



Commercial and Industrial Refrigeration Service Pumps

WELCH
by Gardner Denver **DUOSEAL®**



5Z025

Designed for removing air and moisture from industrial and commercial chillers. Vacuum pumps are rated for low-micron Hg vacuum, continuous duty. Pumps include a gas ballast valve that inhibits condensation reducing corrosion, On/Off switch, 3-wire cord, and oil.

DuoSeal® Belt-Drive—All-metal internal construction and low pump rpm provide long service life. Large oil reservoirs dilute contaminants. Come complete with base, belt, belt guard, and motor. 5Z025 also includes carrying handles.

| Application | Tonnage | Item No. | Pump Capabilities |
|------------------------------------|--------------|--------------|---|
| Lithium Bromide Absorption Chiller | 100 to 500 | 5Z025 | Handles harsh salt-laden water vapor. Withstands accidental ingestion of salt solution. Recirculates clean fraction of vacuum pump oil. |
| | 500 to 1000 | 5Z025, 6D731 | |
| | 1000 to 1500 | 6D731, 6D733 | |
| Cold Storage | 10 to 50 | 5Z025 | Handles long pumpdown time effectively. Handles high water vapor loads. Draws a very deep vacuum. |
| | 50 to 500 | 5Z025, 6D731 | |
| | 500 to 1000 | 6D733 | |
| HCFC, CFC or Ammonia Chiller | 10 to 50 | 5Z025 | Seals and gaskets won't break down in the presence of R-11, R-12, R-13, R-22, R-113, R-123, R-114, R-502, R-503 or ammonia. Handles high water vapor loads. Draws a very deep vacuum. |
| | 50 to 500 | 5Z025, 6D731 | |
| | 500 to 1000 | 6D733 | |

| HP Displacement | Ultimate Pressure Torr | Intake Male SAE Flare | Voltage | Amps AC | Overall | | | Mfr. Model | Item No. |
|----------------------------|------------------------|-----------------------|--------------|-------------|----------|-------|----------|------------|----------------|
| | | | | | L | W | H | | |
| DuoSeal® Belt-Drive | | | | | | | | | |
| 1/2 hp | 5.6 cfm | 1 x 10 ⁻⁴ | 3/4 | 115/230V AC | 8.4/4.2 | 20 in | 12 in | 15 in | 1402B-46 5Z025 |
| | 10.6 cfm | 1 x 10 ⁻⁴ | 3/4 | 115/230V AC | 11/5.5 | 20 in | 14.12 in | 15.37 in | 1376B-46 6D731 |
| 1 hp | 17.7 cfm | 1 x 10 ⁻⁴ | 1 1/2 (F)NPT | 115/230V AC | 13.4/6.7 | 26 in | 13.75 in | 18.75 in | 1397B-46 6D733 |



4LCD2



361L34

EXAIR® Air Knives and Air Knife Kits

- Inlet connection: 1/4" (F)NPT
- Max. dBA: 69 at 80 psi
- Working pressure: 80 to 250 psi
- Air slot gap: 0.002"

Kits include filter, pressure regulator, filter/regulator mounting hardware, and shim kit.

ALUMINUM AIR KNIVES

- Max. temp.: 180°F
- 1.75"D x 1.44"H x 3" to 54"W

Quiet, hard-hitting curtain of air can be used for blowoff, cleaning, drying, and cooling applications.

STAINLESS STEEL AIR KNIVES AND KITS

- Max. temp.: 800°F
- 1.44"D

SUPER AIR KNIFE SHIM KITS

Aluminum—Include 1 each of 0.001", 0.003", and 0.004" polyester shims.

Stainless Steel—Include three 0.002" stainless steel shims.

| Air Slot Width (in.) | Air Consumption (SCFM)* | No. of Inlets | ALUMINUM AIR KNIFE Item No. | ALUMINUM AIR KNIFE KIT Item No. | ALUMINUM AIR KNIFE - STATIC ELIMINATORS Item No. | STAINLESS STEEL AIR KNIFE Item No. | STAINLESS STEEL AIR KNIFE KIT Item No. |
|----------------------|-------------------------|---------------|-----------------------------|---------------------------------|--|------------------------------------|--|
| 3 in | 8.7 scfm | 4 | 4LCA8 | 4LCA9 | — | 4LCC1 | 4LCC2 |
| 6 in | 17.4 scfm | 4 | 4LCC3 | 4LCC4 | 361L34 | 4LCC5 | 4LCC6 |
| 9 in | 26.1 scfm | 4 | 4LCC7 | 4LCC8 | — | 4LCC9 | 4LCD1 |
| 12 in | 34.8 scfm | 4 | 4LCD2 | 4LCD3 | 361L35 | 4LCD4 | 4LCD5 |
| 18 in | 52.2 scfm | 4 | 4LCD6 | 4LCD7 | 361L36 | 4LCD8 | 4LCD9 |
| 24 in | 69.6 scfm | 4 | 4LCE1 | 4LCE2 | 361L37 | 4LCE3 | 4LCE4 |
| 30 in | 87 scfm | 4 | 4LCE5 | 4LCE6 | 361L38 | 4LCE7 | 4LCE8 |
| 36 in | 104.4 scfm | 4 | 4LCE9 | 4LCE10 | 361L39 | 4LCE11 | 4LCE12 |
| 42 in | 121.8 scfm | 4 | 4LCE13 | 4LCE14 | 361L40 | 4LCE15 | 4LCE16 |
| 48 in | 139.2 scfm | 5 | 4LCE17 | 4LCE18 | 361L41 | 4LCE19 | 4LCE20 |
| 54 in | 156 scfm | 5 | 6JL5 | 6JL6 | 361L42 | 6JL7 | 6JL8 |

* Calculated at 80 psi.

| For Use With | Item No. | For Use With | Item No. | For Use With | Item No. | For Use With | Item No. |
|--|----------|--------------|----------|--|----------|--------------|----------------|
| Aluminum Super Air Knife Shim Kits | | | | Stainless Steel Super Air Knife Shim Kits | | | |
| 4LCA8 | 4LCU4 | 4LCE5 | 4LCV7 | 4LCC1 | 4LCU5 | 4LCE7 | 4LCV8 |
| 4LCC3 | 4LCU6 | 4LCE9 | 4LCW2 | 4LCC5 | 4LCU7 | 4LCF2 | 4LCW3 |
| 4LCC7 | 4LCU8 | 4LCF4 | 4LCW4 | 4LCC9 | 4LCU9 | 4LCF6 | 4LCW5 |
| 4LCD2 | 4LCV1 | 4LCF8 | 4LCV9 | 4LCD4 | 4LCV2 | 4LCG1 | 4LCW1 |
| 4LCD6 | 4LCV3 | 6JL5 | 6JL7 | 4LCD8 | 4LCV4 | 6JL8 | 6JN0 |
| 4LCE1 | 4LCV5 | — | — | 4LCE3 | 4LCV6 | — | — |
| For Use With Air Knife Mounting System 6 to 48 In Air Knives | | | | | | | Item No. 4LCW6 |

Static Eliminating Air Gun, Air Cannon, and Power Supplies

EXAIR®

• Pressure range: 5 to 120 psi
Air gun is for manual operations; air cannon is mountable for stationary applications.

Power Supplies—Include metal case and feature lighted power switch.

- 50/60 Hz
- 5mA max.
- Mounting: flange



48RD61

| Air Consumption* | Item No. | No. of Outlets | Input Voltage | Item No. |
|--|----------|----------------|---------------|----------|
| Static Eliminating Air Gun 24 scfm | 48RD62 | 2 | 120/230V AC | 48RD63 |
| Static Eliminating Air Cannon 18.7 scfm | 48RD61 | | | |

* Calculated at 80 psi.



4LCR3



20CL72

EXAIR® Engineered Air Nozzles

Produce outlet flows 25 times greater than the air they consume.

| Air Consumption* | Max. dBA* | Inlet Size | L | ZINC/ALUMINUM Item No. | STAINLESS STEEL Item No. | PEEK THERMOPLASTIC Item No. |
|---|-----------|-------------|------------|------------------------|--------------------------|-----------------------------|
| Blowoff Kit Includes Air Nozzle, Ball Valve, Magnetic Base, Stay Set Hose | | | | | | |
| | | | | 20CL72 | | |
| Clusters | | | | | | |
| 56 scfm | 82 | 3/8 in FNPT | 2 3/8 in | 36JP41 | — | — |
| 98 scfm | 85 | 1/2 in FNPT | 2 3/4 in | 36JP42 | — | — |
| 168 scfm | 89 | 1 in FNPT | 2 15/16 in | 36JP43 | — | — |
| Flat, Safety | | | | | | |
| 10.5 scfm | 75 | 1/8 in FNPT | 1 5/8 in | 20CL70 | 20CL71 | — |
| 22 scfm | 77 | 1/4 in FNPT | 2 1/8 in | 4LCT3 | — | — |
| 22 scfm | 77 | 1/4 in FNPT | 2 3/50 in | — | 4LCT4 | — |
| High Power Safety | | | | | | |
| 35 scfm | 82 | 3/8 in FNPT | 1 3/8 in | 4LCT5 | 4LCT6 | 20CL69 |
| 60 scfm | 82 | 3/8 in MNPT | 2 1/4 in | 4LCT7 | 4LCT8 | — |
| 60 scfm | 87 | 1/2 in FNPT | 2 in | 4LCT9 | 4LCT10 | — |
| 60 scfm | 87 | 1/2 in MNPT | 2 3/4 in | 4LCU2 | 4LCU3 | — |
| Safety | | | | | | |
| 2.5 scfm | 58 | M4 x 1/2 in | 1/2 in | — | 15J053 | 38W842 |
| 2.5 scfm | 58 | 1/8 in MNPT | 7/8 in | — | 15J054 | 38W843 |
| 4.9 scfm | 68 | M5 x 1/2 in | 3/8 in | — | 15J055 | 38W844 |
| 4.9 scfm | 68 | 1/8 in MNPT | 1 in | — | 15J056 | 38W845 |
| 8.3 scfm | 75 | M6 x 3/4 in | 7/9 in | — | 15J057 | 15J059 |
| 8.3 scfm | 75 | 1/8 in MNPT | 1 1/8 in | — | 15J058 | 38W846 |
| 10 scfm | 71 | 1/8 in FNPT | 1 1/2 in | 4LCR4 | 4LCR5 | 6JN6 |
| 10 scfm | 71 | 1/8 in MNPT | 1 3/8 in | 4LCR6 | 4LCR7 | — |
| 13 scfm | 80 | 1/8 in MNPT | 1 1/2 in | — | 4LCR3 | — |
| 14 scfm | 74 | 1/4 in FNPT | 1 3/4 in | 4LCR8 | 4LCR9 | 6JN5 |
| 14 scfm | 74 | 1/4 in MNPT | 2 3/8 in | 4LCT1 | 4LCT2 | — |

* Calculated at 80 psi.