

Heavy-duty type.

Transparent plastic hose with spiral steel wire embedded in the wall.

Suitable for process water, sludge and liquid manure under extreme conditions.  
 Extremely flexible and non-toxic. Acc. to 2007/19/EC.

Vacuum	0,9 bar
Temperature range	-15 °C to +60 °C
Composition	PVC, transparent, smooth, enclosed coil out of steel wire
Bending radius	approx. doubled inner diameter from LW 90 on tripled inner diameter



4480.051-50

Suction and discharge hoses, PVC							
Art. No.	Ident No.	Tube I.D. mm	Tube O.D. mm	max. operating pressure at 20 °C bar	Reel length m	Wall thickness mm	Weight/ meter kg
4480.010	113909	10	16	10	30	3	0.2
4480.012	113910	12	18	9	30	3	0.2
4480.014-50	113911	14	20	9	50	3	0.2
4480.016-50	113912	16	22	9	50	3	0.3
4480.018-50	113913	18	25	8	50	3.5	0.3
4480.020-50	113914	20	27	8	50	3.5	0.3
4480.025-50	113915	25	33	8	50	4	0.5
4480.032-50	113916	32	40	8	50	4	0.7
4480.038-50	113917	38	46	7	50	4	0.8
4480.040-50	113918	40	50	7	50	5	1.0
4480.045-50	113919	45	55	6	50	5	1.2
4480.051-50	113920	51	62	5	50	5.5	1.4
4480.060	113921	60	72	5	30	6	1.8
4480.063	113922	63	75	5	30	6	1.8
4480.076	113923	76	90	4	30	7	2.3
4480.080	113924	80	92	4	30	6	2.6
4480.090	113925	90	103	4	20	6.5	3.0
4480.102	113926	102	116	3	20	7	3.8

⇒ IMPORTANT:

Hose sizes 50 x 40 mm and larger are shipped from our distribution centre in the Netherlands using a forwarding agent.

## Essential conditions for secured application of hose assemblies

### 1. Selection of hose and fittings according demand (specification) by medium and application (working circumstances).

- Particles of liquid or solid agents may physically penetrate, respectively cause chemical reactions.
- Physical effects: causing change in volume of the hose material, consequently causing a change in its characteristics i.e. hardness, tensile strength, elongation.
- Chemical effects: causing change in chemical construction of hose material, causing change in properties (e.g.: plasticizers or ageing-protectors are decomposed causing possible spill or leakage).
- The permitted working pressure and vacuum are not to be exceeded.
- The permitted working temperature in interdependence with the medium is not to be exceeded.
- In case of abrasion always consider wear and tear, and regular checking of the hose is required.
- Hose assemblies may, in the process of use, never absorb dangerous electrical charges and where applicable the electrical resistance (measured over the hose from fitting to fitting) may not exceed the value of  $10^6\Omega$ .
- The indicated overpressure on the plastic spiral hoses refers to a short-term pressure at 20°C. Multiple overpressure usage will lead to a weakened hose and will also reduce the lifetime of the hose.

### 2. Professional assembly

- The selection of hose and fittings must be made in correct sizes and attuned to each other.
- Assemblies of fittings may only be executed by experts and is always subjected to prevailing directives.

### 3. Correct storage

- Always keep the hoses dry and clean.
- Avoid influences from radiation of Ultra Violet and sunshine.
- Store tension free and kink free.
- Avoid temperatures under -10°C and over 30°C.

#### 4. Correct utilization

- Hose-assemblies must always be installed accessible for persons, in its natural position and unobstructed. Take into account that hoses under vacuum suffer from decrease in length, under pressure change in length and diameter will occur (non-reinforced PVC spiral hoses may elongate till 40% of its original length when maximum working pressure is applied).
- Hose-lengths may, in essence, not be claimed on their ability of torsion, elongation and pulling strength.
- Hose lengths may not be put under torsion, compression and extension.
- Hose lengths may not be bended below its bending radius, especially not behind its fittings.
- Hose lengths must be protected against exterior mechanical- thermal- or chemical affection.
- When required inspect and check electrical resistance of the hose lengths.

#### 5. Registration of procedure of instructions meeting regular education of employees. Readiness and use of appropriate personal safety equipments.

- To operate hose-lengths safely it is necessary to implement technical, personal and organisational measures for protection. Preference must be given to the technical and organisational measures. Should these not avoid all dangers, effective personal safety equipment must be provided and used.

#### 6. Regular inspections

- Hose-assemblies must be inspected by an expert prior to putting into use. Regular inspections are recommended then-after.
- Essential details of inspections should be:
  - Visual inspection of the hose:
    - sufficiently cleaned before inspection
    - kinks, bruises, deformations
    - chemical porosity or mechanical damage to inner tube and/or cover
    - damage, deformation or corrosion to the fittings
    - damage, deformation or missing of seals and washers
  - Pressure test, leak proof tests:
    - pores, leaks, kinks, bruises, blisters, deformations
    - unacceptable elongation, overextended torsion
    - leakage in hose-connection or fitting(s)
  - Inspection of electrical conductivity:
  - Testing results must be documented

Source: BG Chemie Merkblatt T002