

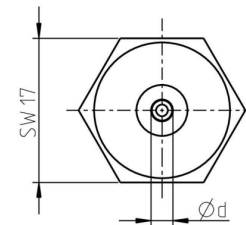
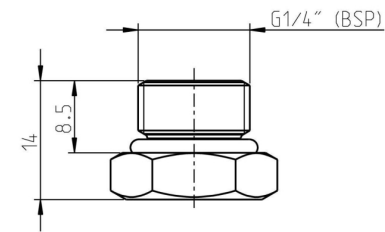
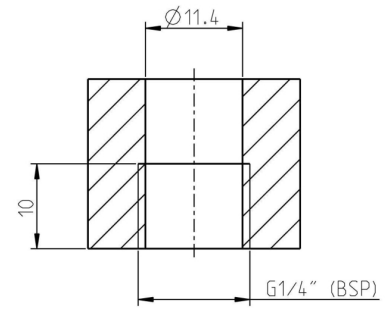
— Flat spray nozzles

## Flat jet nozzle 936

The mvt flat spray nozzles for surface treatment are characterized by their service life, efficiency and quality. Thanks to the wide variety of external shapes, the nozzles can be installed in all customer-specific systems on the market.

### Features and advantages

- Long service life
- Constant jet quality
- Easy installation and disassembly
- Swiss quality



## Applications

Nozzles combine the high power of the spot jet with the large area coverage of the flat jet.

- Automotive and aviation industry
- Construction industry
- mining
- Chemical industry
- Iron, steel and metal industry
- Energy industry
- Beverage industry
- Glass, porcelain and ceramics industry
- Wood industry
- Municipal enterprises
- Agriculture
- Machinery and apparatus engineering
- Food industry
- Offshore applications
- Shipbuilding
- Transportation companies
- Pulp and paper industry
- Cement and concrete industry

| Spray angle | ART. NR. (1) |
|-------------|--------------|
| 10°         | 31572._ _    |
| 20°         | 32157._ _    |
| 30°         | 32158._ _    |
| 40°         | 32159._ _    |
| 50°         | 32160._ _    |
| 60°         | 32161._ _    |
| 70°         | XXXX._ _     |
| 80°         | XXXX._ _     |
| 90°         | 32162._ _    |
| 100°        | XXXX._ _     |
| 110°        | 32163._ _    |

Specifications



Operating pressure (bar)  
max.

500



Operating temperature (°C)  
max.

150

| ART. NR.   | DÜSEN<br>GRÖSSE<br>in US<br>Gal/min<br>bei 40 psi | DÜSEN<br>Ød mm | Sprühwin-<br>kel | DRUCK in psi / bar       |         |         |         |         |         |
|------------|---------------------------------------------------|----------------|------------------|--------------------------|---------|---------|---------|---------|---------|
|            |                                                   |                |                  | psi725                   | psi1450 | psi2900 | psi4350 | psi5800 | psi7250 |
|            |                                                   |                |                  | bar50                    | bar100  | bar200  | bar300  | bar400  | bar500  |
|            |                                                   |                |                  | DURCHFLUSSMENGE in l/min |         |         |         |         |         |
| 31572.0180 | 0007                                              | 0.18           | 10°              | 0.120                    | 0.170   | 0.240   | 0.293   | 0.338   | 0.378   |
| 31572.0230 | 0012                                              | 0.23           | 10°              | 0.196                    | 0.278   | 0.392   | 0.479   | 0.552   | 0.616   |
| 31572.0280 | 0018                                              | 0.28           | 10°              | 0.291                    | 0.411   | 0.581   | 0.710   | 0.819   | 0.914   |
| 31572.0330 | 0025                                              | 0.33           | 10°              | 0.404                    | 0.571   | 0.807   | 0.986   | 1.137   | 1.269   |
| 31572.0380 | 0033                                              | 0.38           | 10°              | 0.536                    | 0.758   | 1.070   | 1.308   | 1.508   | 1.683   |
| 31572.0410 | 0038                                              | 0.41           | 10°              | 0.624                    | 0.882   | 1.245   | 1.523   | 1.755   | 1.959   |
| 31572.0430 | 0042                                              | 0.43           | 10°              | 0.687                    | 0.970   | 1.370   | 1.675   | 1.930   | 2.155   |
| 31572.0460 | 0048                                              | 0.46           | 10°              | 0.786                    | 1.110   | 1.568   | 1.917   | 2.209   | 2.466   |
| 31572.0480 | 0053                                              | 0.48           | 10°              | 0.856                    | 1.209   | 1.707   | 2.087   | 2.405   | 2.685   |
| 32157.0180 | 0007                                              | 0.18           | 20°              | 0.120                    | 0.170   | 0.240   | 0.293   | 0.338   | 0.378   |
| 32157.0230 | 0012                                              | 0.23           | 20°              | 0.196                    | 0.278   | 0.392   | 0.479   | 0.552   | 0.616   |
| 32157.0280 | 0018                                              | 0.28           | 20°              | 0.291                    | 0.411   | 0.581   | 0.710   | 0.819   | 0.914   |
| 32157.0330 | 0025                                              | 0.33           | 20°              | 0.404                    | 0.571   | 0.807   | 0.986   | 1.137   | 1.269   |
| 32157.0380 | 0033                                              | 0.38           | 20°              | 0.536                    | 0.758   | 1.070   | 1.308   | 1.508   | 1.683   |
| 32157.0410 | 0038                                              | 0.41           | 20°              | 0.624                    | 0.882   | 1.245   | 1.523   | 1.755   | 1.959   |
| 32157.0430 | 0042                                              | 0.43           | 20°              | 0.687                    | 0.970   | 1.370   | 1.675   | 1.930   | 2.155   |
| 32157.0460 | 0048                                              | 0.46           | 20°              | 0.786                    | 1.110   | 1.568   | 1.917   | 2.209   | 2.466   |
| 32157.0480 | 0053                                              | 0.48           | 20°              | 0.856                    | 1.209   | 1.707   | 2.087   | 2.405   | 2.685   |
| 32157.0530 | 0064                                              | 0.53           | 20°              | 1.043                    | 1.474   | 2.081   | 2.544   | 2.933   | 3.273   |
| 32157.0580 | 0077                                              | 0.58           | 20°              | 1.249                    | 1.765   | 2.492   | 3.047   | 3.512   | 3.920   |
| 32157.0630 | 0091                                              | 0.63           | 20°              | 1.474                    | 2.083   | 2.940   | 3.595   | 4.144   | 4.625   |
| 32157.0680 | 0106                                              | 0.68           | 20°              | 1.717                    | 2.427   | 3.426   | 4.188   | 4.828   | 5.388   |
| 32157.0730 | 0122                                              | 0.73           | 20°              | 1.979                    | 2.797   | 3.948   | 4.827   | 5.564   | 6.210   |
| 32157.0780 | 0139                                              | 0.78           | 20°              | 2.260                    | 3.193   | 4.507   | 5.510   | 6.352   | 7.089   |
| 32157.0840 | 0161                                              | 0.84           | 20°              | 2.621                    | 3.703   | 5.227   | 6.391   | 7.367   | 8.222   |
| 32157.0890 | 0181                                              | 0.89           | 20°              | 2.942                    | 4.157   | 5.868   | 7.174   | 8.270   | 9.230   |
| 32158.0180 | 0007                                              | 0.18           | 30°              | 0.120                    | 0.170   | 0.240   | 0.293   | 0.338   | 0.378   |
| 32158.0230 | 0012                                              | 0.23           | 30°              | 0.196                    | 0.278   | 0.392   | 0.479   | 0.552   | 0.616   |

| ART. NR.   | DÜSEN<br>GRÖSSE<br>in US<br>Gal/min<br>bei 40 psi | DÜSEN<br>Ød mm | Sprühwin-<br>kel | DRUCK in psi / bar       |         |         |         |         |         |
|------------|---------------------------------------------------|----------------|------------------|--------------------------|---------|---------|---------|---------|---------|
|            |                                                   |                |                  | psi725                   | psi1450 | psi2900 | psi4350 | psi5800 | psi7250 |
|            |                                                   |                |                  | bar50                    | bar100  | bar200  | bar300  | bar400  | bar500  |
|            |                                                   |                |                  | DURCHFLUSSMENGE in l/min |         |         |         |         |         |
| 32158.0280 | 0018                                              | 0.28           | 30°              | 0.291                    | 0.411   | 0.581   | 0.710   | 0.819   | 0.914   |
| 32158.0330 | 0025                                              | 0.33           | 30°              | 0.404                    | 0.571   | 0.807   | 0.986   | 1.137   | 1.269   |
| 32158.0380 | 0033                                              | 0.38           | 30°              | 0.536                    | 0.758   | 1.070   | 1.308   | 1.508   | 1.683   |
| 32158.0410 | 0038                                              | 0.41           | 30°              | 0.624                    | 0.882   | 1.245   | 1.523   | 1.755   | 1.959   |
| 32158.0430 | 0042                                              | 0.43           | 30°              | 0.687                    | 0.970   | 1.370   | 1.675   | 1.930   | 2.155   |
| 32158.0460 | 0048                                              | 0.46           | 30°              | 0.786                    | 1.110   | 1.568   | 1.917   | 2.209   | 2.466   |
| 32158.0480 | 0053                                              | 0.48           | 30°              | 0.856                    | 1.209   | 1.707   | 2.087   | 2.405   | 2.685   |
| 32158.0530 | 0064                                              | 0.53           | 30°              | 1.043                    | 1.474   | 2.081   | 2.544   | 2.933   | 3.273   |
| 32158.0580 | 0077                                              | 0.58           | 30°              | 1.249                    | 1.765   | 2.492   | 3.047   | 3.512   | 3.920   |
| 32158.0630 | 0091                                              | 0.63           | 30°              | 1.474                    | 2.083   | 2.940   | 3.595   | 4.144   | 4.625   |
| 32158.0680 | 0106                                              | 0.68           | 30°              | 1.717                    | 2.427   | 3.426   | 4.188   | 4.828   | 5.388   |
| 32158.0730 | 0122                                              | 0.73           | 30°              | 1.979                    | 2.797   | 3.948   | 4.827   | 5.564   | 6.210   |
| 32158.0780 | 0139                                              | 0.78           | 30°              | 2.260                    | 3.193   | 4.507   | 5.510   | 6.352   | 7.089   |
| 32158.0840 | 0161                                              | 0.84           | 30°              | 2.621                    | 3.703   | 5.227   | 6.391   | 7.367   | 8.222   |
| 32158.0890 | 0181                                              | 0.89           | 30°              | 2.942                    | 4.157   | 5.868   | 7.174   | 8.270   | 9.230   |
| 32158.0940 | 0202                                              | 0.94           | 30°              | 3.282                    | 4.637   | 6.546   | 8.003   | 9.225   | 10.296  |
| 32158.0990 | 0224                                              | 0.99           | 30°              | 3.640                    | 5.143   | 7.261   | 8.877   | 10.232  | 11.420  |
| 32158.1040 | 0247                                              | 1.04           | 30°              | 4.017                    | 5.676   | 8.013   | 9.796   | 11.292  | 12.603  |
| 32158.1090 | 0271                                              | 1.09           | 30°              | 4.413                    | 6.235   | 8.802   | 10.761  | 12.404  | 13.844  |
| 32158.1140 | 0297                                              | 1.14           | 30°              | 4.827                    | 6.820   | 9.628   | 11.771  | 13.568  | 15.143  |
| 32159.0180 | 0007                                              | 0.18           | 40°              | 0.120                    | 0.170   | 0.240   | 0.293   | 0.338   | 0.378   |
| 32159.0230 | 0012                                              | 0.23           | 40°              | 0.196                    | 0.278   | 0.392   | 0.479   | 0.552   | 0.616   |
| 32159.0280 | 0018                                              | 0.28           | 40°              | 0.291                    | 0.411   | 0.581   | 0.710   | 0.819   | 0.914   |
| 32159.0330 | 0025                                              | 0.33           | 40°              | 0.404                    | 0.571   | 0.807   | 0.986   | 1.137   | 1.269   |
| 32159.0380 | 0033                                              | 0.38           | 40°              | 0.536                    | 0.758   | 1.070   | 1.308   | 1.508   | 1.683   |
| 32159.0410 | 0038                                              | 0.41           | 40°              | 0.624                    | 0.882   | 1.245   | 1.523   | 1.755   | 1.959   |
| 32159.0430 | 0042                                              | 0.43           | 40°              | 0.687                    | 0.970   | 1.370   | 1.675   | 1.930   | 2.155   |
| 32159.0460 | 0048                                              | 0.46           | 40°              | 0.786                    | 1.110   | 1.568   | 1.917   | 2.209   | 2.466   |

| ART. NR.   | DÜSEN<br>GRÖSSE<br>in US<br>Gal/min<br>bei 40 psi | DÜSEN<br>Ød mm | Sprühwin-<br>kel | DRUCK in psi / bar       |         |         |         |         |         |
|------------|---------------------------------------------------|----------------|------------------|--------------------------|---------|---------|---------|---------|---------|
|            |                                                   |                |                  | psi725                   | psi1450 | psi2900 | psi4350 | psi5800 | psi7250 |
|            |                                                   |                |                  | bar50                    | bar100  | bar200  | bar300  | bar400  | bar500  |
|            |                                                   |                |                  | DURCHFLUSSMENGE in l/min |         |         |         |         |         |
| 32159.0480 | 0053                                              | 0.48           | 40°              | 0.856                    | 1.209   | 1.707   | 2.087   | 2.405   | 2.685   |
| 32159.0530 | 0064                                              | 0.53           | 40°              | 1.043                    | 1.474   | 2.081   | 2.544   | 2.933   | 3.273   |
| 32159.0580 | 0077                                              | 0.58           | 40°              | 1.249                    | 1.765   | 2.492   | 3.047   | 3.512   | 3.920   |
| 32159.0630 | 0091                                              | 0.63           | 40°              | 1.474                    | 2.083   | 2.940   | 3.595   | 4.144   | 4.625   |
| 32159.0680 | 0106                                              | 0.68           | 40°              | 1.717                    | 2.427   | 3.426   | 4.188   | 4.828   | 5.388   |
| 32159.0730 | 0122                                              | 0.73           | 40°              | 1.979                    | 2.797   | 3.948   | 4.827   | 5.564   | 6.210   |
| 32159.0780 | 0139                                              | 0.78           | 40°              | 2.260                    | 3.193   | 4.507   | 5.510   | 6.352   | 7.089   |
| 32159.0840 | 0161                                              | 0.84           | 40°              | 2.621                    | 3.703   | 5.227   | 6.391   | 7.367   | 8.222   |
| 32159.0890 | 0181                                              | 0.89           | 40°              | 2.942                    | 4.157   | 5.868   | 7.174   | 8.270   | 9.230   |
| 32159.0940 | 0202                                              | 0.94           | 40°              | 3.282                    | 4.637   | 6.546   | 8.003   | 9.225   | 10.296  |
| 32159.0990 | 0224                                              | 0.99           | 40°              | 3.640                    | 5.143   | 7.261   | 8.877   | 10.232  | 11.420  |
| 32159.1040 | 0247                                              | 1.04           | 40°              | 4.017                    | 5.676   | 8.013   | 9.796   | 11.292  | 12.603  |
| 32159.1090 | 0271                                              | 1.09           | 40°              | 4.413                    | 6.235   | 8.802   | 10.761  | 12.404  | 13.844  |
| 32159.1140 | 0297                                              | 1.14           | 40°              | 4.827                    | 6.820   | 9.628   | 11.771  | 13.568  | 15.143  |
| 32159.1190 | 0323                                              | 1.19           | 40°              | 5.260                    | 7.431   | 10.491  | 12.826  | 14.784  | 16.501  |
| 32159.1240 | 0351                                              | 1.24           | 40°              | 5.711                    | 8.069   | 11.391  | 13.926  | 16.053  | 17.917  |
| 32159.1290 | 0380                                              | 1.29           | 40°              | 6.181                    | 8.733   | 12.328  | 15.072  | 17.373  | 19.391  |
| 32159.1350 | 0416                                              | 1.35           | 40°              | 6.769                    | 9.564   | 13.502  | 16.507  | 19.027  | 21.236  |
| 32159.1400 | 0448                                              | 1.40           | 40°              | 7.280                    | 10.286  | 14.520  | 17.752  | 20.463  | 22.839  |
| 32159.1450 | 0480                                              | 1.45           | 40°              | 7.809                    | 11.034  | 15.576  | 19.043  | 21.950  | 24.499  |
| 32159.1500 | 0514                                              | 1.50           | 40°              | 8.357                    | 11.808  | 16.669  | 20.379  | 23.490  | 26.218  |
| 32159.1550 | 0549                                              | 1.55           | 40°              | 8.923                    | 12.608  | 17.798  | 21.760  | 25.083  | 27.995  |
| 32160.0230 | 0012                                              | 0.23           | 50°              | 0.196                    | 0.278   | 0.392   | 0.479   | 0.552   | 0.616   |
| 32160.0280 | 0018                                              | 0.28           | 50°              | 0.291                    | 0.411   | 0.581   | 0.710   | 0.819   | 0.914   |
| 32160.0330 | 0025                                              | 0.33           | 50°              | 0.404                    | 0.571   | 0.807   | 0.986   | 1.137   | 1.269   |
| 32160.0380 | 0033                                              | 0.38           | 50°              | 0.536                    | 0.758   | 1.070   | 1.308   | 1.508   | 1.683   |
| 32160.0410 | 0038                                              | 0.41           | 50°              | 0.624                    | 0.882   | 1.245   | 1.523   | 1.755   | 1.959   |
| 32160.0430 | 0042                                              | 0.43           | 50°              | 0.687                    | 0.970   | 1.370   | 1.675   | 1.930   | 2.155   |

| ART. NR.   | DÜSEN<br>GRÖSSE<br>in US<br>Gal/min<br>bei 40 psi | DÜSEN<br>Ød mm | Sprühwin-<br>kel | DRUCK in psi / bar       |         |         |         |         |         |
|------------|---------------------------------------------------|----------------|------------------|--------------------------|---------|---------|---------|---------|---------|
|            |                                                   |                |                  | psi725                   | psi1450 | psi2900 | psi4350 | psi5800 | psi7250 |
|            |                                                   |                |                  | bar50                    | bar100  | bar200  | bar300  | bar400  | bar500  |
|            |                                                   |                |                  | DURCHFLUSSMENGE in l/min |         |         |         |         |         |
| 32160.0460 | 0048                                              | 0.46           | 50°              | 0.786                    | 1.110   | 1.568   | 1.917   | 2.209   | 2.466   |
| 32160.0480 | 0053                                              | 0.48           | 50°              | 0.856                    | 1.209   | 1.707   | 2.087   | 2.405   | 2.685   |
| 32160.0530 | 0064                                              | 0.53           | 50°              | 1.043                    | 1.474   | 2.081   | 2.544   | 2.933   | 3.273   |
| 32160.0580 | 0077                                              | 0.58           | 50°              | 1.249                    | 1.765   | 2.492   | 3.047   | 3.512   | 3.920   |
| 32160.0630 | 0091                                              | 0.63           | 50°              | 1.474                    | 2.083   | 2.940   | 3.595   | 4.144   | 4.625   |
| 32160.0680 | 0106                                              | 0.68           | 50°              | 1.717                    | 2.427   | 3.426   | 4.188   | 4.828   | 5.388   |
| 32160.0730 | 0122                                              | 0.73           | 50°              | 1.979                    | 2.797   | 3.948   | 4.827   | 5.564   | 6.210   |
| 32160.0780 | 0139                                              | 0.78           | 50°              | 2.260                    | 3.193   | 4.507   | 5.510   | 6.352   | 7.089   |
| 32160.0840 | 0161                                              | 0.84           | 50°              | 2.621                    | 3.703   | 5.227   | 6.391   | 7.367   | 8.222   |
| 32160.0890 | 0181                                              | 0.89           | 50°              | 2.942                    | 4.157   | 5.868   | 7.174   | 8.270   | 9.230   |
| 32160.0940 | 0202                                              | 0.94           | 50°              | 3.282                    | 4.637   | 6.546   | 8.003   | 9.225   | 10.296  |
| 32160.0990 | 0224                                              | 0.99           | 50°              | 3.640                    | 5.143   | 7.261   | 8.877   | 10.232  | 11.420  |
| 32160.1040 | 0247                                              | 1.04           | 50°              | 4.017                    | 5.676   | 8.013   | 9.796   | 11.292  | 12.603  |
| 32160.1090 | 0271                                              | 1.09           | 50°              | 4.413                    | 6.235   | 8.802   | 10.761  | 12.404  | 13.844  |
| 32160.1140 | 0297                                              | 1.14           | 50°              | 4.827                    | 6.820   | 9.628   | 11.771  | 13.568  | 15.143  |
| 32160.1190 | 0323                                              | 1.19           | 50°              | 5.260                    | 7.431   | 10.491  | 12.826  | 14.784  | 16.501  |
| 32160.1240 | 0351                                              | 1.24           | 50°              | 5.711                    | 8.069   | 11.391  | 13.926  | 16.053  | 17.917  |
| 32160.1290 | 0380                                              | 1.29           | 50°              | 6.181                    | 8.733   | 12.328  | 15.072  | 17.373  | 19.391  |
| 32160.1350 | 0416                                              | 1.35           | 50°              | 6.769                    | 9.564   | 13.502  | 16.507  | 19.027  | 21.236  |
| 32160.1400 | 0448                                              | 1.40           | 50°              | 7.280                    | 10.286  | 14.520  | 17.752  | 20.463  | 22.839  |
| 32160.1450 | 0480                                              | 1.45           | 50°              | 7.809                    | 11.034  | 15.576  | 19.043  | 21.950  | 24.499  |
| 32160.1500 | 0514                                              | 1.50           | 50°              | 8.357                    | 11.808  | 16.669  | 20.379  | 23.490  | 26.218  |
| 32160.1550 | 0549                                              | 1.55           | 50°              | 8.923                    | 12.608  | 17.798  | 21.760  | 25.083  | 27.995  |
| 32161.0280 | 0018                                              | 0.28           | 60°              | 0.291                    | 0.411   | 0.581   | 0.710   | 0.819   | 0.914   |
| 32161.0330 | 0025                                              | 0.33           | 60°              | 0.404                    | 0.571   | 0.807   | 0.986   | 1.137   | 1.269   |
| 32161.0380 | 0033                                              | 0.38           | 60°              | 0.536                    | 0.758   | 1.070   | 1.308   | 1.508   | 1.683   |
| 32161.0410 | 0038                                              | 0.41           | 60°              | 0.624                    | 0.882   | 1.245   | 1.523   | 1.755   | 1.959   |
| 32161.0430 | 0042                                              | 0.43           | 60°              | 0.687                    | 0.970   | 1.370   | 1.675   | 1.930   | 2.155   |

| ART. NR.   | DÜSEN<br>GRÖSSE<br>in US<br>Gal/min<br>bei 40 psi | DÜSEN<br>Ød mm | Sprühwin-<br>kel | DRUCK in psi / bar       |         |         |         |         |         |
|------------|---------------------------------------------------|----------------|------------------|--------------------------|---------|---------|---------|---------|---------|
|            |                                                   |                |                  | psi725                   | psi1450 | psi2900 | psi4350 | psi5800 | psi7250 |
|            |                                                   |                |                  | bar50                    | bar100  | bar200  | bar300  | bar400  | bar500  |
|            |                                                   |                |                  | DURCHFLUSSMENGE in l/min |         |         |         |         |         |
| 32161.0460 | 0048                                              | 0.46           | 60°              | 0.786                    | 1.110   | 1.568   | 1.917   | 2.209   | 2.466   |
| 32161.0480 | 0053                                              | 0.48           | 60°              | 0.856                    | 1.209   | 1.707   | 2.087   | 2.405   | 2.685   |
| 32161.0530 | 0064                                              | 0.53           | 60°              | 1.043                    | 1.474   | 2.081   | 2.544   | 2.933   | 3.273   |
| 32161.0580 | 0077                                              | 0.58           | 60°              | 1.249                    | 1.765   | 2.492   | 3.047   | 3.512   | 3.920   |
| 32161.0630 | 0091                                              | 0.63           | 60°              | 1.474                    | 2.083   | 2.940   | 3.595   | 4.144   | 4.625   |
| 32161.0680 | 0106                                              | 0.68           | 60°              | 1.717                    | 2.427   | 3.426   | 4.188   | 4.828   | 5.388   |
| 32161.0730 | 0122                                              | 0.73           | 60°              | 1.979                    | 2.797   | 3.948   | 4.827   | 5.564   | 6.210   |
| 32161.0780 | 0139                                              | 0.78           | 60°              | 2.260                    | 3.193   | 4.507   | 5.510   | 6.352   | 7.089   |
| 32161.0840 | 0161                                              | 0.84           | 60°              | 2.621                    | 3.703   | 5.227   | 6.391   | 7.367   | 8.222   |
| 32161.0890 | 0181                                              | 0.89           | 60°              | 2.942                    | 4.157   | 5.868   | 7.174   | 8.270   | 9.230   |
| 32161.0940 | 0202                                              | 0.94           | 60°              | 3.282                    | 4.637   | 6.546   | 8.003   | 9.225   | 10.296  |
| 32161.0990 | 0224                                              | 0.99           | 60°              | 3.640                    | 5.143   | 7.261   | 8.877   | 10.232  | 11.420  |
| 32161.1040 | 0247                                              | 1.04           | 60°              | 4.017                    | 5.676   | 8.013   | 9.796   | 11.292  | 12.603  |
| 32161.1090 | 0271                                              | 1.09           | 60°              | 4.413                    | 6.235   | 8.802   | 10.761  | 12.404  | 13.844  |
| 32161.1140 | 0297                                              | 1.14           | 60°              | 4.827                    | 6.820   | 9.628   | 11.771  | 13.568  | 15.143  |
| 32161.1190 | 0323                                              | 1.19           | 60°              | 5.260                    | 7.431   | 10.491  | 12.826  | 14.784  | 16.501  |
| 32161.1240 | 0351                                              | 1.24           | 60°              | 5.711                    | 8.069   | 11.391  | 13.926  | 16.053  | 17.917  |
| 32161.1290 | 0380                                              | 1.29           | 60°              | 6.181                    | 8.733   | 12.328  | 15.072  | 17.373  | 19.391  |
| 32161.1350 | 0416                                              | 1.35           | 60°              | 6.769                    | 9.564   | 13.502  | 16.507  | 19.027  | 21.236  |
| 32161.1400 | 0448                                              | 1.40           | 60°              | 7.280                    | 10.286  | 14.520  | 17.752  | 20.463  | 22.839  |
| 32161.1450 | 0480                                              | 1.45           | 60°              | 7.809                    | 11.034  | 15.576  | 19.043  | 21.950  | 24.499  |
| 32161.1500 | 0514                                              | 1.50           | 60°              | 8.357                    | 11.808  | 16.669  | 20.379  | 23.490  | 26.218  |
| 32161.1550 | 0549                                              | 1.55           | 60°              | 8.923                    | 12.608  | 17.798  | 21.760  | 25.083  | 27.995  |
| XXXX.0280  | 0018                                              | 0.28           | 70°              | 0.291                    | 0.411   | 0.581   | 0.710   | 0.819   | 0.914   |
| XXXX.0330  | 0025                                              | 0.33           | 70°              | 0.404                    | 0.571   | 0.807   | 0.986   | 1.137   | 1.269   |
| XXXX.0380  | 0033                                              | 0.38           | 70°              | 0.536                    | 0.758   | 1.070   | 1.308   | 1.508   | 1.683   |
| XXXX.0410  | 0038                                              | 0.41           | 70°              | 0.624                    | 0.882   | 1.245   | 1.523   | 1.755   | 1.959   |
| XXXX.0430  | 0042                                              | 0.43           | 70°              | 0.687                    | 0.970   | 1.370   | 1.675   | 1.930   | 2.155   |

| ART. NR.  | DÜSEN<br>GRÖSSE<br>in US<br>Gal/min<br>bei 40 psi | DÜSEN<br>Ød mm | Sprühwin-<br>kel | DRUCK in psi / bar       |         |         |         |         |         |
|-----------|---------------------------------------------------|----------------|------------------|--------------------------|---------|---------|---------|---------|---------|
|           |                                                   |                |                  | psi725                   | psi1450 | psi2900 | psi4350 | psi5800 | psi7250 |
|           |                                                   |                |                  | bar50                    | bar100  | bar200  | bar300  | bar400  | bar500  |
|           |                                                   |                |                  | DURCHFLUSSMENGE in l/min |         |         |         |         |         |
| XXXX.0460 | 0048                                              | 0.46           | 70°              | 0.786                    | 1.110   | 1.568   | 1.917   | 2.209   | 2.466   |
| XXXX.0480 | 0053                                              | 0.48           | 70°              | 0.856                    | 1.209   | 1.707   | 2.087   | 2.405   | 2.685   |
| XXXX.0530 | 0064                                              | 0.53           | 70°              | 1.043                    | 1.474   | 2.081   | 2.544   | 2.933   | 3.273   |
| XXXX.0580 | 0077                                              | 0.58           | 70°              | 1.249                    | 1.765   | 2.492   | 3.047   | 3.512   | 3.920   |
| XXXX.0630 | 0091                                              | 0.63           | 70°              | 1.474                    | 2.083   | 2.940   | 3.595   | 4.144   | 4.625   |
| XXXX.0680 | 0106                                              | 0.68           | 70°              | 1.717                    | 2.427   | 3.426   | 4.188   | 4.828   | 5.388   |
| XXXX.0730 | 0122                                              | 0.73           | 70°              | 1.979                    | 2.797   | 3.948   | 4.827   | 5.564   | 6.210   |
| XXXX.0780 | 0139                                              | 0.78           | 70°              | 2.260                    | 3.193   | 4.507   | 5.510   | 6.352   | 7.089   |
| XXXX.0840 | 0161                                              | 0.84           | 70°              | 2.621                    | 3.703   | 5.227   | 6.391   | 7.367   | 8.222   |
| XXXX.0890 | 0181                                              | 0.89           | 70°              | 2.942                    | 4.157   | 5.868   | 7.174   | 8.270   | 9.230   |
| XXXX.0940 | 0202                                              | 0.94           | 70°              | 3.282                    | 4.637   | 6.546   | 8.003   | 9.225   | 10.296  |
| XXXX.0990 | 0224                                              | 0.99           | 70°              | 3.640                    | 5.143   | 7.261   | 8.877   | 10.232  | 11.420  |
| XXXX.1040 | 0247                                              | 1.04           | 70°              | 4.017                    | 5.676   | 8.013   | 9.796   | 11.292  | 12.603  |
| XXXX.1090 | 0271                                              | 1.09           | 70°              | 4.413                    | 6.235   | 8.802   | 10.761  | 12.404  | 13.844  |
| XXXX.1140 | 0297                                              | 1.14           | 70°              | 4.827                    | 6.820   | 9.628   | 11.771  | 13.568  | 15.143  |
| XXXX.1190 | 0323                                              | 1.19           | 70°              | 5.260                    | 7.431   | 10.491  | 12.826  | 14.784  | 16.501  |
| XXXX.1240 | 0351                                              | 1.24           | 70°              | 5.711                    | 8.069   | 11.391  | 13.926  | 16.053  | 17.917  |
| XXXX.1290 | 0380                                              | 1.29           | 70°              | 6.181                    | 8.733   | 12.328  | 15.072  | 17.373  | 19.391  |
| XXXX.1350 | 0416                                              | 1.35           | 70°              | 6.769                    | 9.564   | 13.502  | 16.507  | 19.027  | 21.236  |
| XXXX.1400 | 0448                                              | 1.40           | 70°              | 7.280                    | 10.286  | 14.520  | 17.752  | 20.463  | 22.839  |
| XXXX.1450 | 0480                                              | 1.45           | 70°              | 7.809                    | 11.034  | 15.576  | 19.043  | 21.950  | 24.499  |
| XXXX.1500 | 0514                                              | 1.50           | 70°              | 8.357                    | 11.808  | 16.669  | 20.379  | 23.490  | 26.218  |
| XXXX.1550 | 0549                                              | 1.55           | 70°              | 8.923                    | 12.608  | 17.798  | 21.760  | 25.083  | 27.995  |
| XXXX.0330 | 0025                                              | 0.33           | 80°              | 0.404                    | 0.571   | 0.807   | 0.986   | 1.137   | 1.269   |
| XXXX.0380 | 0033                                              | 0.38           | 80°              | 0.536                    | 0.758   | 1.070   | 1.308   | 1.508   | 1.683   |
| XXXX.0410 | 0038                                              | 0.41           | 80°              | 0.624                    | 0.882   | 1.245   | 1.523   | 1.755   | 1.959   |
| XXXX.0430 | 0042                                              | 0.43           | 80°              | 0.687                    | 0.970   | 1.370   | 1.675   | 1.930   | 2.155   |
| XXXX.0460 | 0048                                              | 0.46           | 80°              | 0.786                    | 1.110   | 1.568   | 1.917   | 2.209   | 2.466   |

| ART. NR.   | DÜSEN<br>GRÖSSE<br>in US<br>Gal/min<br>bei 40 psi | DÜSEN<br>Ød mm | Sprühwin-<br>kel | DRUCK in psi / bar       |         |         |         |         |         |
|------------|---------------------------------------------------|----------------|------------------|--------------------------|---------|---------|---------|---------|---------|
|            |                                                   |                |                  | psi725                   | psi1450 | psi2900 | psi4350 | psi5800 | psi7250 |
|            |                                                   |                |                  | bar50                    | bar100  | bar200  | bar300  | bar400  | bar500  |
|            |                                                   |                |                  | DURCHFLUSSMENGE in l/min |         |         |         |         |         |
| XXXX.0480  | 0053                                              | 0.48           | 80°              | 0.856                    | 1.209   | 1.707   | 2.087   | 2.405   | 2.685   |
| XXXX.0530  | 0064                                              | 0.53           | 80°              | 1.043                    | 1.474   | 2.081   | 2.544   | 2.933   | 3.273   |
| XXXX.0580  | 0077                                              | 0.58           | 80°              | 1.249                    | 1.765   | 2.492   | 3.047   | 3.512   | 3.920   |
| XXXX.0630  | 0091                                              | 0.63           | 80°              | 1.474                    | 2.083   | 2.940   | 3.595   | 4.144   | 4.625   |
| XXXX.0680  | 0106                                              | 0.68           | 80°              | 1.717                    | 2.427   | 3.426   | 4.188   | 4.828   | 5.388   |
| XXXX.0730  | 0122                                              | 0.73           | 80°              | 1.979                    | 2.797   | 3.948   | 4.827   | 5.564   | 6.210   |
| XXXX.0780  | 0139                                              | 0.78           | 80°              | 2.260                    | 3.193   | 4.507   | 5.510   | 6.352   | 7.089   |
| XXXX.0840  | 0161                                              | 0.84           | 80°              | 2.621                    | 3.703   | 5.227   | 6.391   | 7.367   | 8.222   |
| XXXX.0890  | 0181                                              | 0.89           | 80°              | 2.942                    | 4.157   | 5.868   | 7.174   | 8.270   | 9.230   |
| XXXX.0940  | 0202                                              | 0.94           | 80°              | 3.282                    | 4.637   | 6.546   | 8.003   | 9.225   | 10.296  |
| XXXX.0990  | 0224                                              | 0.99           | 80°              | 3.640                    | 5.143   | 7.261   | 8.877   | 10.232  | 11.420  |
| XXXX.1040  | 0247                                              | 1.04           | 80°              | 4.017                    | 5.676   | 8.013   | 9.796   | 11.292  | 12.603  |
| XXXX.1090  | 0271                                              | 1.09           | 80°              | 4.413                    | 6.235   | 8.802   | 10.761  | 12.404  | 13.844  |
| XXXX.1140  | 0297                                              | 1.14           | 80°              | 4.827                    | 6.820   | 9.628   | 11.771  | 13.568  | 15.143  |
| XXXX.1190  | 0323                                              | 1.19           | 80°              | 5.260                    | 7.431   | 10.491  | 12.826  | 14.784  | 16.501  |
| XXXX.1240  | 0351                                              | 1.24           | 80°              | 5.711                    | 8.069   | 11.391  | 13.926  | 16.053  | 17.917  |
| XXXX.1290  | 0380                                              | 1.29           | 80°              | 6.181                    | 8.733   | 12.328  | 15.072  | 17.373  | 19.391  |
| XXXX.1350  | 0416                                              | 1.35           | 80°              | 6.769                    | 9.564   | 13.502  | 16.507  | 19.027  | 21.236  |
| XXXX.1400  | 0448                                              | 1.40           | 80°              | 7.280                    | 10.286  | 14.520  | 17.752  | 20.463  | 22.839  |
| XXXX.1450  | 0480                                              | 1.45           | 80°              | 7.809                    | 11.034  | 15.576  | 19.043  | 21.950  | 24.499  |
| XXXX.1500  | 0514                                              | 1.50           | 80°              | 8.357                    | 11.808  | 16.669  | 20.379  | 23.490  | 26.218  |
| XXXX.1550  | 0549                                              | 1.55           | 80°              | 8.923                    | 12.608  | 17.798  | 21.760  | 25.083  | 27.995  |
| 32162.0380 | 0033                                              | 0.38           | 90°              | 0.536                    | 0.758   | 1.070   | 1.308   | 1.508   | 1.683   |
| 32162.0410 | 0038                                              | 0.41           | 90°              | 0.624                    | 0.882   | 1.245   | 1.523   | 1.755   | 1.959   |
| 32162.0430 | 0042                                              | 0.43           | 90°              | 0.687                    | 0.970   | 1.370   | 1.675   | 1.930   | 2.155   |
| 32162.0460 | 0048                                              | 0.46           | 90°              | 0.786                    | 1.110   | 1.568   | 1.917   | 2.209   | 2.466   |
| 32162.0480 | 0053                                              | 0.48           | 90°              | 0.856                    | 1.209   | 1.707   | 2.087   | 2.405   | 2.685   |
| 32162.0530 | 0064                                              | 0.53           | 90°              | 1.043                    | 1.474   | 2.081   | 2.544   | 2.933   | 3.273   |

| ART. NR.   | DÜSEN<br>GRÖSSE<br>in US<br>Gal/min<br>bei 40 psi | DÜSEN<br>Ød mm | Sprühwin-<br>kel | DRUCK in psi / bar       |         |         |         |         |         |
|------------|---------------------------------------------------|----------------|------------------|--------------------------|---------|---------|---------|---------|---------|
|            |                                                   |                |                  | psi725                   | psi1450 | psi2900 | psi4350 | psi5800 | psi7250 |
|            |                                                   |                |                  | bar50                    | bar100  | bar200  | bar300  | bar400  | bar500  |
|            |                                                   |                |                  | DURCHFLUSSMENGE in l/min |         |         |         |         |         |
| 32162.0580 | 0077                                              | 0.58           | 90°              | 1.249                    | 1.765   | 2.492   | 3.047   | 3.512   | 3.920   |
| 32162.0630 | 0091                                              | 0.63           | 90°              | 1.474                    | 2.083   | 2.940   | 3.595   | 4.144   | 4.625   |
| 32162.0680 | 0106                                              | 0.68           | 90°              | 1.717                    | 2.427   | 3.426   | 4.188   | 4.828   | 5.388   |
| 32162.0730 | 0122                                              | 0.73           | 90°              | 1.979                    | 2.797   | 3.948   | 4.827   | 5.564   | 6.210   |
| 32162.0780 | 0139                                              | 0.78           | 90°              | 2.260                    | 3.193   | 4.507   | 5.510   | 6.352   | 7.089   |
| 32162.0840 | 0161                                              | 0.84           | 90°              | 2.621                    | 3.703   | 5.227   | 6.391   | 7.367   | 8.222   |
| 32162.0890 | 0181                                              | 0.89           | 90°              | 2.942                    | 4.157   | 5.868   | 7.174   | 8.270   | 9.230   |
| 32162.0940 | 0202                                              | 0.94           | 90°              | 3.282                    | 4.637   | 6.546   | 8.003   | 9.225   | 10.296  |
| 32162.0990 | 0224                                              | 0.99           | 90°              | 3.640                    | 5.143   | 7.261   | 8.877   | 10.232  | 11.420  |
| 32162.1040 | 0247                                              | 1.04           | 90°              | 4.017                    | 5.676   | 8.013   | 9.796   | 11.292  | 12.603  |
| 32162.1090 | 0271                                              | 1.09           | 90°              | 4.413                    | 6.235   | 8.802   | 10.761  | 12.404  | 13.844  |
| 32162.1140 | 0297                                              | 1.14           | 90°              | 4.827                    | 6.820   | 9.628   | 11.771  | 13.568  | 15.143  |
| 32162.1190 | 0323                                              | 1.19           | 90°              | 5.260                    | 7.431   | 10.491  | 12.826  | 14.784  | 16.501  |
| 32162.1240 | 0351                                              | 1.24           | 90°              | 5.711                    | 8.069   | 11.391  | 13.926  | 16.053  | 17.917  |
| 32162.1290 | 0380                                              | 1.29           | 90°              | 6.181                    | 8.733   | 12.328  | 15.072  | 17.373  | 19.391  |
| 32162.1350 | 0416                                              | 1.35           | 90°              | 6.769                    | 9.564   | 13.502  | 16.507  | 19.027  | 21.236  |
| XXXX.0430  | 0042                                              | 0.43           | 100°             | 0.687                    | 0.970   | 1.370   | 1.675   | 1.930   | 2.155   |
| XXXX.0460  | 0048                                              | 0.46           | 100°             | 0.786                    | 1.110   | 1.568   | 1.917   | 2.209   | 2.466   |
| XXXX.0480  | 0053                                              | 0.48           | 100°             | 0.856                    | 1.209   | 1.707   | 2.087   | 2.405   | 2.685   |
| XXXX.0530  | 0064                                              | 0.53           | 100°             | 1.043                    | 1.474   | 2.081   | 2.544   | 2.933   | 3.273   |
| XXXX.0580  | 0077                                              | 0.58           | 100°             | 1.249                    | 1.765   | 2.492   | 3.047   | 3.512   | 3.920   |
| XXXX.0630  | 0091                                              | 0.63           | 100°             | 1.474                    | 2.083   | 2.940   | 3.595   | 4.144   | 4.625   |
| XXXX.0680  | 0106                                              | 0.68           | 100°             | 1.717                    | 2.427   | 3.426   | 4.188   | 4.828   | 5.388   |
| XXXX.0730  | 0122                                              | 0.73           | 100°             | 1.979                    | 2.797   | 3.948   | 4.827   | 5.564   | 6.210   |
| XXXX.0780  | 0139                                              | 0.78           | 100°             | 2.260                    | 3.193   | 4.507   | 5.510   | 6.352   | 7.089   |
| XXXX.0840  | 0161                                              | 0.84           | 100°             | 2.621                    | 3.703   | 5.227   | 6.391   | 7.367   | 8.222   |
| XXXX.0890  | 0181                                              | 0.89           | 100°             | 2.942                    | 4.157   | 5.868   | 7.174   | 8.270   | 9.230   |
| XXXX.0940  | 0202                                              | 0.94           | 100°             | 3.282                    | 4.637   | 6.546   | 8.003   | 9.225   | 10.296  |

| ART. NR.   | DÜSEN<br>GRÖSSE<br>in US<br>Gal/min<br>bei 40 psi | DÜSEN<br>Ød mm | Sprühwin-<br>kel | DRUCK in psi / bar       |         |         |         |         |         |
|------------|---------------------------------------------------|----------------|------------------|--------------------------|---------|---------|---------|---------|---------|
|            |                                                   |                |                  | psi725                   | psi1450 | psi2900 | psi4350 | psi5800 | psi7250 |
|            |                                                   |                |                  | bar50                    | bar100  | bar200  | bar300  | bar400  | bar500  |
|            |                                                   |                |                  | DURCHFLUSSMENGE in l/min |         |         |         |         |         |
| XXXX.0990  | 0224                                              | 0.99           | 100°             | 3.640                    | 5.143   | 7.261   | 8.877   | 10.232  | 11.420  |
| XXXX.1040  | 0247                                              | 1.04           | 100°             | 4.017                    | 5.676   | 8.013   | 9.796   | 11.292  | 12.603  |
| XXXX.1090  | 0271                                              | 1.09           | 100°             | 4.413                    | 6.235   | 8.802   | 10.761  | 12.404  | 13.844  |
| XXXX.1140  | 0297                                              | 1.14           | 100°             | 4.827                    | 6.820   | 9.628   | 11.771  | 13.568  | 15.143  |
| XXXX.1190  | 0323                                              | 1.19           | 100°             | 5.260                    | 7.431   | 10.491  | 12.826  | 14.784  | 16.501  |
| XXXX.1240  | 0351                                              | 1.24           | 100°             | 5.711                    | 8.069   | 11.391  | 13.926  | 16.053  | 17.917  |
| XXXX.1290  | 0380                                              | 1.29           | 100°             | 6.181                    | 8.733   | 12.328  | 15.072  | 17.373  | 19.391  |
| XXXX.1350  | 0416                                              | 1.35           | 100°             | 6.769                    | 9.564   | 13.502  | 16.507  | 19.027  | 21.236  |
| 32163.0530 | 0064                                              | 0.53           | 110°             | 1.043                    | 1.474   | 2.081   | 2.544   | 2.933   | 3.273   |
| 32163.0580 | 0077                                              | 0.58           | 110°             | 1.249                    | 1.765   | 2.492   | 3.047   | 3.512   | 3.920   |
| 32163.0630 | 0091                                              | 0.63           | 110°             | 1.474                    | 2.083   | 2.940   | 3.595   | 4.144   | 4.625   |
| 32163.0680 | 0106                                              | 0.68           | 110°             | 1.717                    | 2.427   | 3.426   | 4.188   | 4.828   | 5.388   |
| 32163.0730 | 0122                                              | 0.73           | 110°             | 1.979                    | 2.797   | 3.948   | 4.827   | 5.564   | 6.210   |
| 32163.0780 | 0139                                              | 0.78           | 110°             | 2.260                    | 3.193   | 4.507   | 5.510   | 6.352   | 7.089   |
| 32163.0840 | 0161                                              | 0.84           | 110°             | 2.621                    | 3.703   | 5.227   | 6.391   | 7.367   | 8.222   |
| 32163.0890 | 0181                                              | 0.89           | 110°             | 2.942                    | 4.157   | 5.868   | 7.174   | 8.270   | 9.230   |

## Instruction

|  |         |
|--|---------|
|  | < 150 N |
|  | < 250 N |
|  | > 250 N |

When using high-pressure spray guns and lances manually, the recoil force to be absorbed in the longitudinal axis of the spraying device must not exceed 250N! If the recoil force exceeds 150N, a body support must be used!

## FAQ

### 1. What makes the 936 flat spray nozzle stand out?

The 936 flat spray nozzle was specially developed for industrial surface treatment. It impresses with its long service life, high efficiency and consistent blasting quality. Thanks to its versatile external shapes, it can be easily integrated into customer-specific systems and is compatible with standard systems on the market.

## 2. What applications is the 936 flat spray nozzle suitable for?

The 936 flat spray nozzle can be used across all industries and is suitable for applications such as

- Automotive and aviation industry
- Construction, cement and concrete industry
- mining
- chemical industry
- Iron, steel and metal industry
- Energy industry
- Food and beverage industry
- Glass, porcelain and ceramics industry
- Wood industry
- Mechanical and apparatus engineering
- Offshore applications and shipbuilding
- Pulp and paper industry
- Municipal and transportation companies
- Agriculture

It is mainly used for cleaning, coating and surface treatment processes.

## 3. What spray angles are available?

The 936 flat spray nozzle is available in a wide range of spray angles:

**10°, 20°, 30°, 40°, 50°, 60°, 70°, 80°, 90°, 100° and 110°**

This allows the spray fan to be optimally adapted to the respective application - from focused, powerful cleaning (small angle) to large-area processing (large angle).

## 4. What are the technical specifications of the 936 flat spray nozzle?

The most important performance data at a glance:

- **Max. Operating pressure:** 500 bar
- **Max. Operating temperature:** 150 °C
- **Flow rate:** approx. 0.12 to 27.99 l/min (depending on nozzle size and pressure)
- **Nozzle sizes:** 0.18 mm to 1.55 mm

The precise design of the nozzle openings ensures even fluid distribution at different pressure levels from 50 to 500 bar.

## 5. What needs to be considered for manual use?

When using high-pressure spray guns and lances manually, the recoil force to be absorbed in the longitudinal axis of the spraying device must not exceed 250 N. If the recoil force exceeds 150 N, a suitable body support must be used. Compliance with these specifications ensures safe and standard-compliant operation.