

Aluminum SpotDiffusers

Model: **PK & PK-E**

Aluminum SpotDiffusers

www.seilno.com



The SpotDiffuser model PK and PK-E are excellent for spot heating and cooling remote areas. Kitchens, factories, theaters, indoor sports facilities, airport terminals or any place where you need to move conditioned air from an inaccessible place to the work environment is easily handled by the PK and PK-E SpotDiffusers. Engineered to exacting standards and stylish in design, the PK and PK-E are the perfect choices for many new and retrofit building construction.



Model: **PK**



Model: **PK-E**
(without Damper)

MATERIAL

- Aluminum

FINISH

- Clear Anodized
- Custom Colors Available

FEATURES



- The model PK and PK-E can be mounted in a vertical or horizontal position or any angle in between. The architect or engineer has unlimited applications and an infinite choice of mounting locations.
- The ventilation efficiency of the PK and PK-E allow long airflow throws to ventilate or condition remote areas where ducting would be impractical or cost prohibitive.
- The directional control can pinpoint the airflow where it's needed as space or occupant configurations change. This feature makes these units ideal for use on stages and movie sets.
- The modulating volume control allows precise adjustment of airflow in all application without need for special tools, removal or disassembly (PK).
- The lightweight and corrosion-resistant finish make these units easy to install and tailored to a variety of applications. Its solid construction makes this unit rugged and durable in adverse conditions, without possibility of failure of a weld or rivet.

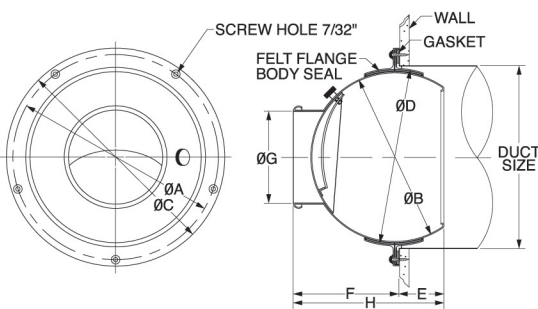
CONSTRUCTION

■ The SEIHO Model PK and PK-E Aluminum SpotDiffusers are manufactured from heavy-gauge aluminum. The overall heavy-duty construction exceeds industry standards by a wide margin. The multi-directional louver body and all other components are machined to close tolerances from solid aluminum alloys, then bright polished. The flange-to-body gasket consists of two tandem felt strips for a leak-proof seal. These components comprise a unit which provides smooth movement of the louver body when adjusting its direction. The flange mounting gasket is closed-cell neoprene or felt, depending on unit size. A knurled aluminum thumb-operated airflow adjustment knob facilitates control of airflow by regulating the volume out of the exit nozzle with the precision internal damper (PK). The internal damper is under tension by a stainless steel spring for sealing and quiet operation (PK).

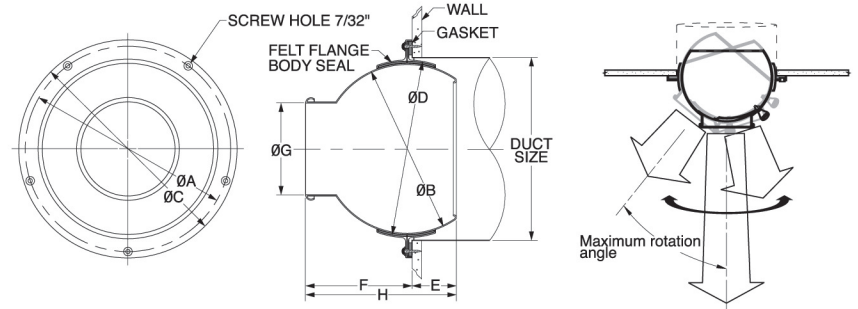
DESIGN

- SEIHO's Model PK and PK-E pivoting body can be rotated in any 3-dimensional direction around its internal center.
- Maximum rotation angle up to 33° to 42° in all direction from its center axis.
- Air flow can be directed up to 90-feet depending upon CFM available. Refer to Performance Data for specific model.

MODEL PK DIMENSIONS



MODEL PK-E DIMENSIONS



| MODEL | DUCT SIZE | A | B | C | D | E | F | G | H | SCREW HOLES | WEIGHT Lbs. | MAX ROTATION ANGLE |
|--------------|-----------|----------|---------|---------|----------|---------|---------|---------|----------|-------------|-------------|--------------------|
| PK 3 PK 3E | 3 11/32 | 3 13/16 | 2 15/16 | 4 17/32 | 3 7/32 | 2 1/32 | 2 3/32 | 1 1/2 | 2 3/4 | 3 | 0.29 | 33° |
| PK 4 PK 4E | 4 11/32 | 4 13/16 | 3 15/16 | 5 1/2 | 4 7/32 | 1 5/16 | 2 9/16 | 1 31/32 | 3 1/2 | 4 | 0.40 | 41° |
| PK 5 PK 5E | 5 1/2 | 5 31/32 | 5 1/8 | 6 11/16 | 5 13/32 | 1 15/16 | 3 7/32 | 2 9/16 | 4 17/32 | 5 | 0.75 | 42° |
| PK 6 PK 6E | 6 5/16 | 6 25/32 | 5 29/32 | 7 15/32 | 6 7/32 | 1 1/2 | 3 11/16 | 2 15/16 | 5 3/16 | 5 | 0.82 | 43° |
| PK 7 PK 7E | 7 15/32 | 8 3/8 | 7 | 9 3/32 | 7 9/32 | 1 1/2 | 4 3/8 | 3 17/32 | 5 7/8 | 5 | 1.02 | 42° |
| PK 8 PK 8E | 8 3/16 | 9 1/8 | 7 7/8 | 9 27/32 | 8 1/32 | 1 23/32 | 4 23/32 | 3 15/16 | 6 7/16 | 5 | 1.28 | 42° |
| PK 10 PK 10E | 11 1/32 | 11 31/32 | 10 1/2 | 12 3/4 | 10 7/8 | 1 31/32 | 6 27/32 | 5 1/2 | 8 13/16 | 5 | 2.10 | 40° |
| PK 12 PK 12E | 12 17/32 | 13 15/32 | 12 | 14 9/32 | 12 3/8 | 2 15/32 | 7 7/8 | 6 1/2 | 10 11/32 | 5 | 2.60 | 39° |
| PK 14 PK 14E | 12 17/32 | 13 15/32 | 12 | 14 9/32 | 12 3/8 | 2 3/8 | 7 9/32 | 7 15/32 | 9 5/8 | 5 | 2.60 | 39° |
| PK 16 PK 16E | 16 23/32 | 17 3/4 | 16 5/32 | 18 1/2 | 16 1/2 | 3 5/8 | 9 3/4 | 9 1/6 | 13 3/8 | 8 | 4.41 | 40° |
| PK 18 PK 18E | 19 1/8 | 20 1/8 | 18 1/2 | 21 1/16 | 18 27/32 | 3 3/4 | 11 5/8 | 10 1/4 | 15 11/32 | 8 | 5.80 | 38° |
| PK 20 PK 20E | 19 1/8 | 20 1/8 | 18 1/2 | 21 1/16 | 18 27/32 | 3 3/4 | 11 5/8 | 12 7/32 | 15 11/32 | 8 | 6.02 | 34° |

Product information is subject to change without notice. All dimensions in inches.

VERSATILITY

The PK and PK-E SpotDiffusers can be used for many different projects. For example:

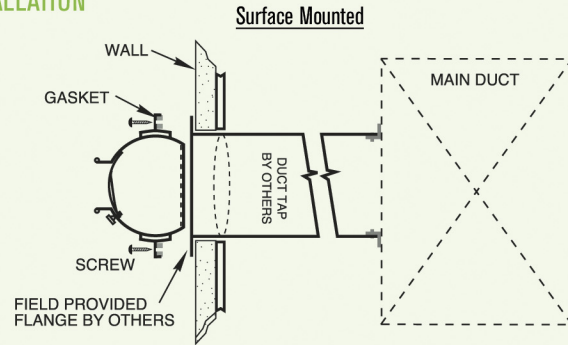
- Restaurants
- Office Buildings
- Shopping Centres
- Hospitals
- Retail Stores
- Ships
- Sports Facilities
- Studios
- Convention Centres
- Factories
- Theatres
- Airport Concourses

FINISH

■ The standard finish is clear anodized aluminum. Powder coatings in a variety of colors are available upon request at a nominal charge. Please contact our sales department for assistance and detailed ordering information.



INSTALLATION



■ The SEIHO Model PK and PK-E Aluminum SpotDiffusers are designed for ease of installation on any ceiling or wall surface after all other mechanical and architectural work has been completed-no interference with other hidden or exposed items during the construction process, and therefore no cause for delays. Because of the light weight aluminum construction, the Model PK and PK-E require no special hangers.

■ For direct tap installation at the duct the Model PK and PK-E can be screwed directly to the duct. Duct velocities should be low, about 500 fpm.

■ The Model PK and PK-E are simply installed using no special tools or techniques required. Final airflow adjustments can then be made by the installer, or during air balancing of the room or building. Variations are easy if the room use is altered.



Aluminum SpotDiffuser Performance Data

Model: **PK & PK-E**



| SIZE | Approx. Nozzle Velocity Terminal Velocity, Vt | 500 | | | | 1000 | | | | 1500 | | | | 2000 | | | | 2500 | | | | 3000 | | | | 3500 | | | | 4000 | | | |
|------|--|-------|-----|-----|-----|-------|-----|-----|-----|------|-----|-----|-----|------|-----|-----|-----|------|-----|-----|-----|------|-----|-----|-----|------|-----|-----|-----|------|-----|-----|-----|
| | | 50 | 100 | 200 | 400 | 50 | 100 | 200 | 400 | 50 | 100 | 200 | 400 | 50 | 100 | 200 | 400 | 50 | 100 | 200 | 400 | 50 | 100 | 200 | 400 | 50 | 100 | 200 | 400 | 50 | 100 | 200 | 400 |
| 3 | Nozzle Area | 5 | | | | 10 | | | | 15 | | | | 20 | | | | 25 | | | | 35 | | | | 40 | | | | 45 | | | |
| | 0.012 sq.ft | 0.01 | | | | 0.03 | | | | 0.09 | | | | 0.19 | | | | 0.31 | | | | 0.75 | | | | 0.82 | | | | 1.1 | | | |
| | NC | - | | | | - | | | | - | | | | <20 | | | | <20 | | | | 21 | | | | 23 | | | | 25 | | | |
| | Throw (ft.) | 7 | 5 | 2 | - | 12 | 7 | 3 | - | 18 | 9 | 6 | 2 | 25 | 12 | 7 | 3 | 31 | 15 | 8 | 4 | 50 | 25 | 12 | 6 | 55 | 27 | 13 | 7 | 60 | 30 | 15 | 8 |
| 4 | Nozzle Area | 10 | | | | 20 | | | | 30 | | | | 40 | | | | 50 | | | | 60 | | | | 70 | | | | 80 | | | |
| | 0.021 sq.ft | 0.01 | | | | 0.05 | | | | 0.14 | | | | 0.25 | | | | 0.39 | | | | 0.56 | | | | 0.8 | | | | 1.05 | | | |
| | NC | - | | | | - | | | | <20 | | | | <20 | | | | 21 | | | | 24 | | | | 28 | | | | 32 | | | |
| | Throw (ft.) | 9 | 6 | 3 | - | 18 | 10 | 5 | - | 27 | 14 | 7 | 3 | 36 | 18 | 9 | 5 | 44 | 23 | 12 | 6 | 53 | 28 | 14 | 7 | 65 | 32 | 16 | 8 | 75 | 37 | 18 | 9 |
| 5 | Nozzle Area | 20 | | | | 40 | | | | 60 | | | | 80 | | | | 90 | | | | 110 | | | | 130 | | | | 150 | | | |
| | 0.026 sq.ft | 0.02 | | | | 0.07 | | | | 0.18 | | | | 0.31 | | | | 0.40 | | | | 0.68 | | | | 0.93 | | | | 1.3 | | | |
| | NC | - | | | | - | | | | <20 | | | | <20 | | | | 22 | | | | 27 | | | | 32 | | | | 35 | | | |
| | Throw (ft.) | 15 | 10 | 5 | - | 30 | 15 | 8 | 2 | 42 | 21 | 9 | 6 | 55 | 29 | 15 | 8 | 62 | 35 | 17 | 9 | 80 | 40 | 19 | 10 | 98 | 45 | 29 | 12 | 105 | 52 | 27 | 14 |
| 6 | Nozzle Area | 25 | | | | 50 | | | | 80 | | | | 100 | | | | 120 | | | | 150 | | | | 170 | | | | 190 | | | |
| | 0.047 sq.ft | 0.02 | | | | 0.07 | | | | 0.18 | | | | 0.29 | | | | 0.44 | | | | 0.82 | | | | 0.93 | | | | 1.2 | | | |
| | NC | - | | | | - | | | | <20 | | | | 20 | | | | 21 | | | | 27 | | | | 30 | | | | 33 | | | |
| | Throw (ft.) | 19 | 10 | 5 | - | 30 | 16 | 8 | 4 | 50 | 25 | 13 | 8 | 65 | 31 | 17 | 9 | 80 | 37 | 20 | 10 | 100 | 45 | 23 | 12 | 110 | 55 | 28 | 14 | 125 | 50 | 30 | 15 |
| 7 | Nozzle Area | 35 | | | | 70 | | | | 110 | | | | 140 | | | | 170 | | | | 210 | | | | 240 | | | | 280 | | | |
| | 0.068 sq.ft | 0.016 | | | | 0.06 | | | | 0.18 | | | | 0.28 | | | | 0.41 | | | | 0.65 | | | | 0.9 | | | | 1.25 | | | |
| | NC | - | | | | - | | | | <20 | | | | 20 | | | | 25 | | | | 29 | | | | 34 | | | | 38 | | | |
| | Throw (ft.) | 22 | 11 | 6 | 2 | 36 | 19 | 9 | 4 | 60 | 29 | 15 | 8 | 80 | 36 | 19 | 10 | 90 | 45 | 23 | 12 | 105 | 60 | 27 | 14 | 125 | 65 | 32 | 16 | 150 | 72 | 37 | 19 |
| 8 | Nozzle Area | 45 | | | | 90 | | | | 130 | | | | 170 | | | | 220 | | | | 260 | | | | 300 | | | | 340 | | | |
| | 0.085 sq.ft | 0.016 | | | | 0.06 | | | | 0.17 | | | | 0.27 | | | | 0.38 | | | | 0.64 | | | | 0.92 | | | | 1.2 | | | |
| | NC | - | | | | <20 | | | | <20 | | | | 22 | | | | 27 | | | | 33 | | | | 35 | | | | 39 | | | |
| | Throw (ft.) | 25 | 12 | 7 | 4 | 40 | 20 | 12 | 6 | 62 | 30 | 16 | 9 | 85 | 39 | 20 | 11 | 105 | 52 | 27 | 13 | 125 | 62 | 30 | 17 | 150 | 72 | 35 | 19 | 162 | 80 | 38 | 20 |
| 10 | Nozzle Area | 85 | | | | 170 | | | | 250 | | | | 330 | | | | 420 | | | | 500 | | | | 580 | | | | 660 | | | |
| | 0.165 sq.ft | 0.014 | | | | 0.06 | | | | 0.14 | | | | 0.24 | | | | 0.44 | | | | 0.63 | | | | 0.92 | | | | 1.2 | | | |
| | NC | - | | | | <20 | | | | <20 | | | | 20 | | | | 26 | | | | 30 | | | | 34 | | | | 38 | | | |
| | Throw (ft.) | 30 | 15 | 8 | 5 | 55 | 30 | 14 | 7 | 90 | 42 | 22 | 10 | 112 | 55 | 29 | 14 | 148 | 72 | 36 | 17 | 162 | 84 | 42 | 21 | 190 | 100 | 48 | 24 | 225 | 112 | 55 | 28 |
| 12 | Nozzle Area | 115 | | | | 230 | | | | 350 | | | | 460 | | | | 580 | | | | 690 | | | | 810 | | | | 920 | | | |
| | 0.230 sq.ft | 0.012 | | | | 0.055 | | | | 0.12 | | | | 0.22 | | | | 0.43 | | | | 0.6 | | | | 0.92 | | | | 1.2 | | | |
| | NC | - | | | | <20 | | | | <20 | | | | 23 | | | | 28 | | | | 32 | | | | 36 | | | | 40 | | | |
| | Throw (ft.) | 35 | 17 | 9 | 6 | 66 | 35 | 17 | 7 | 100 | 50 | 27 | 13 | 137 | 65 | 34 | 17 | 162 | 82 | 42 | 22 | 187 | 100 | 50 | 26 | 220 | 112 | 57 | 29 | 250 | 130 | 70 | 34 |
| 16 | Nozzle Area | 225 | | | | 450 | | | | 680 | | | | 900 | | | | 1120 | | | | 1350 | | | | 1570 | | | | 1800 | | | |
| | 0.448 sq.ft | 0.012 | | | | 0.06 | | | | 0.12 | | | | 0.21 | | | | 0.41 | | | | 0.62 | | | | 0.9 | | | | 1.2 | | | |
| | NC | - | | | | 20 | | | | 21 | | | | 26 | | | | 29 | | | | 37 | | | | 40 | | | | 44 | | | |
| | Throw (ft.) | 47 | 25 | 12 | 7 | 90 | 47 | 24 | 12 | 138 | 66 | 36 | 18 | 175 | 95 | 47 | 23 | 225 | 112 | 55 | 28 | 250 | 137 | 65 | 35 | 275 | 160 | 80 | 42 | 350 | 175 | 95 | 47 |
| 18 | Nozzle Area | 290 | | | | 580 | | | | 860 | | | | 1150 | | | | 1440 | | | | 1720 | | | | 2010 | | | | 2300 | | | |
| | 0.573 sq.ft | 0.01 | | | | 0.06 | | | | 0.10 | | | | 0.21 | | | | 0.42 | | | | 0.6 | | | | 0.9 | | | | 1.15 | | | |
| | NC | - | | | | <20 | | | | 20 | | | | 25 | | | | 31 | | | | 35 | | | | 39 | | | | 42 | | | |
| | Throw (ft.) | 55 | 27 | 13 | 7 | 112 | 55 | 27 | 13 | 152 | 98 | 40 | 20 | 200 | 110 | 52 | 26 | 250 | 125 | 67 | 33 | 300 | 155 | 78 | 40 | 350 | 175 | 90 | 47 | 400 | 200 | 110 | 48 |
| 20 | Nozzle Area | 410 | | | | 820 | | | | 1230 | | | | 1630 | | | | 2040 | | | | 2450 | | | | 2850 | | | | 3260 | | | |
| | 0.814 sq.ft | 0.01 | | | | 0.06 | | | | 0.12 | | | | 0.17 | | | | 0.41 | | | | 0.61 | | | | 0.9 | | | | 1.2 | | | |
| | NC | - | | | | <20 | | | | 20 | | | | 27 | | | | 32 | | | | 38 | | | | 42 | | | | 45 | | | |
| | Throw (ft.) | 70 | 38 | 20 | 10 | 150 | 75 | 39 | 18 | 220 | 112 | 56 | 29 | 275 | 150 | 75 | 37 | 350 | 175 | 90 | 47 | 400 | 212 | 112 | 56 | 425 | 250 | 125 | 65 | 450 | 275 | 150 | 75 |

DASHED LINE IN SP BOX INDICATES STATIC PRESSURE IS LESS THAN 0.01 IN.W.G.
DASHED LINE IN NC BOX INDICATES NOISE LEVEL IS LESS THAN 20.
NC LEVEL IS BASED ON 10dB ROOM ATTENUATION(PWL RE:10-12 WATTS) WITH ONE DIFFUSER OPERATING.