

# Vertical Multi-Stage Pump | Submittal Data

Submittal No: 301-278 | Model: T95VR | RPM: 3600–60 Hz | Effective: June 28, 2024 | Supersedes: June 4, 2024

JOB: \_\_\_\_\_

REPRESENTATIVE: \_\_\_\_\_

ENGINEER: \_\_\_\_\_

CONTRACTOR: \_\_\_\_\_

## PRODUCT DATA

ITEM NO. \_\_\_\_\_ MODEL NO. \_\_\_\_\_

IMPELLER DIAMETER \_\_\_\_\_ HORSEPOWER \_\_\_\_\_

GPM \_\_\_\_\_ VOLTAGE \_\_\_\_\_

HEAD/FT \_\_\_\_\_ RPM \_\_\_\_\_

WEIGHT \_\_\_\_\_

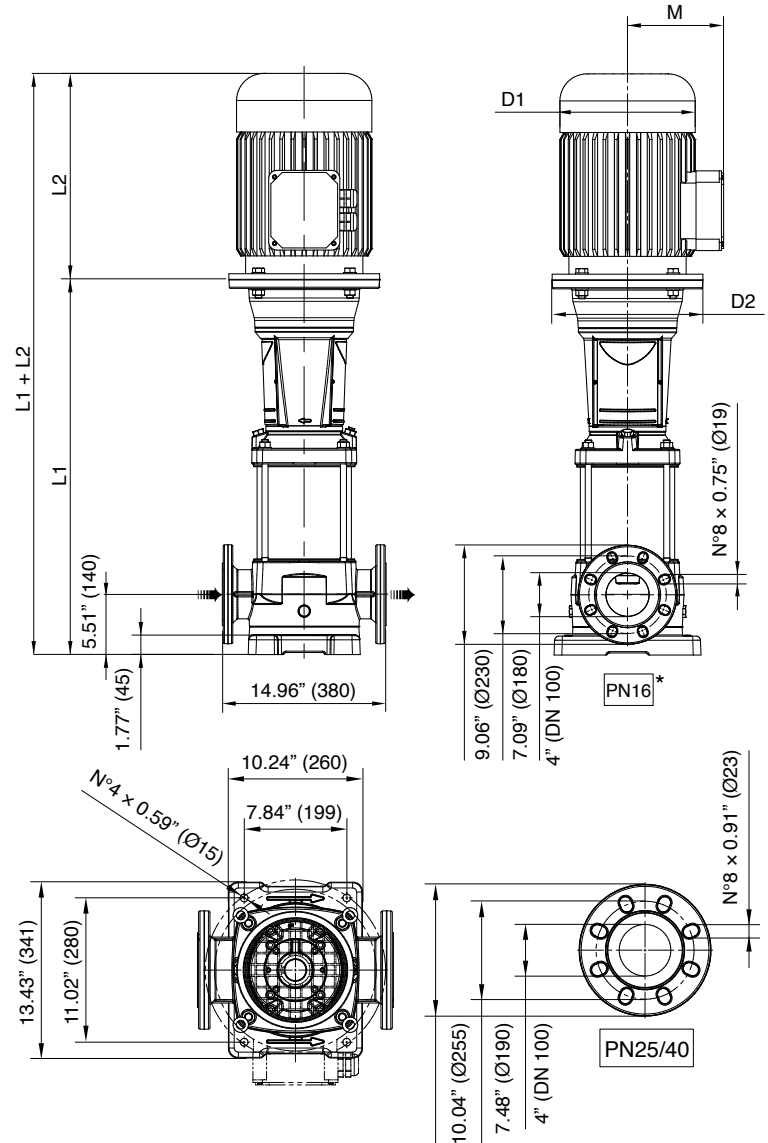
NSF/ANSI/CAN 61-G & 372 CERTIFIED

| Configuration | DOE Basic Model Number | PEI Value        |      | Energy Rating |
|---------------|------------------------|------------------|------|---------------|
| Pump + Motor  | 95VR                   | PEI <sub>d</sub> | 0.96 | 4             |

## DIMENSIONS

| Model      | No Stages | 3600 RPM, 2-Pole Motor Rating |       |                   | Pump End Only |               |
|------------|-----------|-------------------------------|-------|-------------------|---------------|---------------|
|            |           | Power                         |       | NEMA Frame Size   | L1 (in.)      | Weight (lbs.) |
|            |           | HP                            | kW    |                   |               |               |
| T95VR01-1A | 1         | 15.00                         | 11.00 | 213-5TC/254-6TC   | 29.02         | 182/188       |
| T95VR01-00 | 1         | 20.00                         | 15.00 | 254-6TC           | 29.81         | 188           |
| T95VR02-2A | 2         | 25.00                         | 18.50 | 254-6TC/284-6TSC  | 33.43         | 196/204       |
| T95VR02-1A | 2         | 30.00                         | 22.00 | 284-6TSC          | 33.43         | 204           |
| T95VR03-2A | 3         | 40.00                         | 30.00 | 284-6TSC/324-6TSC | 37.26         | 213/219       |
| T95VR03-1A | 3         | 50.00                         | 37.50 | 324-6TSC          | 37.26         | 213           |
| T95VR03-00 | 3         | 50.00                         | 37.50 | 324-6TSC          | 37.26         | 213           |
| T95VR04-2A | 4         | 60.00                         | 40.00 | 324-6TSC/364-5TSC | 40.88         | 227           |

| Model      | No Stages | 3600 RPM, 2-Pole Motor Dimensions (in.) |         |             |         |         |         |
|------------|-----------|-----------------------------------------|---------|-------------|---------|---------|---------|
|            |           | L2 Height                               |         | D1 Diameter |         | M (max) |         |
|            |           | 1Ø TEFC                                 | 3Ø TEFC | 1Ø TEFC     | 3Ø TEFC | 1Ø TEFC | 3Ø TEFC |
| T95VR01-1A | 1         | N/A                                     | 17.89   | N/A         | 10.28   | N/A     | 8.05    |
| T95VR01-00 | 1         | N/A                                     | 19.78   | N/A         | 12.94   | N/A     | 10.04   |
| T95VR02-2A | 2         | N/A                                     | 21.46   | N/A         | 13.63   | N/A     | 12.09   |
| T95VR02-1A | 2         | N/A                                     | 23.14   | N/A         | 15.30   | N/A     | 13.12   |
| T95VR03-2A | 3         | N/A                                     | 25.03   | N/A         | 17.85   | N/A     | 14.63   |
| T95VR03-1A | 3         | N/A                                     | 25.03   | N/A         | 17.85   | N/A     | 14.63   |
| T95VR03-00 | 3         | N/A                                     | 25.03   | N/A         | 17.85   | N/A     | 14.63   |
| T95VR04-2A | 4         | N/A                                     | 27.56   | N/A         | 19.50   | N/A     | 18.10   |



NOTE: Companion flanges, nuts, bolts, and gaskets are not included with pump.

# MOTOR SPECIFICATIONS

Enclosure: TEFC, 2-Pole, 3600 RPM

| VR Pump - Motor Rating Information |              |      |            | Baldor Specific Data |           |            |      |      |      |               |
|------------------------------------|--------------|------|------------|----------------------|-----------|------------|------|------|------|---------------|
| Phase                              | Voltz (60Hz) | HP   | Mount Type | Baldor Motor         | 60 Hertz  |            |      |      |      | Weight (lbs.) |
|                                    |              |      |            |                      | FLA       | SFA        | S.F  | 208v | Amps |               |
| 1                                  | 115/230      | 0.5  | Footless   | VL3503               | 7/3.5     | 8/4        | 1.25 | Y    | 4.1  | 23            |
|                                    |              | 0.75 | Footless   | VL3506               | 9.6/4.8   | 11.6/5.8   | 1.25 | Y    | 6.1  | 29            |
|                                    |              | 1    | Footless   | VL3509               | 11.8/5.9  | 14/7       | 1.25 | Y    | 6.1  | 36            |
|                                    |              | 1.5  | Footless   | PCL3513M             | 13.2/6.6  | 14.8/7.4   | 1.15 | N    | --   | 38            |
|                                    |              | 2    | Footless   | PCL3515M             | 17.6/8.8  | 21/10.5    | 1.15 | N    | --   | 43            |
|                                    | 230          | 3    | Footless   | PCL3519M             | 12.5      | 14.6       | 1.15 | Y    | 13.7 | 52            |
|                                    |              | 5    | Footed     | CL3608TM             | 19.5      | 21.6/19.5  | 1.00 | Y    | 21.6 | 92            |
|                                    |              | 7.5  | Footed     | L3709T-M13B          | 33        | N/A        | 1.00 | N    | --   | 123           |
|                                    |              | 10   | Footed     | CL3711T              | 40        | 43/40      | 1.00 | Y    | 43   | 167           |
|                                    |              |      |            |                      |           |            |      |      |      |               |
| 3                                  | 230/460      | 0.5  | Footless   | VM3537               | 1.6/0.8   | 2.4/1.2    | 1.25 | Y    | 1.54 | 20            |
|                                    |              | 0.75 | Footless   | VM3541               | 2.6/1.3   | 3/1.5      | 1.25 | Y    | 3.1  | 21            |
|                                    |              | 1    | Footless   | VEM3545              | 2.8/1.4   | 3.4/1.7    | 1.25 | Y    | 3    | 32            |
|                                    |              | 1.5  | Footless   | VEM3550              | 3.8/1.9   | 4.3/2.15   | 1.15 | Y    | 4    | 35            |
|                                    |              | 2    | Footless   | VEM3555              | 5/2.5     | 5.6/2.8    | 1.15 | Y    | 5.3  | 43            |
|                                    |              | 3    | Footless   | VEM3559              | 7.2/3.6   | 8.2/4.1    | 1.15 | Y    | 7.9  | 50            |
|                                    |              | 3    | Footed     | CEM3559T             | 7.2/3.6   | 8.2/4.1    | 1.15 | Y    | 7.9  | 52            |
|                                    |              | 3    | Footed     | CEM3610T             | 7.2/3.6   | 8.2/4.1    | 1.15 | Y    | 7.9  | 50            |
|                                    |              | 5    | Footed     | CEM3613T             | 11.6/5.8  | 13.4/6.7   | 1.15 | Y    | 12.8 | 78            |
|                                    |              | 7.5  | Footed     | CEM3616T             | 16.8/8.4  | 19.3/9.7   | 1.15 | Y    | 18.5 | 101           |
|                                    |              | 7.5  | Footed     | CEM3709T             | 18/9      | 20.4/10.2  | 1.15 | Y    | 19   | 120           |
|                                    |              | 10   | Footed     | CEM3711T             | 23.2/11.6 | 27/13.5    | 1.15 | Y    | 24.9 | 121           |
|                                    |              | 15   | Footed     | CEM3713T             | 34/17     | 39/19.5    | 1.15 | Y    | 36.8 | 182           |
|                                    |              | 15   | Footed     | CEM2394T             | 35/17.5   | 40/20      | 1.15 | Y    | 38   | 250           |
|                                    |              | 20   | Footed     | CEM4106T             | 46/23     | 52.6/26.3  | 1.15 | Y    | 50   | 265           |
|                                    |              | 25   | Footed     | CEM4107T             | 58/29     | 66.6/33.3  | 1.15 | Y    | 62   | 346           |
|                                    |              | 30   | Footed     | CEM4108T             | 68/34     | 79/39.5    | 1.15 | N    | --   | 389           |
|                                    |              | 40   | Footed     | CEM4109T             | 90/45     | 103.6/51.8 | 1.15 | Y    | 100  | 600           |
|                                    |              | 50   | Footed     | CEM4114T             | 112/56    | 128/64     | 1.15 | Y    | 122  | 591           |
|                                    |              | 60   | Footed     | CEM4310T             | 131/65.4  | 151/75.5   | 1.15 | Y    | 145  | 830           |
|                                    |              | 75   | Footed     | CEM4313T             | 161/80.7  | 192.6/96.3 | 1.15 | N    | --   | 905           |
|                                    | 575          | 0.5  | Footless   | VM3537-5             | 0.8       | 1          | 1.25 | N    | --   | 19            |
|                                    |              | 0.75 | Footless   | VM3541-5             | 0.96      | 1.2        | 1.25 | N    | --   | 21            |
|                                    |              | 1    | Footless   | VEM3545-5            | 1.1       | 1.3        | 1.25 | N    | --   | 27            |
|                                    |              | 1.5  | Footless   | VEM3550-5            | 1.5       | 1.73       | 1.15 | N    | --   | 38            |
|                                    |              | 2    | Footless   | VEM3555-5            | 2         | 2.22       | 1.15 | N    | --   | 41            |
|                                    |              | 3    | Footless   | VEM3559-5            | 2.9       | 3.31       | 1.15 | N    | --   | 50            |
|                                    |              | 3    | Footed     | CEM3559T-5           | 2.9       | 3.31       | 1.15 | N    | --   | 52            |
|                                    |              | 3    | Footed     | CEM3610T-5           | 2.9       | 3.31       | 1.15 | N    | --   | 58            |
|                                    |              | 5    | Footed     | CEM3613T-5           | 4.7       | 5.36       | 1.15 | N    | --   | 78            |
|                                    |              | 7.5  | Footed     | EM3616T-5-M13B       | 6.8       | 7.74       | 1.15 | N    | --   | 75            |
|                                    |              | 7.5  | Footed     | CEM3769T-5           | 7.4       | 8.38       | 1.15 | N    | --   | 179           |
|                                    |              | 10   | Footed     | CEM3711T-5           | 9.5       | 10.8       | 1.15 | N    | --   | 123           |
|                                    |              | 15   | Footed     | CEM3713T-5           | 13.6      | 15.6       | 1.15 | N    | --   | 169           |
|                                    |              | 20   | Footed     | EM4106T-5-M13C       | 18        | 21.1       | 1.15 | N    | --   | 262           |
|                                    |              | 25   | Footed     | EM4107T-5-M13C       | 23        | 25.2       | 1.15 | N    | --   | 327           |
|                                    |              | 30   | Footed     | EM4108T-5-M13C       | 28        | 30.7       | 1.15 | N    | --   | 347           |
|                                    |              | 40   | Footed     | EM4109T-5-M13C       | 37        | 42.3       | 1.15 | N    | --   | 551           |
|                                    |              | 50   | Footed     | EM4114T-5-M13C       | 45        | 51.3       | 1.15 | N    | --   | 575           |

## T95VR – MATERIALS OF CONSTRUCTION

| Ref. No. | Part Description                        | Material                             |                  |          |
|----------|-----------------------------------------|--------------------------------------|------------------|----------|
|          |                                         | Type                                 | ASTM/AISI        | DIN / EN |
| 10.00    | Pump casing                             | Cast Iron                            | A48 Class 35     | GJL-250  |
| –        | Hydraulics                              | Stainless Steel                      | AISI 316         | 1.4401   |
| 10.02    | Draining plug                           | Stainless Steel                      | AISI 316         | 1.4301   |
| 10.06    | Upper Flange                            | Cast Iron                            | A48 Class 35     | 1.4308   |
| 20.00    | Outer Case                              | Stainless Steel                      | AISI 316         | 1.4301   |
| 20.01    | Mechanical seal housing                 | Stainless Steel                      | CF 8M / AISI 316 | 1.4308   |
| 20.05    | Filling plugs                           | Stainless Steel                      | AISI 316         | 1.4301   |
| 30.00    | Pump shaft                              | Stainless Steel                      | AISI 329         | 1.4057   |
| 30.01    | Kit Mechanical seal                     | Graphite/ SiC EPDM                   | -                | -        |
| 30.02    | Mechanical seal fastening kit           | Stainless Steel                      | AISI 316         | 1.4401   |
| 30.03    | Kit O-rings                             | EPDM                                 | -                | -        |
| 40.00    | Stage housing and diffuser              | Stainless Steel/ Graphite            | AISI 316         | 1.4301   |
| 40.01    | Stage centering outlet                  | Stainless Steel                      | CF 8M / AISI 316 | 1.4308   |
| 40.02    | Floating neck ring                      | PTFE                                 | -                | -        |
| 40.05    | Stage centering inlet                   | Stainless Steel                      | AISI 316         | 1.4401   |
| 40.06    | Stage housing and diffuser with bearing | Stainless Steel                      | AISI 316         | 1.4301   |
| 40.07    | Flange clamping neck ring               | Stainless Steel                      | AISI 316         | 1.4301   |
| 40.08    | Spring ring                             | Stainless Steel                      | AISI 316         | 1.4401   |
| 50.00    | Impeller                                | Stainless Steel                      | AISI 316         | 1.4301   |
| 51.01    | Split cone                              | Stainless Steel                      | AISI 316         | 1.4301   |
| 51.02    | Intermediary sleeve nut                 | Stainless Steel, Tungsten Carbide WC | AISI 316         | 1.4401   |
| 51.03    | Journal sleeve                          | Stainless Steel, Tungsten Carbide WC | AISI 316         | 1.4401   |
| 51.04    | Split cone nut                          | Stainless Steel                      | AISI 316         | 1.4301   |
| 51.05    | Intermediate impeller with screw        | Stainless Steel                      | AISI 316         | 1.4301   |

## Flange Data

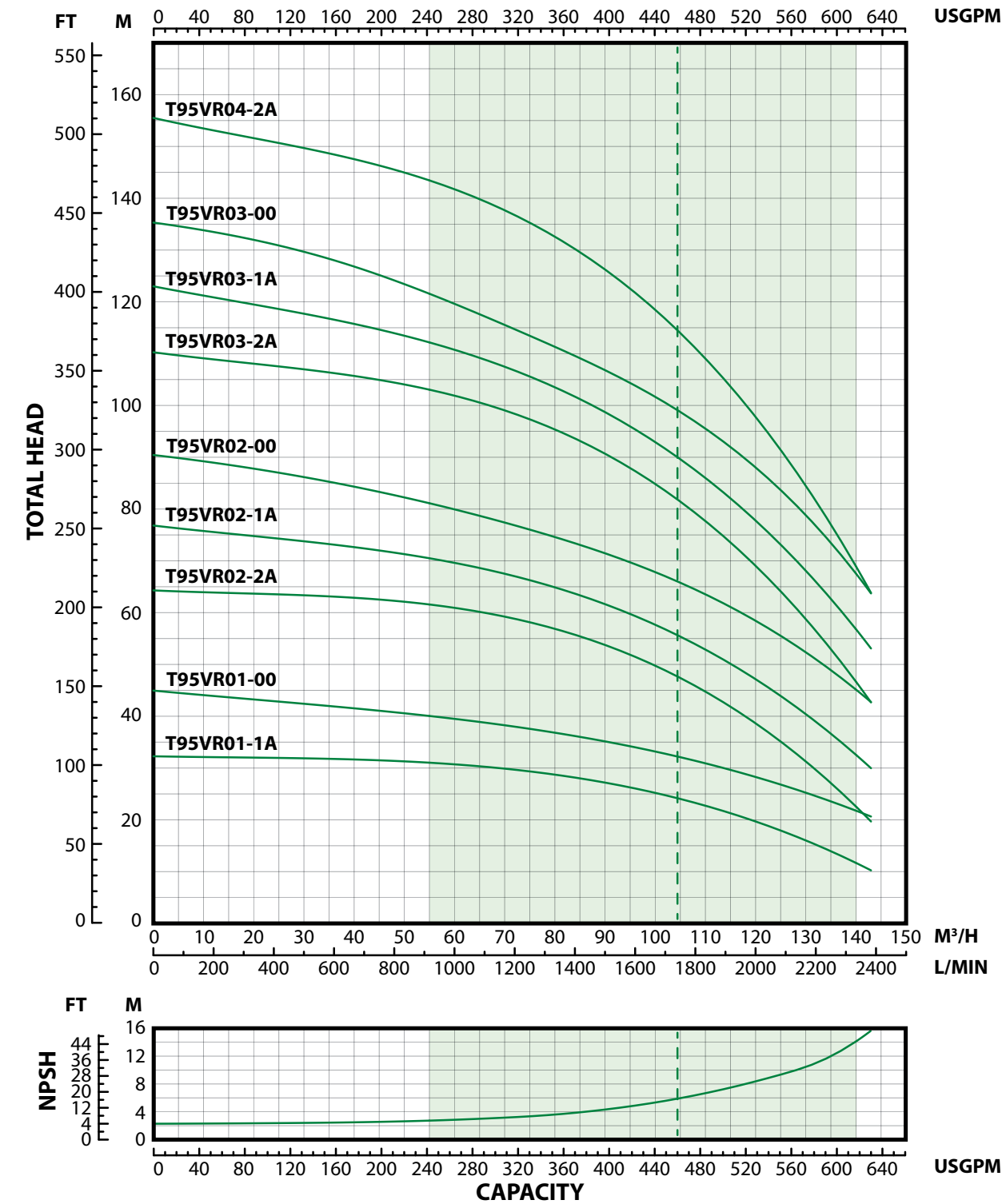
| Series                       | Flange Pipe Size (in.) | Pump Max Rating (PSI) | Select the Companion Flange Based on the Maximum Potential System Pressure (Incoming + Max PSI from the Pump) |       |     |
|------------------------------|------------------------|-----------------------|---------------------------------------------------------------------------------------------------------------|-------|-----|
| T01VR (all stage counts)     | 1.25"                  | 375                   | ANSI 150 steel flange                                                                                         | 1.25" | 260 |
|                              |                        |                       | ANSI 300 steel flange                                                                                         | 1.25" | 750 |
| T03-T06VR (all stage counts) | 1.25"                  | 375                   | ANSI 150 steel flange                                                                                         | 1.25" | 260 |
|                              |                        |                       | ANSI 150 steel flange                                                                                         | 1.50" | 260 |
|                              |                        |                       | ANSI 300 steel flange                                                                                         | 1.25" | 750 |
|                              |                        |                       | ANSI 300 steel flange                                                                                         | 1.50" | 750 |
| T10-T20VR (all stage counts) | 2.00"                  | 375                   | ANSI 150 steel flange                                                                                         | 2.00" | 260 |
|                              |                        |                       | ANSI 300 steel flange                                                                                         | 2.00" | 750 |
| T30VR, -1-2-3 stages         | 2.50"                  | 230                   | ANSI 150 steel flange                                                                                         | 2.50" | 260 |
| T30VR, -4-5-6-7-8 stages     | 2.50"                  | 460                   | ANSI 300 steel flange                                                                                         | 2.50" | 750 |
| T45VR, -1-2 stages           | 3.00"                  | 230                   | ANSI 150 steel flange                                                                                         | 3.00" | 260 |
| T45VR, -3-4-5-6-7 stages     | 3.00"                  | 460                   | ANSI 300 steel flange                                                                                         | 3.00" | 750 |
| T65-95VR, -1-2 stages        | 4.00"                  | 230                   | ANSI 150 steel flange                                                                                         | 4.00" | 260 |
| T65-95VR, -3-4-5 stages      | 4.00"                  | 360                   | ANSI 300 steel flange                                                                                         | 4.00" | 750 |

NOTE: Class 125 and Class 250 flanges and flanged fittings are made from cast iron while Class 150 and Class 300 are ductile iron, steel, or stainless steel. However, the bolting pattern is the same for both Class 125 and 150 so, regardless of material they will bolt together, as is also the case for Class 250 and 300.

NOTE: T30-T45-T65-T95VR series pumps come equipped with two rotatable steel flanges with oval-shaped bolt holes that enable them to fit both DIN and ANSI flanges.

NOTE: Companion flanges, nuts bolts, and gaskets are not included with pump

T95VR – PERFORMANCE CURVES



NOTE: Specifications subject to change without prior notice. Hydraulic characteristics are according to ISO standard 9906, Annex A.

COMMENTS