

PHARMACEUTICAL HOSES **IN SILICONE, EPDM AND PFA**

For applications in the pharmaceutical
and biotech industries.



CONNECT THE WAY YOU WANT.

The flexible Dockweiler connection that connects seamlessly.

As a manufacturer of high purity stainless steel tube systems, Dockweiler has been familiar with the requirements of the pharmaceutical industry for decades. Having added a new range of elastomeric and thermoplastic hoses, we are now able to offer our customers complete hose systems as a one-stop provider. As always, these products meet the well known Dockweiler quality standards.

The advantages at a glance:

- Dockweiler supplies all hose systems as a one-stop provider, ensuring that your particular system is optimally configured.
- All hoses and fittings are made of high-quality materials.
- Full traceability across all stages of manufacture.
- High quality crimping that minimizes gaps.
- The hoses are freely configurable, i.e. the fittings can be combined with the hoses as desired.
- Fast processing and delivery.

Available hose types:

- 1** **MVQ-1** – Platinum-cured silicone, braid-reinforced
- 2** **MVQ-2** – Platinum-cured silicone, braid-reinforced with stainless steel wire reinforcement
- 3** **EPDM** – Braid-reinforced, with stainless steel wire reinforcement, outside blue EPDM, inside food-grade white EPDM
- 4** **PFA-1** – PFA liner (white), braid-reinforced with stainless steel wire reinforcement, outside platinum-cured silicone
- 5** **PFA-2** – PFA liner (black), braid-reinforced with stainless steel wire reinforcement, fully electrically conductive



Available connections:

- A** **TriClamp connections** in accordance with DIN 32676 and ASME BPE 2016
Materials: 1.4404 / UNS S61303 (316L), optionally 1.4435 / UNS S61303 (316L)
- B** **Aseptic connections** in accordance with DIN 11864 Form A, all versions. Material: 1.4435 / UNS S61303 (316L)
- C** **Welding ends** for orbital welding. Material: 1.4435 / UNS S61303 (316L)
- D** **ZeroCon connection with no dead space** Material: 1.4435 / UNS S61303 (316L)
- E** **Further connections** on request

Inner surface roughness $\leq 0.8\mu\text{m}$, also lower on request and with electropolished surface

QUALITY PLUS FLEXIBILITY.

The advantages of Dockweiler hoses at a glance.

 <p>MVQ-1</p> <p>Platinum-cured silicone, braid-reinforced</p>	<p>Construction</p> <p>Made of high purity silicone, inside and out, platinum-cured. High-heat resistant braid insert.</p> <p>Applications</p> <p>Suitable for pharmaceutical, biotech, cosmetic, and food applications, even at high temperatures (injection products, blood plasma, high purity water, and liquid food-stuffs). Not suitable for vacuum applications.</p>	<p>Available sizes</p> <p>1/4" - 1", other sizes as required</p> <table border="1"> <thead> <tr> <th>Maximum length</th> <th>min. Bending radius</th> </tr> </thead> <tbody> <tr> <td>25 m, from a diameter of 25 mm 10 m only</td> <td>40 mm (1/4") - 120 mm (1")</td> </tr> </tbody> </table> <table border="1"> <thead> <tr> <th>Temperature range</th> <th>Working pressure</th> </tr> </thead> <tbody> <tr> <td>- 60° to + 180°C</td> <td>6.0 bar (1/4") - 2.5 bar (1")</td> </tr> </tbody> </table>	Maximum length	min. Bending radius	25 m, from a diameter of 25 mm 10 m only	40 mm (1/4") - 120 mm (1")	Temperature range	Working pressure	- 60° to + 180°C	6.0 bar (1/4") - 2.5 bar (1")	<p>Cleaning options</p> <p>CIP product, sterilizable with steam (40 min, 3 bar at 124°C) or radiation, autoclavable</p> <p>Conformity</p> <p>FDA 21 CFR - 177 2600, BgVV Type II, USP class VI, USP Physicochemical 661, Cytotoxicity, Hemolysis, European Pharmacopoeia 3.1.9.</p>
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 <p>MVQ-2</p> <p>Platinum-cured silicone, braid-reinforced, with stainless steel wire reinforcement</p>	<p>Construction</p> <p>Made of high purity silicone, inside and out, platinum-cured. High-heat resistant braid insert, reinforced with stainless steel wire spiral.</p> <p>Applications</p> <p>Suitable for pharmaceutical, biotech, cosmetic, and food applications even at high temperatures (injection products, blood plasma, high purity water, and liquid food-stuffs).</p>	<p>Available sizes</p> <p>1/2" - 2", other sizes as required</p> <table border="1"> <thead> <tr> <th>Maximum length</th> <th>min. Bending radius</th> </tr> </thead> <tbody> <tr> <td>5.7 m</td> <td>50 mm (1/2") - 120 mm (1")</td> </tr> </tbody> </table> <table border="1"> <thead> <tr> <th>Temperature range</th> <th>Working pressure</th> </tr> </thead> <tbody> <tr> <td>- 60° to + 180°C</td> <td>6.5 bar (1/4") - 5.5 bar (1")</td> </tr> </tbody> </table>	Maximum length	min. Bending radius	5.7 m	50 mm (1/2") - 120 mm (1")	Temperature range	Working pressure	- 60° to + 180°C	6.5 bar (1/4") - 5.5 bar (1")	<p>Cleaning options</p> <p>CIP product, sterilizable with steam (40 min, 3 bar at 124°C) or radiation, autoclavable</p> <p>Conformity</p> <p>FDA 21 CFR - 177 2600, BgVV Type II, USP class VI, USP Physicochemical 661, Cytotoxicity, Hemolysis, European Pharmacopoeia 3.1.9.</p>
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 <p>EPDM</p> <p>Braid-reinforced with stainless steel wire reinforcement, outside blue EPDM, inside food-grade white EPDM</p>	<p>Construction</p> <p>Inside white food-grade EPDM, outside blue EPDM plastic, fabricand stainless steel wire spirial.</p> <p>Applications</p> <p>All food applications, including in the high temperature range</p>	<p>Available sizes</p> <p>3/4" - 2", other sizes as required</p> <table border="1"> <thead> <tr> <th>Maximum length</th> <th>min. Bending radius</th> </tr> </thead> <tbody> <tr> <td>10 m</td> <td>120 mm (3/4") - 300 mm (2")</td> </tr> </tbody> </table> <table border="1"> <thead> <tr> <th>Temperature range</th> <th>Working pressure</th> </tr> </thead> <tbody> <tr> <td>- 30° to + 120°C</td> <td>6.5 bar (1/4") - 4.0 bar (2")</td> </tr> </tbody> </table>	Maximum length	min. Bending radius	10 m	120 mm (3/4") - 300 mm (2")	Temperature range	Working pressure	- 30° to + 120°C	6.5 bar (1/4") - 4.0 bar (2")	<p>Cleaning options</p> <p>CIP product, sterilizable with steam (40 min, 3 bar at 124°C) or radiation, autoclavable</p> <p>Conformity</p> <p>FDA 21CFR - 177 2600, BgVV Type II, USP Physicochemical 661</p>
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 <p>PFA-1</p> <p>PFA liner (white), braid-reinforced with stainless steel wire reinforcement, outside platinum-cured silicone</p>	<p>Construction</p> <p>Inside smooth PFA, outside high purity, platinum-cured silicone. High-heat resistant braid insert, reinforced with stainless steel wire spiral.</p> <p>Applications</p> <p>Suitable for transporting food, chemical, cosmetic, pharmaceutical, and biotech products. Excellent thermal properties, even with very aggressive media. Avoids risk of degradation and product contamination. Very resistant to repeated dynamic processes. Frequently used in dosing and filling systems.</p>	<p>Available sizes</p> <p>1/2" - 2", other sizes as required</p> <table border="1"> <thead> <tr> <th>Maximum length</th> <th>min. Bending radius</th> </tr> </thead> <tbody> <tr> <td>5.7 m</td> <td>95 mm (1/2") - 250 mm (2")</td> </tr> </tbody> </table> <table border="1"> <thead> <tr> <th>Temperature range</th> <th>Working pressure</th> </tr> </thead> <tbody> <tr> <td>- 30° to + 130°C</td> <td>6.5 bar (1/4") - 5.5 bar (2")</td> </tr> </tbody> </table>	Maximum length	min. Bending radius	5.7 m	95 mm (1/2") - 250 mm (2")	Temperature range	Working pressure	- 30° to + 130°C	6.5 bar (1/4") - 5.5 bar (2")	<p>Cleaning options</p> <p>CIP product, sterilizable with steam (135°C for max. 30 min)</p> <p>Conformity</p> <p>FDA 21 P 177-1550 - USP Physicochemical 661, Cytotoxicity test, Hemolysis, USP class VI</p>
Maximum length	min. Bending radius										
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 <p>PFA-2</p> <p>PFA liner (black), braid-reinforced with stainless steel wire reinforcement, fully electrically conductive</p>	<p>Construction</p> <p>Inside smooth PFA, fully fluorinated, antistatic (R≤10⁶ Ohm) outside smooth marble finished, patented, antistatic (R≤10⁶ Ohm). High-heat resistant braid insert, reinforced with stainless steel wire spiral.</p> <p>Applications</p> <p>Suitable for transporting food, chemical, cosmetic, pharmaceutical, and biotech products. Excellent thermal properties, even with very aggressive media. Avoids risk of degradation and product contamination. This hose was specifically developed for the usage in explosive areas and ensures an electrostatic dissipation along the hose and through the hose wall.</p>	<p>Available sizes</p> <p>1/2" - 2", other sizes as required</p> <table border="1"> <thead> <tr> <th>Maximum length</th> <th>min. Bending radius</th> </tr> </thead> <tbody> <tr> <td>20 m</td> <td>135 mm (1/2") - 412 mm (2")</td> </tr> </tbody> </table> <table border="1"> <thead> <tr> <th>Temperature range</th> <th>Working pressure</th> </tr> </thead> <tbody> <tr> <td>depending on the medium</td> <td>6.5 bar (3/4") - 5.5 bar (2")</td> </tr> </tbody> </table>	Maximum length	min. Bending radius	20 m	135 mm (1/2") - 412 mm (2")	Temperature range	Working pressure	depending on the medium	6.5 bar (3/4") - 5.5 bar (2")	<p>Cleaning options</p> <p>CIP product, sterilizable with steam (135°C for max. 30 min)</p> <p>Conformity</p> <p>FDA CFR21 - 177.1550, USP Class VI, Execution in acc. with EN 12115, marking with „Ω/T“</p>
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ONE OF MANY SPECIAL SOLUTIONS.

Dockweiler's custom production makes it possible.

CONNECTING FLOW TO PURITY – FOR MORE THAN 60 YEARS

For over 60 years now, Dockweiler has been a leading manufacturer of stainless steel tube systems. The company is known around the world for the highest standards of quality: in tube systems, in advice, and in customer service.

Dockweiler is now offering rubber hoses that meet the same high standards to the pharmaceutical and biotech industries.

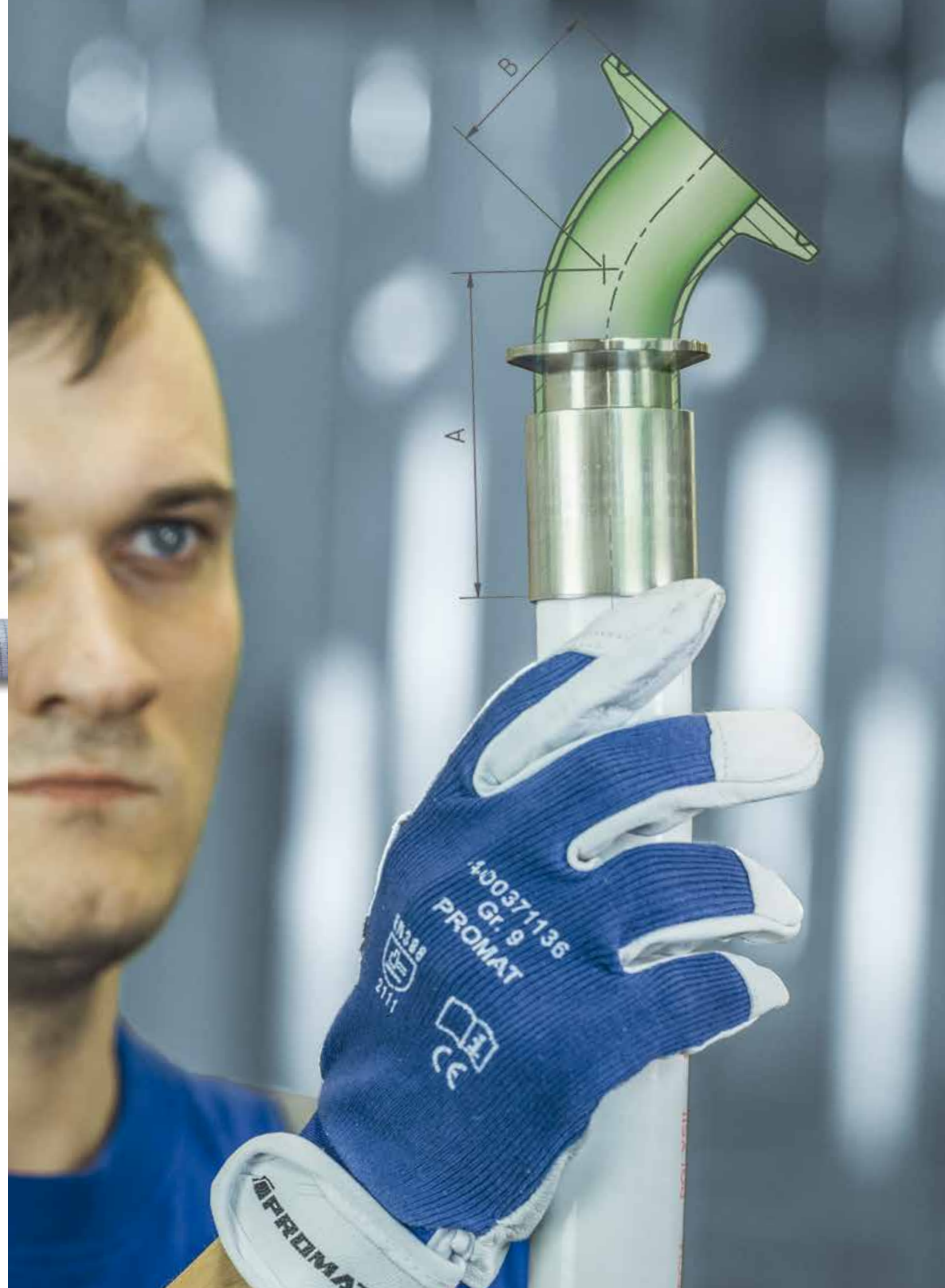


EVERY HOSE IS UNIQUE

When it comes to pharmaceutical hose lines, Dockweiler does not produce any standard items. We tailor each hose to the customer's specific requirements. We can also easily adapt the entire tube system to ensure maximum process reliability and eliminate dead space.

CUSTOM ADAPTATION AS STANDARD

In addition to the four standard connections, Dockweiler offers every option for adapting systems to fit specific processing equipment. Whether you need specific angles, reducers or even complex manifolds, Dockweiler can create whatever tube system you want – and always to the strictest standards of hygiene.



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