

VALVES

**Competence in
Commercial Vehicles**



30

**YEARS
HAFNER**

HAFNER

We are the valve expert for commercial vehicle applications.

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Hafner products are an integral part of commercial vehicle applications. They can be used in anything from PTO valves for bottom loading systems to complex axle lift controls.

Some technical features make Hafner valves especially valuable in commercial vehicles:

- ✓ Applicable for temperatures as low as -50°C
- ✓ Robust design, alternative materials such as stainless steel and different options of surface treatment
- ✓ High flow with a compact design
- ✓ Maximum sealing efficiency at low pressure
- ✓ Solenoid valves for battery applications, also with 6V DC
- ✓ Solenoid valves up to IP67 protection



We offer solutions for various types of commercial vehicles such as:



Tank trucks and trailers

Road sweepers

Refuse vehicles



Firefighting trucks

Skip handler trucks

Semi-trailer

Asphalt machines



Construction vehicles

Hydrogen trucks

Busses



Solutions from our British sales partner AEG:

BOTTOM LOADING AND VAPOUR RECOVERY

We are specialists in providing pneumatic control systems for bottom loading and vapour recovery tank truck operations.



Air Control Cabinet

Our robust tanker pneumatic control systems allow for the simple and effective loading and unloading of compartments.



Guardbar Interlock



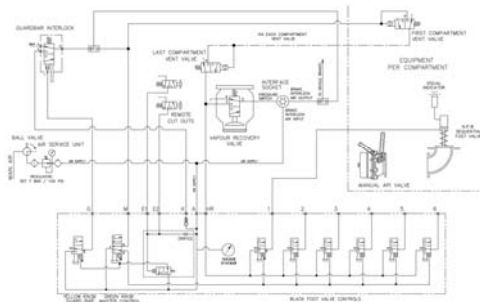
Emergency Shut Down



Dip Interlock Assembly

COMPLETE CUSTOMISED SOLUTIONS

Whether you require standard pneumatic controls or more complex bespoke systems, we can work with you to develop the solution for your precise requirements, to your exact specification.





Hafner offers various valves for use in tank trucks. In addition to components we can offer systems and solutions developed and built in cooperation with our British partner AEG (page 4).

BHP-valves for tanker trucks

With their compact design, interchangeability & customized manifold system, the Hafner BHP-valves are ideal for use in bottom loading systems as well as in PTO (power take-off) applications.

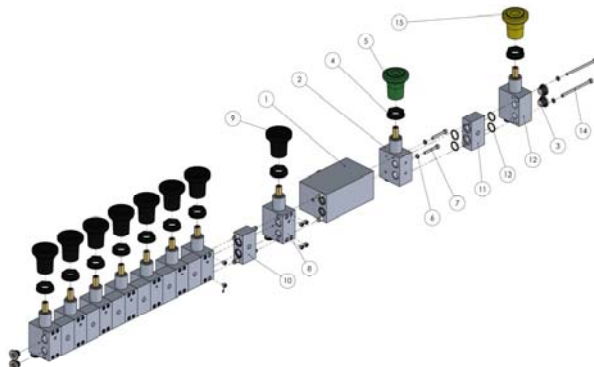
The valves are equipped with an additional pneumatic reset port. This port is often used as a safety connection to ensure that the valve is closed after refuelling.

The valves can be offered with 4 mm and 6 mm push-in fittings. Available knob colours are black, red, green, yellow and blue.

Available on request: ATEX-certified and with cartridges for inch tubes.



Modular system



Tank trucks

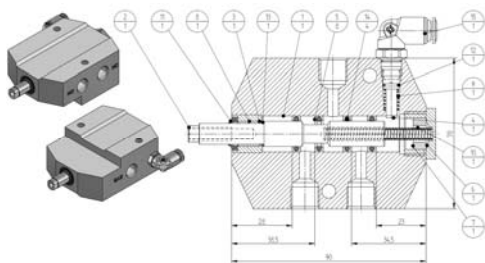
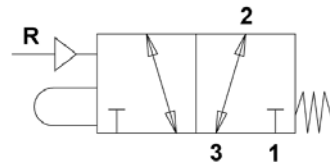
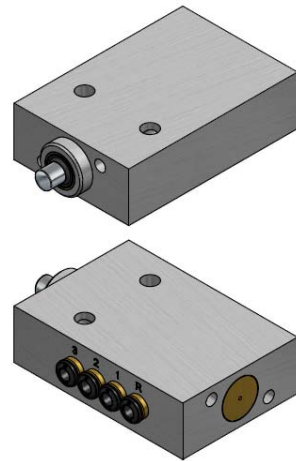


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Guardbar interlock valves

Guardbar interlock valves are designed to pneumatically lock the guard bar, which prevents access to the system's discharge valves, except when loading or unloading.

They can also prevent movement of the vehicle by interlocking to the brakes during loading and discharge.



Customized solution



Valve for emergency bus door control

Valve is used inside busses for emergency door control.

After the bus reaches a certain speed, the valve received an electric signal which opens it and pressurizes the pneumatic cylinder. This will lock the door.

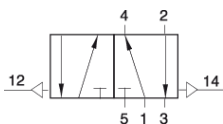
As soon as the bus lowers its speed to a certain point, the electric signal is taken away and the knob can be pushed in case the bus door has to be opened by hand. Pushing the knob will exhaust the cylinder.



Bleed valves

Bleed valves, also called negative switching valves, are widely used in bus door controls.

These valves switch their position not by pressurising the pilot-ports, but by exhausting them. This gives the advantage that the actuating element which can be a manual push-button valve, doesn't need any air supply tubing.



Valve switches the position as soon as the pilot-ports 12 or 14 become exhausted.

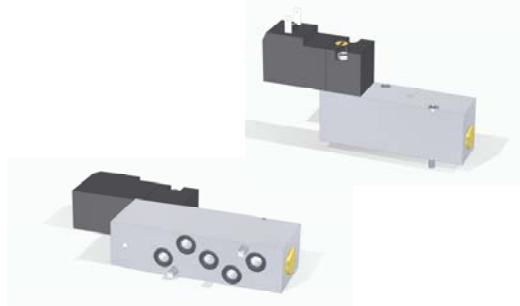




Solenoid valves for +80°C

A small 5/2-way base-mounted valve specifically designed for road sweepers.

The valve can withstand temperatures of up to +80°C and offers a low power consumption of 2 watts only.



Pneumatically actuated valves for +120°C

Similar to the valve above, but pneumatically actuated for +120°C: 5/2- and 5/3-way valves with all the ports on the bottom for manifold assembly.



Cylinders with reinforced piston rod guide

ISO 15552 cylinders in an extremely robust execution featuring a reinforced piston rod guide.

Also available with PUR-coating.





Hand-lever valve for bin lifting controls

5/2-way hand-lever valve with nut for panel mounting, rubber gaiter and modified lever. Used in refuse collection vehicles to operate double-acting cylinders.





Valves to control the hook on skip handler trucks

Solenoid valves for temperatures as low as -40°C, used to control the hook and latch on skip handler trucks.

Equipped with 24V DC Form A coil with 2-watt power consumption.



Pressure regulators and logic elements

Pressure regulators and logic elements (AND-gates) used to avoid over-pressuring of the air-system.

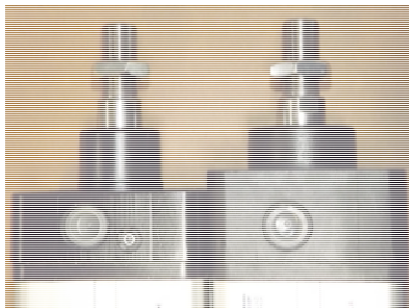




Cylinders with extra long stroke and reinforced piston rod guide

For a manufacturer of semi-trailers, we supply bespoke cylinders with a stroke of more than 1 meter.

The cylinders are equipped with a reinforced piston rod guide.



ISO 1552

Special cylinder
with reinforced
guide



Bespoke cylinders with stainless steel piston rod

Bespoke cylinders with stainless steel piston rod and zinc-plated aluminum body for asphalting machines.

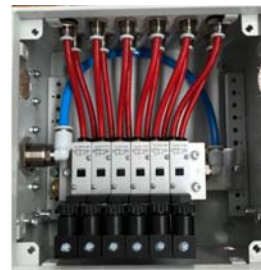
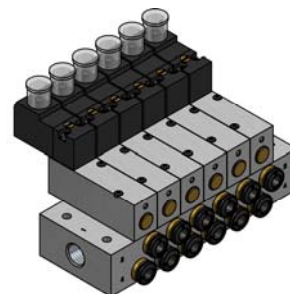
Cylinders are used to control the flow of asphalt. The piston rod is opening and closing the asphalt nozzle.



High temperature solenoid valves on manifold plate

Compact solenoid valves for +80°C with high air-flow of 450 NI/min and low power consumption of 1,8 Watt.

Manifold plates from 2 to 16-stations, equipped with 6 mm push-in fittings.





Manually operated valves

Manually operated valves for panel mounting used in hydrogen transport modules.

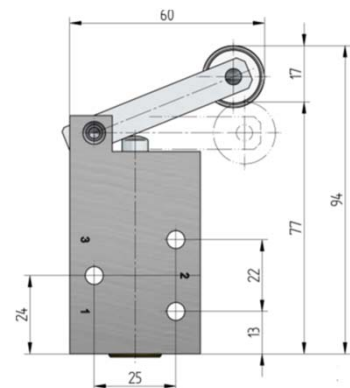
Features:

- Explosion proof for zone 1,2,21 and 22
- Wide temperature range: -40°C to +65°C
- Very robust design with aluminum coupling
- Industry-approved actuating elements from STAHL



Roller lever valve

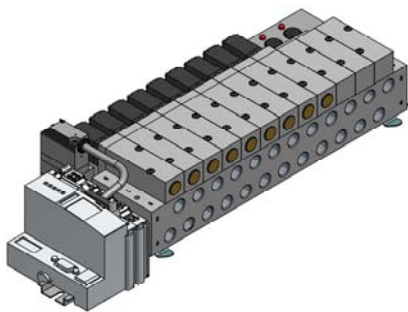
For the same hydrogen modules we also offer a roller lever valve. This valve can be used for -40° and in explosion hazardous environment zone 1 and 21 as well.





Manifolds and valve terminals

For manufacturers of both airport crash tender vehicles and domestic firefighting vehicles we supply manifold systems and valve terminals.



On request: valve terminal with profibus module combined on a DIN-rail. Other bus protocols such as CAN-open are available on request.



Valves for a safety device to protect pedestrians and cyclists

To protect pedestrians and cyclists from falling under a construction vehicle, a British start-up company has developed a special safety device.

We supply the solenoid- and pneumatically actuated valves to control the air bag.



“Easy tarp” for trucks



Valves and cylinders for the “easy tarp” system

We supplied compact cylinders and pneumatic control valves, both for low temperatures (-40°C), to the patented “easy tarp” system.

This system allows the truck driver to lock and unlock the tarp pneumatically. System has been discontinued by the customer.



Cylinder used in fifth wheel couplings for terminal tractors.

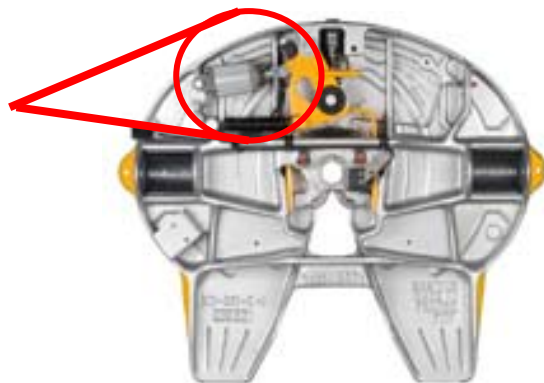
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Air operated lock release mechanism

Hafner supplies a customized cylinder for a fifth wheel coupling manufacturer.

The coupling features an air release function and is developed for terminal tractor applications.



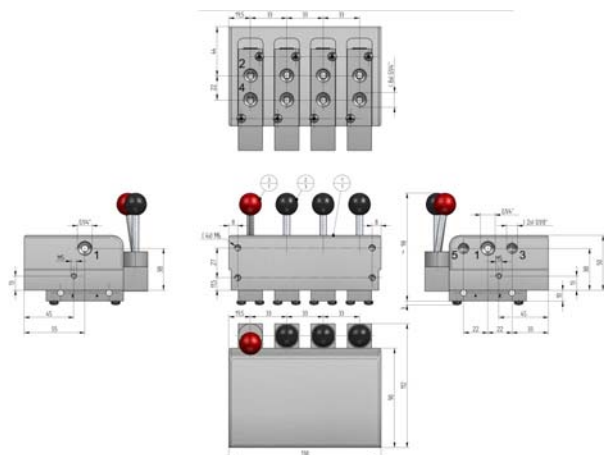


Hand lever valves used in truck cabins

Customized 5/2- and 5/3-way valves installed in truck cabins.

Valves have been designed according to customer specifications to fit a special housing.

Valves can be equipped with a red knob too.



The logo consists of a white square on a dark blue background. Inside the square, the word "HAFNER" is written in a bold, black, sans-serif font.

HAFNER

The logo is a white trapezoidal shape on a dark blue background. It features the number "30" in a large, bold, orange font. Below the number, the words "YEARS" and "HAFNER" are written in a smaller, bold, dark blue font.

30
YEARS
HAFNER

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