

APEX 28

APEX hose pumps

Bredel

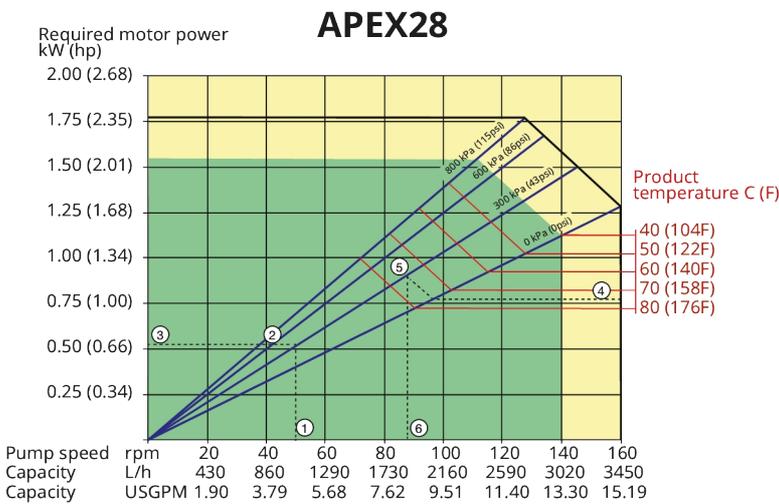
Hose Pumps

Features and benefits

- Seal-less, valve-less design
- Precision machined hose elements for accurate, repeatable performance
- Optimised hose compression for unmatched flow stability
- Direct-coupled drive and maximum flexibility - no separate couplings to align or maintain
- Ultra compact design with flexibility to mount standard gear motors - rotor supported by own bearings to maximise gearbox life
- Lower maintenance costs - single component change means fewer spare parts inventory



APEX 28 performance



1. Flow required indicates pump speed
2. Calculated discharge pressure
3. Net motor power required
4. Product temperature
5. Calculated discharge pressure
6. Maximum recommended pump speed

- Continuous duty
- Intermittent duty

* Maximum 3 hours operation followed by minimum 1 hour stop

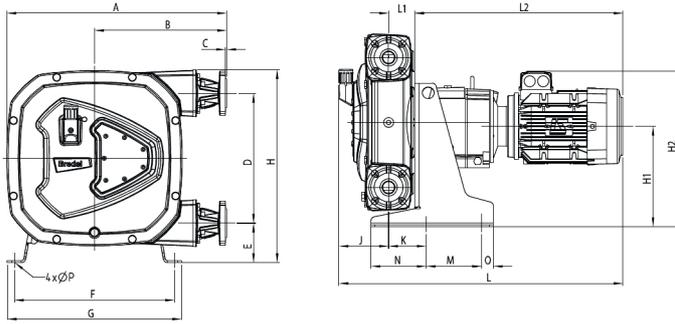
Technical specifications

| | APEX 28 |
|-----------------------------------|-----------------------------|
| Max. flow rate continuous | 3020 L/h |
| Max. flow rate continuous | 797 USGPH |
| Max. flow rate intermittent | 3450 L/h |
| Max. flow rate intermittent | 910 USGPH |
| Volume per revolution | 0.36 L |
| Volume per revolution | 0.095 USG |
| Max. continuous operating speed | 140 rpm |
| Max. intermittent operating speed | 160 rpm |
| Max. operating pressure | 8 bar |
| Max. operating pressure | 116 psi |
| Suction pressure | 0.05 bar abs |
| Suction pressure | 0.73 psi abs |
| Max. inlet pressure | 2.5 bar abs |
| Max. inlet pressure | 37 psi abs |
| Operating temperature range | -20 to 45 °C |
| Operating temperature range | -4 to 113 °F |
| Fluid temperature range | -20 to 80 °C |
| Fluid temperature range | -4 to 176 °F |
| Min. starting torque | 150 N m |
| Min. starting torque | 1330 in/lbs |
| Weight | 100 kg |
| Weight | 220 lbs |
| Hose lubricant required | 2 L |
| Hose lubricant required | 0.53 USG |
| Port configurations | Down, Left, Right, Up |
| Compatible hose materials | EPDM, NBR, NBR for food, NR |
| Flange assembly type | ANSI, DIN, JIS |

Materials of construction

| | APEX 28 |
|----------------|--|
| Hose material | EPDM, Natural rubber (NR), NBR, NBR for food |
| Housing | Cast iron |
| Rotor assembly | Die-cast aluminium |
| Cover assembly | Die-cast aluminium |
| Brackets | Cast iron, Stainless steel AISI 316 |
| Fasteners | Galvanised steel, Stainless steel AISI 316 |
| Support frame | Galvanised steel, Stainless steel AISI 316 |
| Coupling bush | Alloy steel |
| Seals | NBR |

APEX 28 dimensions



| | A | B | C | D | E | F | G | H | H1 | H2max | J | K | Lmax | L1 | L2max | M | N | O | ØP | |
|------------------------|--------------------------------|------|-----|------|-----|------|------|------------------------------|-----|-------|-----|------|------------------------------------|-----|-------|-----|-----|-----|-----|--|
| APEX28 (mm) | 481 | 297 | 2.5 | 264 | 98 | 338 | 370 | 415 | 221 | 359 | 124 | 82.5 | 714 | 63 | 528 | 152 | 121 | 27 | 12 | |
| APEX28 (inch) | 18.9 | 11.7 | 0.1 | 10.4 | 3.9 | 13.3 | 14.6 | 16.3 | 8.7 | 14.1 | 4.9 | 3.2 | 28.1 | 2.5 | 20.8 | 6.0 | 4.8 | 1.1 | 0.5 | |
| Connector sizes | ASME B16.5, 150# (ANSI) | | | | | | | EN 1092-1, PN40 (DIN) | | | | | JIS B2220, 10/16/20 kgf/cm2 | | | | | | | |
| APEX28 | DN 1" | | | | | | | DN 25 | | | | | 25mm | | | | | | | |

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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