



MPVN

HIGH PRESSURE MULTI-STAGE PUMPS

A FULL RANGE OF PRODUCT FEATURES



The MPVN is manufactured for Goulds Water Technology by Austria GmbH, formally called Vogel Pumpen, at their plant near Vienna, Austria.

Performance Range:

| | |
|---------------|--|
| Capacities | up to 1500 GPM (340 m ³ /h) |
| Head | up to 1640 feet (500 m) |
| Maximum speed | up to 3600 RPM |

Sizes:

From 1½" to 5" discharge.

Maximum Temperature:

280° F (140° C)

Maximum Casing Pressure:

800 psig (55 bar)

Handled Liquids:

Pure as well as slightly contaminated media such as:
Cold and Hot Water
Condensate
Oil Suspensions
Acids as well as their watery solutions

Applications:

Water Supply
Booster Systems
Irrigation
Fire Fighting
Snow Making
Cooling Circuits
Boiler Feed
Condensate
District Heating
Reverse Osmosis and Ultra Filtration
Spray Water Systems
Cleaning Systems

Modular System:

VOGEL Vertical Multistage pumps utilize a modular design concept which maximizes component interchangeability. As such, multiple design configurations can be engineered to meet customer requirements without compromise to repair part inventories. The entire performance range is covered by 4 mechanical sizes that hold 8 different hydraulics.

Hydraulics:

Closed radial type impellers designed for casing wear rings on both sides. Axial thrust is minimized by balance holes for minimum bearing loads and maximum bearing lifetime. Diffusers separated from stage casings, easily exchangeable. Balanced radial forces, minimum shaft deflection, minimum vibrations.

HEAVY DUTY DESIGN FOR LONG-TERM OPERATION IN INDUSTRIAL APPLICATIONS.

MPVN LIQUID END NUMBERING SYSTEM

MPV 2 03 B 3 A D 1 A

Flange Orientation:

- A = Left Suction, Left Discharge (code OO)
- B = Left Suction, Rear Discharge (code OR)
- C = Left Suction, Front Discharge (code OL)
- D = Left Suction, Right Discharge (code OG)

Seal Materials: For Optional Mechanical Seal modify catalog order no. with Seal Code listed below.

| Seal Code | Rotary | Stationary | Elastomers |
|-----------|---------|-------------|------------|
| 1 | Carbide | Sil-Carbide | EPR |
| 2 | | | Viton |

Motor Frames:

- | | | |
|-------------------|-------------------|-------------------|
| D = 254TD/256TD | J = 364TSD/365TSD | O = 444TD/445TD |
| E = 284TSD/286TSD | K = 364TD/365TD | P = 447TSD/449TSD |
| F = 284TD/286TD | L = 404TSD/405TSD | R = 447TD/449TD |
| G = 324TSD/326TSD | M = 404TD/405TD | S = 5009SD |
| H = 324TD/326TD | N = 444TSD/445TSD | |

Pump Material:

- | | |
|-------------------|----------------------|
| A = All Iron | C = Stainless Fitted |
| B = Bronze Fitted | D = All Stainless |

Seal Type:

- | | |
|---------------------|-------------------|
| 2 = SA - Unbalanced | 3 = SB - Balanced |
|---------------------|-------------------|

ANSI Discharge Flange Class:

- A = 150
- B = 300
- C = 600

Number of Stages

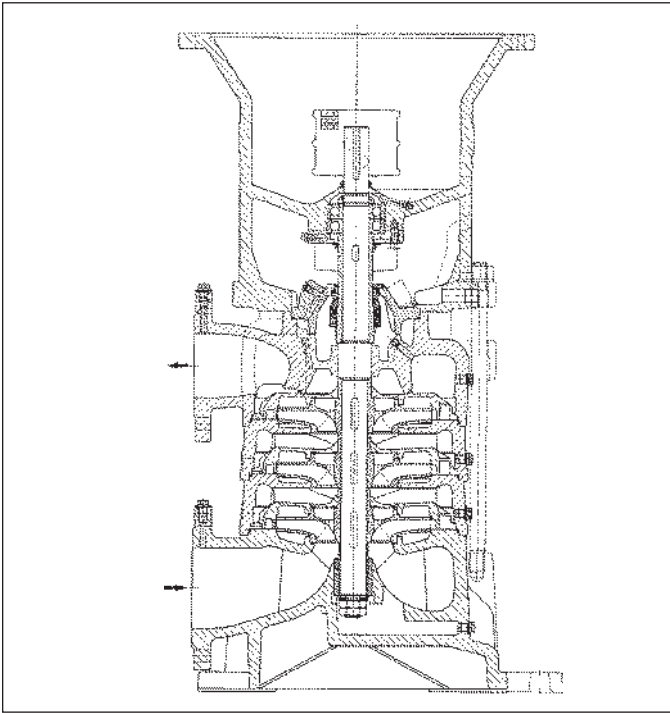
Pump Size:

- | | | |
|----------|-----------|-----------|
| 1 = 40.1 | 4 = 65.1 | 7 = 100.2 |
| 2 = 40.2 | 5 = 65.2 | 8 = 125.1 |
| 3 = 40.3 | 6 = 100.1 | 9 = 125.2 |

Pump Model

Complete Pump Consists of: Liquid End, Coupling and Motor.

MPVN SECTIONAL ASSEMBLY



Type MPVN:

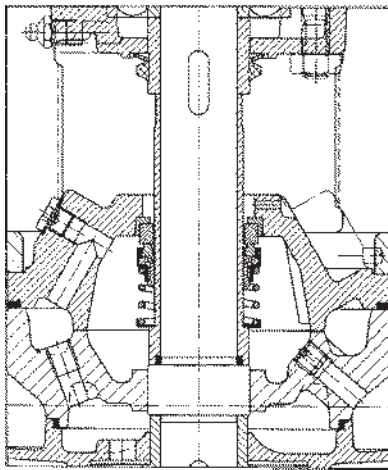
- Vertical configuration with separate thrust bearing, grease lubrication with grease nipples.
- Standard motor according to NEMA MG1-4.07, D flange mounting.
- Flexible coupling between pump and motor.
- Product lubricated sleeve bearing in suction casing.
- Maintenance friendly design. Shaft sealing maintainable without pump disassembly.

Shaft Seal Options:

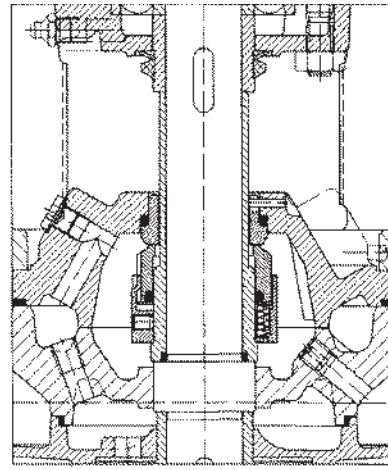
Mechanical Seal:

Seal chamber dimensions-comply with ISO 3096. Mechanical seals of all brands that comply with this standard and EN 12756, version "K" can be used without modification of the standard parts.

The taper bore type seal chamber is self venting and guarantees optimum lubrication and cooling of the seal faces.



Single mechanical seal, design SA
unbalanced up to a maximum of 250 PSI (16 bar)



Single mechanical seal, design SB
balanced up to a maximum of 800 PSI (55 bar)

MPVN PARTS INDEX

Table of Materials

| Pos. | Index of Part | Material Code | | | |
|----------|---|-------------------------------|-------------------------------|-------------------------------|------------------|
| | | 111 | 211 | 311 | 532 |
| | | Cast Iron | Bronze Fitted | Stainless Fitted | All Stainless |
| 1 | Impeller | 0.6025 | 2.1050.01 | 1.4408 | 1.4408 |
| 2, 2/E | Diffuser | 0.6025 | 0.6025 | 0.6025 | 1.4408 |
| 3 | Suction casing | 0.6025 | 0.6025 | 0.6025 | 1.4408 |
| 4 | Discharge casing | 0.6025 (Class 600 -0.7040) | 0.6025 (Class 600 -0.7040) | 0.6025 (Class 600 -0.7040) | 1.4408 |
| 9 | Wear ring | 1) | 1) | 1) | 1.4408 |
| 8, 12 | Bearing cover | 0.6025 | 0.6025 | 0.6025 | 0.6025 |
| 18 | Seal cover | 0.6025 | 0.6025 | 0.6025 | 1.4408 |
| 21 | Bearing bush | G-CuSn16 | G-CuSn16 | G-CuSn16 | PEEK / 1.4462 |
| 23, 2444 | Shaft and shaft sleeves | 1.4021 | 1.4021 | 1.4021 | 1.4462 |
| 60 | Intermediate bearing housing, stage casing | 0.6025 | 0.6025 | 0.6025 | 1.4408 |

1) Upon request of 1.4410 possible

Elastomers (O-Ring) of EPDM for hot water up to 284°F (140°C) (Pay attention to operation limits and chemical resistance), optional Viton elastomers available.

MPVN MATERIAL SPECIFICATION DIN-ASTM

| Casted Material Standards | DIN Designation | DIN | ASTM | UNS |
|-----------------------------------|------------------------|-----------|---------------------------------------|--------|
| Cast Iron | EN GJL-250 (GG 25) | 0.6025 | A48 Class 30 (general castings) | F12401 |
| | | | A278 Class 30 (press. castings) | |
| Ductile Iron | EN-GJS-400-18-LT | 0.7043 | A395 Grade 60-40-18 | F32800 |
| | EN-GJS-400-15 (GGG 40) | 0.7040 | A536 Grade 60-40-10 ^② | - |
| Carbon Steel | GP 240 GH (GS-C25) | 1.0619 | A216 - WCB | J03002 |
| Stainless Steel | 1.4408 | 1.4408 | A351 / A743 / A744 CF-8M ^③ | J92900 |
| | 1.4410 | 1.4410 | A789 / A790 Typ 2507 ^① | S32750 |
| Duplex SS | 1.4517 | 1.4517 | A351 CD4-MCu | |
| Bronze | G - CuSn 10 / CC480K | 2.1050.01 | B427 ^④ | C90700 |
| Wrought Material Standards | | | | |
| Stainless Steel | 1.4021 | 1.4021 | A276 Typ 420 | S42000 |
| Duplex SS | 1.4462 | 1.4462 | A276 Typ 2205 | S31803 |
| Fastener Materials (Bolts) | | | | |
| Carbon Steel | DIN 267 Class 8.8 | 1.7225 | A193 B7 | J41400 |
| Stainless Steel | A2 | A2 | A193 B8 | S30400 |
| Stainless Steel | A4 | A2 | A193 Grade B8M | S31600 |

① only used for casing wear rings

② less elongation

③ A351/A743 for general applications A744 for several services

④ also available B148/B584

COMPARISON OF VARIOUS STANDARDS

| EN (DIN) | | ISO | BSI (UK) | AISI | ASTM | UNS |
|-----------|------------------------|-------------|---------------|--------------|----------------------|------------------|
| 0,6025 | EN-GJL-250 (GG 25) | 185/Gr. 250 | | 1452 Gr. 220 | A 278 Class 30 | |
| 0.7040 | EN-GJS-400-15 (GGG 40) | 1083/400-12 | | | A 536 Gr. 60-40-18 | |
| 2.1050.01 | G-CuSn10 | | | | B584 C 90700 | |
| 1.0421 | X20Cr13 | 683-13-4 | 970 420 S 37 | 420 | A 276 Type 420 | |
| 1.4408 | G-X6CrNiMo 18-10 | | 3100-316 C 16 | CF8M | A (351) 744 Gr. CF8M | |
| 1.4410 | X2CrNiMoN25-7-4 | | | | A182/A479/2276 | S32750 |
| 1.4462 | X2CrNiMoN22-5-3 | | 1503 318 S13 | | A240 | S31803 S32205 |

MECHANICAL SEAL MATERIALS

| DIN Code | Mechanical Seal | Stationary Ring | Elastics | Metal Parts |
|-----------|---------------------|------------------|----------|-------------|
| BQ 1 EGG | Carbon ^① | SiC ^② | EPDM | 316TC |
| BQ 1 VGG | | | Viton | |
| Q1 Q1 VGG | SiC ^② | | | |

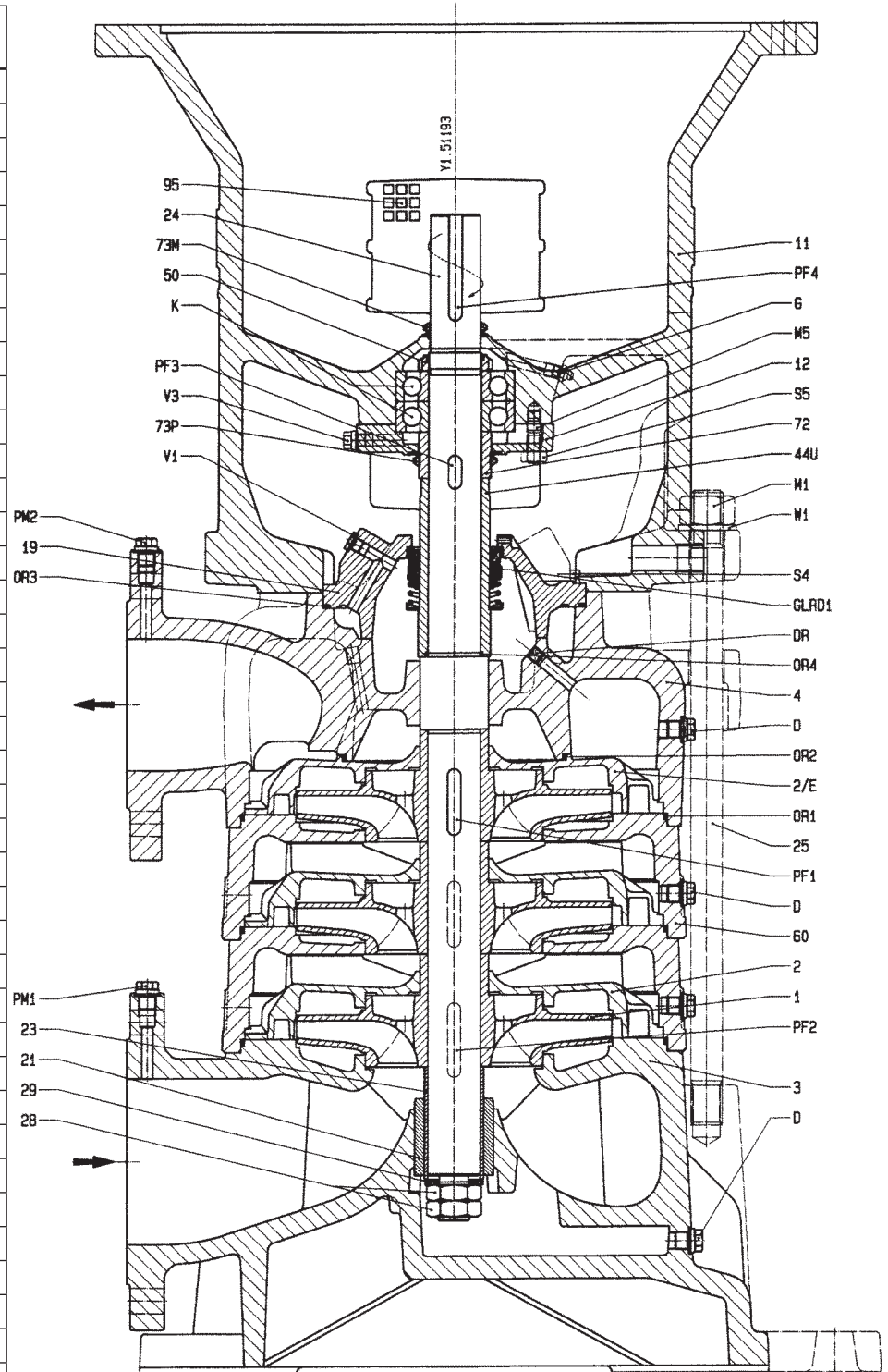
① Carbon resin impregnated

② Pure silicon carbide (without free silicone)

SHAFT SEAL: MECHANICAL SEAL CODE . . .SA (UNBALANCED)

Sizes: MPVN40.2 through MPVN125.2

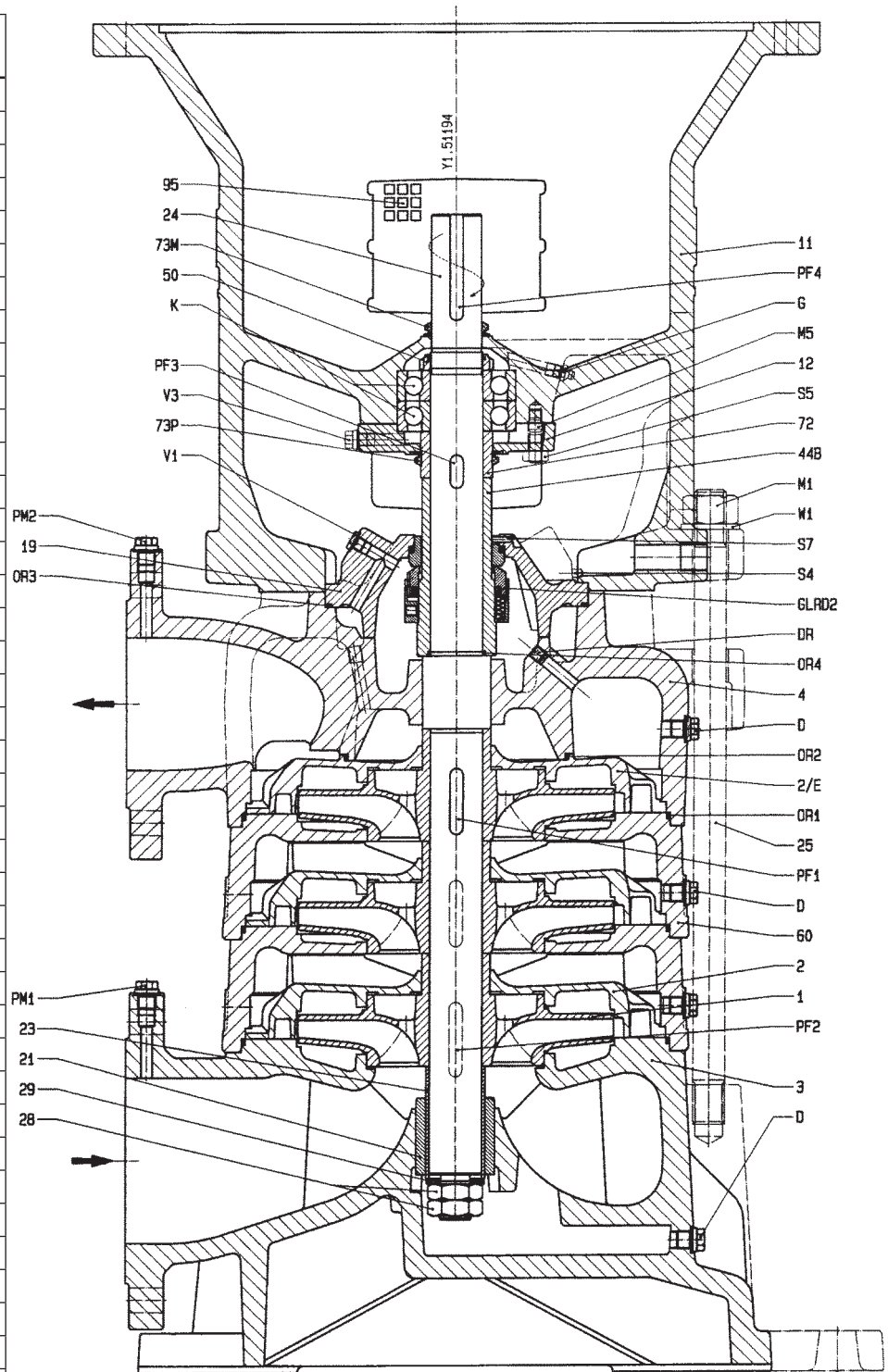
| Part Number | Description |
|-------------|----------------------|
| 1 | Impeller |
| 2 | Diffuser |
| 2E | Diffuser, last stage |
| 3 | Suction casing |
| 4 | Discharge casing |
| 8 | Bearing pedestal |
| 12 | Bearing cover |
| 18 | Seal cover |
| 21 | Bearing bushing |
| 23 | Bearing sleeve |
| 24 | Shaft |
| 25 | Tie bolt |
| 28 | Impeller nut |
| 29 | Washer |
| 44U | Shaft wearing sleeve |
| 50 | Bearing nut |
| 60 | Stage casing |
| 69 | Gland |
| 72 | Spacer sleeve |
| 73M | Thrower |
| 73P | Thrower |
| 95 | Shaft guard |
| D | Drain plug |
| DR | Throttling element |
| G | Grease nipple |
| GLRD1 | Mechanical seal |
| K | Radial ball bearing |
| M1 | Nut |
| M5 | Nut |
| OR1 | O-ring |
| OR2 | O-ring |
| OR3 | O-ring |
| OR4 | O-ring |
| PM1 | Pressure gauge |
| PM2 | Pressure gauge |
| PF1 | Key |
| PF2 | Key |
| PF3 | Key |
| PF4 | Key |
| S4 | Pin |
| S5 | Stud |
| V1 | Plug, threaded |
| V3 | Plug, threaded |
| W1 | Washer |



SHAFT SEAL: MECHANICAL SEAL CODE . . .SB, SD (BALANCED)

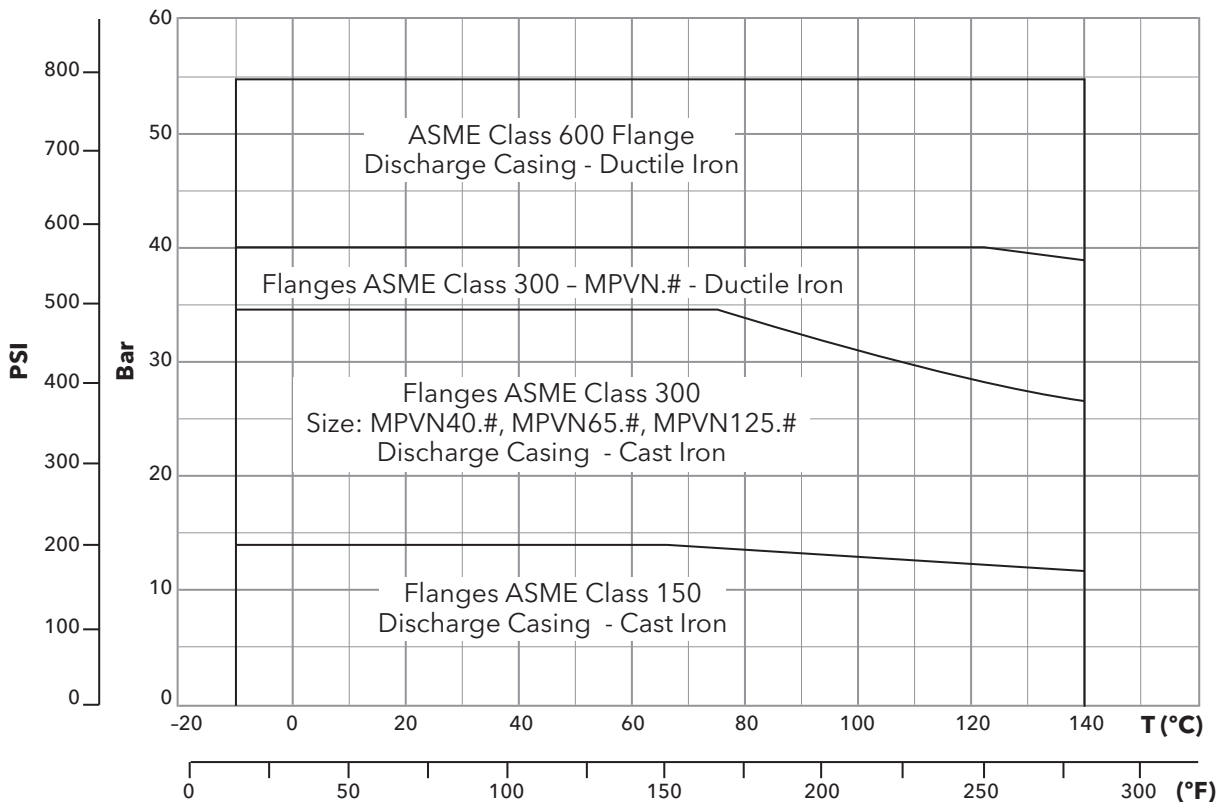
Sizes: MPVN40.2 through MPVN125.2

| Part Number | Description |
|-------------|----------------------|
| 1 | Impeller |
| 2 | Diffuser |
| 2E | Diffuser, last stage |
| 3 | Suction casing |
| 4 | Discharge casing |
| 8 | Bearing pedestal |
| 12 | Bearing cover |
| 18 | Seal cover |
| 21 | Bearing bushing |
| 23 | Bearing sleeve |
| 24 | Shaft |
| 25 | Tie bolt |
| 28 | Impeller nut |
| 29 | Washer |
| 44B | Shaft wearing sleeve |
| 50 | Bearing nut |
| 60 | Stage casing |
| 69 | Gland |
| 72 | Spacer sleeve |
| 73M | Thrower |
| 73P | Thrower |
| 95 | Shaft guard |
| D | Drain plug |
| DR | Throttling element |
| G | Grease nipple |
| GLRD1 | Mechanical seal |
| K | Radial ball bearing |
| M1 | Nut |
| M5 | Nut |
| OR1 | O-ring |
| OR2 | O-ring |
| OR3 | O-ring |
| OR4 | O-ring |
| PM1 | Pressure gauge |
| PM2 | Pressure gauge |
| PF1 | Key |
| PF2 | Key |
| PF3 | Key |
| PF4 | Key |
| S4 | Pin |
| S5 | Stud |
| S7 | Pin |
| V1 | Plug, threaded |
| V3 | Plug, threaded |
| W1 | Washer |

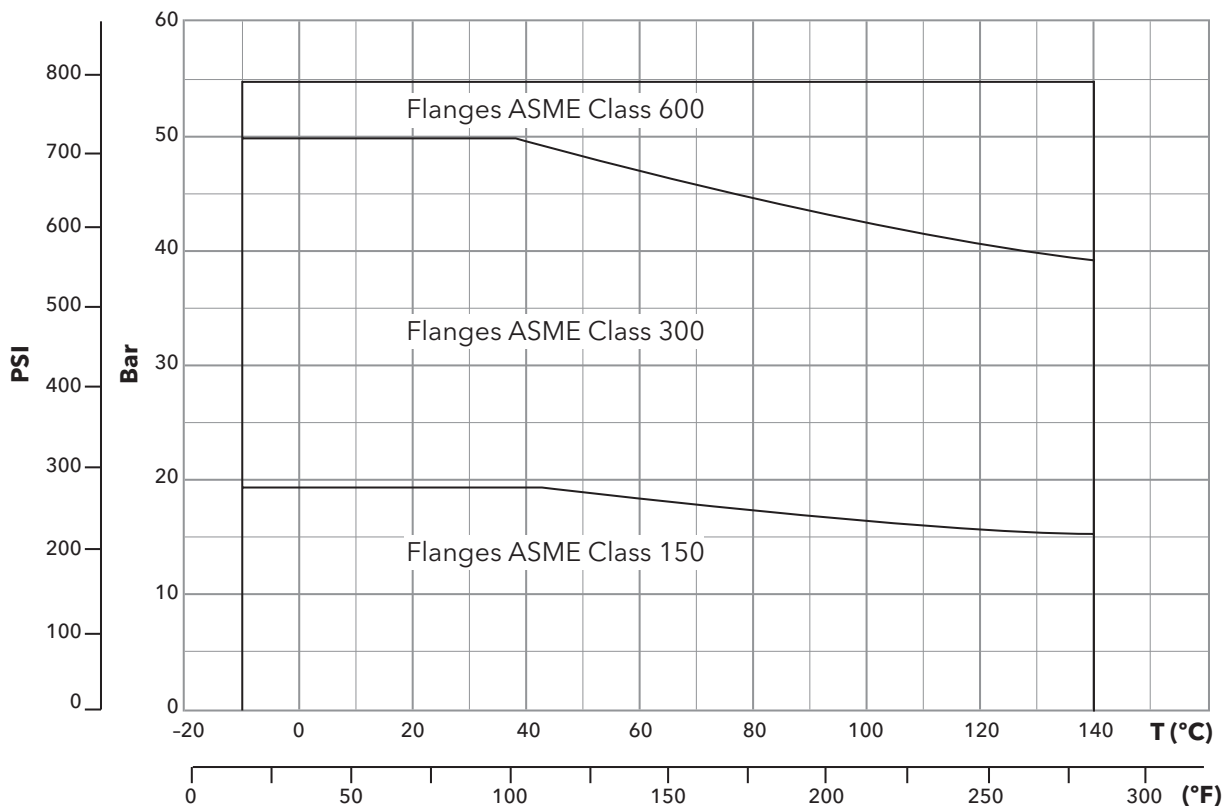


PRESSURE AND TEMPERATURE LIMITS

Maximum Allowed Operating Pressure (Casing and Flanges): Material Code 111 (Cast Iron), 211 (Bronze Fitted), 311 (SS Fitted)



Maximum Allowed Operating Pressure (Casing and Flanges): Material Code 532 (All Stainless)



Maximum Allowed Operating Pressure = incoming pressure at suction flange and pump head at 0 flow.

SELECTION CHARTS FOR SHAFT SEALING WITH MECHANICAL SEAL

Sealing Code of Mechanical Seal:

| Discharge Side | Code |
|----------------|------|
| IV | SA |
| V | SB |
| VI | SD* |

* upon request

General:

Area IV: Mechanical seal acc. DIN 24960, U-shape with L1k, Material: carbon - SiC - EP

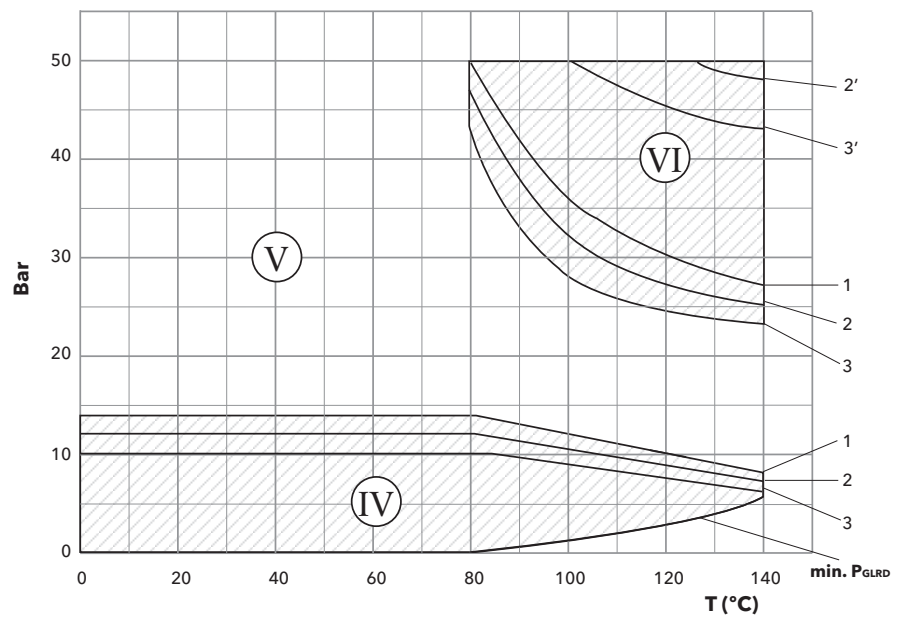
Area V: Mechanical seal acc. DIN 24960, B-shape with L1K, Material: carbon - SiC - EP

Area VI: Mechanical seal acc. DIN 24960, B-shape with L1k, Material: carbon - tungstencarbide - EP

Selection charts are only valid for clean water resp. demineralized boiler feed water. For SiO₂ (silicic acid) contents > 4 mg/l resp. SiO₂ containing water treatment liquids, please ask manufacturer.

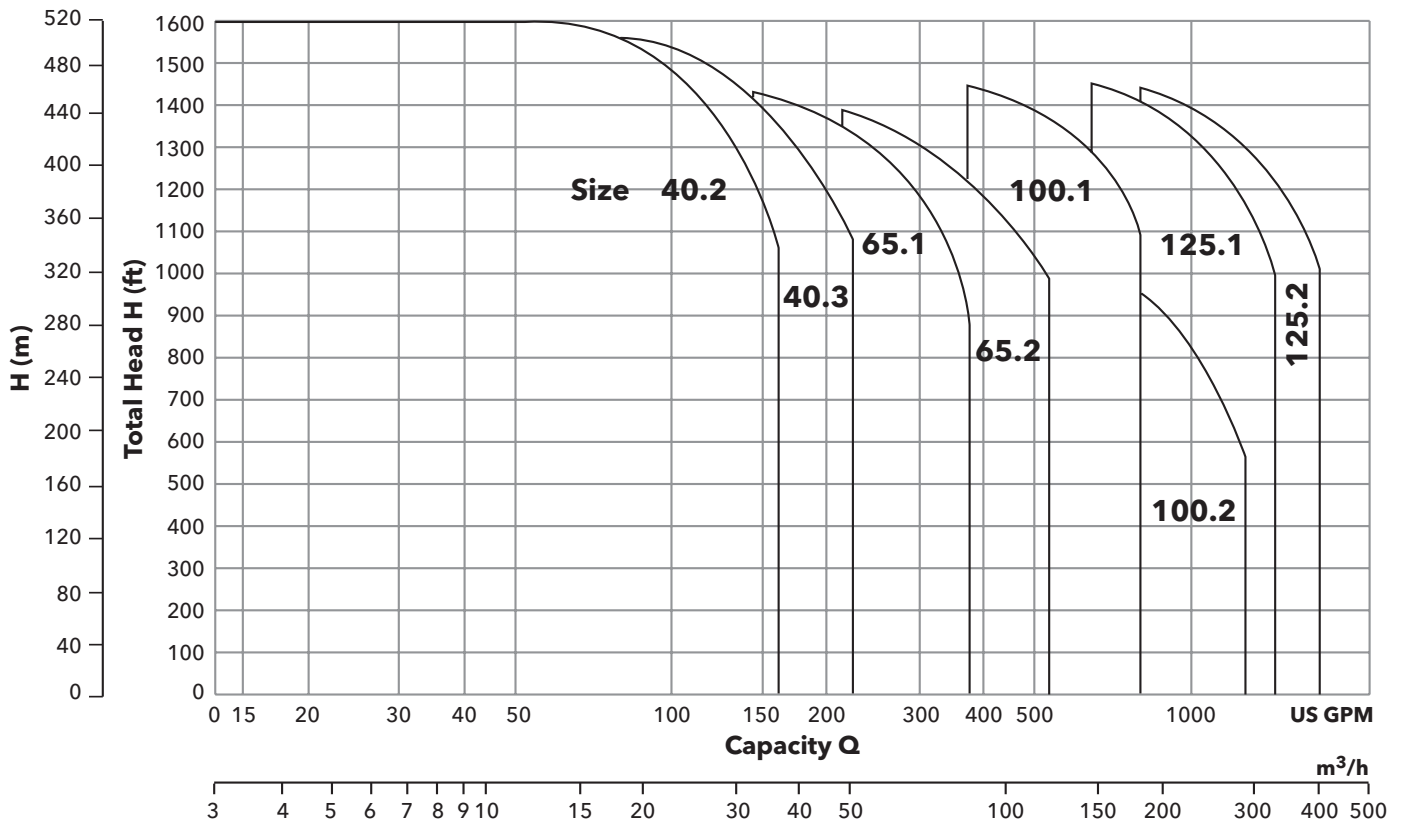
Clean liquids, solids < 10 mg/l

Minimum pressure at suction flange at temperatures > 176°F (80°C) needs to be available.

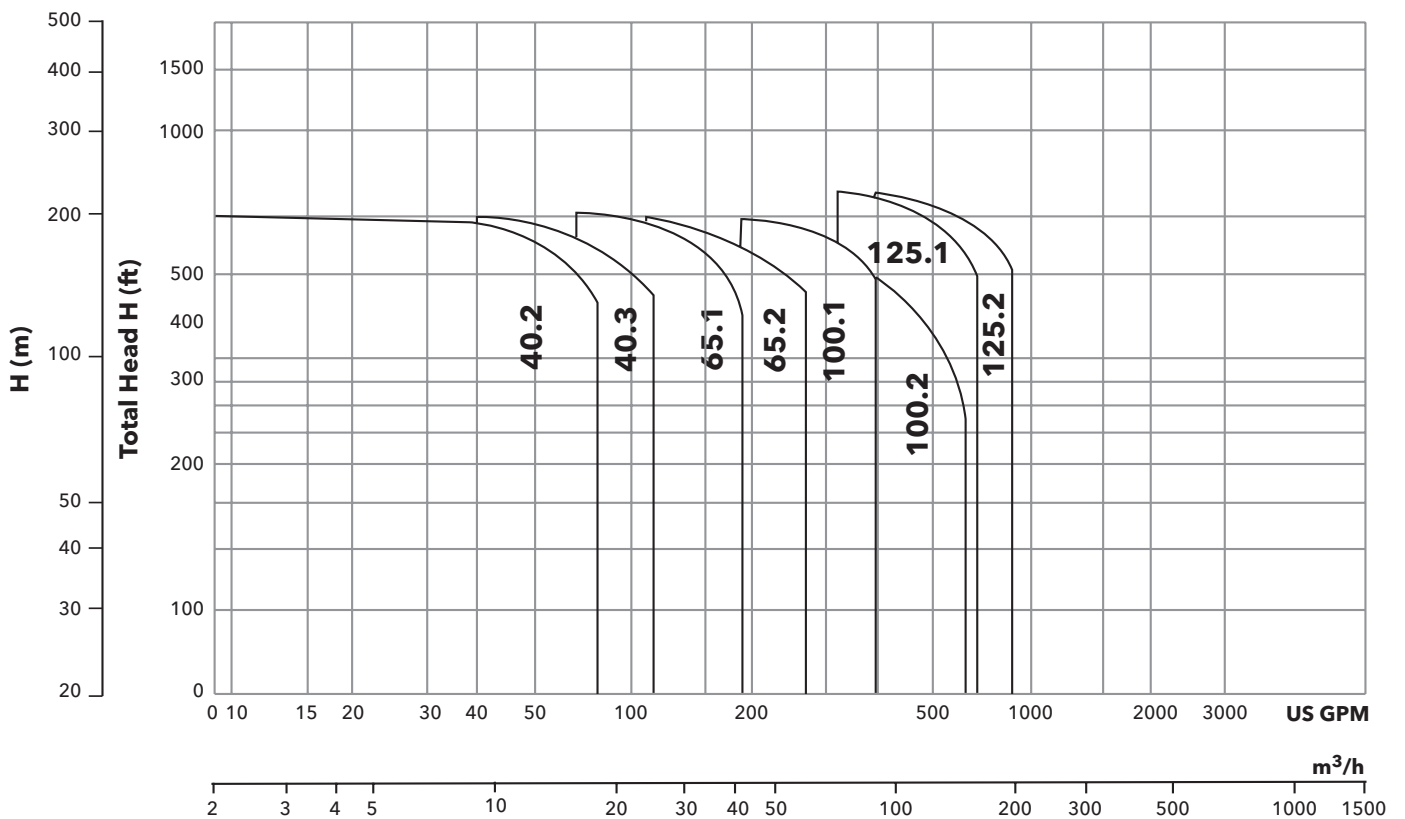


MPVN PERFORMANCE RANGE - 60 HZ

3550 RPM

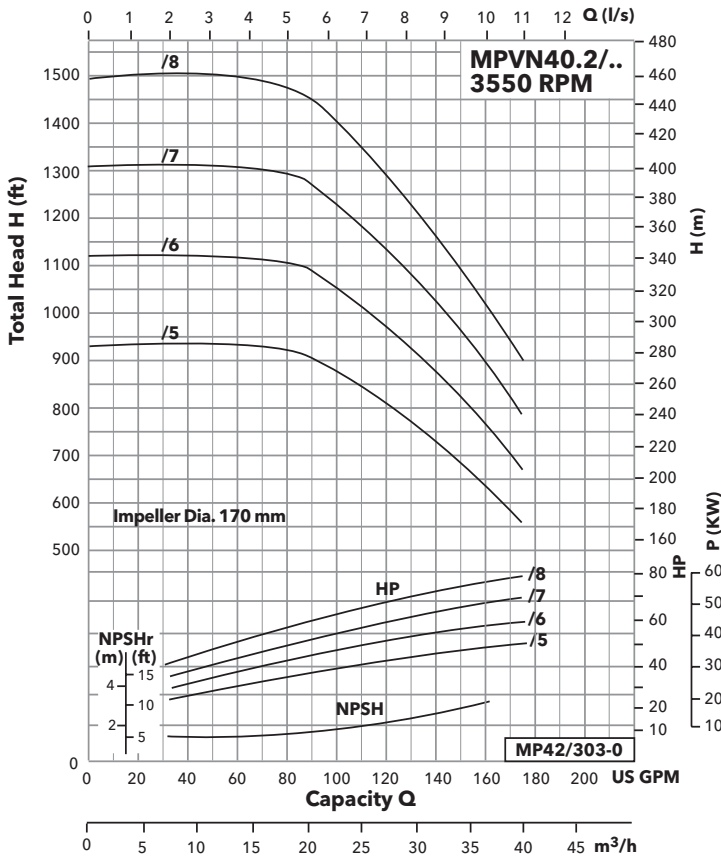
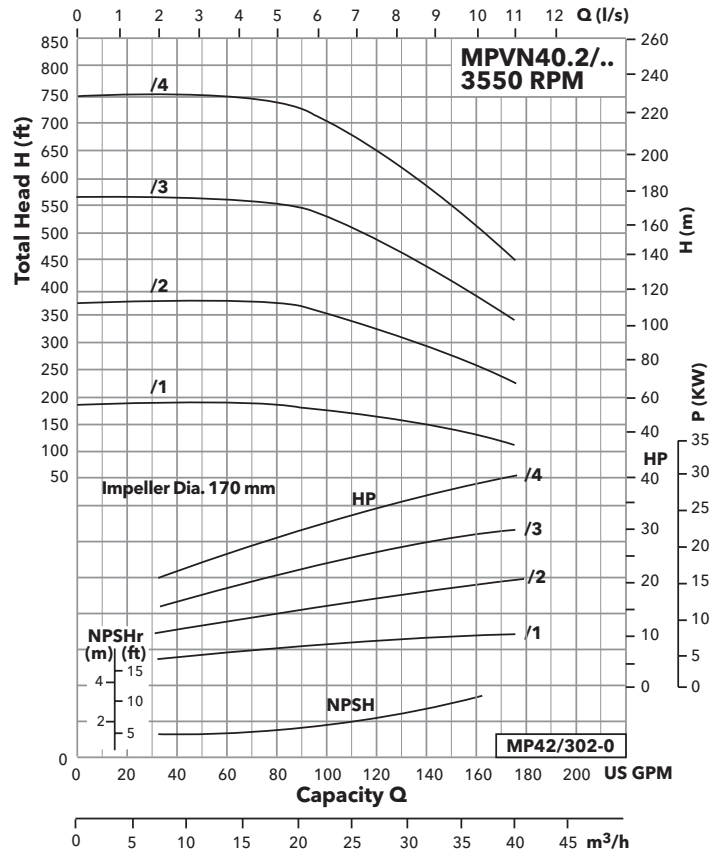
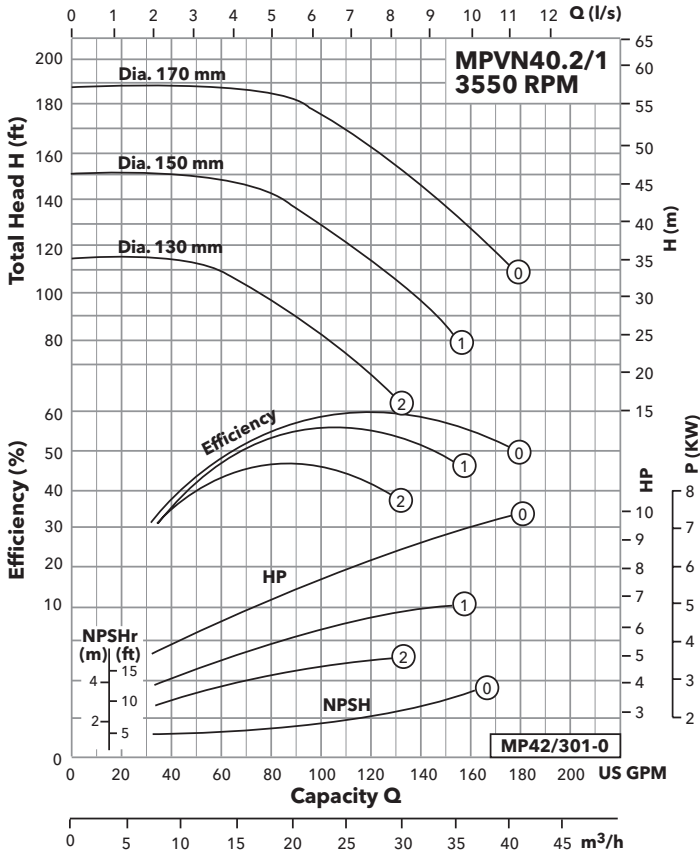


1750 RPM



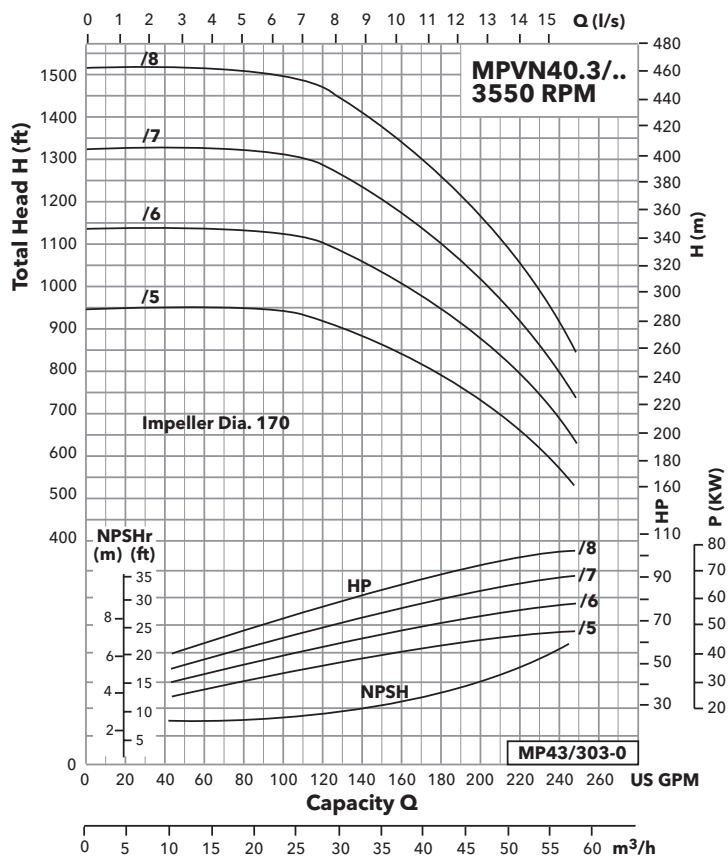
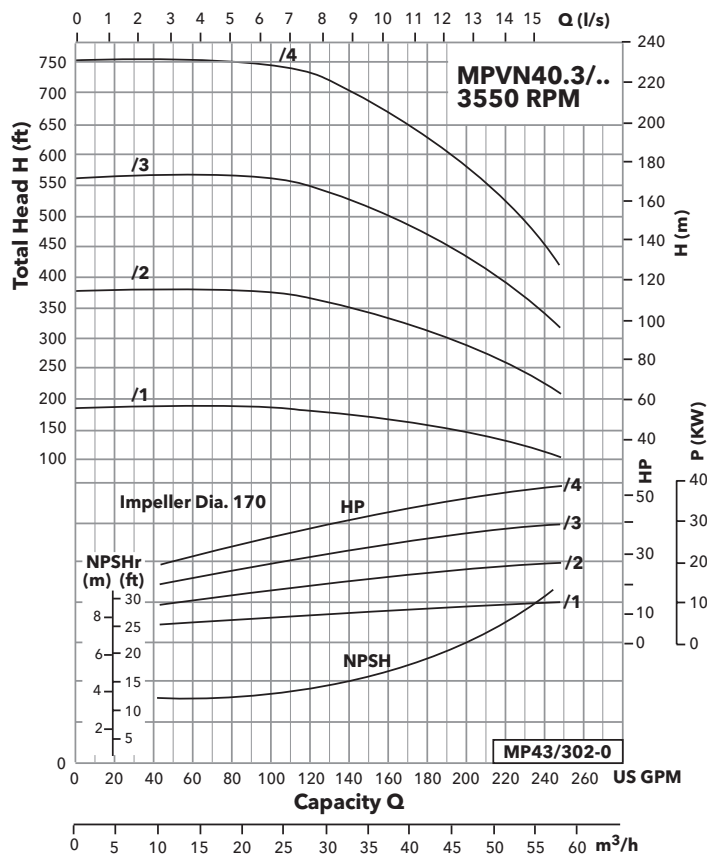
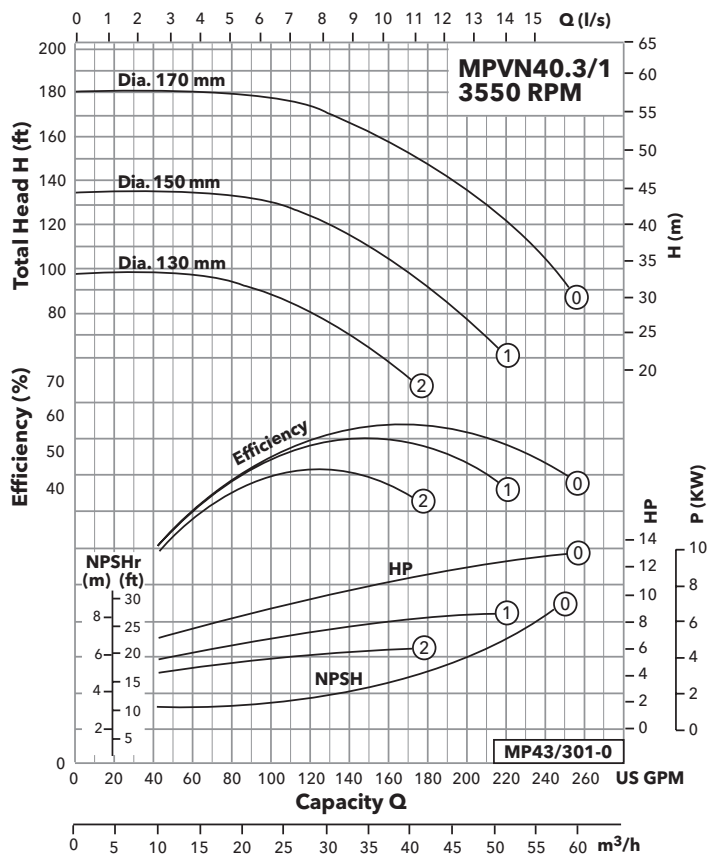
MPVN SELECTION CHARTS

Single Stage



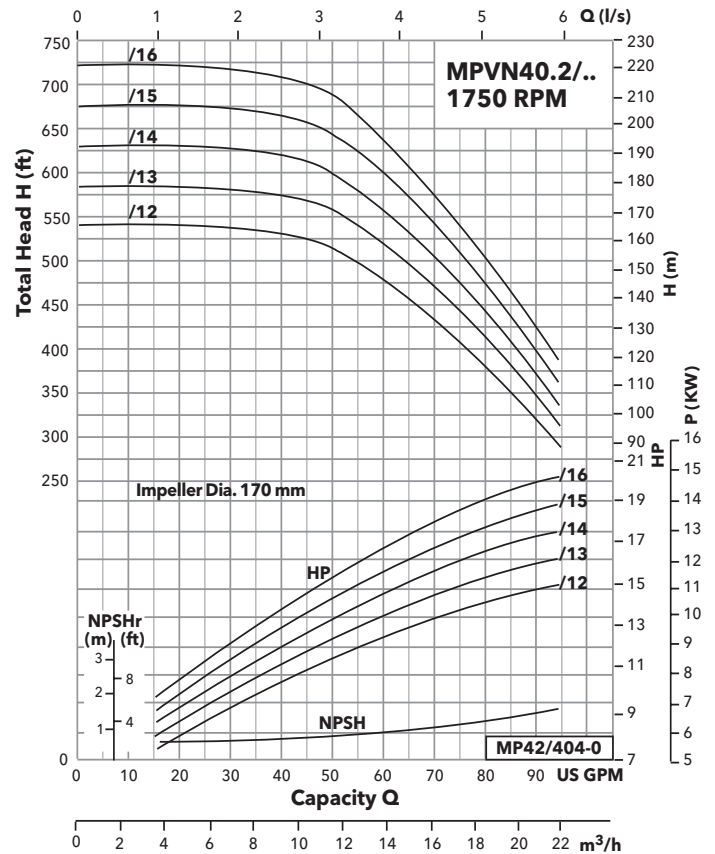
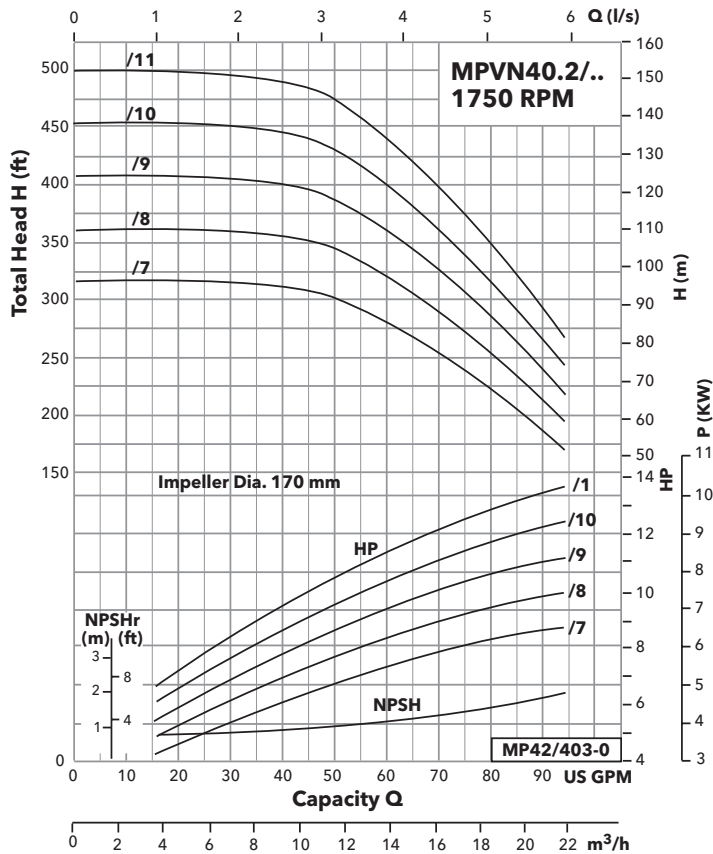
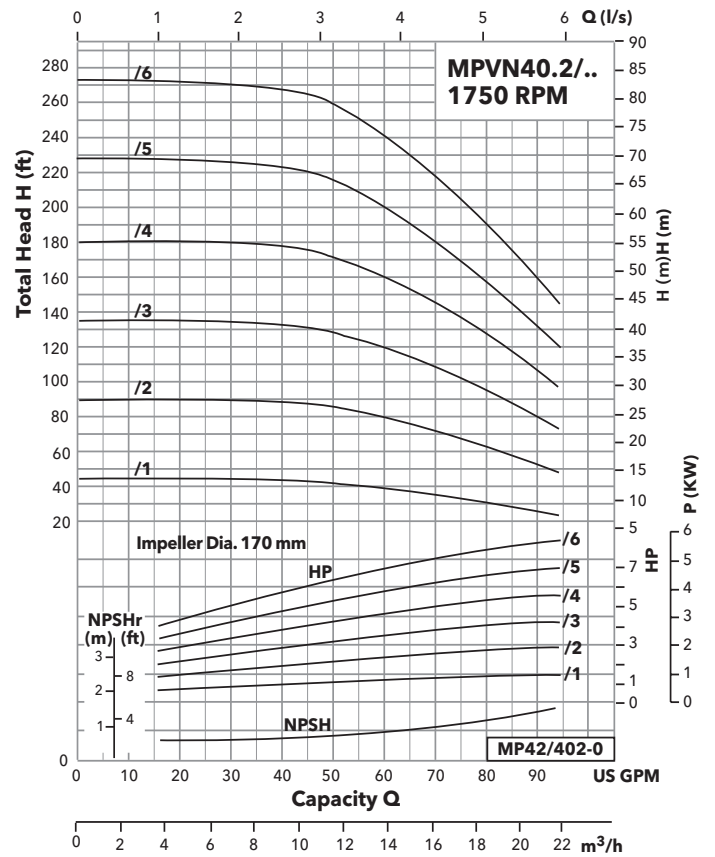
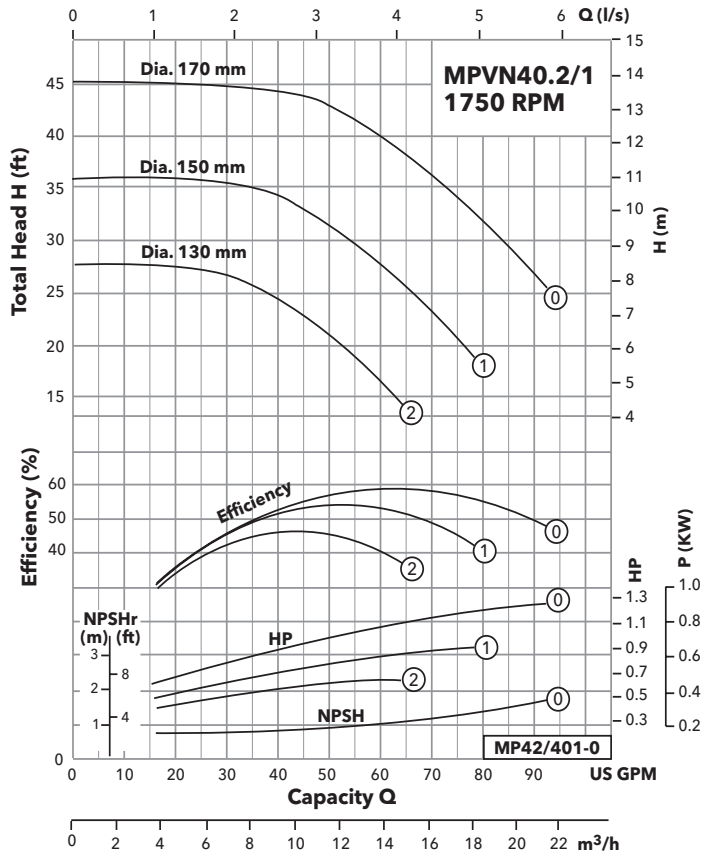
MPVN SELECTION CHARTS

Single Stage



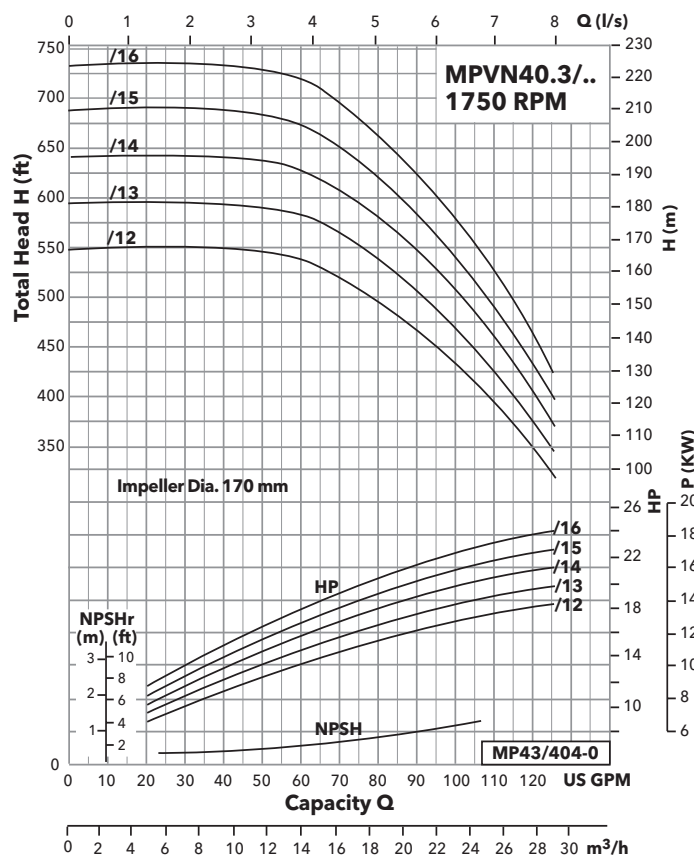
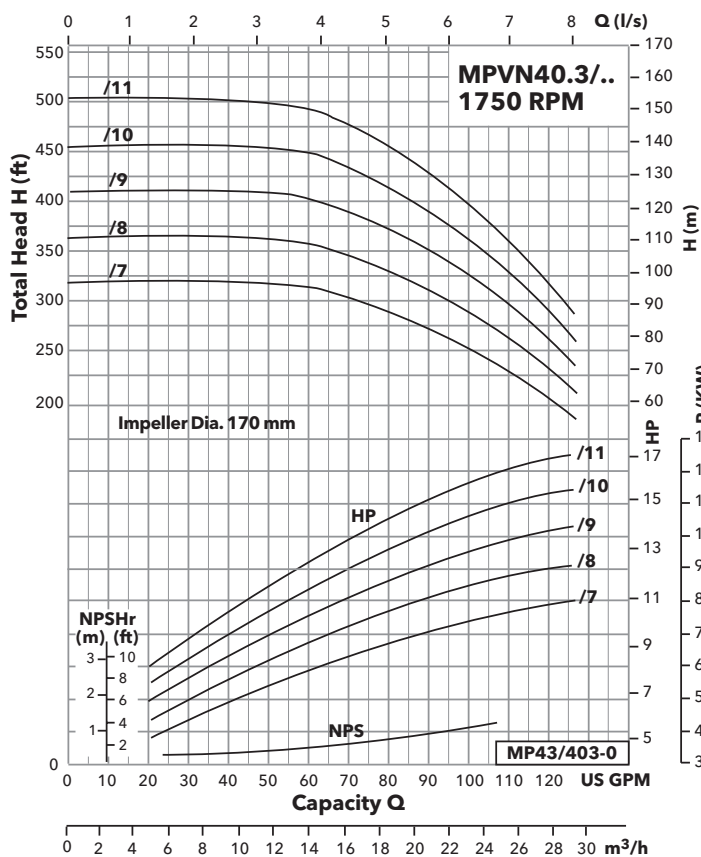
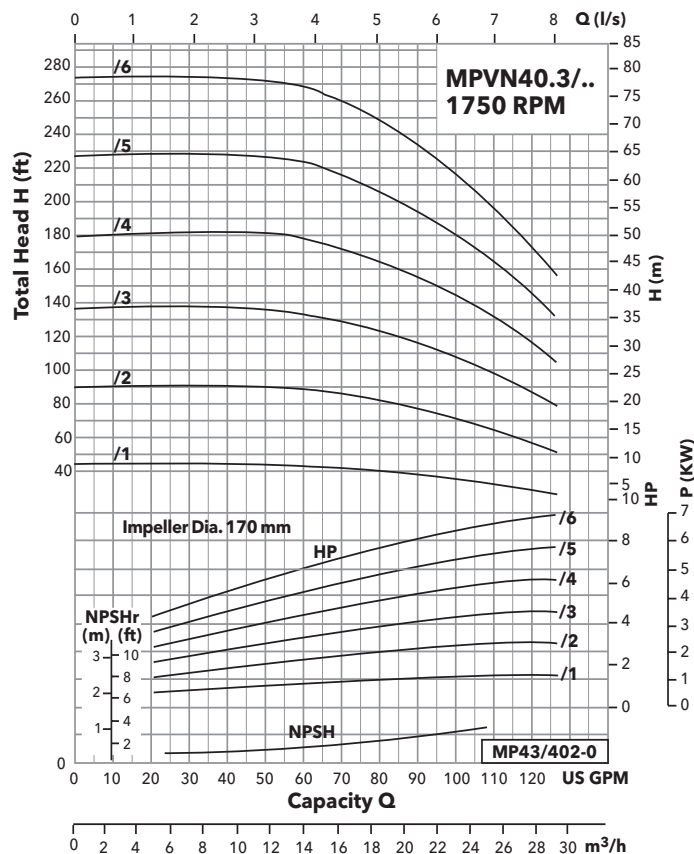
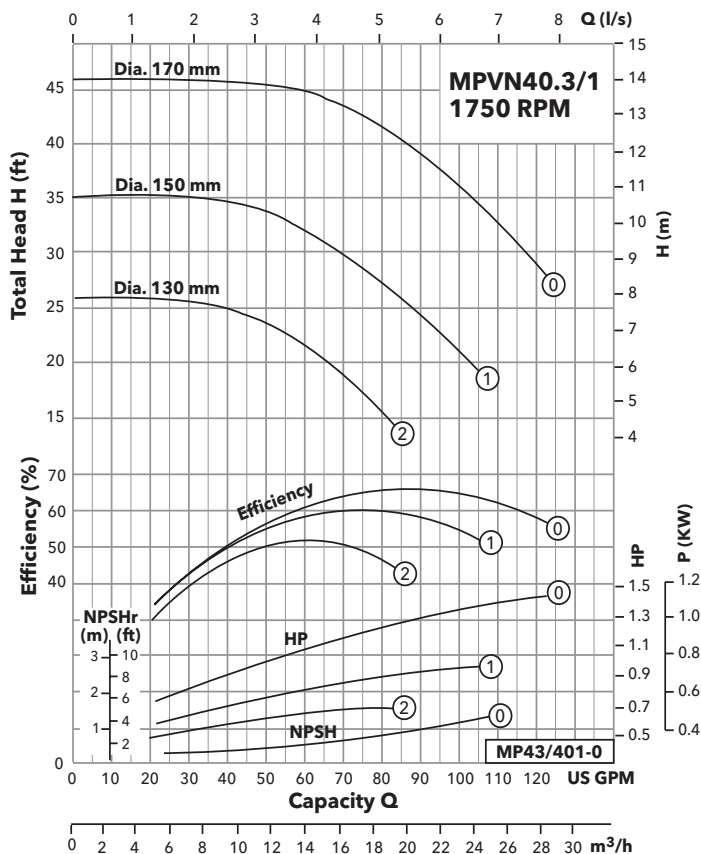
SELECTION CHARTS: MPVN 40.2 n = 1750 RPM

Single Stage

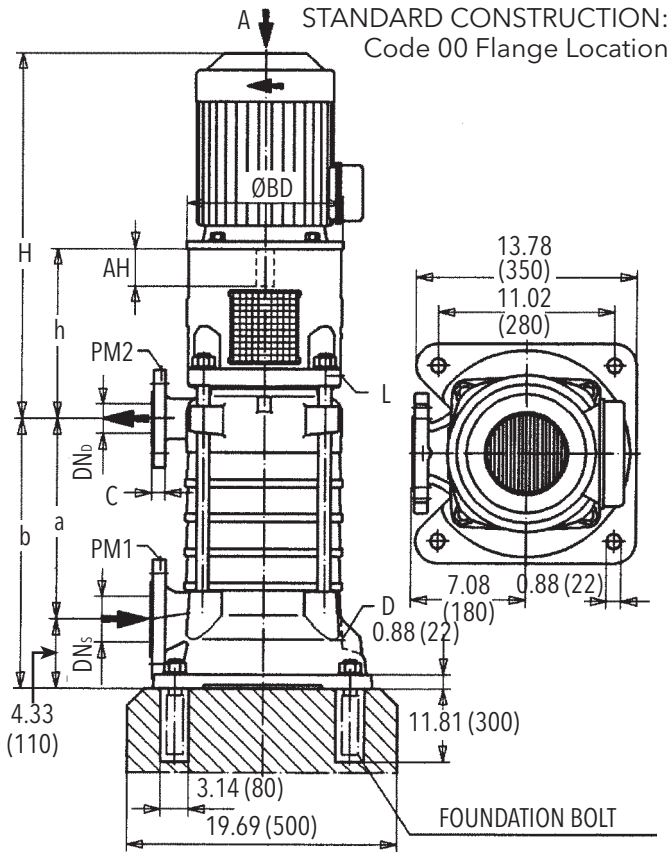


SELECTION CHARTS: MPVN 40.3 n = 1750 RPM

Single Stage



MPVN STANDARD CONSTRUCTION MPVN40.2, MPVN40.3



Number of Stages

| | 1*) | 2*) | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---|----------------|----------------|----------------|----------------|----------------|----------------|-----------------|----------------|----------------|
| a | 3.94 (100) | 6.10 (155) | 8.27 (210) | 10.43 (265) | 12.60 (320) | 14.76 (375) | 16.93 (430) | 19.09 (485) | 21.26 (540) |
| b | 8.27 (210) | 10.43 (265) | 12.60 (320) | 14.76 (375) | 16.93 (430) | 19.09 (485) | 21.26 (540) | 23.43 (595) | 25.59 (650) |
| | 10 | 11 | 12 | 13 | 14 | 15 | 16 | | |
| a | 23.43 (595) | 25.59 (650) | 27.76 (705) | 29.92 (760) | 32.09 (815) | 34.25 (870) | 36.42 (925) | | |
| b | 27.76 (705) | 29.92 (760) | 32.09 (815) | 34.25 (870) | 36.42 (925) | 38.58 (980) | 40.75 (1035) | | |

| NEMA Motor | HP (rpm) | | h | H | BD | AH |
|------------|----------|------|----------------|-----------------|----------------|-----------------|
| | 3550 | 1750 | | | | |
| 254TD | 15 | 15 | 15.51 (394) | 34.69 (881) | 14.02 (356) | 4.00 (101.6) |
| 256TD | 20 | 20 | 15.51 (394) | 34.69 (881) | 14.02 (356) | 4.00 (101.6) |
| 284TD | - | 25 | 15.51 (394) | 37.44 (881) | 14.02 (356) | 4.62 (117.3) |
| 284TSD | 25 | - | 15.51 (394) | 37.44 (881) | 14.02 (356) | 3.25 (82.5) |
| 286TD | - | 30 | 15.51 (394) | 37.44 (881) | 14.02 (356) | 4.62 (117.3) |
| 286TSD | 30 | - | 15.51 (394) | 37.44 (881) | 14.02 (356) | 3.25 (82.5) |
| 324TSD | 40 | - | 15.51 (394) | 38.43 (976) | 17.95 (456) | 3.75 (95.3) |
| 326TSD | 50 | - | 15.51 (394) | 38.43 (976) | 17.99 (457) | 3.75 (95.3) |
| 364TSD | 60 | - | 15.51 (394) | 39.33 (999) | 17.99 (457) | 3.75 (95.3) |
| 365TSD | 75 | - | 15.51 (394) | 39.33 (999) | 17.99 (457) | 3.75 (95.3) |
| 405TSD | 100 | - | 16.69 (424) | 43.43 (1103) | 22.01 (559) | 4.25 (108.0) |

ALTERNATIVE FLANGE LOCATIONS

| | | | |
|----------------|----------------|----------------|----------------|
| | | | |
| Code OO | Code OR | Code OL | Code OG |

PUMP FLANGES

| ASME B16.5 | | | | | | | |
|-----------------------|-------|---------------|---------------|--------------|---------------|-------------|--------------|
| DN | Class | D | K | C | d | L | No. of Holes |
| Discharge 1½ (in.) | 150 | 6.14 (156) | 3.86 (98) | 0.87 (22) | 2.87 (73) | 5/8 (16) | 4 |
| | 300 | 6.14 (156) | 4.49 (114) | 0.87 (22) | 2.87 (73) | 7/8 (22) | 4 |
| | 600 | 7.01 (178) | 4.49 (114) | 1.10 (28) | 2.87 (73) | 5/8 (16) | 4 |
| Suction 2½ (in.) | 150 | 7.52 (191) | 5.51 (140) | 0.94 (24) | 4.13 (105) | ¾ (19) | 4 |
| | 300 | 7.52 (191) | 5.87 (149) | 0.94 (24) | 4.13 (105) | 7/8 (22) | 8 |

PM1 = Suction Gauge Conn. G1/4

PM2 = Discharge Gauge Conn. G1/4

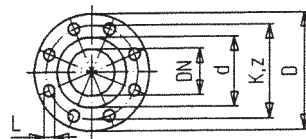
L = Vent Conn. G1/2

D = Drain Conn. G1/4

*) = Code OO not possible, normal configuration code OG

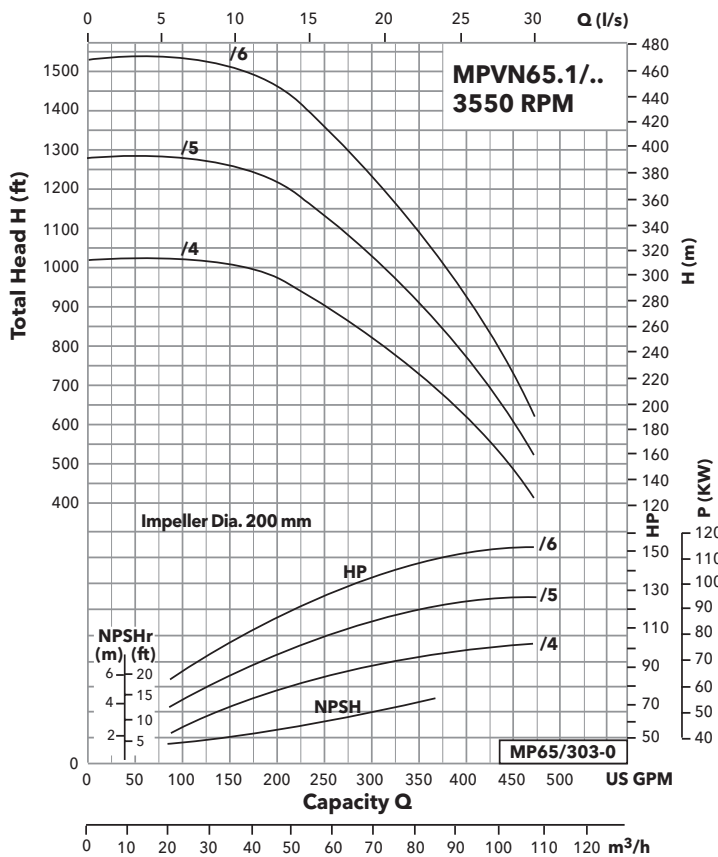
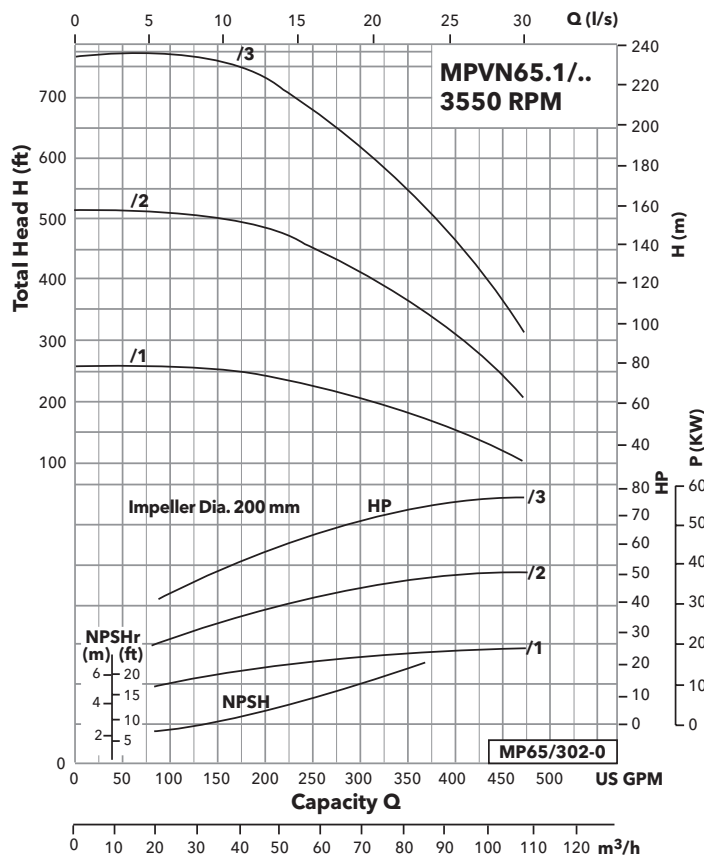
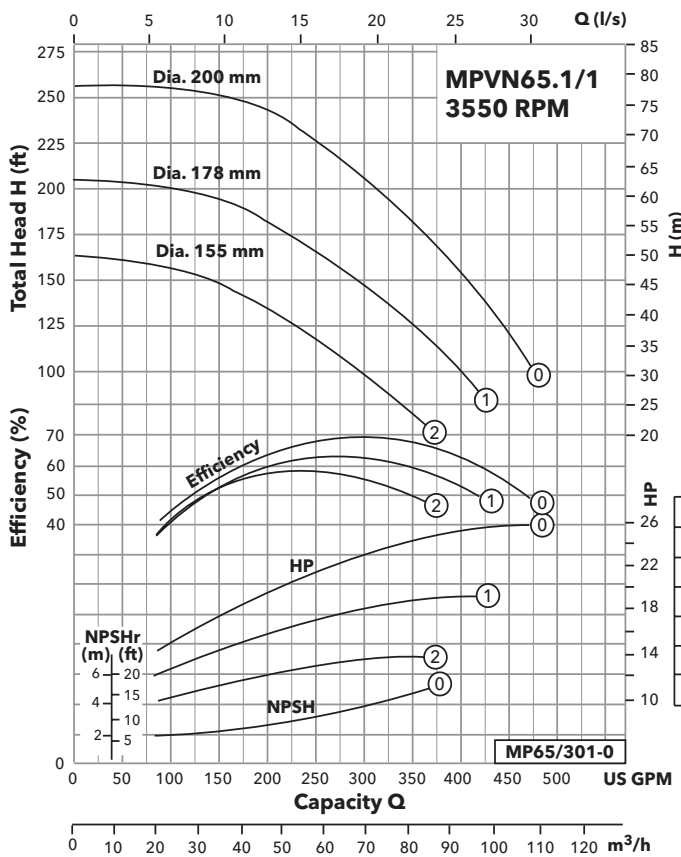
Dimensions in inches (mm).

Dimensions in inches (mm)



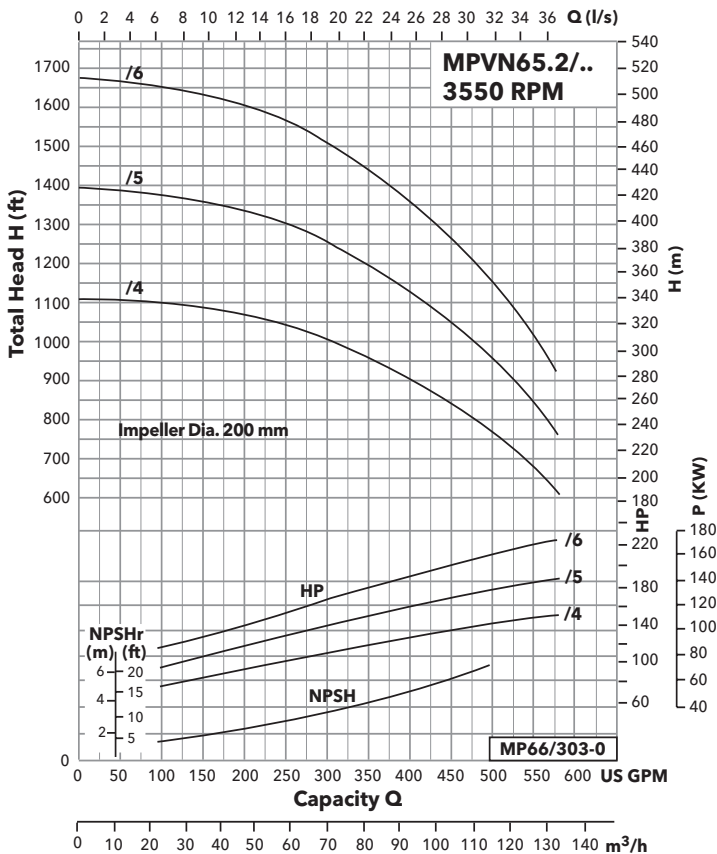
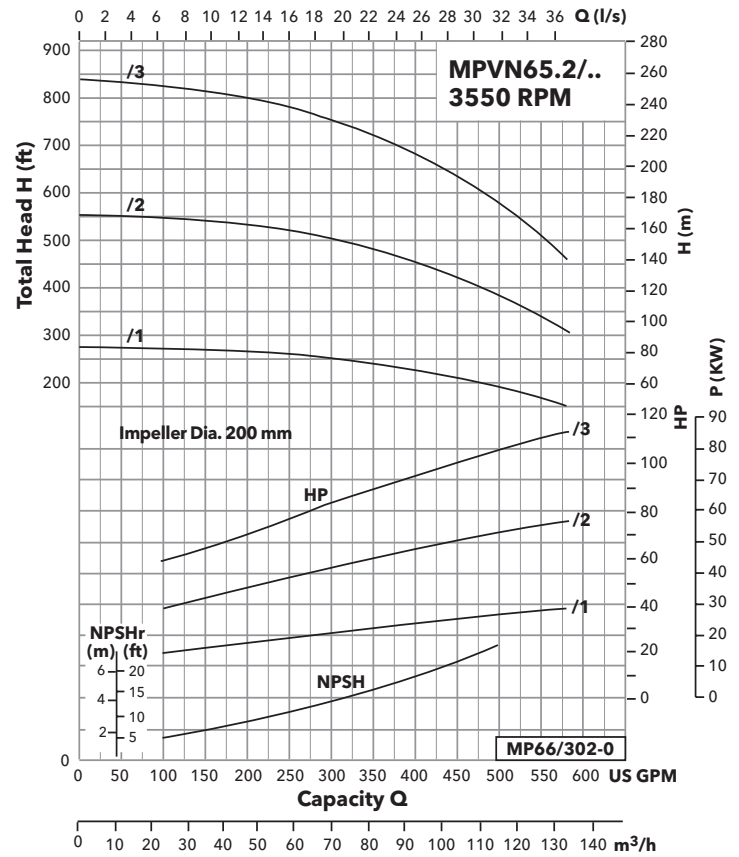
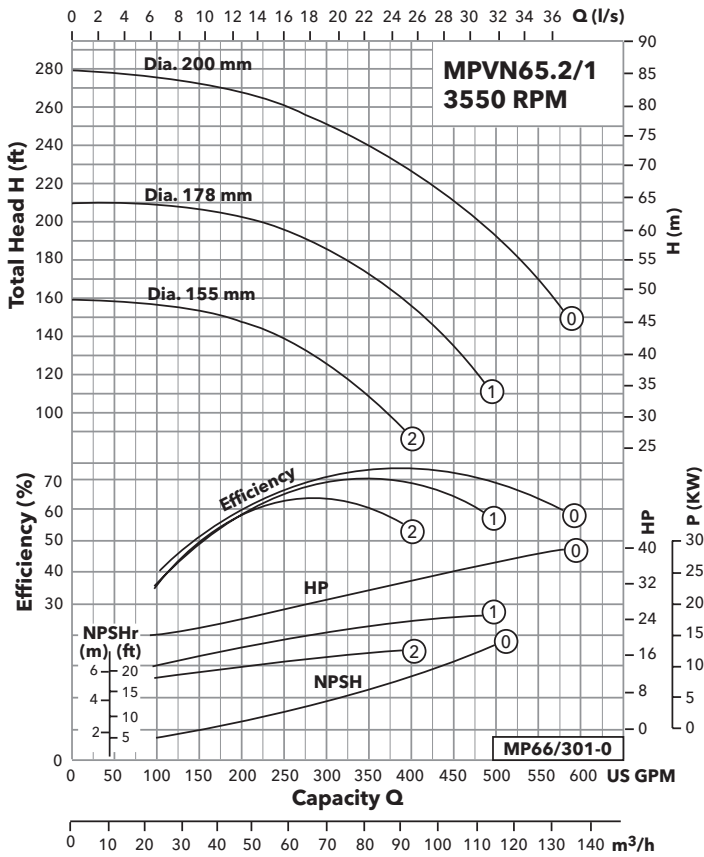
SELECTION CHARTS MPVN 65.1 n = 3550 rpm

Single Stage



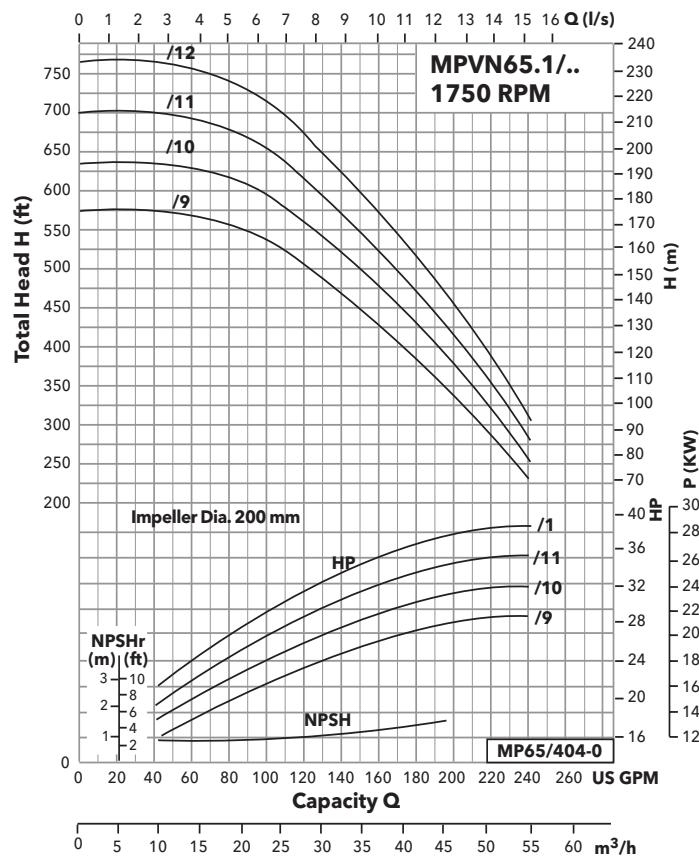
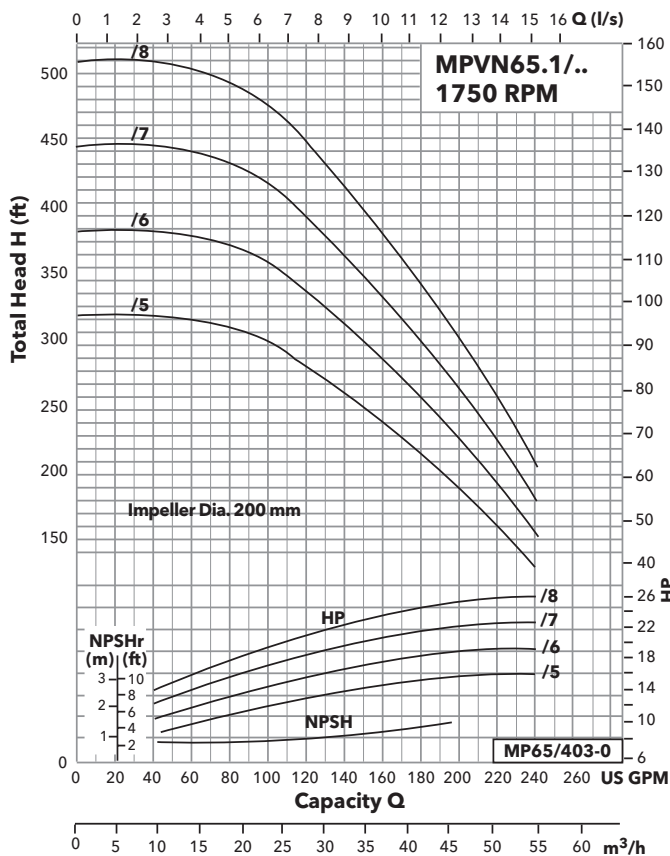
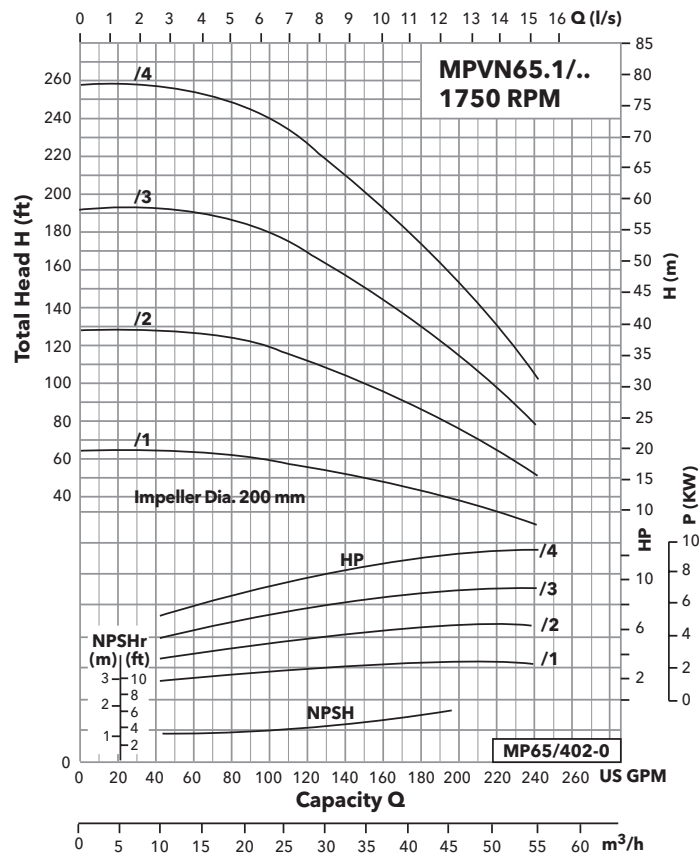
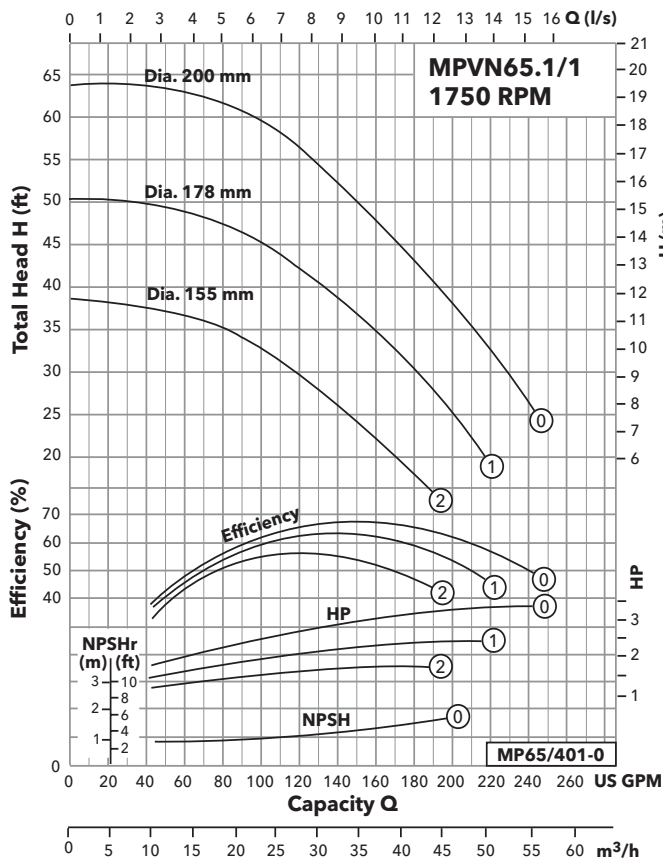
SELECTION CHARTS MPVN 65.2 n = 3550 RPM

Single Stage



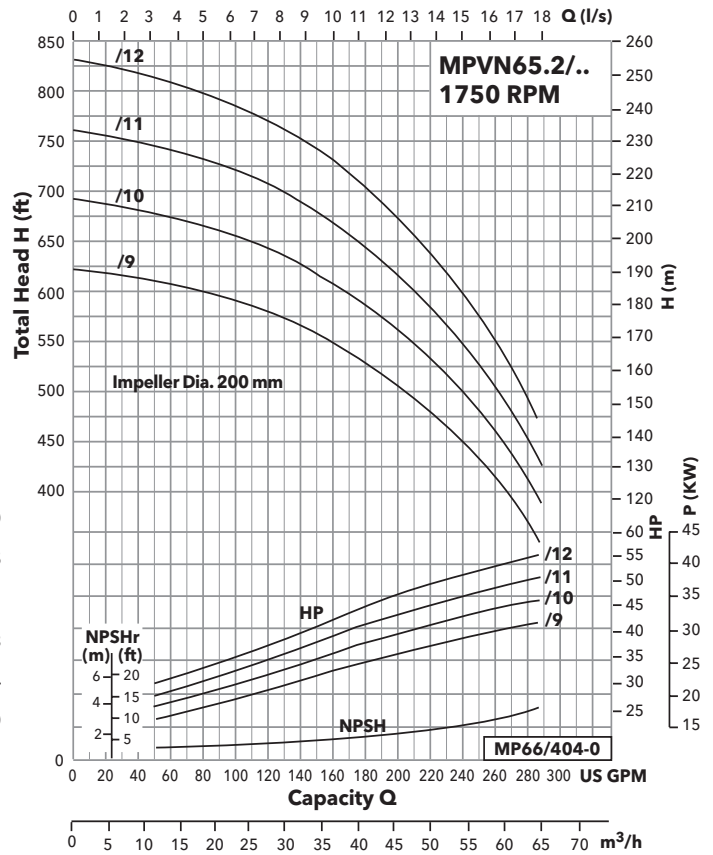
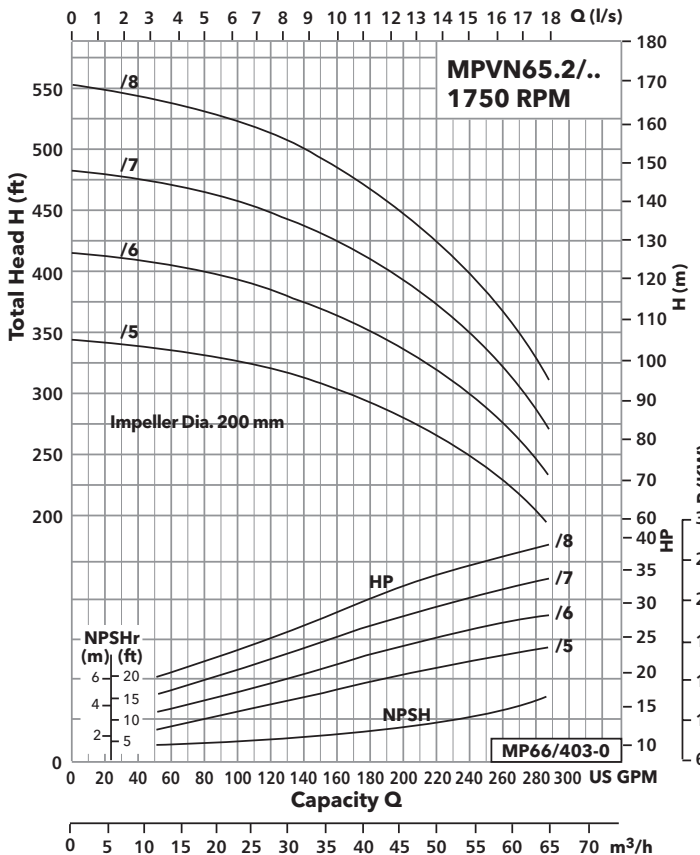
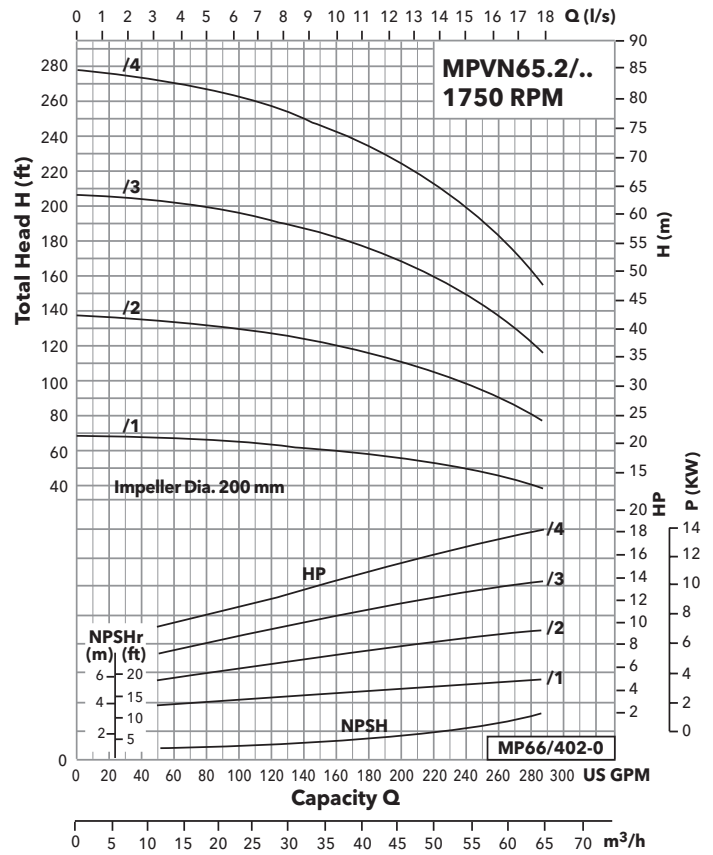
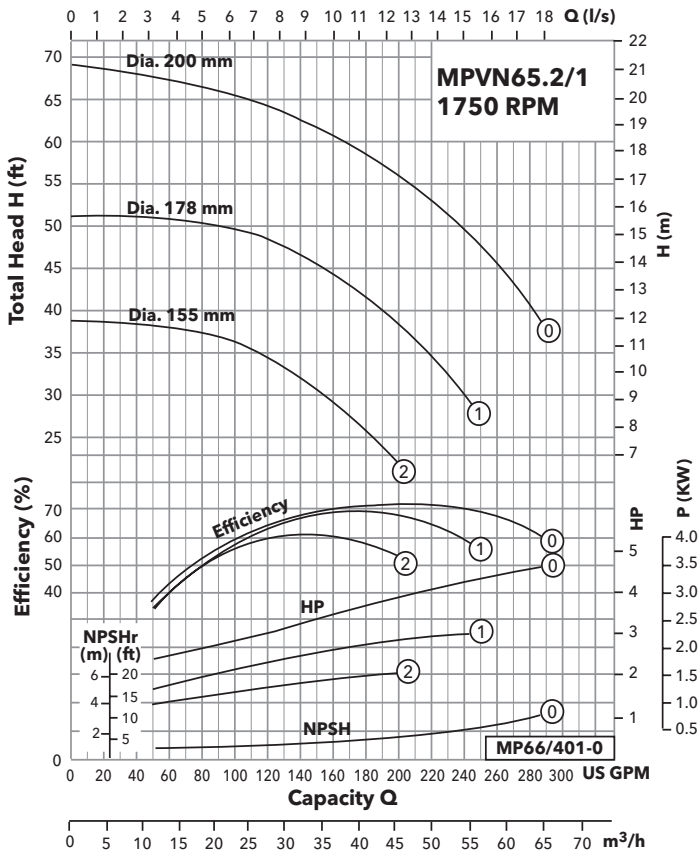
SELECTION CHARTS MPVN 65.1 n = 1750 RPM

Single Stage

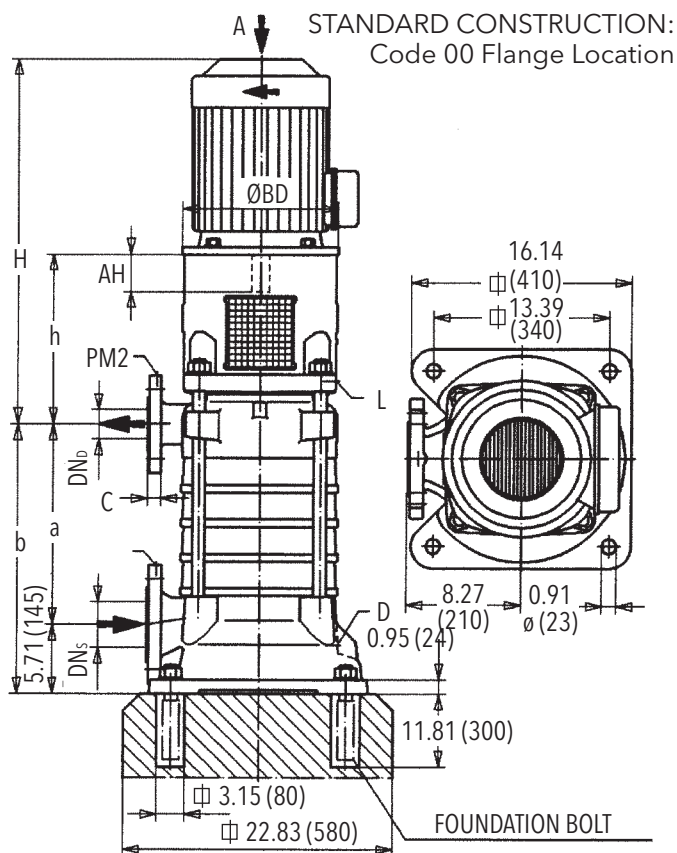


SELECTION CHARTS MPVN 65.2 n = 1750 RPM

Single Stage



MPVN STANDARD CONSTRUCTION MPVN65.1, MPVN65.2



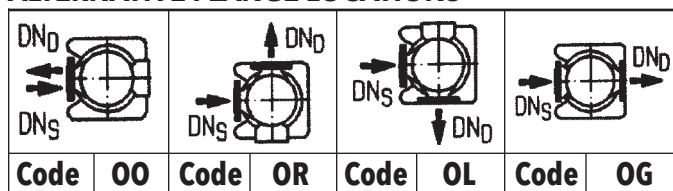
Number of Stages

| | 1*) | 2*) | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| a | 4.92 (125) | 7.68 (195) | 10.43 (265) | 13.19 (335) | 15.94 (405) | 18.70 (475) | 21.46 (545) | 24.21 (615) | 26.97 (685) |
| b | 10.63 (270) | 13.39 (340) | 16.14 (410) | 18.90 (480) | 21.65 (550) | 24.41 (620) | 27.17 (690) | 29.92 (760) | 32.68 (830) |

| | 10 | 11 | 12 |
|---|----------------|----------------|-----------------|
| a | 29.72 (755) | 32.48 (825) | 35.24 (895) |
| b | 35.43 (900) | 38.19 (970) | 40.94 (1040) |

| NEMA Motor | HP (rpm) | | h | H | BD | AH |
|------------|----------|------|----------------|-----------------|----------------|-----------------|
| | 3550 | 1750 | | | | |
| 254TD | 15 | 15 | 16.89 (429) | 36.06 (916) | 14.02 (356) | 4.00 (101.6) |
| 256TD | 20 | 20 | 16.89 (429) | 36.06 (916) | 14.02 (356) | 4.00 (101.6) |
| 284TD | - | 25 | 16.89 (429) | 38.82 (986) | 14.02 (356) | 4.62 (117.3) |
| 284TSD | 25 | - | 16.89 (429) | 38.82 (986) | 14.02 (356) | 3.25 (82.5) |
| 286TD | - | 30 | 16.89 (429) | 38.82 (986) | 14.02 (356) | 4.62 (117.3) |
| 286TSD | 30 | - | 16.89 (429) | 38.82 (986) | 14.02 (356) | 3.25 (82.5) |
| 324TD | - | 40 | 18.07 (459) | 40.98 (1041) | 17.99 (457) | 5.25 (133.4) |
| 324TSD | 40 | - | 16.89 (429) | 39.80 (1011) | 17.99 (457) | 3.75 (95.3) |
| 326TD | - | 50 | 18.07 (459) | 40.98 (1041) | 17.99 (457) | 5.25 (133.4) |
| 326TSD | 50 | - | 16.89 (429) | 39.80 (1011) | 17.99 (457) | 3.75 (95.3) |
| 364TSD | 60 | - | 16.89 (429) | 40.71 (1034) | 17.99 (457) | 3.75 (95.3) |
| 365TD | - | 75 | 18.07 (459) | 41.89 (1064) | 17.99 (457) | 5.88 (149.4) |
| 365TSD | 75 | - | 16.89 (429) | 40.71 (1034) | 17.99 (457) | 3.75 (95.3) |
| 405TSD | 100 | - | 18.07 (459) | 44.80 (1138) | 22.01 (559) | 4.25 (108.0) |
| 444TSD | 125 | - | 18.07 (459) | 49.21 (1250) | 22.01 (559) | 4.75 (120.7) |
| 445TSD | 150 | - | 18.07 (459) | 49.21 (1250) | 22.01 (559) | 4.75 (120.7) |
| 447TSD | 200 | - | 18.07 (459) | 49.21 (1250) | 22.01 (559) | 4.75 (120.7) |

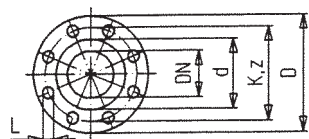
ALTERNATIVE FLANGE LOCATIONS



PUMP FLANGES

| ASME B16.5 | | | | | | | |
|-----------------------|-------|----------------|---------------|--------------|---------------|-----------|---|
| DN | Class | D | K | C | d | L | z |
| Discharge 2½ (in.) | 150 | 7.52 (191) | 5.51 (140) | 0.94 (24) | 4.13 (105) | ¾ (19) | 4 |
| | 300 | 7.52 (191) | 5.87 (149) | 0.94 (24) | 4.13 (105) | ⅞ (22) | 8 |
| | 600 | 8.07 (205) | 5.87 (149) | 1.10 (28) | 4.13 (105) | ⅞ (22) | 8 |
| Suction 4 (in.) | 150 | 9.25 (235) | 7.52 (191) | 1.06 (27) | 6.18 (157) | ¾ (19) | 8 |
| | 300 | 10.00 (254) | 7.87 (200) | 1.06 (27) | 6.18 (157) | ⅞ (22) | 8 |

Dimensions in inches (mm).

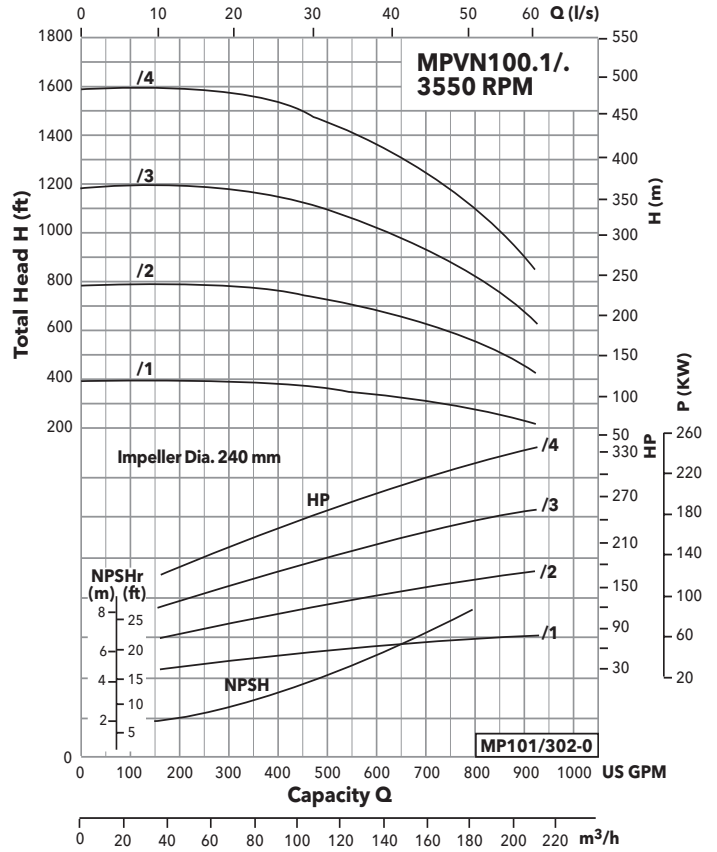
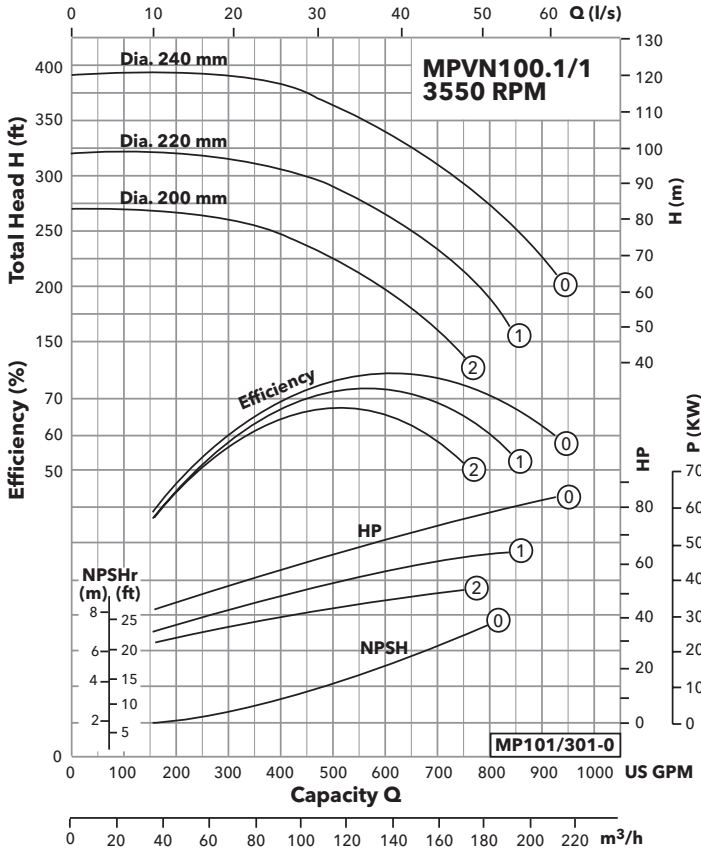


PM1 = Suction Gauge Conn. G1/4
 PM2 = Discharge Gauge Conn. G1/4
 L = Vent Conn. G1/2
 D = Drain Conn. G1/4

*) = Code 00 not possible, normal configuration code OG
 Dimensions in inches (mm).

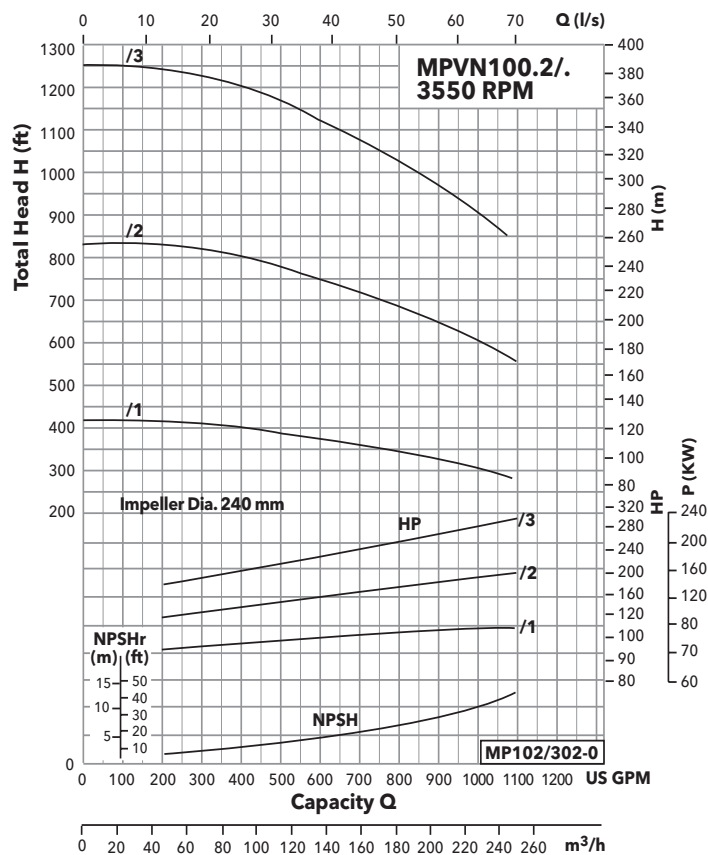
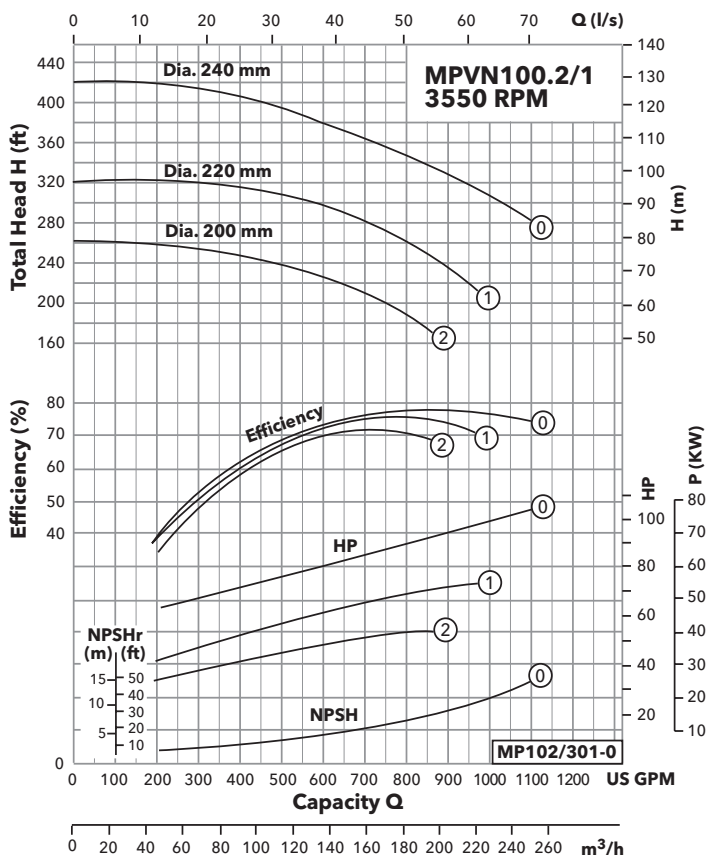
SELECTION CHARTS MPVN 100.1 n = 3550 RPM

Single Stage



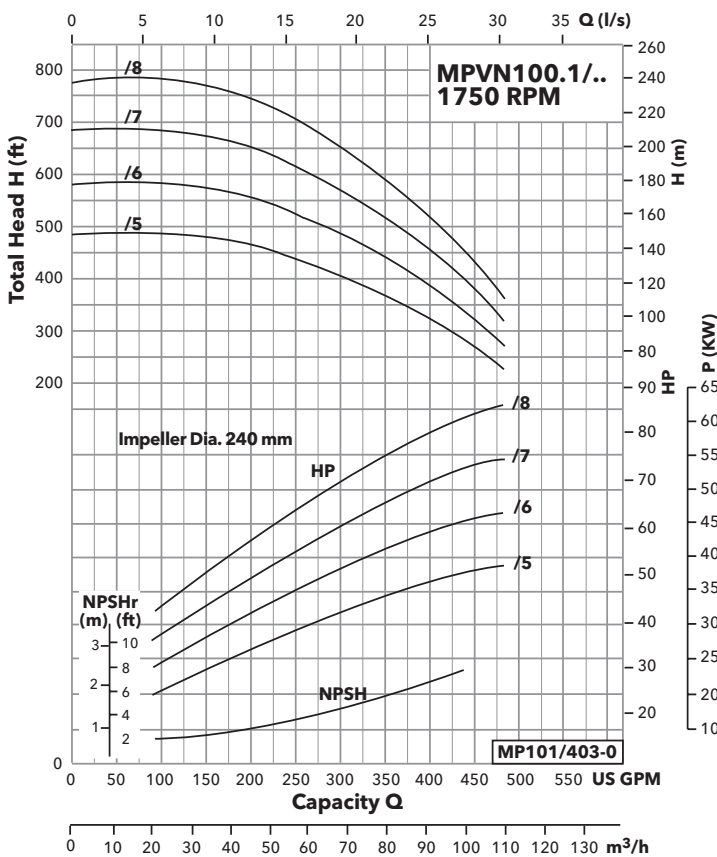
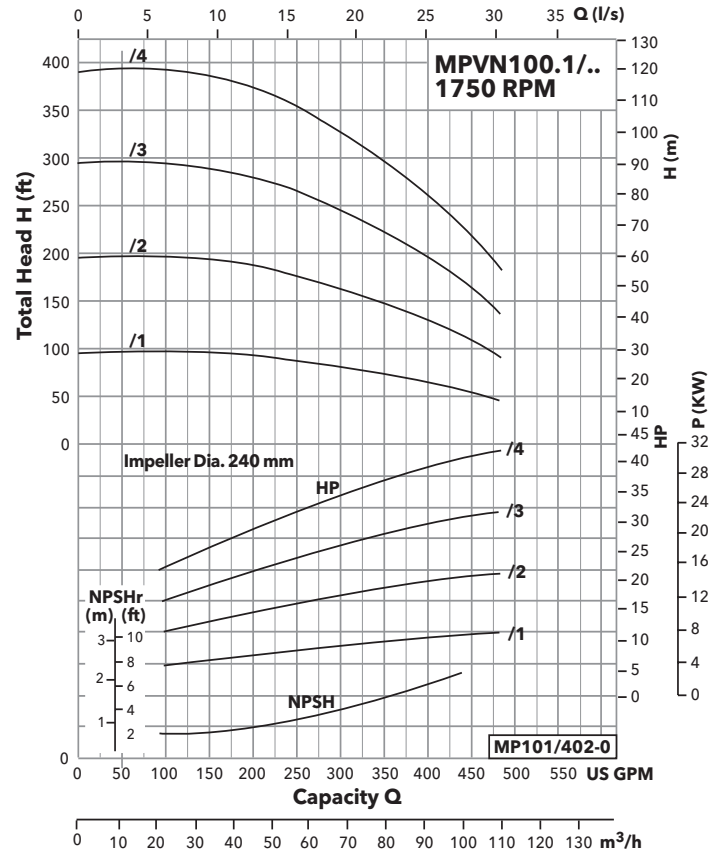
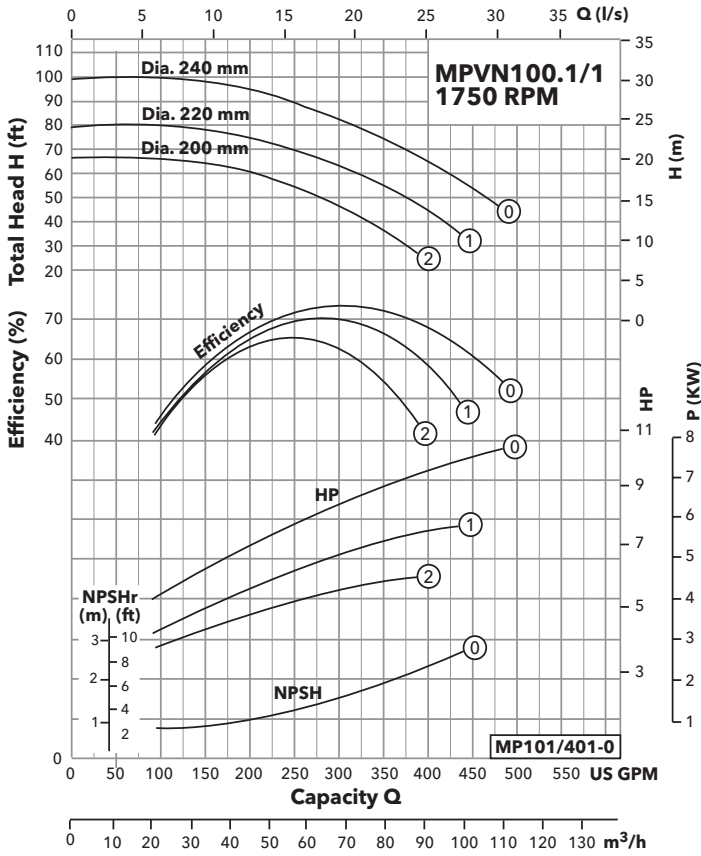
SELECTION CHARTS MPVN 100.2 n = 3550 RPM

Single Stage



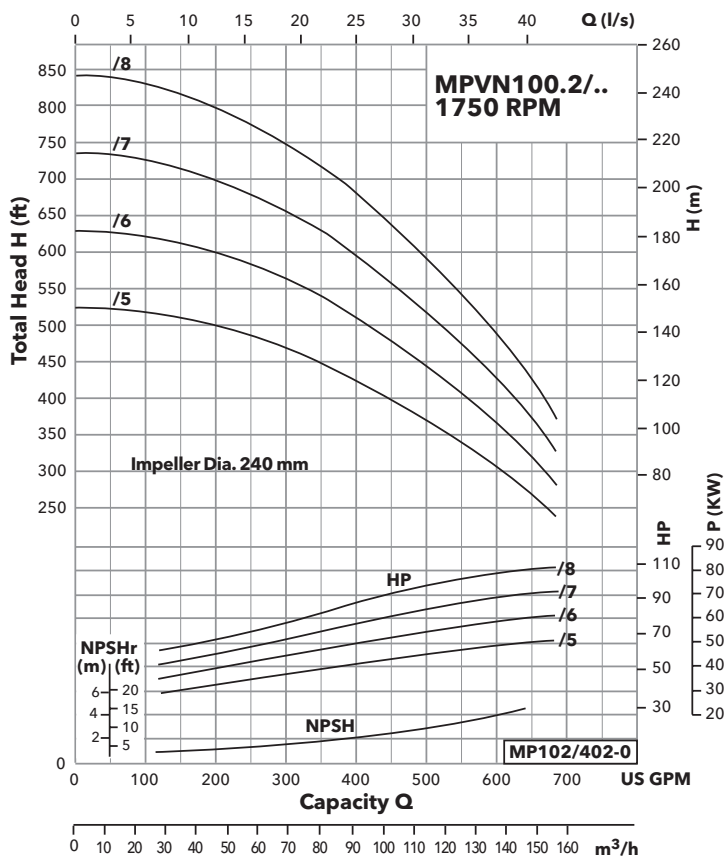
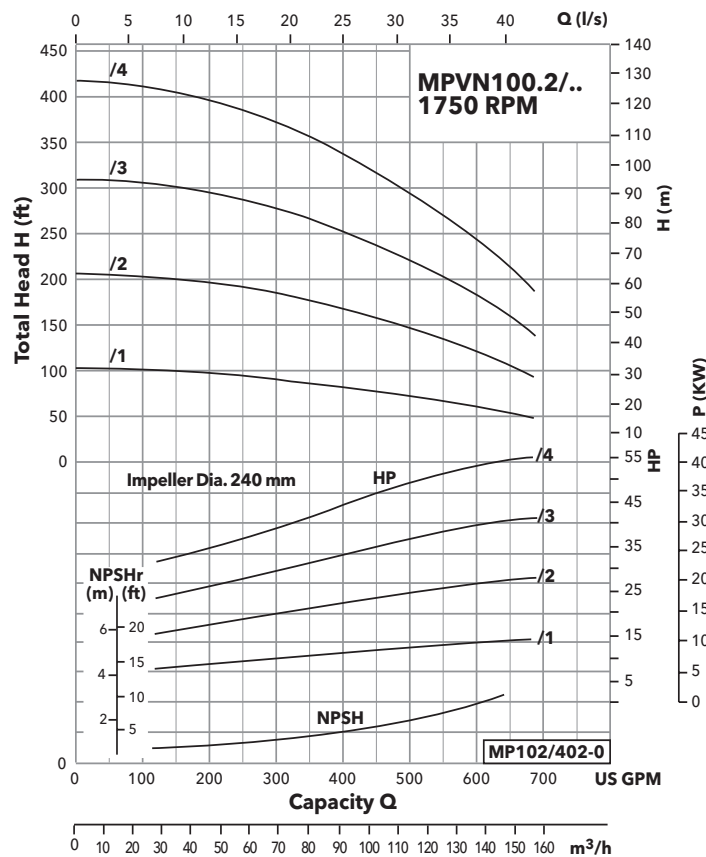
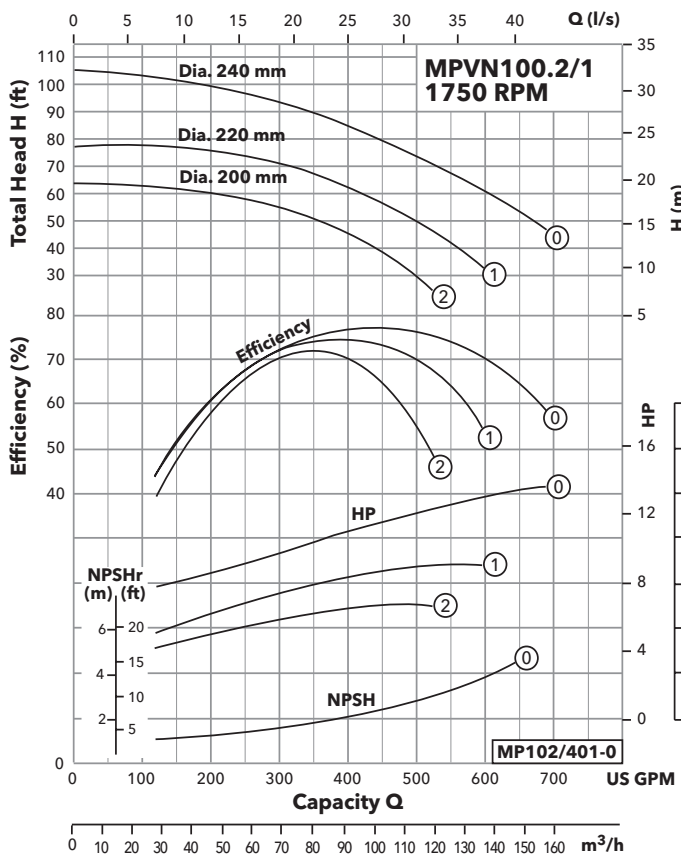
SELECTION CHARTS MPVN 100.1 n = 1750 RPM

Single Stage

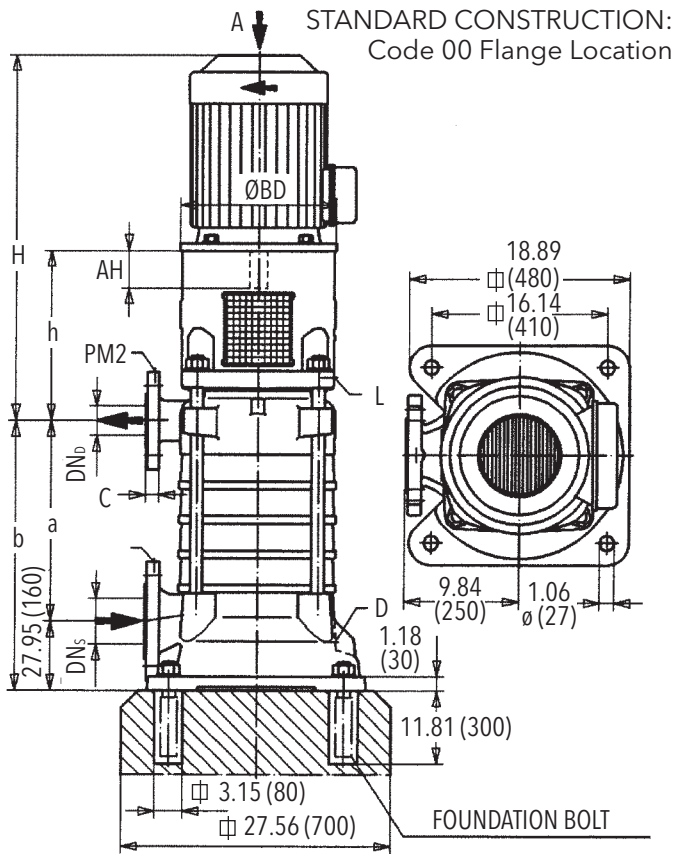


SELECTION CHARTS MPVN 100.2 n = 1750 RPM

Single Stage



MPVN STANDARD CONSTRUCTION MPVN100.1, MPVN100.2



Number of Stages

| | 1*) | 2*) | 3 | 4 | 5 |
|---|----------------|----------------|----------------|----------------|----------------|
| a | 6.89 (175) | 10.24 (260) | 13.58 (345) | 16.93 (430) | 20.28 (515) |
| b | 13.19 (335) | 16.54 (420) | 19.88 (505) | 23.23 (590) | 26.57 (675) |
| | 6 | 7 | 8 | | |
| a | 23.62 (600) | 26.97 (685) | 30.31 (770) | | |
| b | 29.92 (760) | 33.27 (845) | 36.61 (915) | | |

| NEMA Motor | HP (rpm) | | h | H | BD | AH |
|------------|----------|------|----------------|-----------------|----------------|-----------------|
| | 3550 | 1750 | | | | |
| 254TD | - | 15 | 19.06 (484) | 38.23 (971) | 14.02 (356) | 4.00 (101.6) |
| 256TD | - | 20 | 19.06 (484) | 38.23 (971) | 14.02 (356) | 4.00 (101.6) |
| 284TD | - | 25 | 19.06 (484) | 40.98 (1041) | 14.02 (356) | 4.00 (101.6) |
| 286TD | - | 30 | 19.06 (484) | 40.98 (1041) | 14.02 (356) | 4.00 (101.6) |
| 324TSD | - | 40 | 20.24 (514) | 43.15 (1096) | 17.99 (457) | 5.25 (133.4) |
| 326TD | - | 50 | 20.24 (514) | 43.15 (1096) | 17.99 (457) | 5.25 (133.4) |
| 364TD | - | 60 | 20.24 (514) | 44.06 (1119) | 17.99 (457) | 5.88 (149.4) |
| 364TSD | 60 | - | 19.06 (484) | 42.87 (1089) | 17.99 (457) | 3.75 (95.3) |
| 365TD | - | 75 | 19.06 (484) | 44.06 (1119) | 17.99 (457) | 5.88 (149.4) |
| 365TSD | 75 | - | 20.24 (514) | 42.87 (1089) | 17.99 (457) | 3.75 (95.3) |
| 405TD | - | 100 | 19.06 (484) | 48.35 (1228) | 22.01 (559) | 7.25 (184.2) |
| 405TSD | 100 | - | 21.61 (514) | 46.97 (1193) | 22.01 (559) | 4.25 (108.0) |
| 444TSD | 125 | - | 20.24 (514) | 51.38 (1305) | 22.01 (559) | 4.75 (120.7) |
| 445TSD | 150 | - | 20.24 (514) | 51.38 (1305) | 22.01 (559) | 4.75 (120.7) |
| 447TSD | 200 | - | 20.24 (514) | 55.39 (1407) | 22.01 (559) | 4.75 (120.7) |
| 449TSD | 250 | - | 20.24 (514) | 58.39 (1483) | 22.01 (559) | 4.75 (120.7) |
| 449TSD | 300 | - | 20.24 (514) | 58.39 (1483) | 22.01 (559) | 4.75 (120.7) |
| 449TSD | 350 | - | 20.24 (514) | 58.39 (1483) | 22.01 (559) | 4.75 (120.7) |

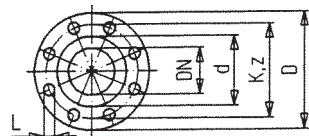
ALTERNATIVE FLANGE LOCATIONS

| | | | |
|---------|---------|---------|---------|
| | | | |
| Code OO | Code OR | Code OL | Code OG |

PUMP FLANGES

| ASME B16.5 | | | | | | | |
|----------------------|-------|----------------|---------------|--------------|---------------|-------------|---|
| DN | Class | D | K | C | d | L | z |
| Discharge 4 (in.) | 150 | 9.25 (235) | 7.52 (191) | 1.06 (27) | 6.14 (156) | 3/4 (19) | 8 |
| | 300 | 10.75 (273) | 7.87 (200) | 1.26 (32) | 6.14 (156) | 7/8 (22) | 8 |
| | 600 | 10.75 (273) | 8.50 (216) | 1.26 (32) | 6.14 (156) | 1 (25) | 8 |
| Suction 5 (in.) | 150 | 10.98 (279) | 8.50 (216) | 1.14 (29) | 7.24 (184) | 7/8 (22) | 8 |
| | 300 | 10.98 (279) | 9.25 (235) | 1.14 (29) | 7.24 (184) | 7/8 (22) | 8 |

Dimensions in inches (mm)

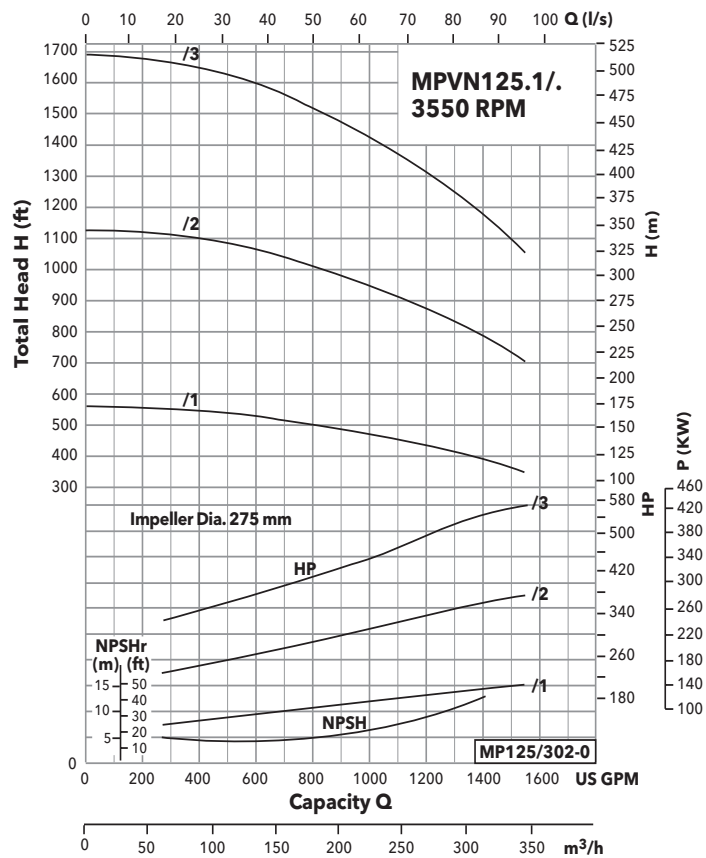
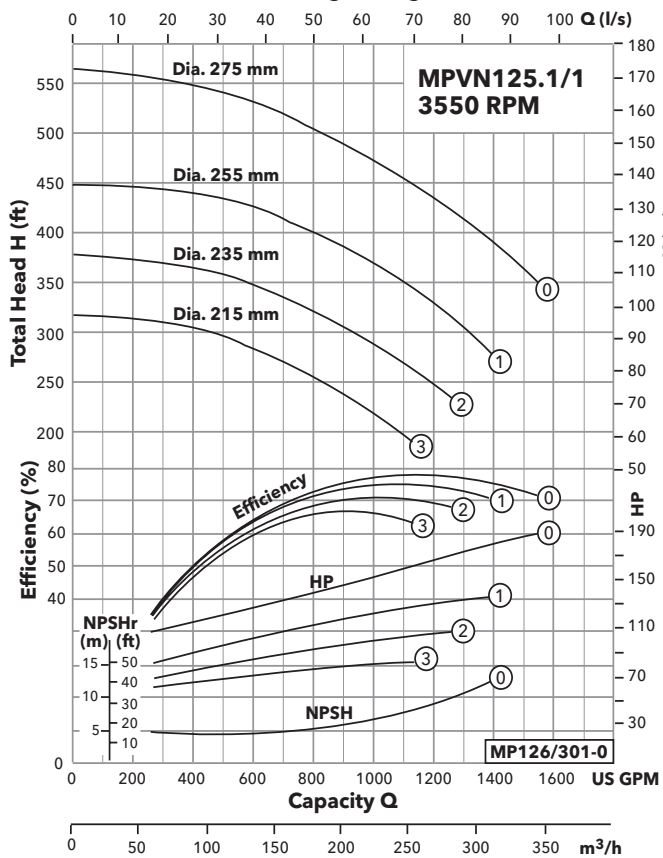


PM1 = Suction Gauge Conn. G1/4
 PM2 = Discharge Gauge Conn. G1/4
 L = Vent Conn. G1/2
 D = Drain Conn. G1/4

*) = Code OO not possible, normal configuration code OG
 Dimensions in inches (mm).

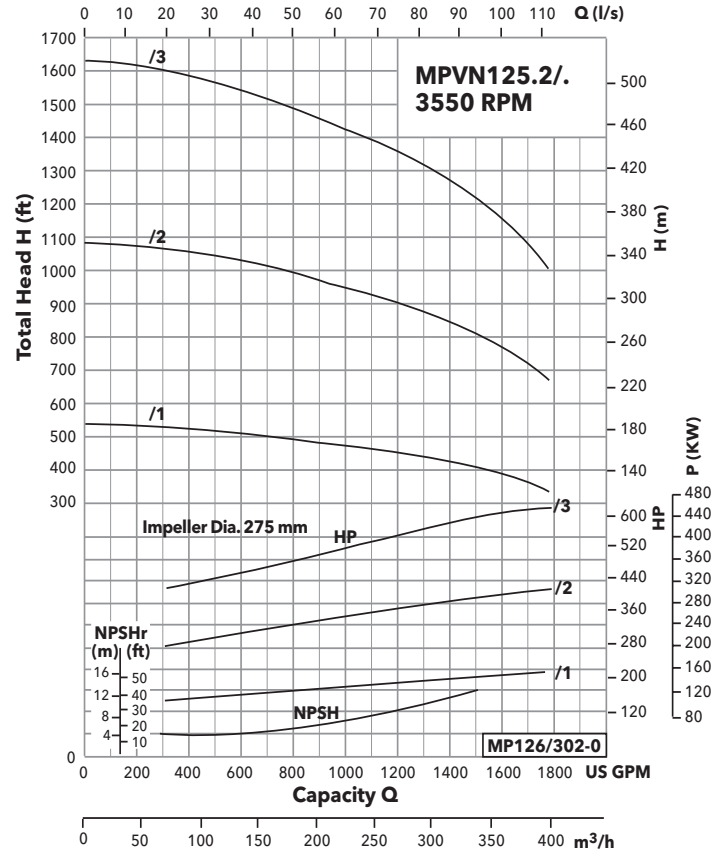
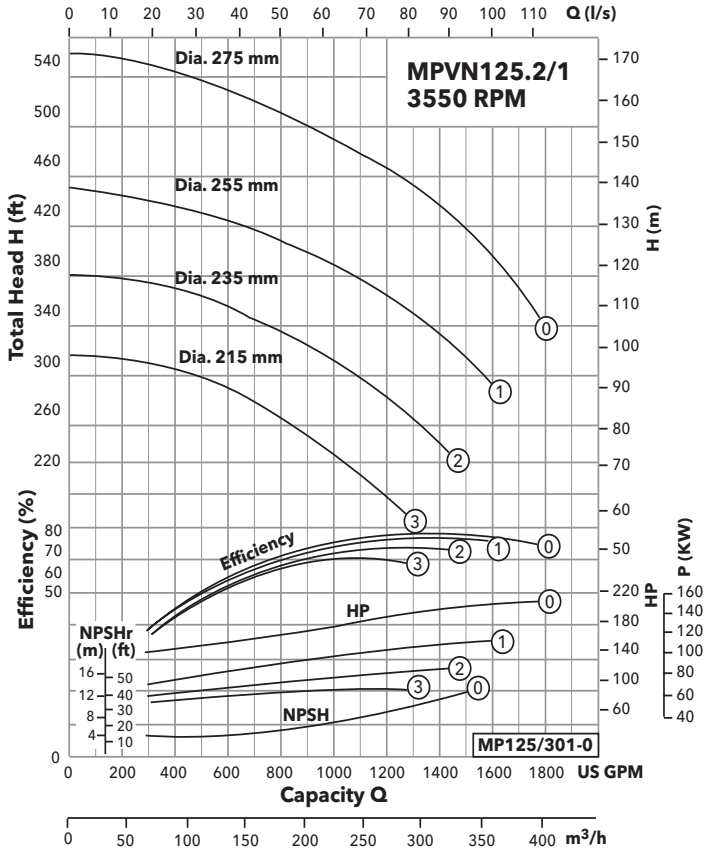
SELECTION CHARTS MPVN 125.1 n = 3550 RPM

Single Stage



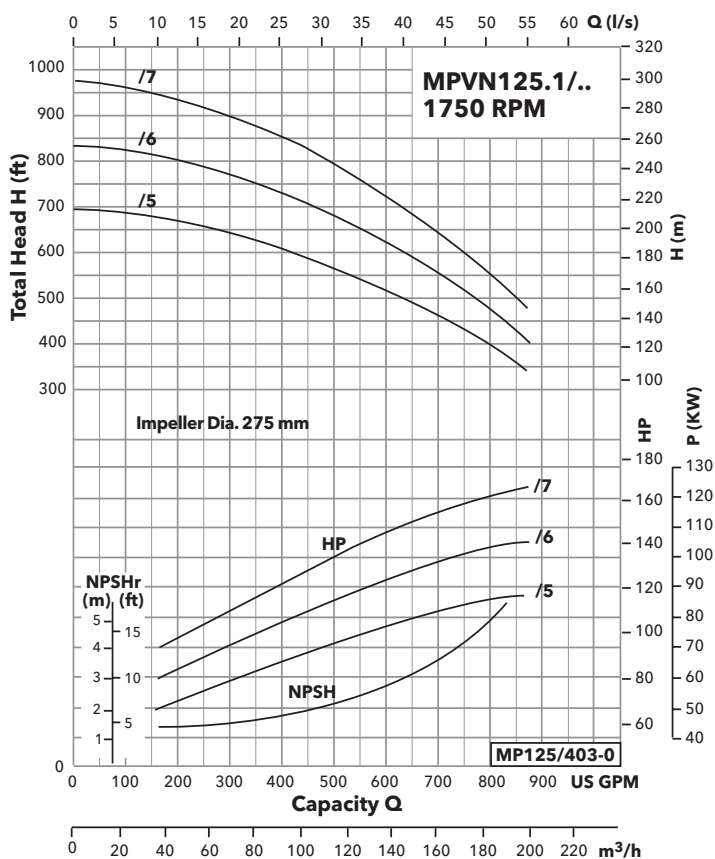
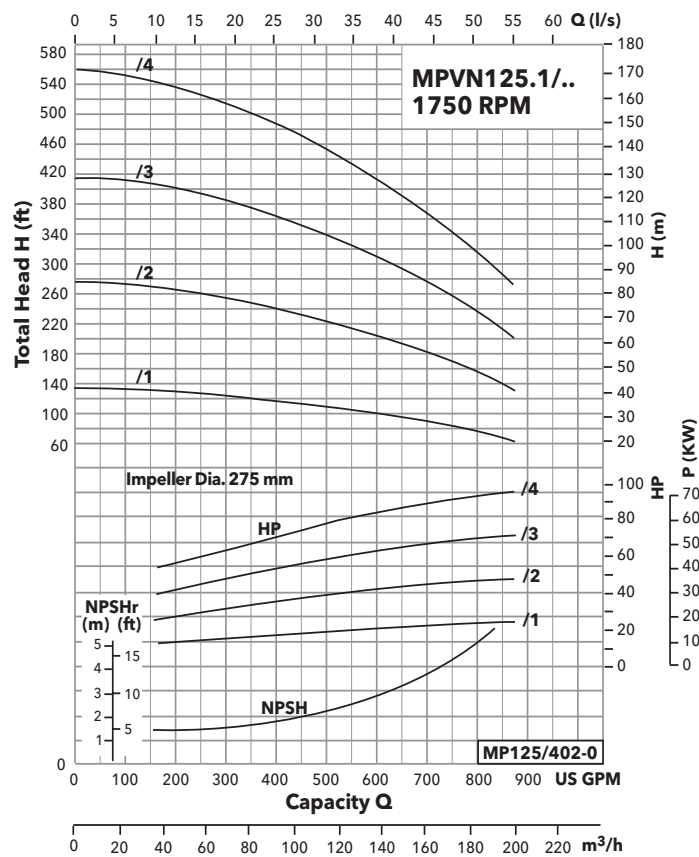
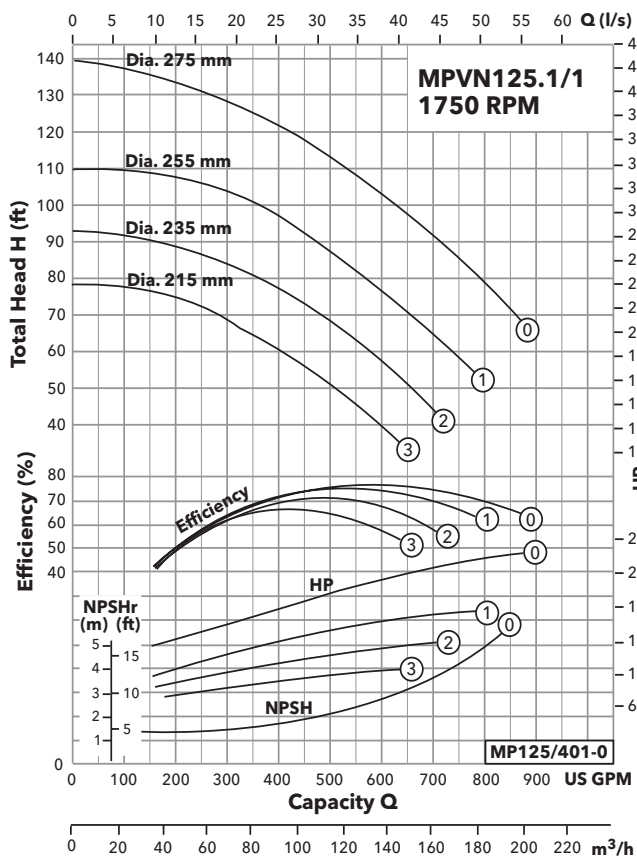
SELECTION CHARTS MPVN 125.2 n = 3550 RPM

Single Stage



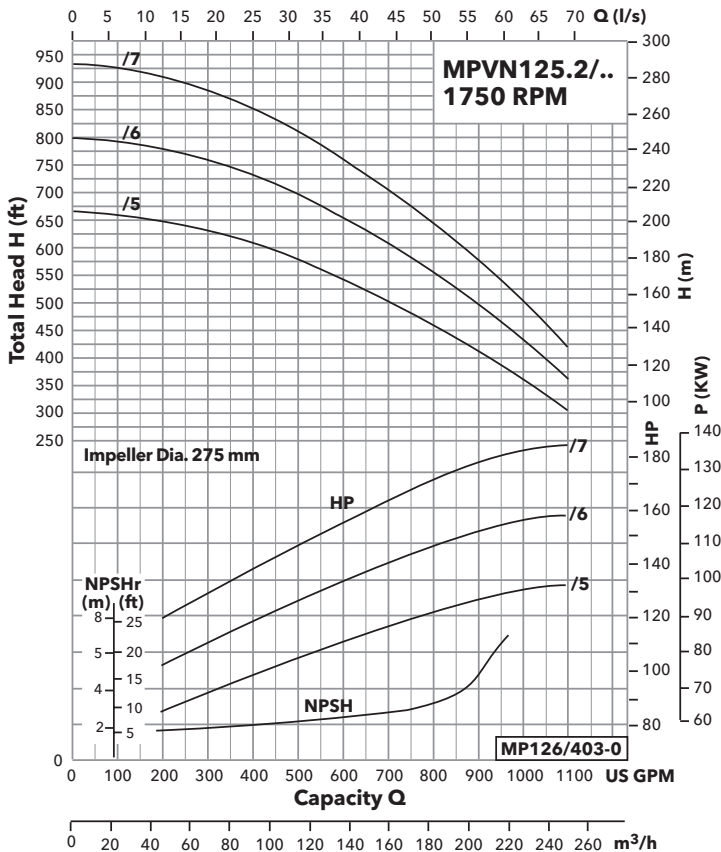
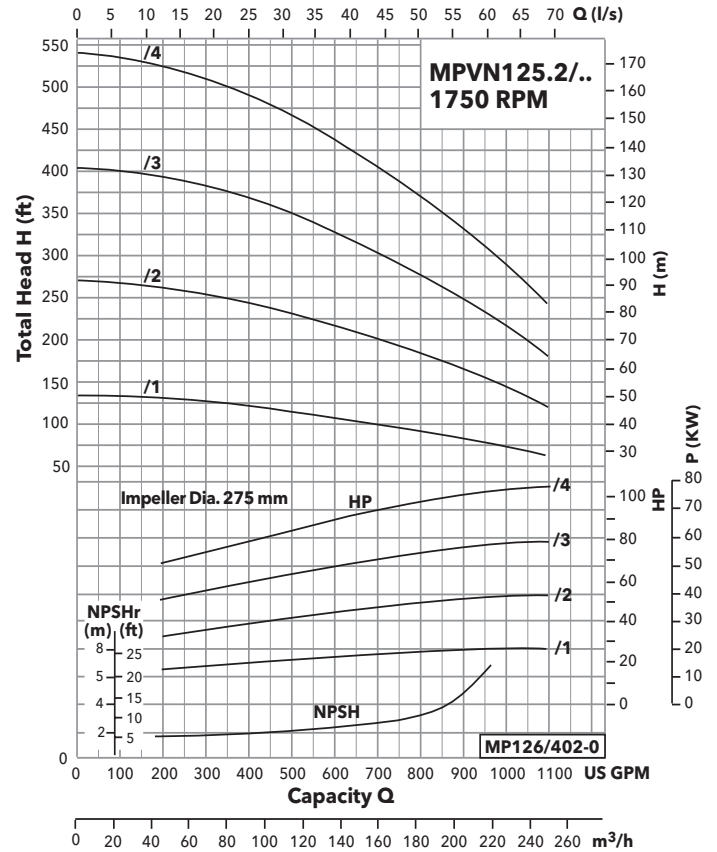
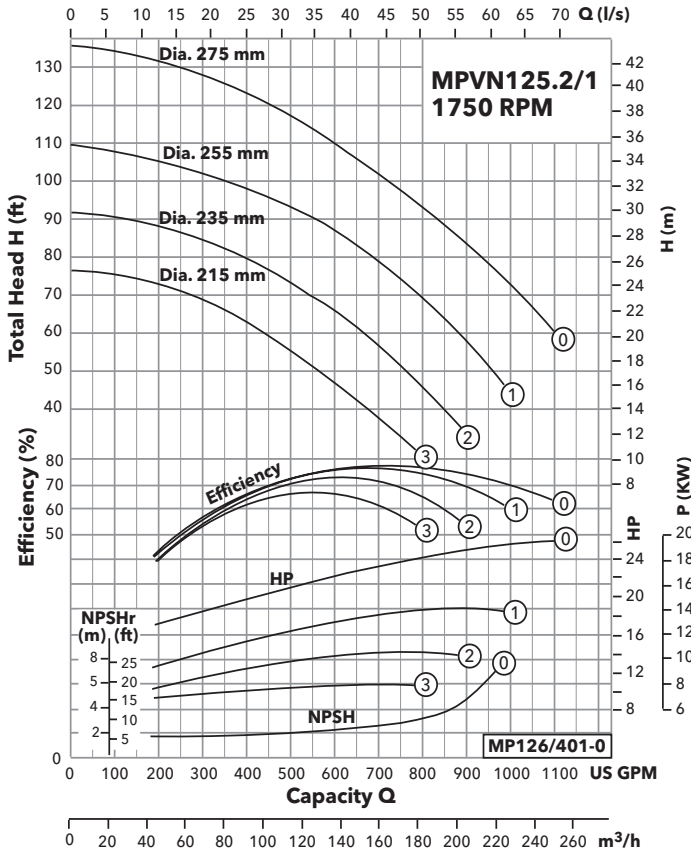
SELECTION CHARTS MPVN 125.1 n = 1750 RPM

Single Stage

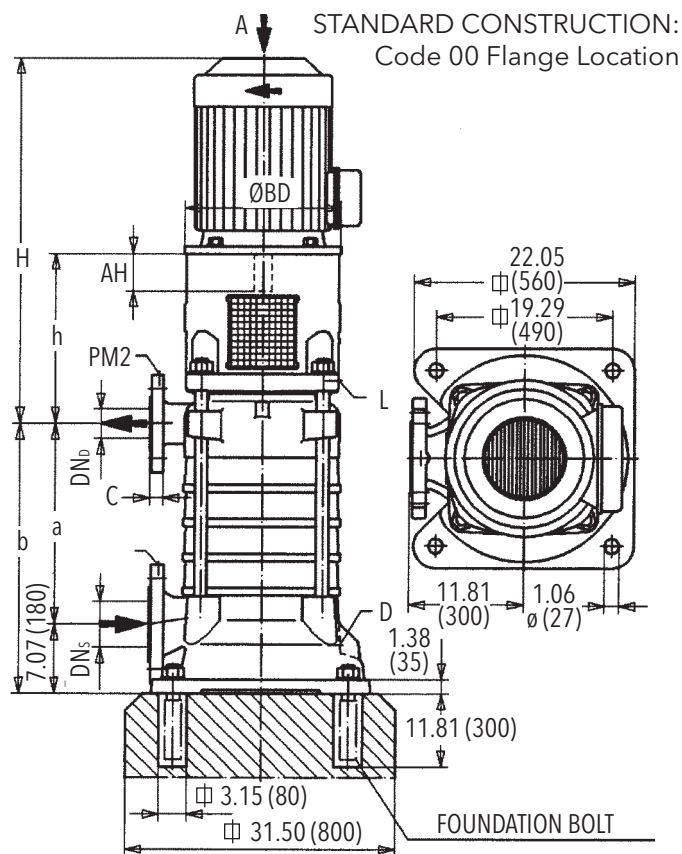


SELECTION CHARTS MPVN 125.2 n = 1750 RPM

Single Stage



MPVN STANDARD CONSTRUCTION MPVN125.1, MPVN125.2



Number of Stages

| | 1*) | 2*) | 3 | 4 | 5 | 6 | 7 |
|---|----------------|----------------|----------------|----------------|----------------|----------------|-----------------|
| a | 8.66 (220) | 12.80 (325) | 16.93 (430) | 21.06 (535) | 25.20 (640) | 29.33 (745) | 33.46 (850) |
| b | 15.75 (400) | 19.88 (505) | 24.02 (610) | 28.15 (715) | 32.28 (820) | 36.42 (925) | 40.55 (1030) |

| NEMA Motor | HP (rpm) | | h | H | BD | AH |
|------------|----------|------|----------------|-----------------|----------------|-----------------|
| | 3550 | 1750 | | | | |
| 324TD | - | 40 | 23.50 (597) | 47.13 (1197) | 17.99 (457) | 5.25 (133.4) |
| 326TD | - | 50 | 23.50 (597) | 47.13 (1197) | 17.99 (457) | 5.25 (133.4) |
| 364TD | - | 60 | 23.50 (597) | 47.32 (1202) | 17.99 (457) | 5.88 (149.4) |
| 365TD | - | 75 | 23.50 (597) | 47.32 (1202) | 17.99 (457) | 5.88 (149.4) |
| 405TD | - | 100 | 25.98 (660) | 52.72 (1339) | 22.01 (559) | 7.25 (184.2) |
| 405TSD | 100 | - | 23.50 (597) | 50.35 (1279) | 22.01 (559) | 4.25 (108.0) |
| 444TD | - | 125 | 25.98 (660) | 57.13 (1451) | 22.01 (559) | 8.50 (215.9) |
| 444TSD | 125 | - | 23.50 (597) | 54.65 (1388) | 22.01 (559) | 4.75 (120.7) |
| 445TD | - | 150 | 23.50 (660) | 57.13 (1451) | 22.01 (559) | 8.50 (215.9) |
| 445TSD | 150 | - | 25.98 (597) | 54.65 (1388) | 22.01 (559) | 4.75 (120.7) |
| 447TD | - | 200 | 23.50 (660) | 61.14 (1553) | 22.01 (559) | 8.50 (215.9) |
| 447TSD | 200 | - | 25.98 (597) | 58.66 (1490) | 22.01 (559) | 4.75 (120.7) |
| 449TD | - | 250 | 25.98 (660) | 64.13 (1629) | 22.01 (559) | 8.50 (215.9) |
| 449TSD | 250 | - | 23.50 (597) | 61.65 (1566) | 22.01 (559) | 4.75 (120.7) |
| 449TSD | 300 | - | 23.50 (597) | 61.65 (1566) | 22.01 (559) | 4.75 (120.7) |
| 449TSD | 350 | - | 23.50 (597) | 61.65 (1566) | 22.01 (559) | 4.75 (120.7) |
| 449TSD | 400 | - | 23.50 (597) | 61.65 (1566) | 22.01 (559) | 4.75 (120.7) |
| 500TSD | 500 | - | 23.50 (630) | 69.80 (1773) | 25.00 (635) | 4.75 (120.7) |

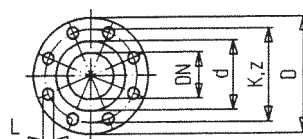
ALTERNATIVE FLANGE LOCATIONS

| | | | |
|---------|---------|---------|---------|
| | | | |
| Code OO | Code OR | Code OL | Code OG |

PUMP FLANGES

| ASME B16.5 | | | | | | | |
|----------------------|-------|----------------|----------------|--------------|---------------|---------------|----|
| DN | Class | D | K | C | d | L | z |
| Discharge 5 (in.) | 150 | 10.98 (279) | 8.50 (216) | 1.14 (29) | 7.24 (184) | 7/8 (22) | 8 |
| | 300 | 10.98 (279) | 9.25 (235) | 1.14 (29) | 7.24 (184) | 7/8 (22) | 8 |
| | 600 | 12.99 (330) | 10.51 (267) | 1.38 (35) | 7.24 (184) | 1 1/8 (29) | 8 |
| Suction 6 (in.) | 150 | 11.81 (300) | 9.49 (241) | 1.26 (32) | 8.31 (211) | 7/8 (22) | 8 |
| | 300 | 12.48 (317) | 10.63 (270) | 1.26 (32) | 8.31 (211) | 7/8 (22) | 12 |

Dimensions in inches (mm)



PM1 = Suction Gauge Conn. G1/4

PM2 = Discharge Gauge Conn. G1/4

L = Vent Conn. G1/2

D = Drain Conn. G1/4

*) = Code 00 not possible, normal configuration code OG
Dimensions in inches (mm).

Xylem |'zīləm|

- 1) The tissue in plants that brings water upward from the roots;
- 2) a leading global water technology company.

We're 12,500 people unified in a common purpose: creating innovative solutions to meet our world's water needs. Developing new technologies that will improve the way water is used, conserved, and re-used in the future is central to our work. We move, treat, analyze, and return water to the environment, and we help people use water efficiently, in their homes, buildings, factories and farms. In more than 150 countries, we have strong, long-standing relationships with customers who know us for our powerful combination of leading product brands and applications expertise, backed by a legacy of innovation.

For more information on how Xylem can help you, go to www.xyleminc.com



Xylem, Inc.
2881 East Bayard Street Ext., Suite A
Seneca Falls, NY 13148
Phone: (800) 453-6777
Fax: (888) 322-5877
www.xyleminc.com/brands/gouldswatertechnology

Goulds is a registered trademark of Goulds Pumps, Inc. and is used under license.
© 2012 Xylem Inc. BMPVN R1 December 2012