

Blower air nozzle: Long flat jet

TAIFUJet
TF-BPF

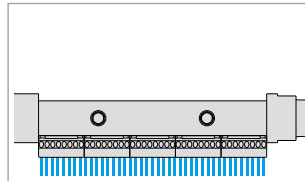
Plastic



Metal



For blowers



Blow pattern

- Long flat air booster nozzle suitable for installation in confined spaces.
- Powerful, high impact air stream can reduce energy consumption by 2/3 compared to compressed air nozzles.
- Unique design provides uniform and efficient distribution of air flow.
- Blow coverage customizable by multiples of 42 mm up to a blow length of 1,596 mm.



Main materials

Plastic: PPS (nozzle tip) and HTPVC (pipe header)
Metal: Aluminum A5052



Weight^{*1}

Plastic: 220–4,360 g



Max. operating pressure

Plastic²: 100 kPa (14 psi), Metal: 100 kPa (14 psi)
[100 kPa = 0.1 MPa]



Max. temperature

Plastic²: 80°C (170°F), Metal: 150°C (300°F)



Noise level

106 dBA at 30 kPa (for plastic TF-BPF 420-80-030)

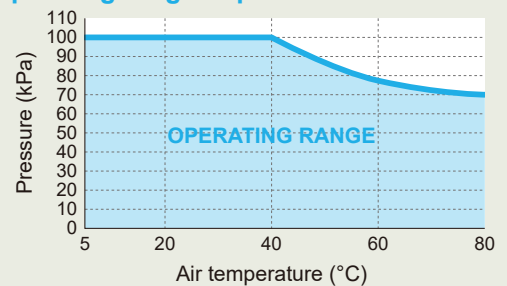


Air consumption

2.94–14.1 m³/min [2,940–14,100 L/min], Normal at 30 kPa

^{*1} Contact us for weight of aluminum TF-BPF series nozzle.

Operating range of plastic model



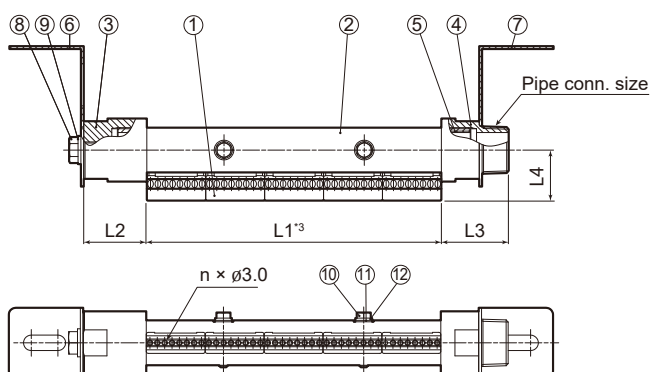
²Heat resistance varies depending on the pressure applied.
Blue colored area indicates the operating range of plastic TF-BPF series.



3D CAD models

Drawing

This drawing is of plastic TF-BPF series. (Contact us for aluminum TF-BPF series.)



³L1 = Length of nozzle tips
(42 mm x number of nozzle tips)
Contact us for blowing width.

Dimensions and weight

Pipe conn. size	Number of orifices [n]	Number of nozzle tips	Outer dimensions (mm)				Weight (g)	
			L1 ³	L2	L3	L4	Plastic TF-BPF	Plate (option)
R1	16–40	2–5	84–210	45	48	36	220–330	230
R1½	48–104	6–13	252–546	56	66	44	580–950	590
R2	112–176	14–22	588–924	66	73	50	1,530–2,060	570
R2½	184–304	23–38	966–1,596	74	84	58	2,990–4,360	550

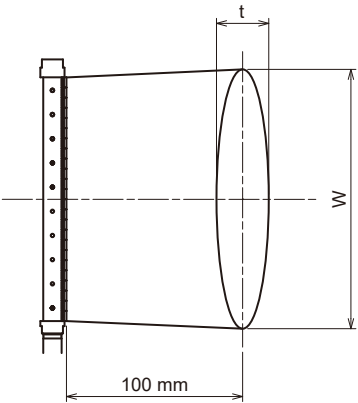
Configuration may differ.

Materials

Components	Materials	Remarks
1 Nozzle tip	PPS	
2 Pipe	HTPVC	
3 Cap	HTPVC	PPS for 2 1/2"
4 Adaptor	HTPVC	PPS for 2 1/2"
5 Sleeve	HTPVC	
6 Plate (fixed)	S304	Optional
7 Plate (loose)	S304	Optional
8 Bolt (M10)	S304 equiv.	Optional
9 Washer (10)	S304 equiv.	Optional
10 Bolt (M6)	S304 equiv.	
11 Packing	PTFE	
12 Washer (6)	S304 equiv.	

• Sealing materials are used for assembly of some parts.
• Optional plates come unassembled.

Blowing Pattern



Model: 1*1/2M TF-BPF 420-80-030 PPS+HTPVC

Air pressure (kPa)	Blowing width W (mm)	Thickness t (mm)
10	425	50
30	430	50

Noise Level at a distance of 1,000 mm

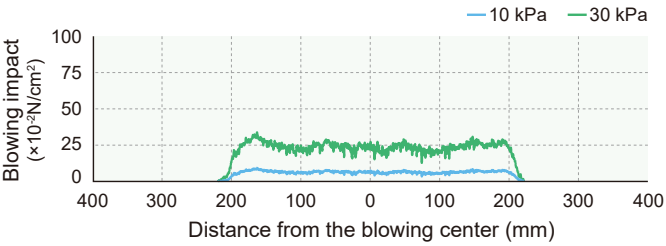
Background noise: 46 dBA

Model: 1*1/2M TF-BPF 420-80-030 PPS+HTPVC

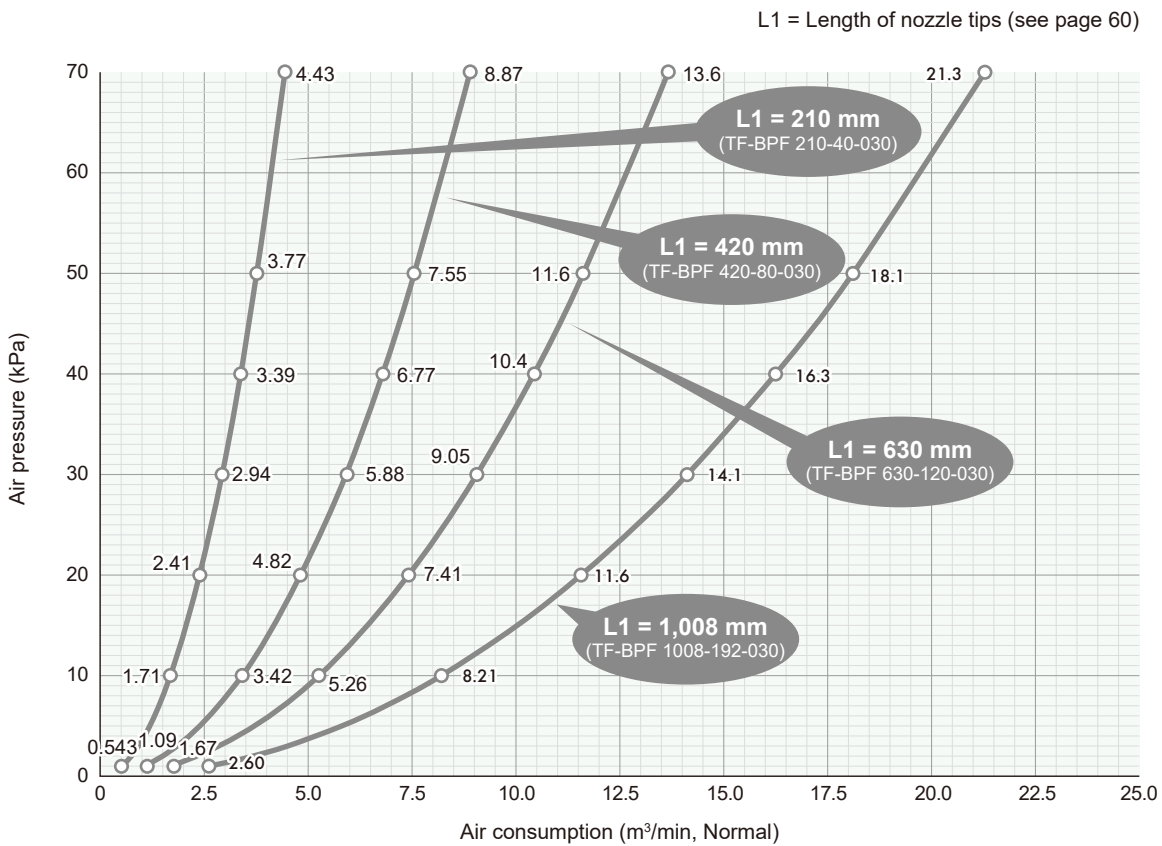
Pressure (kPa)	Noise level (dBA)
10	106
30	106

Blowing Impact Distribution at 100 mm from the nozzle orifice

Model: 1*1/2M TF-BPF 420-80-030 PPS+HTPVC



Air Consumption



HOW TO ORDER

Please let us know the required length of nozzle tips when inquiring or placing an order. Inquiry drawing form is available to verify dimensional specifications.

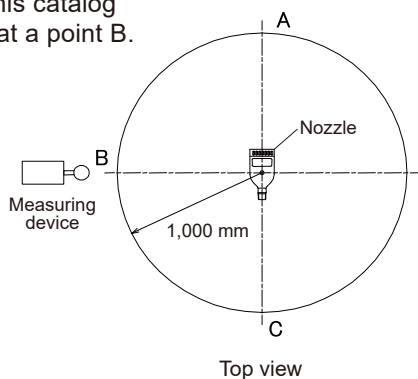
Technical Information

Noise Level Measurement

Noise levels are generally measured at three points A, B, and C, at a distance of 1,000 mm from the nozzle.

The nozzle is installed at a height of 1,000 mm.

Noise levels in this catalog were measured at a point B.

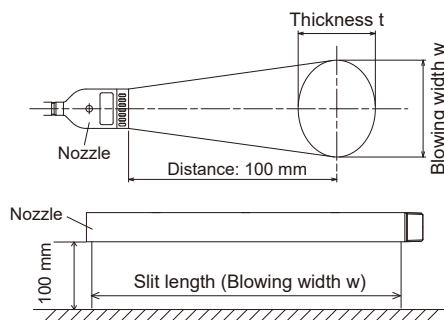


Blowing Pattern Measurement

Blowing air spread is measured at 100 mm from the nozzle orifice.

The blowing width can be used as a guide for spacing nozzles.

The shape of the blow pattern is generally closer to a circle as the distance from the nozzle increases.



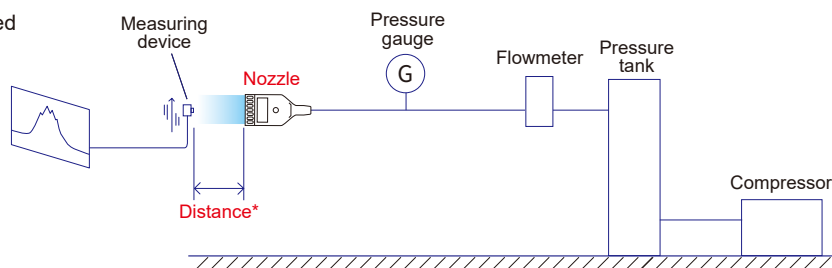
Blowing Impact Measurement

Blowing impact (blowing force) indicates the intensity of air applied to the target surface.

Air blown from the nozzle is measured by a sensor.

The blowing impact increases with an increase of the air pressure supplied.

*The blowing impact in this catalog is measured at a distance of 100 mm from the nozzle orifice except for SLNHA-H, SLNHA-NA, and SLNB series.



Nozzle Materials

The standard and optional materials available for nozzles are shown in the material section of each nozzle series, using the material codes listed here.

	Material code	Material
Plastics	ABS	Acrylonitrile butadiene styrene
	FRPP	Glass-fiber reinforced polypropylene
	HTPVC	Heat-treated polyvinyl chloride
	POM	Polyacetal
	PP	Polypropylene
	PPS	Polyphenylene sulfide
	PTFE	Polytetrafluoroethylene
	PVC	Polyvinyl chloride

	Material code	Material
Metals	S303	Stainless steel 303
	S304	Stainless steel 304
	S316	Stainless steel 316
	S316L	Stainless steel 316L
Rubbers	B	Brass C3604
	EPDM	Ethylene propylene rubber
	FKM	Fluororubber
	NBR	Nitrile rubber

Description of Thread Size and Type

In this catalog, the connection thread size and type are described according to the ISO standard. Threads noted in this catalog are tapered pipe threads unless otherwise specified.

When ordering our nozzles, please specify the thread size using our thread code. For example, "1/4M" is used instead of R1/4 and "1/4F" instead of Rc1/4 as shown right.

Thread type	ISO standard	Our thread code
Male tapered pipe threads	R1/4	1/4M
Female tapered pipe threads	Rc1/4	1/4F

IKEUCHI Air Nozzle Lineup



Type	Flat Jet					
Page	pp. 11–12	pp. 13–15		pp. 16–17	pp. 18–19	pp. 20–21
Nozzle series	TF-F24	TF-FS42		TF-F42	TF-F50	TF-F121
Product photo						
Air supply	Compressor	Compressor		Compressor	Compressor	Compressor
Main material	PPS	PPS	S316L equiv.	PPS	S304	PPS
Weight	4 g	9 g	38 g	30 g	140 g	62 g
Max. operating pressure	0.7 MPa	0.7 MPa	1.0 MPa	0.7 MPa	1.0 MPa	0.7 MPa
Max. temperature	120°C [240°F]	80°C ² [170°F]	400°C [750°F]	80°C ² [170°F]	400°C [750°F]	80°C ² [170°F]
Noise level at 0.3 MPa ¹	76 dBA	79 dBA	60–82 dBA	77 dBA	82 dBA	82 dBA
Air consumption at 0.3 MPa ¹	225 NL/min	440 NL/min	110–630 NL/min	440 NL/min	730 NL/min	1,250 NL/min
Features	• Compact • Low noise level • Uniform impact distribution			• Low noise level • Uniform impact distribution		

Type	Round Jet					
Page	pp. 31–33		pp. 34–35	pp. 36–37	pp. 63–64	
Nozzle series	TF-R		TF-M5R	CCP-A	TF-BR	
Product photo						
Air supply	Compressor		Compressor	Compressor	Blower	
Main material	PP	S316L equivalent & S303	S303	S303	ABS	Aluminum A5052
Weight	2 g	7 g or 12 g	800 g	7.5 g or 19 g	8 g	20 g
Max. operating pressure	0.7 MPa	1.0 MPa	1.0 MPa	1.0 MPa	100 kPa [0.1 MPa]	100 kPa [0.1 MPa]
Max. temperature	60°C [140°F]	400°C [750°F]	216°C [420°F]	400°C [750°F]	80°C [170°F]	150°C [300°F]
Noise level at 0.3 MPa ¹	78 dBA	71–87 dBA	83–91 dBA	66–84 dBA	86 dBA	86 dBA
Air consumption at 0.3 MPa ¹	245 NL/min	157–627 NL/min	1,151–2,632 NL/min	35–215 NL/min	478 NL/min	478 NL/min
Features	• Low noise level • Powerful, high impact air stream		• Low noise level • High volume and powerful air flow	• Targeted, high impact solid air stream	• Low noise level • Powerful, high impact air stream • Minimal air use	

Type	Full Cone Jet	Air Amplifier	Air Blow Gun	
Page	pp. 47–49	pp. 50–55	pp. 56–57	
Nozzle series	JAN	EJA	TF-GUN	
Product photo				
Air supply	Compressor	Compressor	Compressor	Compressor
Main material	S303	S303	PP	PP & PPS
Weight	13 g	405–2,370 g	94 g	97 g or 121 g
Max. operating pressure	1.0 MPa	0.6 MPa	0.7 MPa	0.7 MPa
Max. temperature	400°C [750°F]	*3	50°C [120°F]	50°C ² [120°F]
Noise level at 0.3 MPa	57–82 dBA	83 dBA or less	—	—
Air consumption at 0.3 MPa	49–456 NL/min	150–750 NL/min	225 NL/min ⁵	200–350 NL/min ⁵
Features	• Full cone air blow for wide coverage	• Air amplifying nozzle • Applicable for powder transfer	• Air duster gun with TAIFUJet nozzle	

Flat Jet							
	pp. 22–24	pp. 58–59		pp. 25–30		pp. 60–62	
	HF	TF-BF		TF-PF		TF-BPF	
							
	Compressor	Blower		Compressor		Blower	
	S303	ABS	Aluminum A5052	S304	PPS & S304	PPS & HTPVC	Aluminum A5052
	70 g or 75 g	26 g	65 g	360–13,800 g	950–3,800 g	220–4,360 g	—
	1.0 MPa	100 kPa [0.1 MPa]	100 kPa [0.1 MPa]	1.0 MPa	0.7 MPa	100 kPa [0.1 MPa]	100 kPa [0.1 MPa]
	400°C [750°F]	80°C [170°F]	150°C [300°F]	400°C [750°F]	80°C ² [170°F]	80°C ² [170°F]	150°C [300°F]
	78–84 dBA	85 dBA	85 dBA	84 dBA or more	86 dBA or more	*3	*3
	300–550 NL/min	565 NL/min	565 NL/min	1,150–15,100 NL/min	2,172–13,034 NL/min	2,940–14,100 NL/min	2,940–14,100 NL/min
	• Low noise level • Thick blow pattern • Disassemblable	• Low noise level • Uniform impact distribution • Minimal air use		• Long flat nozzle • Low noise level • Uniform impact distribution		• Long flat nozzle using blower air • Uniform impact distribution • Minimal air use	

Slit Jet							
	pp. 41–43		pp. 44–46	pp. 68–70	pp. 38–40	pp. 65–67	
	SLNHA-H		SLNHA-NA	SLNB	VZ	SAP	
							
	Compressor		Compressor	Blower	Compressor	Compressor	Blower
	PVC	S304	S304	S304	S303	S304	S304
	1.5–4.0 kg	5.0–12.0 kg	4.6–12.0 kg	1.9–7.4 kg	41 g or 69 g	10 g or 16 g	10 g or 16 g
	0.1 MPa	0.3 MPa	0.1 MPa	30 kPa [0.03 MPa]	0.7 MPa	0.7 MPa	
	*3	*3	*3	100°C [210°F]	*3	400°C [750°F]	400°C [750°F]
	*3	*3	*3	90 dBA at 20 kPa ⁴	70–94 dBA	*3	75 dBA or 76 dBA
	656–1,733 NL/min at 0.05 MPa		545–2,881 NL/min at 0.05 MPa	970–5,730 NL/min at 5 kPa	154–1,122 NL/min	736–1,016 NL/min	208–287 NL/min
	• Long slit nozzle • Uniform impact distribution		• No need to adjust slit opening after maintenance	• Long slit nozzle using blower air • Minimal air use	• Tip replaceable • Wide-angle flat blow pattern • Possible to use steam	• Low cost, suitable for mass use • Suitable for use in tight spaces	

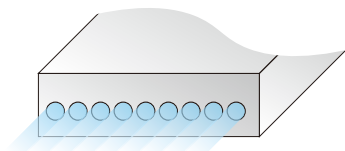
¹ The blower type (nozzle using blower air) was measured at 30 kPa. ² Heat resistance depends on the pressure applied. ³ Inquire with us.

⁴ Value for slit length of 800 mm. ⁵ When air flow regulator valve is set to Max.

Type of Nozzle Orifices

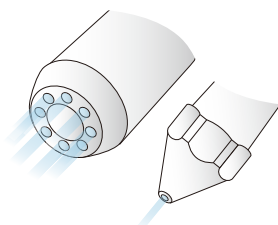
Flat Jet

Nozzle orifices are arranged in one row or multiple rows. TAIFUJet flat type (using compressed air) is designed with a staggered alignment of nozzle orifices and intake holes, which results in a uniform impact distribution.



Round Jet

Single or multiple orifices are arranged in a circle, producing a directed round blowing pattern.



Slit Jet

Wide flat blow or uniform sheet of air (like a curtain) is created from the thin slit nozzle orifice.

