

# VERTICAL MULTI-STAGE PUMPS

VR SERIES - 60 HZ

**FPS**

## FEATURES

- All 316 SS hydraulic components for superior durability, efficiency, and performance over a wide variety of applications
- Rugged NEMA motor mounting with oversized ball bearings ensure long operating life in the toughest jobs. Heavy-duty motor bearing not required
- Silicon Carbide/Carbon/EPDM/SS mechanical seal for superior sealing
- In-line suction and discharge with round ANSI flanges fit widest range of applications and provide convenient, compact installation
- NEMA, ODP, TEFC, 1-ph or 3-ph premium efficiency available

## SPECIFICATIONS

- Standard 316 SS hydraulics
- Up to 600 gpm, 750' tdh / 140 m<sup>3</sup>/h, 23 bar flow and head capacities
- 360 psi (230 psi oval flange) / 26 bar (16 bar oval flange) maximum working pressure
- -15 °C to 120 °C / 5 °F to 250 °F liquid temperature range
- Clockwise rotation
- Round ANSI flanged discharge / suction ports; available options for oval / Victaulic® connections

## APPLICATIONS

### Water Supply and Pressure Boosting

- Pressure boosting in buildings, hotels, residences
- Booster stations
- Pump packages

### Water Treatment

- Filtration systems
- Reverse osmosis systems

### Light Industry

- Commercial washers
- Firefighting system pumps
- Car wash systems

### Irrigation and Agriculture

- Drip irrigation
- Sprinkler irrigation

### Heating, Ventilation, and Air Conditioning (HVAC)

- Cooling towers
- Temperature control
- Refrigeration
- Heating systems
- Boiler feed
- Water recirculation



CLASSIFIED  
UL  
WATER QUALITY  
MECHANICAL DEVICE  
NSF/ANSI 61 & 372  
COLD WATER GR21



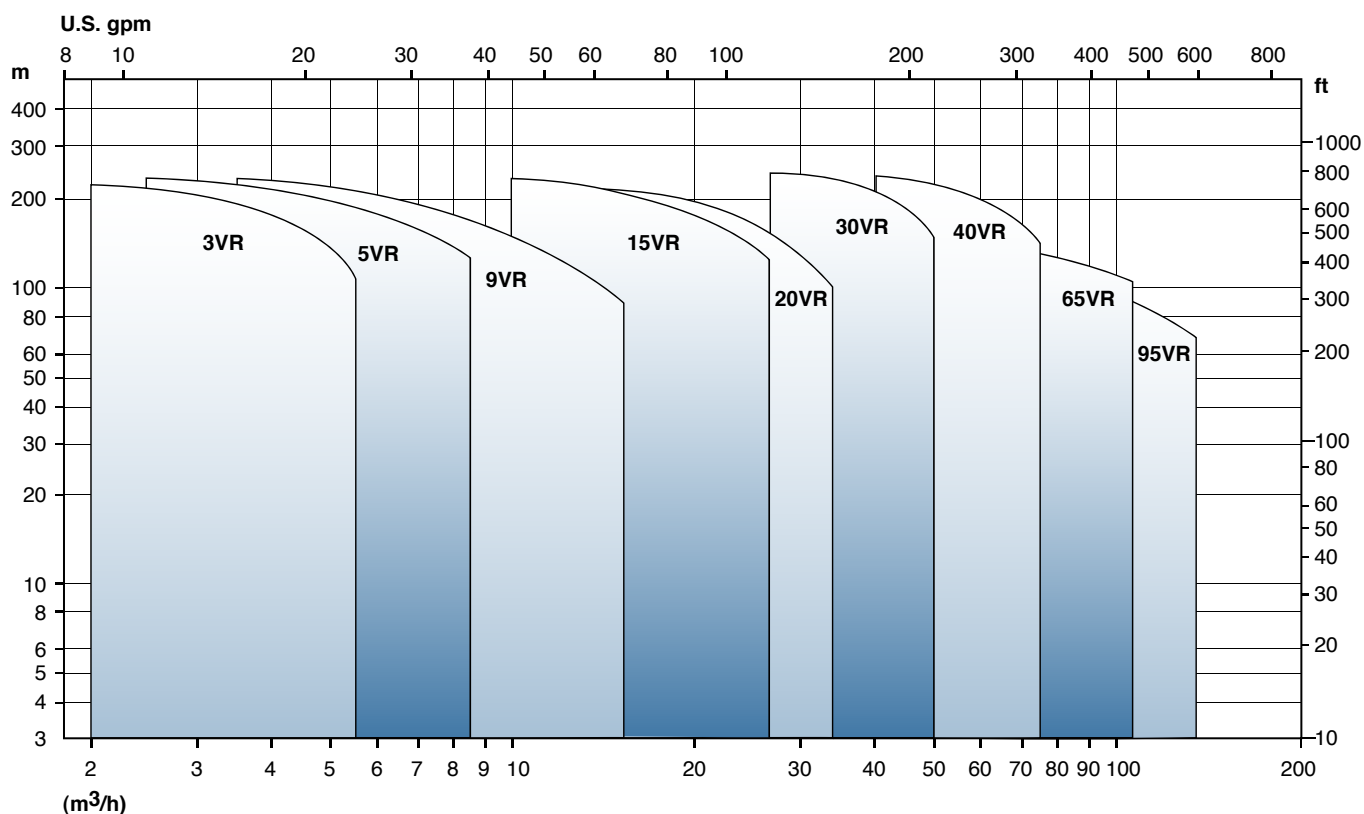
**Franklin Electric**

# VERTICAL MULTI-STAGE PUMPS

VR SERIES - 60 HZ



## 60 HZ FAMILY CURVE



## MAXIMUM WORKING PRESSURE

| Models              | Maximum Working Pressure (bar) |      |      |       |       |       |       |       |       |
|---------------------|--------------------------------|------|------|-------|-------|-------|-------|-------|-------|
|                     | 3 VR                           | 5 VR | 9 VR | 15 VR | 20 VR | 30 VR | 45 VR | 65 VR | 95 VR |
| T version (oval)    | 16                             | 16   | 16   | 16    | 16    |       |       |       |       |
| F, V, and C version | 26                             | 26   | 26   | 26    | 26    |       |       |       |       |
| F version (PN16)    |                                |      |      |       |       | 16    | 16    | 16    | 16    |
| F version (PN25/40) |                                |      |      |       |       | 32    | 32    | 25    | 25    |

NOTE: The inlet pressure of the pump plus the pressure of the water inside the pump cannot exceed the maximum working pressure.

# VERTICAL MULTI-STAGE PUMPS

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## VR MODEL NOMENCLATURE

Example Product Description/Order Number

| Code for Pump End |    |    |    |   |   |   |   | Code for Motor                                                                                                                                                                                                                                                                                              |   |   |   |   |
|-------------------|----|----|----|---|---|---|---|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|---|---|
| 30                | VR | 03 | 2A | G | F | 1 | A | -                                                                                                                                                                                                                                                                                                           | K | 5 | D | 4 |
|                   |    |    |    |   |   |   |   | <b>Phase/Voltage</b><br>1 = 1Ø - 115/230 V      6 = 1Ø - 220 V<br>2 = 1Ø - 230 V          7 = 3Ø - 220 V<br>3 = 3Ø - 230/460 V     8 = 3Ø - 380/415 V<br>4 = 3Ø - 460 V          9 = 3Ø - 415 V<br>5 = 3Ø - 575 V                                                                                           |   |   |   |   |
|                   |    |    |    |   |   |   |   | <b>Enclosure Type</b><br>D = ODP                    T = TEFC<br>P = Premium ODP        E = Premium TEFC                                                                                                                                                                                                     |   |   |   |   |
|                   |    |    |    |   |   |   |   | <b>Hertz</b><br>5 = 50                    6 = 60                                                                                                                                                                                                                                                            |   |   |   |   |
|                   |    |    |    |   |   |   |   | <b>HP/kW Rating</b><br>B = 0.75/0.55      H = 7.5/5.5      N = 30/22<br>C = 1/0.75          J = 10/7.5      P = 40/30<br>D = 1.5/1.1        K = 15/11      R = 50/37<br>E = 2/1.5          L = 20/15      S = 60/45<br>F = 3/2.2          M = 25/18.5    T = 75/55<br>G = 5/3.7          PE = Pump End Only |   |   |   |   |
|                   |    |    |    |   |   |   |   | <b>Motor Flange</b><br>A = NEMA                B = IEC                                                                                                                                                                                                                                                      |   |   |   |   |
|                   |    |    |    |   |   |   |   | <b>Seal Type</b><br>1 = Carbon/SiC EPDM<br>2 = SiC/SiC EPDM<br>3 = Si/SiC FKM<br>4 = Carbon/SiC FKM                                                                                                                                                                                                         |   |   |   |   |
|                   |    |    |    |   |   |   |   | <b>Connection Type</b><br>F = Round Flange<br>V = Victaulic®<br>T = Oval Flange                                                                                                                                                                                                                             |   |   |   |   |
|                   |    |    |    |   |   |   |   | <b>Product Material</b><br>G = CI/316SS      N = 316SS                                                                                                                                                                                                                                                      |   |   |   |   |
|                   |    |    |    |   |   |   |   | <b>Reduced impeller trim type</b><br>00 = No Trim<br>1A = Trim (30, 45, 65, and 95 only)<br>2A = Trim (30, 45, 65, and 95 only)                                                                                                                                                                             |   |   |   |   |
|                   |    |    |    |   |   |   |   | <b>Total number of stages (2 characters)</b>                                                                                                                                                                                                                                                                |   |   |   |   |
|                   |    |    |    |   |   |   |   | <b>Pump Series</b><br>VR - VR Series                                                                                                                                                                                                                                                                        |   |   |   |   |
|                   |    |    |    |   |   |   |   | <b>Nominal Flow</b><br>03 = 16 gpm      30 = 150 gpm<br>05 = 26 gpm      40 = 240 gpm<br>09 = 50 gpm      65 = 350 gpm<br>15 = 80 gpm      95 = 500 gpm<br>20 = 100 gpm                                                                                                                                     |   |   |   |   |

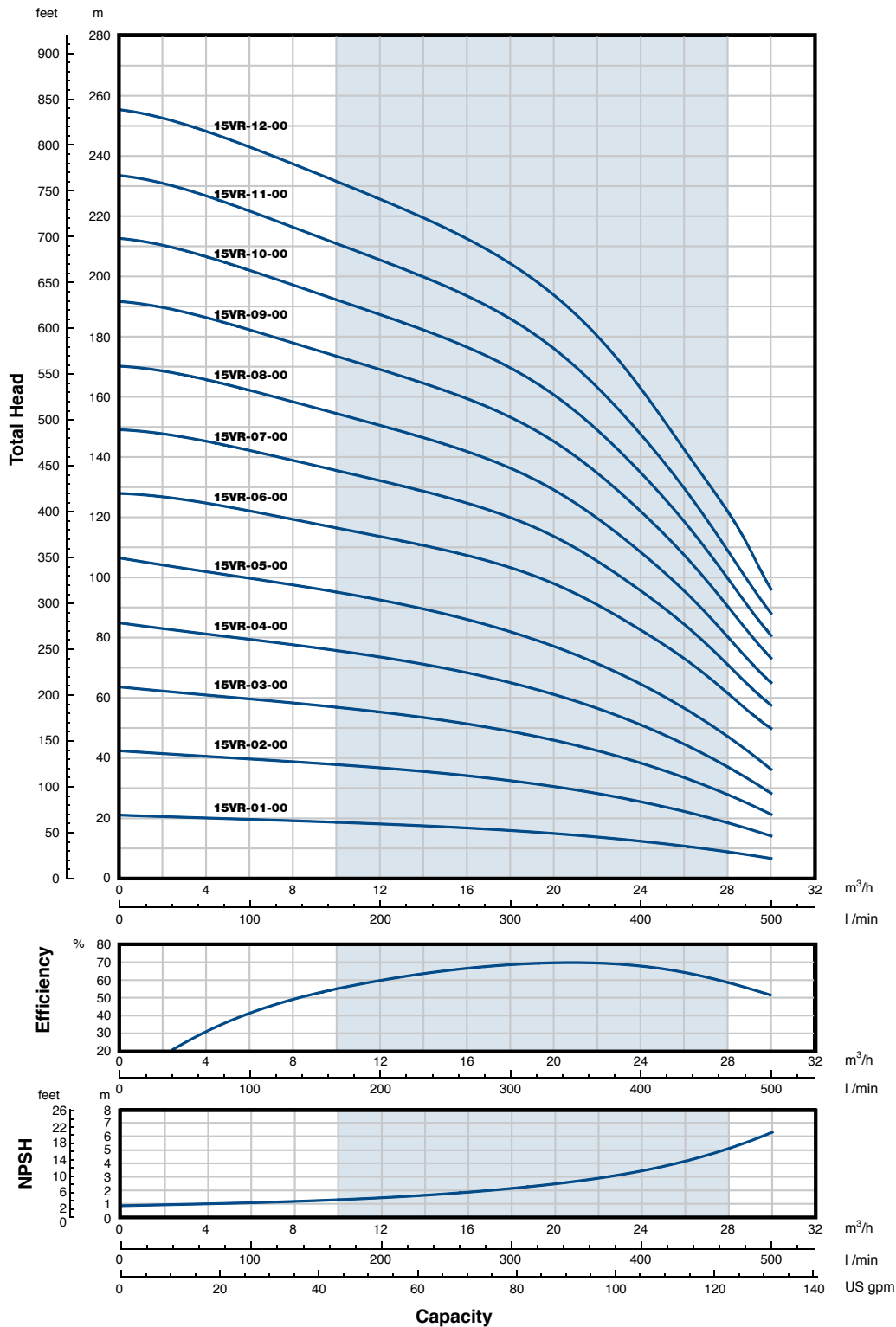
# VERTICAL MULTI-STAGE PUMPS

VR SERIES - 60 HZ



## PERFORMANCE CURVE

15VR 60 HZ



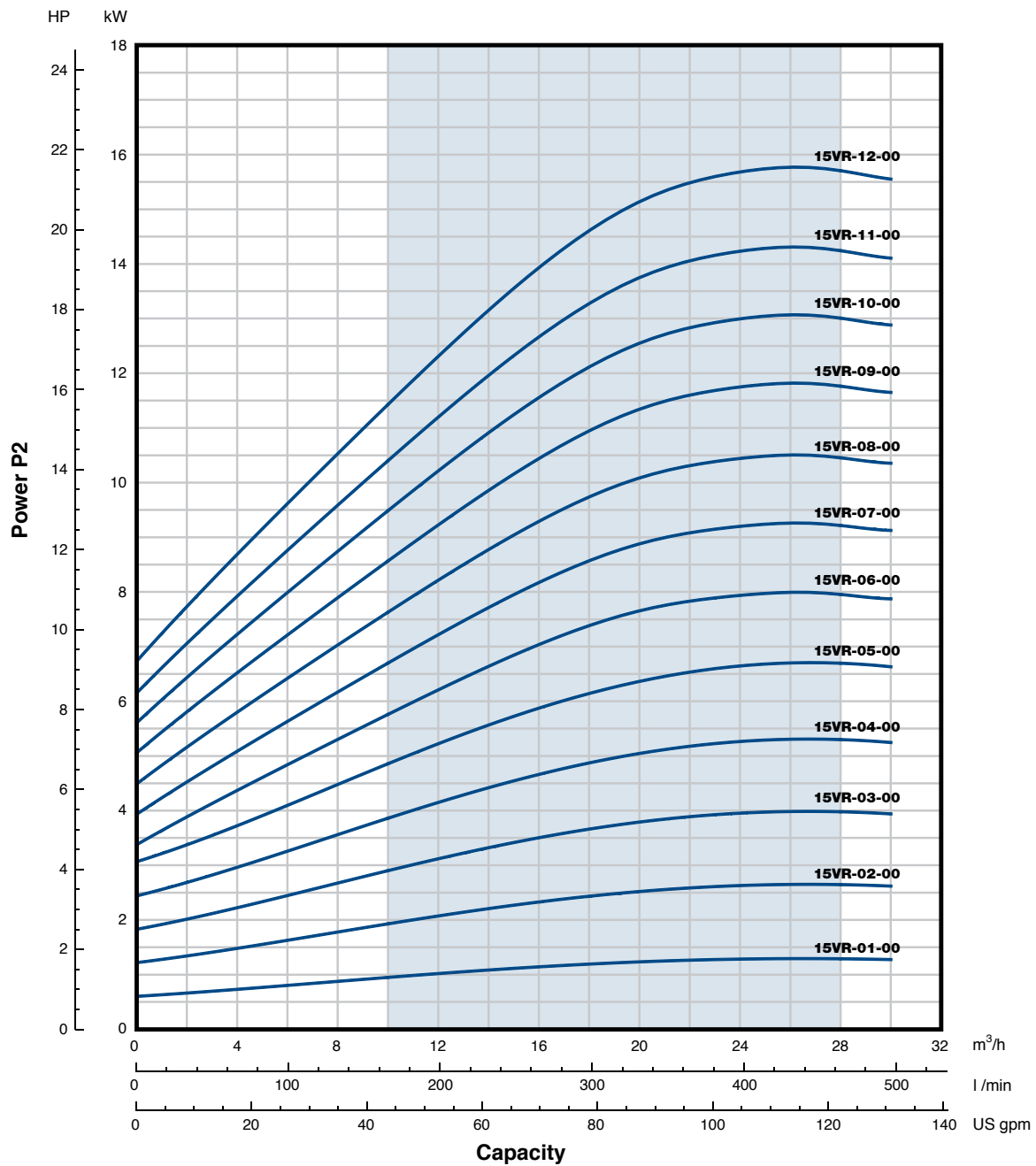
# VERTICAL MULTI-STAGE PUMPS

VR SERIES - 60 HZ



## POWER CURVE

15VR 60 HZ



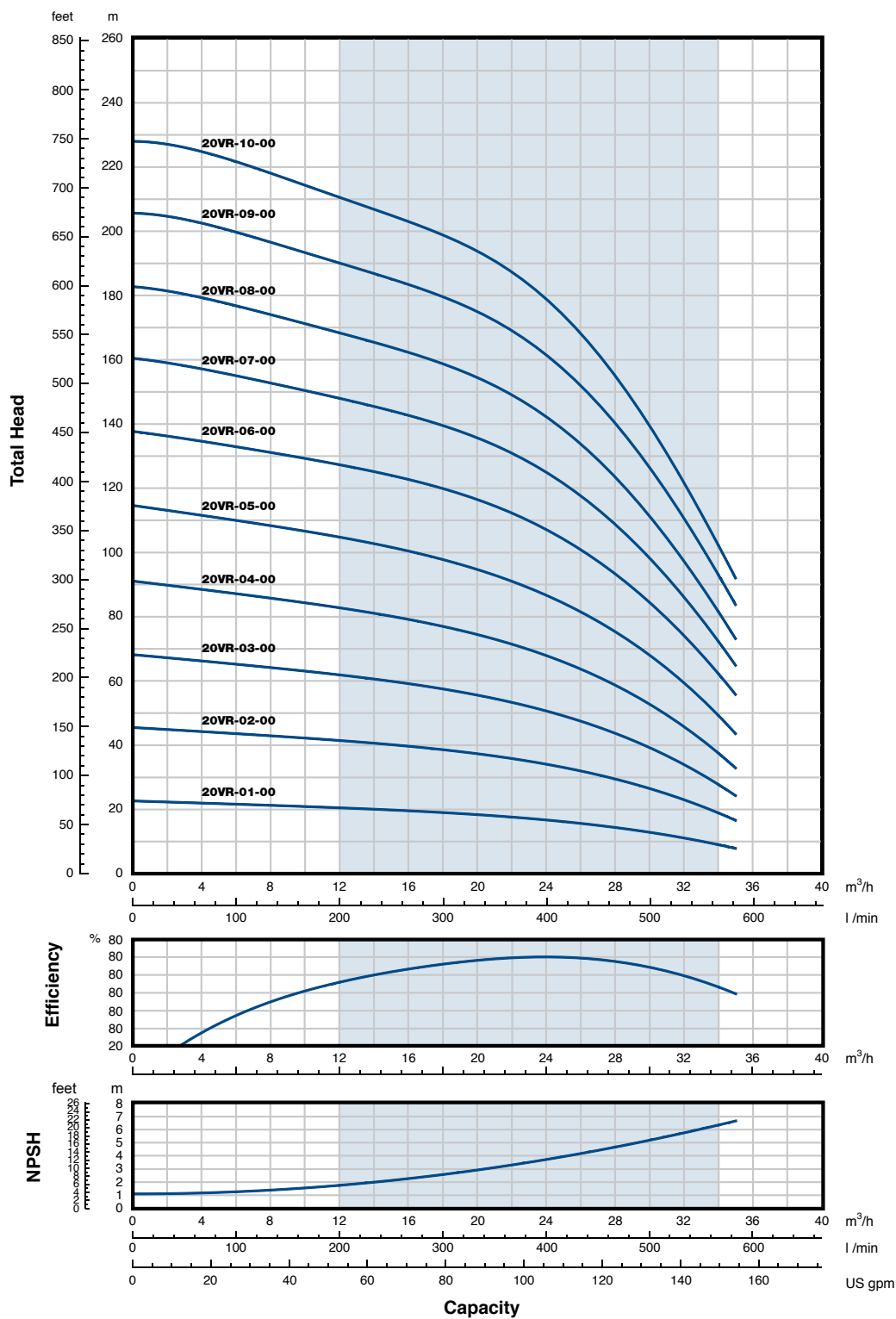
# VERTICAL MULTI-STAGE PUMPS

VR SERIES - 60 HZ



## PERFORMANCE CURVE

20VR 60 HZ



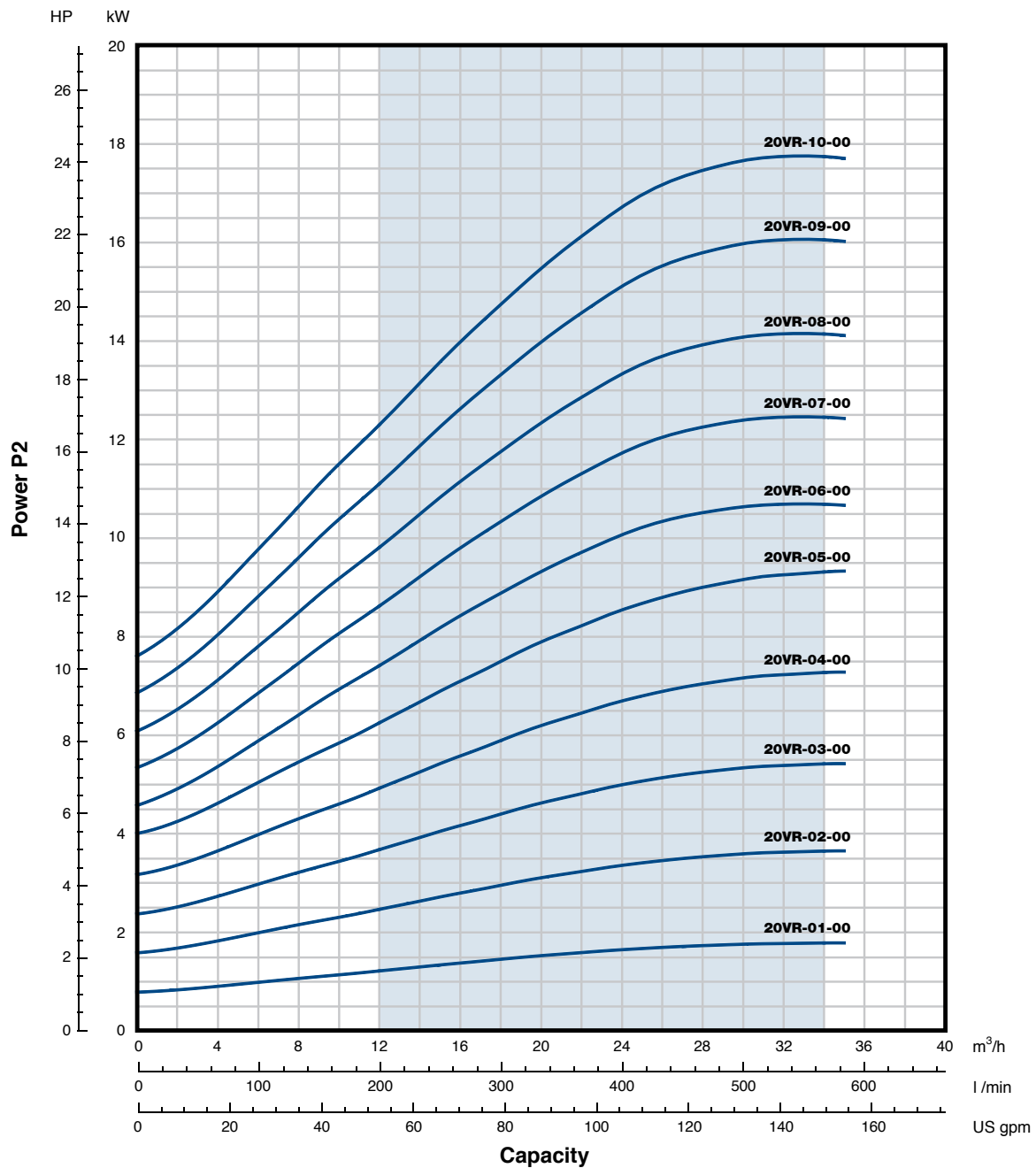
# VERTICAL MULTI-STAGE PUMPS

VR SERIES - 60 HZ



## POWER CURVE

20VR 60 HZ



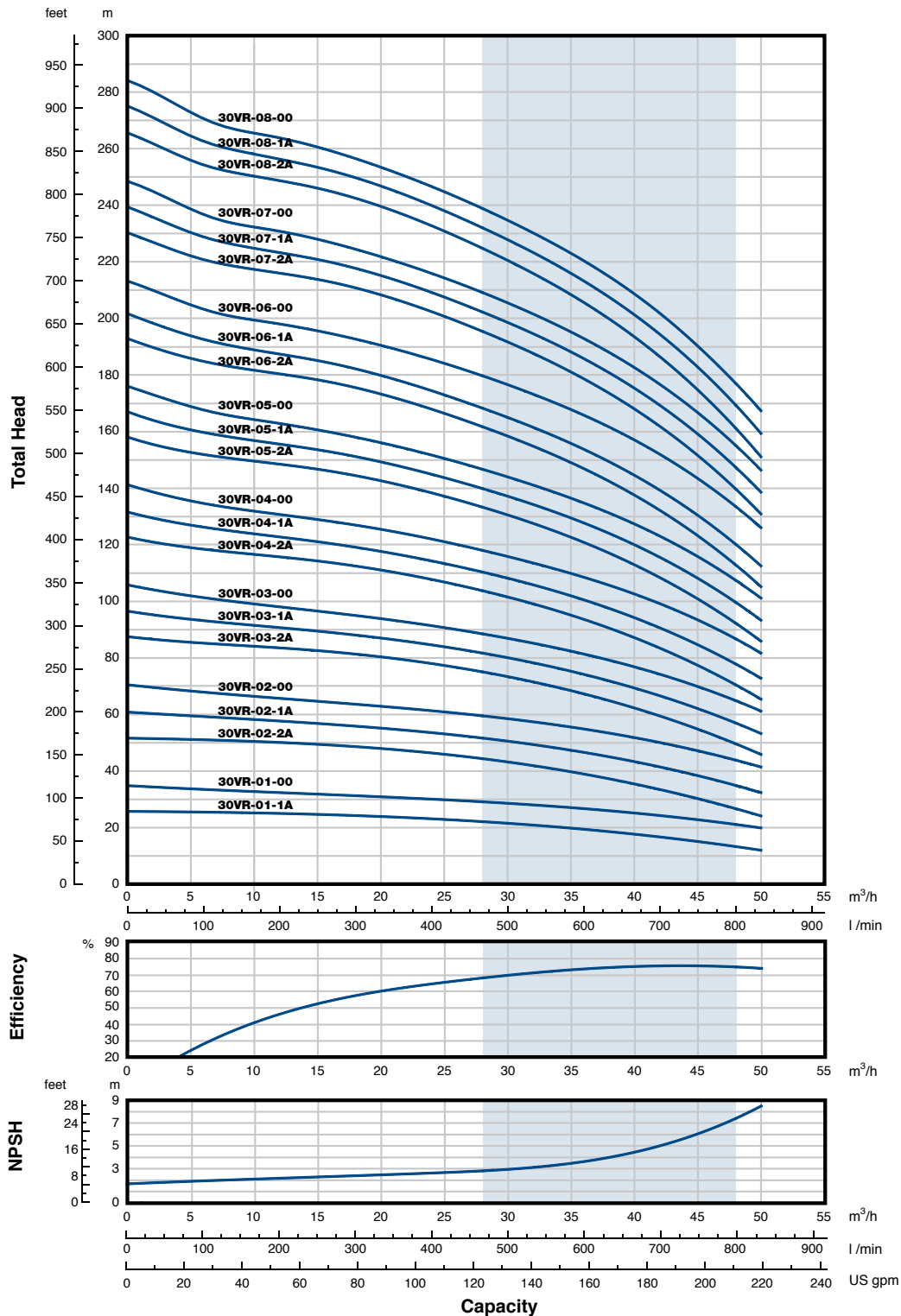
# VERTICAL MULTI-STAGE PUMPS

VR SERIES - 60 HZ



## PERFORMANCE CURVE

30VR 60 HZ



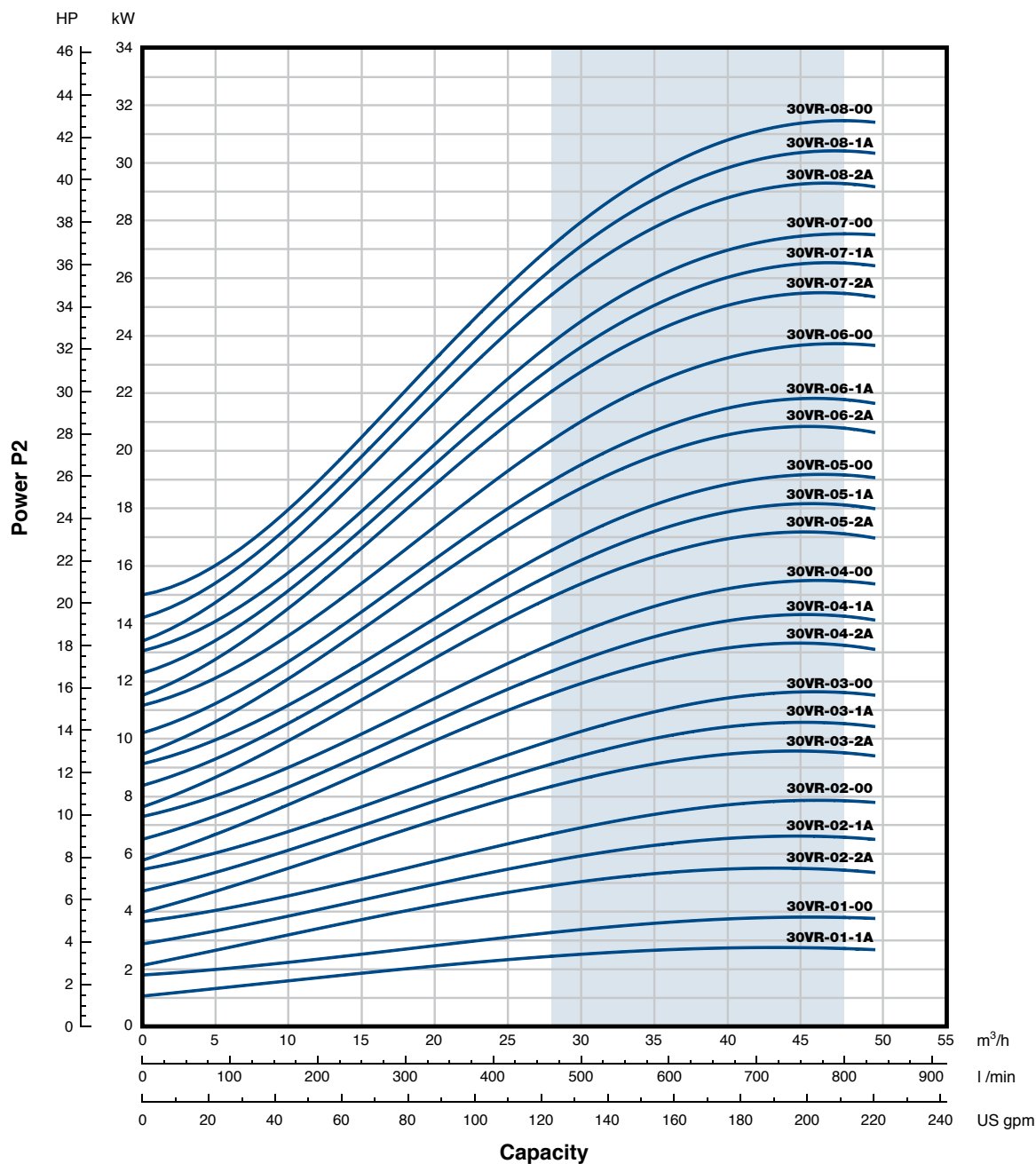
# VERTICAL MULTI-STAGE PUMPS

VR SERIES - 60 HZ



## POWER CURVE

30VR 60 HZ



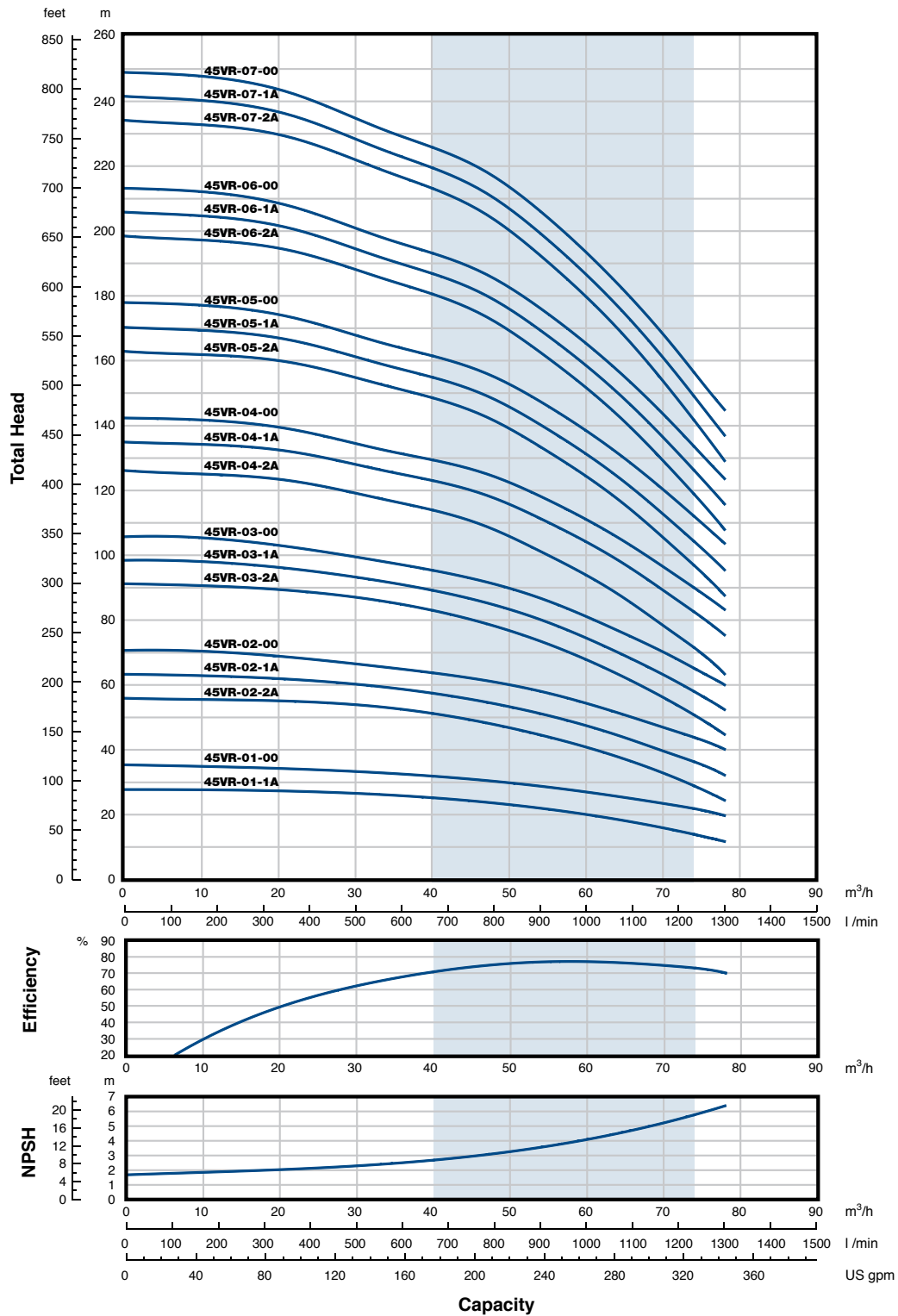
# VERTICAL MULTI-STAGE PUMPS

VR SERIES - 60 HZ



## PERFORMANCE CURVE

45VR 60 HZ



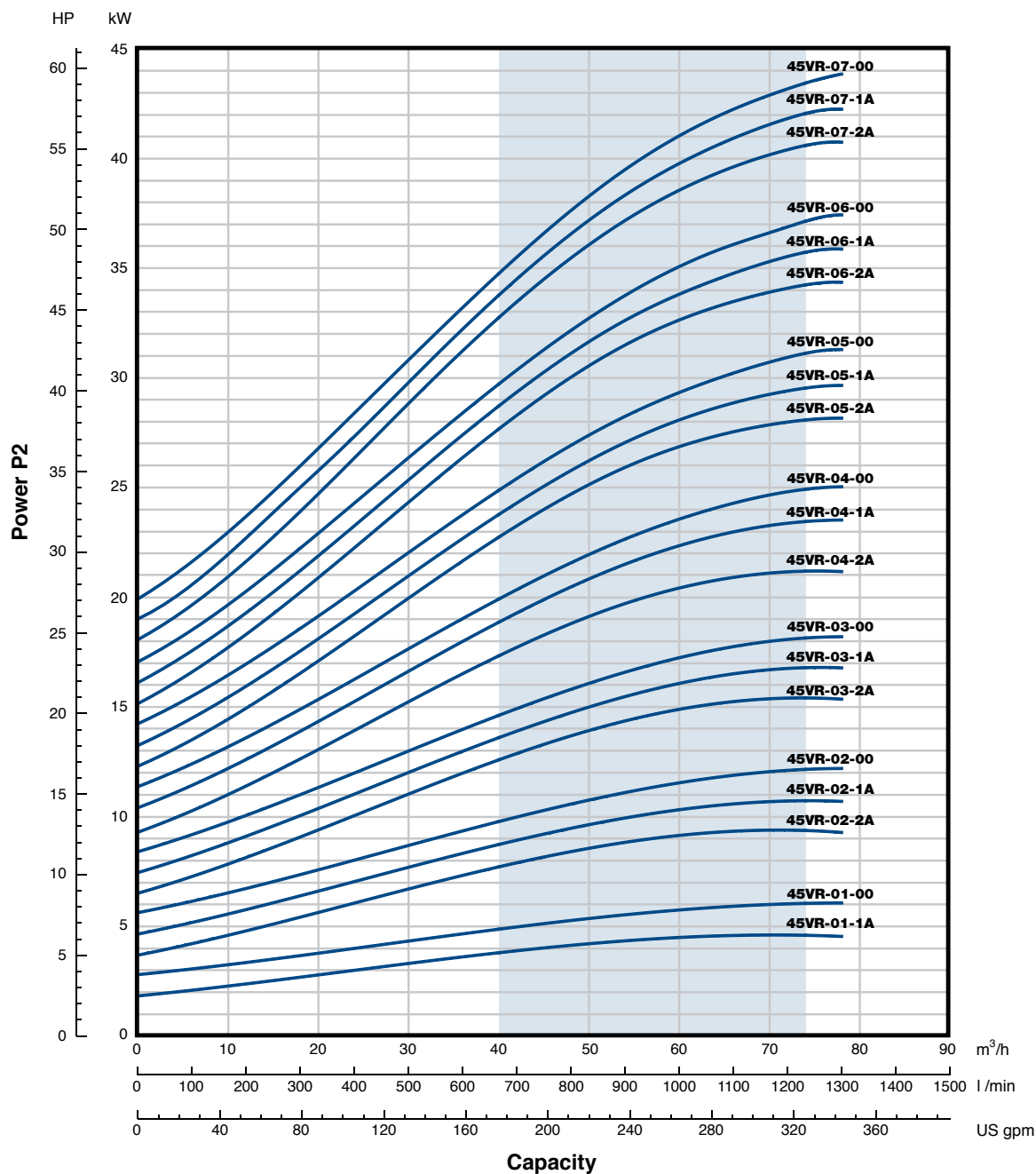
# VERTICAL MULTI-STAGE PUMPS

VR SERIES - 60 HZ



## POWER CURVE

45VR 60 HZ



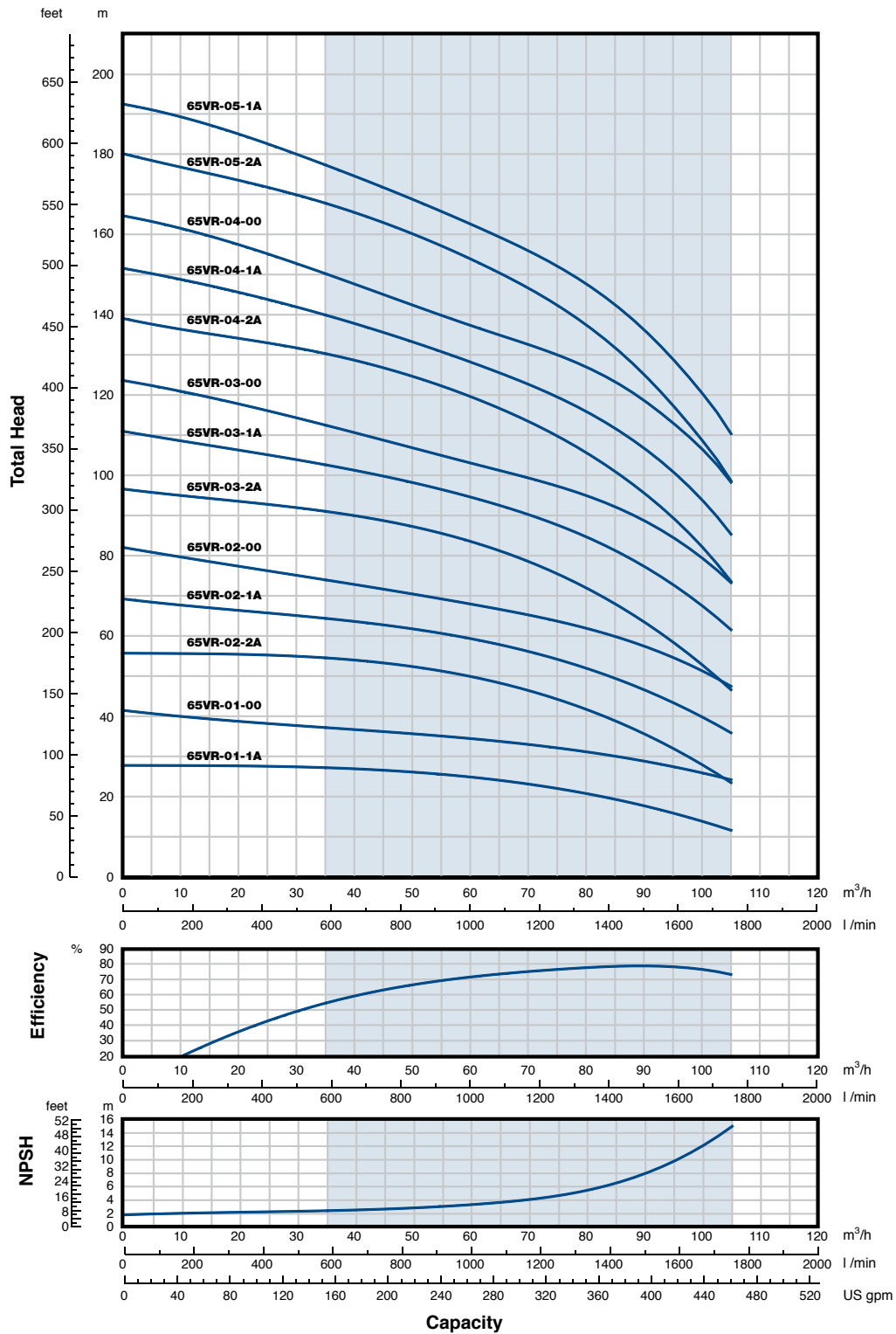
# VERTICAL MULTI-STAGE PUMPS

VR SERIES - 60 HZ



## PERFORMANCE CURVE

65VR 60 HZ



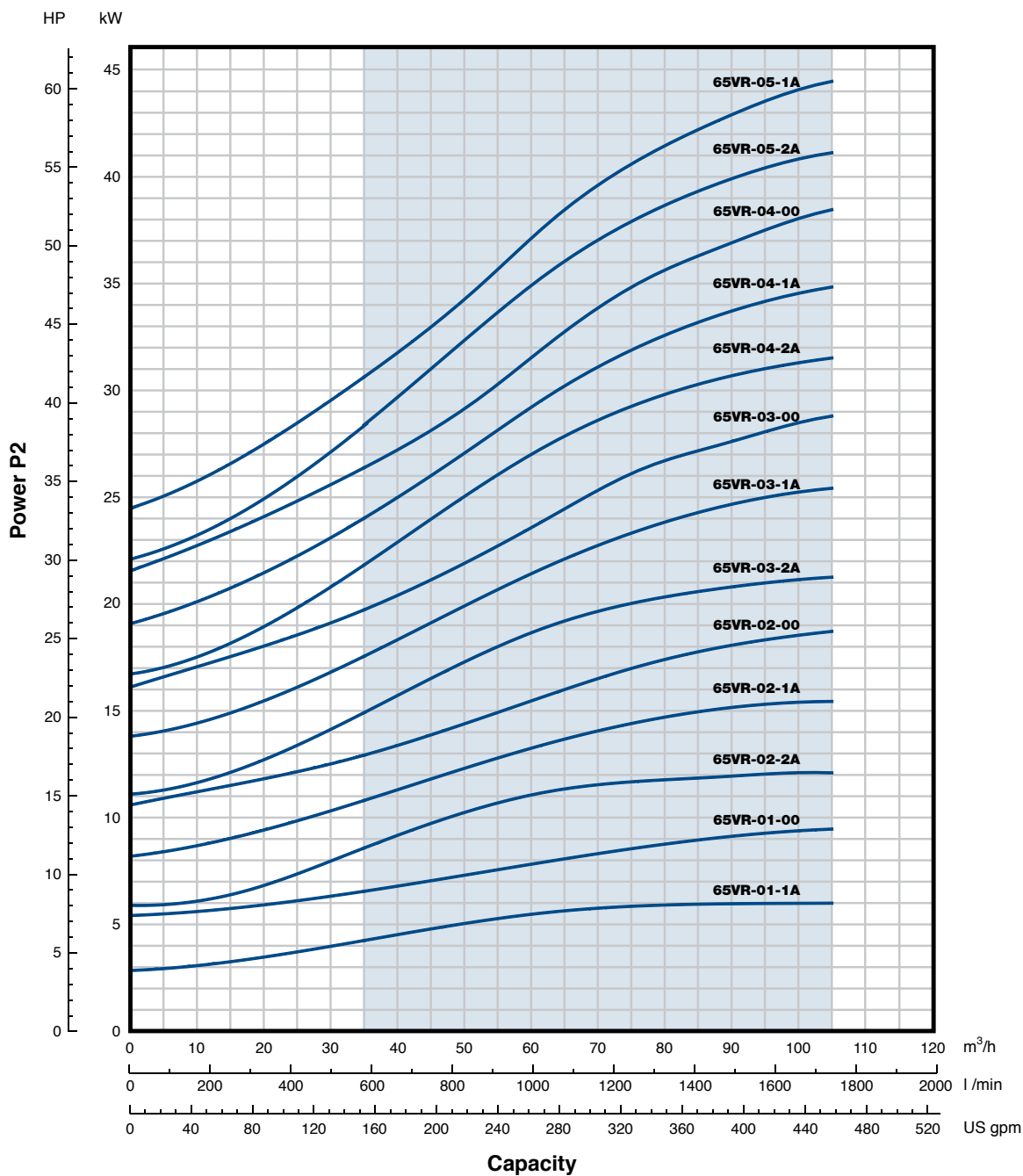
# VERTICAL MULTI-STAGE PUMPS

VR SERIES - 60 HZ



## POWER CURVE

65VR 60 HZ



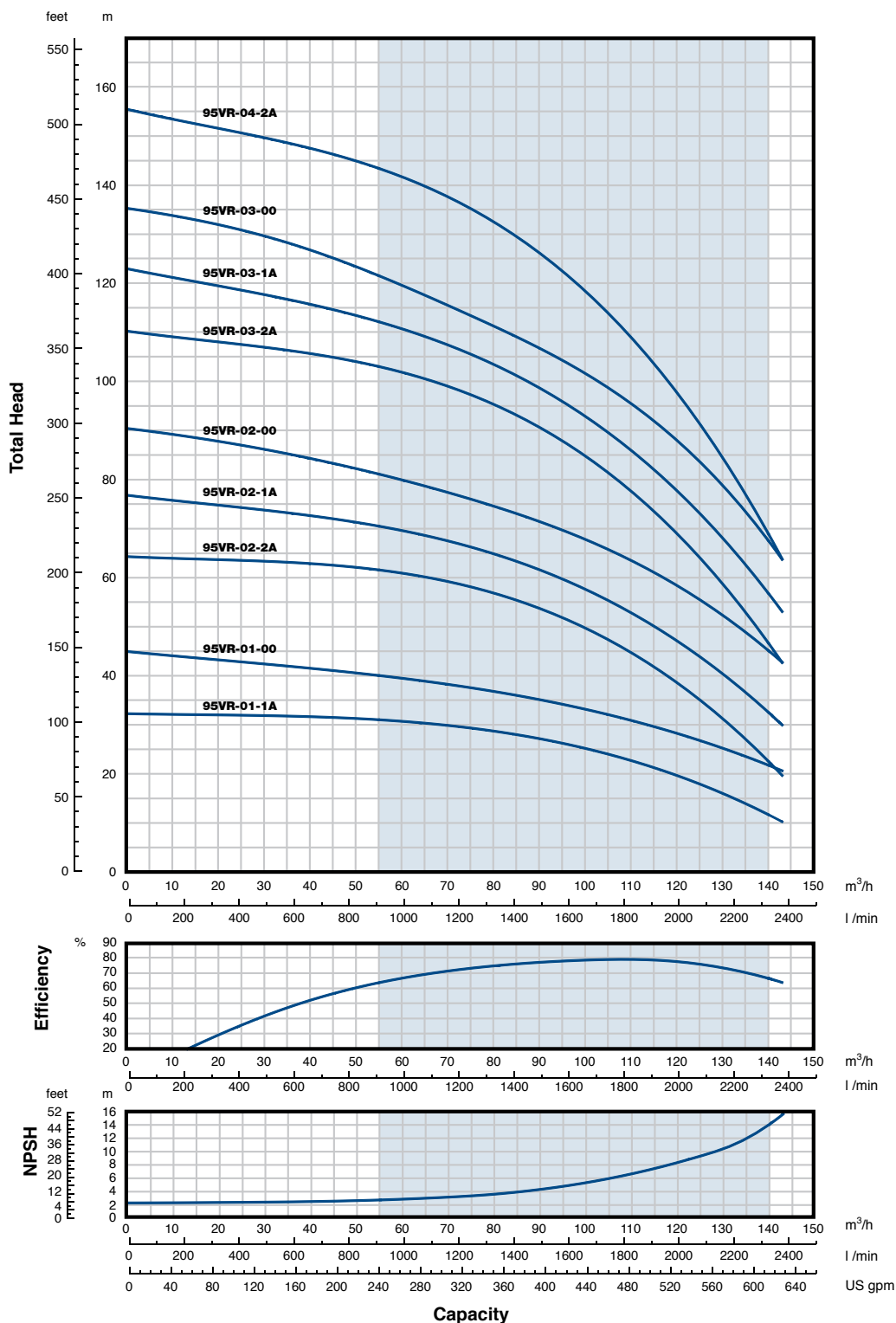
# VERTICAL MULTI-STAGE PUMPS

VR SERIES - 60 HZ



## PERFORMANCE CURVE

95VR 60 HZ



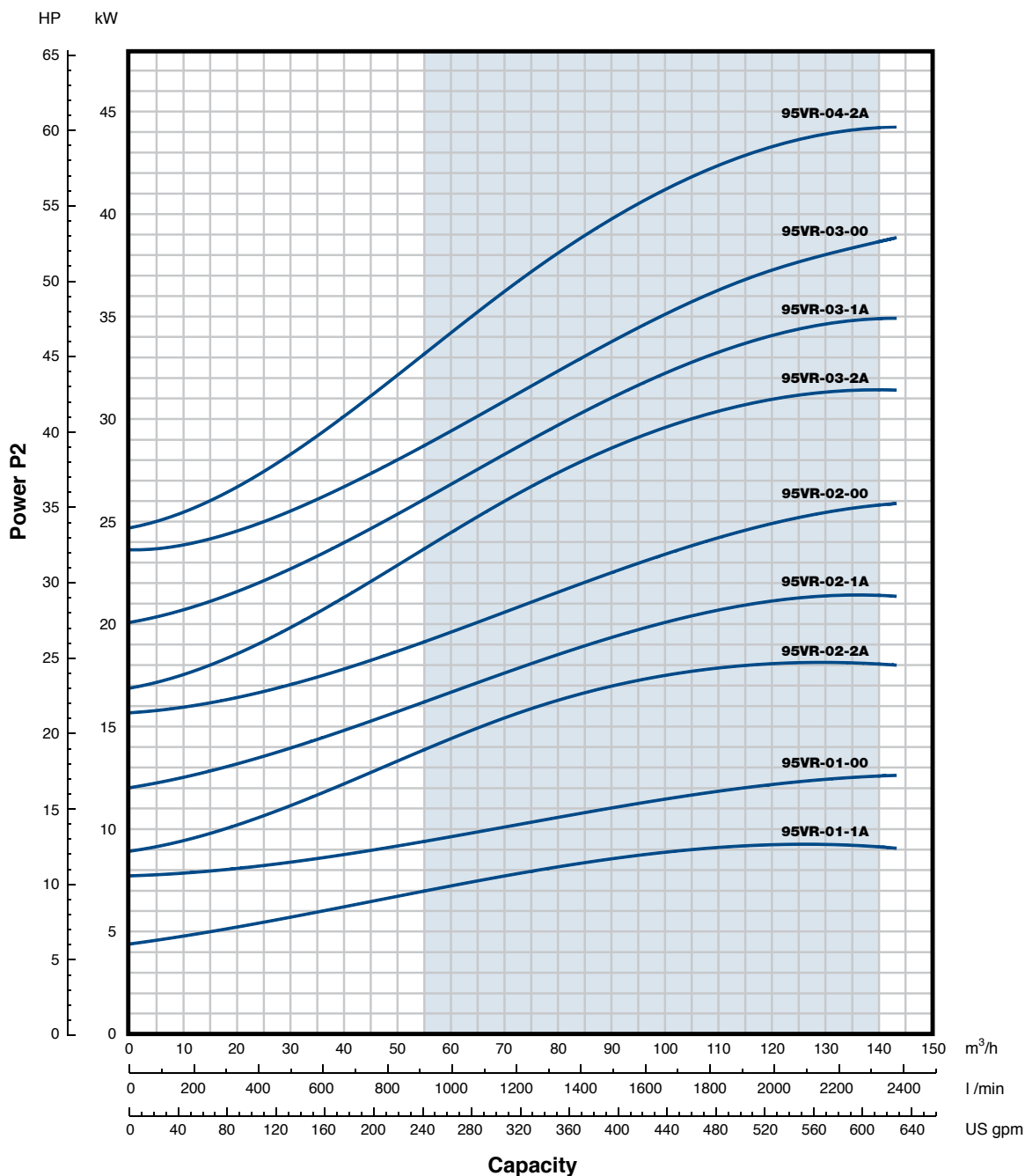
# VERTICAL MULTI-STAGE PUMPS

VR SERIES - 60 HZ



## POWER CURVE

95VR 60 HZ



# VERTICAL MULTI-STAGE PUMPS

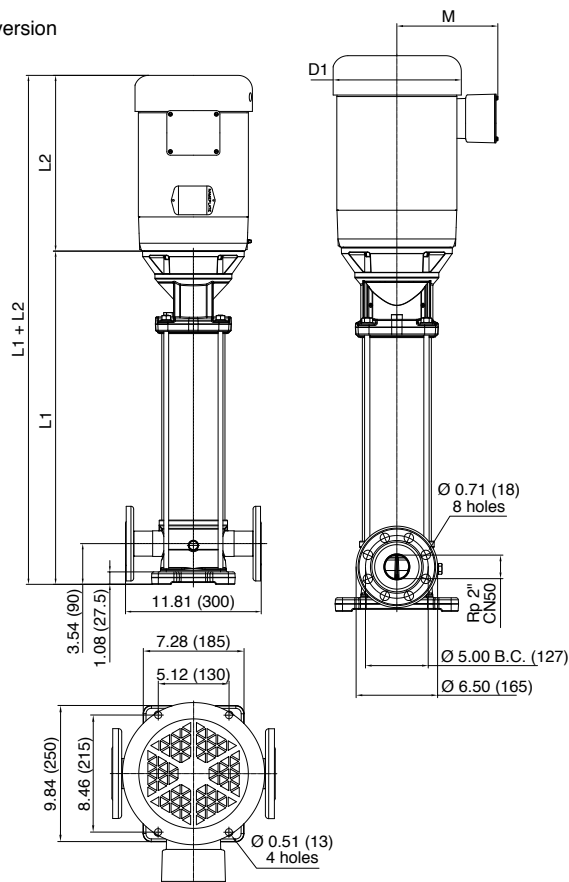
VR SERIES - 60 HZ



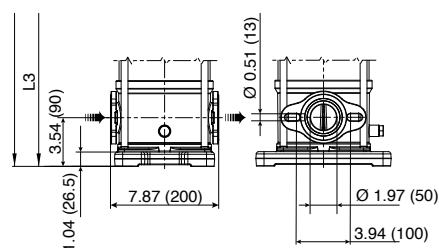
## DIMENSIONS

15VR 60 HZ

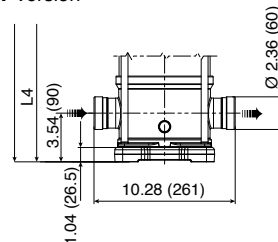
F version



T version



V version



inches (mm)

F version Round flanges on body type PN25: the pump is supplied without counterflanges (optional accessories, including bolts and joints).

V version Connections with rapid fittings type "Victaulic®": the pump is supplied without the collars (optional accessories).

T version Oval flanges on body type PN16: the pump is supplied without threaded oval counterflanges (optional accessories, including bolts and joints).

| Model     | Motor       |     |            | Dimensions (in) |        |         |        |         |       |       |         |        |         |        | Weight (lbs) |     |        |         |        |         |        |         |        |         |  |  |
|-----------|-------------|-----|------------|-----------------|--------|---------|--------|---------|-------|-------|---------|--------|---------|--------|--------------|-----|--------|---------|--------|---------|--------|---------|--------|---------|--|--|
|           | Rated Power |     | NEMA Frame | L1              | L2     |         |        |         | L3    | L4    | M (max) | D1     |         |        |              | PE  | Motor  |         |        |         | PMA    |         |        |         |  |  |
|           | kW          | HP  |            |                 | 10 ODP | 10 TEFC | 30 ODP | 30 TEFC |       |       |         | 10 ODP | 10 TEFC | 30 ODP | 30 TEFC      |     | 10 ODP | 10 TEFC | 30 ODP | 30 TEFC | 10 ODP | 10 TEFC | 30 ODP | 30 TEFC |  |  |
| 15VR01-00 | 1.5         | 2   | 56C        | 16.34           | 11.401 | 11.401  | 9.433  | 11.047  | 10.51 | 10.51 | 5.873   | 6.457  | 7.323   | 6.456  | 7.638        | 53  | 42     | 44      | 27     | 31      | 95     | 97      | 80     | 84      |  |  |
| 15VR02-00 | 3.7         | 5   | 182/4TC    | 16.73           | -      | 14.3    | 12.603 | 15.359  | 11.42 | 11.42 | 6.696   | -      | 8.74    | 10.079 | 10.079       | 57  | -      | 103     | 53     | 69      | -      | 160     | 110    | 126     |  |  |
| 15VR03-00 | 3.7         | 5   | 182/4TC    | 18.62           | -      | 14.3    | 12.603 | 15.359  | 12.05 | 12.05 | 6.696   | -      | 8.74    | 10.079 | 10.079       | 60  | -      | 103     | 53     | 69      | -      | 163     | 113    | 129     |  |  |
| 15VR04-00 | 5.5         | 7.5 | 213/5TC    | 27.87           | -      | -       | 15.124 | 18.628  | 12.91 | 12.91 | 7.973   | -      | -       | 9.846  | 11.306       | 108 | -      | -       | 103    | 118     | -      | -       | 211    | 226     |  |  |
| 15VR05-00 | 7.5         | 10  | 213/5TC    | 29.76           | -      | -       | 15.124 | 18.628  | 13.78 | 13.78 | 7.973   | -      | -       | 9.846  | 11.306       | 111 | -      | -       | 103    | 133     | -      | -       | 214    | 244     |  |  |
| 15VR06-00 | 7.5         | 10  | 213/5TC    | 32.44           | -      | -       | 15.124 | 18.628  | 16.73 | 16.73 | 7.973   | -      | -       | 9.846  | 11.306       | 120 | -      | -       | 103    | 133     | -      | -       | 223    | 253     |  |  |
| 15VR07-00 | 11          | 15  | 254/6TC    | 34.33           | -      | -       | 19.021 | 20.488  | 16.73 | 16.73 | 9.448   | -      | -       | 11.558 | 13.18        | 123 | -      | -       | 151    | 156     | -      | -       | 274    | 279     |  |  |
| 15VR08-00 | 11          | 15  | 254/6TC    | 36.22           | -      | -       | 19.021 | 20.488  | -     | 16.73 | 9.448   | -      | -       | 11.558 | 13.18        | 127 | -      | -       | 151    | 156     | -      | -       | 278    | 283     |  |  |
| 15VR09-00 | 11          | 15  | 254/6TC    | 38.11           | -      | -       | 19.021 | 20.488  | -     | 18.74 | 9.448   | -      | -       | 11.558 | 13.18        | 130 | -      | -       | 151    | 156     | -      | -       | 281    | 286     |  |  |
| 15VR10-00 | 15          | 20  | 254/6TC    | 40.00           | -      | -       | 18.401 | 21.275  | -     | 18.74 | 9.448   | -      | -       | 11.558 | 13.18        | 133 | -      | -       | 151    | 211     | -      | -       | 284    | 344     |  |  |
| 15VR11-00 | 15          | 20  | 254/6TC    | 41.89           | -      | -       | 18.401 | 21.275  | -     | 18.74 | 9.448   | -      | -       | 11.558 | 13.18        | 136 | -      | -       | 151    | 211     | -      | -       | 287    | 347     |  |  |
| 15VR12-00 | 15          | 20  | 254/6TC    | 43.78           | -      | -       | 18.401 | 21.275  | -     | 21.34 | 9.448   | -      | -       | 11.558 | 13.18        | 139 | -      | -       | 151    | 211     | -      | -       | 290    | 350     |  |  |

# VERTICAL MULTI-STAGE PUMPS

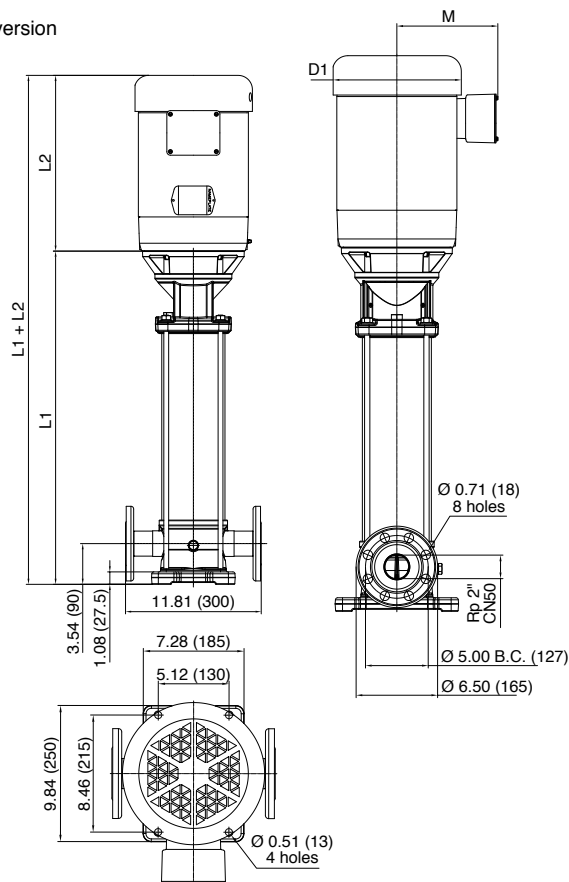
VR SERIES - 60 HZ



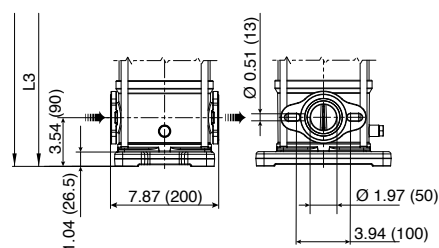
## DIMENSIONS

20VR 60 HZ

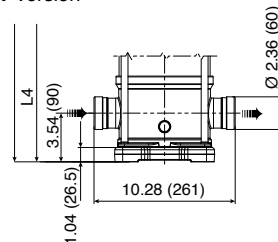
F version



T version



V version



inches (mm)

F version Round flanges on body type PN25: the pump is supplied without counterflanges (optional accessories, including bolts and joints).

V version Connections with rapid fittings type "Victaulic®": the pump is supplied without the collars (optional accessories).

T version Oval flanges on body type PN16: the pump is supplied without threaded oval counterflanges (optional accessories, including bolts and joints).

| Model     | Motor       |     |            | Dimensions (in) |        |         |        |         |       |       |         |        |         |        |         | Weight (lbs) |        |         |        |         |        |         |        |         |
|-----------|-------------|-----|------------|-----------------|--------|---------|--------|---------|-------|-------|---------|--------|---------|--------|---------|--------------|--------|---------|--------|---------|--------|---------|--------|---------|
|           | Rated Power |     | NEMA Frame | L1              | L2     |         |        |         | L3    | L4    | M (max) | D1     |         |        |         | PE           | Motor  |         |        |         | PMA    |         |        |         |
|           | kW          | HP  |            |                 | 1Ø ODP | 1Ø TEFC | 3Ø ODP | 3Ø TEFC |       |       |         | 1Ø ODP | 1Ø TEFC | 3Ø ODP | 3Ø TEFC |              | 1Ø ODP | 1Ø TEFC | 3Ø ODP | 3Ø TEFC | 1Ø ODP | 1Ø TEFC | 3Ø ODP | 3Ø TEFC |
| 20VR01-00 | 1.5         | 2   | 56C        | 16.34           | 11.401 | 11.401  | 9.433  | 11.047  | 10.51 | 10.51 | 5.873   | 6.457  | 7.323   | 6.456  | 7.638   | 53           | 42     | 44      | 27     | 31      | 95     | 97      | 80     | 84      |
| 20VR02-00 | 3.7         | 5   | 182/4TC    | 16.73           | -      | 14.3    | 12.603 | 15.359  | 12.05 | 12.05 | 6.696   | -      | 8.74    | 10.079 | 10.079  | 57           | -      | 103     | 53     | 69      | -      | 160     | 110    | 126     |
| 20VR03-00 | 5.5         | 7.5 | 213/5TC    | 25.98           | -      | -       | 15.124 | 18.628  | 12.91 | 12.91 | 7.973   | -      | -       | 9.846  | 11.306  | 105          | -      | -       | 103    | 118     | -      | -       | 208    | 223     |
| 20VR04-00 | 7.5         | 10  | 213/5TC    | 27.87           | -      | -       | 15.124 | 18.628  | 13.78 | 13.78 | 7.973   | -      | -       | 9.846  | 11.306  | 108          | -      | -       | 103    | 133     | -      | -       | 211    | 241     |
| 20VR05-00 | 11          | 15  | 254/6TC    | 30.55           | -      | -       | 19.021 | 20.488  | 16.73 | 16.73 | 9.448   | -      | -       | 11.558 | 13.18   | 117          | -      | -       | 151    | 156     | -      | -       | 268    | 273     |
| 20VR06-00 | 11          | 15  | 254/6TC    | 32.44           | -      | -       | 19.021 | 20.488  | 16.73 | 16.73 | 9.448   | -      | -       | 11.558 | 13.18   | 120          | -      | -       | 151    | 156     | -      | -       | 271    | 276     |
| 20VR07-00 | 11          | 15  | 254/6TC    | 34.33           | -      | -       | 19.021 | 20.488  | 18.74 | 18.74 | 9.448   | -      | -       | 11.558 | 13.18   | 123          | -      | -       | 151    | 156     | -      | -       | 274    | 279     |
| 20VR08-00 | 15          | 20  | 254/6TC    | 36.22           | -      | -       | 18.401 | 21.275  | -     | 18.74 | 9.448   | -      | -       | 11.558 | 13.18   | 127          | -      | -       | 151    | 211     | -      | -       | 278    | 338     |
| 20VR09-00 | 15          | 20  | 254/6TC    | 38.11           | -      | -       | 18.401 | 21.275  | -     | 21.34 | 9.448   | -      | -       | 11.558 | 13.18   | 130          | -      | -       | 151    | 211     | -      | -       | 281    | 341     |
| 20VR10-00 | 15          | 20  | 254/6TC    | 40.00           | -      | -       | 18.401 | 21.275  | -     | 21.34 | 9.448   | -      | -       | 11.558 | 13.18   | 133          | -      | -       | 151    | 211     | -      | -       | 284    | 344     |

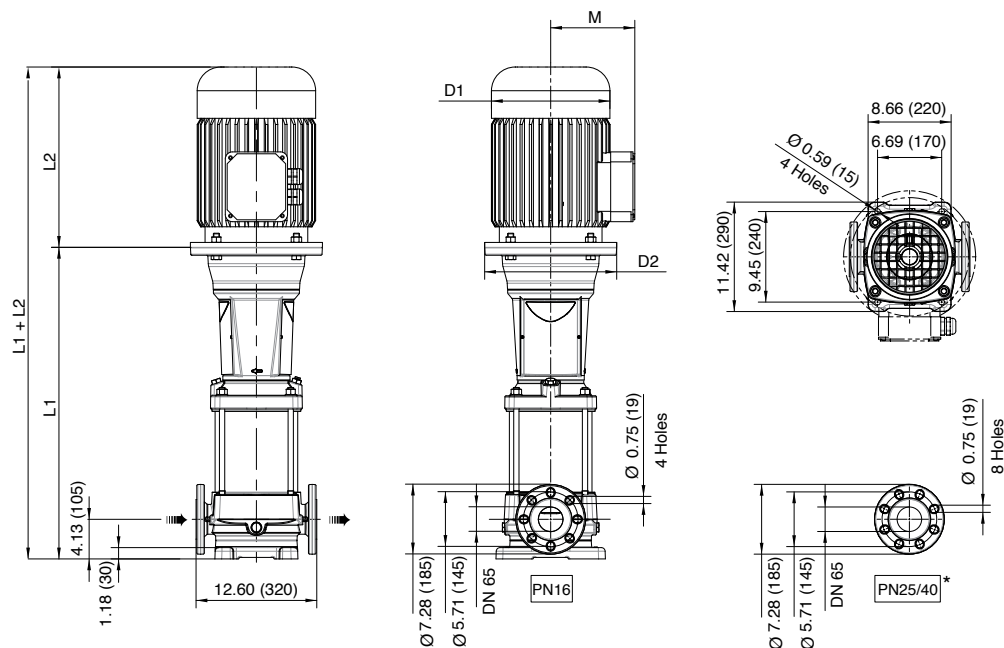
# VERTICAL MULTI-STAGE PUMPS

VR SERIES - 60 HZ



## DIMENSIONS

30VR 60 HZ



inches (mm)

F version The pump is supplied without counterflanges (optional accessories, including bolts and joints).

\*Please note: The holes are rotated compared to PN 16.

| Model     | Motor       |     |            | Dimensions (in) |        |         |        |         |         |        |         |        |         | Weight (lbs) |        |         |        |         |        |         |        |         |
|-----------|-------------|-----|------------|-----------------|--------|---------|--------|---------|---------|--------|---------|--------|---------|--------------|--------|---------|--------|---------|--------|---------|--------|---------|
|           | Rated Power |     | NEMA Frame | L1              | L2     |         |        |         | M (max) | D1     |         |        |         | PE           | Motor  |         |        |         | PMA    |         |        |         |
|           | kW          | HP  |            |                 | 10 ODP | 10 TEFC | 30 ODP | 30 TEFC |         | 10 ODP | 10 TEFC | 30 ODP | 30 TEFC |              | 10 ODP | 10 TEFC | 30 ODP | 30 TEFC | 10 ODP | 10 TEFC | 30 ODP | 30 TEFC |
| 30VR01-1A | 3.7         | 5   | 182/4TC    | 17.91           | -      | 14.3    | 12.603 | 15.359  | 6.696   | -      | 8.74    | 10.079 | 10.079  | 117          | -      | 103     | 53     | 69      | -      | -       | 170    | 186     |
| 30VR01-00 | 3.7         | 5   | 182/4TC    | 17.91           | -      | 14.3    | 12.603 | 15.359  | 6.696   | -      | 8.74    | 10.079 | 10.079  | 117          | -      | 103     | 53     | 69      | -      | -       | 170    | 186     |
| 30VR02-2A | 5.5         | 7.5 | 213/5TC    | 28.50           | -      | -       | 15.124 | 18.628  | 7.973   | -      | -       | 9.846  | 11.306  | 164          | -      | -       | 103    | 118     | -      | -       | 267    | 282     |
| 30VR02-1A | 5.5         | 7.5 | 213/5TC    | 28.50           | -      | -       | 15.124 | 18.628  | 7.973   | -      | -       | 9.846  | 11.306  | 164          | -      | -       | 103    | 118     | -      | -       | 267    | 282     |
| 30VR02-00 | 7.5         | 10  | 213/5TC    | 29.29           | -      | -       | 15.124 | 18.628  | 7.973   | -      | -       | 9.846  | 11.306  | 171          | -      | -       | 103    | 133     | -      | -       | 274    | 304     |
| 30VR03-2A | 11          | 15  | 254/6TC    | 32.52           | -      | -       | 19.021 | 20.488  | 9.448   | -      | -       | 11.558 | 13.18   | 180          | -      | -       | 151    | 156     | -      | -       | 331    | 336     |
| 30VR03-1A | 11          | 15  | 254/6TC    | 32.52           | -      | -       | 19.021 | 20.488  | 9.448   | -      | -       | 11.558 | 13.18   | 180          | -      | -       | 151    | 156     | -      | -       | 331    | 336     |
| 30VR03-00 | 11          | 15  | 254/6TC    | 32.52           | -      | -       | 19.021 | 20.488  | 9.448   | -      | -       | 11.558 | 13.18   | 180          | -      | -       | 151    | 156     | -      | -       | 331    | 336     |
| 30VR04-2A | 15          | 20  | 254/6TC    | 35.75           | -      | -       | 18.401 | 21.275  | 9.448   | -      | -       | 11.558 | 13.18   | 188          | -      | -       | 151    | 211     | -      | -       | 339    | 399     |
| 30VR04-1A | 15          | 20  | 254/6TC    | 35.75           | -      | -       | 18.401 | 21.275  | 9.448   | -      | -       | 11.558 | 13.18   | 188          | -      | -       | 151    | 211     | -      | -       | 339    | 399     |
| 30VR04-00 | 15          | 20  | 254/6TC    | 35.75           | -      | -       | 18.401 | 21.275  | 9.448   | -      | -       | 11.558 | 13.18   | 188          | -      | -       | 151    | 211     | -      | -       | 339    | 399     |
| 30VR05-2A | 15          | 20  | 254/6TC    | 38.98           | -      | -       | 18.401 | 21.275  | 9.448   | -      | -       | 11.558 | 13.18   | 197          | -      | -       | 151    | 211     | -      | -       | 348    | 4408    |
| 30VR05-1A | 18.5        | 25  | 284/6TSC   | 38.98           | -      | -       | 21.073 | 23.307  | 11.073  | -      | -       | 13.7   | 14.173  | 197          | -      | -       | 298    | 362     | -      | -       | 495    | 559     |
| 30VR05-00 | 18.5        | 25  | 284/6TSC   | 38.98           | -      | -       | 21.073 | 23.307  | 11.073  | -      | -       | 13.7   | 14.173  | 197          | -      | -       | 298    | 362     | -      | -       | 495    | 559     |
| 30VR06-2A | 18.5        | 25  | 284/6TSC   | 42.20           | -      | -       | 21.073 | 23.307  | 11.073  | -      | -       | 13.7   | 14.173  | 206          | -      | -       | 298    | 362     | -      | -       | 504    | 568     |
| 30VR06-1A | 22          | 30  | 284/6TSC   | 42.20           | -      | -       | 18.75  | 23.307  | 11.073  | -      | -       | 13.7   | 14.173  | 206          | -      | -       | 299    | 392     | -      | -       | 505    | 598     |
| 30VR06-00 | 22          | 30  | 284/6TSC   | 42.20           | -      | -       | 18.75  | 23.307  | 11.073  | -      | -       | 13.7   | 14.173  | 213          | -      | -       | 299    | 392     | -      | -       | 512    | 605     |
| 30VR07-2A | 22          | 30  | 284/6TSC   | 45.63           | -      | -       | 18.75  | 23.307  | 11.073  | -      | -       | 13.7   | 14.173  | 222          | -      | -       | 299    | 392     | -      | -       | 521    | 614     |
| 30VR07-1A | 30          | 40  | 324/TSC    | 45.63           | -      | -       | 23.651 | 25.866  | 12.575  | -      | -       | 15.118 | 15.827  | 222          | -      | -       | 531    | 547     | -      | -       | 753    | 769     |
| 30VR07-00 | 30          | 40  | 324/TSC    | 45.63           | -      | -       | 23.651 | 25.866  | 12.575  | -      | -       | 15.118 | 15.827  | 222          | -      | -       | 531    | 547     | -      | -       | 753    | 769     |
| 30VR08-2A | 30          | 40  | 324/TSC    | 48.86           | -      | -       | 23.651 | 25.866  | 12.575  | -      | -       | 15.118 | 15.827  | 230          | -      | -       | 531    | 547     | -      | -       | 761    | 777     |
| 30VR08-1A | 30          | 40  | 324/TSC    | 48.86           | -      | -       | 23.651 | 25.866  | 12.575  | -      | -       | 15.118 | 15.827  | 230          | -      | -       | 531    | 547     | -      | -       | 761    | 777     |
| 30VR08-00 | 30          | 40  | 324/TSC    | 48.86           | -      | -       | 23.651 | 25.866  | 12.575  | -      | -       | 15.118 | 15.827  | 230          | -      | -       | 531    | 547     | -      | -       | 761    | 777     |

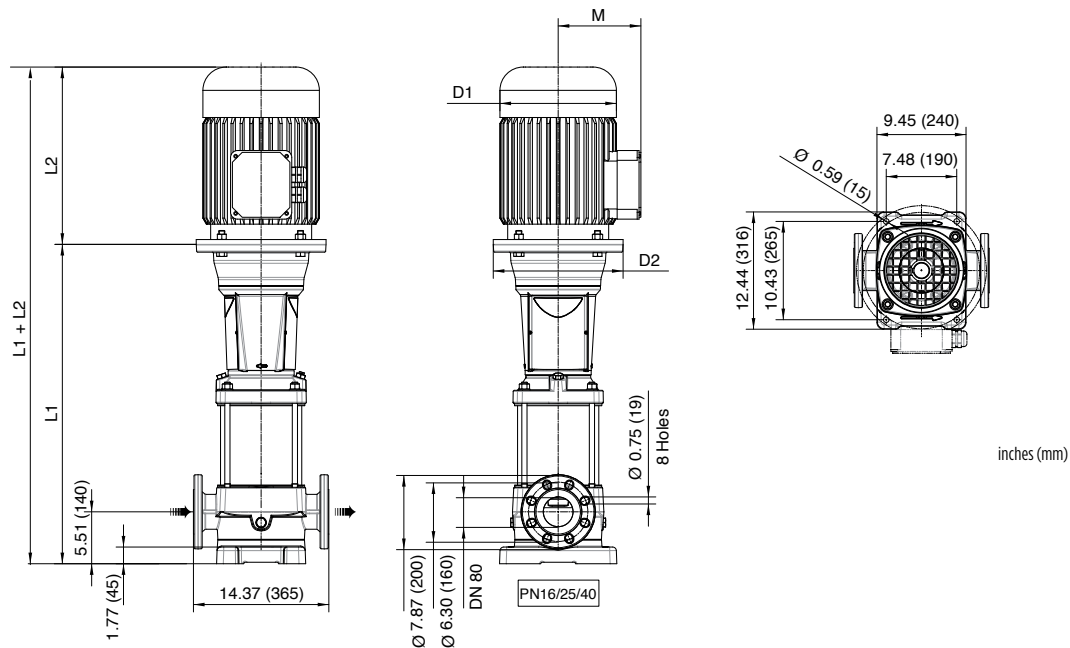
# VERTICAL MULTI-STAGE PUMPS

VR SERIES - 60 HZ



## DIMENSIONS

45VR 60 HZ



inches (mm)

F version The pump is supplied without counterflanges (optional accessories, including bolts and joints).

| Model     | Motor       |     |               | Dimensions (in) |           |            |           |            |            |           |            |           |            | Weight (lbs) |           |            |           |            |     |   |     |      |
|-----------|-------------|-----|---------------|-----------------|-----------|------------|-----------|------------|------------|-----------|------------|-----------|------------|--------------|-----------|------------|-----------|------------|-----|---|-----|------|
|           | Rated Power |     | NEMA<br>Frame | L1              | L2        |            |           |            | M<br>(max) | D1        |            |           |            | PE           | Motor     |            |           |            | PMA |   |     |      |
|           | kW          | HP  |               |                 | 1Ø<br>ODP | 1Ø<br>TEFC | 3Ø<br>ODP | 3Ø<br>TEFC |            | 1Ø<br>ODP | 1Ø<br>TEFC | 3Ø<br>ODP | 3Ø<br>TEFC |              | 1Ø<br>ODP | 1Ø<br>TEFC | 3Ø<br>ODP | 3Ø<br>TEFC |     |   |     |      |
| 45VR01-1A | 5.5         | 7.5 | 213/5TC       | 26.65           | -         | -          | 15.124    | 18.628     | 7.973      | -         | -          | 9.846     | 11.306     | 169          | -         | -          | 103       | 118        | -   | - | 272 | 287  |
| 45VR01-00 | 5.5         | 7.5 | 213/5TC       | 26.65           | -         | -          | 15.124    | 18.628     | 7.973      | -         | -          | 9.846     | 11.306     | 169          | -         | -          | 103       | 118        | -   | - | 272 | 287  |
| 45VR02-2A | 11          | 15  | 254/6TC       | 30.67           | -         | -          | 19.021    | 20.488     | 9.448      | -         | -          | 11.558    | 13.18      | 184          | -         | -          | 151       | 156        | -   | - | 335 | 340  |
| 45VR02-1A | 11          | 15  | 254/6TC       | 30.67           | -         | -          | 19.021    | 20.488     | 9.448      | -         | -          | 11.558    | 13.18      | 184          | -         | -          | 151       | 156        | -   | - | 335 | 340  |
| 45VR02-00 | 11          | 15  | 254/6TC       | 30.67           | -         | -          | 19.021    | 20.488     | 9.448      | -         | -          | 11.558    | 13.18      | 184          | -         | -          | 151       | 156        | -   | - | 335 | 340  |
| 45VR03-2A | 15          | 20  | 254/6TC       | 33.90           | -         | -          | 18.401    | 21.275     | 9.448      | -         | -          | 11.558    | 13.18      | 193          | -         | -          | 151       | 211        | -   | - | 344 | 404  |
| 45VR03-1A | 15          | 20  | 254/6TC       | 33.90           | -         | -          | 18.401    | 21.275     | 9.448      | -         | -          | 11.558    | 13.18      | 193          | -         | -          | 151       | 211        | -   | - | 344 | 404  |
| 45VR03-00 | 18.5        | 25  | 284/6TSC      | 33.90           | -         | -          | 21.073    | 23.307     | 11.073     | -         | -          | 13.7      | 14.173     | 193          | -         | -          | 298       | 362        | -   | - | 491 | 555  |
| 45VR04-2A | 22          | 30  | 284/6TSC      | 37.13           | -         | -          | 18.75     | 23.307     | 11.073     | -         | -          | 13.7      | 14.173     | 201          | -         | -          | 299       | 392        | -   | - | 500 | 593  |
| 45VR04-1A | 22          | 30  | 284/6TSC      | 37.32           | -         | -          | 18.75     | 23.307     | 11.073     | -         | -          | 13.7      | 14.173     | 207          | -         | -          | 299       | 392        | -   | - | 506 | 599  |
| 45VR04-00 | 30          | 40  | 324TSC        | 37.32           | -         | -          | 23.651    | 25.866     | 12.575     | -         | -          | 15.118    | 15.827     | 207          | -         | -          | 531       | 547        | -   | - | 738 | 754  |
| 45VR05-2A | 30          | 40  | 324TSC        | 40.55           | -         | -          | 23.651    | 25.866     | 12.575     | -         | -          | 15.118    | 15.827     | 216          | -         | -          | 531       | 547        | -   | - | 747 | 763  |
| 45VR05-1A | 30          | 40  | 324TSC        | 40.55           | -         | -          | 23.651    | 25.866     | 12.575     | -         | -          | 15.118    | 15.827     | 216          | -         | -          | 531       | 547        | -   | - | 747 | 763  |
| 45VR05-00 | 30          | 40  | 324TSC        | 40.55           | -         | -          | 23.651    | 25.866     | 12.575     | -         | -          | 15.118    | 15.827     | 216          | -         | -          | 531       | 547        | -   | - | 747 | 763  |
| 45VR06-2A | 30          | 40  | 324TSC        | 43.78           | -         | -          | 23.651    | 25.866     | 12.575     | -         | -          | 15.118    | 15.827     | 225          | -         | -          | 531       | 547        | -   | - | 756 | 772  |
| 45VR06-1A | 37          | 50  | 324/6TSC      | 43.78           | -         | -          | 20.935    | 25.866     | 12.575     | -         | -          | 15.118    | 15.827     | 225          | -         | -          | 532       | 584        | -   | - | 757 | 809  |
| 45VR06-00 | 37          | 50  | 324/6TSC      | 43.78           | -         | -          | 20.935    | 25.866     | 12.575     | -         | -          | 15.118    | 15.827     | 225          | -         | -          | 532       | 584        | -   | - | 757 | 809  |
| 45VR07-2A | 37          | 50  | 324/6TSC      | 47.01           | -         | -          | 20.935    | 25.866     | 12.575     | -         | -          | 15.118    | 15.827     | 240          | -         | -          | 532       | 584        | -   | - | 772 | 824  |
| 45VR07-1A | 37          | 50  | 324/6TSC      | 47.01           | -         | -          | 20.935    | 25.866     | 12.575     | -         | -          | 15.118    | 15.827     | 240          | -         | -          | 532       | 584        | -   | - | 772 | 824  |
| 45VR07-00 | 45          | 60  | 324/6TSC      | 47.01           | -         | -          | 27.077    | 28.526     | 16.016     | -         | -          | 17.874    | 17.914     | 240          | -         | -          | 527       | 825        | -   | - | 767 | 1065 |

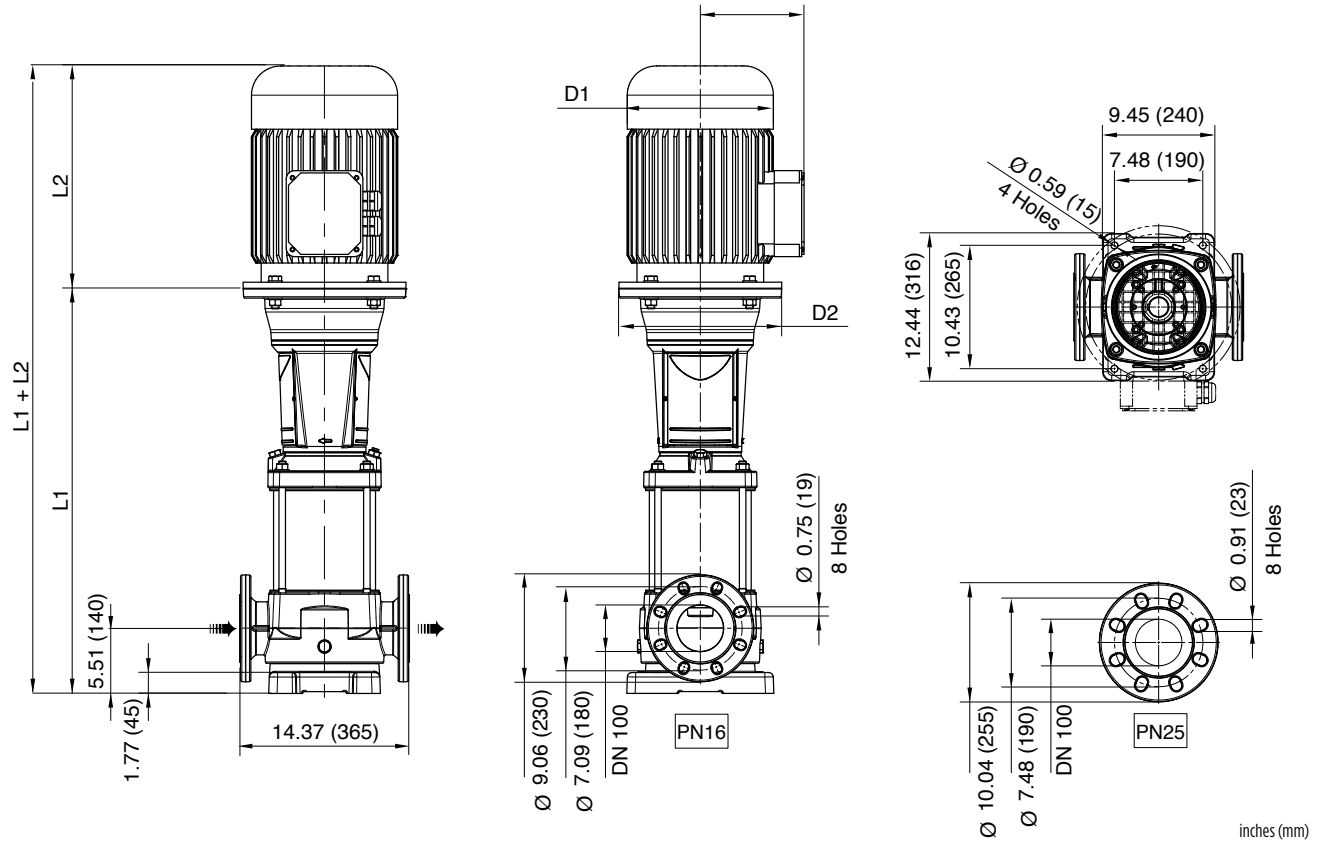
# VERTICAL MULTI-STAGE PUMPS

VR SERIES - 60 HZ



## DIMENSIONS

65VR 60 HZ



inches (mm)

F version The pump is supplied without counterflanges (optional accessories, including bolts and joints).

| Model     | Motor       |     |               | Dimensions (in) |           |            |           |            |            |           |            |           |            | Weight (lbs) |           |            |           |            |     |   |     |      |
|-----------|-------------|-----|---------------|-----------------|-----------|------------|-----------|------------|------------|-----------|------------|-----------|------------|--------------|-----------|------------|-----------|------------|-----|---|-----|------|
|           | Rated Power |     | NEMA<br>Frame | L1              | L2        |            |           |            | M<br>(max) | D1        |            |           |            | PE           | Motor     |            |           |            | PMA |   |     |      |
|           | kW          | HP  |               |                 | 1Ø<br>ODP | 1Ø<br>TEFC | 3Ø<br>ODP | 3Ø<br>TEFC |            | 1Ø<br>ODP | 1Ø<br>TEFC | 3Ø<br>ODP | 3Ø<br>TEFC |              | 1Ø<br>ODP | 1Ø<br>TEFC | 3Ø<br>ODP | 3Ø<br>TEFC |     |   |     |      |
| 65VR01-1A | 5.5         | 7.5 | 213/5TC       | 29.02           | -         | -          | 15.124    | 18.628     | 7.973      | -         | -          | 9.846     | 11.306     | 179          | -         | -          | 103       | 118        | -   | - | 282 | 297  |
| 65VR01-00 | 11          | 15  | 254/6TC       | 29.81           | -         | -          | 19.021    | 20.488     | 9.448      | -         | -          | 11.558    | 13.18      | 185          | -         | -          | 151       | 156        | -   | - | 336 | 341  |
| 65VR02-2A | 11          | 15  | 254/6TC       | 33.43           | -         | -          | 19.021    | 20.488     | 9.448      | -         | -          | 11.558    | 13.18      | 195          | -         | -          | 151       | 156        | -   | - | 346 | 351  |
| 65VR02-1A | 15          | 20  | 254/6TC       | 33.43           | -         | -          | 18.401    | 21.275     | 9.448      | -         | -          | 11.558    | 13.18      | 195          | -         | -          | 151       | 211        | -   | - | 346 | 406  |
| 65VR02-00 | 18.5        | 25  | 284/6TSC      | 33.43           | -         | -          | 21.073    | 23.307     | 11.073     | -         | -          | 13.7      | 14.173     | 196          | -         | -          | 298       | 362        | -   | - | 494 | 558  |
| 65VR03-2A | 18.5        | 25  | 284/6TSC      | 37.06           | -         | -          | 21.073    | 23.307     | 11.073     | -         | -          | 13.7      | 14.173     | 206          | -         | -          | 298       | 362        | -   | - | 504 | 568  |
| 65VR03-1A | 22          | 30  | 284/6TSC      | 37.26           | -         | -          | 18.75     | 23.307     | 11.073     | -         | -          | 13.7      | 14.173     | 213          | -         | -          | 299       | 392        | -   | - | 512 | 605  |
| 65VR03-00 | 30          | 40  | 324TSC        | 37.26           | -         | -          | 23.651    | 25.866     | 12.575     | -         | -          | 15.118    | 15.827     | 213          | -         | -          | 531       | 547        | -   | - | 744 | 760  |
| 65VR04-2A | 30          | 40  | 324TSC        | 40.88           | -         | -          | 23.651    | 25.866     | 12.575     | -         | -          | 15.118    | 15.827     | 223          | -         | -          | 531       | 547        | -   | - | 754 | 770  |
| 65VR04-1A | 37          | 50  | 324/6TSC      | 40.88           | -         | -          | 20.953    | 25.866     | 12.575     | -         | -          | 15.118    | 15.827     | 223          | -         | -          | 532       | 584        | -   | - | 755 | 807  |
| 65VR04-00 | 37          | 50  | 324/6TSC      | 40.88           | -         | -          | 20.953    | 25.866     | 12.575     | -         | -          | 15.118    | 15.827     | 229          | -         | -          | 532       | 584        | -   | - | 761 | 813  |
| 65VR05-2A | 37          | 50  | 324/6TSC      | 44.51           | -         | -          | 20.953    | 25.866     | 12.575     | -         | -          | 15.118    | 15.827     | 239          | -         | -          | 532       | 584        | -   | - | 771 | 823  |
| 65VR05-1A | 45          | 60  | 364/5TSC      | 44.51           | -         | -          | 27.077    | 28.526     | 16.016     | -         | -          | 17.874    | 17.914     | 239          | -         | -          | 527       | 825        | -   | - | 766 | 1064 |

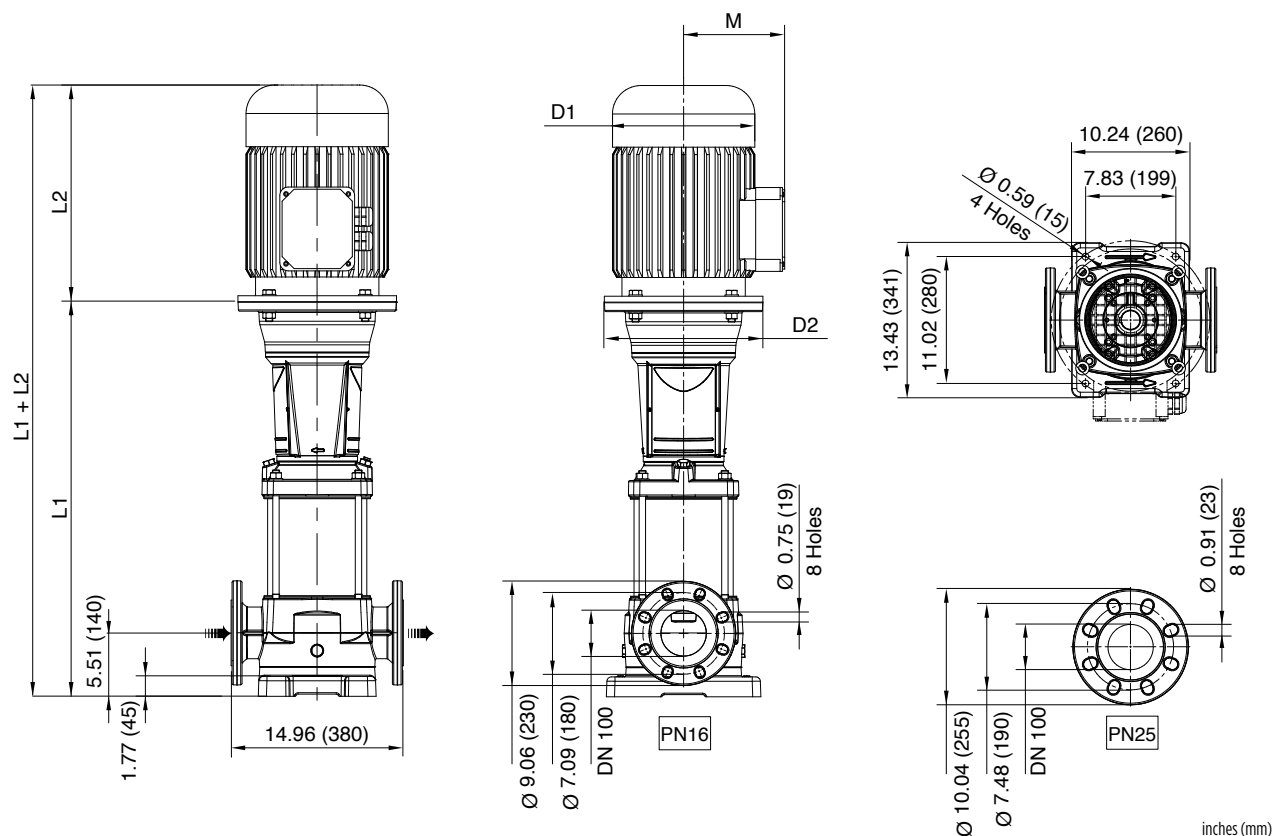
# VERTICAL MULTI-STAGE PUMPS

VR SERIES - 60 HZ



## DIMENSIONS

95VR 60 HZ



F version The pump is supplied without counterflanges (optional accessories, including bolts and joints).

| Model     | Motor       |    |               | Dimensions (in) |           |            |        |         |            |           |            |        |            | Weight (lbs) |           |            |           |            |     |   |     |      |
|-----------|-------------|----|---------------|-----------------|-----------|------------|--------|---------|------------|-----------|------------|--------|------------|--------------|-----------|------------|-----------|------------|-----|---|-----|------|
|           | Rated Power |    | NEMA<br>Frame | L1              | L2        |            |        |         | M<br>(max) | D1        |            |        |            | PE           | Motor     |            |           |            | PMA |   |     |      |
|           | kW          | HP |               |                 | 1Ø<br>ODP | 1Ø<br>TEFC | 3Ø ODP | 3Ø TEFC |            | 1Ø<br>ODP | 1Ø<br>TEFC | 3Ø ODP | 3Ø<br>TEFC |              | 1Ø<br>ODP | 1Ø<br>TEFC | 3Ø<br>ODP | 3Ø<br>TEFC |     |   |     |      |
| 95VR01-1A | 11          | 15 | 213/5TC       | 29.02           | -         | -          | 19.021 | 20.488  | 9.448      | -         | -          | 11.558 | 13.18      | 182          | -         | -          | 151       | 156        | -   | - | 333 | 338  |
| 95VR01-00 | 15          | 20 | 254/6TC       | 29.81           | -         | -          | 18.401 | 21.275  | 9.448      | -         | -          | 11.558 | 13.18      | 188          | -         | -          | 151       | 211        | -   | - | 339 | 399  |
| 95VR02-2A | 18.5        | 25 | 254/6TC       | 33.43           | -         | -          | 21.073 | 23.307  | 11.073     | -         | -          | 13.7   | 14.173     | 196          | -         | -          | 298       | 362        | -   | - | 494 | 558  |
| 95VR02-1A | 22          | 30 | 284/6TSC      | 33.43           | -         | -          | 18.75  | 23.307  | 11.073     | -         | -          | 13.7   | 14.173     | 197          | -         | -          | 299       | 392        | -   | - | 496 | 589  |
| 95VR02-00 | 22          | 30 | 284/6TSC      | 33.63           | -         | -          | 18.75  | 23.307  | 11.073     | -         | -          | 13.7   | 14.173     | 204          | -         | -          | 299       | 392        | -   | - | 503 | 596  |
| 95VR03-2A | 30          | 40 | 284/6TSC      | 37.26           | -         | -          | 23.651 | 25.866  | 12.575     | -         | -          | 15.118 | 15.827     | 213          | -         | -          | 531       | 547        | -   | - | 744 | 760  |
| 95VR03-1A | 37          | 50 | 284/6TSC      | 37.26           | -         | -          | 20.935 | 25.866  | 12.575     | -         | -          | 15.118 | 15.827     | 213          | -         | -          | 532       | 584        | -   | - | 745 | 797  |
| 95VR03-00 | 37          | 50 | 324TSC        | 37.26           | -         | -          | 20.935 | 25.866  | 12.575     | -         | -          | 15.118 | 15.827     | 219          | -         | -          | 532       | 584        | -   | - | 751 | 803  |
| 95VR04-2A | 45          | 60 | 324TSC        | 40.88           | -         | -          | 27.077 | 28.526  | 16.016     | -         | -          | 17.874 | 17.914     | 227          | -         | -          | 527       | 825        | -   | - | 754 | 1052 |

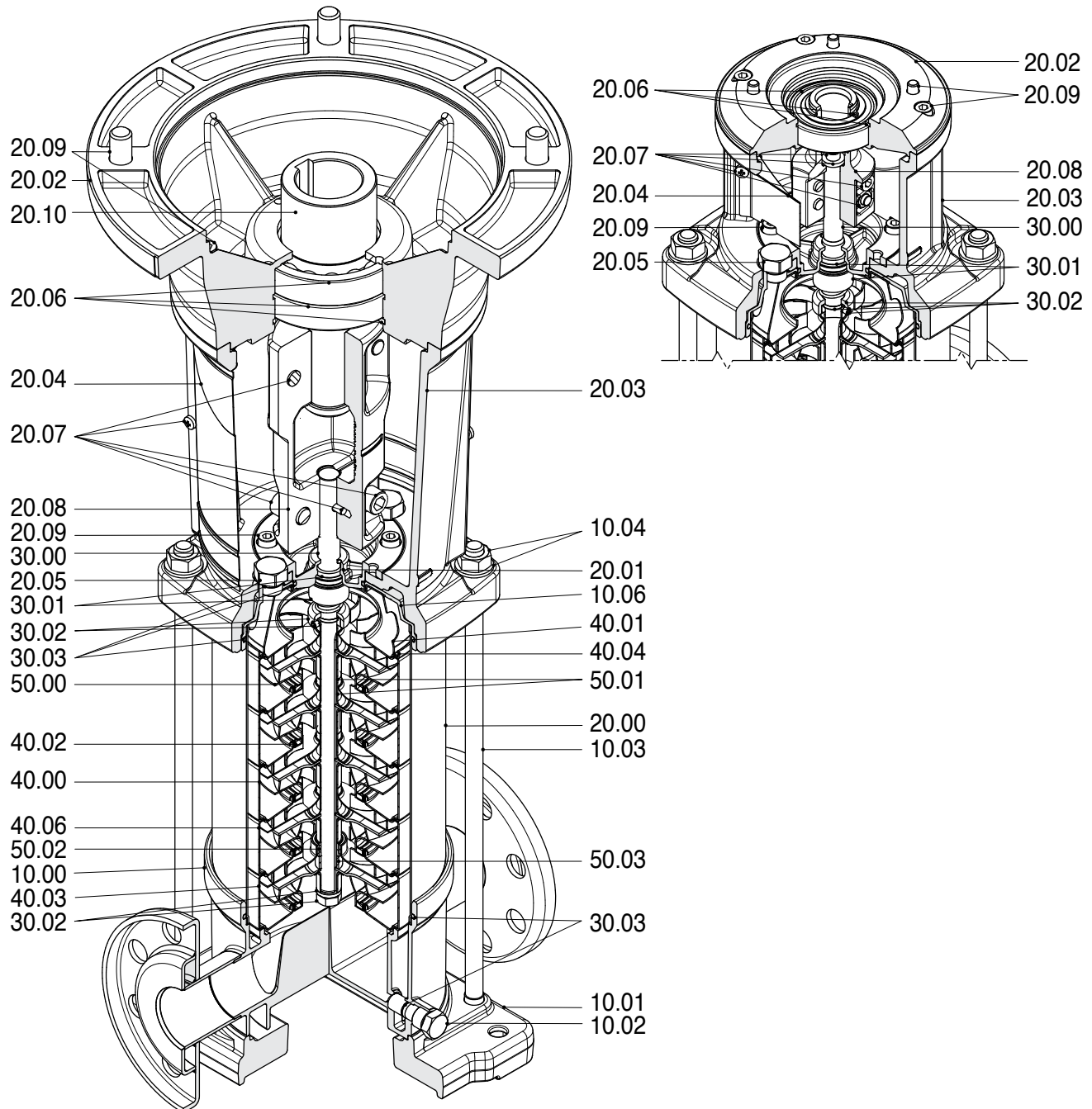
# VERTICAL MULTI-STAGE PUMPS

VR SERIES - 60 HZ



## PUMP SECTION VIEW

15-20VR 60 HZ



# VERTICAL MULTI-STAGE PUMPS

VR SERIES - 60 HZ



## MATERIALS OF CONSTRUCTION

15-20VR 60 HZ

| Ref. No. | Parts Description                     | Material                                                    |                      |        |                   |                 |
|----------|---------------------------------------|-------------------------------------------------------------|----------------------|--------|-------------------|-----------------|
|          |                                       | Type                                                        | G - Standard Version |        | N - 316SS Version |                 |
|          |                                       |                                                             | ASTM/AISI            | DIN/EN | ASTM/AISI         | DIN/EN          |
| 10.00    | Pump casing                           | Stainless Steel                                             | -                    | -      | CF 8M / AISI 316  | 1.4408          |
| 10.02    | Draining and priming cap              | Stainless Steel                                             | -                    | -      | AISI 316          | 1.4401          |
| 10.06    | Upper flange                          | Stainless Steel                                             | -                    | -      | CF 8M / AISI 316  | 1.4408          |
| 20.00    | Outer case                            | Stainless Steel                                             | -                    | -      | AISI 316          | 1.4401          |
| 20.01    | Mechanical seal housing               | Stainless Steel                                             | -                    | -      | CF 8M / AISI 316  | 1.4408 / 1.4401 |
| 20.05    | Filling plugs                         | Stainless Steel                                             | -                    | -      | AISI 316          | 1.4401          |
| 30.00    | Pump shaft                            | Stainless Steel                                             | -                    | -      | AISI 316          | 1.4401          |
| 30.01    | Kit mechanical seal                   | Silicon Carbide SiC, Carbon Graphite, EPDM, Stainless Steel | -                    | -      | -                 | -               |
| 30.02    | Kit mechanical seal fastening kit     | Stainless Steel                                             | -                    | -      | AISI 316          | 1.4401          |
| 30.03    | Kit O-ring                            | EPDM                                                        | -                    | -      | -                 | -               |
| 40.00    | Stage housing and diffuser            | Stainless Steel                                             | -                    | -      | AISI 316          | 1.4401          |
| 40.01    | Stage centering outlet                | Stainless Steel                                             | -                    | -      | AISI 316          | 1.4401          |
| 40.02    | Floating neck ring                    | PTFE/PPS                                                    | -                    | -      | -                 | -               |
| 40.03    | Initial stage housing                 | Stainless Steel                                             | -                    | -      | AISI 316          | 1.4401          |
| 40.04    | Last stage with diffuser              | Stainless Steel                                             | -                    | -      | AISI 316          | 1.4401          |
| 40.06    | Stage housing and diffuser w/ bearing | Stainless Steel, Tungsten Carbide WC                        | -                    | -      | AISI 316          | 1.4401          |
| 50.00    | Impeller                              | Stainless Steel                                             | -                    | -      | AISI 316          | 1.4401          |
| 50.01    | Impeller spacer                       | Stainless Steel                                             | -                    | -      | AISI 316          | 1.4401          |
| 50.02    | Intermediary sleeve                   | Tungsten Carbide WC                                         | -                    | -      | -                 | -               |
| 50.03    | Intermediary sleeve spacer            | Stainless Steel                                             | -                    | -      | AISI 316          | 1.4401          |

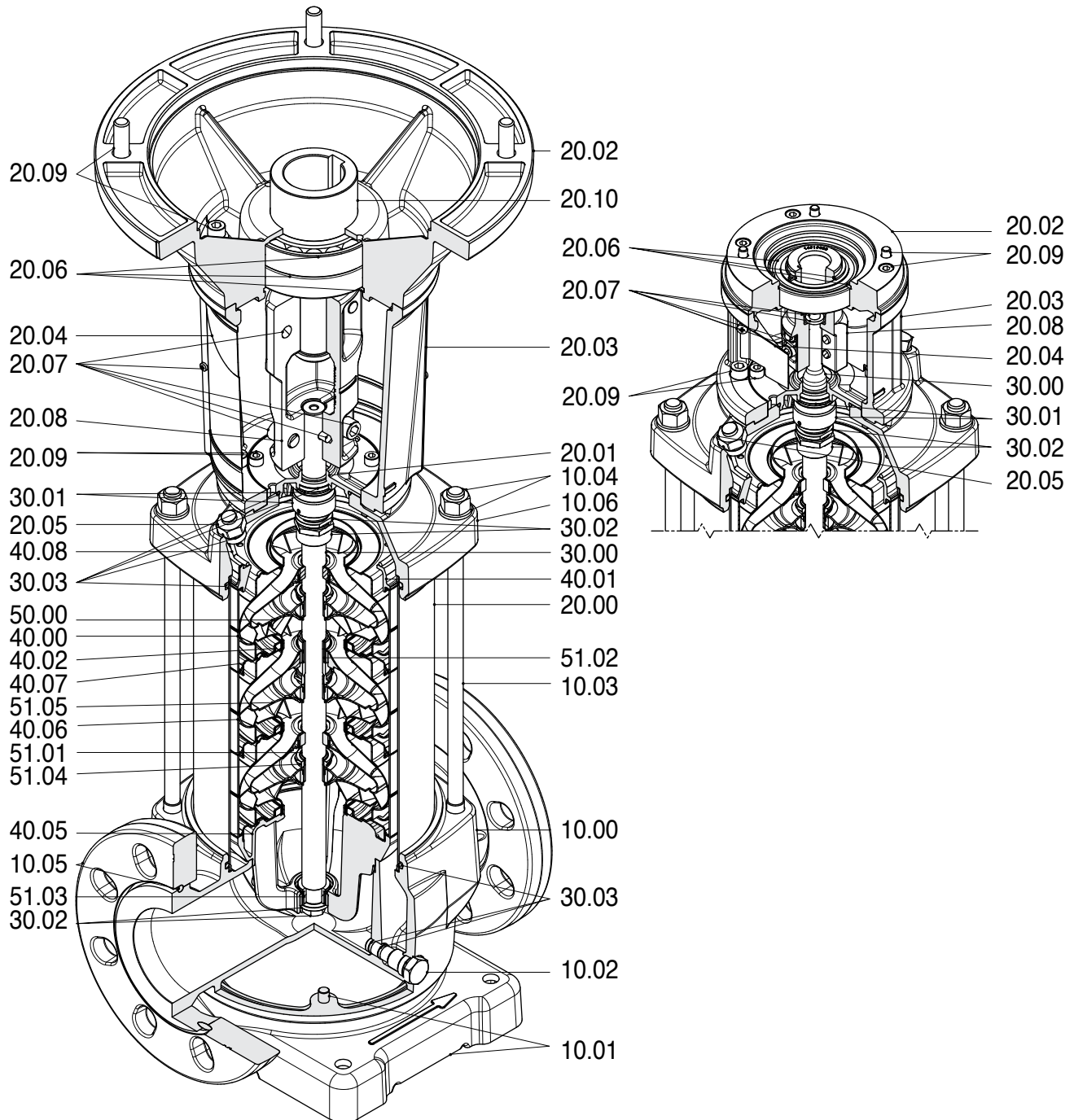
# VERTICAL MULTI-STAGE PUMPS

VR SERIES - 60 HZ



## PUMP SECTION VIEW

30-45-65-95VR 60 HZ



# VERTICAL MULTI-STAGE PUMPS

VR SERIES - 60 HZ



## MATERIALS OF CONSTRUCTION

30-45-65-95VR 60 HZ

| Ref. No. | Parts Description                     | Material                                                    |                      |        |                   |                 |
|----------|---------------------------------------|-------------------------------------------------------------|----------------------|--------|-------------------|-----------------|
|          |                                       | Type                                                        | G - Standard Version |        | N - 316SS Version |                 |
|          |                                       |                                                             | ASTM/AISI            | DIN/EN | ASTM/AISI         | DIN/EN          |
| 10.00    | Pump casing                           | Stainless Steel / Cast Iron                                 | A48 - C35            | GG 25  | CF 8M / AISI 316  | 1.4408          |
| 10.02    | Draining and priming cap              | Stainless Steel                                             | -                    | -      | AISI 316          | 1.4401          |
| 10.06    | Upper flange                          | Stainless Steel / Cast Iron                                 | A48 - C35            | GG 25  | CF 8M / AISI 316  | 1.4408          |
| 20.00    | Outer case                            | Stainless Steel                                             | -                    | -      | AISI 316          | 1.4401          |
| 20.01    | Mechanical seal housing               | Stainless Steel                                             | -                    | -      | CF 8M / AISI 316  | 1.4408 / 1.4401 |
| 20.05    | Filling plugs                         | Stainless Steel                                             | -                    | -      | AISI 316          | 1.4401          |
| 30.00    | Pump shaft                            | Stainless Steel                                             | -                    | -      | AISI 316          | 1.4401          |
| 30.01    | Kit mechanical seal                   | Silicon Carbide SiC, Carbon Graphite, EPDM, Stainless Steel | -                    | -      | -                 | -               |
| 30.02    | Kit mechanical seal fastening kit     | Stainless Steel                                             | -                    | -      | AISI 316          | 1.4401          |
| 30.03    | Kit O-ring                            | EPDM                                                        | -                    | -      | -                 | -               |
| 40.00    | Stage housing and diffuser            | Stainless Steel                                             | -                    | -      | AISI 316          | 1.4401          |
| 40.01    | Stage centering outlet                | Stainless Steel                                             | -                    | -      | AISI 316          | 1.4401          |
| 40.02    | Floating neck ring                    | PTFE/PPS                                                    | -                    | -      | -                 | -               |
| 40.03    | Initial stage housing                 | Stainless Steel                                             | -                    | -      | AISI 316          | 1.4401          |
| 40.04    | Last stage with diffuser              | Stainless Steel                                             | -                    | -      | AISI 316          | 1.4401          |
| 40.06    | Stage housing and diffuser w/ bearing | Stainless Steel, Tungsten Carbide WC                        | -                    | -      | AISI 316          | 1.4401          |
| 50.00    | Impeller                              | Stainless Steel                                             | -                    | -      | AISI 316          | 1.4401          |
| 50.01    | Impeller spacer                       | Stainless Steel                                             | -                    | -      | AISI 316          | 1.4401          |
| 50.02    | Intermediary sleeve                   | Tungsten Carbide WC                                         | -                    | -      | -                 | -               |
| 50.03    | Intermediary sleeve spacer            | Stainless Steel                                             | -                    | -      | AISI 316          | 1.4401          |

# VERTICAL MULTI-STAGE PUMPS

VR SERIES - 60 HZ



## BUILD THE PUMP END

Choose one (1) value from each column

| Nominal Flow | Pump Series | Stages    | Trim Type | Product Material | Connection Type | Seal Type | Motor Flange | Pump/Motor Combination |
|--------------|-------------|-----------|-----------|------------------|-----------------|-----------|--------------|------------------------|
| <b>15</b>    | <b>VR</b>   | <b>04</b> | <b>00</b> | <b>N</b>         | <b>T</b>        | <b>3</b>  | <b>A</b>     | <b>- H</b>             |

NOTE: See Page 28 for motor configuration details

## VR PUMP END ORDER INFORMATION

15-20-30VR 60 HZ

| Pump Hydraulics |             |        |           | Reference Only |      | Available Pump Features |                                                       |                                                                                  |              | Pump and Motor Combination |    |              |
|-----------------|-------------|--------|-----------|----------------|------|-------------------------|-------------------------------------------------------|----------------------------------------------------------------------------------|--------------|----------------------------|----|--------------|
| Nominal Flow    | Pump Series | Stages | Trim Type | HP             | kW   | Product Material        | Connection Type                                       | Seal Type                                                                        | Motor Flange | Liquid End Only            |    | Motor Rating |
| 15              | VR          | 01     | 00        | 2              | 1.5  | N - 316SS               | F - Round Flange<br>T - Oval Flange<br>V - Victaulic® | 1 - Carbon/SiC EPDM<br>2 - SiC/SiC EPDM<br>3 - SiC/SiC FKM<br>4 - Carbon/SiC FKM | A - NEMA     | PE - Pump End              | OR | E            |
|                 |             | 02     |           | 5              | 3.7  |                         |                                                       |                                                                                  |              |                            |    | G            |
|                 |             | 03     |           | 5              | 3.7  |                         |                                                       |                                                                                  |              |                            |    | G            |
|                 |             | 04     |           | 7.5            | 5.5  |                         |                                                       |                                                                                  |              |                            |    | H            |
|                 |             | 05     |           | 10             | 7.5  |                         |                                                       |                                                                                  |              |                            |    | J            |
|                 |             | 06     |           | 10             | 7.5  |                         |                                                       |                                                                                  |              |                            |    | J            |
|                 |             | 07     |           | 15             | 11   |                         |                                                       |                                                                                  |              |                            |    | K            |
| 15              | VR          | 08     | 00        | 15             | 11   | N - 316SS               | F - Round Flange<br>V - Victaulic®                    | 1 - Carbon/SiC EPDM<br>2 - SiC/SiC EPDM<br>3 - SiC/SiC FKM<br>4 - Carbon/SiC FKM | A - NEMA     | PE - Pump End              | OR | K            |
|                 |             | 09     |           | 15             | 11   |                         |                                                       |                                                                                  |              |                            |    | K            |
|                 |             | 10     |           | 20             | 15   |                         |                                                       |                                                                                  |              |                            |    | L            |
|                 |             | 11     |           | 20             | 15   |                         |                                                       |                                                                                  |              |                            |    | L            |
|                 |             | 12     |           | 20             | 15   |                         |                                                       |                                                                                  |              |                            |    | L            |
| 20              | VR          | 01     | 00        | 2              | 1.5  | N - 316SS               | F - Round Flange<br>T - Oval Flange<br>V - Victaulic® | 1 - Carbon/SiC EPDM<br>2 - SiC/SiC EPDM<br>3 - SiC/SiC FKM<br>4 - Carbon/SiC FKM | A - NEMA     | PE - Pump End              | OR | E            |
|                 |             | 02     |           | 5              | 3.7  |                         |                                                       |                                                                                  |              |                            |    | G            |
|                 |             | 03     |           | 7.5            | 5.5  |                         |                                                       |                                                                                  |              |                            |    | H            |
|                 |             | 04     |           | 10             | 7.5  |                         |                                                       |                                                                                  |              |                            |    | J            |
|                 |             | 05     |           | 15             | 11   |                         |                                                       |                                                                                  |              |                            |    | K            |
|                 |             | 06     |           | 15             | 11   |                         |                                                       |                                                                                  |              |                            |    | K            |
|                 |             | 07     |           | 15             | 11   |                         |                                                       |                                                                                  |              |                            |    | K            |
| 20              | VR          | 08     | 00        | 20             | 15   | N - 316SS               | F - Round Flange<br>V - Victaulic®                    | 1 - Carbon/SiC EPDM<br>2 - SiC/SiC EPDM<br>3 - SiC/SiC FKM<br>4 - Carbon/SiC FKM | A - NEMA     | PE - Pump End              | OR | L            |
|                 |             | 09     |           | 20             | 15   |                         |                                                       |                                                                                  |              |                            |    | L            |
|                 |             | 10     |           | 20             | 15   |                         |                                                       |                                                                                  |              |                            |    | L            |
| 30              | VR          | 01     | 1A        | 5              | 3.7  | G - CI/316SS            | F - Round Flange                                      | 1 - Carbon/SiC EPDM<br>2 - SiC/SiC EPDM<br>3 - SiC/SiC FKM<br>4 - Carbon/SiC FKM | A - NEMA     | PE - Pump End              | OR | G            |
|                 |             | 01     | 00        | 5              | 3.7  |                         |                                                       |                                                                                  |              |                            |    | G            |
|                 |             | 02     | 2A        | 7.5            | 5.5  |                         |                                                       |                                                                                  |              |                            |    | H            |
|                 |             | 02     | 1A        | 7.5            | 5.5  |                         |                                                       |                                                                                  |              |                            |    | H            |
|                 |             | 02     | 00        | 10             | 7.5  |                         |                                                       |                                                                                  |              |                            |    | J            |
|                 |             | 03     | 2A        | 15             | 11   |                         |                                                       |                                                                                  |              |                            |    | K            |
|                 |             | 03     | 1A        | 15             | 11   |                         |                                                       |                                                                                  |              |                            |    | K            |
|                 |             | 03     | 00        | 15             | 11   |                         |                                                       |                                                                                  |              |                            |    | K            |
|                 |             | 04     | 2A        | 20             | 15   |                         |                                                       |                                                                                  |              |                            |    | L            |
|                 |             | 04     | 1A        | 20             | 15   |                         |                                                       |                                                                                  |              |                            |    | L            |
|                 |             | 04     | 00        | 20             | 15   |                         |                                                       |                                                                                  |              |                            |    | L            |
|                 |             | 05     | 2A        | 20             | 15   |                         |                                                       |                                                                                  |              |                            |    | L            |
|                 |             | 05     | 1A        | 25             | 18.5 |                         |                                                       |                                                                                  |              |                            |    | M            |
|                 |             | 05     | 00        | 25             | 18.5 |                         |                                                       |                                                                                  |              |                            |    | M            |
|                 |             | 06     | 2A        | 25             | 18.5 |                         |                                                       |                                                                                  |              |                            |    | M            |
|                 |             | 06     | 1A        | 30             | 22   |                         |                                                       |                                                                                  |              |                            |    | N            |
|                 |             | 06     | 00        | 30             | 22   |                         |                                                       |                                                                                  |              |                            |    | N            |
|                 |             | 07     | 2A        | 30             | 22   |                         |                                                       |                                                                                  |              |                            |    | N            |
|                 |             | 07     | 1A        | 40             | 30   |                         |                                                       |                                                                                  |              |                            |    | P            |
|                 |             | 07     | 00        | 40             | 30   |                         |                                                       |                                                                                  |              |                            |    | P            |
|                 |             | 08     | 2A        | 40             | 30   |                         |                                                       |                                                                                  |              |                            |    | P            |
|                 |             | 08     | 1A        | 40             | 30   |                         |                                                       |                                                                                  |              |                            |    | P            |
|                 |             | 08     | 00        | 40             | 30   |                         |                                                       |                                                                                  |              |                            |    | P            |

# VERTICAL MULTI-STAGE PUMPS

VR SERIES - 60 HZ



## BUILD THE PUMP END

Choose one (1) value from each column

| Nominal Flow | Pump Series | Stages    | Trim Type | Product Material | Connection Type | Seal Type | Motor Flange | Pump/Motor Combination |
|--------------|-------------|-----------|-----------|------------------|-----------------|-----------|--------------|------------------------|
| <b>15</b>    | <b>VR</b>   | <b>04</b> | <b>00</b> | <b>N</b>         | <b>T</b>        | <b>3</b>  | <b>A</b>     | - <b>H</b>             |

NOTE: See Page 28 for motor configuration details

## VR PUMP END ORDER INFORMATION

45-65-95VR 60 HZ

| Pump Hydraulics |             |        |           | Reference Only |      | Available Pump Features   |                  |                                                                                  |              | Pump and Motor Combination |    |              |    |                           |                  |                                                                                  |          |               |    |   |
|-----------------|-------------|--------|-----------|----------------|------|---------------------------|------------------|----------------------------------------------------------------------------------|--------------|----------------------------|----|--------------|----|---------------------------|------------------|----------------------------------------------------------------------------------|----------|---------------|----|---|
| Nominal Flow    | Pump Series | Stages | Trim Type | HP             | kW   | Product Material          | Connection Type  | Seal Type                                                                        | Motor Flange | Liquid End Only            |    | Motor Rating |    |                           |                  |                                                                                  |          |               |    |   |
| 45              | VR          | 01     | 1A        | 7.5            | 5.5  | G - CI/316SS<br>N - 316SS | F - Round Flange | 1 - Carbon/SiC EPDM<br>2 - SiC/SiC EPDM<br>3 - SiC/SiC FKM<br>4 - Carbon/SiC FKM | A - NEMA     | PE - Pump End              | OR | H            |    |                           |                  |                                                                                  |          |               |    |   |
|                 |             | 01     | 00        | 7.5            | 5.5  |                           |                  |                                                                                  |              |                            |    | H            |    |                           |                  |                                                                                  |          |               |    |   |
|                 |             | 02     | 2A        | 15             | 11   |                           |                  |                                                                                  |              |                            |    | K            |    |                           |                  |                                                                                  |          |               |    |   |
|                 |             | 02     | 1A        | 15             | 11   |                           |                  |                                                                                  |              |                            |    | K            |    |                           |                  |                                                                                  |          |               |    |   |
|                 |             | 02     | 00        | 15             | 11   |                           |                  |                                                                                  |              |                            |    | K            |    |                           |                  |                                                                                  |          |               |    |   |
|                 |             | 03     | 2A        | 20             | 15   |                           |                  |                                                                                  |              |                            |    | L            |    |                           |                  |                                                                                  |          |               |    |   |
|                 |             | 03     | 1A        | 20             | 15   |                           |                  |                                                                                  |              |                            |    | L            |    |                           |                  |                                                                                  |          |               |    |   |
|                 |             | 03     | 00        | 25             | 18.5 |                           |                  |                                                                                  |              |                            |    | M            |    |                           |                  |                                                                                  |          |               |    |   |
|                 |             | 04     | 2A        | 30             | 22   |                           |                  |                                                                                  |              |                            |    | N            |    |                           |                  |                                                                                  |          |               |    |   |
|                 |             | 04     | 1A        | 30             | 22   |                           |                  |                                                                                  |              |                            |    | N            |    |                           |                  |                                                                                  |          |               |    |   |
|                 |             | 04     | 00        | 40             | 30   |                           |                  |                                                                                  |              |                            |    | P            |    |                           |                  |                                                                                  |          |               |    |   |
|                 |             | 05     | 2A        | 40             | 30   |                           |                  |                                                                                  |              |                            |    | P            |    |                           |                  |                                                                                  |          |               |    |   |
|                 |             | 05     | 1A        | 40             | 30   |                           |                  |                                                                                  |              |                            |    | P            |    |                           |                  |                                                                                  |          |               |    |   |
|                 |             | 05     | 00        | 40             | 30   |                           |                  |                                                                                  |              |                            |    | P            |    |                           |                  |                                                                                  |          |               |    |   |
|                 |             | 06     | 2A        | 40             | 30   |                           |                  |                                                                                  |              |                            |    | P            |    |                           |                  |                                                                                  |          |               |    |   |
|                 |             | 06     | 1A        | 50             | 37   |                           |                  |                                                                                  |              |                            |    | R            |    |                           |                  |                                                                                  |          |               |    |   |
|                 |             | 06     | 00        | 50             | 37   |                           |                  |                                                                                  |              |                            |    | R            |    |                           |                  |                                                                                  |          |               |    |   |
|                 |             | 07     | 2A        | 50             | 37   |                           |                  |                                                                                  |              |                            |    | R            |    |                           |                  |                                                                                  |          |               |    |   |
|                 |             | 07     | 1A        | 50             | 37   |                           |                  |                                                                                  |              |                            |    | R            |    |                           |                  |                                                                                  |          |               |    |   |
|                 |             | 07     | 00        | 60             | 45   |                           |                  |                                                                                  |              |                            |    | S            |    |                           |                  |                                                                                  |          |               |    |   |
| 65              | VR          | 01     | 1A        | 7.5            | 5.5  | G - CI/316SS<br>N - 316SS | F - Round Flange | 1 - Carbon/SiC EPDM<br>2 - SiC/SiC EPDM<br>3 - SiC/SiC FKM<br>4 - Carbon/SiC FKM | A - NEMA     | PE - Pump End              | OR | H            |    |                           |                  |                                                                                  |          |               |    |   |
|                 |             | 01     | 00        | 15             | 11   |                           |                  |                                                                                  |              |                            |    | K            |    |                           |                  |                                                                                  |          |               |    |   |
|                 |             | 02     | 2A        | 15             | 11   |                           |                  |                                                                                  |              |                            |    | K            |    |                           |                  |                                                                                  |          |               |    |   |
|                 |             | 02     | 1A        | 20             | 15   |                           |                  |                                                                                  |              |                            |    | L            |    |                           |                  |                                                                                  |          |               |    |   |
|                 |             | 02     | 00        | 25             | 18.5 |                           |                  |                                                                                  |              |                            |    | M            |    |                           |                  |                                                                                  |          |               |    |   |
|                 |             | 03     | 2A        | 25             | 18.5 |                           |                  |                                                                                  |              |                            |    | M            |    |                           |                  |                                                                                  |          |               |    |   |
|                 |             | 03     | 1A        | 30             | 22   |                           |                  |                                                                                  |              |                            |    | N            |    |                           |                  |                                                                                  |          |               |    |   |
|                 |             | 03     | 00        | 40             | 30   |                           |                  |                                                                                  |              |                            |    | P            |    |                           |                  |                                                                                  |          |               |    |   |
|                 |             | 04     | 2A        | 40             | 30   |                           |                  |                                                                                  |              |                            |    | P            |    |                           |                  |                                                                                  |          |               |    |   |
|                 |             | 04     | 1A        | 50             | 37   |                           |                  |                                                                                  |              |                            |    | R            |    |                           |                  |                                                                                  |          |               |    |   |
|                 |             | 04     | 00        | 50             | 37   |                           |                  |                                                                                  |              |                            |    | R            |    |                           |                  |                                                                                  |          |               |    |   |
|                 |             | 05     | 2A        | 50             | 37   |                           |                  |                                                                                  |              |                            |    | R            |    |                           |                  |                                                                                  |          |               |    |   |
|                 |             | 05     | 1A        | 60             | 45   |                           |                  |                                                                                  |              |                            |    | S            |    |                           |                  |                                                                                  |          |               |    |   |
|                 |             | 95     | VR        | 01             | 1A   |                           |                  |                                                                                  |              |                            |    | 15           | 11 | G - CI/316SS<br>N - 316SS | F - Round Flange | 1 - Carbon/SiC EPDM<br>2 - SiC/SiC EPDM<br>3 - SiC/SiC FKM<br>4 - Carbon/SiC FKM | A - NEMA | PE - Pump End | OR | K |
|                 |             |        |           | 01             | 00   |                           |                  |                                                                                  |              |                            |    | 20           | 15 |                           |                  |                                                                                  |          |               |    | L |
| 02              | 2A          |        |           | 25             | 18.5 | M                         |                  |                                                                                  |              |                            |    |              |    |                           |                  |                                                                                  |          |               |    |   |
| 02              | 1A          |        |           | 30             | 22   | N                         |                  |                                                                                  |              |                            |    |              |    |                           |                  |                                                                                  |          |               |    |   |
| 02              | 00          |        |           | 30             | 22   | N                         |                  |                                                                                  |              |                            |    |              |    |                           |                  |                                                                                  |          |               |    |   |
| 03              | 2A          |        |           | 40             | 30   | P                         |                  |                                                                                  |              |                            |    |              |    |                           |                  |                                                                                  |          |               |    |   |
| 03              | 1A          |        |           | 50             | 37   | R                         |                  |                                                                                  |              |                            |    |              |    |                           |                  |                                                                                  |          |               |    |   |
| 03              | 00          |        |           | 50             | 37   | R                         |                  |                                                                                  |              |                            |    |              |    |                           |                  |                                                                                  |          |               |    |   |
| 04              | 2A          |        |           | 60             | 45   | S                         |                  |                                                                                  |              |                            |    |              |    |                           |                  |                                                                                  |          |               |    |   |

# VERTICAL MULTI-STAGE PUMPS

VR SERIES - 60 HZ



## BUILD THE PUMP MOTOR ASSEMBLY

Choose one (1) value from each column

**Selected Pump: 15VR0400NT3A**

HP/kW Rating

Hertz

Enclosure Type

Phase/Voltage

**H**

**6**

**E**

**3**

## VR SERIES MOTOR ORDER INFORMATION

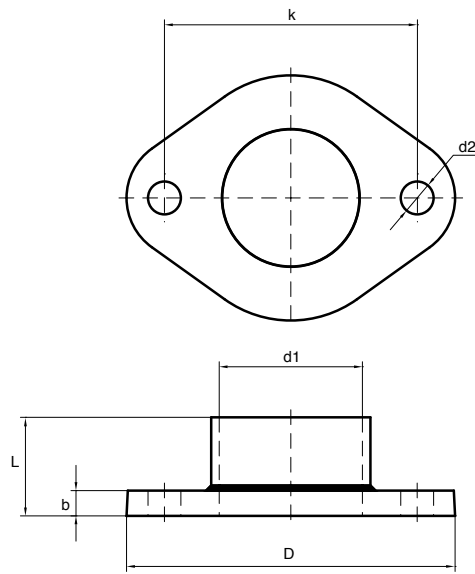
| HP/kW Rating                                                    | Hertz         | Enclosure Type          | Phase/Voltage |                              |
|-----------------------------------------------------------------|---------------|-------------------------|---------------|------------------------------|
| <b>B</b> - 0.75/0.55<br><b>C</b> - 1/0.75<br><b>D</b> - 1.5/1.1 | <b>6</b> - 60 | <b>D</b> - ODP          | 1             | 1Ø - 115/230 V               |
|                                                                 |               |                         | 3             | 3Ø - 230/460 V               |
|                                                                 |               | <b>T</b> - TEFC         | 1             | 1Ø - 115/230 V               |
|                                                                 |               |                         | 3             | 3Ø - 230/460 V               |
|                                                                 |               |                         | 5             | 3Ø - 575 V                   |
| <b>E</b> - 2/1.5                                                | <b>6</b> - 60 | <b>D</b> - ODP          | 1             | 1Ø - 115/230 V               |
|                                                                 |               |                         | 3             | 3Ø - 230/460 V               |
|                                                                 |               | <b>T</b> - TEFC         | 1             | 1Ø - 115/230 V               |
|                                                                 |               |                         | 3             | 3Ø - 230/460 V               |
|                                                                 |               |                         | 5             | 3Ø - 575 V                   |
| <b>F</b> - 3/2.2                                                | <b>6</b> - 60 | <b>D</b> - ODP          | 3             | 3Ø - 230/460 V               |
|                                                                 |               |                         | 1             | 1Ø - 115/230 V               |
|                                                                 |               | <b>T</b> - TEFC         | 3             | 3Ø - 230/460 V               |
|                                                                 |               |                         | 1             | 1Ø - 115/230 V               |
|                                                                 |               |                         | 5             | 3Ø - 575 V                   |
| <b>G</b> - 5/3.7                                                | <b>6</b> - 60 | <b>T</b> - TEFC         | 1             | 1Ø - 115/230 V               |
|                                                                 |               | <b>P</b> - Premium ODP  | 3             | 3Ø - 230/460 V               |
|                                                                 |               | <b>E</b> - Premium TEFC | 3             | 3Ø - 230/460 V               |
|                                                                 |               |                         | 5             | 3Ø - 575 V                   |
|                                                                 |               |                         | 3             | 3Ø - 230/460 V               |
| <b>H</b> - 7.5/5.5                                              | <b>6</b> - 60 | <b>E</b> - Premium TEFC | 3<br>5        | 3Ø - 230/460 V<br>3Ø - 575 V |
| <b>J</b> - 10/7.5                                               |               |                         |               |                              |
| <b>K</b> - 15/11                                                |               |                         |               |                              |
| <b>L</b> - 20/15                                                |               |                         |               |                              |
| <b>M</b> - 25/18.5                                              |               |                         |               |                              |
| <b>N</b> - 30/2240/30                                           |               |                         |               |                              |
| <b>P</b> - 40/30                                                |               |                         |               |                              |
| <b>R</b> - 50/37                                                |               |                         |               |                              |
| <b>S</b> - 60/45                                                |               |                         |               |                              |

# VERTICAL MULTI-STAGE PUMPS

VR SERIES - 60 HZ



## DIMENSIONS OF OVAL COUNTERFLANGES



| DN | Dimensions (in / mm) |            |            |           |           | Holes (in / mm) |    | PN |
|----|----------------------|------------|------------|-----------|-----------|-----------------|----|----|
|    | D                    | dL         | kL         |           | b         | d2              | Nº |    |
| 32 | 3.90 / 99            | Rp 1-1/4"  | 2.95 / 75  | 1.30 / 33 | 0.31 / 8  | 0.43 / 11       | 2  | 16 |
|    |                      | NPT 1-1/4" |            |           |           |                 |    |    |
| 40 | 5.12 / 130           | Rp 1-1/2"  | 3.94 / 100 | 1.38 / 35 | 0.39 / 10 | 0.51 / 13       |    |    |
|    |                      | NPT 1-1/2" |            |           |           |                 |    |    |
| 50 |                      | Rp 2"      |            | 1.54 / 39 |           |                 |    |    |
|    |                      | NPT 2"     |            |           |           |                 |    |    |

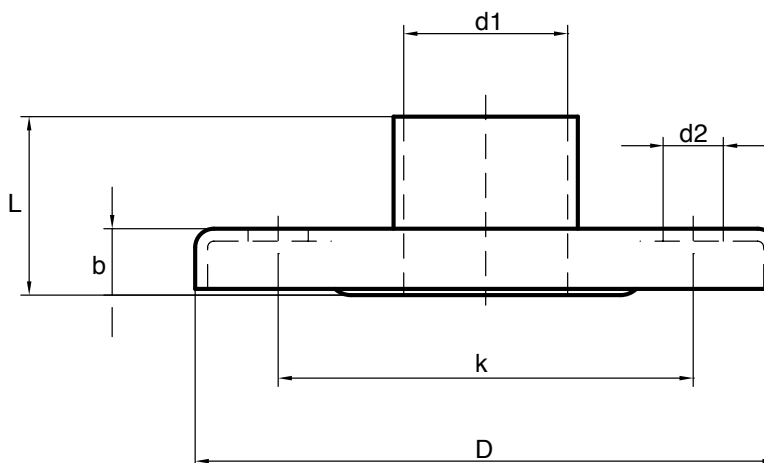
# VERTICAL MULTI-STAGE PUMPS

VR SERIES - 60 HZ



## DIMENSIONS OF ROUND THREADED COUNTERFLANGES

ACCORDING TO EN 1092-1



| DN | Dimensions (in / mm) |                         |            |           | Holes (in / mm) |           | PN       |    |  |
|----|----------------------|-------------------------|------------|-----------|-----------------|-----------|----------|----|--|
|    | D                    | dL                      | kL         |           | b               | d2        |          | Nº |  |
| 25 | 4.53 / 115           | Rp 1"<br>NPT 1"         | 3.35 / 85  | 1.69 / 43 | 0.63 / 16       | 0.55 / 14 | 0.16 / 4 | 25 |  |
| 32 | 5.51 / 140           | Rp 1-1/4"<br>NPT 1-1/4" | 3.94 / 100 |           |                 | 0.71 / 18 |          |    |  |
| 40 | 5.91 / 150           | Rp 1-1/2"<br>NPT 1-1/2" | 4.33 / 110 |           | 0.71 / 18       | 0.75 / 19 | 0.31 / 8 |    |  |
| 50 | 6.50 / 165           | Rp 2"<br>NPT 2"         | 5.00 / 127 |           |                 |           |          |    |  |

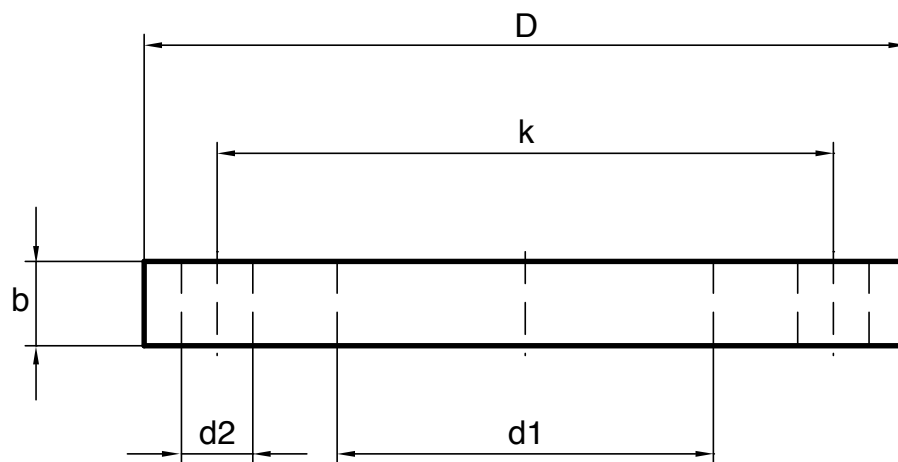
# VERTICAL MULTI-STAGE PUMPS

VR SERIES - 60 HZ



## DIMENSIONS OF WELDING ROUND COUNTERFLANGES

ACCORDING TO EN 1092-1



| DN  | Dimensions (in / mm) |              |            |           | Holes (in / mm) |          | PN |
|-----|----------------------|--------------|------------|-----------|-----------------|----------|----|
|     | D                    | dL           | kL         | b         | d2              | N°       |    |
| 65  | 7.28 / 185           | 3.05 / 77.5  | 5.71 / 145 | 0.87 / 22 | 0.71 / 18       | 0.31 / 8 | 25 |
| 80  | 7.87 / 200           | 3.56 / 90.51 | 2.36 / 60  | 0.94 / 24 |                 |          |    |
| 100 | 9.25 / 235           | 4.57 / 116   | 7.48 / 190 | 1.02 / 26 |                 |          |    |

# VERTICAL MULTI-STAGE PUMPS

VR SERIES - 60 HZ



## ROUND THREADED COMPANION FLANGE KIT - TYPE F

| Part No. | Female NPT | Description                                                                             |
|----------|------------|-----------------------------------------------------------------------------------------|
| 14262024 | 1-1/4"     | Fits VR 3/5: Includes (2) AISI 316 SS flanges, (2) gaskets, (8 each) bolts and nuts     |
| 14262025 | 2"         | Fits VR 9/15/20: Includes (2) AISI 316 SS flanges, (2) gaskets, (8 each) bolts and nuts |

NOTE: Includes gasket and fasteners

## MECHANICAL SEAL KITS

| Part No. | Description                                   |
|----------|-----------------------------------------------|
| 315104   | 15VR/20VR Type 1 Carbon/SiC EPDM Seal Kit     |
| 315105   | 15VR/20VR Type 2 SiC/SiC EPDM Seal Kit        |
| 315106   | 15VR/20VR Type 3 SiC/SiC FKM Seal Kit         |
| 315107   | 15VR/20VR Type 4 Carbon/SiC FKM Seal Kit      |
| 315108   | 30VR thru 95VR Type 1 Carbon/SiC FKM Seal Kit |
| 315109   | 30VR thru 95VR Type 2 SiC/SiC EPDM Seal Kit   |
| 315110   | 30VR thru 95VR Type 3 SiC/SiC FKM Seal Kit    |
| 315111   | 30VR thru 95VR Type 4 Carbon/SiC FKM Seal Kit |

## O-RING KITS

| Part No. | Description                    |
|----------|--------------------------------|
| 315112   | 15VR/20VR EPDM O-ring Kit      |
| 315113   | 15VR/20VR FKM O-ring Kit       |
| 315114   | 30VR thru 95VR EPDM O-ring Kit |
| 315115   | 30VR thru 95VR FKM O-ring Kit  |

# VERTICAL MULTI-STAGE PUMPS

VR SERIES - 60 HZ



## VR SERIES REPLACEMENT STACK KITS

15VR

| Stages | HP  | kW  | Part No. | Description         |
|--------|-----|-----|----------|---------------------|
| 1      | 2   | 1.5 | 315000   | Stack Kit VR1501-00 |
| 2      | 5   | 3.7 | 315001   | Stack Kit VR1502-00 |
| 3      | 5   | 3.7 | 315002   | Stack Kit VR1503-00 |
| 4      | 7.5 | 5.5 | 315003   | Stack Kit VR1504-00 |
| 5      | 10  | 7.5 | 315004   | Stack Kit VR1505-00 |
| 6      | 10  | 7.5 | 315005   | Stack Kit VR1506-00 |
| 7      | 15  | 11  | 315006   | Stack Kit VR1507-00 |
| 8      | 15  | 11  | 315007   | Stack Kit VR1508-00 |
| 9      | 15  | 11  | 315008   | Stack Kit VR1509-00 |
| 10     | 20  | 15  | 315009   | Stack Kit VR1510-00 |
| 11     | 20  | 15  | 315010   | Stack Kit VR1511-00 |
| 12     | 20  | 15  | 315011   | Stack Kit VR1512-00 |

## VR SERIES REPLACEMENT STACK KITS

20VR

| Stages | HP  | kW  | Part No. | Description         |
|--------|-----|-----|----------|---------------------|
| 1      | 2   | 1.5 | 315012   | Stack Kit VR2001-00 |
| 2      | 5   | 3.7 | 315013   | Stack Kit VR2002-00 |
| 3      | 7.5 | 5.5 | 315014   | Stack Kit VR2003-00 |
| 4      | 10  | 7.5 | 315015   | Stack Kit VR2004-00 |
| 5      | 15  | 11  | 315016   | Stack Kit VR2005-00 |
| 6      | 15  | 11  | 315017   | Stack Kit VR2006-00 |
| 7      | 15  | 11  | 315018   | Stack Kit VR2007-00 |
| 8      | 20  | 15  | 315019   | Stack Kit VR2008-00 |
| 9      | 20  | 15  | 315020   | Stack Kit VR2009-00 |
| 10     | 20  | 15  | 315021   | Stack Kit VR2010-00 |

## VR SERIES REPLACEMENT STACK KITS

30VR

| Stages | HP  | kW   | Part No. | Description         |
|--------|-----|------|----------|---------------------|
| 1      | 5   | 3.7  | 315022   | Stack Kit VR3001-1A |
| 1      | 5   | 3.7  | 315023   | Stack Kit VR3001-00 |
| 2      | 7.5 | 5.5  | 315024   | Stack Kit VR3002-2A |
| 2      | 7.5 | 5.5  | 315025   | Stack Kit VR3002-1A |
| 2      | 10  | 7.5  | 315026   | Stack Kit VR3002-00 |
| 3      | 15  | 11   | 315027   | Stack Kit VR3003-2A |
| 3      | 15  | 11   | 315028   | Stack Kit VR3003-1A |
| 3      | 15  | 11   | 315029   | Stack Kit VR3003-00 |
| 4      | 20  | 15   | 315030   | Stack Kit VR3004-2A |
| 4      | 20  | 15   | 315031   | Stack Kit VR3004-1A |
| 4      | 20  | 15   | 315032   | Stack Kit VR3004-00 |
| 5      | 20  | 15   | 315033   | Stack Kit VR3005-2A |
| 5      | 25  | 18.5 | 315034   | Stack Kit VR3005-1A |
| 5      | 25  | 18.5 | 315035   | Stack Kit VR3005-00 |
| 6      | 25  | 18.5 | 315036   | Stack Kit VR3006-2A |
| 6      | 30  | 22   | 315037   | Stack Kit VR3006-1A |
| 6      | 30  | 22   | 315038   | Stack Kit VR3006-00 |
| 7      | 30  | 22   | 315039   | Stack Kit VR3007-2A |
| 7      | 40  | 30   | 315040   | Stack Kit VR3007-1A |
| 7      | 40  | 30   | 315041   | Stack Kit VR3007-00 |
| 8      | 40  | 30   | 315042   | Stack Kit VR3008-2A |
| 8      | 40  | 30   | 315043   | Stack Kit VR3008-1A |
| 8      | 40  | 30   | 315044   | Stack Kit VR3008-00 |

NOTE: Components included: shaft, complete stages, and spacers

# VERTICAL MULTI-STAGE PUMPS

VR SERIES - 60 HZ



## VR SERIES REPLACEMENT STACK KITS

45VR

| Stages | HP  | kW   | Part No. | Description         |
|--------|-----|------|----------|---------------------|
| 1      | 7.5 | 5.5  | 315045   | Stack Kit VR3001-1A |
| 1      | 7.5 | 5.5  | 315046   | Stack Kit VR3001-00 |
| 2      | 15  | 11   | 315047   | Stack Kit VR3002-2A |
| 2      | 15  | 11   | 315048   | Stack Kit VR3002-1A |
| 2      | 15  | 11   | 315049   | Stack Kit VR3002-00 |
| 3      | 20  | 15   | 315050   | Stack Kit VR3003-2A |
| 3      | 20  | 15   | 315051   | Stack Kit VR3003-1A |
| 3      | 25  | 18.5 | 315052   | Stack Kit VR3003-00 |
| 4      | 30  | 22   | 315053   | Stack Kit VR3004-2A |
| 4      | 30  | 22   | 315054   | Stack Kit VR3004-1A |
| 4      | 40  | 30   | 315055   | Stack Kit VR3004-00 |
| 5      | 40  | 30   | 315056   | Stack Kit VR3005-2A |
| 5      | 40  | 30   | 315057   | Stack Kit VR3005-1A |
| 5      | 40  | 30   | 315058   | Stack Kit VR3005-00 |
| 6      | 40  | 30   | 315059   | Stack Kit VR3006-2A |
| 6      | 50  | 37   | 315060   | Stack Kit VR3006-1A |
| 6      | 50  | 37   | 315061   | Stack Kit VR3006-00 |
| 7      | 50  | 37   | 315062   | Stack Kit VR3007-2A |
| 7      | 50  | 37   | 315063   | Stack Kit VR3007-1A |
| 7      | 60  | 45   | 315064   | Stack Kit VR3008-00 |

## VR SERIES REPLACEMENT STACK KITS

65VR

| Stages | HP  | kW   | Part No. | Description         |
|--------|-----|------|----------|---------------------|
| 1      | 7.5 | 5.5  | 315065   | Stack Kit VR6501-1A |
| 1      | 15  | 11   | 315066   | Stack Kit VR6501-00 |
| 2      | 15  | 11   | 315067   | Stack Kit VR6502-2A |
| 2      | 20  | 15   | 315068   | Stack Kit VR6502-1A |
| 2      | 25  | 18.5 | 315069   | Stack Kit VR6502-00 |
| 3      | 25  | 18.5 | 315070   | Stack Kit VR6503-2A |
| 3      | 30  | 22   | 315071   | Stack Kit VR6503-1A |
| 3      | 40  | 30   | 315072   | Stack Kit VR6503-00 |
| 4      | 40  | 30   | 315073   | Stack Kit VR6504-2A |
| 4      | 50  | 37   | 315074   | Stack Kit VR6504-1A |
| 4      | 50  | 37   | 315075   | Stack Kit VR6504-00 |
| 5      | 50  | 37   | 315076   | Stack Kit VR6505-2A |
| 5      | 60  | 45   | 315077   | Stack Kit VR6505-1A |

## VR SERIES REPLACEMENT STACK KITS

95VR

| Stages | HP | kW   | Part No. | Description         |
|--------|----|------|----------|---------------------|
| 1      | 15 | 11   | 315078   | Stack Kit VR9501-1A |
| 1      | 20 | 15   | 315079   | Stack Kit VR9501-00 |
| 2      | 25 | 18.5 | 315080   | Stack Kit VR9502-2A |
| 2      | 30 | 22   | 315081   | Stack Kit VR9502-1A |
| 2      | 30 | 22   | 315082   | Stack Kit VR9502-00 |
| 3      | 40 | 30   | 315083   | Stack Kit VR9503-2A |
| 3      | 50 | 37   | 315084   | Stack Kit VR9503-1A |
| 3      | 50 | 37   | 315085   | Stack Kit VR9503-00 |
| 4      | 60 | 45   | 315086   | Stack Kit VR9504-2A |

NOTE: Components included: shaft, complete stages, and spacers

# VERTICAL MULTI-STAGE PUMPS

VR SERIES - 60 HZ



## MOTOR DATA

### 3600 RPM SINGLE PHASE

| Efficiency    | HP | Volts   | Frame | Service Factor | Rated Current | NEMA-NOM-EFF | Part No. |
|---------------|----|---------|-------|----------------|---------------|--------------|----------|
| Standard ODP  | 2  | 115/230 | 56C   | 1.15           | 21.9/11.00    | 77.9%        | 315116   |
| Standard TEFC | 2  | 115/230 | 56C   | 1.15           | 20.0/10.0     | 77.9%        | 315117   |
|               | 5  | 230     | 184TC | 1.15           | 21.0          | 83.0%        | 315118   |

## MOTOR DATA

### 3600 RPM THREE PHASE

| Efficiency    | HP  | Volts       | Frame    | Service Factor | Rated Current  | NEMA-NOM-EFF | Part No. |
|---------------|-----|-------------|----------|----------------|----------------|--------------|----------|
| Standard ODP  | 2   | 208-230/460 | 56C      | 1.15           | 5.79-5.24/2.62 | 80.0%        | 315119   |
| Standard TEFC | 2   | 208-230/460 | 56C      | 1.15           | 6.24-5.64/2.82 | 78.5%        | 315120   |
| Premium ODP   | 5   | 208-230/460 | 182/4TC  | 1.15           | 13.5-12.2/6.10 | 86.5%        | 315121   |
|               | 7.5 | 208-230/460 | 213/5TC  | 1.15           | 20.9-18.9/9.44 | 89.2%        | 315122   |
|               | 10  | 208-230/460 | 213/5TC  | 1.15           | 26.5-24.0/12.0 | 89.5%        | 315123   |
|               | 15  | 208-230/460 | 254/6TC  | 1.15           | 41.0-37.1/18.5 | 90.8%        | 315124   |
|               | 20  | 208-230/460 | 254/6TC  | 1.15           | 52.6-47.6/23.8 | 91.0%        | 315125   |
|               | 25  | 208-230/460 | 284/6TC  | 1.15           | 66.0-59.7/29.9 | 92.6%        | 315126   |
|               | 30  | 208-230/460 | 284/6TC  | 1.15           | 76.7-69.4/34.7 | 92.4%        | 315127   |
|               | 40  | 208-230/460 | 324/6TSC | 1.15           | 110-99.6/49.8  | 93.3%        | 315128   |
|               | 50  | 208-230/460 | 324/6TSC | 1.15           | 131-118/59.1   | 93.6%        | 315129   |
|               | 60  | 208-230/460 | 324/6TSC | 1.15           | 151-137/68.3   | 94.0%        | 315130   |
| Premium TEFC  | 2   | 208-230/460 | 56C      | 1.15           | 5.46-4.94/2.47 | 85.5%        | 315131   |
|               | 5   | 208-230/460 | 182/4TC  | 1.15           | 13.0-11.8/5.90 | 88.5%        | 315132   |
|               | 7.5 | 208-230/460 | 213/5TC  | 1.15           | 19.2-17.3/8.67 | 89.5%        | 315133   |
|               | 10  | 208-230/460 | 213/5TC  | 1.15           | 25.4-23.0/11.5 | 90.2%        | 315134   |
|               | 15  | 208-230/460 | 254/6TC  | 1.15           | 38.5-34.8/17.4 | 91.0%        | 315135   |
|               | 20  | 208-230/460 | 254/6TC  | 1.15           | 50.2-45.4/22.7 | 91.0%        | 315136   |
|               | 25  | 208-230/460 | 284/6TC  | 1.25           | 63.0-57.0/28.5 | 91.7%        | 315137   |
|               | 30  | 208-230/460 | 284/6TC  | 1.25           | 74.8-67.6/33.8 | 91.7%        | 315138   |
|               | 40  | 208-230/460 | 324/6TSC | 1.25           | 101-91.6/45.8  | 92.4%        | 315139   |
|               | 50  | 208-230/460 | 324/6TSC | 1.25           | 124-112/56.1   | 93.0%        | 315140   |
|               | 60  | 208-230/460 | 324/6TSC | 1.25           | 148-134/67.0   | 93.6%        | 315141   |

## MOTOR DATA

### 3600 RPM THREE PHASE

| Efficiency    | HP  | Volts | Frame    | Service Factor | Rated Current | NEMA-NOM-EFF | Part No. |
|---------------|-----|-------|----------|----------------|---------------|--------------|----------|
| Standard TEFC | 2   | 575   | 56C      | 1.15           | 2.1           | 80.0%        | 315142   |
| Premium TEFC  | 5   | 575   | 182/4TC  | 1.15           | 4.72          | 88.5%        | 315143   |
|               | 7.5 | 575   | 213/5TC  | 1.15           | 6.86          | 89.5%        | 315144   |
|               | 10  | 575   | 213/5TC  | 1.15           | 9.2           | 90.2%        | 315145   |
|               | 15  | 575   | 254/6TC  | 1.15           | 13.6          | 91.0%        | 315146   |
|               | 20  | 575   | 254/6TC  | 1.15           | 18.2          | 91.0%        | 315147   |
|               | 25  | 575   | 284/6TC  | 1.25           | 22.8          | 91.7%        | 315148   |
|               | 30  | 575   | 284/6TC  | 1.25           | 27            | 91.7%        | 315149   |
|               | 40  | 575   | 324/6TSC | 1.25           | 36.6          | 92.4%        | 315150   |
|               | 50  | 575   | 324/6TSC | 1.25           | 44.9          | 93.0%        | 315151   |



**Franklin Electric**