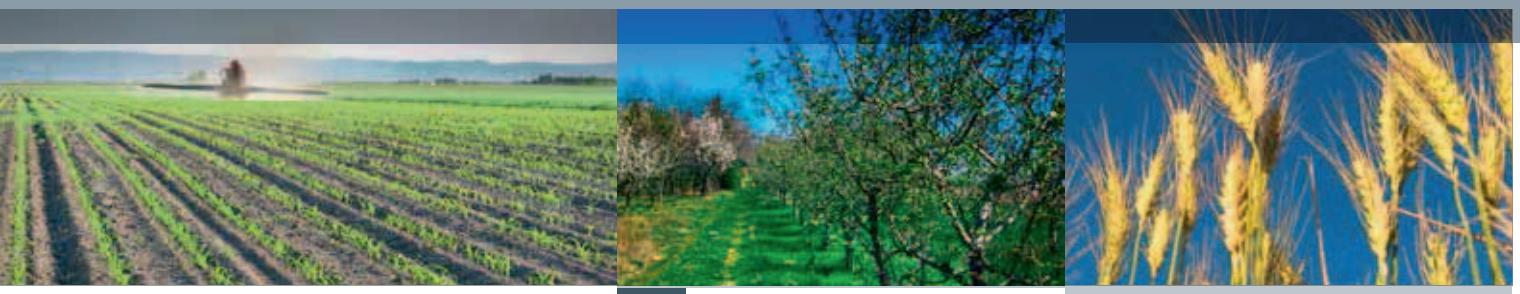
# ALBUZ®

LEADER IN CERAMIC SPRAY NOZZLES


# SPRAY NOZZLES

LOW CROPS | ORCHARD / VINEYARD | OTHER APPLICATIONS

Precision • Resistance • Efficacy • Longevity



# Precision which lasts

For more than 40 years we have been manufacturing and selling ceramic spraying nozzles for agricultural applications. Ceramic nozzles offer an excellent as well as an **exceptional resistance to wear, abrasion and chemicals**.

Manufacturing ceramic nozzles is a complex process. We have a long established expertise in that process and was awarded ISO 9001 Quality Certification.

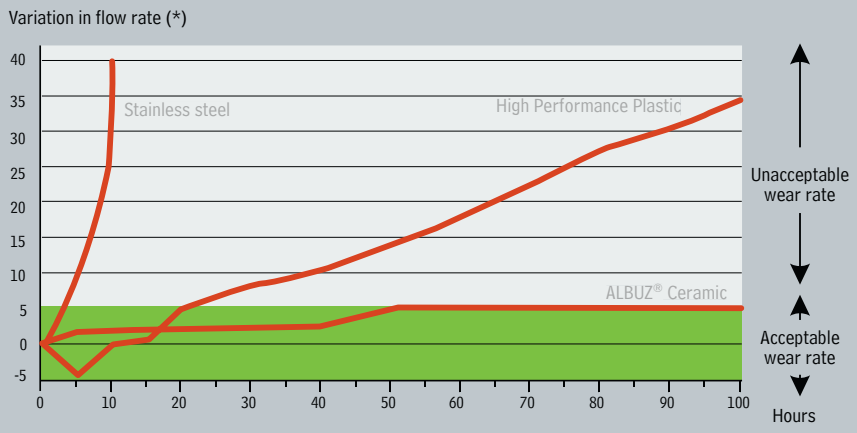
The manufacturing, from raw materials to assembly and quality control, is done in our plant in Normandy, France.

The outstanding properties of our nozzles make ALBUZ® the unrivalled leader in ceramic spraying nozzles for the agriculture industry. Millions of farmers across 45 countries trust ALBUZ®. Our nozzles are made of a specific pink ceramic grade which is **as hard as diamond**. Their wear resistance is far higher than that of materials such as stainless steel, brass, plastics.

We guarantee a high spray quality and excellent flow rate precision, which allows our nozzles to be certified in numerous countries.

The correct use of our nozzles will enable you to both optimise, and reduce the cost of your agrochemical treatments.

## Comparative wear test




(*) Flow rate variation due to wear in % - Test in accordance with NFU.26.110 equivalent to ISO 5682-1

**Ceramic Nozzle**

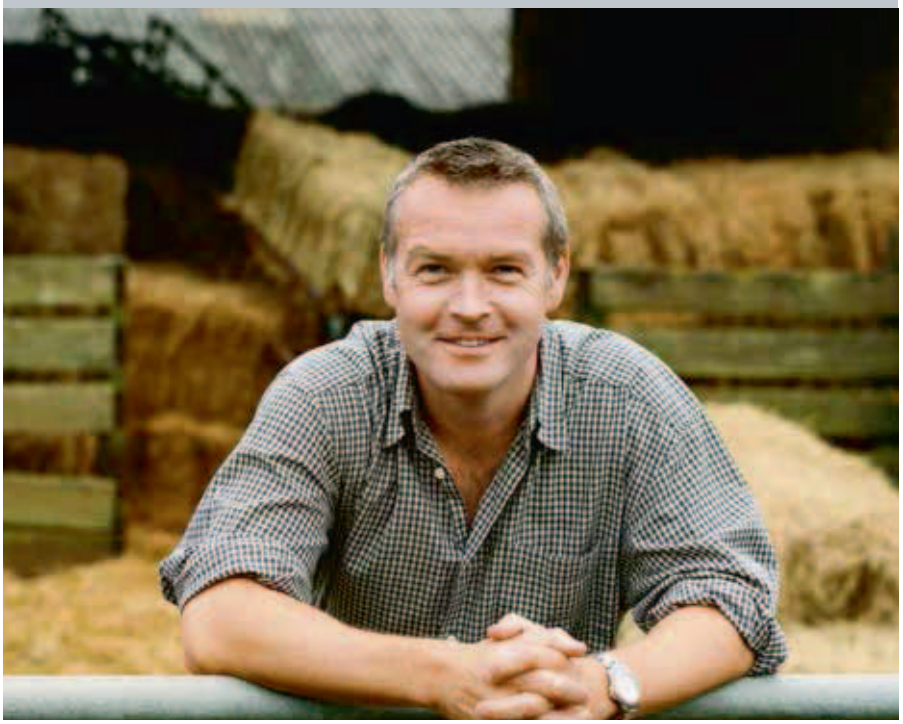
Before

After 50 h

**Stainless steel Nozzle**

Before

After 50 h



# SUMMARY

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# Spraying quality

The objective of an agrochemical treatment is to reach a biological efficiency to satisfy the needs of the farmers.
Several factors are key to the result of each application:

- **The product used, and its performance;**
- **Criteria influencing the application timing:**
  › growth stage,
  › pesticides,
  › diseases,
  › general status of pesticide, disease, and weed activity,
  › climate,
  › spray quality.

The quality of the spraying application is the top priority of the engineering know-how and expertise of ALBUZ®. The nozzle is a key to the performance of the sprayer. It also influences the biological efficiency of the sprayed product.

**Nozzles are characterized by:**
› Flow;
› Angle;
› Spray distribution quality (on the boom);
› Droplet spectrum;
› Distribution on target;
› Drift classification.

ALBUZ® takes into account all those parameters in order to offer a product range that satisfies all the needs of the farming industry. ALBUZ® complies with all environmental regulations. We also anticipate future spraying innovations, by constant investment in R&D.

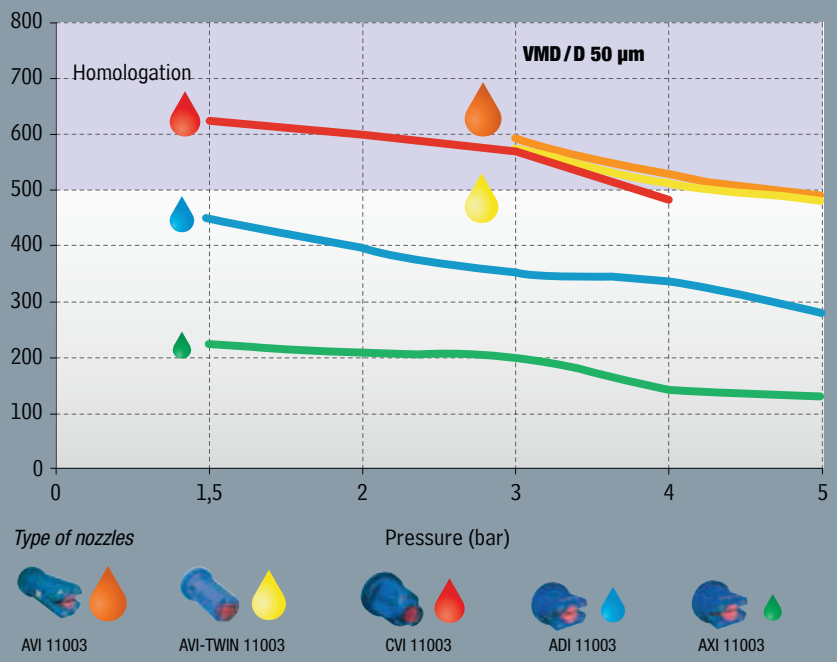
## DROPLET SIZE

The "spray quality" of a nozzle is expressed in terms of its average droplet size in relation to the volume sprayed (VMD). This gives an indication of the risk of drift and of the nozzle to select for a particular application.

Examples:

- For post emergence contact fungicides, an AXI nozzle will be selected because of its VMD of 150 µm and its large number of droplets.
- For an anti-drift nozzle, the AVI or CVI, with a VMD of 450 µm might be chosen as these large droplets reduce the risk of drift.

**Droplet Size Comparison: 03 Size Nozzle**



# Classification of droplet sizes

The nozzle "spray quality" is divided into 6 categories, of which 4 main ones :

- **Fine**: (e.g. AXI) nozzles which produce fine droplets are more often recommended for post-emergence treatments where excellent coverage is necessary.
- **Medium**: (e.g. ADI) nozzles which produce medium droplets are less prone to produce drift, depending on the pressure used.
- **Coarse**: (e.g. AVI/CVI) nozzles which produce big droplets provide a low risk of drift.
- **Very Coarse**: (e.g. AVI) specific nozzles which produce very big droplets.

## DROPLET SIZE SPRAYED BY NOZZLES
ACCORDING TO THE SPRAYING PRESSURE

| bar | ATR 80° | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | WHITE | LILAC | BROWN | YELLOW | ORANGE | RED | GREY | GREEN | BLACK | BLUE |
| 5 | VF | VF | VF | VF | VF | F | F | F | F | F |
| 7 | VF | VF | VF | VF | VF | F | F | F | F | F |
| 10 | VF | VF | VF | VF | VF | F | F | F | F | F |
| 15 | VF | VF | VF | VF | VF | VF | F | F | F | F |
| 20 | VF | VF | VF | VF | VF | VF | VF | VF | VF | VF |

| bar | ATR 60° | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | LILAC | BROWN | YELLOW | ORANGE | RED | GREY | GREEN | BLACK | BLUE |
| 5 | VF | VF | VF | F | F | F | F | F | F |
| 7 | VF | VF | VF | VF | F | F | F | F | F |
| 10 | VF | VF | VF | VF | F | F | F | F | F |
| 15 | VF | VF | VF | VF | VF | VF | VF | VF | VF |
| 20 | VF | VF | VF | VF | VF | VF | VF | VF | VF |

| bar | ATI 80° | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | PURPLE 80-0050 | PINK 80-0075 | ORANGE 80-01 | GREEN 80-015 | YELLOW 80-02 | LILAC 80-025 | BLUE 80-03 | BROWN RED 80-035 | RED 80-04 | Brown 80-05 |
| 5 | VF | VF | VF | VF | VF | F | F | F | F | F |
| 7 | VF | VF | VF | VF | VF | F | F | F | F | F |
| 10 | VF | VF | VF | VF | VF | VF | F | F | F | F |
| 15 | VF | VF | VF | VF | VF | VF | F | F | F | F |
| 20 | VF | VF | VF | VF | VF | VF | VF | VF | VF | VF |

| bar | ATI 60° | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | PINK 60-0075 | ORANGE 60-01 | GREEN 60-015 | YELLOW 60-02 | LILAC 60-025 | BLUE 60-03 | RED 60-04 | Brown 60-05 |
| 5 | VF | VF | VF | VF | F | F | F | F |
| 7 | VF | VF | VF | VF | F | F | F | F |
| 10 | VF | VF | VF | VF | VF | F | F | F |
| 15 | VF | VF | VF | VF | VF | F | F | F |
| 20 | VF | VF | VF | VF | VF | VF | VF | VF |

| bar | TVI 80° | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | PURPLE 80-0050 | PINK 80-0075 | ORANGE 80-01 | GREEN 80-015 | YELLOW 80-02 | LILAC 80-025 | BLUE 80-03 | RED 80-04 |
| 5 | | | UC | UC | UC | UC | UC | UC |
| 7 | UC | VC | UC | UC | UC | UC | UC | UC |
| 10 | XC | VC | XC | XC | XC | XC | UC | UC |
| 15 | VC | C | VC | VC | VC | XC | UC | UC |

| bar | ATF 80° | | | | |
|---|---|---|---|---|---|
| | GREEN 80-015 | YELLOW 80-02 | LILAC 80-025 | BLUE 80-03 | RED 80-04 |
| 3 | F | F | M | M | M |
| 5 | F | F | F | F | F |
| 10 | VF | VF | F | F | F |
| 15 | VF | VF | VF | VF | VF |

| bar | MVI | | | |
|---|---|---|---|---|
| | RED 04 | GREY 06 | WHITE 08 | CLEAR BLUE 10 |
| 1,5 | UC | UC | UC | UC |
| 2 | UC | UC | UC | UC |

| bar | DISC & CORE | | | | | | |
|---|---|---|---|---|---|---|---|
| | AD1/AC13 | AD2/AC25 | AD2/AC46 | AD3/AC13 | AD3/AC25 | AD4/AC45 | AD5/AC45 |
| 1,5 | VF | VF | VF | VF | VF | F | F |
| 2 | VF | VF | VF | VF | VF | VF | VF |
| 3 | VF | VF | VF | VF | VF | VF | VF |

VF **Very fine (< 159 µm)** - F **Fine ( > 159 / < 231 µm )** - M **Médium ( > 231 / < 326 µm )** - C **Coarse ( > 326 /< 386 µm )**
VC **Very coarse ( > 386 µm / < 484 µm)** - XC **Extremely coarse ( > 484 /< 553 µm)** - UC **Ultra coarse (> 553 µm)**

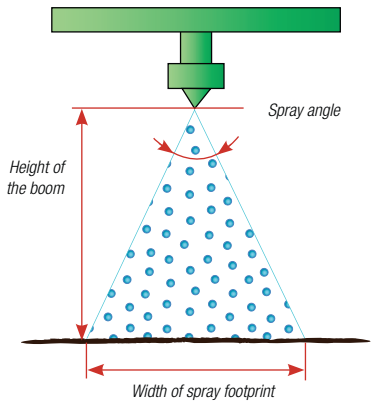
Values measured on the VMD or D50 on IRSTEA Dantec pda.

# Nozzle choice : speed of wind

| Anti drift with air injection e.g. : AVI | With Compression chamber e.g. : ADI | Wide range of pressures e.g. : AXI | Normals e.g. : APE | **Wind speed in mph** (Takes into account the speed of the tractor in function of the direction of the wind ) | **Looking around us, one observes** (Beaufort scale) |
|---|---|---|---|---|---|
| | | | | 0 | Nothing moves |
| | | | | 0 - 1 | Smoke rises straight up |
| | | | | 1 - 5 | Smoke shows the direction of wind |
| | | | | 6 - 11 | We feel the wind on our face and hear the rustle of leaves |
| | | | | 12 - 15 | Leaves and twigs constantly in movement, flags flutter |
| | | | | 16 - 19 | |
| | | | | 20 - 28 | Papers, dust and sand blow about |
| | | | | 29 - 38 | Pine branches sway |
| | | | | 39 - 49 | Electric wires whistle |
| | | | | 50 - 61 | It is difficult to walk against the wind |

# Spray coverage

The chart below indicates the theoretical overlap of spray patterns. The theoretical width of nozzle spray is determined by the spray angle and by the nozzle height above the target. Considering the effect of earth gravity, the higher the nozzle above the target, the narrower the spray footprint of each nozzle, in relation to the theoretical footprint on the table below.




| Spray angle (°) | Height of spraying in relation to the plant or to the seedbed | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 70 | 80 | 90 |
| 15 | 5 | 7 | 8 | 9 | 11 | 12 | 13 | 14 | 16 | 18 | 21 | 24 |
| 20 | 7 | 9 | 11 | 12 | 14 | 16 | 18 | 19 | 21 | 25 | 28 | 32 |
| 25 | 9 | 11 | 13 | 16 | 18 | 20 | 22 | 24 | 27 | 31 | 35 | 40 |
| 30 | 11 | 13 | 16 | 19 | 21 | 24 | 27 | 29 | 32 | 38 | 43 | 48 |
| 35 | 13 | 16 | 19 | 22 | 25 | 28 | 32 | 35 | 38 | 44 | 50 | 57 |
| 40 | 15 | 18 | 22 | 25 | 29 | 33 | 36 | 40 | 44 | 51 | 58 | 66 |
| 45 | 17 | 21 | 25 | 29 | 33 | 37 | 41 | 46 | 50 | 58 | 66 | 75 |
| 50 | 19 | 23 | 28 | 33 | 37 | 42 | 47 | 51 | 56 | 65 | 75 | 84 |
| 55 | 21 | 26 | 31 | 36 | 42 | 47 | 52 | 57 | 62 | 73 | 83 | 94 |
| 60 | 23 | 29 | 35 | 40 | 46 | 52 | 58 | 64 | 69 | 81 | 92 | 104 |
| 65 | 25 | 32 | 38 | 45 | 51 | 57 | 64 | 70 | 76 | 89 | 102 | 115 |
| 70 | 28 | 35 | 42 | 49 | 56 | 63 | 70 | 77 | 84 | 98 | 112 | 126 |
| 75 | 31 | 38 | 46 | 54 | 61 | 69 | 77 | 84 | 92 | 107 | 123 | 138 |
| 80 | 34 | 42 | 50 | 59 | 67 | 76 | 84 | 92 | 101 | 117 | 134 | 151 |
| 85 | 37 | 46 | 55 | 64 | 73 | 82 | 92 | 101 | 110 | 128 | 147 | 165 |
| 90 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 | 140 | 160 | 180 |
| 95 | 44 | 55 | 65 | 76 | 87 | 98 | 109 | 120 | 131 | 153 | 175 | 196 |
| 100 | 48 | 60 | 72 | 83 | 95 | 107 | 119 | 131 | 143 | 167 | 191 | 215 |
| 110 | 57 | 71 | 86 | 100 | 114 | 129 | 143 | 157 | 171 | 200 | 229 | |
| 120 | 69 | 87 | 104 | 121 | 139 | 156 | 173 | 191 | 208 | 242 | | |
| 130 | 86 | 107 | 129 | 150 | 172 | 193 | 214 | 236 | | | | |
| 140 | 110 | 137 | 165 | 192 | 220 | 247 | | | | | | |
| 150 | 149 | 187 | 224 | | | | | | | | | |
| 160 | 227 | | | | | | | | | | | |

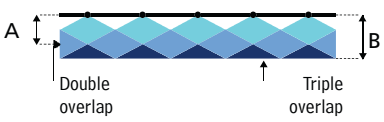
10 No overlap - 10 double overlap

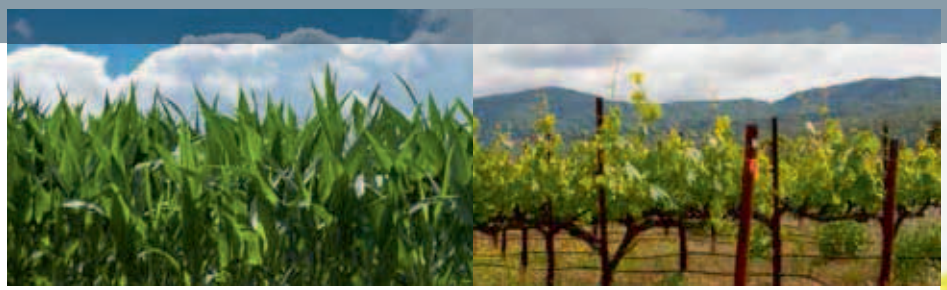
10 triple overlap - 10 quadruple overlap

10 quintuple overlap

## HEIGHT OF BOOMS

| | Nozzle spacing 0,50 m | |
|---|---|---|
| | 80° | 110° |
| Minimum height | 0,80 m | 0,40 m |
| Double overlap A | 0,60 m | 0,35 m |
| Triple overlap B | 0,90 m | 0,70 m |
| Maximum height | 1,20 m | 0,80 m |





# Certification

Some European countries have spraying regulations which require sensitive areas to be protected by untreated "buffer zones", in order to reduce the risks from spray drift.

The drift refers to fine droplets which do not reach the target.
The finest droplets (smaller than 100 µm) are the most susceptible to drift from the effect of the wind or other influences.

**Drift can have hazardous consequences on:**

- Water contamination;
- Human and animal health;
- Nearby vegetation.

**ALBUZ® nozzles are certified** in France, the United Kingdom, Germany, Belgium and the Netherlands. Please visit our web site to find out the list of our nozzles per country.

**ISO and CEN standards specify tolerances on nozzle flow and on spray patternation, to help achieve a precise agrochemical application.**

The flow of nozzles (low crops) may vary by +/- 10% maximum of the flow values indicated in the table, but they should vary by only +/-5% of the average value.

In relation to the patternation, this must give a coefficient of variation of less than 7% at a nozzle height specified by the manufacturer, and less than 9% for nozzle above and below that height.

# How to read flow rate charts

*Sprayer speed*

| Colour | ISO code | # | (bar) | l/mn | Liters / hectare - Nozzle spacing: 50 cm | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 6 km/h | 7 km/h | 8 km/h | 9 km/h | 10 km/h | 12 km/h | 14 km/h | 16 km/h | 18km/h |
| GREEN | CVI 110015 | 80 Mesh | 1,5 | 0,42 | 84 | 72 | 63 | 56 | 50 | 42 | 36 | 32 | 28 |
| | | | 2 | 0,49 | 98 | 84 | 74 | 65 | 59 | 49 | 42 | 37 | 33 |
| | | | 2,5 | 0,54 | 108 | 93 | 81 | 72 | 65 | 54 | 46 | 41 | 36 |
| | | | 3 | 0,60 | 120 | 103 | 90 | 80 | 72 | 60 | 51 | 45 | 40 |
| YELLOW | CVI 11002 | 80 Mesh | 1,5 | 0,57 | 114 | 98 | 86 | 76 | 68 | 57 | 49 | 43 | 38 |
| | | | 2 | 0,66 | 132 | 113 | 99 | 88 | 79 | 66 | 57 | 50 | 44 |
| | | | 2,5 | 0,73 | 146 | 125 | 110 | 97 | 88 | 73 | 63 | 55 | 49 |
| | | | 3 | 0,80 | 160 | 137 | 120 | 107 | 96 | 80 | 69 | 60 | 53 |
| LILAC | CVI 110025 | 50 Mesh | 1,5 | 0,71 | 142 | 122 | 107 | 95 | 85 | 71 | 61 | 53 | 47 |
| | | | 2 | 0,82 | 164 | 141 | 123 | 109 | 98 | 82 | 70 | 62 | 55 |
| | | | 2,5 | 0,91 | 182 | 156 | 137 | 121 | 109 | 91 | 78 | 68 | 61 |
| | | | 3 | 1,00 | 200 | 171 | 150 | 133 | 120 | 100 | 86 | 75 | 67 |

*Nozzle to be selected*

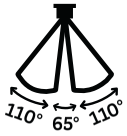
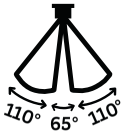
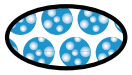
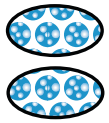
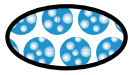
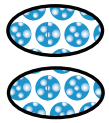
The flow tables are set out as follows: read the sprayer speed to be used, and follow the column down to the desired application rate in liters per hectare. Then follow this row to the left, and you will find the required spraying pressure and the nozzle to be used.

***EXAMPLE***

***If you want a volume of 100 l/ha, at a working speed of 10 km/h, the nozzle to be used will be a lilac 110025 nozzle at 2 bars.***

The Albuz application (see last page) also helps you selecting your nozzle.

# LOW CROPS | FLAT FAN NOZZLE

| TYPE OF NOZZLES | APE<br>Standard flat spray nozzle | ADE<br>Drift reduction flat spray nozzle | AXI 80°/110°<br>Extended range flat spray nozzle | FAST-CAP AXI<br>Buse à fente avec écrou | ADI 110°<br>Drift reduction flat spray nozzle | CVI 110°<br>Low pressure Air induction flat spray nozzle | CVI-TWIN 110°<br>Low pressure Air induction Twin flat spray nozzle | AVI 110°<br>Air induction flat spray nozzle | AVI-TWIN 110°<br>Air induction Twin flat spray nozzle |
|---|---|---|---|---|---|---|---|---|---|
| |  |  |  |  |  |  |  |  |  |
| SPRAY PATTERNATION |  <br>80° - 110° |  <br>110° |  <br>80° - 110° |  <br>80° - 110° |  <br>110° |  <br>110° |  <br>110° 65° 110° |  <br>110° |  <br>110° 65° 110° |
| DROPLETS SIZE CHARACTERISTICS |  |  |  |  |  |  |  |  |  |
| DRIFT HAZARDS | Medium | Low | Medium | Medium | Low | Very Low | Very Low | Very Low | Very Low |
| PRESSURE RANGE | 2 - 3 bar | 2 - 3 bar | 1,5 - 2 bar | 1,5 - 2 bar | 2 - 3 bar | 1,5 - 3 bar | 1,5 - 3 bar | 3 - 5 bar | 3 - 5 bar |
| HERBICIDES – Incorporated treatement | Good | Very Good | Good | Good | Very Good | Very Good | Very Good | Very Good | Very Good |
| HERBICIDES – Taken | Very Good* | Very Good | Very Good* | Very Good* | Very Good | Good | Good | Good | Good |
| HERBICIDES – Contact | Good | Very Good | Good | Good | Very Good | Good | Very Good | Good | Very Good |
| HERBICIDES – Systemic | Very Good* | Very Good | Very Good* | Very Good* | Very Good | Very Good | Very Good | Very Good | Very Good |
| FUNGICIDES – Contact | Very Good* | Very Good | Very Good* | Very Good* | Very Good | Good | Very Good | Good | Very Good |
| FUNGICIDES – Systemic | Very Good* | Very Good | Very Good* | Very Good* | Very Good | Very Good | Very Good | Very Good | Very Good |
| INSECTICIDES – Contact | Very Good* | Very Good | Very Good* | Very Good* | Very Good | Good | Very Good | Good | Very Good |
| INSECTICIDES – Systemic | Very Good* | Very Good | Very Good* | Very Good* | Very Good | Very Good | Very Good | Very Good | Very Good |
| LIQUID FERTILIZER | Good | Good | Good | Good | Good | Very Good | Good | Very Good | Good |

* for a low pressure

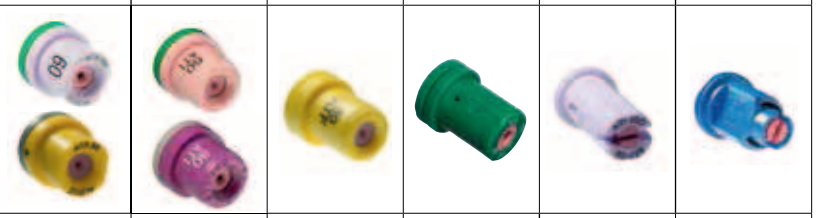
THE NOZZLE RANGE

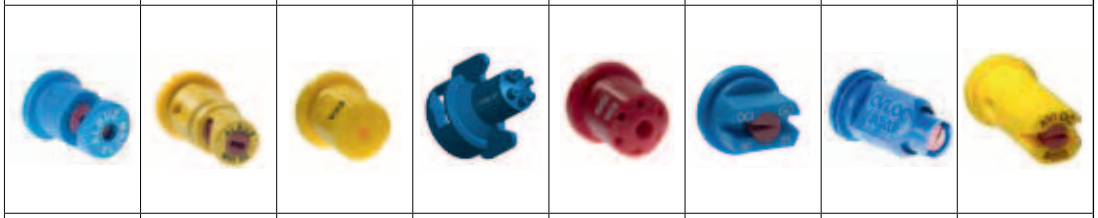
# SELECTING YOUR NOZZLES

ALBUZ®

# ORCHARD, VINEYARD | HOLOW CONE NOZZLE

# OTHER SPRAYINGS

| TYPE OF NOZZLES | ATR 60° ATR 80° Hollow cone nozzle | ATI 60° ATI 80° Hollow cone nozzle | ATF 80° Full cone nozzle | TVI 80° Air Induction Hollow Cone spray nozzle | AVI 80° Air induction flat spray nozzle | CVI 80° Compact Air induction flat spray nozzle |
|---|---|---|---|---|---|---|
| |  | | | | | |
| SPRAY PATTERNATION | 60° - 80° | 60° - 80° | 60° | 80° | 80° | 80° |
| DROPLETS SIZE CHARACTERIS-TICS | | | | | | |
| DRIFT HAZARDS | High | High | High | Very Low | Very Low | Very Low |
| PRESSURE RANGE | 5 - 20 bar | 5 - 20 bar | 3 - 15 bar | 10 - 16 bar | 10 - 20 bar | 10 - 20 bar |
| HERBICIDES – Incorporated treatement | | | | | | |
| HERBICIDES – Taken | | | Good | | | |
| HERBICIDES – Contact | Very Good | Very Good | Very Good | Very Good | Very Good | Very Good |
| HERBICIDES – Systemic | Good | Good | Very Good | Good | Good | Good |
| FUNGICIDES – Contact | Very Good | Very Good | Very Good | Very Good | Very Good | Very Good |
| FUNGICIDES – Systemic | | | Very Good | | | |
| INSECTICIDES – Contact | Very Good | Very Good | Very Good | Very Good | Very Good | Very Good |
| INSECTICIDES – Systemic | | | Very Good | | | |
| LIQUID FERTILIZER | | | | | | |

| MSI Wide Angle Flat spray nozzle | MVI Air induction Wide Angle Flat spray nozzle | EXA 3 jets Fertilizer nozzle | FESI 6 Jets Cap Fertilizer nozzle | ESI 6 jets Fertilizer nozzle | OCI Off center nozzle | CVI-OC Compact Air induction off center spray nozzle | AVI-OC Air injected off center nozzle |
|---|---|---|---|---|---|---|---|
|  | | | | | | | |
| 130°- 160° | 130°- 160° | | | | 15° 65° | 15° 65° | 15° 65° |
| | | | | | | | |
| Medium | Very Low | Very Low | Very Low | Very Low | Medium | Very Low | Very Low |
| 0,5 - 4 bar | 1,5 - 4 bar | 1 - 3 bar | 1,2 - 4 bar | 1,2 - 4 bar | 2 - 4 bar | 2 - 4 bar | 3 - 5 bar |
| Very Good | Very Good | | | | Good | Very Good | Very Good |
| Very Good | Very Good | | | | Good | Very Good | Very Good |
| Good | Good | | | | Good | Good | Good |
| | | | | | Good | Very Good | Very Good |
| | | | | | Very Good* | Good | Good |
| Good | Good | | | | Good | Very Good | Very Good |
| | | | | | Very Good* | Good | Good |
| Good | Good | | | | Good | Very Good | Very Good |
| | | Very Good | Very Good | Very Good | | | |

ALBUZ

EUROPE

## Applications

*All types of treatments (herbicides, fungicides, insecticides...).*


# APE

*Standard flat spray nozzle*

## Main characteristics

› Pink ALBUZ® ceramic orifice (excellent precision and high wear resistance).

› Flat fan pattern angle 80° or 110°: spray overlap required to ensure uniform distribution on the ground.

› Designed for all types of nozzle holders using caps which accept nozzles measuring 11 mm across flats.

## Specific characteristics

› Operates from 2 bar.

› Flow rate characteristics, body size and color code meet ALBUZ® standards.

› Produces medium-sized droplets.

**› Minimum height boom recommended: 50/60 cm (110°) and 80/90 cm (80°).**

**› Recommended pressure: 2 bar.**


**2-4 bar** **80°-110°**

## Flow rate chart

| Colour | (bar) | | l/mn | Liters / hectare - Nozzle spacing: 50 cm | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 8 km/h | 10 km/h | 12 km/h | 14 km/h | 16 km/h | 18km/h | 20km/h | 22km/h |
| YELLOW | 2 | F | 0,49 | 74 | 59 | 49 | 42 | 37 | 33 | 30 | 27 |
| | 2,5 | F | 0,55 | 83 | 66 | 55 | 47 | 42 | 37 | 33 | 31 |
| | 3 | F | 0,61 | 91 | 73 | 61 | 52 | 45 | 40 | 36 | 33 |
| | 3,5 | F | 0,65 | 98 | 79 | 65 | 56 | 49 | 44 | 39 | 36 |
| | 4 | VF | 0,70 | 105 | 84 | 70 | 60 | 53 | 47 | 42 | 38 |
| ORANGE | 2 | F | 0,69 | 104 | 83 | 69 | 59 | 52 | 46 | 42 | 38 |
| | 2,5 | F | 0,77 | 116 | 93 | 77 | 66 | 58 | 52 | 46 | 43 |
| | 3 | F | 0,85 | 127 | 102 | 85 | 73 | 64 | 57 | 51 | 46 |
| | 3,5 | F | 0,92 | 138 | 110 | 92 | 79 | 69 | 61 | 55 | 50 |
| | 4 | F | 0,98 | 147 | 118 | 98 | 84 | 74 | 65 | 59 | 53 |
| RED | 2 | F | 0,99 | 148 | 119 | 99 | 85 | 74 | 66 | 59 | 54 |
| | 2,5 | F | 1,11 | 166 | 133 | 111 | 95 | 83 | 74 | 66 | 60 |
| | 3 | F | 1,21 | 182 | 145 | 121 | 104 | 91 | 81 | 73 | 66 |
| | 3,5 | F | 1,31 | 196 | 157 | 131 | 112 | 98 | 87 | 79 | 71 |
| | 4 | F | 1,40 | 210 | 168 | 140 | 120 | 105 | 93 | 84 | 76 |
| GREEN | 2 | F | 1,40 | 210 | 168 | 140 | 120 | 105 | 93 | 84 | 76 |
| | 2,5 | F | 1,57 | 235 | 188 | 157 | 134 | 117 | 104 | 94 | 85 |
| | 3 | F | 1,71 | 257 | 206 | 171 | 147 | 129 | 114 | 103 | 93 |
| | 3,5 | F | 1,85 | 278 | 222 | 185 | 159 | 139 | 123 | 111 | 101 |
| | 4 | F | 1,98 | 297 | 238 | 198 | 170 | 149 | 132 | 119 | 107 |
| TURQUOISE | 2 | M | 1,69 | 253 | 203 | 169 | 145 | 127 | 113 | 101 | 92 |
| | 2,5 | F | 1,89 | 283 | 227 | 189 | 162 | 142 | 126 | 113 | 103 |
| | 3 | F | 2,07 | 310 | 248 | 207 | 177 | 155 | 138 | 124 | 113 |
| | 3,5 | F | 2,24 | 335 | 268 | 224 | 192 | 168 | 149 | 134 | 122 |
| | 4 | F | 2,39 | 359 | 287 | 239 | 205 | 179 | 159 | 143 | 130 |
| BLUE | 2 | M | 1,98 | 297 | 238 | 198 | 170 | 148 | 132 | 119 | 108 |
| | 2,5 | M | 2,21 | 332 | 266 | 221 | 190 | 166 | 148 | 133 | 121 |
| | 3 | F | 2,42 | 364 | 291 | 242 | 208 | 182 | 162 | 145 | 132 |
| | 3,5 | F | 2,62 | 394 | 314 | 262 | 224 | 196 | 175 | 157 | 142 |
| | 4 | F | 2,80 | 420 | 336 | 280 | 240 | 210 | 187 | 168 | 152 |
| GREY | 2 | C | 2,79 | 418 | 334 | 279 | 239 | 209 | 186 | 167 | 152 |
| | 2,5 | M | 3,11 | 467 | 374 | 311 | 267 | 234 | 208 | 187 | 170 |
| | 3 | M | 3,41 | 512 | 409 | 341 | 292 | 256 | 227 | 205 | 186 |
| | 3,5 | M | 3,69 | 553 | 442 | 369 | 316 | 276 | 246 | 221 | 201 |
| | 4 | F | 3,94 | 591 | 473 | 394 | 338 | 296 | 263 | 236 | 215 |
| BLACK | 2 | C | 3,95 | 592 | 473 | 395 | 338 | 296 | 263 | 237 | 215 |
| | 2,5 | C | 4,41 | 662 | 529 | 441 | 378 | 331 | 294 | 265 | 241 |
| | 3 | C | 4,83 | 725 | 580 | 483 | 414 | 362 | 322 | 290 | 263 |
| | 3,5 | M | 5,22 | 783 | 626 | 522 | 447 | 391 | 348 | 313 | 285 |
| | 4 | M | 5,58 | 837 | 670 | 558 | 478 | 419 | 372 | 335 | 304 |
| IVORY | 2 | VC | 5,61 | 842 | 674 | 561 | 481 | 421 | 374 | 337 | 307 |
| | 2,5 | C | 6,28 | 942 | 753 | 628 | 538 | 471 | 418 | 377 | 343 |
| | 3 | C | 6,88 | 1031 | 825 | 688 | 589 | 516 | 458 | 413 | 375 |
| | 3,5 | C | 7,43 | 1114 | 891 | 743 | 637 | 557 | 495 | 446 | 405 |
| | 4 | C | 7,94 | 1191 | 953 | 794 | 681 | 596 | 529 | 476 | 433 |
| WHITE | 2 | VC | 7,82 | 1188 | 950 | 792 | 679 | 594 | 528 | 475 | 432 |
| | 2,5 | VC | 8,85 | 1328 | 1063 | 885 | 759 | 664 | 590 | 531 | 483 |
| | 3 | C | 9,70 | 1455 | 1164 | 970 | 831 | 727 | 647 | 582 | 529 |
| | 3,5 | C | 10,48 | 1571 | 1257 | 1048 | 898 | 786 | 698 | 629 | 572 |
| | 4 | C | 11,20 | 1680 | 1344 | 1120 | 960 | 840 | 747 | 672 | 611 |

LOW CROPS

## *Applications*

***All types of treatments (herbicides, fungicides, insecticides...).***

ALBUZ

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# ADE

*Drift reduction flat spray nozzle*

## Main characteristics

- Pink ALBUZ® ceramic orifice (excellent precision and high wear resistance).
- Flat fan pattern angle 110°: spray overlap required to ensure uniform distribution on the ground.
- Designed for all types of nozzle holders using caps which accept nozzles measuring 11 mm across flats.
- Drift reduction.

## Specific characteristics

- Operates from 2 bar.
- Flow rate characteristics, body size and color code meet ALBUZ® standards.
- Drift reduction nozzle reduces by 50% the number of small droplets (<100µm).
- Easy to dismantle and clean.
- **Minimum height boom recommended: 50/60 cm.**
- **Recommended pressure: 2 bar.**


**2-4 bar**

**110°**

## Flow rate chart

| Colour | # | (bar) | | l/mn | Liters / hectare - Nozzle spacing: 50 cm | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 8 km/h | 10 km/h | 12 km/h | 14 km/h | 16 km/h | 18 km/h | 20 km/h | 22 km/h | 24 km/h |
| BROWN | 100 Mesh | 2 | M | 0,35 | 53 | 42 | 35 | 30 | 26 | 23 | 21 | 19 | 18 |
| | | 2,5 | M | 0,39 | 59 | 47 | 39 | 33 | 29 | 26 | 23 | 21 | 20 |
| | | 3 | M | 0,43 | 65 | 52 | 43 | 37 | 32 | 29 | 26 | 23 | 22 |
| | | 3,5 | F | 0,47 | 71 | 56 | 47 | 40 | 35 | 31 | 28 | 25 | 23 |
| | | 4 | F | 0,50 | 75 | 60 | 50 | 43 | 38 | 33 | 30 | 27 | 25 |
| YELLOW | 100 Mesh | 2 | M | 0,49 | 74 | 59 | 49 | 42 | 37 | 33 | 30 | 27 | 25 |
| | | 2,5 | M | 0,55 | 83 | 66 | 55 | 47 | 42 | 37 | 34 | 31 | 28 |
| | | 3 | M | 0,61 | 91 | 73 | 61 | 52 | 45 | 41 | 37 | 33 | 31 |
| | | 3,5 | M | 0,65 | 98 | 79 | 65 | 56 | 49 | 44 | 40 | 36 | 33 |
| | | 4 | M | 0,70 | 105 | 84 | 70 | 60 | 53 | 47 | 42 | 38 | 35 |
| ORANGE | 50 Mesh | 2 | M | 0,69 | 104 | 83 | 69 | 59 | 52 | 46 | 41 | 38 | 35 |
| | | 2,5 | M | 0,77 | 116 | 93 | 77 | 66 | 58 | 52 | 47 | 43 | 39 |
| | | 3 | M | 0,85 | 127 | 102 | 85 | 73 | 64 | 57 | 51 | 46 | 43 |
| | | 3,5 | M | 0,92 | 138 | 110 | 92 | 79 | 69 | 61 | 55 | 50 | 46 |
| | | 4 | M | 0,98 | 147 | 118 | 98 | 84 | 74 | 65 | 59 | 53 | 49 |
| RED | 50 Mesh | 2 | C | 0,99 | 148 | 119 | 99 | 85 | 74 | 66 | 59 | 54 | 50 |
| | | 2,5 | M | 1,11 | 166 | 133 | 111 | 95 | 83 | 73 | 66 | 60 | 55 |
| | | 3 | M | 1,21 | 182 | 145 | 121 | 104 | 91 | 81 | 73 | 66 | 61 |
| | | 3,5 | M | 1,31 | 196 | 157 | 131 | 112 | 98 | 87 | 79 | 71 | 66 |
| | | 4 | M | 1,40 | 210 | 168 | 140 | 120 | 105 | 93 | 84 | 76 | 70 |
| GREEN | 50 Mesh | 2 | VC | 1,40 | 210 | 168 | 140 | 120 | 105 | 93 | 84 | 76 | 70 |
| | | 2,5 | C | 1,57 | 235 | 188 | 157 | 134 | 117 | 104 | 94 | 85 | 78 |
| | | 3 | G | 1,71 | 257 | 206 | 171 | 147 | 129 | 114 | 103 | 93 | 86 |
| | | 3,5 | C | 1,85 | 278 | 222 | 185 | 159 | 139 | 123 | 111 | 101 | 93 |
| | | 4 | C | 1,98 | 297 | 238 | 198 | 170 | 149 | 131 | 118 | 107 | 99 |

LOW CROPS

ALBUZ

ISO

## Applications

*All types of treatments (herbicides, fungicides, insecticides...).*


# AXI

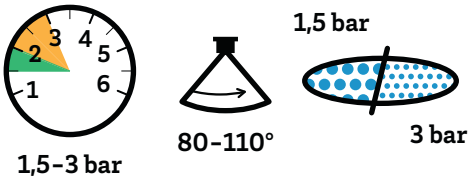
*Extended range flat spray nozzle*

## Main characteristics

- **Designed to be used over a wide range of pressures (from 1.5 to 3 bar).**
- Recommended for use at low pressure (around 1.5 bar) for low volume applications and spray drift reduction (bigger droplets).
- May be used at higher pressure (above 2.5 bar) to improve target coverage (finer droplets).
- Excellent for sprayers equipped with automated flow rate controllers (pressure changes do not affect the spray distribution).

## Specific characteristics

- Ceramic insert in a high resistance plastic body.
- Adapted to any brand of sprayer.
- Flow rate characteristics, body size and colour code meet international ISO standards.
- Flat fan pattern, droplet size vary according to pressure.
- **Minimum boom height recommended: 50/60 cm (110°) and 80/90 cm (80°).**
- **Recommended pressure: 1,5 to 2 bar.**




available in
**FAST CAP**
*Wide pressure range flat fan spray nozzle with cap*

## Flow rate chart

| Colour | ISO code | # | (bar) | 80° | 110° | l/mn | Liters / hectare - Nozzle spacing: 50 cm | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 8 km/h | 9 km/h | 10 km/h | 12 km/h | 14 km/h | 16 km/h | 18 km/h | 22 km/h | 24 km/h |
| GREEN | AXI 110015 80015 | 100 Mesh | 1,5 | F | F | 0,42 | 63 | 56 | 50 | 42 | 36 | 32 | 28 | 23 | 21 |
| | | | 2 | F | F | 0,49 | 74 | 65 | 59 | 49 | 42 | 37 | 33 | 27 | 25 |
| | | | 2,5 | F | F | 0,54 | 81 | 72 | 65 | 54 | 46 | 41 | 36 | 30 | 28 |
| | | | 3 | F | F | 0,60 | 90 | 80 | 72 | 60 | 51 | 45 | 40 | 33 | 30 |
| | | | 3,5 | F | F | 0,64 | 96 | 85 | 77 | 64 | 55 | 48 | 43 | 35 | 33 |
| | | | 4 | VF | VF | 0,69 | 104 | 92 | 83 | 69 | 59 | 52 | 46 | 38 | 35 |
| YELLOW | AXI 11002 8002 | 100 Mesh | 1,5 | F | F | 0,56 | 84 | 75 | 67 | 56 | 48 | 42 | 37 | 31 | 29 |
| | | | 2 | F | F | 0,66 | 99 | 88 | 79 | 66 | 57 | 50 | 44 | 35 | 33 |
| | | | 2,5 | F | F | 0,73 | 110 | 97 | 88 | 73 | 63 | 55 | 49 | 40 | 37 |
| | | | 3 | F | F | 0,80 | 120 | 107 | 96 | 80 | 69 | 60 | 53 | 44 | 40 |
| | | | 3,5 | F | F | 0,86 | 129 | 115 | 103 | 86 | 74 | 65 | 57 | 47 | 43 |
| | | | 4 | F | F | 0,91 | 137 | 121 | 109 | 91 | 78 | 68 | 61 | 50 | 46 |
| LILAC | AXI 110025 80025 | 50 Mesh | 1,5 | M | M | 0,71 | 107 | 95 | 85 | 71 | 61 | 53 | 47 | 39 | 36 |
| | | | 2 | F | F | 0,82 | 123 | 109 | 98 | 82 | 70 | 62 | 55 | 45 | 41 |
| | | | 2,5 | F | F | 0,91 | 137 | 121 | 109 | 91 | 78 | 68 | 61 | 50 | 46 |
| | | | 3 | F | F | 1,00 | 150 | 133 | 120 | 100 | 86 | 75 | 67 | 55 | 50 |
| | | | 3,5 | F | F | 1,08 | 162 | 144 | 130 | 108 | 93 | 81 | 72 | 59 | 54 |
| | | | 4 | F | F | 1,15 | 173 | 153 | 138 | 115 | 99 | 86 | 77 | 63 | 58 |
| BLUE | AXI 11003 8003 | 50 Mesh | 1,5 | M | M | 0,85 | 128 | 113 | 102 | 85 | 73 | 64 | 57 | 46 | 43 |
| | | | 2 | M | M | 0,98 | 147 | 131 | 118 | 98 | 84 | 74 | 65 | 53 | 49 |
| | | | 2,5 | M | M | 1,10 | 165 | 147 | 132 | 110 | 94 | 83 | 73 | 60 | 55 |
| | | | 3 | M | M | 1,20 | 180 | 160 | 144 | 120 | 103 | 90 | 80 | 65 | 60 |
| | | | 3,5 | F | F | 1,30 | 195 | 173 | 156 | 130 | 111 | 98 | 87 | 71 | 65 |
| | | | 4 | F | F | 1,39 | 209 | 185 | 167 | 139 | 119 | 104 | 93 | 76 | 70 |
| RED | AXI 11004 8004 | 50 Mesh | 1,5 | M | M | 1,13 | 170 | 151 | 136 | 113 | 97 | 85 | 75 | 62 | 57 |
| | | | 2 | M | M | 1,31 | 197 | 175 | 157 | 131 | 112 | 98 | 87 | 71 | 66 |
| | | | 2,5 | M | M | 1,46 | 219 | 195 | 175 | 146 | 125 | 110 | 97 | 80 | 73 |
| | | | 3 | M | M | 1,60 | 240 | 213 | 192 | 160 | 137 | 120 | 107 | 87 | 80 |
| | | | 3,5 | M | M | 1,73 | 260 | 231 | 208 | 173 | 148 | 130 | 115 | 94 | 87 |
| | | | 4 | F | F | 1,85 | 278 | 247 | 222 | 185 | 159 | 139 | 123 | 101 | 93 |
| BROWN | AXI 11005 8005 | 50 Mesh | 1,5 | M | M | 1,41 | 212 | 188 | 169 | 141 | 121 | 106 | 94 | 77 | 71 |
| | | | 2 | M | M | 1,63 | 245 | 217 | 196 | 163 | 140 | 122 | 109 | 89 | 82 |
| | | | 2,5 | M | M | 1,82 | 273 | 243 | 218 | 182 | 156 | 137 | 121 | 100 | 92 |
| | | | 3 | M | M | 2,00 | 300 | 267 | 240 | 200 | 171 | 150 | 133 | 109 | 100 |
| | | | 3,5 | M | M | 2,16 | 324 | 288 | 259 | 216 | 185 | 162 | 144 | 118 | 108 |
| | | | 4 | M | M | 2,30 | 345 | 307 | 276 | 230 | 197 | 173 | 153 | 126 | 116 |
| GREY | AXI 11006 8006 | 50 Mesh | 1,5 | M | C | 1,70 | 255 | 227 | 204 | 170 | 146 | 128 | 113 | 93 | 85 |
| | | | 2 | M | M | 1,96 | 294 | 261 | 235 | 196 | 168 | 147 | 131 | 107 | 98 |
| | | | 2,5 | M | M | 2,19 | 329 | 292 | 263 | 219 | 188 | 164 | 146 | 119 | 110 |
| | | | 3 | M | M | 2,40 | 360 | 320 | 288 | 240 | 206 | 180 | 160 | 131 | 120 |
| | | | 3,5 | M | M | 2,59 | 389 | 345 | 311 | 259 | 222 | 194 | 173 | 141 | 130 |
| | | | 4 | M | M | 2,77 | 416 | 369 | 332 | 277 | 237 | 208 | 185 | 151 | 139 |
| WHITE | AXI 11008 8008 | 50 Mesh | 1,5 | C | C | 2,26 | 339 | 301 | 271 | 226 | 194 | 170 | 151 | 123 | 113 |
| | | | 2 | C | C | 2,61 | 392 | 348 | 313 | 261 | 224 | 196 | 174 | 142 | 131 |
| | | | 2,5 | C | C | 2,92 | 438 | 389 | 350 | 292 | 250 | 219 | 195 | 159 | 146 |
| | | | 3 | C | C | 3,20 | 480 | 427 | 384 | 320 | 274 | 240 | 213 | 175 | 160 |
| | | | 3,5 | M | M | 3,46 | 519 | 461 | 415 | 346 | 297 | 260 | 231 | 189 | 173 |
| | | | 4 | M | M | 3,70 | 555 | 493 | 444 | 370 | 317 | 278 | 247 | 202 | 185 |

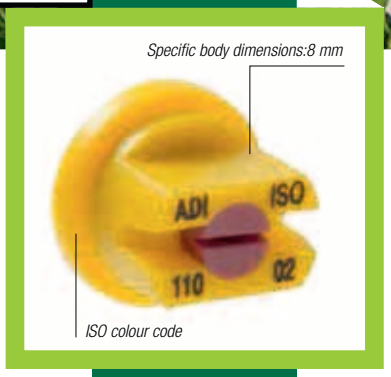
LOW CROPS

## *Applications*

***All types of treatments (herbicides, fungicides, insecticides...).***

ALBUZ

**ISO**




# ADI 110°

*Drift reduction flat spray nozzle*

## Main characteristics

- Pink ALBUZ® ceramic orifice (excellent precision and high wear resistance).
- Flat fan pattern angle 110°: spray overlap required to ensure uniform distribution on the ground.
- Designed for all types of nozzle holders with caps which accept nozzles to ISO dimensions (8 mm across flats).
- Drift reduction.

## Specific characteristics

- Flow rate characteristics, body size and colour code meet international ISO standard.
- Drift reduction nozzle reduces by 50% the number of small droplets (<100µm).
- Easy to dismantle and clean.
- **Minimum height boom recommended: 50/60 cm.**
- **Recommended pressure: 2 bar.**


**2-4 bar**

**110°**

EASY
TO DISMANTLE
AND CLEAN

## Flow rate chart

| Colour | ISO code | # | (bar) | | l / mn | Liters / hectare - Nozzle spacing: 50 cm | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 6 km/h | 7 km/h | 8 km/h | 9 km/h | 10 km/h | 12 km/h | 14 km/h | 16 km/h | 18 km/h | 20 km/h | 22 km/h | 24 km/h |
| ORANGE | ADI 11001 | 100 Mesh | 2 | M | 0,32 | 64 | 55 | 48 | 43 | 38 | 32 | 27 | 24 | 21 | 19 | 18 | 17 |
| | | | 2,5 | M | 0,36 | 72 | 62 | 54 | 48 | 43 | 36 | 31 | 27 | 24 | 22 | 20 | 19 |
| | | | 3 | M | 0,40 | 80 | 69 | 60 | 53 | 48 | 40 | 34 | 30 | 27 | 24 | 22 | 20 |
| | | | 3,5 | F | 0,43 | 86 | 74 | 65 | 57 | 52 | 43 | 37 | 32 | 29 | 26 | 23 | 22 |
| | | | 4 | F | 0,46 | 92 | 79 | 69 | 61 | 55 | 46 | 39 | 35 | 31 | 28 | 25 | 23 |
| GREEN | ADI 110015 | 100 Mesh | 2 | M | 0,49 | 98 | 84 | 74 | 65 | 59 | 49 | 42 | 37 | 33 | 29 | 27 | 25 |
| | | | 2,5 | M | 0,54 | 108 | 93 | 81 | 72 | 65 | 54 | 46 | 41 | 36 | 32 | 30 | 28 |
| | | | 3 | M | 0,60 | 120 | 103 | 90 | 80 | 72 | 60 | 51 | 45 | 40 | 36 | 33 | 30 |
| | | | 3,5 | M | 0,64 | 128 | 110 | 96 | 85 | 77 | 64 | 55 | 48 | 43 | 38 | 35 | 33 |
| | | | 4 | M | 0,69 | 138 | 118 | 104 | 92 | 83 | 69 | 59 | 52 | 46 | 41 | 38 | 35 |
| YELLOW | ADI 11002 | 100 Mesh | 2 | M | 0,66 | 132 | 113 | 99 | 88 | 79 | 66 | 57 | 50 | 44 | 40 | 35 | 33 |
| | | | 2,5 | M | 0,73 | 146 | 125 | 110 | 97 | 88 | 73 | 63 | 55 | 49 | 44 | 40 | 37 |
| | | | 3 | M | 0,80 | 160 | 137 | 120 | 107 | 96 | 80 | 69 | 60 | 53 | 48 | 44 | 40 |
| | | | 3,5 | M | 0,86 | 172 | 147 | 129 | 115 | 103 | 86 | 74 | 65 | 57 | 52 | 47 | 43 |
| | | | 4 | M | 0,91 | 182 | 156 | 137 | 121 | 109 | 91 | 78 | 68 | 61 | 55 | 50 | 46 |
| LILAC | ADI 110025 | 50 Mesh | 2 | M | 0,82 | 164 | 141 | 123 | 109 | 98 | 82 | 70 | 62 | 55 | 49 | 45 | 41 |
| | | | 2,5 | M | 0,91 | 182 | 156 | 137 | 121 | 109 | 91 | 78 | 68 | 61 | 55 | 50 | 46 |
| | | | 3 | M | 1,00 | 200 | 171 | 150 | 133 | 120 | 100 | 86 | 75 | 67 | 60 | 55 | 50 |
| | | | 3,5 | M | 1,08 | 216 | 185 | 162 | 144 | 130 | 108 | 93 | 81 | 72 | 65 | 59 | 54 |
| | | | 4 | M | 1,15 | 230 | 197 | 173 | 153 | 138 | 115 | 99 | 86 | 77 | 69 | 63 | 58 |
| BLUE | ADI 11003 | 50 Mesh | 2 | C | 0,98 | 196 | 168 | 147 | 131 | 118 | 98 | 84 | 74 | 65 | 59 | 53 | 49 |
| | | | 2,5 | M | 1,10 | 220 | 189 | 165 | 147 | 132 | 110 | 94 | 83 | 73 | 66 | 60 | 55 |
| | | | 3 | M | 1,20 | 240 | 206 | 180 | 160 | 144 | 120 | 103 | 90 | 80 | 72 | 65 | 60 |
| | | | 3,5 | M | 1,30 | 260 | 223 | 195 | 173 | 156 | 130 | 111 | 98 | 87 | 78 | 71 | 65 |
| | | | 4 | M | 1,39 | 278 | 238 | 209 | 185 | 167 | 139 | 119 | 104 | 93 | 83 | 76 | 70 |
| RED | ADI 11004 | 50 Mesh | 2 | VC | 1,31 | 262 | 225 | 197 | 175 | 157 | 131 | 112 | 98 | 87 | 79 | 71 | 66 |
| | | | 2,5 | C | 1,46 | 292 | 250 | 219 | 195 | 175 | 146 | 125 | 110 | 97 | 88 | 80 | 73 |
| | | | 3 | C | 1,60 | 320 | 274 | 240 | 213 | 192 | 160 | 137 | 120 | 107 | 96 | 87 | 80 |
| | | | 3,5 | C | 1,73 | 346 | 297 | 260 | 231 | 208 | 173 | 148 | 130 | 115 | 104 | 94 | 87 |
| | | | 4 | M | 1,85 | 370 | 317 | 278 | 247 | 222 | 185 | 159 | 139 | 123 | 111 | 101 | 93 |

**LOW CROPS**

ALBUZ

ISO

# CVI 110°

*Low pressure Air induction flat spray nozzle*


## Applications

***All types of treatments (systemic and contact products) including liquid fertilizers.***

## Main characteristics

- **Designed to be used over a wide range of pressures (from 1.5 to 3 bar).**
- Pink ALBUZ® ceramic orifice (excellent precision and high wear resistance).
- Flat fan pattern angle 110°. Wide angle flat spray: overlap required to ensure uniform distribution on the ground.
- Designed for all types of nozzle holders, using the same cap as ISO nozzles (for example: AXI).


**1,5-3 bar**

## Specific characteristics

- Air induction spray nozzle (venturi system): sprays large drops filled with air bubbles which do not drift and which burst into fine droplets on contact with the plant.
- Almost totally eliminate drift, while increasing the number of impacts (excellent coverage of the treated zone).
- Anti-clogging design and double air-intake orifice.
- Compact design (22 mm lenght) adapted to all booms and nozzles-holders.
- **Minimum height boom recommended: 50/60 cm.**
- **Recommended pressure : 2 bar.**

## Flow rate chart

| Colour | ISO code | # | (bar) | | l/mn | Liters / hectare - Nozzle spacing: 50 cm | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 9 km/h | 10 km/h | 12 km/h | 14 km/h | 16 km/h | 18km/h | 20km/h | 22km/h | 24km/h | 26km/h |
| GREEN | CVI 110015 | 100 Mesh | 1,5 | VC | 0,42 | 56 | 50 | 42 | 36 | 32 | 28 | 25 | 23 | 21 | 19 |
| | | | 2 | VC | 0,49 | 65 | 59 | 49 | 42 | 37 | 33 | 29 | 27 | 25 | 23 |
| | | | 2,5 | VC | 0,54 | 72 | 65 | 54 | 46 | 41 | 36 | 32 | 30 | 28 | 25 |
| | | | 3 | VC | 0,60 | 80 | 72 | 60 | 51 | 45 | 40 | 36 | 33 | 30 | 28 |
| YELLOW | CVI 11002 | 100 Mesh | 1,5 | VC | 0,57 | 76 | 68 | 57 | 49 | 43 | 38 | 34 | 31 | 29 | 26 |
| | | | 2 | VC | 0,66 | 88 | 79 | 66 | 57 | 50 | 44 | 44 | 35 | 33 | 30 |
| | | | 2,5 | VC | 0,73 | 97 | 88 | 73 | 63 | 55 | 49 | 48 | 40 | 37 | 34 |
| | | | 3 | C | 0,80 | 107 | 96 | 80 | 69 | 60 | 53 | 52 | 44 | 40 | 37 |
| LILAC | CVI 110025 | 50 Mesh | 1,5 | VC | 0,71 | 95 | 85 | 71 | 61 | 53 | 47 | 35 | 39 | 36 | 33 |
| | | | 2 | VC | 0,82 | 109 | 98 | 82 | 70 | 62 | 55 | 49 | 45 | 41 | 38 |
| | | | 2,5 | C | 0,91 | 121 | 109 | 91 | 78 | 68 | 61 | 55 | 50 | 46 | 42 |
| | | | 3 | C | 1,00 | 133 | 120 | 100 | 86 | 75 | 67 | 60 | 55 | 50 | 46 |
| BLUE | CVI 11003 | 50 Mesh | 1,5 | VC | 0,85 | 113 | 102 | 85 | 73 | 64 | 57 | 51 | 46 | 43 | 39 |
| | | | 2 | VC | 0,98 | 131 | 118 | 98 | 84 | 74 | 65 | 66 | 53 | 49 | 45 |
| | | | 2,5 | C | 1,10 | 147 | 132 | 110 | 94 | 83 | 73 | 72 | 60 | 55 | 51 |
| | | | 3 | C | 1,20 | 160 | 144 | 120 | 103 | 90 | 80 | 78 | 65 | 60 | 55 |
| RED | CVI 11004 | 50 Mesh | 1,5 | VC | 1,13 | 151 | 136 | 113 | 97 | 85 | 75 | 68 | 62 | 57 | 52 |
| | | | 2 | C | 1,31 | 175 | 157 | 131 | 112 | 98 | 87 | 80 | 71 | 66 | 60 |
| | | | 2,5 | C | 1,46 | 195 | 175 | 146 | 125 | 110 | 97 | 87 | 80 | 73 | 67 |
| | | | 3 | C | 1,60 | 213 | 192 | 160 | 137 | 120 | 107 | 94 | 87 | 80 | 74 |
| BROWN | CVI 11005 | 50 Mesh | 1,5 | VC | 1,41 | 188 | 169 | 141 | 121 | 106 | 94 | 85 | 77 | 71 | 65 |
| | | | 2 | C | 1,63 | 217 | 196 | 163 | 140 | 122 | 109 | 98 | 89 | 82 | 75 |
| | | | 2,5 | C | 1,82 | 247 | 220 | 183 | 156 | 137 | 121 | 110 | 100 | 92 | 84 |
| | | | 3 | C | 2,00 | 267 | 240 | 200 | 171 | 150 | 133 | 120 | 109 | 100 | 92 |

LOW CROPS

## *Applications*

***All types of treatment (systemic and contact products) including liquid fertilizers.***

ALBUZ

**ISO**


# CVI-TWIN

*Low pressure Air induction Twin flat spray nozzle*

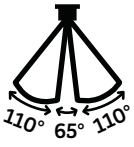
## Main characteristics

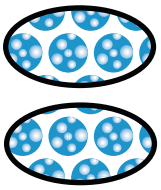
- **Designed to be used over a wide range of pressures (from 1.5 to 3 bar).**
- Pink ALBUZ® ceramic Double-orifices (excellent precision and high wear resistance).
- Flat fan pattern angle 110°. Wide angle flat spray: overlap required to ensure uniform distribution on the ground.
- Designed for all types of nozzle holders, using the same cap which accept nozzles measuring 8 mm across flats. (for example: AXI and CVI).

## Specific characteristics

- The inclination of the jets improves the penetration into the vegetation.
- Air induction nozzle (Venturi system) : sprays large drops filled with air bubbles, which do not drift and burst to form finer droplets on contact with the plant.
- Anti-clogging design and double air-intake orifice.
- Compact design (22 mm lenght) adapted to all booms and nozzles-holders.
- **Minimum height boom recommended: 50/60 cm.**
- **Recommended pressure: 2 bar.**
- **Use 80 mesh filters for 110015/11002 models.**


**1,5-3 bar**



## Flow rate chart

| Colour | ISO code | # | (bar) | | l/mn | Liters / hectare - Nozzle spacing: 50 cm | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 9 km/h | 10 km/h | 12 km/h | 14 km/h | 16 km/h | 18km/h | 20km/h | 22km/h | 24km/h | 26km/h |
| GREEN | CVI-TWIN 110015 | 100 Mesh | 1,5 | VC | 0,42 | 56 | 50 | 42 | 36 | 32 | 28 | 25 | 23 | 21 | 19 |
| | | | 2 | VC | 0,49 | 65 | 59 | 49 | 42 | 37 | 33 | 29 | 27 | 25 | 23 |
| | | | 2,5 | VC | 0,54 | 72 | 65 | 54 | 46 | 41 | 36 | 32 | 30 | 28 | 25 |
| | | | 3 | VC | 0,60 | 80 | 72 | 60 | 51 | 45 | 40 | 36 | 33 | 30 | 28 |
| YELLOW | CVI-TWIN 11002 JKI G 1927 | 100 Mesh | 1,5 | VC | 0,57 | 76 | 68 | 57 | 49 | 43 | 38 | 34 | 31 | 29 | 26 |
| | | | 2 | VC | 0,66 | 88 | 79 | 66 | 57 | 50 | 44 | 44 | 35 | 33 | 30 |
| | | | 2,5 | VC | 0,73 | 97 | 88 | 73 | 63 | 55 | 49 | 48 | 40 | 37 | 34 |
| | | | 3 | C | 0,80 | 107 | 96 | 80 | 69 | 60 | 53 | 52 | 44 | 40 | 37 |
| LILAC | CVI-TWIN 110025 JKI G 1904 | 50 Mesh | 1,5 | VC | 0,71 | 95 | 85 | 71 | 61 | 53 | 47 | 35 | 39 | 36 | 33 |
| | | | 2 | VC | 0,82 | 109 | 98 | 82 | 70 | 62 | 55 | 49 | 45 | 41 | 38 |
| | | | 2,5 | C | 0,91 | 121 | 109 | 91 | 78 | 68 | 61 | 55 | 50 | 46 | 42 |
| | | | 3 | C | 1,00 | 133 | 120 | 100 | 86 | 75 | 67 | 60 | 55 | 50 | 46 |
| BLUE | CVI-TWIN 11003 JKI G 1903 | 50 Mesh | 1,5 | VC | 0,85 | 113 | 102 | 85 | 73 | 64 | 57 | 51 | 46 | 43 | 39 |
| | | | 2 | VC | 0,98 | 131 | 118 | 98 | 84 | 74 | 65 | 66 | 53 | 49 | 45 |
| | | | 2,5 | C | 1,10 | 147 | 132 | 110 | 94 | 83 | 73 | 72 | 60 | 55 | 51 |
| | | | 3 | C | 1,20 | 160 | 144 | 120 | 103 | 90 | 80 | 78 | 65 | 60 | 55 |
| RED | CVI-TWIN 11004 JKI G 1905 | 50 Mesh | 1,5 | VC | 1,13 | 151 | 136 | 113 | 97 | 85 | 75 | 68 | 62 | 57 | 52 |
| | | | 2 | C | 1,31 | 175 | 157 | 131 | 112 | 98 | 87 | 80 | 71 | 66 | 60 |
| | | | 2,5 | C | 1,46 | 195 | 175 | 146 | 125 | 110 | 97 | 87 | 80 | 73 | 67 |
| | | | 3 | C | 1,60 | 213 | 192 | 160 | 137 | 120 | 107 | 94 | 87 | 80 | 74 |
| BROWN | CVI-TWIN 11005 JKI G 1928 | 50 Mesh | 1,5 | VC | 1,41 | 188 | 169 | 141 | 121 | 106 | 94 | 85 | 77 | 71 | 65 |
| | | | 2 | C | 1,63 | 217 | 196 | 163 | 140 | 122 | 109 | 98 | 89 | 82 | 75 |
| | | | 2,5 | C | 1,82 | 247 | 220 | 183 | 156 | 137 | 121 | 110 | 100 | 92 | 84 |
| | | | 3 | C | 2,00 | 267 | 240 | 200 | 171 | 150 | 133 | 120 | 109 | 100 | 92 |

**LOW CROPS**

ALBUZ

ISO

## Applications

*All types of treatments (systemic and contact products) including liquid fertilizers.*


# AVI 110°

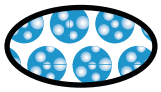
*Air induction flat spray nozzle*

## Main characteristics

- **Designed to be used over a wide range of pressures (from 3 to 5 bar).**
- Pink ALBUZ® ceramic double orifices (excellent precision and high wear resistance).
- Flat fan pattern angle 110°.
- Wide angle flat : spray overlap ensuring uniform distribution on the ground.
- Designed for all types nozzle-holders.
- Designed for all types of nozzle-holders, using the same cap as ALBUZ® APE nozzles.


3-5 bar

110°



## Specific characteristics

- Air-injected spray nozzle (venturi system) : sprays large drops charged with air bubbles which do not drift and become fine droplets in contact with the plant.
- Almost totally eliminate drift, while increasing the number of impacts (excellent coverage of the treated zone).
- Anti-clogging design and double air-intake orifice.
- Compact design (28 mm lenght) adapted to all booms and nozzle holders.
- **Minimum height boom recommended: 50/60 cm.**
- **Recommended pressure: 3 bar.**

## Flow rate chart

| Colour | ISO code | # | (bar) | | l/mn | Liters / hectare - Nozzle spacing: 50 cm | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 8 km/h | 9 km/h | 10 km/h | 12 km/h | 14 km/h | 16 km/h | 18km/h | 20km/h | 22km/h | 24 km/h | 26 km/h |
| ORANGE | AVI 11001 | 100 Mesh | 3 | VC | 0,40 | 60 | 53 | 48 | 40 | 34 | 30 | 27 | 24 | 22 | 20 | 18 |
| | | | 4 | C | 0,46 | 69 | 61 | 55 | 46 | 39 | 35 | 31 | 28 | 25 | 23 | 21 |
| | | | 5 | C | 0,52 | 78 | 69 | 62 | 52 | 45 | 39 | 35 | 31 | 28 | 26 | 24 |
| GREEN | AVI 110015 | 100 Mesh | 3 | VC | 0,60 | 90 | 80 | 72 | 60 | 51 | 45 | 40 | 36 | 33 | 30 | 28 |
| | | | 4 | C | 0,69 | 104 | 92 | 83 | 69 | 59 | 52 | 46 | 41 | 38 | 35 | 32 |
| | | | 5 | C | 0,77 | 116 | 103 | 92 | 77 | 66 | 58 | 51 | 46 | 42 | 39 | 36 |
| YELLOW | AVI 11002 | 100 Mesh | 3 | VC | 0,80 | 120 | 107 | 96 | 80 | 69 | 60 | 53 | 48 | 44 | 40 | 37 |
| | | | 4 | C | 0,91 | 137 | 121 | 109 | 91 | 78 | 68 | 61 | 55 | 50 | 46 | 42 |
| | | | 5 | C | 1,03 | 155 | 137 | 124 | 103 | 88 | 77 | 69 | 62 | 56 | 52 | 48 |
| LILAC | AVI 110025 | 50 Mesh | 3 | VC | 1,00 | 150 | 133 | 120 | 100 | 86 | 75 | 67 | 60 | 55 | 50 | 46 |
| | | | 4 | C | 1,15 | 173 | 153 | 138 | 115 | 99 | 86 | 77 | 69 | 63 | 58 | 53 |
| | | | 5 | C | 1,29 | 194 | 172 | 155 | 129 | 111 | 97 | 86 | 77 | 70 | 65 | 60 |
| BLUE | AVI 11003 | 50 Mesh | 3 | XC | 1,20 | 180 | 160 | 144 | 120 | 103 | 90 | 80 | 72 | 65 | 60 | 55 |
| | | | 4 | C | 1,39 | 209 | 185 | 167 | 139 | 119 | 104 | 93 | 83 | 76 | 70 | 64 |
| | | | 5 | C | 1,55 | 233 | 207 | 186 | 155 | 133 | 116 | 103 | 93 | 85 | 78 | 72 |
| RED | AVI 11004 | 50 Mesh | 3 | XC | 1,60 | 240 | 213 | 192 | 160 | 137 | 120 | 107 | 96 | 87 | 80 | 74 |
| | | | 4 | VC | 1,85 | 278 | 247 | 222 | 185 | 159 | 139 | 123 | 111 | 101 | 93 | 85 |
| | | | 5 | VC | 2,07 | 311 | 276 | 248 | 207 | 177 | 155 | 138 | 124 | 113 | 104 | 96 |
| BROWN | AVI 11005 | 50 Mesh | 3 | XC | 2,00 | 300 | 267 | 240 | 200 | 171 | 150 | 133 | 120 | 109 | 100 | 92 |
| | | | 4 | XC | 2,31 | 347 | 308 | 277 | 231 | 198 | 173 | 154 | 139 | 126 | 116 | 107 |
| | | | 5 | VC | 2,58 | 387 | 344 | 310 | 258 | 221 | 194 | 172 | 155 | 141 | 129 | 119 |
| GREY | AVI 11006 | 50 Mesh | 3 | XC | 2,40 | 360 | 320 | 288 | 240 | 206 | 180 | 160 | 144 | 131 | 120 | 111 |
| | | | 4 | XC | 2,77 | 416 | 369 | 332 | 277 | 237 | 208 | 185 | 166 | 151 | 139 | 128 |
| | | | 5 | VC | 3,10 | 465 | 413 | 372 | 310 | 266 | 233 | 207 | 186 | 169 | 155 | 143 |
| WHITE | AVI 11008 | 50 Mesh | 3 | XC | 3,20 | 480 | 427 | 384 | 320 | 274 | 240 | 213 | 192 | 175 | 160 | 148 |
| | | | 4 | XC | 3,70 | 555 | 493 | 444 | 370 | 317 | 278 | 247 | 222 | 202 | 185 | 171 |
| | | | 5 | XC | 4,13 | 620 | 551 | 496 | 413 | 354 | 310 | 275 | 248 | 225 | 207 | 191 |
| CLEAR BLUE* | AVI 11010 | 50 Mesh | 3 | XC | 4,00 | 600 | 533 | 480 | 400 | 343 | 300 | 267 | 240 | 218 | 200 | 185 |
| | | | 4 | XC | 4,62 | 693 | 616 | 554 | 462 | 396 | 347 | 308 | 277 | 252 | 231 | 213 |
| | | | 5 | XC | 5,16 | 774 | 688 | 619 | 516 | 442 | 387 | 344 | 310 | 281 | 258 | 238 |

G 1620

G 1606

G 1605

* this nozzle was before black color

LOW CROPS

## Applications

*All types of treatment (systemic and contact products).*
*Designed to be used over a wide range of pressures (from 3 to 5 bar).*

ALBUZ

ISO

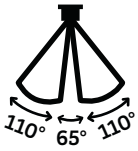

# AVI-TWIN

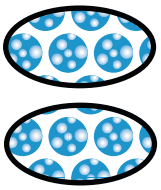
*Air induction Twin flat spray nozzle*

## Main characteristics

- Double-orifices pink ALBUZ® ceramic (excellent precision and high wear resistance).
- Two flat-fan patterns with 110° angles.
- Wide flat angle: spray overlap required to ensure uniform distribution on the ground.
- Designed for all types of nozzle holders, using the same cap as ALBUZ® APE / AVI (11 mm) nozzles.


3-5 bar



## Specific characteristics

- The inclination of the jets improves the penetration of the vegetation.
- Air induction nozzle (venturi system) : sprays large drops filled with air bubbles, which do not drift and burst to form finer droplets on contact with the plant.
- Almost totally eliminate drift, while increasing the number of impacts (excellent coverage of the treated zone).
- Anti-clogging design and double air-intake orifices.
- Compact design length (28 mm length) fits all booms and nozzle holders.
- **Minimum height boom recommended: 50/60 cm.**

## Flow rate chart

| Colour | ISO code | # | (bar) | | l/mn | Liters / hectare - Nozzle spacing: 50 cm | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 8 km/h | 9 km/h | 10 km/h | 12 km/h | 14 km/h | 16 km/h | 18km/h | 20km/h | 22km/h | 24 km/h | 26 km/h |
| ORANGE | AVI-TWIN 11001 | 100 Mesh | 3 | XC | 0,40 | 60 | 53 | 48 | 40 | 34 | 30 | 27 | 24 | 22 | 20 | 18 |
| | | | 4 | XC | 0,46 | 69 | 61 | 55 | 46 | 39 | 35 | 31 | 28 | 25 | 23 | 21 |
| | | | 5 | C | 0,52 | 78 | 69 | 62 | 52 | 45 | 39 | 35 | 31 | 28 | 26 | 24 |
| GREEN | AVI-TWIN 110015 | 100 Mesh | 3 | XC | 0,60 | 90 | 80 | 72 | 60 | 51 | 45 | 40 | 36 | 33 | 30 | 28 |
| | | | 4 | XC | 0,69 | 104 | 92 | 83 | 69 | 59 | 52 | 46 | 41 | 38 | 35 | 32 |
| | | | 5 | C | 0,77 | 116 | 103 | 92 | 77 | 66 | 58 | 51 | 46 | 42 | 39 | 36 |
| YELLOW | AVI-TWIN 11002 | 100 Mesh | 3 | XC | 0,80 | 120 | 107 | 96 | 80 | 69 | 60 | 53 | 48 | 44 | 40 | 37 |
| | | | 4 | XC | 0,91 | 137 | 121 | 109 | 91 | 78 | 68 | 61 | 55 | 50 | 46 | 42 |
| | | | 5 | C | 1,03 | 155 | 137 | 124 | 103 | 88 | 77 | 69 | 62 | 56 | 52 | 48 |
| LILAC | AVI-TWIN 110025 | 50 Mesh | 3 | XC | 1,00 | 150 | 133 | 120 | 100 | 86 | 75 | 67 | 60 | 55 | 50 | 46 |
| | | | 4 | XC | 1,15 | 173 | 153 | 138 | 115 | 99 | 86 | 77 | 69 | 63 | 58 | 53 |
| | | | 5 | VC | 1,29 | 194 | 172 | 155 | 129 | 111 | 97 | 86 | 77 | 70 | 65 | 60 |
| BLUE | AVI-TWIN 11003 | 50 Mesh | 3 | XC | 1,20 | 180 | 160 | 144 | 120 | 103 | 90 | 80 | 72 | 65 | 60 | 55 |
| | | | 4 | XC | 1,39 | 209 | 185 | 167 | 139 | 119 | 104 | 93 | 83 | 76 | 70 | 64 |
| | | | 5 | VC | 1,55 | 233 | 207 | 186 | 155 | 133 | 116 | 103 | 93 | 85 | 78 | 72 |
| RED | AVI-TWIN 11004 JKI G 1750 | 50 Mesh | 3 | XC | 1,60 | 240 | 213 | 192 | 160 | 137 | 120 | 107 | 96 | 87 | 80 | 74 |
| | | | 4 | XC | 1,85 | 278 | 247 | 222 | 185 | 159 | 139 | 123 | 111 | 101 | 93 | 85 |
| | | | 5 | VC | 2,07 | 311 | 276 | 248 | 207 | 177 | 155 | 138 | 124 | 113 | 104 | 96 |
| BROWN | AVI-TWIN 11005 | 50 Mesh | 3 | XC | 2,00 | 300 | 267 | 240 | 200 | 171 | 150 | 133 | 120 | 109 | 100 | 92 |
| | | | 4 | XC | 2,31 | 347 | 308 | 277 | 231 | 198 | 173 | 154 | 139 | 126 | 116 | 107 |
| | | | 5 | VC | 2,58 | 387 | 344 | 310 | 258 | 221 | 194 | 172 | 155 | 141 | 129 | 119 |
| GREY | AVI-TWIN 11006 | 50 Mesh | 3 | XC | 2,40 | 360 | 320 | 288 | 240 | 206 | 180 | 160 | 144 | 131 | 120 | 111 |
| | | | 4 | XC | 2,77 | 416 | 369 | 332 | 277 | 237 | 208 | 185 | 166 | 151 | 139 | 128 |
| | | | 5 | XC | 3,10 | 465 | 413 | 372 | 310 | 266 | 233 | 207 | 186 | 169 | 155 | 143 |

LOW CROPS

ALBUZ

EUROPE

# ATR 80°

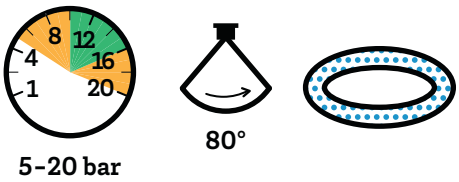
*Hollow cone nozzle*


## Applications

*For fungicides and insecticides. Recommended for orchard and vineyards.*

## Main characteristics

- Angle of 80° at 5 bar.
- Hollow cone nozzle producing fine droplets.
- ALBUZ® durable pink ceramic allows high pressure spraying while maintaining nozzle performance and precision.




## Specific characteristics

- Easy dismantling for cleaning.
- JKI certified.
- Can be used on a sprayer boom from 3 bar pressure.
- Precision polished ceramic surfaces of internal components ensure perfect sealing of the swirl chamber to give precise flowrate.
- **Recommended pressure: 10 bar.**
- Information about droplets size (see page 5)

## Flow rate chart

| bar | l/mn | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | WHITE | LILAC | BROWN | YELLOW | ORANGE | RED | GREY | GREEN | BLACK | BLUE |
| | | G 1348 | G 1349 | G 1350 | G 1351 | G 1352 | | G 1353 | | G 1354 |
| 5 | 0,27 | 0,36 | 0,48 | 0,73 | 0,99 | 1,38 | 1,50 | 1,78 | 2,00 | 2,45 |
| 6 | 0,29 | 0,39 | 0,52 | 0,80 | 1,08 | 1,51 | 1,63 | 1,94 | 2,18 | 2,67 |
| 7 | 0,32 | 0,42 | 0,56 | 0,86 | 1,17 | 1,62 | 1,76 | 2,09 | 2,35 | 2,87 |
| 8 | 0,34 | 0,45 | 0,60 | 0,92 | 1,24 | 1,73 | 1,87 | 2,22 | 2,50 | 3,06 |
| 9 | 0,36 | 0,48 | 0,64 | 0,97 | 1,32 | 1,83 | 1,98 | 2,35 | 2,64 | 3,24 |
| 10 | 0,38 | 0,50 | 0,67 | 1,03 | 1,39 | 1,92 | 2,08 | 2,47 | 2,78 | 3,40 |
| 11 | 0,39 | 0,52 | 0,70 | 1,07 | 1,45 | 2,01 | 2,17 | 2,58 | 2,90 | 3,56 |
| 12 | 0,41 | 0,55 | 0,73 | 1,12 | 1,51 | 2,09 | 2,26 | 2,69 | 3,03 | 3,71 |
| 13 | 0,43 | 0,57 | 0,76 | 1,17 | 1,57 | 2,17 | 2,35 | 2,79 | 3,14 | 3,85 |
| 14 | 0,44 | 0,59 | 0,79 | 1,21 | 1,63 | 2,25 | 2,43 | 2,89 | 3,26 | 3,99 |
| 15 | 0,46 | 0,61 | 0,81 | 1,25 | 1,69 | 2,33 | 2,51 | 2,99 | 3,36 | 4,12 |
| 16 | 0,47 | 0,63 | 0,84 | 1,29 | 1,74 | 2,40 | 2,59 | 3,08 | 3,47 | 4,25 |
| 17 | 0,48 | 0,64 | 0,86 | 1,33 | 1,79 | 2,47 | 2,67 | 3,17 | 3,57 | 4,37 |
| 18 | 0,50 | 0,66 | 0,89 | 1,37 | 1,84 | 2,54 | 2,74 | 3,25 | 3,67 | 4,49 |
| 19 | 0,51 | 0,68 | 0,91 | 1,40 | 1,89 | 2,60 | 2,81 | 3,34 | 3,76 | 4,61 |
| 20 | 0,52 | 0,70 | 0,93 | 1,44 | 1,94 | 2,67 | 2,88 | 3,42 | 3,85 | 4,72 |
| 21 | 0,54 | 0,71 | 0,95 | 1,48 | 1,99 | 2,73 | 2,95 | 3,50 | 3,94 | 4,84 |
| 22 | 0,55 | 0,73 | 0,98 | 1,51 | 2,03 | 2,79 | 3,01 | 3,57 | 4,03 | 4,94 |
| 23 | 0,56 | 0,74 | 1,00 | 1,54 | 2,07 | 2,85 | 3,07 | 3,65 | 4,12 | 5,05 |
| 24 | 0,57 | 0,76 | 1,02 | 1,58 | 2,12 | 2,91 | 3,14 | 3,72 | 4,20 | 5,15 |
| 25 | 0,58 | 0,77 | 1,04 | 1,61 | 2,16 | 2,97 | 3,20 | 3,80 | 4,28 | 5,25 |

ORCHARD
VINEYARD

*Applications*

*For fungicides and insecticides. Recommended for orchard and vineyards.*

ALBUZ

EUROPE


European Colour code

# ATR 60°

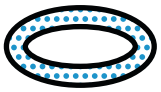
*Hollow cone nozzle*

## Main characteristics

- Angle of 60° at 5 bar.
- Hollow cone nozzle producing fine droplets.
- The **green cap** is used to specify that the nozzles has an angle of 60 degrees.
- ALBUZ® durable pink ceramic allows high pressure spraying while maintaining nozzle performance and precision.


5-20 bar

60°



## Specific characteristics

- Easy dismantling for cleaning.
- The angle of 60 degrees :
  - Is mostly recommended during the use of the Shielded Sprayer or Tunnel sprayer.
  - The drift is reduced on the top part of the target during the process
- Can be used on a sprayer boom from 3 bar pressure.
- Precision polished ceramic surfaces of internal components ensure perfect sealing of the swirl chamber to give precise flowrate.
- **Recommended pressure: 10 bar.**
- Information about droplets size (see page 5)

## Flow rate chart

| bar | l/mn | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | LILAC | BROWN | YELLOW | ORANGE | RED | GREY | GREEN | BLACK | BLUE |
| 5 | 0,36 | 0,48 | 0,73 | 0,99 | 1,38 | 1,50 | 1,78 | 2,00 | 2,45 |
| 6 | 0,39 | 0,52 | 0,80 | 1,08 | 1,51 | 1,63 | 1,94 | 2,18 | 2,67 |
| 7 | 0,42 | 0,56 | 0,86 | 1,17 | 1,62 | 1,76 | 2,09 | 2,35 | 2,87 |
| 8 | 0,45 | 0,60 | 0,92 | 1,24 | 1,73 | 1,87 | 2,22 | 2,50 | 3,06 |
| 9 | 0,48 | 0,64 | 0,97 | 1,32 | 1,83 | 1,98 | 2,35 | 2,64 | 3,24 |
| 10 | 0,50 | 0,67 | 1,03 | 1,39 | 1,92 | 2,08 | 2,47 | 2,78 | 3,40 |
| 11 | 0,52 | 0,70 | 1,07 | 1,45 | 2,01 | 2,17 | 2,58 | 2,90 | 3,56 |
| 12 | 0,55 | 0,73 | 1,12 | 1,51 | 2,09 | 2,26 | 2,69 | 3,03 | 3,71 |
| 13 | 0,57 | 0,76 | 1,17 | 1,57 | 2,17 | 2,35 | 2,79 | 3,14 | 3,85 |
| 14 | 0,59 | 0,79 | 1,21 | 1,63 | 2,25 | 2,43 | 2,89 | 3,26 | 3,99 |
| 15 | 0,61 | 0,81 | 1,25 | 1,69 | 2,33 | 2,51 | 2,99 | 3,36 | 4,12 |
| 16 | 0,63 | 0,84 | 1,29 | 1,74 | 2,40 | 2,59 | 3,08 | 3,47 | 4,25 |
| 17 | 0,64 | 0,86 | 1,33 | 1,79 | 2,47 | 2,67 | 3,17 | 3,57 | 4,37 |
| 18 | 0,66 | 0,89 | 1,37 | 1,84 | 2,54 | 2,74 | 3,25 | 3,67 | 4,49 |
| 19 | 0,68 | 0,91 | 1,40 | 1,89 | 2,60 | 2,81 | 3,34 | 3,76 | 4,61 |
| 20 | 0,70 | 0,93 | 1,44 | 1,94 | 2,67 | 2,88 | 3,42 | 3,85 | 4,72 |
| 21 | 0,71 | 0,95 | 1,48 | 1,99 | 2,73 | 2,95 | 3,50 | 3,94 | 4,84 |
| 22 | 0,73 | 0,98 | 1,51 | 2,03 | 2,79 | 3,01 | 3,57 | 4,03 | 4,94 |
| 23 | 0,74 | 1,00 | 1,54 | 2,07 | 2,85 | 3,07 | 3,65 | 4,12 | 5,05 |
| 24 | 0,76 | 1,02 | 1,58 | 2,12 | 2,91 | 3,14 | 3,72 | 4,20 | 5,15 |
| 25 | 0,77 | 1,04 | 1,61 | 2,16 | 2,97 | 3,20 | 3,80 | 4,28 | 5,25 |

ORCHARD VINEYARD

ALBUZ

ISO

# ATI 80°

*Hollow cone nozzle*


*ISO colour code*

## *Applications*

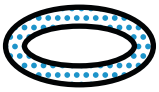
***For fungicides and insecticides. Recommended for orchard and vineyards.***

## Main characteristics

- Angle of 80° at 5 bar.
- Hollow cone nozzle producing fine droplets.
- The **green cap** is used to specify that the nozzles has an angle of 80 degrees.
- ALBUZ® durable pink ceramic allows high pressure spraying while maintaining nozzle performance and precision.


**5-20 bar**

**80°**



## Specific characteristics

- **Flow rate characteristics, colour code meet international ISO standards.**
- Easy dismantling for cleaning.
- The angle of 80 degrees may be matched with TVI 80° nozzles in order to optimize applications.
- Can be used on a sprayer boom from 3 bar pressure.
- Precision polished ceramic surfaces of internal components ensure perfect sealing of the swirl chamber to give precise flowrate.
- **Recommended pressure: 10 bar.**
- Information about droplets size (see page 5)

## Flow rate chart

NEW

| bar | l/mn | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | PURPLE 80-0050 | PINK 80-0075 | ORANGE 80-01 | GREEN 80-015 | YELLOW 80-02 | LILAC 80-025 | BLUE 80-03 | BROWN RED 80-035 | RED 80-04 | BROWN 80-05 |
| 3 | 0,20 | - | - | - | - | - | - | - | - | - |
| 4 | 0,23 | - | - | - | - | - | - | - | - | - |
| 5 | 0,26 | 0,39 | 0,52 | 0,77 | 1,03 | 1,29 | 1,55 | 1,81 | 2,07 | 2,58 |
| 6 | 0,28 | 0,42 | 0,57 | 0,85 | 1,13 | 1,41 | 1,70 | 1,98 | 2,26 | 2,83 |
| 7 | 0,31 | 0,46 | 0,61 | 0,92 | 1,22 | 1,53 | 1,83 | 2,14 | 2,44 | 3,06 |
| 8 | 0,33 | 0,49 | 0,65 | 0,98 | 1,31 | 1,63 | 1,96 | 2,29 | 2,61 | 3,27 |
| 9 | 0,35 | 0,52 | 0,69 | 1,04 | 1,39 | 1,73 | 2,08 | 2,42 | 2,77 | 3,46 |
| 10 | 0,37 | 0,55 | 0,73 | 1,10 | 1,46 | 1,83 | 2,19 | 2,56 | 2,92 | 3,65 |
| 11 | 0,38 | 0,57 | 0,77 | 1,15 | 1,53 | 1,91 | 2,30 | 2,68 | 3,06 | 3,83 |
| 12 | 0,40 | 0,60 | 0,80 | 1,2 | 1,6 | 2,00 | 2,40 | 2,80 | 3,20 | 4,00 |
| 13 | 0,42 | 0,62 | 0,83 | 1,25 | 1,67 | 2,08 | 2,50 | 2,91 | 3,33 | 4,16 |
| 14 | 0,43 | 0,65 | 0,86 | 1,30 | 1,73 | 2,16 | 2,59 | 3,02 | 3,46 | 4,32 |
| 15 | 0,45 | 0,67 | 0,89 | 1,34 | 1,79 | 2,24 | 2,68 | 3,13 | 3,58 | 4,47 |
| 16 | 0,46 | 0,69 | 0,92 | 1,39 | 1,85 | 2,31 | 2,77 | 3,23 | 3,70 | 4,62 |
| 17 | 0,48 | 0,71 | 0,95 | 1,43 | 1,90 | 2,38 | 2,86 | 3,33 | 3,81 | 4,76 |
| 18 | 0,49 | 0,73 | 0,98 | 1,47 | 1,96 | 2,45 | 2,94 | 3,43 | 3,92 | 4,90 |
| 19 | 0,50 | 0,75 | 1,01 | 1,51 | 2,01 | 2,52 | 3,02 | 3,52 | 4,03 | 5,03 |
| 20 | 0,52 | 0,77 | 1,03 | 1,55 | 2,07 | 2,58 | 3,10 | 3,61 | 4,13 | 5,16 |
| 21 | 0,53 | 0,79 | 1,06 | 1,59 | 2,12 | 2,65 | 3,17 | 3,7 | 4,23 | 5,29 |
| 22 | 0,54 | 0,81 | 1,08 | 1,62 | 2,17 | 2,71 | 3,25 | 3,75 | 4,33 | 5,42 |
| 23 | 0,55 | 0,83 | 1,11 | 1,66 | 2,22 | 2,77 | 3,32 | 3,88 | 4,43 | 5,54 |
| 24 | 0,57 | 0,85 | 1,13 | 1,70 | 2,26 | 2,83 | 3,39 | 3,96 | 4,53 | 5,66 |
| 25 | 0,58 | 0,87 | 1,15 | 1,73 | 2,31 | 2,89 | 3,46 | 4,04 | 4,62 | 5,77 |

ORCHARD
VINEYARD

## *Applications*

***For fungicides and insecticides. Recommended for orchard and vineyards.***

ALBUZ

ISO


*ISO colour code*

# ATI 60°

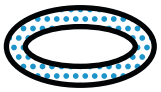
*Hollow cone nozzle*

## Main characteristics

- Angle of 60° at 5 bar.
- Hollow cone nozzle producing fine droplets.
- The **green cap** is used to specify that the nozzles has an angle of 60 degrees.
- ALBUZ® durable pink ceramic allows high pressure spraying while maintaining nozzle performance and precision.


**5-20 bar**

**60°**



## Specific characteristics

- **Flow rate characteristics, colour code meet international ISO standards.**
- Easy dismantling for cleaning.
- The angle of 60 degrees :

- Is mostly recommended during the use of the Shielded Sprayer or Tunnel sprayer.
- The drift is reduced on the top part of the target during the process

- Can be used on a sprayer boom from 3 bar pressure.
- Precision polished ceramic surfaces of internal components ensure perfect sealing of the swirl chamber to give precise flowrate.
- **Recommended pressure: 10 bar.**
- Information about droplets size (see page 5)

## Flow rate chart

| bar | l/mn | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | PINK 60-0075 | ORANGE 60-01 | GREEN 60-015 | YELLOW 60-02 | LILAC 60-025 | BLUE 60-03 | RED 60-04 | Brown 60-05 |
| 5 | 0,39 | 0,52 | 0,77 | 1,03 | 1,29 | 1,55 | 2,07 | 2,58 |
| 6 | 0,42 | 0,57 | 0,85 | 1,13 | 1,41 | 1,70 | 2,26 | 2,83 |
| 7 | 0,46 | 0,61 | 0,92 | 1,22 | 1,53 | 1,83 | 2,44 | 3,06 |
| 8 | 0,49 | 0,65 | 0,98 | 1,31 | 1,63 | 1,96 | 2,61 | 3,27 |
| 9 | 0,52 | 0,69 | 1,04 | 1,39 | 1,73 | 2,08 | 2,77 | 3,46 |
| 10 | 0,55 | 0,73 | 1,10 | 1,46 | 1,83 | 2,19 | 2,92 | 3,65 |
| 11 | 0,57 | 0,77 | 1,15 | 1,53 | 1,91 | 2,30 | 3,06 | 3,83 |
| 12 | 0,60 | 0,80 | 1,2 | 1,6 | 2,00 | 2,40 | 3,20 | 4,00 |
| 13 | 0,62 | 0,83 | 1,25 | 1,67 | 2,08 | 2,50 | 3,33 | 4,16 |
| 14 | 0,65 | 0,86 | 1,30 | 1,73 | 2,16 | 2,59 | 3,46 | 4,32 |
| 15 | 0,67 | 0,89 | 1,34 | 1,79 | 2,24 | 2,68 | 3,58 | 4,47 |
| 16 | 0,69 | 0,92 | 1,39 | 1,85 | 2,31 | 2,77 | 3,70 | 4,62 |
| 17 | 0,71 | 0,95 | 1,43 | 1,90 | 2,38 | 2,86 | 3,81 | 4,76 |
| 18 | 0,73 | 0,98 | 1,47 | 1,96 | 2,45 | 2,94 | 3,92 | 4,90 |
| 19 | 0,75 | 1,01 | 1,51 | 2,01 | 2,52 | 3,02 | 4,03 | 5,03 |
| 20 | 0,77 | 1,03 | 1,55 | 2,07 | 2,58 | 3,10 | 4,13 | 5,16 |
| 21 | 0,79 | 1,06 | 1,59 | 2,12 | 2,65 | 3,17 | 4,23 | 5,29 |
| 22 | 0,81 | 1,08 | 1,62 | 2,17 | 2,71 | 3,25 | 4,33 | 5,42 |
| 23 | 0,83 | 1,11 | 1,66 | 2,22 | 2,77 | 3,32 | 4,43 | 5,54 |
| 24 | 0,85 | 1,13 | 1,70 | 2,26 | 2,83 | 3,39 | 4,53 | 5,66 |
| 25 | 0,87 | 1,15 | 1,73 | 2,31 | 2,89 | 3,46 | 4,62 | 5,77 |

ORCHARD
VINEYARD

ISO

## Applications

*For fungicides and insecticides.*
*Recommended for orchard and vineyards.*
*Recommended to work on a dense vegetation.*


# ATF 80°

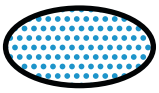
*Full cone nozzle*

## Main characteristics

› Angle of 80° at 5 bar.
› Full cone nozzle producing fine droplets..
› Albuz durable pink ceramic allows high pressure spraying while maintaining nozzle performance and precision.


3-20 bar

80°



## Specific characteristics

› Flow rate characteristics, colour code meet international ISO standards.
› Use 100 mesh nozzle filters for models 80 015 and 80 02.
› Can be used on a sprayer boom (spacing nozzle between 35cm and 50 cm)
**› Recommended pressure on sprayer boom : 3 bar**
**› Recommended pressure for Orchard or Vineyard : 10 bar**
› Information about droplets size (see page 5)

## Flow rate chart

| COLOUR | ISO code | # | (bar) | l/mn | Liters / hectare - Nozzle spacing: 50 cm | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 4 km/h | 5 km/h | 6 km/h | 8 km/h | 9km/h | 10 km/h | 12 km/h | 14 km/h | 16 km/h | 18km/h | 20km/h |
| GREEN | ATF 80 015 | 100 Mesh | 3 | 0,60 | 180 | 144 | 120 | 90 | 80 | 72 | 60 | 51 | 45 | 40 | 36 |
| | | | 4 | 0,69 | 207 | 166 | 138 | 104 | 92 | 83 | 69 | 59 | 52 | 46 | 41 |
| | | | 5 | 0,77 | 231 | 185 | 154 | 116 | 103 | 92 | 77 | 66 | 58 | 51 | 46 |
| YELLOW | ATF 80 02 | 100 Mesh | 3 | 0,80 | 240 | 192 | 160 | 120 | 107 | 96 | 80 | 69 | 60 | 53 | 48 |
| | | | 4 | 0,91 | 276 | 221 | 184 | 137 | 121 | 109 | 91 | 78 | 68 | 61 | 55 |
| | | | 5 | 1,03 | 309 | 247 | 206 | 155 | 137 | 124 | 103 | 88 | 77 | 69 | 62 |
| LILAC | ATF 80 025 | 50 Mesh | 3 | 1,00 | 300 | 240 | 200 | 150 | 133 | 120 | 100 | 86 | 75 | 67 | 60 |
| | | | 4 | 1,15 | 345 | 276 | 230 | 173 | 153 | 138 | 115 | 99 | 86 | 77 | 69 |
| | | | 5 | 1,29 | 387 | 310 | 258 | 194 | 172 | 155 | 129 | 111 | 97 | 86 | 77 |
| BLUE | ATF 80 03 | 50 Mesh | 3 | 1,20 | 360 | 288 | 240 | 180 | 160 | 144 | 120 | 103 | 90 | 80 | 72 |
| | | | 4 | 1,39 | 417 | 334 | 278 | 209 | 185 | 167 | 139 | 119 | 104 | 93 | 83 |
| | | | 5 | 1,55 | 465 | 372 | 310 | 233 | 207 | 186 | 155 | 133 | 116 | 103 | 93 |
| RED | ATF 80 04 | 50 Mesh | 3 | 1,60 | 480 | 384 | 320 | 240 | 213 | 192 | 160 | 137 | 120 | 107 | 96 |
| | | | 4 | 1,85 | 555 | 444 | 370 | 278 | 247 | 222 | 185 | 159 | 139 | 123 | 111 |
| | | | 5 | 2,07 | 621 | 497 | 414 | 311 | 276 | 248 | 207 | 177 | 155 | 138 | 124 |
| NEW BROWN | ATF 80 05 | 50 Mesh | 3 | 2 | 600 | 480 | 400 | 300 | 267 | 240 | 200 | 171 | 150 | 133 | 120 |
| | | | 4 | 2,31 | 693 | 554 | 462 | 347 | 308 | 277 | 231 | 198 | 173 | 154 | 139 |
| | | | 5 | 2,58 | 774 | 619 | 516 | 387 | 344 | 310 | 258 | 221 | 194 | 172 | 155 |

| bar | l/mn | | | | | |
|---|---|---|---|---|---|---|
| | GREEN 80-015 | YELLOW 80-02 | LILAC 80-025 | BLUE 80-03 | RED 80-04 | BROWN 80-05 |
| 3 | 0,60 | 0,80 | 1,00 | 1,20 | 1,60 | 2,00 |
| 4 | 0,69 | 0,91 | 1,15 | 1,39 | 1,85 | 2,31 |
| 5 | 0,77 | 1,03 | 1,29 | 1,55 | 2,07 | 2,58 |
| 6 | 0,85 | 1,13 | 1,41 | 1,70 | 2,26 | 2,83 |
| 7 | 0,92 | 1,22 | 1,53 | 1,83 | 2,44 | 3,06 |
| 8 | 0,98 | 1,31 | 1,63 | 1,96 | 2,61 | 3,27 |
| 9 | 1,04 | 1,39 | 1,73 | 2,08 | 2,77 | 3,46 |
| 10 | 1,10 | 1,46 | 1,83 | 2,19 | 2,92 | 3,65 |
| 11 | 1,15 | 1,53 | 1,91 | 2,30 | 3,06 | 3,83 |
| 12 | 1,2 | 1,6 | 2,00 | 2,40 | 3,20 | 4,00 |
| 13 | 1,25 | 1,67 | 2,08 | 2,50 | 3,33 | 4,16 |
| 14 | 1,30 | 1,73 | 2,16 | 2,59 | 3,46 | 4,32 |
| 15 | 1,34 | 1,79 | 2,24 | 2,68 | 3,58 | 4,47 |
| 16 | 1,39 | 1,85 | 2,31 | 2,77 | 3,70 | 4,62 |
| 17 | 1,43 | 1,90 | 2,38 | 2,86 | 3,81 | 4,76 |
| 18 | 1,47 | 1,96 | 2,45 | 2,94 | 3,92 | 4,90 |
| 19 | 1,51 | 2,01 | 2,52 | 3,02 | 4,03 | 5,03 |
| 20 | 1,55 | 2,07 | 2,58 | 3,10 | 4,13 | 5,16 |
| 21 | 1,59 | 2,12 | 2,65 | 3,17 | 4,23 | 5,29 |
| 22 | 1,62 | 2,17 | 2,71 | 3,25 | 4,33 | 5,42 |
| 23 | 1,66 | 2,22 | 2,77 | 3,32 | 4,43 | 5,54 |
| 24 | 1,70 | 2,26 | 2,83 | 3,39 | 4,53 | 5,66 |
| 25 | 1,73 | 2,31 | 2,89 | 3,46 | 4,62 | 5,77 |

## *Applications*

*For fungicide and insecticide treatments. Recommended for orchard and vineyards.*

ALBUZ

ISO

ISO colour code

# TVI 80°

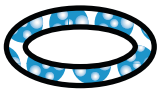
*Air Induction Hollow Cone spray nozzle*

## Main characteristics

- 80° angle at 5 bar.
- Air-induction hollow cone nozzle (Venturi system) spraying large drops filled with air bubbles which do not drift and explode into fine droplets in contact with the plant.
- ALBUZ® durable pink ceramic allows high spraying pressures to be used while maintaining performance and precision.


5-20 bar

80°



## Specific characteristics

- Easy dismantling for a good cleaning.
- 3 ceramic components for more wear resistance.
- Can be used on a boom from a pressure of 5 bar using a special bayonette cap.
- Compact size: length 19 mm.
- Model 80 0050: recommended pressure from 7 bar.
- **Recommended pressure: 10 bar.**
- Information about droplets size (see page 5)

**IMPORTANT !**

**Use 200 mesh nozzle filters for models 80 0050 - 80 0075 and 100 mesh filters for the other sizes.**

## Flow rate chart

| | l / mn | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| bar | PURPLE 80-0050 | PINK 80-0075 | ORANGE 80-01 | GREEN 80-015 | YELLOW 80-02 | LILAC 80-025 | BLUE 80-03 | RED 80-04 |
| | G 1752 | | | G 1751 | | | G 1897 | |
| 5 | - | 0,39 | 0,52 | 0,77 | 1,03 | 1,29 | 1,55 | 2,07 |
| 6 | - | 0,42 | 0,57 | 0,85 | 1,13 | 1,41 | 1,70 | 2,26 |
| 7 | 0,31 | 0,46 | 0,61 | 0,92 | 1,22 | 1,53 | 1,83 | 2,44 |
| 8 | 0,33 | 0,49 | 0,65 | 0,98 | 1,31 | 1,63 | 1,96 | 2,61 |
| 9 | 0,35 | 0,52 | 0,69 | 1,04 | 1,39 | 1,73 | 2,08 | 2,77 |
| 10 | 0,37 | 0,55 | 0,73 | 1,10 | 1,46 | 1,83 | 2,19 | 2,92 |
| 11 | 0,38 | 0,57 | 0,77 | 1,15 | 1,53 | 1,91 | 2,30 | 3,06 |
| 12 | 0,40 | 0,60 | 0,80 | 1,2 | 1,6 | 2,00 | 2,40 | 3,20 |
| 13 | 0,42 | 0,62 | 0,83 | 1,25 | 1,67 | 2,08 | 2,50 | 3,33 |
| 14 | 0,43 | 0,65 | 0,86 | 1,30 | 1,73 | 2,16 | 2,59 | 3,46 |
| 15 | 0,45 | 0,67 | 0,89 | 1,34 | 1,79 | 2,24 | 2,68 | 3,58 |
| 16 | 0,46 | 0,69 | 0,92 | 1,39 | 1,85 | 2,31 | 2,77 | 3,70 |
| 17 | 0,48 | 0,71 | 0,95 | 1,43 | 1,90 | 2,38 | 2,86 | 3,81 |
| 18 | 0,49 | 0,73 | 0,98 | 1,47 | 1,96 | 2,45 | 2,94 | 3,92 |
| 19 | 0,50 | 0,75 | 1,01 | 1,51 | 2,01 | 2,52 | 3,02 | 4,03 |
| 20 | 0,52 | 0,77 | 1,03 | 1,55 | 2,07 | 2,58 | 3,10 | 4,13 |
| 21 | 0,53 | 0,79 | 1,06 | 1,59 | 2,12 | 2,65 | 3,17 | 4,23 |
| 22 | 0,54 | 0,81 | 1,08 | 1,62 | 2,17 | 2,71 | 3,25 | 4,33 |
| 23 | 0,55 | 0,83 | 1,11 | 1,66 | 2,22 | 2,77 | 3,32 | 4,43 |
| 24 | 0,57 | 0,85 | 1,13 | 1,70 | 2,26 | 2,83 | 3,39 | 4,53 |
| 25 | 0,58 | 0,87 | 1,15 | 1,73 | 2,31 | 2,89 | 3,46 | 4,62 |

ORCHARD VINEYARD

ALBUZ

ISO

# AVI 80°

*Air induction flat spray nozzle*


## Applications

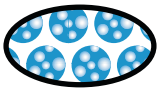
***Particularly recommended for the orchards treatments of systemic and contact products.***

## Main characteristics

- **Designed to be used over a wide range of pressures (from 10 to 20 bar).**
- Pink ALBUZ® ceramic orifice with excellent precision and high wear resistance.
- Flat fan pattern, angle of 80° at 3 bars.
- Can be used for treatments up to 8 metres height.

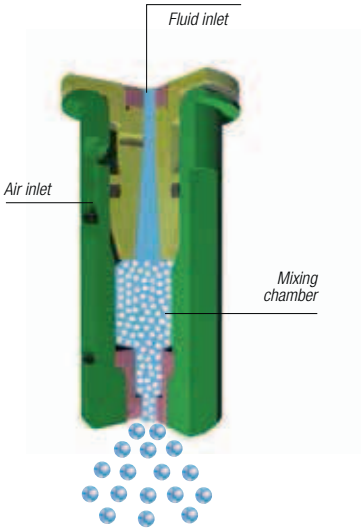

**10-20 bar**

**80°**



## Specific characteristics

- Air induction nozzle (Venturi System): sprays large droplets charged with air bubbles, which minimise drift, burst on impact with the target, spreading fine droplets over the plant surfaces.
- Increase retention of the product on the foliage, and reduce product losses to the ground.
- Reduce dramatically the drift, while enhancing the number of "impacts" of product on the target, (excellent coverage of the treated zones)
- Anti-clogging design and double air-intake orifices.
- Compact design (length 28 mm) adapted to all booms and nozzle holders.
- **Recommended operating pressures: between 10 and 14 bar.**
- **Recommended pressure : 10 bar**




## Flow rate chart

| bar | l/mn | | | | | |
|---|---|---|---|---|---|---|
| | ORANGE 8001 | GREEN 80015 | YELLOW 8002 | LILAC 80025 | BLUE 8003 | RED 8004 |
| | G 1721 | G 1634 | G 1635 | | G 1636 | |
| | 100 Mesh | 100 Mesh | 100 Mesh | 50 Mesh | 50 Mesh | 50 Mesh |
| **10** | 0,73 | 1,10 | 1,46 | 1,83 | 2,19 | 2,92 |
| **11** | 0,77 | 1,15 | 1,53 | 1,91 | 2,30 | 3,06 |
| **12** | 0,80 | 1,20 | 1,60 | 2,00 | 2,40 | 3,20 |
| **13** | 0,83 | 1,25 | 1,67 | 2,08 | 2,50 | 3,33 |
| **14** | 0,86 | 1,30 | 1,73 | 2,16 | 2,59 | 3,46 |
| **15** | 0,89 | 1,34 | 1,79 | 2,24 | 2,68 | 3,58 |
| **16** | 0,92 | 1,39 | 1,85 | 2,31 | 2,77 | 3,70 |
| **17** | 0,95 | 1,43 | 1,90 | 2,38 | 2,86 | 3,81 |
| **18** | 0,98 | 1,47 | 1,96 | 2,45 | 2,94 | 3,92 |
| **19** | 1,01 | 1,51 | 2,01 | 2,52 | 3,02 | 4,03 |
| **20** | 1,03 | 1,55 | 2,07 | 2,58 | 3,10 | 4,13 |
| **21** | 1,06 | 1,59 | 2,12 | 2,65 | 3,17 | 4,23 |
| **22** | 1,08 | 1,62 | 2,17 | 2,71 | 3,25 | 4,33 |
| **23** | 1,11 | 1,66 | 2,22 | 2,77 | 3,32 | 4,43 |
| **24** | 1,13 | 1,70 | 2,26 | 2,83 | 3,39 | 4,53 |
| **25** | 1,15 | 1,43 | 2,31 | 2,89 | 3,46 | 4,62 |

ORCHARD
VINEYARD

## *Applications*

***Particularly recommended for the application of systemic and contact products.***

ALBUZ

ISO


# CVI 80°

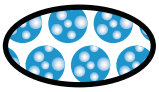
*Compact Air induction flat spray nozzle*

## Main characteristics

- **Designed to be used over a wide range of pressures (from 10 to 20 bar).**
- Pink ALBUZ® ceramic orifice (excellent precision and high wear resistance).
- Flat fan pattern, angle of 80° at 3 bars.
- Can be used for treatments up to 8 metres height.


10-20 bar

80°



## Specific characteristics

- Air induction nozzle (Venturi System): sprays large droplets filled with air bubbles, which minimise drift and burst in contact with the target, spreading fine droplets over the plant surfaces.
- Increase retention of the product on the foliage, and reduce product losses to the ground.
- Reduce dramatically the drift, while enhancing the number of "impacts" of product on the target, (excellent coverage of the treated zones).
- Anti-clogging design and double air-intake orifices.
- Compact design (length 22 mm) adapted to all booms and nozzle holders.
- Recommended operating pressures: between 10 and 14 bar.
- **Recommended pressure: 10 bar.**

## Flow rate chart

| bar | l/mn | | | | | |
|---|---|---|---|---|---|---|
| | ORANGE 8001 | GREEN 80015 | YELLOW 8002 | LILAC 80025 | BLUE 8003 | RED 8004 |
| | G 1900 | G 1901 | G 1902 | | | |
| | 100 Mesh | 100 Mesh | 100 Mesh | 50 Mesh | 50 Mesh | 50 Mesh |
| **10** | 0,73 | 1,10 | 1,46 | 1,83 | 2,19 | 2,92 |
| **11** | 0,77 | 1,15 | 1,53 | 1,91 | 2,30 | 3,06 |
| **12** | 0,80 | 1,20 | 1,60 | 2,00 | 2,40 | 3,20 |
| **13** | 0,83 | 1,25 | 1,67 | 2,08 | 2,50 | 3,33 |
| **14** | 0,86 | 1,30 | 1,73 | 2,16 | 2,59 | 3,46 |
| **15** | 0,89 | 1,34 | 1,79 | 2,24 | 2,68 | 3,58 |
| **16** | 0,92 | 1,39 | 1,85 | 2,31 | 2,77 | 3,70 |
| **17** | 0,95 | 1,43 | 1,90 | 2,38 | 2,86 | 3,81 |
| **18** | 0,98 | 1,47 | 1,96 | 2,45 | 2,94 | 3,92 |
| **19** | 1,01 | 1,51 | 2,01 | 2,52 | 3,02 | 4,03 |
| **20** | 1,03 | 1,55 | 2,07 | 2,58 | 3,10 | 4,13 |
| **21** | 1,06 | 1,59 | 2,12 | 2,65 | 3,17 | 4,23 |
| **22** | 1,08 | 1,62 | 2,17 | 2,71 | 3,25 | 4,33 |
| **23** | 1,11 | 1,66 | 2,22 | 2,77 | 3,32 | 4,43 |
| **24** | 1,13 | 1,70 | 2,26 | 2,83 | 3,39 | 4,53 |
| **25** | 1,15 | 1,43 | 2,31 | 2,89 | 3,46 | 4,62 |

ORCHARD
VINEYARD

ALBUZ

## Applications

*All types of treatments (herbicides, fungicides,insecticides ....)*

# DISC & CORE

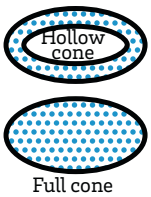
*Ceramic hollow-cone nozzle*

## Specific characteristics

- ALBUZ® durable pink ceramic construction allows high spraying pressures to be used while maintaining performance and precision.


3-20 bar

80°




Full cone

- Hollow cone nozzle spraying fine droplets.
- The combinations of Discs (AD) and Cores (AC) allow a wide choice of uses.
- **Recommended pressure: 10 bar.**
- Information about droplets size (see page 5)

### Hollow cone table

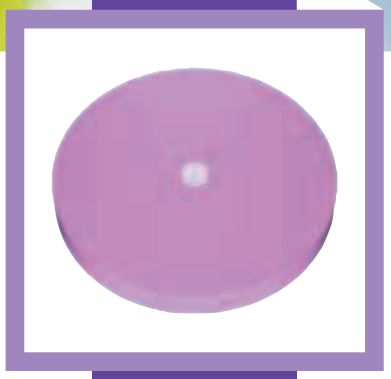
| | | Orifice diameters | l /mn | | | | | | | Angles | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 3 bar | 4 bar | 5 bar | 6 bar | 10 bar | 15 bar | 20 bar | 10 bar | 20 bar |
| AD 1 | AC 13 | 0,8 | 0,24 | 0,27 | 0,3 | 0,33 | 0,41 | 0,49 | 0,56 | 70° | 79° |
| AD 2 | AC 13 | 1,02 | 0,31 | 0,35 | 0,39 | 0,42 | 0,53 | 0,64 | 0,73 | 87° | 97° |
| AD 3 | AC 13 | 1,2 | 0,36 | 0,41 | 0,45 | 0,49 | 0,61 | 0,74 | 0,84 | 89° | 98° |
| AD 4 | AC 13 | 1,56 | 0,45 | 0,52 | 0,57 | 0,62 | 0,78 | 0,93 | 1,06 | 99° | 103° |
| AD 5 | AC 13 | 2 | 0,55 | 0,62 | 0,69 | 0,75 | 0,94 | 1,13 | 1,29 | 102° | 105° |
| AD 1 | AC 23 | 0,8 | 0,28 | 0,32 | 0,35 | 0,38 | 0,48 | 0,57 | 0,65 | 66° | 74° |
| AD 2 | AC 23 | 1,02 | 0,37 | 0,43 | 0,47 | 0,51 | 0,64 | 0,77 | 0,88 | 83° | 93° |
| AD 3 | AC 23 | 1,2 | 0,44 | 0,51 | 0,56 | 0,61 | 0,76 | 0,92 | 1,04 | 84° | 92° |
| AD 4 | AC 23 | 1,56 | 0,56 | 0,64 | 0,71 | 0,77 | 0,97 | 1,16 | 1,32 | 92° | 98° |
| AD 5 | AC 23 | 2 | 0,72 | 0,82 | 0,91 | 0,99 | 1,24 | 1,49 | 1,7 | 96° | 99° |
| AD 6 | AC 23 | 2,4 | 0,85 | 0,97 | 1,07 | 1,16 | 1,46 | 1,75 | 2 | 99° | 101° |
| AD 1 | AC 25 | 0,8 | 0,41 | 0,46 | 0,51 | 0,55 | 0,7 | 0,84 | 0,95 | 50° | 60° |
| AD 2 | AC 25 | 1,02 | 0,59 | 0,67 | 0,74 | 0,8 | 1,01 | 1,21 | 1,38 | 57° | 66° |
| AD 3 | AC 25 | 1,2 | 0,72 | 0,81 | 0,9 | 0,98 | 1,23 | 1,48 | 1,68 | 63° | 69° |
| AD 4 | AC 25 | 1,56 | 1,02 | 1,16 | 1,28 | 1,39 | 1,75 | 2,1 | 2,39 | 75° | 80° |
| AD 5 | AC 25 | 2 | 1,41 | 1,6 | 1,77 | 1,92 | 2,42 | 2,9 | 3,3 | 77° | 80° |
| AD 6 | AC 25 | 2,4 | 1,73 | 1,97 | 2,18 | 2,37 | 2,98 | 3,57 | 4,07 | 82° | 85° |
| AD 7 | AC 25 | 2,8 | 2,07 | 2,36 | 2,61 | 2,83 | 3,57 | 4,28 | 4,87 | 88° | 91° |
| AD 1 | AC 45 | 0,8 | 0,48 | 0,55 | 0,61 | 0,66 | 0,83 | 1 | 1,14 | 32° | 39° |
| AD 2 | AC 45 | 1,02 | 0,73 | 0,83 | 0,92 | 1 | 1,26 | 1,51 | 1,72 | 46° | 53° |
| AD 3 | AC 45 | 1,2 | 0,92 | 1,05 | 1,16 | 1,26 | 1,58 | 1,9 | 2,16 | 48° | 52° |
| AD 4 | AC 45 | 1,56 | 1,35 | 1,54 | 1,7 | 1,85 | 2,32 | 2,79 | 3,17 | 59° | 60° |
| AD 5 | AC 45 | 2 | 1,92 | 2,19 | 2,42 | 2,63 | 3,31 | 3,97 | 4,52 | 68° | 70° |
| AD 6 | AC 45 | 2,4 | 2,46 | 2,79 | 3,09 | 3,35 | 4,22 | 5,07 | 5,77 | 72° | 75° |
| AD 7 | AC 45 | 2,8 | 3,01 | 3,43 | 3,79 | 4,11 | 5,18 | 6,21 | 7,07 | 79° | 80° |
| AD 1 | AC 46 | 0,8 | 0,55 | 0,62 | 0,69 | 0,75 | 0,94 | 1,13 | 1,29 | 23° | 27° |
| AD 2 | AC 46 | 1,02 | 0,92 | 1,05 | 1,16 | 1,26 | 1,58 | 1,9 | 2,16 | 26° | 30° |
| AD 3 | AC 46 | 1,2 | 1,2 | 1,37 | 1,51 | 1,64 | 2,06 | 2,48 | 2,82 | 30° | 30° |
| AD 4 | AC 46 | 1,56 | 2,03 | 2,32 | 2,56 | 2,78 | 3,5 | 4,2 | 4,78 | 35 | 35 |
| AD 5 | AC 46 | 2 | 3,11 | 3,54 | 3,91 | 4,24 | 5,34 | 6,41 | 7,3 | 40° | 42° |
| AD 6 | AC 46 | 2,4 | 4,12 | 4,69 | 5,18 | 5,62 | 7,08 | 8,49 | 9,67 | 45 | 46 |
| AD 7 | AC 46 | 3,230 | 5,49 | 6,40 | 7,10 | 7,84 | 10,16 | 12,43 | 14,33 | 55° | 53° |

### Full cone table

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| AD 1 | AC 31 | 0,8 | 0,53 | 0,61 | 0,67 | 0,73 | 0,92 | 1,1 | 1,25 | 39° | 39° |
| AD 2 | AC 31 | 1,02 | 0,82 | 0,93 | 1,03 | 1,12 | 1,41 | 1,69 | 1,92 | 87° | 95° |
| AD 3 | AC 31 | 1,2 | 0,87 | 0,99 | 1,1 | 1,19 | 1,5 | 1,8 | 2,05 | 65° | 62° |
| AD 1 | AC 35 | 0,8 | 0,53 | 0,61 | 0,67 | 0,73 | 0,92 | 1,1 | 1,25 | 34° | 40° |
| AD 2 | AC 35 | 1,02 | 0,92 | 1,05 | 1,16 | 1,26 | 1,58 | 1,9 | 2,16 | 39° | 39° |
| AD 3 | AC 35 | 1,2 | 1,28 | 1,46 | 1,61 | 1,75 | 2,2 | 2,64 | 3 | 44° | 42° |
| AD 4 | AC 35 | 1,56 | 2,08 | 2,37 | 2,62 | 2,84 | 3,58 | 4,3 | 4,89 | 77° | 72° |
| AD 5 | AC 35 | 2 | 2,62 | 2,98 | 3,3 | 3,58 | 4,51 | 5,41 | 6,16 | 37° | 34° |
| AD 2 | AC 56 | 1,02 | 0,88 | 1 | 1,11 | 1,2 | 1,52 | 1,82 | 20,7 | 21° | 20° |
| AD 3 | AC 56 | 1,2 | 1,19 | 1,36 | 1,5 | 1,63 | 2,05 | 2,46 | 2,8 | 28° | 32° |
| AD 4 | AC 56 | 1,56 | 2,05 | 2,33 | 2,58 | 2,8 | 3,52 | 4,23 | 4,81 | 35° | 38° |
| AD 5 | AC 56 | 2 | 3,46 | 3,94 | 4,36 | 4,73 | 5,96 | 7,15 | 8,14 | 43° | 40° |
| AD 6 | AC 56 | 2,1 | 5,11 | 5,82 | 6,43 | 6,98 | 8,78 | 10,54 | 12 | 56° | 49° |
| AD 7 | AC 56 | 2,3 | 6,87 | 7,81 | 8,64 | 9,38 | 11,8 | 14,17 | 16,12 | 68° | 64° |

ORCHARD VINEYARD

ALBUZ

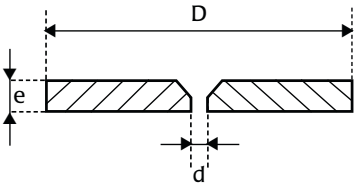


## Applications

*ALBUZ ceramic characteristics allow spraying high pressures while maintaining performance and precision.*
*Exist in several dimensions: diameters 7, 10, 12, 15 and 18mm.*

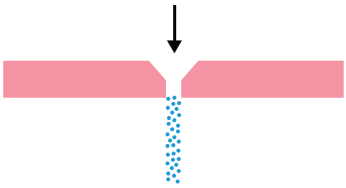
0°

## Drawing 1



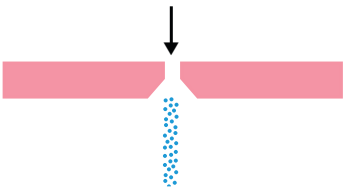

| REF | 7010 | 7011 | 7012 | 7015 | 7018 | 7020 | 7023 | 15007 | 15008 | 15010 | 15012 | 15015 | 15018 | 15020 | 15023 | 15030 | 15040 | 15060 | 18008 | 18010 | 18012 | 18015 | 18018 | 18020 | 18023 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| D (mm) | 7 | | | | | | | 15 | | | | | | | | | | | 18 | | | | | | |
| d* (mm) | 1,0 | 1,1 | 1,2 | 1,5 | 1,8 | 2,0 | 2,3 | 0,7 | 0,8 | 1,0 | 1,2 | 1,5 | 1,8 | 2,0 | 2,3 | 3,0 | 4,0 | 6,0 | 0,8 | 1,1 | 1,2 | 1,5 | 1,8 | 2,0 | 2,3 |
| e (mm) | 3,1 | | | | | | | 3,5 | | | | | | | | | | | 2,5 | | | | | | |

## Drawing 2



| BAR | Litres / mn | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | AMT ..007 | AMT ..008 | AMT ..010 | AMT ..012 | AMT ..015 | AMT ..018 | AMT ..020 | AMT ..023 | AMT ..040 |
| 2 | 0,42 | 0,54 | 0,91 | 1,14 | 1,88 | 2,54 | 3,09 | 3,98 | 12,28 |
| 3 | 0,51 | 0,66 | 1,10 | 1,39 | 2,27 | 3,12 | 3,77 | 4,91 | 15,06 |
| 4 | 0,59 | 0,75 | 1,25 | 1,60 | 2,60 | 3,60 | 4,35 | 5,70 | 17,40 |
| 5 | 0,65 | 0,83 | 1,38 | 1,78 | 2,89 | 4,03 | 4,86 | 6,40 | 19,46 |
| 10 | 0,91 | 1,15 | 1,89 | 2,51 | 3,99 | 5,70 | 6,85 | 9,17 | 27,56 |
| 15 | 1,10 | 1,39 | 2,27 | 3,06 | 4,82 | 6,98 | 8,37 | 11,31 | 33,78 |
| 20 | 1,27 | 1,59 | 2,59 | 3,52 | 5,51 | 8,06 | 9,65 | 13,13 | 39,03 |
| 30 | 1,54 | 1,92 | 3,11 | 4,30 | 6,65 | 9,88 | 11,80 | 16,20 | 47,84 |
| 50 | 1,96 | 2,43 | 3,91 | 5,52 | 8,44 | 12,76 | 15,20 | 21,12 | 61,83 |

## Drawing 3



| BAR | Litres / mn | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | AMT ..007 | AMT ..008 | AMT ..010 | AMT ..012 | AMT ..015 | AMT ..018 | AMT ..020 | AMT ..023 | AMT ..040 |
| 2 | 0,41 | 0,43 | 0,65 | 0,94 | 1,42 | 1,98 | 2,46 | 3,18 | 10,13 |
| 3 | 0,50 | 0,53 | 0,79 | 1,15 | 1,73 | 2,42 | 3,02 | 3,90 | 12,41 |
| 4 | 0,57 | 0,61 | 0,91 | 1,32 | 2,00 | 2,80 | 3,50 | 4,50 | 14,33 |
| 5 | 0,64 | 0,68 | 1,01 | 1,47 | 2,23 | 3,13 | 3,92 | 5,03 | 16,03 |
| 10 | 0,89 | 0,95 | 1,42 | 2,07 | 3,15 | 4,43 | 5,58 | 7,12 | 22,68 |
| 15 | 1,08 | 1,16 | 1,74 | 2,53 | 3,85 | 5,42 | 6,87 | 8,72 | 27,79 |
| 20 | 1,24 | 1,34 | 2,00 | 2,92 | 4,44 | 6,26 | 7,95 | 10,07 | 32,09 |
| 30 | 1,50 | 1,63 | 2,44 | 3,56 | 5,43 | 7,67 | 9,78 | 12,33 | 39,32 |
| 50 | 1,92 | 2,09 | 3,13 | 4,58 | 6,99 | 9,90 | 12,68 | 15,92 | 50,79 |

# Applications

*For herbicide and liquid fertilizer applications*

NEW


# MSI

*Wide Angle Flat spray nozzle*

## Main characteristics

› Thanks to the exceptional wear resistance of Albuz pink ceramic, these nozzles can be used to spray suspension fertilizers.

› Flat jet (30° to 160° angle) providing coarse droplets without drift.

› Can be used on a sprayer boom ( nozzle spacing : 1 m)

**› Recommended pressure : 1 bar**


0,5-4 bar

130°-160°

## Flow rate chart

| bar | LILAC | BLUE | RED | BROWN | GREY | WHITE | CLEAR BLUE | CLEAR GREEN |
|---|---|---|---|---|---|---|---|---|
| 0.5 | 0,42 | 0,51 | 0,68 | 0,85 | 1,02 | 1,35 | 1,69 | 2,54 |
| 1 | 0,59 | 0,71 | 0,94 | 1,18 | 1,42 | 1,89 | 2,36 | 3,54 |
| 1.5 | 0,72 | 0,86 | 1,15 | 1,43 | 1,72 | 2,29 | 2,87 | 4,3 |
| 2 | 0,82 | 0,99 | 1,32 | 1,65 | 1,98 | 2,63 | 3,29 | 4,94 |
| 2.5 | 0,92 | 1,1 | 1,47 | 1,83 | 2,2 | 2,93 | 3,66 | 5,5 |
| 3 | 1 | 1,2 | 1,6 | 2 | 2,4 | 3,2 | 4 | 6 |
| 3.5 | 1,08 | 1,29 | 1,72 | 2,15 | 2,58 | 3,45 | 4,31 | 6,46 |
| 4 | 1,15 | 1,38 | 1,84 | 2,3 | 2,76 | 3,67 | 4,59 | 6,89 |

## FLOW RATE CHART (L/MN)

| bar | LILAC | RED | BROWN | GREY | WHITE | CLEAR BLUE | CLEAR GREEN |
|---|---|---|---|---|---|---|---|
| 0,5 | 30° | 60° | 70° | 75° | 110° | 120° | 140° |
| 1 | 50° | 80° | 95° | 110° | 120° | 130° | 140° |
| 1,5 | 70° | 100° | 110° | 120° | 130° | 130° | 150° |
| 2 | 80° | 110° | 115° | 125° | 135° | 140° | 160° |
| 3 | 95° | 115° | 120° | 125° | 140° | 140° | 160° |
| 4 | 100° | 120° | 125° | 130° | 140° | 145° | 160° |

## NOZZLE COLOR SELECTION - RECOMMENDED PRESSURE (BAR) NOZZLE SPACING 1 M

| water | Km / h | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| l / ha | 4 | | | | 5 | | | | 6 | | | | 7 | | | | 8 | | | | 9 | | | | 10 | | | | 11 | | | |
| 50 | | | | | | | | | | | | | | | | | | | 1,3 | | | | 1,6 | | | | 2,1 | 1,4 | | | 2,5 | 1,7 |
| 75 | | | | | | | | | | | 1,6 | | | | 2,3 | 1,6 | | | 3 | 2,1 | 1,4 | | | 2,6 | 1,8 | | | 3,3 | 2,2 | | | 4 |
| 100 | | | | | | | | | | | 3 | 2,1 | | | 4,1 | 2,8 | 2,1 | | | | 2,6 | 1,6 | | | 3,3 | 2,1 | 1,4 | | | 2,5 | 1,7 | |
| 125 | 2,1 | | | | | | 3,3 | 2,2 | 1,8 | | | 3,3 | 2,5 | | | | 3,3 | 2,1 | | | | 2,6 | 1,8 | | | 3,3 | 2,2 | | | | 2,7 | |
| 150 | 3 | | | 2,1 | 1,8 | | 4,8 | 3,3 | 2,6 | 1,6 | | 4,8 | 3,6 | 2,3 | | | | 3 | 2,1 | | | | 2,6 | 1,4 | | | 3,3 | 1,8 | | | | 2,2 |
| 175 | | | | 2,8 | 2,5 | 1,6 | | | 3,6 | 2,3 | 1,6 | | | 3,1 | | | | | 2,8 | | 1,2 | | | 2 | 1,6 | | | 2,5 | 1,9 | | | 3 |
| 200 | 2,1 | | | | 3,3 | 2,1 | 1,4 | | | 3 | 2,1 | | | | 2,8 | 1,6 | | | | 2,1 | 1,6 | | | 2,6 | 2,1 | | | 3,3 | 2,5 | | | |
| 250 | 3,3 | 2,1 | | | | 3,3 | 2,2 | | | | 3,3 | 1,8 | 1,6 | | | 2,5 | 2,1 | | | 3,3 | 2,6 | | | | 3,3 | 1,4 | | | | 1,7 | | |
| 300 | | 3 | 2,1 | | | | 3,3 | 1,8 | 1,6 | | | 2,6 | 2,3 | | | 3,6 | 3 | 1,3 | | | | 1,6 | | | | 2,1 | | | | 2,5 | | |
| 350 | | | 2,8 | | 1,6 | | | 2,5 | 2,3 | | | 3,6 | 3,1 | | | | | 1,8 | | | | 2,3 | | | | 2,8 | | | | 3,5 | | |
| 400 | | | 3,7 | 2,1 | 2,1 | | | 3,3 | 3 | | | | | 1,8 | | | | 2,3 | | | | 3 | | | | | | | | | | |
| 450 | 1,6 | | | 2,6 | 2,6 | | | | | 1,6 | | | | 2,3 | | | | 3 | | | | | | | | | | | | | | |
| 500 | 2,1 | | | 3,3 | 3,3 | | | | | 2,1 | | | | 2,8 | | | | | | | | | | | | | | | | | | |
| 550 | 2,5 | | | | | 1,7 | | | | 2,5 | | | | 3,5 | | | | | | | | | | | | | | | | | | |
| 600 | 3 | | | | | 2,1 | | | | 3 | | | | | | | | | | | | | | | | | | | | | | |

## Applications

***All types of treatment (systemic and contact products) including liquid fertilizers.***

ALBUZ

**ISO**


# MVI

*Air induction Wide Angle Flat spray nozzle*

## Main characteristics

- Pink ALBUZ® ceramic orifice (excellent precision and high wear resistance).
- Flat fan pattern angle 130° to 160°.
- Big droplets with uniform distribution.
- Designed for all types of nozzles-holders, using the same cap as ALBUZ® APM nozzles.
- Full range with 10 models on ISO flow-rates.

## Specific characteristics

- Air-induction spray nozzle (venturi system): sprays large drops filled with air bubbles, which do not drift and produce fine droplets on contact with the plant.
- Almost totally eliminate drift, while increasing the number of impacts (excellent coverage of the treated zone).
- Anti-clogging design and double air-intake orifice.
- Easy dismantling for a good cleaning.
- **Recommended pressure: 1,5 bar.**


**1,5-4 bar**

**130°-160°**

### NOZZLE COLOR SELECTION - RECOMMENDED PRESSURE (BAR) NOZZLE SPACING 1 M

| Km/h | 4 | | | | 6 | | | | 8 | | | | 10 | | | | 12 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| l / ha | | | | | | | | | | | | | | | | | | | | |
| 40 | | | | | | | | | 2,3 | | | | 3,7 | 2 | | | | 2,9 | 1,9 | |
| 50 | | | | | 2 | | | | 3,7 | 2 | | | | 3,2 | 2,1 | | | | 3 | 2,1 |
| 60 | | | | | 2,9 | 1,6 | | | | 2,9 | 1,9 | | | | 3 | 2,1 | 1,6 | | | 3 |
| 80 | 2,3 | | | | | 2,9 | 1,9 | | | | 3,5 | 2,4 | 2,1 | | | 3,8 | 3 | 1,9 | | |
| 100 | 3,7 | 2 | | | | | 3 | 2,1 | 2,1 | | | 3,8 | 3,3 | 2 | | | | 3 | 2 | |
| 120 | | 2,9 | 1,9 | | 1,6 | | | 3 | 3 | 1,9 | | | | 3 | 2 | | | | 3 | 1,6 |
| 140 | | 0 | 2,6 | 1,8 | 2,3 | | | | | 2,6 | 1,8 | | | | 2,8 | 1,6 | | | | 2,3 |
| 160 | | 0 | 3,5 | 2,4 | 3 | 1,9 | | | | 3,4 | 2,3 | | | | 3,7 | 2,1 | 1,9 | | | 3 |
| 180 | 1,6 | 0 | 2,9 | 3 | 3,8 | 2,4 | 1,6 | | | | 3 | 1,6 | 1,6 | | | 2,6 | 2,4 | | | 3,8 |
| 200 | 2,1 | 0 | 3,6 | 3,8 | | 3 | 2 | | | | 3,7 | 2,1 | 2 | | | 3,3 | 3 | | | |
| 220 | 2,5 | 1,6 | 4,4 | | | 3,6 | 2,5 | | 1,6 | | | 2,5 | 2,5 | | | 4 | | | | |
| 240 | 3 | 1,9 | 5,2 | | | | 3 | 1,6 | 1,9 | | | 3 | 3 | | | | | | | |
| 260 | 3,5 | 2,2 | 1,5 | | | | 3,5 | 1,9 | 2,2 | | | 3,5 | 3,5 | | | | | | | |
| 280 | | 2,6 | 1,8 | | | | | 2,3 | 2,6 | | | | | | | | | | | |
| 300 | | 3 | 2 | | 1,6 | | | 2,6 | 3 | | | | | | | | | | | |
| 320 | | 3,4 | 2,3 | | 1,9 | | | 3 | 3,4 | | | | | | | | | | | |
| 340 | | | 2,6 | 1,5 | 2,1 | | | 3,4 | | | | | | | | | | | | |
| 360 | | | 3 | 1,6 | 2,4 | | | | | | | | | | | | | | | |
| 380 | | | 3,3 | 1,8 | 2,7 | | | | | | | | | | | | | | | |
| 400 | | | | 2,1 | 3 | | | | | | | | | | | | | | | |

### FLOW RATE CHART (L/MN)

| | Green 015 | Yellow 02 | Lilac 025 | Blue 03 | Red 04 | Brown 05 | Grey 06 | White 08 | clear blue 10 |
|---|---|---|---|---|---|---|---|---|---|
| 1,5 | 0,43 | 0,57 | 0,72 | 0,86 | 1,15 | 1,43 | 1,72 | 2,29 | 2,87 |
| 2 | 0,49 | 0,66 | 0,82 | 0,99 | 1,32 | 1,65 | 1,98 | 2,63 | 3,29 |
| 2,5 | 0,55 | 0,73 | 0,92 | 1,1 | 1,47 | 1,83 | 2,2 | 2,93 | 3,66 |
| 3 | 0,6 | 0,8 | 1 | 1,2 | 1,6 | 2 | 2,4 | 3,2 | 4 |
| 3,5 | 0,65 | 0,86 | 1,08 | 1,29 | 1,72 | 2,15 | 2,58 | 3,45 | 4,31 |
| 4 | 0,69 | 0,92 | 1,15 | 1,38 | 1,84 | 2,3 | 2,76 | 3,67 | 4,59 |

### ANGLE CHART

| bar | 1,5 | 2 | 3 |
|---|---|---|---|
| GREEN 015 | 130° | 135° | 140° |
| YELLOW 02 | 130° | 140° | 145° |
| LILAC 025 | 135° | 145° | 150° |
| BLUE 03 | 135° | 140° | 150° |
| RED 04 | 140° | 150° | 155° |
| BROWN 05 | 140° | 150° | 155° |
| GREY 06 | 140° | 150° | 155° |
| WHITE 08 | 145° | 150° | 155° |
| CLEAR BLUE 10 | 145° | 155° | 160° |

# Applications

*For herbicide and liquid fertilizer applications*


# APM

*Wide Angle Flat spray nozzle*

## Main characteristics

- Thanks to the exceptional wear resistance of ALBUZ® pink ceramic, these nozzles can be used to spray suspension fertilizers.
- Flat jet (30° to 165° angle) providing coarse droplets without drift.
- **Recommended pressure: 1 bar.**


**0,5-4 bar**

**30°-160°**

## Flow rate chart

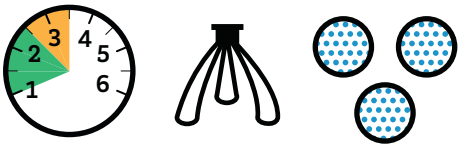
| bar | YELLOW | ORANGE | RED | GREEN | BLUE | GREY | BLACK |
|---|---|---|---|---|---|---|---|
| 0,5 | 0,39 | 0,64 | 0,97 | 1,30 | 1,62 | 2,30 | 3,00 |
| 1 | 0,55 | 0,91 | 1,37 | 1,84 | 2,29 | 3,25 | 4,24 |
| 1,5 | 0,67 | 1,12 | 1,68 | 2,25 | 2,80 | 3,98 | 5,19 |
| 2 | 0,78 | 1,29 | 1,94 | 2,60 | 3,23 | 4,60 | 6,00 |
| 2,5 | 0,87 | 1,44 | 2,17 | 2,90 | 3,61 | 5,14 | 6,70 |
| 3 | 0,95 | 1,58 | 2,38 | 3,18 | 3,96 | 5,63 | 7,35 |
| 3,5 | 1,03 | 1,71 | 2,57 | 3,43 | 4,28 | 6,08 | 7,93 |
| 4 | 1,10 | 1,82 | 2,74 | 3,68 | 4,58 | 6,50 | 8,48 |

| bar | YELLOW | ORANGE | RED | GREEN | BLUE | GREY | BLACK |
|---|---|---|---|---|---|---|---|
| 0,5 | 30° | 60° | 75° | 110° | 120° | 140° | 140° |
| 1 | 50° | 80° | 110° | 120° | 130° | 140° | 160° |
| 1,5 | 70° | 100° | 120° | 130° | 130° | 150° | 160° |
| 2 | 80° | 110° | 125° | 135° | 140° | 160° | 160° |
| 3 | 95° | 115° | 125° | 140° | 140° | 160° | 165° |
| 4 | 100° | 120° | 130° | 140° | 145° | 160° | 165° |

| water | Km / h | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| L / ha | 4 | | | | 5 | | | | 6 | | | | 7 | | | | 8 | | | | 9 | | | | 10 | | | |
| 50 | | | | | | 0,6 | | | | 0,8 | | | | 1,1 | | | 0,5 | | 1,5 | | 0,7 | | 1,9 | | 0,8 | | 2,3 | |
| 75 | | 0,8 | | | 0,5 | 1,3 | | | 0,7 | 1,9 | | | 0,9 | 2,5 | | | 1,2 | 0,5 | 3,3 | | 1,5 | 0,7 | | | 1,9 | 0,8 | | |
| 100 | | 1,5 | | | 0,8 | 2,3 | | | 1,2 | 3,3 | | | 1,6 | 0,7 | | | 2,1 | 0,9 | 0,5 | | 2,7 | 1,2 | 0,7 | | 3,3 | 1,5 | 0,8 | |
| 125 | 0,8 | 2,3 | | | 1,3 | 3,6 | | | 1,9 | 0,8 | | | 2,6 | 1,1 | 0,6 | | 3,3 | 1,5 | 0,8 | 0,5 | | 1,9 | 1 | 0,7 | | 2,3 | 1,3 | 0,6 |
| 150 | 1,2 | 3,3 | | | 1,9 | 0,8 | | | 2,7 | 1,2 | 0,7 | | 3,7 | 1,6 | 0,9 | | | 2,1 | 1,2 | 0,8 | | 2,7 | 1,5 | 1 | | 3,3 | 1,9 | 1,2 |
| 175 | 1,6 | 0,7 | | | 2,6 | 1,1 | 0,6 | | 3,7 | 1,6 | 0,9 | | | 2,2 | 1,2 | 0,8 | | 2,9 | 1,6 | 1 | | 3,6 | 2 | 1,3 | 0,8 | | 2,5 | 1,6 |
| 200 | 2,1 | 0,9 | 0,5 | | 3,3 | 1,5 | 0,8 | 0,5 | | 2,1 | 1,2 | 0,8 | | 2,9 | 1,6 | 1 | 0,7 | | 2,1 | 1,4 | 0,9 | | 2,7 | 1,7 | 1,1 | 0,6 | 3,3 | 2,1 |
| 250 | 3,3 | 1,5 | 0,8 | 0,5 | | 2,3 | 1,3 | 0,8 | | 3,3 | 1,9 | 1,2 | 0,8 | | 2,5 | 1,6 | 1,1 | | 3,3 | 2,1 | 1,3 | 08 | | 2,7 | 1,6 | 1 | | 3,3 |
| 300 | | 2,1 | 1,2 | 0,8 | 0,6 | 3,3 | 1,9 | 1,2 | 0,9 | | 2,7 | 1,7 | 1,2 | | 3,6 | 2,3 | 1,5 | 0,9 | | 3,1 | 1,9 | 1,1 | | 3,9 | 2,4 | 1,4 | | |
| 350 | 0,5 | 2,9 | 1,6 | 1 | 0,8 | | 2,5 | 1,6 | 1,2 | 0,7 | 3,6 | 2,3 | 1,6 | 0,9 | | 3,2 | 2,1 | 1,2 | | | 2,6 | 1,5 | | | 3,2 | 1,9 | | |
| 400 | 0,7 | | 2,1 | 1,4 | 1,1 | | 3,3 | 2,1 | 1,5 | 0,9 | | 3,1 | 2,1 | 1,2 | | | 2,7 | 1,5 | | | 3,4 | 2 | | | | 2,5 | | |
| 450 | 0,9 | | 2,7 | 1,7 | 1,3 | 0,8 | | 2,7 | 1,9 | 1,1 | | 3,9 | 2,6 | 1,5 | | | 3,4 | 2 | | | | 2,5 | | | | 3,1 | | |
| 500 | 1,1 | 0,6 | 3,3 | 2,1 | 1,6 | 1 | | 3,3 | 2,4 | 1,4 | | | 3,2 | 1,9 | | | | 2,5 | | | | 3,1 | | | | | | |
| 550 | 1,3 | 0,7 | | 2,5 | 2 | 1,2 | | | 2,9 | 1,7 | | | | 2,3 | | | | 3 | | | | | | | | | | |

ALBUZ

EUROPE


1–3,5 bar

## Main characteristics

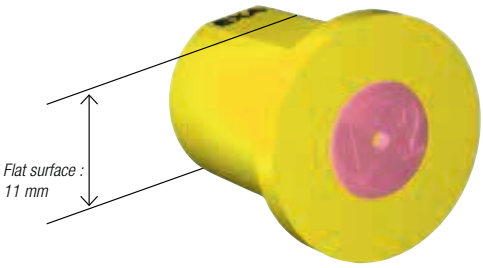
- Liquid fertilizer application.
- 3-stream orifice providing very coarse droplets.
- Boom height and the corresponding pressure provide a consistent distribution of the fertilizer.
- **Recommended pressure: 1 bar**

# EXA

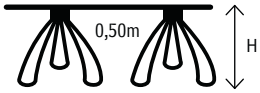
*3 jets Fertilizer nozzle*

### FLOW RATE CHART (L/MN)

| bar | YELLOW | RED | GREEN | BLUE | WHITE | BROWN | GREY | BLACK |
|---|---|---|---|---|---|---|---|---|
| 1 | 0,35 | 0,59 | 0,67 | 0,86 | 1,39 | 1,90 | 2,25 | 3,00 |
| 1,5 | 0,43 | 0,71 | 0,81 | 1,03 | 1,63 | 2,24 | 2,63 | 3,51 |
| 2 | 0,50 | 0,80 | 0,92 | 1,17 | 1,83 | 2,51 | 2,95 | 3,93 |
| 2,5 | 0,56 | 0,89 | 1,01 | 1,29 | 2,00 | 2,74 | 3,21 | 4,28 |
| 3 | 0,61 | 0,97 | 1,10 | 1,40 | 2,15 | 2,95 | 3,45 | 4,60 |
| 3,5 | 0,66 | 1,04 | 1,18 | 1,50 | 2,29 | 3,14 | 3,66 | 4,89 |




### BOOM HEIGHT (METERS)




### PRESSURE (BAR)


### NOZZLE COLOR SELECTION - RECOMMENDED PRESSURE (BAR) (NOZZLE SPACING : 1 M)

| Km / h | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Litres/ Hectares | | 6 | | | | | | 7 | | | | | | 8 | | | | | | 9 | | | | | | 10 | | | | | | 11 | | | | | | 12 | | | | | |
| Water | Nitrogen | P | H | P | H | P | H | P | H | P | H | P | H | P | H | P | H | P | H | P | H | P | H | P | H | P | H | P | H | P | H | P | H | P | H | P | H | P | H | P | H | P | H | P | H | P | H |
| 50 | 44 | | | | | | | | | | | | | | | | | | | | | | | | | 1,4 | 1,3 | | | | | 1,7 | 1,3 | | | | | | | | | | | | |
| 75 | 66 | | | | | | | 1,5 | 1,3 | | | | | 2 | 1,2 | | | | | 2,6 | 1,1 | | | | | 3,1 | 1,2 | | | | | | | 1,5 | 1,4 | | | | | 1,8 | 1,4 | 1,4 | 1,4 |
| 100 | 88 | 2 | 1,2 | | | | | 2,7 | 1,1 | | | | | 3,6 | 1 | 1,4 | 1,4 | | | | | 1,8 | 1,4 | 1,4 | 1,4 | | | 2,2 | 1,3 | 1,7 | 1,4 | 1,3 | 1,4 | 2,7 | 1,3 | 2,1 | 1,1 | 1,5 | 1,4 | 3,2 | 1,3 | 2,5 | 1,3 |
| 125 | 110 | 3,1 | 1,1 | | | | | | | 1,7 | 1,4 | | | | | 2,2 | 1,3 | 1,7 | 1,4 | | | 2,8 | 1,2 | 2,2 | 1,3 | 1,7 | 1,3 | 3,5 | 1,2 | 2,7 | 1,3 | 2 | 1,3 | | | 3,3 | 1,2 | 2,4 | 1,3 | | | | |
| 150 | 132 | | | 1,8 | 1,4 | | | 1,2 | 1,4 | 2,4 | 1,3 | 1,9 | 1,4 | 1,5 | 1,4 | 3,2 | 1,2 | 2,5 | 1,3 | 1,9 | 1,3 | | | 3,1 | 1,2 | 2,4 | 1,3 | | | | | 2,9 | 1,3 | | | | | 3,4 | 1,2 | 1,5 | 1,2 | | |
| 175 | 154 | 1,2 | 1,3 | 2,4 | 1,,3 | 1,9 | 1,4 | 1,6 | 1,3 | 3,3 | 1,2 | 2,6 | 1,3 | 2,1 | 1,3 | | | 3,4 | 1,2 | 2,6 | 1,3 | | | | | 3,3 | 1,2 | 1,4 | 1,2 | | | | | 1,7 | 1,2 | | | | | 2 | 1,2 | | |
| 200 | 176 | 1,5 | 1,3 | 3,2 | 1,2 | 2,5 | 1,3 | 2,1 | 1,3 | | | 3,4 | 1,2 | 2,7 | 1,3 | | | | | 3,4 | 1,2 | 1,5 | 1,2 | | | | | 1,8 | 1,2 | | | | | 2,2 | 1,2 | | | 1,4 | 1,3 | 2,6 | 1,2 | | |
| 250 | 220 | 2,4 | 1,2 | | | | | | | | | | | | | 1,8 | 1,2 | | | | | 2,3 | 1,2 | | | 1,5 | 1,2 | 2,8 | 1,1 | | | 1,8 | 1,2 | 3,4 | 1,1 | | | 2,2 | 1,2 | | | 1,6 | 1,3 |
| 300 | 264 | | | 1,5 | 1,2 | | | | | 2 | 1,2 | | | 1,4 | 1,3 | 2,6 | 1,1 | | | 1,7 | 1,2 | 3,3 | 1,1 | | | 2,2 | 1,2 | | | 1,6 | 1,3 | 2,6 | 1,2 | | | 1,9 | 1,3 | 3,1 | 1,1 | 1,3 | 1,4 | 2,3 | 1,3 |
| 350 | 308 | | | 2 | 1,2 | | | 1,4 | 1,3 | 2,7 | 1,1 | | | 1,9 | 1,2 | 3,5 | 1,1 | | | 2,4 | 1,2 | | | 1,7 | 1,3 | 2,9 | 1,1 | | | 2,1 | 1,3 | 3,5 | 1,1 | 1,5 | 1,3 | 2,6 | 1,2 | | | 1,7 | 1,3 | 3,1 | 1,2 |
| 400 | 352 | 1,4 | 1,3 | 2,6 | 1,1 | | | 1,9 | 1,2 | 3,5 | 1,1 | | | 2,5 | 1,2 | | | 1,8 | 1,3 | 3,1 | 1,1 | | | 2,3 | 1,3 | | | 1,6 | 1,3 | 2,8 | 1,2 | | | 1,9 | 1,2 | 3,4 | 1,1 | | | 2,3 | 1,2 | | |
| 450 | 396 | 1,7 | 1,3 | 3,3 | 1,1 | | | 2,4 | 1,2 | 1,7 | 1,3 | | | 3,1 | 1,1 | | | 2,3 | 1,3 | | | 1,6 | 1,3 | 2,9 | 1,2 | | | 2 | 1,2 | 3,5 | 1,1 | | | 2,4 | 1,2 | | | | | 2,9 | 1,1 | | |
| 500 | 440 | 2,2 | 1,2 | 1,6 | 1,3 | | | 2,9 | 1,1 | 2,1 | 1,3 | | | | | 1,6 | 1,3 | 2,8 | 1,2 | | | 2 | 1,2 | 3,5 | 1,1 | | | 2,5 | 1,2 | | | | | 3 | 1,1 | | | | | | | | |
| 550 | 484 | 2,6 | 1,2 | 1,9 | 1,3 | 1,1 | 1,3 | | | 2,6 | 1,2 | 1,5 | 1,3 | | | 1,9 | 1,2 | 3,4 | 1,1 | | | 2,4 | 1,2 | | | | | 3 | 1,1 | | | | | | | | | | | | | | |
| 600 | 528 | | | 2,3 | 1,2 | 1,3 | 1,3 | | | 3,1 | 1,1 | 1,7 | 1,3 | | | 2,3 | 1,2 | | | | | 2,9 | 1,1 | | | | | 3,5 | 1,1 | | | | | | | | | | | | | | |

OTHER APPLICATIONS


# ESI

*6 jets Fertilizer nozzle*

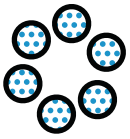
## Main characteristics

- Pink ALBUZ® ceramic calibrated orifice (excellent precision and high wear resistance),
- ISO colour coded and flow rated but with an ALBUZ® 11 mm plastic body shape. Cap fitted with 7° to 10° offset angle from boom position,
- Orifices: 6 streams providing very coarse droplets improving fertilizer distribution.
- **Recommended pressure : 1.5 bar**

## Recommendations

- **The recommended boom height is 60 cm (23.6 inches) from the target; that is similar to the ISO 110° flat-fan nozzle height recommendations.**


**1-4 bar**



## Flow rate chart

| bar | 015 | 02 | 025 | 03 | 04 | 05 | 06 |
|---|---|---|---|---|---|---|---|
| 1 | 0,37 | 0,52 | 0,64 | 0,77 | 1,03 | 1,35 | 1,62 |
| 1,5 | 0,44 | 0,61 | 0,76 | 0,91 | 1,21 | 1,56 | 1,87 |
| 2 | 0,50 | 0,68 | 0,85 | 1,02 | 1,36 | 1,73 | 2,07 |
| 2,5 | 0,55 | 0,74 | 0,93 | 1,12 | 1,49 | 1,87 | 2,25 |
| 3 | 0,60 | 0,80 | 1,00 | 1,20 | 1,60 | 2,00 | 2,40 |
| 3,5 | 0,64 | 0,85 | 1,06 | 1,28 | 1,7 | 2,11 | 2,54 |
| 4 | 0,68 | 0,9 | 1,12 | 1,35 | 1,8 | 2,22 | 2,66 |

| l / ha | | Nozzle spacing : 50 cm | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| WATER | AZOTE | 5 km/h | | | 7 km/h | | | 8 km/h | | | 9 km/h | | | 10 km/h | | | 12 km/h | | | 15 km/h | | |
| 50 | 44 | | | | | | | | | | | 1 | | | 1,3 | | | 2,0 | | | 3,3 | 1,6 |
| 75 | 66 | | | | | 1,4 | | | 2 | | | 2,6 | 1,2 | | 3,3 | 1,6 | | 1,5 | 2,6 | 2,6 | | 1,6 |
| 100 | 88 | | 1,3 | | | 2,8 | 1,4 | 1,1 | 3,8 | 1,9 | | 1,5 | 2,6 | 1,2 | 1,9 | 3,3 | 1,9 | | 3 | | 1,6 | 3,3 |
| 125 | 110 | | 2,2 | | | 1,4 | 2,4 | 1,2 | 1,9 | 3,3 | 1,6 | | 2,6 | 2,1 | | 3,3 | 3,3 | 1,6 | | | 2,8 | 1,5 |
| 150 | 132 | | 3,3 | 1,6 | 1,3 | 2,1 | 3,8 | 1,9 | | 3 | 2,5 | 1,2 | 4 | 3,3 | 1,6 | | | 2,5 | 1,3 | 1,5 | | 2,5 |
| 175 | 154 | | 1,4 | 2,4 | 2,0 | | 3,2 | 2,8 | 1,3 | | 3,8 | 1,8 | | | 2,4 | | 1,2 | 3,8 | 2,1 | 2,3 | | 3,8 |
| 200 | 176 | 1,2 | 1,9 | 3,3 | 2,8 | 1,3 | | 3,8 | 1,9 | 1 | | 3,3 | 1,3 | 1,1 | 3,3 | 1,8 | 1,8 | | 3,0 | 3,4 | | |
| 250 | 220 | 2,1 | 1,0 | 3,3 | | 2,4 | 1,2 | 1,1 | 3,3 | 1,8 | 1,5 | | 2,5 | 2,0 | | 3,4 | 3,4 | | | | | |
| 300 | 264 | 3,3 | 1,6 | | 1,2 | 3,8 | 2,1 | 1,8 | | 3,0 | 2,5 | | | 3,4 | | | | | | | | |
| 350 | 308 | | 2,4 | 1,2 | 1,9 | | 3,2 | 2,8 | | | 3,9 | | | | | | | | | | | |
| 400 | 352 | 1,1 | 3,3 | 1,8 | 2,8 | | | | | | | | | | | | | | | | | |
| 450 | 396 | 1,5 | | 2,5 | | | | | | | | | | | | | | | | | | |
| 500 | 440 | 2 | | 3,4 | | | | | | | | | | | | | | | | | | |
| 550 | 484 | 2,6 | | | | | | | | | | | | | | | | | | | | |

NEW

ALBUZ

ISO

*ISO colour code*

# FESI

*6 Jets Cap*
*Fertilizer nozzle*

## Main characteristics

- Pink Albuz ceramic calibrated orifice (excellent precision and high wear resistance)
- ISO colour coded and flow rated.
- Orifices : 6 stream providing very coarse droplets improving fertilizer distribution

## Recommendations

- The recommended boom height is 60 cm (23.6 inches) from the target; that is similar to the 110° flat fan nozzle (AXI / ADI/ AVI).
- **Recommended pressure : 1.5 bar**


**1-4 bar**

## Flow rate chart

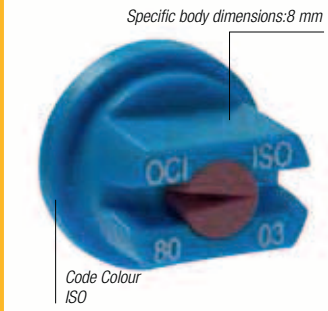
| bar | 08 | 10 | 15 |
|---|---|---|---|
| 1 | 1,91 | 2,86 | 3,58 |
| 1,5 | 2,31 | 3,47 | 4,33 |
| 2 | 2,64 | 3,97 | 4,96 |
| 2,5 | 2,94 | 4,41 | 5,51 |
| 3 | 3,20 | 4,80 | 6,00 |
| 3,5 | 3,44 | 5,16 | 6,45 |
| 4 | 3,66 | 5,49 | 6,87 |

| l / ha | | Nozzle spacing : 50 cm | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| WATER | NITROGEN | 5 km/h | | | 7 km/h | | | 8 km/h | | | 9 km/h | | | 10 km/h | | | 12 km/h | | | 15 km/h | | | 18 km/h | | | 20 km/h | | |
| 50 | 44 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 75 | 66 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 100 | 88 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 125 | 110 | | | | | | | | | | | | | | | | | | | | | | | | | 1,2 | | |
| 150 | 132 | | | | | | | | | | | | | | | | | | | | | | 1,4 | | | 1,8 | 1,1 | |
| 175 | 154 | | | | | | | | | | | | | | | | | | | 1,3 | | | 2 | 1,2 | | 2,5 | 1,5 | |
| 200 | 176 | | | | | | | | | | | | | | | | 1,1 | | | 1,8 | 1,1 | | 2,6 | 1,6 | | | 2 | |
| 250 | 220 | | | | | | | | | | 1 | | | 1,2 | | | 1,8 | 1,1 | | 2,9 | 1,8 | | | 2,6 | | | | 1,4 |
| 300 | 264 | | | | | | | 1,1 | | | 1,4 | | | 1,8 | 1,1 | | 2,6 | 1,6 | | | 2,6 | 1,1 | | | 1,6 | | | 2 |
| 350 | 308 | | | | 1,2 | | | 1,5 | | | 2 | 1,2 | | 2,5 | 1,5 | | | 2,3 | 1 | | | 1,5 | | | 2,3 | | | 2,8 |
| 400 | 352 | | | | 1,5 | | | 2 | 1,3 | | 2,6 | 1,6 | | | 2 | | | 3 | 1,3 | | | 2 | | | 3 | | | |
| 450 | 396 | 1 | | | 2 | 1,2 | | 2,6 | 1,6 | | | 2,1 | | | 2,6 | 1,1 | | | 1,6 | | | 2,6 | | | | | | |
| 500 | 440 | 1,2 | | | 2,5 | 1,5 | | | 2 | | | 2,6 | 1,1 | | | 1,4 | | | 2 | | | | | | | | | |
| 550 | 484 | 1,5 | | | 3 | 1,9 | | | 2,5 | 1,1 | | | 1,4 | | | 1,7 | | | 2,5 | | | | | | | | | |
| 600 | 528 | 1,8 | 1,1 | | | 2,3 | 1 | | 3 | 1,3 | | | 1,6 | | | 2 | | | 3 | | | | | | | | | |

OTHER APPLICATIONS

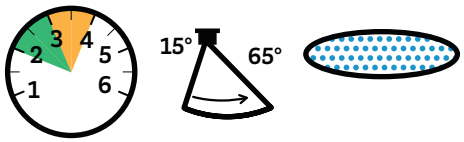
ALBUZ

# ISO




## Main characteristics

- Pink ALBUZ® ceramic orifice (excellent precision and high wear resistance).
- Flat fan pattern angle 80°.
- Improves applications near sensitive areas: water courses, field edges... (see graphs below).
- Designed for all types of nozzle holders, using the same cap as ALBUZ® APE nozzles.
- All types of treatments (pesticides, insecticides, herbicides, etc)
- **Recommended pressure: 2 bar.**




**2-4 bar**

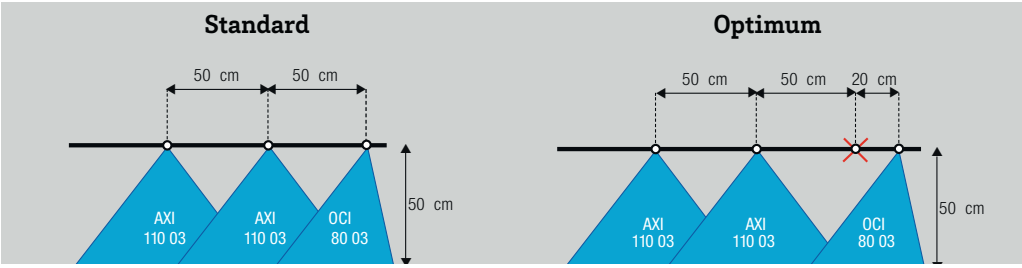
OCI

*Off center nozzle*

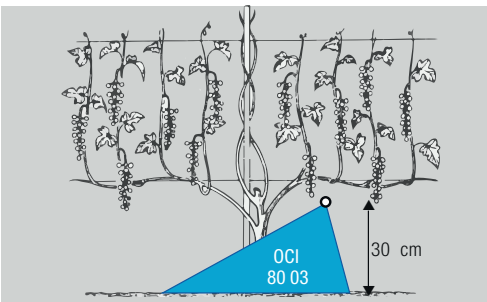
## Flow rate chart

| Colour | ISO code | # | (bar) | l/mn | Liters / hectare - nozzle spacing: 50 cm | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 4 km/h | 5 km/h | 6 km/h | 7 km/h | 8 km/h | 9 km/h | 10 km/h | 12 km/h | 14 km/h | 16 km/h | 18km/h | 20km/h |
| YELLOW | OCI 8002 | 100 Mesh | 2 | 0,65 | 195 | 156 | 130 | 111 | 98 | 87 | 78 | 65 | 56 | 49 | 43 | 39 |
| | | | 3 | 0,80 | 240 | 192 | 160 | 137 | 120 | 107 | 96 | 80 | 69 | 60 | 53 | 48 |
| | | | 4 | 0,91 | 273 | 218 | 182 | 156 | 137 | 121 | 109 | 91 | 78 | 68 | 61 | 55 |
| BLUE | OCI 8003 | 50 Mesh | 2 | 0,98 | 294 | 235 | 196 | 168 | 147 | 131 | 118 | 98 | 84 | 74 | 65 | 59 |
| | | | 3 | 1,20 | 360 | 288 | 240 | 206 | 180 | 160 | 144 | 120 | 103 | 90 | 80 | 72 |
| | | | 4 | 1,39 | 417 | 334 | 278 | 238 | 209 | 185 | 167 | 139 | 119 | 104 | 93 | 83 |
| RED | OCI 8004 | 50 Mesh | 2 | 1,31 | 393 | 314 | 262 | 225 | 197 | 175 | 157 | 131 | 112 | 98 | 87 | 79 |
| | | | 3 | 1,60 | 480 | 384 | 320 | 274 | 240 | 213 | 192 | 160 | 137 | 120 | 107 | 96 |
| | | | 4 | 1,85 | 555 | 444 | 370 | 317 | 278 | 247 | 222 | 185 | 159 | 139 | 123 | 111 |

### TREATMENT ON BOOM




### TREATMENT ON PLANTS




OTHER APPLICATIONS

NEW

*Applications*

***All types of treatments (systemic and contact products) including fertilizers.***

ALBUZ

ISO


# CVI-OC

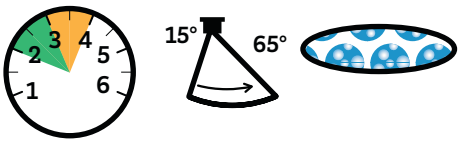
*Compact Air induction off center spray nozzle*

## Main characteristics

- Designed to be used over a wide range of pressures ( from 1.5 bar to 3 bar)
- Pink Albuz ceramic orifice ( excellent precision and high wear resistance)
- Flat fan pattern , 80° spray angle
- Designed for all types of nozzle holders using the same cap as AXI nozzle.

## Specific characteristics

- Air Induction spray nozzles ( Venturi system): spray large drops filled with air bubbles, which do not drift and produce fine droplets in contact with the plant.
- Almost totally eliminate drift, while increasing the number of impacts (excellent coverage of treated zone)
- Improve applications near sensitive areas when used on boom end (see picture 1)
- Optimize quality application when used on boom end - 20 cm ( see picture 2)
- **Recommended pressure : 2 bar**

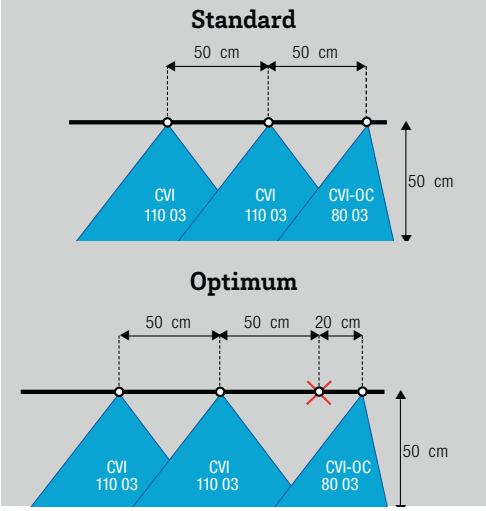



**2-4 bar**

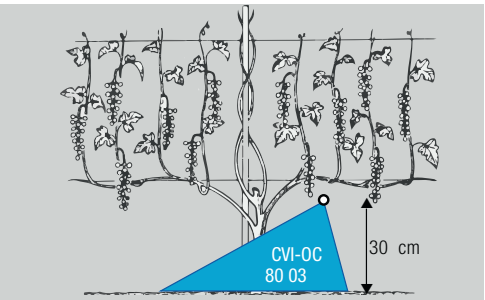
## Flow rate chart

| Colour | ISO code | # | (bar) | | l/mn | Liters / hectare - Nozzle spacing: 50 cm | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 9 km/h | 10 km/h | 12 km/h | 14 km/h | 16 km/h | 18km/h | 20km/h | 22km/h | 24km/h | 26km/h |
| YELLOW | CVI-OC 80 02 | 100 Mesh | 1,5 | TG | 0,57 | 76 | 68 | 57 | 49 | 43 | 38 | 34 | 31 | 29 | 26 |
| | | | 2 | TG | 0,66 | 88 | 79 | 66 | 57 | 50 | 44 | 44 | 35 | 33 | 30 |
| | | | 2,5 | TG | 0,73 | 97 | 88 | 73 | 63 | 55 | 49 | 48 | 40 | 37 | 34 |
| | | | 3 | G | 0,80 | 107 | 96 | 80 | 69 | 60 | 53 | 52 | 44 | 40 | 37 |
| LILAC | CVI-OC 80 025 | 50 Mesh | 1,5 | TG | 0,71 | 95 | 85 | 71 | 61 | 53 | 47 | 35 | 39 | 36 | 33 |
| | | | 2 | TG | 0,82 | 109 | 98 | 82 | 70 | 62 | 55 | 49 | 45 | 41 | 38 |
| | | | 2,5 | G | 0,91 | 121 | 109 | 91 | 78 | 68 | 61 | 55 | 50 | 46 | 42 |
| | | | 3 | G | 1,00 | 133 | 120 | 100 | 86 | 75 | 67 | 60 | 55 | 50 | 46 |
| BLUE | CVI-OC 80 03 | 50 Mesh | 1,5 | TG | 0,85 | 113 | 102 | 85 | 73 | 64 | 57 | 51 | 46 | 43 | 39 |
| | | | 2 | TG | 0,98 | 131 | 118 | 98 | 84 | 74 | 65 | 66 | 53 | 49 | 45 |
| | | | 2,5 | G | 1,10 | 147 | 132 | 110 | 94 | 83 | 73 | 72 | 60 | 55 | 51 |
| | | | 3 | G | 1,20 | 160 | 144 | 120 | 103 | 90 | 80 | 78 | 65 | 60 | 55 |

### *TREATMENT ON BOOM* *(drawing 2)*




### *TREATMENT ON PLANTS* *(drawing 1)*




OTHER APPLICATIONS

ALBUZ

ISO

## Applications

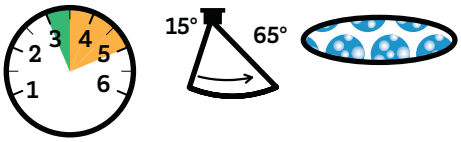
***All types of treatments (systemic and contact products) including fertilizers.***


# AVI-OC

*Air injected off center nozzle*

## Main characteristics

- **Designed to be used over a wide range of pressures (from 3 to 5 bar).**
- Pink ALBUZ® ceramic orifice (excellent precision and high wear resistance).
- Flat fan pattern, 80° spray angle.
- Designed for all types of nozzle holders, using the same cap as ALBUZ® APE nozzles




3-5 bar

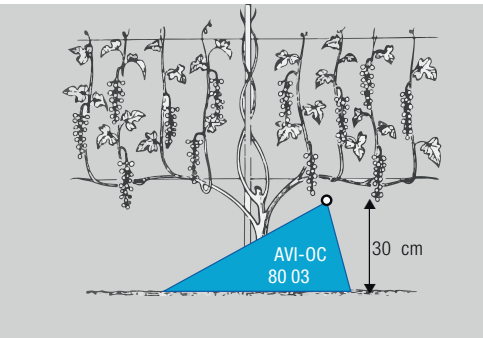
## Specific characteristics

- Air induction spray nozzles (Venturi system): spray large drops filled with air bubbles, which do not drift and produce fine droplets in contact with the plant.
- Almost totally eliminate drift, while increasing the number of impacts (excellent coverage of the treated zone).
- Improve applications near sensitive areas when used on boom end (see picture 1 and picture 2 below).
- **Recommended pressure: 3 bar.**

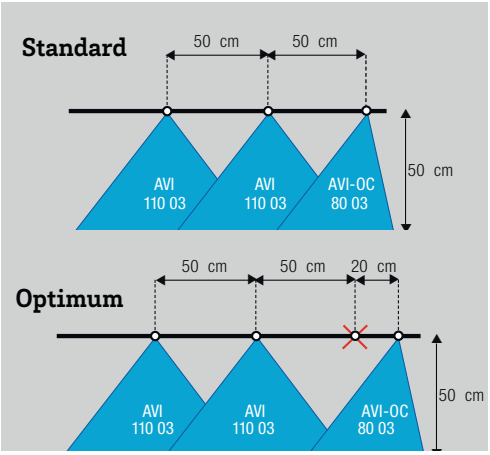
## Flow rate chart

| Colour | ISO code | # | (bar) | l/mn | Liters / hectare - Nozzle spacing : 50 cm | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 4 km/h | 5 km/h | 6 km/h | 7 km/h | 8 km/h | 9 km/h | 10 km/h | 12 km/h | 14 km/h | 16 km/h | 18km/h | 20km/h |
| ORANGE | AVI-OC 8001 | 100 Mesh | 3 | 0,40 | 120 | 96 | 80 | 69 | 60 | 53 | 48 | 40 | 34 | 30 | 27 | 24 |
| | | | 4 | 0,46 | 138 | 110 | 92 | 79 | 69 | 61 | 55 | 46 | 39 | 35 | 31 | 28 |
| | | | 5 | 0,52 | 156 | 125 | 104 | 89 | 78 | 69 | 62 | 52 | 45 | 39 | 35 | 31 |
| GREEN | AVI-OC 80015 | 100 Mesh | 3 | 0,60 | 180 | 144 | 120 | 103 | 90 | 80 | 72 | 60 | 51 | 45 | 40 | 36 |
| | | | 4 | 0,69 | 207 | 166 | 138 | 118 | 104 | 92 | 83 | 69 | 59 | 52 | 46 | 41 |
| | | | 5 | 0,77 | 231 | 185 | 154 | 132 | 116 | 103 | 92 | 77 | 66 | 58 | 51 | 46 |
| YELLOW | AVI-OC 8002 | 100 Mesh | 3 | 0,80 | 240 | 192 | 160 | 137 | 120 | 107 | 96 | 80 | 69 | 60 | 53 | 48 |
| | | | 4 | 0,91 | 273 | 218 | 182 | 156 | 137 | 121 | 109 | 91 | 78 | 68 | 61 | 55 |
| | | | 5 | 1,03 | 309 | 247 | 206 | 177 | 155 | 137 | 124 | 103 | 88 | 77 | 69 | 62 |
| LILAC | AVI-OC 80025 | 50 Mesh | 3 | 1,00 | 300 | 240 | 200 | 171 | 150 | 133 | 120 | 100 | 86 | 75 | 67 | 60 |
| | | | 4 | 1,15 | 345 | 276 | 230 | 197 | 173 | 153 | 138 | 115 | 99 | 86 | 77 | 69 |
| | | | 5 | 1,29 | 387 | 310 | 258 | 221 | 194 | 172 | 155 | 129 | 111 | 97 | 86 | 77 |
| BLUE | AVI-OC 8003 | 50 Mesh | 3 | 1,20 | 360 | 288 | 240 | 206 | 180 | 160 | 144 | 120 | 103 | 90 | 80 | 72 |
| | | | 4 | 1,39 | 417 | 334 | 278 | 238 | 209 | 185 | 167 | 139 | 119 | 104 | 93 | 83 |
| | | | 5 | 1,55 | 465 | 372 | 310 | 266 | 233 | 207 | 186 | 155 | 133 | 116 | 103 | 93 |
| RED | AVI-OC 8004 | 50 Mesh | 3 | 1,60 | 480 | 384 | 320 | 274 | 240 | 213 | 192 | 160 | 137 | 120 | 107 | 96 |
| | | | 4 | 1,85 | 555 | 444 | 370 | 317 | 278 | 247 | 222 | 185 | 159 | 139 | 123 | 111 |
| | | | 5 | 2,07 | 621 | 497 | 414 | 355 | 311 | 276 | 248 | 207 | 177 | 155 | 138 | 124 |
| NEW BROWN | AVI-OC 8005 | 50 Mesh | 3 | 2,00 | 600 | 480 | 400 | 343 | 300 | 267 | 240 | 200 | 171 | 150 | 133 | 120 |
| | | | 4 | 2,31 | 693 | 554 | 462 | 396 | 347 | 308 | 277 | 231 | 198 | 173 | 154 | 139 |
| | | | 5 | 2,58 | 774 | 619 | 516 | 442 | 387 | 344 | 310 | 258 | 221 | 194 | 172 | 155 |

### TREATMENT ON PLANTS *(drawing 1)*




### TREATMENT ON BOOM *(drawing 2)*



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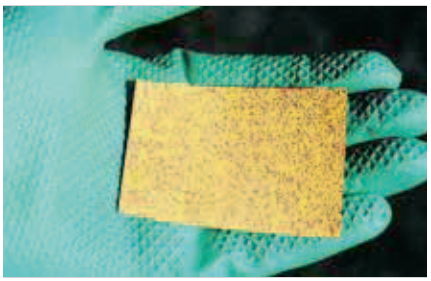
*www.albuz-spray.com*

## Nozzle blister packaging


This packaging has been especially designed for self-service. Nozzles are packed in blisters of 8 pieces except for AVI-OC models and OCI (2 nozzles per blister). On the back of the cardboard label you will find the flow rate chart.

## Water sensitive paper



The special coating of hydro sensitive and oleo sensitive papers will enable you to evaluate spray coverage and the density of droplets. You can then check the spraying quality of your nozzles.

| Oleo sensitive paper | | |
|---|---|---|
| Reference | Paper size | Quantity per pack |
| 039 549 | 76 mm x 52 mm | 50 cards |

| Water sensitive paper | | |
|---|---|---|
| Reference | Paper size | Quantity per pack |
| 039 547 | 76 mm x 26 mm | 50 cards |
| 039 548 | 76 mm x 52 mm | 50 cards |

## Nozzle cleaning brush

**The maintenance of your nozzles is essential. While protecting your nozzles, you save money and time.**

### WINTERIZING

Do not forget to clean your nozzles before winter

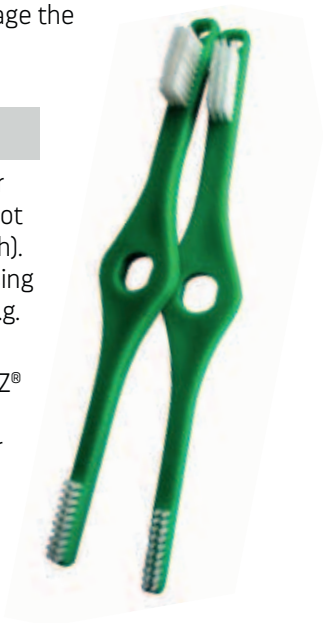
### UNCLOGGING

Remove the nozzles from the nozzle holder and brush them with our ALBUZ® nozzle cleaning brush (important: do not use metal materials such as a knife or wire, which will damage the nozzle).

### CLEANING

Blow compressed air into the nozzle (do not blow with your mouth). Rinse the nozzles using a descaling agent (e.g. Antikal).

After cleaning, ALBUZ® nozzles will be in perfect condition for the next use.



# Sprayer calibration

## FIELD CROP SPRAYERS

**DRIVING SPEED (KM / H) =**

$$\frac{\text{Distance (m)} \times 3{,}6}{\text{Time (s)}}$$

**REQUIRED PRESSURE (BAR) =**

$$\left(\frac{\text{Required output (l/min)}}{\text{Known output (l/min)}}\right)^2 \times \text{Known (bar) pressure}$$

**APPLICATION VOLUME (L/HA) =**

$$\frac{600 \times \text{l / min (per nozzle)}}{\text{Nozzle spacing (m)} \times \text{km / h}}$$

**NOZZLE OUTPUT =**

$$\frac{\text{Nozzle spacing (m)} \times \text{l / ha} \times \text{km / h}}{600}$$

## AIR ASSISTED SPRAYERS

**Determination the size of the nozzles**

To determine the total application volume of the nozzles, you first have to establish the speed of the sprayers and the volume per hectare from the chemical manufacturers recommendations on the product label

**TOTAL L/MIN =**

$$\frac{\text{Row width (m)} \times \text{l / ha} \times \text{km / h}}{600}$$

This amount has to be divided between all the nozzles in function on the mistblower

# Conversion factors

| | Pressure | Flow rate | Volume | Length | Speed |
|---|---|---|---|---|---|
| **Unit** | 1 bar | 1 l/min | 1 l/hac | 1 cm | 1 km/h |
| **US metrics** | 14,51 PSI | 0,26 GPM | 0,11 GPA | 0,39 inch | 0,62 mille/h |

# Filters

## FILTERS PROTECT

A clogged or partially clogged nozzle will be less efficient in spraying your treatments, because it changes the nozzle flowrate and spray pattern. Please ensure that you select the correct filter to use with the specific nozzles you are using, as per our recommendations.

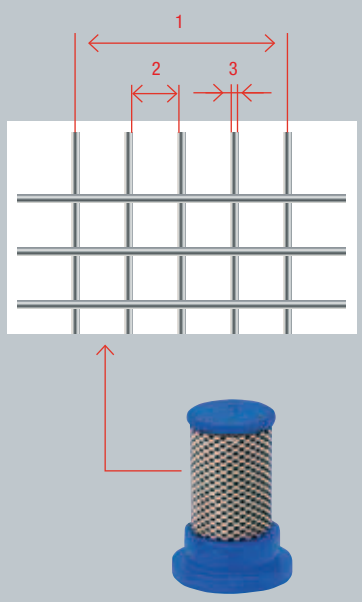
## FILTER CHOICE

There are various models of filters. You will find information in the chart to help you to choose the correct filter.

**Presentation of filter models according to ISO 19 732 standard**

| Colour | Number of wires per inch* (1) | spacing between wires (2) X Diameter of wire (mesh) (3) |
|---|---|---|
| | 16 | 1,25 x 0,32 - 1,40 x 0,25 |
| | 25/30 | 0,45 x 0,32 - 0,63 x 0,16 |
| | 50/60 | 0,28 x 0,22 - 0,35 x 0,18 |
| | 80 | 0,18 x 0,14 - 0,23 x 0,10 |
| | 100 | 0,14 x 0,11 - 0,18 x 0,08 |
| | 150 | 0,10 x 0,07 |
| | 200 | 0,07 x 0,06 - 0,08 x 0,05 |

*1 inch = 2,54 cm



# Liquid fertilizers

Flow rate charts in this catalogue are based on clean water. In order to determine the volume of liquid fertilizer per hectare, use the appropriate conversion factor so as to adapt it to our flow rate charts. Multiply the required flow rate of liquid (in l per min) by the conversion factor of water. The new flow rate obtained in l per min will be found in the flow rate chart; from that value one can find the appropriate nozzle. For example: 150 l/ha of a nitrogen solution at 1.28 kg/l x 1.13 = 170 l/ha of water.

| Density - kg/l | Conversion factors |
|---|---|
| 1,00 - WATER | 1,00 |
| 1,08 | 1,04 |
| 1,20 | 1,10 |
| 1,28 - NITROGEN | 1,13 |

THE RIGHT TO MAKE TECHNICAL AND DESIGN MODIFICATIONS IN THE COURSE OF CONTINUOUS PRODUCT DEVELOPMENT REMAINS RESERVED.

# Nozzle cross-reference chart

| ALBUZ | agrotop | HYPRO | LECHLER | TeeJet | |
|---|---|---|---|---|---|
| **AXI** 80°/110° | SPRAY MAX | VP | LU-C | XR | |
| **ADI** 110° | | LOWDRIFT | AD-C | DG | |
| **CVI** 110° | AIRMIX | GUARDIAN | IDKC | AIXR | |
| **CVI-OC** 80° | AIRMIX OC | | IDKS | | |
| **CVI-TWIN** 110° | | | | | |
| **AVI** 110° | TURBODROP | DB | ID3C | AI | |
| **AVI-OC** 80° | | | IS | AIUB | |
| **AVI-TWIN** 110° | AIRMIX DS | TWC + DB (x2) | | TIJ | |
| **ATR** 80° | | HCX | TR | TRX | |
| **ATR** 60° | | | | | |
| **TVI** 80° | AIRMIX HC | | ITR | AITXB | |
| **ATI** 80° | | | | TXB | |
| **ATI** 60° | | | | | |
| **ATF** 80° | | | | | |
| **ESI EXA** | | FCHESI | FL | SJ7 | SJ3 |
| **APM** | DT | DT | | TF | |
| **MVI** | | | FT | TK | |

**Plastics - Ceramics - Stainless steel**

# ALBUZ

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ALBUZ PLANT

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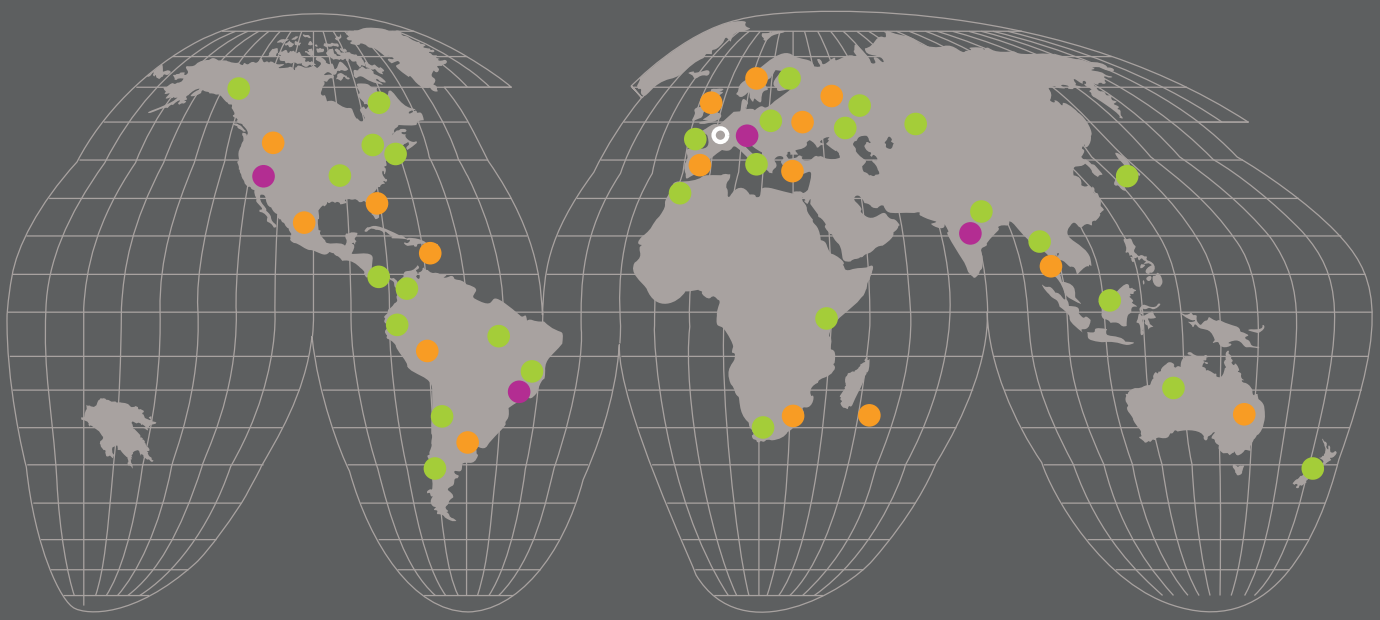

## Quick and simple, select and order your spray nozzles !


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