

# GEAR PUMP: EXTREME 1000 ML/MIN – BLDC MOTOR



The flagship of our product line, the Extreme series is where it all started. It contains more bearings for higher load-carrying capacity, resulting in long life at high pressures. It can accommodate a wide variety of port locations (side, top, face) and sizes. An optional internal pressure relief valve provides additional over-pressurization protection. The brushless DC motor includes current limiting and thermal overprotection, and it's IP-55 rating means reliable operation in harsh environments at peak performance. **The Extreme series - Engineering Your Flow.**

- > Continuous Ink Jet Printing
- > Dialysis
- > Water treatment
- > Food & Beverage

## Benefits



**3D Mounting:** Our pumps are extremely versatile when it comes to mounting. The body is compact in size and the flexible inlet and outlet port locations simplifying the plumbing and conserving valuable space.



**Long Life:** DPP pumps are all characterized by their robustness and performance. Wear and tear is at its lowest, and their smart designs ensure a sustainable reduction of operating costs.



**100% Outgoing Test:** Before any pump leaves our factory, it is stringently and extensively tested in accordance with its specifications. Our customers receive detailed reports, saving them time and money.



**Chemically Resistant:** Our pumps are made from materials that are resistant to a wide range of aggressive chemicals. This means our pumps can also operate reliably and precisely in even the most environments.



**Low Pressure Pulsation:** Thanks to their smart drives and the innovative helical gear design our pumps ensure an extremely smooth fluid delivery with almost no pressure pulsation.



**No Shaft-Seals:** DPP gear pumps are hermetically sealed instead of using conventional shaft seals. This means low maintenance for you and your customers, a long service life and the highest degree of productivity.

## Specifications

### Performance

|                             |                 |
|-----------------------------|-----------------|
| Max. continuous pressure:   | 5 bar           |
| Max. intermittent pressure: | 6 bar           |
| Max. static Case pressure:  | 20 bar          |
| Inlet:                      | Self-priming    |
| Speed range:                | 300-4500 rpm    |
| Fluid viscosity range:      | 0.3 to 1000 cps |

### Electrical

|                              |   |
|------------------------------|---|
| Supply voltage:              | 24 vdc  |
| Speed Control:               | 0-5 vdc   |
| Tach. Output:                | 6V square wave, 2 pulses per revolution   |
| Rotation:                    | Uni-directional   |
| Max. current:                | 2 amps  |
| Max. output power:           | 35 Watts  |
| Current Overload Protection: | 2 amps  |
| 4-conductor Teflon cable:    | 24 AWG  |
| Color code:                  | Black = ground, Red = +24 vdc,<br>Green = Tach. Output, White = 0-5 vdc speed control |
| Motor rating:                | control IP-55   |

### Temperature

|                          |   |
|--------------------------|---|
| Fluid temperature range: | -20 to +100°C                                       |
| Ambient air temp. range: | 0-60°C  |
| Thermal protection:      | Internal thermal sensor off at 90°C, resets at 80°C |
| Relative humidity range: | 0-95% non-condensing                                |

### Construction

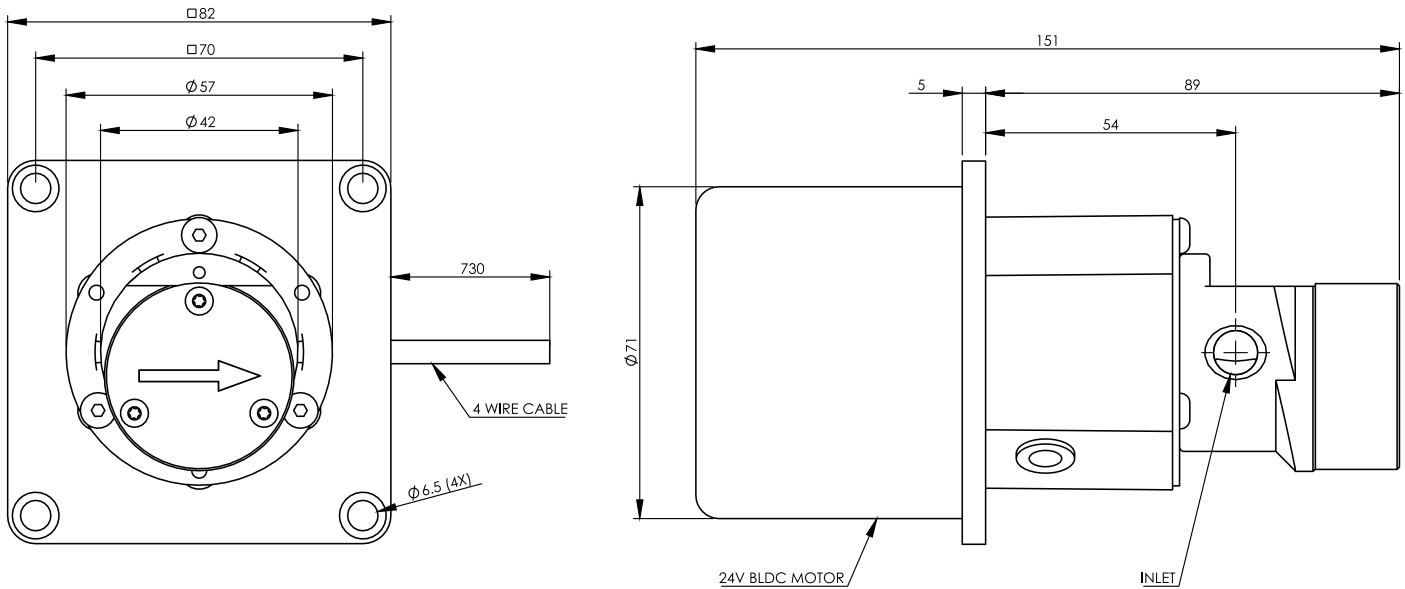
|                                 |   |
|---------------------------------|---|
| Standard:                       | 316L stainless steel, PEEK®, EPDM                               |
| Optional:                       | Alloy-C, PPS (gears), Teflon®, Silicone, Viton®, Kalrez®        |
| Inlet/Outlet:                   | 1/8"-NPT (standard)   |
| Optional:                       | 1/4"-NPT, G1/8, G1/4, exiting the side, top, or end of the pump |
| Internal Pressure Relief Valve: | Optional  |
| Marking:                        | Permanent laser-mark identification for 100% traceability       |
| Mass:                           | 1.3 kg  |

Performance values are limits and cannot all happen simultaneously. Please contact your sales engineer for further technical information and customized options.

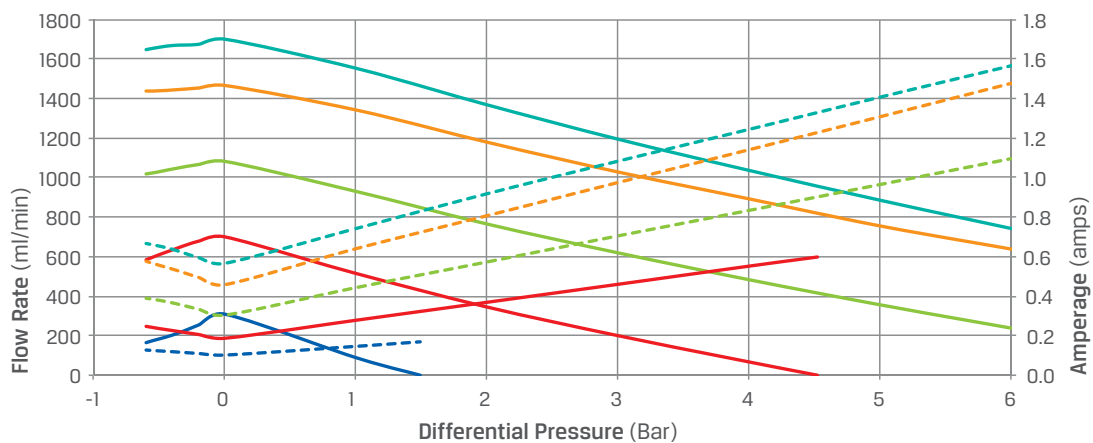


Engineering Your Flow

## Dimensional Outline Drawing (mm)



## Typical Performance Curve (Water at Room Temperature)



### Motor Control Voltage: Amperage (amps)



DPP is certified to medical standard ISO 9001 / ISO 13485 and operates a clean-room according to ISO Class 7. All pumps are customized; the information given represent one of the possibilities.

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