General description

This machine elements in the form of compressed-air cushions for damping, holding, lifting and pressing operations, etc. are increasingly being used in place of single acting compressed-air cylinders, particularly where high forces are required in conjunction with ultra-flat installation dimensions and short-lift movements.
Instead of having a point load on the structure, as in the case of cylinders, this air cushions generate a constant surface pressure of max. 6 bar.

Technical characteristics

Length: 100 - 2000 mm
Lifting Force: 100 - 60,000 da N
Working Stroke: max. 75 mm
Connection: 1/4" - 3/8" - 1/2" - 3/4"
Pressure: max. 6 bar
Temperature: -10° till +55° C

Example

Air cushion with width 245 mm, length 2250 mm & height 17 mm gives
12.5 ton by 6 bar with a course of 75 mm
25.1 ton by 6 bar with a course of 15 mm
Mounting instructions
- remove retaining nut
- remove washer
- fit the thread socket through the hole in the relevant pressure plate
- fit washer over the projecting part of the threaded socket
- screw on retaining nut and tighten only by hand

Compressed-air connection
- use oil-free compressed-air
- wrap teflon tape around the projecting part of the socket
- screw the feeder fitting (= nipple) by hand onto the socket and tighten only by hand
- carry out pressure test
- in case of leakage: retighten nut and nipple by hand

Delivery situation

Situation after assembling

<table>
<thead>
<tr>
<th>Cushion size (mm)</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Maximum width of cushion</td>
<td>49</td>
<td>62</td>
<td>75</td>
<td>90</td>
<td>108</td>
<td>127</td>
<td>150</td>
<td>170</td>
<td>183</td>
<td>206</td>
<td>248</td>
</tr>
<tr>
<td>B Width of clamping plates</td>
<td>20</td>
<td>20</td>
<td>20</td>
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<td>25</td>
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<tr>
<td>C Installation height of clamping plates</td>
<td>15</td>
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<td>15</td>
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<td>16</td>
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<tr>
<td>D Recommended working stroke</td>
<td>7</td>
<td>15</td>
<td>20</td>
<td>25</td>
<td>27</td>
<td>30</td>
<td>35</td>
<td>50</td>
<td>55</td>
<td>60</td>
<td>75</td>
</tr>
<tr>
<td>E Lifting force in daN per cm working length at 6 bar</td>
<td>7.5</td>
<td>6.6</td>
<td>6.6</td>
<td>16</td>
<td>26.4</td>
<td>33</td>
<td>42.4</td>
<td>40</td>
<td>42.4</td>
<td>51.8</td>
<td>61</td>
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<tr>
<td>F Distance between pressure plates at full working stroke</td>
<td>22</td>
<td>30</td>
<td>35</td>
<td>40</td>
<td>45</td>
<td>45</td>
<td>50</td>
<td>65</td>
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<td>91</td>
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<tr>
<td>G Non carrying section</td>
<td>34</td>
<td>44</td>
<td>44</td>
<td>48</td>
<td>52</td>
<td>52</td>
<td>52</td>
<td>77</td>
<td>81</td>
<td>90</td>
<td>107</td>
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