



ALBUZ®

LEADER IN CERAMIC SPRAY NOZZLES



SPRAY NOZZLES



LOW CROPS



ORCHARD / VINEYARD



OTHER APPLICATIONS

Precision • Resistance • Efficacy • Longevity



> Comparative wear test

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.

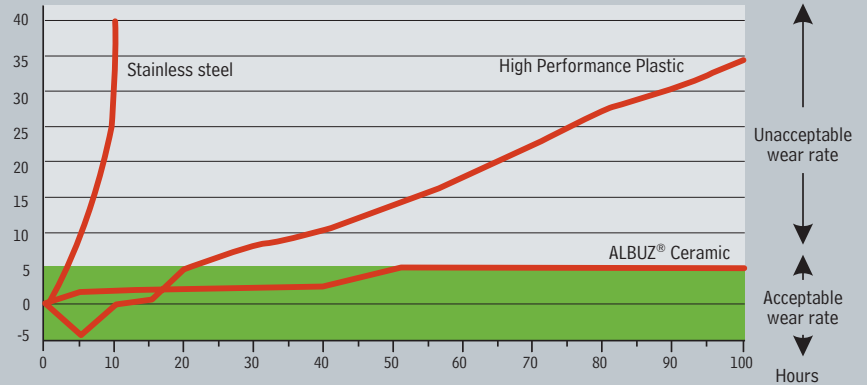
The manufacturing, from raw materials to assembly and quality control, is done in our plant in Normandy, France.

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.

Variation in flow rate (*)



(*) 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

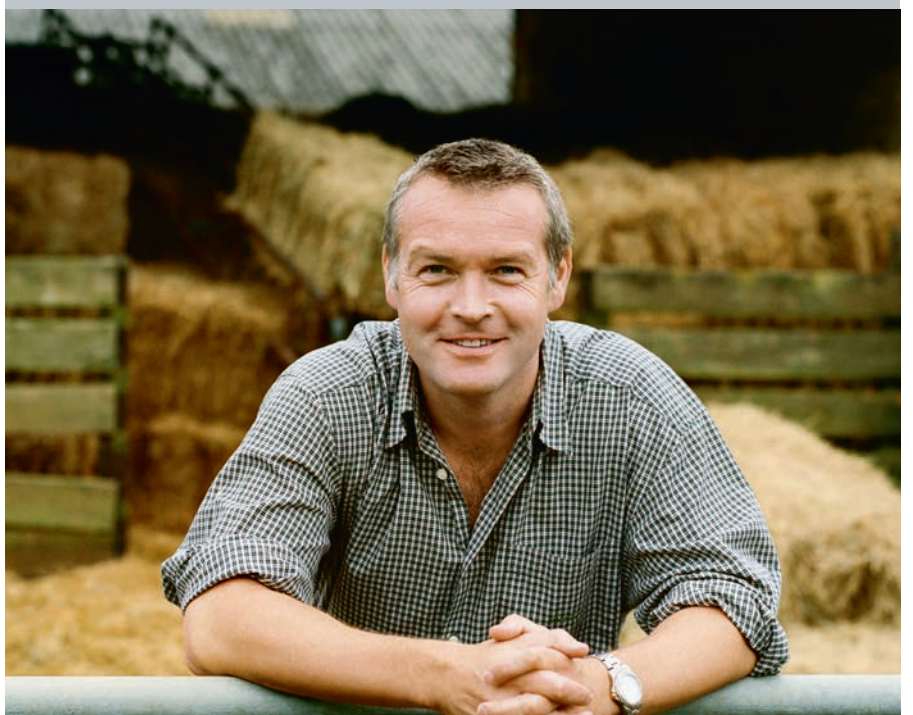
Stainless steel Nozzle



Before



After 50 h



SUMMARY



Low crops

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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.

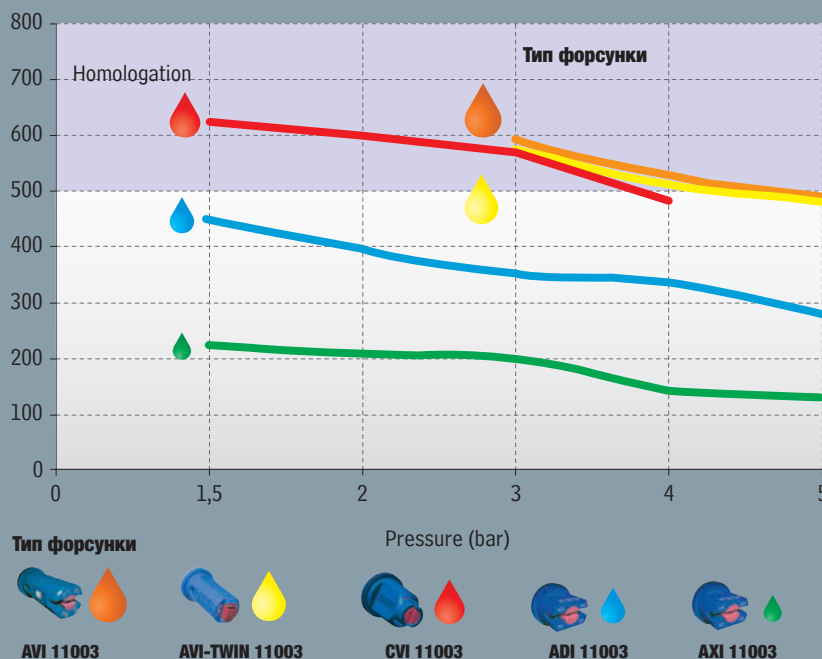
> DROPLET SIZE

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.
- **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.
- **Medium:** (e.g. ADI) nozzles which produce medium droplets are less prone to produce drift, depending on the pressure used.



➤ 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	F
7	VF	VF	VF	VF	F	F	F	F	F	F
10	VF	VF	VF	VF	F	F	F	F	F	F
15	VF	VF	VF	VF	VF	VF	VF	VF	VF	VF
20	VF	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	F	F	F
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
3	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)

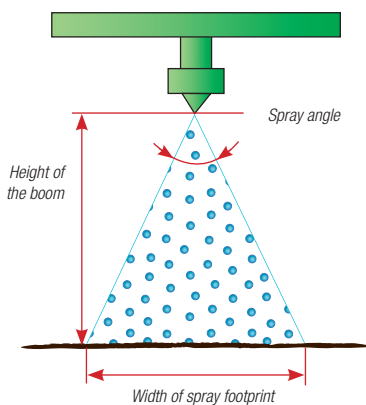
Values measured on the VMD or D50 on IRSTEA Dantec pda.

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

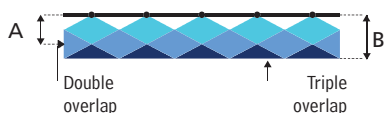
The chart below indicates the theoretical overlap of spray patterns. The theoretical width of nozzle spray is determined by the spray angle and by the nozzle height above the target. Considering the effect of earth gravity, the higher the nozzle above the target, the narrower the spray footprint of each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



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

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



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 pattering, 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 pattering, 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

Colour	ISO code	Mesh	(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	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	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	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

Sprayer speed

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



SELECTING YOUR NOZZLES



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

* for a low pressure



ORCHARD, VINEYARD | HOLLOW CONE NOZZLE

OTHER SPRAYINGS



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

TYPE OF NOZZLES	IMAGE	SPRAY PATTERN	DROPLETS SIZE CHARACTERISTICS	DRIFT HAZARDS	PRESSURE RANGE	HERBICIDES		FUNGICIDES		INSECTICIDES		LIQUID FERTILIZER
						Incorporated treatment	Taken	Contact	Systemic	Contact	Systemic	
MSI Wide Angle Flat spray nozzle				Medium	0,5 - 4 bar	Very Good	Very Good	Good		Good		
MVI Air induction Wide Angle Flat spray nozzle				Very Low	1,5 - 4 bar	Very Good	Very Good	Good		Good		
EXA 3 jets Fertilizer nozzle				Very Low	1 - 3 bar							Very Good
FESI 6 Jets Cap Fertilizer nozzle				Very Low	1,2 - 4 bar							Very Good
ESI 6 jets Fertilizer nozzle				Very Low	1,2 - 4 bar							Very Good
OCI Off center nozzle				Medium	2 - 4 bar	Good	Good	Good	Good	Very Good*	Good	Very Good
CVI-OC Compact Air induction off center spray nozzle				Very Low	2 - 4 bar	Very Good	Very Good	Good	Very Good	Good	Very Good	Very Good
AVI-OC Air injected off center nozzle				Very Low	3 - 5 bar	Very Good	Very Good	Good	Very Good	Good	Very Good	Very Good

specific body dimensions: 11 mm



European Colour code

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°



APE

Standard flat spray nozzle

Flow rate chart

Colour	(bar)	Drop	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
ORANGE	4	VF	0,70	105	84	70	60	53	47	42	38
	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
RED	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
	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
GREEN	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
	2	F	1,40	210	168	140	120	105	93	84	76
TURQUOISE	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
BLUE	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
GREY	4	F	2,39	359	287	239	205	179	159	143	130
	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
BLACK	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
	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
IVORY	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
	2	C	3,95	592	473	395	338	296	263	237	215
WHITE	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
WHITE	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
WHITE	4	C	7,94	1191	953	794	681	596	529	476	433
	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
WHITE	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

EUROPE

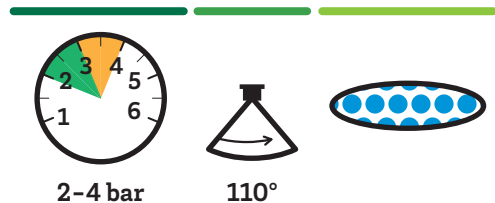
Main characteristics

- › 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.**

Specific body dimensions: 11 mm



2-4 bar

110°

Colour	Mesh	(bar)	Drop	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

Flow rate chart

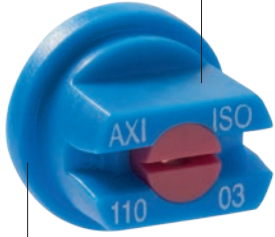
Drift reduction flat spray nozzle

ADE



LOW CROPS

Specific body dimensions: 8 mm



ISO colour code

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.**

AXI

Extended range flat spray nozzle



1,5-3 bar



80-110°

1,5 bar



3 bar

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



Flow rate chart

Colour	ISO code	Mesh	(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	1,5	F	F	0,42	63	56
			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	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	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	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	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	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	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	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



Applications

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

ALBUZ

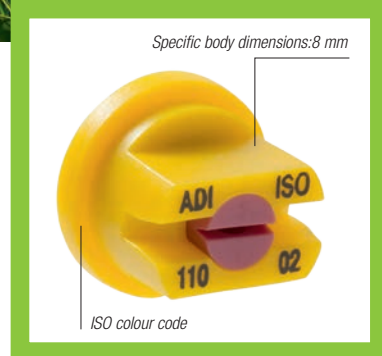
ISO

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



Colour	ISO code	Mesh	(bar)	M	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	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	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	F	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	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	F	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	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	F	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	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	F	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	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	F	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

Flow rate chart

ADI 110°
Drift reduction flat
spray nozzle



LOW
CROPS

Specific body dimensions: 8 mm



ISO colour code

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).

Specific characteristics

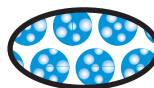
- Air induction spray nozzle (venturi system): sprays large drops filled with air bubbles which do not drift and which burst into fine droplets on contact with the plant.
- Almost totally eliminate drift, while increasing the number of impacts (excellent coverage of the treated zone).
- Anti-clogging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



1,5-5 bar



110°



CVI 110°

Low pressure Air induction flat spray nozzle



LOW CROPS

Flow rate chart	Colour	ISO code	Mesh	(bar)	Drop	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	TG	0,42	56	50	42	36	32	28	25	23	21	19	
			2	TG	0,49	65	59	49	42	37	33	29	27	25	23	
			2,5	TG	0,54	72	65	54	46	41	36	32	30	28	25	
			3	TG	0,60	80	72	60	51	45	40	36	33	30	28	
			4	G	0,69	92	83	69	59	52	46	41	38	35	32	
YELLOW	CVI 11002	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	
			4	G	0,91	121	109	91	78	68	61	55	50	46	42	
LILAC	CVI 110025	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	
			4	G	1,15	153	138	115	99	86	77	69	63	58	53	
BLUE	CVI 11003	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	
			4	G	1,39	185	167	139	119	104	93	83	76	70	64	
RED	CVI 11004	50 Mesh	1,5	TG	1,13	151	136	113	97	85	75	68	62	57	52	
			2	G	1,31	175	157	131	112	98	87	80	71	66	60	
			2,5	G	1,46	195	175	146	125	110	97	87	80	73	67	
			3	G	1,60	213	192	160	137	120	107	94	87	80	74	
			4	TG	1,85	247	222	185	159	139	123	111	101	93	85	
BROWN	CVI 11005	50 Mesh	1,5	TG	1,41	188	169	141	121	106	94	85	77	71	65	
			2	G	1,63	217	196	163	140	122	109	98	89	82	75	
			2,5	G	1,82	247	220	183	156	137	121	110	100	92	84	
			3	G	2,00	267	240	200	171	150	133	120	109	100	92	
			4	xG	2,31	308	277	231	198	173	154	139	126	116	107	
			5	TG	2,58	344	310	258	221	194	172	155	141	129	119	

Applications

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

ALBUZ

ISO

Main characteristics

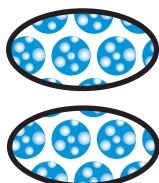
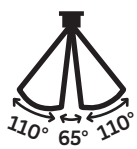
- > Designed to be used over a wide range of pressures (from 1.5 to 3 bar).
- > Pink ALBUZ® ceramic Double-orifices (excellent precision and high wear resistance).
- > Flat fan pattern angle 110°. Wide angle flat spray: overlap required to ensure uniform distribution on the ground.
- > Designed for all 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 length) adapted to all booms and nozzles-holders.
- > **Minimum height boom recommended: 50/60 cm.**
- > **Recommended pressure: 2 bar.**
- > **Use 80 mesh filters for green (015) and yellow (02) models.**



1,5-5 bar



Colour	ISO code	Mesh	(bar)	Drop	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 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 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 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 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 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	

Flow rate chart

CVI-TWIN

Low pressure Air induction
Twin flat spray nozzle



LOW CROPS

Specific body dimension : 11 mm



ISO colour code

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.

Specific characteristics

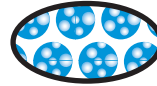
- > Air-injected spray nozzle (venturi system) : sprays large drops charged with air bubbles which do not drift and become fine droplets in contact with the plant.
- > Almost totally eliminate drift, while increasing the number of impacts (excellent coverage of the treated zone).
- > Anti-clogging design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



3-5 bar



110°



AVI 110°

Air induction flat spray nozzle

Flow rate chart



Colour	ISO code	Mesh	(bar)	Drop	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

* this nozzle was before black color



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

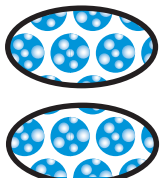
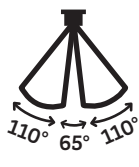
ISO

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.**

Specific body dimensions: 11 mm



ISO colour code

AVI-TWIN

Air induction Twin flat spray nozzle

Flow rate chart

Colour	ISO code	Mesh	(bar)	I/mm	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	20 km/h	22 km/h	24 km/h	26 km/h	
ORANGE	AVI-TWIN 11001	100	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	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	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	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	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	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	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	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

Applications

For fungicides and insecticides.
Recommended for orchard and vineyards.



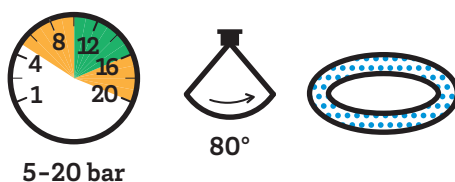
European Colour code

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)



ATR 80°

Hollow cone nozzle

Flow rate chart

bar	l/mn										
	WHITE	LILAC	BROWN	YELLOW	ORANGE	RED	GREY	GREEN	BLACK	BLUE	PURPLE
											NEW
5	0,27	0,36	0,48	0,73	0,99	1,38	1,50	1,78	2,00	2,45	3,05
6	0,29	0,39	0,52	0,80	1,08	1,51	1,63	1,94	2,18	2,67	3,32
7	0,32	0,42	0,56	0,86	1,17	1,62	1,76	2,09	2,35	2,87	3,57
8	0,34	0,45	0,60	0,92	1,24	1,73	1,87	2,22	2,50	3,06	3,81
9	0,36	0,48	0,64	0,97	1,32	1,83	1,98	2,35	2,64	3,24	4,03
10	0,38	0,50	0,67	1,03	1,39	1,92	2,08	2,47	2,78	3,40	4,23
11	0,39	0,52	0,70	1,07	1,45	2,01	2,17	2,58	2,90	3,56	4,43
12	0,41	0,55	0,73	1,12	1,51	2,09	2,26	2,69	3,03	3,71	4,61
13	0,43	0,57	0,76	1,17	1,57	2,17	2,35	2,79	3,14	3,85	4,79
14	0,44	0,59	0,79	1,21	1,63	2,25	2,43	2,89	3,26	3,99	4,96
15	0,46	0,61	0,81	1,25	1,69	2,33	2,51	2,99	3,36	4,12	5,12
16	0,47	0,63	0,84	1,29	1,74	2,40	2,59	3,08	3,47	4,25	5,28
17	0,48	0,64	0,86	1,33	1,79	2,47	2,67	3,17	3,57	4,37	5,43
18	0,50	0,66	0,89	1,37	1,84	2,54	2,74	3,25	3,67	4,49	5,58
19	0,51	0,68	0,91	1,40	1,89	2,60	2,81	3,34	3,76	4,61	5,73
20	0,52	0,70	0,93	1,44	1,94	2,67	2,88	3,42	3,85	4,72	5,87
21	0,54	0,71	0,95	1,48	1,99	2,73	2,95	3,50	3,94	4,84	6,00
22	0,55	0,73	0,98	1,51	2,03	2,79	3,01	3,57	4,03	4,94	6,14
23	0,56	0,74	1,00	1,54	2,07	2,85	3,07	3,65	4,12	5,05	6,27
24	0,57	0,76	1,02	1,58	2,12	2,91	3,14	3,72	4,20	5,15	6,4
25	0,58	0,77	1,04	1,61	2,16	2,97	3,20	3,80	4,28	5,25	6,52





Applications

For fungicides and insecticides.
Recommended for orchard and vineyards.

ALBUZ

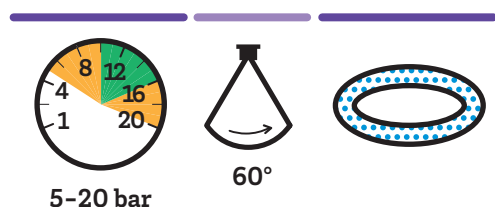
EUROPE

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.

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)



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

Flow rate chart

Hollow cone
nozzle
ATR 60°



ORCHARD
VINEYARD



ISO colour code

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.

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)



5-20 bar



80°



ATI 80°

Hollow cone nozzle

Flow rate chart

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

NEW





Applications

For fungicides and insecticides.
Recommended for orchard and vineyards.

ALBUZ

ISO

Main characteristics

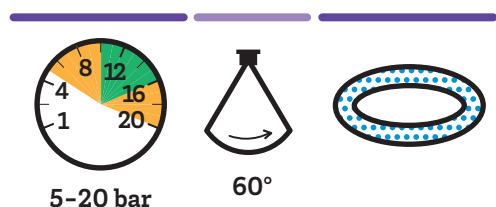
- > Angle of 60° at 5 bar.
- > Hollow cone nozzle producing fine droplets.
- > The **green cap** is used to specify that the nozzle has an angle of 60 degrees.
- > ALBUZ® durable pink ceramic allows high pressure spraying while maintaining nozzle performance and precision.

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)



ISO colour code



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

Flow rate chart

ATI 60°
Hollow cone
nozzle



**ORCHARD
VINEYARD**

ISO

Applications

For fungicides and insecticides.

Recommended for orchard and vineyards.

Recommended to work on a dense vegetation.



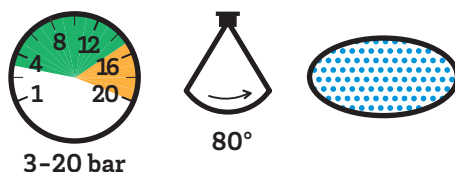
ISO colour code

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.

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)



3-20 bar

80°

Full cone
ATF 80°
nozzle

Flow rate chart

COLOUR	ISO code	Mesh	(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	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	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	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	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	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
BROWN	ATF 80 05	50	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

NEW

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

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.

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)



ISO colour code



5-20 bar



80°



IMPORTANT !

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

bar	l / mn							
	PURPLE 80-0050	PINK 80-0075	ORANGE 80-01	GREEN 80-015	YELLOW 80-02	LILAC 80-025	BLUE 80-03	RED 80-04
	JKI G 1752		JKI G 1751			JKI 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

Flow rate chart

TVI 80°

Air Induction Hollow
Cone spray nozzle



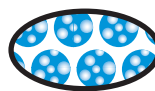
**ORCHARD
VINEYARD**

Specific body dimensions: 11 mm



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

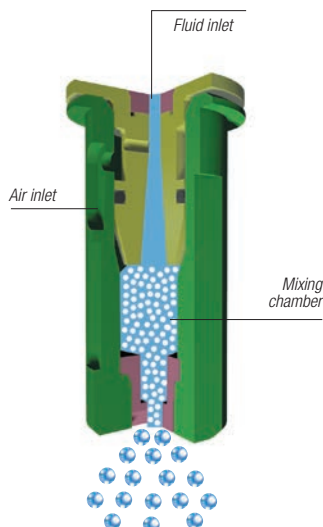
- > Air induction nozzle (Venturi System): sprays large droplets charged with air bubbles, which minimise drift, burst on impact with the target, spreading fine droplets over the plant surfaces.
- > Increase retention of the product on the foliage, and reduce product losses to the ground.
- > Reduce 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**

AVI 80°

Air induction flat spray nozzle

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	1,73	2,31	2,89	3,46	4,62





Applications

Particularly recommended for the application of systemic and contact products.

ALBUZ

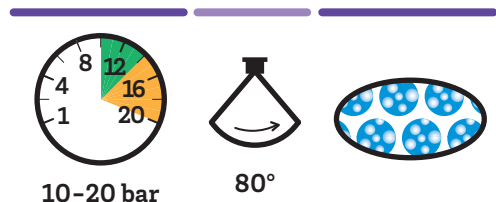
ISO




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.

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.**



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	1,73	2,31	2,89	3,46	4,62

Flow rate chart

CVI 80°
Compact Air induction flat spray nozzle

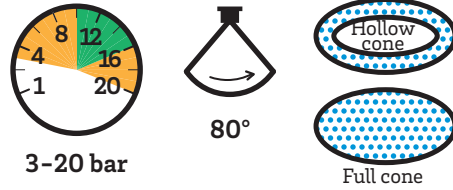


ORCHARD VINEYARD



Specific characteristics

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



DISC & CORE

Ceramic hollow-cone nozzle



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°

Applications

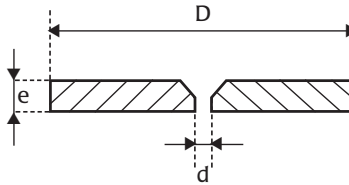
ALBUZ ceramic characteristics allow spraying high pressures while maintaining performance and precision.

Exist in several dimensions: diameters 7, 10, 12, 15 and 18mm.



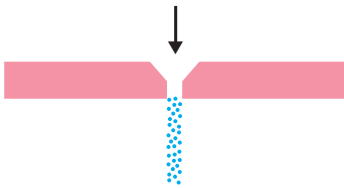
0°

Drawing 1



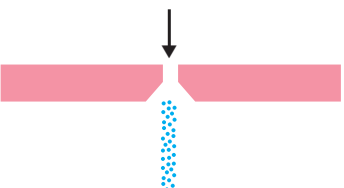
REF	7010	7011	7012	7015	7018	7020	7023	15007	15008	15010	15012	15015	15018	15020	15023	15030	15040	15060	18008	18010	18012	18015	18018	18020	18023
D (mm)	7							15											18						
d* (mm)	1,0	1,1	1,2	1,5	1,8	2,0	2,3	0,7	0,8	1,0	1,2	1,5	1,8	2,0	2,3	3,0	4,0	6,0	0,8	1,1	1,2	1,5	1,8	2,0	2,3
e (mm)	3,1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

AMT

Metering Disc

Specific body dimensions: 11 mm



ISO colour code

Main characteristics

- > Thanks to the exceptional wear resistance of Albus 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°



MSI

Wide Angle Flat spray nozzle

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	BLUE	RED	BROWN	GREY	WHITE	CLEAR BLUE	CLEAR GREEN
1	96	96	96	104	108	117	133	150
1,5	103	103	104	110	114	122	140	154
2	107	108	111	114	118	127	142	156
3	112	113	116	116	124	132	144	160
4	116	116	121	122	128	135	147	162

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

water l / ha	Km / h																						
	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		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			2,5		3,5									
600	3					2,1			3														



Applications

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

ALBUZ

ISO

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.**
- > Use 100 mesh nozzle filters for models 80 015 and 80 02.



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°

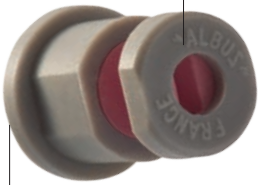
MVI

Air induction Wide Angle Flat spray nozzle



OTHER APPLICATIONS

Specific body dimensions : 11 mm



European Colour code

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°



APM

Wide Angle Flat spray nozzle

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

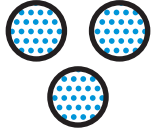
bar	YELLOW	ORANGE	RED	GREEN	BLUE	GREY	BLACK
0,5	30°	60°	75°	110°	120°	140°	140°
1	50°	80°	110°	120°	130°	140°	160°
1,5	70°	100°	120°	130°	130°	150°	160°
2	80°	110°	125°	135°	140°	160°	160°
3	95°	115°	125°	140°	140°	160°	165°
4	100°	120°	130°	140°	145°	160°	165°

water L / ha	Km / h																											
	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	0,8		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												





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

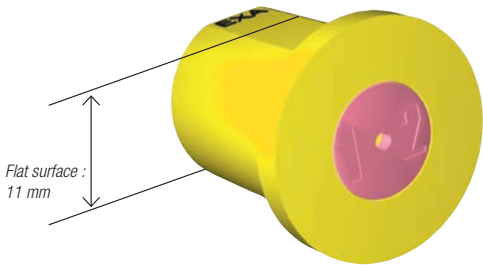
Specific body dimensions: 11 mm



European Colour code

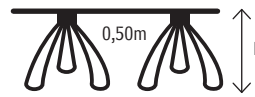
FLOW RATE CHART (L/MN)

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



Flat surface : 11 mm

BOOM HEIGHT (METERS)



PRESSURE (BAR)



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

Water / Litres / Hectares	Km / h																																			
	6				7				8				9				10				11				12											
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				
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	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	1,3	1,9	1,4	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			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					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
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	1,2	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										

EXA

3 jets Fertilizer nozzle



OTHER APPLICATIONS

Specific body dimensions: 11 mm



ISO colour code

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

ESI

6 jets Fertilizer nozzle

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		2,6	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

ISO

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

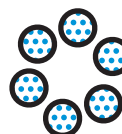
- > The recommended boom height is 60 cm (23.6 inches) from the target; that is similar to the 110° flat fan nozzle (AXI / ADI/ AVI).
- > **Recommended pressure : 1.5 bar**



ISO colour code



1-4 bar



Flow rate chart

bar	08	10	15
1	1,91	2,39	3,58
1,5	2,31	2,89	4,33
2	2,64	3,31	4,96
2,5	2,94	3,67	5,51
3	3,20	4,00	6,00
3,5	3,44	4,3	6,45
4	3,66	4,58	6,87

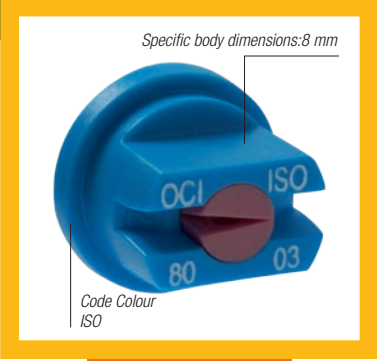
l / ha		Nozzle spacing : 50 cm											
WATER	NITROGEN	5 km/h	7 km/h	8 km/h	9 km/h	10 km/h	12 km/h	15 km/h	18 km/h	20 km/h			
50	44												
75	66												
100	88												
125	110										1,2		
150	132								1,4	1,8	1,1		
175	154							1,3	2	1,2	2,5	1,5	
200	176						1,1	1,8	1,1	2,6	1,6	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			

FESI

6 Jets Cap
Fertilizer nozzle



OTHER APPLICATIONS

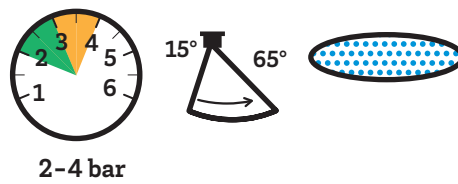


Main characteristics

- > 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.**

OCI

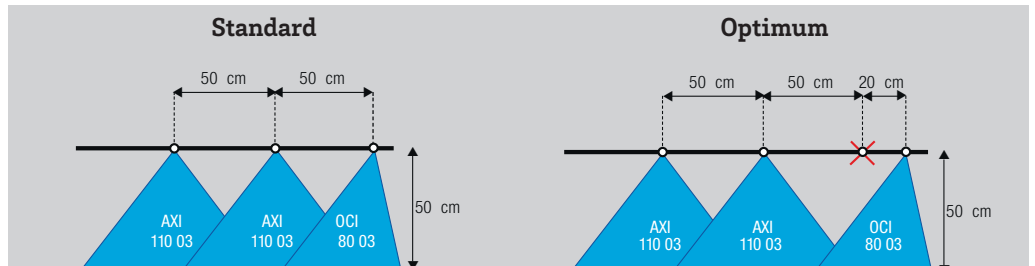
Off center nozzle



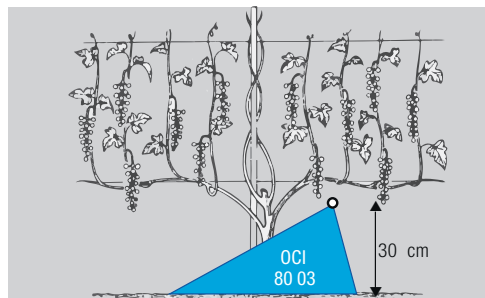
Flow rate chart

Colour	ISO code	Mesh	(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	18 km/h	20 km/h
YELLOW	OCI 8002	100	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	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	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



Applications

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

ALBUZ

NEW

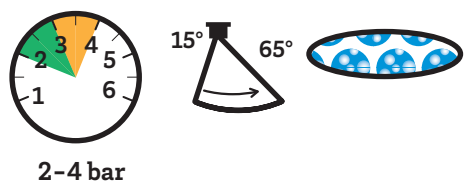
ISO

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**



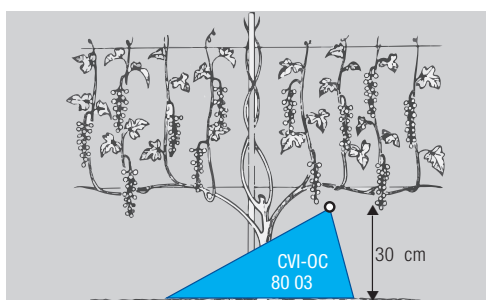
Colour	ISO code	Mesh	(bar)	l/mn	Liters / hectare - Nozzle spacing: 50 cm										
					9 km/h	10 km/h	12 km/h	14 km/h	16 km/h	18km/h	20km/h	22km/h	24km/h	26km/h	
YELLOW	CVI-OC 80 02	100	1,5	TG	0,57	76	68	57	49	43	38	34	31	29	26
			2	TG	0,66	88	79	66	57	50	44	44	35	33	30
			2,5	TG	0,73	97	88	73	63	55	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	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	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

Flow rate chart

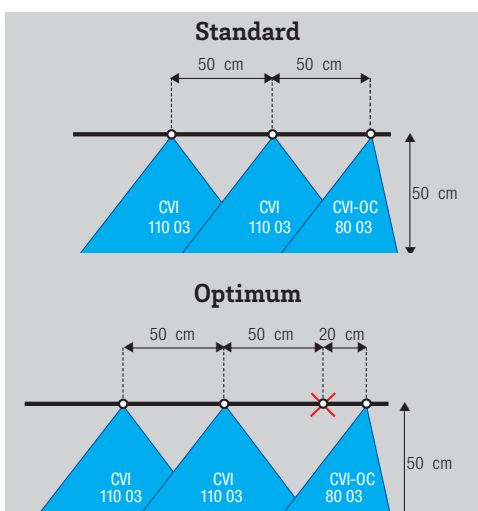
CVI-OC

Compact Air induction off center spray nozzle

TREATMENT ON PLANTS (drawing 1)



TREATMENT ON BOOM (drawing 2)



OTHER APPLICATIONS

Specific body dimensions: 11 mm



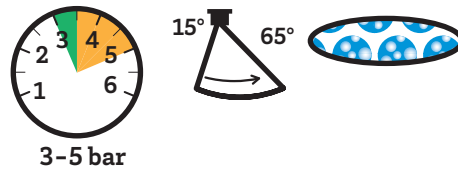
ISO colour code

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

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.



AVI-OC

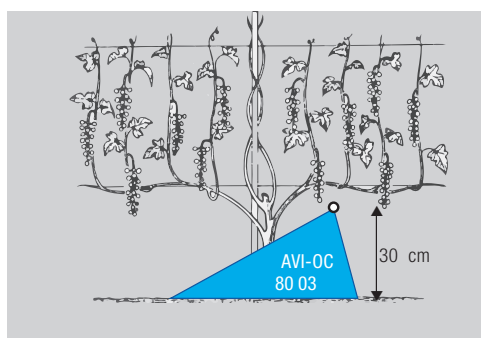
Air injected off center nozzle

Flow rate chart

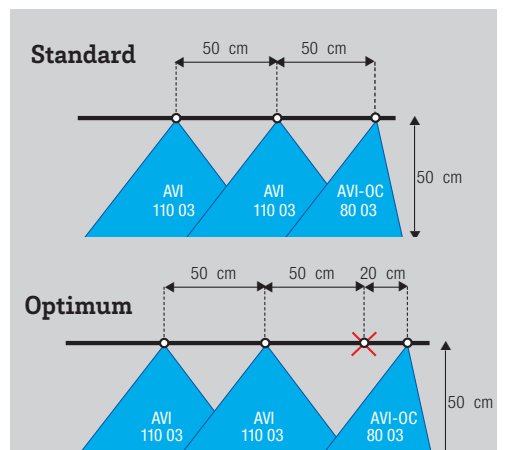
Colour	ISO code	Mesh	(bar)	l/mn	Liters / hectare - Nozzle spacing : 50 cm											
					4 km/h	5 km/h	6 km/h	7 km/h	8 km/h	9 km/h	10 km/h	12 km/h	14 km/h	16 km/h	18 km/h	20 km/h
ORANGE	AVI-OC 8001	100	3	0,40	120	96	80	69	60	53	48	40	34	30	27	24
			4	0,46	138	110	92	79	69	61	55	46	39	35	31	28
			5	0,52	156	125	104	89	78	69	62	52	45	39	35	31
GREEN	AVI-OC 80015	100	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	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	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	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	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
BROWN	AVI-OC 8005	50	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

NEW

TREATMENT ON PLANTS (drawing 1)



TREATMENT ON BOOM (drawing 2)



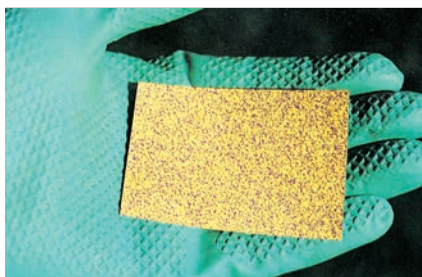
Find our range on
www.albuz-spray.com

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 papers will enable you to evaluate spray coverage and the density of droplets. You can then check the spraying quality of your nozzles.

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 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

$$\text{DRIVING SPEED (KM/H)} = \frac{\text{Distance (m)} \times 3,6}{\text{Time (s)}}$$

$$\text{REQUIRED PRESSURE (BAR)} =$$

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

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

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

> 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

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

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

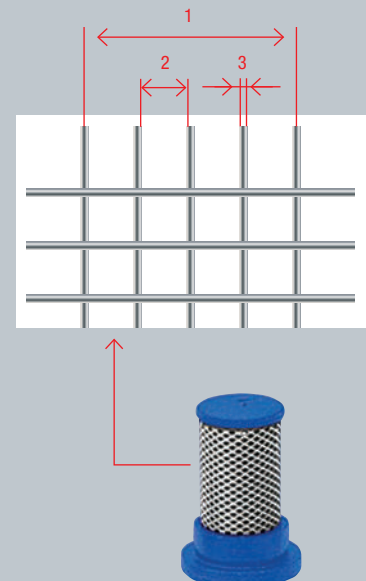
A clogged or partially clogged nozzle will be less efficient in spraying your treatments, because it changes the nozzle flowrate and spray pattern. Please ensure that you select the correct filter to use with the specific nozzles you are using, as per our recommendations.

> 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)
Brown	16	1,25 x 0,32
		1,40 x 0,25
Red	25/30	0,45 x 0,32
		0,63 x 0,16
Blue	50/60	0,28 x 0,22
		0,35 x 0,18
Yellow	80	0,18 x 0,14
		0,23 x 0,10
Green	100	0,14 x 0,11
		0,18 x 0,08
Orange	150	0,10 x 0,07
		0,07 x 0,06
Pink	200	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 113 = 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



Nozzle cross-reference chart

ALBUZ	agrotop	HYPRO	LEHLER	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		FCHESE	FL	SJ7	SJ3
APM	DT	DT		TF	
MVI			FT	TK	

Plastics -
 Ceramics -
 Stainless steel

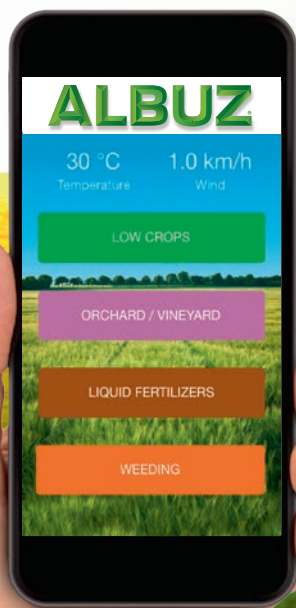
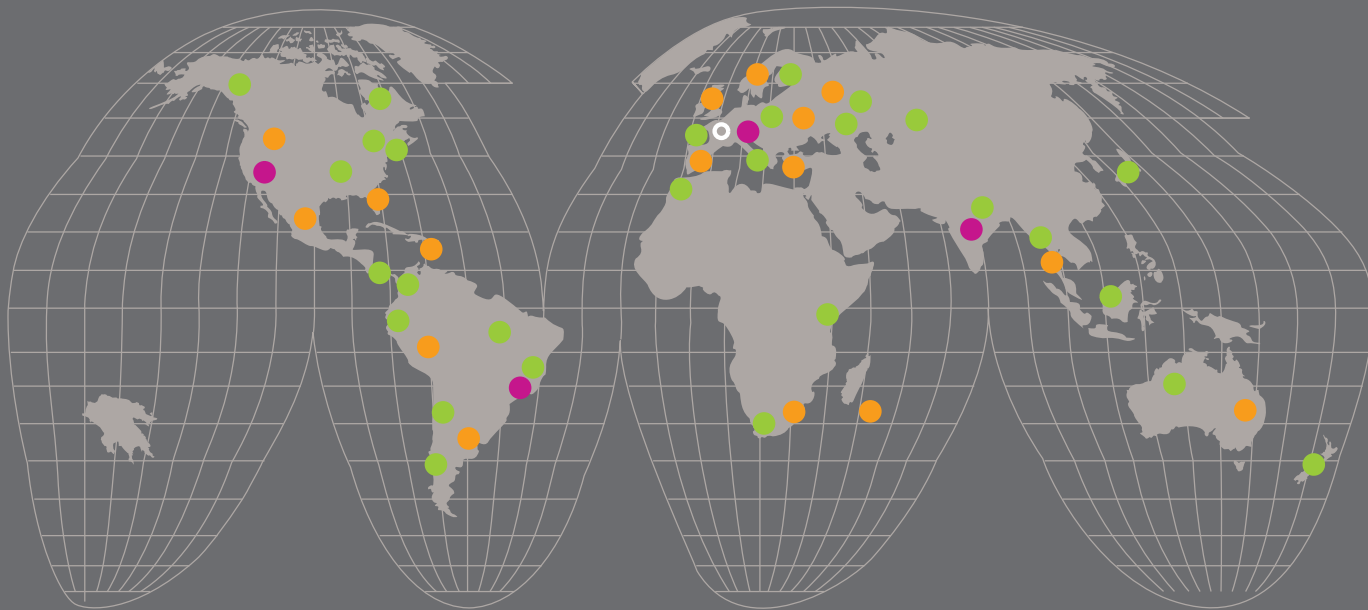
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ALBUZ

LEADER IN CERAMIC SPRAY NOZZLES

○ ALBUZ PLANT

● ● ● OUR DISTRIBUTORS



Quick and simple, select and order your spray nozzles !

NEW

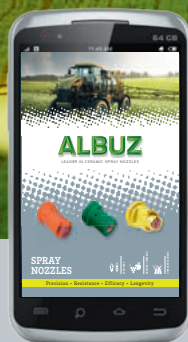
Free Application to download !



Available on the iPhone
App Store



ANDROID APP ON
Google play



www.albuz-spray.com

Conception et réalisation : HB Impressions • 02 32 40 00 91 - Doc 039561 Rev. K - 03/2017


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