

**ENGINEERING
YOUR SPRAY SOLUTION**



Air nozzles

Air curtains
Blowing off and out
Cleaning
Cooling
Drying
Reheating
Transporting
and many others...



Air nozzles

As a rule, any flat fan or solid stream nozzle can be operated with air instead of liquid.

However, you'll obtain the best results using the nozzle designs we specially engineered for applications of compressed air or saturated steam. For further details, please refer to the next pages.

In addition to air, various nozzle types are also suited for injecting saturated steam. Typical applications of Lechler air nozzles are, for instance, efficient blowing off and blowing out, cooling, drying or cleaning.

Multi-channel air nozzles

In many industries and workshops compressed air has become an indispensable tool.

Compressed air is needed for cleaning, blowing off, drying, conveying and for numerous other applications.

Where uncontrolled compressed air is applied, very often annoying, high-frequency hiss noises arise, which may cause serious harm to hearing. These »noises« are produced by turbulences generated at the air outlet. Their intensity depends on the shape of the nozzle orifice and on the air pressure. This means: the better and stronger the air jet is supposed to be, the higher the health-injuring noise level and the higher the air consumption and its cost.

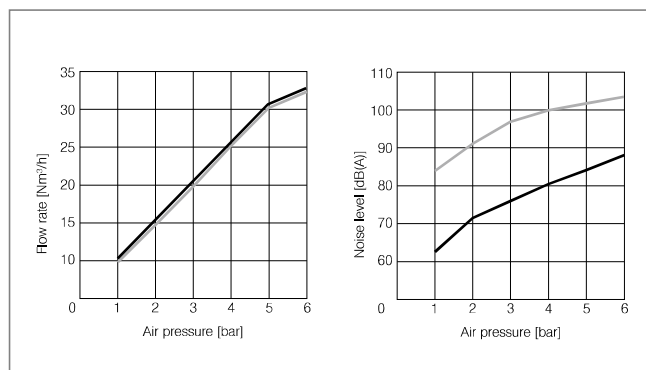
The solution: Lechler multi-channel air nozzles, featuring a significantly reduced sound level, high blowing power and low air consumption.

The performance of multi-channel air nozzles is based on partitioning the air inflow into single air jets. 16 air channels, arranged to ensure optimum flow conditions, provide for a particularly uniform, straight and powerful overall air jet.



In comparison to single-hole air nozzles the advantages are as follows:

- Reduction of the noise level of up to 12 dB
- Low service air pressure with the same blowing power
- Lower air consumption
- Better blowing effect over a longer reach
- Lower operating costs



Comparison of a conventional, single-hole nozzle with the Lechler multi-channel round jet nozzle type 600.326

- Lechler multi-channel round jet nozzle
- Conventional single-hole nozzle

Note for calculation of measuring values:

Blowing power: Blowing distance vertical 50 mm on a scale, area 400 x 500 mm.



Air nozzles

Flat fan nozzles for air	Series		Air consumption [m³/h] at p = 2 bar	Connection	Application/ Design	Page
	600.130 600.484	Particularly silent!	8,00 - 18,00	1/4 BSPP 1/4 BSPP NPT 1/4 M 12 x 1,25 Quick release cuppling NW5	Blowing off and blowing out, cleaning, drying, cooling, conveying with air. Multi-channel flat fan nozzle. Plastic versions.	6.5
	600.283 600.493 600.562		7,50 – 30,00	1/8 BSPP 1/4 BSPP 1/4 NPT	Blowing off and blowing out, cleaning, drying, cooling, conveying with air. Multi-channel flat fan nozzle. Metallic versions.	6.6
	679		2,60 – 32,80	Assembly with 3/8 lock nut	Blowing off liquids, cooling, reheating, drying. Easy nozzle changing. Simple jet alignment.	6.7
	686		1,00 – 16,00	1/8 BSPT	Blowing off liquids, cooling, reheating, drying. Tongue-type nozzle.	6.8

Air nozzles

For more information please ask for our special brochure "Nozzles and Accessories for Compressed Air".

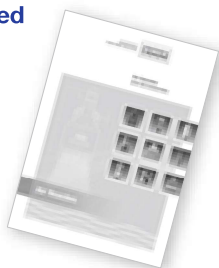




Air nozzles

Solid stream nozzles for air	Series		Air consumption [m ³ /h] at p = 2 bar	Connection	Application/ Design	Page
	600.326	Particularly silent!	15.00	1/4 BSPP M 12 x 1,25	Targeted blowing out and blowing off with the aid of air guns. Multi-channel round jet nozzle, producing a powerful air jet with punctiform impact pattern.	6.9
	600.388		8,60	1/8 BSPP M 12 x 1,25	Targeted blowing out and blowing off with the aid of air guns. Multi-channel round jet nozzle, Compact design. Especially for blowing out of pocket holes.	6.9
	544		1.00 – 16.00	1/8 BSPT 1/4 BSPT	Targeted blowing out and blowing off. Powerful air jet with punctiform impact pattern.	6.10
	540 541	240°	39.30 – 325.00	1/2 BSPP	Injection of steam into liquids, injection of compressed air into bulk goods, gas injection. Multi-channel solid stream nozzle.	6.11

For more information please ask for our special brochure »Nozzles and Accessories for Compressed Air«.





Multi-channel flat fan nozzles for air Whisperblast®, Plastic versions Series 600.130/600.484

**Particularly
silent!**

**Highly efficient air stream,
acting upon areas.
Reduced noise levels.
Low air consumption.**

Applications:

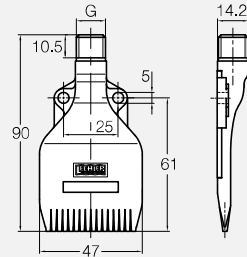
Blowing off and blowing out,
cleaning, drying, cooling,
conveying with air.



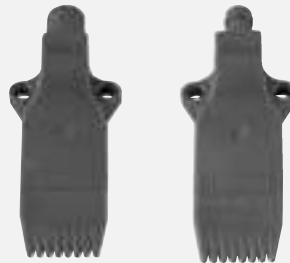
* Complies with
OSHA require-
ments on noise
level



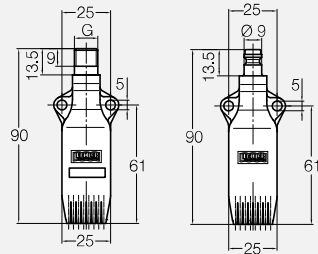
600.130 (POM or PP)



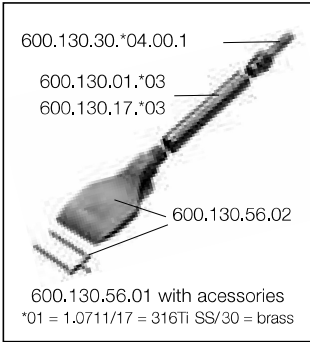
Weight: 23 g · T_{max} POM: 50 °C
Weight: 15 g · T_{max} PP: 60 °C



600.484.56 (POM)

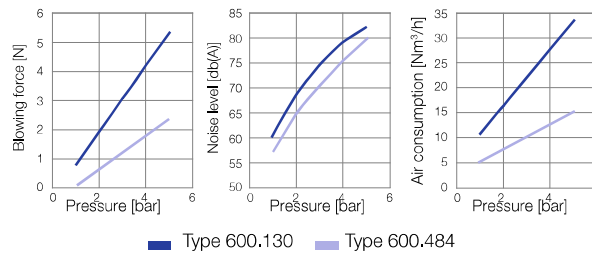


Weight: 16 g · T_{max}: 50 °C



Item 600.130.56.01 does not
meet FDA/(EC) No. 1935/2004
requirements.

Technical Data



Socket
Ordering no.
095.016.30.14.23.0

Material: Brass

For connection of series
600.130 with compressed air
guns.



Ball joints see page 9.8

Type	Ordering no.					
	Mat. no.		Code			
	S2 PP	56 POM	1/4 BSPP	1/4 NPT	M12 x 1.25	Quick connection NW 5
600.130	○	○	AC	BC	-	-
600.130 with plug	-	○	02	-	-	-
600.130 with plug, Hose barb (D = 8 mm) and Extension tube, steel (L = 85 mm)	-	○	01	-	-	-
600.484	-	○	AC	BC	HG	00

Example of ordering: Type 600.130. + Mat. no. 56 + Code AC = Ordering no. 600.130.56.AC






Multi-channel flat fan nozzles for air Whisperblast®, metallic versions Series 600.283/600.493/600.562

Particularly
silent!


Metallic versions for higher temperatures. Highly efficient air stream, acting upon areas. Reduced noise levels. Low air consumption.

Applications:


Blowing off and blowing out, cleaning, drying, cooling, conveying with air.



600.283.42 (Aluminum)



600.493.1Y (Stainless steel 316L SS)

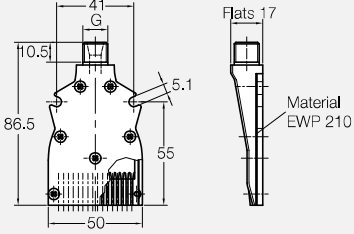


600.562.1Y.10 (Stainless steel 316L SS)

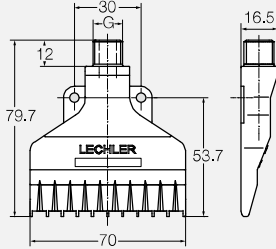
Complies with OSHA requirements on noise level only

Complies with OSHA requirements

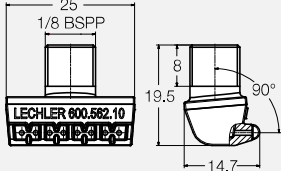
Complies with OSHA requirements



Weight: 60 g · T_{max}: 200 °C



Weight: 126 g · T_{max}: 550 °C



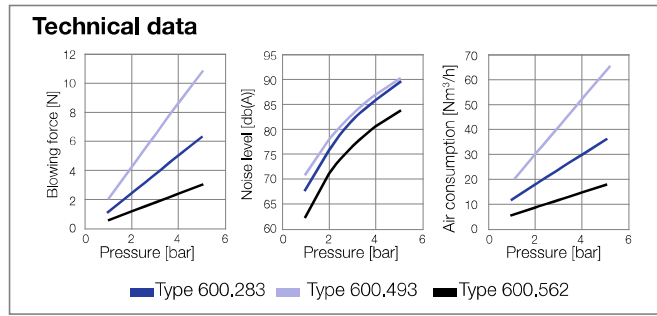
Weight: 17 g · T_{max}: 550 °C



**Socket
Ordering no.
095.016.30.14.23.0**

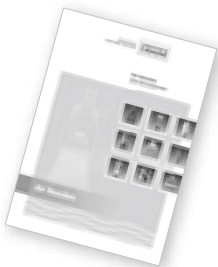
Material: Brass

For connection with compressed air guns for the following series:
– 600.283
– 600.493



Ball joints see page 9.8

For more information please ask for our special brochure »Nozzles and Accessories for Compressed Air«.



Type	Ordering no.				
	Mat. no.		Code		
	42	1Y			
	Aluminum	Stainless steel	1/8 BSPP	1/4 BSPP	1/4 NPT
600.283	○	-	-	AC	BC
600.493	-	○	-	AC	BC
600.562.1Y.10	-	○	○	-	-

Example of ordering: Type 600.283, + Mat. no. 42, + Code AC = Ordering no. 600.283.42.AC



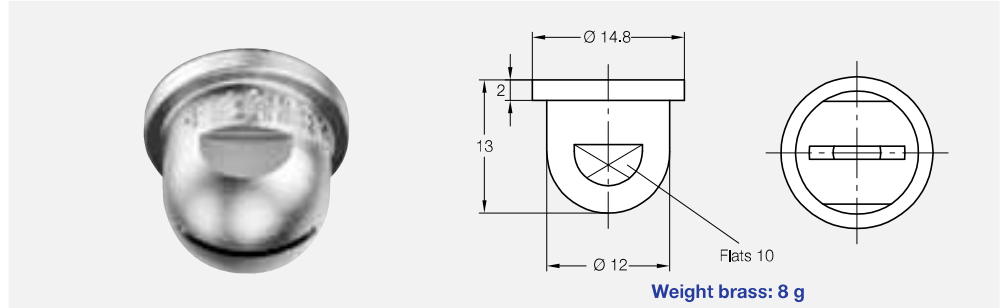
Flat fan nozzles for air or saturated steam


Series 679

**Particularly wide-angle,
powerful air jet.
Assembling with retaining
nut. Easy nozzle changing.
Simple jet alignment.**

Applications:

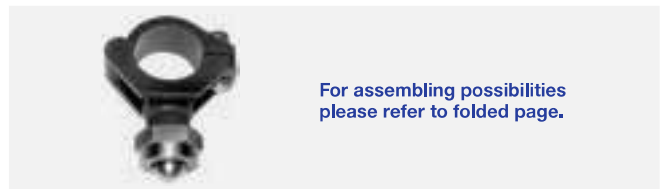
Blowing off liquids, cooling,
reheating, drying.



Spray angle 	Ordering no.		A Ø [mm]	\dot{V}_n Air [m³/h]				\dot{M} Saturated steam [kg/h]				
	Type	Mat. no.		p [bar]				p [bar]				
		17 316Ti SS		30 Brass	0.5	2.0	5.0	10.0	0.5	2.0	5.0	10.0
approx. 70°–90°	679.037	-	○	1.2	1.50	3.00	6.00	11.00	1.20	2.30	4.60	8.30
	679.085	○	○	1.3	2.00	4.00	8.00	14.70	1.60	3.10	6.10	11.10
	679.117	○	○	1.5	2.10	4.20	8.40	15.40	1.70	3.30	6.50	11.70
	679.165	○	○	1.8	2.60	5.10	10.30	18.80	2.00	4.10	8.00	14.30
	679.255	○	○	2.1	3.60	7.30	14.50	26.60	2.80	5.70	11.20	20.20
	679.365	○	○	2.8	6.30	12.70	25.40	46.50	5.00	10.00	19.60	35.30
	679.415	○	○	3.6	10.20	20.30	40.70	74.60	8.00	16.00	31.40	56.70
679.495	○	○	4.3	15.60	31.10	62.20	114.00	12.40	24.80	48.50	87.60	

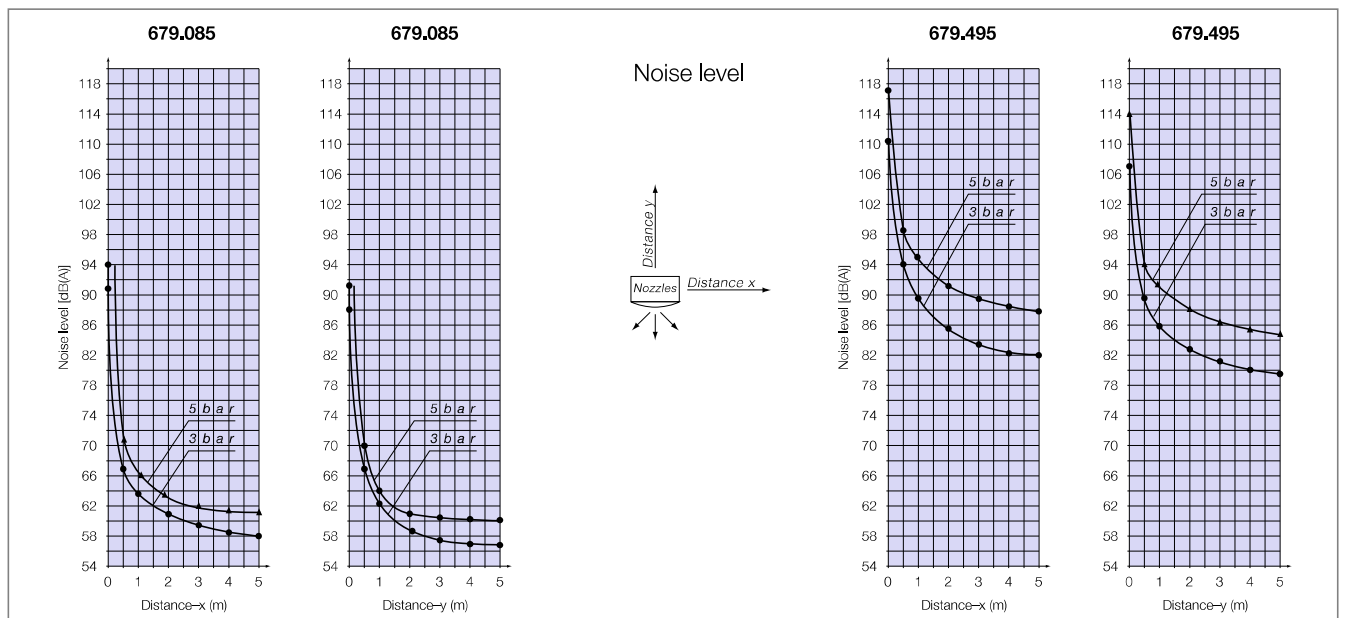
A = equivalent bore diameter

Example	Type	+	Mat. no.	=	Ordering no.
of ordering:	679.037.	+	30	=	679.037.30



For assembling possibilities
please refer to folded page.

The folded page at the end of the catalogue will give you a survey on the various assembly possibilities. For complete assembly accessories, please refer to »Accessories«.





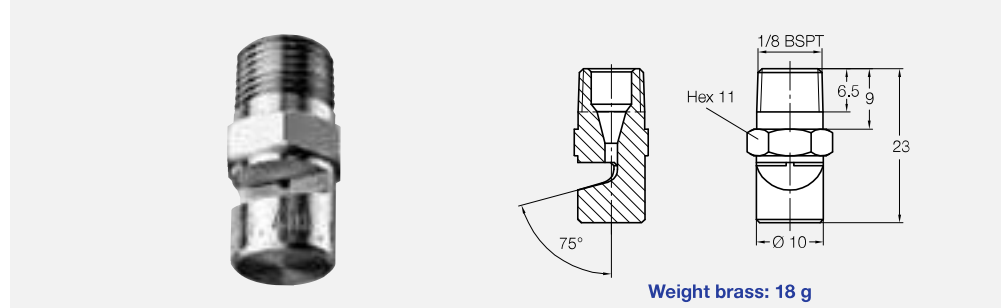
Tongue-type nozzles for air or saturated steam


Series 686

**Wide-angle,
powerful air jet.**

Applications:

Blowing off liquids, cooling,
reheating, drying.



Spray angle 	Ordering no.				B Ø [mm]	η	\dot{V}_n Air [m³/h]				\dot{M} Saturated steam [kg/h]			
	Type	Mat. no.		Code			p [bar]				p [bar]			
		16 303 SS	30 Brass				1.0	2.0	5.0	10.0	1.0	2.0	5.0	10.0
approx. 27-47°	686.408	○	○	CA	1.0	75°	1.07	1.60	3.20	5.86	0.88	1.31	2.57	4.64
	686.488	○	○	CA	1.3	75°	1.76	2.64	5.29	9.69	1.46	2.17	4.25	7.67
approx. 70°	686.528	○	○	CA	1.5	75°	2.20	3.31	6.61	12.13	1.83	2.71	5.31	9.59
	686.568	○	○	CA	1.7	75°	2.73	4.09	8.19	15.01	2.27	3.36	6.57	11.87
	686.608	○	○	CA	1.9	75°	3.35	5.02	10.04	18.40	2.78	4.11	8.06	14.55
	686.688	○	○	CA	2.4	75°	5.45	8.18	16.36	30.00	4.53	6.71	13.14	23.72
	686.728	○	○	CA	2.7	75°	6.88	10.33	20.65	37.86	5.71	8.46	16.58	29.94
	686.808	○	○	CA	3.4	75°	10.89	16.33	32.66	59.87	9.04	13.28	26.22	47.35

B = bore diameter

The folded page at the end of the catalogue will give you a survey on the various assembly possibilities. For complete assembly accessories, please refer to »Accessories«.

Example of ordering:	Type	+	Mat. no.	+	Code	=	Ordering no.
	686.408	+	16	+	CA	=	686.408.16.CA



Ball joints see page 9.8



Multi-channel round jet nozzles for air Series 600.326/600.388

**Particularly
silent!**


Powerful air jet, producing punctiform impact patterns. Low noise level. Low air consumption.

Applications:


Targeted blowing out and blowing off with compressed air guns.

Reduction of noise level of up to 12 dB (A).


OSHA®



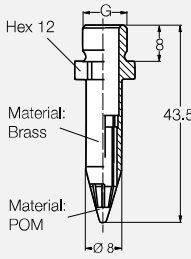
600.326.5K (ABS)
T_{max}: 50 °C



600.326.3W (Zinc)
T_{max}: 90 °C



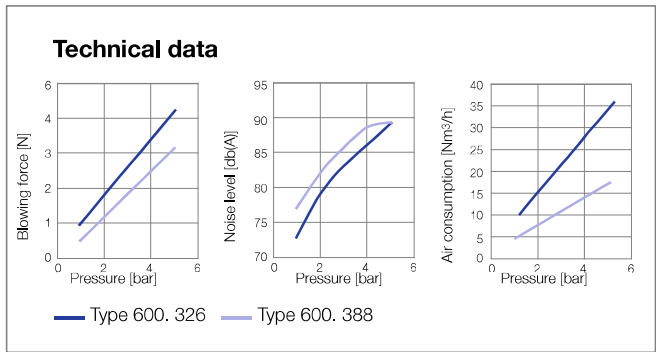
600.388.30 (Brass, POM)
T_{max}: 50 °C



Hex 12
Material: Brass
Material: POM
43.5

**Mini-round jet nozzle.
Compact design.**

Applications:
Especially for blowing out pocket holes.



Ball joints see page 9.8

Ordering no.		Connection thread G	Weight
Type	Code		
600.326.5K (Material: ABS)	AC	1/4 BSPP	9 g
	HG	M 12 x 1.25	
600.326.3W (Material: Zinc)	AC	1/4 BSPP	47 g
	HG	M 12 x 1.25	
600.388.30 (Material: Brass/POM)	AA	1/8 BSPP	12 g
	HG	M 12 x 1.25	

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



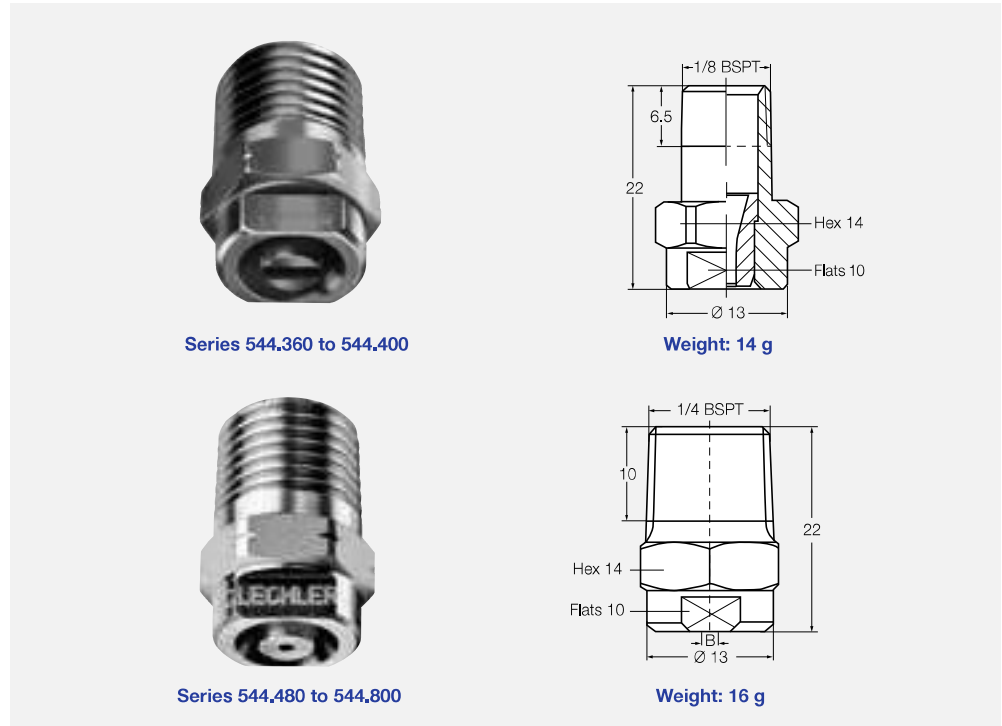
Solid stream nozzles for air or saturated steam

Series 544

**Powerful air jet,
producing punctiform
impact patterns.**

Applications:

Targeted blowing out and blowing off.



Ordering no.				B Ø [mm]	\dot{V}_n Air [m³/h]				\dot{M} Saturated steam [kg/h]			
Type	Mat. no.	Code			p [bar]				p [bar]			
	16	303 SS	1/8 BSPT		1/4 BSPT	1.0	2.0	3.0	5.0	1.0	2.0	3.0
544.360	○	CA	CC	1.05	0.93	1.40	1.92	2.88	0.77	1.14	1.64	2.42
544.400	○	CA	CC	1.30	1.43	2.14	2.94	4.41	1.18	1.75	2.51	3.71
544.480	○	CA	CC	1.33	1.67	2.51	3.42	5.13	1.39	2.06	2.92	4.23
544.560	○	CA	CC	1.69	2.58	3.87	5.27	7.90	2.14	3.18	4.50	6.66
544.640	○	CA	CC	2.09	4.33	6.50	8.81	13.22	3.60	5.33	7.52	11.13
544.720	○	CA	CC	2.66	6.85	10.27	14.00	21.02	5.68	8.42	11.96	17.70
544.800	○	CA	CC	3.30	10.75	16.12	21.87	32.81	8.92	13.21	18.66	27.63

B = bore diameter

Example of ordering: Type 544.360 + Mat. no. 16 + Code CA = Ordering no. 544.360.16.CA



Ball joints see page 9.8

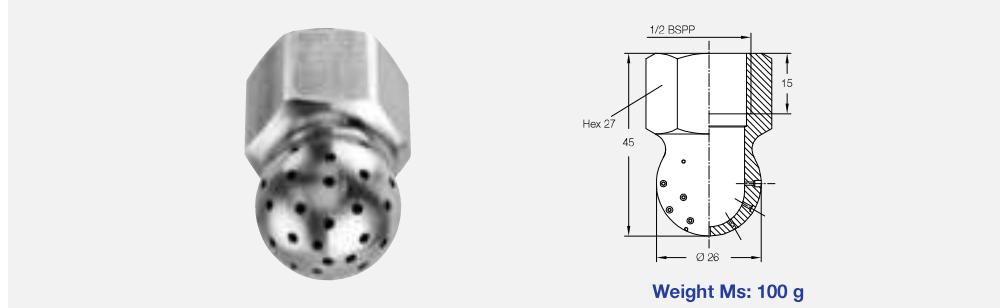



Cluster solid stream nozzles for air or saturated steam Series 540/541

**Powerful air jet with
40 individual bore holes.**

Applications:

Injection of steam into liquids,
injection of compressed air
into bulk goods, gas injection
(acid and neutralization
baths).



 Spray angle	Ordering no.		B Ø [mm]	\dot{V}_n Air [m³/h]				\dot{M} 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
approx. 240°	540.909	○	0,8	22,80	34,20	45,50	68,30	18,10	26,90	35,50	52,70
	540.989	○	1,0	35,50	53,30	71,00	106,50	28,20	41,70	55,10	81,70
	541.109	○	1,5	83,30	124,90	166,50	249,80	66,00	97,70	129,20	191,60
	541.189	○	2,0	129,70	194,50	259,30	389,00	103,00	152,60	201,70	299,10
	541.239	○	2,3	167,20	250,80	334,30	501,50	133,20	197,30	260,80	386,60

B = bore diameter

Example of ordering:	Type	+	Mat. no.	=	Ordering no.
	540,909	+	16	=	540,909,16