

# Bredel Heavy Duty 50

Bredel Heavy Duty pumps

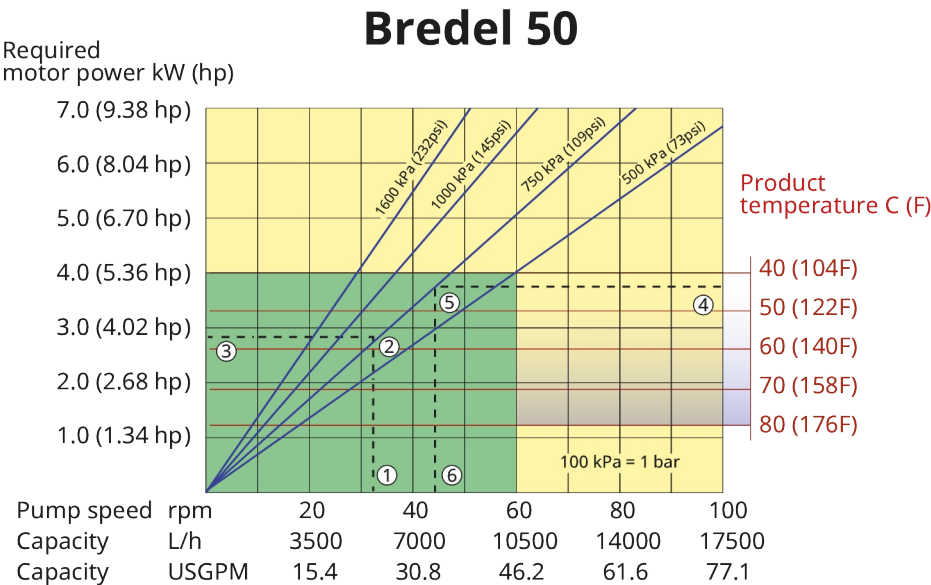


### Features and benefits

- Heavy duty frame: designed for safer pump transportation, using a forklift truck
- Window guard: extra protection for the inspection window
- Reinforced brackets: more robust design, less risk of lubricant leakage, easier maintenance
- C4H paint: enhanced durability in highly corrosive environments



### Bredel Heavy Duty 50 performance



Note: The area of continuous operation diminishes with increased product temperatures. For product temperatures >40C, the area of continuous operation reduces to the corresponding red temperature line.

- Continuous duty
- Intermittent duty

\* Maximum 3 hours operation followed by minimum 1 hour stop

## Technical specifications

|                                    | Bredel Heavy Duty 50                                          |
|------------------------------------|---------------------------------------------------------------|
| Max. flow rate continuous          | 10512 L/h (2774 USGPH)                                        |
| Max. flow rate intermittent        | 17520 L/h (4623 USGPH)                                        |
| Volume per revolution              | 2.92 l (0.77 USG)                                             |
| Max. continuous operating speed    | 60 rpm                                                        |
| Max. intermittent operating speed  | 100 rpm                                                       |
| Max. operating pressure            | 16 bar (232 psi)                                              |
| Max. inlet pressure                | 2.5 bar abs (38 psi abs)                                      |
| Max. suction capability            | 9.5 mWC (374 inWC)                                            |
| Suction capability (80% Flow rate) | 8 mWC (315 inWC)                                              |
| Operating temperature              | -20 °C to 45 °C (-4 °F to 113 °F)                             |
| Fluid temperature                  | -20 °C to 80 °C (-4 °F to 176 °F)                             |
| Min. starting torque               | 620 N m (5487 in.lbs)                                         |
| Weight                             | 399 kg (879 lbs)                                              |
| Heavy Duty bracket weight          | 7 kg                                                          |
| Heavy Duty bracket weight          | 15.4 lbs                                                      |
| Window guard weight                | 2.4 kg (5.4 lbs)                                              |
| Heavy Duty support frame weight    | 85 kg (187 lbs)                                               |
| Hose lubricant required            | 10 l (2.64 USG)                                               |
| Port configurations                | Down, Left, Right, Up                                         |
| Bearing configuration              | 2 std bearings                                                |
| Compatible hose materials          | CSM, EPDM, F-NBR, NBR, NBR for food, NR-Metering, NR-Transfer |
| Flange assembly type               | ANSI, DIN, JIS                                                |

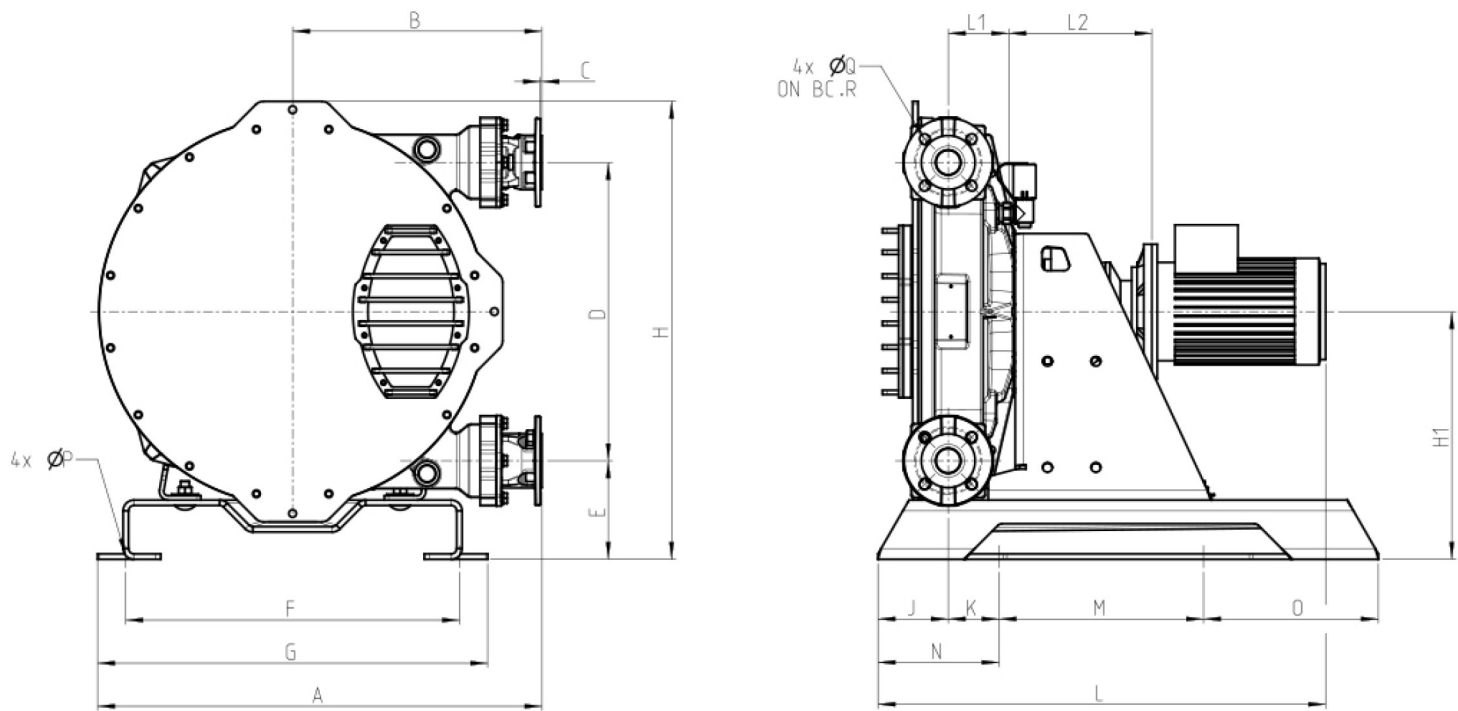
Please consult your Bredel representative for lower or higher temperature operation.

Allowable ambient temperature is based on pump capabilities and may be further limited by gearbox ambient capabilities.

## Materials of construction

|                        | Bredel Heavy Duty 50                                                                |
|------------------------|-------------------------------------------------------------------------------------|
| Hose material          | CSM, EPDM, F-NBR, NBR, NBR for food, NR-Metering, NR-Transfer                       |
| Housing                | Cast iron, ISO12944 category C4H, ISO12944 category C4M, ISO12944 category C5M      |
| Rotor assembly         | Cast iron, ISO12944 category C4M                                                    |
| Cover assembly         | Cast iron, ISO12944 category C4M                                                    |
| Brackets and fasteners | Cast iron, Galvanised steel, ISO12944 category C4M, Stainless steel 316             |
| Support frame          | Galvanised steel, ISO12944 category C4H, ISO12944 category C5M, Stainless steel 316 |
| Coupling bush          | Alloy steel                                                                         |
| Seals                  | Neoprene, Nitrile, Thermoplastic polyurethane                                       |
| Window guard           | ISO12944 category C4H, Steel                                                        |

Bredel Heavy Duty 50 dimensions



| Type               | A    | B    | C    | D    | E   | F    | G         | H    | H1   | J   | K   | Lmax   | L1  | L2max | M   | N   | O    | ØP   | ØQ   | R   |
|--------------------|------|------|------|------|-----|------|-----------|------|------|-----|-----|--------|-----|-------|-----|-----|------|------|------|-----|
| Bredel 50 (mm)     | 826  | 464  | 3    | 554  | 183 | 620  | 725       | 851  | 460  | 131 | 95  | 1022   | 112 | 339   | 380 | 225 | 325  | 18   | 18   | 125 |
| Bredel 50 (inches) | 32.5 | 18.3 | 0.12 | 21.8 | 7.2 | 24.4 | 28.5      | 33.5 | 18.1 | 5.2 | 3.7 | 40.2   | 4.4 | 13.3  | 15  | 8.9 | 12.8 | 0.71 | 0.71 | 4.9 |
| Connector sizes    |      |      |      |      |     |      | ANSI 150# |      |      |     |     | EN DIN |     |       |     |     | JIS  |      |      |     |
| Bredel 50          |      |      |      |      |     |      | 2"        |      |      |     |     | 50mm   |     |       |     |     | 50mm |      |      |     |

Disclaimer: The information contained in this document is believed to be correct at the time of publication, but Watson-Marlow Bredel BV accepts no liability for any error it contains, and reserves the right to alter specifications without prior notice. All mentioned values in this document are values under controlled circumstances at our test bed. Actual flow rates achieved may vary because of changes in temperature, viscosity, inlet and discharge pressures and/or system configuration. APEX, DuCoNite, Bioprene and Bredel are registered trademarks.



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