

Pinch Valves directly from the Manufacturer

to see at EasyFairs SCHÜTTGUT 2014 in Dortmund

can be used for pneumatically conveyed powders, granules, fibers, liquids etc.

As in previous years, the German company **AKO Armaturen & Separationstechnik GmbH** will exhibit their air operated and mechanical Pinch Valves as well as various Pinch Valve Accessories and Knife Gate Valves at the EasyFairs SCHÜTTGUT trade fair 2014.



FREE PRODUCT FLOW W/PINCH VALVES

The AKO Pinch Valves are mainly used for interruption of flow of material in pneumatic conveying systems and / or in other piping systems. Moreover, they are often used as a closure valve in silo-discharge systems.

PINCH VALVES ARE PRESSURE CONTROLLED SHUT-OFF VALVES FOR APPLICATIONS IN INDUSTRIAL AUTOMATION

Advantages of Pinch Valves, air operated:

Free flow of product, minimum frictional resistance, 100% leak free, no blockages and low net weight are among the most important benefits of air operated Pinch Valves.



FLANGE CONNECTION - AIR PINCH VALVES

Air Pinch Valve Connection Options:

The different connection options of AKO air operated pinch valves are:

- [FLANGE CONNECTION](#) according to DIN EN 1092-1 PN 10/16 / ANSI B 16.5/150lbs
- [INTERNAL THREAD CONNECTION](#) according to DIN EN ISO 228 (G) / ANSI/ASME B1.20.1 (NPT)
- [TRI-CLAMP CONNECTION](#) according to DIN 32676 row A + C
- [WELD-ON ENDS](#) according to DIN 11850 series 2 / ASTM A554
- [THREADED SPIGOT \(RJT CONNECTION\)](#) according to DIN 11851

In addition threaded hose nozzles made of stainless steel AISI 316L, available in DN10-80, can interconnect with AKO air operated pinch valve with internal thread connection of type VMP, VMC and VF.



INTERNAL THREAD - AIR PINCH VALVE

AKO Armaturen & Separationstechnik GmbH

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Function of Air Pinch Valves:

In open position, the inner cross section of the valve corresponds to diameter of valve. Supplying compressed air into the casing / body of the air operated Pinch Valve compresses the sleeve to close freely to form a lip shape. This ensures that the product flow is completely sealed off tight and that the sleeve is guaranteed the longest service life at the same time. This closes the air operated Pinch Valve and completely seals off the flow of the product. As soon as the supply of compressed air is interrupted and the Pinch Valve casing is vented or drained, the specially manufactured sleeve is opened by its rebound elasticity/resilience, enabling the pressure in the medium to flow through the full passage of the air operated Pinch Valves.



TRI-CLAMP - AIR PINCH VALVES

Areas of Application:

Due to the wide variety of materials of housing (body), flanges and socket ends of a pinch valve such as aluminum, steel, stainless steel, plastic (POM) or PVC and a replaceable sleeve in different elastomer grades (NR, EPDM, FPM, IIR, silicone, etc.), the pinch valves can be used in a variety of application areas such as



WELD ON ENDS - AIR PINCH VALVES

- PNEUMATIC CONVEYORS, for bulk materials of all kinds
- VACUUM SUPPORT, suction of shavings, etc.
- CHEMICAL INDUSTRY, paints, fertilizers, etc.
- PLASTIC INDUSTRY, for granules, powders, pellets, etc.
- CERAMIC INDUSTRY, for solids
- ENVIRONMENTAL TECHNOLOGY, for sewage water, dust, sludge, etc.
- WATER TREATMENT/PLANTS, for lime, suspensions, etc.
- CONSTRUCTION/CEMENT INDUSTRY, for cement, concrete, sand, gravel, gypsum, etc
- SILO FOR BULK MATERIAL, overflow protection, distribution, sampling, etc.
- FOOD INDUSTRY, for mash, chocolate, nuts, etc.



RJT CONNECTION – AIR PINCH VALVES

AKO offers a big selection of control components such as solenoid valves, filter regulator, pressure switches etc. that can be installed /delivered on request.

AKO air operated pinch valves meet all requirements of the **Pressure Equipment Directive 97/23/EC**. Besides special conductive models with separate earthing are also available for the use in hazardous areas for zones **1,21** and **2,22**.



MECHANICAL PINCH VALVE

Control:

It is recommended to mount a quick exhaust valve directly at the control port. Thus, the pinch valve will open quickly and irrespective of size and distance of the pilot valve. If an air AKO pinch valve is put under pressure by vacuum $>0.1\text{bar}$ a pressure equalization should be generated, for example, with the AKOVAC (vacuum unit).

MECHANICAL AND CONTROL PINCH VALVES ALSO OFFER THE IDEAL SOLUTION FOR ISOLATING AND REGULATING / METERING ABRASIVE, CORROSIVE AND FIBROUS PRODUCTS SUCH AS GRANULATES, POWDER, PELLETS, DUST AND LIQUIDS CONTAINING SOLIDS, ETC.

Function of mechanical Pinch Valve:

The sleeve of the manual and control Pinch Valve is controlled by a mechanism inside the casing and an actuator of your choice. The mechanism comprises one or two pinch bars arranged horizontally above and below the sleeve, and is guided at the side by two rods. Mechanical Pinch Valves can be provided with various actuators such as handwheel, pneumatic cylinders and electrical actuators.

A direct connection between the sleeve and the pinch bar(s) ensures an optimum opening of the sleeve to provide the full passage. The maximum operating pressure of the manual and control Pinch Valve is dependent on the type and nominal size, and is between 3 and 40 Bar.

Maintenance of Pinch Valves:

Even after a long downtime, the functionality is guaranteed. Since, however, the pinch valve sleeve is subjected to aging and wear, it should be replaced regularly depending on the requirements. If the sleeve is defective, the pinch valve no longer closes properly.



SILO FILLING WITH PINCH VALVES

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With the help of detailed assembly instructions and new assembly videos, the pinch valve sleeve can easily be replaced by the customer on site (<http://www.pinch-valve.com/en/products/assembly-videos.html>).

Short production downtime remains therefore guaranteed.

Sizes available:

Air operated Pinch Valves: **DN 10-250**

Mechanical Pich Valves: **DN 15-500**

Visit our booth at **EASY FAIRS 2014** and learn more about AKO Pinch Valves:

Halle 4, Stand E29 - We are looking forward to your visit!

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AKO, Pinch Valve Manufacturer since 1985

The high quality of our pinch valves and other products has additionally been monitored and certified regularly in accordance with TUEV and DIN ISO 9001:2008 for more than 10 years