Technical Data Sheet

SPIRAL_AS_Flat_Food_Carbon

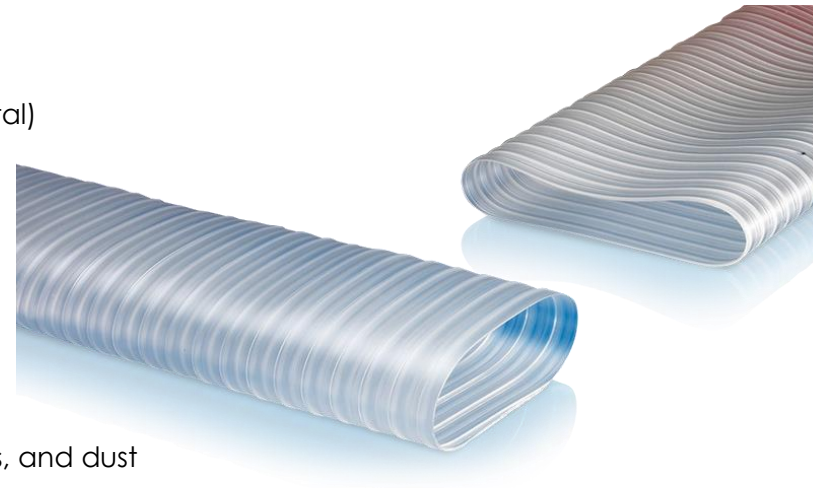
Spiral Hose Poly Urethane Antistatic Flat Food Contact Compliant Carbon wire
Super Flexible & Telescopic

Flexible hose/ducting for transport of explosion hazardous abrasive dust, powder, fibers, air, gasses, and liquids. This hose does not contain any metallic spiral, a fiber wire is sealed in instead.
This fiber wire can be grounded / earthed.
This hose is tested to be suitable for direct contact with food and pharmaceutical products, such as sugar, milk powder, rice, cereals, coffee, chocolate, grains, tea, flour, frozen foods.
This hose is suitable for explosion hazardous environments due to its electrostatic conductive properties.
The hose can be used for extraction arms, long distances to connect tubing machinery or components.

The Poly Urethane material is suitable for contact with food according to American and European food contact regulations.

Advantages

- Highly Flexible
- High mechanical strength
  Axial and Lateral (vertical and horizontal)
- Antistatic / Static Dissipative
- Metal detectors
-
- Excellent abrasion resistance
- Translucent
- Smooth welded seams
- Great aging resistance
- Nonporous
- No material degradation
- Explosion Safety Certified gases, liquids, and dust
- ATEX 2014/34/EU (1999/92/EC)
- TRGS 727
- Food Contact Compliant
  FDA, (EC)1935/2004, 10/2011, 2015/174
- Wide range of diameters
- Wide range of end connections available



Filcoflex B.V.
The Netherlands
Luxemburgstraat 3
5171 PK
Kaatsheuvel

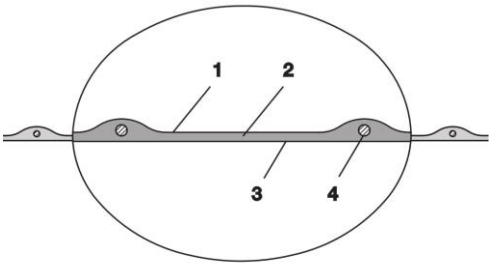
Website : www.filcoflex.com
E-mail : info@filcoflex.com
Telephone : +31 (0) 416 764 764
Fax : +31 (0) 416 764 763

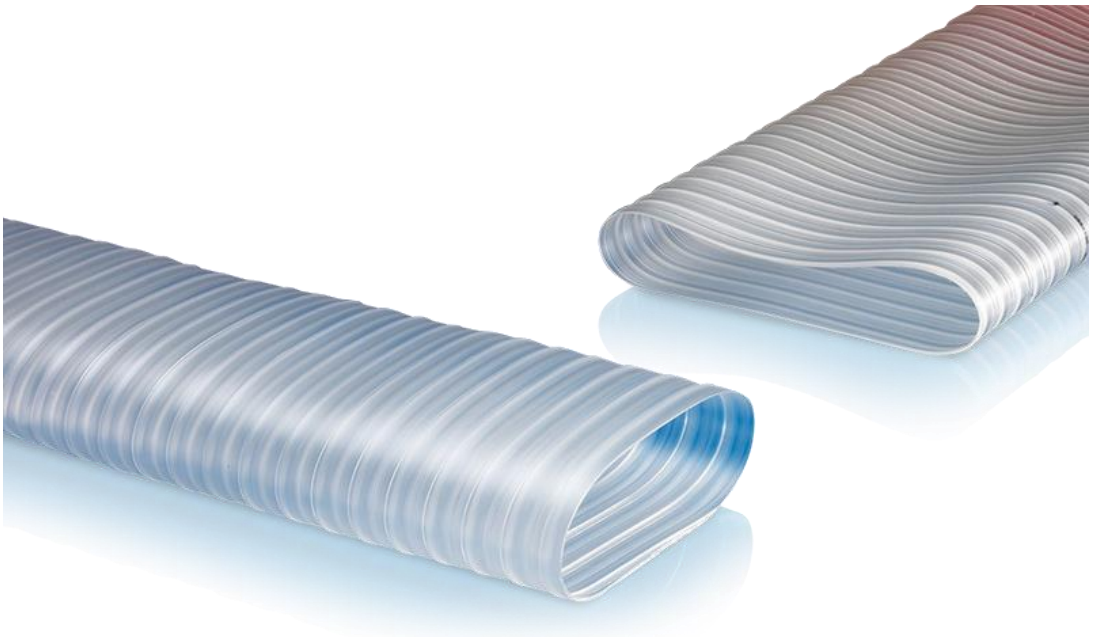
Technical Data Sheet

Applications
Stationary, Vibratory, Gyratory, Sifters, Screeners, Feeders, Spray driers, Fluid Bed, Static Cool Bed, Bin dischargers, Hoppers, Conveyors, Packing equipment, metal detectors. weight, and capacity), ATEX zones 20,21,22, 0,1,2 gasses, dusts, and liquids.

General Properties

Name :	Spiral Flat AS Food Inox Protape PUR-INOX 330 FOOD-AS
Description :	Poly Ether Urethane
Color :	Translucent
Surface :	Matt (both sides)
Wall Thickness :	1,00mm / 0.0393 Inch (+/-20%)
Operating Temperature :	-40 °C to 90°C -40 °F to +194 °F
Max. Surge Temp :	+120 °C / +248 °F
Low Temperature Flexibility :	Good
Air Permeability :	0
Type of Material :	Spiral Hose
Wire :	Carbon fiber wire





Filcoflex B.V.
The Netherlands
Luxemburgstraat 3
5171 PK
Kaatsheuvel

Website : www.filcoflex.com
E-mail : info@filcoflex.com
Telephone : +31 (0) 416 764 764
Fax : +31 (0) 416 764 763

Technical Data Sheet

Available Diameters and Pressure Resistance

Ø mm	**Ø** Inch	**Ø OD** mm	**Pressure** Bar DIN26057	**Minimum Length** M
50	2	55	0.580	2
60	2.36	65	0.560	2
80	3.14	85	0.510	2.5 / 5
85	3.36	90	0.480	2.5 / 5
100	4	105	0.410	2.5 / 5
110	4.3	115	0.375	2.5 / 5
114	4.5	120	0.355	2.5 / 5
120	4.72	125	0.340	2.5 / 5
125	5	130	0.330	2.5 / 5
150	6	155	0.275	2.5 / 5
155	6.1	160	0.265	2.5 / 5
160	6.3	165	0.255	2.5 / 5
165	6.5	170	0.250	2.5 / 5
178	7	185	0.230	2.5 / 5
200	8	205	0.205	2.5 / 5
205	8.07	210	0.200	2.5 / 5
220	8.66	225	0.185	2.5 / 5
250	10	255	0.165	2.5 / 5
275	10.8	280	0.150	2.5 / 5
305	12	310	0.135	2.5 / 5
350	14	355	0.115	2.5 / 5
405	16	410	0.105	2.5 / 5

Overpressure and under pressure are recommended threshold operating values, products can be subject to higher loads upon request.
The bending radius is measured through the inside of the hose arch. The right to make technical modifications is reserved. All values determined at 20°C and are approximate data.

* Spiral AS Flat with 2 stainless steel reinforcement rings and 2 Poly Ethylene reinforcement rings, which will run through a metal detector, under negative pressure.

Filcoflex B.V.
The Netherlands
Luxemburgstraat 3
5171 PK
Kaatsheuvel

Website : www.filcoflex.com
E-mail : info@filcoflex.com
Telephone : +31 (0) 416 764 764
Fax : +31 (0) 416 764 763

Technical Data Sheet

ATEX & Explosion Safety

Permanently antistatic wall in accordance with ISO 8031 electrical and surface resistance < 10^9 Ω and in accordance with TRGS 727 <2.5*10^8 Ω.

In accordance with ATEX 2014/34/EU (1999/92/EC) and German TRGS 727: pneumatic transport of flammable dusts and bulk combustible materials (zone 20, 21, 22), aspiration of combustible dusts (Zone 22 inside), for conveying for flammable liquids (inside zone 0,1,2), for conveying for non-flammable liquids, for use in zone 1 and 2 (gases), for use in zone 0 (gases).

Test Report:

- 005_Spiral-PU-AS-FOOD-INOX_Electrostatic Properties Testing Report___dekra_gutachten_trgs_727_de_2.PDF

Filcoflex B.V.
The Netherlands
Luxemburgstraat 3
5171 PK
Kaatsheuvel

Website : www.filcoflex.com
E-mail : info@filcoflex.com
Telephone : +31 (0) 416 764 764
Fax : +31 (0) 416 764 763

Technical Data Sheet

Food Contact Compliancy

This product complies with the following regulations for plastics in repetitive contact with foods: *
All compliances to regulations have been approved by an independent testing laboratory for the complete hose according to:

- **United States**
  - FDA 21 CFR 177.2600

- **European Community**
  - (EC) 1935/2004
  - (EC) 10/2011
  - (EC) 2015/74
  - (EC) 2023-2006

  Tested with food simulant E.

* Some restrictions may apply, a copy of all certifications can be downloaded, or will be sent to you upon request.
We will be happy to advise further if you have any questions.

Other compliances

In accordance with GMP EC 2023/2006
Conforms to RoHS guideline

Test Report:
001_Spiral-PU-AS-FOOD-INOX_Migration Testing Report__8_antistatic_airduc_protape_barduc-ec-2015-174_test_report.PDF

Filcoflex B.V.
The Netherlands
Luxemburgstraat 3
5171 PK
Kaatsheuvel

Website : www.filcoflex.com
E-mail : info@filcoflex.com
Telephone : +31 (0) 416 764 764
Fax : +31 (0) 416 764 763

Technical Data Sheet

Resistance

- Odorless and tasteless
- Microbe and hydrolysis resistant
- Good resistance to: oil, gasoline, and chemicals
- Very good low temperature flexibility.
- CIP resistant (see CIP chemicals guide)
- Cleaning Chemicals (see cleaning guide)
- For a detailed chemical resistance please see our chemical compatibility chart

Weighing Applications

Suitable for high volume and weight, weighing and dosing applications.

Production Methods used

Joining / Bonding:

- Welding
  - HF high frequency welding
    Welding the material and cooling it down under compression with Radio Frequency to make the TPU material flow nearly seamless to form a uniform thickness with the original material wall thickness.
  - Heat contact – with silver alloy heating element
    Welds are welded surface to surface after which the weld are compressed while cooling.
  - Hot air – hot filtered and conditioned contaminent-, oil- and grease- free compressed air

Filcoflex B.V.
The Netherlands
Luxemburgstraat 3
5171 PK
Kaatsheuvel

Website : www.filcoflex.com
E-mail : info@filcoflex.com
Telephone : +31 (0) 416 764 764
Fax : +31 (0) 416 764 763