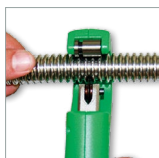


gebosuper.vario

GEBO SUPER VARIO



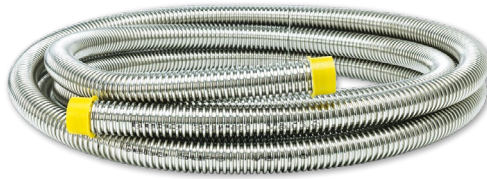
GEBO SUPERVARIO is a product line for making hydraulic connections using flexible corrugated tubes of AISI 316L stainless steel.

MAIN FEATURES OF GEBO SUPERVARIO PIPES

- designed for water systems; stainless steel type 1.4404 (AISI 316L) is extremely **resistant to corrosion, glycol and aggressive chemical environments**, and requires no additional protection;
- owing to its elasticity, the pipe is very easy to form, which makes it easier to install, especially in so-called “difficult conditions”; it is easy to cut, bend and straighten in comparison with AISI 304 steel;
- **corrugated tubes are widely used in water and heating systems**, e.g.: in connections with the system of: boilers, furnaces, heat pumps, tanks, heat exchangers, air conditioners, solar systems and other water devices, and also as an alternative to non-durable flexible hoses in steel braid;
- due to the characteristics of AISI 316 steel, **GEBO SUPERVARIO corrugated tubes can be used in more aggressive indoor environments** such as swimming pools and buildings with special hygiene requirements (hospitals, laboratories and kitchen facilities of canteens or restaurants).
- the tube has a **hygienic certificate** of the National Institute of Hygiene with an approval for drinking water.

In 2019, the GEBO SUPERVARIO tube system received an award in the “Product of the Year” category in the “Recommended by Polish plumbers” plebiscite initiated by the National Association of Plumbing Companies.





CORRUGATED TUBE MATERIAL: austenitic steel type 1.4404 (AISI 316L), according to EN 10088-2; size DN12-DN50

TUBE OPERATING TEMPERATURE: -270°C – max. 600°C

OPERATING TEMPERATURE OF KLINGERSIL SEALS C-4400: -50°C to 150°C - continuous operation

OPERATING PRESSURE: 3-21 bar - according to the table below, in line with the requirements of EN ISO 10380

QUALITY CONTROL: according to requirements of EN ISO 10380

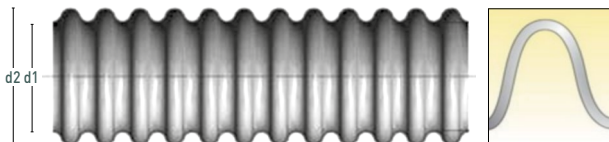
CERTIFICATES: National certificates

DN	Code	Article description	Length [m]
12	SVW12.30	Pipe DN12 [1/2"] 30 m	30
	SVW12.4	Pipe DN12 [1/2"] 4 m	4
16	SVW16.30	Pipe DN16 [3/4"] 30 m	30
	SVW16.4	Pipe DN16 [3/4"] 4 m	4
20	SVW20.30	Pipe DN20 [1"] 30 m	30
	SVW20.4	Pipe DN20 [1"] 4 m	4
25	SVW25.30*	Pipe DN25 [1 1/4"] 30 m	30
	SVW25.4*	Pipe DN25 [1 1/4"] 4 m	4
32	SVW32.30*	Pipe DN32 [1 1/2"] 30 m	30
	SVW32.4*	Pipe DN32 [1 1/2"] 4 m	4

*- to special order

Technical specification:								
DN	Dimension [mm]		Acceptable deviation for d1 and d2	Bending radius [mm]	Operating pressure at 20°C [bar]	Nominal pressure [PN]	Weight (+/-) 10% [kg/m]	Number of corrugations per 100 mm
	[mm]	d1						
12	12.5	16.5	(+/-) 0.2	20	21	20	0.086	25
16	16.3	21.4	(+/-) 0.2	25	16	16	0.156	22
20	20.5	26.5	(+/-) 0.2	30	10	10	0.226	21
25	25.4	31.8	(+/-) 0.4	35	10	10	0.255	19
32	34.6	41.1	(+/-) 0.4	40	4	4	0.335	21

Product not suitable for dynamic loads



SOLAR SYSTEMS

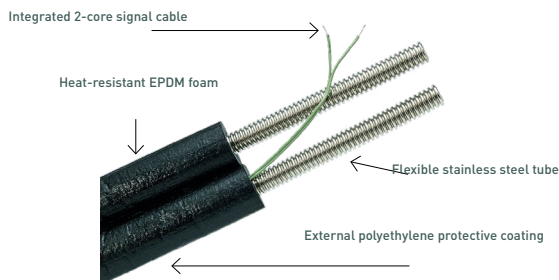
SOLAR TUBE

Double flexible corrugated tubes for the installation of solar systems reduce operating time and ensure that there are no leaks in the system. Strong polyethylene coating provides protection against mechanical damage. It has longitudinal perforation, which allows for easy separation of tubes without damaging the insulation. The insulation is made of synthetic closed-cell EPDM foam, which has excellent resistance to high temperature, weather conditions and UV radiation.

- **MATERIAL:** Flexible tubes of stainless steel 1.4404 – AISI 316L
- **INSULATION:** Heat-resistant EPDM foam
- **INSULATION THICKNESS:** 13 mm
- **TEMPERATURE RESISTANCE OF THE INSULATION:** +150 °C for continuous operation (+175 °C for short-term loads)
- **INSTALLATION:** no special or additional tools required
- **TWO-CORE SIGNAL CABLE:** silicone sheath resistant to temperatures up to +180 °C
- **HEAT CONDUCTION:** Heat conduction values
 - λ (0 °C) = 0.038 W/mK
 - λ (40 °C) = 0.042 W/mK
- **REACTION TO FIRE:** self-extinguishing, prevents fire from spreading; does not produce flaming droplets in case of fire
- **VAPOUR PERMEABILITY:** $\mu \geq 4.500$ (ISO 12572)

DN	Code	Article description	Length [m]
16	SVS16.25.2	2 in 2 Double solar tube DN16	25
20	SVS20.25.2*	2 in 2 Double solar tube DN20	25

* to special order, ask for other sizes



SOLAR KIT

Code	Article description
SVS16SET	Solar kit 3/4" (DN16) - 4 nuts with seals and rings, 2 nipples M/M
SVS20SET*	Solar kit 1" (DN20) - 4 nuts with seals and rings, 2 nipples M/M

* to special order, ask for other sizes

PLUMBER'S CASE

**The plumber's case contains:**

- 2.5 mm L-type wrench
- Cutting tool* - 1 piece
- 1/2" (DN12) nuts with seals and rings - 10 pieces
- 3/4" (DN16) nuts with seals and rings - 10 pieces
- 1" (DN20) nuts with seals and rings - 10 pieces
- Exchangeable DN12 head for flanging tool - 1 piece
- Exchangeable DN16 head for flanging tool - 1 piece
- Exchangeable DN20 head for flanging tool - 1 piece
- Flanging tool body - 1 piece

Code	Article description
SVT12	Exchangeable DN12 head
SVT16	Exchangeable DN16 head
SVT20	Exchangeable DN20 head
SVT25	Exchangeable DN25 head
SVT32	Exchangeable DN32 head
SVTBODY	Flanging tool body for connection with exchangeable heads DN12-25
SVTBODY32	Flanging tool body in size DN32
SVTCUT	Cutting tool*

* with built-in deburrer, operating range 3-35 mm

NUTS AND NIPPLES



Code	Article description
SV12SET01	Brass nut 1/2 (DN12), female, with flat seal KlingerSil C-4400 and steel ring - 10 pieces
SV16SET02	Brass nut 3/4 (DN16), female, with flat seal KlingerSil C-4400 and steel ring - 10 pieces
SV20SET03	Brass nut 1" (DN20), female, with flat seal KlingerSil C-4400 and steel ring - 10 pieces
SV25SET04*	Brass nut 1 1/4" (DN25), female, with flat seal KlingerSil C-4400 and steel ring - 10 pieces
SV32SET05*	Brass nut 1 1/2" (DN32), female, with flat seal KlingerSil C-4400 and steel ring - 10 pieces
SV16SET0102	Reducing nut 3/4" x 1/2", female, with KlingerSil seal C-4400 3/4" x 1/2" and 1/2" ring for pipe DN12 - 10 pieces

* - to special order, ask for other sizes

RINGS AND SEALS FOR GEBO NUTS

Code	Article description
SV12SR	Ring for 1/2" nut - 10 pieces
SV16SR	Ring for 3/4" nut - 10 pieces
SV20SR	Ring for 1" nut - 10 pieces
SV12GASKET	Seal for 1/2" nut - 10 pieces
SV16GASKET	Seal for 3/4" nut - 10 pieces
SV20GASKET	Seal for 1" nut - 10 pieces
SV1612GASKET	Seal for 3/4" x 1/2" reducing nut - 10 pieces

OTHER PRODUCTS FOR CONNECTIONS - BRASS NIPPLES



Code	Article description
SVN11.0101	Brass nipple 1/2" x 1/2", M/M
SVN11.0202	Brass nipple 3/4" x 3/4", M/M
SVN11.0303	Brass nipple 1" x 1", M/M
SVN11.0404*	Brass nipple 1 1/4" x 1 1/4", M/M

* - to special order, ask for other sizes

ASSEMBLY INSTRUCTIONS

1. Cut the tube evenly around its axis to the desired length by setting the cutting tool blade between the corrugations (fig. 1).
2. Put the nut on the tube (fig. 2).
3. Remove the upper part of the flanging tool head and place the tube in the lower part of the head at a distance of 1 corrugation from the end of the tube (fig. 3).
4. Replace the upper part of the head (fig. 4) and secure it with the rubber O-ring (fig. 5).
5. Using 10-15 strokes, form a smooth and flat collar (fig. 6 and 7).
6. Pull the rubber O-ring off, open the head and remove the pipe (fig. 8).
7. Smooth the edge of the tube (fig. 9) with the deburrer (fig. 10) and check that the edges are sufficiently smooth and clean (fig. 11).
8. Place the ring behind the formed collar (fig. 12) and clamp it around the tube (fig. 13).
9. After the seal is placed (fig. 14), the connection is ready (fig. 15).

