

# Control Cabinets built by HAFNER



Image source: Voith GmbH



Image source: Voith GmbH

- ✓ **Compact & economic solutions**
- ✓ **Individual valve isolation available**
- ✓ **Manifold with all ports on the bottom**
  - less installation efforts,
  - less risk of leakage,
  - no pneumatic tubing inside the box

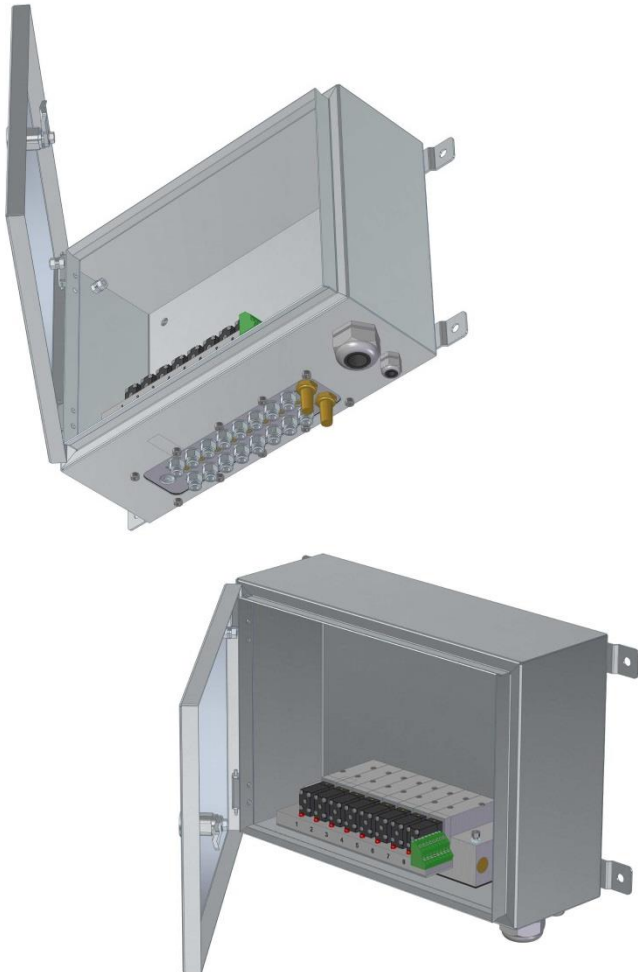
**HAFNER**

Control cabinet with 8 x 5/2-way single solenoid valves with 7 mm orifice, assembled on a valve terminal.

Different electrical connections are available:

- D-Sub multipin connector
- Electrical terminal board with individual + and -
- Individual wiring

The cabinet is made from 1.4301 (ASI 304) stainless steel, size 400x280x155 mm (WxHxD) with protection class IP 66.

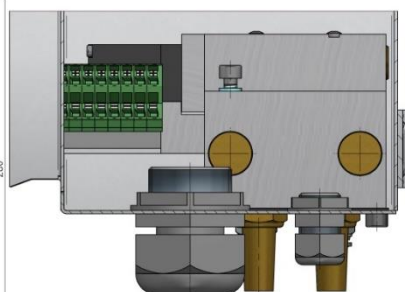
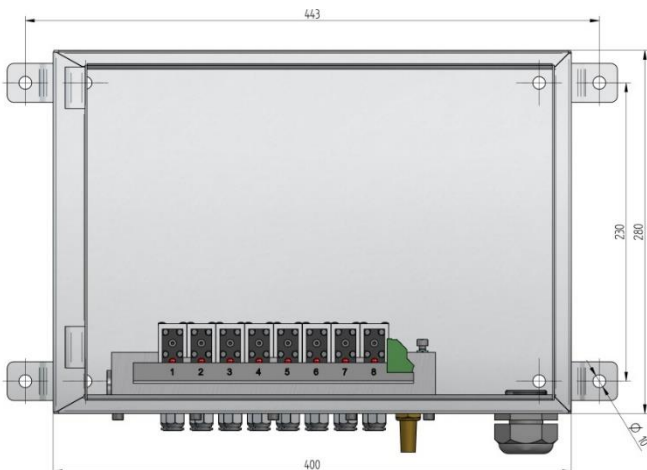
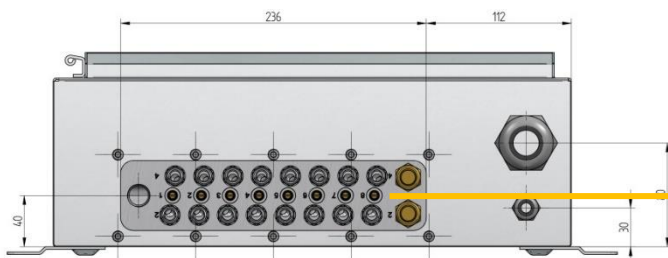


## Special: Individual valve isolation

In certain industries the user appreciates, to take away air pressure at any valve on the plate individually.

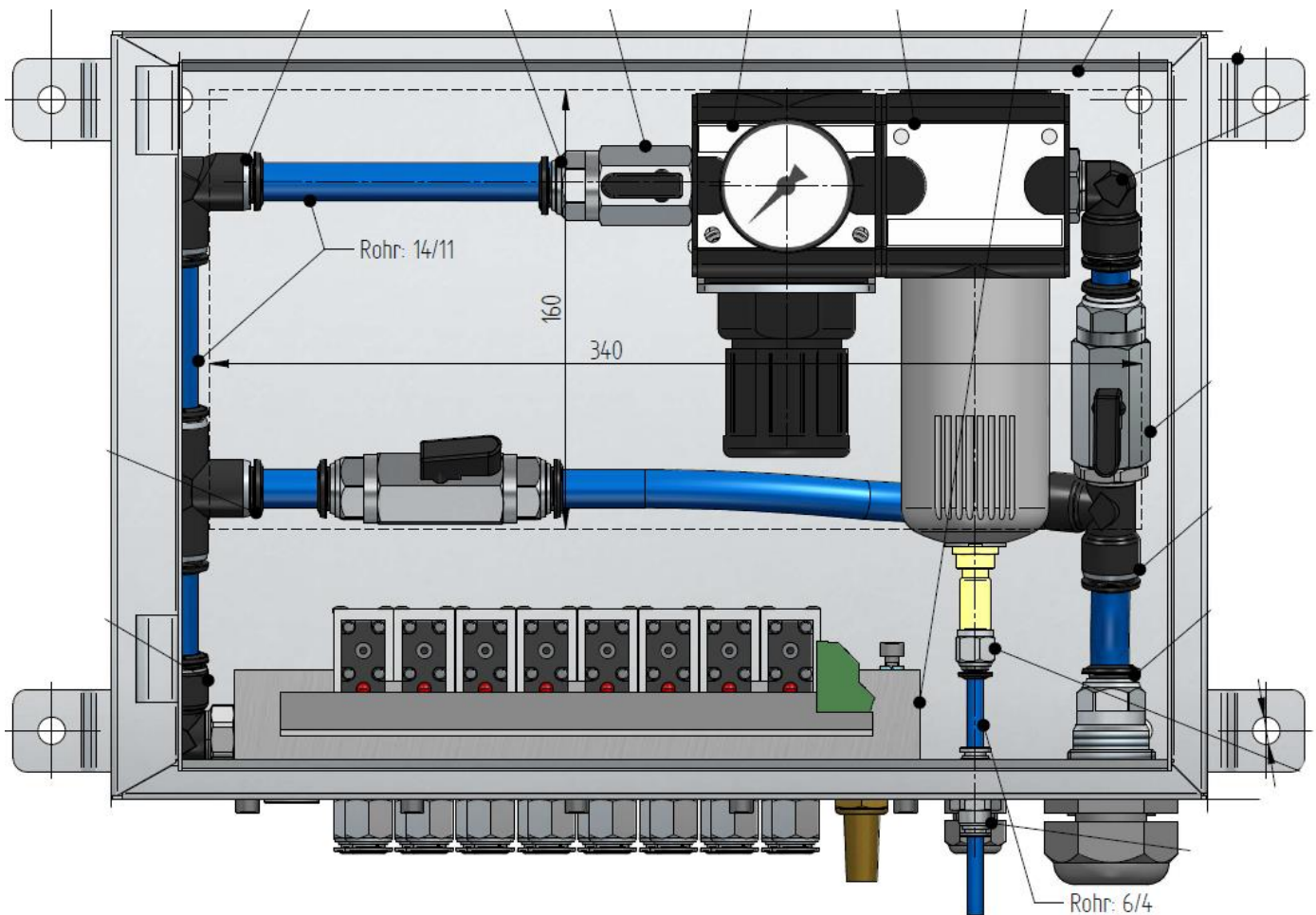
The manifold plate offers an individual valve isolation on any position.

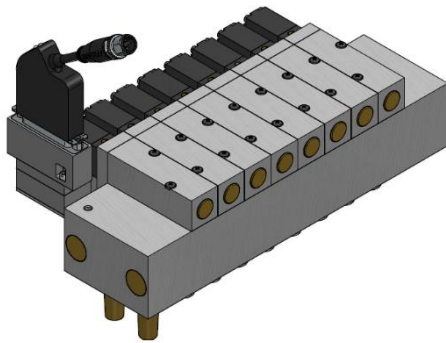
Valves can easily be exchanged by closing the screw without interruption of the air-supply of the other valves on the base-plate.



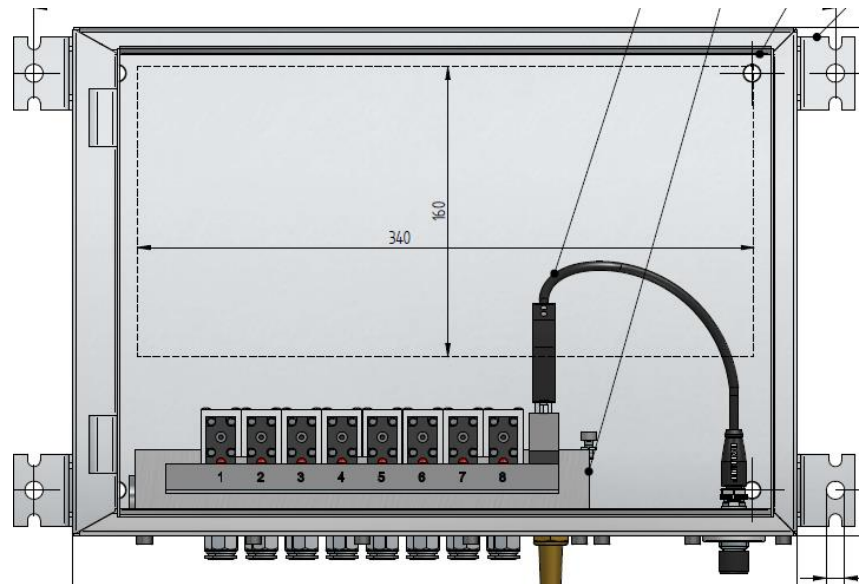
Control cabinet similar to the version on the previous page but with integrated filter-regulator and by-pass function.

The condensate from the automatic condensate drain is discharged outside at the bottom of the cabinet.





Control cabinet with IO-link connector.



Alternatively, valve terminals with fieldbus protocols are available as well.

- EtherCAT
- PROFINET
- Modbus/TCP
- Ethernet/IP







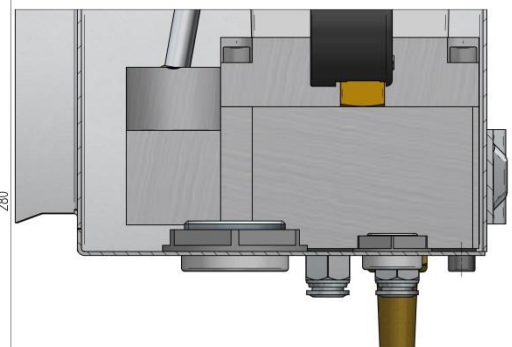
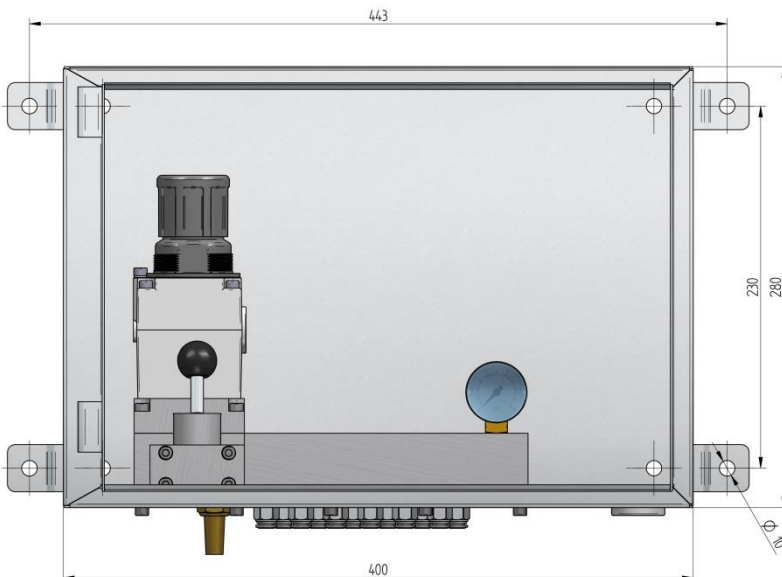
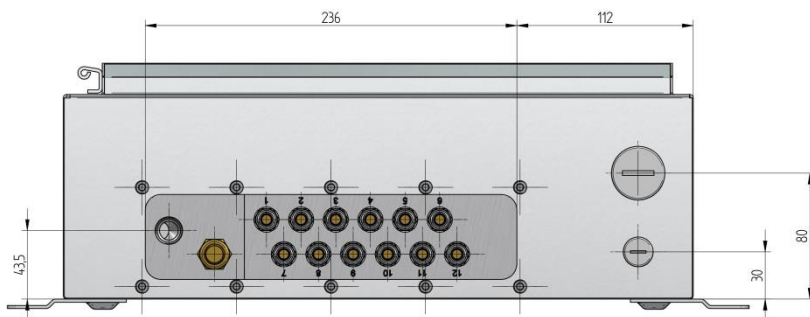
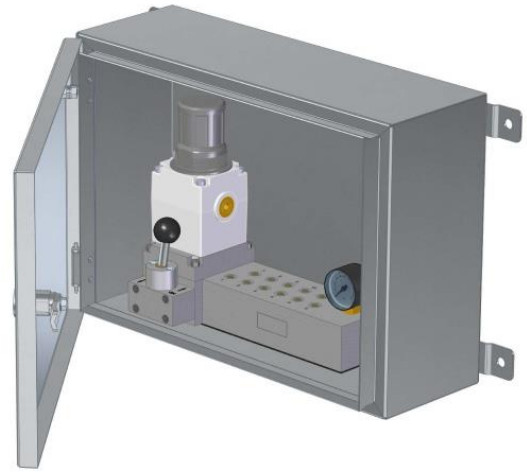
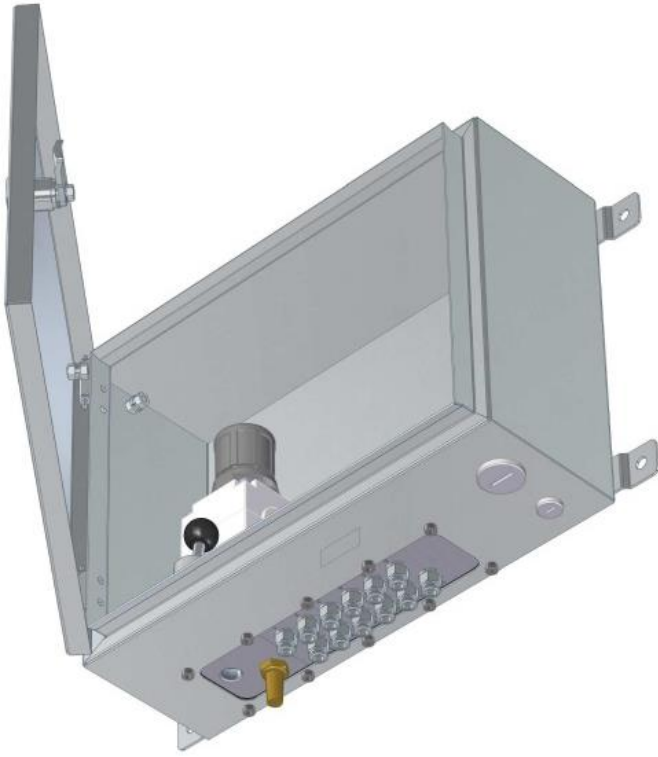
# Air distributor cabinet

page 6

Air distribution cabinet equipped with a pressure regulator, pressure gauge, main 3/2-way switch-on / -off valve and 12 connections G1/4".

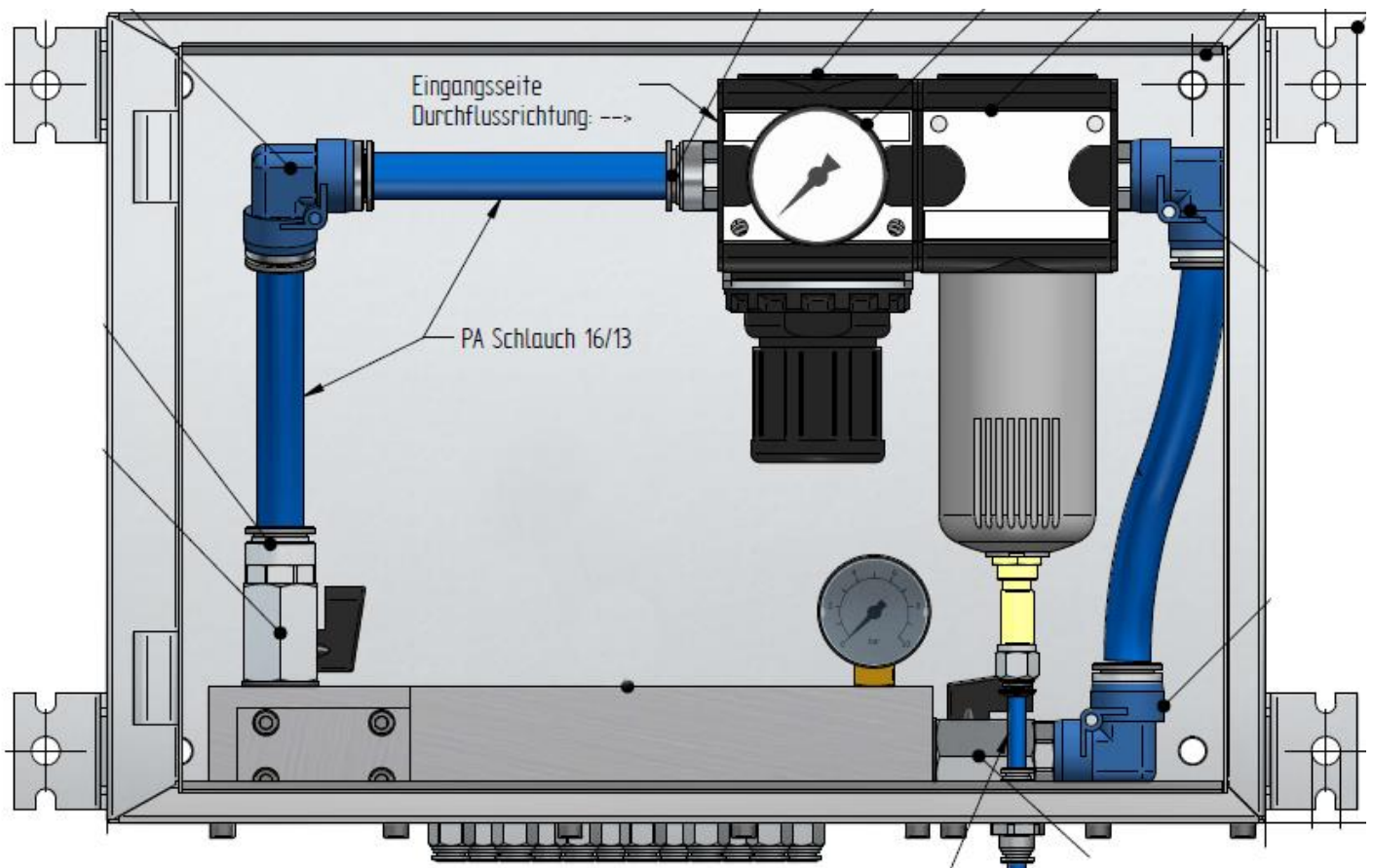
Each outlet can be shut-off individually by the shut-off screw inside the box.

The cabinet is made from 1.4301 (ASI 304) stainless steel, size 400x280x155 mm (WxHxD) with protection class IP 66.



Air distributor cabinet similar to the version on the previous page but with integrated filter-regulator and by-pass function.

The condensate from the automatic condensate drain is discharged outside at the bottom of the cabinet.



# Control cabinet “Junkomat”

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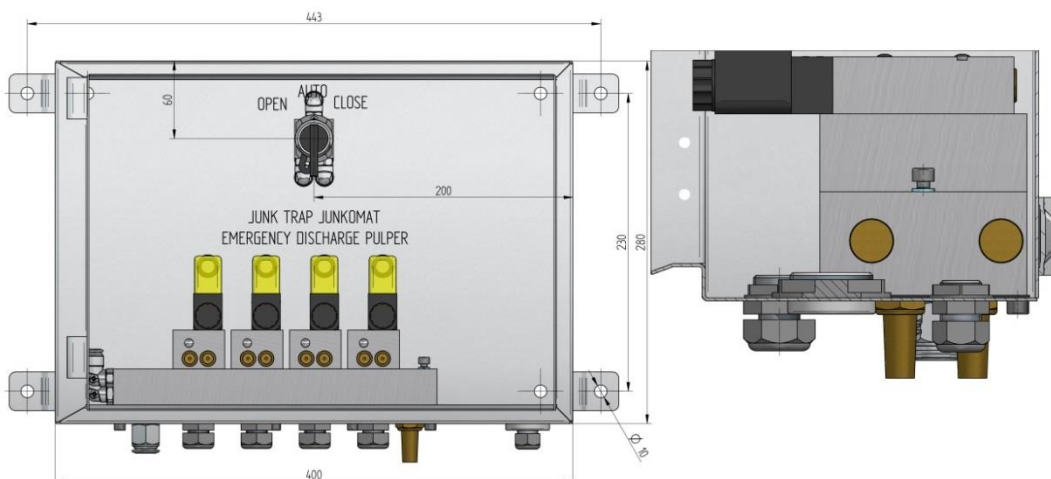
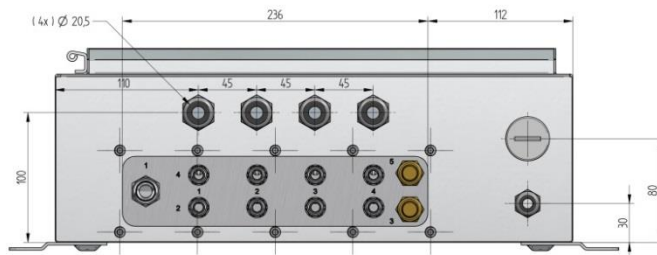
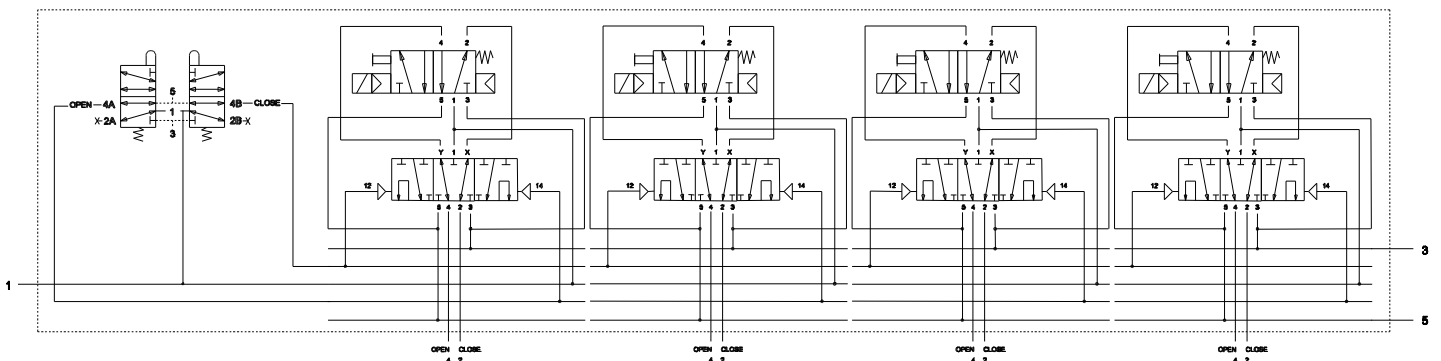
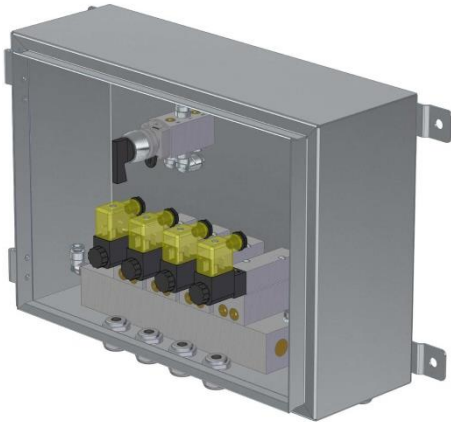


The Junkomat is a control-unit for four pneumatically actuated process-valves.

Under standard conditions the process-valves are piloted with 5/2-way single solenoid valves.

All the solenoid valves can be overrode by a manual switch in the door of the box. All the four process valves will open or close at the same time.

The cabinet is made from 1.4301 (ASI 304) stainless steel, size 400x280x155 mm (WxHxD) with protection class IP 66.

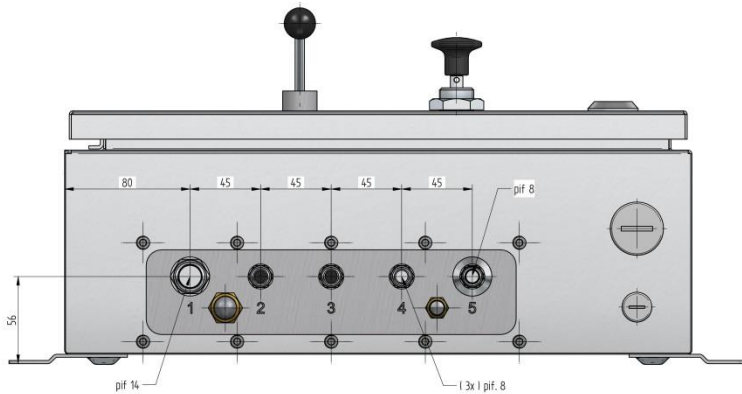
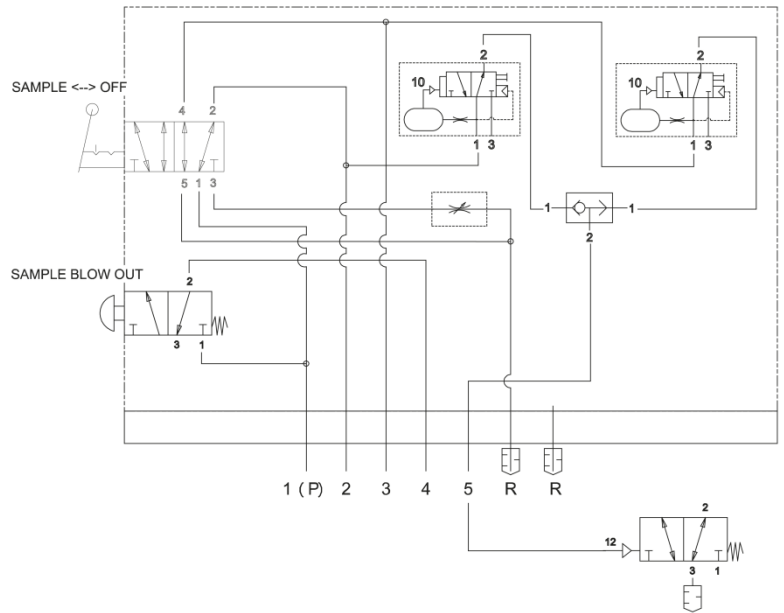
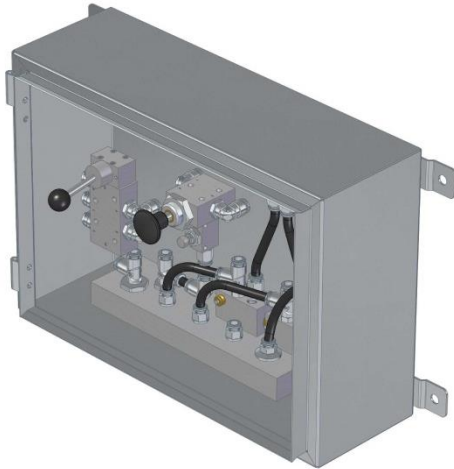
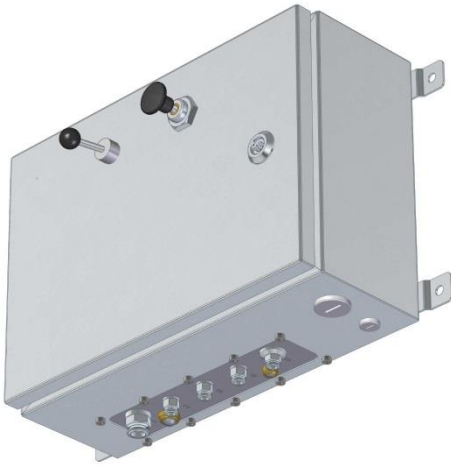




# Control cabinet for "sample taking"

The control is automatically giving an air-impulse to clean into the sample-take unit whenever the lever-valve is actuated. Additional impulses can be added manually. An air-booster valve is part of the delivery.

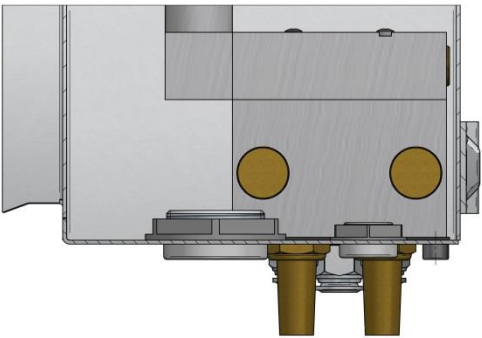
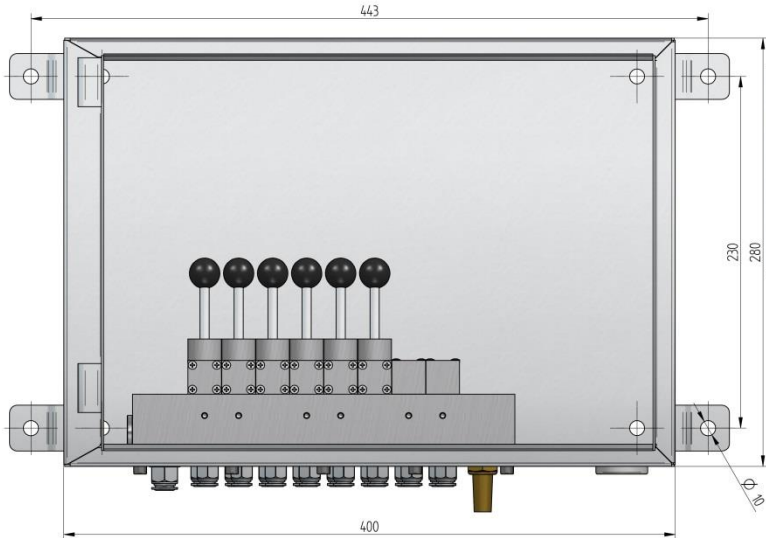
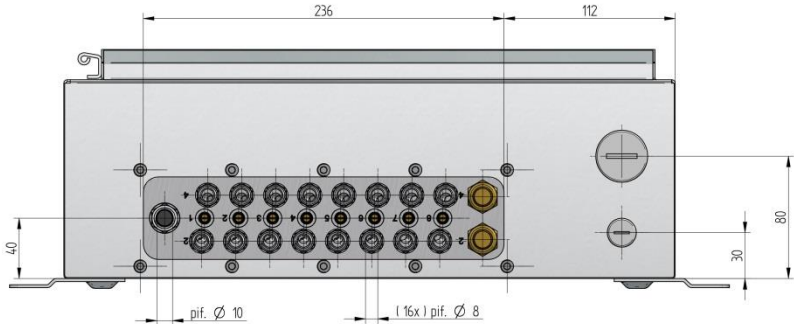
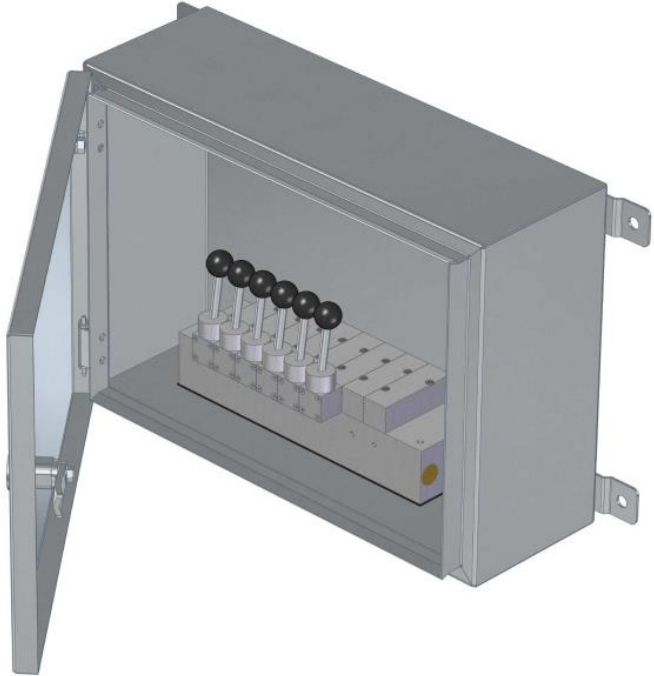
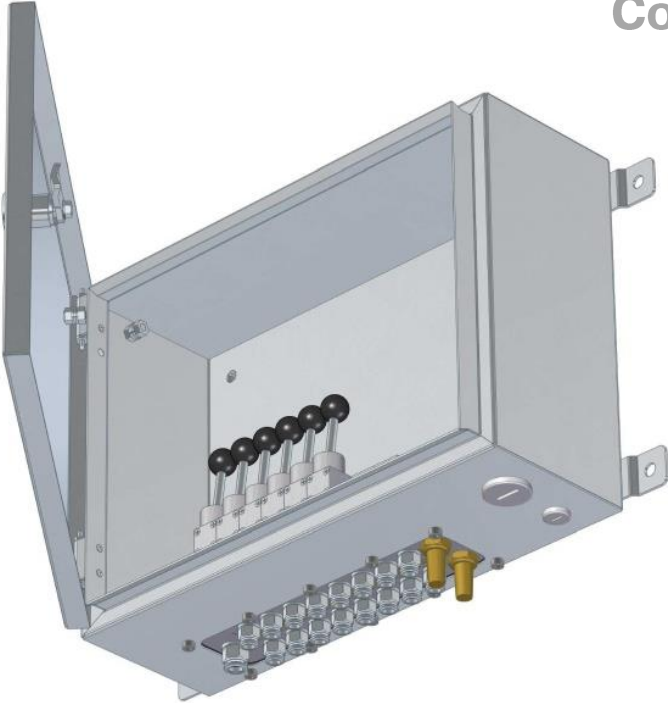
The cabinet is made from 1.4301 (ASI 304) stainless steel, size 400x280x155 mm (WxHxD) with protection class IP 66.



# Control cabinet with manual valves

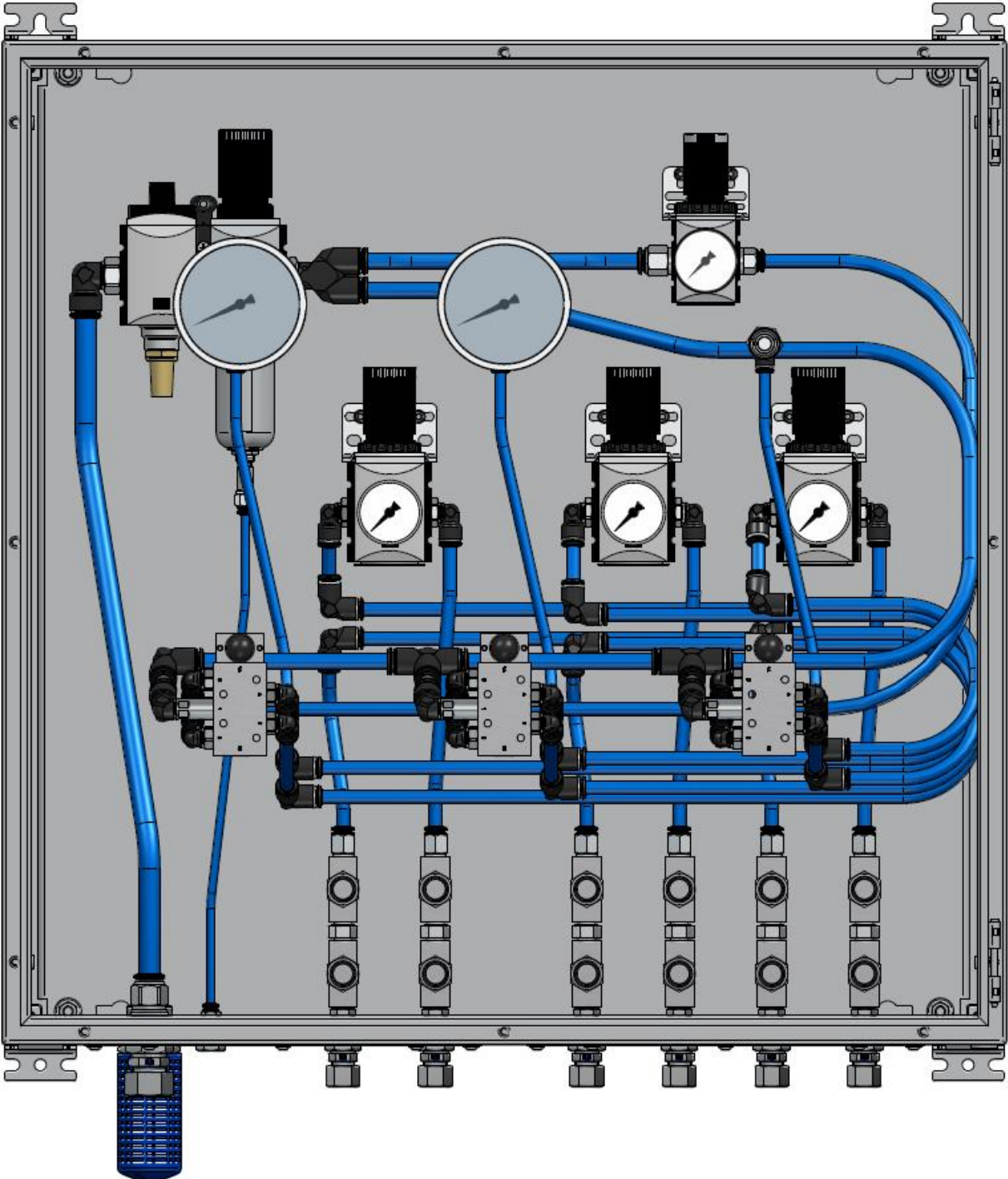
Control cabinet with up to 8 x 5/2-way hand-lever valves with 7 mm orifice, assembled on a manifold plate with individual valve isolation. Ported G 1/4".

The cabinet is made from 1.4301 (ASI 304) stainless steel, size 400x280x155 mm (WxHxD) with protection class IP 66.



# Control cabinet for paper mills to transport the paper by rope.

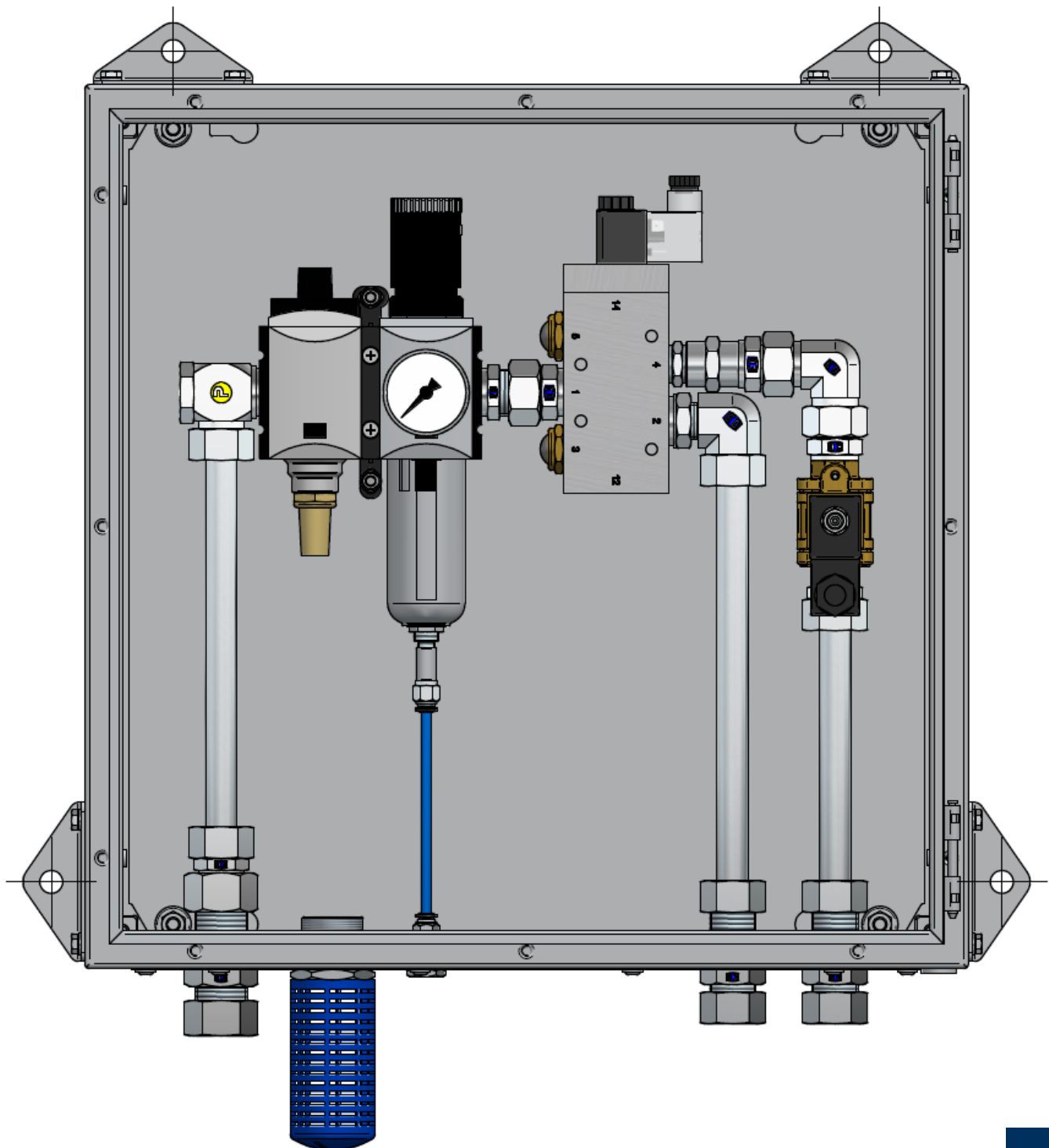
Stainless steel control cabinet 760x760 mm consisting of a filter regulator unit, pressure regulators, hand lever valves and uni-directional flow control valves.



# Control cabinet “cutter blade” for paper mills.

Stainless steel control cabinet 500x500 mm consisting of a filter regulator unit with ball valve, 5/2-way solenoid valve and 2/2-way solenoid valve.

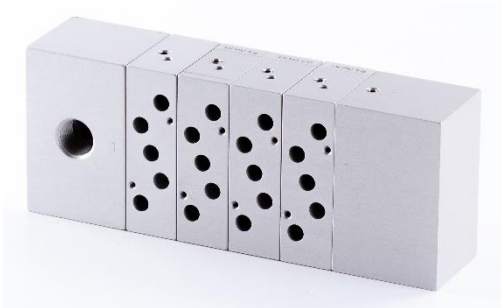
Control cabinet is used for winders.







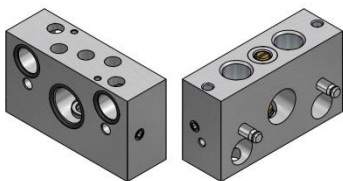
Bottom (ports 1-5)



Top (for valve mounting)

**- Drawings on the next page -**

The individual plates are also available with individual valve isolation type R 5 704 K1 D1.



## Individual valve isolation

Modular manifold system with all ports on the bottom. Plates are designed for assemblage in control cabinets.

Common connection to port 1 (pressure), 3 (exhaust) and 5 (exhaust). The ports 2 and 4 of the individual valves are also located in the manifold plate. The system can be build up and taken apart by just operating two hexagon socket screws.

Additional stations can be added at any position and any time.

The following valves can be assembled to the system RB 5 \_\_ 704 K1:

5/2 single solenoid	MH 510 704
5/2 double solenoid	MH 520 704
5/3 solenoid	MH 53_ 704

You can find the valves on page 15.

3/2-way functions by closing either port 2 or 4.

The system consists of:

End-plate right	type R 5 704 K1 R
End-plate left	type R 5 704 K1 L
Individual position	type R 5 704 K1

Blanking plates are also available type BP 5 704.

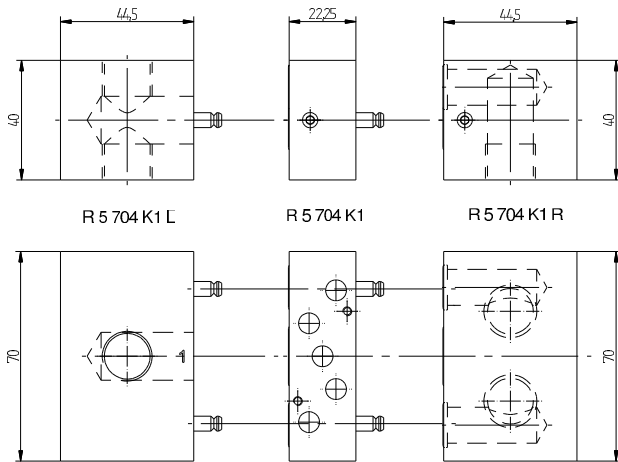
Please notice:

End-plates are not offering an individual valve-position.

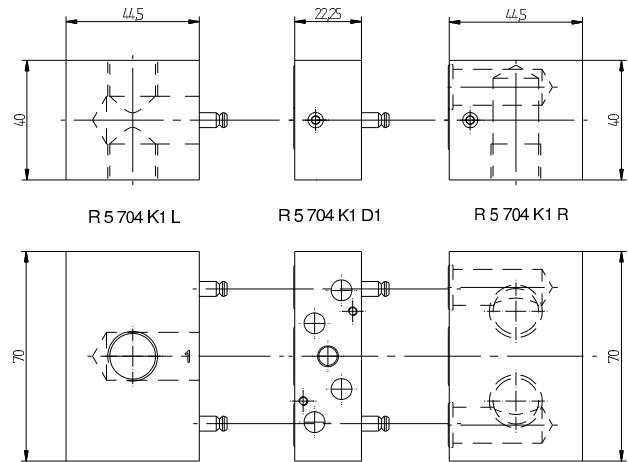
The plates can also be ordered assembled by the manufacturer. In this case order RB 5 \_\_ 704 K1. Please add two digits for the number of positions required.

In case the customer wants to have the FRL inside the box, the endplate left offers as second supply port that faces inside the box. One of the two has to be closed with a plug.

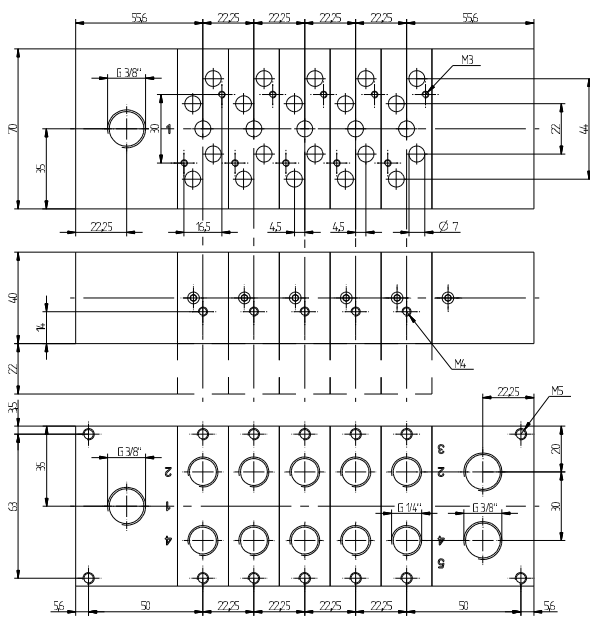
Type	Function	Weight
R 5 704 K1 R	End-plate right	0,13 kg
R 5 704 K1 L	End-plate left	0,12 kg
R 5 704 K1	Individual position	0,09 kg
R 5 704 K1 D1	Individual position, with individual valve isolation	0,09 kg



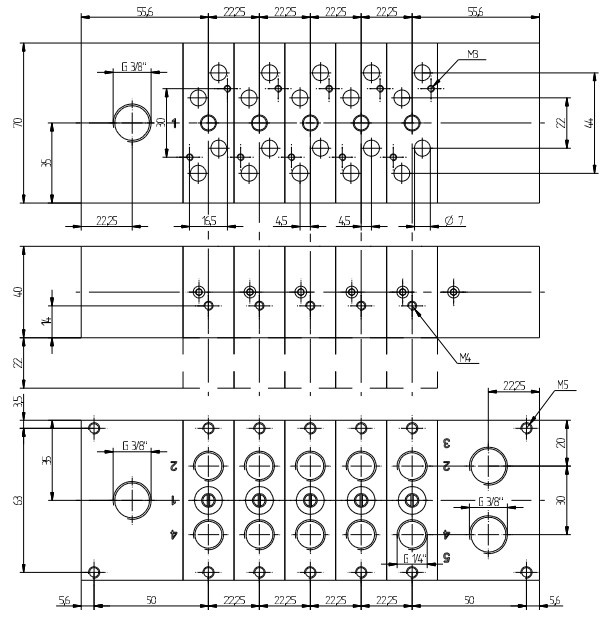
**Parts of modular manifold  
RB 5\_704 K1**



**Parts of modular manifold  
RB 5\_704 K1 D1**



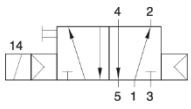
**RB 5\_704 K1** Orifice size: 10 mm



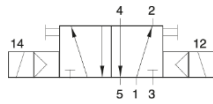
**RB 5\_704 K1 D1** Orifice size: 10 mm

**Please note:**

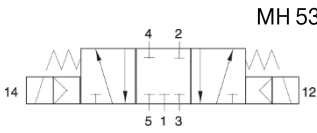
Electric module to generate a valve-terminal with D-Sub multipin connection can be added to the terminal. In this case please use valves type MK 5\_704 T. Please also refer to page 11.



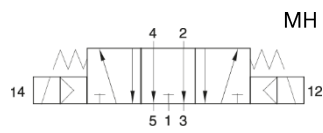
MH 510 704



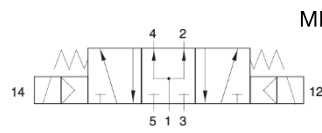
MH 520 704



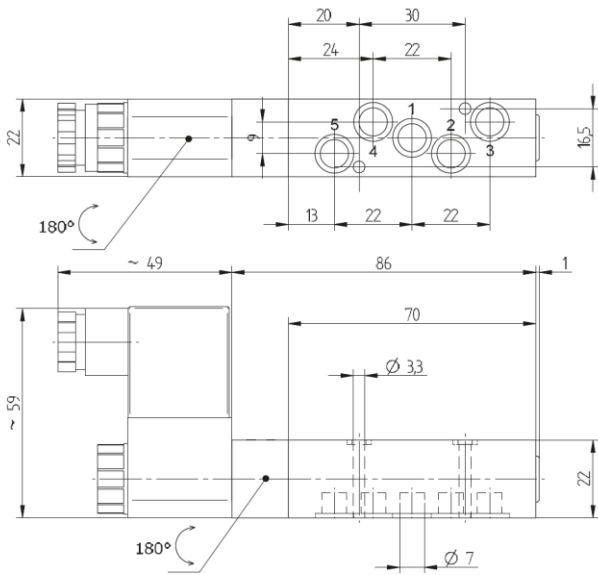
MH 531 704



MH 532 704



MH 533 704



MH 510 704



Bottom side

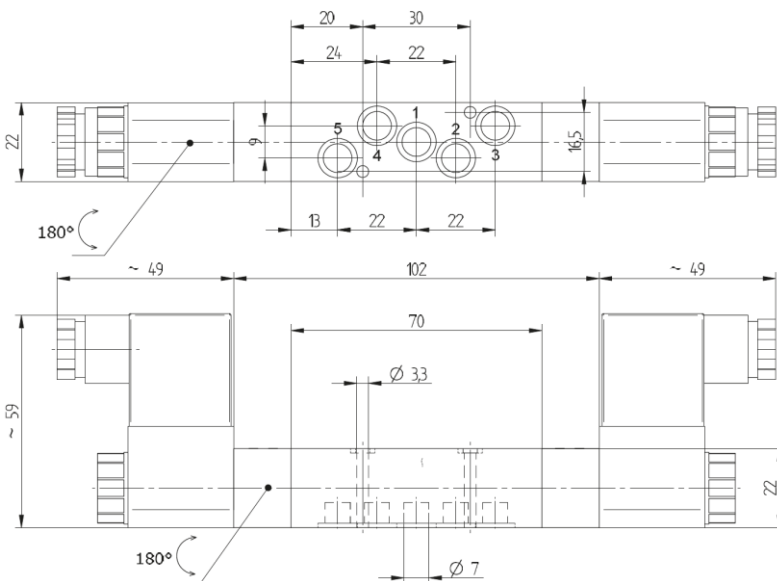
5/2-way solenoid valve actuated by permanent signal and equipped with air spring return.

All the ports are in the plate.

Available with solenoid operators:  
230V/50Hz, 110V/50Hz, 24V/50Hz,  
48V=, 24V=, 12V=.

Valves are generally equipped with manual override.

If requested without manual override please order M 510 \_ \_ \_ .



MH 520 704 /  
MH 53\_704



Valve terminal with 5-way valves, orifice 7 mm, all the ports are in the plate. Plates are designed for assemblage in control cabinets.

Ports 2 and 4: G 1/4".

The terminal is available with 2, 3, 4, 5, 6, 8, 10, 12 positions, others on request. Every station is equipped with a varistor and red LED for coils 24V= or 24V~.

The pneumatic manifolds are displayed and described on page 14, type RB 5\_\_ 704 K1.

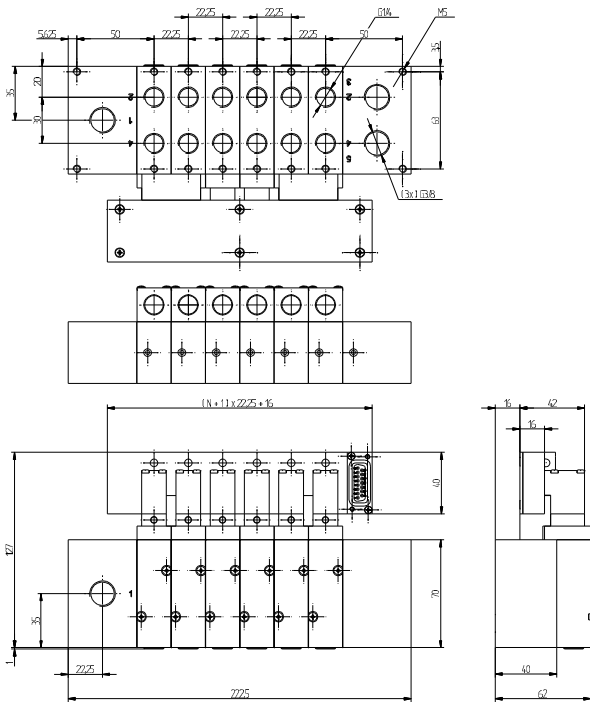
Valves for terminal use offer a 1.8 Watt / 3 VA solenoid, turned by 180° and no 3rd pin (ground). Order-number valves: MK 5\_\_ 704T 24DC or MK 5\_\_ 704 T 24AC.

3/2-way functions by closing either port 2 or 4.

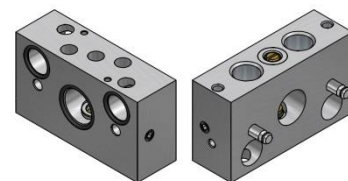
Blanking plates are also available type BP 5 704.

In case the customer wants to have the FRL inside the box, the endplate left offers as second supply port that faces inside the box. One of the two has to be closed with a G 3/8" plug.

The valve terminals are also available with individual valve isolation. If requested, please order T\_5\_\_ 704 K1D1.



## T\_22 5\_\_ 704 K1 equipped with valves type 704 T



### Individual valve isolation

The following valves can be used on that type of valve terminal:

Type	Function	Page*	Comment
MK 510 704 T	single sol.	8	
MK 520 704 T	double sol.	8	double body
MK 53_ 704 T	5/3-way	8	double body, 3 versions available, refer to description





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