### NFPA 1901 RATING CHART

**MBP FLEX SERIES PTO PUMP**

**RATED 500 GPM @ 150 PSI TO 1000 GPM @ 150 PSI**

**SINGLE STAGE PUMP- 203 mm (8.00 inch) DIAMETER IMPELLER**

Maximum elevation at which the pump will perform the rating with standard test conditions of 10 ft lift, 20 ft of suction hose & strainer. Standard test conditions and maximum elevation do not include truck piping losses.

<table>
<thead>
<tr>
<th>PUMP MODEL</th>
<th>RATED CAPACITY (US GPM)</th>
<th>PRESSURE (PSIG)</th>
<th>POWER REQUIRED (HP)</th>
<th>GEARBOX</th>
<th>INPUT DRIVE SHAFT (Rev/Min)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MBP50-11F</td>
<td>500</td>
<td></td>
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<tr>
<td>MBP75-11F</td>
<td>750</td>
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<tr>
<td>MBP100-11F</td>
<td>1000</td>
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</tbody>
</table>

### NOTES:
1. Gauge pressure does not include lift or suction losses.
2. Speed must not exceed engine manufacturer’s maximum no-load governed speed.
3. The pump is capable of the high pressure performance shown. Actual obtainable pressure should be checked in advance, and is governed by the engine speed, available power, and pump ratio.

### THIS CHART IS TO BE USED TO SELECT THE PROPER PUMP GEARBOX RATIO. THE INPUT SPEED AND POWER REQUIREMENTS SHOWN ARE NOMINAL 5% FIGURES.

### WHEN USING THIS CHART, IT IS IMPORTANT TO OBTAIN THE NET POWER OUTPUT OF THE ENGINE. THE ENGINE MANUFACTURER’S PUBLISHED CURVE MAY NOT REPRESENT A TRUE NET POWER WHEN TOTALING ALL THE LOAD DEDUCTIONS THAT MAY BE ENCOUNTERED FOR THE RATING. THE DEDUCTIONS COULD BE ENGINE AND VEHICLE ACCESSORIES, ALTITUDE, TEMPERATURE, BAROMETER, ETC. CHECK WITH THE ENGINE MANUFACTURER FOR THEIR RECOMMENDATION AND APPROVAL OF THE NET POWER CURVE.

### THE PUMPING TORQUE REQUIREMENTS MIGHT EXCEED THE TRUCK’S TRANSMISSION CASE, POWER TAKE-OFF AND DRIVELINE COMPONENT LIMITS. CONTACT THE RESPECTIVE EQUIPMENT MANUFACTURER FOR THEIR APPROVAL OF THE PUMPING APPLICATION.

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**ECO NO.** 4566 4567 4570 6286 6287 6270

**REV.** A B C

**CHANGED FROM** RELEASE TO PRODUCTION CHANGED RATIO FROM 1.65 TO 1.64 TO MATCH OTHER FLEX DOCUMENTS ADDED 500 GPM RATING PAGE 3 of 3

**CHANGED TO**

**DATE** 27Jan2018 18Feb2018 3Apr2018

**APVD** MAL MAL MAL

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**FSG-CRV-01498**

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**DRAWN** DLM MAL

**CHANGED** DLM MAL

**DATE** 27Jan2018 3Apr2018

**Page** 1 of 3
### NFPA 1901 METRIC RATING CHART

**MBP FLEX SERIES PTO PUMP**

**RATED 2000 LPM @ 1000 kPa TO 3000 LPM @ 1000 kPa**

**SINGLE STAGE PUMP- 203 mm (8.00 inch) DIAMETER IMPELLER**

**MAXIMUM ELEVATION AT WHICH THE PUMP WILL PERFORM THE RATING WITH STANDARD TEST CONDITIONS OF 3 m LIFT, 6 m OF SUCTION HOSE & STRAINER. STANDARD TEST CONDITIONS AND MAXIMUM ELEVATION DO NOT INCLUDE TRUCK PIPING LOSSES.**

<table>
<thead>
<tr>
<th>RATED CAPACITY (LPM)</th>
<th>RATIO</th>
<th>TORQUE (Nm)</th>
<th>POWER REQUIRED (kW)</th>
<th>GEARBOX INPUT DRIVE SHAFT (Rev/Min)</th>
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<tbody>
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<td>MBP200M-37F</td>
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<td>MBP200M-29F</td>
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<td>MBP300M-11F</td>
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</table>

### CAPACITY

- **2000 LPM**
  - MBP200M-37F
  - MBP200M-29F
  - MBP200M-26F
  - MBP200M-23F
  - MBP200M-19F
  - MBP200M-16F
  - MBP200M-13F
  - MBP200M-11F

- **3000 LPM**
  - MBP300M-37F
  - MBP300M-29F
  - MBP300M-26F
  - MBP300M-23F
  - MBP300M-19F
  - MBP300M-16F
  - MBP300M-13F
  - MBP300M-11F

### PRESSURE

- **2000 LPM**
  - PUMP MODEL: MBP200M-37F
  - 1000 mm HOSE, 710 m (2330 ft.)

- **3000 LPM**
  - PUMP MODEL: MBP300M-37F
  - 150 mm HOSE, 3270 m (10750 ft.)

**NOTES:**

1. GAUGE PRESSURE DOES NOT INCLUDE LIFT OR SUCTION LOSSES.
2. SPEED MUST NOT EXCEED ENGINE MANUFACTURER'S MAXIMUM NO-LOAD GOVERNED SPEED.
3. THE PUMP IS CAPABLE OF THE HIGH PRESSURE PERFORMANCE SHOWN. ACTUAL OBTAINABLE PRESSURE SHOULD BE CHECKED IN ADVANCE, AND IS GOVERNED BY THE ENGINE SPEED, AVAILABLE POWER, AND PUMP RATIO.

This chart is to be used to select the proper pump gearbox ratio. The input speed and power requirements shown are nominal ±5% figures. When using this chart, it is important to obtain the net power output of the engine. The engine manufacturer's published curve may not represent a true net power when totaling all the load deductions that may be encountered for the rating. The deductions could be engine and vehicle accessories, altitude, temperature, barometer, etc. Check with the engine manufacturer for their recommendation and approval of the net power curve.

The pumping torque requirements might exceed the truck's transmission case, power take-off and driveline component limits. Contact the respective equipment manufacturer for their approval of the pumping application.

---

**ECO NO.**

**NOTE:**

- **4566** A
- **4557** B
- **4570** C

**RELEASE TO PRODUCTION**

<table>
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<tr>
<th>DRAWN</th>
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<td>DLM</td>
<td>MAL</td>
<td>05Mar2018</td>
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**CHANGED RATIO FROM 1.65 TO 1.64 TO MATCH OTHER FLEX DOCUMENTS**

**ADDED MBP60GB RATING PAGE 3 of 3**

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**HIGH PRESSURE**

| 125 mm HOSE, 2780 m (9130 ft.) | 125 mm HOSE, 1380 m (4540 ft.) |
| 150 mm HOSE, 2350 m (7710 ft.) | 150 mm HOSE, 2350 m (7710 ft.) |
| 150 mm HOSE, 3270 m (10750 ft.) | 150 mm HOSE, 3270 m (10750 ft.) |
| 225 2313 135 | 1500 1700 110 | 2780 1860 563 | 503 451 2320 | 360 3280 319 | 4140 253 4730 221 |
| 2331 135 | 1610 798 | 2060 624 | 2310 556 | 2570 500 | 3150 408 3640 353 | 4590 280 5250 245 |
| 750 2100 120 | 1540 743 | 1980 578 | 2220 516 | 2470 464 | 3030 378 3500 327 | 4410 260 5040 227 |

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**CONTACT:**

- THE RESPECTIVE EQUIPMENT MANUFACTURER FOR THEIR APPROVAL OF THE PUMPING APPLICATION.
### GB6245 - 2006 RATING CHART

**MBP GB FLEX SERIES PTO PUMP**

**Rated 32 Liter/sec @ 1.03 MPa to 60 Liter/sec @ 1.03 MPa**

**Single Stage Pump - 203 mm (8.00 inch) Diameter Impeller**

**Operating Conditions C1 & C2:**

The pump will perform the rating with standard test conditions of sea level altitude, 758.0 mm-Hg [29.84 in-Hg] atmospheric pressure, 20 °C [68 °F] water temperature, 3 m [10 ft] lift, 6 m [20 ft] of suction hose & strainer.

**Operating Condition C3:**

The pump will perform the rating with standard test conditions of sea level altitude, 758.0 mm-Hg [29.84 in-Hg] atmospheric pressure, 20 °C [68 °F] water temperature, 7 m [23 ft] lift, 9 m [30 ft] of suction hose & strainer.

<table>
<thead>
<tr>
<th>GEARS</th>
<th>INPUT</th>
<th>DRIVE</th>
<th>SHAFT (Rev/Min)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.34</td>
<td>2.91</td>
<td>GB7000-11F</td>
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<tr>
<td>1.14</td>
<td>2.11</td>
<td>GB7000-11F</td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**

1. **Size of Suction Hose & Strainer:** 32 L/s: 115 mm (4.5 inch); 40, 50 & 60 L/s: 150 mm (6 inch).
2. **Speed Must Not Exceed Engine Manufacturer's Maximum No-Load Governed Speed.**

**This Chart Is to Be Used to Select the Proper Pump Gearbox Ratio. The Input Speed and Power Requirements Shown Are Nominal ±5% Figures.**

When using this chart, it is important to obtain the net power output of the engine. The engine manufacturer's published curve may not represent a true net power when totaling all the load deductions that may be encountered for the rating. The deductions could be engine and vehicle accessories, altitude, temperature, barometer, etc. Check with the engine manufacturer for their recommendation and approval of the net power curve.

The pumping torque requirements might exceed the truck's transmission case, power take-off and driveline component limits. Contact the respective equipment manufacturer for their approval of the pumping application.

---

**ECO NO.**

- 4566
- 4657
- 4870

**REV**

- A
- B
- C

**CHANGED FROM**

- 4566
- 4657
- 4870

**RELEASE TO PRODUCTION**

- DLM 21May2018 MAL
- DLM 19Mar2018 MAL
- DLM 21Mar2018 MAL

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