



## Nozzles and Accessories for Compressed Air



A wide range of  
noise-reduced nozzles

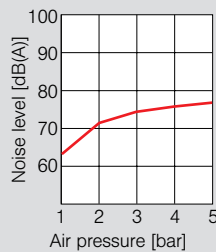
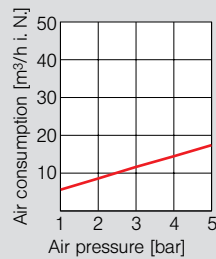
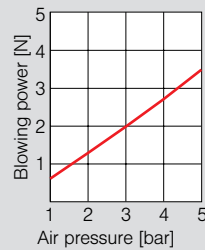


# Compressed Air can Make the Process More Efficient

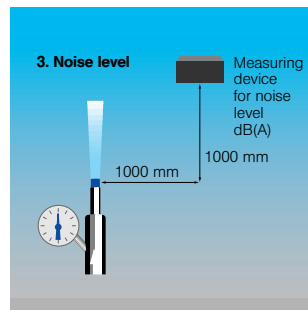
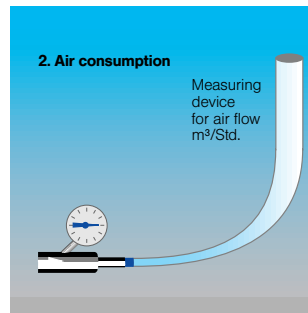
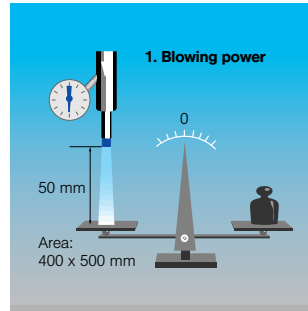
In many industries compressed air is a vital aid for drying, cooling and transporting, blowing-off and cleaning, loosening and mixing and assists thereby the economical realization of processes. The range of applications has not reached its limit. In all these applications two aspects should be taken into consideration: Generating compressed air requires money and the high-frequency noise, this occurs mainly at high pressures and by using single orifice nozzles and can damage hearing. Therefore it is necessary to use compressed air as economically as possible and to use modern technics of low noise.

Lechler has combined its total know-how of nozzle technology, the practical experience concerning applications and newest trends of research and has provided a special offer to this subject. Should it not be possible for you to find a solution for a special case within this wide range, please contact our specialists.

## Example for measuring



## Measuring method



Blowing power, air consumption and noise level are the three decisive criterions for the selection of air nozzles. In order to reach comparable values Lechler uses measuring methods, which are typical in the industry.

## Modern Nozzle Technics for More Efficiency and Less Noise.

By the development of new **multiple spray nozzles** with specially formed nozzle orifices, the noise causing turbulences at the air exit have been considerably reduced; at the same time an improvement of the efficiency was reached by the nozzle construction. Thus it is possible to reduce the air pressure – and also the air consumption – but maintain a constant blowing power.

This positive effect was reached mainly by dividing the air stream into smaller air streams. Hereby the incoming compressed air is led evenly into air channels, which are favourably arranged with regard to streaming. The result is a particularly even and powerful total air stream.

The advantages for practical use are convincing:

### **More comfortable working conditions**

by reducing the noise level by up to 12 dB.

► This corresponds to a reduction by a half of the noise for the human ear.

### **Lower energy costs**

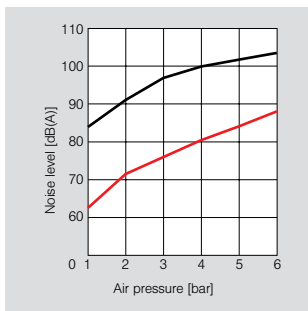
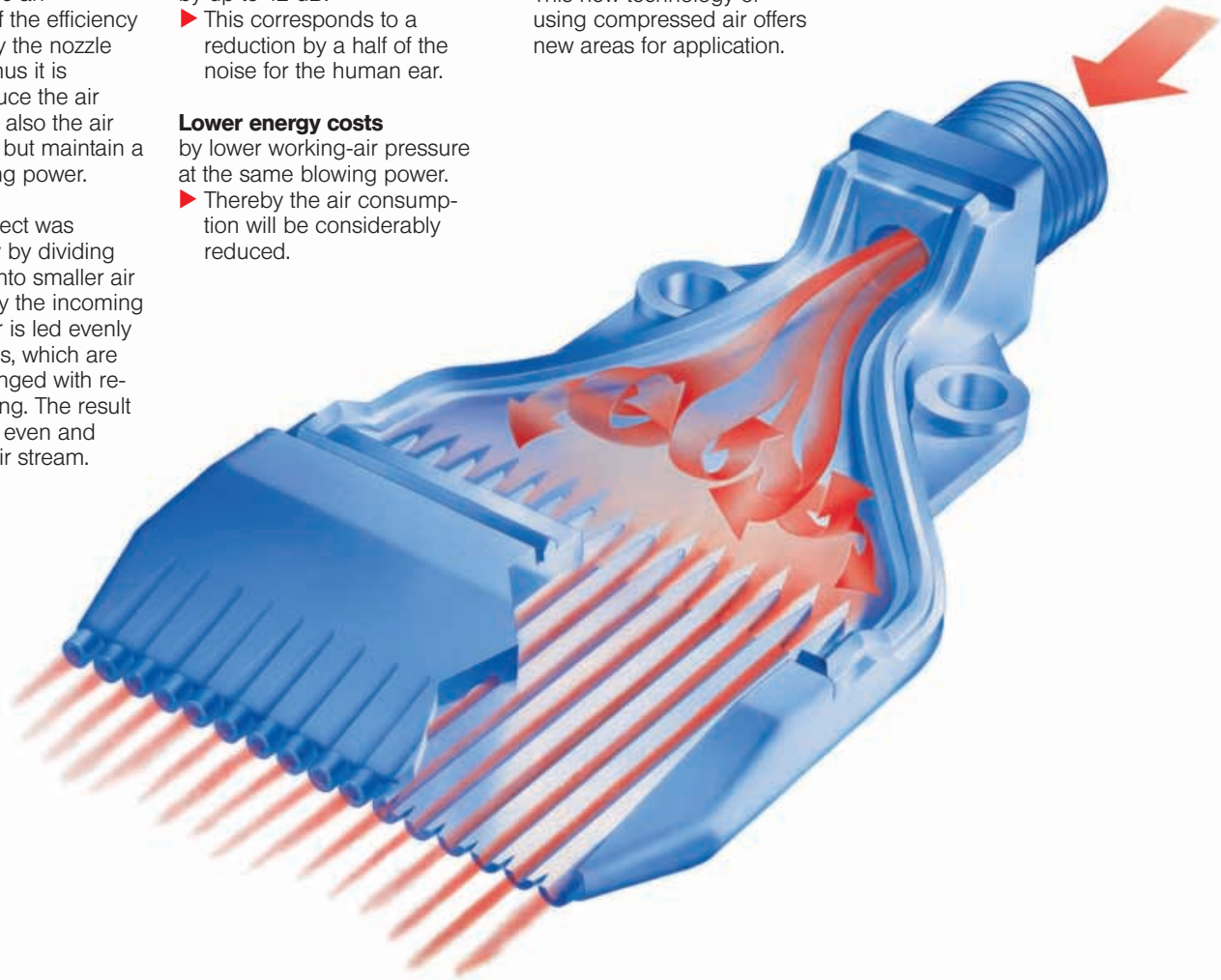
by lower working-air pressure at the same blowing power.

► Thereby the air consumption will be considerably reduced.

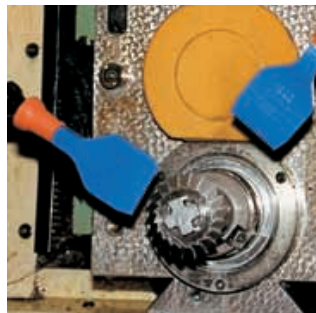
### **Higher capacity**

by better blowing power from larger distances and by an evenly directed air stream.

► Thereby the efficiency will be considerably increased. This new technology of using compressed air offers new areas for application.



— Lechler multiple spray nozzle  
— Conventional nozzle



The new Lechler compressed air nozzles have already proven successful in practice in many operations.



# Whisperblast Multiple Spray Nozzles

## Low-noise flat jet nozzles

Standard versions  
for universal applications



600.130.56 (POM)



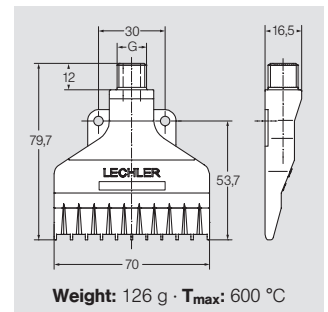
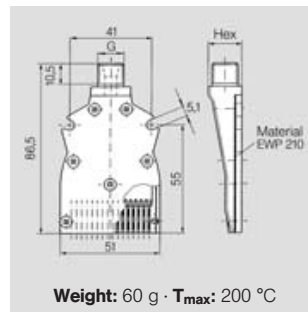
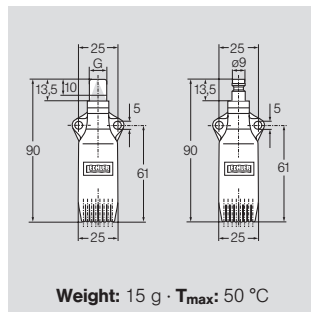
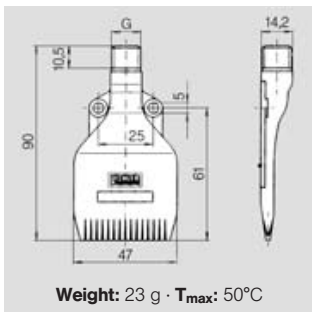
600.484.56 (POM)



600.283.42 (aluminium)

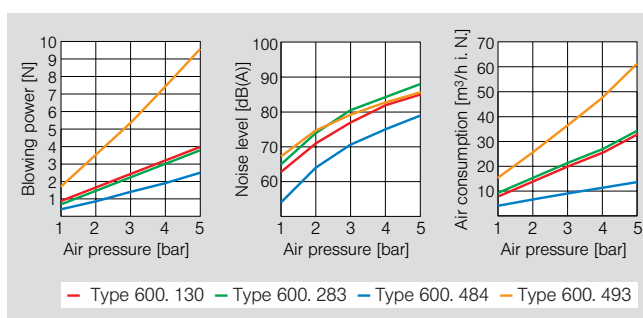


600.493.1Y (stainless steel 316L)



### Multiple spray flat jet nozzle series 600.130 / 600.484 / 600.283 / 600.493

- Powerful air stream, directed on the surface
- Low noise level
- Low air consumption
- Standard nozzle with a big variety of applications
- Aluminium version for high mechanical/thermal stress



### Applications:

Blowing-off, cleaning, drying, cooling, transporting.

Nozzle row see page 12



600.130.56.01  
with accessories

Ordering no.		Thread connection G	Accessories
Type	Code		
600.130.56 (material: POM)	BC	1/4 NPT	
	AC	G 1/4 A ISO 228	
	02	G 1/4 A ISO 228	Plug
	01	G 1/4 A ISO 228	Plug Hose nipple (D = 8 mm), Clamping piece, steel (L = 85 mm)
600.484.56 (material: POM)	AC	G 1/4 A ISO 228	
	BC	1/4 NPT	
	HG	M12 x 1,25	
	00	Quick Connection NW5	
600.283.42 (material: aluminium)	AC	G 1/4 A ISO 228	
	BC	1/4 NPT	
600.493.1Y (material: stainless steel 316L)	AC	G 1/4 A ISO 228	
	BC	1/4 NPT	

Example	Type	+	Code	=	Ordering no.
for ordering:	600.130.56	+	AC	=	600.130.56.AC





# Whisperblast Multiple Spray Nozzles

## Low-noise flat jet nozzles

Special versions  
for special applications

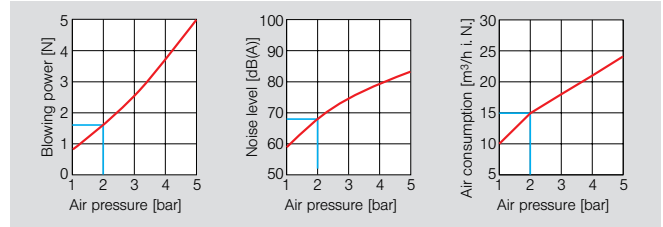
### Mini-flat jet nozzle type 600.382.30.AE

- Exceptionally low air consumption

**Weight:** 35 g · **T<sub>max</sub>:** 90°C

**V<sub>Air</sub>:** 15 m³/h at 2 bar

**Connection:** 3/8 BSPP



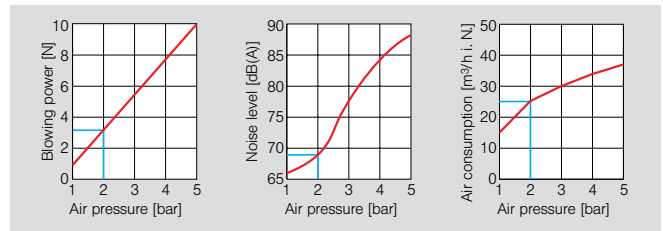
### Intensive-flat jet nozzle type 600.383.30.AE

- Exceptionally high blowing power

**Weight:** 36 g · **T<sub>max</sub>:** 90°C

**V<sub>Air</sub>:** 25 m³/h at 2 bar

**Connection:** 3/8 BSPP



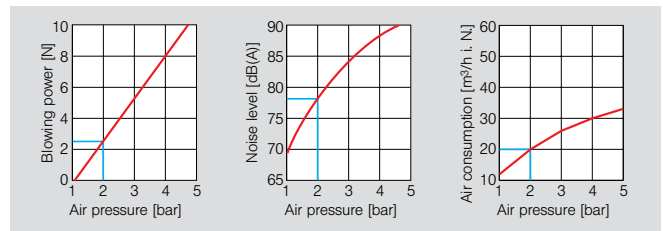
### Compact-flat jet nozzle type 600.386.01.AE

- Exceptionally short form for narrow positions

**Weight:** 38 g · **T<sub>max</sub>:** 90°C

**V<sub>Air</sub>:** 20 m³/h at 2 bar

**Connection:** 3/8 BSPP



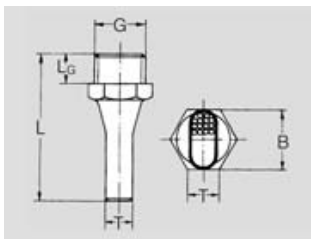
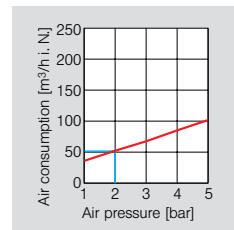
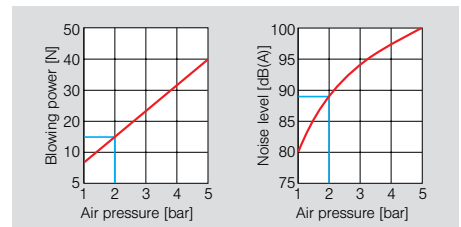
### Maxi-flat jet nozzle type 600.385.30.AL

- Suitable for low-noise blowing of big air quantities

**Weight:** 155 g · **T<sub>max</sub>:** 90°C

**V<sub>Air</sub>:** 51 m³/h at 2 bar

**Connection:** 3/4 BSPP



Ordering no.	Material	G BSPP	L [mm]	L <sub>G</sub> [mm]	S [mm]	T [mm]
600. 382. 30 AE	Brass / PVC	3/8	100	10	21,5	4,5
600. 383. 30. AE	Brass / PVC	3/8	100	10	21,0	6,0
600. 386. 01. AE	Steel / PVC	3/8	50	10	16,5	8,5
600. 385. 30. AL	Brass / PVC	3/4	120	—	43,0	9,0



# Whisperblast Multiple Spray Nozzles

## Low-noise round jet nozzles

### Multiple round jet nozzle series 600.326

- Powerful, focused impinging air stream
- Low noise level
- Low air consumption
- Standard nozzle with big varieties of application
- Mainly suitable in connection with an usual hand held air gun

### Applications:

Precise blowing-off, drying and cooling.

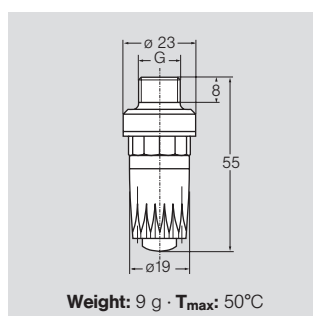
**Zinc-version is not for use with steam or in steam atmosphere.**



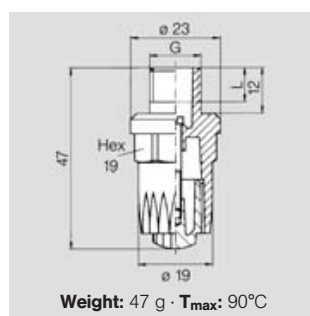
600.326.5K (ABS)



600.326.3W (Zinc)



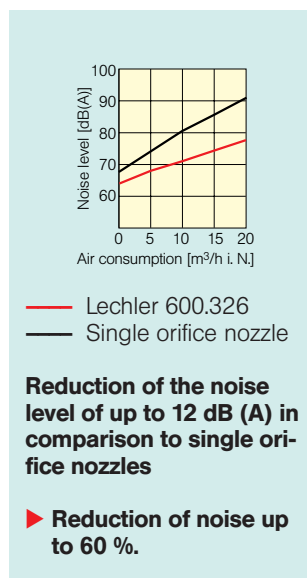
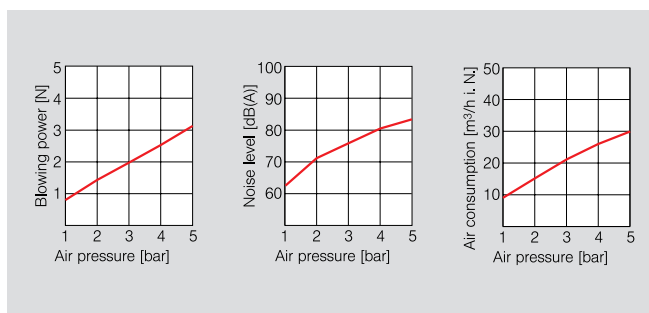
Weight: 9 g · T<sub>max</sub>: 50°C



Weight: 47 g · T<sub>max</sub>: 90°C



**Type 600.326.5K.HG**  
in connection with typical compressed air gun



Ordering no.		Thread connection G
Type	Code	
600.326.5K (Material: ABS)	BA	1/8 NPT
	BC	1/4 NPT
	AC	1/4 BSPP
	HG	M 12 x 1,25
600.326.3W (Material: Zinc)	AC	1/4 BSPP
	HG	M 12 x 1,25



Example	Type	+	Code	=	Ordering no.
for ordering:	600.326.5K	+	AC	=	600.326.5K.AC



## Whisperblast Multiple Spray Nozzles

### Low-noise round jet nozzles

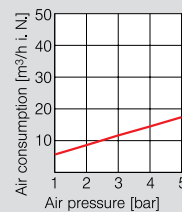
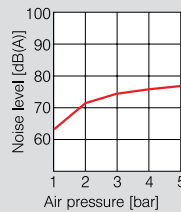
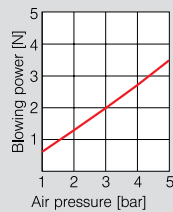
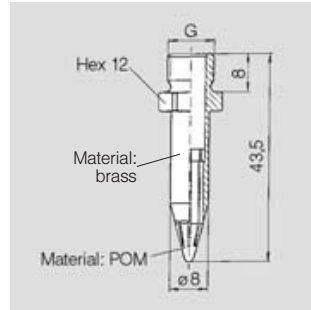
#### Mini-multiple round jet nozzles

##### series 600.388

- Particularly high blowing
- Compact form
- Mainly suitable for positions where access is limited and also for blowing-out blind holes

Material: Brass/POM

**Weight:** 12 g · **T<sub>max</sub>:** 50°C



Ordering no.		Thread connection G
Type	Code	
600.388.30	AA	1/8 BSPP
(Material: Brass/POM)	HG	M 12 x 1,25

**Example**      **Type**      **+** **Code**      **=** **Ordering no.**  
**for ordering:**      600.388.30      + AA      = 600.388.30.AA

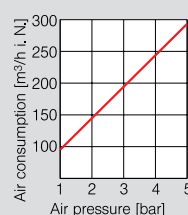
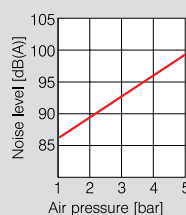
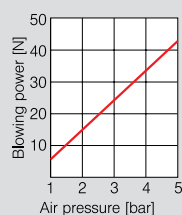
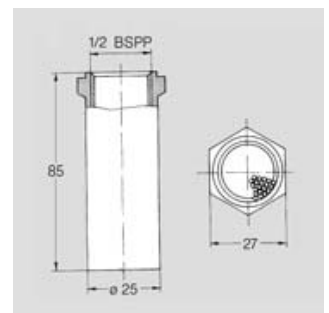
#### Maxi-multiple round jet nozzle

##### type 600.387.30.AH

- Particularly high blowing power, even for long distances

Material: Brass/PVC

**Weight:** 100 g · **T<sub>max</sub>:** 90°C



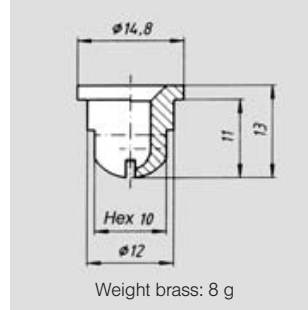


# Compressed Air Nozzles for Special Applications

## Flat jet slot nozzles

### Flat jet slot nozzle for air and saturated steam series 679

- Wide, strong air stream
- Easy, adjustable mounting
- Easy, spray adjustment

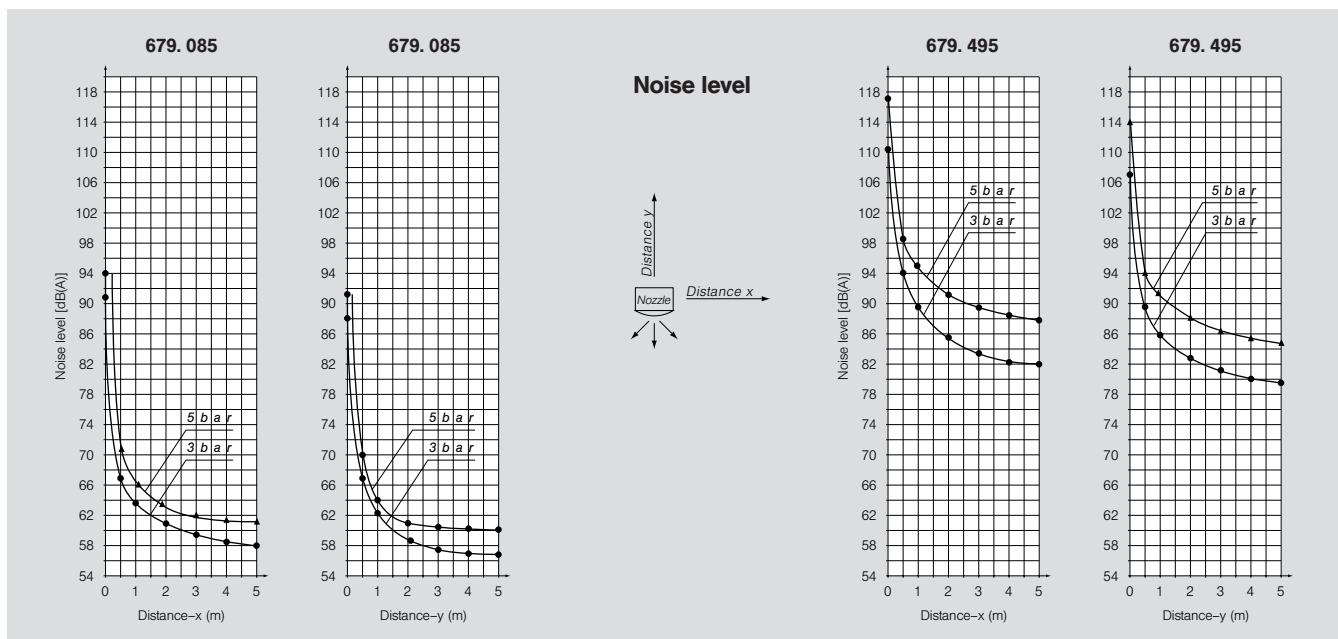


Accessories for assembly see p. 11

Ordering no.		A Ø [mm]	V̇ <sub>n</sub> Air [m <sup>3</sup> /h i. N.]				Ṁ Saturated steam [kg/h]			
Type	Mat. no.		p [bar]				p [bar]			
	17 30									
	1.4571 Brass		0,5	2,0	5,0	10,0	0,5	2,0	5,0	10,0
679. 037	— ○	1,2	1,40	2,60	5,40	11,00	0,50	1,50	3,20	6,10
679. 085	○ ○	1,3	1,20	3,00	6,00	11,10	0,90	1,90	3,70	6,70
679. 117	○ ○	1,5	1,70	3,50	7,80	15,00	0,80	2,30	5,10	9,50
679. 165	○ ○	1,8	2,20	5,30	10,70	19,50	1,70	3,30	6,60	11,80
679. 255	○ ○	2,1	3,20	7,90	15,70	28,80	2,50	4,90	9,70	17,50
679. 365	○ ○	2,8	5,40	13,10	26,20	48,10	4,10	8,20	16,10	29,10
679. 415	○ ○	3,6	8,90	21,70	43,30	79,40	6,80	13,60	26,70	48,10
679. 495	○ ○	4,3	13,40	32,80	65,60	120,20	10,30	20,60	40,40	72,90

A = equivalent bore diameter

**Example**      **Type**      **+** **Material no.**      **=** **Ordering no.**  
**for ordering:**      **679. 037**      **+**      **30**      **=**      **679. 037. 30**





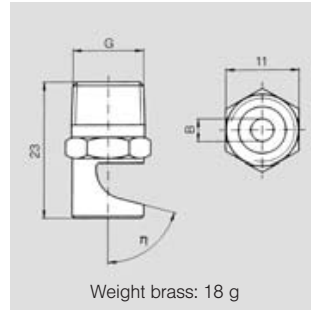


## Compressed Air Nozzles for Special Applications

### Flat jet tongue type nozzles / Multiple solid jet nozzles

#### Flat jet tongue type nozzle for air and saturated steam series 686

- Air stream on an extremely wide area
- Suitable for short blowing distances



Ordering no.				B [mm]	η	V̇n Air [m3/h i. N.]				Ṁ Saturated steam [kg/h]			
Type	Mat. no.		Code			p [bar]				p [bar]			
	16	30	BSPT										
	1.4305	Brass				1/8							
						1,0	2,0	5,0	10,0	1,0	2,0	5,0	10,0
686. 408	○	○	CA	1,0	75°	0,70	1,00	2,10	3,70	0,90	1,30	2,40	4,00
686. 488	○	○	CA	1,3	75°	1,20	1,70	3,60	6,20	1,40	2,10	3,90	6,50
686. 528	○	○	CA	1,5	75°	1,60	2,30	4,80	8,40	1,90	2,80	5,20	8,70
686. 568	○	○	CA	1,7	75°	2,00	3,00	6,30	11,00	2,50	3,70	6,90	11,50
686. 608	○	○	CA	1,9	75°	2,50	3,70	7,80	13,50	3,10	4,60	8,60	14,30
686. 688	○	○	CA	2,4	75°	4,00	5,90	12,40	21,50	4,90	7,30	13,60	22,70
686. 728	○	○	CA	2,7	75°	7,10	10,00	21,20	38,20	5,70	9,20	16,40	29,20
686. 808	○	○	CA	3,4	75°	11,20	16,00	33,70	60,60	9,00	14,60	26,00	46,30

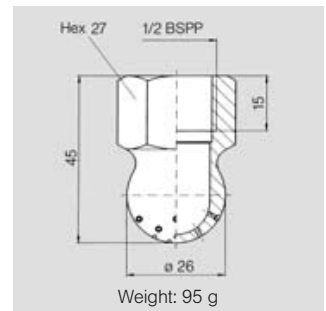
B = bore diameter


#### Multiple solid jet nozzle for air and saturated steam series 540/541

- Even complete air distribution by 40 single bores

#### Applications:

Steam atomization into liquids, aeration of bulk material, loosening, atomization of gas into acid and neutralizing baths, liquid circulation, acceleration of chemical reactions and processes.



 Spray angle	Ordering no.		B Ø [mm]	V̇ <sub>n</sub> Air [m³/h i. N.]				Ṁ Saturated steam [kg/h]							
	Type	Mat. no.		p [bar]				p [bar]							
		16		1,0	2,0	3,0	5,0	1,0	2,0	3,0	5,0				
appr. 240°	540. 909	○	0,8	26,20	39,30	52,50	78,70	21,80	32,00	38,20	58,60				
	540. 989	○	1,0	41,00	61,50	82,00	102,00	34,00	50,00	59,70	91,50				
	541. 109	○	1,5	92,20	138,00	184,00	231,00	76,60	113,00	134,00	206,00				
	541. 189	○	2,0	164,00	246,00	328,00	492,00	136,00	200,00	239,00	366,00				
	541. 239	○	2,3	217,00	325,00	434,00	651,00	180,00	265,00	316,00	484,00				

B = bore diameter

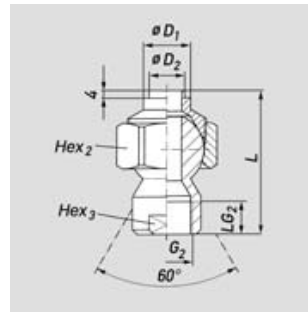
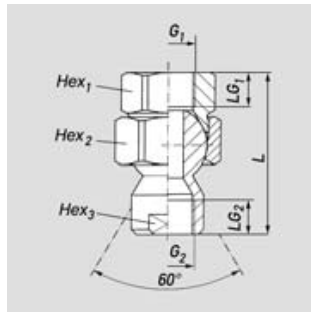
Example  
for ordering    Type    + Material no. (+ code) = Ordering no.  
686. 408 + 16                    (+ CA) = 686. 408. 16. (CA)



## Accessories for Whisperblast Multiple Spray Nozzles

### Ball joint

- For moveable assembly of low-noise flat jet and round jet nozzles
- Swiveling range: 30 degrees any direction
- Durable metal version, without wear-prone gaskets



**Rotating joint**  
**Ordering no.: 095.016.56.07.21**

- Material polypropylene
- Swivelling on one plane
- Less expensive alternative to metal ball joints
- Swivelling range 90° left/right

G1: NPT 1/4 inside thread  
G2: 3/8 BSPP outside thread

Connection	Ordering no.					Dimensions [mm]											Weight (brass)
	Type	Material no.			Code												
		16	16	30													
		1.4305/1.4571 303 SS/316 SS	1.4305	Brass													
		D1	D2	G1	G2	LG1	LG2	L	Hex1	Hex2	Hex3						
Ball joints with thread connection	092. 020	-	○	○	AD	-	-	G1/4	G1/4	12,0	11,5	60,3	27	27	17	60 g	
	092. 021	-	○	○	AF	-	-	G3/8	G1/4	12,0	11,5	58,3	27	27	17	80 g	
	092. 030	-	○	○	AF	-	-	G3/8	G3/8	12,0	12,0	56,7	27	30	19	80 g	
Ball joints with welding connection	092. 020	○	-	-	SD	20,0	15,0	-	G1/4	-	11,5	64,3	-	27	17	60 g	
	092. 030	○	-	-	SF	22,0	15,0	-	G3/8	-	12,0	58,7	-	30	19	80 g	

<b>Example</b>	<b>Type</b>	<b>+</b>	<b>Material no.</b>	<b>+</b>	<b>Code</b>	<b>=</b>	<b>Ordering no.</b>
<b>for ordering:</b>	<b>092. 020</b>	<b>+</b>	<b>16</b>	<b>+</b>	<b>SD</b>	<b>=</b>	<b>092. 020. 16. SD</b>

### Flexible pneumatic tube

#### Material:

Rubber tube, covered by metal braid; steel core

#### Connections:

Air supply: 3/8 BSPP

Nozzle side: 1/4 BSPP

$T_{max} = 100^{\circ}C$  ·  $p_{max} = 15$  bar



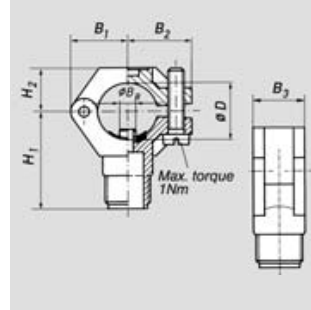
Ordering no.	Length [mm]	Suitable for nozzle series
Z. SPZ. 150. 02. AE. AD. 0	150	600. 130 600. 283 600. 326
Z. SPZ. 300. 02. AE. AD. 0	300	
Z. SPZ. 450. 02. AE. AD. 0	450	



## Accessories for Flat Jet Slot Nozzles

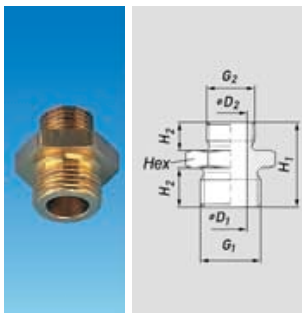
### Clamps

- For flat jet slot nozzles series 679
- Easy fixing of nozzles with nut
- Adjustment of stream without any problems



Ordering no.				Screw	Dimensions [mm]								Weight (Polyamide)		
Type	Material no.														
	51 Polyamide	53 Polypropylene	5E PVDF												
					Pipe ø	D ø	B <sub>R</sub> ø	B <sub>1</sub>	B <sub>2</sub>	B <sub>3</sub>	H <sub>1</sub>	H <sub>2</sub>			
090. 003	○	○	○		Material 1.4305	1/2"	20-22,0	6,2	21,2	23,8	18,5	36,5		16,5	20 g
090. 013	○	○	○			3/4"	25-27,5	7,8	24,5	26,5	22,0	39,5		17,5	25 g
090. 023	○	○	○	1"		32-34,5	10,8	30,0	31,0	22,0	44,0	21,0	32 g		

### Double nipple



Ordering no.			Dimensions [mm]							Weight (Brass)
Type	Mat. no.									
	17 1.4571/ 316 SS	30 Brass								
			G1 BSPP	G2 BSPP	H1	H2	D1	D2	Hex	
065.215	○	○	3/8	1/4	25	10	10	7	22	30 g
065.211	○	○	3/8	3/8	25	10	11,5	-	22	25 g

### Nuts



Ordering no.						Dimensions [mm]					Weight (brass)
Type	Material no.										
	16 1.4305/ 303 SS	17 1.4571/ 316 SS	30 Brass	56 POM	5E PVDF	G BSPP	H <sub>1</sub>	H <sub>2</sub>	D	Hex	
065.200	○	○	○	-	-	3/8	13,0	10,0	12,8	22	25 g
065.200	-	-	-	○	○	3/8	14,5	11,5	12,8	22	25 g

## Multiple Nozzle Base



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E-mail: [info@lechler.de](mailto:info@lechler.de)  
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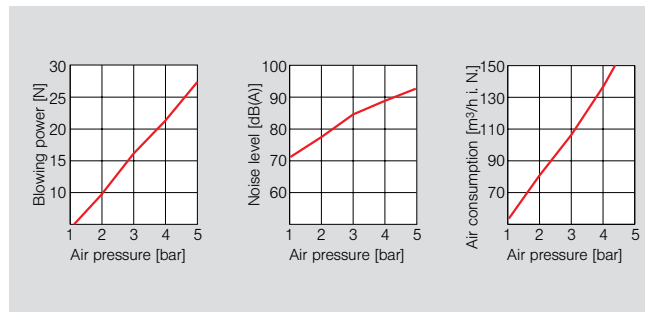
**Multiple Nozzle Base**  
**order No. 600.130.56.05**  
with 5 Whisperblast nozzles  
type 600.130.56.AC

Materials:  
Nozzles: POM, nozzle  
base: PVC

Thread: G 3/8" BSPP

### Applications:

- Cover big working ranges
- Air curtain



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