# PRIMEROYAL® Series
Metering Pump

## Models PK and PKG

The PRIMEROYAL® PK and PRIMEROY® PKG metering pumps are versatile, reliable pumps that consistently and accurately inject chemicals. The pumps' field-proven design enables precise control of the pump delivery rate while meeting or exceeding industry standards for steady state accuracy and repeatability. They feature a compact, variable eccentric drive that changes the stroke length by changing the position of the center of the shaft in the eccentric. Models PK and PKG provide accurate dosing of a broad spectrum of fluids at flow rates that can reach up to 2,500 l/h (660.5 gph). The pumps have a modular design that accepts three types of liquid ends and offer capacity control options so they can meet the specific requirements of a large number of demanding industrial processes.

## Applications

- Oil and Gas
  - Upstream – Injection of methanol at pressures of 1,034 bar (15,000 psi) and more at the wellhead for onshore and offshore wells
  - Midstream – Injection of corrosion inhibitors for produced oil and gas integrity during transportation
  - Downstream – Injection of chemicals for separation and treatment of refined products
  - Produced water treatment – Injection of sodium hypochlorite, biocides, scale inhibitors, oxygen reducing agent, etc.
- Chemical and Petrochemical Processing
  - Dosing catalysts for polymerization of polyethylene
- Power Generation
  - High-pressure boiler feed water treatment

## Features and Benefits

- Compliant with API675 standards
- Compliant with API674 standards in fixed stroke configuration
- Minimized footprint
- Available in vertical or horizontal motor configurations
- Manual or electrical stroke length adjustment
- Capacity adjustable while running or stopped
- Packed plunger, Teflon® PTFE or metallic double diaphragm liquid ends available
- Conforms to ATEX CE EX II 2G/D c T3 with ATEX motors
- Multiplexable

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## General Specifications

| | |
|---|---|
| **Accuracy** | ± 1% over a range of 10 to 100% nominal flowrate |
| **Flow rate adjustment** | Micrometric adjustment of stroke while running or stopped |
| **Maximum stroke** | 40 mm (1.57 in) |
| **Frequencies at 50 Hz 960 rpm** | 39 and 120 spm |
| **Frequencies at 50 Hz 1,440 rpm** | 59, 100, 144 and 180 spm |
| **Frequencies at 60 Hz 1,140 rpm** | 47 and 144 spm |
| **Frequencies at 60 Hz 1,725 rpm** | 71, 120, and 173 spm |
| **Thrust** | 475 daN (1,068 lbf) |
| **Ambient operating temperature** | Standard: -10°C to 50°C (14°F to 122°F)<br>Low temperature option: -40°C to 50°C (-40°F to 122°F) |
| **API675** | Confroms (exemptions available on request) |
| **ATEX** | Conforms to TEX CE EX II 2G/D c T3 with ATEX motor<br>ATEX for plastic liquid ends, please consult us<br>For packed plunger liquid ends, in area 1 consult us |
| **Suction** | 2 m (6.57 ft) water on M, H and P liquid ends<br>4 m (13 ft) water on UT liquid ends<br>6 m (19.7 ft) water on N and NX liquid ends |
| **Motor mounting** | Only FF165 and FF215 |

## Design Specifications

**Model PK with Packed Plunger Type NX***

| Flow rate | | Pressure Max. 50 Hz Motor (kW) | | | | Freq. (spm) Motor Speed (rpm) | | Flow rate | | Pressure Max. 60 Hz Motor (HP) | | | | Freq. (spm) Motor Speed (rpm) | | Connections ball valves |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0.55 | 0.75 | 1.1 | 1.5 | | | | | 0.75 | 1 | 1.5 | 2 | | | |
| 10 bar | Pres. Max. | H | J | K | L | 960 | 1,440 | 145 psi | Pres. Max. | H | J | K | L | 1,140 | 1,750 | |
| l/h | | bar | | | | | | gph | | psi | | | | | | |
| Ø 8 mm - Swept volume: 2.01 cm³ | | | | | | | | Ø 0.31 in - Swept volume: 0.12 in³ | | | | | | | | 3/8" MP |
| 4.2 | 2.7 | 930 | | | | 39 | | 1.3 | 0.86 | 13,488 | | | | 47 | | (Ø 6.35 mm / 2.250 in - LD |
| 6.6 | 4.2 | 750 | 930 | | | | 59 | 2.1 | 1.3 | 10,878 | 13,488 | | | | 71 | |
| 11.6 | 7.3 | 450 | 650 | 930 | | | 100 | 3.7 | 2.3 | 6,527 | 9,427 | 13,488 | | | 120 | |
| 13.9 | 8.8 | 370 | 530 | 820 | 930 | 120 | | 4.4 | 2.8 | 5,366 | 7,687 | 11,893 | 13,488 | 144 | | |
| 16.7 | 10.5 | 310 | 440 | 700 | 930 | | 144[1] | Not applicable with a 60 Hz motor | | | | | | | | |
| Ø 12 mm - Swept Volume: 4.52 cm³ | | | | | | | | Ø 0.47 in - Swept Volume: 0.28 in³ | | | | | | | | 1/2" |
| 9.5 | 8 | 400 | | | | 39 | | 3.0 | 2.5 | 5,801 | | | | 47 | | (Ø 6.35 mm / 0.250 in - LD) |
| 14.9 | 12.6 | 340 | 400 | | | | 59 | 4.7 | 4.0 | 4,931 | 5,801 | | | | 71 | |
| 26.1 | 22 | 200 | 280 | 400 | | | 100 | 8.3 | 7.0 | 2,901 | 4,061 | 5,801 | | | 120 | |
| 31.3 | 26.4 | 160 | 235 | 360 | 400 | 120 | | 9.9 | 8.4 | 2,321 | 3,408 | 5,221 | 5,801 | 144 | | |
| 37.5 | 31.7 | 130 | 195 | 300 | 400 | | 144[1] | Not applicable with a 60 Hz motor | | | | | | | | |

* This chart demonstrates the minimum and maximum flow rate and pressure of the pump. For other specifications, please consult your local representative.
*To have a certification in zone 1, please add probes = CONSULT
[1]Do not use with 60 Hz Motor
LD = Hardened valves - double valve

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# Design Specifications

## Model PK with Packed Plunger Type UT or N*

| Flow rate | | Pressure Max. 50 Hz Motor (kW) | | | | Freq. (spm) | | Flow rate | | Pressure Max. 60 Hz Motor (HP) | | | | Freq. (spm) | | Connections ball valves |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0.55 | 0.75 | 1.1 | 1.5 | Motor Speed (rpm) | | | | 0.75 | 1 | 1.5 | 2 | Motor Speed (rpm) | | |
| 10 bar | Pres. Max. | H | J | K | L | 960 | 1,440 | 145 psi | Pres. Max. | H | J | K | L | 1,140 | 1,725 | |
| l/h | | bar | | | | | | gph | | psi | | | | | | |
| Ø 9.5 mm - Swept volume: 2.85 cm³ | | | | | | | | Ø 0.37 in - Swept volume: 0.17 in³ | | | | | | | | 1/2" |
| 6.3 | 5 | 300 | | | | 39 | | 2.0 | 1.6 | 4,351 | | | | 47 | | (Ø 6.35 mm / 0.250 in - LD) |
| 9.6 | 7.7 | 300 | | | | | 59 | 3.0 | 2.4 | 4,351 | | | | | 71 | |
| 16.4 | 13.1 | 300 | | | | | 100 | 5.2 | 4.2 | 4,351 | | | | | 120 | |
| 19.6 | 15.7 | 257 | 300 | | | 120 | | 6.2 | 5.0 | 3,727 | 4,351 | | | 144 | | |
| 23.6 | 18.9 | 212 | 300 | | | | 144[1] | Not applicable with a 60 Hz motor | | | | | | | | |
| Ø 38.1 mm - Swept Volume: 45.60 cm³ | | | | | | | | Ø 1.5 in - Swept Volume: 2.78 in³ | | | | | | | | 1" |
| 102 | 100 | 38 | | | | 39 | | 32.3 | 31.7 | 551 | | | | 47 | | (Ø 25 mm / 0.98 in- NS) |
| 154 | 152 | 31 | 38 | | | | 59 | 48.8 | 48.2 | 450 | 551 | | | | 71 | |
| 262 | 259 | 15 | 25 | 38 | | | 100 | 83.1 | 82.1 | 218 | 363 | 551 | | | 120 | |
| 315 | 311 | 11 | 20 | 33 | 38 | 120 | | 99.9 | 98.6 | 160 | 290 | 479 | 551 | 144 | | |
| 378 | 373 | 8 | 15 | 27 | 38 | | 144[1] | Not applicable with a 60 Hz motor | | | | | | | | |

* This chart demonstrates the minimum and maximum flow rate and pressure of the pump. For other specifications, please consult your local representative.
*For methanol applications, please consult us
*To have a certification zone 1, please add probes = CONSULT
[1]Do not use with a 60 Hz motor
LD = Hardened valves - double valve
NS = Single valve

# Design Specifications

## Model PK with Packed Plunger Type UT*

| Flow rate | | Pressure Max. 50 Hz Motor (kW) | | | | | Freq. (spm) | | Flow rate | | Pressure Max. 60 Hz Motor (HP) | | | | | Freq. (spm) | | Connections ball valves |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0.55 | 0.75 | 1.1 | 1.5 | 2.2 | Motor Speed (rpm) | | | | 0.75 | 1 | 1.5 | 2 | 3 | Motor Speed (rpm) | | |
| 10 bar | Pres. Max. | H | J | K | L | M | 960 | 1,440 | 145 psi | Pres. Max. | H | J | K | L | M | 1,140 | 1,725 | |
| l/h | | bar | | | | | | | gph | | psi | | | | | | | |
| Ø 44.5 mm - Swept Volume: 62.07 cm³ | | | | | | | | | Ø 1.75 in - Swept Volume: 3.79 in³ | | | | | | | | | 1" |
| 139 | 138 | 27 | | | | | 39 | | 44.1 | 43.7 | 392 | | | | | 47 | | (Ø 25 mm / 0.98 in - NS) |
| 210 | 208 | 22 | 27 | | | | | 59 | 66.6 | 65.9 | 319 | 392 | | | | | 71 | |
| 357 | 354 | 10 | 17 | 27 | | | | 100 | 113.7 | 112.2 | 145 | 247 | 392 | | | | 120 | |
| 429 | 426 | 7 | 13 | 24 | 27 | | 120 | | 136.0 | 135.0 | 102 | 189 | 348 | 392 | | 144 | | |
| 514 | 510 | | 10 | 19 | 27 | | | 144[1] | Not applicable with a 60 Hz motor | | | | | | | | | |
| Ø 88.9 mm - Swept Volume: 248.29 cm³ | | | | | | | | | Ø 3.50 in - Swept Volume: 14.66 in³ | | | | | | | | | 2" |
| | 557 | 5 | 6 | | | | 39 | | | 176.6 | 72 | 87 | | | | 47 | | (Ø 40 mm / 1.1575 in - NS) |
| | 844 | | | 6 | | | | 59 | | 267.6 | | | 87 | | | | 71 | |
| | 1,432 | | | | 6 | | | 100 | | 454.0 | | | | 87 | | | 120 | |
| | 1,718 | | | | 5 | 6 | 120 | | | 544.6 | | | | 72 | 87 | 144 | | |
| | 2,062 | | | | | 6 | | 144[1] | Not applicable with a 60 Hz motor | | | | | | | | | |

* This chart demonstrates the minimum and maximum flow rate and pressure of the pump. For other specifications, please consult your local representative.
*For methanol applications, please consult us
*To have a certification zone 1, please add probes = CONSULT
[1]Do not use with a 60 Hz motor
NS = Single valve

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# Design Specifications

## Model PK with Metallic Single Diaphragm Liquid End Type M*

| Flow rate | | Pressure Max. 50 Hz Motor (kW) | | | | | Freq. (spm) Motor Speed (rpm) | | Flow rate | | Pressure Max. 60 Hz Motor (HP) | | | | Freq. (spm) Motor Speed (rpm) | | Connections ball valves |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0.55 | 0.75 | 1.1 | 1.5 | 2.2 | | | | | 0.75 | 1 | 1.5 | 2 | | | |
| 10 bar | Pres. Max. | H | J | K | L | M | 960 | 1,440 | 145 psi | Pres. Max. | H | J | K | L | 1,140 | 1,725 | |
| l/h | | bar | | | | | | | gph | | psi | | | | | | |
| Ø 8 mm - Swept Volume: 2.01 cm³ - Diaphragm: 92 mm | | | | | | | | | Ø 0.315 in - Swept Volume: 0.12 in³ - Diaphragm: 3.62 in | | | | | | | | 1/2" |
| 4.3 | 3.1 | 500 | | | | | 39 | | 1.4 | 1.0 | 7,252 | | | | 47 | | (Ø 6.35 mm / 0.250 in - LD) |
| 6.5 | 4.6 | 500 | | | | | | 59 | 2.1 | 1.5 | 7,252 | | | | | 71 | |
| 11.1 | 7.8 | 457 | 500 | | | | | 100 | 3.5 | 2.5 | 6,628 | 7,252 | | | | 120 | |
| 13.3 | 9.4 | 381 | 500 | | | | 120 | | 4.2 | 3.0 | 5,526 | 7,252 | | | 144 | | |
| 16 | 11.3 | 317 | 455 | 500 | | | | 144 | 5.1 | 3.6 | 4,598 | 6,599 | 7,252 | | | 173 | |
| 20 | 14.1 | 254 | 364 | 500 | | | | 180[1,2] | Not applicable with a 60 Hz motor | | | | | | | | |
| Ø 25 mm - Swept Volume: 19.63 cm³ - Diaphragm: 182 mm | | | | | | | | | Ø 0.98 in - Swept Volume: 1.20 in³ - Diaphragm: 7.2 in | | | | | | | | 1" |
| 42 | 39 | 96 | | | | | 39 | | 13.3 | 12.4 | 1,392 | | | | 47 | | (Ø 15.9 mm / 0.625 in - LD) |
| 63 | 59 | 79 | 96 | | | | | 59 | 20.0 | 18.7 | 1,146 | 1,392 | | | | 71 | |
| 108 | 102 | 46 | 67 | 96 | | | | 100 | 34.2 | 32.3 | 667 | 972 | 1,392 | | | 120 | |
| 130 | 123 | 39 | 55 | 85 | 96 | | 120 | | 41.2 | 39.0 | 566 | 798 | 1,233 | 1,392 | 144 | | |
| 156 | 147 | 32 | 46 | 71 | 96 | | | 144 | 49.5 | 46.6 | 464 | 667 | 1,030 | 1,392 | | 173 | |
| 195 | 184 | 25 | 37 | 57 | 79 | 96 | | 180[1,2] | Not applicable with a 60 Hz motor | | | | | | | | |

* This chart demonstrates the minimum and maximum flow rate and pressure of the pump.
For other specifications, please consult your local representative.
Suction Lift: pump set to 2 m (7 ft) water

[1]Do not use a 60 Hz motor
[2]Use with "flooded suction" (0.5 bar or 7 psi)
LD = Hardened valves - double valve

# Design Specifications

## Model PK with Metallic Double Diaphragm Liquid End Type M*

| Flow rate | | Pressure Max. 50 Hz Motor (kW) | | | | | Freq. (spm) Motor Speed (rpm) | | Flow rate | | Pressure Max. 60 Hz Motor (HP) | | | | Freq. (spm) Motor Speed (rpm) | | Connections ball valves |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0.55 | 0.75 | 1.1 | 1.5 | 2.2 | | | | | 0.75 | 1 | 1.5 | 2 | | | |
| 10 bar | Pres. Max. | H | J | K | L | M | 960 | 1,440 | 145 psi | Pres. Max. | H | J | K | L | 1,140 | 1,725 | |
| l/h | | bar | | | | | | | gph | | psi | | | | | | |
| Ø 8 mm - Swept Volume: 2.01 cm³ - Diaphragm: 92 mm | | | | | | | | | Ø 0.315 in - Swept Volume: 0.12 in³ - Diaphragm: 3.62 in | | | | | | | | 1/2" |
| 4.3 | 2.9 | 350 | | | | | 39 | | 1.4 | 0.9 | 5,076 | | | | 47 | | (Ø 6.35 mm / 0.250 in - LD) |
| 6.5 | 4.3 | 350 | | | | | | 59 | 2.1 | 1.4 | 5,076 | | | | | 71 | |
| 11.1 | 7.3 | 350 | | | | | | 100 | 3.5 | 2.3 | 5,076 | | | | | 120 | |
| 13.3 | 8.8 | 350 | | | | | 120 | | 4.2 | 2.8 | 5,076 | | | | 144 | | |
| 16 | 10.5 | 317 | 350 | | | | | 144 | 5.1 | 3.3 | 4,598 | 5,076 | | | | 173 | |
| 20 | 13.2 | 254 | 350 | | | | | 180[1,2] | Not applicable with a 60 Hz motor | | | | | | | | |
| Ø 25 mm - Swept Volume: 19.63 cm³ - Diaphragm: 182 mm | | | | | | | | | Ø 0.98 in - Swept Volume: 1.20 in³ - Diaphragm: 7.2 in | | | | | | | | 1" |
| 42 | 38 | 96 | | | | | 39 | | 13.3 | 12.0 | 1,392 | | | | 47 | | (Ø 15.9 mm / 0.625 in - LD) |
| 63 | 57 | 79 | 96 | | | | | 59 | 20.0 | 18.1 | 1,146 | 1,392 | | | | 71 | |
| 108 | 98 | 46 | 67 | 96 | | | | 100 | 34.2 | 31.1 | 667 | 972 | 1,392 | | | 120 | |
| 130 | 118 | 39 | 55 | 85 | 96 | | 120 | | 41.2 | 37.4 | 566 | 798 | 1,233 | 1,392 | 144 | | |
| 156 | 142 | 32 | 46 | 71 | 96 | | | 144 | 49.5 | 45.0 | 464 | 667 | 1,030 | 1,392 | | 173 | |
| 195 | 178 | 25 | 37 | 57 | 79 | 96 | | 180[1,2] | Not applicable with a 60 Hz motor | | | | | | | | |

* This chart demonstrates the minimum and maximum flow rate and pressure of the pump.
For other specifications, please consult your local representative.
Suction Lift: pump set to 2 m (7 ft) water

[1]Do not use a 60 Hz motor
[2]Use with "flooded suction" (0.5 bar or 7 psi)
LD = Hardened valves - double valve

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# Design Specifications

## Model PK with HPD Diaphragm Liquid End: Metallic Type H*

| Flow rate | | Pressure Max. 50 Hz Motor (kW) | | | | | Freq. (spm) Motor Speed (rpm) | | Flow rate | | Pressure Max. 60 Hz Motor (HP) | | | | Freq. (spm) Motor Speed (rpm) | | Connections ball valves |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0.55 | 0.75 | 1.1 | 1.5 | 2.2 | | | | | 0.75 | 1 | 1.5 | 2 | | | |
| 10 bar | Pres. Max. | H | J | K | L | M | 960 | 1,440 | 145 psi | Pres. Max. | H | J | K | L | 1,140 | 1,725 | |
| l/h | | bar | | | | | | | gph | | psi | | | | | | |
| Ø 20 mm - Swept Volume: 12.57 cm³ - Diaphragm: 106 mm | | | | | | | | | Ø 0.79 in - Swept Volume: 0.77 in³ - Diaphragm: 4.2 in | | | | | | | | 1/2" |
| 27 | 21 | 151 | | | | | 39 | | 8.6 | 6.7 | 2,190 | | | | 47 | | (Ø 9.52 mm / 0.375 in - ND) |
| 42 | 33 | 124 | 151 | | | | | 59 | 13.3 | 10.5 | 1,798 | 2,190 | | | | 71 | |
| 71 | 56 | 73 | 104 | 151 | | | | 100 | 22.5 | 17.8 | 1,059 | 1,508 | 2,190 | | | 120 | |
| 85 | 68 | 61 | 87 | 133 | 151 | | 120 | | 26.9 | 21.6 | 885 | 1,262 | 1,929 | 2,190 | 144 | | |
| 103 | 82 | 50 | 72 | 111 | 151 | | | 144 | 32.7 | 26.0 | 725 | 1,044 | 1,610 | 2,190 | | 173 | |
| 128 | 102 | 40 | 58 | 89 | 124 | 151 | | 180[1] | Not applicable with a 60 Hz motor | | | | | | | | |
| Ø 32 mm - Swept Volume: 32.17 cm³ - Diaphragm: 106 mm | | | | | | | | | Ø 1.26 in - Swept Volume: 1.96 in³ - Diaphragm: 4.2 in | | | | | | | | 1/2" |
| 71 | 66 | 59 | | | | | 39 | | 22.5 | 20.9 | 856 | | | | 47 | | (Ø 15.9 mm / 0.625 in - NS) |
| 108 | 100 | 48 | 59 | | | | | 59 | 34.2 | 31.7 | 696 | 856 | | | | 71 | |
| 183 | 170 | 28 | 41 | 59 | | | | 100 | 58.0 | 53.9 | 406 | 595 | 856 | | | 120 | |
| 220 | 204 | 23 | 34 | 52 | 59 | | 120 | | 69.7 | 64.7 | 334 | 493 | 754 | 856 | 144 | | |
| 264 | 245 | 18 | 28 | 43 | 59 | | | 144 | 83.7 | 77.7 | 261 | 406 | 624 | 856 | | 173 | |
| 330 | 307 | 14 | 22 | 34 | 48 | 59 | | 180[1] | Not applicable with a 60 Hz motor | | | | | | | | |

* This chart demonstrates the minimum and maximum flow rate and pressure of the pump. For other specifications, please consult your local representative.
[1]Do not use a 60 Hz motor
ND = Double valve
NS = Single valve

# Design Specifications

## Model PK with HPD Diaphragm Liquid End: Plastic Type P*

| Flow rate | | Pressure Max. 50 Hz Motor (kW) | | | Freq. (spm) Motor Speed (rpm) | | Flow rate | | Pressure Max. 60 Hz Motor (HP) | | | Freq. (spm) Motor Speed (rpm) | | Connections ball valves |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0.55 | 0.75 | 1.1 | | | | | 0.75 | 1 | 1.5 | | | |
| 10 bar | Pres. Max. | H | J | K | 960 | 1,440 | 145 psi | Pres. Max. | H | J | K | 1,140 | 1,725 | |
| l/h | | bar | | | | | gph | | psi | | | | | |
| Ø 32 mm - Swept Volume: 32.17 cm³ - Diaphragm:106 mm | | | | | | | Ø 1.26 in - Swept Volume: 1.96 in³ - Diaphragm: 4.2 in | | | | | | | 1/2" |
| 71 | | 10 | | | 39 | | 22.5 | | 145 | | | 47 | | (Ø 15.9 mm / 0.625 in - NS) |
| 108 | | 10 | | | | 59 | 34.2 | | 145 | | | | 71 | |
| 183 | | 10 | | | | 100 | 58.0 | | 145 | | | | 120 | |
| 220 | | 10 | | | 120 | | 69.7 | | 145 | | | 144 | | |
| 264 | | 10 | | | | 144 | 83.7 | | 145 | | | | 173 | |
| 330 | | 10 | | | | 180[1] | Not applicable with a 60 Hz motor | | | | | | | |

* This chart demonstrates the minimum and maximum flow rate and pressure of the pump. For other specifications, please consult your local representative.
[1]Do not use a 60 Hz motor
NS = Single valve

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## Design Specifications

### Model PKG with Metallic Liquid End with GSD Diaphragm Type H*

| Flow rate | | Pressure Max. 50 Hz Motor (kW) | | | | | Freq. (spm) Motor Speed (rpm) | | Flow rate | | Pressure Max. 60 Hz Motor (HP) | | | | | Freq. (spm) Motor Speed (rpm) | | Connections ball valves |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0.55 | 0.75 | 1.1 | 1.5 | 2.2 | | | | | 0.75 | 1 | 1.5 | 2 | 3 | | | |
| 10 bar | Pres. Max. | H | J | K | L | M | 960 | 1,440 | 145 psi | Pres. Max. | H | J | K | L | M | 1,140 | 1,725 | |
| l/h | | bar | | | | | | | gph | | psi | | | | | | | |
| Ø 40 mm - Swept Volume: 50.27 cm³ - Diaphragm: 145 mm | | | | | | | | | Ø 1.57 in - Swept Volume: 3.07 in³ - Diaphragm: 5.7 in | | | | | | | | | 1/2" |
| 105 | 96 | 37 | | | | | 39 | | 33.3 | 30.4 | 537 | | | | | 47 | | (Ø15.9 mm / 0.625 in - NS) |
| 160 | 147 | 31 | 37 | | | | | 59 | 50.7 | 46.6 | 450 | 537 | | | | | 71 | |
| 271 | 249 | 17 | 26 | 37 | | | | 100 | 85.9 | 78.9 | 247 | 377 | 537 | | | | 120 | |
| 325 | 298 | 13 | 21 | 33 | 37 | | 120 | | 103.0 | 94.5 | 189 | 305 | 479 | 537 | | 144 | | |
| 390 | 358 | 10 | 16 | 27 | 37 | | | 144 | 123.6 | 113.5 | 145 | 232 | 392 | 537 | | | 173 | |
| 488 | 448 | 7 | 12 | 21 | 31 | 37 | | 180[1] | Not applicable to a 60 Hz motor | | | | | | | | | |
| Ø 100 mm - Swept Volume: 314.16 cm³ - Diaphragm: 225 mm | | | | | | | | | Ø 3.94 in - Swept Volume: 19.17 in³ - Diaphragm: 8.86 in | | | | | | | | | 2" |
| | 676 | | 5 | | | | 39 | | | 214.3 | | 73 | | | | 47 | | (Ø 40 mm / 1.575 in - NS) |
| | 1,023 | | 4 | 5 | | | | 59 | | 324.3 | | 58 | 73 | | | | 71 | |
| | 1,734 | | | | 5 | | | 100 | | 549.7 | | | | 73 | | | 120 | |
| | 2,080 | | | | 4 | 5 | 120 | | | 659.4 | | | | 58 | 73 | 144 | | |
| | 2,500 | | | | | 5 | | 144[1] | Not applicable to a 60 Hz motor | | | | | | | | | |

* This chart demonstrates the minimum and maximum flow rate and pressure of the pump. For other specifications, please consult your local representative.
[1]Do not use a 60 Hz motor
NS = Single valve

## Design Specifications

### Model PKG with Plastic Liquid End with GSD Diaphragm Type P*

| Flow rate | | Pressure Max. 50 Hz Motor (kW) | | | | | Freq. (spm) Motor Speed (rpm) | | Flow rate | | Pressure Max. 60 Hz Motor (HP) | | | | | Freq. (spm) Motor Speed (rpm) | | Connections ball valves |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0.55 | 0.75 | 1.1 | 1.5 | 2.2 | | | | | 0.75 | 1 | 1.5 | 2 | 3 | | | |
| 10 bar | Pres. Max. | H | J | K | L | M | 960 | 1,440 | 145 psi | Pres. Max. | H | J | K | L | M | 1,140 | 1,725 | |
| l/h | | bar | | | | | | | gph | | psi | | | | | | | |
| Ø 40 mm - Swept Volume: 50.27 cm³ - Diaphragm: 145 mm | | | | | | | | | Ø 1.57 in - Swept Volume: 3.07 in³ - Diaphragm: 5.7 in | | | | | | | | | 1" |
| 105 | | 10 | | | | | 39 | | 33.3 | | 145 | | | | | 47 | | (Ø25 mm / 0.98 in- NS) |
| 160 | | 10 | | | | | | 59 | 50.7 | | 145 | | | | | | 71 | |
| 271 | | 10 | | | | | | 100 | 85.9 | | 145 | | | | | | 120 | |
| 325 | | 10 | | | | | 120 | | 103.0 | | 145 | | | | | 144 | | |
| 390 | | 10 | | | | | | 144 | 123.6 | | 145 | | | | | | 173 | |
| 488 | | 7 | 10 | | | | | 180[1] | Not applicable to a 60 Hz motor | | | | | | | | | |
| Ø 100 mm - Swept Volume: 314.16 cm³ - Diaphragm: 225 mm | | | | | | | | | Ø 3.94 in - Swept Volume: 19.17 in³ - Diaphragm: 8.86 in | | | | | | | | | 1" 1/2 |
| | 676 | | 5 | | | | 39 | | | 214.3 | | 73 | | | | 47 | | (Ø 40 mm / 1.575 in - NS) |
| | 1,023 | | 4 | 5 | | | | 59 | | 324.3 | | 58 | 73 | | | | 71 | |
| | 1,734 | | | | 5 | | | 100 | | 549.7 | | | | 73 | | | 120 | |
| | 2,080 | | | | 4 | 5 | 120 | | | 659.4 | | | | 58 | 73 | 144 | | |
| | 2,500 | | | | | 5 | | 144[1] | Not applicable to a 60 Hz motor | | | | | | | | | |

* This chart demonstrates the minimum and maximum flow rate and pressure of the pump. For other specifications, please consult your local representative.
[1]Do not use a 60 Hz motor
NS = Single valve

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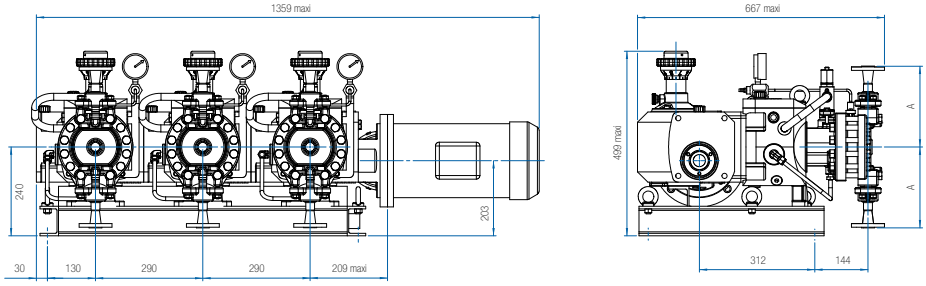
# Dimensions

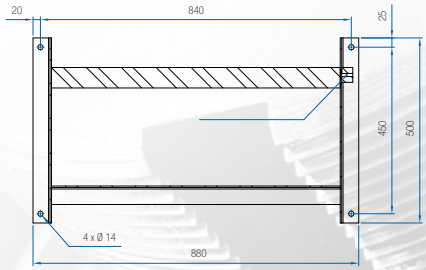
## HPD Diaphragm Liquid End Triplex Configuration

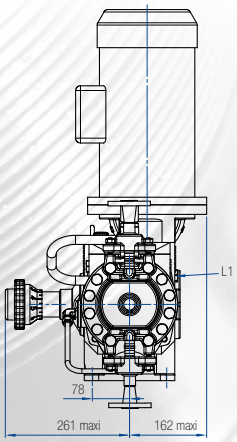


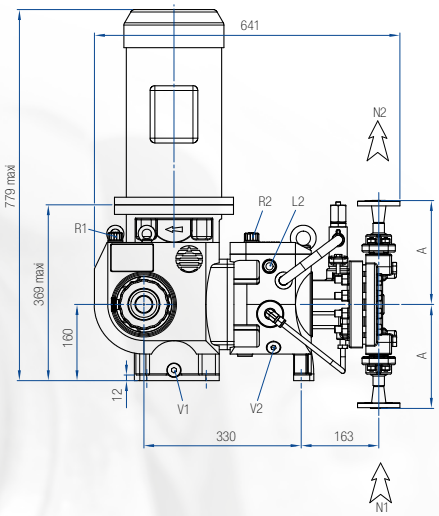


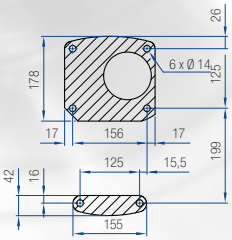


## HPD Diaphragm Liquid End Simplex Configuration




# Weight and Packing

| Version | Net weight | | Gross weight | | Packing | |
|---|---|---|---|---|---|---|
| | kg | lbs | kg | lbs | (L x W x H) mm | (L x W x H) in |
| **Series PK** | | | | | | |
| Simplex | 110 | 242 | 168 | 370 | 900 x 600 x 1,050 | 35.5 x 23.6 x 41.4 |
| **Series PKG** | | | | | | |
| Simplex | 120 | 265 | 170 | 375 | 700 x 650 x 1,000 | 27.6 x 25.6 x 39.4 |

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