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Rohrleitungsteile, Fittings und Armaturen mit Bund und geteilten Losflanschen oder mit Festflanschen sowie Kolonnen, Apparate und Apparate-Zubehör  
Piping material, fittings and valves with collar and split flanges (in two pieces) or with fix flanges and columns, vessels, reactors, accessories  
Tuyauteries, fittings et vannes avec collets et brides libres (en deux parties) ou avec brides à collerettes et colonnes, appareils, réacteurs, accessoires.

| Standards  | DIN (D) SN (CH)  | ANSI (USA)   | BS (GB)  |
|--|--|--|--|
| Druckstufen<br>Pressure ranges<br>Echelons de pression                                   | DIN 2873 PN 10<br>DIN 2501<br>EN1092-1<br>DIN 3202/F 1 PN 10 | ANSI-B-16.5<br>150 PSI<br>300 PSI                            | B.S. table E<br>150 PSI<br>300 PSI                           |
| Werkstoff emaillierbarer Stahl<br>Material fit for glass lining<br>Matériaux émaillables | nach Katalogblatt 10-151                                     | acc. to specification sheet 10-151                           | acc. to specification sheet 10-151                           |
| Toleranzen<br>Tolerances<br>Tolerances   | DIN 2873 / 2876<br>DIN 28005-2<br>DIN 28006-2<br>DIN 28007-2 | DIN 2873 / 2876<br>DIN 28005-2<br>DIN 28006-2<br>DIN 28007-2 | DIN 2873 / 2876<br>DIN 28005-2<br>DIN 28006-2<br>DIN 28007-2 |

| ESTRELLA Email   | ESTRELLA glass  | Email ESTRELLA  |  |
|--|---|---|--|
| Emailqualität<br>Emailprüfung  | Glass quality<br>Glass testing  | Qualité de l'email<br>Contrôle de l'email   | ESTRELLA 2000<br>DIN EN 14430<br>20KV-12KV   |
| <b>Technische Lieferbedingungen:</b><br>Rohre, Fittings, Armaturen, Zubehör,<br>Kolonnen, Apparate   | <b>Technical delivery conditions:</b><br>pipes, fittings, valves, accessories,<br>columns, reactors   | <b>Conditions techniques de livraison:</b><br>tuyauteries, fittings, vannes,<br>accessoires<br>colonnes, réacteurs  | DIN 2876<br>DIN EN 15159-1   |
| <b>Physikalische Eigenschaften</b><br>Spezifisches Gewicht<br>Erweichungstemperatur<br>Thermische leitfähigkeit<br>Linearer Ausdehnungskoeffizient<br>(20 bis 400°C)<br>Spez. Wärmekapazität | <b>Physical properties</b><br>Density<br>Softening point<br>Thermal conductivity<br>Linear expansion coefficient<br>(20 up to 400°C)<br>Specific thermal capacity | <b>Caractéristiques physiques</b><br>Poids spécifique<br>Température de ramollissement<br>Conductibilité calorifique<br>Coefficient de dilatation linéaire<br>(20 à 400°C)<br>Capacité thermique massique | g/cm <sup>3</sup> 2,55<br>°C 520<br>W/m °C 1,16<br>°C <sup>-1</sup> 8,8x10 <sup>-6</sup><br>J/kg °C 830      |
| <b>Chemische Beständigkeit</b><br>HCL Dampf (DIN ISO 2743)<br>NaOH (DIN ISO 2745)<br>H <sub>2</sub> O Dampf (DIN ISO 2744)   | <b>Chemical resistance</b><br>HCL vapor (DIN ISO 2743)<br>NaOH (DIN ISO 2745)<br>H <sub>2</sub> O vapor (DIN ISO 2744)  | <b>Résistance chimique</b><br>HCL vapeur (DIN ISO 2743)<br>NaOH (DIN ISO 2745)<br>H <sub>2</sub> O vapeur (DIN ISO 2744)  | g/m <sup>2</sup> d 0,2<br>g/m <sup>2</sup> d 1,3<br>g/m <sup>2</sup> d 0,1                                   |
| <b>Mechanische Eigenschaften</b><br>Elastizitätsmodul<br>Zugfestigkeit<br>Druckfestigkeit<br>Schlagfestigkeit (DIN 51155)<br>Haftfestigkeit  | <b>Mechanical properties</b><br>Modulus of elasticity<br>Tensile strength<br>Pressure strength<br>Impact resistance (DIN 51155)<br>Adhesive strength              | <b>Caractéristiques mécaniques</b><br>Module d'élasticité<br>Résistance à la traction<br>Résistance à la pression<br>Résistance au choc (DIN 51155)<br>Adhérence email/acier                              | N/mm <sup>2</sup> 80'000<br>N/mm <sup>2</sup> 80<br>N/mm <sup>2</sup> 800<br>N 74<br>N/mm <sup>2</sup> ≥ 100 |
| <b>Temperaturwechselbeständigkeit</b><br>(DIN 51167)<br>Kälteschock Emailseite<br>(Rohrleitungen, Apparate)  | <b>Thermal shock resistance</b><br>(DIN 51167)<br>Abrupt cooling glass lining<br>(pipes, vessels)   | <b>Résistance au choc thermique</b><br>(DIN 51167)<br>Refroidissement face émaillée<br>(Tuyauteries, appareils)   | °C° 235<br>°C 150  |
| <b>Montage</b><br>Für Montageinformation verlangen Sie<br>bitte unsere Montageanleitung  | <b>Installation</b><br>For installation instruction please ask<br>for our assembly manual   | <b>Installation</b><br>Demandez notre manuel pour les<br>instructions de montage  |  |

Die Estrella AG unterliegt einem Qualitätssicherungs-System nach ISO 9001  
Estrella AG is governed by Quality System acc. to Norm ISO 9001  
Estrella AG est soumis selon norme ISO 9001

Die Estrella ist vom TÜV Südwest anerkannter Fachbetrieb nach § 19I WHG (Wasserhaushaltsgesetz)  
Estrella AG is accredited special shop acc. to § 19I WHG (water conservation regulation) by TÜV Südwest

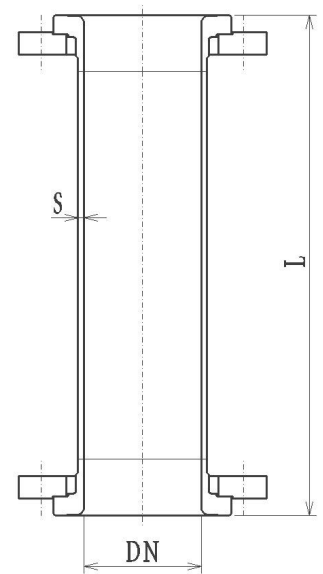
Estrella AG est une société qualifiée par le TÜV Südwest d'après § 19I WHG (règlementation de protection des eaux usagées)

- Obige Spezifikationen können ohne vorherige Bestätigung durch uns im Auftragsfalle nicht zur Grundlage von Reklamationen oder Ersatzansprüchen gemacht werden.
- The above specifications cannot be made basis of claims or liabilities unless we have reconfirmed them in case of an order.
- Les données de la spécification ci-dessus ne peuvent, en cas de commande, servir de motif de réclamation ou de remplacement de pièce sans la confirmation par nos services techniques

Stahl emailliert „5-000“  
 Produkt Spezifikationen siehe Blatt „5-000“  
 Glass lined steel „5-000“  
 Product specifications see sheet „5-000“  
 Acier vitrifié „5-000“  
 Specifications produit voir feuille „5-000“

Grössere Nennweiten siehe Rubrik „Kolonnen 3-xxx“  
 Larger diameters see item „Columns 3-xxx“  
 Diamètres plus grands voir rubrique „Colonnes 3-xxx“

**Lieferbar auch in Zwischenlängen**  
**Available also in intermediate lengths**  
**Livable également en longueurs intermédiaires**



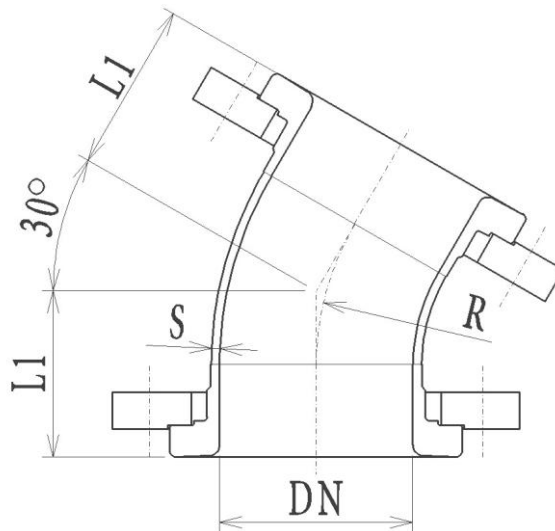
Alle Gewichte einschl. Losflanschen  
 All weights incl. split flanges  
 Les poids s'entendent avec brides libres

*Montage ohne Losflanschen!*  
*Assembly without split flanges!*  
*Montage sans brides libres*

| DN   | 15                                    | 25   | 32   | 40   | 50   | 65   | 80   | 100  | 125  | 150  | 200   | 250   | 300   |
|------|---------------------------------------|------|------|------|------|------|------|------|------|------|-------|-------|-------|
| S    | 3,20                                  | 3.60 | 3.60 | 4.00 | 4.50 | 4.50 | 5.00 | 5.00 | 5.00 | 5.00 | 6.30  | 6.30  | 7.10  |
| L    | <b>Gewicht / Weight / Poids (daN)</b> |      |      |      |      |      |      |      |      |      |       |       |       |
| 100  | 1.5                                   | 2.3  | 3.1  | 3.9  | 5.2  | 7.7  | 3.6  | 4.2  | 5.4  | 6.7  | 10.7  | 12.0  | 15.1  |
| 150  | 1.6                                   | 2.5  | 3.2  | 4.1  | 5.6  | 8.1  | 9.1  | 10.9 | 15.0 | 17.8 | 29.5  | 14.2  | 18.0  |
| 200  | 1.7                                   | 2.6  | 3.5  | 4.4  | 5.9  | 8.6  | 9.7  | 11.7 | 15.8 | 18.9 | 31.3  | 36.5  | 47.0  |
| 250  | 1.8                                   | 2.8  | 3.7  | 4.6  | 6.3  | 9.0  | 10.2 | 12.4 | 16.7 | 20.0 | 33.0  | 38.7  | 50.0  |
| 300  | 1.9                                   | 2.9  | 3.9  | 4.8  | 6.6  | 9.5  | 10.8 | 13.1 | 17.6 | 21.0 | 34.8  | 41.0  | 53.0  |
| 400  | 2.0                                   | 3.2  | 4.3  | 5.3  | 7.3  | 10.3 | 12.0 | 14.6 | 19.4 | 23.3 | 38.4  | 45.4  | 59.0  |
| 500  | 2.1                                   | 3.5  | 4.7  | 5.8  | 8.0  | 11.2 | 13.0 | 16.0 | 21.2 | 25.5 | 42.0  | 50.0  | 65.0  |
| 600  | 2.3                                   | 3.8  | 5.0  | 6.3  | 8.6  | 12.0 | 14.2 | 17.5 | 23.0 | 27.7 | 45.5  | 54.4  | 70.8  |
| 700  | 2.5                                   | 4.1  | 5.5  | 6.8  | 9.3  | 13.0 | 15.2 | 19.5 | 24.9 | 30.0 | 49.1  | 58.8  | 76.7  |
| 800  | 2.7                                   | 4.4  | 5.8  | 7.3  | 10.0 | 13.8 | 16.4 | 20.5 | 26.7 | 32.0 | 52.7  | 63.3  | 82.6  |
| 900  | 2.8                                   | 4.7  | 6.2  | 7.8  | 10.7 | 14.7 | 17.5 | 22.0 | 28.5 | 34.3 | 56.3  | 67.8  | 88.5  |
| 1000 | 3.0                                   | 5.0  | 6.7  | 8.3  | 11.4 | 15.5 | 18.6 | 23.4 | 30.3 | 36.5 | 59.8  | 72.2  | 94.5  |
| 1200 | -                                     | 5.6  | 7.4  | 9.2  | 12.7 | 17.3 | 20.9 | 26.4 | 34.0 | 41.0 | 67.0  | 81.2  | 106.3 |
| 1500 | -                                     | 6.5  | 8.6  | 10.7 | 14.8 | 20.0 | 24.2 | 30.8 | 39.3 | 47.5 | 77.7  | 94.6  | 124.0 |
| 2000 | -                                     | 8.0  | 10.5 | 13.2 | 18.2 | 24.2 | 29.8 | 38.0 | 48.4 | 58.5 | 95.5  | 117.0 | 153.8 |
| 2500 | -                                     | -    | -    | 15.6 | 21.6 | 28.6 | 35.4 | 45.5 | 57.5 | 69.5 | 113.4 | 139.3 | 183.5 |
| 3000 | -                                     | -    | -    | 18.0 | 25.0 | 33.0 | 41.0 | 52.8 | 66.5 | 80.5 | 131.2 | 161.6 | 213.0 |

Stahl emailliert „5-000“  
 Produkt Spezifikationen siehe Blatt „5-000“  
 Glass lined steel „5-000“  
 Product specifications see sheet „5-000“  
 Acier vitrifié „5-000“  
 Specifications produit voir feuille „5-000“

Grössere Nennweiten siehe Rubrik „Kolonnen 3-xxx“  
 Larger diameters see item „Columns 3-xxx“  
 Diamètres plus grands voir rubrique „Colonnes 3-xxx“

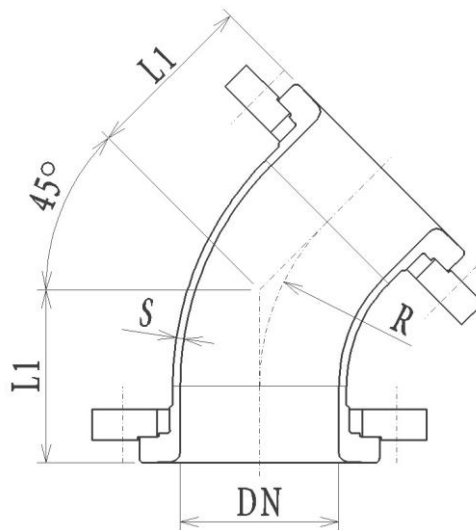


Alle Gewichte einschl. Losflanschen  
 All weights incl. split flanges  
 Les poids s'entendent avec brides libres

| DN  | 15  | 25  | 32  | 40  | 50  | 65  | 80  | 100  | 125  | 150  | 200  | 250  | 300  |
|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|
| L 1 | 45  | 50  | 60  | 65  | 70  | 70  | 80  | 85   | 90   | 100  | 120  | 140  | 160  |
| R   | 5D  | 5D  | 5D  | 4D  | 5D  | 4D  | 5D  | 3D   | 3D   | 3D   | 3D   | 3D   | 3D   |
| S   | 3.2 | 3.6 | 3.6 | 4.0 | 4.5 | 4.5 | 5.0 | 5.0  | 5.0  | 5.0  | 6.3  | 6.3  | 7.1  |
| daN | 1.5 | 2.2 | 3.1 | 3.8 | 4.8 | 6.1 | 9.0 | 11.1 | 13.9 | 17.5 | 28.5 | 39.0 | 52.0 |

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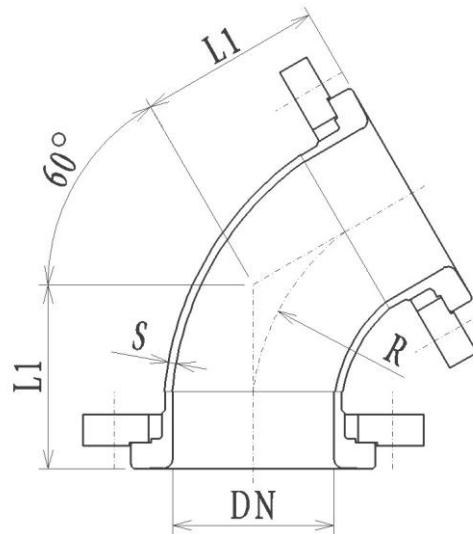


Alle Gewichte einschl. Losflanschen  
 All weights incl. split flanges  
 Les poids s'entendent avec brides libres

| DN  | 15   | 25  | 32  | 40  | 50  | 65  | 80  | 100  | 125  | 150  | 200  | 250  | 300  |
|-----|------|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|
| L 1 | 50   | 60  | 65  | 70  | 80  | 85  | 95  | 105  | 125  | 150  | 180  | 220  | 260  |
| R   | 5D   | 4D  | 4D  | 5D  | 3D  | 3D  | 3D  | 3D   | 3D   | 3D   | 3D   | 3D   | 3D   |
| S   | 3.2  | 3.6 | 3.6 | 4.0 | 4.5 | 4.5 | 5.0 | 5.0  | 5.0  | 5.0  | 6.3  | 6.3  | 7.1  |
| daN | 1.55 | 2.5 | 3.7 | 4.2 | 5.1 | 7.7 | 9.5 | 12.4 | 16.5 | 22.3 | 33.7 | 48.7 | 69.0 |

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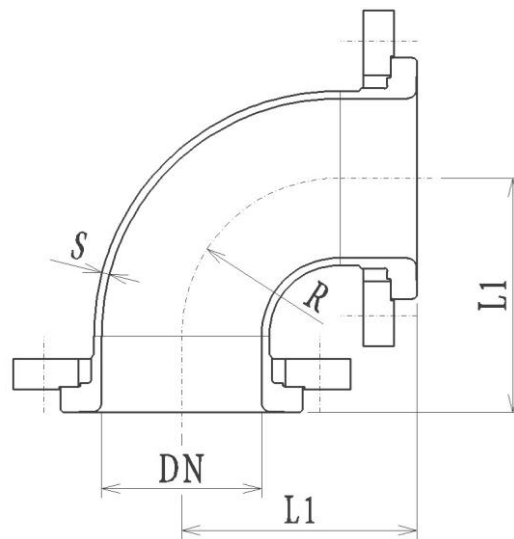


Alle Gewichte einschl. Losflanschen  
 All weights incl. split flanges  
 Les poids s'entendent avec brides libres

| DN  | 15  | 25  | 32  | 40  | 50  | 65  | 80   | 100  | 125  | 150  | 200  | 250  | 300  |
|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|
| L 1 | 60  | 65  | 80  | 85  | 100 | 100 | 110  | 120  | 130  | 150  | 180  | 220  | 280  |
| R   | 5D  | 4D  | 4D  | 4D  | 4D  | 3D  | 3D   | 3D   | 3D   | 2D   | 2D   | 3D   | 3D   |
| S   | 3.2 | 3.6 | 3.6 | 4.0 | 4.5 | 4.5 | 5.0  | 5.0  | 5.0  | 5.0  | 6.3  | 6.3  | 7.1  |
| daN | 1.6 | 2.6 | 3.0 | 4.7 | 6.6 | 8.3 | 10.0 | 12.8 | 17.0 | 21.6 | 34.3 | 45.7 | 66.0 |

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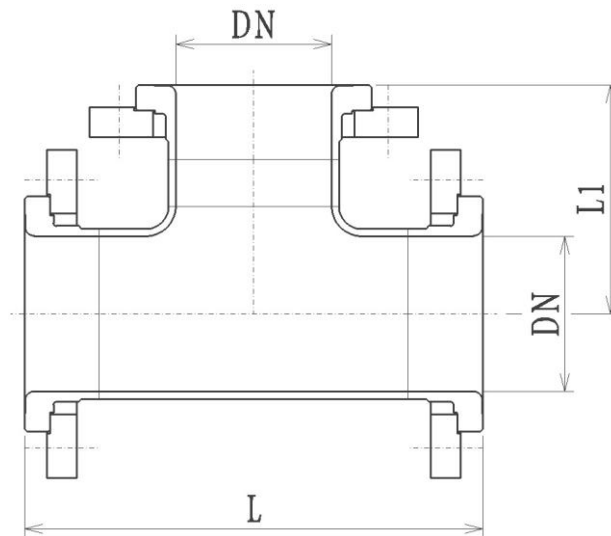


Alle Gewichte einschl. Losflanschen  
 All weights incl. split flanges  
 Les poids s'entendent avec brides libres

| DN  | 15  | 25  | 32  | 40  | 50  | 65  | 80   | 100  | 125  | 150  | 200  | 250  | 300  |
|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|
| L 1 | 70  | 90  | 100 | 105 | 115 | 120 | 135  | 155  | 175  | 195  | 260  | 315  | 350  |
| R   | 5D  | 4D  | 4D  | 3D  | 3D  | 3D  | 3D   | 2D   | 2D   | 2D   | 2D   | 2D   | 2D   |
| S   | 3.2 | 3.6 | 3.6 | 4.0 | 4.5 | 4.5 | 5.0  | 5.0  | 5.0  | 5.0  | 6.3  | 6.3  | 7.1  |
| daN | 1.7 | 2.8 | 3.9 | 4.4 | 5.5 | 7.5 | 11.3 | 13.5 | 18.8 | 22.8 | 35.8 | 54.4 | 79.0 |

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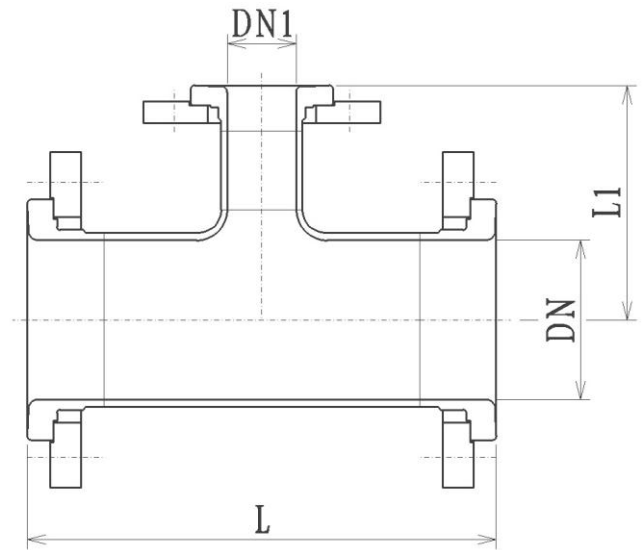
Alle Gewichte einschl. Losflanschen  
 All weights incl. split flanges  
 Les poids s'entendent avec brides libres

| DN  | 15  | 25  | 32  | 40  | 50  | 65   | 80   | 100  | 125  | 150  | 200  | 250  | 300  |
|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|
| L   | 140 | 180 | 200 | 210 | 230 | 240  | 270  | 310  | 350  | 390  | 520  | 630  | 700  |
| L 1 | 70  | 90  | 100 | 105 | 115 | 120  | 135  | 155  | 175  | 195  | 260  | 315  | 350  |
| S   | 3.2 | 3.6 | 3.6 | 4.0 | 4.5 | 4.5  | 5.0  | 5.0  | 5.0  | 5.0  | 6.3  | 6.3  | 7.1  |
| daN | 2.5 | 4.2 | 6.0 | 6.9 | 9.4 | 11.4 | 16.9 | 22.7 | 30.8 | 39.2 | 63.2 | 93.1 | 95.5 |



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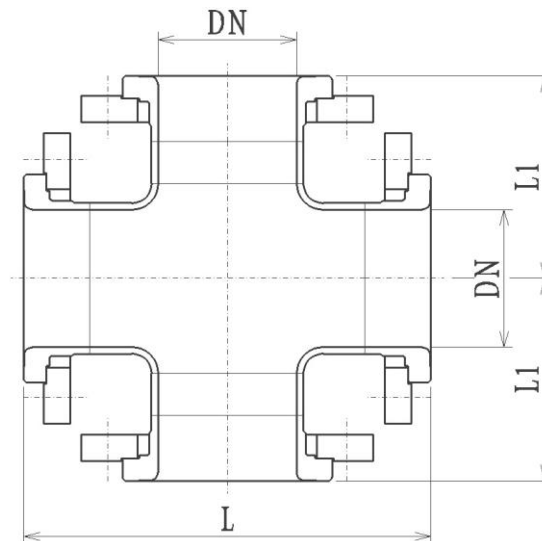


Alle Gewichte einschl. Losflanschen  
 All weights incl. split flanges  
 Les poids s'entendent avec brides libres

| DN   | 25 |    | 32  |    | 40  |     | 50  |     | 65   |     | 80   |     | 100  |     | 125  |     | 150  |     | 200  |     | 250  |     | 300  |     |
|------|----|----|-----|----|-----|-----|-----|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|
| DN 1 | L  | L1 | L   | L1 | L   | L1  | L   | L1  | L    | L1  | L    | L1  | L    | L1  | L    | L1  | L    | L1  | L    | L1  | L    | L1  | L    | L1  |
| 25   |    |    | 200 | 95 | 210 | 95  | 230 | 100 | 240  | 105 | 270  | 115 | 310  | 125 | 350  | 140 | 390  | 155 | 520  | 185 | 630  | 230 | 700  | 290 |
| daN  |    |    | 6.1 |    | 6.9 |     | 8.1 |     | 11.2 |     | 13.8 |     | 18.2 |     | 23.3 |     | 32.1 |     | 48.3 |     | 65.8 |     | 77.3 |     |
| 32   |    |    |     |    | 210 | 100 | 230 | 105 | 240  | 110 | 270  | 120 | 310  | 130 | 350  | 145 | 390  | 160 | 520  | 190 | 630  | 235 | 700  | 295 |
| daN  |    |    |     |    | 7.1 |     | 8.3 |     | 11.4 |     | 14.1 |     | 18.5 |     | 23.4 |     | 32.3 |     | 48.6 |     | 66.4 |     | 78.2 |     |
| 40   |    |    |     |    |     |     | 230 | 110 | 240  | 115 | 270  | 125 | 310  | 135 | 350  | 150 | 390  | 165 | 520  | 195 | 630  | 240 | 700  | 300 |
| daN  |    |    |     |    |     |     | 8.6 |     | 11.8 |     | 14.3 |     | 18.7 |     | 23.8 |     | 32.6 |     | 48.9 |     | 66.9 |     | 78.8 |     |
| 50   |    |    |     |    |     |     |     |     | 240  | 120 | 270  | 130 | 310  | 140 | 350  | 155 | 390  | 170 | 520  | 200 | 630  | 245 | 700  | 305 |
| daN  |    |    |     |    |     |     |     |     | 12.2 |     | 14.7 |     | 19.0 |     | 24.0 |     | 32.9 |     | 49.4 |     | 67.8 |     | 79.8 |     |
| 65   |    |    |     |    |     |     |     |     |      |     | 270  | 135 | 310  | 145 | 350  | 160 | 390  | 175 | 520  | 205 | 630  | 250 | 700  | 310 |
| daN  |    |    |     |    |     |     |     |     |      |     | 16.0 |     | 20.3 |     | 25.3 |     | 34.1 |     | 50.4 |     | 68.9 |     | 81.0 |     |
| 80   |    |    |     |    |     |     |     |     |      |     |      |     | 310  | 150 | 350  | 165 | 390  | 180 | 520  | 210 | 630  | 255 | 700  | 315 |
| daN  |    |    |     |    |     |     |     |     |      |     |      |     | 21.4 |     | 26.4 |     | 35.2 |     | 51.6 |     | 70.2 |     | 82.1 |     |
| 100  |    |    |     |    |     |     |     |     |      |     |      |     |      |     | 350  | 170 | 390  | 185 | 520  | 215 | 630  | 260 | 700  | 320 |
| daN  |    |    |     |    |     |     |     |     |      |     |      |     |      |     | 28.4 |     | 37.2 |     | 53.6 |     | 72.4 |     | 83.4 |     |
| 125  |    |    |     |    |     |     |     |     |      |     |      |     |      |     |      |     | 390  | 190 | 520  | 220 | 630  | 265 | 700  | 325 |
| daN  |    |    |     |    |     |     |     |     |      |     |      |     |      |     |      |     | 39.2 |     | 55.8 |     | 74.6 |     | 85.9 |     |
| 150  |    |    |     |    |     |     |     |     |      |     |      |     |      |     |      |     |      |     | 520  | 225 | 630  | 270 | 700  | 330 |
| daN  |    |    |     |    |     |     |     |     |      |     |      |     |      |     |      |     |      |     | 60.3 |     | 79.7 |     | 88.2 |     |
| 200  |    |    |     |    |     |     |     |     |      |     |      |     |      |     |      |     |      |     |      |     | 630  | 275 | 700  | 335 |
| daN  |    |    |     |    |     |     |     |     |      |     |      |     |      |     |      |     |      |     |      |     | 84.8 |     | 93.9 |     |
| 250  |    |    |     |    |     |     |     |     |      |     |      |     |      |     |      |     |      |     |      |     |      |     | 700  | 340 |
| daN  |    |    |     |    |     |     |     |     |      |     |      |     |      |     |      |     |      |     |      |     |      |     | 98.2 |     |

Stahl emailliert „5-000“  
 Produkt Spezifikationen siehe Blatt „5-000“  
 Glass lined steel „5-000“  
 Product specifications see sheet „5-000“  
 Acier vitrifié „5-000“  
 Specifications produit voir feuille „5-000“

Grössere Nennweiten siehe Rubrik „Kolonnen 3-xxx“  
 Larger diameters see item „Columns 3-xxx“  
 Diamètres plus grands voir rubrique „Colonnes 3-xxx“

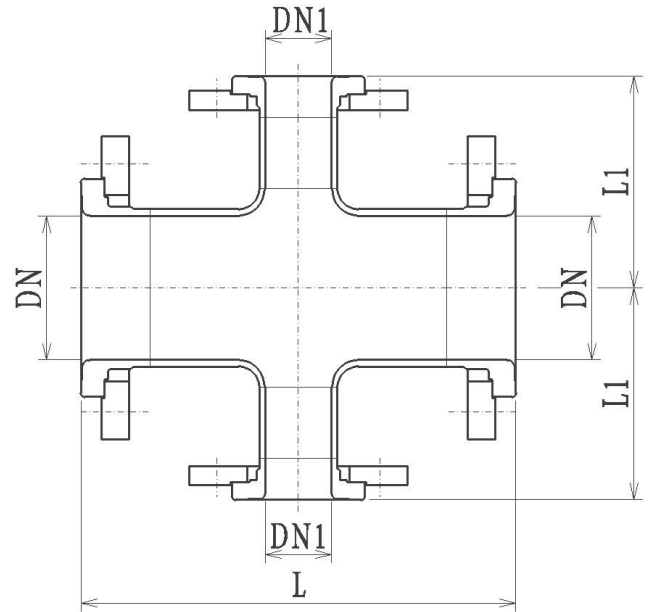


Alle Gewichte einschl. Losflanschen  
 All weights incl. split flanges  
 Les poids s'entendent avec brides libres

| DN  | 15  | 25  | 32  | 40  | 50   | 65   | 80   | 100  | 125  | 150  | 200  | 250   | 300   |
|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|-------|-------|
| L   | 140 | 180 | 200 | 210 | 230  | 240  | 270  | 310  | 350  | 390  | 520  | 630   | 700   |
| L 1 | 70  | 90  | 100 | 105 | 115  | 120  | 135  | 155  | 175  | 195  | 260  | 315   | 350   |
| S   | 3.2 | 3.6 | 3.6 | 4.0 | 4.5  | 4.5  | 5.0  | 5.0  | 5.0  | 5.0  | 6.3  | 6.3   | 7.1   |
| daN | 3.2 | 6.2 | 8.3 | 9.7 | 12.0 | 16.1 | 24.7 | 29.2 | 40.4 | 49.1 | 76.1 | 113.8 | 133.4 |

Stahl emailliert „5-000“  
 Produkt Spezifikationen siehe Blatt „5-000“  
 Glass lined steel „5-000“  
 Product specifications see sheet „5-000“  
 Acier vitrifié „5-000“  
 Specifications produit voir feuille „5-000“

Grössere Nennweiten siehe Rubrik „Kolonnen 3-xxx“  
 Larger diameters see item „Columns 3-xxx“  
 Diamètres plus grands voir rubrique „Colonnes 3-xxx“



Alle Gewichte einschl. Losflanschen  
 All weights incl. split flanges  
 Les poids s'entendent avec brides libres

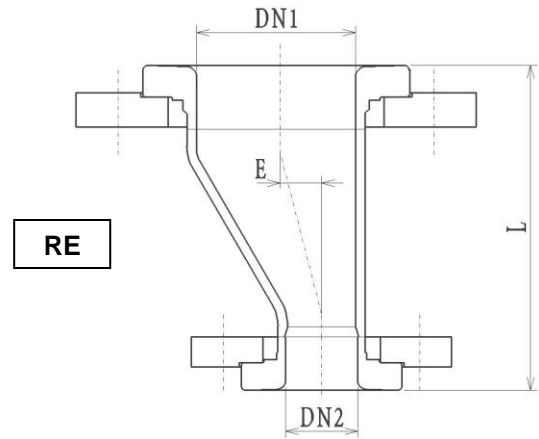
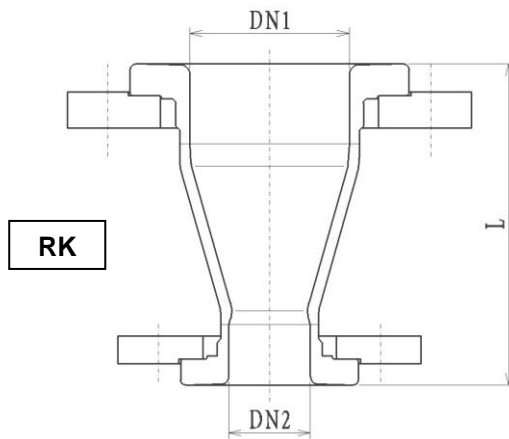
| DN  | 25  |    | 32  |    | 40   |     | 50   |     | 65   |     | 80   |     | 100  |     | 125  |     | 150  |     | 200  |     | 250   |     | 300   |     |  |  |
|-----|-----|----|-----|----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|-------|-----|-------|-----|--|--|
|     | L   | L1 | L   | L1 | L    | L1  | L    | L1  | L    | L1  | L    | L1  | L    | L1  | L    | L1  | L    | L1  | L    | L1  | L     | L1  | L     | L1  |  |  |
| 25  |     |    | 200 | 95 | 210  | 95  | 230  | 100 | 240  | 105 | 270  | 115 | 310  | 125 | 350  | 140 | 390  | 155 | 520  | 185 | 630   | 230 | 700   | 290 |  |  |
| daN | 8.4 |    | 9.2 |    | 9.8  |     | 14.6 |     | 18.6 |     | 25.0 |     | 30.1 |     | 42.4 |     | 62.6 |     | 51.1 |     | 85.6  |     |       |     |  |  |
| 32  |     |    |     |    | 210  | 100 | 230  | 105 | 240  | 110 | 270  | 120 | 310  | 130 | 350  | 145 | 390  | 160 | 520  | 190 | 630   | 235 | 700   | 295 |  |  |
| daN |     |    | 9.6 |    | 10.2 |     | 15.0 |     | 19.2 |     | 25.6 |     | 30.4 |     | 42.8 |     | 63.2 |     | 51.7 |     | 87.4  |     |       |     |  |  |
| 40  |     |    |     |    |      |     | 230  | 110 | 240  | 115 | 270  | 125 | 310  | 135 | 350  | 150 | 390  | 165 | 520  | 195 | 630   | 240 | 700   | 300 |  |  |
| daN |     |    |     |    | 10.6 |     | 15.8 |     | 19.6 |     | 26.0 |     | 31.2 |     | 43.4 |     | 63.8 |     | 52.7 |     | 88.6  |     |       |     |  |  |
| 50  |     |    |     |    |      |     |      |     | 240  | 120 | 270  | 130 | 310  | 140 | 350  | 155 | 390  | 170 | 520  | 200 | 630   | 245 | 700   | 305 |  |  |
| daN |     |    |     |    |      |     | 16.6 |     | 20.4 |     | 26.6 |     | 31.6 |     | 44.0 |     | 64.8 |     | 54.3 |     | 90.6  |     |       |     |  |  |
| 65  |     |    |     |    |      |     |      |     |      |     | 270  | 135 | 310  | 145 | 350  | 160 | 390  | 175 | 520  | 205 | 630   | 250 | 700   | 310 |  |  |
| daN |     |    |     |    |      |     |      |     | 23.0 |     | 29.2 |     | 34.2 |     | 46.2 |     | 66.8 |     | 56.5 |     | 93.0  |     |       |     |  |  |
| 80  |     |    |     |    |      |     |      |     |      |     |      |     | 310  | 150 | 350  | 165 | 390  | 180 | 520  | 210 | 630   | 255 | 700   | 315 |  |  |
| daN |     |    |     |    |      |     |      |     |      |     | 31.4 |     | 36.4 |     | 48.4 |     | 69.2 |     | 59.1 |     | 95.2  |     |       |     |  |  |
| 100 |     |    |     |    |      |     |      |     |      |     |      |     |      |     | 350  | 170 | 390  | 185 | 520  | 215 | 630   | 260 | 700   | 320 |  |  |
| daN |     |    |     |    |      |     |      |     |      |     |      |     | 40.4 |     | 52.4 |     | 73.2 |     | 63.5 |     | 97.8  |     |       |     |  |  |
| 125 |     |    |     |    |      |     |      |     |      |     |      |     |      |     |      |     | 390  | 190 | 520  | 220 | 630   | 265 | 700   | 325 |  |  |
| daN |     |    |     |    |      |     |      |     |      |     |      |     |      |     | 56.4 |     | 77.6 |     | 67.9 |     | 102.2 |     |       |     |  |  |
| 150 |     |    |     |    |      |     |      |     |      |     |      |     |      |     |      |     |      |     | 520  | 225 | 630   | 270 | 700   | 330 |  |  |
| daN |     |    |     |    |      |     |      |     |      |     |      |     |      |     |      |     | 86.8 |     | 74.1 |     | 108.2 |     |       |     |  |  |
| 200 |     |    |     |    |      |     |      |     |      |     |      |     |      |     |      |     |      |     |      |     | 630   | 275 | 700   | 335 |  |  |
| daN |     |    |     |    |      |     |      |     |      |     |      |     |      |     |      |     |      |     | 84.5 |     | 118.4 |     |       |     |  |  |
| 250 |     |    |     |    |      |     |      |     |      |     |      |     |      |     |      |     |      |     |      |     |       |     | 700   | 340 |  |  |
| daN |     |    |     |    |      |     |      |     |      |     |      |     |      |     |      |     |      |     |      |     |       |     | 128.5 |     |  |  |

Stahl emailliert  
Produkt Spezifikationen siehe Blatt „5-000“  
Glass lined steel  
Product specifications see sheet „5-000“  
Acier vitrifié  
Specifications produit voir feuille „5-000“

*konzentrisch:*      *Auführung*  
*concentric:*      *form*  
*concentrique:*    *forme*  
RK  
RK  
RK

Grössere Nennweiten siehe Rubrik „Kolonnen 3-xxx“  
Larger diameters see item „Columns 3-xxx“  
Diamètres plus grands voir rubrique „Colonnes 3-xxx“

*exzentrisch:*      *Auführung*  
*eccentric:*        *form*  
*excentrique:*     *forme*  
RE  
RE  
RE

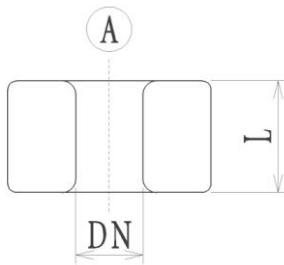


Alle Gewichte einschl. Losflanschen  
All weights incl. split flanges  
Les poids s'entendent avec brides libres

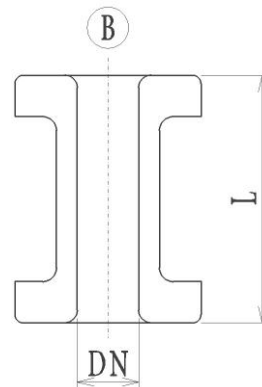
| DN 1 |     | 32  | E | 40  | E | 50  | E  | 65  | E  | 80  | E  | 100  | E  | 125  | E  | 150  | E  | 200  | E  | 250  | E   | 300  | E   |      |
|------|-----|-----|---|-----|---|-----|----|-----|----|-----|----|------|----|------|----|------|----|------|----|------|-----|------|-----|------|
| DN 2 |     |     |   |     |   |     |    |     |    |     |    |      |    |      |    |      |    |      |    |      |     |      |     |      |
| 25   | L   | 140 | 4 | 140 | 7 | 140 | 13 | 150 | 21 | 160 | 26 | 175  | 39 | 200  | 52 | 225  | 66 |      |    |      |     |      |     |      |
|      | daN | 3.0 |   | 3.3 |   | 3.6 |    | 4.6 |    | 6.1 |    | 7.2  |    | 9.2  |    | 12.2 |    |      |    |      |     |      |     |      |
| 32   | L   |     |   | 140 | 3 | 140 | 9  | 150 | 17 | 160 | 23 | 175  | 34 | 200  | 47 | 225  | 62 |      |    |      |     |      |     |      |
|      | daN |     |   | 3.7 |   | 4.1 |    | 5.1 |    | 6.8 |    | 8.1  |    | 10.3 |    | 12.8 |    |      |    |      |     |      |     |      |
| 40   | L   |     |   |     |   | 140 | 6  | 150 | 14 | 160 | 20 | 175  | 33 | 200  | 45 | 225  | 59 | 250  | 83 |      |     |      |     |      |
|      | daN |     |   |     |   | 4.3 |    | 5.3 |    | 7.2 |    | 8.5  |    | 10.7 |    | 13.2 |    | 18.4 |    |      |     |      |     |      |
| 50   | L   |     |   |     |   |     | 8  | 150 | 14 | 160 | 14 | 175  | 27 | 200  | 40 | 225  | 53 | 250  | 78 | 300  | 105 | 350  | 129 |      |
|      | daN |     |   |     |   |     |    | 5.6 |    | 7.5 |    | 8.7  |    | 11.5 |    | 14.0 |    | 19.3 |    | 26.7 |     | 33.1 |     |      |
| 65   | L   |     |   |     |   |     |    |     | 6  | 160 | 6  | 175  | 19 | 200  | 32 | 225  | 46 | 250  | 70 | 300  | 97  | 350  | 121 |      |
|      | daN |     |   |     |   |     |    |     |    | 8.2 |    | 9.4  |    | 12.3 |    | 14.8 |    | 20.1 |    | 27.8 |     | 33.9 |     |      |
| 80   | L   |     |   |     |   |     |    |     |    |     | 13 | 175  | 25 | 200  | 25 | 225  | 40 | 250  | 65 | 300  | 91  | 350  | 115 |      |
|      | daN |     |   |     |   |     |    |     |    |     |    | 10.9 |    | 13.9 |    | 16.5 |    | 21.1 |    | 28.9 |     | 35.1 |     |      |
| 100  | L   |     |   |     |   |     |    |     |    |     |    |      | 13 | 200  | 13 | 225  | 27 | 250  | 52 | 300  | 79  | 350  | 103 |      |
|      | daN |     |   |     |   |     |    |     |    |     |    |      |    | 14.6 |    | 17.1 |    | 22.1 |    | 29.7 |     | 35.9 |     |      |
| 125  | L   |     |   |     |   |     |    |     |    |     |    |      |    |      | 14 | 225  | 14 | 250  | 40 | 300  | 67  | 350  | 90  |      |
|      | daN |     |   |     |   |     |    |     |    |     |    |      |    |      |    | 19.3 |    | 24.0 |    | 32.6 |     | 36.2 |     |      |
| 150  | L   |     |   |     |   |     |    |     |    |     |    |      |    |      |    |      | 25 | 250  | 25 | 300  | 52  | 350  | 76  |      |
|      | daN |     |   |     |   |     |    |     |    |     |    |      |    |      |    |      |    | 25.4 |    | 33.9 |     | 38.5 |     |      |
| 200  | L   |     |   |     |   |     |    |     |    |     |    |      |    |      |    |      |    |      |    | 300  | 27  | 350  | 51  |      |
|      | daN |     |   |     |   |     |    |     |    |     |    |      |    |      |    |      |    |      |    | 36.2 |     | 43.9 |     |      |
| 250  | L   |     |   |     |   |     |    |     |    |     |    |      |    |      |    |      |    |      |    |      |     | 350  | 28  |      |
|      | daN |     |   |     |   |     |    |     |    |     |    |      |    |      |    |      |    |      |    |      |     |      |     | 47.2 |

Stahl emailliert „5-000“  
 Produkt Spezifikationen siehe Blatt „5-000“  
 Glass lined steel „5-000“  
 Product specifications see sheet „5-000“  
 Acier vitrifié „5-000“  
 Specifications produit voir feuille „5-000“

Grössere Nennweiten siehe Rubrik „Kolonnen 3-xxx“  
 Larger diameters see item „Columns 3-xxx“  
 Diamètres plus grands voir rubrique „Colonnes 3-xxx“



Ausführung A  
 Execution A  
 Exécution A

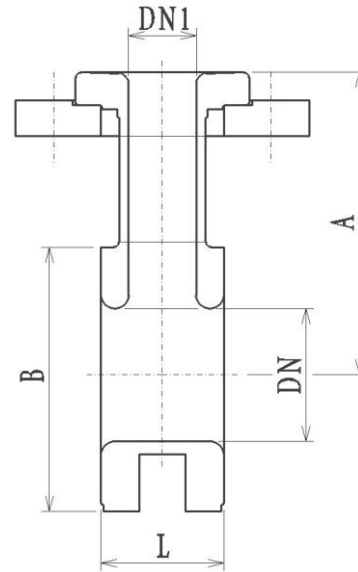


Ausführung B (Einbau ohne Losflanschen)  
 Execution B (Assembly without split flanges)  
 Exécution B (Montage sans brides libres)

| DN | 15                             | 25   | 32   | 40   | 50   | 65   | 80   | 100  | 125  | 150  | 200  | 250  | 300  |
|----|--------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| L  | Gewicht / Weight / Poids (daN) |      |      |      |      |      |      |      |      |      |      |      |      |
| 12 | 0.17                           | 0.25 | 0.30 | 0.37 | 0.45 | 0.60 | 0.75 | 0.90 | -    | -    | -    | -    | -    |
| 15 | 0.21                           | 0.35 | 0.45 | 0.55 | 0.7  | 0.9  | 1.2  | 1.3  | 1.6  | 1.9  | 2.5  | 3.4  | 3.9  |
| 20 | 0.28                           | 0.50 | 0.60 | 0.75 | 0.9  | 1.2  | 1.5  | 1.8  | 2.2  | 2.50 | 3.4  | 4.6  | 5.0  |
| 25 | 0.35                           | 0.60 | 0.75 | 0.92 | 1.1  | 1.5  | 1.9  | 2.2  | 2.7  | 3.2  | 4.4  | 5.8  | 6.3  |
| 30 | 0.42                           | 0.75 | 0.90 | 1.1  | 1.4  | 1.8  | 2.3  | 2.7  | 3.3  | 3.8  | 5.2  | 6.9  | 7.5  |
| 35 | 0.50                           | 0.80 | 1.1  | 1.3  | 1.7  | 2.2  | 2.7  | 3.2  | 4.2  | 4.8  | 6.7  | 8.6  | 8.8  |
| 40 | 0.57                           | 1.0  | 1.2  | 1.4  | 1.8  | 2.4  | 3.0  | 3.6  | 4.4  | 5.0  | 6.9  | 9.3  | 10.1 |
| 45 | 0.64                           | 1.1  | 1.4  | 1.7  | 2.2  | 2.9  | 3.5  | 4.1  | 5.4  | 6.2  | 8.8  | 11.0 | 11.3 |
| 50 | 0.70                           | 1.2  | 1.5  | 1.9  | 2.4  | 3.3  | 3.9  | 4.6  | 6.0  | 6.9  | 9.8  | 12.3 | 12.6 |
| 60 | 0.85                           | 1.35 | 1.85 | 2.3  | 2.9  | 3.95 | 4.7  | 5.5  | 7.3  | 8.3  | 11.8 | 14.8 | 15.1 |
| 70 | 0.31                           | 1.7  | 2.0  | 2.6  | 3.3  | 4.5  | 5.4  | 6.0  | 8.0  | 8.9  | 12.6 | 15.7 | 17.6 |
| 80 | 0.33                           | 1.9  | 2.3  | 2.9  | 3.8  | 5.1  | 6.2  | 6.3  | 9.1  | 9.5  | 13.7 | 18.0 | 20.1 |
| 90 | 0.35                           | 2.2  | 2.6  | 3.3  | 4.3  | 5.7  | 7.0  | 7.2  | 10.2 | 10.8 | 15.4 | 20.2 | 22.6 |

Stahl emailliert „5-000“  
 Produkt Spezifikationen siehe Blatt „5-000“  
 Glass lined steel „5-000“  
 Product specifications see sheet „5-000“  
 Acier vitrifié „5-000“  
 Specifications produit voir feuille „5-000“

Grössere Nennweiten siehe Rubrik „Kolonnen 3-xx“  
 Larger diameters see item „Columns 3-xxx“  
 Diamètres plus grands voir rubrique „Colonnes 3-xxx“



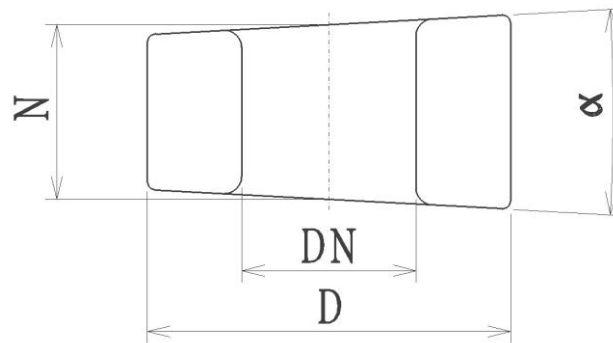
Andere Abmessungen auf Anfrage  
 Other dimensions upon request  
 Autres dimensions sur demande

Alle Gewichte einschl. Losflanschen  
 All weights incl. split flanges  
 Les poids s'entendent avec brides libres

| DN  | DN 1 | B   | A   | daN   |        |
|-----|------|-----|-----|-------|--------|
|     |      |     |     | L= 50 | L= 100 |
| 25  | 25   | 68  | 90  | 2.5   |        |
| 32  | 25   | 78  | 100 | 2.8   |        |
| 40  | 25   | 88  | 110 | 3.2   |        |
| 50  | 25   | 102 | 120 | 3.7   |        |
| 65  | 25   | 122 | 135 | 4.6   |        |
| 80  | 25   | 138 | 145 | 5.2   |        |
| 100 | 25   | 158 | 155 | 5.9   |        |
| 125 | 25   | 188 | 170 | 7.3   |        |
| 150 | 25   | 212 | 190 | 8.2   | 16.8   |
|     | 50   |     |     |       | 18.5   |
| 200 | 25   | 268 | 215 | 11.1  | 22.6   |
|     | 50   |     |     |       | 24.3   |
| 250 | 25   | 320 | 245 | 13.6  | 29.1   |
|     | 50   |     |     |       | 30.9   |
| 300 | 25   | 370 | 270 | 17.0  | 33.9   |
|     | 50   |     |     |       | 35.7   |

Stahl emailliert „5-000“  
 Produkt Spezifikationen siehe Blatt „5-000“  
 Glass lined steel „5-000“  
 Product specifications see sheet „5-000“  
 Acier vitrifié „5-000“  
 Specifications produit voir feuille „5-000“

Grössere Nennweiten siehe Rubrik „Kolonnen 3-xxx“  
 Larger diameters see item „Columns 3-xxx“  
 Diamètres plus grands voir rubrique „Colonnes 3-xxx“

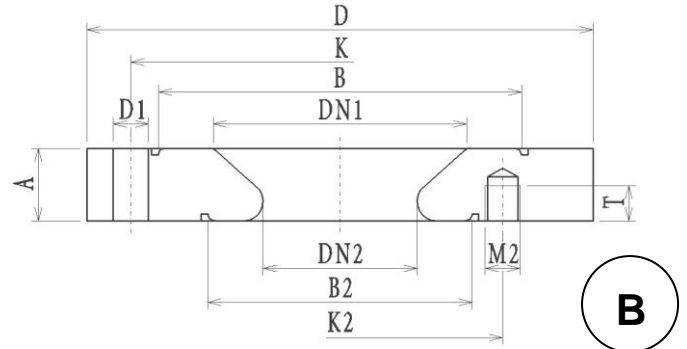
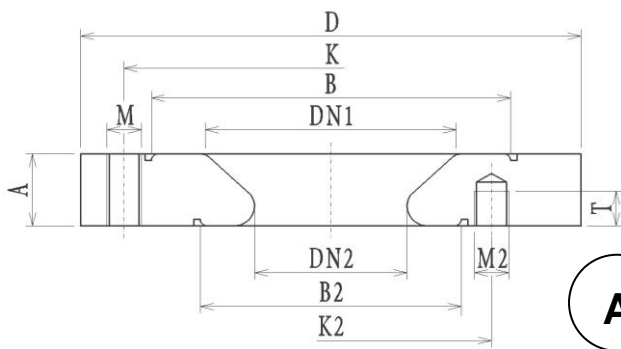


Einbau ohne Losflanschen  
 Assembly without split flange  
 Montage sans brides libres

| $\alpha$ | DN  | 25   | 32   | 40   | 50   | 65   | 80   | 100  | 125  | 150   | 200  | 250  | 300  |
|----------|-----|------|------|------|------|------|------|------|------|-------|------|------|------|
| 1.5°     | N   | 25   | 25   | 25   | 25   | 25   | 25   | 25   | 25   | 30    | 30   | 30   | 40   |
|          | D   | 68   | 78   | 88   | 102  | 122  | 138  | 158  | 188  | 212   | 268  | 320  | 370  |
|          | daN | 2.42 | 2.82 | 3.63 | 4.85 | 6.46 | 8.48 | 11.3 | 11.5 | 14.54 | 21.8 | 25.8 | 40.8 |
| 3°       | N   | 25   | 25   | 25   | 25   | 25   | 25   | 25   | 25   | 30    | 30   | 30   | 40   |
|          | D   | 68   | 78   | 88   | 102  | 122  | 138  | 158  | 188  | 212   | 268  | 320  | 370  |
|          | daN | 2.42 | 2.82 | 3.63 | 4.85 | 6.46 | 8.48 | 11.3 | 11.5 | 14.54 | 21.8 | 25.8 | 40.8 |

Stahl emailliert  
Produkt Spezifikationen siehe Blatt „5-000“  
Glass lined steel  
Product specifications see sheet „5-000“  
Acier vitrifié  
Specifications produit voir feuille „5-000“

Grössere Nennweiten siehe Rubrik „Kolonnen 3-xxx“  
Larger diameters see item „Columns 3-xxx“  
Diamètres plus grands voir rubrique „Colonnes 3-xxx“

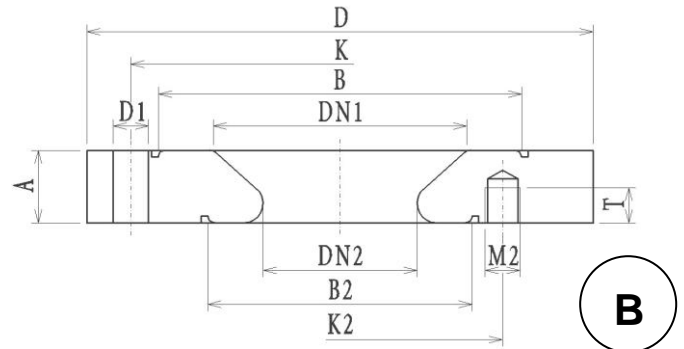
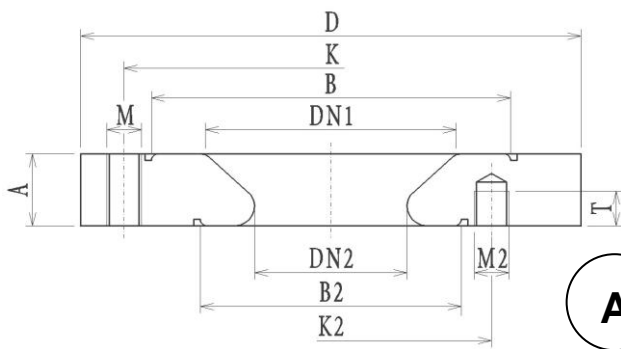


| DN 1 | DN 2 | A  | D   | D1    | B   | B2  | K   | K2  | M      | M2     | T  | daN  | Type |
|------|------|----|-----|-------|-----|-----|-----|-----|--------|--------|----|------|------|
| 25   | 15   | 35 | 115 |       | 68  | 45  | 85  | 65  | 4x M12 | 4x M12 | 12 | 2.1  | A    |
| 32   | 15   | 35 | 140 |       | 78  | 45  | 100 | 65  | 4x M16 | 4x M12 | 12 | 3.5  | A    |
|      | 25   | 35 | 140 |       | 78  | 68  | 100 | 85  | 4x M16 | 4x M12 | 12 | 3.4  | A    |
| 40   | 15   | 35 | 150 |       | 88  | 45  | 110 | 65  | 4x M16 | 4x M12 | 12 | 4    | A    |
|      | 25   | 35 | 150 |       | 88  | 68  | 110 | 85  | 4x M16 | 4x M12 | 12 | 3.9  | A    |
|      | 32   | 35 | 150 |       | 88  | 78  | 110 | 100 | 4x M16 | 4x M16 | 16 | 3.8  | A    |
| 50   | 15   | 35 | 165 |       | 102 | 45  | 125 | 65  | 4x M16 | 4x M12 | 12 | 4.9  | A    |
|      | 25   | 35 | 165 |       | 102 | 68  | 125 | 85  | 4x M16 | 4x M12 | 12 | 4.8  | A    |
|      | 32   | 35 | 165 |       | 102 | 78  | 125 | 100 | 4x M16 | 4x M16 | 16 | 4.7  | A    |
|      | 40   | 35 | 165 |       | 102 | 88  | 125 | 110 | 4x M16 | 4x M16 | 16 | 4.6  | A    |
| 65   | 25   | 35 | 185 |       | 122 | 68  | 145 | 85  | 4x M16 | 4x M12 | 12 | 6.0  | A    |
|      | 32   | 35 | 185 |       | 122 | 78  | 145 | 100 | 4x M16 | 4x M16 | 16 | 5.9  | A    |
|      | 40   | 35 | 185 |       | 122 | 88  | 145 | 110 | 4x M16 | 4x M16 | 16 | 5.8  | A    |
|      | 50   | 35 | 185 |       | 122 | 102 | 145 | 125 | 4x M16 | 4x M16 | 16 | 5.7  | A    |
| 80   | 25   | 35 | 200 | 8x 18 | 138 | 68  | 160 | 85  |        | 4x M12 | 12 | 7.1  | B    |
|      | 32   | 35 | 200 |       | 138 | 78  | 160 | 100 | 8x M16 | 4x M16 | 16 | 7.0  | A    |
|      | 40   | 35 | 200 |       | 138 | 88  | 160 | 110 | 8x M16 | 4x M16 | 16 | 6.8  | A    |
|      | 50   | 35 | 200 |       | 138 | 102 | 160 | 125 | 8x M16 | 4x M16 | 16 | 6.7  | A    |
|      | 65   | 35 | 200 |       | 138 | 122 | 160 | 145 | 8x M16 | 4x M16 | 16 | 6.6  | A    |
| 100  | 25   | 45 | 220 | 8x 18 | 158 | 68  | 180 | 85  |        | 4x M12 | 12 | 10.9 | B    |
|      | 32   | 45 | 220 | 8x 18 | 158 | 78  | 180 | 100 |        | 4x M16 | 16 | 10.7 | B    |
|      | 40   | 45 | 220 |       | 158 | 88  | 180 | 110 | 8x M16 | 4x M16 | 16 | 10.5 | A    |
|      | 50   | 45 | 220 |       | 158 | 102 | 180 | 125 | 8x M16 | 4x M16 | 16 | 10.3 | A    |
|      | 65   | 45 | 220 |       | 158 | 122 | 180 | 145 | 8x M16 | 4x M16 | 16 | 9.9  | A    |
|      | 80   | 45 | 220 |       | 158 | 138 | 180 | 160 | 8x M16 | 8x M16 | 16 | 9.5  | A    |
| 125  | 25   | 45 | 250 | 8x 18 | 188 | 68  | 210 | 85  |        | 4x M12 | 16 | 14.8 | B    |
|      | 32   | 45 | 250 | 8x 18 | 188 | 78  | 210 | 100 |        | 4x M16 | 16 | 14.6 | B    |
|      | 40   | 45 | 250 | 8x 18 | 188 | 88  | 210 | 110 |        | 4x M16 | 16 | 13.8 | B    |
|      | 50   | 45 | 250 | 8x 18 | 188 | 102 | 210 | 125 |        | 4x M16 | 16 | 13.6 | B    |
|      | 65   | 45 | 250 |       | 188 | 122 | 210 | 145 | 8x M16 | 4x M16 | 16 | 13.0 | A    |
|      | 80   | 45 | 250 |       | 188 | 138 | 210 | 160 | 8x M16 | 8x M16 | 16 | 12.4 | A    |
|      | 100  | 45 | 250 |       | 188 | 158 | 210 | 180 | 8x M16 | 8x M16 | 16 | 11.7 | A    |



Stahl emailliert  
Produkt Spezifikationen siehe Blatt „5-000“  
Glass lined steel  
Product specifications see sheet „5-000“  
Acier vitrifié  
Specifications produit voir feuille „5-000“

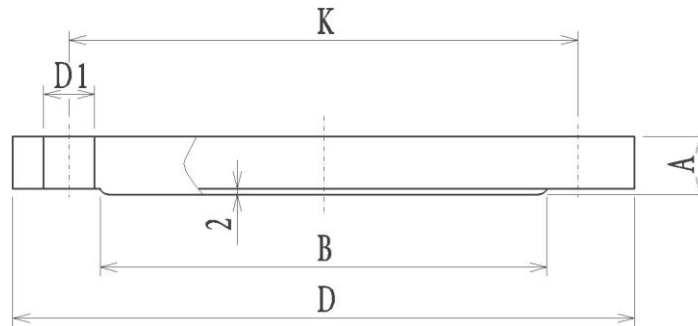
Grössere Nennweiten siehe Rubrik „Kolonnen 3-xxx“  
Larger diameters see item „Columns 3-xxx“  
Diamètres plus grands voir rubrique „Colonnes 3-xxx“



| DN 1 | DN 2 | A   | D   | D1     | B   | B2  | K   | K2      | M       | M2     | T    | daN  | Type |
|------|------|-----|-----|--------|-----|-----|-----|---------|---------|--------|------|------|------|
| 150  | 25   | 45  | 285 | 8x 23  | 212 | 68  | 240 | 85      |         | 4x M12 | 16   | 17.7 | B    |
|      | 32   | 45  | 285 | 8x 23  | 212 | 78  | 240 | 100     |         | 4x M16 | 16   | 18.3 | B    |
|      | 40   | 45  | 285 | 8x 23  | 212 | 88  | 240 | 110     |         | 4x M16 | 16   | 18.5 | B    |
|      | 50   | 45  | 285 | 8x 23  | 212 | 102 | 240 | 125     |         | 4x M16 | 16   | 18.  | B    |
|      | 65   | 45  | 285 | 8x 23  | 212 | 122 | 240 | 145     |         | 4x M16 | 16   | 17.5 | B    |
|      | 80   | 45  | 285 |        | 212 | 138 | 240 | 160     | 8x M20  | 8x M16 | 16   | 17.0 | A    |
|      | 100  | 45  | 285 |        | 212 | 158 | 240 | 180     | 8x M20  | 8x M16 | 16   | 16.0 | A    |
| 200  | 125  | 45  | 285 |        | 212 | 188 | 240 | 210     | 8x M20  | 8x M16 | 16   | 15.0 | A    |
|      | 50   | 45  | 340 | 8x 23  | 268 | 102 | 295 | 125     |         | 4x M16 | 16   | 26.0 | B    |
|      | 65   | 45  | 340 | 8x 23  | 268 | 122 | 295 | 145     |         | 4x M16 | 16   | 25.0 | B    |
|      | 80   | 45  | 340 | 8x 23  | 268 | 138 | 295 | 160     |         | 8x M16 | 16   | 24.0 | B    |
|      | 100  | 45  | 340 | 8x 23  | 268 | 158 | 295 | 180     |         | 8x M16 | 16   | 23.0 | B    |
|      | 125  | 45  | 340 |        | 268 | 188 | 295 | 210     | 8x M20  | 8x M16 | 16   | 22.0 | A    |
| 250  | 150  | 45  | 340 |        | 268 | 212 | 295 | 240     | 8x M20  | 8x M20 | 20   | 21.0 | A    |
|      | 50   | 45  | 395 | 12x 23 | 320 | 102 | 350 | 125     |         | 4x M16 | 16   | 37,0 | B    |
|      | 65   | 45  | 395 | 12x 23 | 320 | 122 | 350 | 145     |         | 4x M16 | 16   | 36,0 | B    |
|      | 80   | 45  | 395 | 12x 23 | 320 | 138 | 350 | 160     |         | 8x M16 | 16   | 35,0 | B    |
|      | 100  | 45  | 395 | 12x 23 | 320 | 158 | 350 | 180     |         | 8x M16 | 16   | 34,0 | B    |
|      | 125  | 45  | 395 | 12x 23 | 320 | 188 | 350 | 210     |         | 8x M16 | 16   | 32,0 | B    |
|      | 150  | 45  | 395 | 12x 23 | 320 | 212 | 350 | 240     |         | 8x M20 | 20   | 30,0 | B    |
| 300  | 200  | 45  | 395 |        | 320 | 268 | 350 | 295     | 12x M20 | 8x M20 | 20   | 25,0 | A    |
|      | 50   | 45  | 445 | 12x 23 | 370 | 102 | 400 | 125     |         | 4x M16 | 16   | 50,0 | B    |
|      | 65   | 45  | 445 | 12x 23 | 370 | 122 | 400 | 145     |         | 4x M16 | 16   | 49,0 | B    |
|      | 80   | 45  | 445 | 12x 23 | 370 | 138 | 400 | 160     |         | 8x M16 | 16   | 48,0 | B    |
|      | 100  | 45  | 445 | 12x 23 | 370 | 158 | 400 | 180     |         | 8x M16 | 16   | 47,0 | B    |
|      | 125  | 45  | 445 | 12x 23 | 370 | 188 | 400 | 210     |         | 8x M16 | 16   | 45,0 | B    |
|      | 150  | 45  | 445 | 12x 23 | 370 | 212 | 400 | 240     |         | 8x M20 | 20   | 43,0 | B    |
|      | 200  | 45  | 445 | 12x 23 | 370 | 268 | 400 | 295     |         | 8x M20 | 20   | 40,0 | B    |
| 250  | 45   | 445 |     | 370    | 320 | 400 | 350 | 12x M20 | 12x M20 | 20     | 35,0 | A    |      |

Stahl emailliert  
 Produkt Spezifikationen siehe Blatt „5-000“  
 Glass lined steel  
 Product specifications see sheet „5-000“  
 Acier vitrifié  
 Specifications produit voir feuille „5-000“

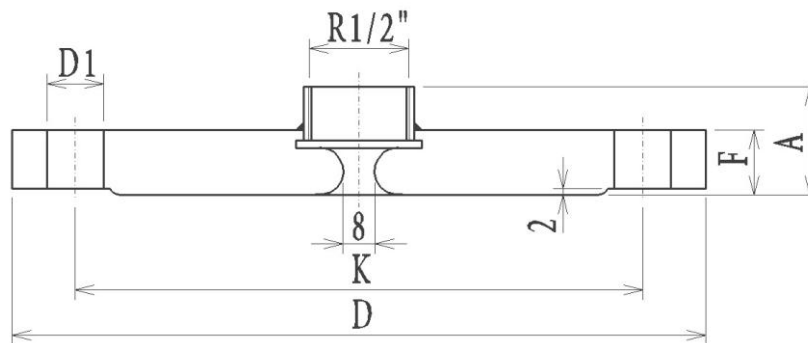
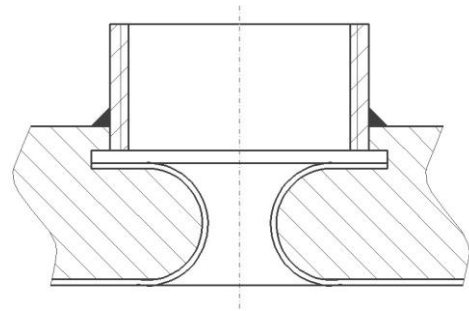
Grössere Nennweiten siehe Rubrik „Kolonnen 3-xxx“  
 Larger diameters see item „Columns 3-xxx“  
 Diamètres plus grands voir rubrique „Colonnes 3-xxx“



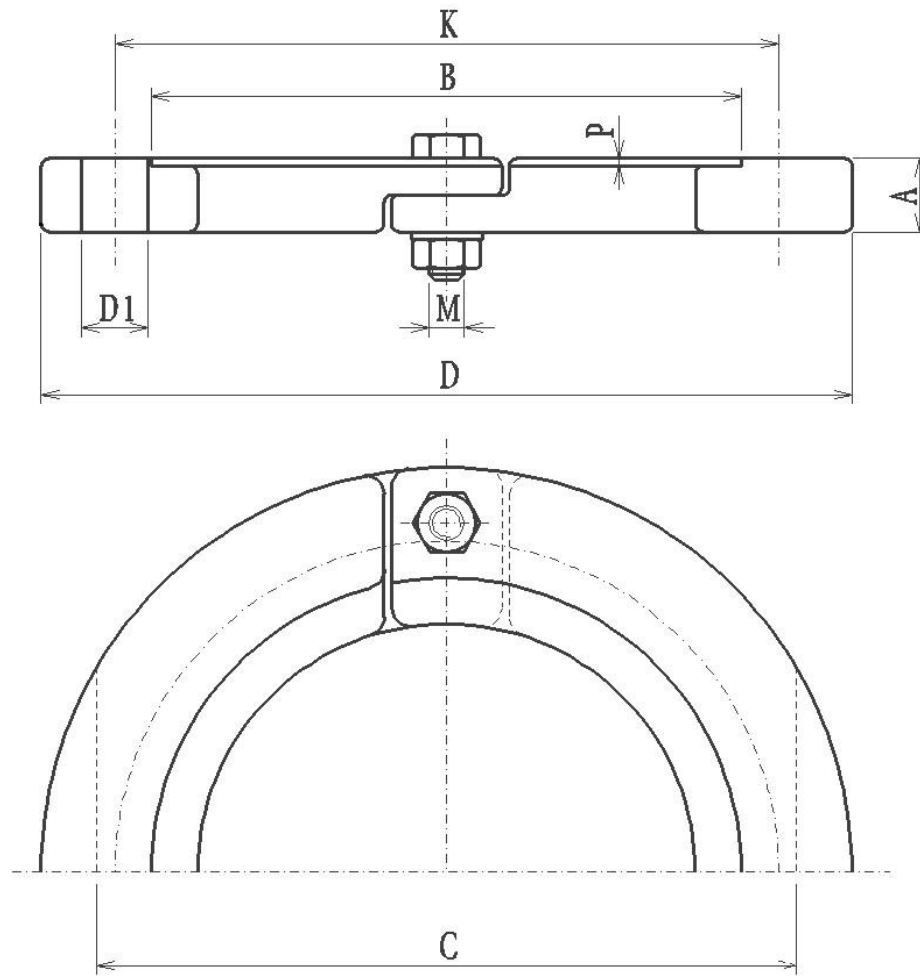
| DN      | 15    | 25    | 32    | 40    | 50    | 65    | 80    | 100   | 125   | 150   | 200   | 250    | 300    |
|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|
| A       | 16    | 16    | 16    | 16    | 18    | 18    | 20    | 22    | 24    | 24    | 26    | 28     | 28     |
| B       | 45    | 68    | 78    | 88    | 102   | 122   | 138   | 158   | 188   | 212   | 268   | 320    | 370    |
| D       | 95    | 115   | 140   | 150   | 165   | 185   | 200   | 220   | 250   | 285   | 340   | 395    | 445    |
| K       | 65    | 85    | 100   | 110   | 125   | 145   | 160   | 180   | 210   | 240   | 295   | 350    | 400    |
| n x D 1 | 4x 14 | 4x 14 | 4x 18 | 4x 18 | 4x 18 | 4x 18 | 8x 18 | 8x 18 | 8x 18 | 8x 23 | 8x 23 | 12x 23 | 12x 23 |
| daN     | 0.9   | 1.4   | 2.0   | 2.3   | 3.2   | 4.3   | 5.9   | 6.2   | 8.4   | 10.4  | 16.5  | 24.0   | 31.0   |

Stahl emailliert „5-000“  
 Produkt Spezifikationen siehe Blatt „5-000“  
 Glass lined steel „5-000“  
 Product specifications see sheet „5-000“  
 Acier vitrifié „5-000“  
 Specifications produit voir feuille „5-000“

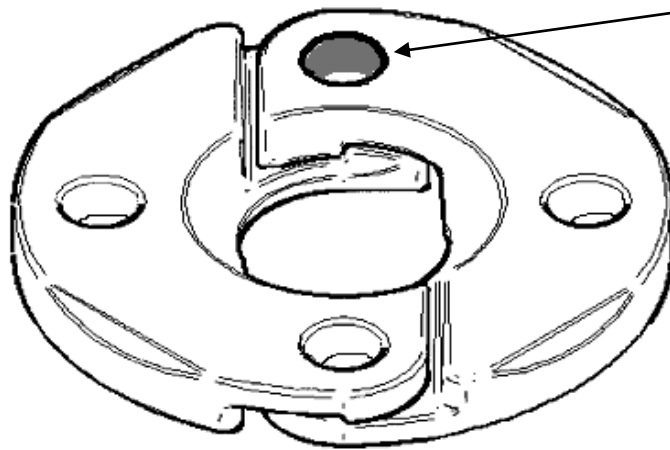
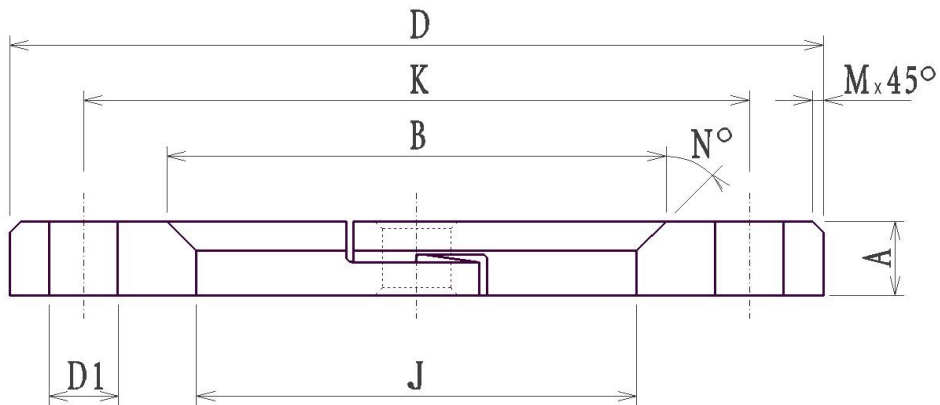
Grössere Nennweiten siehe Rubrik „Kolonnen 3-xxx“  
 Larger diameters see item „Columns 3-xxx“  
 Diamètres plus grands voir rubrique „Colonnes 3-xxx“



| DN      | 25    | 32    | 40    | 50    | 65    | 80    | 100   | 125   | 150   | 200   | 250    | 300    |
|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|
| A       | 26    | 26    | 26    | 28    | 28    | 30    | 32    | 34    | 34    | 36    | 38     | 38     |
| D       | 115   | 140   | 150   | 165   | 185   | 200   | 220   | 250   | 285   | 340   | 395    | 445    |
| n x D 1 | 4x 14 | 4x 18 | 4x 18 | 4x 18 | 4x 18 | 8x 18 | 8x 18 | 8x 18 | 8x 23 | 8x 23 | 12x 23 | 12x 23 |
| F       | 16    | 16    | 16    | 18    | 18    | 20    | 22    | 24    | 24    | 26    | 28     | 28     |
| K       | 85    | 100   | 110   | 125   | 145   | 160   | 180   | 210   | 240   | 295   | 350    | 400    |
| daN     | 1.4   | 2.0   | 2.3   | 3.2   | 4.3   | 5.9   | 6.2   | 8.4   | 10.4  | 16.5  | 24.0   | 31.0   |



| DN  | 15    | 25    | 32    | 40    | 50    | 65    | 80    | 100   | 125   | 150   | 200   | 250    | 300    |
|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|
| A   | 12    | 14    | 14    | 14    | 16    | 17    | 18    | 20    | 22    | 24    | 28    | 32     | 34     |
| B   | 48    | 70    | 80    | 90    | 104   | 124   | 140   | 160   | 190   | 214   | 270   | 322    | 372    |
| C   | 76    | 90    | 108   | 118   | 132   | 152   |       |       |       |       |       |        |        |
| D   | 95    | 115   | 140   | 150   | 165   | 185   | 200   | 220   | 250   | 285   | 340   | 395    | 445    |
| K   | 65    | 85    | 100   | 110   | 125   | 145   | 160   | 180   | 210   | 240   | 295   | 350    | 400    |
| P   | 2     | 2     | 2     | 2     | 2     | 2     | 2     | 2     | 3     | 2     | 3     | 3      | 3      |
| M   | M 8   | M 8   | M 10  | M 10  | M 10  | M 10  | M 10  | M 10  | M 10  | M 12  | M 12  | M 12   | M 12   |
| D 1 | 4x 14 | 4x 14 | 4x 18 | 4x 18 | 4x 18 | 4x 18 | 8x 18 | 8x 18 | 8x 18 | 8x 23 | 8x 23 | 12x 23 | 12x 23 |
| PN  | 16    | 16    | 16    | 16    | 16    | 16    | 16    | 16    | 16    | 16    | 10    | 10     | 10     |
| daN | 0.58  | 0.7   | 1.15  | 1.3   | 1.8   | 2.4   | 2.55  | 3.15  | 4.7   | 6.0   | 9.5   | 11.7   | 14.2   |

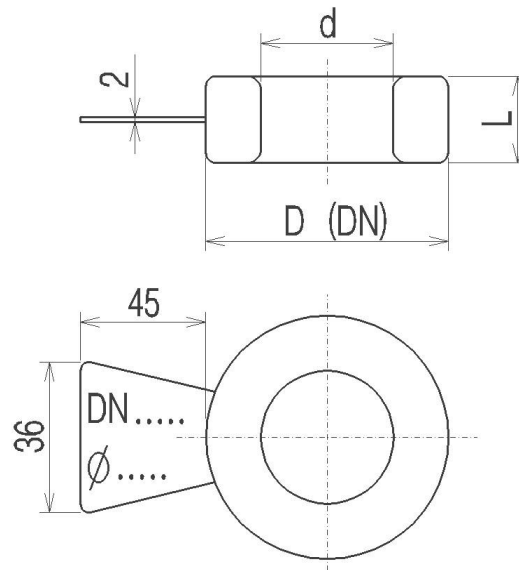


mit VA Scharnierhülse  
 with stainless steel hinge sleeve  
 avec douille d'assemblage inox

| DN                            | 15          | 20          | 25          | 32          | 40          | 50          | 65          | 80          | 100         | 125         | 150         | 200         |
|-------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| <b>A<math>\pm</math> 0,25</b> | 14          | 14          | 16          | 16          | 20          | 17          | 21          | 20          | 20          | 24          | 26          | 35          |
| <b>B</b>                      | 37.5        | 42          | 50          | 62          | 74          | 80          | 94.6        | 110         | 135         | 168         | 195         | 251         |
| <b>J</b>                      | 26          | 31          | 37          | 50          | 54          | 65.5        | 82.5        | 94          | 119         | 144         | 174         | 226         |
| <b>D</b>                      | 95          | 105         | 115         | 140         | 150         | 165         | 185         | 200         | 220         | 250         | 285         | 340         |
| <b>K</b>                      | 65          | 75          | 85          | 100         | 110         | 125         | 145         | 160         | 180         | 210         | 240         | 295         |
| <b>M</b>                      | 6           | 6           | 2.5         | 6           | 10          | 14          | 10          | 8           | 3           | 5           | 3           | 2           |
| <b>N°</b>                     | 30          | 45          | 45          | 45          | 45          | 45          | 30          | 45          | 45          | 45          | 45          | 45          |
| <b>D1</b>                     | 4 x<br>Ø 14 | 4 x<br>Ø 14 | 4 x<br>Ø 14 | 4 x<br>Ø 18 | 4 x<br>Ø 18 | 4 x<br>Ø 18 | 4 x<br>Ø 18 | 8 x<br>Ø 18 | 8 x<br>Ø 18 | 8 x<br>Ø 18 | 8 x<br>Ø 23 | 8 x<br>Ø 23 |
| <b>daN</b>                    | 0.6         | 0,7         | 1.0         | 1.4         | 2.1         | 2.4         | 2.7         | 3.3         | 3.9         | 5.0         | 7.4         | 12.6        |

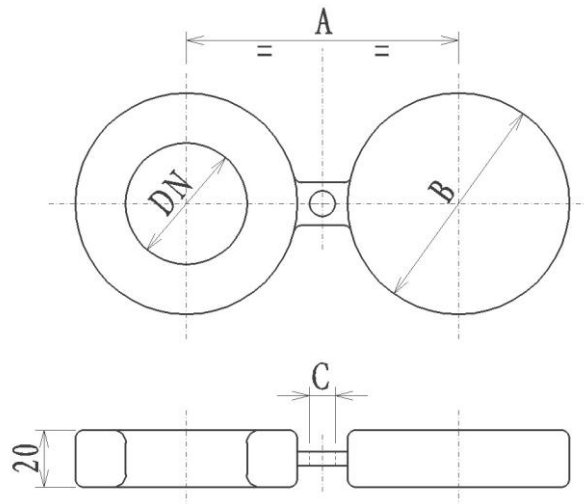
Stahl emailliert „5-000“  
 Produkt Spezifikationen siehe Blatt „5-000“  
 Glass lined steel „5-000“  
 Product specifications see sheet „5-000“  
 Acier vitrifié „5-000“  
 Specifications produit voir feuille „5-000“

Grössere Nennweiten siehe Rubrik „Kolonnen 3-xxx“  
 Larger diameters see item „Columns 3-xxx“  
 Diamètres plus grands voir rubrique „Colonnes 3-xxx“



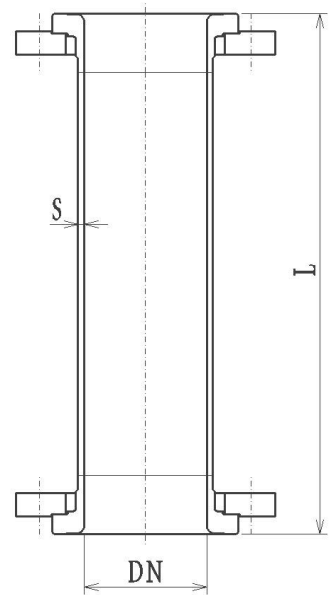
| DN | 25   | 32 | 40 | 50  | 65  | 80  | 100 | 125 | 150 | 200 | 250 | 300 |
|----|--|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| D  | 68   | 78 | 88 | 102 | 122 | 138 | 158 | 188 | 212 | 268 | 320 | 370 |
| d  | <b>Auf Wunsch / on request / selon demande (min. Ø 10)</b> |    |    |     |     |     |     |     |     |     |     |     |
| L  | 15   | 15 | 15 | 15  | 15  | 15  | 20  | 20  | 20  | 20  | 20  | 20  |

Stahl emailliert „5-000“  
 Produkt Spezifikationen siehe Blatt „5-000“  
 Glass lined steel „5-000“  
 Product specifications see sheet „5-000“  
 Acier vitrifié „5-000“  
 Specifications produit voir feuille „5-000“



| DN  | 25  | 32  | 40  | 50  | 65  | 80  | 100 | 125 | 150 | 200  | 250  | 300  |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| A   | 85  | 100 | 110 | 125 | 145 | 160 | 180 | 210 | 240 | 295  | 350  | 400  |
| B   | 68  | 78  | 88  | 100 | 122 | 138 | 158 | 188 | 210 | 268  | 320  | 370  |
| C   | 14  | 18  | 18  | 18  | 18  | 18  | 18  | 18  | 23  | 23   | 23   | 23   |
| daN | 1.0 | 1.4 | 1.7 | 2.2 | 3.1 | 3.9 | 4.9 | 6.8 | 8.1 | 12.8 | 17.5 | 22.7 |

Stahl emailliert  
 Produkt Spezifikationen siehe Blatt „5-000“  
 Glass lined steel  
 Product specifications see sheet „5-000“  
 Acier vitrifié  
 Specifications produit voir feuille „5-000“

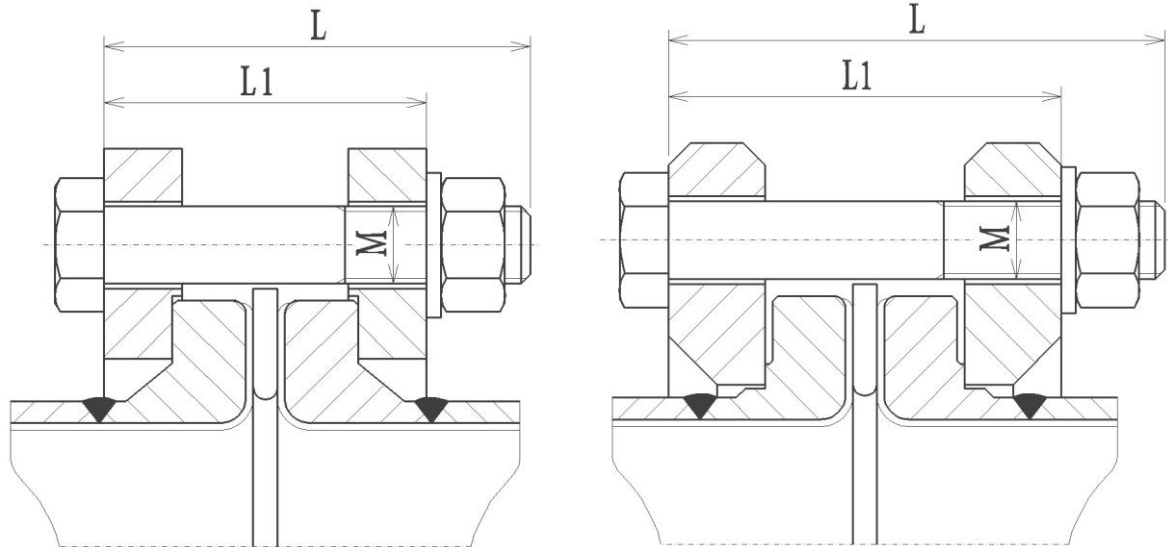


Alle Gewichte einschl. Losflanschen  
 All weights incl. split flanges  
 Les poids s'entendent avec brides libres

| DN | 25   | 32   | 40   | 50   | 65   | 80   | 100  | 125  | 150  | 200  | 250  | 300  |
|----|------|------|------|------|------|------|------|------|------|------|------|------|
| S  | 3.60 | 3.60 | 4.00 | 4.50 | 4.50 | 5.00 | 5.00 | 5.00 | 5.00 | 5.90 | 6.30 | 7.10 |
| L  | 160  | 180  | 200  | 230  | 290  | 310  | 350  | 400  | 480  | 600  |      |      |



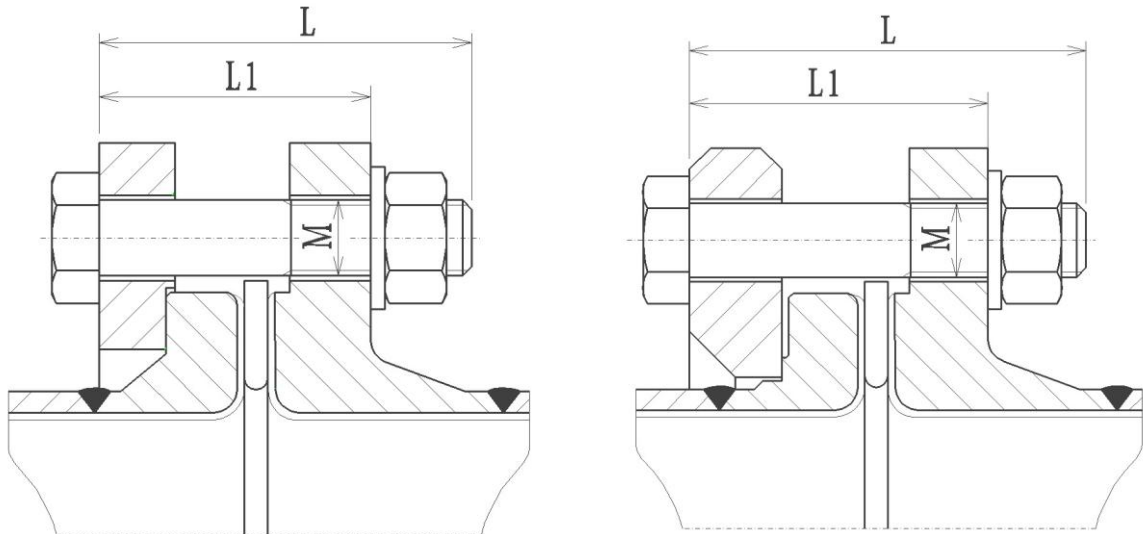
### DN 25 - DN 300 PN10



Anzugsmomente: siehe Blatt 5-230  
 Torque values: see sheet 5-230  
 Couples de serrage: voir feuille 5-230

|     |          | Mit DIN Losflanschen<br>With DIN split flanges<br>Avec brides libres DIN                     |     | Mit Sicherheitslosflanschen<br>With safety split flanges<br>Avec brides de sécurité          |     |
|-----|----------|--|-----|--|-----|
|     |          | Rohrleitung auf Rohrleitung<br>Pipes sections to pipes sections<br>Tuyauterie sur tuyauterie |     | Rohrleitung auf Rohrleitung<br>Pipes sections to pipes sections<br>Tuyauterie sur tuyauterie |     |
| DN  | M        | L  | L1  | L  | L1  |
| 25  | 4 x M12  | 75   | 58  | 85   | 69  |
| 32  | 4 x M16  | 80   | 58  | 90   | 69  |
| 40  | 4 x M16  | 80   | 58  | 100  | 77  |
| 50  | 4 x M16  | 90   | 66  | 100  | 75  |
| 65  | 4 x M16  | 90   | 68  | 110  | 83  |
| 80  | 8 x M16  | 100  | 72  | 110  | 83  |
| 100 | 8 x M16  | 100  | 78  | 110  | 87  |
| 125 | 8 x M16  | 100  | 80  | 120  | 96  |
| 150 | 8 x M20  | 120  | 88  | 130  | 102 |
| 200 | 8 x M20  | 130  | 98  | 150  | 124 |
| 250 | 12 x M20 | 140  | 110 |  |     |
| 300 | 12 x M20 | 150  | 125 |  |     |

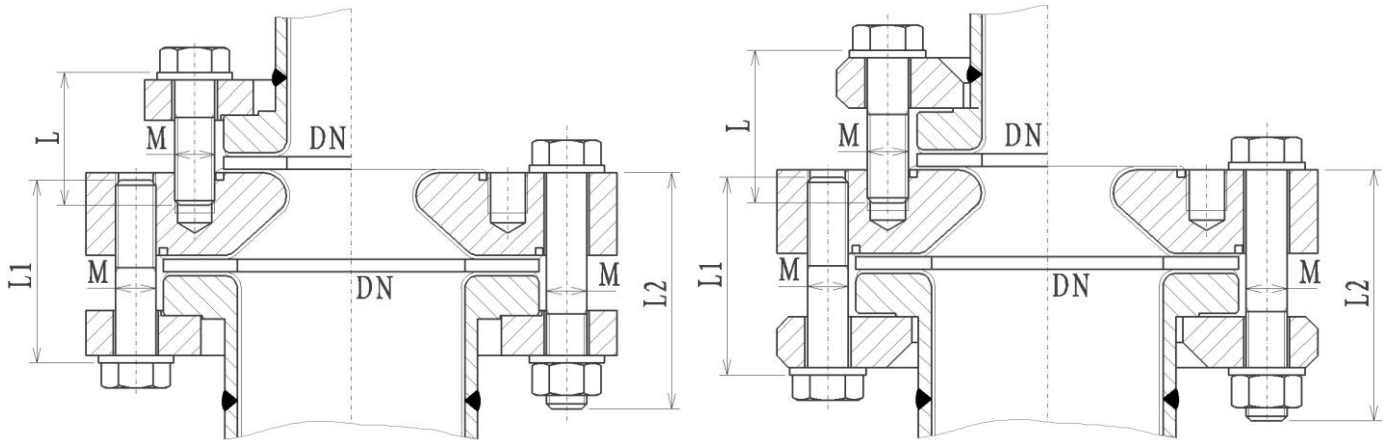
**DN 25 - DN 300 PN10**



Anzugsmomente: siehe Blatt 5-230  
 Torque values: see sheet 5-230  
 Couples de serrage: voir feuille 5-230

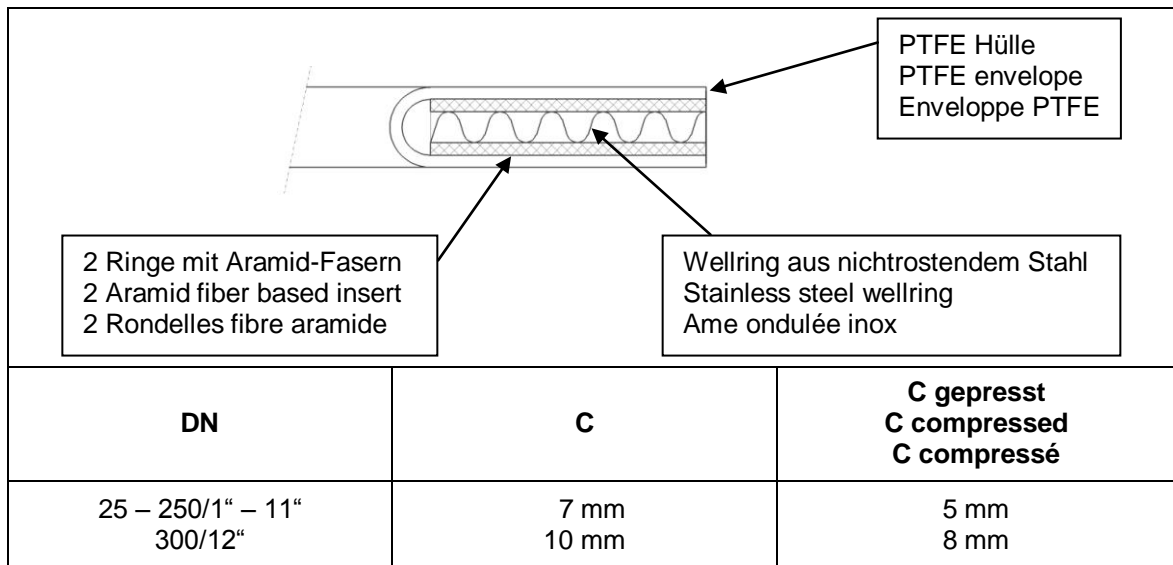
|     |          | Mit DIN Losflanschen<br>With DIN split flanges<br>Avec brides libres DIN      |    | Mit Sicherheitslosflanschen<br>With safety split flanges<br>Avec brides de sécurité |    |
|-----|----------|---|----|---|----|
|     |          | Rohrleitung auf Armaturen<br>Pipes sections to valves<br>Tuyauterie sur vanne |    | Rohrleitung auf Armaturen<br>Pipes sections to valves<br>Tuyauterie sur vanne       |    |
| DN  | M        | L   | L1 | L   | L1 |
| 25  | 4 x M12  | 65  | 51 | 75  | 55 |
| 32  | 4 x M16  | 70  | 51 | 75  | 55 |
| 40  | 4 x M16  | 70  | 51 | 80  | 58 |
| 50  | 4 x M16  | 75  | 55 | 80  | 57 |
| 65  | 4 x M16  | 75  | 56 | 85  | 61 |
| 80  | 8 x M16  | 80  | 60 | 90  | 61 |
| 100 | 8 x M16  | 90  | 63 | 90  | 62 |
| 125 | 8 x M16  | 90  | 68 | 100   | 67 |
| 150 | 8 x M20  | 100   | 70 | 100   | 70 |
| 200 | 8 x M20  | 100   | 77 | 120   | 82 |
| 250 | 12 x M20 | 110   | 85 |   |    |
| 300 | 12 x M20 | 120   | 94 |   |    |

### DN 25 - DN 300 PN10



Anzugsmomente: siehe Blatt 5-230  
 Torque values: see sheet 5-230  
 Couples de serrage: voir feuille 5-230

|     |          | Mit DIN Losflanschen<br>With DIN split flanges<br>Avec brides libres DIN      |     |     | Mit Sicherheitslosflanschen<br>With safety split flanges<br>Avec brides de sécurité |     |     |
|-----|----------|---|-----|-----|---|-----|-----|
|     |          | Rohrleitung auf Armaturen<br>Pipes sections to valves<br>Tuyauterie sur vanne |     |     | Rohrleitung auf Armaturen<br>Pipes sections to valves<br>Tuyauterie sur vanne       |     |     |
| DN  | M        | L   | L1  | L2  | L   | L1  | L2  |
| 25  | 4 x M12  | 45  | 50  |     | 50  | 55  |     |
| 32  | 4 x M16  | 50  | 60  |     | 55  | 65  |     |
| 40  | 4 x M16  | 50  | 60  |     | 60  | 70  |     |
| 50  | 4 x M16  | 50  | 60  |     | 55  | 70  |     |
| 65  | 4 x M16  | 55  | 60  |     | 60  | 70  |     |
| 80  | 8 x M16  | 55  | 70  | 90  | 60  | 70  | 100 |
| 100 | 8 x M16  | 60  | 70  | 110 | 65  | 80  | 110 |
| 125 | 8 x M16  | 60  | 70  | 110 | 65  | 80  | 120 |
| 150 | 8 x M20  | 70  | 80  | 110 | 75  | 90  | 130 |
| 200 | 8 x M20  | 75  | 90  | 120 |   | 100 | 140 |
| 250 | 12 x M20 | 80  | 90  | 130 |   |     |     |
| 300 | 12 x M20 |   | 100 | 140 |   |     |     |



Auf Anfrage: Graphit Einlage, Wellring mit Erdungslasche  
 Upon request: Graphite insert, wellring with earthing lug  
 Sur demande: insert graphite, ame ondulée avec patte de mise à la terre

| DN        | Druckbereich<br>Pressure range<br>Plage pression | Temperatur Bereich<br>Temperatur range<br>Plage de température |
|-----------|--|--|
| 25 – 80   | -1/25 bar  | -30/230° C   |
| 100 – 150 | -1/16 bar  |  |
| ≥ 200     | -1/10 bar  |  |

| DIN 28148 |                                     |
|-----------|-------------------------------------|
| DN        | Rohrleitung<br>Piping<br>Tuyauterie |
| 25        | ∅ 70 / 35                           |
| 32        | ∅ 82 / 43                           |
| 40        | ∅ 92 / 49                           |
| 50        | ∅ 107 / 61                          |
| 65        | ∅ 127 / 77                          |
| 80        | ∅ 142 / 90                          |
| 100       | ∅ 162 / 115                         |
| 125       | ∅ 192 / 141                         |
| 150       | ∅ 218 / 169                         |
| 200       | ∅ 273 / 220                         |
| 250       | ∅ 328 / 274                         |
| 300       | ∅ 378 / 325                         |

| DN | Schrauben<br>Screws<br>Visseries | Anzugsmomente<br>Tightening torque<br>Couples de serrage |
|----|----------------------------------|--|
| 25 | 4 x M 12                         | 30   |
| 32 | 4 x M 16                         | 50   |
| 40 | 4 x M 16                         | 55   |
| 50 | 4 x M 16                         | 70   |
| 65 | 4 x M 16                         | 90   |
| 80 | 8 x M 16                         | 55   |

| DN  | Schrauben<br>Screws<br>Visseries | Anzugsmomente<br>Tightening torque<br>Couples de serrage |
|-----|----------------------------------|--|
| 100 | 8 x M 16                         | 60   |
| 125 | 8 x M 16                         | 80   |
| 150 | 8 x M 16                         | 100  |
| 200 | 8 x M 20                         | 150  |
| 250 | 12 x M20                         | 130  |
| 300 | 12 x M20                         | 150  |

Nachziehen angepasst werden.

**DIE VERSCHIEDENEN DICHTUNGSTYPEN GELTEN NUR ALS EMPFEHLUNG!**

These values are given according to practical trials, only as recommendation. In accordance with working conditions,

this values as well as the re-tightening frequency have to be adapted.

**THE DIFFERENT GASKET TYPES ARE ONLY RECOMMENDATION!**

Les valeurs indiquées ci-dessus le sont à titre indicatif. Les valeurs et fréquences de resserrage sont à adapter selon les conditions de service.

**LES DIVERS TYPES DE JOINTS SONT DONNÉS À TITRE INDICATIF !**

| Typ/Type | Aufbau/Composition  | Thickness               | Operating range    |
|----------|---|-------------------------|--------------------|
| 1        | <ul style="list-style-type: none"> <li>PTFE-ummantelt Dichtung<br/>PTFE envelope gasket, joint envelope PTFE</li> <li>Mit Aramid Faser Einlage<br/>With aramid insert, avec insert en aramide</li> <li>Mit oder ohne Wellring<br/>With or without wellring, avec ou sans âme ondulée</li> </ul> | Up to DN 250<br>7 / 5mm | -25°C / + 160°C    |
| 2        | <ul style="list-style-type: none"> <li>PTFE-ummantelt Dichtung<br/>PTFE envelope gasket, joint envelope PTFE</li> <li>Mit Graphit Einlage<br/>With graphit insert, avec insert graphite</li> <li>Mit oder ohne Wellring<br/>With or without wellring, avec ou sans âme ondulée</li> </ul>       | From DN 300<br>10 / 8mm | - 50° C / + 230° C |
| 3        | <ul style="list-style-type: none"> <li>Modified PTFE<br/>Modified PTFE, PTFE modifié</li> </ul>   | 3,2 to 6,3mm            | - 50° C / + 200° C |
| 4        | <ul style="list-style-type: none"> <li>100% Expandiertes PTFE<br/>( GORE-GR / GORE-Style 800 )<br/>100% expanded PTFE, PTFE 100% expansé</li> </ul>   | 3 to 6 mm<br>6 mm       | - 50° C / + 230° C |