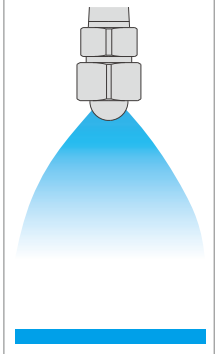
# Flat blow slit jet VZ

For compressors



Blow pattern

- Wide-angle flat blow provides large coverage.
- Air flow volume can be adjusted by changing the nozzle tip.
- Three-piece nozzle can be disassembled for easy cleaning of orifice.
- Can be used for blowing either compressed air or steam.

Material
S303

Weight
Pipe conn. size R1/4: 41 g
Pipe conn. size R3/8: 69 g

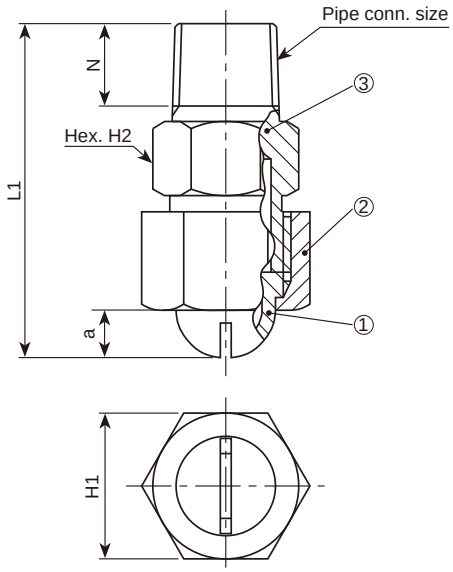
Max. operating pressure
0.7 MPa (100 psi)

Noise level
70–94 dBA at 0.3 MPa

Air consumption
154–1,122 L/min, Normal at 0.3 MPa

## Drawing

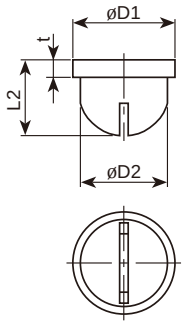
### Complete Assembly




1. Nozzle tip
2. Cap
3. Adaptor

3D CAD models

### Nozzle Tip

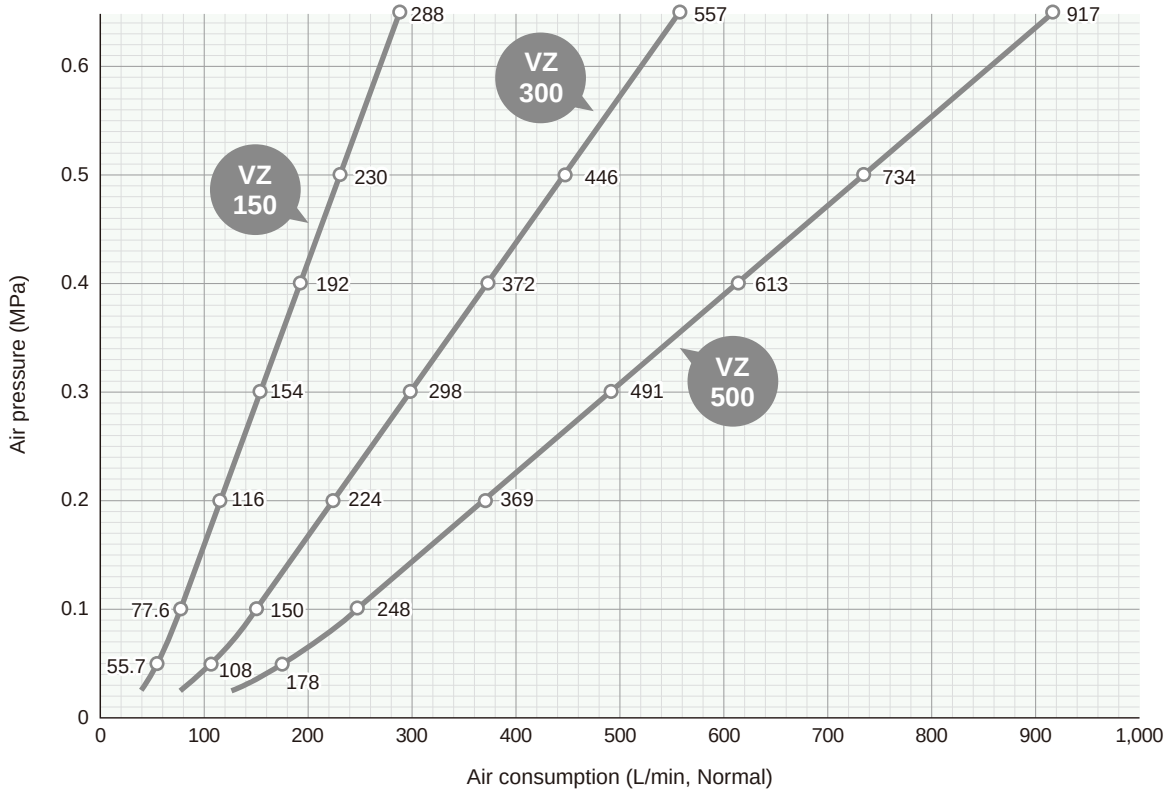


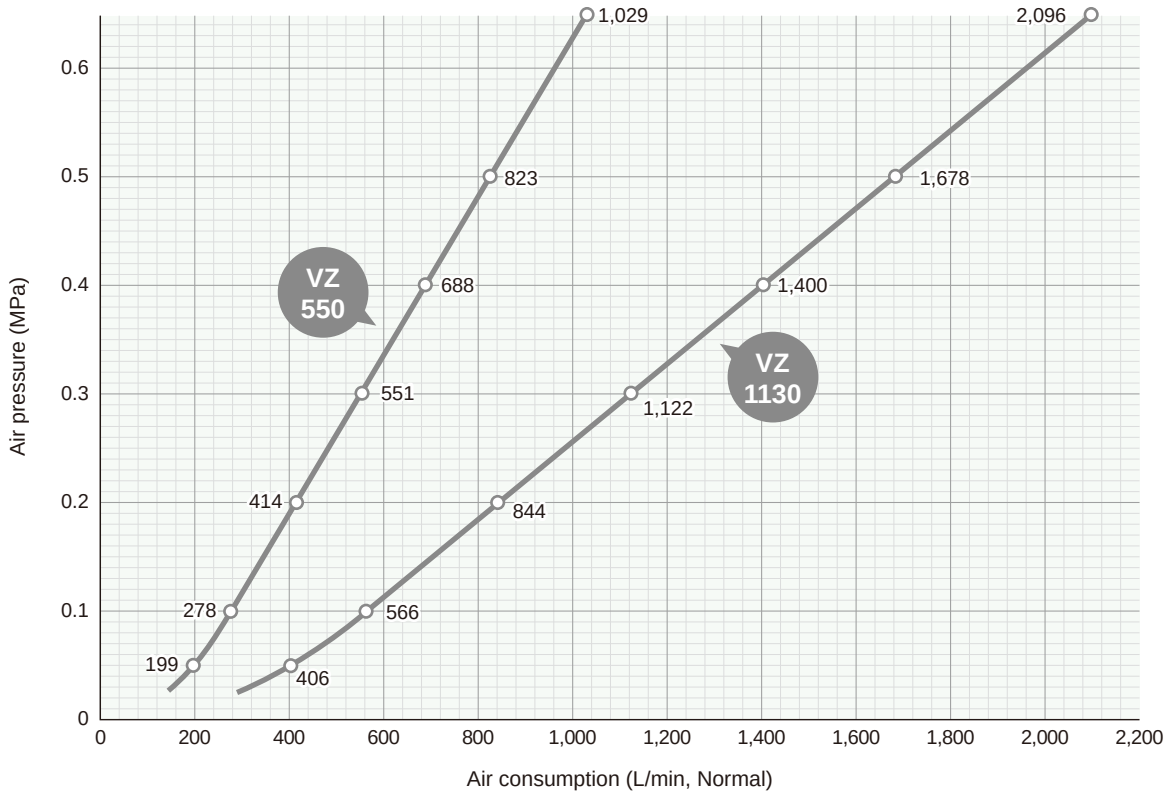

| Complete Assembly | | | | | | | Nozzle Tip | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Pipe conn. size*1 | Outer dimensions (mm) | | | | | Weight (g) | Outer dimensions (mm) | | | | Weight (g) |
| | L1 | H1 | H2 | N | a | | L2 | øD1 | øD2 | t | |
| R1/4 (150–500) | 43.0 | 19.0 | 17.0 | 10.5 | 6.5 | 41 | 11.0 | 14.5 | 12.5 | 2.5 | 5.1 |
| R3/8 (550–1130) | 48.5 | 23.0 | 21.0 | 11.0 | 9.5 | 69 | 14.0 | 18.0 | 16.0 | 2.5 | 8.0 |

*1 Numbers after the pipe connection size indicate the capacity code (see page 40).

## Air Consumption

See Performance Data on page 40 for the other VZ series models and their air consumption.



## Noise Level

at a distance of 1,000 mm

Background noise: 34 dBA

| Capacity code | Pressure (MPa) | Noise level (dBA) |
|---|---|---|
| 150 | 0.1 | 59 |
| | 0.3 | 70 |
| | 0.5 | 74 |

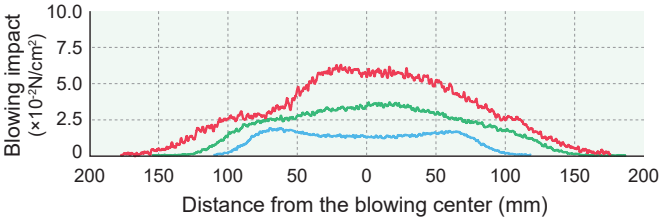
| Capacity code | Pressure (MPa) | Noise level (dBA) |
|---|---|---|
| 550 | 0.1 | 74 |
| | 0.3 | 84 |
| | 0.5 | 90 |

| Capacity code | Pressure (MPa) | Noise level (dBA) |
|---|---|---|
| 1130 | 0.1 | 87 |
| | 0.3 | 94 |
| | 0.5 | 100 |

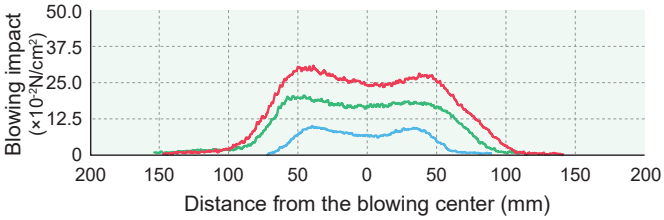
## Blowing Impact Distribution

at 100 mm from the nozzle orifice

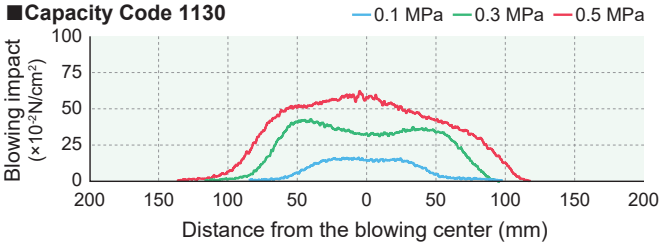
■Capacity Code 150




■Capacity Code 550




■Capacity Code 1130




## Performance Data

| Capacity code | Pipe conn. size | | Air consumption (L/min, Normal) | | | | | | Steam consumption (kg/hr) (When using steam instead of air) | | | | | | Free passage diameter (mm) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | R1/4 | R3/8 | 0.05 MPa | 0.1 MPa | 0.2 MPa | 0.3 MPa | 0.5 MPa | 0.7 MPa | 0.05 MPa | 0.1 MPa | 0.2 MPa | 0.3 MPa | 0.5 MPa | 0.7 MPa | |
| 150 | ● | – | 55.7 | 77.6 | 116 | 154 | 230 | 307 | 2.62 | 3.56 | 5.27 | 6.97 | 10.3 | 13.7 | 0.2 |
| 200 | ● | – | 73.1 | 102 | 152 | 202 | 302 | 402 | 3.44 | 4.67 | 6.92 | 9.14 | 13.6 | 17.9 | 0.4 |
| 250 | ● | – | 90.5 | 126 | 188 | 250 | 374 | 498 | 4.26 | 5.78 | 8.57 | 11.3 | 16.8 | 22.2 | 0.5 |
| 300 | ● | – | 108 | 150 | 224 | 298 | 446 | 594 | 5.08 | 6.90 | 10.2 | 13.5 | 20.0 | 26.5 | 0.6 |
| 350 | ● | – | 125 | 175 | 261 | 346 | 518 | 690 | 5.90 | 8.00 | 11.9 | 15.7 | 23.2 | 30.7 | 0.7 |
| 400 | ● | – | 143 | 199 | 297 | 394 | 590 | 786 | 6.72 | 9.12 | 13.5 | 17.9 | 26.5 | 35.0 | 0.8 |
| 450 | ● | – | 160 | 223 | 333 | 443 | 662 | 882 | 7.54 | 10.2 | 15.2 | 20.0 | 29.7 | 39.3 | 0.9 |
| 500 | ● | – | 178 | 248 | 369 | 491 | 734 | 977 | 8.36 | 11.3 | 16.8 | 22.2 | 32.9 | 43.5 | 1.1 |
| 550 | – | ● | 199 | 278 | 414 | 551 | 823 | 1,096 | 9.38 | 12.7 | 18.8 | 24.9 | 36.9 | 48.8 | 0.9 |
| 600 | – | ● | 219 | 305 | 455 | 605 | 905 | 1,205 | 10.3 | 14.0 | 20.7 | 27.4 | 40.6 | 53.7 | 1.0 |
| 650 | – | ● | 235 | 328 | 489 | 650 | 972 | 1,295 | 11.1 | 15.0 | 22.3 | 29.4 | 43.6 | 57.7 | 1.1 |
| 700 | – | ● | 253 | 353 | 526 | 700 | 1,047 | 1,394 | 11.9 | 16.2 | 24.0 | 31.7 | 46.9 | 62.1 | 1.1 |
| 750 | – | ● | 272 | 380 | 566 | 753 | 1,126 | 1,500 | 12.8 | 17.4 | 25.8 | 34.1 | 50.5 | 66.8 | 1.2 |
| 900 | – | ● | 326 | 454 | 677 | 901 | 1,347 | 1,794 | 15.3 | 20.8 | 30.8 | 40.7 | 60.4 | 79.9 | 1.5 |
| 1130 | – | ● | 406 | 566 | 844 | 1,122 | 1,678 | 2,235 | 19.1 | 25.9 | 38.4 | 50.8 | 75.2 | 99.5 | 1.9 |

● shows availability of the item.

## HOW TO ORDER

To inquire about or order a specific nozzle please refer to this coding system.

**Complete Assembly**

<Example> 1/4M VZ 150 S303

**1/4M VZ 150 S303**

Pipe Conn. Size*2
- ●1/4M
- ●3/8M

Capacity Code
- ●150–500
- ●550–1130

**Nozzle Tip (only)**

<Example> VZ 150-TIP S303

**VZ 150 -TIP S303**

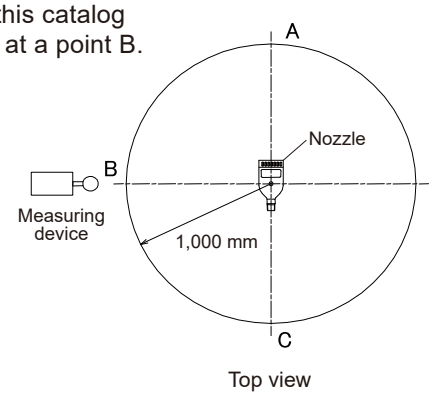
Capacity Code
- ●150–500
- ●550–1130

*2"M" indicates male thread ("R" of the ISO standard), e.g. 1/4M = R1/4.

# Technical Information

## Noise Level Measurement

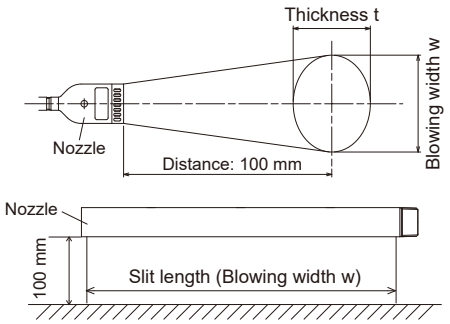
Noise levels are generally measured at three points A, B, and C, at a distance of 1,000 mm from the nozzle.
The nozzle is installed at a height of 1,000 mm.
Noise levels in this catalog were measured at a point B.



Top view

## Blowing Pattern Measurement

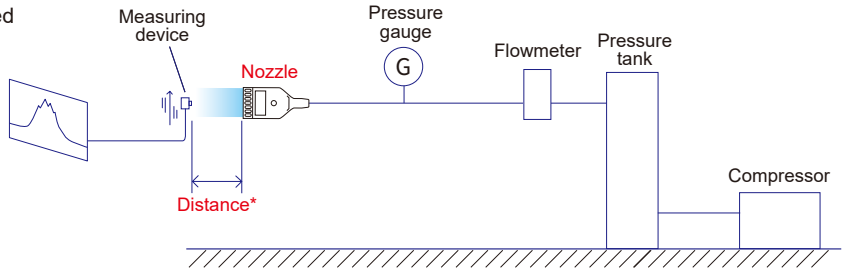
Blowing air spread is measured at 100 mm from the nozzle orifice.
The blowing width can be used as a guide for spacing nozzles.
The shape of the blow pattern is generally closer to a circle as the distance from the nozzle increases.




## 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 |
| | B | Brass C3604 |
| Rubbers | 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<br>• Low noise level<br>• Uniform impact distribution | | | • Low noise level<br>• 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<br>• Powerful, high impact air stream | | • Low noise level<br>• High volume and powerful air flow | • Targeted, high impact solid air stream | • Low noise level<br>• Powerful, high impact air stream<br>• 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<br>• Applicable for powder transfer | • Air duster gun with TAIFUJet nozzle | |

Scan to watch our video:
"Introduction to All Our Air Nozzles".

| | 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<br>• Thick blow pattern<br>• Disassemblable | • Low noise level<br>• Uniform impact distribution<br>• Minimal air use | | • Long flat nozzle<br>• Low noise level<br>• Uniform impact distribution | | • Long flat nozzle using blower air<br>• Uniform impact distribution<br>• Minimal air use | |

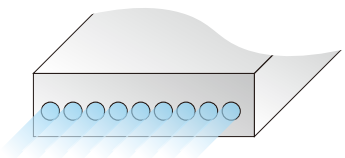
| | Slit Jet | | | | | | |
|---|---|---|---|---|---|---|---|
| | pp. 41–43 | | pp. 44–46 | pp. 68–70 | pp. 38–40 | pp. 65–67 | |
| | **SLNHA-H** | | **SLNHA-NA** | **SLNB** | **VZ** | **SAP** | |
| | | | | | | | |
| | Compressor | | Compressor | Blower | Compressor | Compressor | Blower |
| | PVC | S304 | 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<br>• Uniform impact distribution | | • No need to adjust slit opening after maintenance | • Long slit nozzle using blower air<br>• Minimal air use | • Tip replaceable<br>• Wide-angle flat blow pattern<br>• Possible to use steam | • Low cost, suitable for mass use<br>• 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

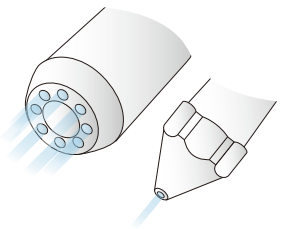
### Flat Jet

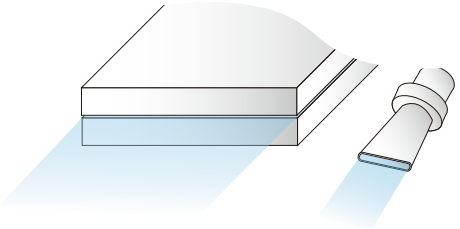
Nozzle orifices are arranged in one row or multiple rows.
TAIFUJet flat type (using compressed air) is designed with a staggered alignment of nozzle orifices and intake holes, which results in a uniform impact distribution.



### 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.