# Valve Technology

# Overview of Section 7

## Valve Technology

Everything at a Glance

# Overview of Section 7

## Valve Technology

Everything at a Glance



### Check Valves SVN



PACKAGING WOOD

- Max. blow-off flow rate: 27 m³/h
- Connection thread: G1/4"

Check valve with shaped nipple for direct connection to the suction pad, reduction of the volume flow and maintenance of the vacuum if not all suction pads are covered.

### Flow Resistors SW



METAL PACKAGING WOOD

- Nozzle diameter: 0.25 to 2.0 mm

Flow resistance without moving parts, in minimum model size for reduction of the volume flow and maintenance of the vacuum if not all suction pads are covered.

## Sensing Valves

### Sensing Valves TV / TVN



UNIVERSAL

- Flow rate: 0.7 to 9.6 m³/h
- Connection thread: G1/8" to G1/2"

Sensing valve as spring-loaded sensing plunger for mechanically checking the coverage of the suction pad.

## Non-Return Valves

### Non-Return Valves RSV



UNIVERSAL

- Nominal diameter: 6 to 54 mm
- Nominal flow rate: 5 to 350 m³/h
- Connection thread: G1/4" to G2"

Non-return valve with spring return safeguards the system in case of power failure or failure of the vacuum generator.

## Manually Actuated Valves

### Two-Way Ball Valves KVZ



UNIVERSAL

- Nominal diameter: 8 to 50 mm
- Nominal flow rate: 5 to 310 m³/h

Manual two-way ball valve for switching entire vacuum/pressure circuits or individual suction pads on or off.

### Three-Way Ball Valves KVD



UNIVERSAL

- Nominal diameter: 6 to 25 mm
- Nominal flow rate: 5 to 55 m³/h

Manual three-way ball valve for switching entire vacuum or pressure circuits or individual suction pads on or off.

# Overview of Section 7

## Valve Technology

Everything at a Glance

### Manual Slide Valves HSV

552

- Nominal diameter: 7 to 24 mm
- Nominal flow rate: 6 to 50 m³/h

Manual sliding valve for manually switching entire vacuum or pressure circuits or individual suction pads on or off.

## Overview Valves

| Application | Check Valves | Flow Resistors | Sensing Valves |
|---|---|---|---|
| Handling of porous workpieces such as chipboards and MDF panels | ● (If type SVN is used) | ● | |
| Handling of air-tight workpieces such as sheets of metal of varying sizes | ● | | ● |
| Handling of cardboard sheets and boxes of varying sizes | | ● | |
| Handling operations with very short cycle times | ● | | ● |
| Cases where some of the suction pads are not fully in contact with the workpiece | ● | ● | |
| Cases where the workpiece is to be blown off for faster release | ● | Restricted by the reduced cross-section | |

## Checklist for Selection of Valves

| | |
|---|---|
| **Which functions are required?** | We can supply solenoid valves (3/2-way, 2/2-way), manually actuated vacuum and compressed-air valves, check valves, sensing valves and flow resistors. |
| **Which volume flow rate needs to be controlled?** | This determines the nominal flow rate and the size of the valve. |
| **What are the requirements with respect to size, weight and cycle times?** | Further information can be found in the design data and/or technical data of the valves. |
| **Which type of energy is available?** | See the notes in the design data or the technical data (solenoid valve EMVP also needs a compressed-air supply). |
| **Does the workpiece need to be released very quickly (blown off)?** | With type EMV, compressed-air for blowing off can be connected directly. Otherwise, additional valves are needed for this function. |