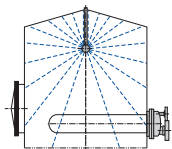




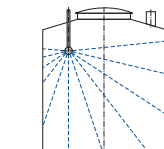
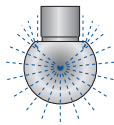
- Faible pression requise
- Différents matériaux et états de surface possible
- Trame d'aspersion variable
- Bonne performance de rinçage

|                                 |  |
|---------------------------------|--|
| Pression de service:            | 1 - 2.5 bar (14.5 - 36.3 psi)                                      |
| Diamètre de lavage:             | max. 8 m (26.2 ft)   |
| Débit:                          | 0.9 - 66.7 m <sup>3</sup> /h<br>(15 - 1,112 l/min / 4 - 294 USgpm) |
| Angle de lavage:                | 188° - 360°  |
| Température d'utilisation:      | max. 95 °C (203 °F)  |
| Matériaux:                      | inox 316L (1.4404),<br>316L (1.4435), 1.4539, alliage 59, 2.4605   |
| Connexion:                      | clipsé / taraudé   |
| Surfaces:                       | mat, électropolie  |
| Position spécifique de montage: | aucune   |

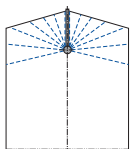
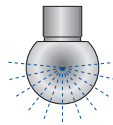
### Trame d'aspersion



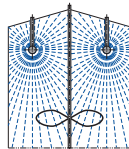
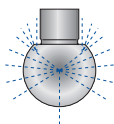
Trame d'aspersion A pour cuve verticale



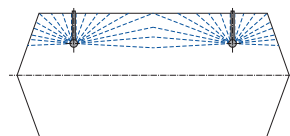
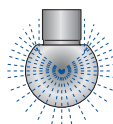
Trame d'aspersion B pour cuve verticale Avec ouverture sur le dôme



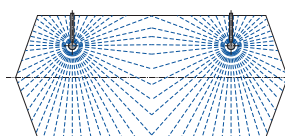
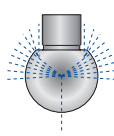
Trame d'aspersion G pour cuve verticale



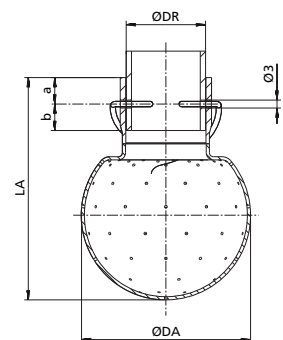
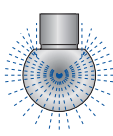
Trame d'aspersion LA pour cuve verticale



Trame d'aspersion L pour cuve horizontale



Trame d'aspersion LA pour cuve horizontale



### Boules d'aspersion, dimensions, dimension des perçages

|                                   | Type 05        |            |                 |              |                      | Type 1          |            |                |                      |                 | Type 2       |            |               |
|-----------------------------------|----------------|------------|-----------------|--------------|----------------------|-----------------|------------|----------------|----------------------|-----------------|--------------|------------|---------------|
|                                   | 316L<br>1.4404 |            | 316 L<br>1.4435 | 1.4539       | Alliage 59<br>2.4605 | 316 L<br>1.4404 |            | 316L<br>1.4435 | Alliage 59<br>2.4605 | 316 L<br>1.4404 |              |            |               |
| Ø DR                              | 12<br>[mm]     | 13<br>[mm] | 1/2" OD<br>[mm] | 13.5<br>[mm] | 13<br>[mm]           | 1/2" OD<br>[mm] | 29<br>[mm] | 1" OD<br>[mm]  | 29<br>[mm]           | 33.7<br>[mm]    | 33.7<br>[mm] | 53<br>[mm] | 2" OD<br>[mm] |
| Ø DA                              | 28             | 28         | 28              | 28           | 28                   | 28              | 64         | 64             | 64                   | 64              | 64           | 93         | 93            |
| LA                                | 46.6           | 46.6       | 46.6            | 46.6         | 46.6                 | 46.6            | 84         | 84             | 84                   | 84              | 84           | 113.5      | 113.5         |
| b+a                               | 18             | 18         | 16              | 18           | 18                   | 18              | 20         | 20             | 20                   | 16.5            | 16.5         | 30         | 30            |
| a                                 | 10             | 10         | 8               | 10           | 10                   | 10              | 10         | 10             | 10                   | 6               | 6            | 10         | 10            |
| b                                 | 8              | 8          | 8               | 8            | 8                    | 8               | 10         | 10             | 10                   | 10.5            | 10.5         | 20         | 20            |
| Perçage du bord inférieur du tube |                |            |                 |              |                      |                 |            |                |                      |                 |              |            |               |
| b-0.2                             | 7.8            | 7.8        | 7.8             | 7.8          | 7.8                  | 7.8             | 9.8        | 9.8            | 9.8                  | 10.3            | 10.3         | 19.8       | 19.8          |

# GEA Breconcherry

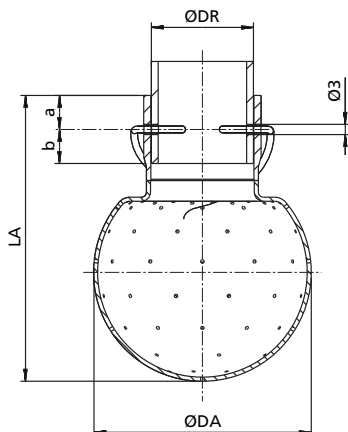
## Laveurs statiques – boules d'aspersion

Clipsé suivant DIN 11850

Surface: mat, matériaux: 316L (1.4404)

| Type     | Angle d'aspersion | Débit de lavage [m³/h] 1 bar | Diamètre de lavage [m] | Dimensions |         | Connexions: clip pour tube da [mm] | Article no. |
|----------|-------------------|------------------------------|------------------------|------------|---------|------------------------------------|-------------|
|          |                   |                              |                        | DA [mm]    | LA [mm] |                                    |             |
| A 05     | 360°              | 5.1                          | 1.0 - 2.0              | 28         | 46.6    | 12                                 | 253-109.63  |
| A 05-1.0 | 360°              | 2.8                          | 0.8 - 1.5              | 28         | 46.6    | 12                                 | 253-109.73  |
| A 05     | 360°              | 5.1                          | 1.0 - 2.0              | 28         | 46.6    | 13                                 | 253-111.40  |
| A 05-1.0 | 360°              | 2.8                          | 0.8 - 1.5              | 28         | 46.6    | 13                                 | 253-111.41  |
| A 1-1.0  | 360°              | 3.0                          | 1.5 - 2.5              | 64         | 84.0    | 29                                 | 254-000044  |
| A 1-1.5  | 360°              | 7.0                          | 1.8 - 3.0              | 64         | 84.0    | 29                                 | 254-000046  |
| A 1      | 360°              | 9.8                          | 2.0 - 3.0              | 64         | 84.0    | 29                                 | 254-000030  |
| A 1-1    | 360°              | 12.8                         | 2.5 - 3.5              | 64         | 84.0    | 29                                 | 254-000031  |
| A 1-2    | 360°              | 15.3                         | 3.0 - 4.0              | 64         | 84.0    | 29                                 | 254-000032  |
| A 2      | 360°              | 21.9                         | 3.5 - 5.0              | 93         | 113.5   | 53                                 | 254-000042  |
| A 2-1    | 360°              | 28.4                         | 4.0 - 6.0              | 93         | 113.5   | 53                                 | 254-000040  |
| A 2-2    | 360°              | 35.6                         | 5.0 - 7.0              | 93         | 113.5   | 53                                 | 254-000041  |
| A 2-3    | 360°              | 40.9                         | 6.0 - 8.0              | 93         | 113.5   | 53                                 | 254-000049  |
| B 05     | 192°              | 3.0                          | 1.0 - 2.0              | 28         | 46.6    | 12                                 | 253-109.74  |
| B 05     | 192°              | 3.0                          | 1.0 - 2.0              | 28         | 46.6    | 13                                 | 253-111.42  |
| B 1      | 192°              | 9.5                          | 2.0 - 3.0              | 64         | 84.0    | 29                                 | 254-000033  |
| B 2      | 194°              | 22.4                         | 3.5 - 5.0              | 93         | 113.5   | 53                                 | 254-000050  |
| B 2-3    | 194°              | 42.2                         | 6.0 - 8.0              | 93         | 113.5   | 53                                 | 254-000053  |
| G 05     | 232°              | 4.7                          | 1.0 - 2.0              | 28         | 46.6    | 12                                 | 253-109.78  |
| G 05     | 232°              | 4.7                          | 1.0 - 2.0              | 28         | 46.6    | 13                                 | 253-111.46  |
| G 1      | 206°              | 9.2                          | 2.0 - 3.0              | 64         | 84.0    | 29                                 | 254-000036  |
| G 1-1    | 206°              | 11.2                         | 2.5 - 3.5              | 64         | 84.0    | 29                                 | 254-000037  |
| G 1-2    | 206°              | 14.5                         | 3.0 - 4.0              | 64         | 84.0    | 29                                 | 254-000038  |
| G 2      | 246°              | 20.1                         | 3.5 - 5.0              | 93         | 113.5   | 53                                 | 254-000054  |
| G 2-1    | 246°              | 26.8                         | 4.0 - 6.0              | 93         | 113.5   | 53                                 | 254-000055  |
| G 2-2    | 246°              | 34.7                         | 5.0 - 7.0              | 93         | 113.5   | 53                                 | 254-000056  |
| G 2-3    | 246°              | 41.0                         | 6.0 - 8.0              | 93         | 113.5   | 53                                 | 254-000057  |
| L 1      | 188°              | 8.6                          | 2.5 - 3.0              | 64         | 84.0    | 29                                 | 254-000045  |
| LA 1-1.0 | 360°              | 5.5                          | 1.5 - 2.5              | 64         | 84.0    | 29                                 | 254-000048  |
| LA 1-1.5 | 360°              | 11.0                         | 2.5 - 3.0              | 64         | 84.0    | 29                                 | 254-000047  |

Pression de service recommandée 1.0 à 2.5 bar g à l'entrée de la boule d'aspersion



### Tubes

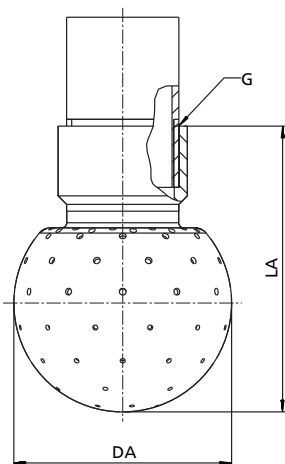
| DIN 11850 series 2<br>(DIN 11866 series séries A pour dimensions) |         |        | DIN 11866 séries B<br>DIN EN ISO 1127 |         |        | DIN 11866 séries C<br>ASME-BPE 2005 |         |        |
|---|---------|--------|---------------------------------------|---------|--------|-------------------------------------|---------|--------|
| DN  | DR [mm] | s [mm] | DN/OD                                 | DR [mm] | s [mm] | DN                                  | DR [mm] | s [mm] |
| 10  | 13      | 1.5    | 13.5                                  | 13.5    | 1.6    | 1/2"                                | 12.7    | 1.65   |
| 15  | 19      | 1.5    | 17.2                                  | 17.2    | 1.6    | 3/4"                                | 19.05   | 1.65   |
| 20  | 23      | 1.5    | 21.3                                  | 21.3    | 1.6    |                                     |         |        |
|   |         |        | 26.9                                  | 26.9    | 1.6    |                                     |         |        |
| 25  | 29      | 1.5    | 33.7                                  | 33.7    | 2.0    | 1"                                  | 25.4    | 1.65   |
| 40  | 41      | 1.5    | 42.4                                  | 42.4    | 2.0    | 1 1/2"                              | 38.1    | 1.65   |
| 50  | 53      | 1.5    | 48.3                                  | 48.3    | 2.0    | 2"                                  | 50.8    | 1.65   |

Tarudée suivant DIN 11850 228-1

Surface: mat, matériaux: 316L (1.4404)

| Type     | Angle d'aspersion | Débit de lavage [m³/h] 1 bar | Diamètre de lavage [m] | Dimensions |         | Connexions: Douille taraudée | Article no. |
|----------|-------------------|------------------------------|------------------------|------------|---------|------------------------------|-------------|
|          |                   |                              |                        | DA [mm]    | LA [mm] |                              |             |
| A 05     | 360°              | 4.7                          | 1.0 - 2.0              | 28         | 25      | G 1/4"                       | 253-106.01  |
| A 05-1.0 | 360°              | 2.4                          | 0.8 - 1.5              | 28         | 25      | G 1/4"                       | 253-106.26  |
| A 1-1.0  | 360°              | 2.5                          | 1.5 - 2.5              | 64         | 84      | G 1"                         | 253-106.34  |
| A 1-1.5  | 360°              | 6.5                          | 1.8 - 3.0              | 64         | 84      | G 1"                         | 253-106.35  |
| A 1      | 360°              | 9.4                          | 2.0 - 3.0              | 64         | 84      | G 1"                         | 253-106.10  |
| A 1-1    | 360°              | 12.3                         | 2.5 - 3.5              | 64         | 84      | G 1"                         | 253-106.11  |
| A 1-2    | 360°              | 14.8                         | 3.0 - 4.0              | 64         | 84      | G 1"                         | 253-106.12  |
| A 2      | 360°              | 20.9                         | 3.5 - 5.0              | 93         | 113.5   | G 2"                         | 253-106.36  |
| A 2-1    | 360°              | 27.4                         | 4.0 - 6.0              | 93         | 113.5   | G 2"                         | 253-106.37  |
| A 2-2    | 360°              | 34.6                         | 5.0 - 7.0              | 93         | 113.5   | G 2"                         | 253-106.38  |
| A 2-3    | 360°              | 39.9                         | 6.0 - 8.0              | 93         | 113.5   | G 2"                         | 253-106.33  |
| B 05     | 192°              | 2.5                          | 1.0 - 2.0              | 28         | 25      | G 1/4"                       | 253-106.02  |
| B 1      | 192°              | 9.0                          | 2.0 - 3.0              | 64         | 84      | G 1"                         | 253-106.13  |
| B 2      | 194°              | 21.4                         | 3.5 - 5.0              | 93         | 113.5   | G 2"                         | 253-106.39  |
| B 2-3    | 194°              | 41.2                         | 6.0 - 8.0              | 93         | 113.5   | G 2"                         | 253-106.42  |
| G 05     | 232°              | 4.2                          | 1.0 - 2.0              | 28         | 25      | G 1/4"                       | 253-106.22  |
| G 1      | 206°              | 8.7                          | 2.0 - 3.0              | 64         | 84      | G 1"                         | 253-106.19  |
| G 1-1    | 206°              | 10.7                         | 2.5 - 3.5              | 64         | 84      | G 1"                         | 253-106.20  |
| G 1-2    | 206°              | 14.0                         | 3.0 - 4.0              | 64         | 84      | G 1"                         | 253-106.21  |
| G 2      | 246°              | 19.1                         | 3.5 - 5.0              | 93         | 113.5   | G 2"                         | 253-106.47  |
| G 2-1    | 246°              | 25.8                         | 4.0 - 6.0              | 93         | 113.5   | G 2"                         | 253-106.48  |
| G 2-2    | 246°              | 33.7                         | 5.0 - 7.0              | 93         | 113.5   | G 2"                         | 253-106.49  |
| G 2-3    | 246°              | 40.0                         | 6.0 - 8.0              | 93         | 113.5   | G 2"                         | 253-106.50  |
| L 1      | 188°              | 8.1                          | 2.5 - 3.0              | 64         | 84      | G 1"                         | 253-106.73  |
| LA 1-1.5 | 360°              | 10.5                         | 2.5 - 3.0              | 64         | 84      | G 1"                         | 253-106.77  |

Pression de service recommandée 1.0 à 2.5 bar g à l'entrée de la boule d'aspersion



### Tubes

| DIN 11850 series 2<br>(DIN 11866 series séries A pour dimensions) |         |        | DIN 11866 séries B<br>DIN EN ISO 1127 |         |        | DIN 11866 séries C<br>ASME-BPE 2005 |         |        |
|---|---------|--------|---------------------------------------|---------|--------|-------------------------------------|---------|--------|
| DN  | DR [mm] | s [mm] | DN/OD                                 | DR [mm] | s [mm] | DN                                  | DR [mm] | s [mm] |
| 10  | 13      | 1.5    | 13.5                                  | 13.5    | 1.6    | 1/2"                                | 12.7    | 1.65   |
| 15  | 19      | 1.5    | 17.2                                  | 17.2    | 1.6    | 3/4"                                | 19.05   | 1.65   |
| 20  | 23      | 1.5    | 21.3                                  | 21.3    | 1.6    |                                     |         |        |
|   |         |        | 26.9                                  | 26.9    | 1.6    |                                     |         |        |
| 25  | 29      | 1.5    | 33.7                                  | 33.7    | 2.0    | 1"                                  | 25.4    | 1.65   |
| 40  | 41      | 1.5    | 42.4                                  | 42.4    | 2.0    | 1 1/2"                              | 38.1    | 1.65   |
| 50  | 53      | 1.5    | 48.3                                  | 48.3    | 2.0    | 2"                                  | 50.8    | 1.65   |

# GEA Breconcherry

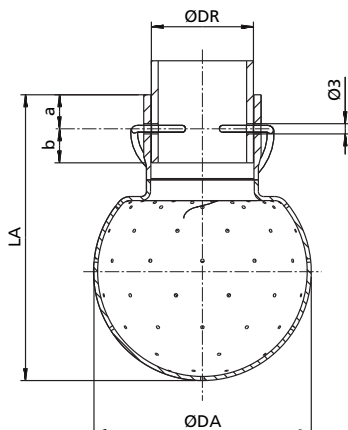
## Laveurs statiques – boules d'aspersion

Clipsé avec tube OD inch

Surface: brillant, Ra ext.  $\leq 0.8 \mu\text{m}$ , material: 316L (1.4404)

| Type     | Angle d'aspersion | Débit de lavage [m <sup>3</sup> /h] 1 bar | Diamètre de lavage [m] | Dimensions |         | Connexions: clip pour tube OD inch [mm] | Article no. |
|----------|-------------------|---|------------------------|------------|---------|---|-------------|
|          |                   |   |                        | DA [mm]    | LA [mm] |   |             |
| A 05     | 360°              | 5.1                                       | 1.0 - 2.0              | 28         | 46.6    | 1/2" (12.7)                             | 253-109.42  |
| A 05-1.0 | 360°              | 2.8                                       | 0.8 - 1.5              | 28         | 46.6    | 1/2" (12.7)                             | 253-111.43  |
| A 1-1.0  | 360°              | 3.0                                       | 1.5 - 2.5              | 64         | 84.0    | 1" (25.4)                               | 253-111.48  |
| A 1-1.5  | 360°              | 7.0                                       | 1.8 - 3.0              | 64         | 84.0    | 1" (25.4)                               | 253-111.49  |
| A 1      | 360°              | 9.8                                       | 2.0 - 3.0              | 64         | 84.0    | 1" (25.4)                               | 253-109.43  |
| A 1-1    | 360°              | 12.8                                      | 2.5 - 3.5              | 64         | 84.0    | 1" (25.4)                               | 253-109.44  |
| A 1-2    | 360°              | 15.3                                      | 3.0 - 4.0              | 64         | 84.0    | 1" (25.4)                               | 253-109.47  |
| A 2      | 360°              | 21.9                                      | 3.5 - 5.0              | 93         | 113.5   | 2" (50.8)                               | 253-109.49  |
| A 2-1    | 360°              | 28.4                                      | 4.0 - 6.0              | 93         | 113.5   | 2" (50.8)                               | 253-109.52  |
| A 2-2    | 360°              | 35.6                                      | 5.0 - 7.0              | 93         | 113.5   | 2" (50.8)                               | 253-109.54  |
| A 2-3    | 360°              | 40.9                                      | 6.0 - 8.0              | 93         | 113.5   | 2" (50.8)                               | 253-109.59  |
| B 05     | 192°              | 3.0                                       | 1.0 - 2.0              | 28         | 46.6    | 1/2" (12.7)                             | 253-111.44  |
| B 1      | 192°              | 9.5                                       | 2.0 - 3.0              | 64         | 84.0    | 1" (25.4)                               | 253-109.50  |
| B 2      | 194°              | 22.4                                      | 3.5 - 5.0              | 93         | 113.5   | 2" (50.8)                               | 253-111.51  |
| B 2-3    | 194°              | 42.2                                      | 6.0 - 8.0              | 93         | 113.5   | 2" (50.8)                               | 253-111.54  |
| G 05     | 232°              | 4.7                                       | 1.0 - 2.0              | 28         | 46.6    | 1/2" (12.7)                             | 253-111.45  |
| G 1      | 206°              | 9.2                                       | 2.0 - 3.0              | 64         | 84.0    | 1" (25.4)                               | 253-109.06  |
| G 1-1    | 206°              | 11.2                                      | 2.5 - 3.5              | 64         | 84.0    | 1" (25.4)                               | 253-109.45  |
| G 1-2    | 206°              | 14.5                                      | 3.0 - 4.0              | 64         | 84.0    | 1" (25.4)                               | 253-109.48  |
| G 2      | 246°              | 20.1                                      | 3.5 - 5.0              | 93         | 113.5   | 2" (50.8)                               | 253-109.07  |
| G 2-1    | 246°              | 26.8                                      | 4.0 - 6.0              | 93         | 113.5   | 2" (50.8)                               | 253-109.53  |
| G 2-2    | 246°              | 34.7                                      | 5.0 - 7.0              | 93         | 113.5   | 2" (50.8)                               | 253-109.55  |
| G 2-3    | 246°              | 41.0                                      | 6.0 - 8.0              | 93         | 113.5   | 2" (50.8)                               | 253-111.55  |
| L 1      | 188°              | 8.6                                       | 2.5 - 3.0              | 64         | 84.0    | 1" (25.4)                               | 253-111.37  |
| LA 1-1.0 | 360°              | 5.5                                       | 1.5 - 2.5              | 64         | 84.0    | 1" (25.4)                               | 253-111.65  |
| LA 1-1.5 | 360°              | 11.0                                      | 2.5 - 3.0              | 64         | 84.0    | 1" (25.4)                               | 253-111.62  |

Pression de service recommandée 1.0 à 2.5 bar g à l'entrée de la boule d'aspersion



### Tubes

| DIN 11850 series 2<br>(DIN 11866 series séries A pour dimensions) |         |        | DIN 11866 séries B<br>DIN EN ISO 1127 |         |        | DIN 11866 séries C<br>ASME-BPE 2005 |         |        |
|---|---------|--------|---------------------------------------|---------|--------|-------------------------------------|---------|--------|
| DN  | DR [mm] | s [mm] | DN/OD                                 | DR [mm] | s [mm] | DN                                  | DR [mm] | s [mm] |
| 10  | 13      | 1.5    | 13.5                                  | 13.5    | 1.6    | 1/2"                                | 12.7    | 1.65   |
| 15  | 19      | 1.5    | 17.2                                  | 17.2    | 1.6    | 3/4"                                | 19.05   | 1.65   |
| 20  | 23      | 1.5    | 21.3                                  | 21.3    | 1.6    |                                     |         |        |
|   |         |        | 26.9                                  | 26.9    | 1.6    |                                     |         |        |
| 25  | 29      | 1.5    | 33.7                                  | 33.7    | 2.0    | 1"                                  | 25.4    | 1.65   |
| 40  | 41      | 1.5    | 42.4                                  | 42.4    | 2.0    | 1 1/2"                              | 38.1    | 1.65   |
| 50  | 53      | 1.5    | 48.3                                  | 48.3    | 2.0    | 2"                                  | 50.8    | 1.65   |

### Fixation par clip suivant DIN 11850

Surface: électroplie\*, Ra ext.  $\leq 0.5 \mu\text{m}$ , matériaux: 1.4435, Fe<1%

| Type     | Angle d'aspersion | Débit de lavage [m <sup>3</sup> /h] 1 bar | Diamètre de lavage [m] | Dimensions |         | Connexions: clip pour tube [mm] | Article no. |
|----------|-------------------|---|------------------------|------------|---------|---------------------------------|-------------|
|          |                   |   |                        | DA [mm]    | LA [mm] |                                 |             |
| A 1-1.0  | 360°              | 3.0                                       | 1.5 - 2.5              | 64         | 84      | 29                              | 253-111.83  |
| A 1-1.5  | 360°              | 7.0                                       | 1.8 - 3.0              | 64         | 84      | 29                              | 253-111.84  |
| A 1      | 360°              | 9.8                                       | 2.0 - 3.0              | 64         | 84      | 29                              | 253-111.82  |
| LA 1-1.0 | 360°              | 5.5                                       | 1.5 - 2.5              | 64         | 84      | 29                              | 253-111.80  |
| LA 1-1.5 | 360°              | 11.0                                      | 2.5 - 3.0              | 64         | 84      | 29                              | 253-111.81  |

### Fixation par clip suivant ISO

Surface: électroplie\*, Ra ext.  $\leq 0.5 \mu\text{m}$ , matériaux: 1.4435, Fe<1%

| Type     | Angle d'aspersion | Débit de lavage [m <sup>3</sup> /h] 1 bar | Diamètre de lavage [m] | Dimensions |         | Connexions: clip pour tube ISO [mm] | Article no. |
|----------|-------------------|---|------------------------|------------|---------|-------------------------------------|-------------|
|          |                   |   |                        | DA [mm]    | LA [mm] |                                     |             |
| A 05     | 360°              | 5.1                                       | 1.0 - 2.0              | 28         | 46.6    | 13.5                                | 253-111.78  |
| A 05-1.0 | 360°              | 2.8                                       | 0.8 - 1.5              | 28         | 46.6    | 13.5                                | 253-111.79  |
| A 1-1.0  | 360°              | 3.0                                       | 1.5 - 2.5              | 64         | 84.0    | 33.7                                | 253-111.88  |
| A 1-1.5  | 360°              | 7.0                                       | 1.8 - 3.0              | 64         | 84.0    | 33.7                                | 253-111.87  |
| LA 1-1.0 | 360°              | 5.5                                       | 1.5 - 2.5              | 64         | 84.0    | 33.7                                | 253-111.85  |
| LA 1-1.5 | 360°              | 11.0                                      | 2.5 - 3.0              | 64         | 84.0    | 33.7                                | 253-111.86  |

### Fixation par clip suivant OD et ISO

Surface: électroplie\*, Ra ext.  $\leq 0.5 \mu\text{m}$ , matériaux: 2.4605/2.4602

| Type     | Angle d'aspersion | Débit de lavage [m <sup>3</sup> /h] 1 bar | Diamètre de lavage [m] | Dimensions |         | Connexions: clip pour tube OD/ISO [mm] | Article no. |
|----------|-------------------|---|------------------------|------------|---------|--|-------------|
|          |                   |   |                        | DA [mm]    | LA [mm] |  |             |
| A 05     | 360°              | 5.1                                       | 1.0 - 2.0              | 28         | 48      | 1/2" (12.7)                            | 253-111.76  |
| A 05-1.0 | 360°              | 2.8                                       | 0.8 - 1.5              | 28         | 48      | 1/2" (12.7)                            | 253-111.77  |
| A 1-1.0  | 360°              | 3.0                                       | 1.5 - 2.5              | 64         | 85      | 33.7                                   | 253-111.68  |
| A 1-1.5  | 360°              | 7.0                                       | 1.8 - 3.0              | 64         | 85      | 33.7                                   | 253-111.69  |

### Fixation par clip suivant DIN ISO 228-1

Surface: électroplie\*, Ra ext.  $\leq 0.5 \mu\text{m}$ , matériaux: 2.4605/2.4602

| Type     | Angle d'aspersion | Débit de lavage [m <sup>3</sup> /h] 1 bar | Diamètre de lavage [m] | Dimensions |         | Connexions: Manchon G | Article no. |
|----------|-------------------|---|------------------------|------------|---------|-----------------------|-------------|
|          |                   |   |                        | DA [mm]    | LA [mm] |                       |             |
| A 05     | 360°              | 4.7                                       | 1.0 - 2.0              | 28         | 48      | G 1/4"                | 253-106.78  |
| A 05-1.0 | 360°              | 2.4                                       | 0.8 - 1.5              | 28         | 48      | G 1/4"                | 253-106.79  |

Attention: Le débit pour les boules d'aspersion électroplées en inox 316L (1.4435) et les boules d'aspersion fabriquées en alliage 59 (2.4605) (Hastelloy® C22/2.4602) peut se révéler différent de 15-20% Par rapport aux débits donnés dans le tableau.

### Connexion taraudée suivant DIN ISO

Surface: mat, matériaux: 1.4539

| Type | Angle d'aspersion | Débit de lavage [m <sup>3</sup> /h] 1 bar | Diamètre de lavage [m] | Dimensions |         | Connexions: Manchon G | Article no. |
|------|-------------------|---|------------------------|------------|---------|-----------------------|-------------|
|      |                   |   |                        | DA [mm]    | LA [mm] |                       |             |
| A 05 | 360°              | 4.7                                       | 1.0 - 2.0              | 28         | 25      | G 1/4"                | 253-106.68  |

Pression de service recommandée 1.0 à 2.5 bar g à l'entrée de la boule d'aspersion

Boules d'aspersion clipsées

Pression de service recommandée à l'entrée de la boule d'aspersion

| Type     | Angle d'aspersion | Diamètre de lavage [m] | Pression recommandée |                  |  |                  |                  |                  |
|----------|-------------------|------------------------|----------------------|------------------|--|------------------|------------------|------------------|
|          |                   |                        | Cuves sans internes  |                  | Cuves avec internes tels qu'agitateurs |                  |                  |                  |
|          |                   |                        | 1 bar g [m³/h]       | 1.5 bar g [m³/h] | 1.8 bar g [m³/h]                       | 2.0 bar g [m³/h] | 2.2 bar g [m³/h] | 2.5 bar g [m³/h] |
| A 05     | 360°              | 1.0 - 2.0              | 5.1                  | 6.2              | 6.8                                    | 7.2              | 7.6              | 8.1              |
| A 05-1.0 | 360°              | 0.8 - 1.5              | 2.8                  | 3.4              | 3.8                                    | 4.0              | 4.2              | 4.4              |
| A 1-1.0  | 360°              | 1.5 - 2.5              | 3.0                  | 3.7              | 4.0                                    | 4.2              | 4.4              | 4.7              |
| A 1-1.5  | 360°              | 1.8 - 3.0              | 7.0                  | 8.6              | 9.4                                    | 9.9              | 10.4             | 11.1             |
| A 1      | 360°              | 2.0 - 3.0              | 9.8                  | 12.0             | 13.1                                   | 13.9             | 14.5             | 15.5             |
| A 1-1    | 360°              | 2.5 - 3.5              | 12.8                 | 15.7             | 17.2                                   | 18.1             | 19.0             | 20.2             |
| A 1-2    | 360°              | 3.0 - 4.0              | 15.3                 | 18.7             | 20.5                                   | 21.6             | 22.6             | 24.1             |
| A 2      | 360°              | 3.5 - 5.0              | 21.9                 | 26.8             | 29.4                                   | 31.0             | 32.5             | 34.6             |
| A 2-1    | 360°              | 4.0 - 6.0              | 28.4                 | 34.8             | 38.2                                   | 40.2             | 42.2             | 45.0             |
| A 2-2    | 360°              | 5.0 - 7.0              | 35.6                 | 43.6             | 47.8                                   | 50.3             | 52.8             | 56.3             |
| A 2-3    | 360°              | 6.0 - 8.0              | 40.9                 | 50.1             | 54.9                                   | 57.8             | 60.7             | 64.7             |
| B 05     | 192°              | 1.0 - 2.0              | 3.0                  | 3.7              | 4.0                                    | 4.2              | 4.4              | 4.7              |
| B 1      | 192°              | 2.0 - 3.0              | 9.5                  | 11.6             | 12.7                                   | 13.4             | 14.1             | 15.0             |
| B 2      | 194°              | 3.5 - 5.0              | 22.4                 | 27.4             | 30.1                                   | 31.7             | 33.2             | 35.4             |
| B 2-3    | 194°              | 6.0 - 8.0              | 42.2                 | 51.7             | 56.6                                   | 59.7             | 62.6             | 66.7             |
| G 05     | 232°              | 1.0 - 2.0              | 4.7                  | 5.8              | 6.3                                    | 6.6              | 7.0              | 7.4              |
| G 1      | 206°              | 2.0 - 3.0              | 9.2                  | 11.3             | 12.3                                   | 13.0             | 13.6             | 14.5             |
| G 1-1    | 206°              | 2.5 - 3.5              | 11.2                 | 13.7             | 15.0                                   | 15.8             | 16.6             | 17.7             |
| G 1-2    | 206°              | 3.0 - 4.0              | 14.5                 | 17.8             | 19.5                                   | 20.5             | 21.5             | 22.9             |
| G 2      | 246°              | 3.5 - 5.0              | 20.1                 | 24.6             | 27.0                                   | 28.4             | 29.8             | 31.8             |
| G 2-1    | 246°              | 4.0 - 6.0              | 26.8                 | 32.8             | 36.0                                   | 37.9             | 39.8             | 42.4             |
| G 2-2    | 246°              | 5.0 - 7.0              | 34.7                 | 42.5             | 46.6                                   | 49.1             | 51.5             | 54.9             |
| G 2-3    | 246°              | 6.0 - 8.0              | 41.0                 | 50.2             | 55.0                                   | 58.0             | 60.8             | 64.8             |
| L 1      | 188°              | 2.5 - 3.0              | 8.6                  | 10.5             | 11.5                                   | 12.2             | 12.8             | 13.6             |
| LA 1-1.0 | 360°              | 1.5 - 2.5              | 5.5                  | 6.7              | 7.4                                    | 7.8              | 8.2              | 8.7              |
| LA 1-1.5 | 360°              | 2.5 - 3.0              | 11.0                 | 13.5             | 14.8                                   | 15.6             | 16.3             | 17.4             |

Attention: Le débit pour les boules d'aspersion électropolies en inox 316L (1.4435) et les boules d'aspersion fabriquées en alliage 59 (2.4605) (Hastelloy® C22/2.4602) peut se révéler différent de 15-20% Par rapport aux débits donnés dans le tableau.

Formule de conversion pour les autres débits pour autres volumes:  $Q_2 = Q_1 \times \text{racine}(p_2 / p_1)$  [m³/h]

Orientation générale 30-50 l/min par mètre de circonférence du réservoir



Boules d'aspersion taraudées

Pression de service recommandée à l'entrée de la boule d'aspersion

| Type     | Angle d'aspersion | Diamètre de lavage [m] | Pression recommandée |                  |  |                  |                  |                  |
|----------|-------------------|------------------------|----------------------|------------------|--|------------------|------------------|------------------|
|          |                   |                        | Cuves sans internes  |                  | Cuves avec internes tels qu'agitateurs |                  |                  |                  |
|          |                   |                        | 1 bar g [m³/h]       | 1.5 bar g [m³/h] | 1.8 bar g [m³/h]                       | 2.0 bar g [m³/h] | 2.2 bar g [m³/h] | 2.5 bar g [m³/h] |
| A 05     | 360°              | 1.0 - 2.0              | 4.7                  | 5.8              | 6.3                                    | 6.6              | 7.0              | 7.4              |
| A 05-1.0 | 360°              | 0.8 - 1.5              | 2.4                  | 2.9              | 3.2                                    | 3.4              | 3.6              | 3.8              |
| A 1-1.0  | 360°              | 1.5 - 2.5              | 2.5                  | 3.1              | 3.4                                    | 3.5              | 3.7              | 4.0              |
| A 1-1.5  | 360°              | 1.8 - 3.0              | 6.5                  | 8.0              | 8.7                                    | 9.2              | 9.6              | 10.3             |
| A 1      | 360°              | 2.0 - 3.0              | 9.4                  | 11.5             | 12.6                                   | 13.3             | 13.9             | 14.9             |
| A 1-1    | 360°              | 2.5 - 3.5              | 12.3                 | 15.1             | 16.5                                   | 17.4             | 18.2             | 19.4             |
| A 1-2    | 360°              | 3.0 - 4.0              | 14.8                 | 18.1             | 19.9                                   | 20.9             | 22.0             | 23.4             |
| A 2      | 360°              | 3.5 - 5.0              | 20.9                 | 25.6             | 28.0                                   | 29.6             | 31.0             | 33.0             |
| A 2-1    | 360°              | 4.0 - 6.0              | 27.3                 | 33.4             | 36.6                                   | 38.6             | 40.5             | 43.2             |
| A 2-2    | 360°              | 5.0 - 7.0              | 34.6                 | 42.4             | 46.4                                   | 48.9             | 51.3             | 54.7             |
| A 2-3    | 360°              | 6.0 - 8.0              | 39.9                 | 48.9             | 53.5                                   | 56.4             | 59.2             | 63.1             |
| B 05     | 192°              | 1.0 - 2.0              | 2.5                  | 3.1              | 3.4                                    | 3.5              | 3.7              | 4.0              |
| B 1      | 192°              | 2.0 - 3.0              | 9.0                  | 11.0             | 12.1                                   | 12.7             | 13.3             | 14.2             |
| B 2      | 194°              | 3.5 - 5.0              | 21.4                 | 26.2             | 28.7                                   | 30.3             | 31.7             | 33.8             |
| B 2-3    | 194°              | 6.0 - 8.0              | 41.2                 | 50.5             | 55.3                                   | 58.3             | 61.1             | 65.1             |
| G 05     | 232°              | 1.0 - 2.0              | 4.2                  | 5.1              | 5.6                                    | 5.9              | 6.2              | 6.6              |
| G 1      | 206°              | 2.0 - 3.0              | 8.7                  | 10.7             | 11.7                                   | 12.3             | 12.9             | 13.8             |
| G 1-1    | 206°              | 2.5 - 3.5              | 10.7                 | 13.1             | 14.4                                   | 15.1             | 15.9             | 16.9             |
| G 1-2    | 206°              | 3.0 - 4.0              | 14.0                 | 17.1             | 18.8                                   | 19.8             | 20.8             | 22.1             |
| G 2      | 246°              | 3.5 - 5.0              | 19.1                 | 23.4             | 25.6                                   | 27.0             | 28.3             | 30.2             |
| G 2-1    | 246°              | 4.0 - 6.0              | 25.8                 | 31.6             | 34.6                                   | 36.5             | 38.3             | 40.8             |
| G 2-2    | 246°              | 5.0 - 7.0              | 33.7                 | 41.3             | 45.2                                   | 47.7             | 50.0             | 53.3             |
| G 2-3    | 246°              | 6.0 - 8.0              | 40.0                 | 49.0             | 53.7                                   | 56.6             | 59.3             | 63.2             |
| L 1      | 188°              | 2.5 - 3.0              | 8.1                  | 9.9              | 10.9                                   | 11.5             | 12.0             | 12.8             |
| LA 1-1.5 | 360°              | 2.5 - 3.0              | 10.5                 | 12.9             | 14.1                                   | 14.8             | 15.6             | 16.6             |

Attention: Le débit pour les boules d'aspersion électropolies en inox 316L (1.4435) et les boules d'aspersion fabriquées en alliage 59 (2.4605) (Hastelloy® C22/2.4602) peut se révéler différent de 15-20% Par rapport aux débits donnés dans le tableau.

Formule de conversion pour les autres débits pour autres volumes:  $Q2 = Q1 \times \text{racine}(p2 / p1)$  [m³/h]

Orientation générale 30-50 l/min par mètre de circonférence du réservoir

