# BOXER 100

1" AIR-OPERATED DOUBLE DIAPHRAGM PUMPS

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suction / delivery connections</td>
<td>G 1&quot; or DN 25(*)</td>
</tr>
<tr>
<td>Air fitting</td>
<td>G 3/8&quot; f</td>
</tr>
<tr>
<td>Max flow rate*</td>
<td>160 l/min</td>
</tr>
<tr>
<td>Max supply air pressure</td>
<td>8 bar</td>
</tr>
<tr>
<td>Max head*</td>
<td>80 m</td>
</tr>
<tr>
<td>Max negative suction head - dry-running**</td>
<td>4 m</td>
</tr>
<tr>
<td>Max negative suction head - pump primed</td>
<td>9.5 m</td>
</tr>
<tr>
<td>Max diameter of suspended solids</td>
<td>4 mm</td>
</tr>
<tr>
<td>Noise level</td>
<td>75 dB</td>
</tr>
<tr>
<td>Volume per stroke</td>
<td>222 cc</td>
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</tbody>
</table>

(*) NPT fittings on request

** The value depends on the pump configuration.

- Robust Design
- PATENTED stall-prevention pneumatic circuit
- Operates with non-lubricated air
- SELF-PRIMING
- Dry operation
- ATEX certification for ZONE 1 - ZONE 2
- IECEx certification
- Adjustable operating speed
- Extremely versatile
- Suitable for pumping liquids with high viscosity and demanding applications
- Possibility of pumping fluids containing suspended solids
- Possibility of suspended installation
- Manifolds can be supplied with stainless steel reinforcement rings for pumps in PP – PP+CF – PVDF
- Suitable for continuous use

BOXER 100
AIR-OPERATED DOUBLE DIAPHRAGM PUMPS

Specifications and types

**PP**

- **Maximum Dimensions**
  - Height: 325 mm
  - Width: 329 mm
  - Depth: 202 mm

- **Construction materials (casing and manifolds) and net weight**
  - Polypropylene (with glass additive): 7.6 Kg
    - Max 3°C min.
    - 65°C max
  - Conductive polypropylene (with carbon additive): 7.6 Kg
    - Max 3°C min.
    - 65°C max

- **Construction materials (casing and manifolds) available on request**
  - POMc
  - UHMWPE

**PVDF**

- **Maximum Dimensions**
  - Height: 325 mm
  - Width: 329 mm
  - Depth: 202 mm

- **Construction materials (casing and manifolds) and net weight**
  - PVDF: 9.6 Kg
    - Max 3°C min.
    - 95°C max

- **Construction materials (casing and manifolds) available on request**
  - POMc
  - UHMWPE
BOXER 100
AIR-OPERATED DOUBLE DIAPHRAGM PUMPS

Specifications and types

<table>
<thead>
<tr>
<th>ALU</th>
<th>Boxer 100</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Maximum Dimensions</strong></td>
<td></td>
</tr>
<tr>
<td>Height</td>
<td>324 mm</td>
</tr>
<tr>
<td>Width</td>
<td>315 mm</td>
</tr>
<tr>
<td>Depth</td>
<td>202 mm</td>
</tr>
<tr>
<td><strong>Construction materials (casing and manifolds) and net weight</strong></td>
<td></td>
</tr>
<tr>
<td>ALU</td>
<td>8.5 Kg</td>
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<tr>
<td>Max 3°C min.</td>
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<tr>
<td>95°C max</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Electropolished AISI 316</th>
<th>Boxer 100</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Maximum Dimensions</strong></td>
<td></td>
</tr>
<tr>
<td>Height</td>
<td>327 mm</td>
</tr>
<tr>
<td>Width</td>
<td>308 mm</td>
</tr>
<tr>
<td>Depth</td>
<td>202 mm</td>
</tr>
<tr>
<td><strong>Construction materials (casing and manifolds) and net weight</strong></td>
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<tr>
<td>Electropolished AISI 316</td>
<td>11.7 Kg</td>
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<tr>
<td>Max 3°C min.</td>
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<tr>
<td>95°C max</td>
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</table>

Product Link: https://www.northridgepumps.com/p_1026_north-ridge-boxer-100-air-operated-double-diaphragm-pump
BOXER 100
AIR-OPERATED DOUBLE DIAPHRAGM PUMPS

Specifications and types

T20 distributor material (pneumatic circuit):
• POM

Central material:
• Polypropylene (with glass additive)
• Conductive polypropylene (with carbon additive)
• Aluminium
• AISI 316
• DUPLEX/S.DUPELEX

Diaphragm materials:
• PTFE
• HYTREL
• SANTOPRENE
• NBR
• EPDM

Caps materials:
• Polypropylene (with glass additive)
• Conductive polypropylene (with carbon additive)
• PVDF
• Aluminium
• Natural ECTFE
• AISI 316

Balls materials:
• PTFE
• AISI 316
• EPDM
• NBR

O-ring materials:
• EPDM
• NBR
• VITON®
• PTFE

Package:
• cardboard box – cm 27 x 39 x 41 – weight 1.4 Kg
[The weight refers to the package only, without the pump]

Any chromatic variations in our polypropylene and PVDF products are due to the special mixtures of the raw materials used. The use of high quantities of, respectively, glass and carbon additives, results in a unique aesthetic that does not affect the quality of the product in any way. Quite the opposite, it highlights its highly technological nature, to the benefit of its performance.

MAIN APPLICATION SECTORS

AUTOMOTIVE | PRODUCTION AND STORAGE OF BIODIESEL | WATER AND SLUDGE TREATMENT | PHARMACEUTICAL INDUSTRY | OIL & GAS
GRAPHIC INDUSTRY | CERAMIC, STONE, MARBLE, GLASS AND MISING INDUSTRY | PAINT INDUSTRY | PACKING, GLUE, SOLDER PROCESSING INDUSTRY
TEXTILE AND LEATHER INDUSTRY | MECHANICAL AND METAL-LURIC INDUSTRY | GALVANIC AND ELECTRONIC INDUSTRY

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# BOXER 100

**AIR-OPERATED DOUBLE DIAPHRAGM PUMPS**

## Specifications and types

**BOXER PUMPS CODES CODING**

ex. IB50-P-HTTPV--

Internal distributor, Boxer 50, PP casing, Hytrel® air side diaphragm, PTFE product side diaphragm, PTFE balls, PP ball seats, Viton® o-ring.

<table>
<thead>
<tr>
<th>I</th>
<th>IB50-</th>
<th>P</th>
<th>H</th>
<th>T</th>
<th>T</th>
<th>P</th>
<th>V</th>
<th>-</th>
<th>-</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>INTERNAL DISTRIBUTOR</td>
<td>PUMP MODEL</td>
<td>DAMPER PUMP</td>
<td>AIR-SIDE DIAPHRAGM</td>
<td>PRODUCT-SIDE DIAPHRAGM</td>
<td>BALLS</td>
<td>BALL SEATS</td>
<td>O-RING</td>
<td>SPLIT MANIFOLD</td>
</tr>
<tr>
<td>I</td>
<td>B7</td>
<td>Boxer 7</td>
<td>B - Polypropylene</td>
<td>N - NBR</td>
<td>T - PTFE</td>
<td>P - Polypropylene</td>
<td>A - PE-UHMW</td>
<td>C - version CONDUCT for standard ATEX ZONE 1 Ex II 2G/2D c IIB T135°C</td>
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<td>B15</td>
<td>Boxer 15</td>
<td>F - PVDF</td>
<td>D - EPDM</td>
<td>X - IPE-UHMW</td>
<td>R - PP-VC</td>
<td>S - Silicone</td>
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<td></td>
<td>B25</td>
<td>Microboxer</td>
<td>A - AISI 316</td>
<td>M - Santoprene</td>
<td>X*</td>
<td>Z*</td>
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<tr>
<td>MIN</td>
<td>B50</td>
<td>Miniboxer</td>
<td>AL - aluminium</td>
<td>H - Hytrel</td>
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<td>Boxer 81</td>
<td>C - version CONDUCT for standard IECEx</td>
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<td>Boxer 90</td>
<td>Z - version for standard IECEx</td>
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<tr>
<td>B100</td>
<td>Boxer 100</td>
<td>(both only on request)</td>
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<tr>
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</tbody>
</table>

*P = split manifold
*3 = 3° central hole on manifold
*NPT = "NPT" thread
*J = spacer on shaft
*W = clamp manifold
(all only on request)

**STANDARD:** II 3G Ex h IIB T4 Gc - II 3D Ex h IIB T135°C Db X - I M2 Ex h I Mb X

**CONDUCT:** II 2G Ex h IIB T4 Gb - II 2D Ex h IIB T135°C Db X - Ex IIIB T4 Gb - Ex IIB T135°C Db

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**SELF-PRIMING USE**

**UNDER HEAD USE**

**IMMERSED**

**DRUM TRANSFER**

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**SPLIT SUCTION and DELIVERY**

**SPLIT SUCTION**

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