## **ProMinent® Evolution 3**

Capacity range of single pump: 6.0 – 329 gph @ 5800 – 250 psig



The **ProMinent**<sup>®</sup> **Evolution 3** meets the most exacting safety requirements as an extremely robust hydraulic diaphragm metering pump. It stands out thanks to its PTFE multi-layer diaphragm with integral diaphragm rupture warning system and unique diaphragm position control. Its modular construction offers excellent flexibility for countless applications.

The **ProMinent**<sup>®</sup> Evolution hydraulic diaphragm family of metering pumps form an integrated product range with **stroke lengths of 0 to 40 mm**. This covers the capacity range of **0.79 to 1,955 gph** at pressures ranging from **5800 to 145 psig**. The **ProMinent**<sup>®</sup> Evolution product range is designed to comply with API 675. A wide range of drive versions are available, including some with ATEX certification for use in Zone 1 or Zone 2 areas at risk from explosion.

#### **Features & Benefits**

Maximum process reliability

- PTFE multi-layer diaphragm with integral diaphragm rupture warning system is standard on all pumps
- Integral hydraulic relief valve
- The exclusive Diaphragm Position Control protects the pump against operating faults (e.g no damage in the event of a blockage on either the suction or discharge side)
- Metering reproducibility is better than  $\pm$  1 % within the 10 100 % stroke length range under defined conditions and with correct installation
- Continuous bleeding of the hydraulic oil chamber ensures reliable operation

Excellent flexibility

 The Evolution's modular compact construction allows for a wide range of applications. The Evolution can be multiplexed with up to five (5) metering units of identical or varying pump capacities for the greatest application adaptability



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### Technical data for EF3a single pump 60 Hz

| EF3a      |                       |   |     |     |     |     |                                  |                           |
|-----------|-----------------------|---|-----|-----|-----|-----|----------------------------------|---------------------------|
| Plunger Ø | Stroke<br>Volume      | Pump capacity in gph at strokes/min<br>(60 Hz & 1800 rpm) |     |     |     |     | Maxmium<br>Discharge<br>Pressure | Maxmium<br>Motor<br>Power |
|           | Strokes per<br>minute | 88  | 116 | 139 | 174 | 198 |                                  |                           |
| mm        | ml/stroke             | gph   | gph | gph | gph | gph | psig                             | HP                        |
| 16        | 5.03                  | 6   | 8   | 10  | 12  | 14  | 5800                             | 2                         |
| 19        | 7.09                  | 10  | 13  | 15  | 19  | 22  | 4085                             | 2                         |
| 22        | 9.50                  | 13  | 17  | 20  | 25  | 29  | 3045                             | 2                         |
| 26        | 13.27                 | 18  | 24  | 28  | 35  | 40  | 2185                             | 2                         |
| 30        | 17.67                 | 24  | 31  | 37  | 47  | 53  | 1635                             | 2                         |
| 34        | 22.70                 | 30  | 40  | 48  | 60  | 68  | 1275                             | 2                         |
| 42        | 34.64                 | 46  | 61  | 73  | 92  | 104 | 840                              | 2                         |
| 50        | 49.09                 | 65  | 86  | 103 | 129 | 146 | 590                              | 2                         |
| 60        | 70.69                 | 93  | 124 | 148 | 185 | 211 | 405                              | 2                         |
| 68        | 90.79                 | 120   | 159 | 190 | 238 | 271 | 315                              | 2                         |
| 75        | 110.45                | 146   | 194 | 232 | 289 | 329 | 260                              | 2                         |

**Important Note:** The above is an abridged version of the available product range. Contact ProMinent if specific capacities are needed for your application

## Materials in contact with the medium Dosing head complete

# Dosing HeadCheck Valve Body/ Seat/SealDiaphragm316L SS316L SSPTFE multi-layer diaphragmAlloy 20Alloy 20PTFE multi-layer diaphragmHastelloy CHastelloy CPTFE multi-layer diaphragm



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