

# NFPA 1901 RATING CHART

## RSD FLEX SERIES PTO PUMP

**RATED 750 GPM @ 150 PSI TO 1500 GPM @ 150 PSI**

**SINGLE STAGE PUMP- 254 mm (10.00 inch) IMPELLER (750 - 1250 GPM); 260 mm (10.25 inch) IMPELLER (1500 GPM)**

**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.**

**RSD75** 4-1/2 IN. HOSE, 5730 FEET (1740 m)

**RSD75** 6 IN. HOSE, 12120 FEET (3690 m)

**RSD125** (2) 6 IN. HOSE, 9100 FEET (2770 m)

**RSD75** 5 IN. HOSE, 9010 FEET (2740 m)

**RSD100** 6 IN. HOSE, 8320 FEET (2530 m)

**RSD150** (2) 6 IN. HOSE, 7610 FEET (2310 m)

**RSD100** 5 IN. HOSE, 3590 FEET (1090 m)

**RSD125** 6 IN. HOSE, 5090 FEET (1550 m)

**RSD150** 6 IN. HOSE, 2160 FEET (650 m)

**FSG-CRV-01499**

| RATED<br>CAPACITY<br>(US GPM) | CAPACITY<br>(US GPM) | PRESSURE<br>(PSIG) <sup>1</sup> | POWER<br>REQUIRED<br>(HP) | GEARBOX INPUT DRIVE SHAFT (Rev/Min) <sup>2</sup> |                    |               |                    |               |                    |               |                    |               |                    |               |                    |               |                    |
|-------------------------------|----------------------|---------------------------------|---------------------------|--------------------------------------------------|--------------------|---------------|--------------------|---------------|--------------------|---------------|--------------------|---------------|--------------------|---------------|--------------------|---------------|--------------------|
|                               |                      |                                 |                           | RATIO<br>2.91                                    | TORQUE<br>(LBS-FT) | RATIO<br>2.60 | TORQUE<br>(LBS-FT) | RATIO<br>2.33 | TORQUE<br>(LBS-FT) | RATIO<br>1.90 | TORQUE<br>(LBS-FT) | RATIO<br>1.64 | TORQUE<br>(LBS-FT) | RATIO<br>1.31 | TORQUE<br>(LBS-FT) | RATIO<br>1.14 | TORQUE<br>(LBS-FT) |
| 750                           | PUMP MODEL           |                                 |                           | RSD75-29F                                        |                    | RSD75-26F     |                    | RSD75-23F     |                    | RSD75-19F     |                    | RSD75-16F     |                    | RSD75-13F     |                    | RSD75-11F     |                    |
|                               | 750                  | 150                             | 103                       | 1170                                             | 462                | 1320          | 410                | 1470          | 368                | 1800          | 300                | 2080          | 260                | 2610          | 207                | 2990          | 181                |
|                               | 750                  | 165                             | 114                       | 1220                                             | 490                | 1360          | 439                | 1520          | 393                | 1860          | 321                | 2150          | 278                | 2710          | 220                | 3100          | 193                |
|                               | 525                  | 200                             | 114                       | 1310                                             | 456                | 1470          | 406                | 1630          | 366                | 2000          | 299                | 2310          | 259                | 2910          | 205                | 3330          | 179                |
|                               | 375                  | 250                             | 131                       | 1450                                             | 476                | 1620          | 426                | 1810          | 381                | 2220          | 311                | 2560          | 270                | 3230          | 214                | 3690          | 187                |
| 1000                          | PUMP MODEL           |                                 |                           | RSD100-29F                                       |                    | RSD100-26F    |                    | RSD100-23F    |                    | RSD100-19F    |                    | RSD100-16F    |                    | RSD100-13F    |                    | RSD100-11F    |                    |
|                               | 1000                 | 150                             | 132                       | 1230                                             | 565                | 1380          | 504                | 1530          | 454                | 1880          | 370                | 2170          | 320                | 2740          | 254                | 3130          | 222                |
|                               | 1000                 | 165                             | 143                       | 1290                                             | 583                | 1450          | 518                | 1610          | 467                | 1980          | 380                | 2280          | 330                | 2880          | 261                | 3290          | 228                |
|                               | 700                  | 200                             | 134                       | 1310                                             | 538                | 1470          | 480                | 1640          | 430                | 2010          | 351                | 2320          | 304                | 2930          | 241                | 3350          | 211                |
|                               | 500                  | 250                             | 145                       | 1450                                             | 526                | 1620          | 470                | 1810          | 421                | 2220          | 343                | 2560          | 298                | 3230          | 236                | 3700          | 206                |
| 1250                          | PUMP MODEL           |                                 |                           | RSD125-29F                                       |                    | RSD125-26F    |                    | RSD125-23F    |                    | RSD125-19F    |                    | RSD125-16F    |                    | RSD125-13F    |                    | RSD125-11F    |                    |
|                               | 1250                 | 150                             | 164                       | 1270                                             | 677                | 1420          | 606                | 1590          | 541                | 1950          | 441                | 2250          | 382                | 2830          | 304                | 3240          | 265                |
|                               | 1250                 | 165                             | 183                       | 1330                                             | 723                | 1490          | 645                | 1660          | 579                | 2030          | 473                | 2350          | 409                | 2960          | 325                | 3390          | 284                |
|                               | 875                  | 200                             | 157                       | 1340                                             | 615                | 1500          | 549                | 1670          | 493                | 2050          | 402                | 2370          | 348                | 2990          | 276                | 3420          | 241                |
|                               | 625                  | 250                             | 163                       | 1450                                             | 589                | 1630          | 524                | 1810          | 472                | 2220          | 385                | 2570          | 333                | 3230          | 265                | 3700          | 231                |
| HIGH <sup>3</sup><br>PRESSURE | 200                  | 300                             | 150                       | 1570                                             | 502                | 1760          | 448                | 1960          | 402                | 2400          | 328                | 2770          | 284                | 3490          | 226                | 4000          | 197                |
| 1500                          | PUMP MODEL           |                                 |                           | RSD150-29F                                       |                    | RSD150-26F    |                    | RSD150-23F    |                    | RSD150-19F    |                    | RSD150-16F    |                    | RSD150-13F    |                    | RSD150-11F    |                    |
|                               | 1500                 | 150                             | 210                       | 1230                                             | 896                | 1380          | 798                | 1540          | 716                | 1890          | 583                | 2180          | 505                | 2750          | 401                | 3140          | 351                |
|                               | 1500                 | 165                             | 228                       | 1280                                             | 937                | 1440          | 833                | 1600          | 750                | 1960          | 612                | 2270          | 529                | 2850          | 421                | 3270          | 367                |
|                               | 1050                 | 200                             | 193                       | 1290                                             | 786                | 1450          | 700                | 1620          | 626                | 1980          | 512                | 2290          | 443                | 2880          | 352                | 3300          | 307                |
|                               | 750                  | 250                             | 201                       | 1390                                             | 759                | 1560          | 677                | 1730          | 610                | 2130          | 496                | 2460          | 429                | 3100          | 340                | 3540          | 298                |
| HIGH <sup>3</sup><br>PRESSURE | 200                  | 300                             | 190                       | 1500                                             | 666                | 1680          | 595                | 1870          | 534                | 2290          | 436                | 2650          | 377                | 3340          | 299                | 3820          | 261                |

### NOTES:

- GAUGE PRESSURE DOES NOT INCLUDE LIFT OR SUCTION LOSSES.
- SPEED MUST NOT EXCEED ENGINE MANUFACTURER'S MAXIMUM NO-LOAD GOVERNED SPEED.
- 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  $\pm 5\%$  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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|---------|-----|---------------------------------------------------------------|-----|-----------|------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| 4566    | A   | RELEASE TO PRODUCTION                                         | DLM | 27Sep2018 | MAL  |                                                                                                                                                                |          |
| 4657    | B   | CHANGED RATIO FROM 1.65 TO 1.64 TO MATCH OTHER FLEX DOCUMENTS | DLM | 16Nov2018 | MAL  |                                                                                                                                                                |          |
|         |     |                                                               |     |           |      |                                                                                                                                                                |          |
|         |     |                                                               |     |           |      |                                                                                                                                                                |          |
|         |     |                                                               |     |           |      | DRAWN:                                                                                                                                                         | CHECKED: |
|         |     |                                                               |     |           |      | DLM                                                                                                                                                            | MAL      |
|         |     |                                                               |     |           |      | DATE:                                                                                                                                                          | Page     |
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**FSG-CRV-01499**

# NFPA 1901 METRIC RATING CHART

## RSD FLEX SERIES PTO PUMP

RATED 3000 LPM @ 1000 kPa TO 6000 LPM @ 1000 kPa

SINGLE STAGE PUMP- 254 mm (10.00 inch) IMPELLER (3000 - 5000 LPM); 260 mm (10.25 inch) IMPELLER (6000 LPM)

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.

RSD300M 110 mm HOSE, 1240 m (4070 ft.)

RSD300M 150 mm HOSE, 3420 m (11240 ft.)

RSD500M (2) 150 mm HOSE, 2420 m (7950 ft.)

RSD300M 125 mm HOSE, 2350 m (7710 ft.)

RSD400M 150 mm HOSE, 2160 m (7110 ft.)

RSD600M (2) 150 mm HOSE, 2200 m (7230 ft.)

RSD400M 125 mm HOSE, 500 m (1650 ft.)

RSD600M 150 mm HOSE, 260 m (860 ft.)

FSG-CRV-01499

| RATED<br>CAPACITY<br>(LPM)    | CAPACITY<br>(LPM) | PRESSURE<br>(kPa) <sup>1</sup> | POWER<br>REQUIRED<br>(kW) | GEARBOX INPUT DRIVE SHAFT (Rev/Min) <sup>2</sup> |                 |               |                 |               |                 |               |                 |               |                 |               |                 |               |                 |
|-------------------------------|-------------------|--------------------------------|---------------------------|--------------------------------------------------|-----------------|---------------|-----------------|---------------|-----------------|---------------|-----------------|---------------|-----------------|---------------|-----------------|---------------|-----------------|
|                               |                   |                                |                           | RATIO<br>2.91                                    | TORQUE<br>(N-m) | RATIO<br>2.60 | TORQUE<br>(N-m) | RATIO<br>2.33 | TORQUE<br>(N-m) | RATIO<br>1.90 | TORQUE<br>(N-m) | RATIO<br>1.64 | TORQUE<br>(N-m) | RATIO<br>1.31 | TORQUE<br>(N-m) | RATIO<br>1.14 | TORQUE<br>(N-m) |
| 3000                          | PUMP MODEL        |                                |                           | RSD300M-29F                                      |                 | RSD300M-26F   |                 | RSD300M-23F   |                 | RSD300M-19F   |                 | RSD300M-16F   |                 | RSD300M-13F   |                 | RSD300M-11F   |                 |
|                               | 3000              | 1000                           | 77                        | 1190                                             | 615             | 1330          | 551             | 1490          | 492             | 1820          | 402             | 2100          | 349             | 2650          | 276             | 3030          | 242             |
|                               | 3000              | 1100                           | 88                        | 1240                                             | 676             | 1390          | 603             | 1550          | 540             | 1900          | 441             | 2190          | 383             | 2760          | 304             | 3160          | 265             |
|                               | 2100              | 1400                           | 87                        | 1320                                             | 629             | 1480          | 561             | 1650          | 503             | 2030          | 409             | 2340          | 355             | 2950          | 282             | 3380          | 246             |
|                               | 1500              | 1700                           | 99                        | 1460                                             | 646             | 1640          | 575             | 1830          | 515             | 2240          | 421             | 2590          | 364             | 3260          | 289             | 3730          | 253             |
| 4000                          | PUMP MODEL        |                                |                           | RSD400M-29F                                      |                 | RSD400M-26F   |                 | RSD400M-23F   |                 | RSD300M-19F   |                 | RSD400M-16F   |                 | RSD400M-13F   |                 | RSD400M-11F   |                 |
|                               | 4000              | 1000                           | 101                       | 1250                                             | 771             | 1400          | 688             | 1560          | 618             | 1910          | 504             | 2200          | 438             | 2770          | 348             | 3180          | 303             |
|                               | 4000              | 1100                           | 112                       | 1350                                             | 791             | 1510          | 707             | 1690          | 632             | 2070          | 516             | 2390          | 447             | 3010          | 355             | 3450          | 310             |
|                               | 2800              | 1400                           | 102                       | 1330                                             | 735             | 1490          | 656             | 1660          | 589             | 2040          | 479             | 2350          | 416             | 2960          | 330             | 3390          | 288             |
|                               | 2000              | 1700                           | 110                       | 1450                                             | 727             | 1620          | 651             | 1810          | 582             | 2220          | 475             | 2560          | 412             | 3230          | 326             | 3690          | 286             |
| 5000                          | PUMP MODEL        |                                |                           | RSD500M-29F                                      |                 | RSD500M-26F   |                 | RSD500M-23F   |                 | RSD500M-19F   |                 | RSD500M-16F   |                 | RSD500M-13F   |                 | RSD500M-11F   |                 |
|                               | 5000              | 1000                           | 124                       | 1290                                             | 920             | 1440          | 824             | 1610          | 737             | 1970          | 602             | 2280          | 521             | 2870          | 414             | 3280          | 362             |
|                               | 5000              | 1100                           | 137                       | 1370                                             | 953             | 1530          | 853             | 1710          | 763             | 2100          | 622             | 2420          | 539             | 3050          | 428             | 3490          | 374             |
|                               | 3500              | 1400                           | 119                       | 1360                                             | 837             | 1520          | 749             | 1690          | 673             | 2080          | 547             | 2400          | 474             | 3020          | 377             | 3460          | 329             |
|                               | 2500              | 1700                           | 124                       | 1450                                             | 814             | 1630          | 724             | 1820          | 648             | 2230          | 529             | 2570          | 459             | 3240          | 364             | 3710          | 318             |
| HIGH <sup>3</sup><br>PRESSURE | 750               | 2100                           | 112                       | 1570                                             | 680             | 1760          | 607             | 1960          | 545             | 2400          | 445             | 2770          | 386             | 3490          | 306             | 4000          | 267             |
| 6000                          | PUMP MODEL        |                                |                           | RSD600M-29F                                      |                 | RSD600M-26F   |                 | RSD600M-23F   |                 | RSD600M-19F   |                 | RSD600M-16F   |                 | RSD600M-13F   |                 | RSD600M-11F   |                 |
|                               | 6000              | 1000                           | 168                       | 1260                                             | 1274            | 1410          | 1139            | 1570          | 1023            | 1930          | 832             | 2230          | 720             | 2810          | 571             | 3210          | 500             |
|                               | 6000              | 1100                           | 175                       | 1310                                             | 1279            | 1470          | 1140            | 1640          | 1022            | 2010          | 834             | 2320          | 722             | 2920          | 574             | 3340          | 502             |
|                               | 4200              | 1400                           | 154                       | 1310                                             | 1119            | 1470          | 997             | 1640          | 894             | 2010          | 729             | 2320          | 632             | 2930          | 500             | 3350          | 438             |
|                               | 3000              | 1700                           | 156                       | 1390                                             | 1075            | 1560          | 958             | 1740          | 859             | 2130          | 701             | 2460          | 607             | 3100          | 482             | 3550          | 421             |
| HIGH <sup>3</sup><br>PRESSURE | 750               | 2100                           | 142                       | 1500                                             | 903             | 1680          | 806             | 1870          | 724             | 2290          | 591             | 2650          | 511             | 3340          | 405             | 3820          | 355             |

### NOTES:

- GAUGE PRESSURE DOES NOT INCLUDE LIFT OR SUCTION LOSSES.
- SPEED MUST NOT EXCEED ENGINE MANUFACTURER'S MAXIMUM NO-LOAD GOVERNED SPEED.
- 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.

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|---------|-----|---------------------------------------------------------------|-----|-----------|------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|---------------------------------------------------------------------------------------|--------|
| 4566    | A   | RELEASE TO PRODUCTION                                         | DLM | 27Sep2018 | MAL  |                                                                                                                                                                |          |                                                                                       |        |
| 4657    | B   | CHANGED RATIO FROM 1.65 TO 1.64 TO MATCH OTHER FLEX DOCUMENTS | DLM | 16Nov2018 | MAL  |                                                                                                                                                                |          |                                                                                       |        |
|         |     |                                                               |     |           |      |                                                                                                                                                                |          |                                                                                       |        |
|         |     |                                                               |     |           |      | DRAWN:                                                                                                                                                         | CHECKED: | DATE:                                                                                 | Page   |
|         |     |                                                               |     |           |      | DLM                                                                                                                                                            | MAL      | 06Mar2018                                                                             | 2 of 3 |

FSG-CRV-01499

# GB6245 - 2006 RATING CHART

## RSD GB FLEX SERIES PTO PUMP

**RATED 47 Liter/sec @ 1.03 MPa TO 100 Liter/sec @ 1.03 MPa**

**SINGLE STAGE PUMP- 260 mm (10.25 inch) DIAMETER IMPELLER**

**FSG-CRV-01499**

**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<sup>1</sup>.

**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<sup>1</sup>.

| RATED<br>CAPACITY<br>(LITER/SEC) | OPERATING<br>CONDITION | CAPACITY<br>(LITER/SEC) | PRESSURE<br>(MPa) | POWER<br>REQUIRED<br>(kW) | GEARBOX INPUT DRIVE SHAFT (Rev/Min) <sup>2</sup> |                 |               |                 |               |                 |               |                 |               |                 |               |                 |               |                 |
|----------------------------------|------------------------|-------------------------|-------------------|---------------------------|--------------------------------------------------|-----------------|---------------|-----------------|---------------|-----------------|---------------|-----------------|---------------|-----------------|---------------|-----------------|---------------|-----------------|
|                                  |                        |                         |                   |                           | RATIO<br>2.91                                    | TORQUE<br>(N·m) | RATIO<br>2.60 | TORQUE<br>(N·m) | RATIO<br>2.33 | TORQUE<br>(N·m) | RATIO<br>1.90 | TORQUE<br>(N·m) | RATIO<br>1.64 | TORQUE<br>(N·m) | RATIO<br>1.31 | TORQUE<br>(N·m) | RATIO<br>1.14 | TORQUE<br>(N·m) |
| 47                               | PUMP MODEL             |                         |                   |                           | CB10/47                                          |                 |               |                 |               |                 |               |                 |               |                 |               |                 |               |                 |
|                                  |                        |                         |                   |                           | RSD47GB-29F                                      |                 | RSD47GB-26F   |                 | RSD47GB-23F   |                 | RSD47GB-19F   |                 | RSD47GB-16F   |                 | RSD47GB-13F   |                 | RSD47GB-11F   |                 |
|                                  | C1                     | 47                      | 1.03              | 87                        | 1140                                             | 725             | 1270          | 650             | 1420          | 582             | 1740          | 475             | 2010          | 411             | 2530          | 326             | 2900          | 285             |
|                                  | C2                     | 33                      | 1.34              | 101                       | 1250                                             | 769             | 1400          | 687             | 1560          | 616             | 1920          | 501             | 2210          | 435             | 2790          | 345             | 3190          | 301             |
|                                  | C3                     | 23.5                    | 1.03              | 66                        | 1160                                             | 546             | 1300          | 487             | 1450          | 437             | 1780          | 356             | 2060          | 308             | 2590          | 245             | 2970          | 213             |
| 60                               | PUMP MODEL             |                         |                   |                           | CB10/60                                          |                 |               |                 |               |                 |               |                 |               |                 |               |                 |               |                 |
|                                  |                        |                         |                   |                           | RSD60GB-29F                                      |                 | RSD60GB-26F   |                 | RSD60GB-23F   |                 | RSD60GB-19F   |                 | RSD60GB-16F   |                 | RSD60GB-13F   |                 | RSD60GB-11F   |                 |
|                                  | C1                     | 60                      | 1.03              | 101                       | 1150                                             | 836             | 1290          | 745             | 1440          | 668             | 1760          | 546             | 2040          | 471             | 2570          | 374             | 2940          | 327             |
|                                  | C2                     | 42                      | 1.34              | 108                       | 1260                                             | 819             | 1410          | 732             | 1580          | 653             | 1930          | 535             | 2230          | 463             | 2810          | 367             | 3220          | 321             |
|                                  | C3                     | 30                      | 1.03              | 72                        | 1170                                             | 590             | 1310          | 527             | 1460          | 473             | 1790          | 386             | 2070          | 334             | 2610          | 265             | 2980          | 232             |
| 80                               | PUMP MODEL             |                         |                   |                           | CB10/80                                          |                 |               |                 |               |                 |               |                 |               |                 |               |                 |               |                 |
|                                  |                        |                         |                   |                           | RSD80GB-29F                                      |                 | RSD80GB-26F   |                 | RSD80GB-23F   |                 | RSD80GB-19F   |                 | RSD80GB-16F   |                 | RSD80GB-13F   |                 | RSD80GB-11F   |                 |
|                                  | C1                     | 80                      | 1.03              | 133                       | 1220                                             | 1039            | 1370          | 925             | 1520          | 834             | 1870          | 678             | 2160          | 587             | 2720          | 466             | 3110          | 408             |
|                                  | C2                     | 56                      | 1.34              | 129                       | 1290                                             | 955             | 1440          | 855             | 1610          | 765             | 1970          | 625             | 2280          | 540             | 2870          | 429             | 3280          | 376             |
|                                  | C3                     | 40                      | 1.03              | 84                        | 1180                                             | 676             | 1320          | 604             | 1470          | 543             | 1810          | 441             | 2090          | 382             | 2630          | 303             | 3010          | 265             |
| 90                               | PUMP MODEL             |                         |                   |                           | CB10/90                                          |                 |               |                 |               |                 |               |                 |               |                 |               |                 |               |                 |
|                                  |                        |                         |                   |                           | RSD90GB-29F                                      |                 | RSD90GB-26F   |                 | RSD90GB-23F   |                 | RSD90GB-19F   |                 | RSD90GB-16F   |                 | RSD90GB-13F   |                 | RSD90GB-11F   |                 |
|                                  | C1                     | 90                      | 1.03              | 149                       | 1240                                             | 1148            | 1390          | 1025            | 1550          | 919             | 1900          | 750             | 2190          | 650             | 2760          | 516             | 3160          | 451             |
|                                  | C2                     | 63                      | 1.34              | 149                       | 1310                                             | 1087            | 1470          | 969             | 1630          | 874             | 2000          | 712             | 2310          | 617             | 2910          | 489             | 3330          | 428             |
|                                  | C3                     | 45                      | 1.03              | 91                        | 1190                                             | 730             | 1330          | 653             | 1480          | 587             | 1820          | 477             | 2100          | 414             | 2650          | 328             | 3030          | 287             |
| 100                              | PUMP MODEL             |                         |                   |                           | CB10/100                                         |                 |               |                 |               |                 |               |                 |               |                 |               |                 |               |                 |
|                                  |                        |                         |                   |                           | RSD100GB-29F                                     |                 | RSD100GB-26F  |                 | RSD100GB-23F  |                 | RSD100GB-19F  |                 | RSD100GB-16F  |                 | RSD100GB-13F  |                 | RSD100GB-11F  |                 |
|                                  | C1                     | 100                     | 1.03              | 172                       | 1280                                             | 1285            | 1440          | 1142            | 1600          | 1028            | 1970          | 835             | 2270          | 725             | 2860          | 575             | 3280          | 501             |
|                                  | C2                     | 70                      | 1.34              | 160                       | 1340                                             | 1228            | 1500          | 1097            | 1670          | 985             | 2050          | 802             | 2360          | 697             | 2980          | 552             | 3410          | 482             |
|                                  | C3                     | 50                      | 1.03              | 101                       | 1200                                             | 1371            | 1350          | 1218            | 1500          | 1097            | 1840          | 894             | 2130          | 772             | 2680          | 614             | 3070          | 536             |

**NOTES:**

- NUMBER & SIZE OF SUCTION HOSE & STRAINER: 47 L/s: (1) 115 mm (4.5 inch); 60, 80 & 90 L/s: (1) 150 mm (6 inch); 100 L/s: (2) 150 mm (6 inch).
- 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. | REV | CHANGED FROM                                                  | BY  | DATE      | APVD | <div>HALE PRODUCTS, INC.</div> <div>A Unit of IDEX Corporation</div> <div>Ocala, FL 34475 USA</div> <div>COPYRIGHT ©</div> <div>NOT TO BE REPRODUCED OR USED TO MAKE OTHER</div> <div>DRAWINGS OR MACHINERY</div> |          |           |        |
|---------|-----|---------------------------------------------------------------|-----|-----------|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-----------|--------|
| 4566    | A   | RELEASE TO PRODUCTION                                         | DLM | 27Sep2018 | MAL  |                                                                                                                                                                                                                   |          |           |        |
| 4657    | B   | CHANGED RATIO FROM 1.65 TO 1.64 TO MATCH OTHER FLEX DOCUMENTS | DLM | 16Nov2018 | MAL  |                                                                                                                                                                                                                   |          |           |        |
|         |     |                                                               |     |           |      |                                                                                                                                                                                                                   |          |           |        |
|         |     |                                                               |     |           |      | DRAWN:                                                                                                                                                                                                            | CHECKED: | DATE:     | Page   |
|         |     |                                                               |     |           |      | DLM                                                                                                                                                                                                               | MAL      | 06Mar2018 | 3 of 3 |



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