Industrial peristaltic pumps
BOMBAS BOYSER, S.L.
It is a Spanish company specialised in the manufacture of peristaltic pumps for industrial use. Founded in 1993, the company currently has one of the most comprehensive ranges of peristaltic pumps in the world, split into four product families and more than twenty different models.

We distribute our products all over the world through a network of more than thirty distributors, thus guaranteeing impeccable technical assistance and after-sales service regardless of geographic location.

This catalogue offers a general and technical overview of our products. We have a continuous and permanent quality vocation to achieve your satisfaction as client, thanks to an excellent industrial product with which we seek to offer our very best, totally focused on the development and manufacture of the products presented below.

Why peristaltic pumps?

*Operating principle*

The operating principle of a peristaltic pump is defined by its simplicity and advantages.

A tubular element with accurate dimensions manufactured in different types of elastomer or thermoplastic is housed into the pump body.

When this tubular element is compressed by the rotary action of the rotor and its corresponding rollers or shoes, quickly recovers its initial form creating a vacuum and subsequently suctioning the fluid.

The fluid gets into the cavity formed by the rollers that compress the tube and is driven smoothly towards the outlet by the next roller.

Hence, we are dealing with a positive displacement volumetric pump that delivers outstanding features.
Some applications:

- **WATER TREATMENT**: Sampling, Muds transfer, Abrasive products dosing: Lime slurry, Carbon slurry, Potassium Permanganate, etc... Chemicals dosing: Ferric Chloride, Sodium Hypochlorite, Sodium Bisulphite, Polymers, etc...

- **CHEMICAL INDUSTRY**: Dosing of all kinds of liquids in process, Dyes, Pigments, Paints, Detergents, Cosmetic creams, Gel, Resins, Latex, Corrosive acids, Inks, Anti-foaming, Glue, Oils, Peroxide, etc...

- **FOOD AND BEVERAGE**: Additives dosing in bakery, Beverages, Juices, Sauces, Enzymes, Syrup, Milk, Oils, Enology additives, Liquid egg, Jams, Marmalades, Meat products, Mayonnaise, etc...

- **OTHER**: Laboratory, Paper industry, Printing and packaging, Mortars, Ceramics, Agriculture, Mining, Pharmaceutical industry, Engineering, etc...

Main features:

- Self-priming up to 9 m.w.c.
- Enable to run dry without damage
- Seal-less
- Reversible rotation system
- Abrasion-resistant
- Excellent accuracy +/- 1%
- Economical and easy-to-maintain
- Corrosion-resistant
- Easy to clean
The DS-M series peristaltic pumps are industrial pumps for dosing or transfer fluids at low flow and low pressure. Their tubular element is easy to replace and is available in six different internal diameters for the same pump model. They are reversible, self-priming pumps and can pump fluids with small solids or particles in suspension, and are highly useful for pumping fluids in liquid status but which contain air or other gases or vapours. The standard version is equipped with a triple-roller rotor for maximum accuracy and minimum pulsating flow.

**Applications:**

**Water treatment:**
Sampling, feeding filtering membranes, metering of chemical products: iron chloride, sodium hypochlorite, iron sulphate, etc. Metering of products with solids in suspension: lime milk, potassium permanganate, active charcoal, etc., metering of polymers, etc.

**Food & beverage:**
Dosing of additives in bread- and pastry-making, drinks, juices, sauces, colorants, lactic ferments, etc.

**Chemical industry:**
Dosing of all kinds of fluids in processes, colorants, pigments, resins, latex, acids, inks, anti-foaming agents, etc.

**Other sectors:**
Laboratories, paper industry, printing and packing, ceramics, agriculture, mining, etc.
Types of tubes available

Silicone
Norprene® A-60-F
Tygon®
Norprene® A-60-G
Solv®

Performance table

<table>
<thead>
<tr>
<th>Internal tube diameters available</th>
<th>ml/rev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>0,8 mm</td>
<td>0,16</td>
</tr>
<tr>
<td>1,6 mm</td>
<td>0,40</td>
</tr>
<tr>
<td>3,2 mm</td>
<td>1,66</td>
</tr>
<tr>
<td>4,8 mm</td>
<td>3,80</td>
</tr>
<tr>
<td>6,4 mm</td>
<td>6,26</td>
</tr>
<tr>
<td>8,0 mm</td>
<td>10,00</td>
</tr>
</tbody>
</table>

ml/min

- 8,0 mm tube
- 6,4 mm tube
- 4,8 mm tube
- 3,2 mm tube
- 1,6 mm tube
- 0,8 mm tube
Industrial pumps and fluid equipment

Industrial reinforced rubber hose peristaltic pumps for working pressures of up to 8 bar.

Flow rates from 10 to 1200 l/h, different drive options at fixed or variable speed, with the possibility of choosing different types of connections.

Roller press system with ball bearings and hose lubrication by means of a small supply of silicone grease.

Accessories:
- Tube leakage detector
- Pulsation dampening system
- TRI-CLAMP, DIN 11851, SMS, NPT, PP, PVDF connections
- Electronic dosing equipment
- Anticorrosive chemical version
## Technical data

<table>
<thead>
<tr>
<th></th>
<th>AMP-10/B</th>
<th>AMP-13/B</th>
<th>AMP-16/C</th>
<th>AMP-19/C</th>
<th>AMP-22</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Capacity</strong></td>
<td>0,023 l/rev</td>
<td>0,038 l/rev</td>
<td>0,092 l/rev</td>
<td>0,123 l/rev</td>
<td>0,246 l/rev</td>
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<tr>
<td><strong>Connections</strong></td>
<td>3/8”</td>
<td>3/8”</td>
<td>3/4”</td>
<td>1”</td>
<td>1”</td>
</tr>
<tr>
<td><strong>Max pressure</strong></td>
<td>8 bar</td>
<td>8 bar</td>
<td>8 bar</td>
<td>2 bar</td>
<td>8 bar</td>
</tr>
<tr>
<td><strong>Hose tightening system</strong></td>
<td>Rollers</td>
<td>Rollers</td>
<td>Rollers</td>
<td>Rollers</td>
<td>Rollers</td>
</tr>
<tr>
<td><strong>Hoses available in rubber</strong></td>
<td>NR, NBR, EPDM, NBR-A, HYPALON</td>
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<td>NR, NBR, EPDM, NBR-A, HYPALON</td>
<td></td>
</tr>
<tr>
<td><strong>Tubes available in thermoplastic</strong></td>
<td>Norprene®</td>
<td>Norprene®</td>
<td>Norprene®</td>
<td>Norprene®</td>
<td>Tygon®</td>
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</tbody>
</table>

### Performance table

![Performance chart](chart.png)
Industrial pumps and fluid equipment

Industrial reinforced rubber hose peristaltic pumps for working pressures up to 8 bar.

Flow rates from 100 to 20000 l/h, different drive options at fixed or variable speed, with the possibility of choosing different types of connections.

Roller press system with ball bearings and hose lubrication by means of a small supply of silicone grease.

Robust design with integrated ball bearing box in pump body.

**Accessories:**
- Tube leakage detector
- Pulsation dampening system
- TRI-CLAMP, DIN 11851, SMS, NPT, PP, HALAR connections
- Equipment for creating vacuum in the pump body
- Feed screw hopper for feeding heterogeneous products
- Anticorrosive chemical version
## Technical data

<table>
<thead>
<tr>
<th></th>
<th>FMP-30</th>
<th>FMP-40</th>
<th>FMP-50/B</th>
<th>FMP-60</th>
<th>FMP-70</th>
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</thead>
<tbody>
<tr>
<td><strong>Capacity</strong></td>
<td>0,43 l/rev</td>
<td>0,86 l/rev</td>
<td>1,47 l/rev</td>
<td>3,16 l/rev</td>
<td>6,72 l/rev</td>
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<tr>
<td><strong>Connections</strong></td>
<td>1 1/4&quot;</td>
<td>1 1/2&quot;</td>
<td>DN 40</td>
<td>DN 50</td>
<td>DN 65</td>
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<tr>
<td><strong>Max pressure</strong></td>
<td>8 bar</td>
<td>8 bar</td>
<td>8 bar</td>
<td>8 bar</td>
<td>8 bar</td>
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<td>Rollers</td>
<td>Rollers</td>
<td>Rollers</td>
</tr>
<tr>
<td><strong>Hoses available in rubber</strong></td>
<td>NR NBR EPDM NR-A NBR-A</td>
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### Performance table

![Performance table graph](image)

- FMP-70
- FMP-60
- FMP-50/B
- FMP-40
- FMP-30
Industrial pumps and fluid equipment

Industrial reinforced rubber hose peristaltic pumps for working pressures up to 15 bar.

Flow rates from 100 to 35000 l/h, different drive possibilities at fixed or variable speed, tube connection with DIN or ANSI flanges.

Tube tightening system with shoes and internal fluid-based lubrication in the pump body.

Robust design with integrated ball bearing box in pump body.

**Accessories:**
- Tube leakage detector
- Pulsation dampening system
- TRI-CLAMP, DIN 11851, SMS, NPT, PP, HALAR connections
- Equipment for creating vacuum in the pump body
- Feed screw hopper for feeding heterogeneous products
- Anticorrosive chemical version
## Technical data

<table>
<thead>
<tr>
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<th>RBT-25/B</th>
<th>RBT-32/B</th>
<th>RBT-40</th>
<th>RBT-60</th>
<th>RBT-70</th>
<th>RBT-80</th>
<th>RBT-100</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Capacity</strong></td>
<td>0,3 l/rev</td>
<td>0,62 l/rev</td>
<td>1,33 l/rev</td>
<td>3,61 l/rev</td>
<td>6,7 l/rev</td>
<td>11,7 l/rev</td>
<td>20,0 l/rev</td>
</tr>
<tr>
<td><strong>Connections</strong></td>
<td>DN-25</td>
<td>DN-32</td>
<td>DN-40</td>
<td>DN-50</td>
<td>DN-65</td>
<td>DN-80</td>
<td>DN-100</td>
</tr>
<tr>
<td><strong>Max pressure</strong></td>
<td>15 bar</td>
<td>15 bar</td>
<td>15 bar</td>
<td>15 bar</td>
<td>15 bar</td>
<td>15 bar</td>
<td>15 bar</td>
</tr>
<tr>
<td><strong>Hose tightening system</strong></td>
<td>Shoes</td>
<td>Shoes</td>
<td>Shoes</td>
<td>Shoes</td>
<td>Shoes</td>
<td>Shoes</td>
<td>Shoes</td>
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<tr>
<td><strong>Hoses available</strong></td>
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## Performance table

![Graph showing performance in m³/h vs. rpm for different models of RBT pumps]
Pulsation dampers:

The FLEXODAMP pulsation dampers convert the pulsating flow of peristaltic pumps into continuous flow, delivering better flow control, proper operation of accessories such as pressure gauges, flow meter, pressure valves, etc., and improved expectations for the life of hoses, accessories, valves, etc., as well as the actual pump.

The flexible version also provides isolation from possible vibrations, water hammering and makes the pump easier to handle in certain operations, for example in the replacement of the inner hose.

Feed screw hopper:

The feed screw hopper, by means of the use of a worm screw, permits the injection of product into the pump suction, rendering it possible to pump heterogeneous products which normally contain a high percentage of solids which would be otherwise practically impossible to pump with a hose pump.

It is available for hose pumps with connections equal to or greater than 2" and the FMP or RBT series.
Dosing and flow control equipment:

We have special dosing and flow control equipment for our small and medium-sized pumps.

The equipment is comprised of an encoder installed between the motor and the pump's geared motor, and an electrical control panel that includes a touch screen, PLC and a frequency converter.

These elements allow the user to perform volumetric functions with automatic shutdown, continuous metering functions with automatic correction of rotation speed, counting, totalling, etc.

The equipment features a user-friendly and safe calibration function.

Vacuum equipment:

The choice of vacuum equipment in our peristaltic pumps permits an evident improvement in the pump's suction conditions when they are working full out, either because high-viscosity products are being pumped or due to suction conditions.

The equilibrium between the vacuum inside the pumping hose created through the operation of the pump, and on the outside through the vacuum equipment inside the pump body, permits the mechanical recovery of the hose's initial form and therefore pumping in extreme conditions. Please contact our technical department.
Pumping fluids in all kinds of terrain