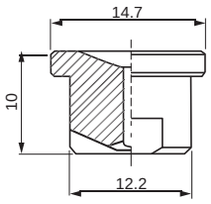
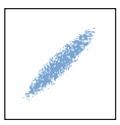
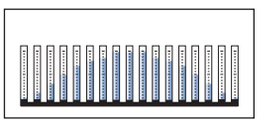
LOW CAPACITY

Flat fan nozzle tips are usually mounted onto a pipe by means of a welded nipple or a clamp, and secured in place with a retaining nut. They can be easily replaced and the jet can be conveniently oriented in the desired direction.
The tips models shown on this page delivery very low flow values. Their precisely machined small orifices can be protected from clogging by means of a filter assembled inside our nipples and clamps that are designed for this purpose. Please find more information on page 44.





Spray section

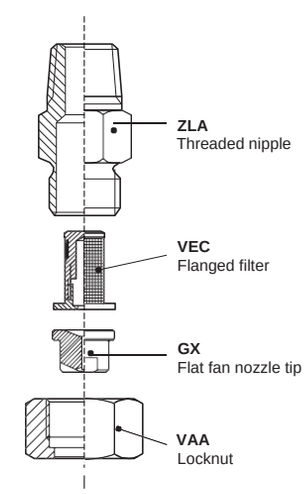


convex distribution

- **Connection**: Flange
- **Typical applications**
  Washing: semiconductor and precision parts cleaning
  Cooling: continuous casting, product cooling
  Lubrication: spray of lubricating oils and release agents
  Other applications: spray of flavouring agents, cooling oil and antifoulant chemicals

GXD 25°	GXL 40°	GXN 50°	GXR 65°	Capacity code	D mm	Capacity at different pressure values (l/min) (bar) 0.5	1.0	1.5	2.0	3.0	4.0	5.0	7.0	10
				0060	0.28				0.05	0.06	0.07	0.08	0.09	0.11
				0100	0.34				0.08	0.10	0.12	0.13	0.15	0.18
			•	0130	0.38				0.11	0.13	0.15	0.17	0.20	0.24
		•	•	0200	0.46		0.12	0.14	0.16	0.20	0.23	0.26	0.31	0.37
				0260	0.53		0.15	0.18	0.21	0.26	0.30	0.34	0.40	0.47
				0390	0.66		0.23	0.28	0.32	0.39	0.45	0.50	0.60	0.71
•	•	•	•	0590	0.79	0.24	0.34	0.42	0.48	0.59	0.68	0.76	0.90	1.08
•	•	•	•	0780	0.91	0.32	0.45	0.55	0.64	0.78	0.90	1.01	1.19	1.42
				1120	1.10	0.49	0.69	0.85	0.98	1.20	1.39	1.55	1.83	2.19
				1160	1.30	0.65	0.92	1.13	1.31	1.60	1.85	2.07	2.44	2.92

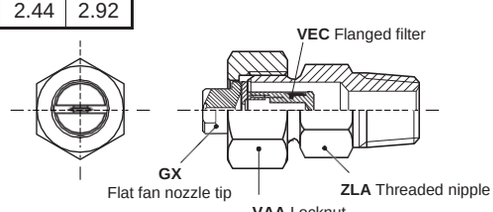
GXS 73°	GXT 80°	GXV 95°	GXJ 110°	Capacity code	D mm	0.5	1.0	1.5	2.0	3.0	4.0	5.0	7.0	10
				0060	0.28				0.05	0.06	0.07	0.08	0.09	0.11
				0100	0.34				0.08	0.10	0.12	0.13	0.15	0.18
				0130	0.38				0.11	0.13	0.15	0.17	0.20	0.24
•				0150	0.40				0.12	0.15	0.17	0.19	0.23	0.27
				0200	0.46		0.12	0.14	0.16	0.20	0.23	0.26	0.31	0.37
				0260	0.53		0.15	0.18	0.21	0.26	0.30	0.34	0.40	0.47
	•	•	•	0390	0.66		0.23	0.28	0.32	0.39	0.45	0.50	0.60	0.71
•	•	•	•	0590	0.79	0.24	0.34	0.42	0.48	0.59	0.68	0.76	0.90	1.08
				0780	0.91	0.32	0.45	0.55	0.64	0.78	0.90	1.01	1.19	1.42
				1120	1.10	0.49	0.69	0.85	0.98	1.20	1.39	1.55	1.83	2.19
•	•	•	•	1160	1.30	0.65	0.92	1.13	1.31	1.60	1.85	2.07	2.44	2.92



Assembly fittings

MATERIAL PROCESSING

Because of the extreme difficulty of working hard materials such as stainless steels with very small profile drills, not all the capacity sizes shown in the nozzle table are available in all materials. The table below shows the minimum capacity values we can produce for each given material. Please contact our sales for more information.



Material	0060	0100	0130	0150	0200	0260	0390	0590	0780	1120	1160
B31 - AISI 316L SS								•	•	•	•
B1 - AISI 303 SS			•	•	•	•	•	•	•	•	•
T1 - Brass	•	•	•	•	•	•	•	•	•	•	•

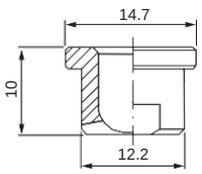
HOW TO MAKE UP THE NOZZLE CODE

EX.: GXD 0390 B1

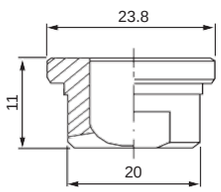
GX D 0390 XX

- NOZZLE TYPE
- SPRAY ANGLE: • D - 25° • S - 73° • L - 40° • T - 80° • N - 50° • V - 95° • R - 65° • J - 110°
- CAPACITY
- MATERIAL: • B1 - AISI 303 Stainless steel • B31 - AISI 316L Stainless steel • T1 - Brass

GX (FLAT FAN NOZZLE TIPS)



3/8" Standard capacity



3/4" Large capacity

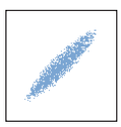
STANDARD AND LARGE CAPACITIES

Flat fan nozzle tips are usually mounted onto a pipe by means of a welded 3/8" nipple or a clamp, and secured in place with a retaining nut. They can be easily replaced and their jet can be conveniently oriented in the desired direction.These nozzle are available in two types: 3/8" standard capacity and 3/4" large capacity. The tip is assembled with a pipe clamp, a welding nipple and a locknut. Please find more information on page 44.

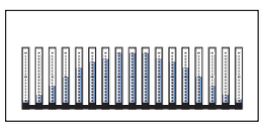
- **Typical applications**

Washing: filter cloth cleaning, parts cleaning, vehicles cleaning
Cooling: steel cooling, product cooling
Lubrication: spray of lubricating oil and release agents
Other applications: spray of antifoulant chemicals, etc.

- **Connection**: Flange



Spray section



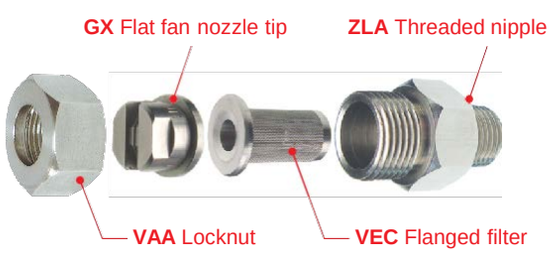
Convex distribution

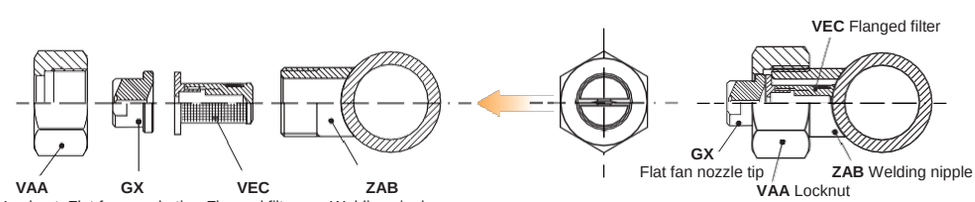
SPRAY ANGLE CODES

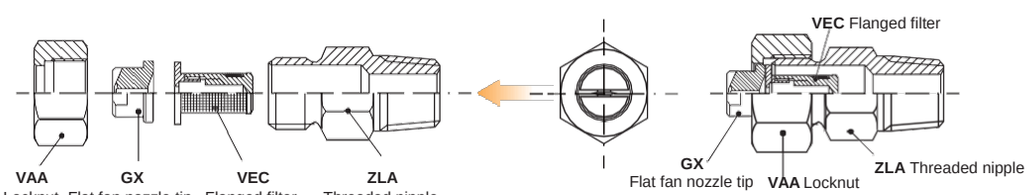
GXA	GXF	GXM	GXQ	GXU	GXW
0°	30°	45°	60°	90°	120°

ASSEMBLY FITTINGS

This illustration shows a typical assembly of a nozzle tip with a locknut and a welding nipple.







HOW TO MAKE UPTHE NOZZLE CODE

EX.: GXA 1310 B1

GX A 1310 xx

- NOZZLE TYPE
- SPRAY ANGLE: **A** - 0° · **F** - 30° · **M** - 45° · **Q** - 60° · **U** - 90° · **W** - 120°
- CAPACITY
- MATERIAL: **B1** - AISI 303 Stainless steel · **B31** - AISI 316L Stainless steel · **T1** - Brass

STANDARD AND LARGE CAPACITIES

3/8" STANDARD CAPACITY TIPS

GXA 0°	GXF 30°	GXM 45°	GXQ 60°	GXU 90°	GXW 120°	Code	D mm	Capacity at different pressure values (l/min) (bar)								
								0.5	1.0	1.5	2.0	3.0	4.0	5.0	7.0	10
•	•	•	•	•	•	**1190**	1.30	0.78	1.10	1.34	1.55	1.90	2.19	2.45	2.90	3.47
•	•	•	•	•	•	**1233**	1.50	0.95	1.35	1.65	1.90	2.33	2.69	3.01	3.56	4.25
•	•	•	•	•	•	**1310**	1.70	1.27	1.79	2.19	2.53	3.10	3.58	4.00	4.74	5.66
•	•	•	•	•	•	**1385**	1.80	1.57	2.22	2.72	3.14	3.85	4.45	4.97	5.88	7.03
•	•	•	•	•	•	**1490**	2.10	2.00	2.83	3.46	4.00	4.90	5.66	6.33	7.48	8.95
•	•	•	•	•	•	**1581**	2.30	2.37	3.35	4.11	4.74	5.81	6.71	7.50	8.87	10.6
•	•	•	•	•	•	**1780**	2.70	3.18	4.50	5.52	6.37	7.80	9.01	10.1	11.9	14.2
•	•	•	•	•	•	**1980**	3.00	4.00	5.66	6.93	8.00	9.80	11.3	12.7	15.0	17.9
•	•	•	•	•	•	**2124**	3.40	5.06	7.16	8.77	10.1	12.4	14.3	16.0	18.9	22.6
	•	•	•	•	•	**2153**	3.80	6.25	8.83	10.8	12.5	15.3	17.7	19.8	23.4	27.9
	•	•	•	•	•	**2194**	4.30	7.92	11.2	13.7	15.8	19.4	22.4	25.0	29.6	35.4
	•	•	•	•	•	**2245**	4.80	10.0	14.1	17.3	20.0	24.5	28.3	31.6	37.4	44.7

3/4" LARGE CAPACITY TIPS

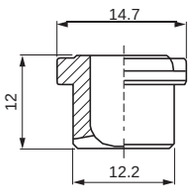
GXA 0°	GXF 30°	GXM 45°	GXQ 60°	GXU 90°	GXW 120°	Code	D mm	Capacity at different pressure values (l/min) (bar)								
								0.5	1.0	1.5	2.0	3.0	4.0	5.0	7.0	10
	•	•	•	•	•	**1781**	2.70	3.18	4.50	5.52	6.37	7.80	9.01	10.1	11.9	14.2
	•	•	•	•	•	**1981**	3.00	4.00	5.66	6.93	8.00	9.80	11.3	12.7	15.0	17.9
•	•	•	•	•	•	**2125**	3.40	5.06	7.16	8.77	10.1	12.4	14.3	16.0	18.9	22.6
•	•	•	•	•	•	**2154**	3.80	6.25	8.83	10.8	12.5	15.3	17.7	19.8	23.4	27.9
•	•	•	•	•	•	**2195**	4.30	7.92	11.2	13.7	15.8	19.4	22.4	25.0	29.6	35.4
•	•	•	•	•	•	**2246**	4.80	10.0	14.1	17.3	20.0	24.5	28.3	31.6	37.4	44.7
•	•	•	•	•	•	**2311**	5.40	12.7	18.0	22.0	25.4	31.1	35.9	40.1	47.5	56.8
•	•	•	•	•	•	**2490**	6.40	20.0	28.3	34.6	40.0	49.0	56.6	63.3	74.8	89.5
•	•	•	•	•	•	**2610**	7.50	24.9	35.2	43.1	49.8	61.0	70.4	78.8	93.2	111
	•	•	•	•	•	**2760**	8.30	31.0	43.9	53.7	62.1	76.0	87.8	98.1	116	139
	•	•	•	•	•	**3122**	12.5	49.8	70.4	86.3	99.6	122	141	158	186	223

ASSEMBLY FITTINGS CODING

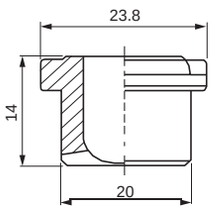
Name	Code and material	Appearance	Standard size 3/8"	Large size 3/4"
Locknut P.88	**B1** - AISI 303 SS **B3** - AISI 316 SS **T1** - Brass **D6** - Fiberglass reinforced PP		VAA 0380 **xx**	VAA 0750 **xx**
Welding nipple P.89	**B1** - AISI 303 SS **B31**- AISI 316L SS		ZAA 1738 **xx**	ZAA 2775 **xx**
Threaded nipple P.89	**B1** - AISI 303 SS **B31**- AISI 316L SS **T1** - Brass		ZLA 2538 **xx**	ZLA 7575 **xx**
Metal pipe clamp P.87	**B1** - AISI 303 SS **T1** - Brass		ZPM	=
Plastic pipe clamp P.86	**D6** - Fiberglass reinforced PP		ZPB 0050 D6	=
Plastic bayonet pipe clamp P.86	**D82** - PVDF		ZPC 0050 D82	=
Flanged filter P.92	**B1** - AISI 303 SS **B3** - AISI 316 SS **T1** - Brass **D3** - Polyamide		VEC 0138 **xx**	=

GY (DOVETAIL FLAT FAN TIPS)

3/8" Standard capacity



3/4" Large capacity



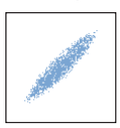
STANDARD AND LARGE CAPACITIES

GY flat fan nozzle tips are usually mounted onto a pipe by means of a welding nipple and secured in place with a retaining nut. Therefore, they can be easily replaced and their dovetail connection assures an always precise assembly as the nozzle can be assembled only when the flat fan is properly oriented. They are available in three types: 3/8" standard capacity, 3/4" large capacity and 1" extra-large capacity. The tip models shown on this page deliver the most popular capacity values, while GY flat fan tips with bigger capacities and sizes can be manufactured on request and supplied with matching dovetail nipples and retaining nuts. Please find information about instalment and accessories on page 89.

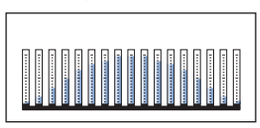
- **Connection**: Dovetail flat fan tips
- **Typical applications**

Washing: steel cleaning
filter cloth cleaning
parts cleaning

Cooling: steel cooling, product cooling



Spray section



Convex distribution

SPRAY ANGLE CODES

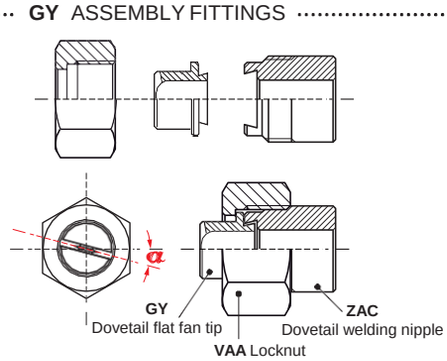
GYA	GYF	GYM	GYQ	GYU	GYW
0°	30°	45°	60°	90°	120°

ASSEMBLY FITTINGS

The picture below shows a GY nozzle tip (in the middle) assembled with a dovetail nipple (right) and a locknut (left).

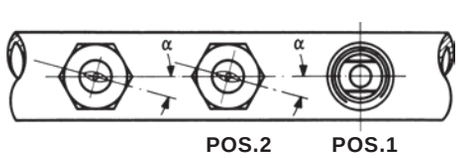
Locknut | **Dovetail flat fan tip** | **Dovetail welding nipple**

GY ASSEMBLY FITTINGS



DOVETAIL NIPPLES

GY nozzle tips are assembled onto their own series of matching dovetail nipples, to assure perfect alignment: the two tip sizes require nipples and caps as shown in the table below. The orientation of the spray jets, properly inclined to avoid their interfering, is automatically obtained welding the nipples in place with their dovetail aligned along the pipe axis. This is easily done by running a stright rule across the dovetail profile machined on the nipple.



See values for jet deviation angle (α) beside capacity tables next page.

HOW TO MAKE UP THE NOZZLE CODE

EX.: GYF 1190 B1

GY F 1190 xx

- NOZZLE TYPE: GY
- SPRAY ANGLE: F
- CAPACITY: 1190
- MATERIAL: xx

SPRAY ANGLE:
- A - 0°
- F - 30°
- M - 45°
- Q - 60°
- U - 90°
- W - 120°

MATERIAL:
- **B1** - AISI 303 Stainless steel
- **B31**- AISI 316L Stainless steel
- **T1** - Brass

STANDARD AND LARGE CAPACITIES

3/8" STANDARD CAPACITY TIPS

Jet deviation angle α = 5°

GYF 30°	GYM 45°	GYQ 60°	GYU 90°	GYW 120°	Capacity code	D mm	Capacity at different pressure values (l/min) (bar)								
							0.5	1.0	1.5	2.0	3.0	4.0	5.0	7.0	10
					1190	1.30	0.78	1.10	1.34	1.55	1.90	2.19	2.45	2.90	3.47
					1233	1.50	0.95	1.35	1.65	1.90	2.33	2.69	3.01	3.56	4.25
•	•	•	•	•	1310	1.70	1.27	1.79	2.19	2.53	3.10	3.58	4.00	4.74	5.66
•	•	•	•	•	1385	1.80	1.57	2.22	2.72	3.14	3.85	4.45	4.97	5.88	7.03
					1490	2.10	2.00	2.83	3.46	4.00	4.90	5.66	6.33	7.48	8.95
					1581	2.30	2.37	3.35	4.11	4.74	5.81	6.71	7.50	8.87	10.6
•	•	•	•	•	1780	2.70	3.18	4.50	5.52	6.37	7.80	9.01	10.1	11.9	14.2
•	•	•	•	•	1980	3.00	4.00	5.66	6.93	8.00	9.80	11.3	12.7	15.0	17.9
					2124	3.40	5.06	7.16	8.77	10.1	12.4	14.3	16.0	18.9	22.6
					2153	3.80	6.25	8.83	10.8	12.5	15.3	17.7	19.8	23.4	27.9
•	•	•	•	•	2194	4.30	7.96	11.3	13.8	15.9	19.5	22.5	25.2	29.8	35.6

3/4" LARGE CAPACITY TIPS

Jet deviation angle α = 15°

GYA 0°	GYF 30°	GYM 45°	GYQ 60°	GYU 90°	GYW 120°	Capacity code	D mm	Capacity at different pressure values (l/min) (bar)								
								0.5	1.0	1.5	2.0	3.0	4.0	5.0	7.0	10
	•	•	•	•	•	1781	2.70	3.18	4.50	5.52	6.37	7.80	9.01	10.1	11.9	14.2
	•	•	•	•	•	1981	3.00	4.00	5.66	6.93	8.00	9.80	11.3	12.7	15.0	17.9
•	•	•	•	•	•	2125	3.40	5.06	7.16	8.77	10.1	12.4	14.3	16.0	18.9	22.6
•	•	•	•	•	•	2154	3.80	6.25	8.83	10.8	12.5	15.3	17.7	19.8	23.4	27.9
•	•	•	•	•	•	2195	4.30	7.92	11.2	13.7	15.8	19.4	22.4	25.0	29.6	35.4
•	•	•	•	•	•	2246	4.80	10.0	14.2	17.4	20.1	24.6	28.4	31.8	37.6	44.9
•	•	•	•	•	•	2311	5.40	12.7	18.0	22.0	25.4	31.1	35.9	40.1	47.5	56.8
•	•	•	•	•	•	2490	6.40	20.0	28.3	34.6	40.0	49.0	56.6	63.3	74.8	89.5
•	•	•	•	•	•	2610	7.50	24.9	35.2	43.1	49.8	61.0	70.4	78.8	93.2	111
	•	•	•	•	•	2760	8.30	31.0	43.9	53.7	62.1	76.0	87.8	98.1	116	139
	•	•	•			3122	12.5	49.8	70.4	86.3	99.6	122	141	158	186	223

ASSEMBLY FITTINGS CODING

Name	Code and material	Appearance	Model no.	
			Standard size 3/8"	Large size 3/4"
Locknut	**B1** - AISI 303 SS **B3** - AISI 316 SS **T 1** - Brass		VAA 0381 **xx**	VAA 0750 **xx**
Dovetail welding nipple	**B1** - AISI 303 SS **B31** - AISI 316L SS		ZAC 1738 **xx**	ZAC 2775 **xx**

HOW TO MAKE UP THE NOZZLE CODE

EX.: GYF 1190 B1