Polyurethane. Standard type or with braided reinforcements for high pressures.

These exceptionally elastic polyurethane hoses boast a recoil force similar to that of conventional nylon spiral hose, but with less tendency to loop and significantly better resistance to abrasion.
There is consequently less danger of scratching coated or sensitive surfaces.
The hose is extremely flexible and non-kinking.

Operating temperature -40 °C to 74 °C

Spiral hose, with swivel adapter and kink protector

Art. No.	Type No.	Thread	Hose size mm	Coil O.D. mm	Max. operating pressure at 23 °C bar	Service length max. m
113434	SP 16-300	G 1/4	8x5	40	10	3.0
113435	SP 16-600	G 1/4	8x5	40	10	6.0
113436	SP 16-750	G 1/4	8x5	40	10	7.5
137369	SP 16-1000	G 1/4	8x5	40	10	10.0
113437	SP 17-300	G 1/4	9.5x6.3	60	10	3.0
113438	SP 17-600	G 1/4	9.5x6.3	60	10	6.0
113439	SP 17-750	G 1/4	9.5x6.3	60	10	7.5
113440	SP 17-1000	G 1/4	9.5x6.3	60	10	10.0
113441	SP 18-300	G 3/8	12x8	80	9	3.0
113442	SP 18-600	G 3/8	12x8	80	9	6.0
113443	SP 18-750	G 3/8	12x8	80	9	7.5
114590	SP 18-1000	G 3/8	12x8	80	9	10.0

Spiral hose, with swivel adapter and kink protector, braided

Art. No.	Type No.	Thread	Hose size mm	Coil O.D. mm	Max. operating pressure at 23 °C bar	Service length max. m
113467	SP 19-300	G 1/4	9.5x6.3	42	14	3.0
113468	SP 19-600	G 1/4	9.5x6.3	42	14	6.0
113469	SP 19-750	G 1/4	9.5x6.3	42	14	7.5
113470	SP 20-300	G 3/8	12x8	55	14	3.0
113471	SP 20-600	G 3/8	12x8	55	14	6.0
113472	SP 20-750	G 3/8	12x8	55	14	7.5

SP 17-600

SP 19-300

Spiral hose

Art. No. 113434 to 113472

RIEGLER

Swivel adapter

Art. No.	Type No.	Thread	a/f mm	Hose size mm
113473	SP 220	G 1/4	17	8x5
113474	SP 221	G 1/4	17	9.5x6.3
113475	SP 222	G 3/8	19	12x8

SP 221

Item:	**SP 16-300, SP 16-600, SP 16-750, SP 16-1000**
Material:	Ether based polyurethane
Hardness:	95A
Inner Diameter:	0.197 +/-.005"
Outer Diameter:	0.315 +/-.005"
Wall Thickness:	.059" +/-.0025"
Nominal Coil OD:	1 7/8"
Temperature Range:	-40°F to 165°F
Vacuum Rating:	28" Hg
Working Pressure (75°F):	145 PSI
Safety Factor:	3 to 1
Compliance:	UL94HB, NSF61
Other:	UV Stabilized

Item:	**SP 17-300, SP 17-600, SP 17-750, SP 17-1000**
Material:	Ether based polyurethane
Hardness:	95A
Inner Diameter:	.245" +/-.005"
Outer Diameter:	.375" +/-.005"
Wall Thickness:	.065" +/-.0025"
Nominal Coil OD:	2 1/2"
Temperature Range:	-40°F to 165°F
Working Pressure (75°F):	145 PSI
Safety Factor:	3 to 1
Compliance:	UL94HB, NSF61
Other:	UV Stabilized

Item:	SP 18-300, SP 18-600, SP 18-750, SP 18-1000
Material:	Ether based polyurethane
Hardness:	95A
Inner Diameter:	.315" +/-.005"
Outer Diameter:	.472" +/-.005"
Wall Thickness:	.0785" +/-.0035"
Nominal Coil OD:	2 15/16"
Temperature Range:	-40°F to 165°F
Working Pressure (75°F):	130 PSI
Safety Factor:	3 to 1
Compliance:	UL94HB, NSF61
Other:	UV Stabilized

Item:	SP 19-300, SP 19-600, SP 19-750
Material:	Ether based polyurethane
Reinforcement:	Polyester synthetic thread
Hardness:	95A Inner, 85A Outer
Inner Diameter:	.245" +/-.005"
Outer Diameter:	.375" +/-.005"
Wall Thickness:	.065" +/-.0025"
Nominal Coil OD:	1 3/4"
Temperature Range:	-40°F to 165°F
Working Pressure (75°F):	200 PSI
Safety Factor:	4 to 1
Compliance:	UL94HB, NSF61
Other:	UV Stabilized

Spiral hose

Art. No. 113434 to 113472

Item:	**SP 20-300, SP 20-600, SP 20-750**
Material:	Ether based polyurethane
Reinforcement:	Polyester synthetic thread
Hardness:	85A Inner, 85A Outer
Inner Diameter:	.315" +/-.005"
Outer Diameter:	.472" +/-.005"
Wall Thickness:	.0785" +/-.0035"
Nominal Coil OD:	2 3/16"
Temperature Range:	-40°F to 165°F
Working Pressure (75°F):	200 PSI
Safety Factor:	4 to 1
Compliance:	UL94HB, NSF61
Other:	UV Stabilized

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

Quelle: BG Chemie Merkblatt T002