M42 Instructions for use and safety instructions

M42 is a complete range of quick couplings for rapid and safe handling of pipe and hose systems. The couplings are produced in a range of sizes and are available in galvanised steel, stainless steel and aluminium.

All couplings and fittings are manufactured in their entirety at our production facility in Tyresö. Its design and construction make the M42 user-friendly. It seals completely for both pressure and vacuum and can be used for anything that can be pumped, blown or sucked through pipes and hoses.

Warning:

- 1. Improper use and/or incorrect installation could compromise the reliability of the connection between the female and the male element.
- 2. It is important to ensure that the pipe/hose system is depressurised during coupling and uncoupling.
- 3. In the event of a force being exerted in the pipe/hose system, for example due to the pipe being suspended or similar, the M42 coupling should be connected with the hook system in line with the force.
- 4. When abrasive media is transported, there may be heavy wear on the male and female elements, with the coupling in an angled position.
 Use of a male coupling with an extra long guide socket is **recommended** to guide the media straight through the coupling with minimal wear.
- 5. If the coupling is accidentally subjected to pressure significantly above the maximum pressure, the hook system will spring, partially displacing the O-ring and causing the medium to leak out. The hook system will still hold the coupling together.
- 6. M42 must only be used within the specified pressure limits:

DN	Max pressure (PS) Liquid Fluid group 2	Max pressure (PS) Gas Fluid group 2
DN50	12.5 bar	8 bar
DN80	12.5 bar	8 bar
DN100	12.5 bar	8 bar
DN125	12.5 bar	8 bar
DN150	12.5 bar	6 bar
DN200	6 bar	4 bar

Negative pressure max 80% vacuum

- 7. Max temperature + 125°C
- 8. See "MEDIA (GAS & LIQUIDS) WHICH ARE NOT TO BE USED" for a list of media that are not be used in the coupling.



COMPONENTS

- Spherical male element with guide socket
- Female element with O-ring seat
- Ring and hook system mounted on the female element
- O-ring

HOOK SYSTEM

- A ring and hook system is mounted on the female coupling.
- The hook system consists of a hinged ring.
- The lower hook and upper hook with lever are mounted on the hinged ring.
- When connected, the lever locks in the safe "over centre" position. It provides extra security by locking the lever tighter with increasing pressure.

SAFETY LOCKING DEVICE

- The spring-loaded safety locking device is mounted on the upper hook.
- When the lever is engaged in the closed position, the safety locking device automatically locks the lever in the locked position and prevents accidental uncoupling.
- When uncoupling, the safety locking device is released by holding it down at the front edge so the lever can be released from its locked position and raised.

ANGLING

• The design of the coupling and the hinged hook system allow for angling in any direction. The coupling allows angling of 10–15° depending on the coupling size.

O-RING

- The thick seal in its seat guarantees total tightness for both pressure and vacuum, even when conveying media with a coarser structure.
- The thick O-ring itself displaces minor contaminants and seals securely against the male component.
- NOTE: It is always important to make sure that the coupling provides a tight seal before commissioning the pipe/hose.
- The seal is available in a variety of materials for use with different media and temperatures.



MEDIA (GAS & LIQUIDS) WHICH ARE NOT TO BE USED

The following media consisting of substances and mixtures, as defined in Articles 2(7) and 2(8) of Regulation (EC) No 1272/2008 (CLP Regulation), classified as hazardous according to the following hazard classes for physical or health hazards according to Annex 1, Sections 2 and 3, shall not be used in the coupling:

- Unstable explosives, mixtures and objects or explosives, mixtures and objects in risk groups 1.1, 1.2, 1.3, 1.4 and 1.5.
- Flammable gases, categories 1 and 2.
- Oxidising gases, category 1.
- Flammable liquids, categories 1 and 2.
- Flammable liquids, category 3 with a maximum permissible temperature above the flash point.
- Flammable solids, categories 1 and 2.
- Self-reactive substances and mixtures, type A–F.
- Pyrophoric liquids, category 1.
- Pyrophoric solids, category 1.
- Substances and mixtures which, upon contact with water, emit flammable gases, categories 1, 2 and 3.
- Oxidising liquids, categories 1, 2 and 3.
- Oxidising solids, categories 1, 2 and 3.
- Organic peroxides, type A–F.
- Acute oral toxicity, categories 1 and 2.
- Acute dermal toxicity, categories 1 and 2.
- Acute inhalation toxicity, categories 1, 2 and 3.
- Specific organ toxicity single exposure: category 1.



M42 Closing and opening

The safety locking device engages automatically in the closed position.



