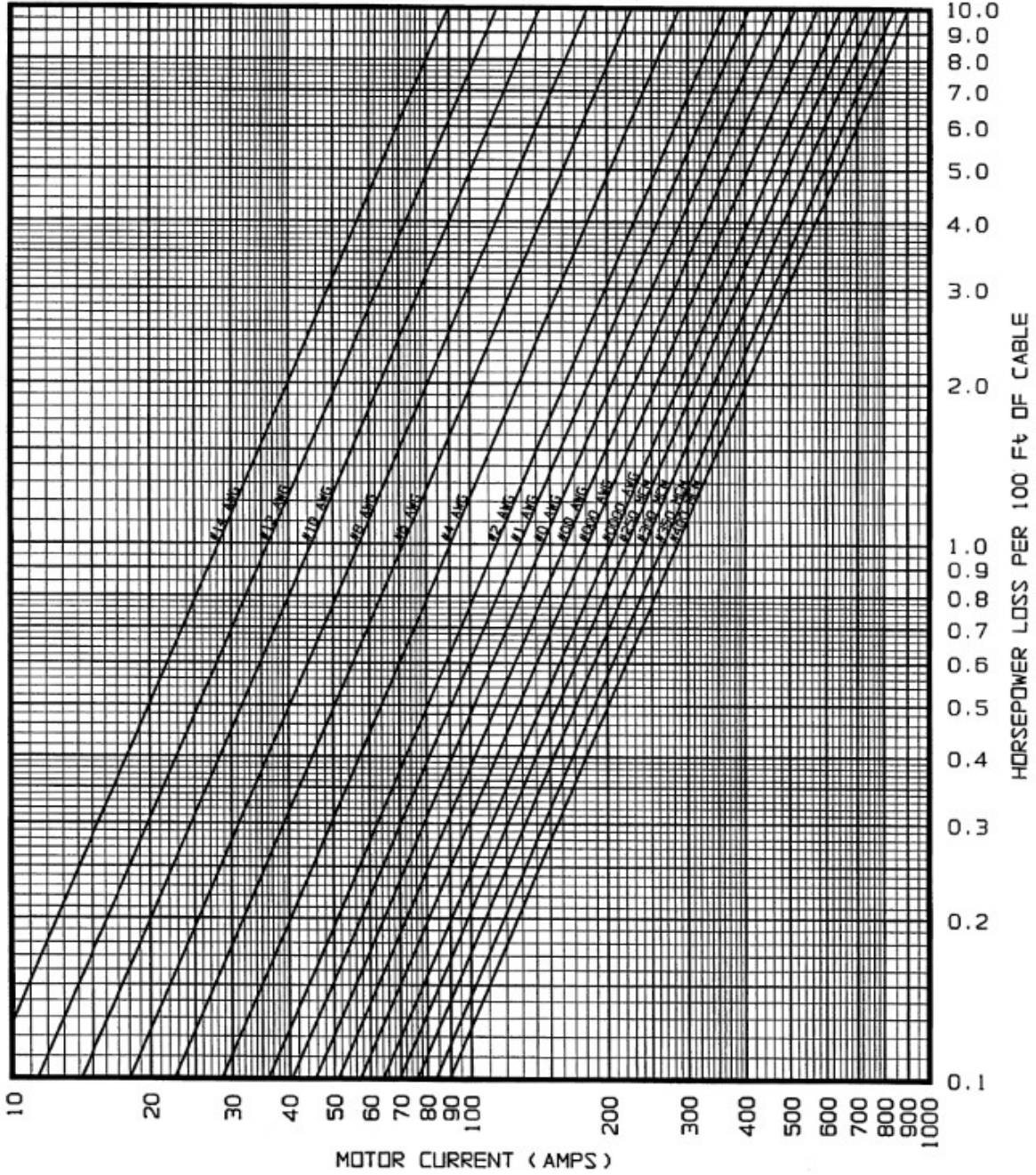
$$\begin{aligned}
 \text{Wire-to-Water} \\
 \text{Efficiency} &= \text{Field Water HP} / \text{Motor Input HP at the Surface} \\
 &= 59.47 \text{ HP} / 90.39 \text{ HP} \\
 &= 65.79 \%
 \end{aligned}$$

Once the Wire-to-Water Efficiency has been calculated, KW hours per 1000 gallons pumped can be figured by the formula:

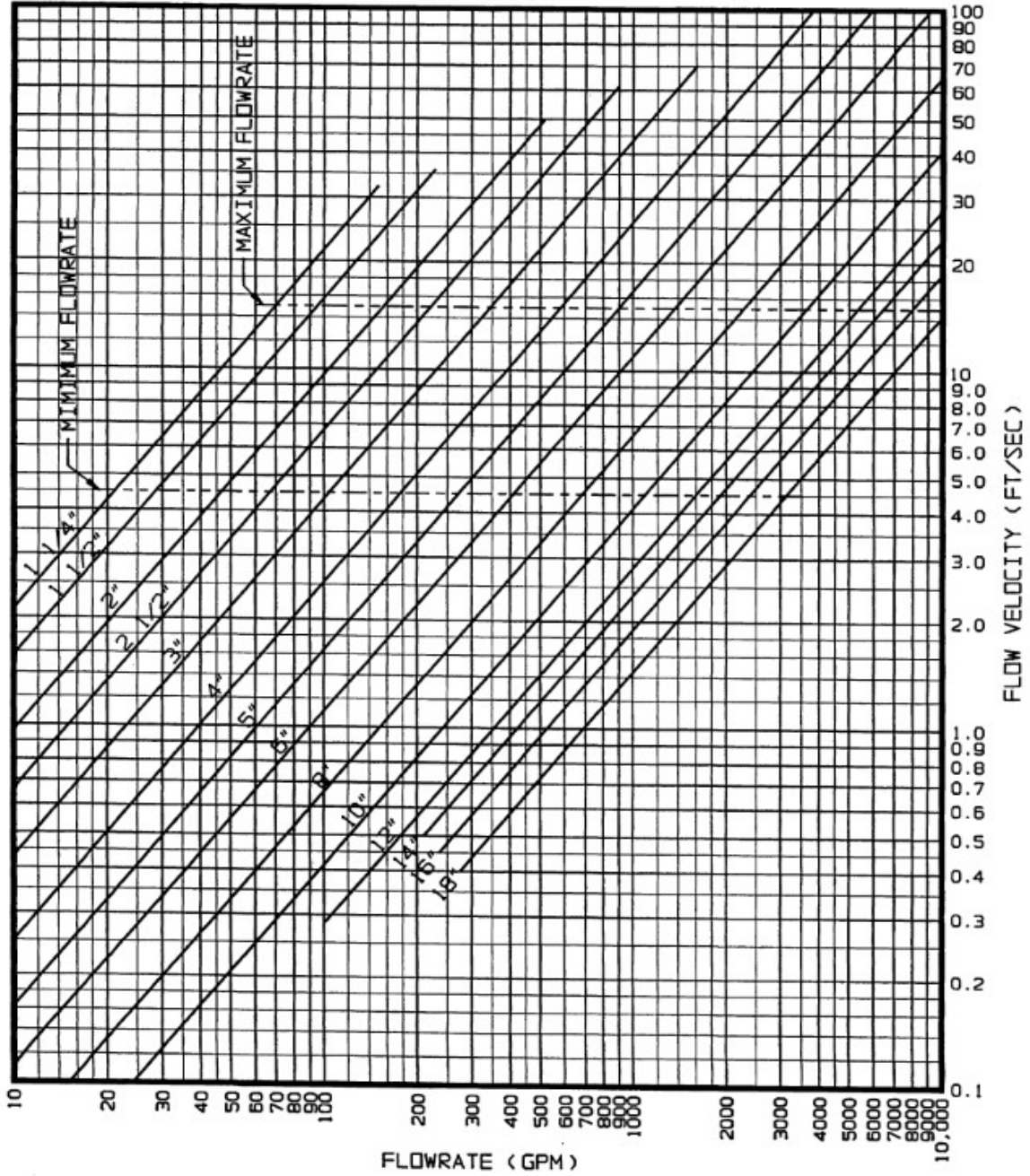
$$\begin{aligned}
 \text{KW hours per} \\
 \text{1000 gallons} &= (\text{Field Head} \times 0.00314) / \text{Wire-to-Water Efficiency} \\
 \text{pumped} &= (471 \times 0.00314) / 0.6579 \\
 &= 2.248 \text{ KW hours per 1000 gallons pumped}
 \end{aligned}$$

Total cost per 1000 gallons pumped may be calculated by multiplying the cost per KW hour (from your Utility or Power Company) by the above number.

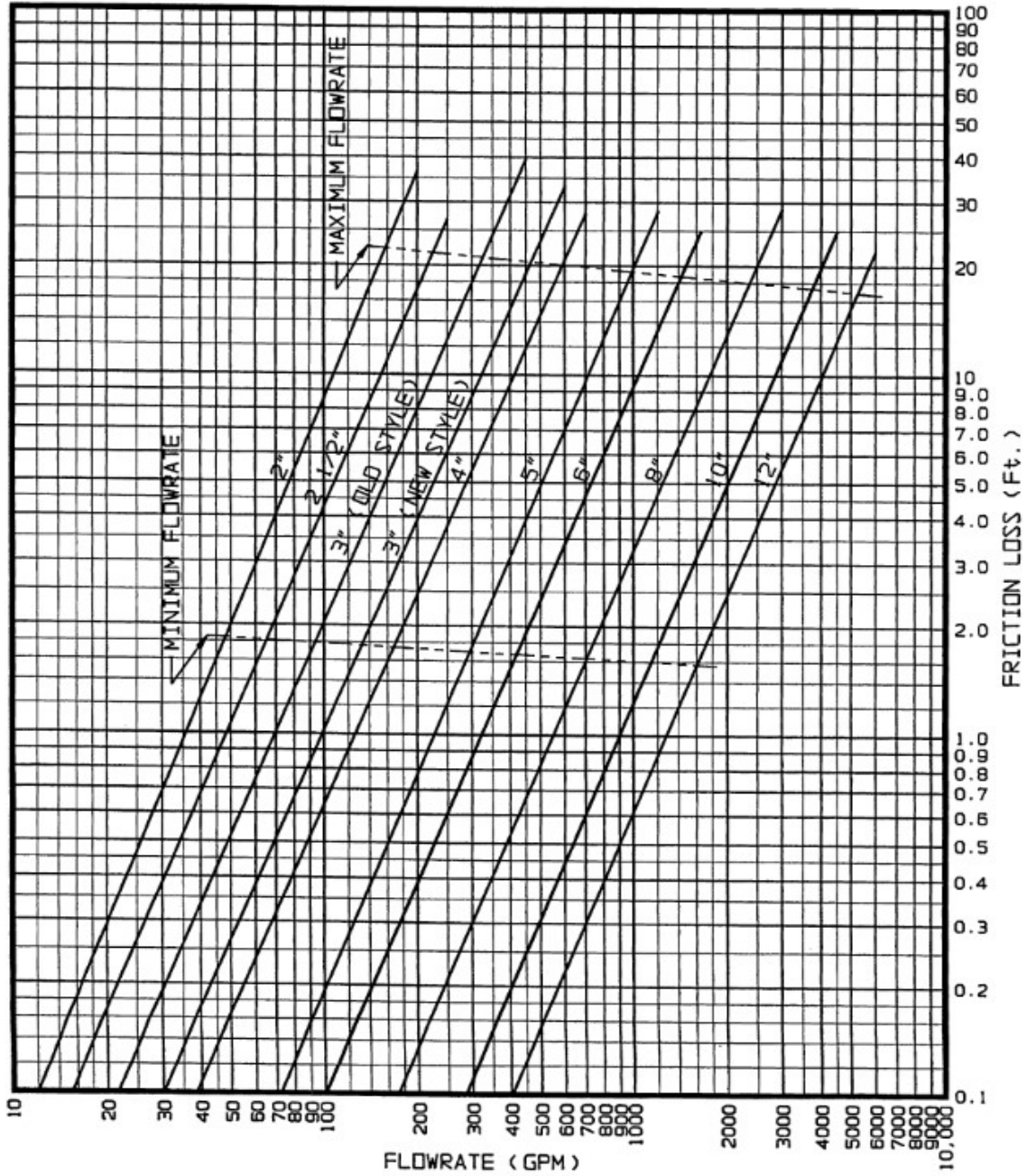
SUBMERSIBLE CABLE
HORSEPOWER LOSS CHART



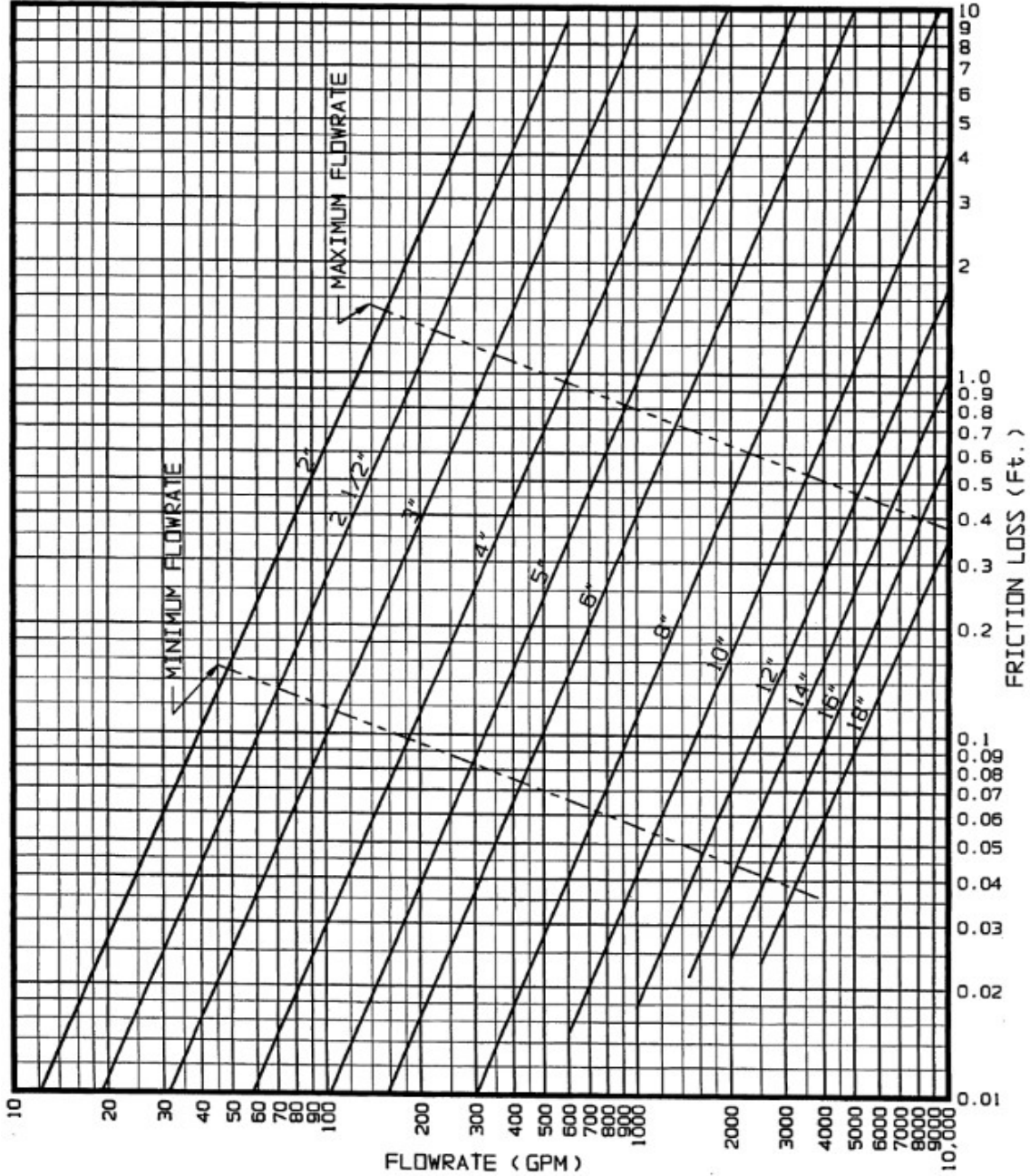
SUBMERSIBLE COLUMN PIPE
VELOCITY CHART



SUBMERSIBLE CHECK VALVE
FRICTION LOSS CHART



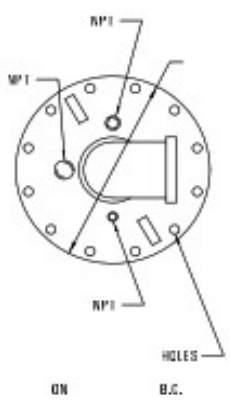
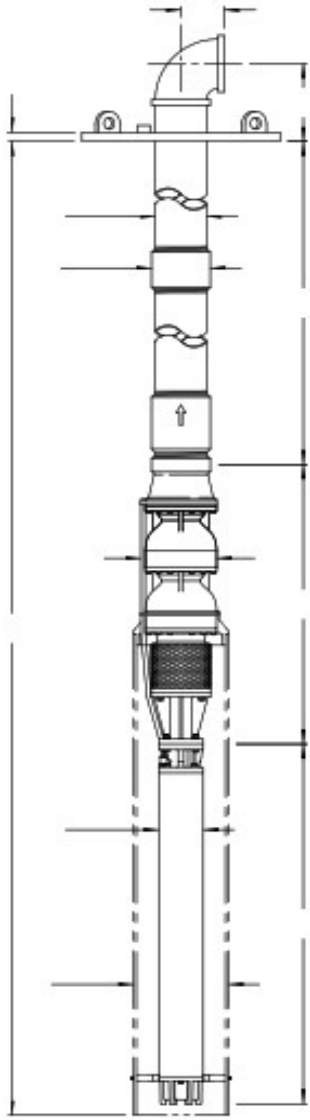
SUBMERSIBLE SURFACE PLATE
FRICTION LOSS CHART



SUBMERSIBLE PUMP
WITH THREADED COLUMN PIPE

DATE _____ DISTRIBUTOR _____

JOB _____ GPM _____ TDH _____



DISCHARGE HEAD _____

DISCHARGE FLANGE _____

FOUNDATION PLATE _____

COLUMN ASSEMBLY _____

CHECK VALVE _____

CABLE _____

BOWL MODEL # _____

IMPELLER DIAMETER _____

IMPELLER TYPE _____

SPECIAL _____

MOTOR MAKE _____

HP _____ SIZE _____

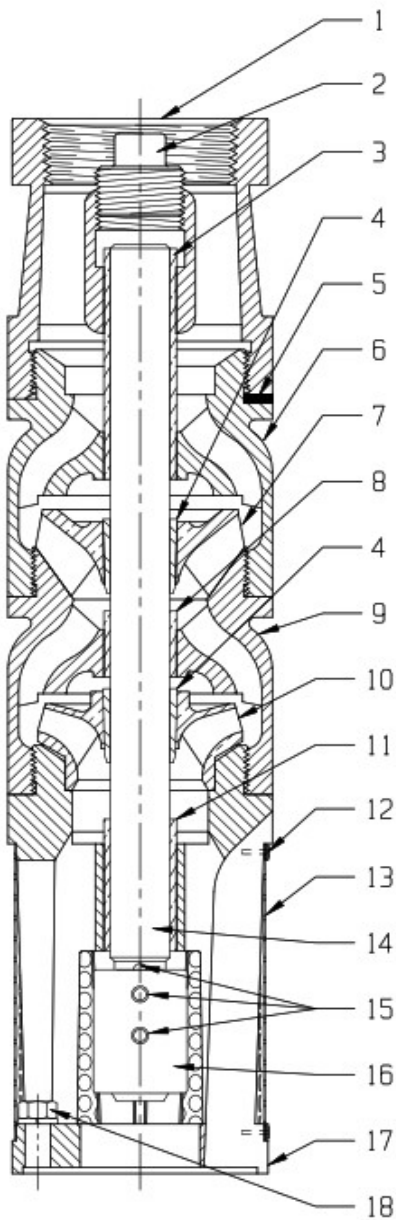
R.P.M. _____

PHASE _____ HERTZ _____

VOLTAGE _____

OTHER _____

OTHER _____



ORDER # _____ QUOTE # _____

CUSTOMER _____

JOB _____ DATE _____

PUMP END MODEL _____ STAGES _____

SERIAL # _____ TRIM _____

BOWLSHAFT SIZE _____ COUPLING _____

DISCHARGE SIZE _____ BOWL DIAMETER _____

MOTOR _____ SIZE _____

RPM _____ PHASE _____ VOLTAGE _____

CYCLE _____ OTHER _____

| ITEM # | DESCRIPTION | MATERIALS | |
|--------|--------------------------------|---------------------------------|-------|
| | | STANDARD | OTHER |
| 1 | DISCHARGE BOWL | CAST IRON CLASS 30 | |
| 2 | PIPE PLUG | COMMERCIAL | |
| 3 | DISCHARGE BUSHING | BRONZE ASTM B-505-89835 | |
| 4 | IMPELLER COLLET | STEEL C1 018 | |
| 5 | BOWL PIN (When Req'd) | BRASS | |
| 6 | TOP BOWL | CAST IRON CLASS 30 | |
| 7 | IMPELLER - OPEN | BRONZE ASTM B-584-89833 | |
| 8 | INTERMEDIATE BOWL BEARING | BRONZE RUBBER COMBINATION | |
| 9 | INTERMEDIATE BOWL | CAST IRON CLASS 30 | |
| 10 | IMPELLER - ENCLOSED | BRONZE ASTM B-584-89833 | |
| 11 | MOTOR BRACKET BUSHING | BRONZE ASTM B-505-89835 | |
| 12 | SCREEN RIVETS | STAINLESS | |
| 13 | SCREEN | STAINLESS | |
| 14 | BOWLSHAFT | STAINLESS TYPE 416 | |
| 15 | MOTOR COUPLING KEY & SETSCREWS | STAINLESS | |
| 16 | MOTOR COUPLING | STAINLESS | |
| 17 | MOTOR BRACKET | CAST IRON CLASS 30 | |
| 18 | MOTOR NUTS & LOCKWASHERS | STAINLESS | |

REFERENCE CURVE _____

REFERENCE DRAWINGS _____

ORDER # _____ QUOTE # _____

CUSTOMER _____

JOB _____ DATE _____

PUMP END MODEL _____ STAGES _____

SERIAL # _____ TRIM _____

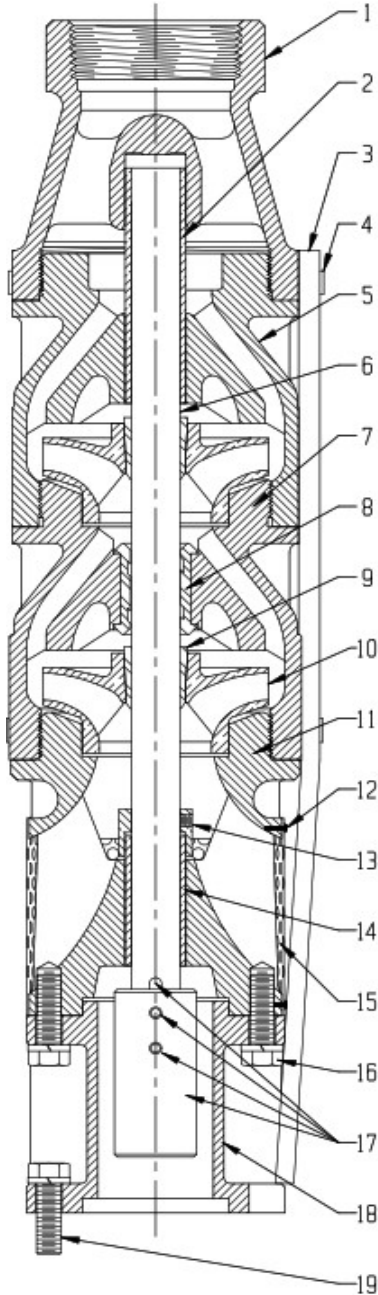
BOWLSHAFT SIZE _____ COUPLING _____

DISCHARGE SIZE _____ BOWL DIAMETER _____

MOTOR _____ SIZE _____

RPM _____ PHASE _____ VOLTAGE _____

CYCLE _____ OTHER _____



| ITEM # | DESCRIPTION | MATERIALS | |
|--------|---------------------------------|---------------------------------|-------|
| | | STANDARD | OTHER |
| 1 | DISCHARGE BOWL | CAST IRON CLASS 30 | |
| 2 | DISCHARGE BUSHING | BRONZE ASTM B-505-89835 | |
| 3 | CABLE GUARD | STAINLESS | |
| 4 | CABLE GUARD BAND | STAINLESS | |
| 5 | TOP BOWL | CAST IRON CLASS 30 | |
| 6 | BOWLSHAFT | STAINLESS TYPE 416 | |
| 7 | INTERMEDIATE BOWL | CAST IRON CLASS 30 | |
| 8 | INTERMEDIATE BOWL BEARING | BRONZE RUBBER COMBINATION | |
| 9 | IMPELLER COLLET | STEEL C1018 | |
| 10 | IMPELLER ENCLOSED OPEN | BRONZE ASTM B-584-89833 | |
| 11 | MOTOR BRACKET | CAST IRON CLASS 30 | |
| 12 | SCREEN RIVETS | STAINLESS | |
| 13 | SAND COLLAR | BRONZE ASTM B-505-89835 | |
| 14 | MOTOR BRACKET BUSHING | BRONZE ASTM B-505-89835 | |
| 15 | SCREEN | STAINLESS | |
| 16 | MOTOR BRACKET CAPSCREWS | STAINLESS | |
| 17 | MOTOR COUPLING, KEY & SETSCREWS | STAINLESS | |
| 18 | MOTOR ADAPTER | CAST IRON CLASS 30 | |
| 19 | MOTOR BOLTS & LOCKWASHERS | STAINLESS | |

REFERENCE CURVE _____

REFERENCE DRAWINGS _____

ORDER # _____ QUOTE # _____

CUSTOMER _____

JOB _____ DATE _____

PUMP END MODEL _____ STAGES _____

SERIAL # _____ TRIM _____

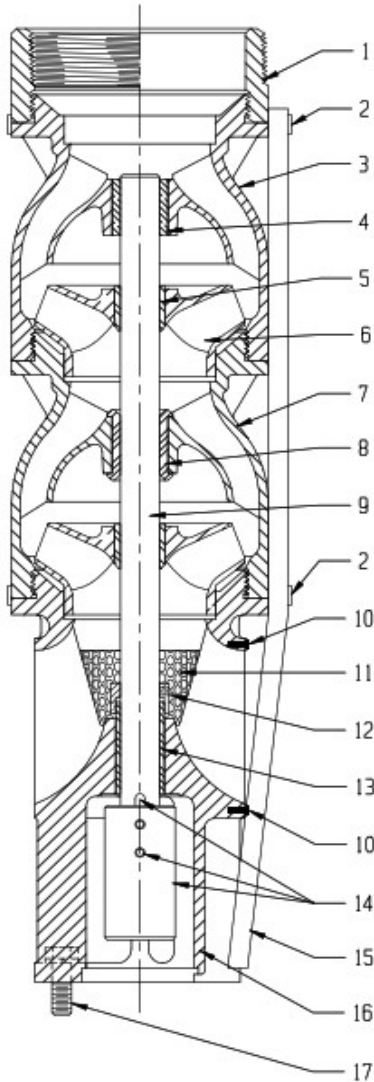
BOWLSHAFT SIZE _____ COUPLING _____

DISCHARGE SIZE _____ BOWL DIAMETER _____

MOTOR _____ SIZE _____

RPM _____ PHASE _____ VOLTAGE _____

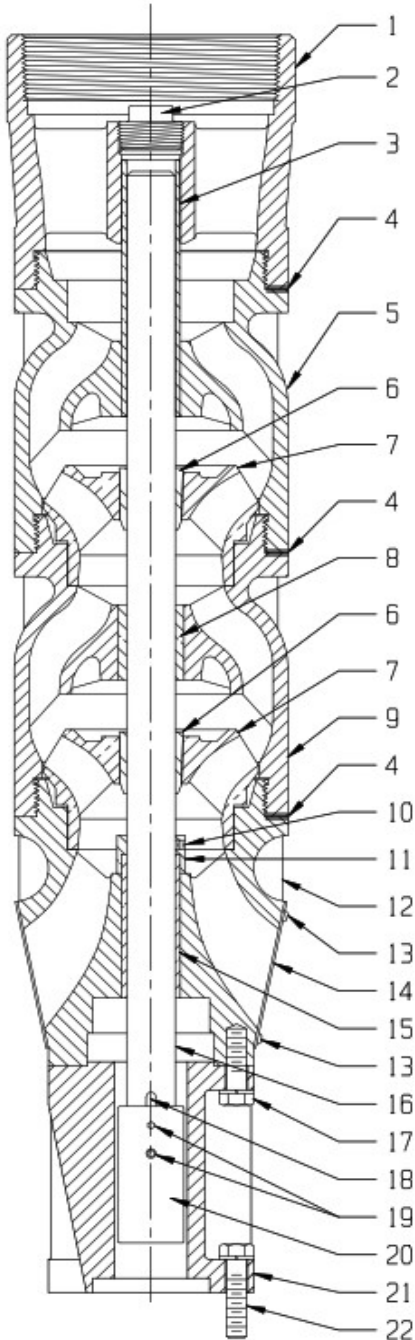
CYCLE _____ OTHER _____



| ITEM # | DESCRIPTION | MATERIALS | |
|--------|---------------------------------|---------------------------|-------|
| | | STANDARD | OTHER |
| 1 | DISCHARGE ADAPTER | CAST IRON CLASS 30 | |
| 2 | CABLE GUARD BAND | STAINLESS | |
| 3 | TOP BOWL | CAST IRON CLASS 30 | |
| 4 | TOP BOWL BEARING | BRONZE ASTM B-505-89835 | |
| 5 | IMPELLER COLLET | STEEL C1018 | |
| 6 | IMPELLER-ENCLOSED | BRONZE ASTM B-584-89833 | |
| 7 | INTERMEDIATE BOWL | CAST IRON CLASS 30 | |
| 8 | INTERMEDIATE BOWL BEARING | BRONZE RUBBER COMBINATION | |
| 9 | BOWLSHAFT | STAINLESS TYPE 416 | |
| 10 | SCREEN RIVETS | STAINLESS | |
| 11 | SCREEN | STAINLESS | |
| 12 | SAND COLLAR | BRONZE ASTM B-505-89835 | |
| 13 | MOTOR BRACKET BUSHING | BRONZE ASTM B-505-89835 | |
| 14 | MOTOR COUPLING, KEY & SETSCREWS | STAINLESS | |
| 15 | CABLE GUARD | STAINLESS | |
| 16 | MOTOR BRACKET | CAST IRON CLASS 30 | |
| 17 | MOTOR BOLTS & LOCKWASHERS | STAINLESS | |

REFERENCE CURVE _____

REFERENCE DRAWINGS _____



ORDER # _____ QUOTE # _____

CUSTOMER _____

JOB _____ DATE _____

PUMP END MODEL _____ STAGES _____

SERIAL # _____ TRIM _____

BOWLSHAFT SIZE _____ COUPLING _____

DISCHARGE SIZE _____ BOWL DIAMETER _____

MOTOR _____ SIZE _____

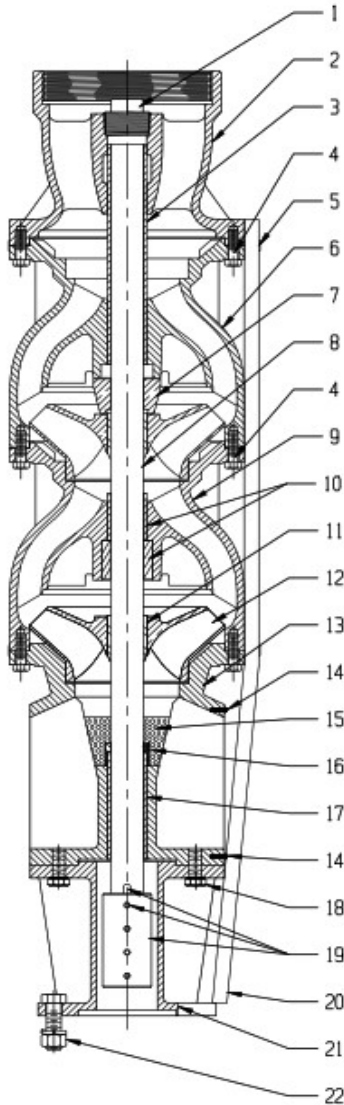
RPM _____ PHASE _____ VOLTAGE _____

CYCLE _____ OTHER _____

| ITEM # | DESCRIPTION | MATERIALS | |
|--------|---------------------------|---------------------------------|-------|
| | | STANDARD | OTHER |
| 1 | DISCHARGE BOWL | CAST IRON CLASS 30 | |
| 2 | PIPE PLUG | COMMERCIAL | |
| 3 | DISCHARGE BUSHING | BRONZE ASTM B-505-89835 | |
| 4 | BOWL PIN | BRASS | |
| 5 | TOP BOWL | CAST IRON CLASS 30 | |
| 6 | IMPELLER COLLET | STEEL C1018 | |
| 7 | IMPELLER-ENCLOSED | BRONZE ASTM B-584-89833 | |
| 8 | INTERMEDIATE BOWL BEARING | BRONZE RUBBER COMBINATION | |
| 9 | INTERMEDIATE BOWL | CAST IRON CLASS 30 | |
| 10 | SAND COLLAR SETSCREWS | STAINLESS | |
| 11 | SAND COLLAR | BRONZE ASTM B-505-89835 | |
| 12 | MOTOR BRACKET | CAST IRON CLASS 30 | |
| 13 | SCREEN RIVETS | STAINLESS | |
| 14 | SCREEN | STAINLESS | |
| 15 | MOTOR BRACKET BUSHING | BRONZE ASTM B-505-89835 | |
| 16 | BOWLSHAFT | STAINLESS TYPE 416 | |
| 17 | MOTOR BRACKET CAPSCREWS | STAINLESS | |
| 18 | COUPLING KEY | STAINLESS | |
| 19 | COUPLING SETSCREWS | STAINLESS | |
| 20 | MOTOR COUPLING | STAINLESS | |
| 21 | MOTOR ADAPTOR | CAST IRON CLASS 30 | |
| 22 | MOTOR BOLTS & LOCKWASHERS | STAINLESS | |

REFERENCE CURVE _____

REFERENCE DRAWINGS _____



ORDER # _____ QUOTE # _____

CUSTOMER _____

JOB _____ DATE _____

PUMP END MODEL _____ STAGES _____

SERIAL # _____ TRIM _____

BOWL/SHAFT SIZE _____ COUPLING _____

DISCHARGE SIZE _____ BOWL DIAMETER _____

MOTOR _____ SIZE _____

RPM _____ PHASE _____ VOLTAGE _____

CYCLE _____ OTHER _____

| ITEM # | DESCRIPTION | MATERIALS | |
|--------|-------------------------------------|---------------------------------|-------|
| | | STANDARD | OTHER |
| 1 | PIPE PLUG | COMMERCIAL | |
| 2 | DISCHARGE BOWL | CAST IRON CLASS 30 | |
| 3 | DISCHARGE BUSHING | BRONZE ASTM B-505-89835 | |
| 4 | CAPSCREWS | STAINLESS | |
| 5 | CABLE GUARD BAND | STAINLESS | |
| 6 | TOP BOWL | CAST IRON CLASS 30 | |
| 7 | UPTHRUST COLLAR | BRONZE ASTM B-505-89835 | |
| 8 | BOWL/SHAFT | STAINLESS TYPE 416 | |
| 9 | INTERMEDIATE BOWL | CAST IRON CLASS 30 | |
| 10 | INTERMEDIATE BOWL BEARING | BRONZE RUBBER COMBINATION | |
| 11 | IMPELLER COLLET | STEEL C1018 | |
| 12 | IMPELLER ENCLOSED OPEN | BRONZE ASTM B-584-89833 | |
| 13 | MOTOR BRACKET | CAST IRON CLASS 30 | |
| 14 | SCREEN RIVETS | STAINLESS | |
| 15 | SCREEN | STAINLESS | |
| 16 | SAND COLLAR | BRONZE ASTM B-505-89835 | |
| 17 | MOTOR BRACKET BUSHING | BRONZE ASTM B-505-89835 | |
| 18 | MOTOR BRACKET CAPSCREWS | STAINLESS | |
| 19 | MOTOR COUPLING, KEY & SET SCREWS | STAINLESS | |
| 20 | CABLE GUARD | STAINLESS | |
| 21 | MOTOR ADAPTOR | CAST IRON CLASS 30 | |
| 22 | MOTOR BOLTS & LOCKWASHERS | STAINLESS | |

REFERENCE CURVE _____

REFERENCE DRAWINGS _____