

NOZZLES

Catalog



Nozzles

Fan Nozzles



Fan nozzles for straight wetting pattern



Applications:



Disinfection
gate



Weeds
spraying



Institution
disinfection



Food
hygiene &
sanitation

Features & Benefits

- Wide range of flow rates
- High distribution uniformity and coverage
- Easy setup
- Low maintenance
- Cost efficient

Configuration

- Supplied as a separate item or with accessories
- Inlet filter option



NOZZLES

Technical Data

- Operating pressure range: 2-10 bar
- Fan angle: 65°, 110°
- Flow rate: 0.296-3.212 l/m

Product code	Marking	α Angle	Lit per Min Bar 2	Lit per Min Bar 3	Lit per Min Bar 4	Lit per Min Bar 6	Lit per Min Bar 8	Lit per Min Bar 10	Colour
12210110057	110 005	110 °	0.296	0.362	0.417	0.513	0.585	0.658	● Green
12210110209	110 02	110 °	1.20	1.45	1.70	2.00	2.267	2.533	● Yellow
12210110255	110 025	110 °	0.623	0.780	0.899	1.106	1.267	1.428	● Creme
12210110308	110 03	110 °	1.167	1.432	1.649	2.039	2.330	2.620	● Blue
12210110406	110 04	110 °	1.434	1.760	2.032	2.501	2.857	3.212	● Red
12210110503	110 05	110 °	1.627	2.027	2.350	2.893	3.315	3.737	● Brown
12210165051	65 005	65 °	0.38	0.47	0.53	0.66	0.753	0.847	○ White
12210165052	65 005	65 °	0.38	0.47	0.53	0.66	0.753	0.847	● Black

Accessories:



1/4" FEMALE 135° NOZZLE HOLDER CAT. NO.

Product code	R1	R2
32210000040	1/16" NC	1/4" NPT

11/16" NUT FOR NOZZLE

Product code	Type
32272900082	1/16" NC

1/4" FEMALE STRAIGHT NOZZLE HOLDER

Product code	R1	R2
32210300042	1/16" NC	1/4" NPT

1/4" MALE STRAIGHT NOZZLE HOLDER

Product code	R1	R2
32212200042	1/16" NC	1/4" NPT

SPRAY GUN

Product code	End connector
22210004002	1/4" female
22210011003	1/16" male

8MM NYLON RETRACTABLE COIL

Product code	Length
24050505058	5 feet
24050505108	10 feet
24050505158	15 feet

SPRAY GUN - IODINE

Product code	End connector
22210004004	1/4" female

NOZZLE FILTER

Product code	Mesh	Colour	L mm	Colour
22212791100	100		21.1	○ White
*22212791000	100	Red	21.1	



Nut 11/16" for nozzle
+ Fan spray nozzle
+ 1/4" female straight nozzle holder

* non drop

Nozzles

Conical Spray Nozzles



For round, hollow, wetting pattern and fine spray



Applications:



Agriculture
cooling and
humidity control



Livestock
cooling



Vegetable
climate
control



Cowshed
disinfection
udder



Aeroponic
system

Features & Benefits

- Maintains vital humidity levels that extend product shelf life
- Excellent droplet size
- Wide range of flow rates
- High distribution uniformity and coverage
- Easy setup
- Low maintenance
- Cost efficient

Configuration

- Single outlet
- 2 outlet + needle valve.
- Inlet filter: 150 micron / 100 mesh
- Non-drop filter (0.3 bar)
- ¼" NPT connection

NOZZLES

Technical Data

- Operating pressure range: 2-10 bar
- Recommended filtration: 100 micron / 150 mesh
- Fan angle: 65°, 80°, 105°
- Flow rate range: 0.035-0.817 l/m
- Average drop size: 75 micron at 4.0 bar

Product code	Marking	α Angle	Lit per Min Bar 2	Lit per Min Bar 3	Lit per Min Bar 4	Lit per Min Bar 6	Lit per Min Bar 8	Lit per Min Bar 10	Colour
22210011055	1 105	105°	0.058	0.068	0.078	0.098	0.111	0.125	● Creme
22210011057	1 105	105°	0.058	0.068	0.078	0.098	0.111	0.125	● Green
22210016502	1 65	65°	0.061	0.074	0.084	0.098	0.110	0.123	● Black
22210018001	1 80	80°	0.063	0.078	0.092	0.117	0.135	0.153	○ White
22210018002	1 80	80°	0.063	0.078	0.092	0.117	0.135	0.153	● Black
22210018011	1 80F	80°	0.035	0.042	0.049	0.059	0.067	0.075	○ Off White
22210018012	1 80F	80°	0.035	0.042	0.049	0.059	0.067	0.075	● Black
22210028006	3 80	80°	0.350	0.430	0.520	0.630	0.723	0.817	● Red

Accessories:



1/4" FEMALE 135° NOZZLE HOLDER CAT. NO.

Product code	R1	R2
32210000040	1/16" NC	1/4" NPT



1/16" NUT FOR NOZZLE

Product code	Type
32272900082	1/16" NC



1/4" FEMALE STRAIGHT NOZZLE HOLDER

Product code	R1	R2
32210300042	1/16" NC	1/4" NPT



1/4" MALE STRAIGHT NOZZLE HOLDER

Product code	R1	R2
32212200042	1/16" NC	1/4" NPT



MISTING UNIT MARK 1

Product code	R1	R2	SW1	SW2	SW3	Colour
222729T0101	1/16" NC	1/4" NPT	175	16	175 mm	○ White
222729T0102	1/16" NC	1/4" NPT	175	16	175 mm	● Black



NOZZLE FILTER

product code	Mesh	Colour	L mm	Colour
22212791100	100		21.1	○ White
*22212791000	100	Red	21.1	

* non drop



Nut 1/16" for nozzle

+ **Conical spray nozzle**

+ 1/4" female/1/4" male straight nozzle holder

Misting Unit Mark 1

+ Nut 1/16" for nozzle

+ **Conical spray nozzle**



Nozzles

Conical spray nozzle with 1/8" NPT male thread



Applications:



Disinfection and hygiene



Agriculture cooling and humidity control



Livestock cooling



Vegetable climate control



Aeroponic system

NOZZLES

Features & Benefits

- Maintains vital humidity levels that extend product shelf life
- Excellent droplet size
- Wide range of flow rates
- High distribution uniformity and coverage
- Easy setup
- Low maintenance
- Cost efficient

Configuration

- Conical spray nozzle with 1/8" NPT male thread
- Non-Drop conical spray nozzles with 1/8" NPT male thread and a non-drop valve - automatic closing mechanism that operates when pressure drops below 0.3 bars.
- Conical spray nozzle with filter 150 micron / 100 mesh

Technical Data

- Provide round hollow wetting pattern and fine spray.
- Operating pressure range: 2-10 bar
- Operating pressure range - Non drop: 3-10 bar
- Recommended filtration: 100 micron / 150 mesh
- Spray angle: 80°, 105°, 120°, 145°
- Flow rate: 0.04 - 0.36 l/m
- Average drop size 75 micron at 4.0 bar

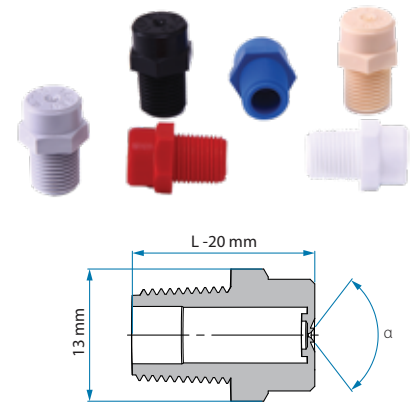
Nozzles

Conical spray nozzle with 1/8" NPT male thread

Conical Spray Nozzle 1/8" NPT

Conical spray nozzle with 1/8" NPT male thread

Product code	Marking	α Angle	Thread Size	Lit per Min Bar 2	Lit per Min Bar 3	Lit per Min Bar 4	Lit per Min Bar 6	Lit per Min Bar 8	Lit per Min Bar 10	Colour
22210211055	21 105	105°	1/8"	0.063	0.075	0.086	0.108	0.123	0.138	● Creme
22210218008	21 80	80°	1/8"	0.060	0.070	0.080	0.093	0.104	0.115	● Blue
22210078001	07 80	80°	1/8"	0.043	0.053	0.060	0.069	0.078	0.086	○ White
22210078002	07 80	80°	1/8"	0.043	0.053	0.060	0.069	0.078	0.086	● Black
22210078003	07 80	80°	1/8"	0.043	0.053	0.060	0.069	0.078	0.086	● Grey
22210221202	22 120	120°	1/8"	0.108	0.132	0.152	0.190	0.217	0.245	● Black
22210078006	07 80F	80°	1/8"	0.038	0.047	0.054	0.064	0.073	0.081	● Red
22210078011	07 80F	80°	1/8"	0.038	0.047	0.054	0.064	0.073	0.081	○ White
22210078012	07 80F	80°	1/8"	0.038	0.047	0.054	0.064	0.073	0.081	● Black
22212201458	220 145	145°	1/8"	0.171	0.207	0.240	0.280	0.327	0.368	● Blue



Non Drop Nozzle 1/8" NPT

Non-drop conical spray nozzles with 1/8" NPT male thread and a non-drop valve

Product code	Marking	Thread Size	α Angle	Lit per Min Bar 3	Lit per Min Bar 4	Lit per Min Bar 6	Lit per Min Bar 8	Lit per Min Bar 10	Colour
22211211055	21 105	1/8"	105°	0.072	0.084	0.106	0.123	0.140	● Creme
22211211052	21 105	1/8"	105°	0.072	0.084	0.106	0.123	0.140	● Black
22211218008	21 80	1/8"	80°	0.06	0.074	0.092	0.108	0.124	● Blue
22211078001	07 80	1/8"	80°	0.046	0.053	0.069	0.081	0.092	○ White
22211078002	07 80	1/8"	80°	0.046	0.053	0.069	0.081	0.092	● Black
22211078003	07 80	1/8"	80°	0.046	0.053	0.069	0.081	0.092	● Grey
22211221202	22 80	1/8"	80°	0.120	0.142	0.182	0.213	0.244	● Black
22211078006	07 80F	1/8"	80°	0.040	0.048	0.062	0.073	0.084	● Red
22211078011	07 80F	1/8"	80°	0.040	0.048	0.062	0.073	0.084	○ White
22211078012	07 80F	1/8"	80°	0.040	0.048	0.062	0.073	0.084	● Black
22212211458	220 145	1/8"	145°	0.168	0.205	0.257	0.313	0.360	● Blue

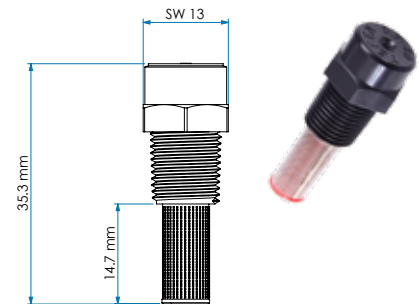


NOZZLES

Conical Spray Nozzle 1/8" NPT with Filter

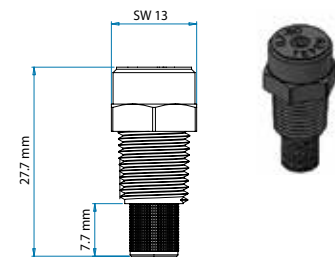
Conical spray nozzle 1/8" NPT with long filter

Product code	Marking	Thread Size	α Angle	Lit per Min Bar 2	Lit per Min Bar 3	Lit per Min Bar 4	Lit per Min Bar 6	Lit per Min Bar 8	Lit per Min Bar 10	Colour
22219211055	21 105	1/8"	105°	0.060	0.070	0.080	0.093	0.104	0.115	● Creme
22219218008	21 80	1/8"	80°	0.060	0.070	0.080	0.093	0.104	0.115	● Blue
22219078001	07 80	1/8"	80°	0.041	0.05	0.057	0.066	0.074	0.083	○ White
22219078002	07 80	1/8"	80°	0.041	0.05	0.057	0.066	0.074	0.083	● Black
22219078003	07 80	1/8"	80°	0.043	0.053	0.060	0.069	0.078	0.086	● Grey
22219221202	22 120	1/8"	120°	0.103	0.124	0.149	0.171	0.194	0.216	● Black
22219078006	07 80F	1/8"	80°	0.040	0.046	0.053	0.061	0.068	0.075	● Red
22219078012	07 80F	1/8"	80°	0.040	0.046	0.053	0.061	0.068	0.075	● Black



Conical spray nozzle 1/8" NPT with short filter

Product code	Marking	Thread Size	α Angle	Lit per Min Bar 2	Lit per Min Bar 3	Lit per Min Bar 4	Lit per Min Bar 6	Lit per Min Bar 8	Lit per Min Bar 10	Colour
22215211055	21 105	1/8"	105 °	0.06	0.07	0.08	0.093	0.104	0.115	● Creme
22212218038	21 80	1/8"	80 °	0.06	0.07	0.08	0.093	0.104	0.115	● Blue
22215218008	21 80	1/8"	80 °	0.06	0.07	0.08	0.093	0.104	0.115	● Blue
22211078031	07 80	1/8"	80 °	0.041	0.05	0.057	0.066	0.074	0.083	○ White
22211078033	07 80	1/8"	80 °	0.041	0.05	0.057	0.066	0.074	0.083	● Grey
22215078006	07 80F	1/8"	80 °	0.103	0.124	0.149	0.171	0.194	0.216	● Red
22215078011	07 80F	1/8"	80 °	0.103	0.124	0.149	0.171	0.194	0.216	○ White
22215221202	22 120	1/8"	120 °	0.103	0.124	0.149	0.171	0.194	0.216	● Black



Conical spray nozzle with cap filter

Product code	Marking	Thread Size	α Angle	Lit per Min Bar 2	Lit per Min Bar 3	Lit per Min Bar 4	Lit per Min Bar 6	Lit per Min Bar 8	Lit per Min Bar 10	Colour
22212078001	07 80	1/8"	80 °	0.041	0.05	0.057	0.066	0.074	0.083	○ White
22212078011	07 80F	1/8"	80 °	0.041	0.05	0.057	0.066	0.074	0.083	○ White
22212211055	21 105	1/8"	105 °	0.06	0.07	0.08	0.093	0.104	0.115	● Creme
22212218008*	21 80	1/8"	80 °	0.103	0.124	0.149	0.171	0.194	0.216	● Blue
22212221202	22 120	1/8"	120 °	0.103	0.124	0.149	0.171	0.194	0.216	● Black



*non-drop nozzle

Accessories:



HIGH FLOW NOZZLE

Product code	Marking	α Angle	Thread Size	Lit per Min Bar 2	Lit per Min Bar 3	Lit per Min Bar 4	Lit per Min Bar 6	Colour
22210311055	31 105	105°	1/8"	0.084	0.096	0.118	0.120	● Creme
*22219311055	31 105	105°	1/8"	0.080	0.090	0.102	0.110	

* With filter

ACCESSORIES FOR NOZZLES

Product code	Product
38000000054	PVC Protector Cap for Nozzle

The PVC cap protects the delicate upper nozzle crown from external mechanical damage.

Nozzles

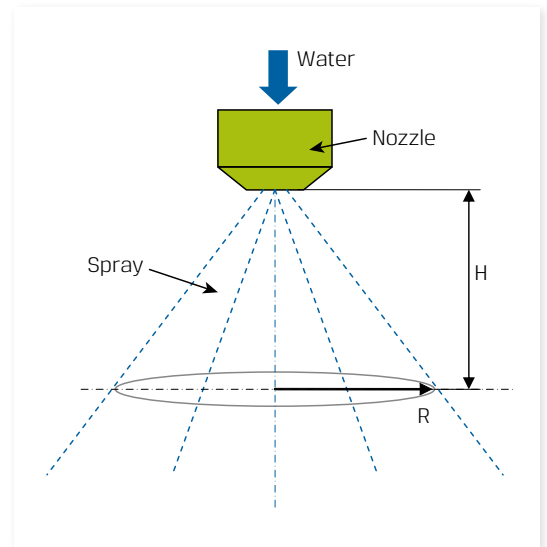
Droplet size measurements

Conical spray nozzle with 1/8" NPT male: Research conducted by the Technion - Israel Institute of Technology on Tefen nozzles provides additional information regarding the droplet size measurement as per velocity, flux and fluid mix.

Measurement methodology

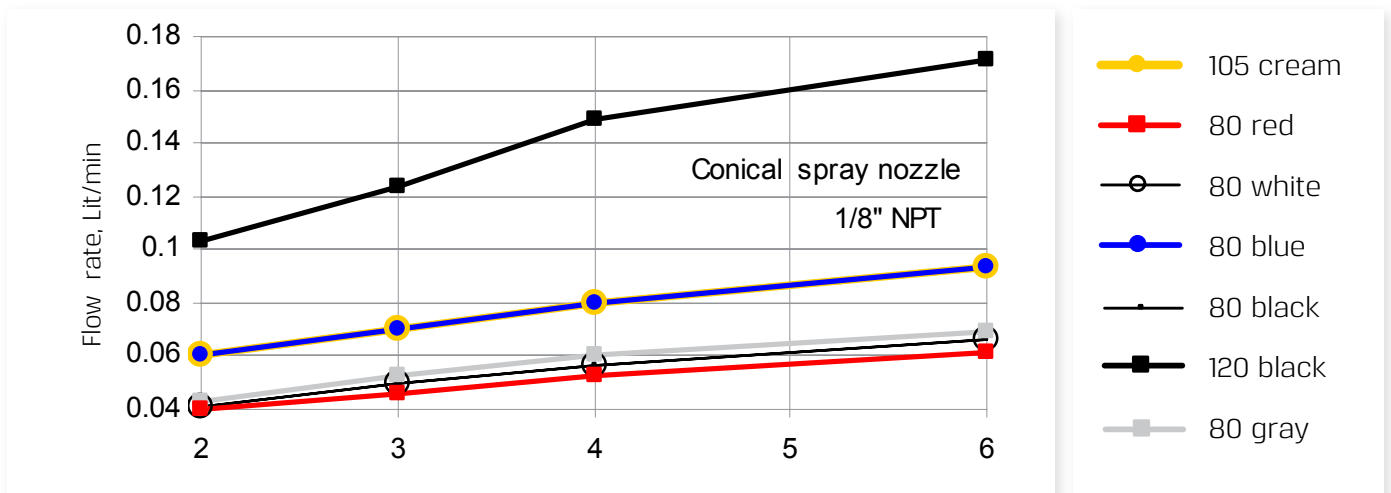
Measurements of vertical spray characteristics were carried out with 75mm downstream at 10mm steps along the perpendicular radius of the spray cone. The spray angle was measured according to the liquid flux distribution and digital photographs.

Nozzle test layout



Water flow rate vs. water pressure for different nozzles

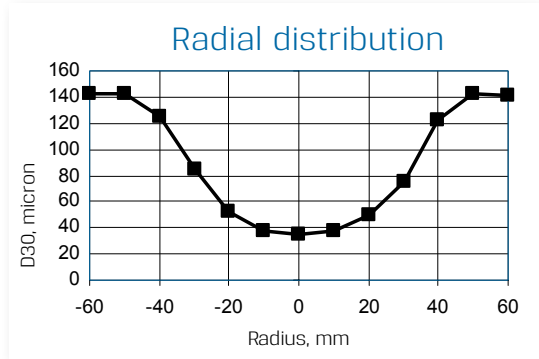
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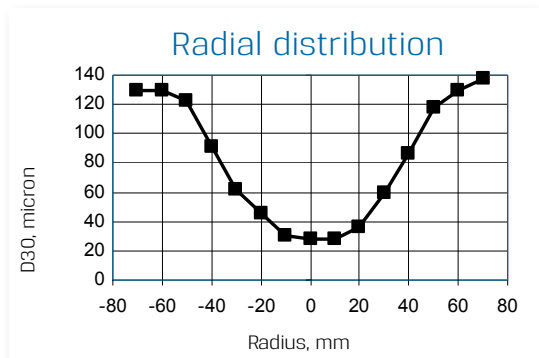
NOZZLES



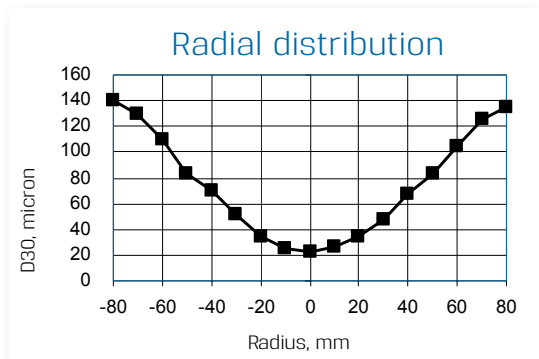
Droplet size measurements for 22210078003



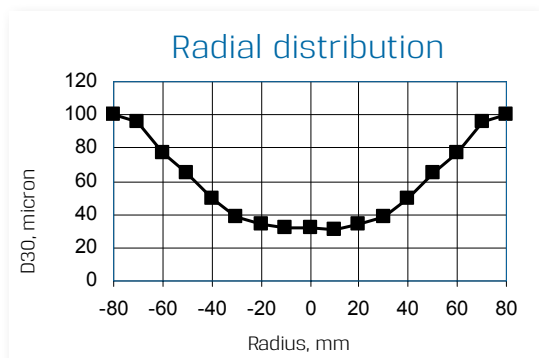
Droplet size measurements for 22210218008



Droplet size measurements for 22210211055



Droplet size measurements for 22211221202





About Tefen

Tefen is a leading company in the field of flow products and dosing pumps. The company produces a high-quality wide range of fittings and complementary flow products and a line of hydraulic and electric proportional dosing pumps for a variety of industries and purposes, such as animal healthcare, disinfection, sanitation, agriculture, and industrial applications.

For more than five decades, we have provided our clients and partners with reliable technologies and products that meet their flow and dosing control challenges. Integrity, quality and excellence are the core values that are the foundation of our products, manufacturing facilities, customer service and work environment.

Tefen's dedication to quality and outstanding customer service has won the confidence of loyal and satisfied customers all over the world. Tefen's products are sold in more than 50 countries through a large network of distributors.



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