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Hinweis:

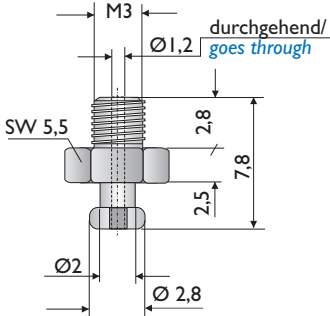
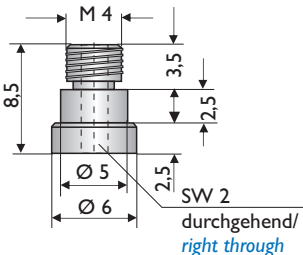
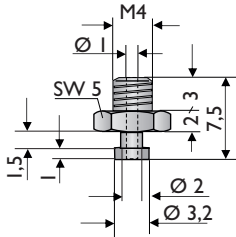
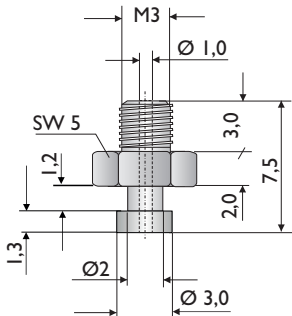
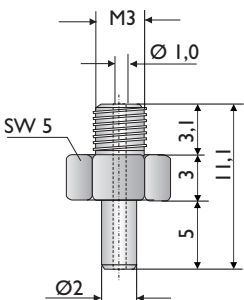
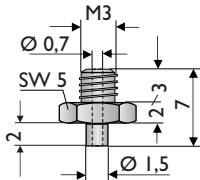
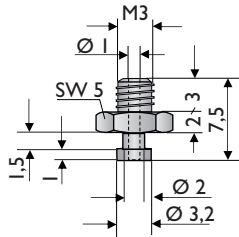
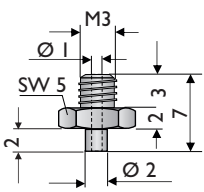
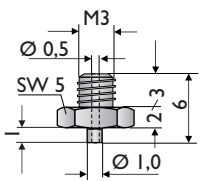
Unser gesamtes Sortiment finden Sie unter www.mf-automation.com

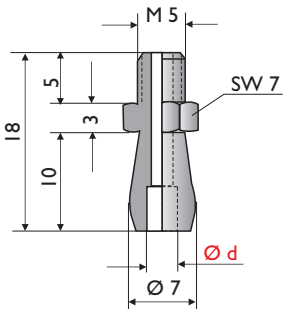
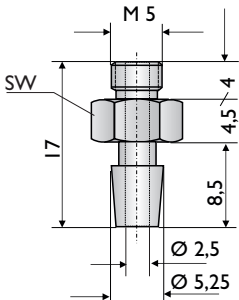
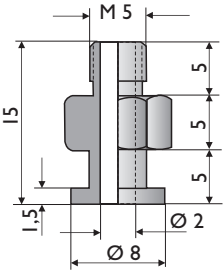
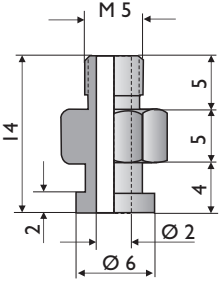
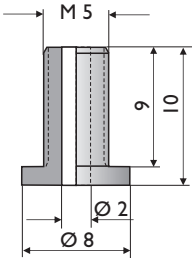
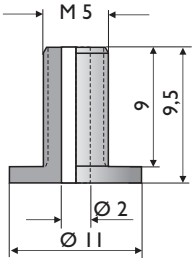
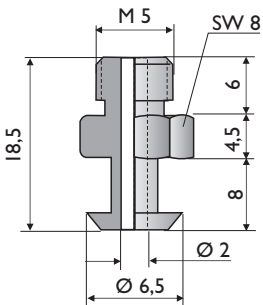
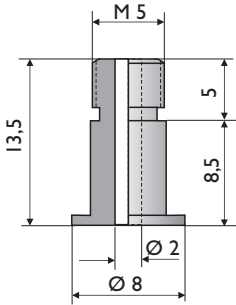
Note:

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Anschlussteile AG M3 - AG M4

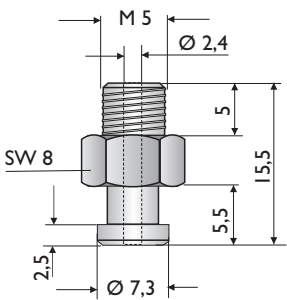
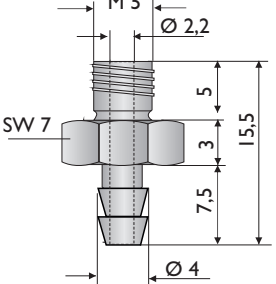
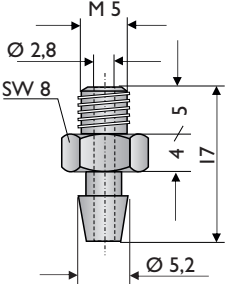
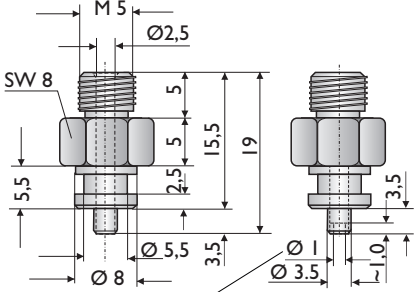
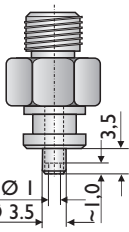
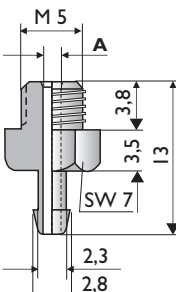
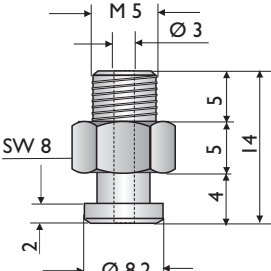
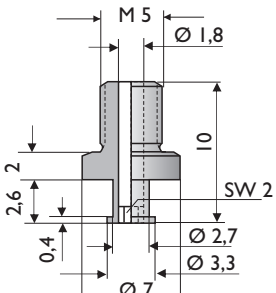
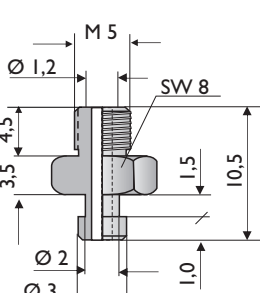
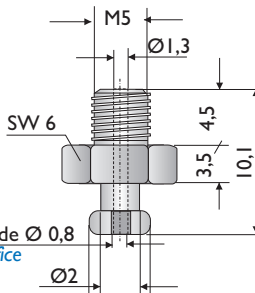
Fittings AG M3 - AG M4

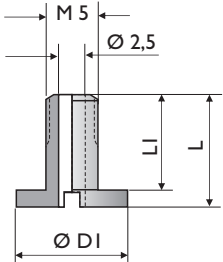
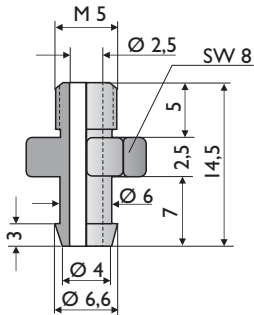
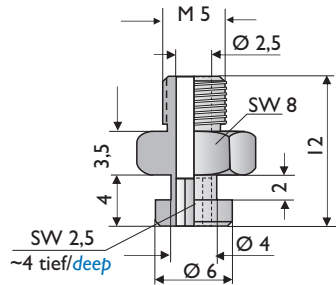
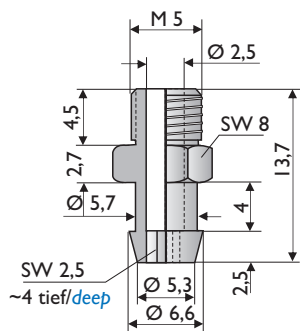
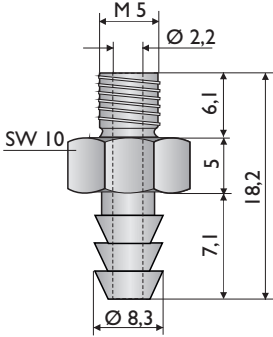
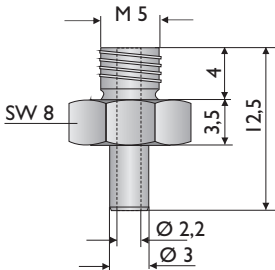
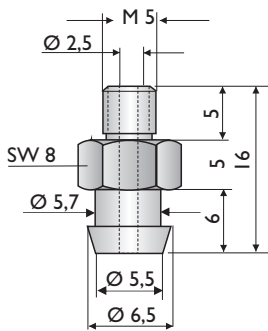
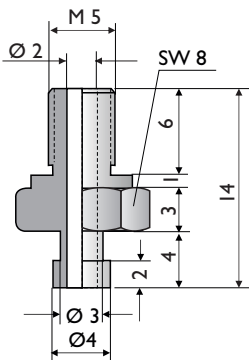
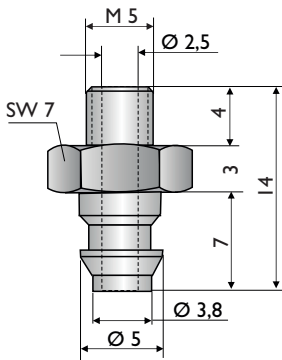
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<p>Art. No.: AT.0607 AG M3</p> 	<p>Art. No.: AT.0608 AG M3</p> 	<p>Art. No.: AT.0611 AG M3</p> 
<p>Art. No.: AT.0614 AG M3</p> 	<p>Art. No.: AT.0625 AG M3</p> 	<p>Art. No.: AT.0626 AG M3</p> 

<p>Art. No.: $\varnothing d$ 00 08 01 - AG M5 2,9 00 08 02 - AG M5 4,75</p> 	<p>Art. No.: 00 08 06 AG M5</p> 	<p>Art. No.: 00 08 236 AG M5</p> 
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Anschlussteile AG M5

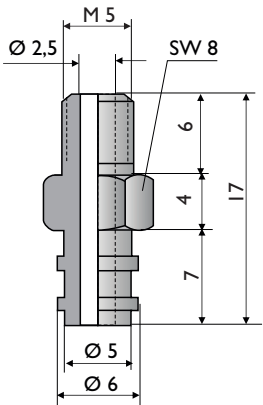
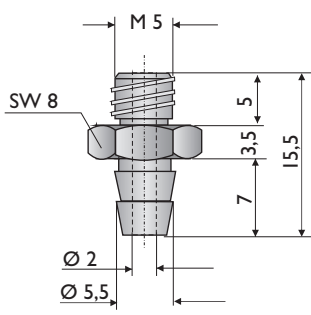
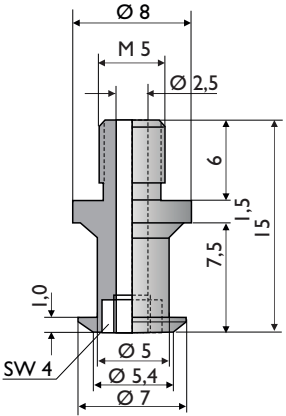
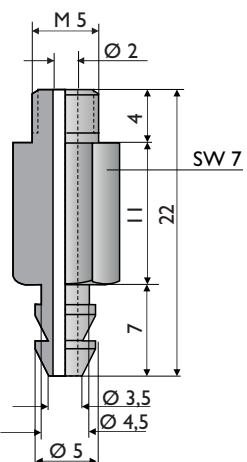
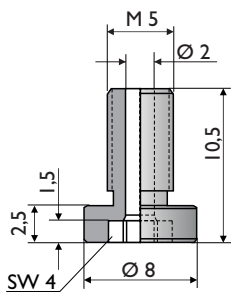
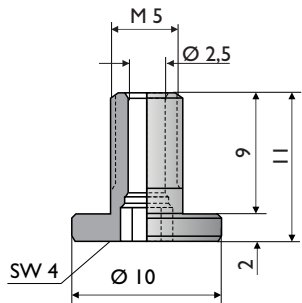
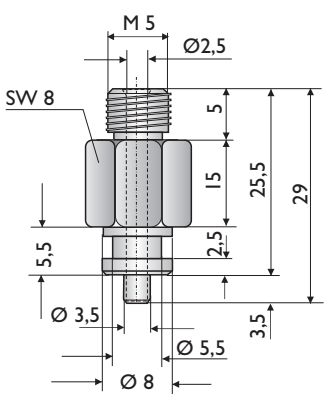
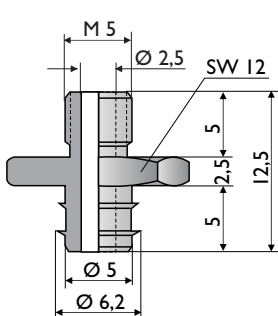
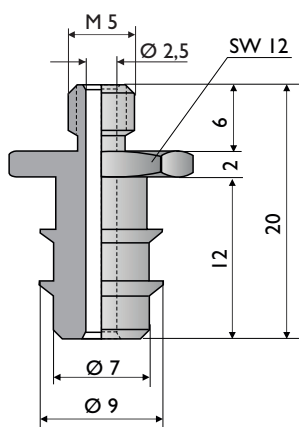
Fittings AG M5

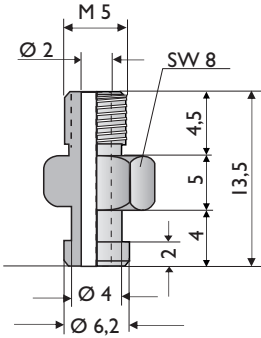
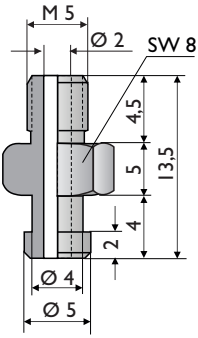
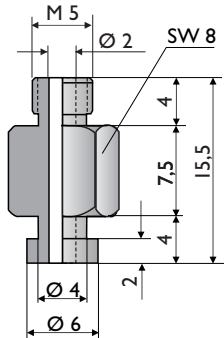
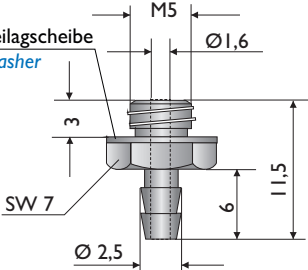
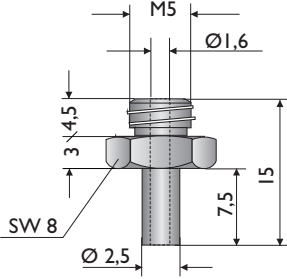
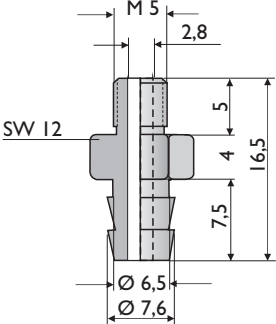
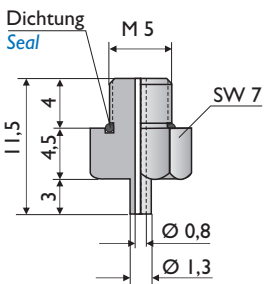
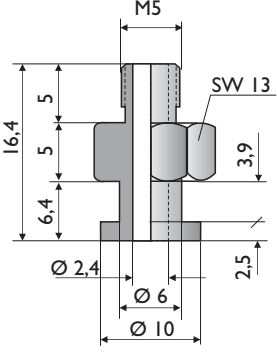
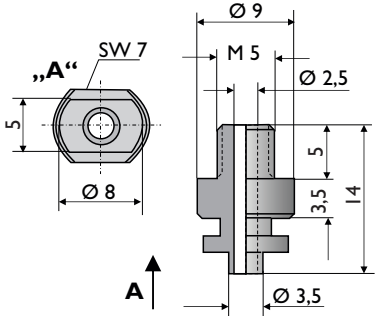
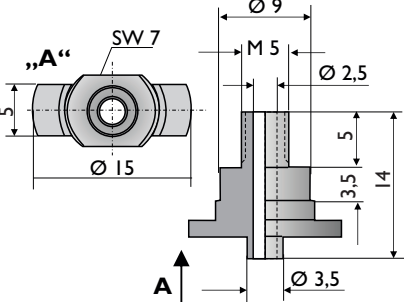
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<p>Art. No.: AT.0137 AG M5</p>  <p>Art. No.: AT.0137-I mit Festblende/ with fixed orifice</p>  <p>mit Festblende Ø 1 mm/ with fixed orifice dia. 1 mm</p>	<p>Art. No.: AT.0153.GR -AG M5 Saugbohrung $A = 1,6$ mm Suction hole $A = 1,6$ mm</p> <p>Art. No.: AT.0153.MSV -AG M5 Saugbohrung $A = 1,4$ mm Suction hole $A = 1,4$ mm</p> <p>Art. No.: AT.0153.Alu -AG M5 Saugbohrung $A = 1,4$ mm Suction hole $A = 1,4$ mm</p> <p>Art. No.: AT.0153.MS -AG M5 Saugbohrung $A = 1,4$ mm Suction hole $A = 1,4$ mm</p> 	<p>Art. No.: AT.0200 AG M5</p> 
<p>Art. No.: AT.0283 AG M5</p> 	<p>Art. No.: AT.0300 AG M5</p> 	<p>Art. No.: AT.0300-08 AG M5</p>  <p>mit Festblende Ø 0.8 with fixed orifice</p>

<div>Art. No.: AT.0310 - AG M5 AT.0311 - AG M5</div>	<div>DI 8 11</div> <div>L 9 11</div> <div>LI 7 9</div>	<div>Art. No.: AT.0317 AG M5</div>	<div>Art. No.: AT.0536 (VSA 30) AG M5</div>
			
<div>Art. No.: AT.0537 (VSA 40) AG M5</div>	<div>Art. No.: AT.0560 AG M5</div>	<div>Art. No.: AT.0606 AG M5</div>	
			
<div>Art. No.: AT.0613 AG M5 - Alu blank</div>	<div>Art. No.: AT.0621 AG M5</div>	<div>Art. No.: AT.0622 AG M5</div>	
			

Anschlussteile AG M5

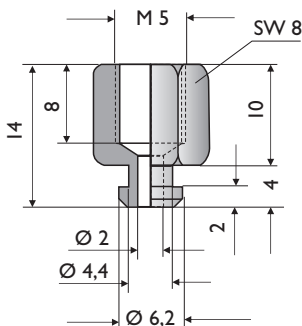
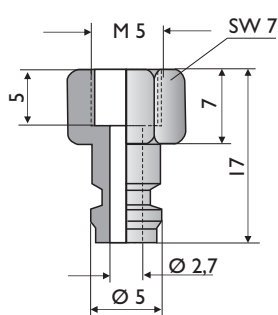
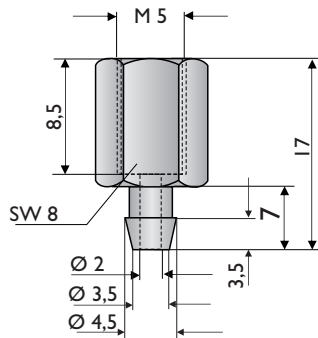
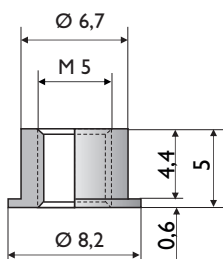
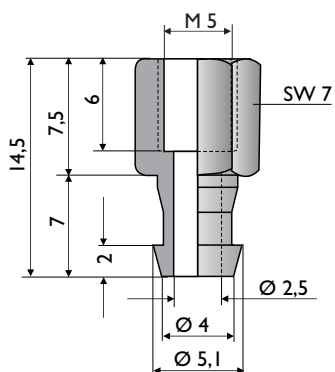
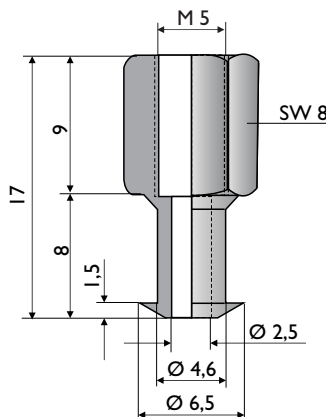
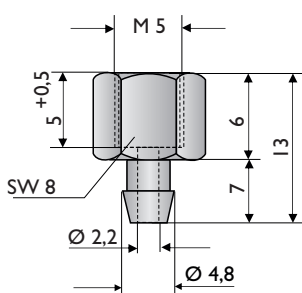
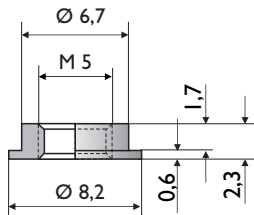
Fittings AG M5

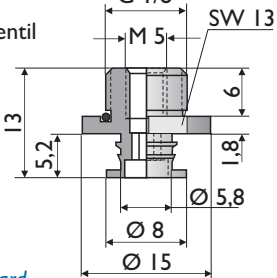
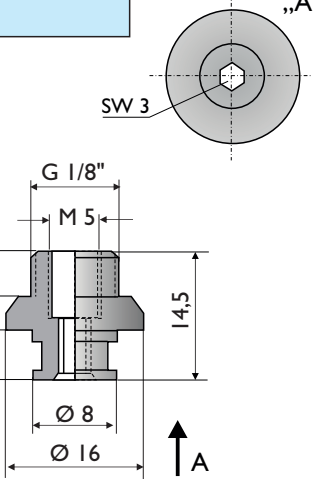
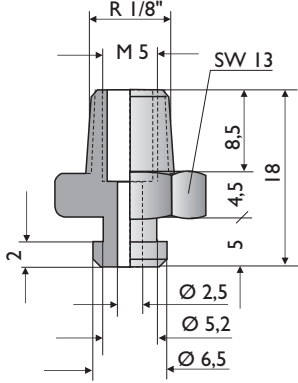
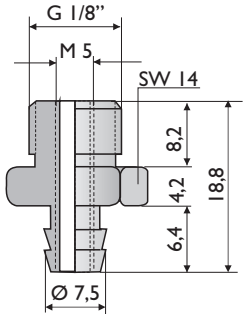
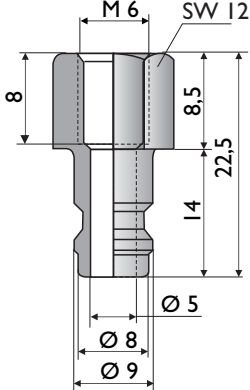
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<p>Art. No.: AT.0628 AG M5</p> 	<p>Art. No.: AT.0629 AG M5</p> 	<p>Art. No.: AT.0631 AG M5</p> 
<p>Art. No.: AT.0637 AG M5</p> 	<p>Art. No.: AT.0646 AG M5</p> 	<p>Art. No.: AT.0647 AG M5</p> 

<p>Art. No.: AT.0650 AG M5</p> 	<p>Art. No.: AT.0651 AG M5</p> 	<p>Art. No.: AT.0656 AG M5</p> 
<p>Art. No.: AT.0701.MSV AG M5 - Messing vernickelt AG M5 - <i>nickel-plated brass</i></p> 	<p>Art. No.: AT.0701.Alu AG M5 - Alu blank</p> 	<p>Art. No.: AT.0702 AG M5 - Alu blank</p> 
<p>Art. No.: AT.0711 AG M5</p> 	<p>Art. No.: AT.0713 AG M5 - Alu blank</p> 	<p>Art. No.: AT.0339.M5 AG M5</p>  <p>Art. No.: AT.0340.M5 AG M5</p> 

Anschlussteile IG M5

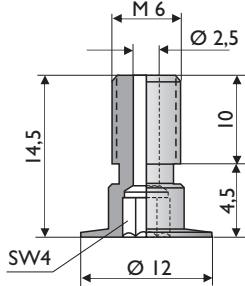
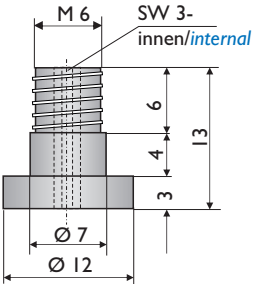
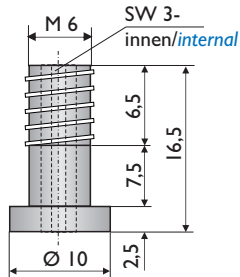
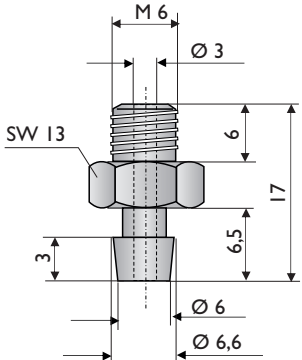
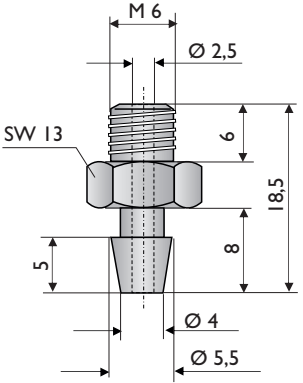
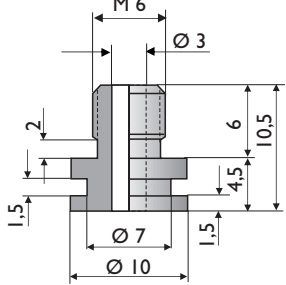
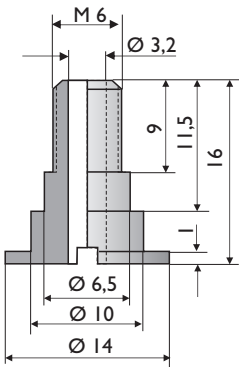
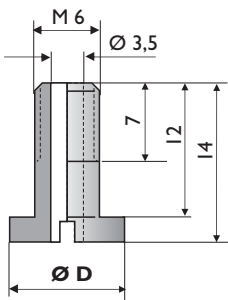
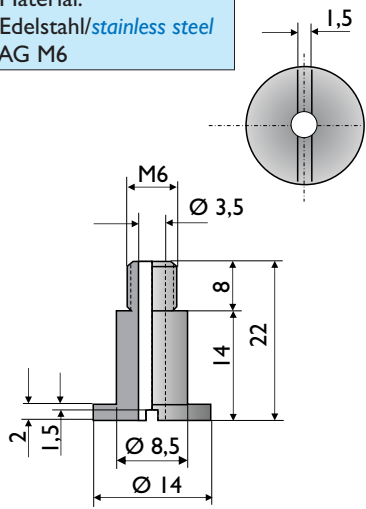
Fittings IG M5

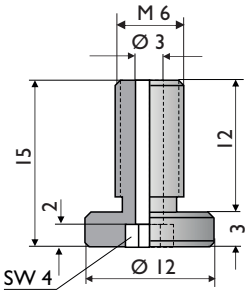
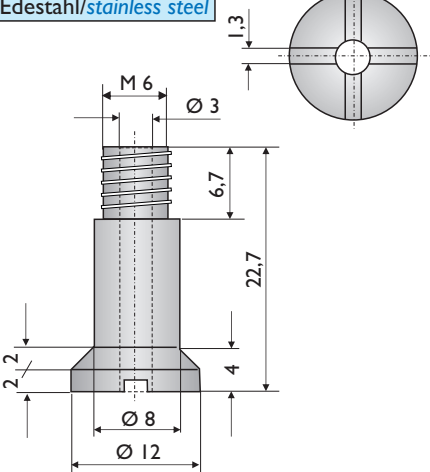
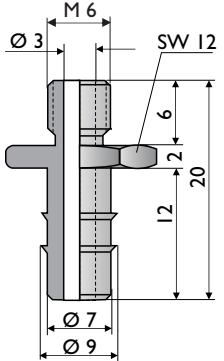
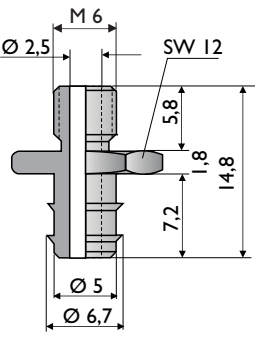
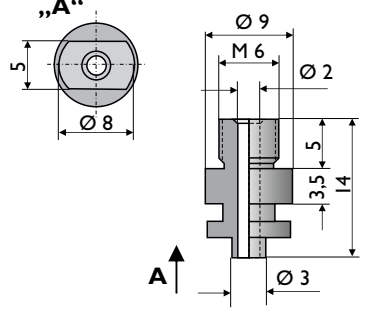
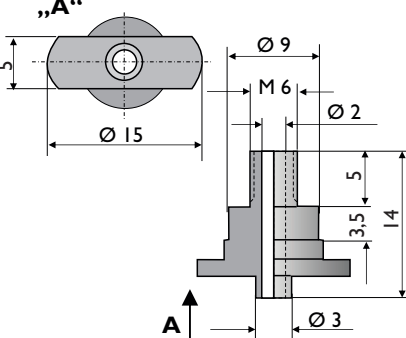
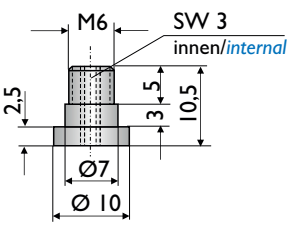
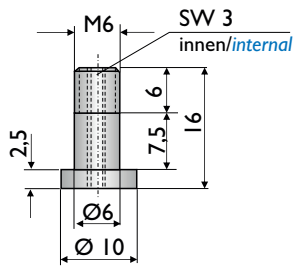
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<p>Art. No.: AT.0382 IG M5</p>  <p>Für Flachsauger/<i>for flat suction cups</i> Art. No.: F0.010.005 F0.015.010</p>	<p>Art. No.: AT.0638 IG M5</p> 	<p>Art. No.: AT.0639 IG M5</p> 
<p>Art. No.: AT.0705 IG M5</p> 	<p>Art. No.: AT.0715 IG M5</p>  <p>Für Flachsauger/<i>for flat suction cups</i> Art. No.: F0.010.005 F0.015.010</p>	

<p>Art. No.: AT.0802 IG M5</p> <p>1. AT.0802: Standard 2. AT.0802.FS: mit Filtersieb 3. AT.0802.V: mit Strömungsventil</p>  <p>1. AT.0802: Standard 2. AT.0802.FS: with built in mesh-filter 3. AT.0802.V: with check valve</p>	<p>Art. No.: AT.0250 IG M5</p> 	<p>Art. No.: AT.0188 IG M5 Material POM</p> 
<p>Art. No.: AT.0238 IG M5</p> 		
<p>Art. No.: AT.0703 IG M6</p> 		

Anschlussteile AG M6

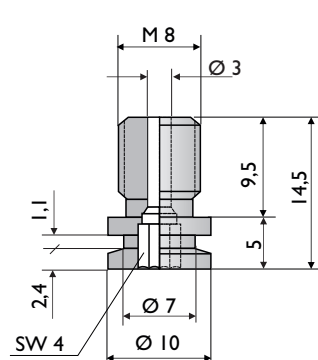
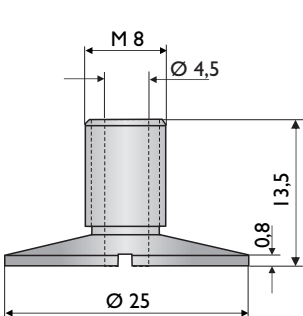
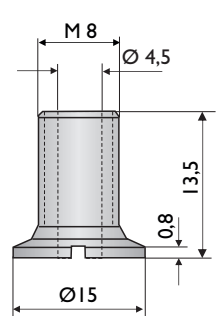
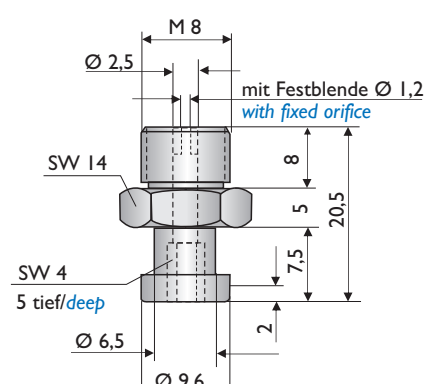
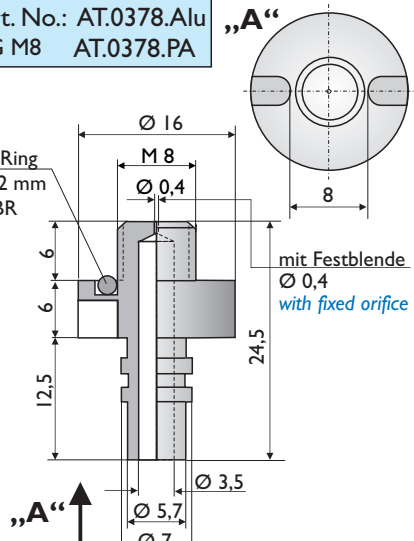
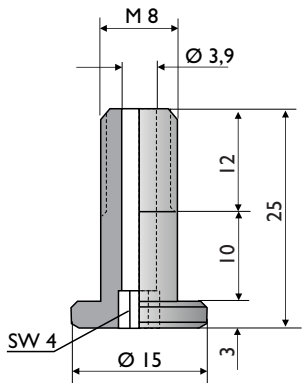
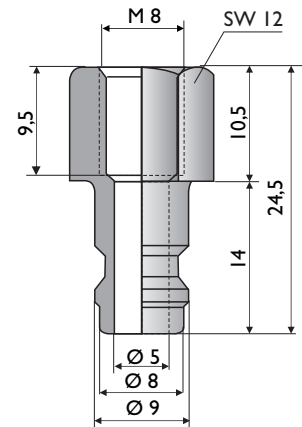
Fittings AG M6

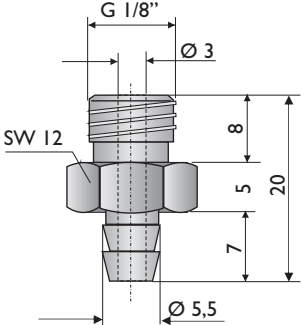
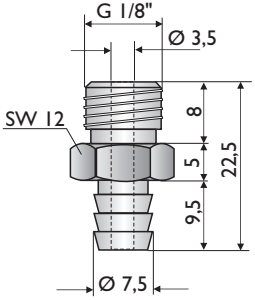
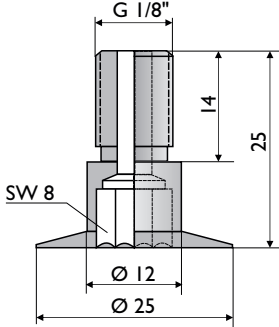
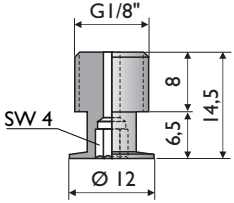
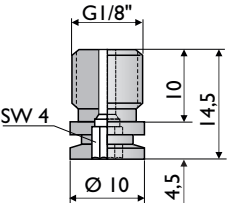
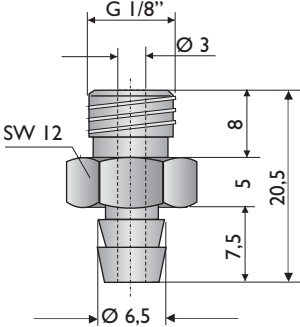
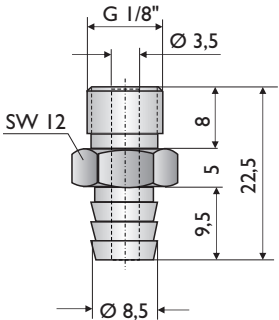
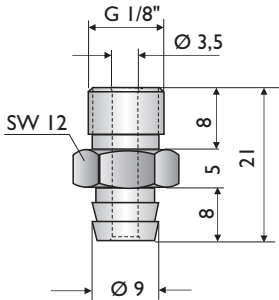
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<p>Art. No.: AT.0103 AG M6 Material Alu</p> 	<p>Art. No.: AT.0104 AG M6 Material Alu</p> 	<p>Art. No.: AT.0105 AG M6</p> 
<p>Art. No.: AT.0253 AG M6</p> 	<p>Art. No.: AT.0312.MSV - Ø D = 10 mm AG M6 AT.0312.Alu - Ø D = 11 mm</p> 	<p>Art. No.: AT.0641.ES Material: <i>Edelstahl/stainless steel</i> AG M6</p> 

<p>Art. No.: AT.0600 AG M6</p> 	<p>Art. No.: AT.0601 AG M6 Edelstahl/stainless steel</p> 	<p>Art. No.: AT.0643 AG M6</p> 
<p>Art. No.: AT.0648 AG M6</p> 	<p>Art. No.: AT.0339 AG M6</p> 	<p>Art. No.: AT.0340 AG M6</p> 
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Anschlussteile AG M8 - IG M8

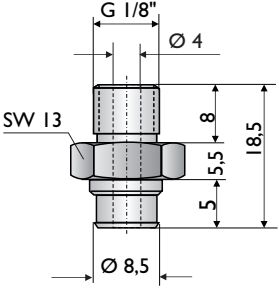
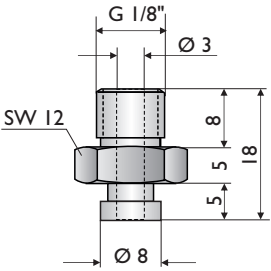
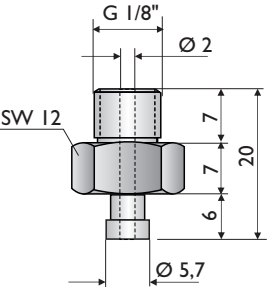
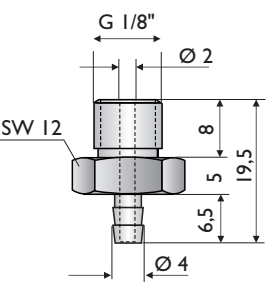
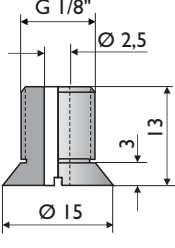
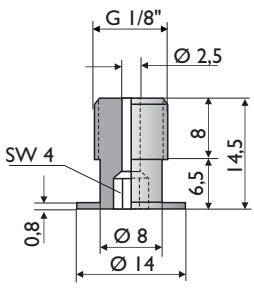
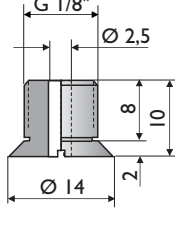
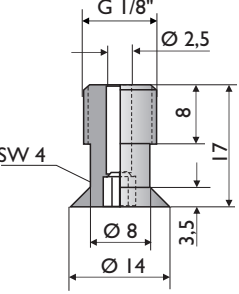
Fittings AG M8 - IG M8

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<p>Art. No.: AT.0001-2 AG M8</p> 	<p>Art. No.: AT.0378.Alu AG M8 AT.0378.PA</p> <p>„A“</p> 	<p>Art. No.: AT.0636 AG M8</p> 
<p>Art. No.: AT.0704 IG M8</p> 		

<p>Art. No.: 00 08 03 AG 1/8"</p> 	<p>Art. No.: 00 08 05 AG 1/8"</p> 	<p>Art. No.: 00 08 44 AG 1/8" Material Alu</p> 
<p>Art. No.: 00 08 60 AG 1/8"</p> 	<p>Art. No.: 00 08 61 AG 1/8"</p> 	<p>Art. No.: 00 08 67 AG 1/8"</p> 
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Anschlussteile AG 1/8"

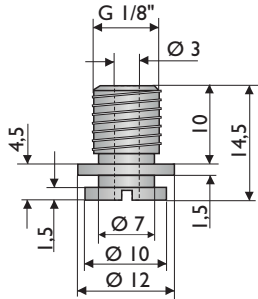
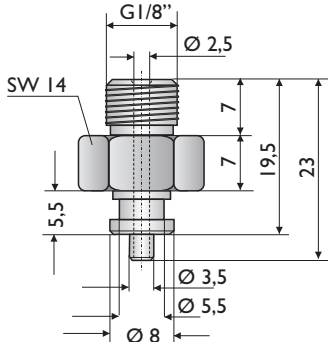
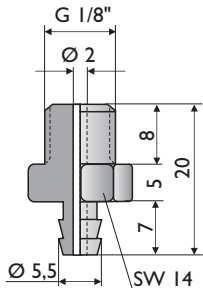
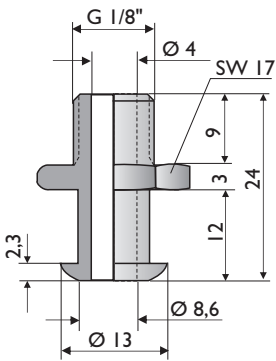
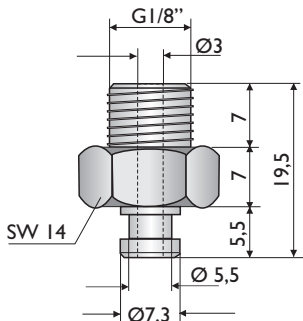
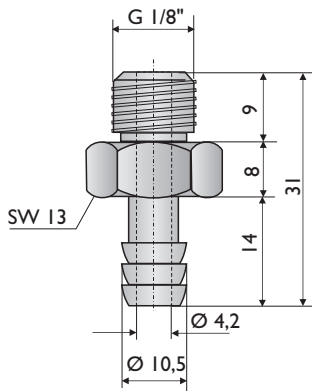
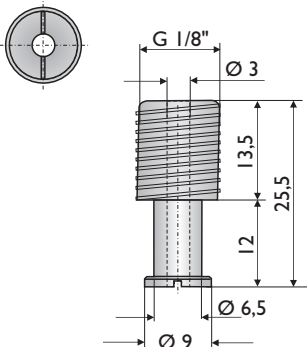
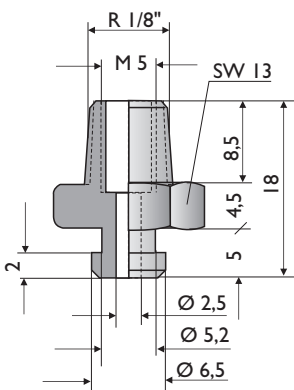
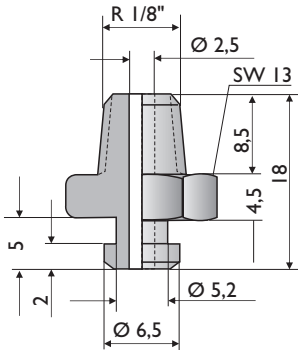
Fittings AG 1/8"

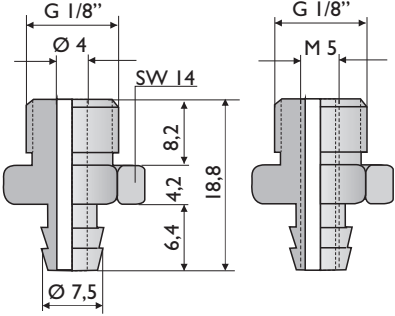
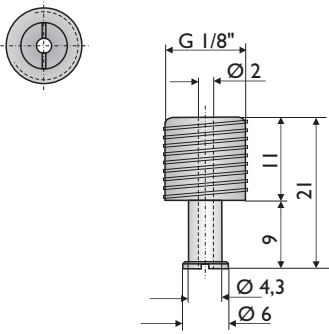
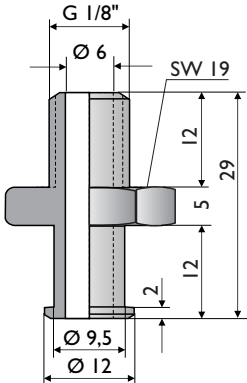
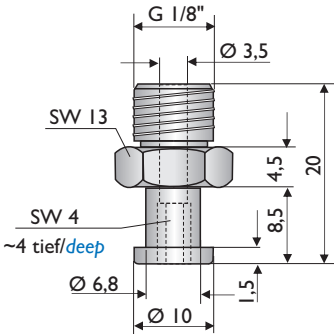
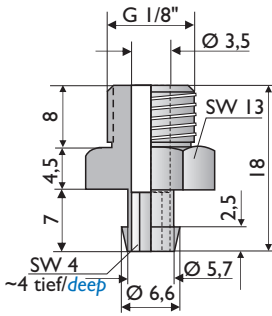
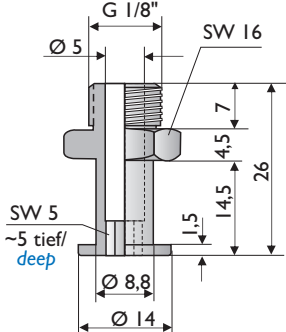
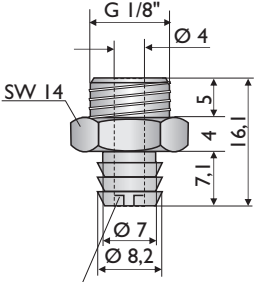
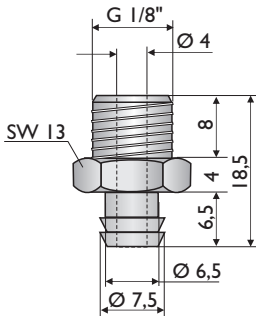
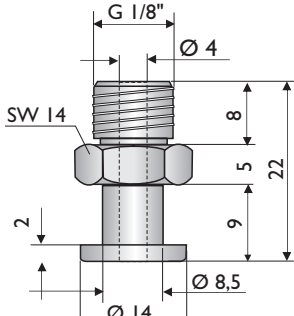
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<p>Art. No.: 00 08 239 AG 1/8"</p> 	<p>Art. No.: 00 08 243 AG 1/8"</p> 	<p>Art. No.: 00 08 244 AG 1/8"</p> 
<p>Art. No.: 00 08 246 AG 1/8"</p> 	<p>Art. No.: 00 08 247 AG 1/8"</p> 	

<p>Art. No.: AT.0001-I AG 1/8"</p> <p>mit Festblende Ø 1mm, 1,5 mm tief/deep with fixed orifice</p> <p>SW 14</p> <p>SW 4 5 tief/deep</p> <p>Ø 2,5</p> <p>Ø 6,5</p> <p>Ø 9,6</p> <p>8</p> <p>7,5</p> <p>2</p> <p>20,5</p>	<p>Art. No.: AT.0002.SW5 AG 1/8"</p> <p>SW 17</p> <p>innen/internal SW 5</p> <p>Ø 4,5</p> <p>Ø 8,7</p> <p>Ø 13</p> <p>9</p> <p>14,5</p> <p>2</p> <p>28</p>	<p>Art. No.: AT.0003 AG 1/8" Material Alu blank</p> <p>SW 14</p> <p>SW 4</p> <p>Ø 4</p> <p>Ø 6</p> <p>Ø 6,5</p> <p>7,5</p> <p>6</p> <p>6,5</p> <p>20</p>
<p>Art. No.: AT.0006 AG 1/8" Material Alu</p> <p>SW 14</p> <p>SW 4</p> <p>Ø 2,5</p> <p>Ø 5</p> <p>Ø 10</p> <p>8</p> <p>6,5</p> <p>2</p> <p>19,5</p>	<p>Art. No.: AT.0009.SW 14 AG 1/8"</p> <p>SW 14</p> <p>SW 4</p> <p>Ø 2</p> <p>Ø 4,4</p> <p>Ø 6,2</p> <p>8</p> <p>4,5</p> <p>2</p> <p>17,5</p>	<p>Art. No.: AT.0015 AG 1/8"</p> <p>SW 19</p> <p>SW 4</p> <p>Ø 4</p> <p>Ø 7</p> <p>Ø 9,5</p> <p>7</p> <p>7,5</p> <p>2</p> <p>18,5</p>
<p>Art. No.: AT.0021 AG 1/8"</p> <p>SW 14</p> <p>SW 4</p> <p>Ø 2</p> <p>Ø 5</p> <p>Ø 8</p> <p>8</p> <p>5,5</p> <p>2</p> <p>17,5</p>	<p>Art. No.: AT.0063 AG 1/8"</p> <p>SW 13</p> <p>SW 4</p> <p>Ø 2,5</p> <p>Ø 5,2</p> <p>Ø 6,5</p> <p>8</p> <p>6</p> <p>1,5</p> <p>19</p>	<p>Art. No.: AT.0064 AG 1/8"</p> <p>SW 13</p> <p>SW 4</p> <p>Ø 3</p> <p>Ø 5</p> <p>Ø 8</p> <p>8</p> <p>5</p> <p>1,5</p> <p>17</p>

Anschlussteile AG 1/8"

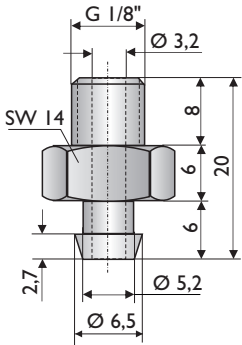
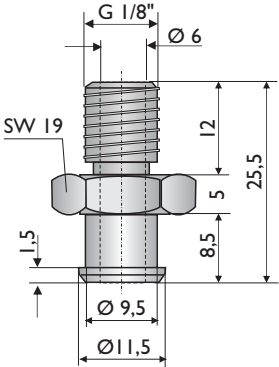
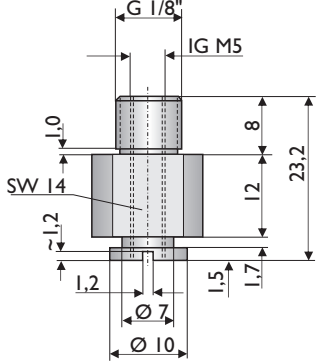
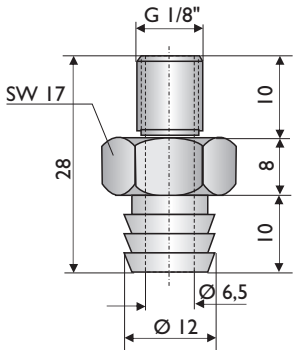
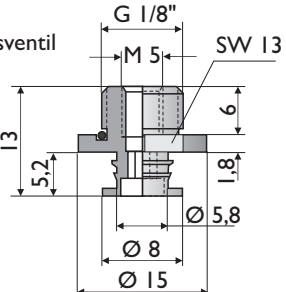
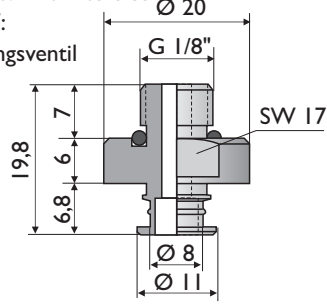
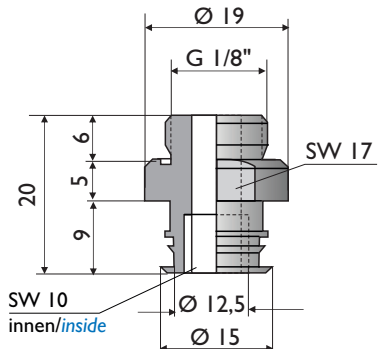
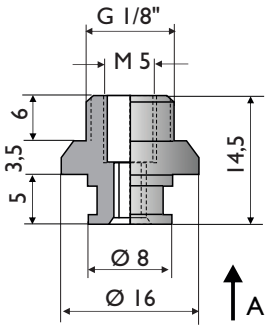
Fittings AG 1/8"

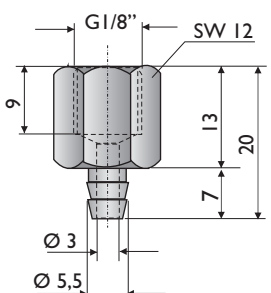
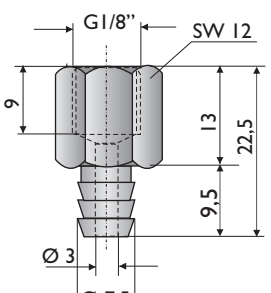
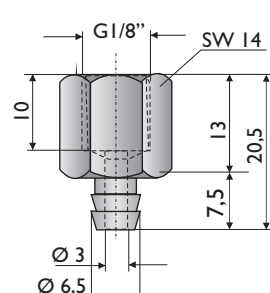
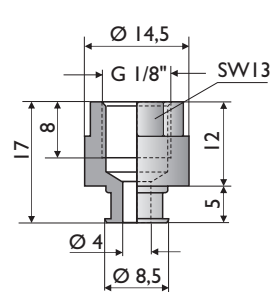
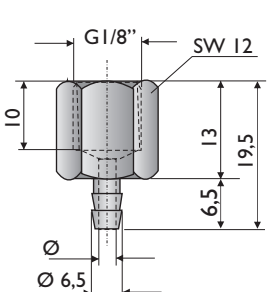
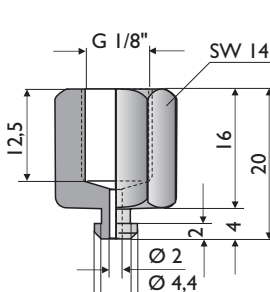
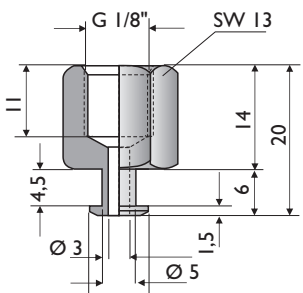
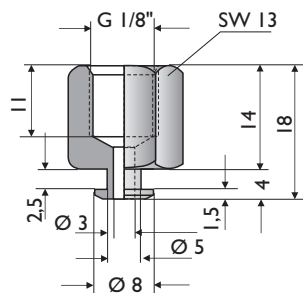
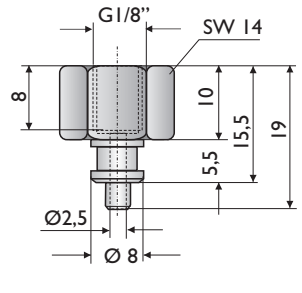
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<p>Art. No.: AT.0093 AG 1/8"</p> 	<p>Art. No.: AT.0095 AG 1/8"</p> 	<p>Art. No.: AT.0132 AG 1/8"</p> 
<p>Art. No.: AT.0147 AG 1/8"</p> 	<p>Art. No.: AT.0188 AG R 1/8" Material POM</p> 	<p>Art. No.: AT.0189 AG R 1/8" Material POM</p> 

<p>Art. No.: AT.0238 AG 1/8"</p>	<p>Art. No.: AT.0238 IG M5-AG 1/8"</p>	<p>Art. No.: AT.0242 AG 1/8"</p>	<p>Art. No.: AT.0352 AG 1/8"</p>
			
<p>Art. No.: AT.0538 (VSA 60) AG 1/8"</p>		<p>Art. No.: AT.0539 (VSA 70) AG 1/8"</p>	<p>Art. No.: AT.0541 (VSA 90) AG 1/8"</p>
			
<p>Art. No.: AT.0567-0.6 AG 1/8"</p>		<p>Art. No.: AT.0567-4 AG 1/8"</p>	<p>Art. No.: AT.0612 AG 1/8"</p>
 <p>mit Festblende Ø 0,6mm/ with fixed orifice</p>			

Anschlussteile AG 1/8"

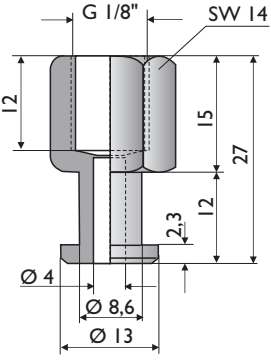
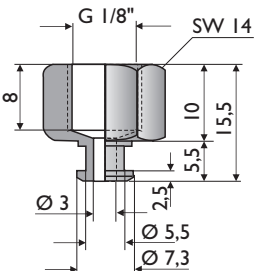
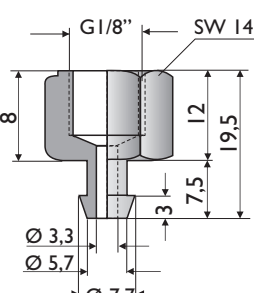
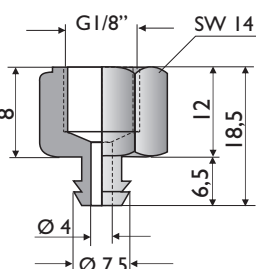
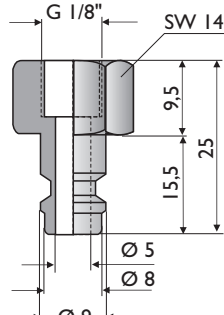
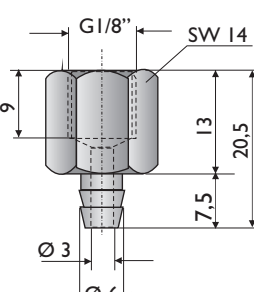
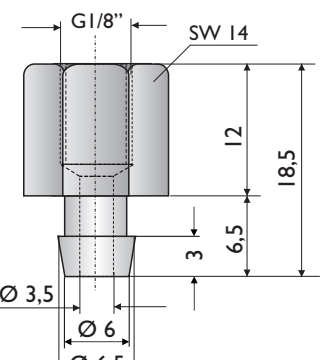
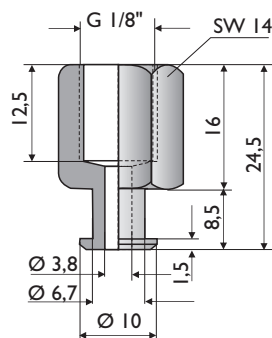
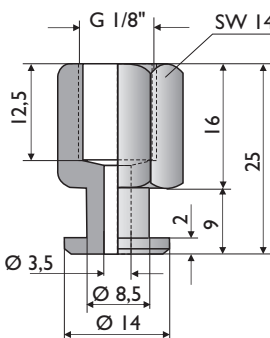
Fittings AG 1/8"

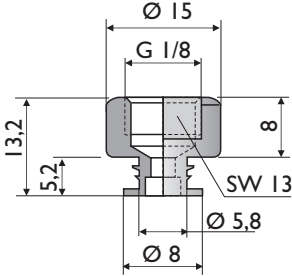
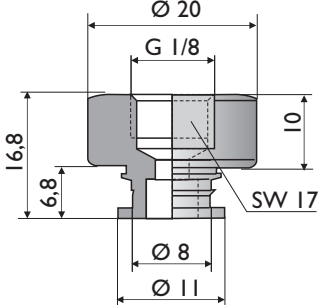
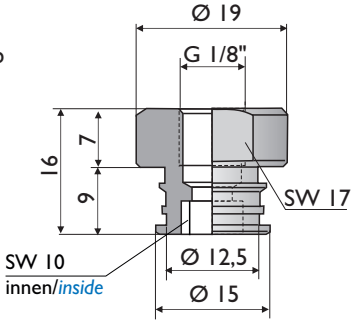
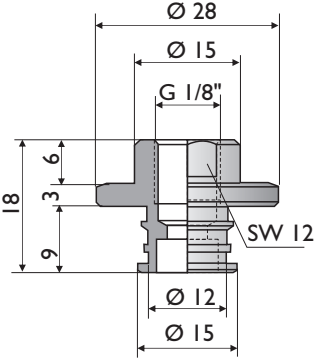
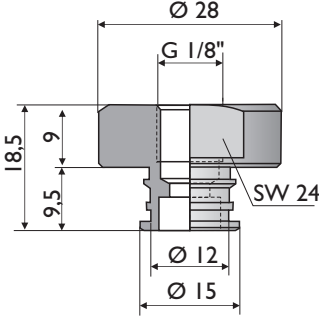
<p>Art. No.: AT.0632 AG 1/8"</p> 	<p>Art. No.: AT.0645 AG 1/8"</p> 	<p>Art. No.: AT.0717 AG 1/8"</p>  <p>Spezialhalter für Balgensauger/ <i>Special fitting for:</i> Art. No.: BI0.018.001</p>
<p>Art. No.: AT.0723 AG 1/8"</p> 	<p>Art. No.: AT.0802 AG 1/8"</p> <p>1. AT.0802: Standard 2. AT.0802.FS: mit Filtersieb 3. AT.0802.V: mit Strömungsventil</p>  <p><i>1. AT.0802: Standard</i> <i>2. AT.0802.FS: with mesh filter</i> <i>3. AT.0802.V: with check valve</i></p>	
<p>Art. No.: AT.0814 AG 1/8"</p> <p>1. AT.0814: Standard 2. AT.0814.FS: mit Filtersieb 3. AT.0814.V: mit Strömungsventil</p>  <p><i>1. AT.0814: Standard</i> <i>2. AT.0814.FS: with mesh filter</i> <i>3. AT.0814.V: with check valve</i></p>	<p>Art. No.: AT.0845 AG 1/8"</p> <p>1. AT.0845.FS: mit Filtersieb</p>  <p><i>1. AT.0845.FS: with mesh filter</i></p>	<p>Art. No.: AT.0250 AG 1/8"</p>  <p>„A“</p> <p>SW 3</p> <p>SW 10 innen/inside</p> <p>↑ A</p>

<p>Art. No.: 00 08 04 IG 1/8"</p> 	<p>Art. No.: 00 08 14 IG 1/8"</p> 	<p>Art. No.: 00 08 64 IG 1/8"</p> 
<p>Art. No.: 00 08 132 IG 1/8"</p> 	<p>Art. No.: 00 08 240 IG 1/8"</p> 	<p>Art. No.: AT.0007 IG 1/8"</p> 
<p>Art. No.: AT.0061 IG 1/8"</p> 	<p>Art. No.: AT.0065 IG 1/8"</p> 	<p>Art. No.: AT.0086 IG 1/8"</p> 

Anschlussteile IG 1/8"

Fittings IG 1/8"

<p>Art. No.: AT.0092 IG 1/8"</p> 	<p>Art. No.: AT.0096 IG 1/8"</p> 	<p>Art. No.: AT.0109 IG 1/8"</p> 
<p>Art. No.: AT.0110 IG 1/8"</p> 	<p>Art. No.: AT.0240 IG 1/8"</p> 	<p>Art. No.: AT.0206 IG 1/8"</p> 
<p>Art. No.: AT.0615 IG 1/8"</p> 	<p>Art. No.: AT.0619 IG 1/8"</p> 	<p>Art. No.: AT.0620 IG 1/8"</p> 

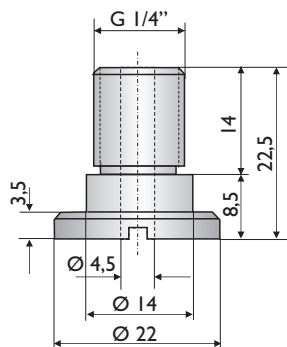
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<p>Art. No.: AT.0835 IG 1/8"</p> <p>1. AT.0835.FS: mit Filtersieb</p>  <p><i>1. AT.0835.FS: with mesh filter</i></p>	<p>Art. No.: AT.0812 IG 1/8"</p> <p>1. AT.0812: Standard</p>  <p><i>1. AT.0812: Standard</i></p>
<p>Art. No.: AT.0813 IG 1/8"</p> <p>1. AT.0813: Standard 2. AT.0813.FS: mit Filtersieb 3. AT.0813.V: mit Strömungsventil</p>  <p><i>1. AT.0813: Standard 2. AT.0813.FS: with mesh filter 3. AT.0813.V: with check valve</i></p>	

Anschlussteile AG 1/4"

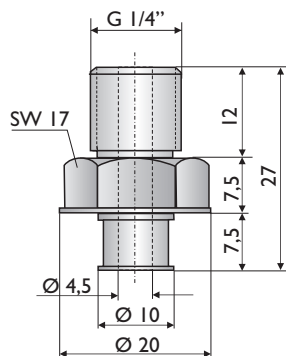
Fittings AG 1/4"

<p>Art. No.: 00 08 09 AG 1/4"</p>	<p>Art. No.: 00 08 10 AG 1/4"</p>	<p>Art. No.: 00 08 15 AG 1/4"</p>
<p>Art. No.: 00 08 18 AG 1/4"</p>	<p>Art. No.: 00 08 19 AG 1/4"</p>	<p>Art. No.: 00 08 20 AG 1/4"</p>
<p>Art. No.: 00 08 22 AG 1/4"</p>	<p>Art. No.: 00 08 24 AG 1/4"</p>	<p>Art. No.: 00 08 26 AG 1/4"</p>

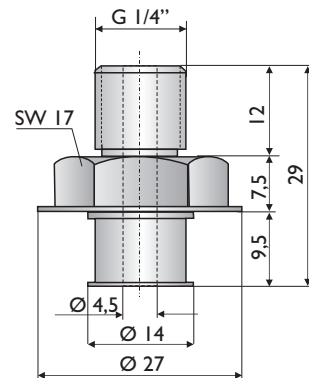
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AG 1/4"



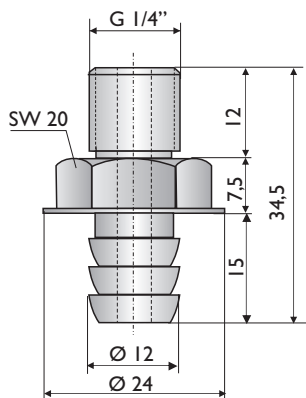
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AG 1/4"



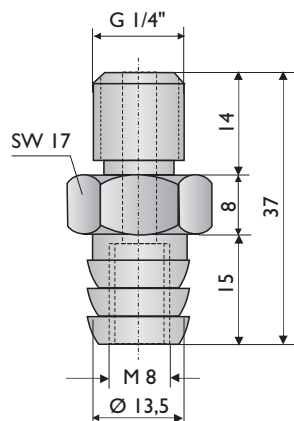
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AG 1/4"



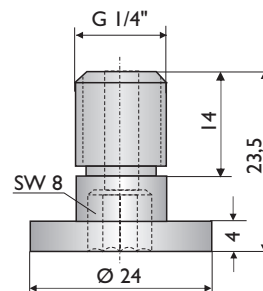
Art. No.: 00 08 148
AG 1/4"



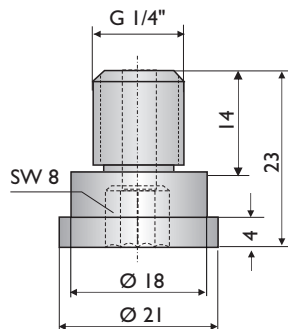
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AG 1/4"



Art. No.: 00 08 248
AG 1/4"



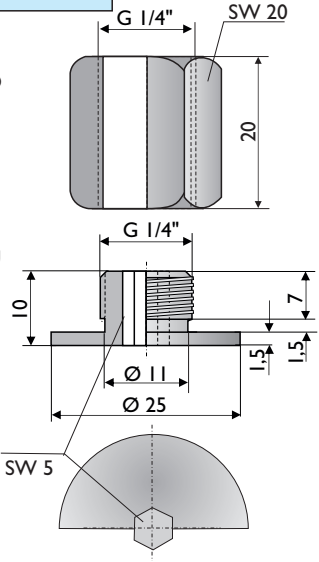
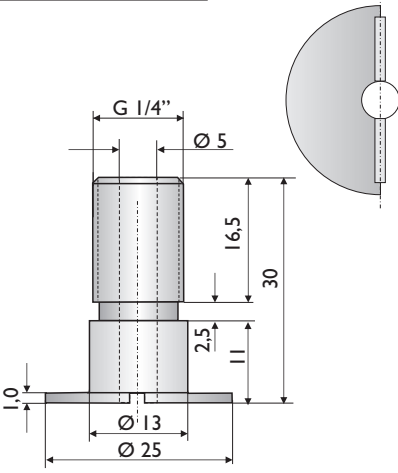
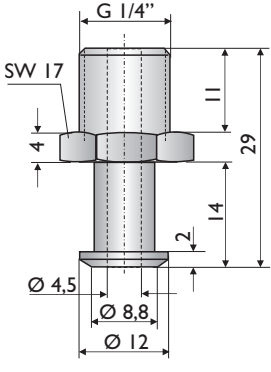
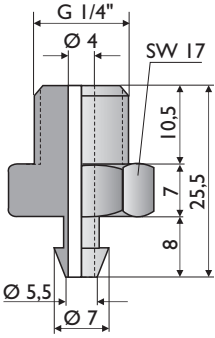
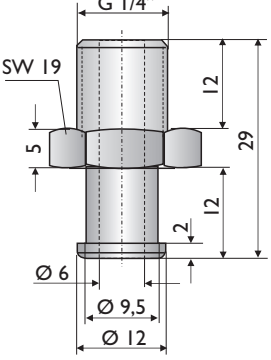
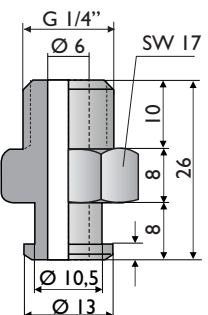
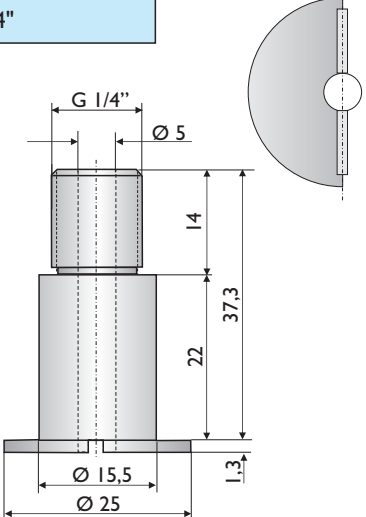
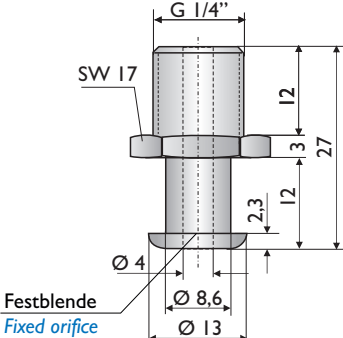
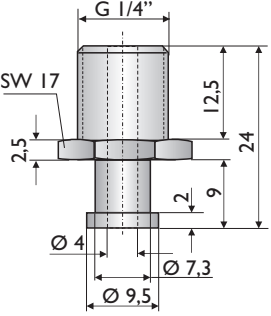
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AG 1/4"



Anschlussteile AG 1/4"

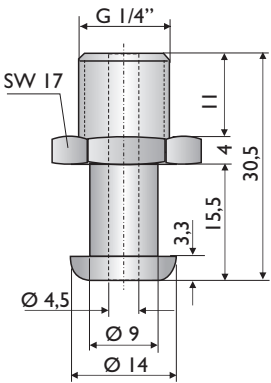
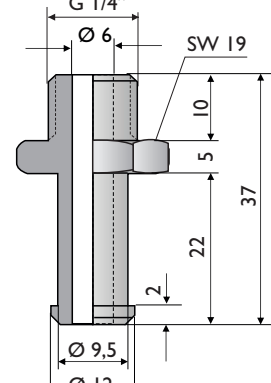
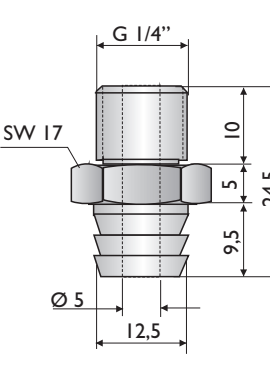
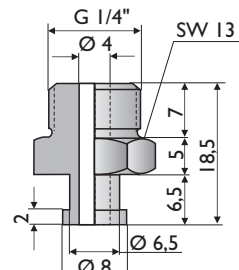
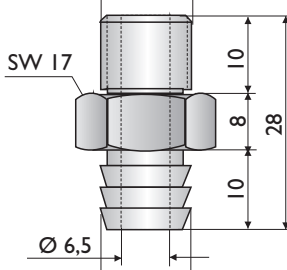
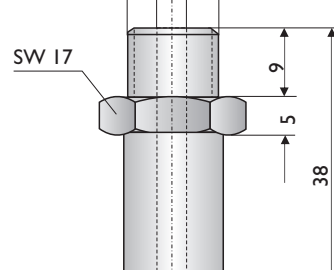
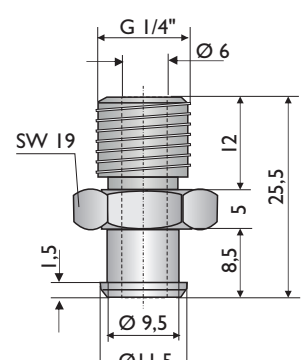
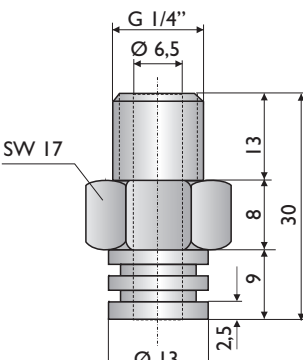
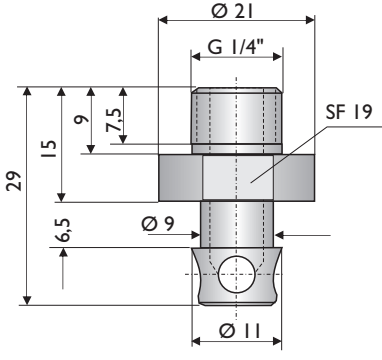
Fittings AG 1/4"

<p>Art. No.: AT.0010 AG 1/4"</p>	<p>Art. No.: AT.0017 AG 1/4"</p>	<p>Art. No.: AT.0049 AG 1/4"</p>
<p>Art. No.: AT.0088 AG 1/4"</p>	<p>Art. No.: AT.0097 AG 1/4"</p>	<p>Art. No.: AT.0145 AG 1/4"</p>
<p>Art. No.: AT.0152 AG 1/4"</p>	<p>Art. No.: AT.0175 AG 1/4"</p>	<p>Art. No.: AT.0176 AG 1/4"</p>

<p>Art. No.: AT.0182.O AT.0182.U</p> 	<p>Art. No.: AT.0184 AG 1/4"</p> 	<p>Art. No.: AT.0190 AG 1/4"</p> 
<p>Art. No.: AT.0194 AG 1/4"</p> 	<p>Art. No.: AT.0204 AG 1/4"</p> 	<p>Art. No.: AT.0213 AG 1/4"</p> 
<p>Art. No.: AT.0216 AG 1/4"</p> 	<p>Art. No.: AT.0249 AG 1/4"</p>  <p>Art. No.: AT.0249-1,5 AG 1/4" mit Festblende Ø 1,5 mm unten with fixed orifice dia. 1,5 mm below</p>	<p>Art. No.: AT.0274 AG 1/4"</p> 

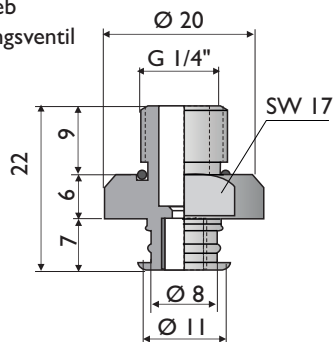
Anschlussteile AG 1/4"

Fittings AG 1/4"

<p>Art. No.: AT.0281 AG 1/4"</p> 	<p>Art. No.: AT.0359 AG 1/4"</p> 	<p>Art. No.: AT.0451 AG 1/4"</p> 
<p>Art. No.: AT.0504 AG 1/4"</p> 	<p>Art. No.: AT.0603 AG 1/4"</p> 	<p>Art. No.: AT.0609 AG 1/4"</p> 
<p>Art. No.: AT.0634 AG 1/4"</p> 	<p>Art. No.: AT.0712 AG 1/4"</p> 	<p>Art. No.: AT.0850 AG 1/4"</p> 

Art. No.: AT.0823
AG 1/4"

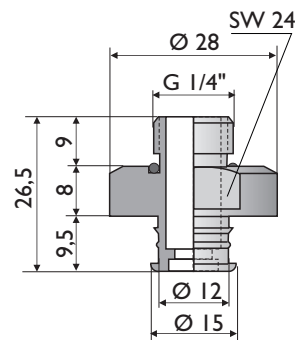
1. AT.0823: Standard
2. AT.0823.FS: mit Filtersieb
3. AT.0823.V: mit Strömungsventil



1. AT.0823: Standard
 2. AT.0823.FS: with mesh filter
 3. AT.0823.V: with check valve

Art. No.: AT.0824
AG 1/4"

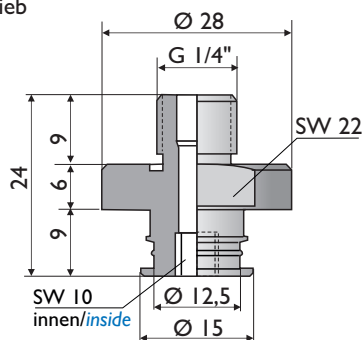
1. AT.0824: Standard
2. AT.0824.FS: mit Filtersieb
3. AT.0824.V: mit Strömungsventil



1. AT.0824: Standard
 2. AT.0824.FS: with mesh filter
 3. AT.0824.V: with check valve

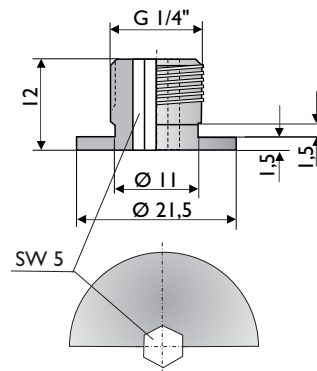
Art. No.: AT.0846
AG 1/4"

1. AT.0846.FS: mit Filtersieb

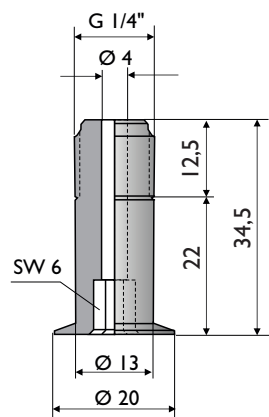


1. AT.0846.FS: with mesh filter

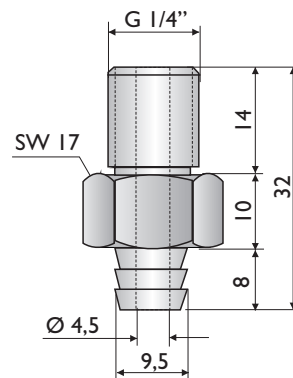
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AG 1/4", Alu



Art. No.: AT.0141
AG 1/4"

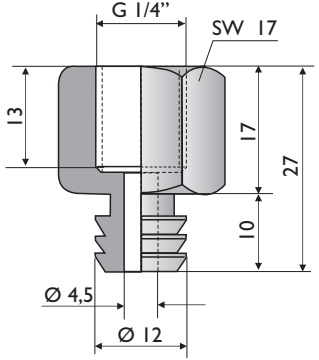
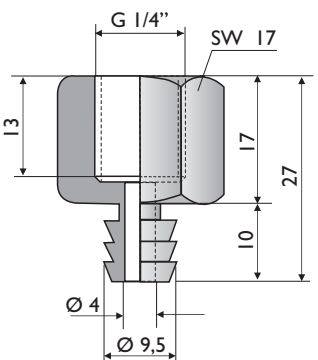
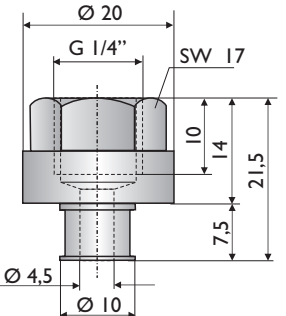
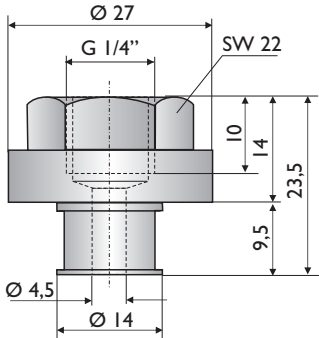
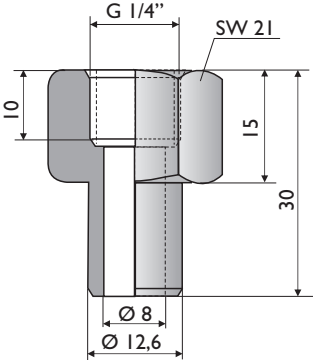
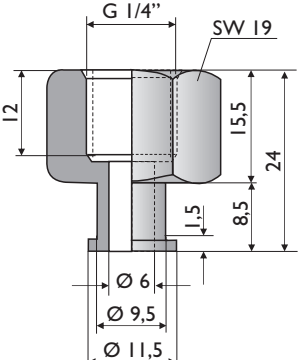
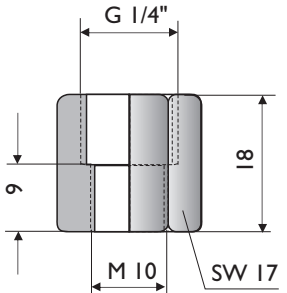
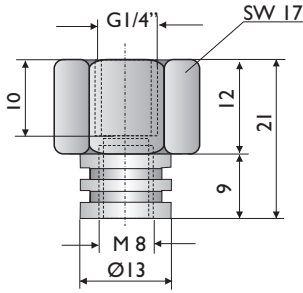
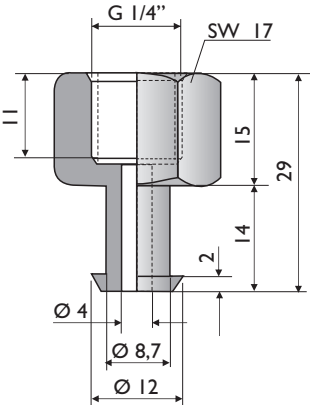


Art. No.: AT.0043
AG 1/4", Alu

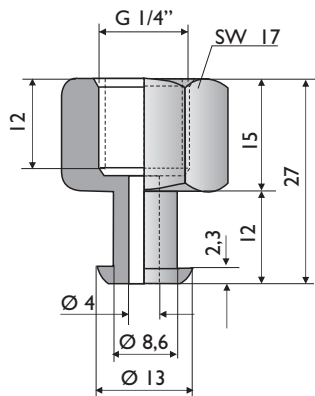


Anschlussteile IG 1/4"

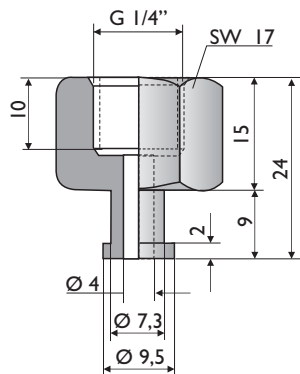
Fittings IG 1/4"

<p>Art. No.: 00 08 21 IG 1/4"</p> 	<p>Art. No.: 00 08 50 IG 1/4"</p> 	<p>Art. No.: 00 08 134 IG 1/4"</p> 
<p>Art. No.: 00 08 141 IG 1/4"</p> 	<p>Art. No.: AT.0031 IG 1/4"</p> 	<p>Art. No.: AT.0038 IG 1/4"</p> 
<p>Art. No.: AT.0089 IG 1/4"</p> 	<p>Art. No.: AT.0098 IG 1/4"</p> 	<p>Art. No.: AT.0192 IG 1/4"</p> 

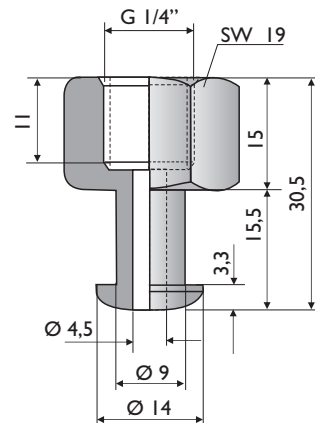
Art. No.: AT.0248
IG 1/4"



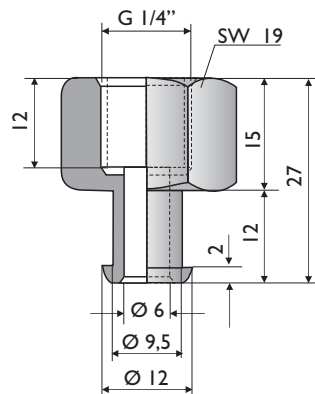
Art. No.: AT.0275
IG 1/4"



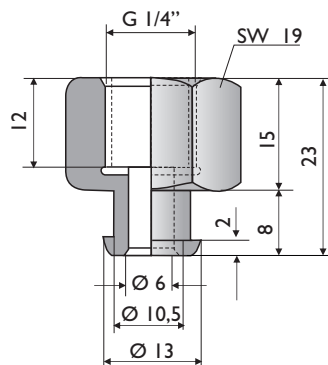
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IG 1/4"



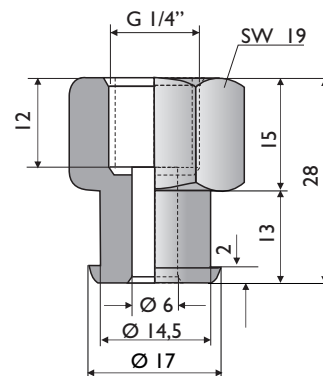
Art. No.: AT.0324
IG 1/4"



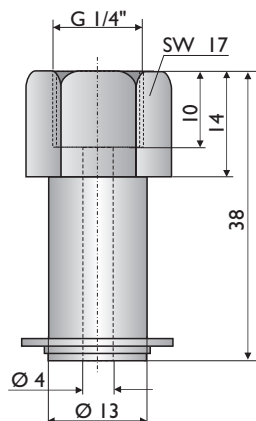
Art. No.: AT.0356
IG 1/4"



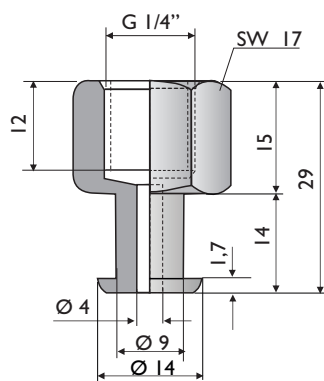
Art. No.: AT.0358
IG 1/4"



Art. No.: AT.0610
IG 1/4"

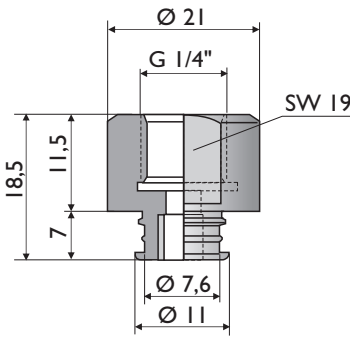
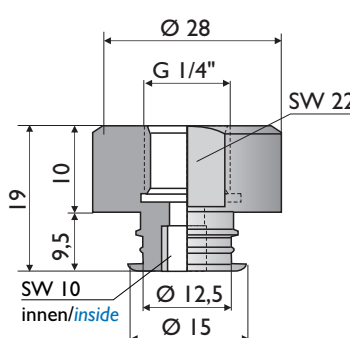
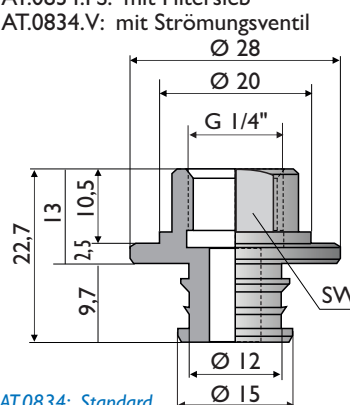
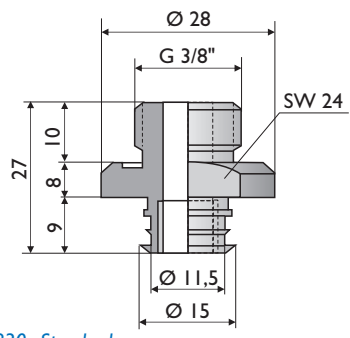
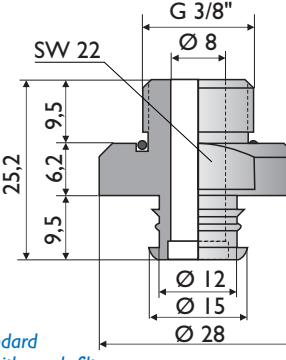
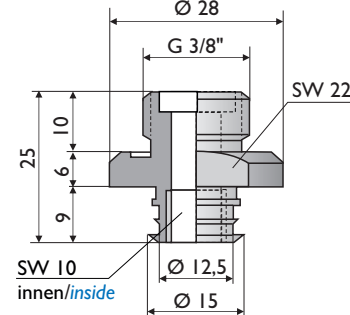
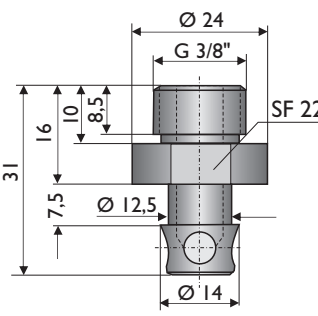
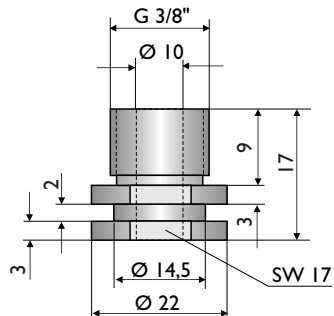
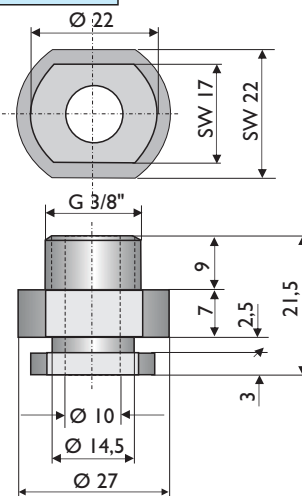


Art. No.: AT.0642
IG 1/4"



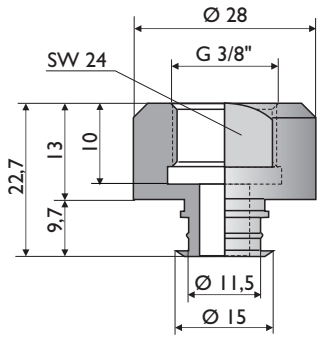
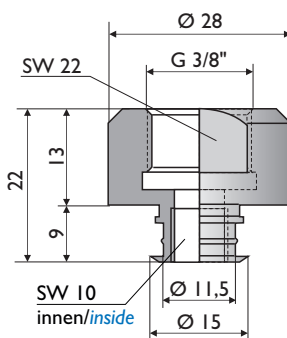
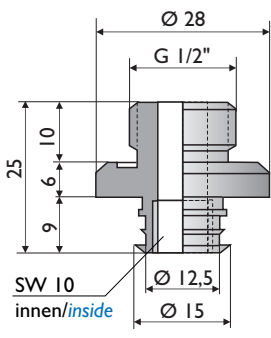
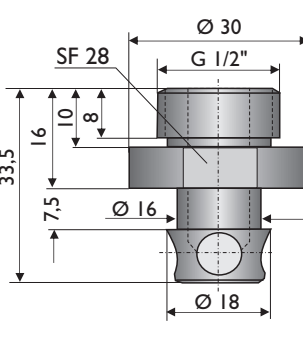
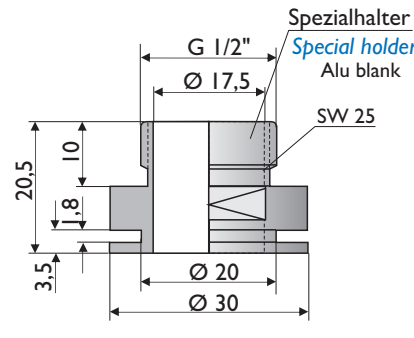
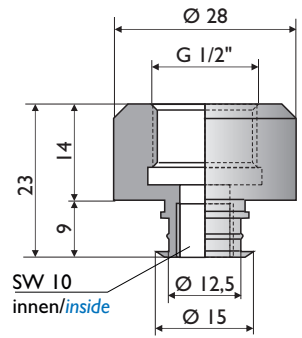
Anschlusssteile IG 1/4" - AG 3/8"

Fittings IG 1/4" - AG 3/8"

<p>Art. No.: AT.0827 IG 1/4"</p> <p>1. AT.0827.FS: mit Filtersieb</p>  <p>1. AT.0827.FS: with mesh filter</p>	<p>Art. No.: AT.0836 IG 1/4"</p> <p>1. AT.0836.FS: mit Filtersieb</p>  <p>1. AT.0836.FS: with mesh filter</p>	<p>Art. No.: AT.0834 IG 1/4"</p> <p>1. AT.0834: Standard 2. AT.0834.FS: mit Filtersieb 3. AT.0834.V: mit Strömungsventil</p>  <p>1. AT.0834: Standard 2. AT.0834.FS: with mesh filter 3. AT.0834.V: with check valve</p>
<p>Art. No.: AT.0830 AG 3/8"</p> <p>1. AT.0830: Standard 2. AT.0830.FS: mit Filtersieb 3. AT.0830.V: mit Strömungsventil</p>  <p>1. AT.0830: Standard 2. AT.0830.FS: with mesh filter 3. AT.0830.V: with check valve</p>	<p>Art. No.: AT.0828 AG 3/8"</p> <p>1. AT.0828: Standard 2. AT.0828.FS: mit Filtersieb 3. AT.0828.V: mit Strömungsventil</p>  <p>1. AT.0828: Standard 2. AT.0828.FS: with mesh filter 3. AT.0828.V: with check valve</p>	<p>Art. No.: AT.0847 IG 3/8"</p> <p>1. AT.0847.FS: mit Filtersieb</p>  <p>1. AT.0847.FS: with mesh-filter</p>
<p>Art. No.: AT.0851 AG 3/8"</p> 	<p>Art. No.: AT.0037 AG 3/8"</p> 	<p>Art. No.: AT.0714 AG 3/8"</p> 

Anschlussteile IG 3/8" - AG 1/2" - IG 1/2"

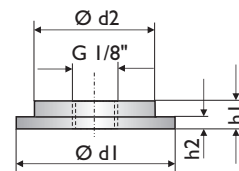
Fittings AG 3/8" - IG 3/8" - AG 1/2" - IG 1/2"

<p>Art. No.: AT.083 I IG 3/8"</p> <p>1. AT.083 I: Standard 2. AT.083 I.FS: mit Filtersieb 3. AT.083 I.V: mit Strömungsventil</p>  <p><i>1. AT.083 I: Standard 2. AT.083 I.FS: with mesh filter 3. AT.083 I.V: with check valve</i></p>	<p>Art. No.: AT.0837 IG 3/8"</p> <p>1. AT.0837.FS: mit Filtersieb</p>  <p><i>1. AT.0837.FS: with mesh-filter</i></p>	
<p>Art. No.: AT.0848 AG 1/2"</p> <p>1. AT.0848.FS: mit Filtersieb</p>  <p><i>1. AT.0848.FS: with mesh-filter</i></p>	<p>Art. No.: AT.0852 AG 1/2"</p> 	<p>Art. No.: AT.372 AG 1/2"</p>  <p><i>Spezialhalter Special holder Alu blank</i></p>
<p>Art. No.: AT.0838 IG 1/2"</p> <p>1. AT.0838.FS: mit Filtersieb</p>  <p><i>1. AT.0838.FS: with mesh-filter</i></p>		

Anschlusssteile - Spezial

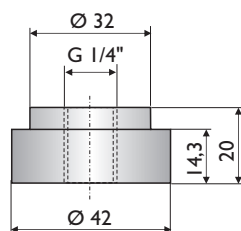
Fittings - Special

Art. No.	Ø d1	Ø d2	h1	h2	für Sauger/ for suction cups	Gewicht/ Weight
AT.0233	17,5	14,9	6,0	3,1	F0.020.027 + F0.025.024	2,4 g
AT.0234	20,5	17,5	6,0	3,0	F0.030.016 + F0.035.008	3,4 g
AT.0235	28,5	25,0	5,5	2,1	F0.040.018 + F0.050.010	7,0 g



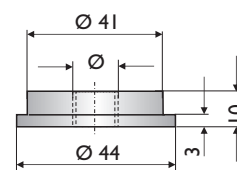
Art. No.: AT.0179
IG 1/4"

für Vakuumsauger/
for vacuum suction cup
Art. No.: F0.070.001
Gewicht/Weight: 50 g



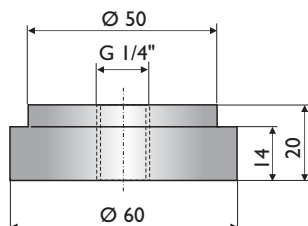
Art. No.: Ø
AT.0259 = Ø 6
AT.0262 = G 1/8"
AT.0284 = G 1/4"

für Vakuumsauger/
for vacuum suction cup
Art. No.: F0.065.003
Gewicht/Weight: 45 g



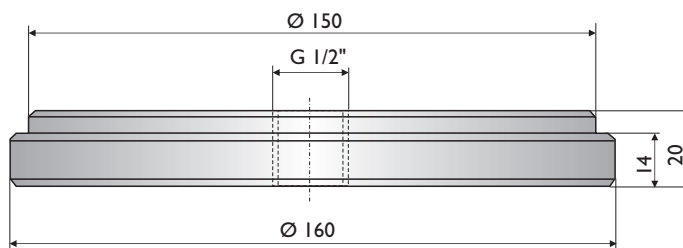
Art. No.: AT.0180
IG 1/4"

für Vakuumsauger/
for vacuum suction cup
Art. No.: F0.100.001
Gewicht/Weight: 70 g



Art. No.: AT.0335
IG 1/2", Material Alu

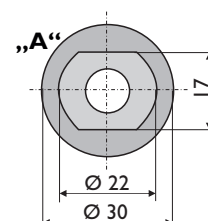
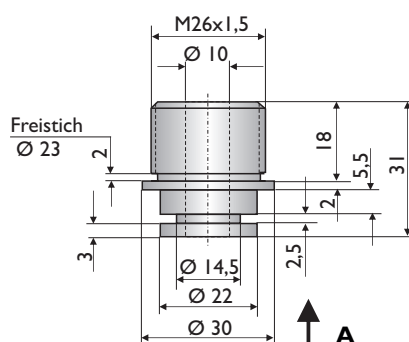
für Vakuumsauger/
for vacuum suction cup
Art. No.: F0.200.001
Gewicht/Weight: 1050 g

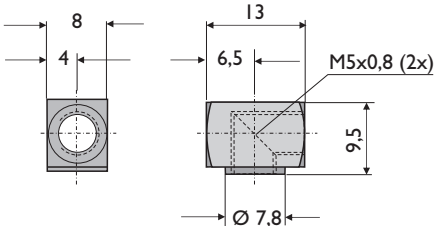
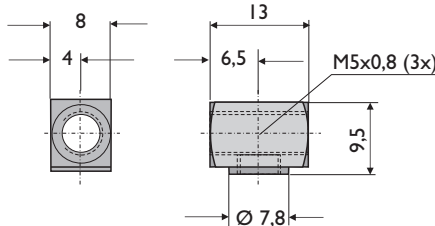
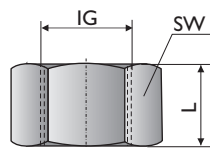
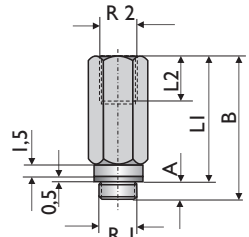
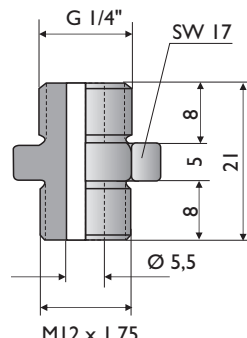
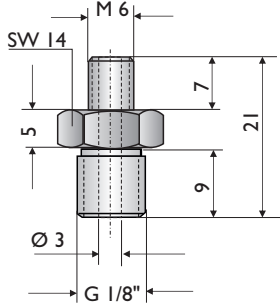
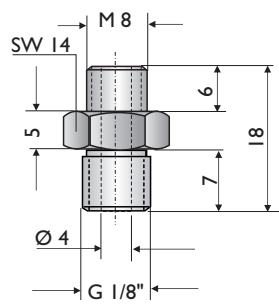
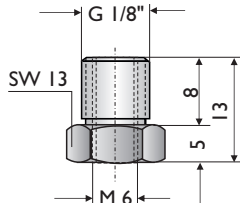
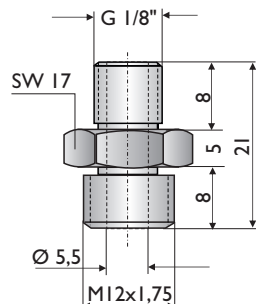
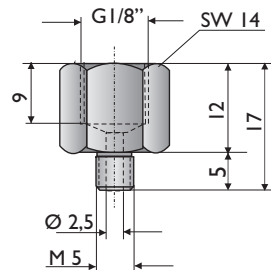
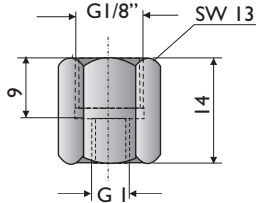


Art. No.: AT.0037.M26.VA
AG M26x1,5
Edelstahl/Stainless steel

Spezialhalter für die Backindustrie
Special fitting for the bakery industry

Gewicht/Weight: 81 g

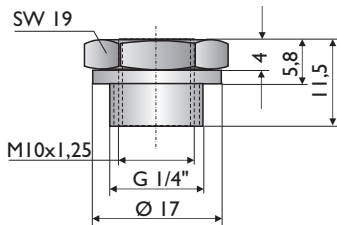


<div>L-Fitting Art. No.: 41.450 2 x IG M5</div> <div></div>		<div>T-Fitting Art. No.: 41.451 3 x IG M5</div> <div></div>		<div>Doppelnippel/Double fittings</div> <table><tr><th>Art. No.</th><th>IG</th><th>L</th><th>SW</th></tr><tr><td>44.009</td><td>M3 x 0,5</td><td>6</td><td>5,5</td></tr><tr><td>44.010</td><td>M5 x 0,8</td><td>8</td><td>7</td></tr><tr><td>44.011</td><td>M5 x 0,8</td><td>8</td><td>10</td></tr><tr><td>44.012</td><td>M5 x 0,8</td><td>13</td><td>10</td></tr></table> <div></div>		Art. No.	IG	L	SW	44.009	M3 x 0,5	6	5,5	44.010	M5 x 0,8	8	7	44.011	M5 x 0,8	8	10	44.012	M5 x 0,8	13	10		
Art. No.	IG	L	SW																								
44.009	M3 x 0,5	6	5,5																								
44.010	M5 x 0,8	8	7																								
44.011	M5 x 0,8	8	10																								
44.012	M5 x 0,8	13	10																								
<table><tr><th>Art. No.</th><th>R1 (AG)</th><th>R2 (IG)</th><th>A</th><th>B</th><th>L1</th><th>L2</th><th>SW</th></tr><tr><td>44.001</td><td>M3 x 0,5</td><td>M3 x 0,5</td><td>2,5</td><td>12,5</td><td>10</td><td>5</td><td>5,5</td></tr><tr><td>44.002</td><td>M5 x 0,8</td><td>M5 x 0,8</td><td>3,0</td><td>19,0</td><td>16</td><td>6</td><td>8</td></tr></table> <div></div>		Art. No.	R1 (AG)	R2 (IG)	A	B	L1	L2	SW	44.001	M3 x 0,5	M3 x 0,5	2,5	12,5	10	5	5,5	44.002	M5 x 0,8	M5 x 0,8	3,0	19,0	16	6	8	<div>Art. No.: AT.0108 AG 1/4"/AG M12x1,75</div> <div></div>	
Art. No.	R1 (AG)	R2 (IG)	A	B	L1	L2	SW																				
44.001	M3 x 0,5	M3 x 0,5	2,5	12,5	10	5	5,5																				
44.002	M5 x 0,8	M5 x 0,8	3,0	19,0	16	6	8																				
<div>Art. No.: AT.0279 AG M6/AG 1/8"</div> <div></div>		<div>Art. No.: AT.0131 AG M8/AG 1/8"</div> <div></div>		<div>Art. No.: AT.0303 AG 1/8"/IG M6</div> <div></div>																							
<div>Art. No.: AT.0107 IG 1/8"/AG M12x1,75</div> <div></div>		<div>Art. No.: AT.0079 IG 1/8"/AG M5</div> <div></div>		<div>Art. No.: AT.0306 - IG 1/8"/G1 = M5 Art. No.: AT.0307 - IG 1/8"/G1 = M6</div> <div></div>																							

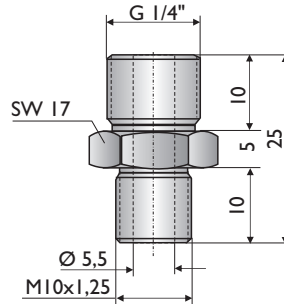
Spezial-Reduzierungen

Special Reductions

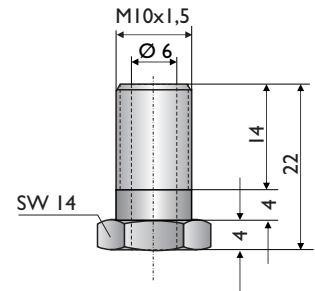
Art. No.: AT.0090
 AG 1/4"/IG M10x1,25



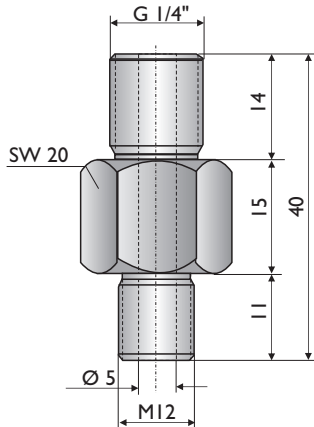
Art. No.: AT.0320
 AG 1/4"/AG M10x1,25



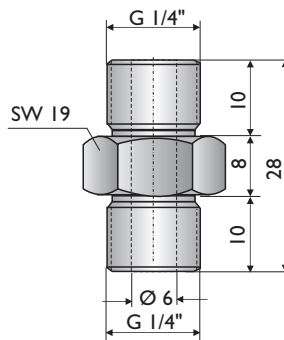
Art. No.: AT.0115
 AG M10x1,5



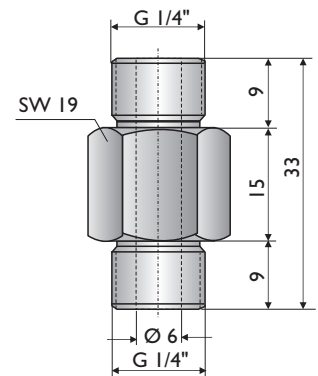
Art. No.: 00 08 129
 AG 1/4"/AG M12



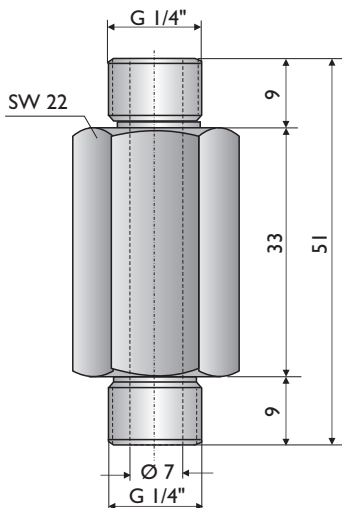
Art. No.: AT.0012
 AG 1/4"/AG 1/4"



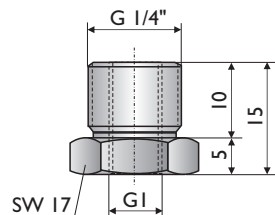
Art. No.: AT.0013
 AG 1/4"/AG 1/4"



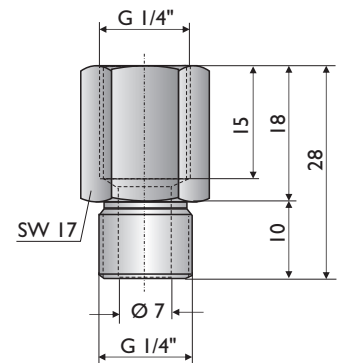
Art. No.: AT.0011
 AG 1/4"/AG 1/4"

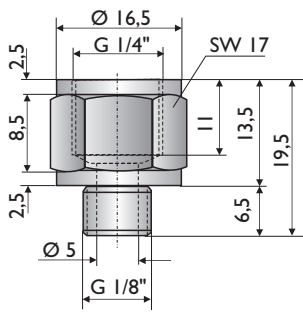
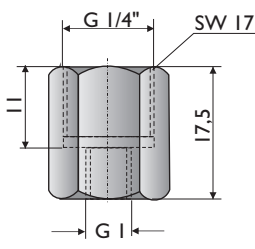
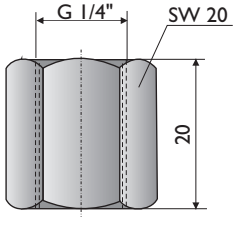
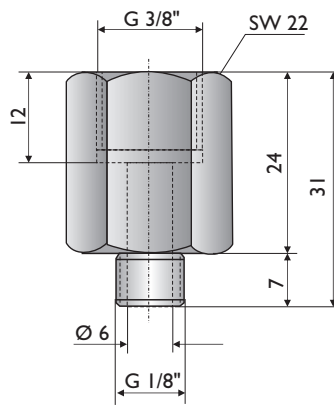
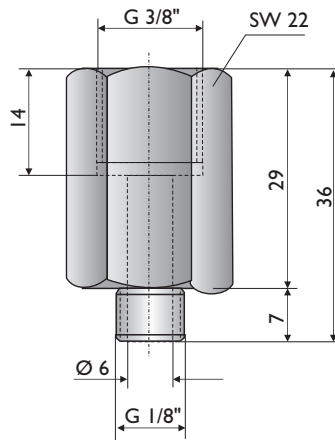
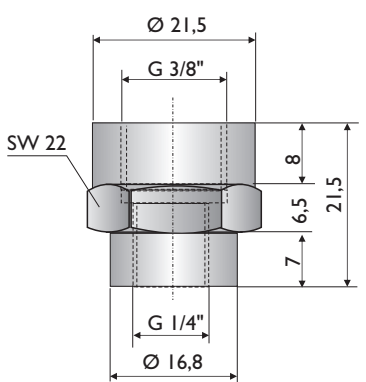
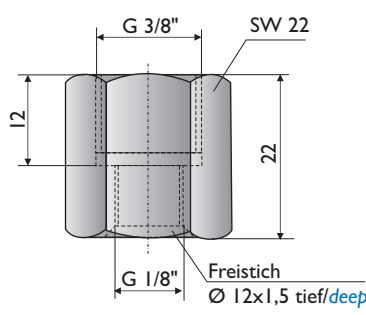
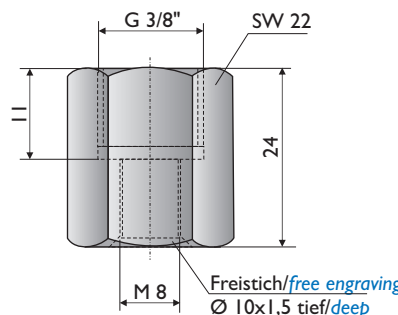


Art. No.: AT.0304 - AG 1/4"/GI = M6
 Art. No.: AT.0305 - AG 1/4"/GI = M8



Art. No.: AT.0078
 IG 1/4"/AG 1/4"



<p>Art. No.: AT.0040 IG 1/4"/AG 1/8"</p> 	<p>Art. No.: AT.0308 - IG 1/4"/GI = M6 Art. No.: AT.0309 - IG 1/4"/GI = M8</p> 	<p>Art. No.: AT.0182.O IG 1/4"</p> 
<p>Art. No.: AT.0018 IG 3/8"/AG 1/8"</p> 	<p>Art. No.: AT.0019 IG 3/8"/AG 1/8"</p> 	<p>Art. No.: AT.0228 IG 3/8"/IG 1/4"</p> 
<p>Art. No.: AT.0020 IG 3/8"/IG 1/8"</p>  <p>Freistich Ø 12x1,5 tief/deep</p>	<p>Art. No.: AT.0014 IG 3/8"/IG M8</p>  <p>Freistich/free engraving Ø 10x1,5 tief/deep</p>	

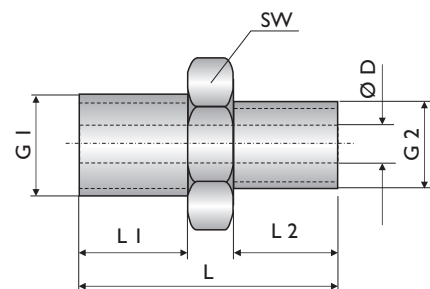
Doppelnippel - Reduziernippel

Double Fittings - Reduction Fittings

Doppelnippel mit zylindrischen Gewinde M 3 bis G 3"

Double Fittings with cylindrical thread M3 to G 3"

Art. No.	G 1	G 2	SW	L	L1	L2	Ø D
DN.M5M3	M5	M3	8	13	5	4	2
41.452	M5	M5	7	9,5	3	3	2,5
DN.M5M5	M5	M5	8	12	4,5	4,5	2,6
DN.18M5	G 1/8"	M5	14	15,5	6,5	4	2,3
DN.1818	G 1/8"	G 1/8"	14	16,5	6	6	6
DN.14M5	G 1/4"	M5	17	19	10	5	2,5
DN.1418	G 1/4"	G 1/8"	19	19	8	6	5,5
DN.1414	G 1/4"	G 1/4"	17	21	8	8	8
DN.3818	G 3/8"	G 1/8"	19	20,5	9	7	5
DN.3814	G 3/8"	G 1/4"	24	22	9	8	8
DN.3838	G 3/8"	G 3/8"	19	23	9	9	11
DN.1214	G 1/2"	G 1/4"	24	23,5	10	8	11
DN.1238	G 1/2"	G 3/8"	32	24	10	9	11
DN.1212	G 1/2"	G 1/2"	24	25,5	10	10	14
DN.3438	G 3/4"	G 3/8"	30	25,5	10	10	11
DN.3434	G 3/4"	G 3/4"	30	28	11	11	20
DN.3412	G 3/4"	G 1/2"	34	26,5	11	10	15
DN.1012	G 1"	G 1/2"	34	32,5	14,5	11	15
DN.1034	G 1"	G 3/4"	36	30	13	11	20
DN.1010	G 1"	G 1"	36	32	13	13	26
DN.11412	G 1 1/4"	G 1/2"	43	34	16	11	15
DN.11434	G 1 1/4"	G 3/4"	42	35	16	12	20
DN.11410	G 1 1/4"	G 1"	43	38,5	16,5	15	26
DN.114114	G 1 1/4"	G 1 1/4"	42	40	16,5	16,5	34
DN.11234	G 1 1/2"	G 3/4"	50	36	16	12,5	20
DN.11210	G 1 1/2"	G 1"	50	39	15,5	15,5	26
DN.112114	G 1 1/2"	G 1 1/4"	60	40	16	16	34
DN.112112	G 1 1/2"	G 1 1/2"	50	40	16,5	16,5	38
DN.2010	G 2"	G 1"	60	42	17	16	26
DN.20114	G 2"	G 1 1/4"	60	43	17	17	34
DN.20112	G 2"	G 1 1/2"	60	44	18	18	40
DN.2020	G 2"	G 2"	60	44	18	18	51
DN.21220	G 2 1/2"	G 2"	77	55	24	19,5	51
DN.212212	G 2 1/2"	G 2 1/2"	77	59	24	24	66
DN.3020	G 3"	G 2"	89	50	20	20	50
DN.30212	G 3"	G 2 1/2"	89	53	20	23	66
DN.3030	G 3"	G 3"	89	60	24,5	24,5	78



Massänderungen (ausser Gewinde) vorbehalten/
Subject to change without notice (except threads)

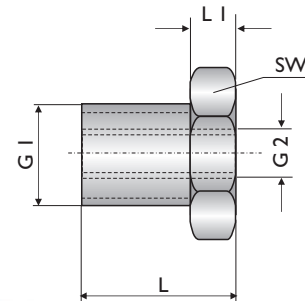
Material:
Messing vernickelt/nickled brass (MSV = Standard)

Auf Anfrage/on request
Edelstahl/stainless steel

Reduziernippel mit zylindrischen Außen- und Innengewinde M 3 bis G 1"

Reduction Fittings with cylindrical external and internal thread M 3 to G 1"

Art. No.	G 1	G 2	SW	L 1	L
DNR.M5M3	M5	M3	7	1,5	6
DNR.M518	M5	G 1/8"	14	11	16
DNR.18M5	G 1/8"	M5	14	4	10
DNR.1814	G 1/8"	G 1/4"	17	13,5	18
DNR.1838	G 1/8"	G 3/8"	22	14	20
DNR.1812	G 1/8"	G 1/2"	24	18	24
DNR.14M5	G 1/4"	M5	17	4	13
DNR.1418	G 1/4"	G 1/8"	17	5	13
DNR.1438	G 1/4"	G 3/8"	19	20	26
DNR.1412	G 1/4"	G 1/2"	24	16,5	26
DNR.3818	G 3/8"	G 1/8"	19	5	14
DNR.3814	G 3/8"	G 1/4"	19	5	14
DNR.3812	G 3/8"	G 1/2"	24	16	26
DNR.1218	G 1/2"	G 1/8"	24	5	15
DNR.1214	G 1/2"	G 1/4"	24	6	15
DNR.1238	G 1/2"	G 3/8"	24	6	15
DNR.1234	G 1/2"	G 3/4"	32	17	27
DNR.3414	G 3/4"	G 1/4"	30	5	15
DNR.3438	G 3/4"	G 3/8"	30	5	16
DNR.3412	G 3/4"	G 1/2"	30	6	16
DNR.1012	G 1"	G 1/2"	36	6	19
DNR.1034	G 1"	G 3/4"	36	6	19



Maßänderungen (außer Gewinde) vorbehalten
 Subject to changes without notice (except threads)

Material:
 Messing vernickelt/nickled brass (MSV = Standard)

Auf Anfrage/on request
 Edelstahl/stainless steel

Weitere Komponenten im Programm auf Anfrage:

- Verschraubungen und Quickanschlüsse
- Mini-Steckverschraubungen
- Rotationsverschraubungen
- Sperranschluß-Steckverschraubungen
- Schnellkupplungen
- Verschraubungen für Reinräume, hohe Temperaturen und Chemikalien
- Verschraubungen in Edelstahl
- Verschraubungen, antistatisch (ESD)
- Verschraubungen selbstverlöschend (UL94 V-O)
- Verschraubungen mit Festblenden von 0,1 - 2,0 mm

Further components in the program on request

- Screw connections and Quick connections
- Mini screws and quick connections
- Rotation screw connections
- Stopp fittings
- Quick couplings
- Connections for clean room, high temperatures an chemicals
- Connections in stainless steel
- Connections, antistatic type
- Screw Connections self-extinguishing (UL94 V-O)
- Screw Connections with fixed orifice of 0,1 - 2,0 mm



Doppelnippel Serie „ATP“

Double Fittings Series „ATP“

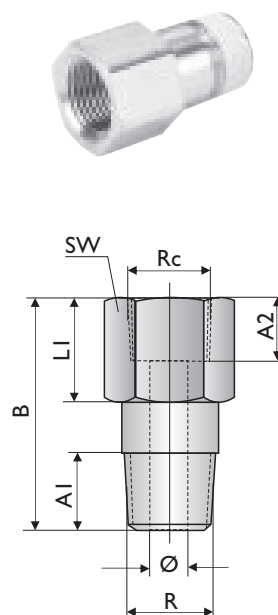
Innen-Außengewinde/internal-External Thread

Art. No.	R	Rc	Abmessungen/Dimensions in mm						Gewicht/ Weight g
			AI	A2	B	LI	SW	Ø	
ATP.AM5.IM5	M5x0,8	M5x0,8	3	5	19,5	4	8	1,8	5,0
ATP.AM5.IM5.L		M5x0,8		5	23,0	4	8	1,8	6,5
ATP.AM5.II8		Rc1/8"		8	14,5	10	14	1,8	11,0
ATP.AI8.IM5	R1/8"	M5x0,8	8	6	12,0	4	10	4,2	6,0
ATP.AI8.II8		Rc1/8"		8	28,5	11	14	6,0	17,0
ATP.AI8.II4		Rc1/4"		11	21,0	13	17	6,0	19,0
ATP.AI8.I38		Rc3/8"		12	22,0	14	21	6,0	28,0
ATP.AI4.IM5	R1/4"	M5x0,8	11	6	16,0	5	14	4,2	16,0
ATP.AI4.II8		Rc1/8"		8	19,0	8	14	4,6	16,5
ATP.AI4.II4		Rc1/4"		11	33,0	15	17	8,0	31,5
ATP.AI4.I38		Rc3/8"		12	25,0	14	21	8,0	31,5
ATP.AI4.II2		Rc1/2"		15	30,0	19	24	8,0	42,5
ATP.A38.II8	R3/8"	Rc1/8"	12	8	17,5	5,5	17	6,0	25,0
ATP.A38.II4		Rc1/4"		11	22,5	10,5	17	8,0	26,5
ATP.A38.I38		Rc3/8"		12	37,0	16	21	10,0	54,0
ATP.A38.II2		Rc1/2"		15	31,0	19	24	10,0	47,5
ATP.AI2.II2	R1/2"	Rc1/2"	15	15	43,0	19	24	11,0	85,0

R = Außengewinde konisch
External thread conical
Rc = Innengewinde konisch
Internal thread conical

(nicht/not M5)

Material:
Messing vernickelt/nickel-plated brass

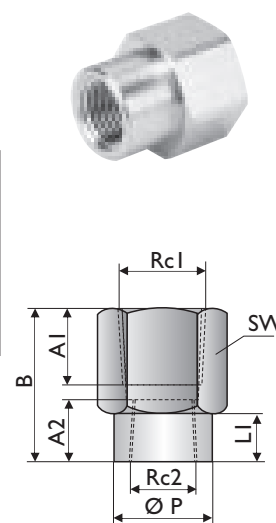


Adapter mit Innengewinde / Adapter with internal thread

	Rc1	Rc2	AI	A2	B	LI	ØP	SW	Gewicht/ Weight g
ATP.II8.IM5	Rc1/8"	M5x0,8	8	5	17	7	8	14	11,5
ATP.II4.II8	Rc1/4"	Rc1/8"	11	8	21	8	14	17	22,5
ATP.I38.II8	Rc3/8"	Rc1/8"	12	8	22	8	14	21	31,5
ATP.I38.II4	Rc3/8"	Rc1/4"	12	11	25	11	17	21	35,5
ATP.II2.II4	Rc1/2"	Rc1/4"	15	11	30	11	17	24	51,5
ATP.II2.I38	Rc1/2"	Rc3/8"	15	12	33	14	21	24	59,0

Rc1 + Rc2 = Innengewinde konisch
Internal thread conical
(nicht/not M5)

Material:
Messing vernickelt/nickel-plated brass



Federstößel Serie „Mini“, Hub 6,0 - 39,5 mm

Spring Levelers Series „Mini“, Stroke 6,0 - 39,5 mm

Vorteile

- Hohe Genauigkeit in der Handhabung durch präzise Führung,
- Sechskantführung innenliegend (nur bei verdrehgesicherter Ausführung),
- Innenliegende Druckfeder,
- Hochwertige Mechanik durch Verwendung rostfreier Materialien.
- Hohe Standzeit

Advantages

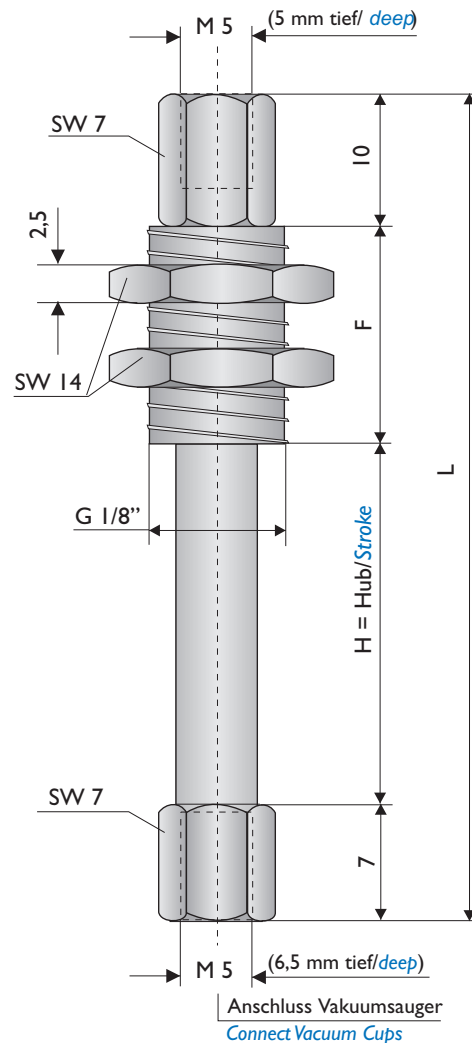
- High accuracy in the handling by a perfect guidance.
- Hexagonal guidance inside (only at non-rotating type).
- Compression spring inside.
- High-quality mechanics by use of stainless materials.
- Long service live.

Ausführung verdrehgesichert Non-rotating type

Art. No.	L	H Hub/ Stroke mm	F	Gewicht/ Weight g
FST.0001.V	41,5	6,5	18	17
FST.0002.V	49	10	22	19
FST.0003.V	76	20	39	27
FST.0004.V	119	39,5	62,5	39

Ausführung nicht verdrehgesichert Rotating type

Art. No.	L	H Hub/ Stroke mm	F	Gewicht/ Weight g
FST.0001	42,5	6,5	19	17
FST.0002	49	10	22	19
FST.0003	76	20	39	28
FST.0004	120,5	39,5	64	42

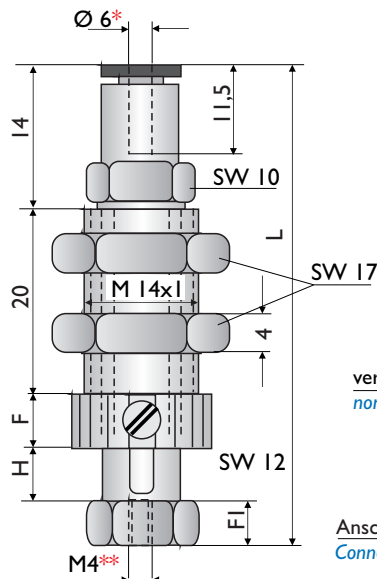


Federstößel Serie „Mini“, Hub 6 + 10 mm, verdrehgesichert Spring Leveler Series „Mini“ Stroke 6 + 10 mm, non-rotating

Art. No.	L	H Hub/ Stroke mm	F	FI	Gewicht/ Weight g
FST.0034.V	52	6	6	6	34
FST.0098.V	57	10	8	5	36

* Ø 6 mm auf Anfrage auch mit Ø 4 mm lieferbar.
 ** M4 auch in M6 lieferbar.

* Dia. 6 mm on request also available with dia. 4 mm.
 ** M4 also available with female thread M6.



verdrehgesichert
non-rotating

Anschluss Vakuumsauger
Connect Vacuum Cups



Federstößel Serie „Mini“, Hub 10 - 50 mm

Spring Levelers Series „Mini“, Stroke 10 - 50 mm

Verdrehgesichert /non rotating

Vorteile

- Hohe Genauigkeit in der Handhabung durch präzise Führung,
- Innenliegende Druckfeder,
- Hochwertige Mechanik durch Verwendung rostfreier Materialien.
- Hohe Standzeit

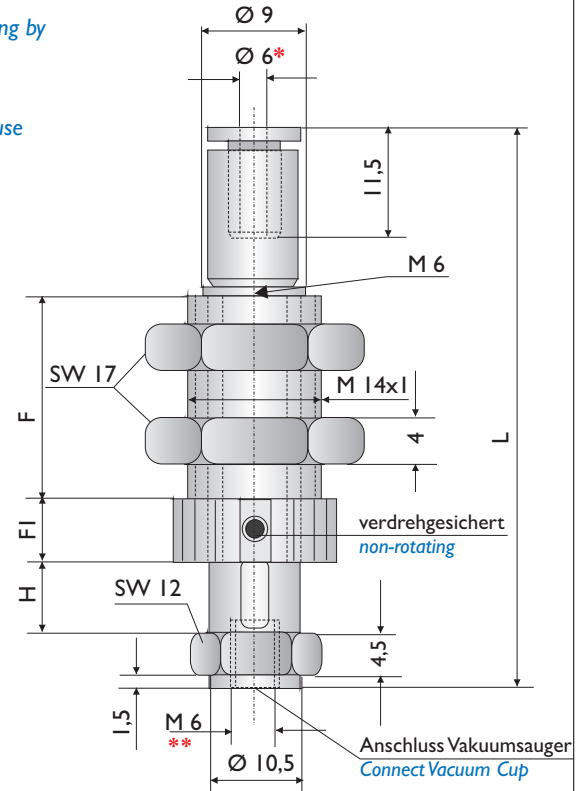
Advantages

- High accuracy in the handling by a perfect guidance.
- Compression spring inside.
- High-quality mechanics by use of stainless materials.
- Long service live.

Art. No.	L	H Hub/ Stroke mm	F	FI	Gewicht/ Weight g
FST.0031.V	59	10	20	8	40
FST.0032.V	69	15	25	8	44
FST.0033.V	85	20	34	10	50

* Ø 6 mm auf Anfrage auch mit Ø 4 mm lieferbar,
** M6 auch in M 4 lieferbar

* Ø 6 mm on request also available with dia. 4 mm,
** M6 also available with female thread M4.



5

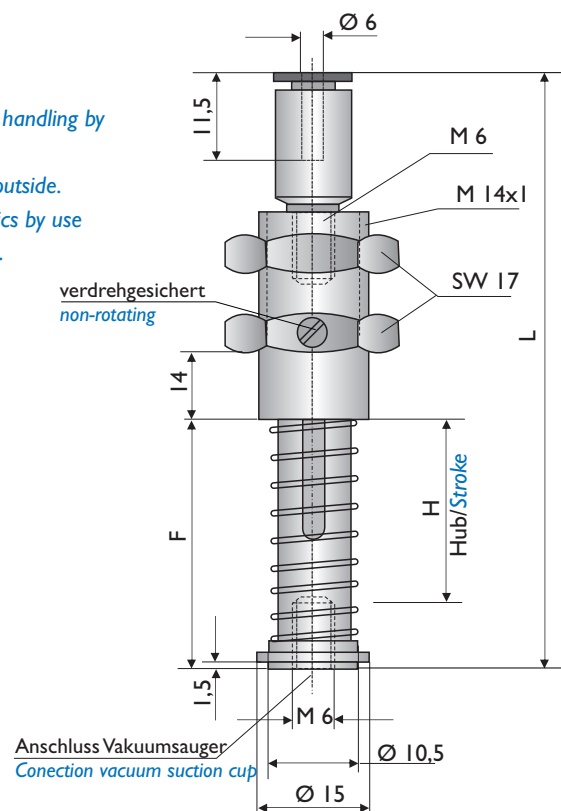
Vorteile

- Hohe Genauigkeit in der Handhabung durch präzise Führung,
- Aussenliegende Druckfeder,
- Hochwertige Mechanik durch Verwendung rostfreier Materialien.
- Hohe Standzeit

Advantages

- High accuracy in the handling by a perfect guidance.
- Compression spring outside.
- High-quality mechanics by use of stainless materials.
- Long service live.

Art. No.	L	H Hub/ Stroke mm	F	Gewicht/ Weight g
FST.0035.V	62	20	30	49 g
FST.0036.V	74	30	42	54 g
FST.0037.V	88	40	56	58 g
FST.0038.V	100	50	68	63 g



Federstößel Serie Hub 10 - 25 mm

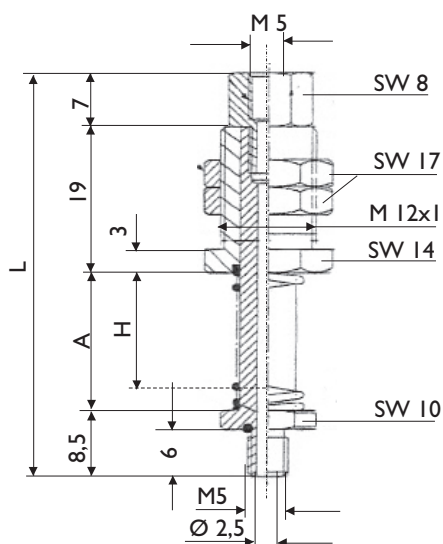
Spring Levelers Serie Stroke 10 - 25 mm

Vorteile:

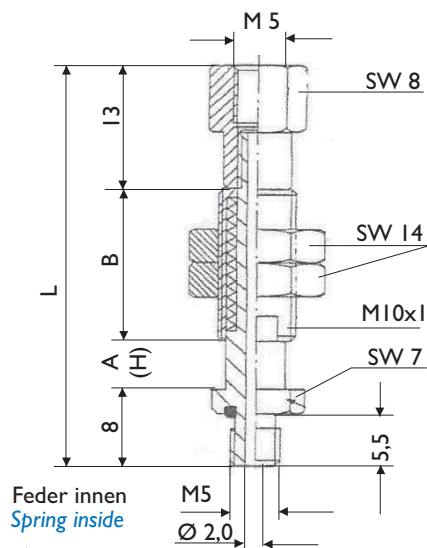
- Hohe Genauigkeit in der Handhabung durch präzise Führung.
- Hochwertige Mechanik durch Verwendung rostfreier Materialien.
- Hohe Standzeit.

Benefits

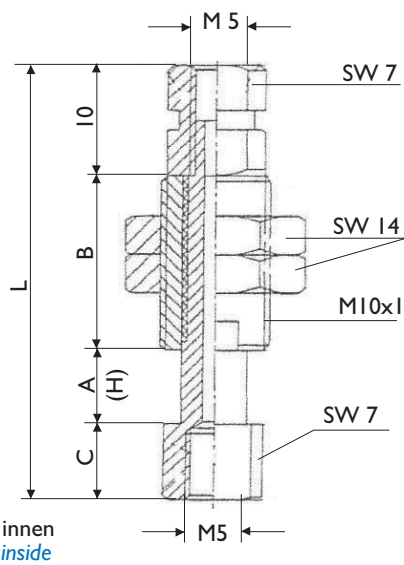
- High accuracy in the handling by a perfect guidance.
- High-quality mechanics by use of stainless material.
- Long service life.



Art. No.	L	H Hub/ Stroke mm	A	Gewicht/ Weight g
FST.0029	53	10	18	30
FST.0030	63	20	28	35



Art. No.	L	H Hub/ Stroke mm	A	B	Gewicht/t Weight g
FST.0040	42	6	6	15	19
FST.0041	75	10	10	44	28
FST.0042	90	25	25	44	35



Art. No.	L	H Hub/ Stroke mm	A	B	C	Gewicht/ Weight g
FST.0043	43	7	7	19	7	19
FST.0044	75	15	15	23	27	28
FST.0045	73	20	20	36	7	28

Federstößel Serie Hub 10 - 50 mm

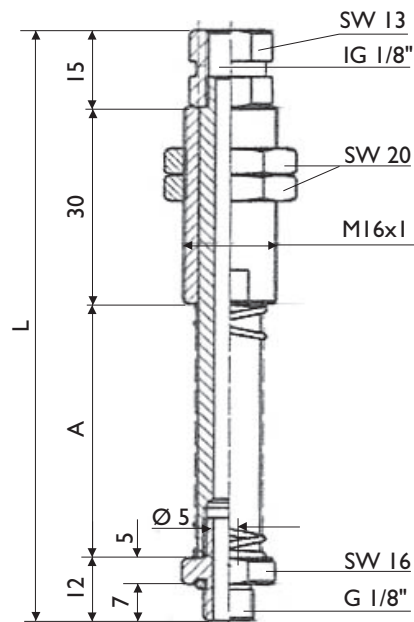
Spring Levelers Series Stroke 10 - 50 mm

Vorteile:

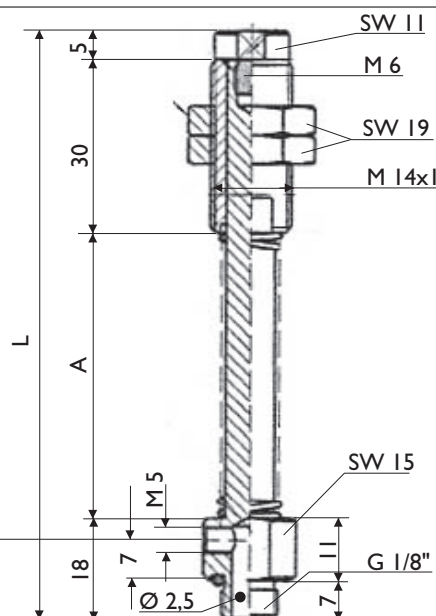
- Hohe Genauigkeit in der Handhabung durch präzise Führung.
- Hochwertige Mechanik durch Verwendung rostfreier Materialien.
- Hohe Standzeit.

Benefits

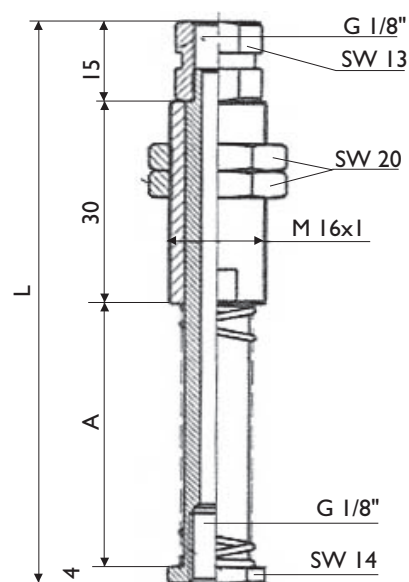
- High accuracy in the handling by a perfect guidance.
- High-quality mechanics by use of stainless material.
- Long service life.



Art. No.	L	H Hub/ Stroke mm	A	Gewicht/ Weight g
FST.0046	77	10	20	98
FST.0047	92	20	35	109
FST.0048	107	30	50	125
FST.0049	127	50	70	130



Art. No.	L	H Hub/ Stroke mm	A	Gewicht/ Weight g
FST.0050	73	10	20	90
FST.0051	88	20	35	104
FST.0052	103	30	50	118
FST.0053	123	50	70	122



Art. No.	L	H Hub/ Stroke mm	A	Gewicht/ Weight g
FST.0054	69	10	20	50
FST.0055	84	20	35	65
FST.0056	99	30	50	75
FST.0057	119	50	70	99

Federstößel Serie Hub 10 - 50 mm

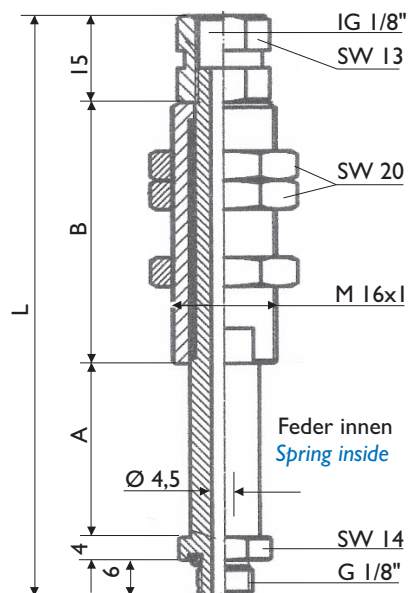
Spring Levelers Serie Stroke 10 - 50 mm

Vorteile:

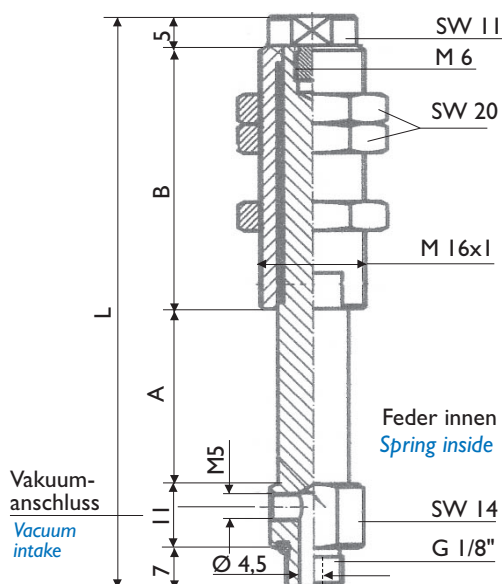
- Hohe Genauigkeit in der Handhabung durch präzise Führung.
- Hochwertige Mechanik durch Verwendung rostfreier Materialien.
- Hohe Standzeit.

Benefits

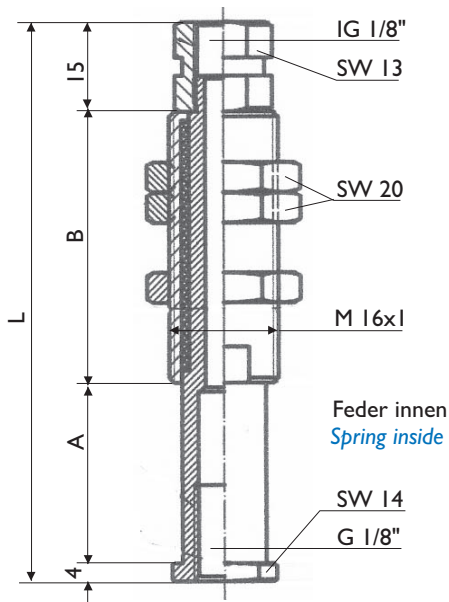
- High accuracy in the handling by a perfect guidance.
- High-quality mechanics by use of stainless material.
- Long service life.



Art. No.	L	H Hub Stroke mm	A	B	Gewicht/ Weight g
FST.0058	60	10	10	25	67
FST.0027	80	20	20	35	74
FST.0059	100	30	30	45	92
FST.0060	140	50	50	65	125



Art. No.	L	H Hub/ Stroke mm	A	B	Gewicht/ Weight g
FST.0061	58	10	10	25	65
FST.0062	78	20	20	35	72
FST.0063	98	30	30	45	90
FST.0064	138	50	50	65	123



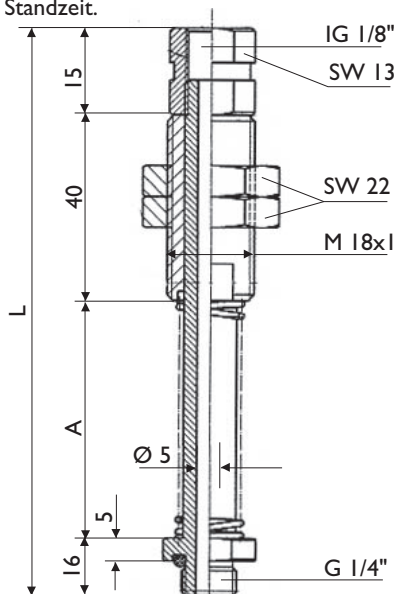
Art. No.	L	H Hub Stroke mm	A	B	Gewicht/ Weight g
FST.0065	54	10	10	25	62
FST.0066	74	20	20	35	79
FST.0067	94	30	30	45	88
FST.0068	134	50	50	65	117

Federstößel Serie Hub 10 - 50 mm

Spring Levelers Series Stroke 10 - 50 mm

Vorteile:

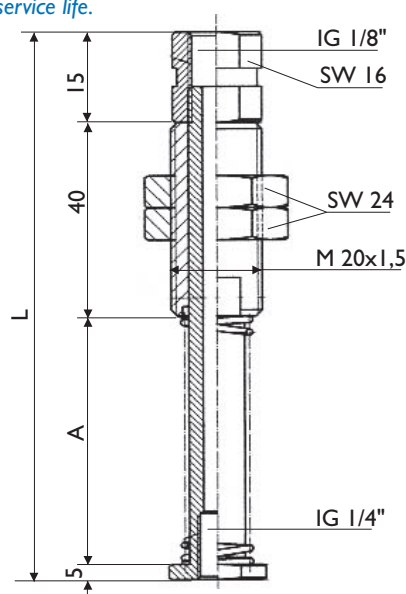
- Hohe Genauigkeit in der Handhabung durch präzise Führung.
- Hochwertige Mechanik durch Verwendung rostfreier Materialien.
- Hohe Standzeit.



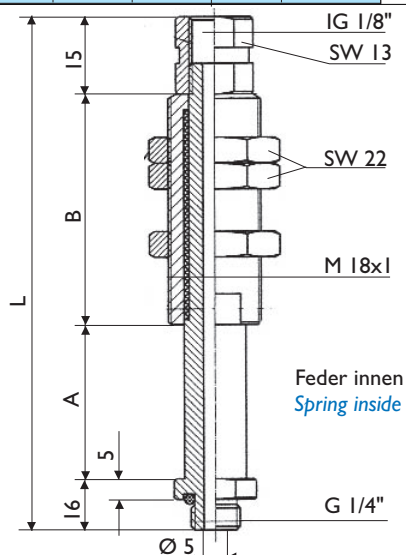
Art. No.	L	H Hub/ Stroke mm	A	Gewicht/ Weight g
FST.0070	91	10	20	132
FST.0071	106	20	35	147
FST.0072	121	30	50	158
FST.0073	141	50	70	171

Benefits

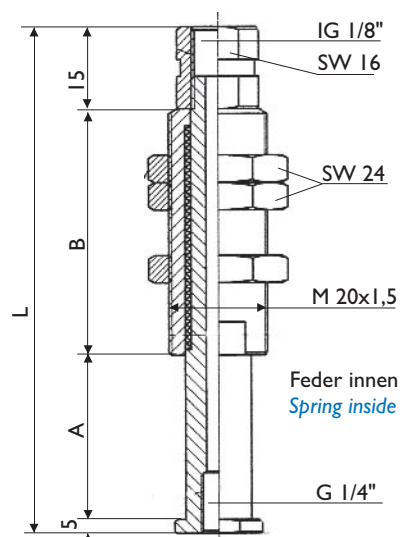
- High accuracy in the handling by a perfect guidance.
- High-quality mechanics by use of stainless material.
- Long service life.



Art. No.	L	H Hub/ Stroke mm	A	Gewicht/ Weight g
FST.0074	80	10	20	134
FST.0075	95	20	35	142
FST.0076	110	30	50	155
FST.0077	130	50	70	169



Art. No.	L	H Hub/ Stroke mm	A	B	Gewicht/ Weight g
FST.0078	66	10	10	25	102
FST.0079	86	20	20	35	118
FST.0080	106	30	30	45	132
FST.0081	146	50	50	65	152



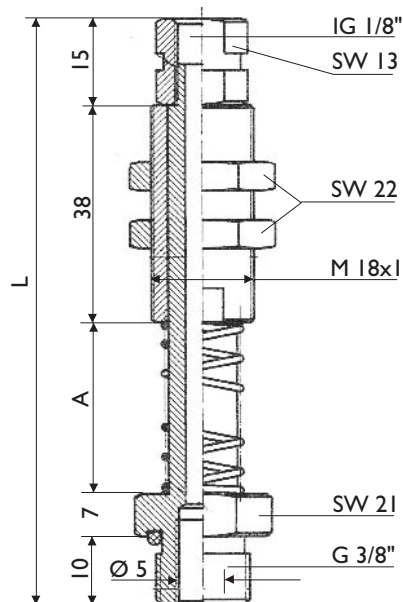
Art. No.	L	H Hub/ Stroke mm	A	B	Gewicht/ Weight g
FST.0082	55	10	10	25	130
FST.0083	75	20	20	35	132
FST.0084	95	30	30	45	142
FST.0085	135	50	50	65	161

Vorteile:

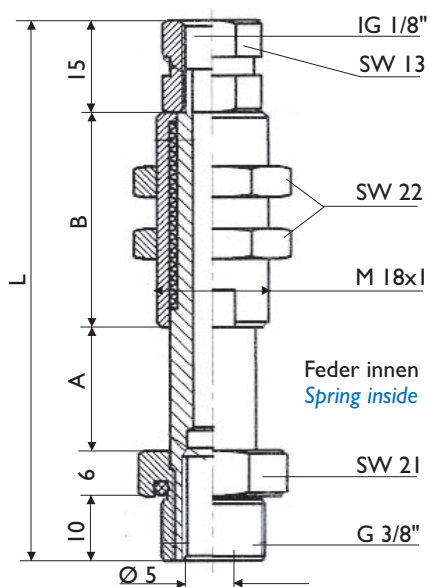
- Hohe Genauigkeit in der Handhabung durch präzise Führung.
- Hochwertige Mechanik durch Verwendung rostfreier Materialien.
- Hohe Standzeit.

Benefits

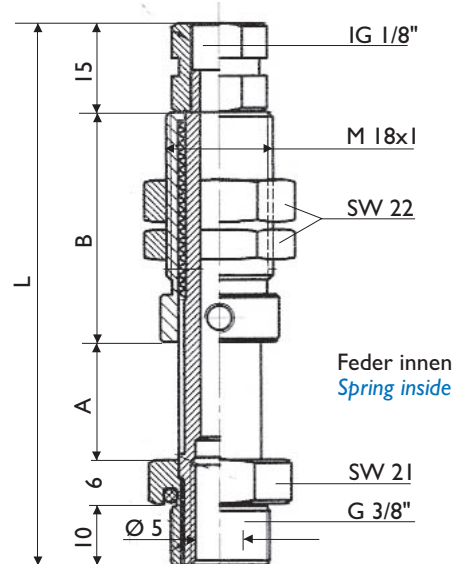
- High accuracy in the handling by a perfect guidance.
- High-quality mechanics by use of stainless material.
- Long service life.



Art. No.	L	H Hub/ Stroke mm	A	Gewicht/ Weight g
FST.0086	90	10	20	142
FST.0087	105	20	35	155
FST.0088	120	30	50	168
FST.0089	140	50	70	179



Art. No.	L	H Hub/ Stroke mm	A	B	Gewicht/ Weight g
FST.0090	65	10	10	24	130
FST.0091	86	20	20	35	141
FST.0092	107	30	30	46	149
FST.0093	147	50	50	66	165



V= verdrehgesichert/V= non-rotating

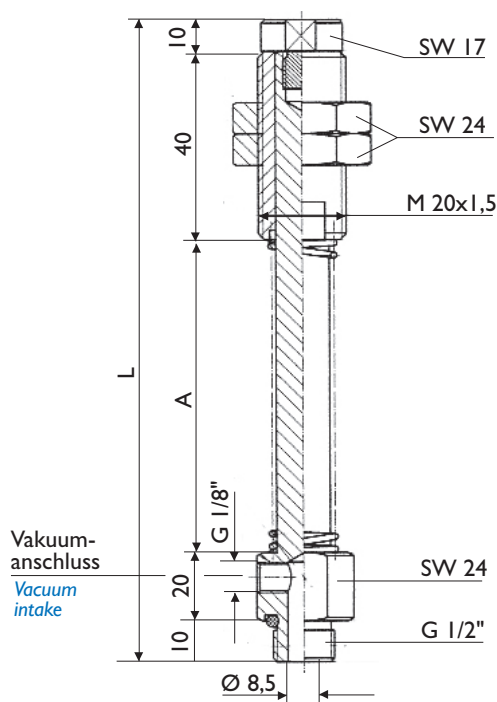
Art. No.	L	H Hub/ Stroke mm	A	B	Gewicht/ Weight g
FST.0094.V	69	10	10	28	131
FST.0095.V	90	20	20	39	142
FST.0096.V	111	30	30	50	151
FST.0097.V	151	50	50	70	168

Federstößel Serie Hub 10 - 50 mm

Spring Levelers Series Stroke 10 - 50 mm

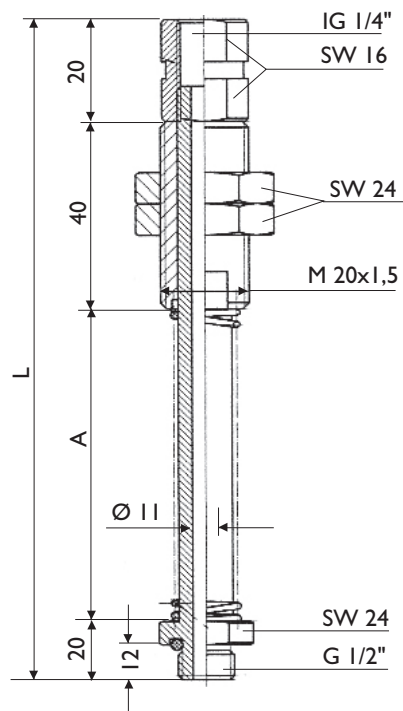
Vorteile:

- Hohe Genauigkeit in der Handhabung durch präzise Führung.
- Hochwertige Mechanik durch Verwendung rostfreier Materialien.
- Hohe Standzeit.



Benefits

- High accuracy in the handling by a perfect guidance.
- High-quality mechanics by use of stainless material.
- Long service life.



Art. No.	L	H Hub/ Stroke mm	A	Gewicht/ Weight g
FST.0100	100	10	20	105
FST.0101	115	20	35	176
FST.0102	130	30	50	189
FST.0103	170	50	90	205

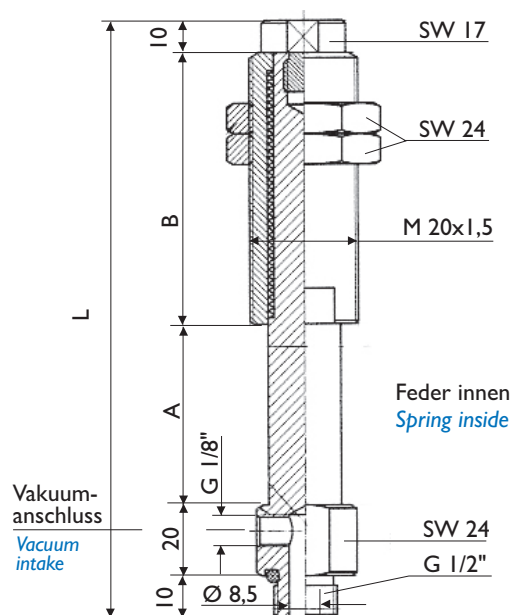
Art. No.	L	H Hub/ Stroke mm	A	Gewicht/ Weight g
FST.0104	100	10	20	107
FST.0105	115	20	35	178
FST.0106	130	30	50	192
FST.0107	170	50	90	210

Vorteile:

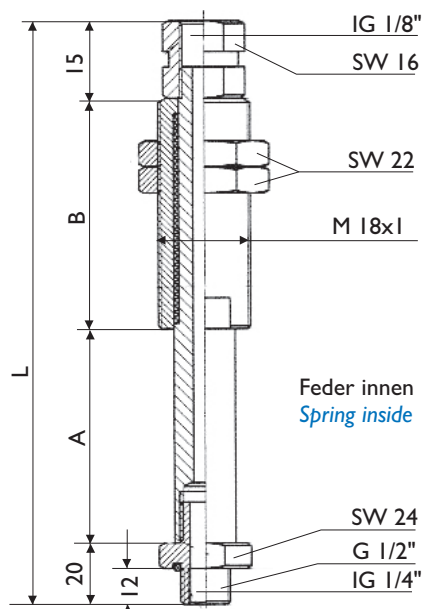
- Hohe Genauigkeit in der Handhabung durch präzise Führung.
- Hochwertige Mechanik durch Verwendung rostfreier Materialien.
- Hohe Standzeit.

Benefits

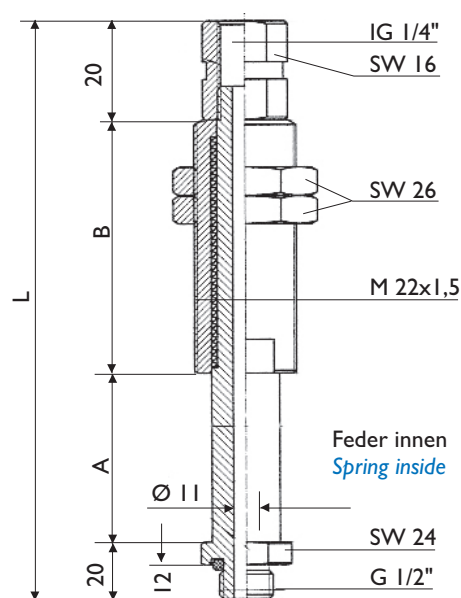
- High accuracy in the handling by a perfect guidance.
- High-quality mechanics by use of stainless material.
- Long service life.



Art. No.	L	H Hub/ Stroke mm	A	B	Gewicht/ Weight g
FST.0108	80	10	10	30	152
FST.0109	95	20	20	35	161
FST.0110	120	30	30	50	182
FST.0111	160	50	50	70	199



Art. No.	L	H Hub/ Stroke mm	A	B	Gewicht/ Weight g
FST.0112	75	10	10	30	130
FST.0113	90	20	20	35	141
FST.0114	115	30	30	50	158
FST.0115	155	50	50	70	179



Art. No.	L	H Hub/ Stroke mm	A	B	Gewicht/ Weight g
FST.0116	80	10	10	30	188
FST.0117	95	20	20	35	206
FST.0118	120	30	30	50	228
FST.0119	160	50	50	70	245

Federstößel Serie Hub 15 - 60 mm

Spring Levelers Series Stroke 15 - 60 mm

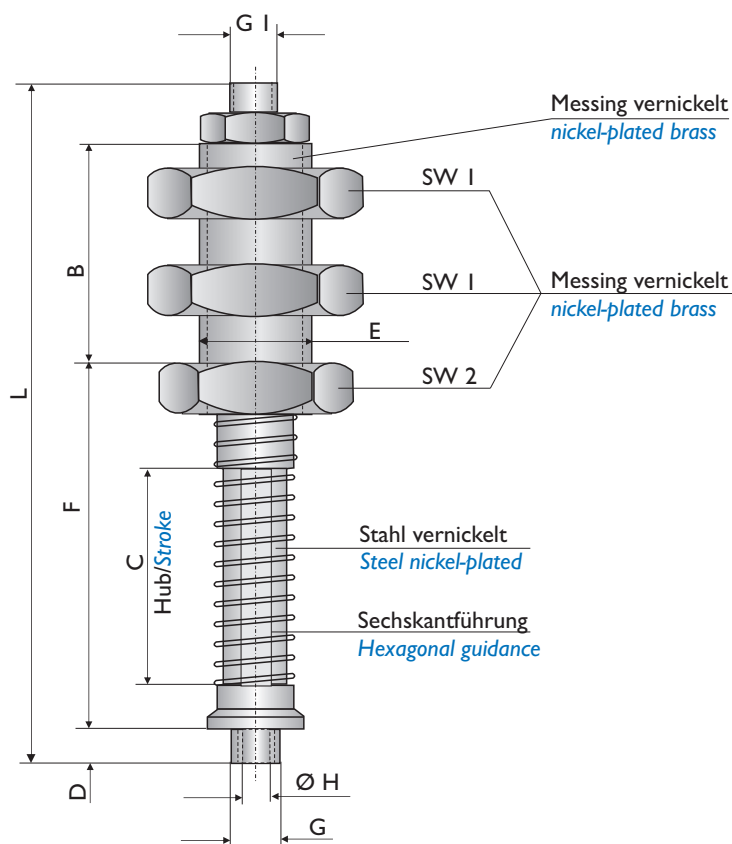
Verdrehgesichert /non-rotating

Vorteile:

- Hohe Genauigkeit in der Handhabung durch präzise Sechskant-Führung
- Hochwertige Mechanik durch Verwendung rostfreier Materialien
- Hohe Standzeit

Benefits

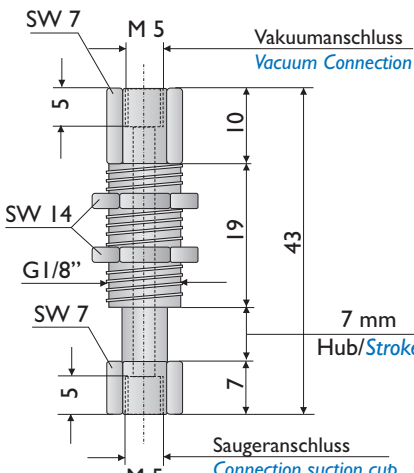
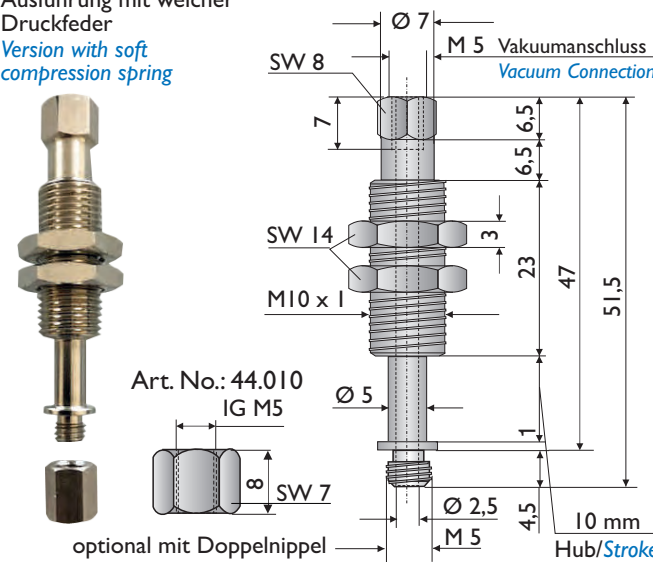
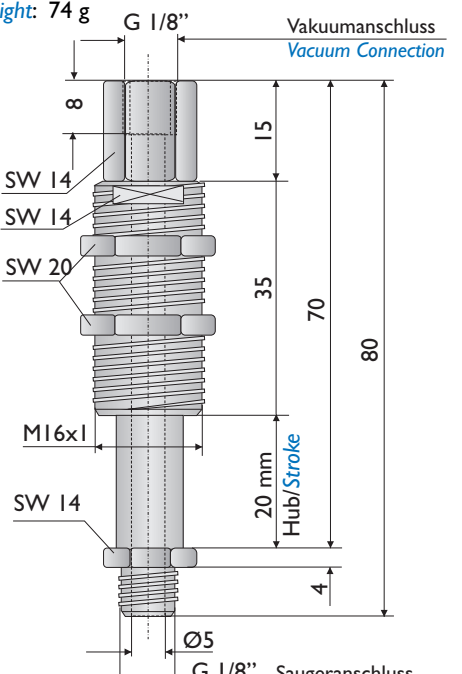
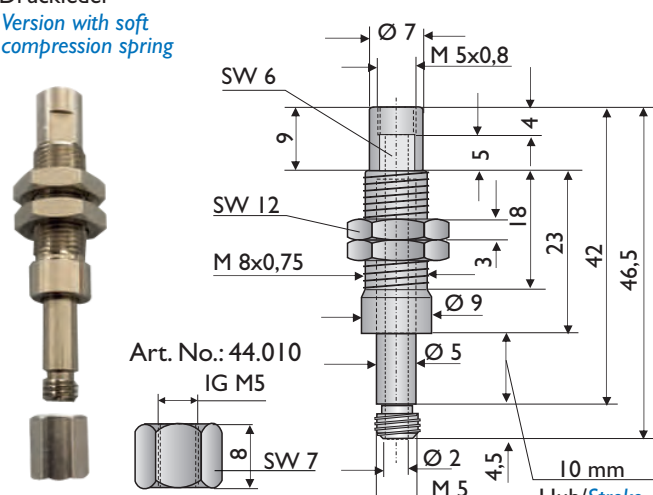
- High accuracy in the handling by a perfect hexagonal guidance
- High-quality mechanics by use of stainless materials
- Long service live



Pos.	Art. No.	Abmessungen/Dimensions in mm											Gewicht Weight g
		C	G	GI	L	B	D	F	E	Ø H	SW 1	SW 2	
1	FST.0012.V	15	G 1/8"	M 5	76	23	6	38,5	M12x1	2	17	14	56
2	FST.0013.V	25	G 1/8"	M 5	86	23	6	48,5	M12x1	2	17	14	56
3	FST.0014.V	25	G 1/8"	G 1/8"	112	42	8	49,5	M18x1	5	24	21	156
4	FST.0015.V	25	G 1/4"	G 1/8"	113	42	14	50,0	M18x1	5	24	21	156
5	FST.0016.V	40	G 1/8"	G 1/8"	127	42	8	72,5	M18x1	5	24	21	166
6	FST.0017.V	40	G 1/4"	G 1/8"	127	42	14	73,0	M18x1	5	24	21	166
7	FST.0018.V	60	G 1/8"	G 1/8"	147	42	8	84,0	M18x1	5	24	21	174
8	FST.0019.V	60	G 1/4"	G 1/8"	147	42	14	93,0	M18x1	5	24	21	174
9	FST.0020.V	40	G 1/4"	G 1/4"	158	50	14	83,0	M28x1,5	6	36	32	508
10	FST.0021.V	40	G 3/8"	G 1/4"	158	50	14	83,0	M28x1,5	6	36	32	508

Federstößel Serie Hub 7 - 20 mm

Spring Levelers Serie Stroke 7 - 20 mm

<p>Vorteile</p> <ul style="list-style-type: none"> • Innenliegende Druckfeder. • Hohe Genauigkeit in der Handhabung durch präzise Führung. • Hochwertige Mechanik. • Durch Verwendung rostfreier Materialien hohe Standzeit. 	<p>Benefits</p> <ul style="list-style-type: none"> • <i>Compression spring inside.</i> • <i>High accuracy in the handling by a perfect guidance.</i> • <i>High-quality mechanics.</i> • <i>By use of stainless material long service life.</i>
<p>Art. No.: FST.0026 nicht verdrehgesichert/<i>rotating</i> Gewicht/<i>Weight</i>: 18 g</p> 	<p>Art. No.: FST.0039 nicht verdrehgesichert/<i>rotating</i> Gewicht/<i>Weight</i>: 19 g Ausführung mit weicher Druckfeder <i>Version with soft compression spring</i></p>  <p>optional mit Doppelnippel <i>optional with double fitting</i></p>
<p>Art. No.: FST.0027 nicht verdrehgesichert/<i>rotating</i> Gewicht/<i>Weight</i>: 74 g</p> 	<p>Art. No.: FST.0024 nicht verdrehgesichert/<i>rotating</i> Gewicht/<i>Weight</i>: 15 g Ausführung mit weicher Druckfeder <i>Version with soft compression spring</i></p>  <p>optional mit Doppelnippel <i>optional with double fitting</i></p>

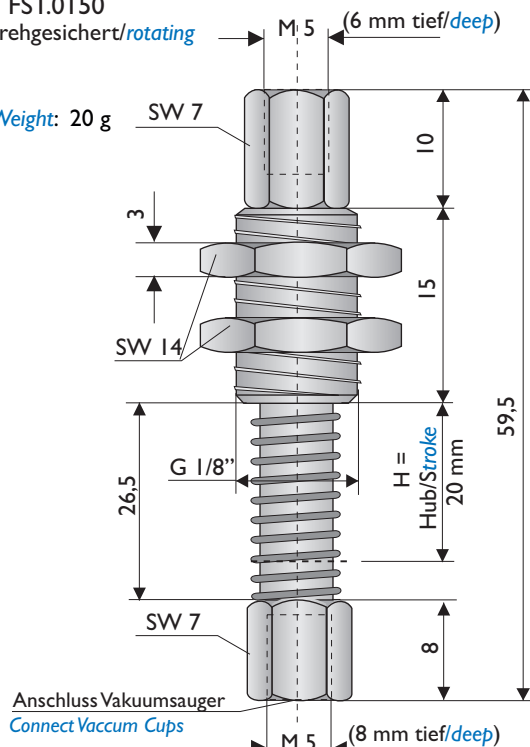
Federstößel Serie Hub 10 - 31 mm

Spring Levelers Series Stroke 10 - 31 mm

Art. No.: FST.0150

nicht verdrehgesichert/rotating

Gewicht/Weight: 20 g

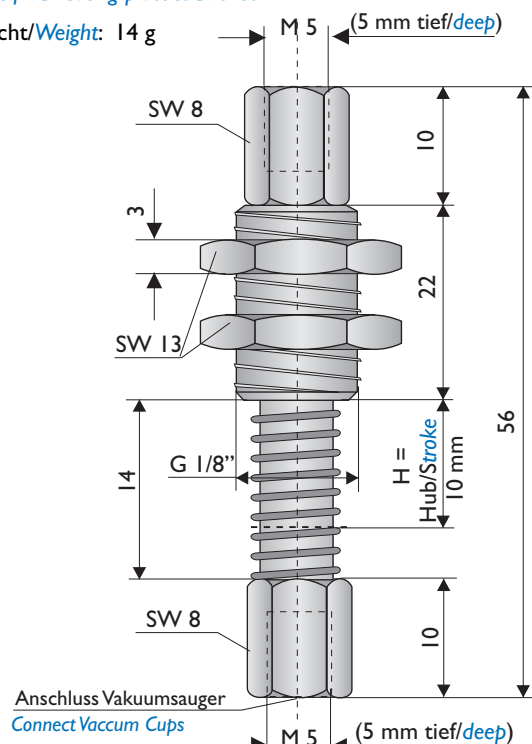


Anschluss Vakuumsauger
Connect Vacuum Cups

Art. No.: FST.0025

Federstößel „Micro“/Spring Leveler „Micro“
mit Kunststoff-Gleitlager „selbstschmierend“/
with self-lubricating plastics bushes

Gewicht/Weight: 14 g



Anschluss Vakuumsauger
Connect Vacuum Cups

Art. No.: FST.0120.MSV

Material: Messing vernickelt/nickel brass (Standard)

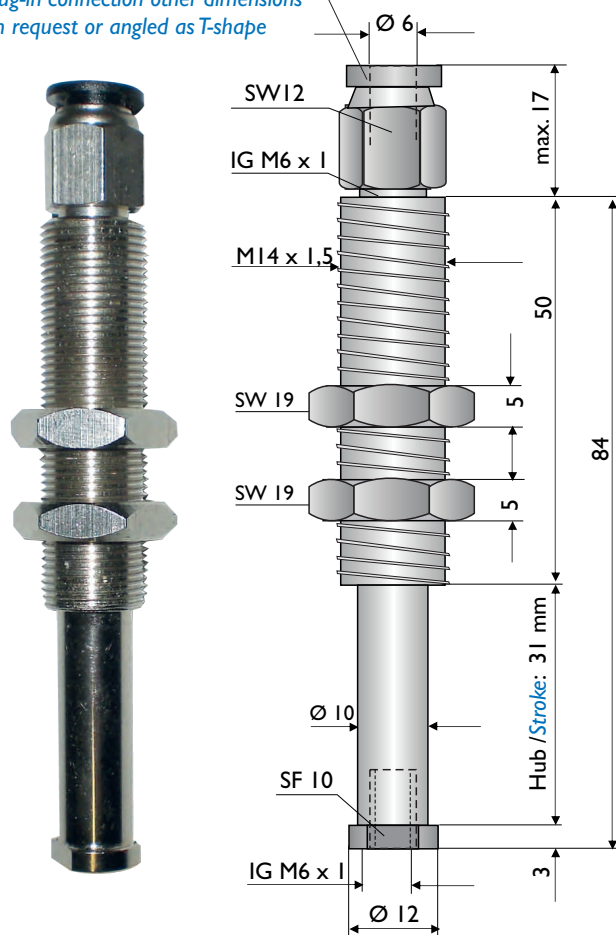
Art. No.: FST.0120.ES

Material: Edelstahl/Stainless steel (auf Anfrage/on request)

Innenliegende Druckfeder/Compression spring inside

Gewicht/Weight: 78 g

Steckanschluss
auf Wunsch andere Abmessungen,
abgewinkelt oder in T-Ausführung
Plug-in connection other dimensions
on request or angled as T-shape



Vorteile:

- Hohe Genauigkeit in der Handhabung durch präzise Führung.
- Hochwertige Mechanik durch Verwendung rostfreier Materialien.
- Hohe Standzeit.

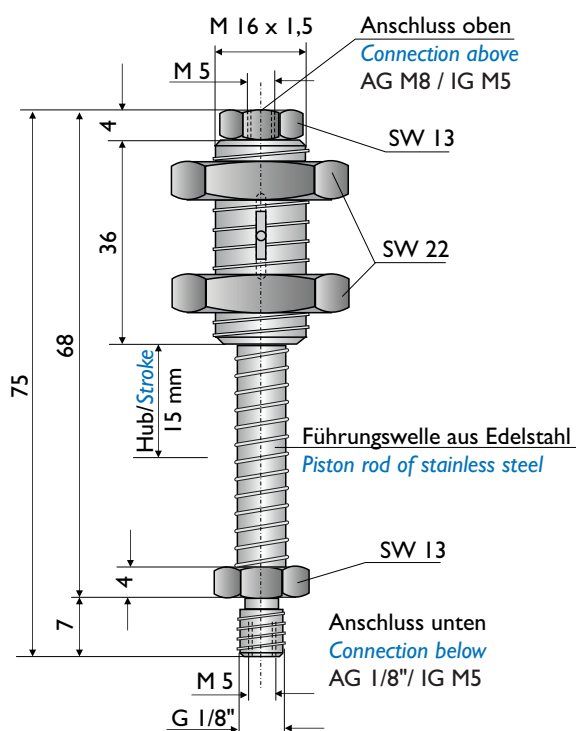
Benefits

- High accuracy in the handling by a perfect guidance.
- High-quality mechanics by use of stainless material.
- Long service life.

Art. No.: FST.0122.V

verdrehgesichert/*non-rotating*

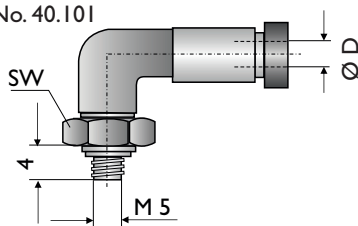
Gewicht/*Weight*: 73 g



Beispiel Anschluss drehbar
Example Connection rotating

D Ø 4 = Art. No. 40.100

D Ø 6 = Art. No. 40.101

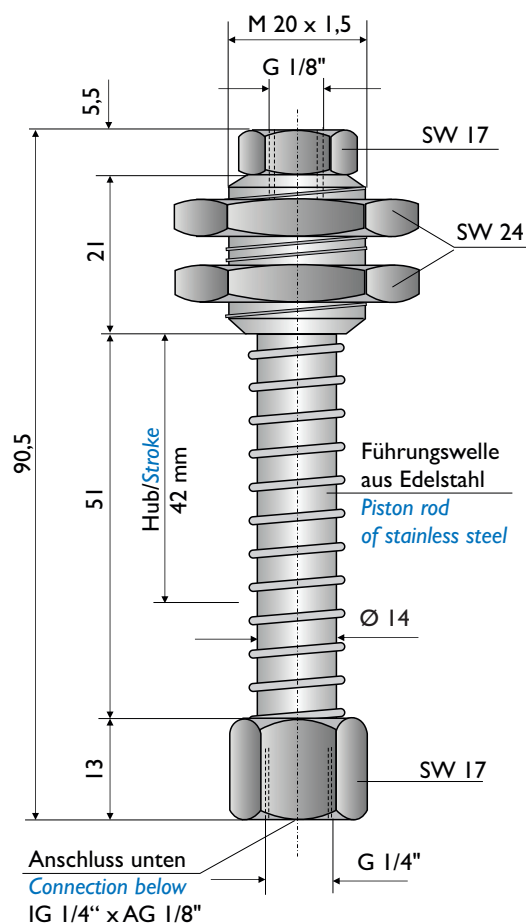


Anschlüsse unten und oben auswechselbar
Connections above and below replaceable

Art. No.: FST.0123

nicht verdrehgesichert/*rotating*

Gewicht/*Weight*: 123 g



Kugelgelenke Serie GSL + GSV

Ball Joints Series GSL + GSV

Eigenschaften und Vorteile:

- Kugelgelenk zum Handling von schrägen Werkstücken.
- Große Haltekraft (siehe Tabelle) mit 2,5-facher Sicherheit.
- Besonders geeignet zum Heben von schweren Platten.
- Alle 4 Baugrößen kombinierbar mit Federstösseln.
- Absolut vakuumdicht.
- Auslenkung bis 15°.
- Verwendung hochwertiger Materialien (Kugel aus Edelstahl).

Kugelgelenke, rotierbar um 360°

In 4 Baugrößen: 1/8" - 1/4" - 3/8" - 1/2"

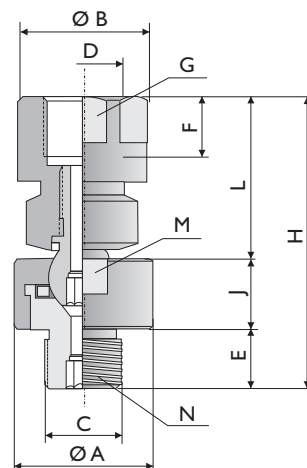
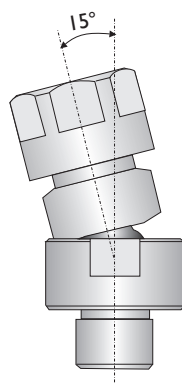
Ball joints, 360° rotatable

In 4 sizes: 1/8" - 1/4" - 3/8" - 1/2"



Properties and Advantages:

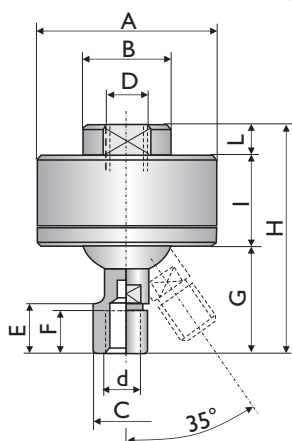
- Ball joint for the handling of sloping work pieces.
- Large holding force (see table) with 2.5 fold safety.
- Particularly suitable for lifting of heavy loads.
- All 4 sizes are combined with spring levellers.
- Absolutely vacuum tight.
- Flexible up to 15°.
- Use of high-quality materials (ball made of stainless steel).



F = Haltekraft bei 2,5-facher Sicherheit / F = Holding force with 2,5 fold safety

Art. No.	A Ø	B Ø	C	D	E	F	G SW	H	J	L	M SW	N SW	Gewicht/ Weight g	F kg
GSL 1/8"	20	12	G 1/8"	G 1/8"	8,5	8	11	43,0	12	22,5	18	4	40	21,9
GSL 1/4"	20	16	G 1/4"	G 1/4"	10	8	15	44,6	12	22,6	18	4	56	39,2
GSL 3/8"	30	28	G 3/8"	G 3/8"	13	13	26	63,3	15	35,3	28	6	206	66,8
GSL 1/2"	30	28	G 1/2"	G 1/2"	17	15	26	72,3	15	40,3	28	6	232	103,7

Kugelgelenke Serie GSV, einstellbar / Ball Joints Series GSV, adjustable



Kugelgelenke in verschiedenen Anschlussvarianten bis 35° fix einstellbar

Ball Joints with various fitting options, adjustable to 35°

Art. Nr.	A Ø	B Ø	C Ø	D	d	E	F	G	H	I	L	max. zugel. Gewicht max. adm. weight
GSV 1/8"	40	20	--	G1/8"	G1/8"	11,5	10	24,5	51,5	20	7	18,24 kg
GSV 1/4"	45	25	--	G1/4"	G1/4"	14,5	12	28,5	60,5	25	7	23,54 kg
GSV 3/8"	50	30	--	G3/8"	G3/8"	14	12	34,5	69,5	25	10	33,91 kg
GSVF 1/8"	40	20	15	G1/8"	G1/8"	11,5	10	24,5	51,5	20	7	18,24 kg
GSVF 1/4"	45	25	20	G1/4"	G1/4"	14,5	12	28,5	60,5	25	7	23,54 kg
GSVF 3/8"	50	30	21	G3/8"	G3/8"	17	12	34,5	69,5	25	10	33,91 kg



Eigenschaften und Vorteile:

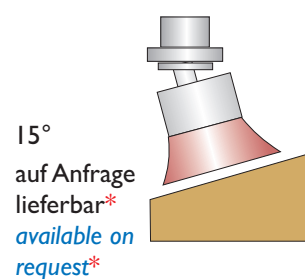
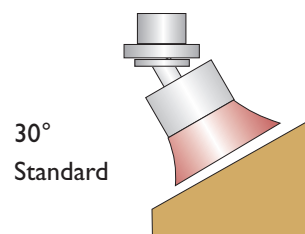
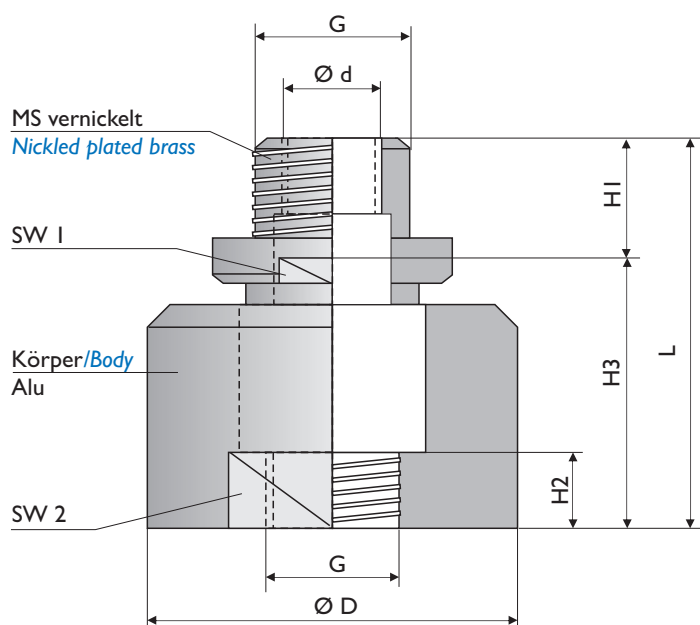
- Kugelgelenk zum Handling von schrägen Werkstücken.
- Alle 3 Baugrößen kombinierbar mit Federstößeln (auf Anfrage).
- Absolut vakuumdicht.

Properties and Advantages:

- Ball joint for the handling of sloping workpieces
- All three sizes are combined with spring levers (on request)
- Absolutely vacuum tight

Ausführung: Kugelgelenke, rotierbar um 360°, in 3 Baugrößen verfügbar.

Design: Ball Joints, rotatable by 360°, available in three sizes.



* zum Beispiel/for example

Art. No. KG.15.15
 KG.20.15
 KG.28.15

Art. No.	KG.15	KG.20	KG.28
Ø d mm	2	3,5	6
Ø D mm	15	20	28
G	M 4 x 0,7	M 6 x 1	M10 x 1,5
H1 mm	4	6,0	10
H2 mm	7	6,5	9,5
H3 mm	19	22,5	30,5
L mm	23	28,5	40,5
SW I	4	7	12
SW 2	---	---	24
Gewicht/Weight g	9	19	57
Für Sauger-Ø/ for Cup dia. mm	10 - 15	15 - 50	50 - 100

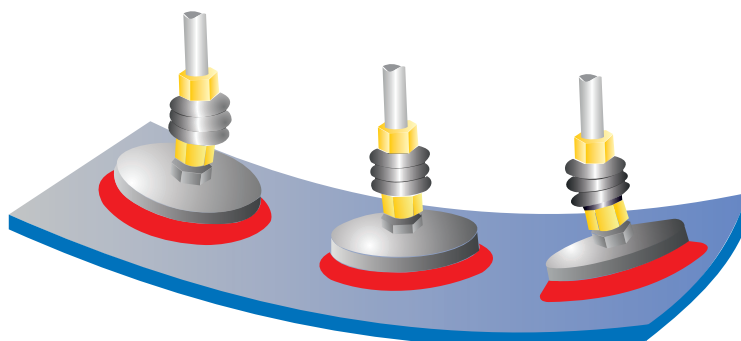
Flexible Gummigelenke Serie GG

Flexible Rubber Joints Series GG

Hohe Tragkraft/high load capacity

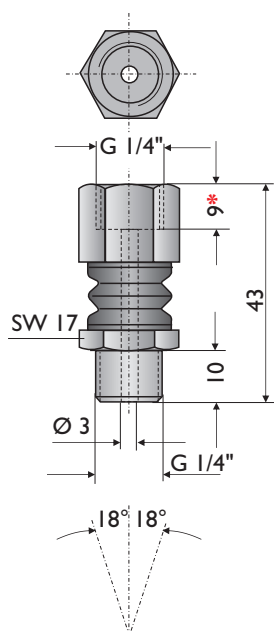
- Diese flexiblen Gummigelenke werden zur Handhabung von schrägen Werkstücken (z.B. Holz-, Kunststoff- oder Stahlplatten) mittels größerer Saugplatten eingesetzt (ab ca. Ø 60 mm).
- Selbstständige Rückstellung in neutrale Lage.
- Vakuumdichte Ausführung.
- Kombination mit Federstösseln (auch verdrehgesichert) möglich.
- Material: Gummigelenke aus NBR (ölbeständig) und Halterungen aus Stahl.
- Mit Sicherheitshalterung

- These flexible rubber joints are used to handle angled workpieces (e.g. plates of wood, plastics or steel) with larger suction plates (up to dia. 60 mm).
- Independent reset in neutral position.
- Vacuum tight design.
- Combination with spring levelers (also torsionally rigid).
- Material: rubber joints made of NBR (oil resistant) and holders made of steel.
- With safety holder.



Art. No.: GG.01.14

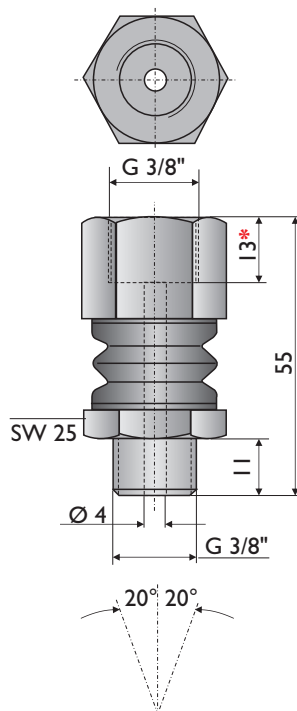
Max. Tragkraft vertikal: 200 kg
Max. load capacity vertical: 200 kg
 Gewicht/Weight: 36 g



*Max. Einschraubtiefe/
Screw-in max: 8 mm

Art. No.: GG.02.38

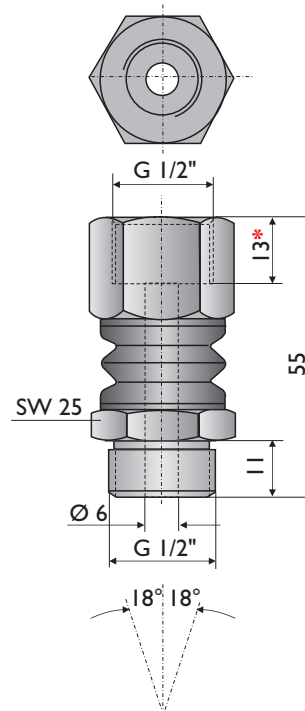
Max. Tragkraft vertikal: 300 kg
Max. load capacity vertical: 300 kg
 Gewicht/Weight: 104 g



*Max. Einschraubtiefe/
Screw-in max: 11 mm

Art. No.: GG.03.12

Max. Tragkraft vertikal: 300 kg
Max. load capacity vertical: 300 kg
 Gewicht/Weight: 95 g

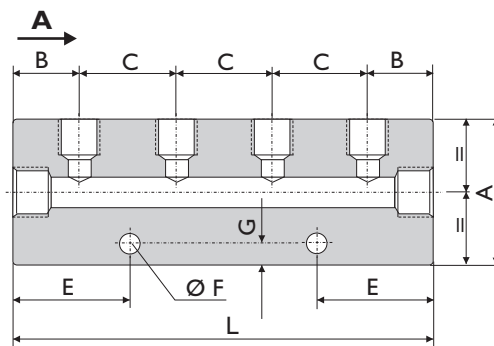
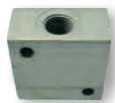


*Max. Einschraubtiefe/
Screw-in max: 11 mm

Für Vakuum und Druckluft / for vacuum and compressed air

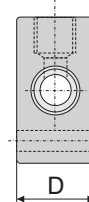
Verteilerleisten, einseitig/*Distributors one-sided*

	Art. No.	Gewinde Eingang <i>Thread Entrance</i>	Gewinde Ausgang <i>Thread Exit</i>	L	A	B	C	D	E	ØF	G
2 Abgänge 2 Exits	VLE2.18M5	G 1/8"	M 5	45	20	15	15	15	22,5	4,2	3,5
	VLE2.1418	G 1/4"	G 1/8"	60	30	15	30	20	30,0	5,2	4,5
	VLE2.3818	G 3/8"	G 1/8"	66	40	18	30	20	33,0	5,2	4,5
	VLE2.3814	G 3/8"	G 1/4"	72	40	18	36	20	36,0	6,5	6,0
	VLE2.1214	G 1/2"	G 1/4"	80	40	22	36	28	40,0	6,5	5,8
4 Abgänge 4 Exits	VLE4.18M5	G 1/8"	M 5	75	20	15	15	15	22,5	4,2	3,5
	VLE4.1418	G 1/4"	G 1/8"	120	30	15	30	20	30,0	5,2	4,5
	VLE4.3818	G 3/8"	G 1/8"	126	30	18	30	20	33,0	5,2	4,5
	VLE4.3814	G 3/8"	G 1/4"	144	30	18	36	20	36,0	6,5	6,0
	VLE4.1214	G 1/2"	G 1/4"	152	40	22	36	28	40,0	6,5	5,8
6 Abgänge 6 Exits	VLE6.18M5	G 1/8"	M 5	105	20	15	15	15	22,5	4,2	3,5
	VLE6.1418	G 1/4"	G 1/8"	180	30	15	30	20	30,0	5,2	4,5
	VLE6.3818	G 3/8"	G 1/8"	186	30	18	30	20	33,0	5,2	4,5
	VLE6.3814	G 3/8"	G 1/4"	216	30	18	36	20	36,0	6,5	6,0
	VLE6.1214	G 1/2"	G 1/4"	224	40	22	36	28	40,0	6,5	5,8



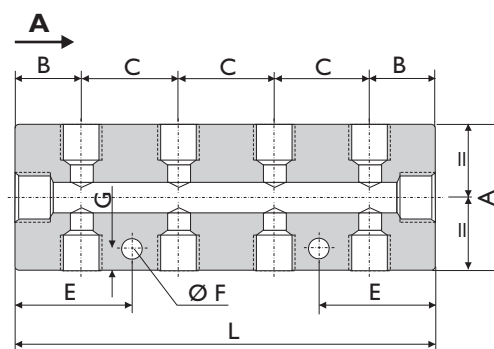
Material: Alu
16 bar

"A"



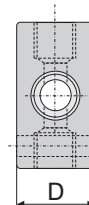
Verteilerleisten, doppelseitig/*Distributors, both sides*

	Art. No.	Gewinde Eingang <i>Thread Entrance</i>	Gewinde Ausgang <i>Thread Exit</i>	L	A	B	C	D	E	ØF	G
2x2 Abgänge 2x2 Exits	VLD2.18M5	G 1/8"	M 5	45	20	15	15	15	22,5	4,2	3,5
	VLD2.1418	G 1/4"	G 1/8"	60	30	15	30	20	30,0	5,2	4,5
	VLD2.3818	G 3/8"	G 1/8"	66	40	18	30	20	33,0	5,2	4,5
	VLD2.3814	G 3/8"	G 1/4"	72	40	18	36	20	36,0	6,5	6,0
	VLD2.1214	G 1/2"	G 1/4"	80	40	22	36	28	40,0	6,5	5,8
2x4 Abgänge 2x4 Exits	VLD4.18M5	G 1/8"	M 5	75	20	15	15	15	22,5	4,2	3,5
	VLD4.1418	G 1/4"	G 1/8"	120	30	15	30	20	30,0	5,2	4,5
	VLD4.3818	G 3/8"	G 1/8"	126	40	18	30	20	33,0	5,2	4,5
	VLD4.3814	G 3/8"	G 1/4"	144	40	18	36	20	36,0	6,5	6,0
	VLD4.1214	G 1/2"	G 1/4"	152	40	22	36	28	40,0	6,5	5,8
2x6 Abgänge 2x6 Exits	VLD6.18M5	G 1/8"	M 5	105	20	15	15	15	22,5	4,2	3,5
	VLD6.1418	G 1/4"	G 1/8"	180	30	15	30	20	30,0	5,2	4,5
	VLD6.3818	G 3/8"	G 1/8"	186	40	18	30	20	33,0	5,2	4,5
	VLD6.3814	G 3/8"	G 1/4"	216	40	18	36	20	36,0	6,5	6,0
	VLD6.1214	G 1/2"	G 1/4"	224	40	22	36	28	40,0	6,5	5,8



Material: Alu
16 bar

"A"



Verschlusschrauben siehe Seite 5.056/
fastener screw with see page 5.056

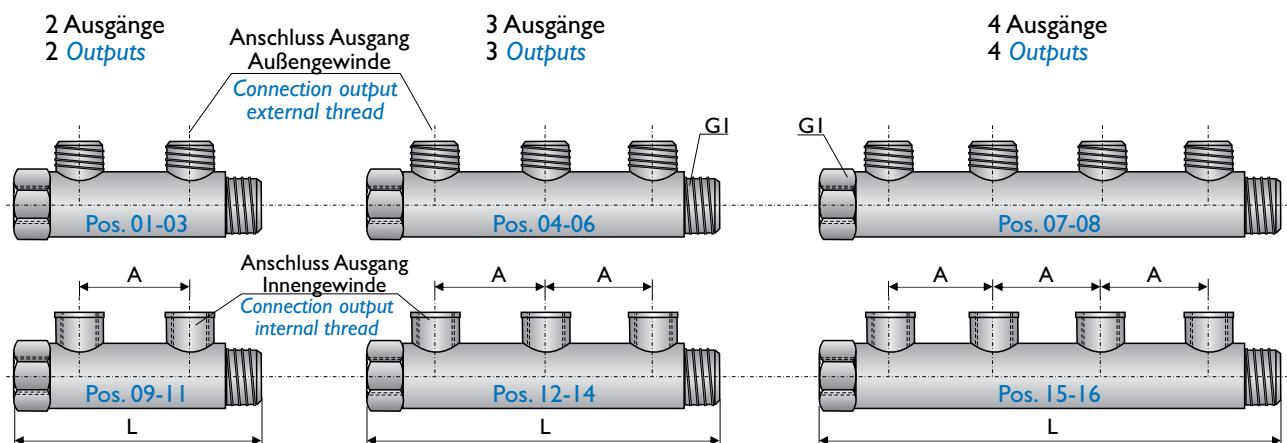
Verteilerrohre + Verschlüsse

Distributor Tubes + Closures

Für Vakuum und Druckluft / for vacuum and compressed air

Diese Verteilerrohre können beliebig verlängert werden, da sie über ein Innen- und Außengewinde verfügen.

These distributor tubes can be extended, because they have an internal and external thread.



Pos.	Art. No.	Eingang Input	Ausgang Output	L	A	Material
01	VLA2.03412.MSV	G 3/4"	2 x AG G 1/2"	87	38	MSV
02	VLA2.01012.MSV	G 1"	2 x AG G 1/2"	89	38	MSV
03	VLA2.11412.MS	G 1 1/4"	2 x AG G 1/2"	137	60	MS
04	VLA3.03412.MSV	G 3/4"	3 x AG G 1/2"	125	38	MSV
05	VLA3.01012.MSV	G 1"	3 x AG G 1/2"	127	38	MSV
06	VLA3.11412.MS	G 1 1/4"	3 x AG G 1/2"	197	60	MS
07	VLA4.03412.MSV	G 3/4"	4 x AG G 1/2"	163	38	MSV
08	VLA4.01012.MSV	G 1"	4 x AG G 1/2"	165	38	MSV
09	VLI2.03412.MSV	G 3/4"	2 x IG G 1/2"	87	38	MSV
10	VLI2.01012.MSV	G 1"	2 x IG G 1/2"	89	38	MSV
11	VLI1.412.MS	G 1 1/4"	2 x IG G 1/2"	137	60	MS
12	VLI3.03412.MSV	G 3/4"	3 x IG G 1/2"	125	38	MSV
13	VLI3.01012.MSV	G 1"	3 x IG G 1/2"	127	38	MSV
14	VLI3.11412.MS	G 1 1/4"	3 x IG G 1/2"	137	60	MS
15	VLI4.03412.MSV	G 3/4"	4 x IG G 1/2"	163	38	MSV
16	VLI4.01012.MSV	G 1"	4 x IG G 1/2"	165	38	MSV



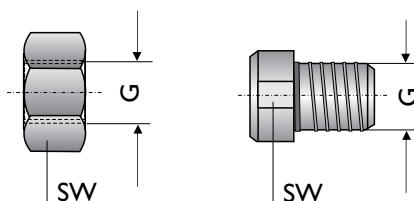
Materialhinweis:
MS = Messing blank
MSV = Messing vernickelt

Material note:
MS = Bare brass
MSV = Nickel-plated brass

Weitere Größen oder Sonderanfertigungen auf Anfrage/other sizes or special design on request

Verschlusskappen/Closing Cups

Pos.	Art. No.	Innengewinde Internal Thread G
1	VK.018.MSV	G 1/8"
2	VK.014.MSV	G 1/4"
3	VK.038.MSV	G 3/8"
4	VK.012.MSV	G 1/2"
5	VK.034.MSV	G 3/4"
6	VK.010.MSV	G 1"
7	VK.114.MSV	G 1 1/4"
8	VK.112.MSV	G 1 1/2"
9	VK.020.MSV	G 2"



Verschlusschrauben/Locking Screws

Pos.	Art. No.	Außengewinde External Thread G
1	VS.0M5.MSV	M 5
2	VS.018.MSV	G 1/8"
3	VS.014.MSV	G 1/4"
4	VS.038.MSV	G 3/8"
5	VS.012.MSV	G 1/2"
6	VS.034.MSV	G 3/4"
7	VS.010.MSV	G 1"
8	VS.114.MS	G 1 1/4"
9	VS.112.MS	G 1 1/2"
10	VS.020.MS	G 2"

Mit Vakuumdrucksperre in der Buchse/*with vacuum pressure lock in the socket*

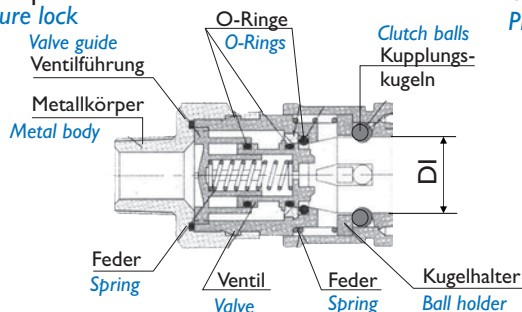
Kupplung bestehend aus:

- Buchse und Stecker, geeignet für Vakuum und Druck bis max. 9 bar
- Fördermedium: Luft,
- Betriebstemperatur: 0 - 60° C
- Standardfarbe: hellgrau (auf Wunsch: schwarz)

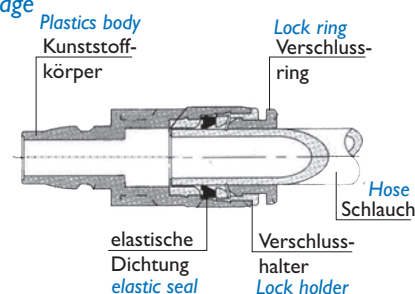
Clutch consisting of:

- Socket and plug suitable for vacuum and pressure to max. 9 bar
- Transportation medium: Air
- Working temperature: 0 - 60° C
- Standard color: light grey (on request: black)

Buchse mit Drucksperre
Socket with pressure lock

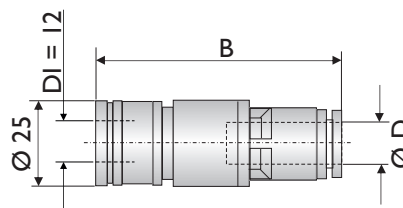


Stecker mit freiem Durchgang
Plug with free passage



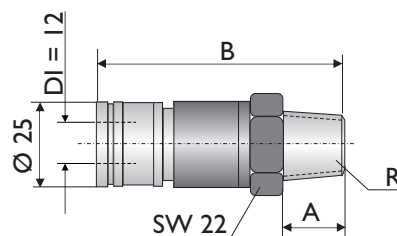
Buchse mit Steckanschluss/*Sockets with plug in*

Art. No.	Schlauch-Ø D/ Hose dia. D mm	B	Gewicht/ Weight g	eff. Fläche/ eff. Area mm²
45.001	6	55	23	11,5
45.002	8	55	23	19,8
45.003	10	60	28	22,6
45.004	12	60	29	23,0



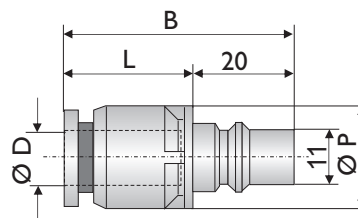
Buchse mit Gewindeanschluss/*Sockets with thread connection*

Art. No.	Gewinde- anschluss/ Thread connect	A	B	Gewicht/ Weight g	eff. Fläche/ eff. Area mm²
45.011	R 1/4"	11	50	41,0	22,9
45.012	R 3/8"	12	51	43,5	24,1
45.013	R 1/2"	13	54	53,3	24,2



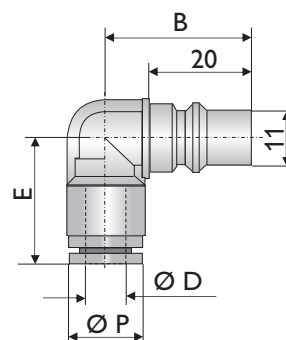
Stecker mit freiem Durchgang/*Plugs with free passage*

Art. No.	Schlauch-Ø D/ Hose dia. D mm	B	L	ØP	Gewicht/ Weight g	eff. Fläche/ eff. Area mm²
45.021	6	39,0	19,0	16	6,0	12,5
45.022	8	39,0	19,0	16	6,5	23,3
45.023	10	45,5	25,5	20	12,5	33,8
45.024	12	45,5	25,5	20	14,0	33,1



Winkelstecker mit freiem Durchgang/*Angle plugs with free passage*

Art. No.	Schlauch-Ø D/ Hose dia. D mm	B	ØP	E	Gewicht/ Weight g	eff. Fläche/ eff. Area mm²
45.031	6	28	14,5	24	7,5	10,7
45.032	8	28	14,5	24	7,5	17,5
45.033	10	31	21,0	30	15,0	26,3
45.034	12	31	21,0	30	16,0	29,0



Rotationsverschraubungen Serie RGN + RWN

Rotary Joints Series RGN + RWN

Anwendung:

Diese, mit einem Kugellager ausgestatteten Rotationsverschraubungen, werden dort eingesetzt, wo Anschlüsse schnelle Dreh- und Schwenkbewegungen ausführen müssen.

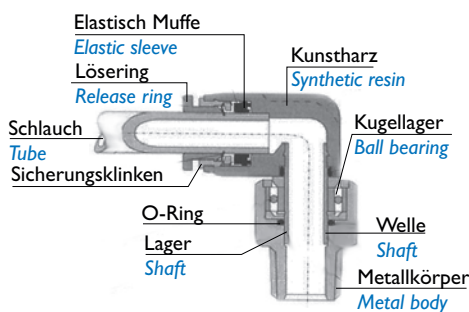
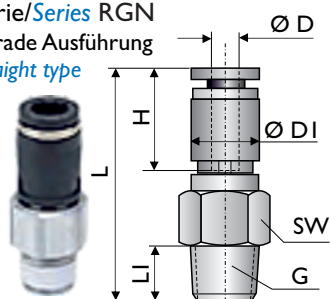
Application:

These rotary joints are equipped with ball bearings and are used for connections, which have to make fast rotating and swiveling movements.

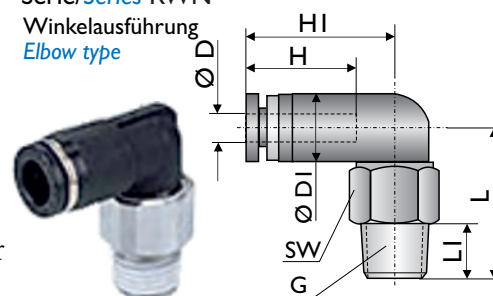
Einsatz bei/used with	Luft, Vakuum/Air, Vacuum
Betriebsdruck/ Operating Pressure	0 - 9 bar
Vakuum/Vacuum	-999,9 mbar
Betriebstemperatur/ Working Temperature	0° - 60°C

Art. No.	Schlauch-Ø Tube dia. Ø D	Abmessungen/Dimensions in mm						Gewicht/ Weight g	UPM (min ⁻¹)	Durchgangs- öffnung/ Through hole dia. Ø mm	eff. Fläche/ effective area mm ²
		G	L	LI	H	Ø DI	SW				
RGN.04M5		M5x0,8	33	3				13		1,8	1,9
RGN.04M6	4	M6x1,0	34	4	16	10	12	13	500	2,5	4,2
RGN.04I8		R1/8"	34	8				14		2,5	3,6
RGN.06M5		M5x0,8	36	3				19		2,5	3,6
RGN.06M6		M6x1,0	37	4				19		3	4,5
RGN.06I8	6	R1/8"	37	8	17	12,5	14	18	500	4	9
RGN.06I4		R1/4"	39	11				23		4	9
RGN.08I8		R1/8"	46	8				34		6	
RGN.08I4	8	R1/4"	45	11	19	14,5	17	32	400	6	20
RGN.0838		R3/8"	45	12				39		6	
RGN.10I8		R1/8"	56	8				22	68	7	
RGN.10I4		R1/4"	59	11				22	74	7	
RGN.1038	10	R3/8"	57	12	20	17,8	22	70	300	8	35
RGN.10I2		R1/2"	59	15				22	86	8	
RGN.12I4		R1/4"	62	11				94		7	
RGN.1238	12	R3/8"	62	12	24	20,8	24	95	250	9,5	50
RGN.12I2		R1/2"	62	15				102		9,5	

Serie/Series RGN gerade Ausführung Straight type



Serie/Series RWN Winkelausführung Elbow type



Art. No.	Schlauch-Ø/ Tube dia. Ø D	Abmessungen/Dimensions in mm							Gewicht/ Weight g	UPM (min ⁻¹)	Durchgangs- öffnung/ Through hole dia. Ø mm	eff. Fläche/ effective area mm ²
		G	L	LI	H	HI	Ø DI	SW				
RWN.04M5		M5x0,8	20,5	3					13		1,8	1,5
RWN.04M6	4	M6x1,0	21,5	4	15	20	10	12	14	500	2,5	4
RWN.04I8		R1/8"	22	8					15		2,5	2,9
RWN.06M5		M5x0,8	23,5	3					20		2,5	2,9
RWN.06M6		M6x1,0	24,5	4					20		3	6,1
RWN.06I8	6	R1/8"	24	8	17	23	12,5	14	19	500	4	7,5
RWN.06I4		R1/4"	26	11					24		4	7,5
RWN.08I8		R1/8"	31,5	8					35		6	
RWN.08I4	8	R1/4"	30,5	11	18	26	14,5	17	33	400	6	16,5
RWN.0838		R3/8"	30,5	12					41		6	
RWN.10I8		R1/8"	35	8					22	61	7	22
RWN.10I4		R1/4"	38	11					22	67	7	21
RWN.1038	10	R3/8"	36	12	20	30	17,5	22	63	300	8	30
RWN.10I2		R1/2"	38,5	15					22	79	8	24
RWN.12I4		R1/4"	41	11					84		7	
RWN.1238	12	R3/8"	42	12	23,5	33	21	24	85	250	9,5	42,5
RWN.12I2		R1/2"	42	15					91		9,5	

High-Speed Rotationsverschraubungen Serie RGH + RWH

High Speed Rotary Joints Series RGH + RWH

Anwendung:

Diese, mit zwei Kugellagern ausgestatteten High-Speed-Rotationsverschraubungen, werden dort eingesetzt, wo Anschlüsse schnelle Dreh- und Schwenkbewegungen ausführen müssen und normale Rotationsverschraubungen nicht ausreichen.

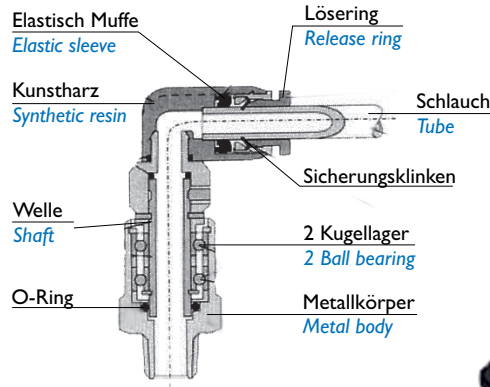
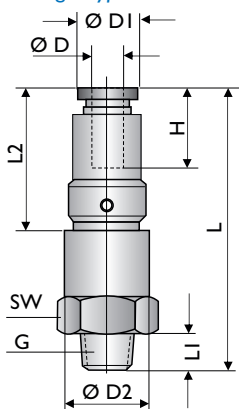
Application:

These rotary joints are equipped with 2 ball bearings and are used for connections, which have to make fast rotating and swiveling movements and where normal rotary joints are insufficient.

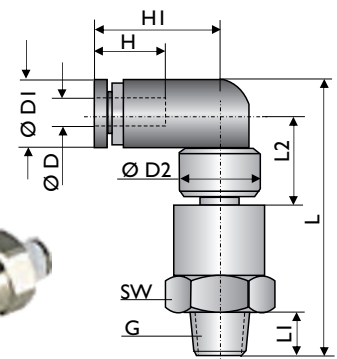
Einsatz bei/used with	Luft, Vakuum/Air, Vacuum
Betriebsdruck/ Operating Pressure	0 - 9 bar
Vakuum/Vacuum	-999,9 mbar
Betriebstemperatur/ Working Temperature	0° - 60°C

Art. No.	Schlauch-Ø/ Tube dia. Ø D	Abmessungen/Dimensions in mm								Gewicht/ Weight g	UPM (min ⁻¹)	Durchgangs- öffnung/ Through hole dia. Ø mm	eff. Fläche/ effective area mm ²
		G	L	LI	L2	H	Ø D1	Ø D2	SW				
RGH.04M5		M5x0,8	43	3	23					26		1,8	2,2
RGH.04M6	4	M6x1,0	44	4	23	15	11	12	12	27	1500	3	3
RGH.04I8		R1/8"	48	8	23					29		3	3,4
RGH.06I8		R1/8"	54,5	8	27,5					50		4,6	12,8
RGH.06I4	6	R1/4"	57,5	11	27,5	16,5	13	17	17	57	1200	4,6	12,2
RGH.08I8		R1/8"	58	8	30					55		5	10,7
RGH.08I4	8	R1/4"	61	11	30	17,5	15	17	17	60	1200	5	11,5
RGH.1038		R3/8"	68	12	31,5					122		7,5	41,5
RGH.10I2	10	R1/2"	71	15	31,5	20	20	23,5	24	138	900	7,5	42,9
RGH.1238		R3/8"	70	12	35,5					126		9	51,2
RGH.12I2	12	R1/2"	73,5	15	35,5	23	21	23,5	24	142	900	9	49,6

Serie/Series RGH gerade Ausführung Straight type



Serie/Series RWH Winkelausführung Elbow type



Art. No.	Schlauch-Ø/ Tube dia. Ø D	Abmessungen/Dimensions in mm								Gewicht/ Weight g	UPM (min ⁻¹)	Durchgangs- öffnung/ Through hole dia. Ø mm	eff. Fläche/ effective area mm ²
		G	L	LI	L2	H	HI	Ø D1	Ø D2	SW			
RWH.04M5		M5x0,8	35	3						22		1,8	2,2
RWH.04M6	4	M6x1,0	36	4	13	15	19,5	10	11,5	12	1500	3	4,5
RWH.04I8		R1/8"	38	8						27		3	4,1
RWH.06I8		R1/8"	45	8						48		4,6	10
RWH.06I4	6	R1/4"	48	11	17	16,5	22,5	13	16,5	17	1200	4,6	10,5
RWH.08I8		R1/8"	46	8						50		5	11,5
RWH.08I4	8	R1/4"	49	11	18	17,5	25	15	16,5	17	1200	5	13
RWH.1038		R3/8"	56,5	12						108		7,5	27,2
RWH.10I2	10	R1/2"	59,5	15	21	20	28,5	18	23,5	24	126	7,5	27
RWH.1238		R3/8"	58,5	12						113		9	42,5
RWH.12I2	12	R1/2"	61,5	15	23	23	32	21,5	23,5	24	130	9	41,6

High-Speed Rotationsverschraubungen Serie RMFH + RMMH

High Speed Rotary Joints Series RMFH + RMMH

Anwendung:

Diese, mit zwei Kugellagern ausgestatteten High-Speed-Rotationsverschraubungen, werden dort eingesetzt, wo Anschlüsse schnelle Dreh- und Schwenkbewegungen ausführen müssen und normale Rotationsverschraubungen nicht ausreichen.

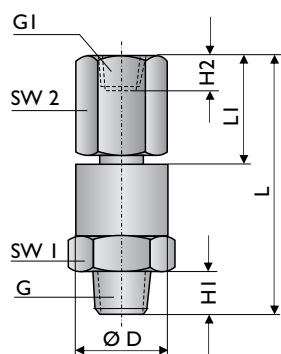
Application:

These rotary joints are equipped with 2 ball bearings and are used for connections, which have to make fast rotating and swiveling movements and where normal rotary joints are insufficient.

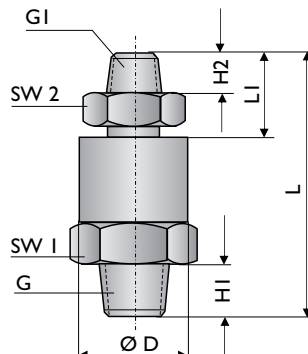
Einsatz bei/used with	Luft, Vakuum/Air, Vacuum
Betriebsdruck/ Operating Pressure	0 - 9 bar
Vakuum/Vacuum	-999,9 mbar
Betriebstemperatur/ Working Temperature	0° - 60°C

Art. No.	G	Abmessungen/Dimensions in mm								Gewicht/ Weight g	UPM (min ⁻¹)	Durchgangs- öffnung/ Through hole dia. Ø mm	eff. Fläche/ effective area mm ²
		GI	HI	H2	L	LI	Ø D	SW1	SW2				
RMFH.1818	R1/8"	R1/8"		8	47	19			14	51			13,9
RMFH.1814	R1/8"	R1/4"	8	11	51	23	16,5	17	17	62	1200	5	11
RMFH.1418	R1/4"	R1/8"		8	50	19			14	56			14,8
RMFH.1414	R1/4"	R1/4"	11	11	54	23	16,5	17	17	68	1200	5	11,2
RMFH.3838	R3/8"	R3/8"		12	62	26,5			22	134			47,2
RMFH.3812	R3/8"	R1/2"	12	15	64	28	23,5	24	24	140	900	9	53,1
RMFH.1238	R1/2"	R3/8"		12	65	26,5			22	150			47,5
RMFH.1212	R1/2"	R1/2"	15	15	67	28	23,5	24	24	160	900	9	50,2

Serie/Series RMFH
gerade Ausführung
Straight type



Serie/Series RMMH
gerade Ausführung
Straight type



Art. No.	G	Abmessungen/Dimensions in mm								Gewicht/ Weight g	UPM (min ⁻¹)	Durchgangs- öffnung/ Through hole dia. Ø mm	eff. Fläche/ effective area mm ²
		GI	HI	H2	L	LI	Ø D	SW1	SW2				
RMMH.1818	R1/8"	R1/8"		8	43,5	15,5				42			12,8
RMMH.1814	R1/8"	R1/4"	8	11	46	18	16,5	17	14	47	1200	5	12,2
RMMH.1418	R1/4"	R1/8"		8	46,5	15,5				48			11,1
RMMH.1414	R1/4"	R1/4"	11	11	49	18	16,5	17	14	53	1200	5	11,4
RMMH.3838	R3/8"	R3/8"		12	57	21,5				112			48,8
RMMH.3812	R3/8"	R1/2"	12	15	60	24,5	23,5	24	22	129	900	9	47,9
RMMH.1238	R1/2"	R3/8"		12	60	21,5				130			50,5
RMMH.1212	R1/2"	R1/2"	15	15	63	24,5	23,5	24	22	147	900	9	47,0