

Vacuum Series

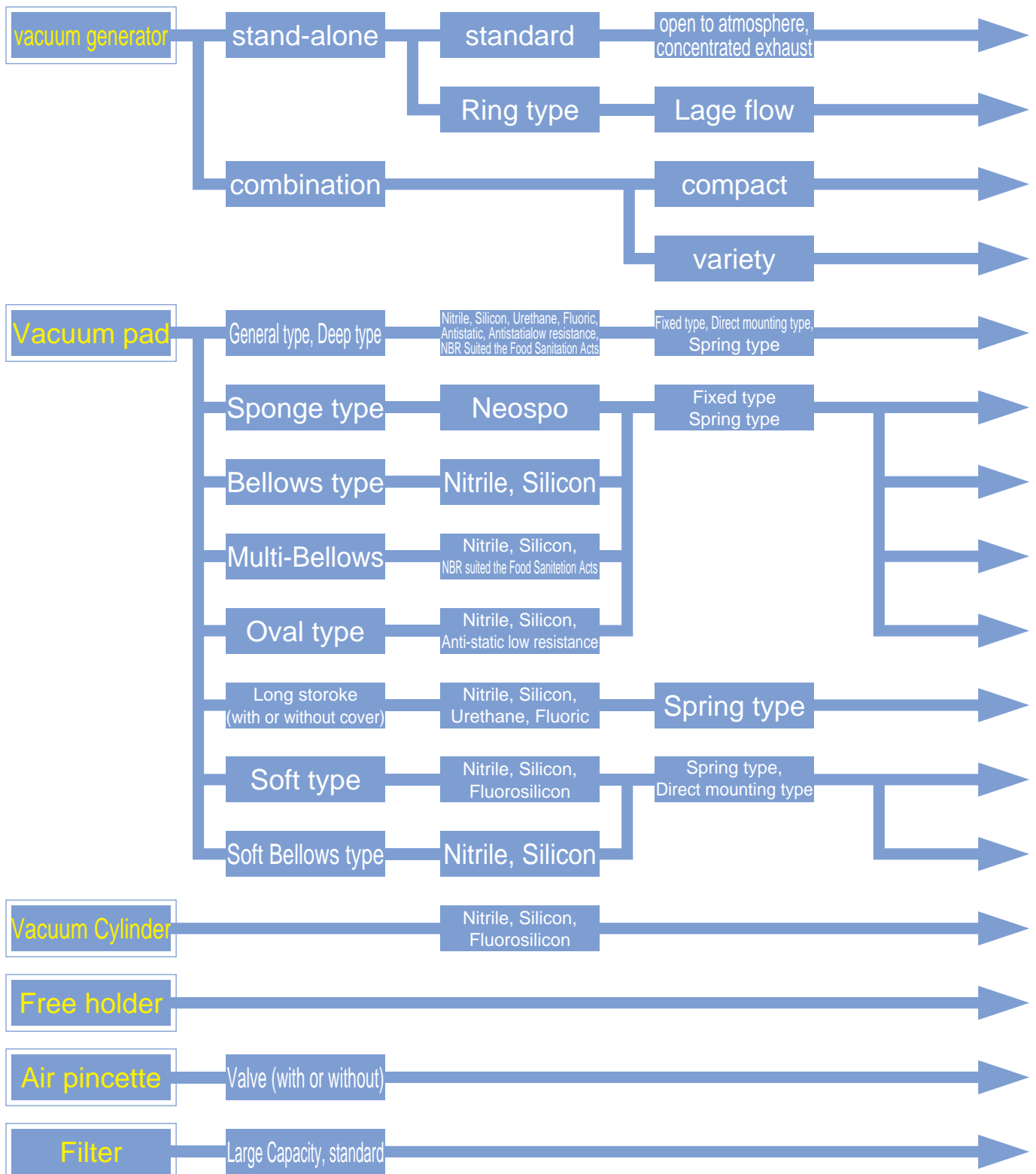


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Vacuum Series

Coming in a wide variety of tube, thread, and pad size as well as holder and pad types, PISCO supplies vacuum generators and vacuum pads which are used in work conveyer to all applications of pneumatic piping.

Classification Index



PISCO

ALL PRODUCTS

General catalogue

Product Name	Fluid Admitted	Service Pressure range	Rated Supply Pressure	Service Temperature range	Page
Vacuum generator	Air	21.3~102psi (0.15~0.7MPa)	71.1psi (0.5MPa)	32~140°F (0~60°C)	382
Vacuum generator VRL	Air	0~150psi (0~0.9MPa)	71.1psi (0.5MPa)	32~140°F (0~60°C)	400
Vacuum generator VG	Air	36.3~102psi (0.25~0.7MPa)	—	32~122°F (0~50°C)	406
Vacuum generator VK	Air	36.3~102psi (0.25~0.7MPa)	—	41~122°F (5~50°C)	410
Vacuum pad Standard type	Vacuum	pad size : $\phi 2 \sim \phi 200$ mm pad Material:8types	pad types : 2 types holder types : 6 types	—	442
Vacuum pad Sponge type	Vacuum	pad size : $\phi 10 \sim \phi 100$ mm	holder types : 5 types	—	450
Vacuum pad Bellows type	Vacuum	pad size : $\phi 10 \sim \phi 80$ mm pad Material:2types	holder types : 5 types	—	454
Vacuum pad Multi-Bellows type	Vacuum	pad size : $\phi 10 \sim \phi 50$ mm pad Material:3types	holder types : 4 types	—	458
Vacuum pad oval type	Vacuum	pad size : 11 types pad Material:3types	holder types : 7 types	—	462
Vacuum pad Long stroke	Vacuum	pad size : $\phi 4 \sim \phi 50$ mm pad Material:4types	pad types : 5 types holder types : 2 types	Stroke : 10~50mm	466
Vacuum pad Soft type	Vacuum	pad size : $\phi 4 \sim \phi 40$ mm pad Material:3types	holder types : 3 types	—	494
Vacuum pad Soft Bellows type	Vacuum	pad size : $\phi 6 \sim \phi 20$ mm pad Material:2types	holder types : 3 types	—	496
Vacuum Cylinder	Vacuum	pad size : $\phi 4 \sim \phi 40$ mm pad Material:3types	holder types : 1 type	Stroke : 5~30mm	498
Free holder	Vacuum	Connectable pad size: $\phi 10 \sim \phi 100$ mm	Swing angle:30°or 15°	—	500
Air pincette	Air	21.3~102psi (0.15~0.7MPa)	71.1psi (0.5MPa)	32~140°F (0~60°C)	502
Vacuum Filter	Vacuum	-29.5in. Hg(-100KPa)	Filtering accuracy : 10 μ	32~140°F (0~60°C)	504

Common Safety Instructions for Vacuum

Be sure to read the following instructions before selecting and using the PISCO devices. Also read the detailed instructions for individual series.

Warning

1. Where there is the danger of work dropping, provide some drop prevention means to assure safety.
2. Avoid use where there are constant pressures of 0.1Mpa(14.5psi) or above in the vacuum circuit. Since the vacuum devices are not of explosion-proof structure, such use may cause damage to the device bodies.
3. Watch out for drop of vacuum due to faulty air supply or power supply. Reduced suction may cause the drop of work. Therefore, take an adequate protective measure.
4. Where two or more pads are used with a single ejector in vacuum circuit, defective suction of one pad may cause the drop of vacuum at the other pad(s).
5. Avoid such usage as may stop up the exhaust port of the ejector or raise exhaust resistance. Such careless usage may cause the loss or drop of vacuum.
6. Do not use the vacuum devices in an atmosphere containing corrosive gas, inflammable gas, explosive gas, chemicals, seawater or vapor. Never allow the vacuum system to suck in such substances.
7. Provide a protective cover where the equipment is exposed to sunshine.
8. Carry out periodic maintenance and checks of the silencer element of the ejector and the filter element of the vacuum filter. A clogged element may cause performance drop or trouble.
9. Replace the element after gaining a full knowledge of the element of the vacuum generator.
10. Install the piping by checking the ports of the ejector in the manual and by the marking on the body. Mistaken piping may cause damage to the device body.
11. Use clean air free from drainage or dirt for ejector air supply. Also, never supply air by a lubricator. Impurities or oil contained in compressed air may cause malfunction or performance drop.
12. Do not give excessive tension or bending to leads. Disconnection may result.
13. Tighten the lock nut, in any, on the product securely with your hand and not with any tool. Tightening with a tool may cause damage to the lock nut or the device body. Also, incomplete tightening may cause a loose lock nut or inaccurate initial setting.
14. Do not subject the product with a rotatable resin body to forcible swinging or rotation. Damage to the resin body or leakage may result.

⚠ Caution

- 1.The specified supply pressure to the ejector is that during ejector operation. Secure the specified level in consideration of pressure drop. If the specified level is not met, then the ejector may emit an abnormal noise at certain supply pressures and become unstable, affecting the sensor and other parts adversely.
- 2.In selecting the piping and equipment, take into account that the effective sectional area on the supply pressure side of the ejector should be about three times the sectional area of the nozzle diameter. Inadequate supply flow may result in performance drop.
- 3.Provide the vacuum-side piping as short as possible and with the bore as large as possible. If the piping is long or the bore is small, the response time at suction or release may become longer and the necessary suction flow may not be achieved.
- 4.Connect the vacuum switch or the ejector with vacuum switch as close to the end of the vacuum piping as possible. With much distance between the vacuum switch and the end of vacuum piping, the piping resistance may become large and the vacuum at the sensor may be high even during the non-suction interval. This will cause malfunction of the vacuum switch.
- 5.In handling the joints, observe the instructions in "Common Safety Instructions for Quick-Fitting Joints" (For installation and removal of the screwed-on type, refer to "4. Notes on Installation" and "5. Notes on Removal.")
- 6.In handling the electronic vacuum switch (sensor), observe the "Common Safety Instructions" and "Detailed Safety Instructions" for the pressure sensors and the pressure sensors with digital indication of the control series.
- 7.In handling the mechanical vacuum switch (sensor), observe the "Common Safety Instructions for mechanical vacuum switches."
- 8.The filter clear cover is polycarbonate, so avoid use in an atmosphere or location containing chemicals (see table below).

● Table Chemicals

Names of Chemicals
Thinner
Carbon tetrachloride
Chloroform
Acetate
Aniline
Cyclo hexane
Trichloro ethylene
Sulfuric acid
Lactic acid
Water soluble cutting oil (alkaline)

*There are chemicals other than listed above that can not be used. Please contact PISCO for information.

Common Safety Instructions for Mechanical Vacuum Switches

Warning

1. Do not use the mechanical vacuum switches in inflammable or explosive gas, fluid or atmosphere. As these vacuum switches are not explosion-proof, fire or explosion may be caused.
2. Do not use these devices in locations where they can be exposed to water drops, oil drops, dust, etc. The mechanical vacuum switches are neither drip-proof nor dust-proof, so that trouble may result.
3. The mechanical vacuum switches may suffer no performance drop when a pressure of about 0.5Mpa(72.5psi) is applied instantaneously. Yet make arrangement so that any pressure of 0.2Mpa(29psi) or above does not normally act on the vacuum switch at vacuum break. Otherwise damage to the switch may result.
4. Use the mechanical vacuum switch in the specified set pressure range. Use outside the range may cause malfunction due to pressure differences.
5. Be sure to turn off power before wiring the mechanical vacuum switch. When wiring, check the lead colors to avoid miswiring.