



the right connection

Fitting / Disassembly Instructions

Please note complete fitting instructions for each type of coupling

	<p>Preparation</p> <p>Deburr and remove sharp edges from pipe ends. Clean the pipe surface of impurities (bad coating) → No loose matter under sealing lips.</p>													
	<p>Mark half-width of pipe coupling on both pipe ends as fitting guide</p>													
	<p>Remove plastic packing straps and fit the pipe coupling over the pipe end</p> <ul style="list-style-type: none"> • Do not dismantle the pipe joint • Do not drop the pipe joint 													
<p>Pipe alignment</p>														
	<p>Setting gap between pipe ends</p> <p>A space between pipe ends can arise through misalignment, inaccurate assembly or changes in length. STRAUB couplings can bridge spaces between pipe ends; please note the R value given in the technical datasheets (strip inserts see page 43).</p>													
	<p>Axial movement ΔL STRAUB-FLEX and STRAUB-OPEN-FLEX couplings act as expansion joints within stated limits</p>	<p>Max. axial movement</p> <table border="1"> <thead> <tr> <th>STRAUB-Type</th> <th>mm ΔL</th> </tr> </thead> <tbody> <tr> <td>FLEX 1 / OPEN-FLEX 1</td> <td>5</td> </tr> <tr> <td>FLEX 2 / OPEN-FLEX 2</td> <td>10</td> </tr> <tr> <td>FLEX 3 / OPEN-FLEX 3</td> <td>15</td> </tr> <tr> <td>FLEX 3.5 / OPEN-FLEX 3.5</td> <td>15</td> </tr> <tr> <td>FLEX 4 / OPEN-FLEX 4</td> <td>20</td> </tr> </tbody> </table>	STRAUB-Type	mm ΔL	FLEX 1 / OPEN-FLEX 1	5	FLEX 2 / OPEN-FLEX 2	10	FLEX 3 / OPEN-FLEX 3	15	FLEX 3.5 / OPEN-FLEX 3.5	15	FLEX 4 / OPEN-FLEX 4	20
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	<p>Clamping range</p> <p>Connecting two pipes with equal outside diameter (see also datasheets)</p>													
	<p>Outside diameter difference</p> <p>Up to \varnothing 100 mm → 2 mm From \varnothing 100 mm → 2 % From \varnothing 300 mm → 6 mm</p>													
<p>Do not work beyond limits or add them together! Limits are for static loads and radially rigid pipes only. For dynamic forces like pressure surges and thrust, apply a safety factor (contact your local partner or the manufacturer).</p>														

	<p>Bolting</p> <p>Adjust pipe coupling then tighten bolts lightly and alternately with a ratched wrench or power wrench</p>
	<p>Do not rotate pipe coupling on the pipe once teeth are engaged</p>
	<p>Tighten the locking bolts with a torque wrench to the final prescribed torque rate engraved on the pipe coupling's outer surface; the torque wrench must be set accordingly</p>
<p>Failure prevention: Do not tighten bolts above prescribed torque rate. Trouble shooting: In case of leakage, clean pipe and sealing lips surface before installing pipe coupling again. Detachable and reusable (see disassembly instruction).</p>	
	<p>Safety measures before removing pipe joint</p> <p>Verify that there is no pressure inside the coupling. Discharge the pipeline. Protect yourself against the medium. Make sure that the pipes are not held by the coupling.</p>
	<p>Disassembly</p> <p>Loosen bolts alternately but do not remove completely. Do not rotate pipe coupling on pipe as long as teeth are engaged.</p>
	<p>Loosen teeth engagement (applicable for GRIP couplings only)</p> <p>Insert tool underneath casing and lift.</p> <p>Caution - Do not harm sealing sleeve!</p>
	<p>Remove pipe joint</p> <p>Slide pipe coupling to the side. Caution! Sealing lip may touch pipe end. Turn and move pipe joint smoothly. Clean pipe coupling and relubricate bolts with an appropriate lubricant before refitting.</p>
	<p>Caution</p> <p>Pipe couplings can not take shearing forces (see installation consideration). STRAUB pipe couplings are maintenance-free, i.e. never retighten bolts; contact factory for minimum wall thickness of pipe.</p>
	<p>Additional corrosion protection (see page 57): If risk of corrosion exists, for long term pipe coupling protection use shrink sleeves or protection tapes. This is especially necessary where couplings are used underground.</p>

For further information, please refer to the Straub Technical Manual.