



- High filling efficiency
- Sheared angle inlet
- Minimum air leakage
- Explosion proof models available up to 145 PSI
- Customized solutions
- Drilled flanges in accordance with PN10, ANSI 150lbs and JIS
- Flameproof versions available suitable for St2 products
- Versions conforming to ATEX 94/9/EC available
- Easy detachable versions available

AL-AXL rotary airlocks

The AL and AXL rotary airlocks with enlarged inlet have been designed by DMN for many applications in the metering and pneumatic conveying of products in powder and granular form. Due to the modular design of this extensive and flexible range of valves many different configurations are available, using standard components.

The AXL valves with enlarged inlet are specifically designed for applications where inlet size is more important than capacity or for handling products with poor flowability.

The AL and AXL valve range includes USDA Dairy Accepted models and versions conforming to the EC 1935/2004 directive for sanitary use in the food and pharmaceutical industry. These stainless steel valves are easy detachable in a few minutes and meet the highest hygienic standards.

The AL valves are also available with an optional body having one round and one square flange and a larger diameter inlet: the AML version. The AML valves can also be used as a transition piece from round to square or vice versa.

Both AL and AXL standard and Dairy valves are optionally available in MZC execution with supporting bars for easy removal of the end cover and rotor without damaging the housing. The MZC valves are easy detachable in a few minutes.

The AL valves are available in 10 consecutive sizes from 100-500, covering a capacity range of the rotor from 0.03-8.12 CFR at 100% filling. In the 400-500 sizes the valves can also be supplied with square in- and outlet (type OS). The AXL valves are available in 4 sizes from 200-350, capacity range of the rotor from 0.19-1.20 CFR at 100% filling. The AXL size corresponds with the dimension of the inlet flange.

| | | | | | | | | | | |
|-----------------------|------|------|------|------|------|------|------|------|------|------|
| Size Type AL | 100 | 150 | 175 | 200 | 250 | 300 | 350 | 400 | 450 | 500 |
| Size Type AXL | | | 200 | 250 | 300 | 350 | | | | |
| Ft ³ /rev* | 0.03 | 0.09 | 0.19 | 0.37 | 0.67 | 1.20 | 2.05 | 3.21 | 4.77 | 8.12 |

* at 100% filling

Product information

The AL valves are supplied in 316 stainless steel, cast iron and aluminium. The AXL valves are available in 316 stainless steel. Variations such as nickel and chrome plating and Tungsten coating are equally available on both models.

The standard rotor has 9 fixed blades. Various rotor configurations are optionally available, such as adjustable blades, reduced capacity, scalloped fixed vaned, end disc etc. Due to the state of the art manufacturing facility high accuracy and tight rotor clearances can easily be attained. The end covers have outboard bearing, lubricated and sealed for life. Eight different types of shaft sealing are available.

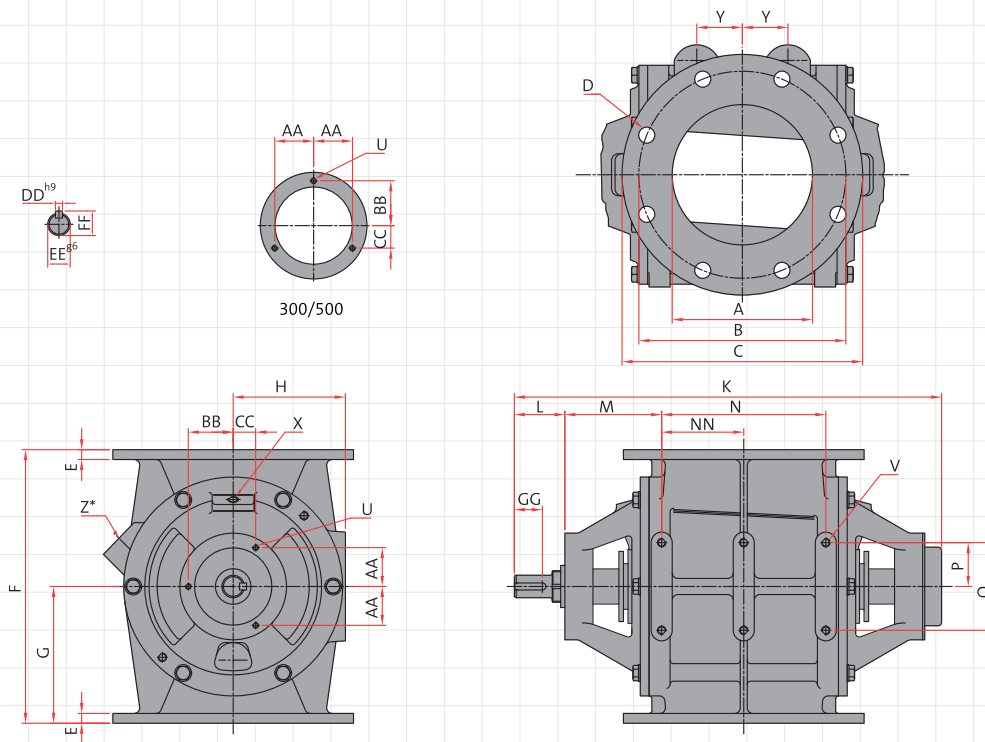
The standard models are suitable for products up to a temperature of 302 °F and a maximum pressure difference of 29 PSI. Special configurations are available to accommodate temperatures between -328 °F and 1652 °F. Certified configurations are available that are pressure shock resistant and flame proof up to 145 PSI pressure for St2 products.

All models offer optimum venting through the large vent holes, standard pre-drilled and plugged on cast iron based options, optional on stainless steel and aluminium versions.

DMN fits SEW drives as their standard, other drives can be fitted on request. Whilst having a preference for direct drives, chain, air and hydraulic drives can also be supplied.

AL-AXL

Dimensions AL



| Type | | AL | | | | | | | | | AXL | | | | | | | | | |
|------|-----|----------------------|-------|-------|----------|-------|-------|----------|------|-------|-------|-------|--------|-------|-------|----------|------|-------|-------|-------|
| AL | AXL | Ft ³ /rev | DIN | | | ANSI | | | E | H | ØA | ØB | D | ØC | ØB | D | E | H | F | G |
| 100 | | 0.03 | 3.94 | 6.69 | 4xØ0.71 | 8.27 | — | — | 0.41 | 3.54 | | | | | | | | 7.09 | 3.54 | |
| 150 | | 0.09 | 5.91 | 9.45 | 8xØ0.91 | 11.22 | 9.50 | 8xØ0.87 | 0.47 | 4.33 | | | | | | | | 11.02 | 5.51 | |
| 175 | 200 | 0.19 | 6.89 | 10.63 | 8xØ0.91 | 12.40 | — | — | 0.55 | 5.12 | 7.87 | 11.61 | 8xØ23 | 13.50 | 11.75 | 8xØ22.2 | 0.55 | 6.50 | 12.99 | 6.50 |
| 200 | 250 | 0.37 | 7.87 | 11.61 | 8xØ0.91 | 13.50 | 11.75 | 8xØ0.87 | 0.55 | 6.30 | 9.84 | 13.78 | 12xØ23 | 15.98 | 14.25 | 12xØ25.4 | 0.63 | 7.78 | 15.35 | 7.68 |
| 250 | 300 | 0.67 | 9.84 | 13.78 | 12xØ0.91 | 15.98 | 14.25 | 12xØ1.00 | 0.63 | 7.48 | 11.81 | 15.75 | 12xØ23 | 19.02 | 17.00 | 12xØ25.4 | 0.83 | 8.76 | 17.72 | 8.86 |
| 300 | 350 | 1.20 | 11.81 | 15.75 | 12xØ0.91 | 19.02 | 17.00 | 12xØ1.00 | 0.83 | 8.86 | 13.78 | 18.11 | 16xØ23 | 20.87 | 18.75 | 12xØ28.6 | 0.83 | 8.86 | 21.26 | 10.63 |
| 350 | | 2.05 | 13.78 | 18.11 | 16xØ0.91 | 20.87 | 18.75 | 12xØ1.13 | 1.02 | 10.63 | | | | | | | | 25.98 | 12.99 | |
| 400 | | 3.21 | 15.75 | 20.28 | 16xØ1.02 | 23.43 | 21.25 | 16xØ1.13 | 1.02 | 12.80 | | | | | | | | 29.53 | 14.76 | |
| 450 | | 4.77 | 17.72 | 22.24 | 20xØ1.02 | 25.00 | 22.75 | 16xØ1.25 | 1.02 | 14.96 | | | | | | | | 33.66 | 16.83 | |
| 500 | | 8.12 | 19.69 | 24.41 | 20xØ1.06 | 27.56 | 25.00 | 20xØ1.25 | 1.10 | 17.13 | | | | | | | | 37.80 | 18.90 | |

| Type | | AL | | | | | | | | | | | | | | | | | | |
|------|-----|-------|------|------|-------|-------|-------|------|-------|-------|--------------|------|---------|------|------|------|------|------|------|------|
| AL | AXL | K | L | M | N | NN | O | P | U | V | X | Y | Z* | AA | BB | CC | DD | EE | FF | GG |
| 100 | | 12.91 | 2.13 | 3.31 | 3.54 | — | 2.95 | 1.28 | 2xM6 | 4xM8 | ¼" BSP (Ø10) | — | — | 1.38 | — | — | 0.31 | 0.98 | 1.10 | 1.54 |
| 150 | | 19.06 | 2.36 | 5.00 | 5.75 | — | 3.94 | 1.97 | 3xM6 | 4xM10 | ¼" BSP (Ø10) | 1.57 | ¼" BSP | 1.46 | 2.07 | 1.46 | 0.31 | 1.18 | 1.30 | 1.42 |
| 175 | 200 | 20.63 | 2.36 | 4.92 | 7.48 | — | 3.94 | 1.97 | 3xM6 | 4xM10 | ¼" BSP (Ø10) | 2.09 | 1" BSP | 1.46 | 2.07 | 1.46 | 0.31 | 1.18 | 1.30 | 1.42 |
| 200 | 250 | 23.98 | 2.83 | 5.43 | 9.21 | — | 4.92 | 2.46 | 3xM8 | 4xM12 | ¼" BSP (Ø10) | 2.56 | 1¼" BSP | 2.18 | 2.52 | 1.26 | 0.39 | 1.26 | 1.38 | 1.73 |
| 250 | 300 | 25.94 | 2.83 | 5.43 | 11.18 | 5.59 | 4.92 | 2.46 | 3xM8 | 6xM12 | ¼" BSP (Ø10) | 2.95 | 1¼" BSP | 2.18 | 2.52 | 1.26 | 0.39 | 1.26 | 1.38 | 1.73 |
| 300 | 350 | 30.04 | 2.91 | 5.91 | 14.17 | 7.09 | 4.92 | 2.46 | 3xM10 | 6xM12 | ⅜" BSP (Ø10) | 3.74 | 1½" BSP | 2.90 | 3.35 | 1.67 | 0.39 | 1.50 | 1.61 | 1.77 |
| 350 | | 32.80 | 2.91 | 6.10 | 16.54 | 8.27 | 4.92 | 2.46 | 3xM10 | 6xM12 | ⅜" BSP (Ø10) | 4.41 | 1½" BSP | 2.90 | 3.35 | 1.67 | 0.39 | 1.50 | 1.61 | 1.77 |
| 400 | | 37.17 | 4.25 | 6.06 | 19.69 | 9.84 | 7.87 | 3.94 | 3xM10 | 6xM16 | ⅜" BSP (Ø10) | 4.92 | 2" BSP | 2.90 | 3.35 | 1.67 | 0.55 | 1.97 | 2.13 | 2.76 |
| 450 | | 41.42 | 4.37 | 6.69 | 22.52 | 11.26 | 11.81 | 5.91 | 3xM10 | 6xM16 | ⅜" BSP (Ø10) | 6.42 | 2" BSP | 2.90 | 3.35 | 1.67 | 0.71 | 2.36 | 2.52 | 2.76 |
| 500 | | 45.16 | 4.33 | 6.73 | 25.59 | 12.80 | 13.39 | 5.12 | 3xM10 | 6xM16 | ⅜" BSP (Ø10) | 7.09 | 2" BSP | 3.92 | 4.53 | 2.26 | 0.71 | 2.36 | 2.52 | 2.76 |

* Standard pre-drilled for cast iron | Standaard voorgeboord bij gietijzer | Standard geboort in Gußeisen | Standard percé pour fonte | Standard pre-taladrado para fundición de Fe | Standard preforato per ghisa | Standardowo otwory w żeliwie | Предварительно изготовленные отверстия стандартны для чугуна

Technical modifications are possible, dimensions in inches | Technische wijzigingen voorbehouden, maten in inches | Technische Änderungen vorbehalten, Maße in Inches | Changements d'exécutions techniques réservés, dimensions en pouces | Son posibles variaciones técnicas, dimensiones en pulgadas | Sono possibili variazioni tecniche, dimensioni in pollici | Możliwe są modyfikacje techniczne, wymiary w calach | Сохраняется право на внесение технических изменений, размеры в дюймах