

Nylon 11 (PA).

These hoses allow gaseous and liquid media to flow safely and efficiently (Air, gases, oils, greases, fuels, organic and inorganic substances). Thanks to their small coil diameter, they are compact, easy to handle and lightweight. Very good recoil force owing to the use of nylon 11 (PA).

Operating temperature -40 °C to 100 °C

Spiral hose, without fittings

Art. No.	Type No.	Hose size mm	Coil O.D. mm	No. of coils	Max. operating pressure at 23 °C bar	Service length max. m
113391	SP 5	4.7x3.1	38	144	22	10.0
113392	SP 6	6.3x4.8	75	140	16	22.5
113393	SP 8	7.9x6.3	75	135	13	22.5
113394	SP 10	9.5x7.9	115	90	12	22.5
113395	SP 12	11.8x9.5	140	70	11	22.5



SP 6

Spiral hose, with swivel adapter fitted at both ends and kink protector

Art. No.	Type No.	Thread	Hose size mm	Coil O.D. mm	No. of coils	Max. operating pressure at 23 °C bar	Service length max. m
113396	SP 5-250	R 1/8	4.7x3.1	38	36	22	2.5
113397	SP 5-500	R 1/8	4.7x3.1	38	72	22	5.0
113398	SP 5-750	R 1/8	4.7x3.1	38	108	22	7.5
137367	SP 5-1000	R 1/8	4.7x3.1	38	144	22	10.0
113399	SP 6-250	R 1/4	6.3x4.8	75	15	16	2.5
113400	SP 6-500	R 1/4	6.3x4.8	75	30	16	5.0
113401	SP 6-750	R 1/4	6.3x4.8	75	45	16	7.5
137368	SP 6-1000	R 1/4	6.3x4.8	75	60	16	10.0
113402	SP 8-250	R 1/4	7.9x6.3	75	15	13	2.5
113403	SP 8-500	R 1/4	7.9x6.3	75	30	13	5.0
113404	SP 8-750	R 1/4	7.9x6.3	75	45	13	7.5
136342	SP 8-1000	R 1/4	7.9x6.3	75	60	13	10.0
113405	SP 10-250	R 1/4	9.5x7.9	115	10	12	2.5
113406	SP 10-500	R 1/4	9.5x7.9	115	20	12	5.0
113407	SP 10-750	R 1/4	9.5x7.9	115	30	12	7.5
136343	SP 10-1000	R 1/4	9.5x7.9	115	40	12	10.0
113408	SP 12-250	R 3/8	11.8x9.5	140	8	11	2.5
113409	SP 12-500	R 3/8	11.8x9.5	140	15	11	5.0
113410	SP 12-750	R 3/8	11.8x9.5	140	23	11	7.5
136344	SP 12-1000	R 3/8	11.8x9.5	140	30	11	10.0



SP 8-500

Swivel adapter with kink protector for spiral hose made of nylon (PA)

Art. No.	Type No.	Thread	a/f mm	Hose size mm	Material
113420	SP 110	R 1/8	11	4.7x3.1	Brass
113421	SP 111	R 1/4	14	6.3x4.8	Brass
113422	SP 112	R 1/4	14	7.9x6.3	Brass
113423	SP 113	R 1/4	15	9.5x7.9	Brass
113424	SP 114	R 3/8	19	11.8x9.5	Brass



SP 111

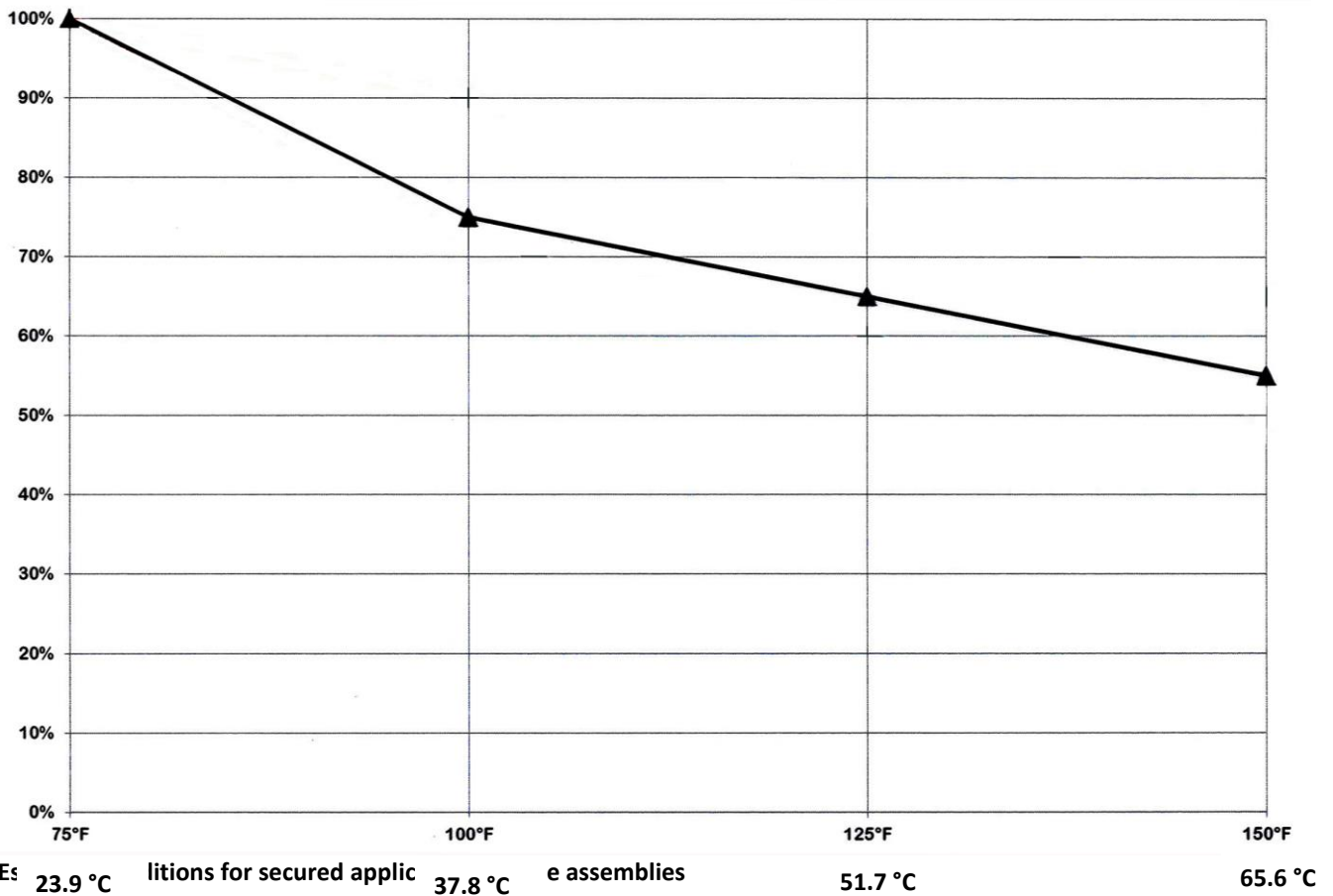
Rigid adapter with kink protector for calibrated hoses

Art. No.	Type No.	Thread	a/f mm	Hose size mm	Length mm	Material
113425	SP 101/1	G 1/8	12	6.0x4.0	103.0	Brass
113426	SP 101/2	G 1/8	12	8.0x6.0	106.0	Brass
113427	SP 102/1	G 1/4	17	6.0x4.0	103.0	Brass
113428	SP 102/2	G 1/4	17	8.0x6.0	106.0	Brass
159796	KSF1486ST	G 1/4	14	8,0x6,0		Brass
113429	SP 102/3	G 1/4	17	10.0x8.0	119.0	Brass
113430	SP 102/4	G 1/4	17	12.0x9.0	123.0	Brass
113431	SP 104/1	G 3/8	19	8.0x6.0	106.0	Brass
113432	SP 104/2	G 3/8	19	10.0x8.0	119.0	Brass
113433	SP 104/3	G 3/8	19	12.0x9.0	123.0	Brass



SP 102/1

Pressure-/Temperature-Diagramme of spiral hoses Nylon (PA):



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

Quelle: BG Chemie Merkblatt T002