

**Art. No.** 156067

**Type No.** AS.Z.136.4.A



Exemplary illustration

The autogenous twin hoses in accordance with DIN EN ISO 5172 are pre-assembled and ready to use, each with two hoses nozzles for a G 1/4"-connection for oxygen and a G 3/8" LH connection for acetylene. They are clearly superior in terms of quality, as the two hose lines are not manufactured individually and then glued together, but are extruded together in a single operation. They are therefore permanently welded together without the risk of them coming apart over time.

## Technical data

|                         |                  |
|-------------------------|------------------|
| Inner tube              | NR / SBR         |
| Outer cover             | NR / EPDM        |
| Gas type                | oxygen, fuel gas |
| Material connections    | brass            |
| Thread 1                | G 1/4 IT         |
| Thread 2                | G 3/8 LH IT      |
| Max. operating pressure | 20 bar           |
| Reel length             | 4 m              |
| Tube O.D.               | 13.3 mm          |
| Tube I.D.               | 6.3 mm           |
| Min. bending radius     | 80 mm            |
| Colour                  | blue-red         |

## Commercial data

|                         |               |
|-------------------------|---------------|
| eCl@ss 5.1.4            | 21069190      |
| eCl@ss 9.0              | 21089262      |
| UNSPSC_Code_v190501     | 40141764      |
| UNSPSC_CodeDesc_v190501 | Hose assembly |

## Essential conditions for secured application of hose assemblies

### Selection of hose and fittings according to medium and operating conditions

- Components of liquid, gaseous or solid media may physically penetrate the hose material or cause chemical reactions.
- Physical effects: These may cause a change in the volume of the hose material and consequently alter its properties such as hardness, tensile strength and elongation.
- Chemical effects: These may change the chemical structure of the hose material and thus its properties (e.g. plasticizers or ageing protection agents may be leached out). Corrosion of metal fittings can lead to leakage.
- The permissible working pressure or vacuum of the hose assembly must not be exceeded.
- The permissible operating temperature, depending on the medium, must not be exceeded.
- In case of abrasion, wear of the hose must be taken into account and monitored regularly.
- Hose assemblies must not become dangerously electrostatically charged during operation. Where there is a risk of electrostatic charging, the electrical resistance (measured over the hose assembly from fitting to fitting) must not exceed 106  $\Omega$ .
- The specified overpressure for plastic spiral hoses refers to a short-term static pressure at 20 °C. Repeated pressure loading weakens the hose and reduces its service life.

### Professional assembly

- The selection of hose and fittings must comply with applicable standards and be dimensionally matched.
- The assembly of hose fittings may only be carried out by qualified personnel in accordance with the assembly instructions.

### Correct storage

- Store hoses clean and dry.
- Avoid direct sunlight or UV radiation.
- Store hoses free of tension and kinks.
- Avoid temperatures below -10 °C and above 30 °C.

### Correct installation and use

- Hose assemblies must be installed in such a way that they are always accessible and not restricted in their natural position or movement.  
It must be taken into account that hoses shorten under vacuum and change in length and diameter under pressure. (Non-reinforced plastic spiral hoses may elongate by up to 40% at maximum permissible operating pressure.)
- Hose assemblies must not be subjected to torsion, tensile or compressive loads.
- Hose assemblies must not kink, especially near the fittings.
- The minimum specified bending radius of the hose must not be exceeded.
- Hose assemblies must be protected against external mechanical, thermal or chemical influences.
- If required, the electrical resistance of the hose assembly must be checked.

### Definition of work procedures in an operating instruction, regular training of employees, and provision and use of suitable personal protective equipment.

- To ensure the safe operation of hose assemblies, technical, organizational and personal protective measures must be implemented. Priority shall always be given to technical and organizational measures. If these measures do not eliminate all hazards, effective personal protective equipment must be provided and used.

### Regular inspections

- **Visual inspection:**
  - Hose sufficiently cleaned
  - Kinks, crushing or deformation
  - Chemical embrittlement or mechanical damage to the hose cover or inner tube
  - Fittings damaged, deformed or corroded
  - Seals damaged or missing
- **Pressure and leak test:**
  - Leaks, pores, blisters, bulges or deformation
  - Impermissible elongation or torsion
  - Leakage at hose connections or fittings
- **Inspection of electrical conductivity**
  - The inspection results must be documented.