

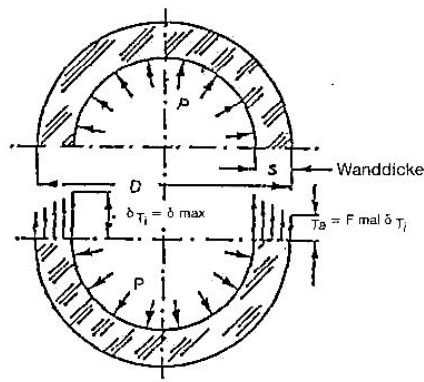


Working pressure for round glass-hollow cylinder

The diagram is valid for stressfree tubes and cylindric hollows with circular cross-section, constant wall thickness and free ends, if there is no unfavourable thermal charge. The average value of the 1-minute-bursting pressure (cold water-test pressure) is 2.5-times of the pressure. If the bursting-pressure values scatter by 15%, the probability of fracture in case of permanent stress is about 1:10. If the maximum wall stress is doubled by unfavourable stress capacity or run-out, the probability of fracture in case of permanent pressure increases at about 1:200.

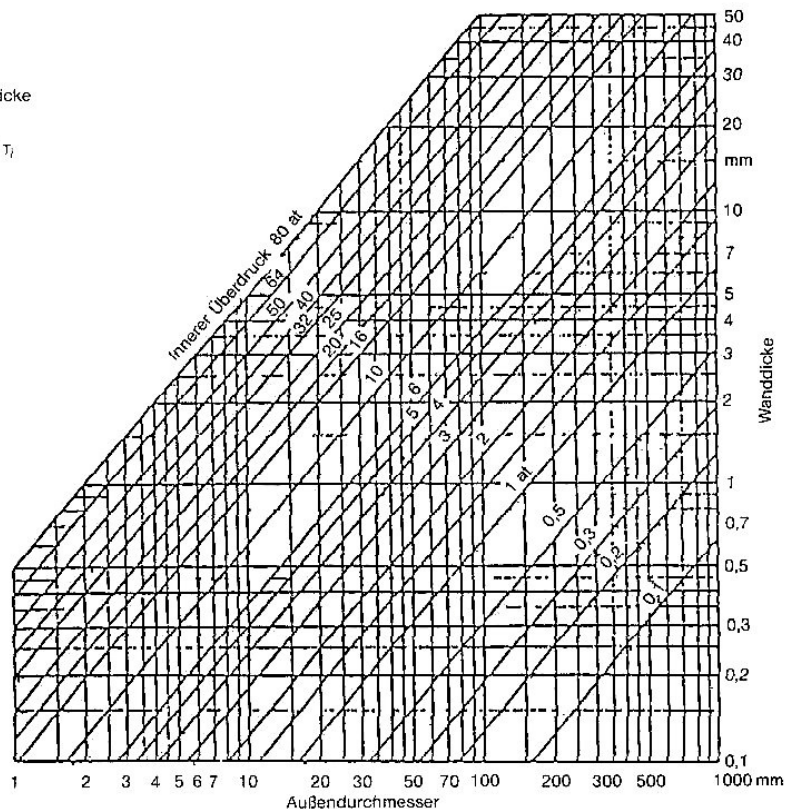
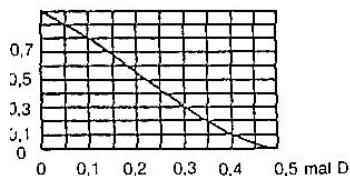
Sight glasses

ISO
 DIN
 US o.D. Tubing
 DIN line 2



Maximale Glasanstrengung durch tangentielle Zugspannung an der Innenwand

Lastannahme
 $\delta_{T1} = 0,6 \text{ kN/mm}^2$





NAUE GmbH

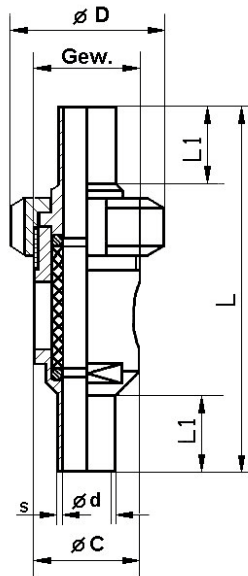
Sondermaschinen - und Filterbau

Am Rotböhl 5

64331 Weiterstadt

Tel. 0 61 50 / 97 38 - 0

Fax. 0 61 50 / 70 18



Aseptic-sight glass

| | | |
|----------|-----------|----------------|
| Material | Male part | 1.4404 / 316 L |
| | Liner | 1.4404 / 316 L |
| | Nut | 1.4301 / 304 |

Above steel qualities are available ex stock. Other steel qualities such as 316L and other dimensions are available upon request.

| Metric thread | | | | | | | | Round thread | |
|---------------|-------------|---|-------------------|-----|--|-------------|----------|--------------|--|
| DN | d x s | C | D | L | | O-ring | Part n° | Part n° | |
| 6 | 8,0 x 1,0 | | SW17 | 75 | | 6,0 x 2,5 | 05-11876 | 05-13876 | |
| 8 | 10,0 x 1,0 | | SW24 | 77 | | 8,0 x 2,5 | 05-11877 | 05-13877 | |
| 10 | 13,5 x 1,6 | | SW27 | 82 | | 10,5 x 2,5 | 05-11878 | 05-13878 | |
| 12 | 17,2 x 1,6 | | SW36 | 92 | | 15,0 x 3,0 | 05-11879 | 05-13879 | |
| 15 | 21,3 x 1,6 | | $\varnothing 48$ | 97 | | 18,5 x 3,0 | 05-11880 | 05-13880 | |
| 20 | 26,9 x 1,6 | | $\varnothing 62$ | 109 | | 25,0 x 3,0 | 05-11881 | 05-13881 | |
| 25 | 33,7 x 2,0 | | $\varnothing 76$ | 130 | | 30,0 x 3,0 | 05-11882 | 05-13882 | |
| 32 | 42,4 x 2,0 | | $\varnothing 95$ | 137 | | 39,0 x 3,0 | 05-11883 | 05-13883 | |
| 40 | 48,3 x 2,0 | | $\varnothing 105$ | 152 | | 45,0 x 3,0 | 05-11884 | 05-13884 | |
| 50 | 60,3 x 2,6 | | $\varnothing 140$ | 178 | | 55,0 x 3,0 | 05-11885 | 05-13885 | |
| 65 | 76,0 x 2,6 | | | 210 | | 72,0 x 4,0 | 05-11886 | 05-13886 | |
| 80 | 88,9 x 2,6 | | | 240 | | 84,0 x 4,0 | 05-11887 | 05-13887 | |
| 100 | 114,3 x 2,6 | | | 320 | | 110,0 x 4,0 | 05-11888 | 05-13888 | |
| 150 | 168,3 x 2,6 | | | 430 | | 163,0 x 4,0 | 05-11889 | 05-13889 | |

| DN | Liner | Male part ISO | | Nut ISO | | Glass tube |
|-----|-------------|---------------|--------------|---------------|--------------|------------|
| | ISO orbital | metric thread | round thread | metric thread | round thread | |
| 6 | 05-11125 | 05-11 | 05-13 | 05-11200 | 05-13200 | |
| 8 | 05-11126 | 05-11 | 05-13 | 05-11201 | 05-13201 | |
| 10 | 05-11127 | 05-11 | 05-13 | 05-11202 | 05-13202 | |
| 12 | 05-11128 | 05-11 | 05-13 | 05-11203 | 05-13203 | |
| 15 | 05-11129 | 05-11 | 05-13 | 05-11204 | 05-13204 | |
| 20 | 05-11130 | 05-11 | 05-13 | 05-11205 | 05-13205 | |
| 25 | 05-11131 | 05-11 | 05-13 | 05-11206 | 05-13206 | |
| 32 | 05-11132 | 05-11 | 05-13 | 05-11207 | 05-13207 | |
| 40 | 05-11133 | 05-11 | 05-13 | 05-11208 | 05-13208 | |
| 50 | 05-11134 | 05-11 | 05-13 | 05-11209 | 05-13209 | |
| 65 | 05-11135 | 05-11 | 05-13 | 05-11210 | 05-13210 | |
| 80 | 05-11136 | 05-11 | 05-13 | 05-11211 | 05-13211 | |
| 100 | 05-11137 | 05-11 | 05-13 | 05-11212 | 05-13212 | |
| 150 | 05-11138 | 05-11 | 05-13 | 05-11214 | 05-13214 | |

Dimensions/part numbers are subject to change without notice



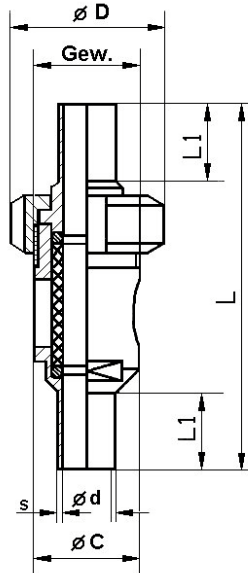
DIN

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Aseptic-sight glass

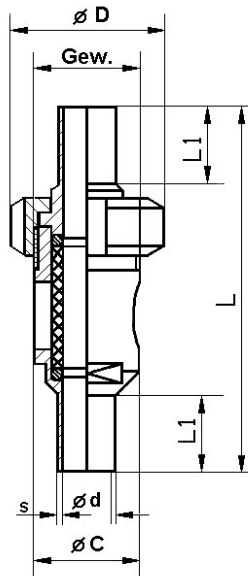
| | | |
|----------|-----------|----------------|
| Material | Male part | 1.4404 / 316 L |
| | Liner | 1.4404 / 316 L |
| | Nut | 1.4301 / 304 |

Above steel qualities are available ex stock. Other steel qualities such as 316L and other dimensions are available upon request.

| Metric thread | | | | | | | | Round thread | |
|---------------|-------------|---|-------------------|-----|--|--|-------------|--------------|----------|
| DN | d x s | C | D | L | | | O-ring | Part n° | Part n° |
| 6 | 8,0 x 1,0 | | SW17 | 75 | | | 6,0 x 2,5 | 05-12876 | 05-14876 |
| 8 | 10,0 x 1,0 | | SW24 | 77 | | | 8,0 x 2,5 | 05-12877 | 05-14877 |
| 10 | 12,0 x 1,0 | | SW27 | 82 | | | 10,5 x 2,5 | 05-12878 | 05-14878 |
| 15 | 18,0 x 1,5 | | \varnothing 48 | 97 | | | 15,0 x 3,0 | 05-12880 | 05-14880 |
| 20 | 22,0 x 1,5 | | \varnothing 62 | 109 | | | 20,0 x 3,0 | 05-12881 | 05-14881 |
| 25 | 28,0 x 1,5 | | \varnothing 76 | 130 | | | 25,0 x 3,0 | 05-12882 | 05-14882 |
| 32 | 34,0 x 1,5 | | \varnothing 95 | 137 | | | 30,0 x 3,0 | 05-12883 | 05-14883 |
| 40 | 40,0 x 1,5 | | \varnothing 105 | 152 | | | 39,0 x 3,0 | 05-12884 | 05-14884 |
| 50 | 52,0 x 1,5 | | \varnothing 140 | 178 | | | 50,0 x 3,0 | 05-12885 | 05-14885 |
| 65 | 70,0 x 2,0 | | | 210 | | | 66,0 x 4,0 | 05-12886 | 05-14886 |
| 80 | 85,0 x 2,0 | | | 240 | | | 81,0 x 4,0 | 05-12887 | 05-14887 |
| 100 | 104,0 x 2,0 | | | 320 | | | 100,0 x 4,0 | 05-12888 | 05-14888 |
| 150 | 154,0 x 2,0 | | | 430 | | | 150,0 x 4,0 | 05-12889 | 05-14889 |

| DN | Liner | Male part DIN | | Nut DIN | | Glass tube |
|-----|-------------|---------------|--------------|---------------|--------------|------------|
| | DIN orbital | metric thread | round thread | metric thread | round thread | |
| 6 | 05-12125 | 05-11 | 05-13 | 05-11200 | 05-13200 | |
| 8 | 05-12126 | 05-11 | 05-13 | 05-11201 | 05-13201 | |
| 10 | 05-12127 | 05-11 | 05-13 | 05-11202 | 05-13202 | |
| 15 | 05-12129 | 05-11 | 05-13 | 05-11203 | 05-13203 | |
| 20 | 05-12130 | 05-11 | 05-13 | 05-12205 | 05-14205 | |
| 25 | 05-12131 | 05-11 | 05-13 | 05-12206 | 05-14206 | |
| 32 | 05-12132 | 05-11 | 05-13 | 05-11206 | 05-13206 | |
| 40 | 05-12133 | 05-11 | 05-13 | 05-11207 | 05-13207 | |
| 50 | 05-12134 | 05-11 | 05-13 | 05-12209 | 05-14209 | |
| 65 | 05-12135 | 05-11 | 05-13 | 05-11210 | 05-13210 | |
| 80 | 05-12136 | 05-11 | 05-13 | 05-12211 | 05-14211 | |
| 100 | 05-12137 | 05-11 | 05-13 | 05-12212 | 05-14212 | |
| 150 | 05-12139 | 05-11 | 05-13 | 05-12214 | 05-14214 | |

Dimensions/part numbers are subject to change without notice



Aseptic-sight glass

| | | |
|----------|-----------|----------------|
| Material | Male part | 1.4404 / 316 L |
| | Liner | 1.4404 / 316 L |
| | Nut | 1.4301 / 304 |

Above steel qualities are available ex stock. Other steel qualities such as 316L and other dimensions are available upon request.

| Metric thread | | | | | | | | Round thread | |
|---------------|------------|---|-------|-----|--|--|------------|--------------|----------|
| DN | d x s | C | D | L | | | O-Ring | Part n° | Part n° |
| 10 | 13,0 x 1,5 | | SW27 | 82 | | | 10,5 x 2,5 | 05-22878 | 05-23878 |
| 15 | 19,0 x 1,5 | | Ø 48 | 97 | | | 16,0 x 3,0 | 05-22880 | 05-23880 |
| 20 | 23,0 x 1,5 | | Ø 62 | 109 | | | 20,0 x 3,0 | 05-22881 | 05-23881 |
| 25 | 29,0 x 1,5 | | Ø 76 | 130 | | | 26,0 x 3,0 | 05-22882 | 05-23882 |
| 32 | 35,0 x 1,5 | | Ø 95 | 137 | | | 32,0 x 3,0 | 05-22883 | 05-23883 |
| 40 | 41,0 x 1,5 | | Ø 105 | 152 | | | 38,0 x 3,0 | 05-22884 | 05-23884 |
| 50 | 53,0 x 1,5 | | Ø 140 | 178 | | | 50,0 x 3,0 | 05-22885 | 05-23885 |
| | | | | | | | | | |
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| DN | Liner | Male part DIN 2 | | Nut DIN 2 | | Glass tube |
|----|---------------|-----------------|--------------|---------------|--------------|------------|
| | DIN 2 orbital | metric thread | round thread | metric thread | round thread | |
| 10 | 05-22127 | 05-22 | 05-23 | 05-22202 | 05-23202 | |
| 15 | 05-22129 | 05-22 | 05-23 | 05-22204 | 05-23204 | |
| 20 | 05-22130 | 05-22 | 05-23 | 05-22205 | 05-23205 | |
| 25 | 05-22131 | 05-22 | 05-23 | 05-22206 | 05-23206 | |
| 32 | 05-22132 | 05-22 | 05-23 | 05-22207 | 05-23207 | |
| 40 | 05-22133 | 05-22 | 05-23 | 05-22208 | 05-23208 | |
| 50 | 05-22134 | 05-22 | 05-23 | 05-22209 | 05-23209 | |
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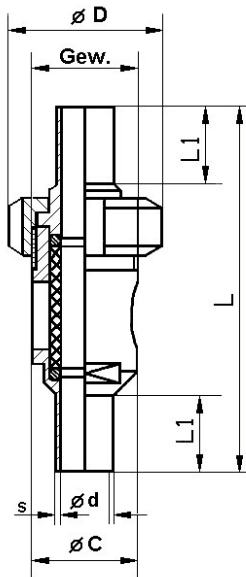
US
o.D.Tubing

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Aseptic-sight glass

| | | |
|----------|-----------|----------------|
| Material | Male part | 1.4404 / 316 L |
| | Liner | 1.4404 / 316 L |
| | Nut | 1.4301 / 304 |

Above steel qualities are available ex stock. Other steel qualities such as 316L and other dimensions are available upon request.

| Metric thread | | | | | | | | | Round thread |
|---------------|---------------|---|-------------------|-----|----|--|--------------|----------|--------------|
| o.D. | d x s | C | D | L | | | O-ring | Part n° | Part n° |
| 1/4 | 6,35 x 1,22 | | SW17 | | | | 4,0 x 2,0 | 05-15876 | 05-19876 |
| 3/8 | 9,53 x 1,22 | | SW24 | 76 | 16 | | 7,5 x 2,5 | 05-15877 | 05-19877 |
| 1/2 | 12,70 x 1,65 | | SW27 | 76 | 16 | | 10,0 x 2,5 | 05-15878 | 05-19878 |
| 3/4 | 19,05 x 1,65 | | SW36 | 101 | 16 | | 16,0 x 3,0 | 05-15880 | 05-19880 |
| 1 | 25,40 x 1,65 | | \varnothing 48 | 105 | 16 | | 22,0 x 3,0 | 05-15882 | 05-19882 |
| 1 1/2 | 38,10 x 1,65 | | \varnothing 62 | | | | 36,0 x 3,0 | 05-15884 | 05-19884 |
| 2 | 50,80 x 1,65 | | \varnothing 76 | | | | 48,0 x 3,0 | 05-15885 | 05-19885 |
| 2 1/2 | 63,50 x 1,65 | | \varnothing 95 | | | | 61,0 x 4,0 | 05-15886 | 05-19886 |
| 3 | 76,20 x 1,65 | | \varnothing 105 | | | | 74,0 x 4,0 | 05-15887 | 05-19887 |
| 4 | 101,60 x 2,10 | | \varnothing 140 | | | | 100,0 x 5,00 | 05-15888 | 05-19888 |

| o.D. | Liner | Male part US | | Nut US | | Glass tube |
|-------|----------|--------------|---------------|--------------|---------------|------------|
| | | US orbital | metric thread | round thread | metric thread | |
| 1/4 | | | | | | |
| 3/8 | 05-15128 | 05-15 | 05-19 | 05-15201 | 05-13201 | |
| 1/2 | 05-15130 | 05-15 | 05-19 | 05-15202 | 05-13202 | |
| 3/4 | 05-15132 | 05-15 | 05-19 | 05-15204 | 05-13204 | |
| 1 | 05-15134 | 05-15 | 05-19 | 05-15206 | 05-13206 | |
| 1 1/2 | 05-15136 | 05-15 | 05-19 | 05-15208 | 05-13208 | |
| 2 | 05-15138 | 05-15 | 05-19 | 05-15209 | 05-13209 | |
| 2 1/2 | 05-15140 | 05-15 | 05-19 | 05-15215 | 05-19215 | |
| 3 | 05-15142 | 05-15 | 05-19 | 05-15210 | 05-13210 | |
| 4 | 05-15144 | 05-15 | 05-19 | 05-15212 | 05-13212 | |

Dimensions/part numbers are subject to change without notice