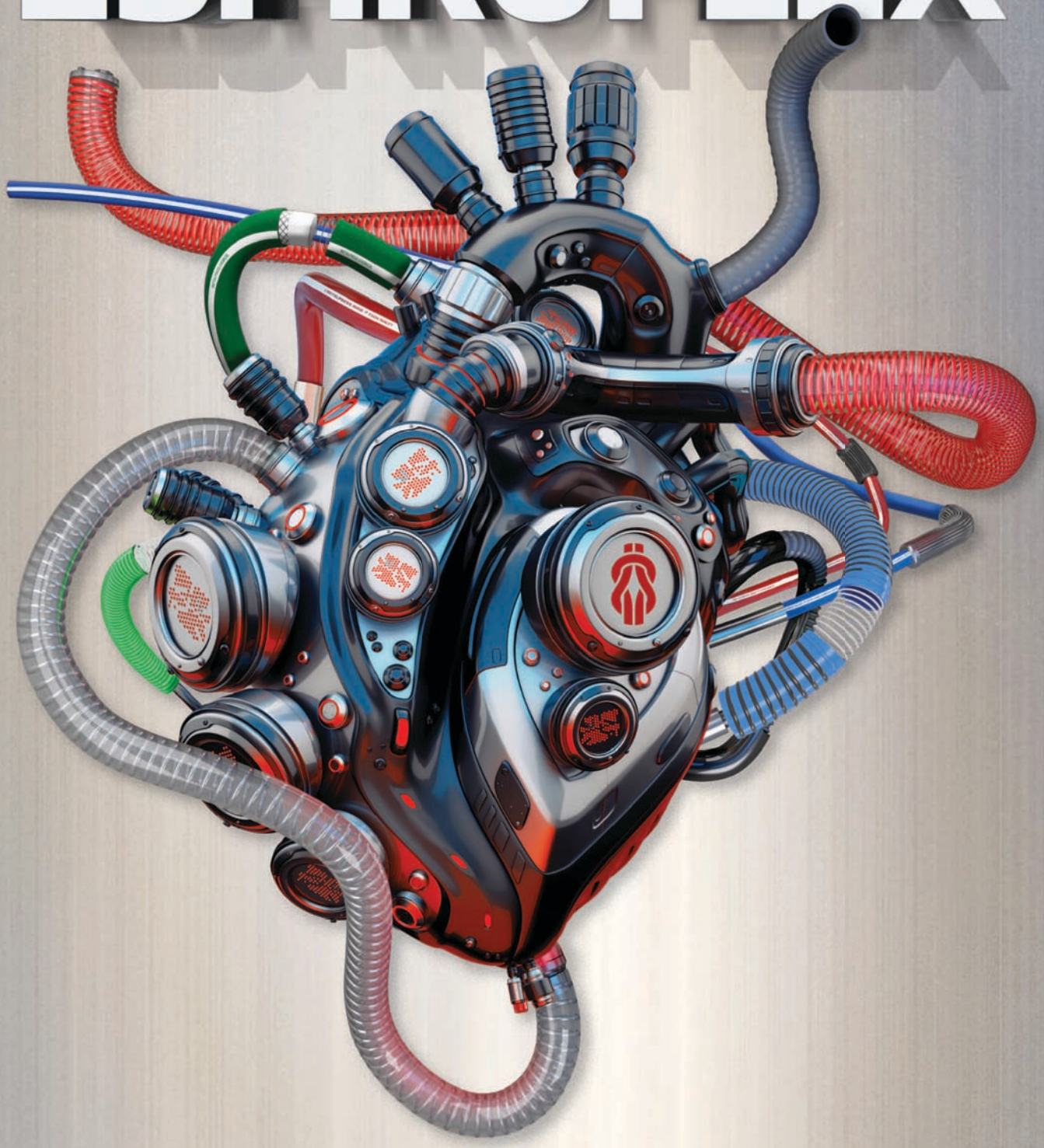
MARKET LEADER ON TECHNICAL HOSES

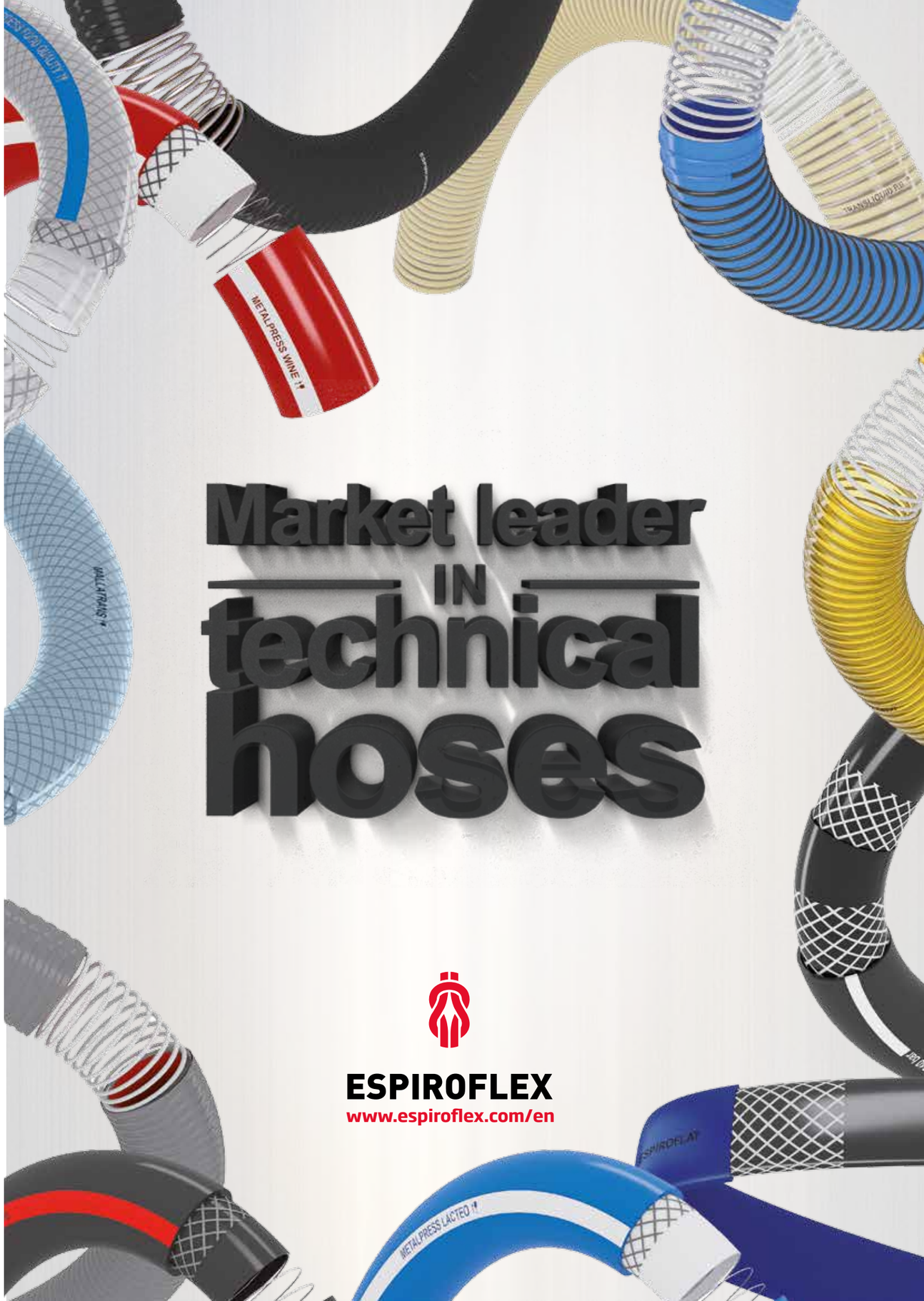
ESPIROFLEX



TECHNICAL CATALOGUE

ANIVERSARIO
ANNIVERSARY
1995 • 2020

ESPIROFLEX


Market leader
IN
technical
hoses
ESPIROFLEX
www.espiroflex.com/en

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25 years of Espiroflex: a history of constant growth

This year **2020, Espiroflex** is celebrating its **25th anniversary**. Since it began in 1995, the company's main goal has always been continuous growth. Today, a quarter of a century later, the company can look back proudly on the constant progress it has seen across every level. **Over the course of the last 25 years, Espiroflex has evolved from a small, Spanish company into an established world leader.**

For this reason, we would like to thank everyone who has been involved with **Espiroflex** and who has formed a part of its successful history. Suppliers, distributors and representatives have played a key role in developing this great project. Without them, we wouldn't have been able to achieve our objectives.

Of course, we must single out our employees and customers for special praise. **Espiroflex's** employees constitute the foundations of our philosophy and the best example of our company values: commitment, loyalty and selfless. The most significant example of this is the ongoing continuity of a large number of employees who started working here 25 years ago. Similarly, the entire work force's sacrifice, working tirelessly **24/7 during the recent Covid-19 crisis**, has once again showcased their commitment and the crucial value they provide.

In addition, our relationships with our customers – **based on trust, respect and loyalty** – have led to us maintaining a solid relationship with each and every one of them for more than two decades. Each year, we welcome numerous new customers who comply with these values with a view to also developing a long-standing relationship.

From all of us here at **Espiroflex,** thank you for being a part of this great family and for having helped us establish our position as a world leader in the technical hose industry.

As a result, we are fully committed to you all, which is evidenced through our primary aim for the coming years: to continue growing while remaining true to the same values.

Here's to many more years of **Espiroflex!**

ANIVERSARIO
ANNIVERSARY
1995 • 2020

Espiroflex timeline

From the outset, **Espiroflex** has focused on sustained, strong and constant growth.
Always based on self-funding, the aim of this growth is continuous overall improvement **of the service provided.**

Espiroflex was founded in 1995 by a group of shareholders with extensive experience in flexible hoses.

1995

Soditecc, a distributor company in **France**, is established.

2001

Production plant in **Czech Rep.** A strategic supply point is established for central **Europe and the East**.

2004

Espiroflex Deutschland, a distributor company in Germany, is born.

2005

The facilities at the **head offices in Spain** are expanded by 12,000m² to increase storage capacity.

2009

Construction of new group facilities in **France**, amounting to more than 8,000 m².

2011

Expansion of the plant at **Sta. Perpetua: 3,000m²**, including **7 production lines** and a new raw material production plant.

2015

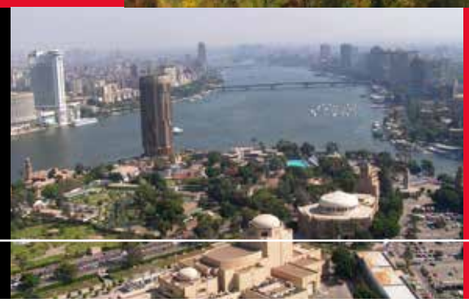
Expansion begins at the facilities in the **Czech Republic** with **2,500m²** assigned to the implementation of new production lines.

2016

Soditecc, expansion of more than **4,000m²**.

2019

Creation of Espiroflex **Egypt** and Espiroflex **Benelux** to expand the international distribution of the brand worldwide.



2020

ANIVERSARIO
ANNIVERSARY
1995 • 2020

ESPIROFLEX
TECHNICAL HOSES

Leader on technical hoses

A world leader in the manufacture of technical and flexible hoses. **More than 5,000 product references** in the largest technical catalogue on the market. Specialists in the development of technical solutions for demanding sectors, such as the **industrial, agriculture, food, wine, swimming pool, sanitary and chemical industries,** among many others.

The only European manufacturer with a raw material production plant supplying its entire production.

Storage capacity for 5,500 pallets, 3 million metres of hoses in stock, guaranteeing an immediate response to the market.

Manufacturing 24 hours a day, 365 days a year.

Present in over 50 countries, distribution across the 5 continents.

Specialisation and the latest technology

More than 40 million metres manufactured annually using 8 different production technologies, distributed across more than 45 production lines in total.

R&D Department in constant development.

Manufacture of over 3 million metres per month.

Customised product manufacture, according to customer requirements.

Over 70,000m² at the service of the market

Production plants strategically located in **Spain** and the **Czech Republic**, and our own companies in **Germany** and **France** to supply European markets with an immediate response.

Espiroflex in numbers

STORAGE CAPACITY OF **6,000 EUROPALLETS**

SELF-SUFFICIENT

2 PLANTS FOR **RAW MATERIALS**

6 million 500 thousand kg ANNUAL MANUFACTURING **OF RAW MATERIALS**

ANNUAL MANUFACTURING

35,000,000

MILLION METRES

10 TYPES **WITH DIFFERENT** TECHNOLOGIES

OVER **40** PRODUCTION **LINES**

Our own raw material production plant

This allows us to generate our own materials, exercise full control over their quality, and constantly research and develop new product compositions with continuous improvement and development (our hallmarks) in mind.

ESPIROFLEX. MANUFACTURE OF FLEXIBLE HOSES

ESPIROFLEX FRANCE (SODITECC)
NARBONNE

ESPIROFLEX DEUTSCHLAND
NETTETAL

ESPIROFLEX BENELUX
(UTRECHT)

ESPIROFLEX EGYPT
(BADR CITY)

ESPIROFLEX ESPAÑA
HEAD OFFICE

ESPIROFLEX CZECH REPUBLIC
(PACOV)

INTERNATIONAL EXPANSION:

- AUSTRIA
- ANDORRA
- ALGERIA
- ARGENTINA
- AUSTRALIA
- BELGIUM
- BRAZIL
- BULGARIA
- CHILE
- CHINA
- CYPRUS
- COLOMBIA
- COSTA RICA
- CROATIA
- CZECH REPUBLIC
- DENMARK
- EGYPT
- SPAIN
- UNITED STATES
- ESTONIA
- FRANCE
- GEORGIA
- GERMANY
- UNITED KINGDOM
- GREECE
- HUNGARY
- ICELAND
- INDIA
- IRELAND
- ISRAEL
- ITALY
- JORDAN
- KAZAKHSTAN
- LATVIA
- LITHUANIA
- MALTA
- MOROCCO
- MAURITANIA
- MAURITIUS
- MEXICO
- MONACO
- NETHERLANDS
- NEW ZEALAND
- NORWAY
- PAKISTAN
- POLAND
- PORTUGAL
- MOLDOVA
- ROMANIA
- RUSSIA
- SERBIA
- SLOVAKIA
- SOLVENIA
- SPAIN
- SWEDEN
- SWITZERLAND
- TUNISIA
- TURKEY
- UKRAINE

Leader in global distribution

25 years after it was founded, **Espiroflex** has established itself as a world leader in all markets. Its constant growth is based on product innovation and logistic strategy that permit an efficient service **committed** to the markets.

ESPIROFLEX. MANUFACTURE OF FLEXIBLE HOSES

Espiroflex France Soditecc (Narbonne)

The rapid commercial progression experienced by **Espiroflex** in the French market resulted in the creation of our subsidiary **Soditecc.**

LEADER IN FRANCE

LEADER IN **DISTRIBUTION**

PVC - PU AND RUBBER

LEADER IN **TECHNICAL HOSES**

STORAGE CAPACITY OF **4,000** m² **ON 5 LEVELS**

5

DELIVERY TIMES

24h AND 48h

FACILITIES OF OVER **8,000 m²**

EXPANSION **4,000 700 m²**

The excellent network connections and geographical proximity between our head office and this subsidiary allow for a **continual distribution service** that reduces lead times, offering optimal service.

Espiroflex Czech (Pacov)

With more than 15 years of experience, the **Espiroflex Czech** plant has become one of the group's leading subsidiaries.

TOTAL FACILITIES

14,000 m²

STORAGE CAPACITY OF **1,000 EUROPALLETS**

ANNUAL MANUFACTURING

3 MILLION METRES MANUFACTURED **ANNUALLY**

1 million kg OF RAW MATERIALS

12 production **LINES**

5 TYPES WITHDIFFERENTTECHNOLOGIES

Consolidating a resilient client base across much of Europe

Its excellent geographical location and already extensive experience in the industry make this company synonymous with a guarantee for customers.

Espiroflex Deutschland (Nettetal)

Located in a strategic town in terms of logistics, it offers optimal service to every part of Central Europe.

TOTAL FACILITIES

5,000 m²

STRATEGIC LOCATION

BETWEEN

GERMANY — NETHERLANDS

STORAGE

2,000 m²

EXCLUSIVELY ASSIGNED

A distributor company for one of Europe's main markets

Its storage capacity and an expert sales team allow it to adapt to the needs of our customers in this area.

ESPIROFLEX. MANUFACTURE OF FLEXIBLE HOSES

Espiroflex Benelux (Utrecht)

Espiroflex keeps committed to international expansion and establishes a new subsidiary with the aim of providing immediate service to the powerful market in the Netherlands.

TOTAL FACILITIES

PVC - PU AND RUBBER

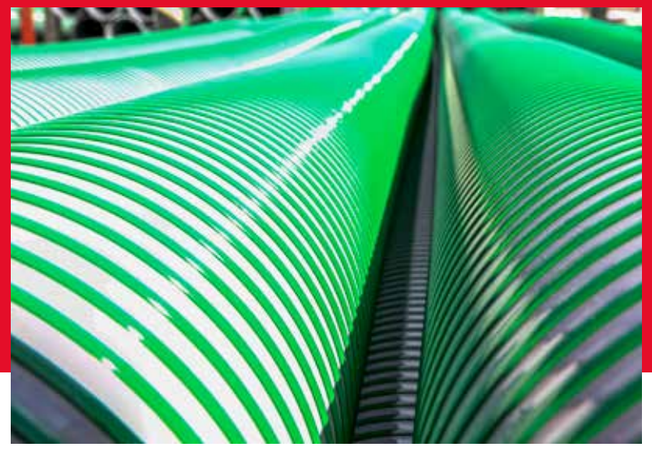
EXPERTS IN **TECHNICAL HOSES**

DELIVERY TIME

24h AND 48h

STRATEGIC LOCATION

BETWEEN



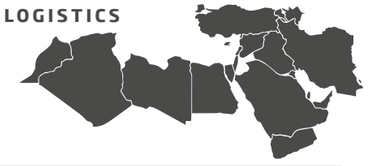
Without a doubt, Espiroflex Benelux was born with a clear sales proposition: provide customers with a thorough service from product recommendation to absolute dedication in after-sales service.

Espiroflex Egypt (Badr City)

With the aim of continuing to strengthen logistics networks with all our customers around the World, Espiroflex has created a distribution network in Egypt from which it supplies to all Arab countries

BENCHMARK IN ARAB COUNTRIES

BENCHMARK IN **LOGISTICS**



DELIVERY TIME

24h AND 48h

EXPERTS IN **TECHNICAL HOSES**

PVC - PU AND RUBBER

FACILITIES OF OVER **1,000m²**

Egypt is an strategic point from a logistics perspective
since it allows a better service to both North Africans counties as well as all those from the Arabian Peninsula.
Constant growing and demand in the recent years by all our Arab partners urged Espiroflex to open a new international subsidiary.
Espiroflex Egypt means the first subsidiary out of Europe reaching a total of 6 worldwide

ESPIROFLEX. MANUFACTURE OF FLEXIBLE HOSES

Philosophy

Since it was founded, the company's **mission** has been to offer the market constant innovation of a **product with superior quality** in a bid to develop the industry and provide it with new solutions, thus enabling it to move forward as a whole in technical terms.

To achieve this, Espiroflex has a clear vision:
vertical integration of the entire process.
From engineering developments and material formulation to final production of hoses, via manufacture of our own raw materials.

Espiroflex, which was originally a family-run company, has always based its success on unwavering, distinctive values that demand **commitment, loyalty and selflessness** at all times, both internally and from its business partners.

LEADING-EDGE

QUALITY

VERTICAL INTEGRATION

Quality and innovation are our aims

As a result of the company's philosophy, based on **constant innovation of a product with superior quality**, Espiroflex's main investments are made in relation to its R&D and Quality Control departments.

Espiroflex **extensively monitors** each and **every one of the products it makes**, and it also performs a subsequent analysis and it stores samples for each batch.
This internal process is key to monitoring every product that leaves our facilities, as well as with regard to the **multiple certifications** awarded to our products globally, which amount to the highest form of **guarantees for our customers.**

ESPIROFLEX. MANUFACTURE OF FLEXIBLE HOSES

Digitalisation

The customer service paradigm has been digitalised in leaps and bounds in recent years, and **Espiroflex** has sought to be a leader in this transformation in our industry, both internally and in our relationships with customers.

Internally, digitalisation processes in terms of production have amounted to a great development for ongoing product improvements, for which reason we are able to offer new solutions to the market that, up until now, didn't exist.

There have also been new aspects externally. Since **2020,** all customers are able to fully develop sales management tasks through our online platform.
The most notable online services are **stock visibility**, in addition to **order placing and tracking**.

Corporate Social Responsibility

Due to the main difficulties **Covid-19** has posed for the world, **Espiroflex** has decided to focus all of its corporate social responsibility on the fight against this global pandemic.

Espiroflex has adapted its production to focus on providing material to basic need industries, and the medical sector in particular. The **manufacture of medical hoses for ventilators** has been especially relevant as they are a key factor in this battle against the health crisis.

Espiroflex's recent collaboration with the automobile manufacturer, **SEAT**, has been particularly notable. This humanitarian project saw Espiroflex freely provide all the production tools necessary to manufacture **1500 ventilators each week.**

Industrial Agricultural

INDUSTRIAL - AGRICULTURAL

Liquids

Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features.

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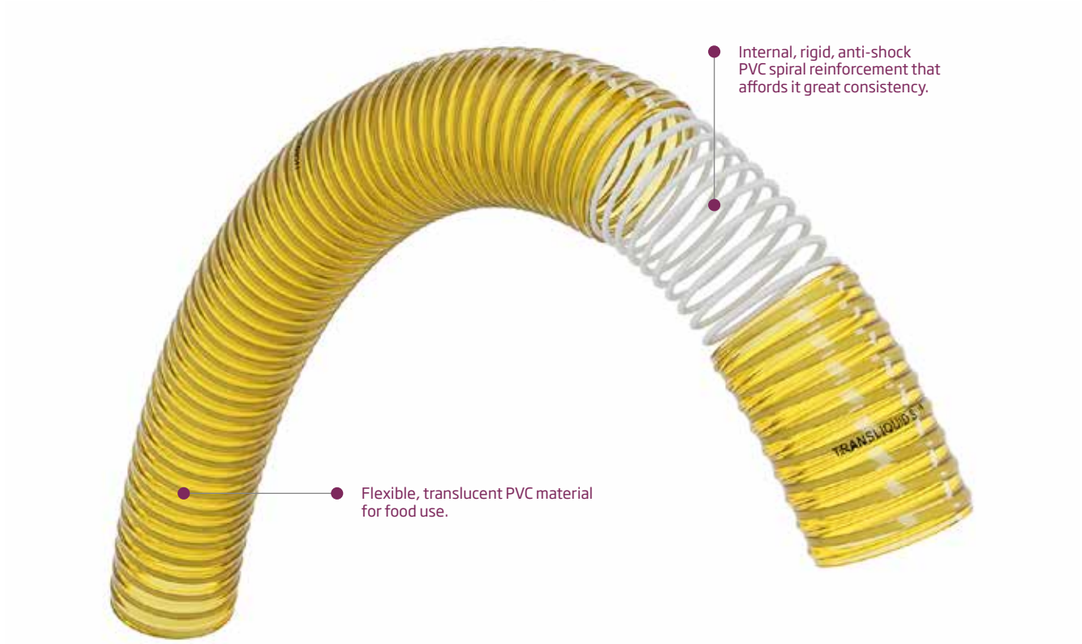
Transliquid®

Pumping and suction hose for liquid-food products.

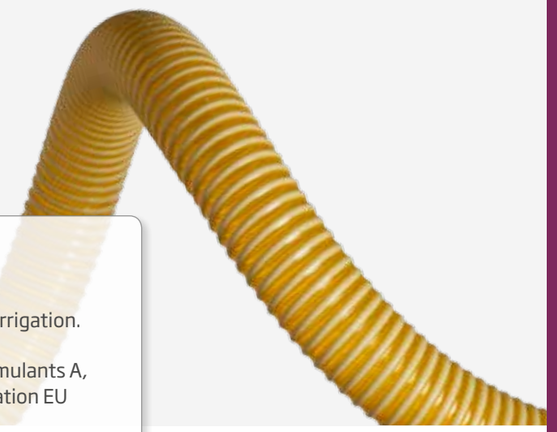


Features

- For food use in accordance with European regulations EC 1935/2004 and EU 10/2011 (see declaration of conformity).
- The hose wall is smooth on the inside and corrugated on the outside.
- Good chemical resistance associated with PVC's resistance chart.
- Recommended temperature for use between -10°C and 60°C.

FOOD USE · INDUSTRIAL USE · AGRICULTURAL USE

HIGH QUALITY CONTROL · FREE FROM Cd / Pb / Ba (FREE Cd-Pb-Ba)



Applications

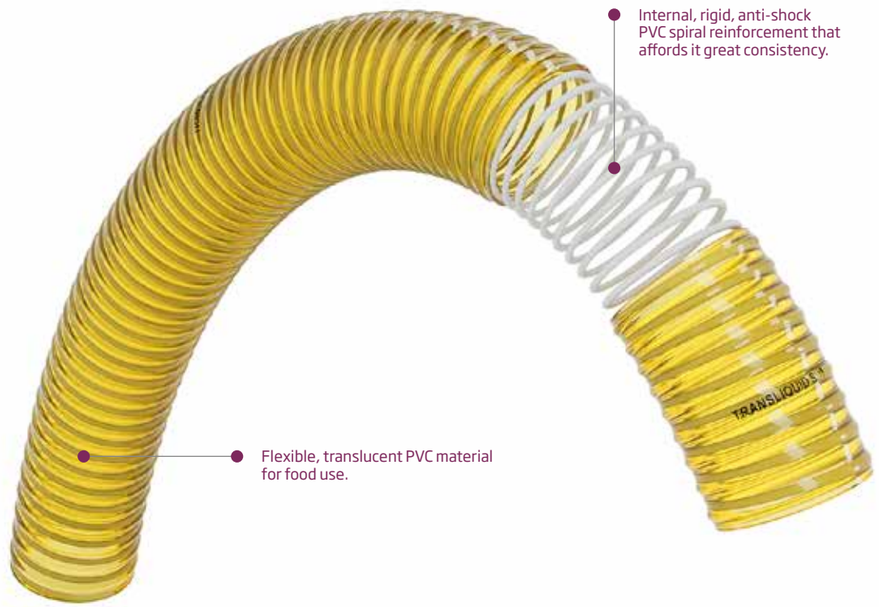
- Transport of fluids in industrial facilities.
- Pumping and suction in agricultural machinery and irrigation.
- Transfer of liquid food products that require food simulants A, B and C in OM2 conditions in accordance with Regulation EU 10/2011.
- Installation in bilge pumps and similar uses for the suction of liquids in general.

INT ø mm	INT ø in	WALL THICKNESS mm	WEIGHT g/m	OPERATING PRESSURE bar	MINIMUM BURST PRESSURE bar	BENDING RADIUS mm	VACUUM m H_2O	COLOURS AVAILABLE
15	5/8"	3	180	7	21	60	9	
20	3/4"	3.3	285	7	21	80	9	
25	1"	3.5	360	7	21	100	9	
32	1" 1/4	3.5	435	5	15	128	9	
35	1" 3/8	3.5	495	5	15	140	9	
38	1" 1/2	3.8	520	5	15	152	9	
40	1" 5/8	4	540	5	15	160	9	
45	1" 3/4	4	630	5	15	180	9	
51	2"	4	765	5	15	200	9	
55	2" 1/8	4	810	5	15	220	9	
60	2" 1/32	4.5	900	4	12	240	9	
63	2" 1/2	4.5	990	4	12	260	9	
70	2" 3/4	4.5	1125	4	12	280	9	
76	3"	4.5	1260	4	12	300	9	
80	3" 1/8	5	1440	4	12	320	9	
90	3" 1/2	5	1665	3	9	360	9	
102	4"	5.5	1980	3	9	400	9	
110	4" 5/16	6	2250	3	9	440	9	
120	4" 3/4	6.5	2500	3	9	480	9	
127	5"	6.5	2700	3	9	500	9	
140	5" 1/2	7	3600	3	9	560	9	
152	6"	7	3870	3	9	600	9	
203	8"	8.5	6270	2.5	7.5	800	9	

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters.

Transliquid® S

Pumping and suction light hose for liquid food products.



Features

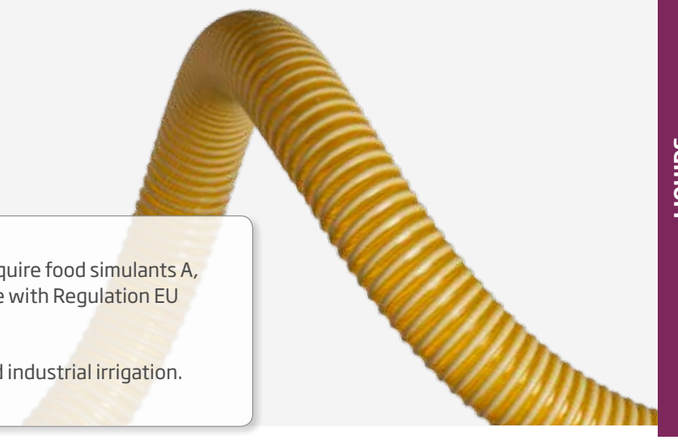
- For food use in accordance with European regulations EC 1935/2004 and EU 10/2011 (see declaration of conformity).
- The hose wall is smooth on the inside and corrugated on the outside.
- Good chemical resistance associated with PVC's resistance chart.
- Recommended temperature for use between -10°C and 60°C.

FOOD USE · INDUSTRIAL USE · AGRICULTURAL USE

HIGH QUALITY CONTROL · FREE FROM Cd / Pb / Ba (FREE Cd-Pb-Ba)

Applications

- Transfer of liquid food products that require food simulants A, B and C in OM2 conditions in accordance with Regulation EU 10/2011.
- Pumping and suction in agricultural and industrial irrigation.

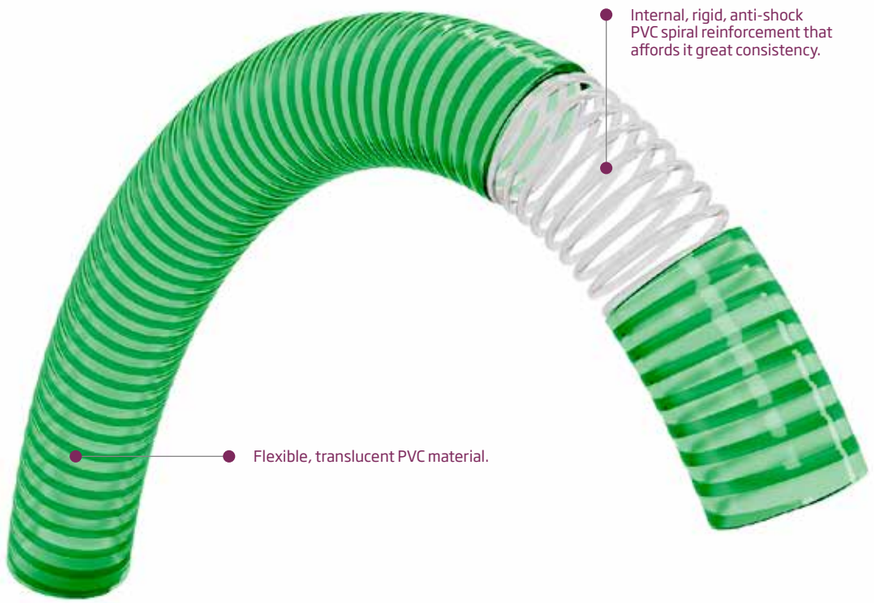


INT ø mm	INT ø in	WALL THICKNESS mm	WEIGHT g/m	OPERATING PRESSURE bar	MINIMUM BURST PRESSURE bar	BENDING RADIUS mm	VACUUM m H_2O	COLOURS AVAILABLE
15	5/8"	3	140	5	15	45	9	
20	3/4"	3	220	5	15	60	9	
25	1"	3	280	5	15	75	9	
30	1" 1/8	3	315	5	15	90	9	
32	1" 1/4	3	335	5	15	96	9	
35	1" 3/8	3.2	410	5	15	105	9	
38	1" 1/2	3.2	440	5	15	120	9	
40	1" 5/8	3.2	470	4	12	120	9	
45	1" 3/4	3.5	570	4	12	135	9	
51	2"	3.5	680	4	12	150	9	
55	2" 1/8	3.8	730	4	12	165	9	
60	2" 1/32	3.8	810	3	9	180	9	
63	2" 1/2	3.8	875	3	9	195	9	
70	2" 3/4	3.8	940	3	9	210	9	

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters.

Transliquid® Superelastic

Pumping and suction hose for liquids. Designed especially for low temperatures.



Features

- For agricultural and industrial use.
- The hose wall is smooth, both inside and outside.
- Good chemical resistance associated with PVC's resistance chart.
- Recommended temperature for use between -25°C and 60°C.

INDUSTRIAL USE

AGRICULTURAL USE

HIGH QUALITY CONTROL

FREE Cd-Pb-Ba

FREE FROM Cd / Pb / Ba

Applications

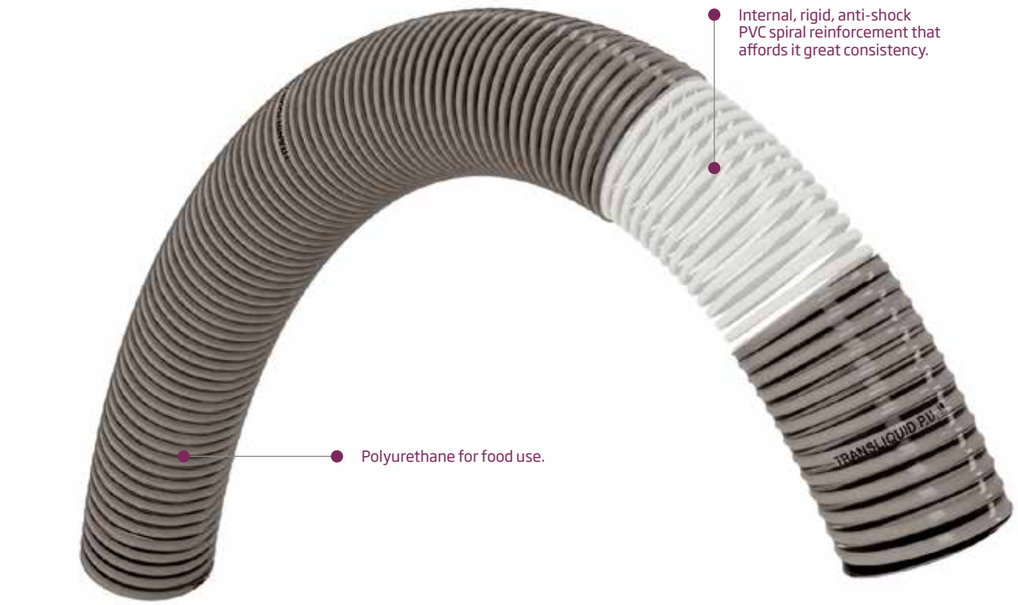
- Pumping and suction in agricultural machinery and irrigation.

INT ø mm	INT ø in	WALL THICKNESS mm	WEIGHT g/m	OPERATING PRESSURE bar	MINIMUM BURST PRESSURE bar	BENDING RADIUS mm	VACUUM m H_2O
19	¾"	3.3	290	6	18	60	9
25	1"	3.5	395	6	18	75	9
32	1" ¼	3.5	489	5	15	95	9
38	1" ½	3.5	630	4	12	120	9
40	1" ⅝	3.5	660	4	12	120	9
45	1" ¾	3.5	738	4	12	135	9
51	2"	4.0	810	4	12	150	9
60	2" 1/32	4.3	960	4	12	180	9
76	3"	4.5	1575	4	12	225	9

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters.

Transliquid® PU

Polyurethane hose with a PVC spiral for pumping and suction of highly abrasive liquids (rebar, mud, sand, etc.).



Features

- For food use in accordance with European regulations EC 1935/2004 and EU 10/2011 (see declaration of conformity).
- The hose wall is smooth on the inside and corrugated on the outside.
- Good chemical resistance associated with PU's resistance chart and very good resistance to hydrolysis.
- Recommended temperature for use between -20°C and 80°C.

FOOD USE · INDUSTRIAL USE · AGRICULTURAL USE · MADE FROM POLY-URETHANE · ANTI-ABRASION · HIGH QUALITY CONTROL · FREE FROM Cd / Pb / Ba

Applications

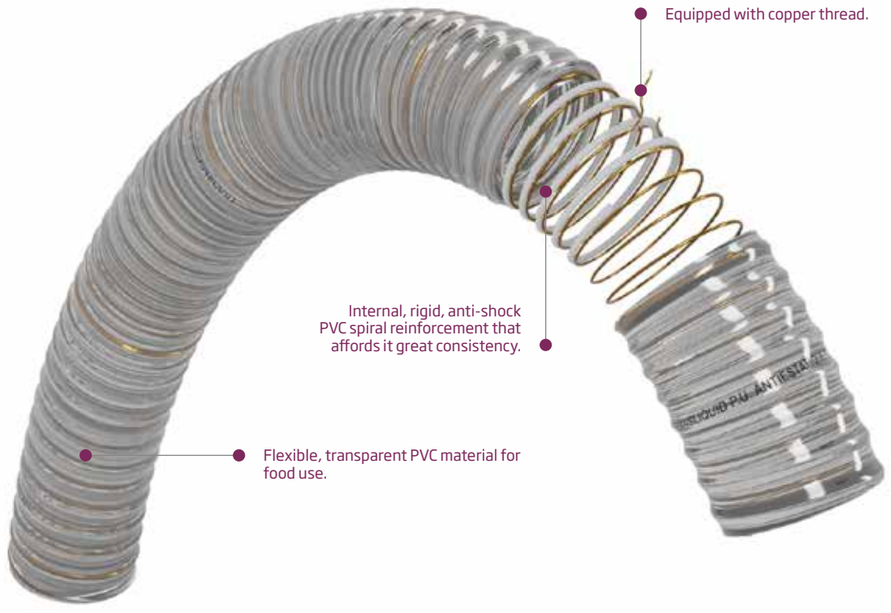
- Pumping and suction of highly abrasive liquids (rebar, mud, sand, seeds, etc.).

INT ø mm	INT ø in	WALL THICKNESS mm	WEIGHT g/m	OPERATING PRESSURE bar	MINIMUM BURST PRESSURE bar	BENDING RADIUS bar	VACUUM m H_2O
20	3/4"	2.6	205	5	15	120	9
25	1"	2.6	235	5	15	150	9
30	1" 1/8	3	360	5	15	180	9
32	1" 1/4	3	384	5	15	190	9
38	1" 1/2	3.2	418	5	15	240	9
40	1" 5/8	3.2	470	5	15	240	9
45	1" 3/4	3.5	550	5	15	270	9
51	2"	3.7	600	5	15	300	9
55	2" 1/8	3.8	660	5	15	330	9
60	2" 1/32	4	800	5	15	360	9
63	2" 1/2	4.2	815	4	12	390	9
70	2" 3/4	4.4	1000	4	12	420	9
76	3"	4.6	1100	4	12	450	9
80	3" 1/8	4.7	1200	4	12	480	9
90	3" 1/2	5	1400	4	12	540	9
102	4"	5	1600	3	9	600	9
110	4" 5/16	5	1850	3	9	660	9
127	5"	6	2090	3	9	750	9
152	6"	6.7	3400	3	9	900	9

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters.

Transliquid® Antiestático

PVC hose for pumping and suction of liquid food products. Antistatic product suitable for facilities governed by ATEX regulations.



Features

- For food use in accordance with European regulations EC 1935/2004 and EU 10/2011 (see declaration of conformity).
- Equipped with a copper wire that makes it antistatic.
- The hose wall is smooth on the inside and corrugated on the outside.
- Good chemical resistance associated with PVC's resistance chart.
- Recommended temperature for use between -10°C and 60°C.

FOOD USE · INDUSTRIAL USE · AGRICULTURAL USE · ANTISTATIC · FREE FROM Cd / Pb / Ba · HIGH QUALITY CONTROL

Applications

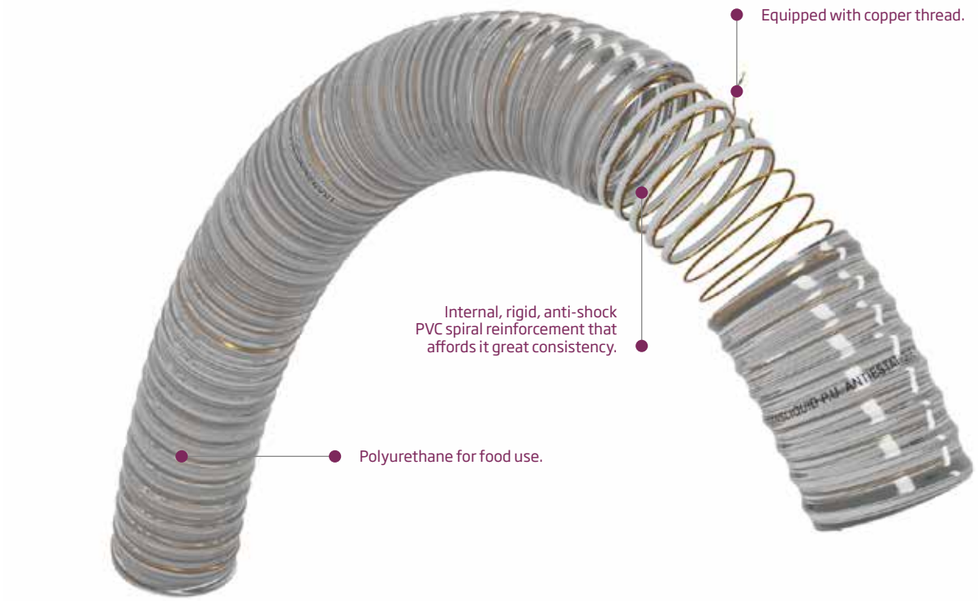
- Transfer of liquid food products that require food simulants A, B and C in OM2 conditions in accordance with Regulation EU 10/2011.
- Pumping and suction in agricultural and industrial irrigation when the facility needs to have antistatic properties.

INT ø mm	INT ø in	WALL THICKNESS mm	WEIGHT g/m	OPERATING PRESSURE bar	MINIMUM BURST PRESSURE bar	BENDING RADIUS mm	VACUUM m H_2O
20	3/4"	3.3	285	7	21	80	9
25	1"	3.5	360	7	21	100	9
30	1" 1/8	3.5	405	5	15	120	9
32	1" 1/4	3.5	435	5	15	128	9
35	1" 3/8	3.5	495	5	15	140	9
38	1" 1/2	3.8	520	5	15	152	9
40	1" 5/8	4	540	5	15	160	9
45	1" 3/4	4	630	5	15	180	9
51	2"	4	765	5	15	200	9
55	2" 1/8	4	810	5	15	220	9
60	2" 1/32	4.5	900	4	12	240	9
63	2" 1/2	4.5	990	4	12	260	9
70	2" 3/4	4.5	1125	4	12	280	9
76	3"	4.5	1260	4	12	300	9
80	3" 1/8	5	1440	4	12	320	9
90	3" 1/2	5	1665	3	9	360	9
102	4"	5.5	1980	3	9	400	9
110	4" 5/16	6	2250	3	9	440	9
120	4" 3/4	6.5	2500	3	9	480	9
127	5"	6.5	2700	3	9	500	9
140	5" 1/2	7	3600	3	9	560	9
152	6"	7	3870	3	9	600	9
203	8"	8.5	6270	2.5	7.5	800	9

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters.

Transliquid® PU Antiestático

Polyurethane hose with a PVC spiral for pumping and suction of highly abrasive liquids. Antistatic product suitable for facilities governed by ATEX regulations.



Features

- For food use in accordance with European regulations EC 1935/2004 and EU 10/2011 (see declaration of conformity).
- Equipped with a copper wire that makes it antistatic.
- Highly resistant and great flexibility, even at low temperatures.
- The hose wall is smooth on the inside and corrugated on the outside.
- Good chemical resistance associated with PU's resistance chart and very good resistance to hydrolysis.
- Recommended temperature for use between -20°C and 80°C.

FOOD USE · INDUSTRIAL USE · AGRICULTURAL USE · MADE FROM POLYURETHANE · ANTI-ABRASION

ANTISTATIC · HIGH QUALITY CONTROL · FREE FROM Cd / Pb / Ba · TEMPERATURES -20°C TO 80°C

Applications

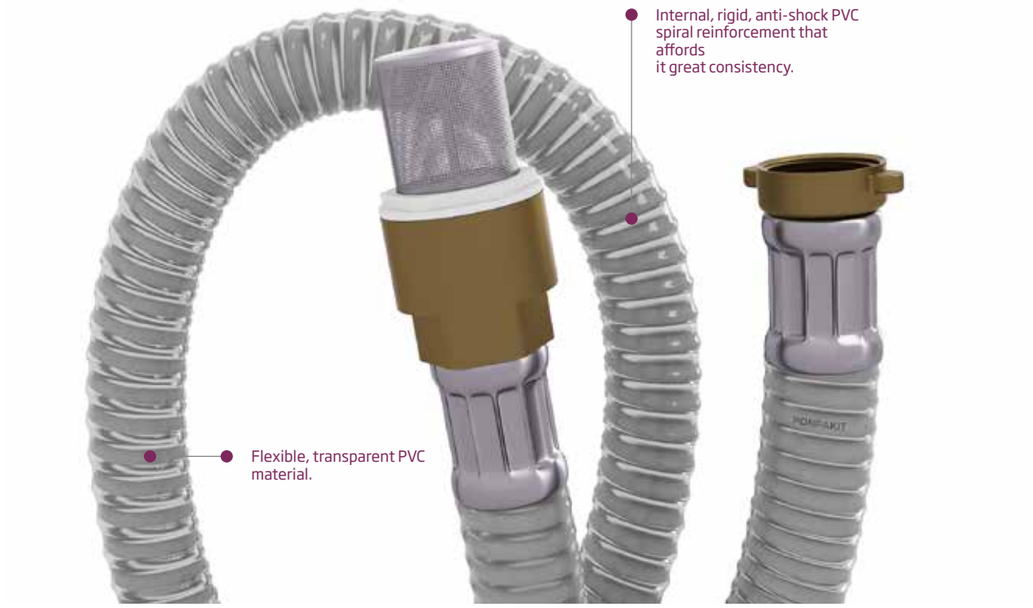
- Pumping and suction of highly abrasive liquids when antistatic conditions are required.

INT ø mm	INT ø in	WALL THICKNESS mm	WEIGHT g/m	OPERATING PRESSURE bar	MINIMUM BURST PRESSURE bar	BENDING RADIUS mm	VACUUM m H_2O
20	3/4"	2.6	205	5	15	120	9
25	1"	2.6	235	5	15	150	9
30	1" 1/8	3	360	5	15	180	9
32	1" 1/4	3	384	5	15	190	9
38	1" 1/2	3.2	418	5	15	240	9
40	1" 5/8	3.2	470	5	15	240	9
45	1" 3/4	3.5	550	5	15	270	9
51	2"	3.7	600	5	15	300	9
55	2" 1/8	3.8	660	5	15	330	9
60	2" 1/32	4	800	5	15	360	9
63	2" 1/2	4.2	815	4	12	390	9
70	2" 3/4	4.4	1000	4	12	420	9
76	3"	4.6	1100	4	12	450	9
80	3" 1/8	4.7	1200	4	12	480	9
90	3" 1/2	5	1400	4	12	540	9
102	4"	5	1600	3	9	600	9
110	4" 5/16	5	1850	3	9	660	9
127	5"	6	2090	3	9	750	9
152	6"	6.7	3400	3	9	900	9

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters.

Suction Kit

Seven-metre section of special suction hose with 1" connector accessories, female fitting and check suction valve.

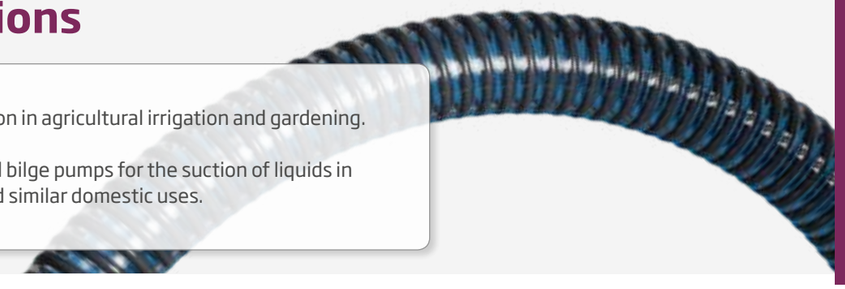


Features

- For food use in accordance with European regulations EC 1935/2004 and EU 10/2011 (see declaration of conformity).
- The hose wall is smooth on the inside and corrugated on the outside.
- Good chemical resistance associated with PVC's resistance chart.
- Supplied in 7-metre rolls with two 1" connectors, assembled and fixed, one of which is equipped with a check suction valve, in metal or plastic.
- Recommended temperature for use between -10°C and 60°C.

DOMESTIC USE · FOOD USE · INDUSTRIAL USE · AGRICULTURAL USE · HIGH QUALITY CONTROL · FREE FROM Cd / Pb / Ba

Applications



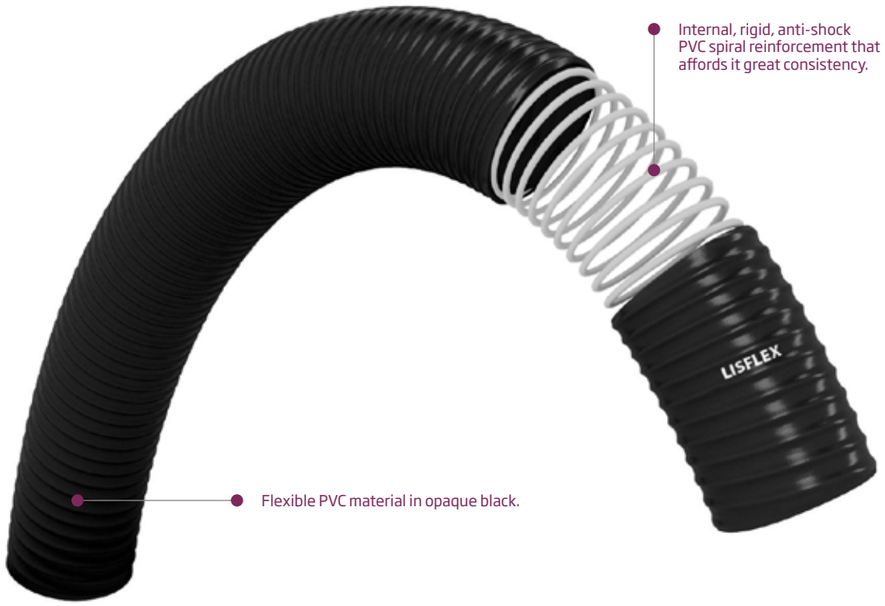
- Pumping and suction in agricultural irrigation and gardening.
- Installation in small bilge pumps for the suction of liquids in ponds, gardens and similar domestic uses.

INT ø mm	INT ø in	WALL THICKNESS mm	WEIGHT g/m	OPERATING PRESSURE bar	MINIMUM BURST PRESSURE bar	BENDING RADIUS mm	VACUUM m H_2O
25	1"	3	280	5	15	75	9
32	1" 1/4	3	335	5	15	75	9

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters.

Lisflex®

Hose for discharges, pumping of liquids and conduction in filtration circuits for ponds, small lakes, baths and similar gardening uses. Pumping and suction in agricultural machinery.



Features

- For agricultural and industrial use.
- The hose wall is smooth, both inside and outside.
- Good chemical resistance associated with PVC's resistance chart.
- Recommended temperature for use between -10°C and 60°C.

DOMESTIC USE · INDUSTRIAL USE · AGRICULTURAL USE

FREE Cd-Pb-Ba

HIGH QUALITY CONTROL · FREE FROM Cd / Pb / Ba

Applications

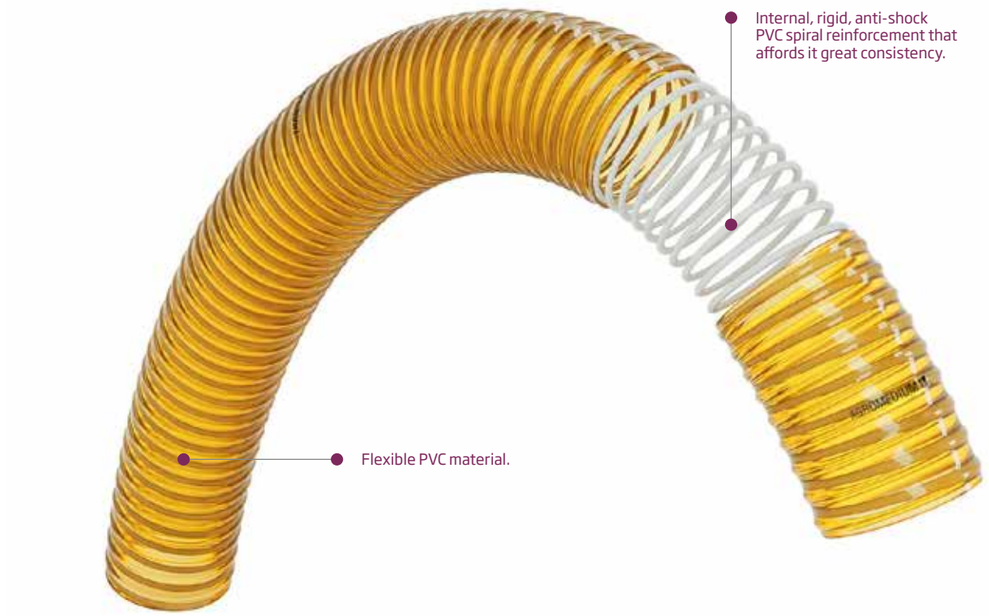
- Discharge circuits for swimming pools, ponds, small lakes and garden fountains.

INT ø mm	INT ø in	WALL THICKNESS mm	WEIGHT g/m	OPERATING PRESSURE bar	MINIMUM BURST PRESSURE bar	BENDING RADIUS mm	VACUUM m H_2O
19	¾"	1.7	181	5	15	80	9
25	1"	2.3	250	4	12	100	9
32	1" ¼	2.7	380	4	12	130	9
38	1" ½	2.8	470	4	12	160	9
40	1" ⅝	3	510	4	12	160	9
51	2"	3.7	760	3	9	200	9
63	1" ½	3.8	1050	3	9	250	9
70	2" ¾	4.8	1500	3	9	280	9
76	3"	4.8	1700	3	9	300	9
102	4"	4.8	2100	3	9	400	9

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters.

Agromedium®

Suction and pumping hose for agricultural and industrial irrigation with a moderate aggressiveness index.



Features

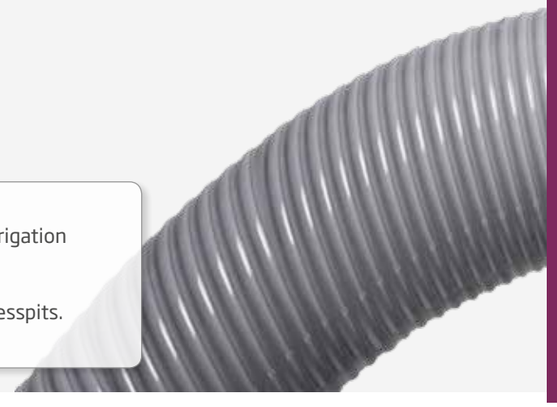
- For agricultural and industrial use.
- Available in version for food use, orange (see declaration of conformity).
- The hose wall is smooth on the inside and corrugated on the outside.
- Good chemical resistance associated with PVC's resistance chart.
- Recommended temperature for use between -10°C and 60°C.

FOOD USE · INDUSTRIAL USE · AGRICULTURAL USE

HIGH QUALITY CONTROL · FREE FROM Cd / Pb / Ba

Applications

- Pumping and suction in agricultural and industrial irrigation and slurry.
- Transport of granulated materials and drainage of cesspits.

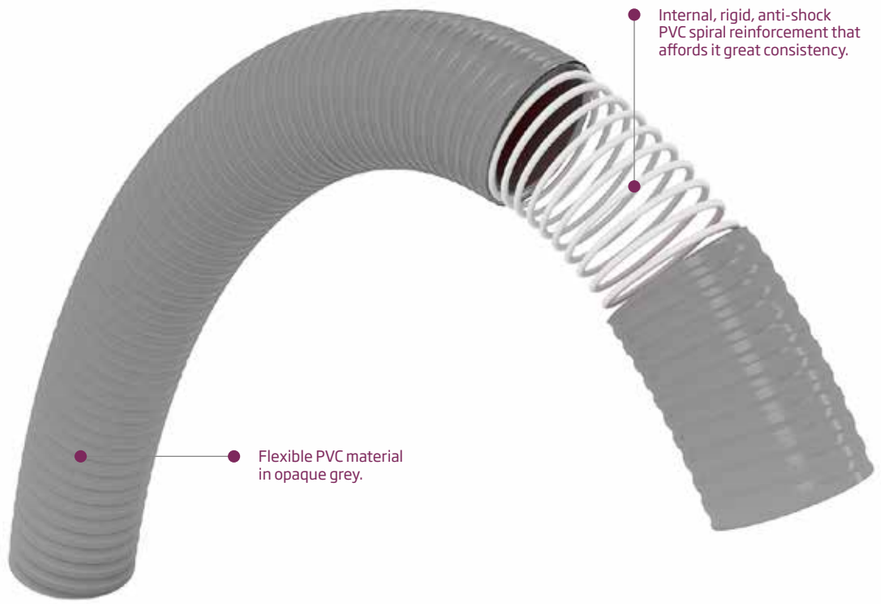


INT ø mm	INT ø in	WALL THICKNESS mm	WEIGHT g/m	OPERATING PRESSURE bar	MINIMUM BURST PRESSURE bar	BENDING RADIUS mm	VACUUM m H_2O	COLOURS AVAILABLE
51	2"	5	960	5	15	250	9	
55	2" 1/8	5	1120	5	15	275	9	
60	2" 1/32	5.5	1300	5	15	300	9	
63	2" 1/2	5.5	1360	5	15	315	9	
70	2" 3/4	6	1520	5	15	350	9	
76	3"	6	1600	5	15	375	9	
80	3" 1/8	6	1700	4	12	400	9	
90	3" 1/2	6	2050	4	12	450	9	
102	4"	7	2650	3	9	500	9	
110	4" 5/16	7	2850	3	9	550	9	
120	4" 3/4	7.5	3100	3	9	600	9	
127	5"	7.5	3200	3	9	625	9	
152	6"	8	5000	3	9	750	9	
203	8"	11	8100	2.5	7.5	1000	9	
254	10"	12.5	10400	2.5	7.5	1250	9	
305	12"	13.5	12000	2.5	7.5	1500	9	

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters.

Transfort®

Pumping and suction hose for slurries, industrial irrigation, cesspits, bilges and products with a high aggressiveness index.



Features

- For agricultural and industrial use.
- The hose wall is smooth on the inside and corrugated on the outside.
- Good chemical resistance associated with PVC's resistance chart.
- Recommended temperature for use between -10°C and 60°C.

INDUSTRIAL USE

AGRICULTURAL USE

HIGH QUALITY CONTROL

FREE Cd-Pb-Ba

FREE FROM Cd / Pb / Ba

Applications

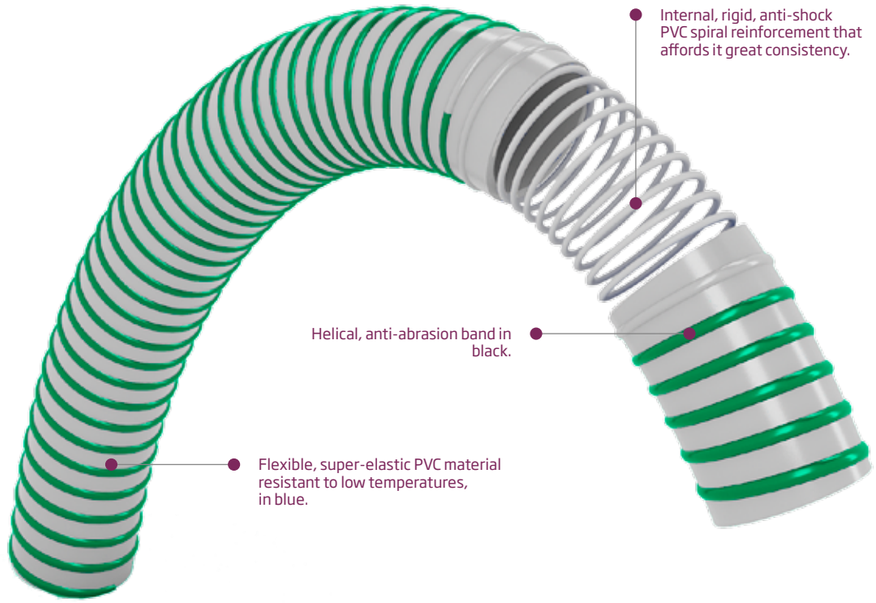
- Pumping and suction in agricultural and industrial irrigation and slurry.
- Transport of granulated materials and drainage of cesspits.

INT ø mm	INT ø in	WALL THICKNESS mm	WEIGHT g/m	OPERATING PRESSURE bar	MINIMUM BURST PRESSURE bar	BENDING RADIUS mm	VACUUM m H_2O
40	1" 5/8	5	765	5	15	200	9
45	1" 3/4	5.5	900	5	15	225	9
51	2"	5.5	1080	5	15	250	9
55	2" 1/8	5.5	1180	5	15	275	9
60	2" 1/32	6.2	1440	5	15	300	9
63	2" 1/2	6.2	1500	5	15	315	9
70	2" 3/4	6.5	1650	5	15	350	9
76	3"	6.5	1800	5	15	375	9
80	3" 1/8	6.5	1980	4	12	400	9
90	3" 1/2	7	2340	4	12	450	9
102	4"	7.5	2970	3	9	500	9
110	4" 3/4	7.5	3240	3	9	550	9
120	5"	7.5	3500	3	9	600	9
127	5"	7.5	3600	3	9	625	9
130	5" 1/2	7.5	3750	3	9	650	9
140	6"	7.5	5300	3	9	700	9
152	6"	9.5	5670	3	9	750	9
160	8"	9.5	6000	3	9	800	9
203	10"	11.5	9250	2.5	7.5	1000	9
254	12"	12.5	11700	2.5	7.5	1250	9
305	12"	12.5	13500	2.5	7.5	1500	9

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters.

Transfort® Superelastic

Highly flexible hose for industrial irrigation and mobile tanks. Especially recommended for facilities at low temperatures. For pumping and suction of slurries and products with a high aggressiveness index. Suitable for temperatures down to -25°C.

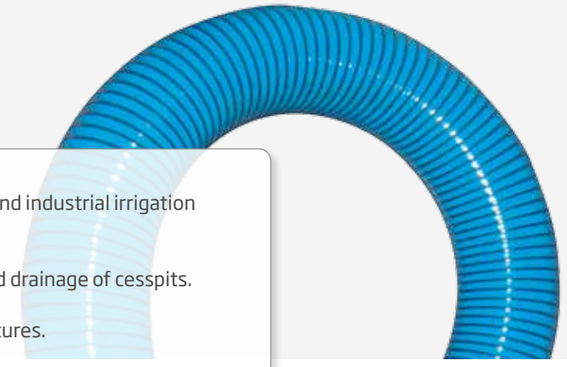


Features

- For agricultural and industrial use.
- Great flexibility, even at low temperatures.
- The hose wall is smooth on the inside and corrugated on the outside. It is equipped with a helical band that grants it greater resistance to abrasion when dragged across the ground.
- Good chemical resistance associated with PVC's resistance chart.
- Recommended temperature for use between -25°C and 60°C.
- Option in blue-black or gray-green.

INDUSTRIAL USE · TANKER TRUCK · AGRICULTURAL USE · GREATER FLEXIBILITY · HIGH QUALITY CONTROL · FREE FROM Cd / Pb / Ba

Applications



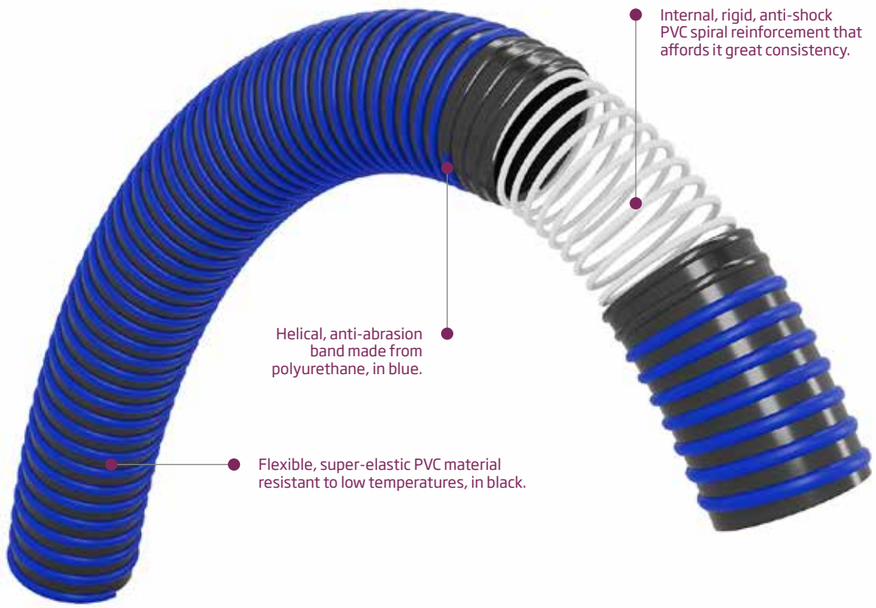
- Pumping and suction in agricultural and industrial irrigation and slurry.
- Transport of granulated materials and drainage of cesspits.
- Particularly suitable for low temperatures.
- Designed especially for use in tanker trucks.

INT ø mm	INT ø in	WALL THICKNESS mm	WEIGHT g/m	OPERATING PRESSURE bar	MINIMUM BURST PRESSURE bar	BENDING RADIUS mm	VACUUM m H_2O
40	1" 5/8	4.5	730	6	18	160	9
45	1" 3/4	5	900	6	18	180	9
51	2"	5.2	1050	5	15	200	9
60	2" 1/32	5.5	1250	4.5	13.5	240	9
63	2" 1/2	6	1390	4.5	13.5	250	9
70	2" 3/4	6.5	1600	4.5	13.5	280	9
76	3"	6.5	1700	4	12	300	9
80	3" 1/8	6.5	1850	3.5	10.5	320	9
90	3" 1/2	6.7	2250	3.5	10.5	360	9
102	4"	7.3	2700	3	9	410	9
110	4" 5/16	7.5	3100	3	9	440	9
120	5"	8	3600	2.5	7.5	480	9
127	6"	8.3	3900	2.5	7.5	500	9
152	8"	9.5	5000	2	6	600	9
203	10"	12.1	10000	2	6	800	9
254	10"	12.1	12400	1.5	4.5	1000	9

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters.

Transfort® Superflex

Highly flexible hose for industrial irrigation and mobile tanks.
Especially recommended for facilities at low temperatures.
For pumping and suction of slurries and products that are highly aggressive. Suitable for temperatures down to -40°C.



Features

- For agricultural and industrial use.
- Great flexibility, even at low temperatures.
- The hose wall is smooth on the inside and corrugated on the outside. The exterior of the hose is covered by a blue helical band made from polyurethane, which grants it great resistance to the abrasion caused by dragging the hose along the ground.
- Good chemical resistance associated with PVC's resistance chart.
- Recommended temperature for use between -40°C and 60°C.

INDUSTRIAL USE · AGRICULTURAL USE · TANKER TRUCK · HIGH QUALITY CONTROL · FREE FROM Cd / Pb / Ba · TEMPERATURES -40°C TO 60°C

Applications

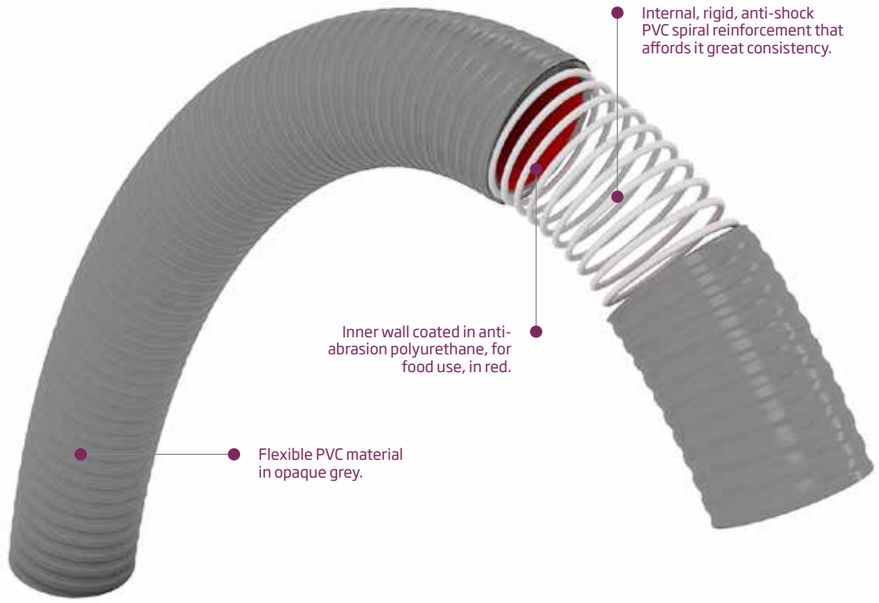
- Pumping and suction in agricultural and industrial irrigation and slurry.
- Transport of granulated materials and drainage of cesspits.
- Particularly suitable for low temperatures.
- Designed especially for use in tanker trucks and portable tanks.

INT ø mm	INT ø in	WALL THICKNESS mm	WEIGHT g/m	OPERATING PRESSURE bar	MINIMUM BURST PRESSURE bar	BENDING RADIUS mm	VACUUM m H_2O
40	1" 5/8	4.5	730	6	18	160	9
45	1" 3/4	5	900	6	18	180	9
51	2"	5.2	1050	5	15	200	9
60	2" 1/32	5.5	1250	4.5	13.5	240	9
63	2" 3/4	6	1390	4.5	13.5	250	9
70	3"	6.5	1600	4.5	13.5	280	9
76	3" 1/8	6.5	1700	4	12	300	9
80	3" 1/2	6.5	1850	3.5	10.5	320	9
90	3" 1/2	6.7	2250	3.5	10.5	360	9
102	4"	7.3	2700	3	9	410	9
110	5"	7.5	3100	3	9	440	9
120	6"	8	3600	2.5	7.5	480	9
127	5"	8.3	3900	2.5	7.5	500	9
152	6"	9.5	5000	2	6	600	9
203	8"	12.1	10000	2	6	800	9
254	10"	12.1	12400	1.5	4.5	1000	9

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters.

Transfort® PU

Pumping and suction hose for slurries, industrial irrigation, cesspits, bilges and products with a very high aggressiveness index. Internal polyurethane layer to grant it greater resistance to abrasion.



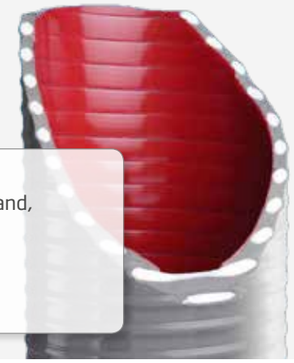
Features

- For agricultural, industrial and food use.
- Pumping and suction hose for slurries, industrial irrigation, cesspits, bilges and products that are extremely aggressive.
- Internal polyurethane layer to grant it greater resistance to abrasion.
- Recommended temperature for use between -10°C and 60°C.

INDUSTRIAL USE · FOOD USE · AGRICULTURAL USE · ANTI-ABRASION · HIGH QUALITY CONTROL · FREE FROM Cd / Pb / Ba

Applications

- For pumping and suction of abrasive liquids: sludge, sand, cement, gravel, etc.
- Highly abrasive products.

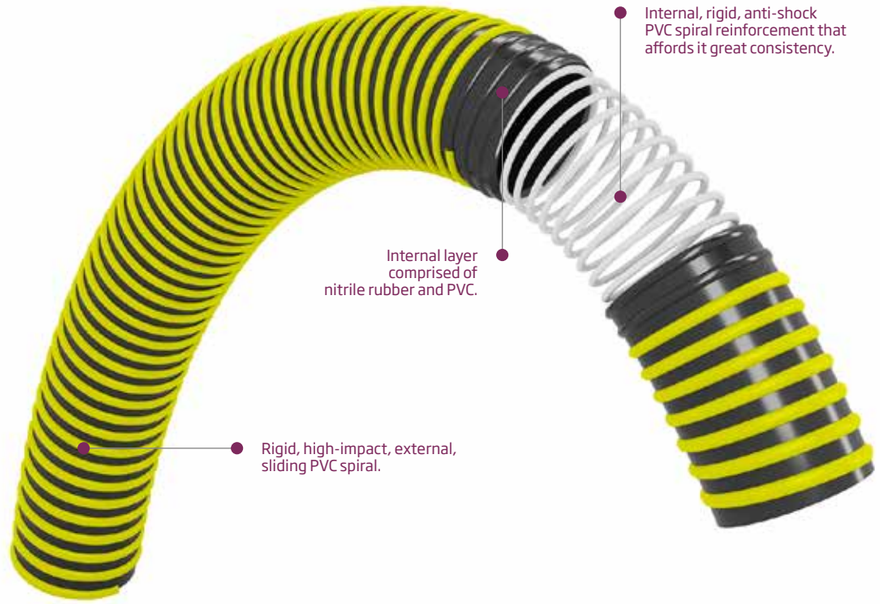


INT ø mm	INT ø in	WALL THICKNESS mm	WEIGHT g/m	OPERATING PRESSURE bar	MINIMUM BURST PRESSURE bar	BENDING RADIUS mm	VACUUM m H_2O
40	1" 5/8	5	800	9	27	400	9
51	2"	5.5	1200	8	24	500	9
60	2" 1/32	6	1600	7	21	600	9
63	2" 1/2	6.5	1750	7	21	630	9
70	2" 3/4	7	1900	6	18	700	9
76	3"	7	2000	6	18	760	9
80	3" 1/8	7	2200	6	18	800	9
90	3" 1/2	7.5	2600	5	15	900	9
102	4"	8	3100	5	15	1000	9
110	4" 5/16	8.3	3300	5	15	1100	9
127	5"	8.3	3600	3	9	1300	9
152	6"	10.5	6400	3	9	1600	9
203	8"	12.5	10200	2	6	2000	9

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters.

Espirotiger®

Hose designed to transport abrasive materials in harsh working conditions. Equipped with an internal layer comprised of nitrile rubber and PVC, in addition to a rigid, high-impact, external PVC spiral. Its special formulation makes this hose highly resistant and durable.



Features

- For industrial use.
- The hose wall is smooth on the inside and corrugated on the outside.
- Good chemical resistance associated with PVC's resistance chart.
- Recommended temperature for use between -20°C and 60°C.
- Rigid PVC spiral on the hose's external surface, granting it greater resistance to wear and tear caused by dragging, and reducing its coefficient of friction with all kinds of surfaces.

INDUSTRIAL USE · CONSTRUCTION · UV PROTECTION · SMOOTH INTERIOR · ANTI-ABRASION · HIGH QUALITY CONTROL · FREE FROM Cd / Pb / Ba

Applications

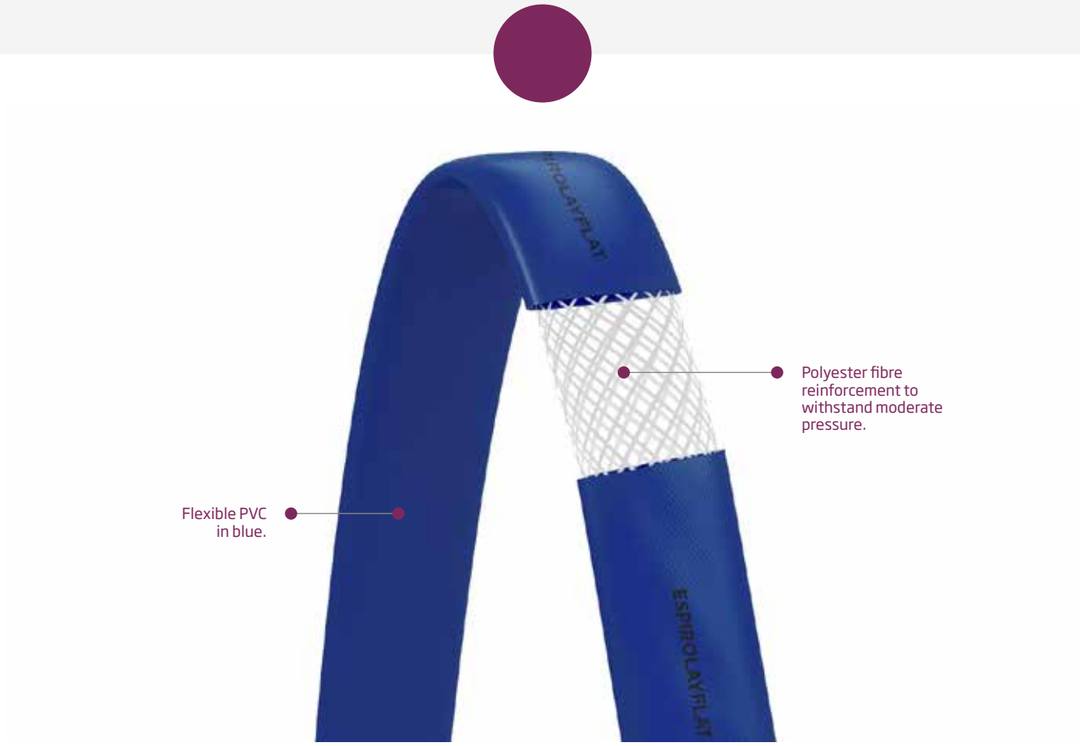
- Designed for use in civil works and shipyards.
- Transfer of abrasive materials, such as grains, gravel and cement.

INT ø mm	INT ø in	EXT ø mm	TOTAL THICKNESS mm	WEIGHT g/m	OPERATING PRESSURE bar	MINIMUM BURST PRESSURE bar	BENDING RADIUS mm	VACUUM m H_2O
45	1" 3/4	55	5.0	750	7	21	100	9
51	2"	63	6.5	820	7	21	130	9
64	2" 1/2	79	7.5	1340	7	21	160	9
76	3"	91	8.0	1600	5	15	205	9
102	4"	118	8.0	2760	4.5	13.5	240	9
127	5"	150	12.5	4300	4.5	13.5	270	9
152	6"	175	12.5	5100	4	12	300	9
203	8"	227	13.5	7200	3.5	10.5	320	9

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters.

Espirolayflat®

Flat, flexible, monolayer hose made from plasticised PVC, reinforced internally by polyester fibre.



Features

- Made of PVC for industrial and agricultural use, covering a polyester mesh such that it forms a single layer.
- Highly flexible and light.
- Thanks to its flat structure, it is easy to use and roll up, occupying little space.
- Easy to install.
- Adapted clamps should be employed during use to ensure the hose's subsequent good functioning.
- Recommended temperature for use between -10°C and 60°C.

ECONOMIC · INDUSTRIAL USE · AGRICULTURAL USE · TRANSPORT OF WATER · HIGH QUALITY CONTROL · FREE FROM Cd / Pb / Ba

Applications

- Piping agricultural drip irrigation.
- Piping water at low pressures.
- Particularly recommended for facilities that require the hose to be perforated in order to install the drip accessory.

INT ø mm	INT ø in	WALL THICKNESS mm	WEIGHT g/m	OPERATING PRESSURE bar	MINIMUM BURST PRESSURE bar	LONG ROLL mm
51	2"	1	230	4	12	100
63	2" 1/2	1.15	320	4	12	100
76	3"	1.15	400	4	12	100
90	3" 1/2	1.15	425	4	12	100
102	4"	1.20	445	4	12	100
110	4" 5/16	1.20	515	4	12	100
127	5"	1.35	800	4	12	100
152	6"	1.35	900	3	9	50
203	8"	2.20	1785	3	9	50

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters.

Waterflat® S

Flat hose to transfer, transport and pump agricultural irrigation at low pressure.

Features

- For industrial and agricultural use, and construction.
- Its interior textile reinforcement allows it to withstand working pressures.
- Thanks to its flat structure, it is easy to use and roll up, occupying little space.
- Highly flexible and light.
- Easy to install.
- Adapted clamps should be employed during use to ensure the hose's subsequent good functioning.
- Recommended temperature for use between -10°C and 60°C.

INDUSTRIAL USE · AGRICULTURAL USE · CONSTRUCTION · HIGH QUALITY CONTROL · FREE FROM Cd / Pb / Ba

Applications

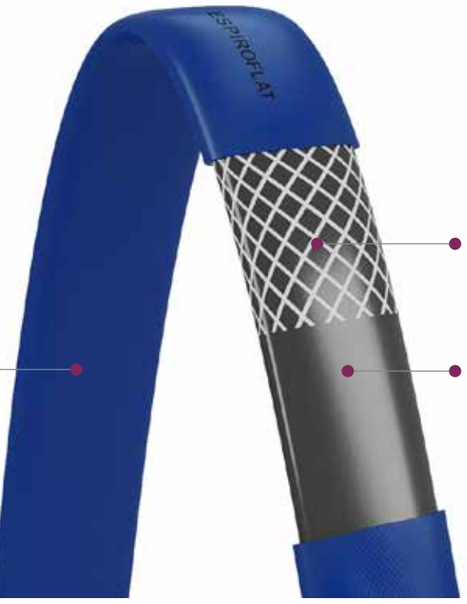
- Transfer, transport and pumping of drinking water, fertilisers and other liquids in agricultural irrigation and in construction.
- Protective casing for machinery in the agricultural industry.

INT ø mm	INT ø in	WEIGHT g/m	OPERATING PRESSURE bar	MINIMUM BURST PRESSURE bar	ELONGATION ΔL%	DILATION ΔD%	COLOURS AVAILABLE
40	1" 5/8	190	4	12	±7	±10	○ ●
51	2"	285	4	12	±7	±10	
55	2" 1/8	310	4	4.5	±7	±10	
63	2" 1/2	325	3	9	±7	±10	
76	3"	375	2.5	7.5	±7	±10	
102	4"	550	2.5	7.5	±7	±10	

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters.

Espiroflat®

Flat hose to transfer, transport and pump agricultural irrigation at low pressure.



Features

- For industrial and agricultural use, and construction.
- Its interior textile reinforcement allows it to withstand working pressures.
- Thanks to its flat structure, it is easy to use and roll up, occupying little space.
- Highly flexible and light.
- Easy to install.
- Adapted clamps should be employed during use to ensure the hose's subsequent good functioning.
- Recommended temperature for use between -10°C and 60°C.

INDUSTRIAL USE · CONSTRUCTION · AGRICULTURAL USE · HIGH QUALITY CONTROL · FREE FROM Cd / Pb / Ba

Applications

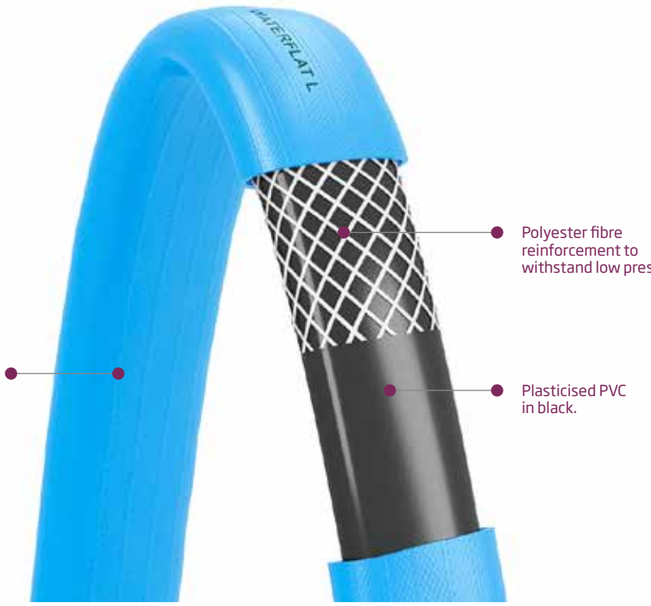
- Piping agricultural drip irrigation.
- Piping water at low pressure.

INT ø mm	INT ø in	TOTAL THICKNESS mm	WEIGHT g/m	OPERATING PRESSURE bar	MINIMUM BURST PRESSURE bar	ELONGATION ΔL%	DILATION ΔD%
40	1" 5/8	1.3	220	5	15	±7	±10
45	1" 3/4	1.3	245	5	15	±7	±10
51	2"	1.4	340	5	15	±7	±10
55	2" 1/8	1.4	360	5	15	±7	±10
63	2" 1/2	1.5	380	4	12	±7	±10
76	3"	1.5	440	4	12	±7	±10
80	3" 1/8	1.5	450	4	12	±7	±10
90	3" 1/2	1.5	520	4	12	±7	±10
102	4"	1.6	640	3	9	±7	±10
110	4" 5/16	1.6	720	3	9	±7	±10
127	5"	1.9	880	3	9	±7	±10

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters.

Waterflat® L

Flat hose to transfer and transport agricultural and construction irrigation at low pressure.



Features

- For industrial and agricultural use, and construction.
- Its interior textile reinforcement allows it to withstand working pressures.
- Thanks to its flat structure, it is easy to use and roll up, occupying little space.
- Highly flexible and light.
- Easy to install.
- Adapted clamps should be employed during use to ensure the hose's subsequent good functioning.
- Recommended temperature for use between -10°C and 60°C.

INDUSTRIAL USE · AGRICULTURAL USE · CONSTRUCTION · HIGH QUALITY CONTROL · FREE FROM Cd / Pb / Ba

Applications

Transfer, transport and pumping of drinking water, fertilisers and other liquids in agricultural irrigation and in construction.

INT ø mm	INT ø in	TOTAL THICKNESS mm	WEIGHT g/m	OPERATING PRESSURE bar	MINIMUM BURST PRESSURE bar	ELONGATION ΔL%	DILATION ΔD%	COLOURS AVAILABLE
25	1"	1.6	180	6	18	±7	±10	
30	1" 1/8	1.6	200	6	18	±7	±10	
35	1" 3/8	1.6	240	6	18	±7	±10	
40	1" 5/8	1.6	280	6	18	±7	±10	
45	1" 3/4	1.6	320	6	18	±7	±10	
51	2"	1.6	375	6	18	±7	±10	
55	2" 1/8	1.8	400	6	18	±7	±10	
63	2" 1/2	1.8	430	5	15	±7	±10	
70	2" 3/4	1.8	450	5	12	±7	±10	
76	3"	1.8	550	5	12	±7	±10	
80	3" 1/8	1.8	560	5	12	±7	±10	
90	3" 1/2	2.1	660	5	12	±7	±10	
102	4"	2.1	760	4	10.5	±7	±10	
110	4" 5/16	2.2	1000	4	10.5	±7	±10	
127	5"	2.2	1180	4	10.5	±7	±10	
152	6"	2.2	1300	4	10.5	±7	±10	

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters.

Waterflat® M

Flat hose to pump liquids, for agricultural irrigation and to transport water in general at medium pressures. Striated hose for greater resistance to dragging.

Features

- For industrial and agricultural use.
- Striated hose for greater resistance to dragging.
- Its interior textile reinforcement allows it to withstand medium working pressures.
- Thanks to its flat structure, it is easy to use and roll up, occupying little space.
- Highly flexible and light.
- Easy to install.
- Adapted clamps should be employed during use to ensure the hose's subsequent good functioning.
- Recommended temperature for use between -10°C and 60°C.

INDUSTRIAL USE · AGRICULTURAL USE · HIGH QUALITY CONTROL · FREE FROM Cd / Pb / Ba

Applications

- Pumping in bilge pumps, washing down, quarries, etc.
- Agricultural irrigation.
- Transport of water in general.

INT ø mm	INT ø mm	TOTAL THICKNESS mm	WEIGHT g/m	OPERATING PRESSURE bar	MINIMUM BURST PRESSURE bar	ELONGATION ΔL%	DILATION ΔD%
25	1"	2.2	240	10	30	±7	±10
30	1" 1/8	2.2	275	10	30	±7	±10
32	1" 1/4	2.2	290	10	30	±7	±10
35	1" 3/8	2.2	300	10	30	±7	±10
38	1" 1/2	2.2	335	10	30	±7	±10
40	1" 5/8	2.2	350	10	30	±7	±10
45	1" 3/4	2.2	400	10	30	±7	±10
51	2"	2.2	480	8	24	±7	±10
55	2" 1/8	2.2	500	7	21	±7	±10
63	2" 1/2	2.2	540	7	21	±7	±10
70	2" 3/4	2.2	620	7	21	±7	±10
76	3"	2.4	750	7	21	±7	±10
80	3" 1/8	2.4	800	7	21	±7	±10
90	3" 1/2	2.4	900	7	21	±7	±10
102	4"	2.4	1050	6	18	±7	±10
110	4" 5/16	2.4	1150	6	18	±7	±10
127	5"	2.5	1390	6	18	±7	±10
152	6"	3	1800	4	12	±7	±10
203	8"	2.5	2000	3	9	±7	±10

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters

Waterflat® H

Flat hose that is highly resistant to abrasion and pressure.
For the pumping of pumps in bilges, washing down and quarries.
Agricultural irrigation and water transport in general.

Features

- For industrial and agricultural use.
- Its interior textile reinforcement allows it to withstand working pressures of up to 14 bar.
- Thanks to its flat structure, it is easy to use and roll up, occupying little space.
- Highly flexible and light.
- Easy to install.
- Adapted clamps should be employed during use to ensure the hose's subsequent good functioning.
- Recommended temperature for use between -10°C and 60°C.

INDUSTRIAL USE · AGRICULTURAL USE · HIGH QUALITY CONTROL · FREE FROM Cd / Pb / Ba

Applications

- Pumping in bilge pumps, washing down, quarries, etc.
- Agricultural irrigation.
- Transport of water in general.

INT ø mm	INT ø in	TOTAL THICKNESS mm	WEIGHT g/m	OPERATING PRESSURE bar	MINIMUM BURST PRESURE bar	ELONG-ATION ΔL%	DILATION ΔD%	COLOURS AVAILABLE
40	1" 5/8	2.5	440	14	42	±7	±10	
45	1" 3/4	2.5	480	14	42	±7	±10	
51	2"	2.5	520	12	36	±7	±10	
55	2" 1/8	2.5	580	12	36	±7	±10	
63	2" 1/2	2.8	750	12	36	±7	±10	
70	2" 3/4	2.8	840	12	36	±7	±10	
76	3"	2.8	880	12	36	±7	±10	
90	3" 1/2	3.1	1150	10	30	±7	±10	
102	4"	3.1	1300	10	30	±7	±10	
110	4" 5/16	3.2	1480	10	30	±7	±10	
127	5"	3.2	1625	8	24	±7	±10	
152	6"	3.2	2000	6	18	±7	±10	

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters.

Sodigom®

Flat, flexible hose made from black synthetic rubber, reinforced internally with polyester fibre, for discharging pumps and use in construction work, mines and agriculture in general.

Features

- For industrial and agricultural use.
- Minimum pressure drop thanks to its smooth wall.
- Made of high-tenacity polyester thread using a circular loom.
- Longitudinal, external striations to improve resistance to abrasion and improve handling.
- Recommended temperature for use between -20°C and 80°C.

INDUSTRIAL USE · AGRICULTURAL USE · HIGH TEMPERATURES · RUBBER FEEL · HIGH QUALITY CONTROL · FREE FROM Cd / Pb / Ba

Applications

- Flat, easy-to-use hose for discharging pumps and use in construction works, quarries, mines and agriculture.
- Excellent resistance to abrasion and oils.

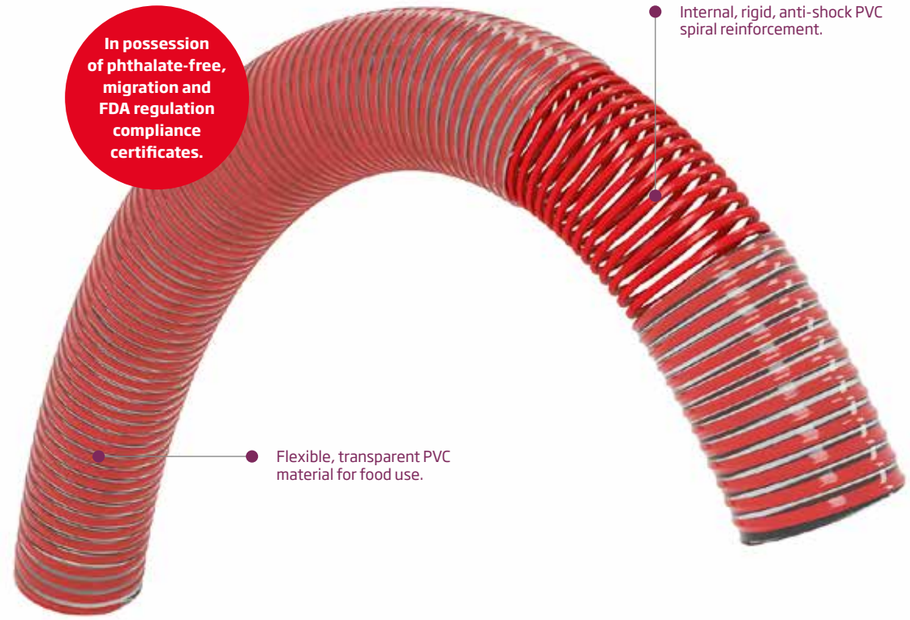
INT ø mm	INT ø in	TOTAL THICKNESS mm	WEIGHT g/m	OPERATING PRESSURE bar	MINIMUM BURST PRESSURE bar	ELONGATION ΔL%	DILATION ΔD%
20	¾"	2.1	180	20	60	±7	±10
25	1"	2.1	280	20	60	±7	±10
38	1" ½	2.1	350	16	48	±7	±10
45	1" ¾	2.1	400	16	48	±7	±10
51	2"	2.25	500	16	48	±7	±10
63	2" ½	2.25	600	16	48	±7	±10
70	2" ¾	2.50	680	15	45	±7	±10
76	3"	2.6	750	13	39	±7	±10
80	3" ⅛	2.7	900	13	39	±7	±10
90	3" ½	2.9	1000	13	39	±7	±10
102	4"	3	1100	13	39	±7	±10
110	4" 5/16	3	1400	10	30	±7	±10
127	5"	3	1700	10	30	±7	±10
152	6"	3	2400	10	30	±7	±10
203	8"	3	2400	10	30	±7	±10

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters.

Transvin® Phthalates Free

Phthalate-free, PVC hose for transferring and transporting wine and all kinds of alcoholic liquids (50% vol.), in addition to milk products and their by-products. Manufactured in accordance with European legislation on raw materials for non-fatty food use.

In possession of phthalate-free, migration and FDA regulation compliance certificates.



Features

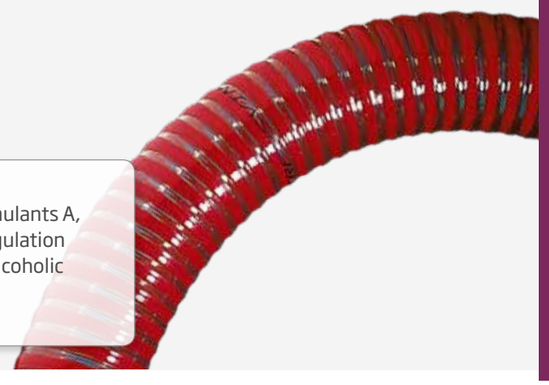
- For food use in accordance with European regulations EC 1935/2004 and EU 10/2011 (see declaration of conformity).
- The hose wall is smooth, both inside and outside.
- Good chemical resistance associated with PVC's resistance chart.
- Recommended temperature for use between -10°C and 60°C.

FOOD USE · TANKER TRUCK · MILK PRODUCT TRANSPORT · WINE TRANSPORT

HIGH QUALITY CONTROL · FREE FROM Cd / Pb / Ba · PHTHALATE-FREE

Applications

- Transfer of liquid food products that require food simulants A, B, C and D1 in OM2 conditions in accordance with Regulation EU 10/2011, such as wine, must, beer, vinegar and alcoholic liquids up to 50% vol. and milk products.

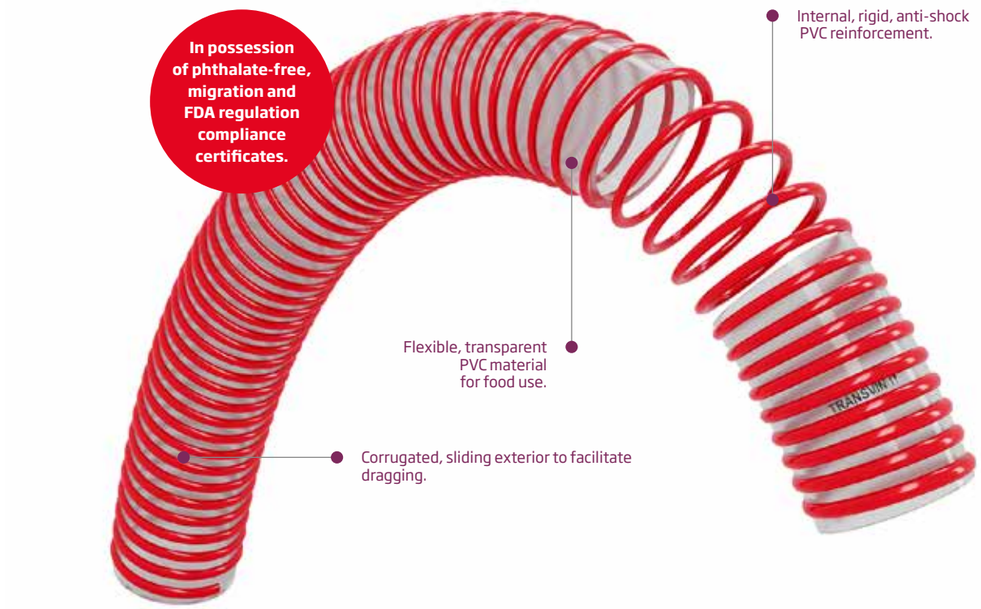


INT ø mm	INT ø in	WALL THICKNESS mm	WEIGHT g/m	OPERATING PRESSURE bar	MINIMUM BURST PRESSURE bar	BENDING RADIUS mm	VACUUM m H_2O
25	1"	3.1	390	8	24	125	9
30	1" 1/8	4	480	8	24	150	9
32	1" 1/4	4	500	8	24	160	9
35	1" 3/8	4.2	580	8	24	175	9
38	1" 1/2	4.2	670	8	24	190	9
40	1" 5/8	4.3	685	8	24	200	9
45	1" 3/4	4.5	850	8	24	225	9
51	2"	5	1020	8	24	250	9
55	2" 1/8	5	1190	7	21	275	9
60	2" 1/4	5.2	1260	7	21	300	9
63	2" 1/2	5.6	1320	7	21	310	9
70	2" 3/4	5.8	1615	6	18	350	9
76	3"	5.8	1700	6	18	375	9
80	3" 1/8	6	1870	5	15	400	9
90	3" 1/2	6.5	2156	5	15	450	9
102	4"	7	2680	4	12	500	9
110	4" 5/16	7.3	3060	4	12	550	9
120	4" 3/4	7.4	3320	4	12	600	9
127	5"	7.6	3485	4	12	625	9
152	6"	8.5	5355	3	9	760	9

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances. Depending on technical developments, specifications may be modified without advance notice being given. Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters.

Transvin® Phthalates Free (Sliding)

Phthalate-free PVC hose for transferring and transporting wine, alcoholic liquid foods (50% vol.), and milk products and their by-products. Manufactured in accordance with European legislation on raw materials for non-fatty food use. The hose's exterior is corrugated, with a rigid, sliding spiral to facilitate dragging.



Features

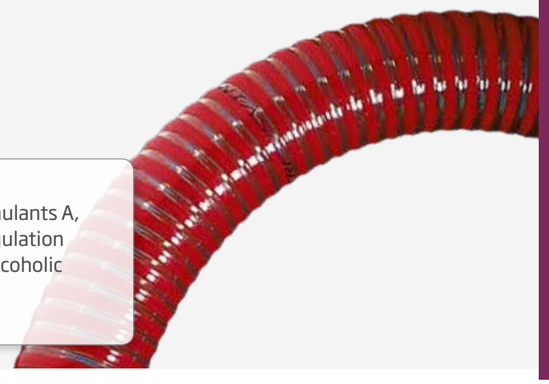
- For food use in accordance with European regulations EC 1935/2004 and EU 10/2011 (see declaration of conformity).
- The hose wall is smooth on the inside and corrugated on the outside.
- Good chemical resistance associated with PVC's resistance chart.
- Recommended temperature for use between -10°C and 60°C.

FOOD USE · TANKER TRUCK · MILK PRODUCT TRANSPORT · WINE TRANSPORT

HIGH QUALITY CONTROL · FREE FROM Cd / Pb / Ba · PHTHALATE-FREE

Applications

- Transfer of liquid food products that require food simulants A, B, C and D1 in OM2 conditions in accordance with Regulation EU 10/2011, such as wine, must, beer, vinegar and alcoholic liquids up to 50% vol. and milk products.



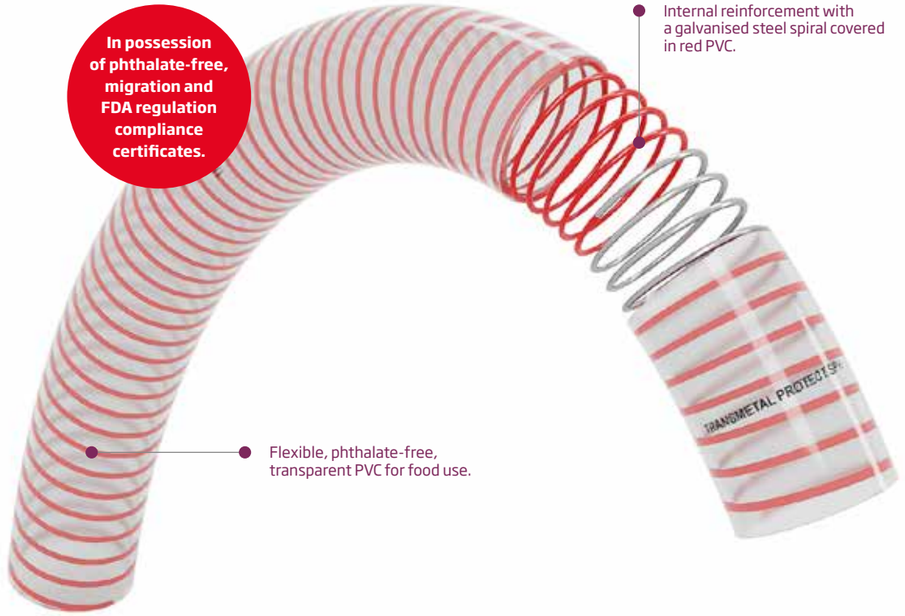
INT ø mm	INT ø in	WALL THICKNESS mm	WEIGHT g/m	OPERATING PRESSURE bar	MINIMUM BURST PRESSURE bar	BENDING RADIUS mm	VACUUM m H_2O
25	1"	3.5	390	8	24	125	9
30	1" 1/8	4	480	8	24	150	9
32	1" 1/4	4	500	8	24	160	9
35	1" 3/8	4.2	580	8	24	175	9
38	1" 1/2	4.2	670	8	24	190	9
40	1" 5/8	4.3	685	8	24	200	9
45	1" 3/4	4.5	850	8	24	225	9
51	2"	5	1020	8	24	250	9
55	2" 1/8	5	1190	7	21	275	9
60	2" 1/32	5.2	1260	7	21	300	9
63	2" 1/2	5.6	1320	7	21	310	9
70	2" 3/4	5.8	1615	6	18	350	9
76	3"	5.8	1700	6	18	375	9
80	3" 1/8	6	1870	5	15	400	9
90	3" 1/2	6.5	2156	5	15	450	9
102	4"	7	2680	4	12	500	9
110	4" 5/16	7.3	3060	4	12	550	9
120	4" 3/4	7.4	3320	4	12	600	9
127	5"	7.6	3485	4	12	625	9
152	6"	8.5	5355	3	9	760	9

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters.

Transmetal® Protect

Hose manufactured by co-extrusion of vinyl compounds, internally reinforced with a galvanised steel spiral covered in red PVC.

In possession of phthalate-free, migration and FDA regulation compliance certificates.



Features

- For industrial use and food use in accordance with European regulations EC 1935/2004 and EU 10/2011.
- Made of flexible, phthalate-free, transparent PVC.
- The hose wall is smooth, both inside and outside.
- Hose with good chemical resistance associated with PVC's usual properties.
- Good resistance to pressure and vacuum when suctioning.
- Recommended temperature for use between -20°C and 60°C.

INDUSTRIAL USE · FOOD USE · AGRICULTURAL USE · MILK PRODUCT TRANSPORT · TRANSPORT OF WATER · WINE TRANSPORT · ANTISTATIC

SMOOTH INTERIOR · HIGH PRESSURES · HIGH QUALITY CONTROL · STEEL SPIRAL (Fe-C) · PHTHALATE-FREE (FREE PHTHALATES) · FREE FROM Cd / Pb / Ba (FREE Cd-Pb-Ba)

Applications

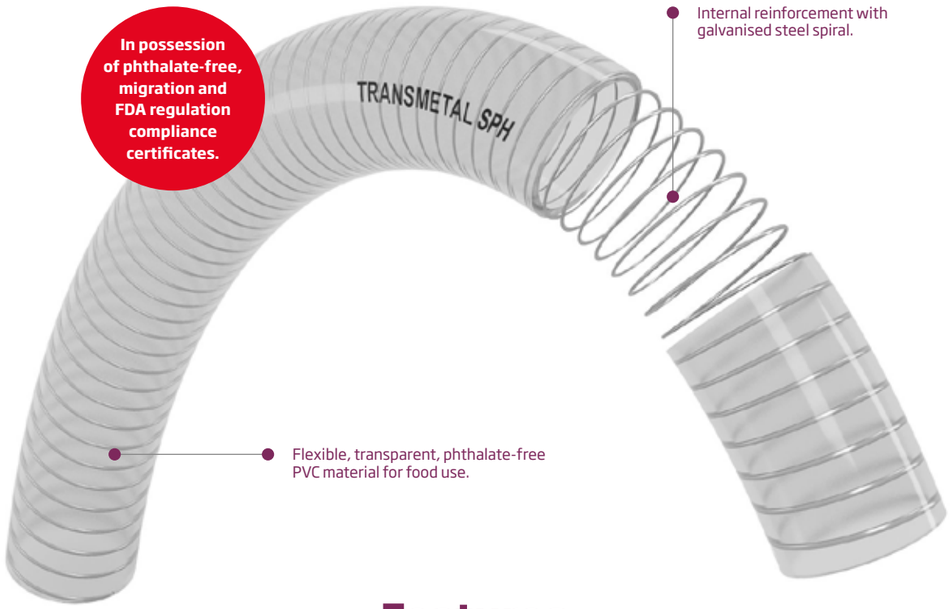
- Transfer of liquid food products that require food simulants A, B, C and D1 in OM2 conditions in accordance with Regulation EU 10/2011, such as wine, must, beer, alcohols up to 50% vol. and milk products.

INT ø mm	INT ø in	WALL THICKNESS mm	WEIGHT g/m	OPERATING PRESSURE bar	MINIMUM BURST PRESSURE bar	BENDING RADIUS mm	VACUUM m H_2O
25	1"	4.0	480	9	27	50	9
32	1" 1/4	4.2	622	9	27	65	9
40	1" 5/8	4.8	950	9	27	80	9
51	2"	5.4	1300	7	21	100	9
60	2" 1/32	6.0	1750	6	18	120	9
70	2" 3/4	6.1	2100	5	15	140	9
80	3" 1/8	6.5	2500	4	12	120	9

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances. Depending on technical developments, specifications may be modified without advance notice being given. Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters.

Transmetal® Phthalates Free

Phthalate-free hose for transferring air, plastic chippings, alcoholic liquids (50% vol.), liquid foods and for vacuum pumps. Reinforced with a galvanised steel spiral, which grants it vacuum resistance.



Features

- For food use in accordance with European regulations EC 1935/2004 and EU 10/2011. (See declaration of conformity).
- Highly flexible.
- Good resistance to pressure and vacuum when suctioning.
- The hose wall is smooth, both inside and outside.
- Good chemical resistance associated with PVC's resistance chart.
- Recommended temperature for use between -10°C and 60°C.

INDUSTRIAL USE · FOOD USE · AGRICULTURAL USE · NAUTICAL USE · WINE TRANSPORT

HIGH QUALITY CONTROL · FREE FROM Cd / Pb / Ba · PHTHALATE-FREE

Applications

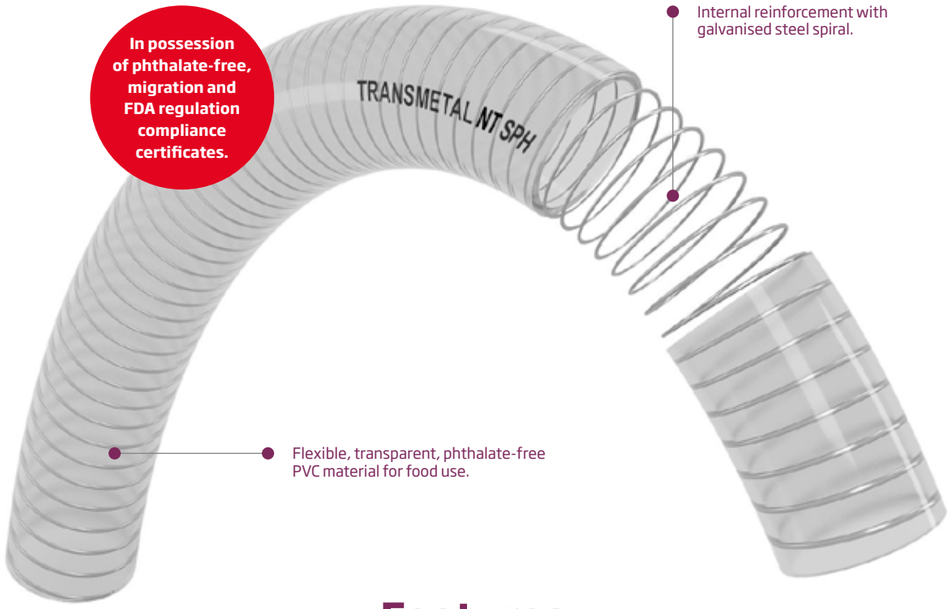
- Transfer of liquid food products that require food simulants A, B, C and D1 in OM2 conditions in accordance with Regulation EU 10/2011, such as wine, must, beer, vinegar and alcoholic liquids up to 50% vol. and milk products.

INT ø mm	INT ø in	WALL THICKNESS mm	WEIGHT g/m	OPERATING PRESSURE bar	MINIMUM BURST PRESSURE bar	BENDING RADIUS mm	VACUUM m H_2O
10	3/8"	3.1	180	9	27	20	9
12	1/2"	3.1	190	9	27	20	9
13	1/2"	3.1	210	9	27	26	9
14	5/8"	3.1	230	9	27	28	9
16	5/8"	3.1	260	9	27	32	9
20	3/4"	3.5	340	9	27	40	9
22	7/8"	3.5	400	9	27	44	9
25	1"	4	520	9	27	50	9
30	1" 1/8	4.2	630	9	27	60	9
32	1" 1/4	4.2	660	9	27	64	9
35	1" 3/8	4.3	750	9	27	70	9
38	1" 1/2	4.5	800	9	27	76	9
40	1" 5/8	4.8	950	9	27	80	9
42	1" 3/4	4.8	1040	9	27	84	9
45	1" 3/4	4.9	1150	9	27	90	9
51	2"	5.4	1300	7	21	100	9
55	2" 1/8	5.4	1460	6	18	110	9
60	2" 1/32	6	1750	6	18	120	9
63	2" 1/2	6.1	1800	6	18	125	9
70	2" 3/4	6.1	2100	5	15	140	9
76	3"	6.5	2250	5	15	150	9
80	3" 1/8	6.5	2500	4	12	160	9
90	3" 1/2	7	2900	4	12	180	9
102	4"	7	3650	3	9	200	9
110	4" 5/16	7.2	3950	3	9	220	9
120	4" 3/4	8	4300	3	9	240	9
127	5"	8	4600	3	9	250	9
152	6"	10	6600	2.5	7	300	9

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters.

Transmetal® NT Phthalates Free

Phthalate-free hose for transferring air, plastic chippings, alcoholic liquids (50% vol.), liquid foods and for vacuum pumps. Reinforced with a galvanised steel spiral, which grants it vacuum resistance.



Features

- For food use in accordance with European regulations EC 1935/2004 and EU 10/2011. (See declaration of conformity).
- Highly flexible.
- Good resistance to pressure and vacuum when suctioning.
- The hose wall is smooth, both inside and outside.
- Good chemical resistance associated with PVC's resistance chart.
- Recommended temperature for use between -10°C and 60°C.

INDUSTRIAL USE · FOOD USE · AGRICULTURAL USE · NAUTICAL USE · WINE TRANSPORT

HIGH QUALITY CONTROL · FREE FROM Cd / Pb / Ba · PHTHALATE-FREE

Applications

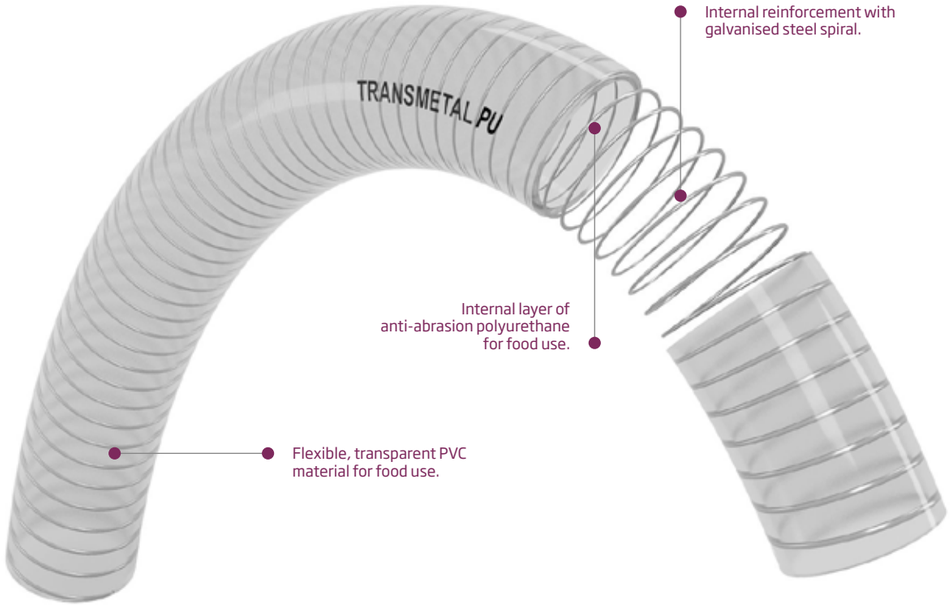
- Transfer of liquid food products that require food simulants A, B, C and D1 in OM2 conditions in accordance with Regulation EU 10/2011, such as wine, must, beer, vinegar and alcoholic liquids up to 50% vol. and milk products.

INT ø mm	INT ø in	WALL THICKNESS mm	WEIGHT g/m	OPERATING PRESSURE bar	MINIMUM BURST PRESSURE bar	BENDING RADIUS mm	VACUUM m H_2O
20	3/4"	3.50	365	7	21	35	9
25	1"	4.00	470	6	18	44	9
30	1" 1/8	4.00	540	6	18	55	9
32	1" 1/4	4.00	640	6	18	60	9
35	1" 3/8	4.00	665	6	18	65	9
38	1" 1/2	4.00	735	6	18	70	9
40	1" 5/8	4.40	835	5	15	75	9
45	1" 3/4	4.40	990	5	15	75	9
51	2"	4.60	1110	5	15	90	9
60	2" 1/32	4.60	1290	4	12	110	9
63	2" 1/2	4.60	1375	4	12	115	9
76	3"	5.60	2000	3	9	130	9
80	3" 1/8	5.60	2125	3	9	140	9
90	3" 1/2	5.60	2365	3	9	160	9
102	4"	6.00	2930	3	8	180	9
102	4"	6.0	3015	3	8	185	9
110	4" 5/16	6.0	3150	3	8	195	9
120	4" 3/4	7.0	4020	2	6	215	9
127	5"	7.0	4180	2	6	220	9
152	6"	7.5	5410	2	5	270	9

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters.

Transmetal® PU

Flexible, transparent PVC hose, reinforced with a galvanised steel spiral and an internal polyurethane layer.



Features

- For food use in accordance with European regulations EC 1935/2004 and EU 10/2011 (see declaration of conformity).
- Highly resistant to abrasion, thanks to its internal polyurethane layer of 0.5 mm.
- Good resistance to pressure and vacuum when suctioning.
- The hose wall is smooth, both inside and outside.
- Good chemical resistance associated with PU's resistance chart.
- Recommended temperature for use between -20°C and 70°C.

INDUSTRIAL USE · FOOD USE · AGRICULTURAL USE · NAUTICAL USE · WINE TRANSPORT

PU — MADE FROM POLYURETHANE · ANTI-ABRASION · HIGH QUALITY CONTROL · FREE Cd-Pb-Ba — FREE FROM Cd / Pb / Ba

Applications

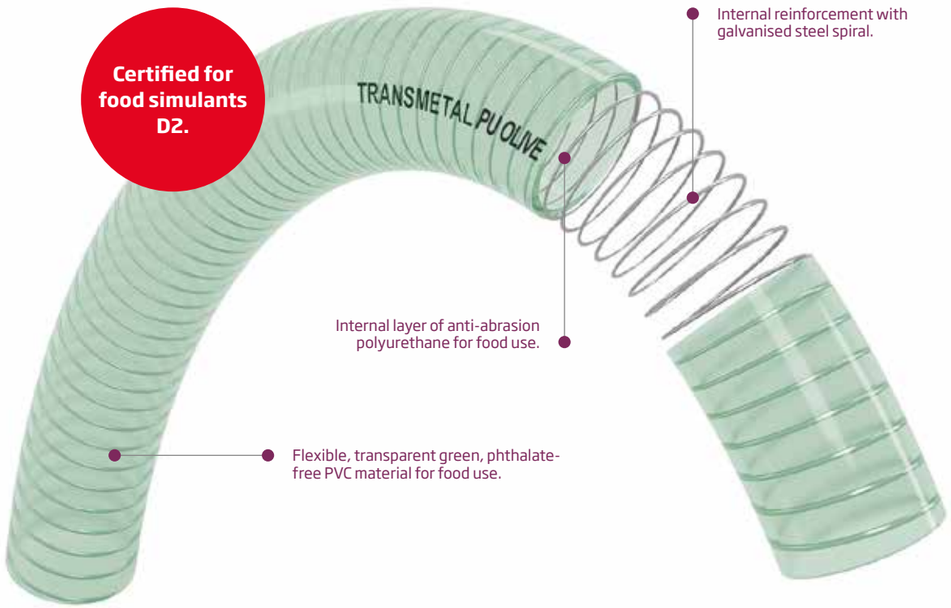
- Transport of pneumatic, hydraulic and chemical liquids. For transferring air, plastic chippings, alcoholic liquids up to 20% vol., liquid foods that require food simulants A, B and C in OM2 conditions according to Regulation EU 10/2011.
- Vacuum pumps. Facilities that require great flexibility.
- Cleaning machinery (sewage, sediments, muds, etc.).
- Cleaning of pipelines.

INT ø mm	INT ø in	WALL THICKNESS mm	WEIGHT g/m	OPERATING PRESSURE bar	MINIMUM BURST PRESSURE bar	BENDING RADIUS mm	VACUUM m H_2O
40	1" 5/8	4.8	950	9	27	80	9
45	1" 3/4	4.9	1150	9	27	90	9
51	2"	5.4	1300	7	21	100	9
55	1" 1/8	5.4	1460	6	18	110	9
60	2" 1/32	6	1750	6	18	120	9
63	2" 1/2	6.1	1900	5	15	130	9
70	2" 3/4	6.1	2100	5	15	140	9
76	3"	6.5	2250	5	15	150	9
80	3" 1/8	6.5	2500	4	12	160	9
90	3" 1/2	7	2900	4	12	180	9
102	4"	7	3650	3	9	200	9
102	4"	7.2	3850	3	9	210	9
110	4" 5/16	7.2	3950	3	9	220	9
120	4" 3/4	8	4300	3	9	240	9
127	5"	8	4600	3	9	250	9
152	6"	10	6600	2.5	7	300	9

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters

Transmetal® PU Olive Oil

Flexible, phthalate-free PVC hose, reinforced with a galvanised steel spiral and an internal, polyester-base, polyurethane layer.



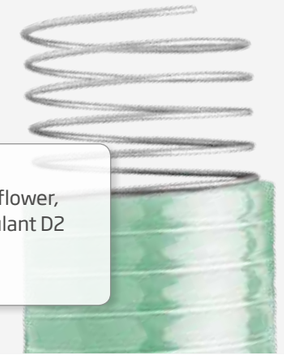
Features

- For food use in accordance with European regulations EC 1935/2004 and EU 10/2011. (See declaration of conformity).
- Highly resistant to abrasion, thanks to its internal polyurethane layer of 0.5 mm.
- Good resistance to pressure and vacuum when suctioning.
- The hose wall is smooth, both inside and outside.
- Good chemical resistance associated with PU's resistance chart.
- Recommended temperature for use between -20°C and 80°C.

ANTISTATIC · MADE FROM POLYURETHANE · ANTI-ABRASION · HIGH QUALITY CONTROL · STEEL SPIRAL · PHTHALATE -FREE

Applications

- Transporting and transferring vegetable oils (olive, sunflower, soya, etc.) and those liquid foods that require food simulant D2 in accordance with Regulation EU 10/2011.

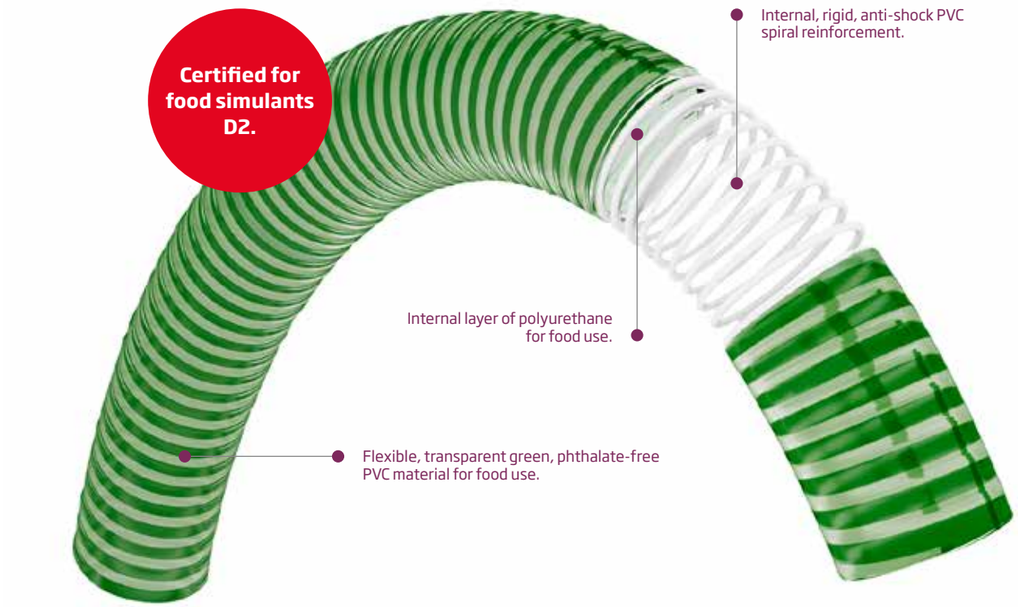


INT ø mm	INT ø in	WALL THICKNESS mm	WEIGHT g/m	OPERATING PRESSURE bar	MINIMUM BURST PRESSURE bar	BENDING RADIUS mm	VACUUM m H_2O
40	1" 5/8	4.8	950	9	27	80	9
45	1" 3/4	4.9	1150	9	27	90	9
51	2"	5.4	1300	7	21	100	9
55	2" 1/8	5.4	1460	6	18	110	9
60	2" 1/32	6	1750	6	18	120	9
63	2" 1/2	6.1	1900	5	15	130	9
70	2" 3/4	6.1	2100	5	15	140	9
76	3"	6.5	2250	5	15	150	9
80	3" 1/8	6.5	2500	4	12	160	9
90	3" 1/2	7	2900	4	12	180	9
102	4"	7	3650	3	9	200	9
110	4" 5/16	7.2	3950	3	9	220	9
120	4" 3/4	8	4300	3	9	240	9
127	5"	8	4600	3	9	250	9
152	6"	10	6600	2.5	7	300	9

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters.

Espirofood® PU

Flexible, phthalate-free PVC hose, reinforced with a rigid, anti-shock PVC spiral and an internal, polyester-base, polyurethane layer.



Features

- For food use in accordance with European regulations EC 1935/2004 and EU 10/2011 (see declaration of conformity).
- Internal layer of polyurethane for food use, which grants it anti-abrasion characteristics.
- The hose wall is smooth, both inside and outside.
- Good chemical resistance associated with PU's resistance chart.
- Recommended temperature for use between -20°C and 80°C.

PU — MADE FROM POLYURETHANE

ANTI-ABRASION

HIGH QUALITY CONTROL

FREE PHTHALATES — PHTHALATE-FREE

Applications

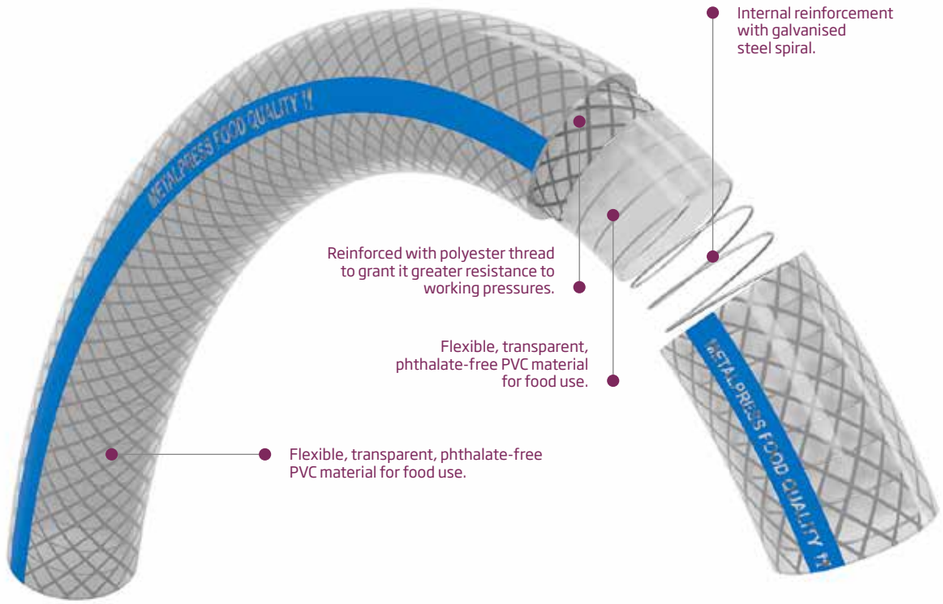
- Pumping and suction of liquid foods that require food simulant D2 in OM2 conditions in accordance with Regulation EU 10/2011.

INT ø mm	INT ø in	WALL THICKNESS mm	WEIGHT g/m	OPERATING PRESSURE bar	MINIMUM BURST PRESSURE bar	BENDING RADIUS mm	VACUUM m H_2O
25	1"	4.5	458	5	16	125	9
30	1" 1/8	4.5	555	5	16	150	9
35	1" 3/8	4.5	640	5	16	175	9
40	1" 5/8	5.0	722	5	16	200	9
45	1" 3/4	5.5	850	5	16	225	9
51	2"	5.5	1020	5	16	250	9
60	2" 1/4	5.5	1360	5	16	300	9
63	1" 1/2	5.5	1450	5	16	325	9
70	2" 3/4	6.0	1600	5	16	350	9
76	3"	6.5	1700	5	16	375	9
80	3" 1/8	7.0	1870	4	12.5	400	9
90	3" 1/2	7.5	2210	4	12.5	450	9
102	4"	8.0	2800	3	9.5	500	9
110	4" 5/16	8.5	3060	3	9.5	550	9

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters.

Metalpress® Food

Phthalate-free PVC hose with double reinforcement - textile and metal spiral - for suction and transfer of liquid foods and alcoholic liquids (50% vol.), in addition to milk products.



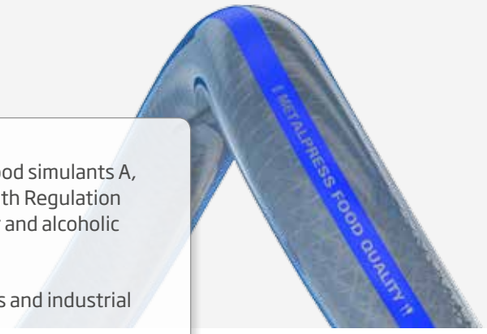
Features

- For food use in accordance with European regulations EC 1935/2004 and EU 10/2011 (see declaration of conformity).
- Good resistance to pressure and vacuum when suctioning.
- The hose wall is smooth, both inside and outside.
- Good chemical resistance associated with PVC's resistance chart.
- Recommended temperature for use between -25°C and 60°C.

INDUSTRIAL USE · FOOD USE · AGRICULTURAL USE · NAUTICAL USE · WINE TRANSPORT

HIGH QUALITY CONTROL · PHTHALATE-FREE (FREE PHTHALATES) · FREE FROM Cd / Pb / Ba (FREE Cd-Pb-Ba)

Applications



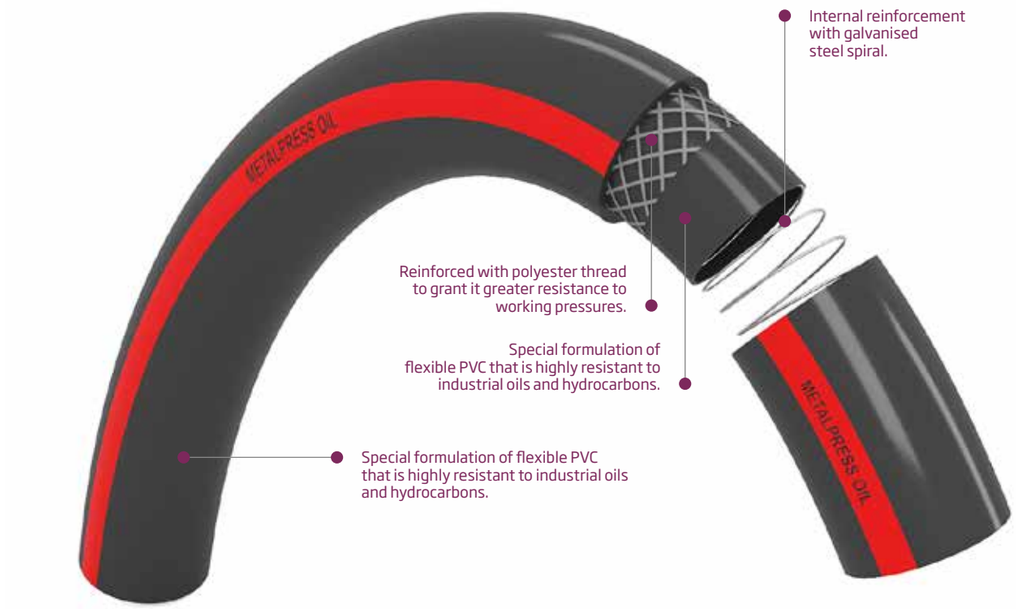
- Transfer of liquid food products that require food simulants A, B, C and D1 in OM2 conditions in accordance with Regulation EU 10/2011, such as wine, must, beer, vinegar and alcoholic liquids up to 50% vol. and milk products.
- Irrigation systems, cleaning of large containers and industrial equipment in general.

INT ø mm	INT ø in	EXT ø mm	WEIGHT g/m	OPERATING PRESSURE bar	MINIMUM BURST PRESSURE bar	BENDING RADIUS mm	VACUUM m H_2O
19	3/4	28	475	16	48	60	9
25	1"	35	680	16	48	70	9
32	1" 1/4	42	800	16	48	80	9
35	1" 3/8	47	1100	14	42	115	9
38	1" 1/2	51	1200	14	42	125	9
40	1" 5/8	53	1220	14	42	130	9
45	1" 3/4	58	1400	12	36	140	9
51	2"	64	1600	12	36	150	9
60	2" 1/4	74	2000	12	36	180	9
63	2" 1/2	77	2100	12	36	190	9
76	3"	92	2900	12	36	210	9
90	3" 1/2	107	3500	10	30	250	9
102	4"	119	4000	10	30	300	9

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters.

Metalpress® Oil

Phthalate-free PVC hose with double reinforcement - textile and metal spiral - for suction and transfer of industrial oils and fuels.



Features

- For industrial use.
- Special formulation for industrial oils and hydrocarbons (diesel, gasoline, etc.).
- Good resistance to pressure and vacuum when suctioning.
- The hose wall is smooth, both inside and outside.
- Good chemical resistance associated with PVC's resistance chart.
- Recommended temperature for use between -20°C and 70°C.

INDUSTRIAL USE · AGRICULTURAL USE · NAUTICAL USE · RESISTANT TO HYDROCARBONS · HIGH QUALITY CONTROL · FREE FROM Cd / Pb / Ba

Applications

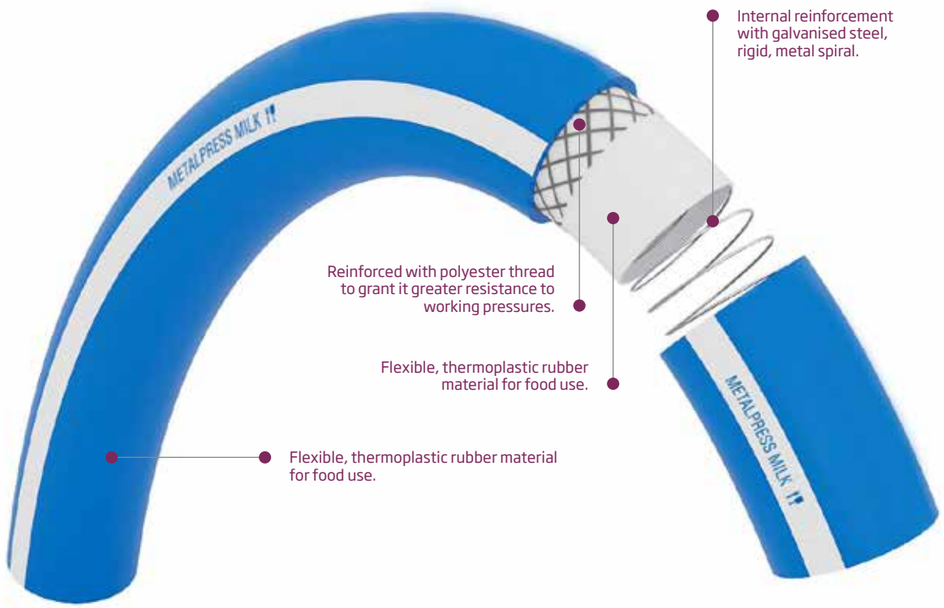
- Suction and transfer of hydrocarbons and industrial oils.

INT ø mm	INT ø in	EXT ø mm	WEIGHT g/m	OPERATING PRESSURE bar	MINIMUM BURST PRESSURE bar	BENDING RADIUS mm	VACUUM m H_2O
19	3/4	28	475	16	48	60	9
25	1"	35	680	16	48	70	9
32	1" 1/4	42	800	16	48	80	9
35	1" 3/8	47	1100	14	42	115	9
38	1" 1/2	51	1200	14	42	125	9
40	1" 5/8	53	1220	14	42	130	9
45	1" 3/4	58	1400	12	36	140	9
51	2"	64	1600	12	36	150	9
60	2" 1/4	74	2000	12	36	180	9
63	1" 1/2	77	2100	12	36	190	9
76	3"	92	2900	12	36	210	9
90	3" 1/2	107	3500	10	30	250	9
102	4"	119	4000	10	30	300	9

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters.

Metalpress® Milk

Thermoplastic rubber (TPV) hose with double reinforcement - textile and metal spiral - for suction and transfer of fatty liquid foods. Designed especially for milk products. Can be sterilised at 90°C.



Features

- For food use according to FDA 21 CFR section 177.2600 and ANSI/NSF Standard 51: "Food Equipment". Materials" and NSF/ ANSI Standard 61: "Drinking Water System Components" (see declaration of conformity).
- Very flexible, even at low temperatures.
- Hose with good chemical resistance to chemical products, associated with TPV's resistance chart.
- Recommended temperature for use between -30°C and 90°C.

FOOD USE · INDUSTRIAL USE · MILK PRODUCT TRANSPORT · HIGH QUALITY CONTROL · FREE FROM Cd / Pb / Ba

Applications

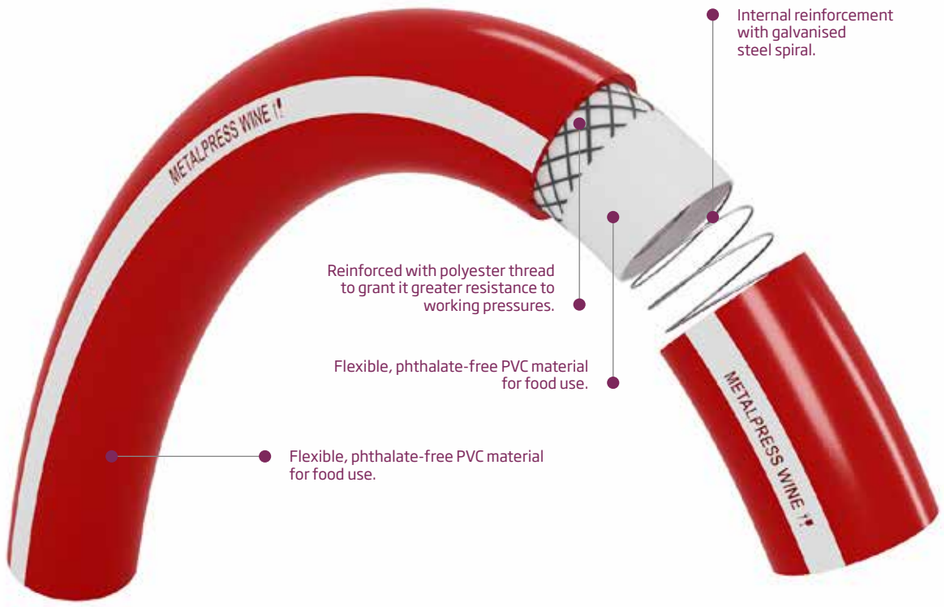
- Transfer of potable water, liquid milk products and those that are coherent with the declaration of conformity.

INT ø mm	INT ø in	EXT ø mm	WEIGHT g/m	OPERATING PRESSURE bar	MINIMUM BURST PRESSURE bar	BENDING RADIUS mm	VACUUM m H_2O
20	3/4"	28	543	16	48	55	9
25	1"	35	680	16	48	70	9
32	1" 1/4	42	800	16	48	80	9
35	1" 3/8	47	1100	14	42	115	9
38	1" 1/2	51	1200	14	42	125	9
40	1" 5/8	53	1220	14	42	130	9
45	1" 3/4	58	1400	12	36	140	9
51	2"	64	1600	12	36	150	9
60	2" 1/4	74	2000	12	36	180	9
63	2" 1/2	77	2100	12	36	190	9
76	3"	92	2900	12	36	210	9
80	3" 1/8	97	3150	12	36	230	9
90	3" 1/2	107	3500	10	30	250	9
102	4"	119	4000	10	30	300	9

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters.

Metalpress® Wine

Phthalate-free PVC hose with double reinforcement - textile and metal spiral - for suction and transfer of liquid foods and alcoholic liquids (50% vol.), in addition to milk products. Especially designed for the pumping and suction of musts, wines, beers and liqueurs. Version available with resistance up to 90°C.



Features

- For food use in accordance with European regulations EC 1935/2004 and EU 10/2011 (see declaration of conformity).
- Good resistance to pressure and vacuum when suctioning.
- The hose wall is smooth, both inside and outside.
- Good chemical resistance associated with PVC's resistance chart.
- Recommended temperature for use between -25°C and 60°C (optional version of up to 90°C).

INDUSTRIAL USE · FOOD USE · WINE TRANSPORT · HIGH QUALITY CONTROL · PHTHALATE-FREE · FREE FROM Cd / Pb / Ba

Applications

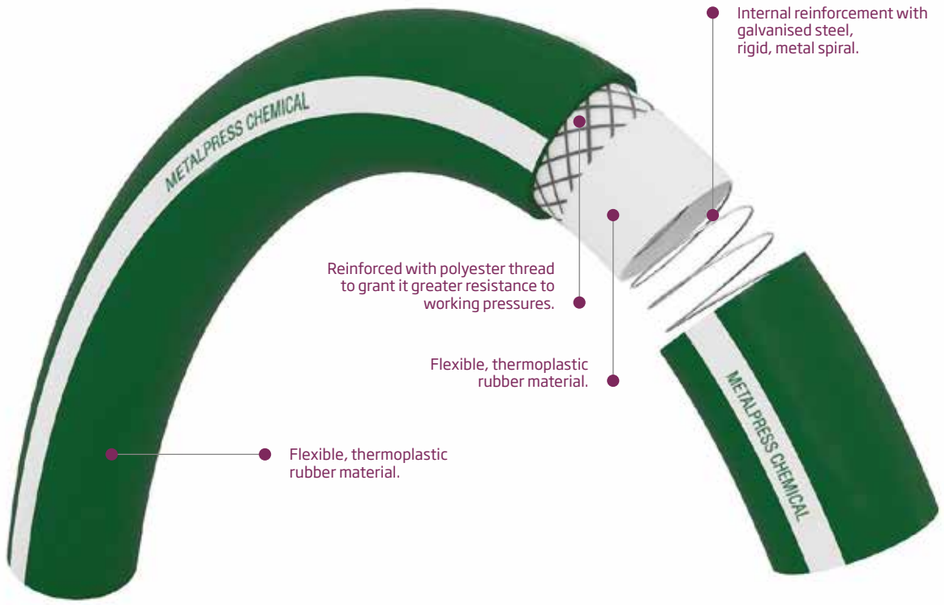
- Transfer of liquid food products that require food simulants A, B, C and D1 in OM2 conditions in accordance with Regulation EU 10/2011, such as wine, must, beer, vinegar and alcoholic liquids up to 50% vol. and milk products.
- Emptying wine tanks.

INT ø mm	INT ø in	EXT ø mm	WEIGHT g/m	OPERATING PRESSURE bar	MINIMUM BURST PRESSURE bar	BENDING RADIUS mm	VACUUM m H_2O
20	¾"	28	543	16	48	55	9
25	1"	35	680	16	48	70	9
32	1" ¼	42	800	16	48	80	9
35	1" ⅜	47	1100	14	42	115	9
38	1" ½	51	1200	14	42	125	9
40	1" ⅝	53	1220	14	42	130	9
45	1" ¾	58	1400	12	36	140	9
51	2"	64	1600	12	36	150	9
60	2" ¼	74	2000	12	36	180	9
63	2" ½	77	2100	12	36	190	9
76	3"	92	2900	12	36	210	9
80	3" ⅛	97	3150	12	36	230	9
90	3" ½	107	3500	10	30	250	9
102	4"	119	4000	10	30	300	9

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters.

Metalpress® Chemical

Thermoplastic rubber (TPV) hose with double reinforcement - textile and metal spiral - for suction and transfer of products in the chemical industry (see chemical resistance chart).



Features

- Industrial use.
- Very flexible, even at low temperatures.
- Hose with good chemical resistance to chemical products, associated with TPV's resistance chart.
- Recommended temperature for use between -25°C and 80°C.

INDUSTRIAL USE

HIGH QUALITY CONTROL

FREE PHTHALATES
PHTHALATE-FREE

FREE Cd-Pb-Ba
FREE FROM Cd / Pb / Ba

Applications

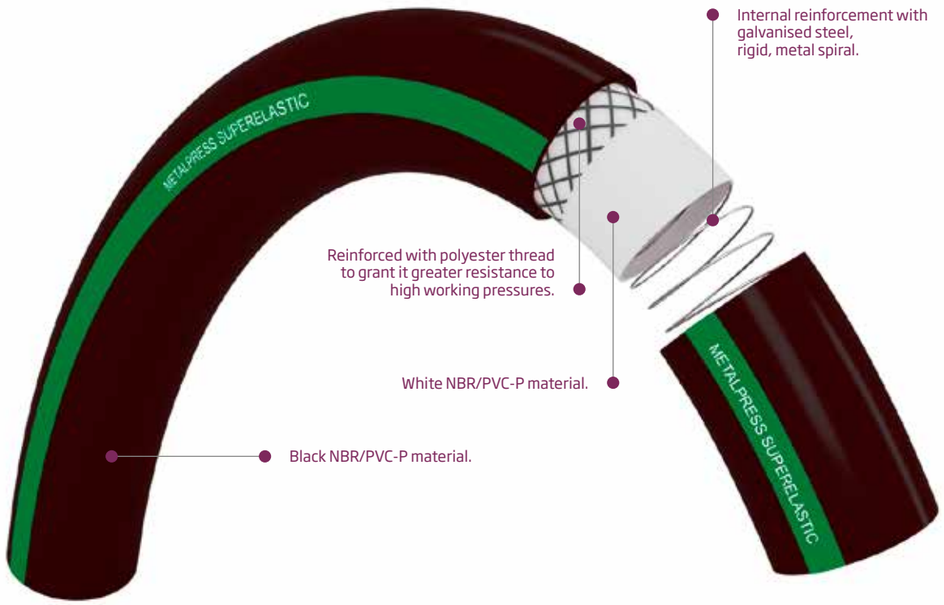
- Transfer of chemical products, associated with TPV's resistance chart.

INT ø mm	INT ø in	EXT ø mm	WEIGHT g/m	OPERATING PRESSURE bar	MINIMUM BURST PRESSURE bar	BENDING RADIUS mm	VACUUM m H_2O
20	3/4"	28	543	16	48	55	9
25	1"	16	680	48	70	70	9
32	1" 1/4	16	800	48	80	80	9
35	1" 3/8	14	1100	42	115	115	9
38	1" 1/2	14	1200	42	125	125	9
40	1" 5/8	14	1220	42	130	130	9
45	1" 3/4	12	1400	36	140	140	9
51	2"	12	1600	36	150	150	9
60	2" 1/32	12	2000	36	180	180	9
63	2" 1/2	12	2100	36	190	190	9
76	3"	12	2900	36	210	210	9
80	3" 1/8	12	3150	36	230	230	9
90	3" 1/2	10	3150	30	250	250	9
102	4"	10	4000	30	300	300	9

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters

Metalpress® Superelastic

NBR/PVC hose with double reinforcement - textile and metal spiral - for suction and transfer of liquids in the agricultural sector and industry.



Features

- For agricultural and industrial use.
- Very flexible, even at low temperatures.
- Good chemical resistance associated with PVC's resistance chart.
- Recommended temperature for use between -30°C and 55°C.

INDUSTRIAL USE

AGRICULTURAL USE

RUBBER FEEL

HIGH QUALITY CONTROL

FREE Cd-Pb-Ba

FREE FROM Cd / Pb / Ba

Applications

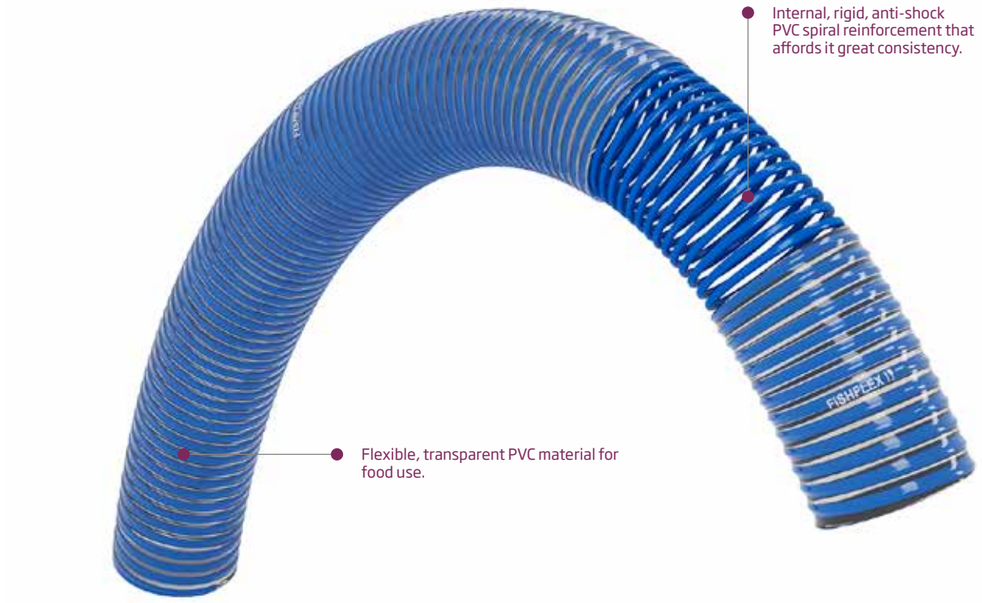
- Pumping and suction of slurries. Tanker trucks.
- Transfer of chemical products with a low aggressiveness index.
- Industrial irrigation.
- Draining cesspits.
- Given its highly flexible nature, it is recommended for use in movable tanks.

INT ø mm	INT ø in	EXT ø mm	WEIGHT g/m	OPERATING PRESSURE bar	MINIMUM BURST PRESSURE bar	BENDING RADIUS mm	VACUUM m H_2O
20	3/4"	28	543	16	48	55	9
25	1"	35	680	16	48	70	9
32	1" 1/4	42	800	16	48	80	9
35	1" 3/8	47	1100	14	42	115	9
38	1" 1/2	51	1200	14	42	125	9
40	1" 5/8	53	1220	14	42	130	9
45	1" 3/4	58	1400	12	36	140	9
51	2"	64	1600	12	36	150	9
60	2" 1/32	74	2000	12	36	180	9
63	2" 1/2	77	2100	12	36	180	9
76	3"	92	2900	12	36	210	9
80	3" 1/8	97	3150	12	36	230	9
90	3" 1/2	107	3500	10	30	250	9
102	4"	119	4000	10	30	300	9

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters.

Fishflex®

Hose for pumping and transferring fish through sea water. Highly resistant to salt, with a rigid, anti-shock spiral to protect the fish being piped.



Features

- For food use in accordance with European regulations EC 1935/2004 and EU 10/2011 (see declaration of conformity).
- Made of flexible, transparent PVC designed especially to withstand sea water.
- The hose wall is smooth on the inside and corrugated on the outside.
- Good chemical resistance associated with PVC's resistance chart.
- Recommended temperature for use between -25°C and 60°C.

FOOD USE · INDUSTRIAL USE · AGRICULTURAL USE · RESISTANT TO SEA SALT · HIGH QUALITY CONTROL · FREE FROM Cd / Pb / Ba

Applications

- Transfer of fish via sea water pumping.
- Transfer of liquid food products that require food simulants A, D2/3 in OM3 conditions in accordance with Regulation EU 10/2011.
- Piping salt water.

INT ø mm	INT ø in	WALL THICKNESS mm	WEIGHT g/m	OPERATING PRESSURE bar	MINIMUM BURST PRESSURE bar	BENDING RADIUS mm	VACUUM m H_2O
63	1" ½	4.5	1029	6	18	315	9
102	4"	8.5	2900	4	12	500	9
152	6"	11.5	5600	3	9	750	9
203	8"	13.5	9000	2	6	1015	9
254	10"	16	13600	1.5	4.5	1250	9
305	12"	17	19000	1	3	1500	9

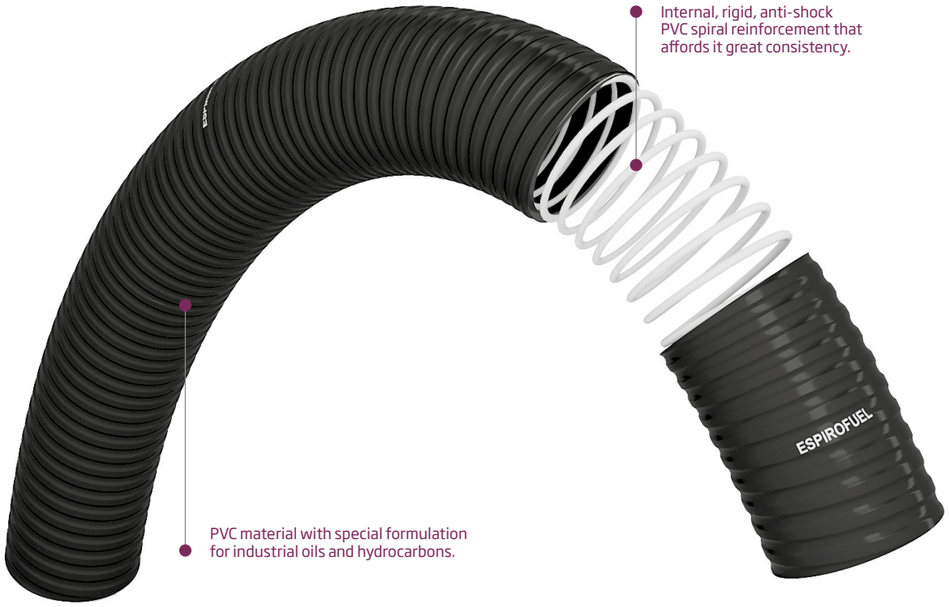
Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters.

Espirofuel®

Hose with special stability when dealing with hydrocarbons, gasoline and fuel, which makes it perfect for pumping and suctioning petroleum products and industrial oils.

Applications

- Suction and transfer of hydrocarbons and industrial oils.



Features

- For industrial use.
- Special formulation for industrial oils and hydrocarbons, diesel, gasoline, etc.
- The hose wall is smooth on the inside and corrugated on the outside.
- Good chemical resistance associated with PVC's resistance chart.
- Recommended temperature for use between -25°C and 70°C.

INDUSTRIAL USE

AGRICULTURAL USE

RESISTANT TO HYDROCARBONS

HIGH QUALITY CONTROL

FREE Cd-Pb-Ba

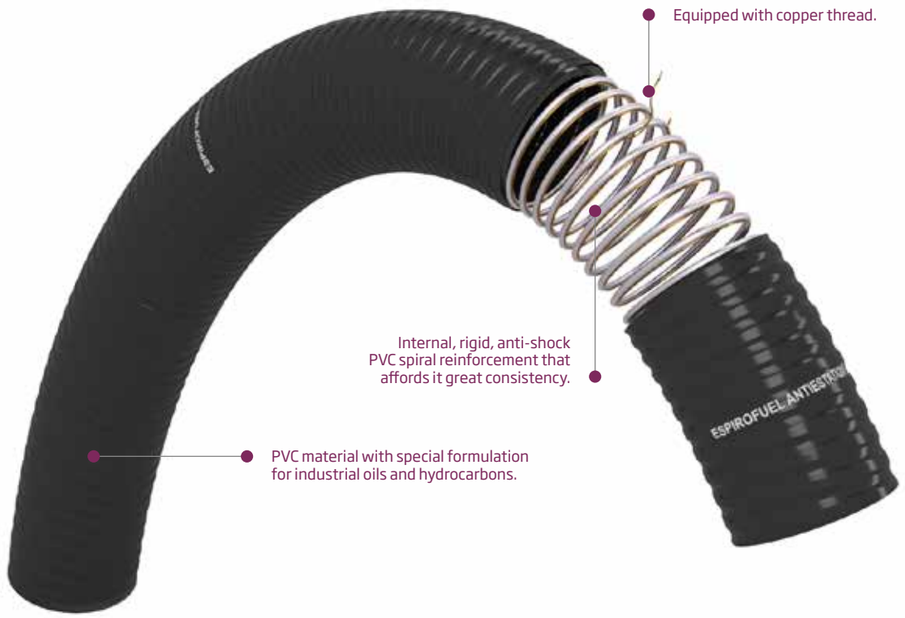
FREE FROM Cd / Pb / Ba

INT ø mm	INT ø in	WALL THICKNESS mm	WEIGHT g/m	OPERATING PRESSURE bar	MINIMUM BURST PRESSURE bar	BENDING RADIUS mm	VACUUM m H_2O
25	1"	4.3	550	7	21	160	9
30	1" 1/8	4.5	680	5	15	192	9
35	1" 3/8	750	5	15	224	224	9
40	1" 5/8	850	5	15	256	256	9
45	1" 3/4	1000	5	15	288	288	9
51	2"	1200	5	15	320	320	9
55	2" 1/8	1400	5	15	350	350	9
60	2" 1/4	1600	5	15	384	384	9
63	2" 1/2	1700	5	15	403	403	9
70	2" 3/4	1900	5	15	448	448	9
76	3"	2000	5	15	480	480	9
80	3" 1/8	2200	4	12	512	512	9
90	3" 1/2	2600	4	12	576	576	9
102	4"	3300	4	12	640	640	9
110	4" 5/16	3610	4	12	700	700	9

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters.

Espirofuel® Antiestático

Hose with special stability when dealing with hydrocarbons, gasoline and fuel, which makes it perfect for pumping and suctioning petroleum products and industrial oils. An antistatic product suitable for facilities governed by ATEX regulations.



Features

- For industrial use.
- Special formulation for industrial oils and hydrocarbons, diesel, gasoline, etc.
- Equipped with a copper wire that makes it antistatic.
- The hose wall is smooth on the inside and corrugated on the outside.
- Good chemical resistance associated with PVC's resistance chart.
- Recommended temperature for use between -25°C and 70°C.

INDUSTRIAL USE · AGRICULTURAL USE · RESISTANT TO HYDROCARBONS · ANTISTATIC · HIGH QUALITY CONTROL · FREE FROM Cd / Pb / Ba

Applications

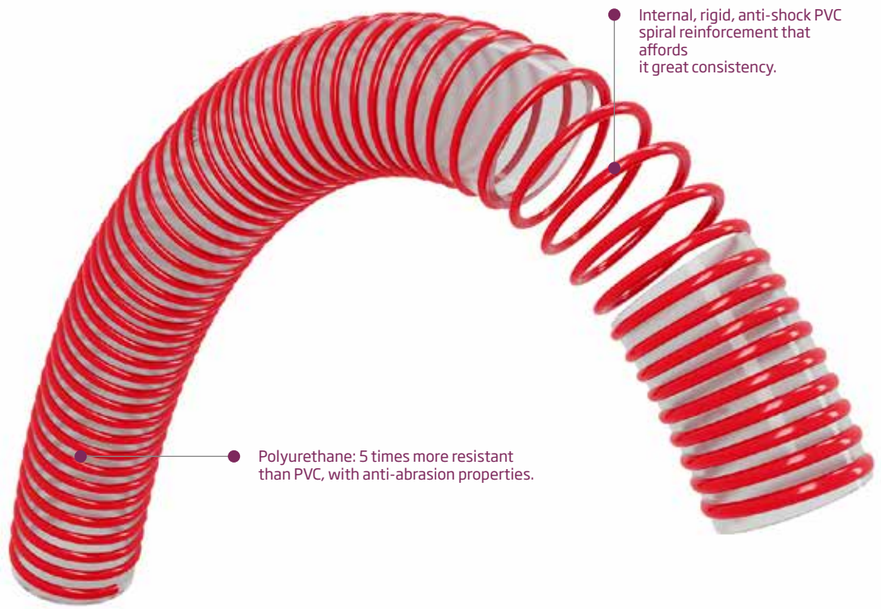
- Suction and transfer of hydrocarbons and industrial oils.

INT ø mm	INT ø in	WALL THICKNESS mm	WEIGHT g/m	OPERATING PRESSURE bar	MINIMUM BURST PRESSURE bar	BENDING RADIUS mm	VACUUM m H_2O
25	1"	4.3	550	7	21	160	9
30	1" 1/8	4.5	680	5	15	192	9
35	1" 3/8	4.5	750	5	15	224	9
40	1" 5/8	4.5	850	5	15	256	9
45	1" 3/4	5.5	1000	5	15	288	9
51	2"	5.5	1200	5	15	320	9
55	2" 1/8	5.5	1400	5	15	350	9
60	2" 1/4	6	1600	5	15	384	9
63	2" 1/2	6	1700	5	15	403	9
70	2" 3/4	6.3	1900	5	15	448	9
76	3"	6.5	2000	5	15	480	9
80	3" 1/8	6.7	2200	4	12	512	9
90	3" 1/2	7	2600	4	12	576	9
102	4"	7	3300	4	12	640	9
110	4"	7	3610	4	12	700	9

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters.

Espiroliquid® PU

Pumping and suction polyurethane hose with a PVC spiral for highly abrasive liquids (rebar, mud, sand, etc.). Five times more resistant to abrasion than PVC.



Features

- For food use in accordance with European regulations EC 1935/2004 and EU 10/2011 (see declaration of conformity).
- Smooth internal surface to prevent the formation of sediments on the walls. Corrugated external surface.
- Good chemical resistance associated with PU's resistance chart and very good resistance to hydrolysis.
- Full flexibility (bending radius = internal diameter), which grants this hose great mechanical possibilities. Extremely light.
- Recommended temperature for use between -20°C and 80°C.

Applications

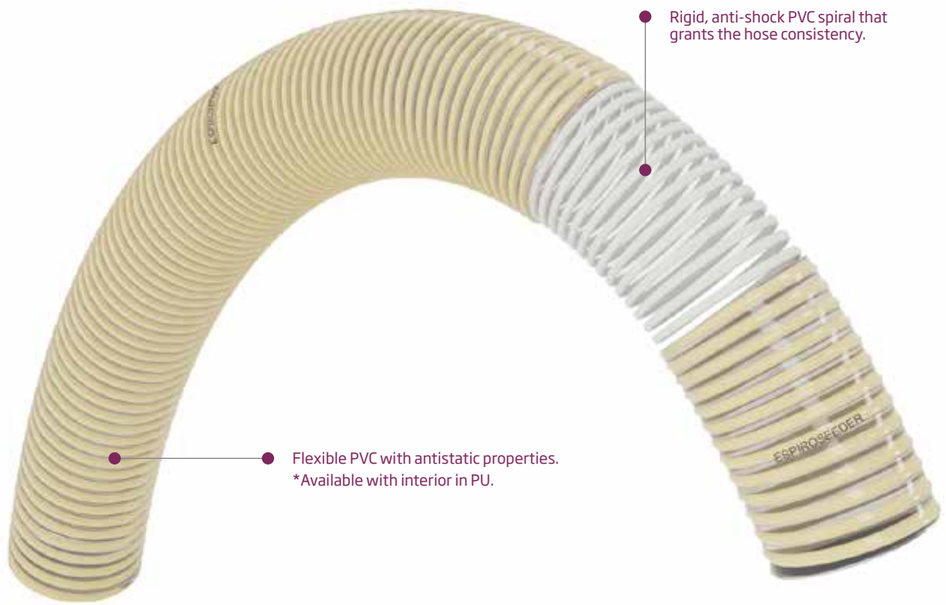
- Suction of abrasive material.

INT ø mm	INT ø in	EXT ø mm	FLEXIBLE THICKNESS mm	WEIGHT g/m	OPERATING PRESSURE bar	MINIMUM BURST PRESSURE bar	VACUUM m H_2O
20	3/4"	27	0.9	194	5	15	9
22	7/8"	29	0.9	200	5	15	9
25	1"	31	0.9	208	5	15	9
30	1" 1/8	38	1.0	320	5	15	9
35	1" 3/8	41	1.0	364	4.5	13.5	9
40	1" 5/8	48	1.0	408	4	12	9
45	1" 3/4	54	1.0	486	3.5	10.5	9
51	2"	59	1.0	582	3	9	9
55	2" 1/8	64	1.1	672	3	9	9
60	2" 1/32	70	1.1	776	3	9	9
63	2" 1/2	73	1.1	884	3	9	9
70	2" 3/4	81	1.1	970	2.5	7.5	9
76	3"	86	1.1	1068	2.5	7.5	9
80	3" 1/8	92	1.1	1164	2.5	7.5	9
90	3" 1/2	102	1.2	1358	2	6	9
102	4"	113	1.2	1552	2	6	9
110	4" 5/16	123	1.2	1920	2	6	9
127	5"	143	1.2	2548	1.5	4.5	9
140	5" 1/2	157	1.5	3150	1	3	9
152	6"	170	1.5	3440	1	3	9

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters

Espiroseeder®

Flexible PVC hose, reinforced with a rigid, anti-shock PVC spiral equipped with antistatic material.



Features

- For industrial and agricultural use.
- Flexible, translucent PVC with a special formulation of low, superficial electrical resistivity, which grants the hose antistatic properties. (10^9< K.I.< 10^11 Ω.m).
- The hose wall surface is smooth, both inside and outside.
- Good chemical resistance associated with PVC's resistance chart.
- Recommended temperature for use between -20°C and 60°C.

INDUSTRIAL USE · AGRICULTURAL USE · SMOOTH INTERIOR · PVC SPIRAL · HIGH QUALITY CONTROL · FREE FROM Cd / Pb / Ba · ANTISTATIC

Applications

- Pumping of seeds in sowing machines.
- Pumping and suction of liquids in applications where the hose must have antistatic properties.
- Available with interior in PU.

INT ø mm	INT ø in	WALL THICKNESS mm	WEIGHT g/m	OPERATING PRESSURE bar	MINIMUM BURST PRESSURE bar	BENDING RADIUS mm	VACUUM m H_2O
30	1" 1/8	2.6	345	4	12	60	9
32	1" 1/4	2.6	365	4	12	60	9
35	1" 3/8	2.6	395	4	12	70	9

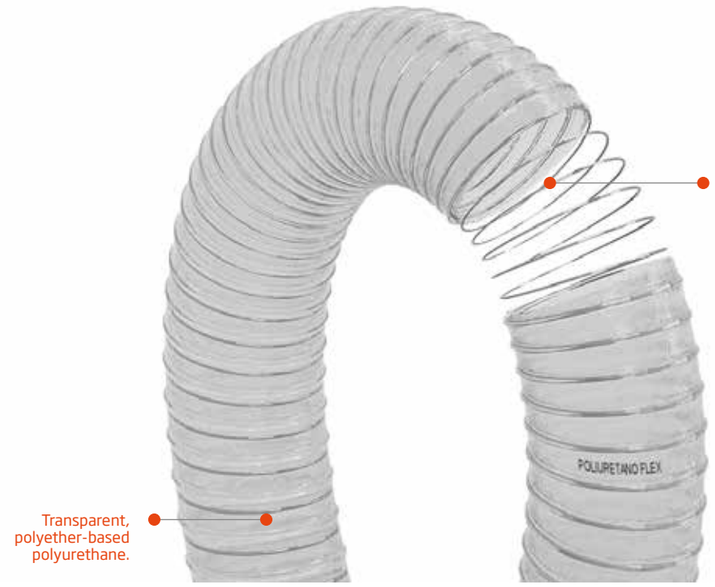
Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters

Air

Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features.

Poliuretano Flex®

Flexible, transparent, polyether-based polyurethane hose and an internal, antistatic, galvanised steel spiral that is suitable for facilities governed by ATEX regulations for the suction of low-abrasion products.



Features

- For food use in accordance with European regulations EC 1935/2004 and EU 10/201 (see declaration of conformity).
- Highly flexible and resistant to abrasion, humidity and microorganisms.
- Good chemical resistance associated with PU's resistance chart.
- Withstands temperatures between -30°C and 80°C.
- Option of manufacture with polyester base subject to request.
- The product is compacted when supplied.

Applications

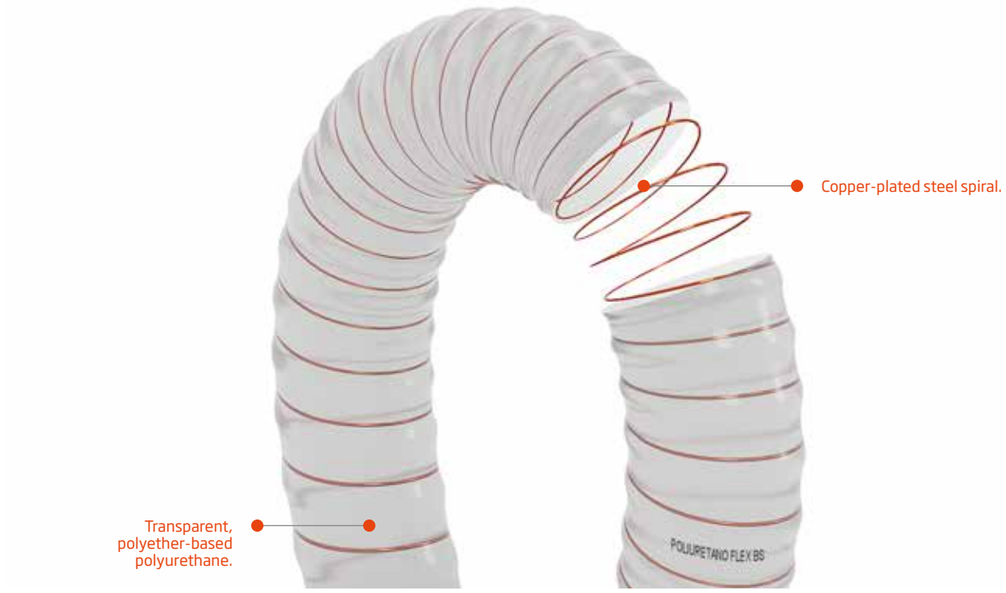
- Suction of abrasive content, gases from oils, smoke, sawdust, vapours, etc. in addition to food products that require food simulant E in OM2 conditions in accordance with Regulation EU 10/2011.

INT ø mm	INT ø in	FLEXIBLE THICKNESS mm	WEIGHT g/m	BENDING RADIUS mm	VACUUM m H_2O
40	1" 5/8	0.4	200	40	5
45	1" 3/4	0.4	225	45	4.5
51	2"	0.4	250	50	4
60	2" 1/4	0.45	300	60	3
63	2" 1/2	0.45	315	63	3
63	2" 1/2	0.45	325	65	2.5
70	2" 3/4	0.45	335	70	2
76	3"	0.45	340	76	2
80	3" 1/8	0.45	360	80	1.5
90	3" 1/2	0.45	380	90	1.5
102	4"	0.45	450	100	1.5
110	4" 5/16	0.5	520	110	1.5
120	4" 3/4	0.5	560	120	1.5
127	5"	0.5	590	125	1.5
130	5" 1/4	0.5	600	130	1.5
140	5" 1/2	0.5	650	140	1.5
152	6"	0.5	820	150	1
160	6" 1/4	0.5	880	160	1
180	7"	0.5	990	180	1
203	8"	0.5	1100	200	1
254	10"	0.5	1300	250	1
305	12"	0.5	1400	300	0.5
356	14"	0.5	1980	350	0.5
406	16"	0.5	2100	400	0.5
500	20"	0.5	2500	500	0.4
550	22"	0.6	2650	550	0.4
600	24"	0.6	2900	600	0.3

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters

Poliuretano Flex® BS

Flexible, transparent, polyether-based polyurethane hose and an internal, antistatic, copper-plated steel spiral that is suitable for facilities governed by ATEX regulations for the suction of low-abrasion products.



Features

- For industrial use.
- Highly flexible and resistant to abrasion, humidity and microorganisms.
- Good chemical resistance associated with PU's resistance chart.
- Withstands temperatures between -20°C and 70°C.
- The product is compacted when supplied.

Applications

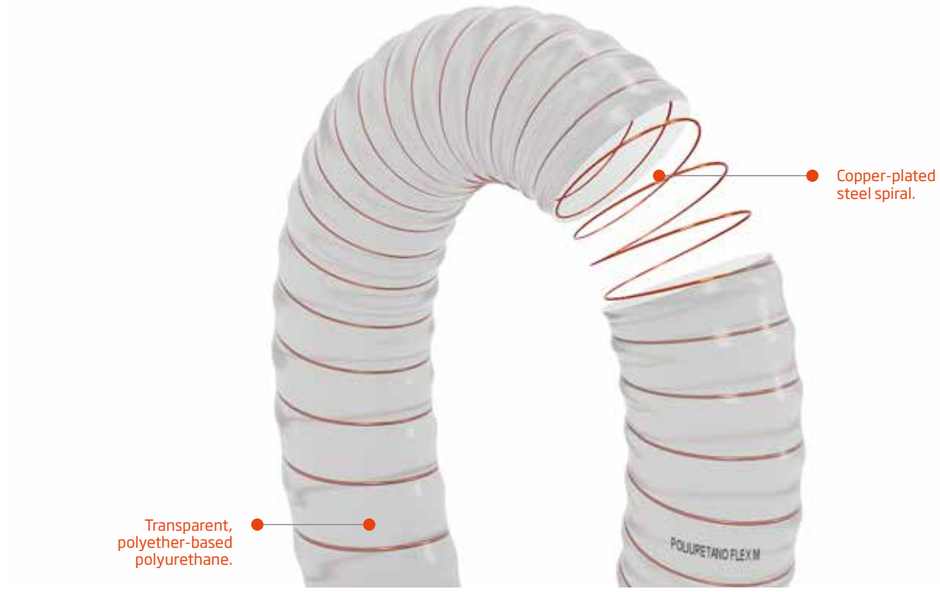
- Suction of abrasive content, gases from oils, smoke, sawdust, vapours, etc.
- Ventilation and supply of air with low-abrasion loads.

INT ø mm	INT ø in	FLEXIBLE THICKNESS mm	WEIGHT g/m	BENDING RADIUS mm	VACUUM m H_2O
40	1" 5/8	0.4	230	40	5
45	1" 3/4	0.4	250	45	5
51	2"	0.4	280	50	1.5
60	2" 1/32	0.4	340	60	4
63	2" 1/2	0.4	360	63	3
70	3"	0.4	390	70	3
76	3" 1/8	0.4	410	76	2
80	3" 1/2	0.4	440	80	2
90	2"	0.4	490	90	1.5
102	4"	0.5	510	100	1.5
110	4" 5/16	0.5	560	110	1.5
120	4" 3/4	0.5	610	120	1.5
127	5"	0.5	630	125	1.5
130	5" 1/4	0.5	660	130	1.5
140	5" 1/2	0.5	760	140	1.5
152	6"	0.5	790	152	1.0
160	6" 1/4	0.5	880	160	1.0
170	6" 3/4	0.5	915	170	1.0
180	7"	0.5	950	180	1.0
203	8"	0.5	1030	200	1.0
210	8" 1/4	0.5	1100	210	1.0
220	8" 3/4	0.5	1175	220	1.0
225	9"	0.5	1200	225	1.0
254	10"	0.5	1475	254	1.0
305	12"	0.5	1980'	305	0.5
356	14"	0.5	2000	350	0.5
406	16"	0.5	2070	400	0.5
450	18"	0.5	2300	450	0.5
500	20"	0.5	2600	500	0.5
600	24"	0.5	3100	600	0.5

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters

Poliuretano Flex® M

Flexible, transparent, polyether-based polyurethane hose and an internal, antistatic, copper-plated steel spiral that is suitable for facilities governed by ATEX regulations for the suction of medium-abrasion products.



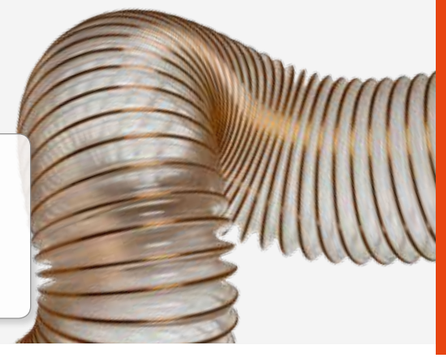
Features

- For food use in accordance with European regulations EC 1935/2004 and EU 10/201 (see declaration of conformity).
- Highly resistant to abrasion, humidity and microorganisms.
- Good chemical resistance associated with PU's resistance chart.
- Withstands temperatures between -30°C and 80°C.
- Option of manufacture with polyester base subject to request.
- The product is compacted when supplied.

INDUSTRIAL USE · FOOD USE · COPPER-PLATED SPIRAL · SUCTION · MADE FROM POLYURETHANE · ANTI-ABRASION · ANTISTATIC

Applications

- Suction of abrasive content, gases from oils, smoke, sawdust, vapours, etc. in addition to food products that require food simulant E in OM2 conditions in accordance with Regulation EU 10/2011.

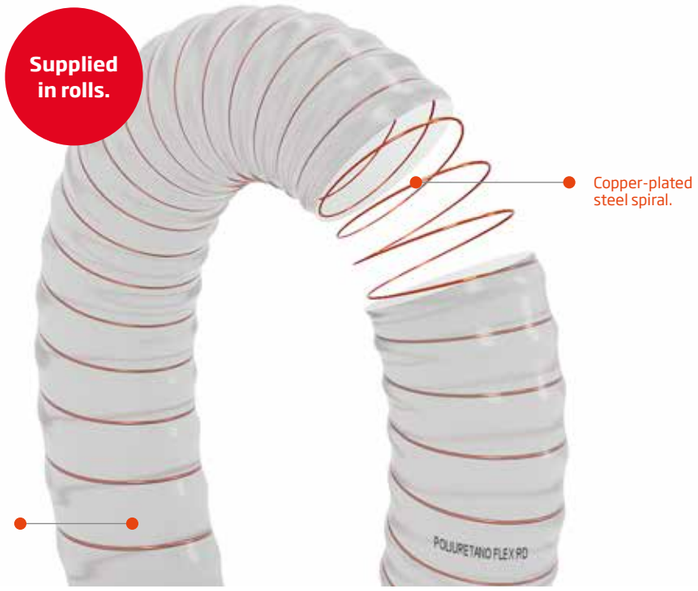


INT ø mm	INT ø in	FLEXIBLE THICKNESS mm	WEIGHT g/m	BENDING RADIUS mm	VACUUM m H_2O
40	1" 5/8	0.4	230	30	6.0
45	1" 3/4	0.4	245	35	5.5
51	2"	0.45	300	40	5.0
60	2" 1/4	0.45	315	45	4.0
63	2" 1/2	0.45	320	50	4.0
63	2" 1/2	0.45	330	55	3.5
70	2" 3/4	0.45	370	60	3.0
76	3"	0.55	400	60	3.0
80	3" 1/8	0.55	445	65	2.5
90	3" 1/2	0.6	500	75	2.5
102	4"	0.6	675	85	2.5
110	4" 5/16	0.6	725	90	2.5
120	4" 3/4	0.6	790	95	2.5
127	5"	0.6	875	100	2.5
130	5" 1/4	0.6	900	105	2.5
135	5" 1/4	0.6	960	110	2.5
140	5" 1/2	0.6	980	115	2.0
152	6"	0.6	1030	120	2.0
160	6" 1/4	0.6	1135	130	2.0
170	6" 3/4	0.6	1150	135	2.0
180	7"	0.6	1300	150	2.0
203	8"	0.6	1400	165	1.5
220	8" 3/4	0.6	1460	170	1.5
225	9"	0.6	1480	190	1.0
254	10"	0.60	1850	230	1.0
305	12"	0.70	2075	240	1.0
320	12" 3/4	0.70	2280	270	0.80
356	14"	0.70	2610	305	0.70
406	16"	0.70	3100	340	0.70
500	20"	0.70	3250	375	0.70
550	22"	0.70	3600	415	0.5
600	24"	0.70	4170	450	0.5

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about
the minimum purchase amounts assigned to non-standard diameters

Poliuretano Flex® RD

Flexible, transparent, polyester-based polyurethane hose and an internal, antistatic, copper-plated steel spiral that is suitable for facilities governed by ATEX regulations for the suction of very high-abrasion products.



Features

- For food use in accordance with European regulations EC 1935/2004 and EU 10/2011 (see declaration of conformity).
- Highly resistant to abrasion, vapours from chemical products, and fats and oils in their content.
- Good chemical resistance associated with PU's resistance chart.
- Withstands temperatures between -30°C and 80°C.
- Product supplied in rolls.

INDUSTRIAL USE · FOOD USE · COPPER-PLATED SPIRAL · SUCTION · MADE FROM POLYURETHANE · ANTI-ABRASION · ANTISTATIC

Applications

- Ventilation and suction of very high-abrasion materials.
- Suction of abrasive content, gases from oils, smoke, sawdust, vapours, etc. in addition to food products that require food simulant E in OM2 conditions in accordance with Regulation EU 10/2011.

INT ø mm	INT ø in	FLEXIBLE THICKNESS mm	WEIGHT g/m	BENDING RADIUS mm	VACUUM m H_2O
40	1" 5/8	0.4	230	40	6.0
45	1" 3/4	0.4	245	45	5.5
51	2"	0.45	300	50	5.0
60	2" 1/4	0.45	315	60	4.0
63	2" 1/2	0.45	330	65	4.0
70	2" 3/4	0.45	370	70	3.5
76	3"	0.55	400	75	3.0
80	3" 1/8	0.55	445	80	3.0
90	3" 1/2	0.6	500	90	2.5
102	4"	0.6	675	100	2.5
110	4" 5/16	0.6	725	110	2.5
120	4" 3/4	0.6	790	120	2.5
127	5"	0.6	875	125	2.5
130	5" 1/4	0.6	900	130	2.5
135	5" 1/4	0.6	960	135	2.5
140	5" 1/2	0.6	980	140	2.5
152	6"	0.6	1030	150	2.0
160	6" 1/4	0.6	1135	160	2.0
170	6" 3/4	0.6	1150	170	2.0
180	7"	0.6	1300	180	2.0
203	8"	0.6	1400	200	2.0
220	8" 3/4	0.6	1460	220	1.5
254	10"	0.6	1850	250	1.0
305	12"	0.7	2075	300	1.0
356	14"	0.7	2610	350	0.8
406	16"	0.7	3100	400	0.7
500	20"	0.7	3250	500	0.6
550	22"	0.7	3600	550	0.6
600	24"	0.7	4170	600	0.5

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters

Poliuretano Flex® H

Flexible, transparent, polyether-based polyurethane hose and an internal, antistatic, copper-plated steel spiral that is suitable for facilities governed by ATEX regulations for the suction of high-abrasion products.

Applications

- Suction of highly abrasive food material that requires the food simulant E in OM2 conditions in accordance with Regulation EU 10/2011.

Supplied in rolls.

Features

- For food use in accordance with European regulations EC 1935/2004 and EU 10/201 (see declaration of conformity).
- Highly resistant to abrasion, humidity and microorganisms.
- Good chemical resistance associated with PU's resistance chart.
- Withstands temperatures between -30°C and 80°C.
- Option of manufacture with polyester base subject to request.
- Product supplied in rolls.

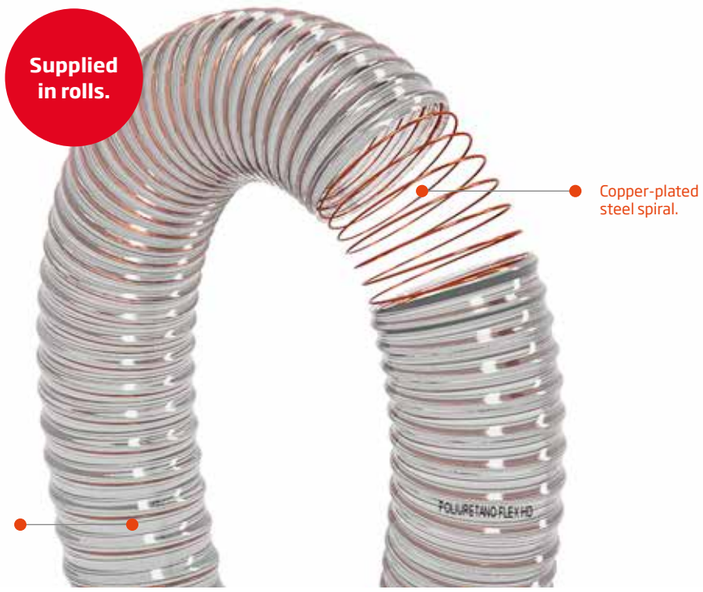
INDUSTRIAL USE · FOOD USE · COPPER-PLATED SPIRAL · SUCTION · MADE FROM POLYURETHANE · ANTI-ABRASION · ANTISTATIC

INT ø mm	INT ø in	FLEXIBLE THICKNESS mm	WEIGHT g/m	BENDING RADIUS mm	VACUUM m H_2O
40	1" 5/8	1	460	80	6
45	1" 3/4	1	510	90	5.5
51	2"	1	560	100	5
60	2" 1/4	1	660	120	4.5
70	2" 3/4	1	775	140	4
76	3"	1	825	150	3.5
80	3" 1/8	1.1	875	160	3
90	3" 1/2	1.1	980	180	3
102	4"	1.1	1000	200	2.5
110	4" 5/16	1.1	1100	220	2.5
120	4" 3/4	1.1	1275	240	2
127	5"	1.1	1350	250	2
130	5" 1/4	1.1	1380	260	2
140	5" 1/2	1.1	1450	280	2
152	6"	1.1	1550	300	2
160	6" 1/4	1.1	1625	320	2
180	7"	1.1	1850	360	2
203	8"	1.1	2100	400	1.8
225	9"	1.1	2300	450	1.8
254	10"	1.1	2600	500	1.5
280	11"	1.1	2850	560	1.5
305	12"	1.1	3100	600	1.5
356	14"	1.1	3200	700	1
406	16"	1.1	3600	800	0.8
450	18"	1.1	3750	900	0.8
500	20"	1.1	5000	1000	0.8
550	22"	1.1	5300	1100	0.7
600	24"	1.1	5600	1200	0.7

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters

Poliuretano Flex® HD

Flexible, transparent, polyether-based polyurethane hose and an internal, antistatic, copper-plated steel spiral that is suitable for facilities governed by ATEX regulations for the suction of very high-abrasion products.



Features

- For food use in accordance with European regulations EC 1935/2004 and EU 10/201 (see declaration of conformity).
- Highly resistant to abrasion, humidity and microorganisms.
- Good chemical resistance associated with PU's resistance chart.
- Withstands temperatures between -30°C and 80°C.
- Option of manufacture with polyester base subject to request.
- Product supplied in rolls.

INDUSTRIAL USE · FOOD USE · COPPER-PLATED SPIRAL · SUCTION · MADE FROM POLYURETHANE · ANTI-ABRASION · ANTISTATIC

Applications

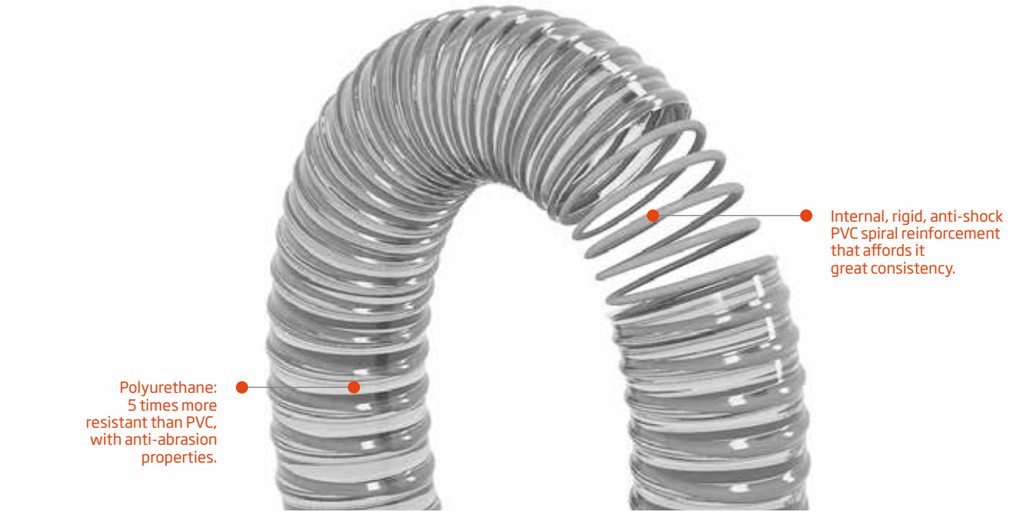
- Suction of extremely abrasive content (iron, rebar, glass). Suction cleaning machinery in forests, roads, etc.
- Suction of highly abrasive food material that requires the food simulant E in OM2 conditions in accordance with Regulation EU 10/2011.

INT ø mm	INT ø in	FLEXIBLE THICKNESS mm	WEIGHT g/m	BENDING RADIUS mm	VACUUM m H_2O
45	1" 3/4	1.6	525	180	6
51	2"	1.6	560	200	6
60	2" 1/4	1.6	645	240	5
76	3"	1.6	900	305	5
80	3" 1/8	1.6	960	320	5
90	3" 1/2	1.6	1050	360	5
102	4"	1.6	1300	410	5
110	4" 5/16	1.6	1325	440	5
120	4" 3/4	1.6	1350	480	4
125	5"	1.6	1450	510	3
140	5" 1/2	1.6	1525	540	3
152	6"	1.6	1750	610	3
160	6" 1/4	1.6	1800	640	3
180	7"	1.6	2400	720	2
200	8"	1.6	2650	800	2
220	8" 3/4	1.6	3125	880	2
225	9"	1.6	3250	900	2
250	10"	1.6	3350	1000	2
300	12"	1.6	3500	1200	2

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters

Espiro® PU

Transparent, polyether-based polyurethane pumping and suction hose, reinforced with a rigid, anti-shock PVC spiral, for abrasive products.



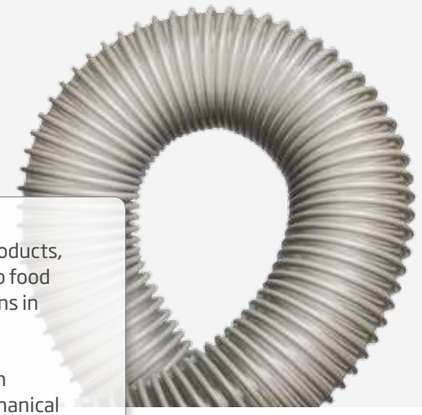
Features

- For food use in accordance with European regulations EC 1935/2004 and EU 10/2011 (see declaration of conformity).
- Great flexibility (bending radius = internal diameter). Extremely light.
- Highly resistant to abrasion, humidity and microorganisms.
- The hose wall is smooth on the inside and corrugated on the outside.
- Good chemical resistance associated with PU's resistance chart.
- Recommended temperature for use between -20°C and 80°C.
- Option of manufacture with polyester base subject to request.

INDUSTRIAL USE · FOOD USE · AGRICULTURAL USE · SUCTION · SMOOTH INTERIOR · ANTI-ABRASION

PU — MADE FROM POLYURETHANE · PVC — PVC SPIRAL · +80°C / -20°C — TEMPERATURE -20°C TO 80°C · FREE Cd-Pb-Ba — FREE FROM Cd / Pb / Ba

Applications



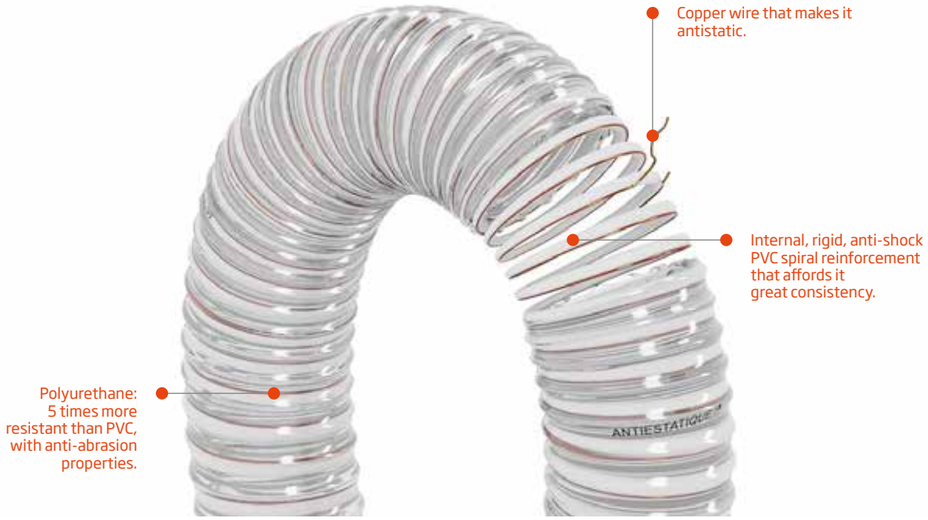
- Pumping and suction of gases, smoke and abrasive products, such as sawdust, pellets, rebar and dust, in addition to food products that require food simulant E in OM2 conditions in accordance with Regulation EU 10/2011.
- Suction of abrasive material in industrial facilities with special need for resistance to abrasion, constant mechanical movement, and the application of force or repetitive impacts.

INT ø mm	INT ø in	FLEXIBLE THICKNESS mm	WEIGHT g/m	BENDING RADIUS mm	VACUUM m H_2O
25	1"	0.5	154	25	3
32	1" 1/4	0.5	180	32	3
35	1" 3/8	0.5	195	35	3
38	1" 1/4	0.5	225	38	3
40	1" 5/8	0.5	250	40	3
45	1" 3/4	0.5	260	45	3
51	2"	0.5	300	50	3
60	2" 1/4	0.5	425	60	3
63	2" 1/2	0.5	445	60	3
70	2" 3/4	0.5	500	70	3
76	3"	0.5	550	75	3
80	3" 1/8	0.5	590	80	3
90	3" 1/2	0.6	670	90	3
102	4"	0.6	870	100	3
110	4" 5/16	0.6	950	110	3
120	4" 3/4	0.6	1000	120	3
127	5"	0.6	1100	125	3
130	5" 1/4	0.6	1200	130	3
140	5" 1/2	0.7	1300	140	3
152	6"	0.7	1500	150	3
160	6" 1/4	0.8	1700	160	3
170	6" 3/4	0.8	1900	170	3
180	7"	0.8	1950	180	3
203	8"	1	2200	200	3
254	10"	1	2600	250	3
305	12"	1	3425	300	3

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters

Espiro® PU Antiestático

Transparent, polyether-based polyurethane pumping and suction hose, reinforced with a rigid, anti-shock PVC spiral, for abrasive products. Equipped with a copper wire that grants it an antistatic feature, making it perfect for facilities governed by ATEX regulations.



Features

- For food use in accordance with European regulations EC 1935/2004 and EU 10/2011 (see declaration of conformity).
- Great flexibility (bending radius = internal diameter). Extremely light.
- Highly resistant to abrasion, humidity and microorganisms.
- The hose wall is smooth on the inside and corrugated on the outside.
- Good chemical resistance associated with PU's resistance chart.
- Recommended temperature for use between -20°C and 80°C.
- Option of manufacture with polyester base subject to request.

INDUSTRIAL USE · FOOD USE · AGRICULTURAL USE · SUCTION · SMOOTH INTERIOR · ANTI-ABRASION

PU — MADE FROM POLYURETHANE · PVC — PVC SPIRAL · +80°C / -20°C — TEMPERATURE -20 °C TO 80°C · FREE Cd-Pb-Ba — FREE FROM Cd / Pb / Ba · ANTISTATIC

Applications

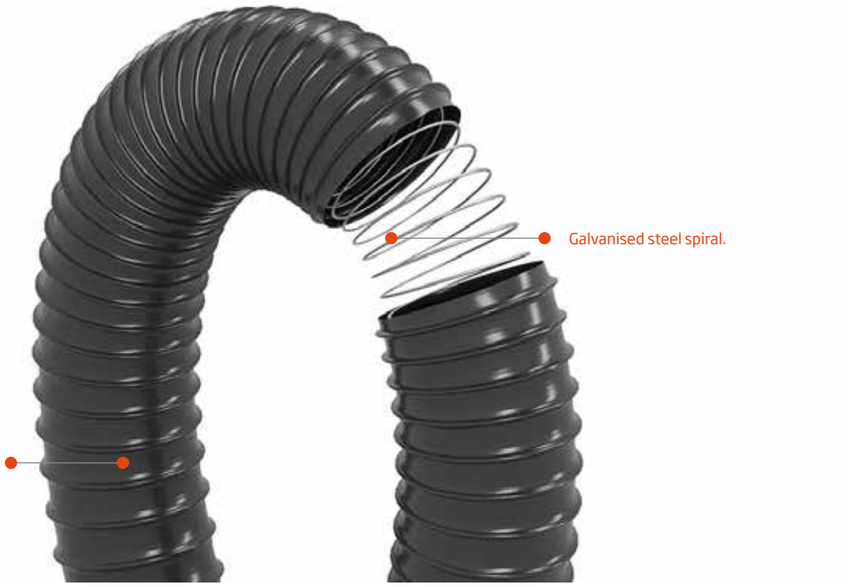
- Pumping and suction of gases, smoke and abrasive products, such as sawdust, pellets, rebar and dust, in addition to food products that require food simulant E in OM2 conditions in accordance with Regulation EU 10/2011.
- Suction of abrasive material in industrial facilities with special need for resistance to abrasion, constant mechanical movement, and the application of force or repetitive impacts.

INT ø mm	INT ø in	FLEXIBLE THICKNESS mm	WEIGHT g/m	BENDING RADIUS mm	VACUUM m H_2O
32	1" 1/4	0.5	180	32	3
35	1" 3/8	0.5	195	35	3
38	1" 1/4	0.5	225	38	3
40	1" 5/8	0.5	250	40	3
45	1" 3/4	0.5	260	45	3
51	2"	0.5	305	50	3
60	2" 1/4	0.5	425	60	3
63	2" 1/2	0.5	445	60	3
70	2" 3/4	0.5	500	70	3
75	3"	0.5	550	75	3
80	3" 1/8	0.5	590	80	3
90	3" 1/2	0.6	670	90	3
102	4"	0.6	870	100	3
110	4" 5/16	0.6	950	110	3
120	4" 3/4	0.6	1000	120	3
125	5"	0.6	1100	125	3
130	5" 1/4	0.6	1200	130	3
140	5" 1/2	0.7	1300	140	3
150	6"	0.7	1500	150	3
160	6" 1/4	0.8	1700	160	3
170	6" 3/4	0.8	1900	170	3
180	7"	0.8	1950	180	3
200	8"	1.0	2200	200	3
250	10"	1.0	2600	250	3
300	12"	1.0	3425	300	3

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters

Vacumflex®

Plasticised PVC hose, reinforced with a galvanised steel spiral that grants it an antistatic feature, making it perfect for facilities governed by ATEX regulations and designed for industrial ventilation of low-abrasion content.



Features

- For industrial use.
- Highly flexible and light.
- Antistatic.
- Good chemical resistance associated with PVC's resistance chart.
- Recommended temperature for use between -10°C and 60°C.

INDUSTRIAL USE · VENTILATION · SUCTION · METAL SPIRAL

LIGHT · FREE FROM Cd / Pb / Ba · TEMPERATURE -10°C TO 60°C

Applications

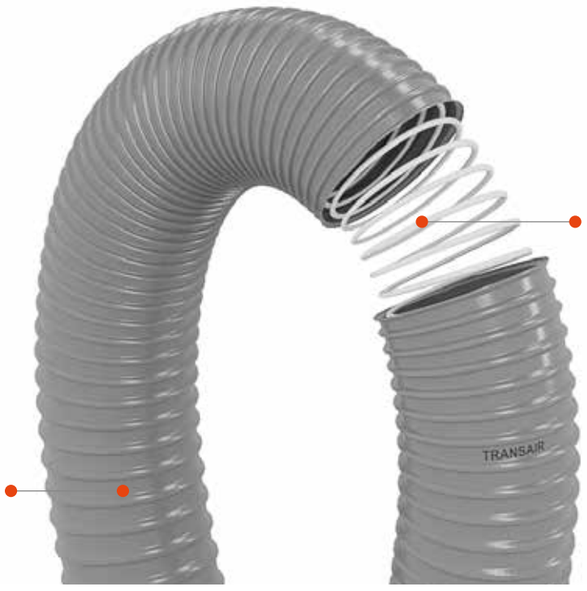
- Suction of low-abrasion content, dust, gases, sawdust, threads, etc.

INT ø mm	INT ø in	WEIGHT g/m	BENDING RADIUS mm	VACUUM m H_2O
40	1" 5/8	430	47	3
45	1" 3/4	470	52	3
51	2"	530	57	2.5
60	2" 1/4	630	67	2.5
70	2" 3/4	670	77	2.5
76	3"	730	82	2.5
80	3" 1/8	790	88	2.5
90	3" 1/2	820	98	2.5
102	4"	1200	108	2.5
110	4" 5/16	1300	118	2.5
120	4" 3/4	1360	128	2.5
127	5"	1420	133	2.5
130	5" 1/4	1500	138	1.2
140	5" 1/2	1700	148	1.2
150	6"	1750	158	1.2
160	6" 1/4	1800	168	1.2
170	6" 3/4	2050	178	1.2
180	7"	2150	188	1.2
203	8" 3/4	2250	208	1
254	10"	3150	260	1
305	12"	3800	310	0.5
350	14"	4450	360	0.5
400	16"	5000	410	0.5
450	18"	5300	460	0.2
500	20"	5700	510	0.2
600	24"	5800	610	0.2

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters

Transair®

Flexible PVC hose, reinforced with a rigid, anti-shock PVC spiral, designed for suction, gas supply and industrial ventilation.



Features

- For industrial use.
- Fireproof in accordance with standard UL94 category V2 (UL94 category V0 available on request).
- Great flexibility (bending radius = internal diameter) and lightness.
- Smooth internal surface and corrugated external surface.
- Good chemical resistance associated with PVC's resistance chart.
- Withstands temperatures between -10°C and 60°C.

INDUSTRIAL USE · VENTILATION · SUCTION

PVC SPIRAL · TEMPERATURE -10°C TO 60°C

Applications

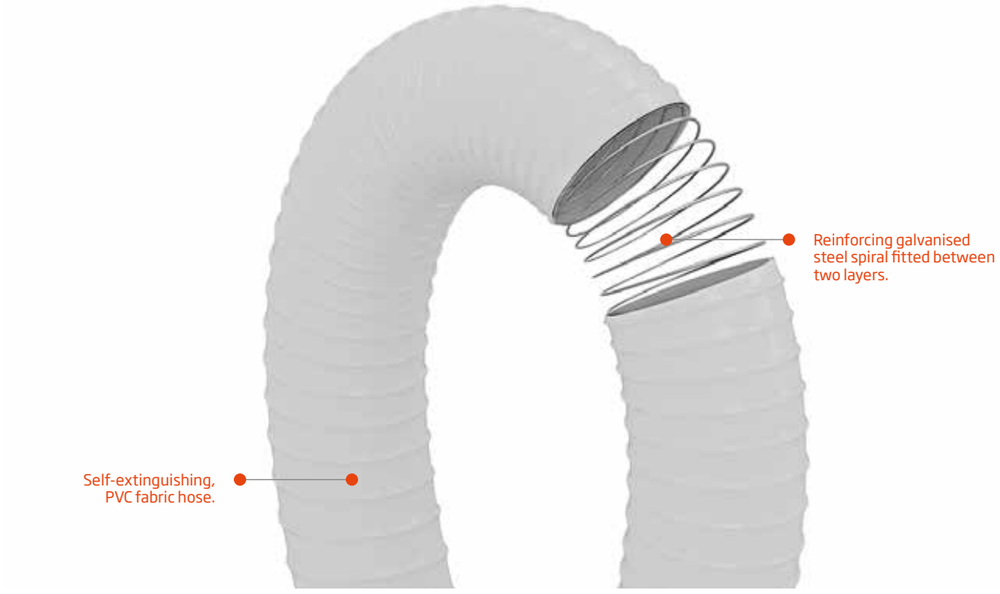
- Suction, piping and pumping of smoke, sawdust, seeds, textile fibres, etc.
- Industrial suction and ventilation.

INT ø mm	INT ø in	WEIGHT g/m	BENDING RADIUS mm	VACUUM m H_2O
15	5/8"	100	15	5
20	3/4"	120	20	5
25	1"	170	25	5
30	1" 1/8	210	30	5
32	1" 1/4	218	32	5
35	1" 3/8	240	35	5
38	1" 1/2	260	38	5
40	1" 5/8	280	40	5
45	1" 3/4	410	45	4
51	2"	450	50	4
55	1" 1/8	490	55	4
60	2" 1/4	540	60	4
63	2" 1/2	590	65	4
70	2" 3/4	640	70	4
76	3"	690	75	4
80	3" 1/8	780	80	4
90	3" 1/2	830	90	4
102	4"	980	100	4
110	4" 5/16	1150	110	4
120	4" 3/4	1200	120	4
127	5"	1250	125	4
130	5" 1/4	1300	130	4
140	5" 1/2	1500	140	4
150	6"	1700	150	4
160	6" 1/4	1825	160	4
180	7"	2200	180	4
203	8"	2400	200	4
254	10"	3000	250	4
305	12"	3600	300	4

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters

Extraflex®

Hose made of self-extinguishing PVC fabric, reinforced by a galvanised copper spiral, for the suction of smoke and ventilation systems.



Features

- Hose made from plasticised PVC, reinforced with self-extinguishing PVC fabric and with a reinforcing galvanised steel spiral fitted between two layers.
- Full flexibility and extremely light.
- Fire resistant in accordance with category M2.
- Resistant to smoke and gases. Good chemical resistance associated with PVC's usual properties.
- Withstands maximum temperatures from -15°C to 90°C.

INDUSTRIAL USE · VENTILATION · SUCTION

METAL SPIRAL · M2 FIREPROOF

Applications

- Air conditioning facilities (civil and naval), ventilation, suction of smoke, vapours, dust, gas, etc.

INT ø mm	INT ø in	TOTAL THICKNESS mm	WEIGHT g/m	BENDING RADIUS mm	VACUUM m H_2O
40	1" 5/8	1.1	110	20	2.5
51	2"	1.1	120	25	2
60	2" 1/4	1.1	140	30	1.9
63	2" 1/2	1.3	160	30	1.8
70	2" 3/4	1.3	175	35	1.8
76	3"	1.3	190	40	1.8
80	3" 1/8	1.3	195	40	1.7
90	3" 1/2	1.3	220	45	1.5
102	4"	1.3	228	50	1.3
110	4" 5/16	1.5	250	55	1.2
120	4" 3/4	1.5	295	60	1.1
127	5"	1.5	315	63	1
130	5" 1/4	1.5	325	65	0.95
140	5" 1/2	1.5	350	70	0.9
152	6"	1.8	370	75	0.85
160	6" 1/4	1.8	440	80	0.80
180	7"	1.8	480	90	0.75
203	8"	1.8	550	100	0.7
228	9"	1.8	580	115	0.65
254	10"	2.1	690	125	0.6
280	11"	2.1	880	140	0.5
305	12"	2.1	900	150	0.5
356	14"	2.1	1100	175	0.4
406	16"	2.1	1280	200	0.3
500	20"	2.1	1500	250	0.3
550	22"	2.1	1610	275	0.2
600	24"	2.1	1750	320	0.2

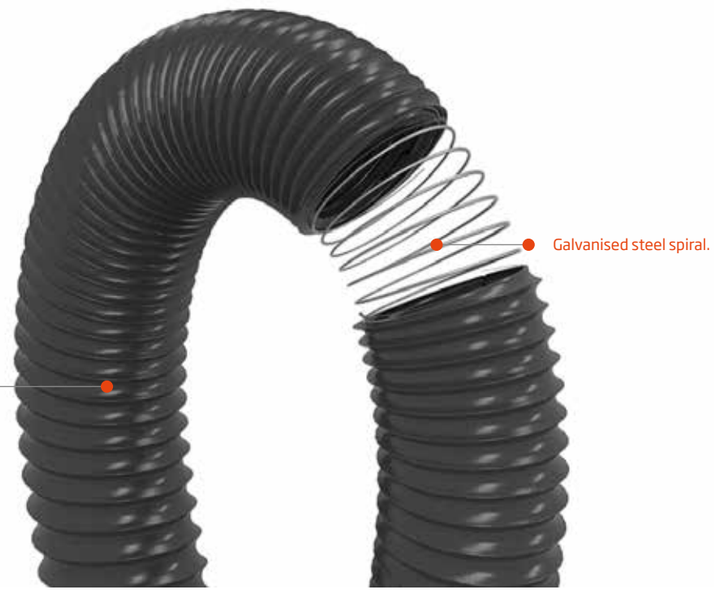
Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters

Espiropreno®

Hose made from thermoplastic rubber, reinforced with a special galvanised steel spiral, for suctioning gases and smoke at high temperatures.

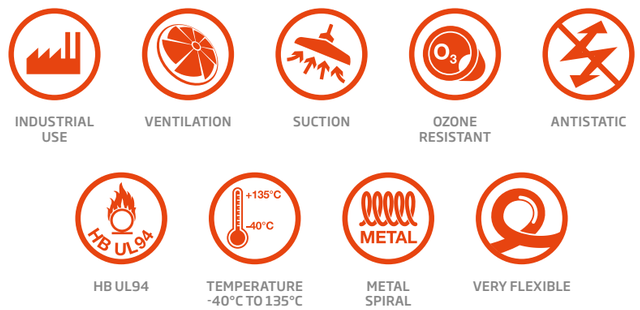
Applications

- Suction of hot gases and smoke from welding and engines.



Features

- For industrial use.
- Highly flexible and very light, as well as highly resilient thanks to TPV's properties.
- Fireproof in accordance with regulation UL94 category HB.
- Good chemical resistance associated with TPV's resistance chart. Excellent resistance to fatigue, ozone and industrial smoke.
- Withstands temperatures between -40°C and 135°C.

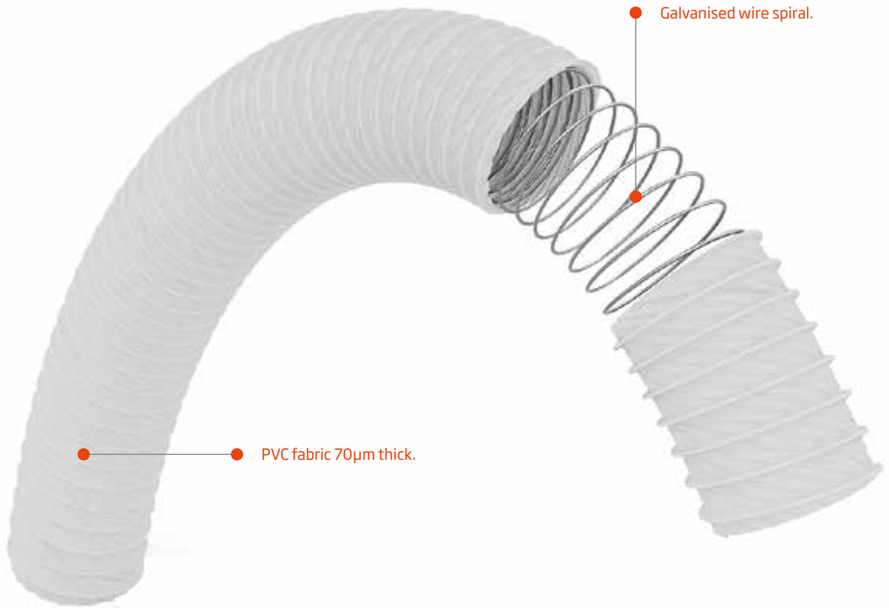


INT ø mm	INT ø in	FLEXIBLE THICKNESS mm	WEIGHT g/m	BENDING RADIUS mm	VACUUM m H_2O
40	1" 5/8	0.4	165	32	2
45	1" 3/4	0.5	200	36	2
51	2"	0.5	230	40	2
55	1" 1/8	0.5	245	45	2
60	2" 1/4	0.5	260	50	1.7
63	2" 1/2	0.5	270	55	1.7
70	2" 3/4	0.5	280	60	1.7
76	3"	0.6	295	65	1.7
80	3" 1/8	0.6	340	65	1.6
90	3" 1/2	0.6	380	75	1.6
102	4"	0.6	500	85	1.3
110	4" 5/16	0.65	550	90	1.2
120	4" 3/4	0.65	610	100	1
127	5"	0.65	650	105	1
130	5" 1/4	0.75	690	105	0.8
140	5" 1/2	0.75	720	115	0.8
152	6"	0.75	900	125	0.8
160	6" 1/4	0.75	960	130	0.7
180	7"	0.8	1090	150	0.5
203	8"	0.8	1170	165	0.4
254	10"	0.8	1500	210	0.4
305	12"	0.8	1700	250	0.3
356	14"	0.8	2200	300	0.3
406	16"	0.8	2675	350	0.3
456	18"	0.8	3425	400	0.3
500	20"	0.8	4600	450	0.2
600	24"	0.8	5600	550	0.2

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters

Superflex Air®

Hose made from PVC fabric, reinforced with a galvanised steel spiral, for ventilation systems in dryers and air extractors in caravans.



Features

- For industrial use.
- Very flexible and extremely light.
- Good chemical resistance associated with PVC's resistance chart.
- Withstands temperatures between -10°C and 60°C.

INDUSTRIAL USE · VENTILATION · SUCTION

METAL SPIRAL · VERY FLEXIBLE

Applications

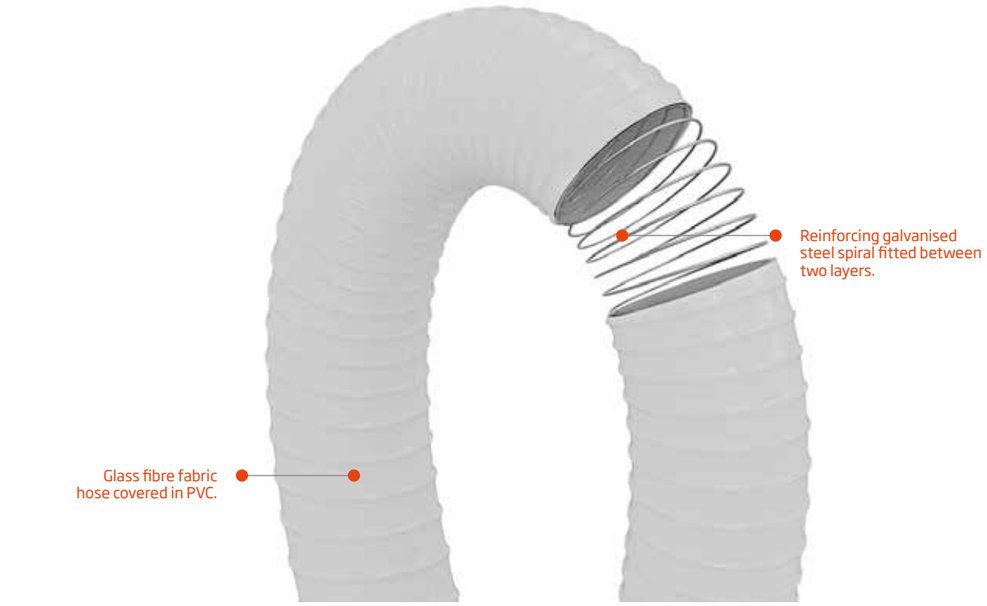
- Ventilation systems in dryers and air extractors in caravans.

INT ø mm	INT ø in	WEIGHT g/m	BENDING RADIUS mm	VACUUM m H_2O
82	3" 1/4	65	41	1.5
90	3" 1/2	70	45	1.4
102	4"	76	50	1.3
110	4" 5/16	90	55	1.1
127	5"	100	63	1
152	6"	120	75	0.85

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters

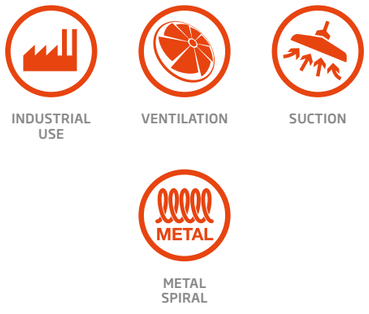
Thermoflex®

Hose made of glass fibre fabric, covered in plasticised PVC, with special resistance to traction and tears. Designed specifically for ventilation and the suction of smoke, vapours and dust. Resistant to high temperatures and self-extinguishing.



Features

- For industrial use.
- Resistant to smoke and gases. Good chemical resistance associated with PVC's usual properties.
- Full flexibility and extremely light.
- Withstands temperatures between -10°C and 130°C.



INDUSTRIAL USE · VENTILATION · SUCTION · METAL SPIRAL

Applications

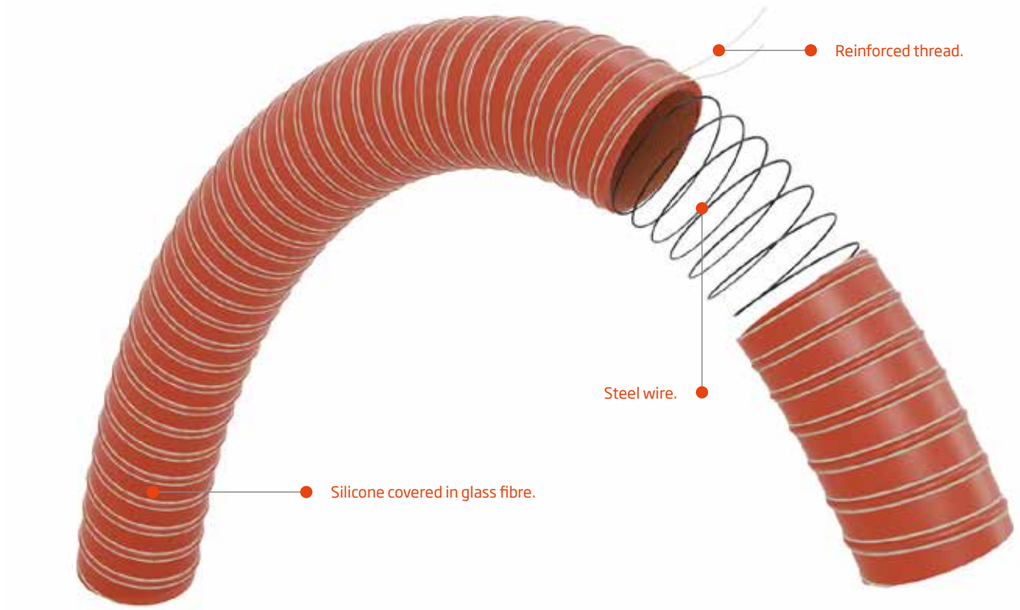
- Air conditioning facilities (civil and naval), ventilation, suction of smoke, vapours, dust, gas, etc.

INT ø mm	INT ø in	WEIGHT g/m	BENDING RADIUS mm	VACUUM m H_2O
40	1" 5/8	110	20	2.5
51	2"	120	25	2.0
60	2" 1/4	140	30	1.9
63	2" 1/2	160	30	1.8
70	2" 3/4	175	35	1.8
76	3"	190	40	1.8
80	3" 1/8	195	40	1.7
90	3" 1/2	220	45	1.5
102	4"	228	50	1.3
110	4" 5/16	250	55	1.2
120	4" 3/4	295	60	1.1
127	5"	315	63	1.0
130	5" 1/4	325	65	0.95
140	5" 1/2	350	70	0.90
152	6"	370	75	0.85
160	6" 1/4	440	80	0.80
180	7"	480	90	0.75
203	8"	550	100	0.70
228	9"	580	115	0.65
254	10"	690	125	0.60
280	11"	880	140	0.50
305	12"	900	150	0.5
356	14"	1100	175	0.40
406	16"	1280	200	0.30
450	18"	1315	225	0.30
500	20"	1500	250	0.30
550	22"	1610	275	0.20
600	24"	1750	320	0.2

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters

Espirosilicone®

Fireproof, silicone hose covered in glass fibre.
Designed to pipe air at high temperatures.



Features

- Silicone wall covered in glass fibre.
- Reinforced by a steel spiral fitted in the wall.
- The spiral's position is fixed by path cords on each side.
- Double layer.
- Highly resistant to heat.
- Waterproof, smooth interior, flexible.
- Large bending radius. Anti-knotting.
- Fire-retardant UL94.
- Temperature range -70°C to 260°C.

INDUSTRIAL USE · VENTILATION · ANTISTATIC · HIGH TEMPERATURES · METAL SPIRAL · FREE FROM Cd / Pb / Ba

Applications

- Piping of hot and cold air.
- Piping/transfer of chippings in dryers in the plastic industry.
- Blowers, compressors and printers.
- Gas extinguishing technologies, engine construction, heat engines, aircraft construction and military industry.

INT ø mm	INT ø in	EXT ø mm	WEIGHT g/m	OPERATING PRESSURE bar	BENDING RADIUS mm	VACUUM m H_2O
20	3/4"	24	120	3	24	7.3
25	1"	29	190	2.8	29	7.1
32	1" 1/4	36	280	2.7	36	6.5
38	1" 1/2	43	310	2.6	43	6.0
44	1" 3/4	49	350	2.6	49	5.8
51	2"	57	390	2.6	57	5.2
63	2" 1/2	68	490	2.4	68	4.6
76	3"	81	600	2.1	81	4.3
90	3" 1/2	95	710	2.0	95	4.0
102	4"	107	800	1.9	107	3.5
114	4" 1/2	120	890	1.5	120	3.0
127	5"	133	960	1.4	133	2.3
140	5" 1/2	146	1100	1.3	146	2.0
152	6"	158	1400	1.2	158	1.7
165	6" 1/2	171	1700	0.9	171	1.2
178	7"	184	1430	0.8	184	1.2
203	8"	209	1900	0.7	209	0.9
254	10"	260	2090	0.5	260	0.7
305	12"	311	2610	0.5	311	0.7

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters

Aspiración Industrial

Opaque, highly flexible, light hose made of ethylene copolymers for domestic and industrial suction.

Applications

- Domestic vacuums and in vehicles.

Made with ethylene copolymers, and highly resistant to deformation, UV rays and harsh weather conditions.

Features

- For domestic and industrial use.
- Highly resistant to permanent deformities.
- Resistant to UV rays, the cold and breakage when extended.
- Its bending radius is approximately twice its external diameter.
- Minimum pressure drop.
- Withstands temperatures between -30°C and 55°C.
- Can also be made in black.

INDUSTRIAL USE · DOMESTIC USE · SUCTION

HIGH QUALITY CONTROL · FREE FROM Cd / Pb / Ba

INT ø mm	INT ø in	EXT ø mm	WEIGHT g/m	BENDING RADIUS mm	VACUUM m H_2O	COLOURS AVAILABLE
25	1"	32	160	65	9	
32	1" 1/4	41	260	82	9	
38	1" 1/2	47	300	93	9	
45	1" 3/4	55	450	111	9	
51	2"	60	460	122	9	
60	2" 1/4	70	600	146	9	

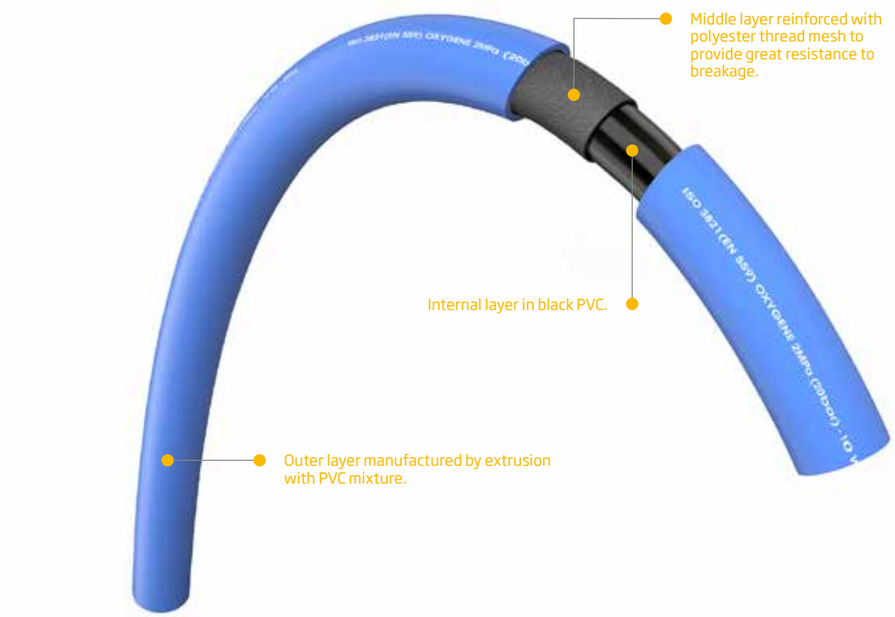
Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters

Pressure

Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features.

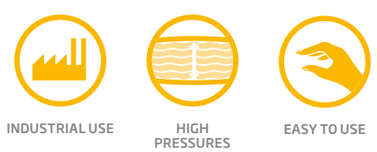
Oxygen

Multi-layer, flexible PVC hose, reinforced with polyester mesh.
Specifically for conducting oxygen in welding equipment.



Features

- For industrial use.
- Highly flexible and easy to handle.
- Highly resistant to breakage when extended.
- Highly resistant to traction (7.5 MPa) and pressure at high temperatures.
- Good chemical resistance associated with PVC's resistance chart.
- Recommended temperature for use between -10°C and 60°C.
- Rubber option.



Applications

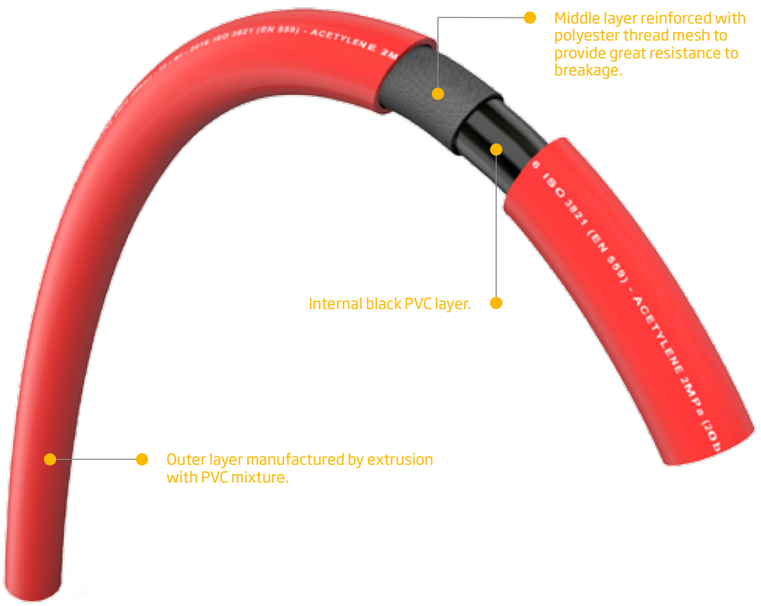
Conducting oxygen and acetylene for welding.

INT ø mm	INT ø in	EXT ø mm	WEIGHT g/m	OPERATING PRESSURE bar	MINIMUM BURST PRESSURE bar
8	5/16"	15	160	20	60
10	3/8"	17	170	20	60

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters

Acetylene

Multi-layer, flexible PVC hose in red, reinforced with a polyester mesh. Specifically for conducting acetylene in welding equipment.



Features

- For industrial use.
- Highly flexible and easy to handle.
- Highly resistant to breakage when extended.
- Highly resistant to traction (7.5 MPa) and pressure at high temperatures.
- Good chemical resistance associated with PVC's resistance chart.
- Recommended temperature for use between -10°C and 60°C.
- Rubber option.

HIGH PRESSURES

EASY TO USE

HIGH QUALITY CONTROL

FREE Cd-Pb-Ba

FREE FROM Cd / Pb / Ba

Applications

- Conducting oxygen and acetylene for welding.

INT ø mm	INT ø in	EXT ø mm	WEIGHT g/m	OPERATING PRESSURE bar	MINIMUM BURST PRESSURE bar
8	5/16"	15	160	20	60
10	3/8"	17	170	20	60

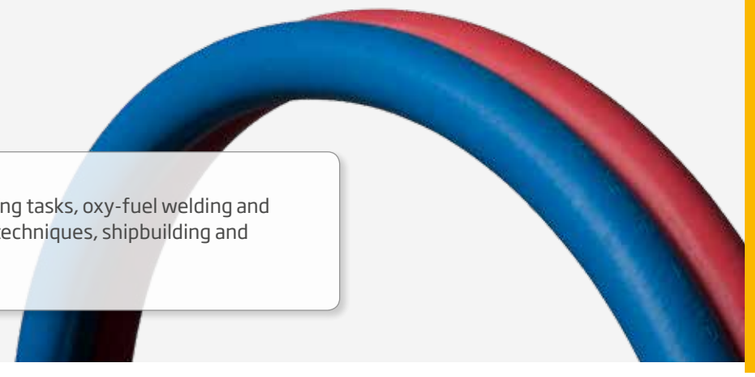
Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters

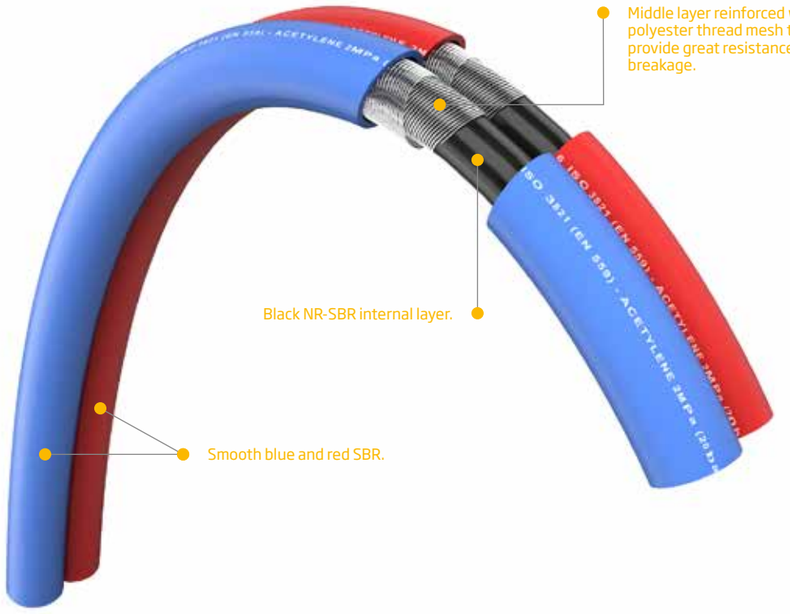
Bitubo

Very light and flexible double rubber hose manufactured via continuous manufacturing. Manufactured according to our own specifications and in line with EN 559.

Applications

- Designed especially for welding tasks, oxy-fuel welding and cutting, and similar industry techniques, shipbuilding and construction.





Features

- Made of smooth, black EPDM/SBR, reinforced by synthetic, high-tenacity thread.
- Guarantees perfect adherence thanks to collective extrusion.
- Resistant to abrasion.
- Smooth or striated red or blue surface.
- Withstands temperatures between -25°C and 100°C.

INDUSTRIAL USE

CHEMICAL TRANSPORT

INT ø mm	INT ø in	EXT ø mm	WEIGHT g/m	OPERATING PRESSURE bar	MINIMUM BURST PRESSURE bar
6+6	1/4"+ 1/4"	12+12	26	10/20	30/60
8+9	5/16"+ 3/8"	16+16	44	10/20	30/60

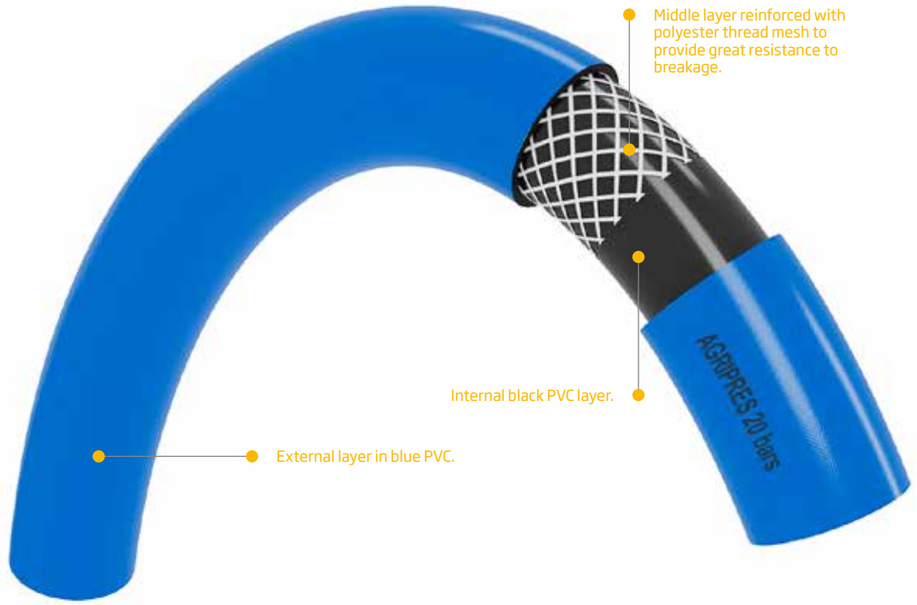
Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about
the minimum purchase amounts assigned to non-standard diameters

Agripres® 20 bar

Multi-layer, plasticised PVC hose, reinforced by a polyester mesh.
Specifically for fumigation equipment.

Applications

- Agricultural fumigation.



Features

- For agricultural use.
- Great flexibility and low permeability.
- Anti-knotting.
- Highly resistant to extension.
- Highly resistant to the absorption of fertilisers and pesticides.
- Withstands temperatures between -10°C and 60°C.

AGRICULTURAL USE · SPRAYS · HIGH PRESSURES · EASY TO USE · HIGH QUALITY CONTROL · FREE FROM Cd / Pb / Ba (FREE Cd-Pb-Ba)

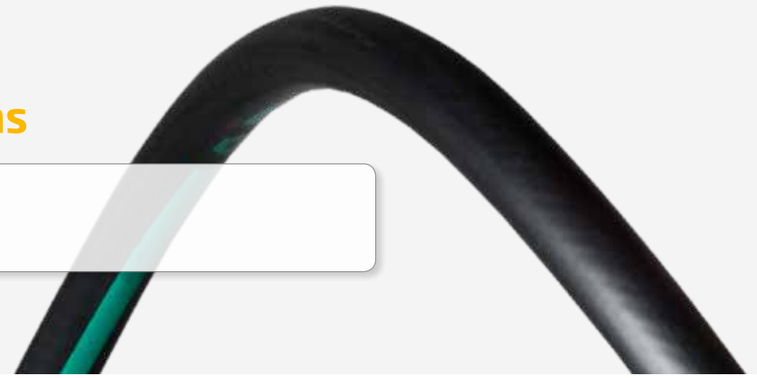
INT ø mm	INT ø in	EXT ø mm	WEIGHT g/m	OPERATING PRESSURE bar	MINIMUM BURST PRESSURE bar
6	1/4"	11	87	20	60
8	5/16"	13	105	20	60
10	3/8"	15	125	20	60
13	1/2"	19	185	20	60
16	5/8"	23	265	20	60
19	3/4"	26	305	20	60
25	1"	34	515	20	60

COLOURS AVAILABLE

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters

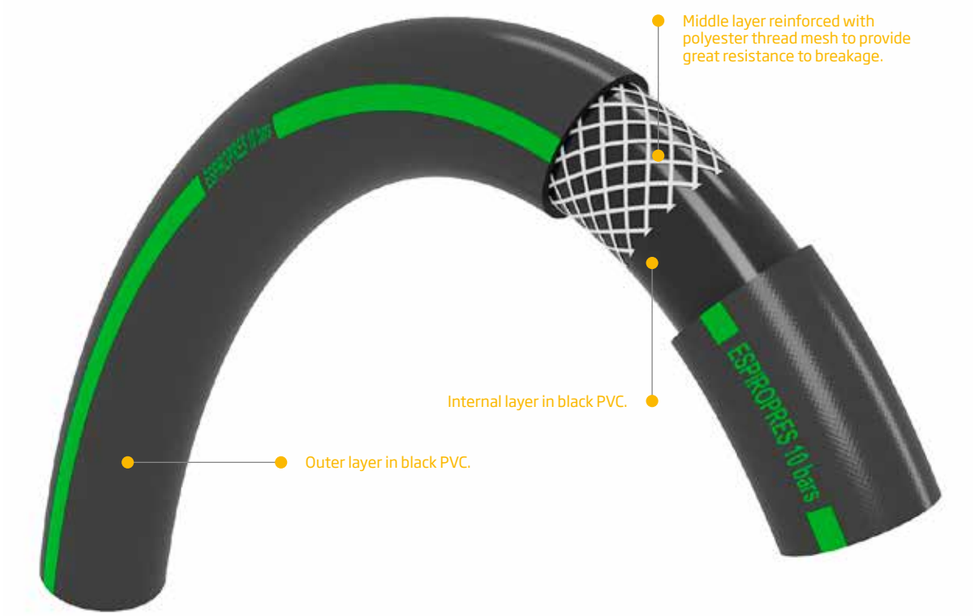
Espiropres® 10 bar

Multi-layer, plasticised PVC hose, reinforced with a polyester mesh.
Specifically designed for medium-pressure compressed air equipment.



Applications

- Compressed air.



Features

- For industrial use and for the construction industry.
- Great flexibility and low permeability.
- Anti-knotting.
- Highly resistant to extension.
- Withstands temperatures between -10°C and 60°C.

INT ø mm	INT ø in	EXT ø mm	WEIGHT g/m	OPERATING PRESSURE bar	MINIMUM BURST PRESSURE bar
6	1/4"	12	105	10	30
8	5/16"	14	130	10	30
10	3/8"	16	160	10	30
12	1/2"	18	180	10	30
16	5/8"	23	270	10	30
19	3/4"	27	365	10	30
25	1"	34	515	10	30

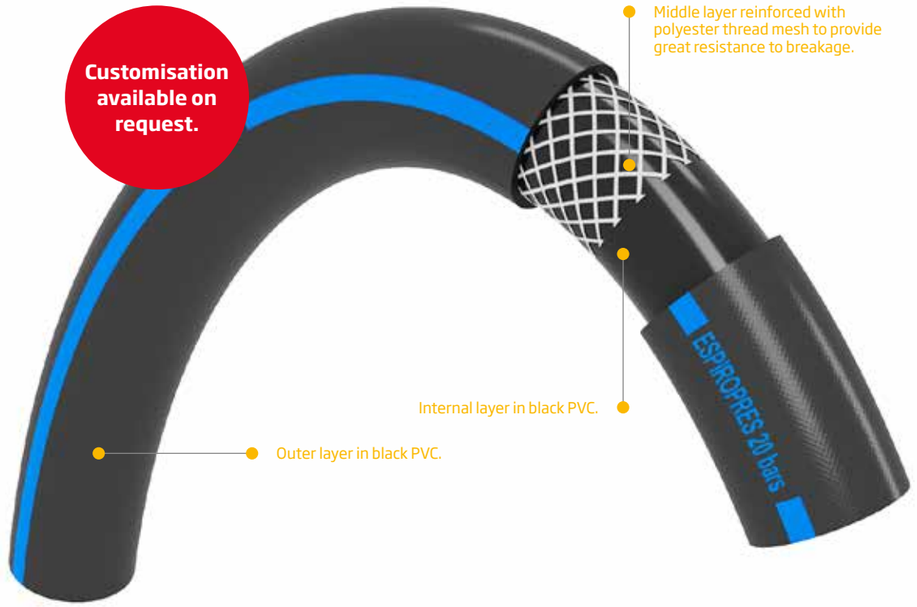
Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters

Espiropres® 20 bar

Multi-layer, plasticised PVC hose, reinforced by a polyester mesh.
Specifically designed for medium-pressure compressed air equipment.

Applications

- Compressed air, hydraulic hammers.



Features

- For industrial use and for the construction industry.
- Great flexibility and low permeability.
- Anti-knotting.
- Highly resistant to extension.
- Withstands temperatures between -10°C and 60°C.

INDUSTRIAL USE

SPRAYS

EASY TO USE

HIGH QUALITY CONTROL

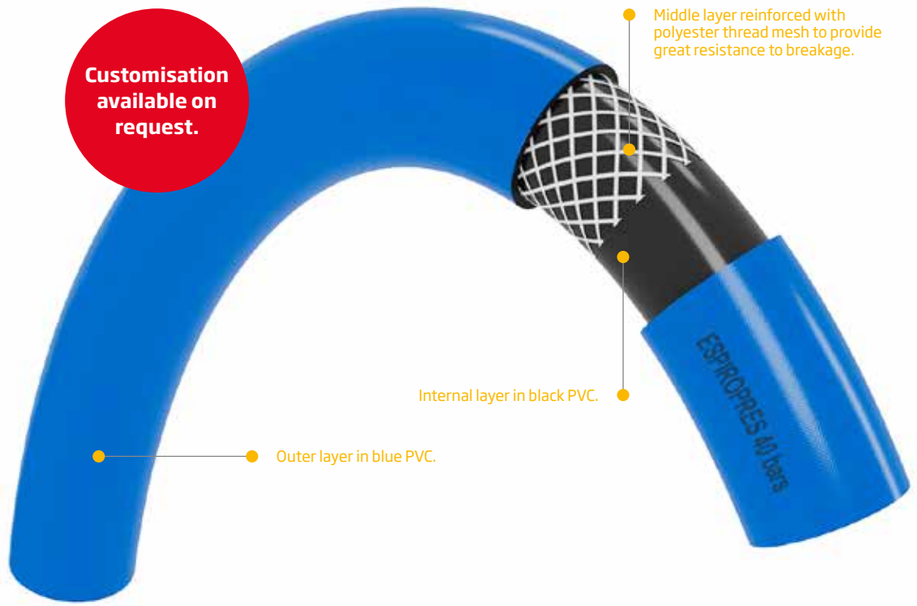
FREE FROM Cd / Pb / Ba

INT ø mm	INT ø in	EXT ø mm	WEIGHT g/m	OPERATING PRESSURE bar	MINIMUM BURST PRESSURE bar
6	1/4"	14	165	20	60
8	5/16"	16	200	20	60
10	3/8"	18	235	20	60
12	1/2"	21	310	20	60
16	5/8"	26	435	20	60
19	5/8"	29	490	20	60
25	1"	36	670	20	45

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters

Espiropres® 40 bar

Multi-layer, plasticised PVC hose, reinforced by a polyester mesh.
Specifically designed for medium-pressure compressed air equipment.



Features

- For agricultural and industrial use.
- Great flexibility and low permeability.
- Anti-knotting.
- Highly resistant to extension.
- Withstands temperatures between -10°C and 60°C.

AGRICULTURAL USE · INDUSTRIAL USE · SPRAYS · HIGH PRESSURES

EASY TO USE · HIGH QUALITY CONTROL · FREE FROM Cd / Pb / Ba

Applications

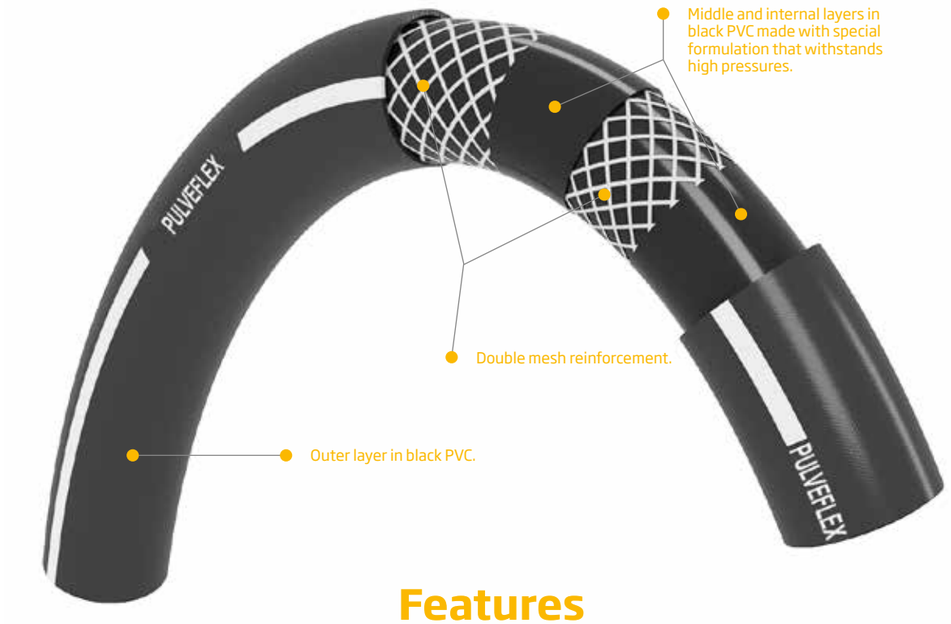
- Pressure spraying of insecticides and antiparasitic treatments in agricultural uses.
- Pressurised liquid transport.
- Compressors.

INT ø mm	INT ø in	EXT ø mm	WEIGHT g/m	OPERATING PRESSURE bar	MINIMUM BURST PRESSURE bar	BENDING Ø mm	COLOURS AVAILABLE
8	5/16"	15	160	40	120	25	
10	3/8"	16	150	40	120	30	
12	1/2"	19	254	40	120	35	
16	5/8"	24	315	40	120	60	
19	5/8"	27	360	40	120	75	
25	1"	35	585	40	120	110	

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters

Pulveflex® 80 bar

PVC hose with double polyester fibre reinforcement and manufactured using patented SINE TORSION technology that prevents the hose from twisting when used at high pressures. Specially designed for agricultural fumigation at high pressures. Installation in agricultural sanitary machinery: agricultural atomisers, nebulisers and sprayers.



Features

- For industrial use and for the construction industry.
- SINE TORSION TECHNOLOGY SYSTEM: patented technology that prevents the usual kinks from happening when twisted on itself in use at maximum pressure.
- Great flexibility and low permeability.
- Equipped with a double layer of polyester mesh.
- Anti-knotting.
- Highly resistant to extension.
- Withstands temperatures between -10°C and 60°C.

AGRICULTURAL USE · INDUSTRIAL USE · SPRAYS · HIGH PRESSURES

EASY TO USE · HIGH QUALITY CONTROL · FREE FROM Cd / Pb / Ba

Applications

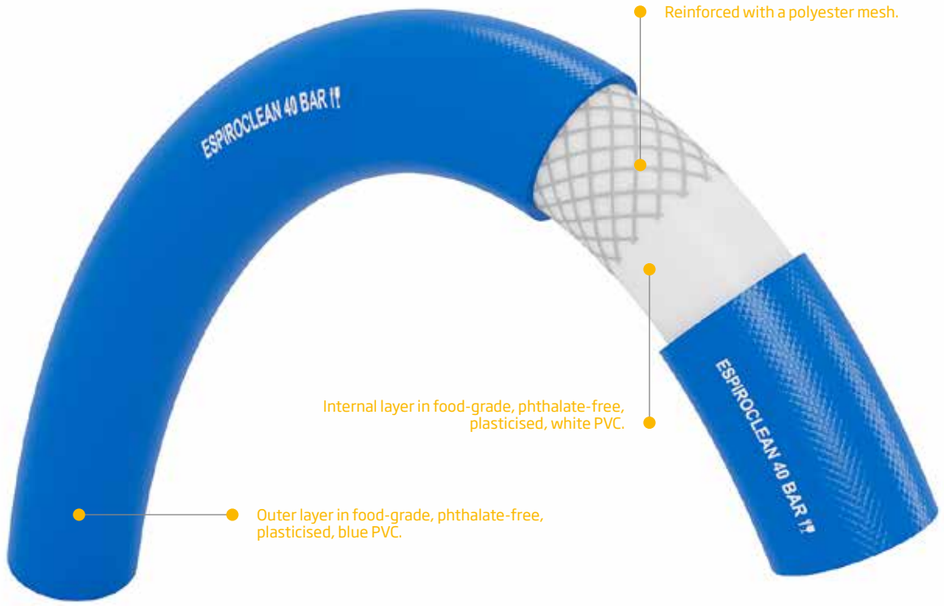
- Installation in agricultural sanitary machinery: agricultural atomisers, nebulisers and sprayers.
- Piping of liquids at high pressures.
- Compressors.

INT ø mm	INT ø in	EXT ø mm	WEIGHT g/m	OPERATING PRESSURE bar	MINIMUM BURST PRESSURE bar
8	5/16"	15	170	80	240
10	3/8"	17	190	80	240
12	1/2"	20	270	80	240
16	5/8"	26	445	80	240
19	3/4"	30	535	80	240

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters

Espiroclean® 40 bar

Multi-layer, plasticised PVC hose, reinforced with a polyester mesh.
Specifically designed for medium-pressure compressed air equipment



Applications

- Cleaning of industrial food and catering facilities. Designed to withstand medium pressures.

Features

- For food use in accordance with European regulations EC 1935/2004 and EU 10/2011 (see declaration of conformity).
- Highly flexible, anti-knotting and highly resistant to extension.
- Good chemical resistance associated with PVC's resistance chart.
- Withstands temperatures between -10°C and 80°C.

INDUSTRIAL USE · FOOD USE · POLYESTER REINFORCEMENT · HIGH QUALITY CONTROL

FREE Cd-Pb-Ba — FREE FROM Cd / Pb / Ba

FREE PHTHALATES — PHTHALATE -FREE

INT ø mm	INT ø in	EXT ø mm	WEIGHT g/m	OPERATING PRESSURE bar
12	1/2"	20	245	40
16	5/8"	24	310	40
19	3/4"	28	390	40
25	1"	34	515	40

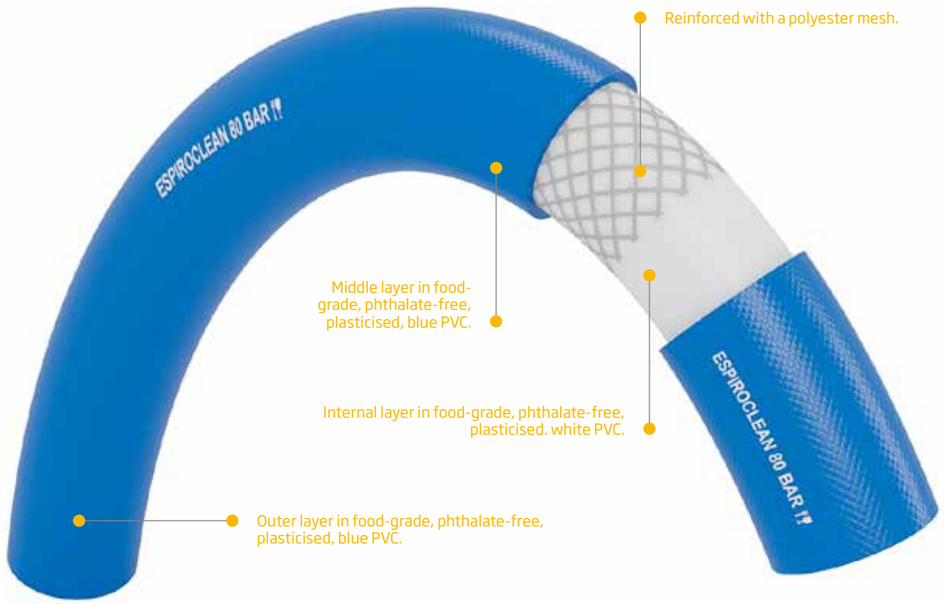
Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters

Espiroclean® 80 bar

Multi-layer, plasticised PVC hose, reinforced with a double polyester mesh.
Specifically designed for high-pressure compressed air equipment.

Applications

- Cleaning of industrial food and catering facilities. Designed to withstand medium pressures.



Features

- For food use in accordance with European regulations EC 1935/2004 and EU 10/2011 (see declaration of conformity).
- Highly flexible, anti-knotting and highly resistant to extension.
- Double mesh reinforcement to withstand high pressure.
- Good chemical resistance associated with PVC's resistance chart.
- Withstands temperatures between -10°C and 80°C.

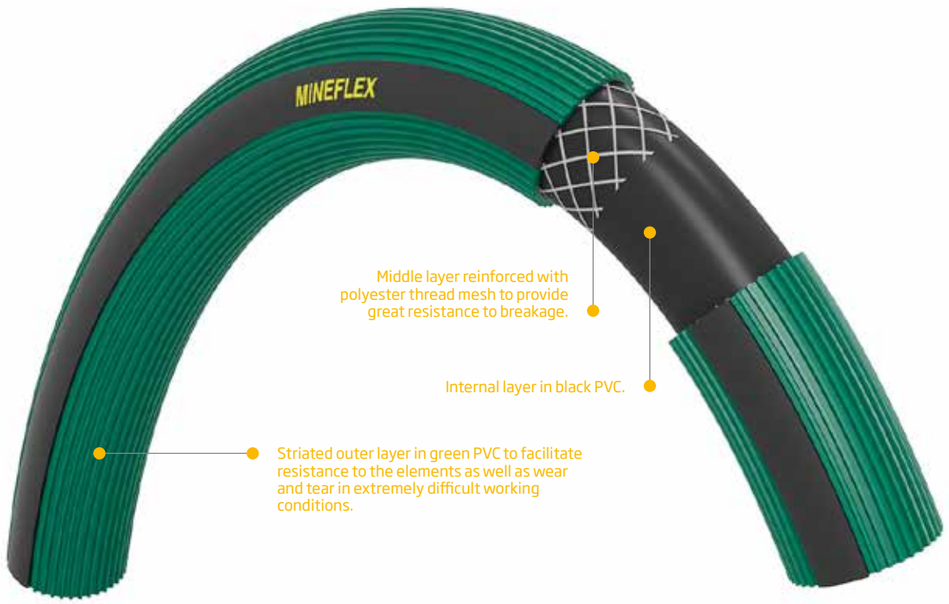
INDUSTRIAL USE · FOOD USE · 5 LAYERS · HIGH PRESSURES · HIGH QUALITY CONTROL · FREE FROM Cd / Pb / Ba

INT ø mm	INT ø in	EXT ø mm	WEIGHT g/m	OPERATING PRESSURE bar	BENDING RADIUS mm
12	½"	22	325	80	110

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters

Mineflex®

Hose made from vinyl components
and internally reinforced by a polyester mesh.



Features

- For industrial use.
- Highly flexible but resistant to folding, stretching, abrasion and accidental cuts.
- Stable against UV rays.
- Striated outer layer to facilitate resistance to the elements as well as wear and tear in very difficult working conditions.
- Resistant to a wide variety of chemical products and diverse weather events. Temperature range between -10°C and 60°C.
- Designed in accordance with European quality standard EN 694 and South African quality standard SANS 1086.

INDUSTRIAL USE · HIGH PRESSURES · HIGH QUALITY CONTROL · FREE FROM Cd / Pb / Ba

Applications

- General use in industrial environments, particularly in mining facilities.

INT ø mm	INT ø in	EXT ø mm	WEIGHT g/m	OPERATING PRESSURE bar	MINIMUM BURST PRESSURE bar
10.5	3/8"	4	235	17	68
12.5	1/2"	5	355	17	68
20	3/4"	5.5	554	15	60
25	1"	5.5	658	14	56
32	1" 1/4	7	1080	10	40
40	1" 5/8	7.3	1370	9	36
51	2"	7.5	1720	9	36

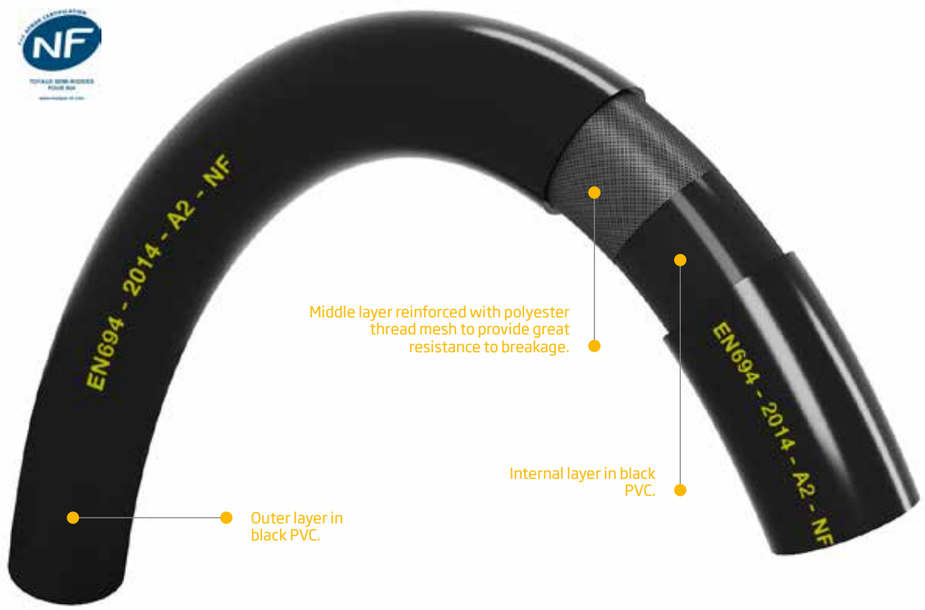
Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about
the minimum purchase amounts assigned to non-standard diameters

R.I.A.®

Flexible, multi-layer hose with a reinforced, braided, polyester thread interior to be used in fire extinguishers. Manufactured in accordance with EN 694.

Applications

- Hoses for fire extinguishers with water or dry chemical extinguishing agents.



Features

- Product certified by the French quality association AFNOR in line with NF021 certification protocol.
- Hose especially for fire extinguishing equipment manufactured in accordance with EN 694.
- Temperature range between -20°C and 60°C.

INDUSTRIAL USE

HIGH PRESSURES

HIGH QUALITY CONTROL

FREE Cd-Pb-Ba

FREE FROM Cd / Pb / Ba

INT ø mm	INT ø in	EXT ø mm	WEIGHT g/m	OPERATING PRESSURE bar	PRESSURE BURST PRESSURE bar	COLOURS AVAILABLE
19	3/4"	26	315	12	42	
25	1"	32	440	12	42	
33	1" 5/16	41	670	7	24.5	

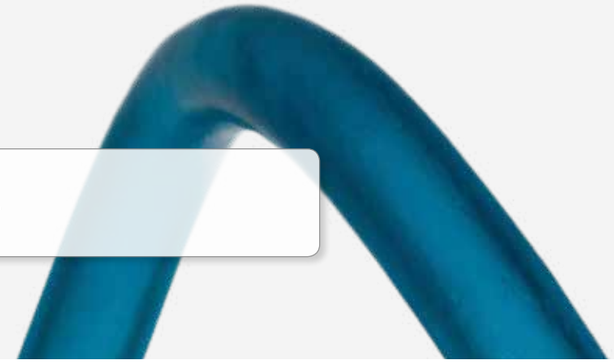
Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters

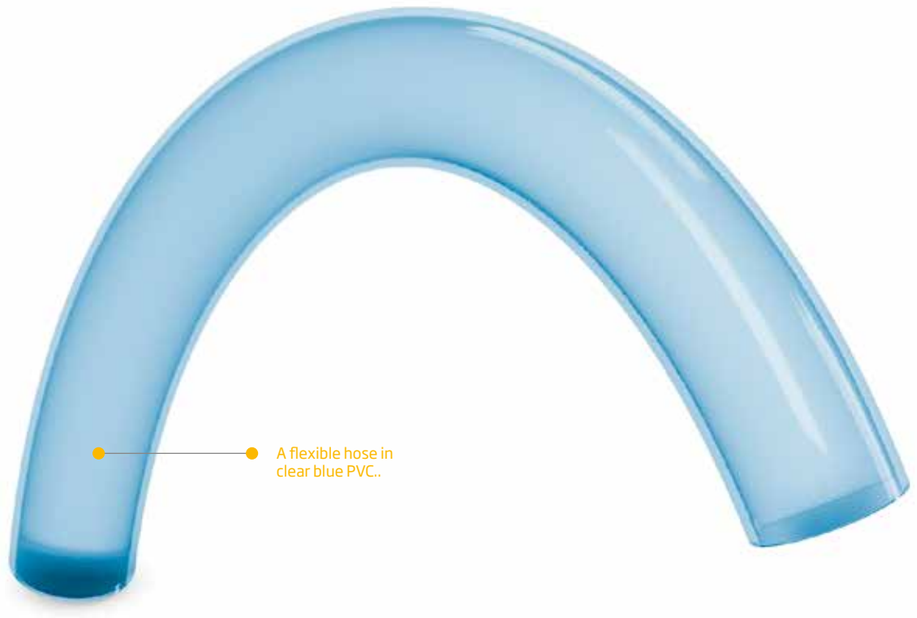
Espirocristal® Gasolina

Flexible, monolayer hose made using transparent, plasticised PVC with improved resistance to hydrocarbons.

Applications

- Piping gasoline at low pressure.





Features

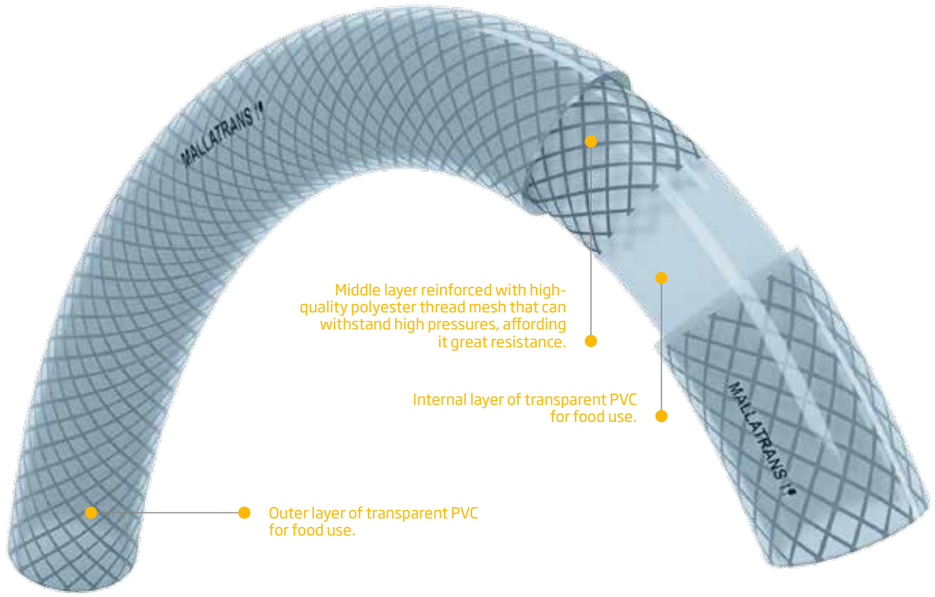
- For industrial use.
- Great flexibility and highly resistant to breakage caused by extension.
- Especially designed for the transfer of fuels and their by-products.
- Good chemical resistance associated with PVC's resistance chart.
- Recommended temperature for use between -10°C and 60°C.

INT ø mm	INT ø in	EXT ø mm	WEIGHT g/m	BENDING RADIUS mm
4	11/64"	8	46	16
5	13/64"	9	54	18
6	1/4"	10	64	20
7	9/32"	12	92	25
8	5/16"	12	78	25

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters

Mallatrans®

Multi-layer, transparent, plasticised PVC hose, reinforced by a polyester mesh. Especially designed for the transfer of liquid food products.



Features

- For food use in accordance with European regulations EC 1935/2004 and EU 10/2011 (see declaration of conformity).
- Highly flexible and easy to handle.
- Good chemical resistance associated with PVC's resistance chart.
- Highly flexible, high-quality hose internally reinforced by a polyester mesh that can withstand considerable working pressures, affording it resistance to breakage when extended.
- Recommended temperature for use between -10°C and 60°C.

FOOD USE · INDUSTRIAL USE · EASY TO USE · LIGHT · HIGH QUALITY CONTROL · FREE FROM Cd / Pb / Ba

Applications

- Transfer of liquid food products that require food simulants A, B, C and D1 in OM2 conditions in accordance with Regulation EU 10/2011, such as wine, must, beer, vinegar and alcoholic liquids up to 20%.
- Food product processing industry.
- Compressed air industrial facilities.

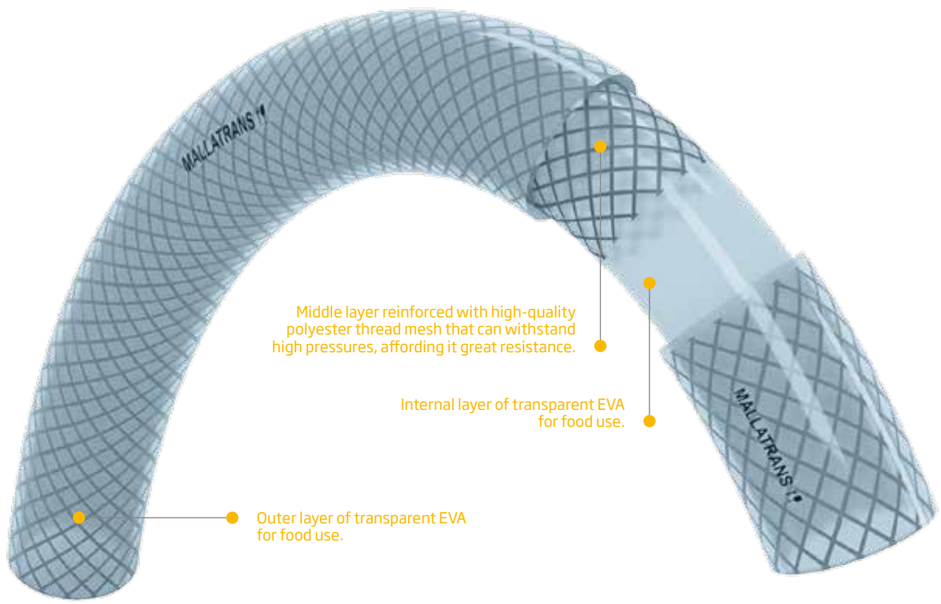
INT ø mm	INT ø in	EXT ø mm	WEIGHT g/m	OPERATING PRESSURE bar	MINIMUM BURST PRESSURE bar	BENDING RADIUS mm
6	1/4"	11	83	15	45	15
8	5/16"	11	55	15	45	20
10	3/8"	14	93	15	45	30
12	1/2"	15	80	15	45	35
15	5/8"	22	260	15	45	45
19	5/8"	25	260	10	30	75
20	3/4"	26	275	10	30	80
25	1"	31	330	10	30	110
30	1" 1/4	40	680	7	21	160
40	1" 5/8	52	1075	6	18	250
51	2"	60	1075	5	15	290

COLOURS AVAILABLE

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters

Mallatrans® EVA

Hose manufactured by extruding polyethylene components. Internally reinforced with a highly-resistant, polyester thread mesh.



Features

- For food use in accordance with European regulations EC 1935/2004 and EU 10/2011.
- Highly resistant to breakage when extended.
- Highly flexible and easy to handle.
- Free from halogens.
- Transparent so the materials transported are always visible.
- Hose with good chemical resistance associated with polyethylene's usual properties.
- Withstands temperatures between -10°C and 60°C.

FOOD USE · INDUSTRIAL USE · AGRICULTURAL USE · HIGH PRESSURES · HIGH QUALITY CONTROL · FREE FROM Cd / Pb / Ba

Applications

- Transfer of liquid food products that require food simulants A, B and C in OM2 conditions in accordance with Regulation EU 10/2011, such as wine, must, beer, vinegar and alcoholic liquids up to 20°.
- Food product processing industry.
- Drink dispensers.

INT ø mm	INT ø in	EXT ø mm	WEIGHT g/m	OPERATING PRESSURE bar	MINIMUM BURST PRESSURE bar	BENDING RADIUS mm
6	1/4"	12	104	20	60	25
7	9/32"	14	142	20	60	30
8	5/16"	14	128	15	45	30
10	3/8"	16	148	15	45	35

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters

Swimming pool Construction

Pages 188 - 207

SWIMMING POOL - CONSTRUCTION

Swimming pool Construction

Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features.

Hidrotubo®

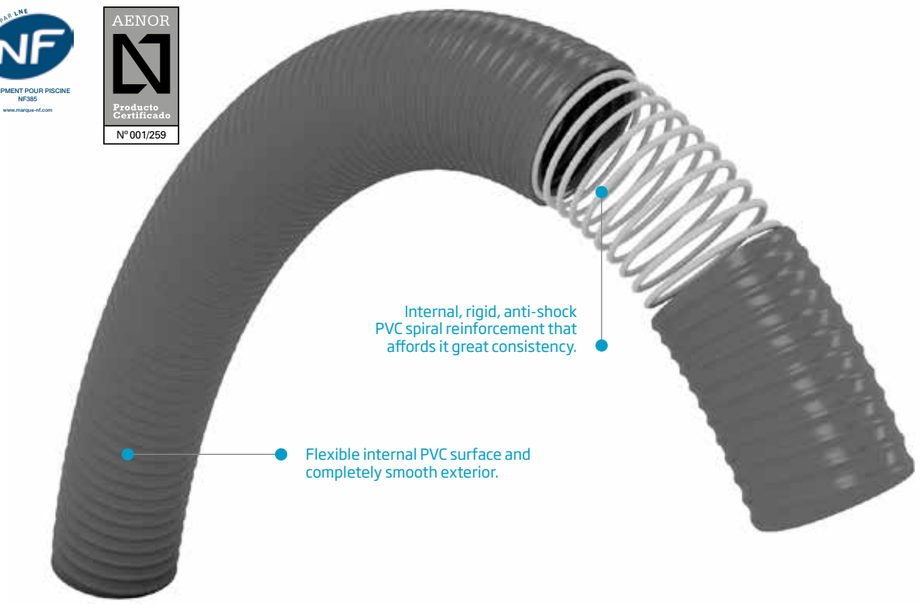
Flexible, reinforced hose with rigid, anti-shock PVC spiral, manufactured in accordance with UNE-EN ISO 3994.

Applications

Discharge, hydro-sanitary piping, swimming pool filtration systems, hydro-massage bathtubs, drains, condensation and air conditioning facilities.

EQUIPMENT POUR PISCINE NF385

AENOR Producto Certificado Nº 001/259



Features

- For industrial, sanitary and special use in swimming pools.
- Smooth internal and external surfaces. Highly flexible and light.
- External diameters adjusted to ensure easy assembly on PVC fittings with adhesive and PVC with elastic seal, as well as PP fittings.
- Hermetically sealed and resistant at joint up to pressure of 30 bar.
- Good chemical resistance associated with PVC's resistance chart.
- Great resistance to waste water and chlorinated swimming pool water.
- Withstands temperatures between -10°C and 60°C.
- Hose with AENOR N MARK product certification in accordance with UNE-EN ISO 3994, category T2.

USE IN POOLS · SANITARY USE · INDUSTRIAL USE · CONSTRUCTION · TEMPERATURE -10°C TO 60°C (+60°C / -10°C) · HIGH QUALITY CONTROL · FREE FROM Cd / Pb / Ba (FREE Cd-Pb-Ba)

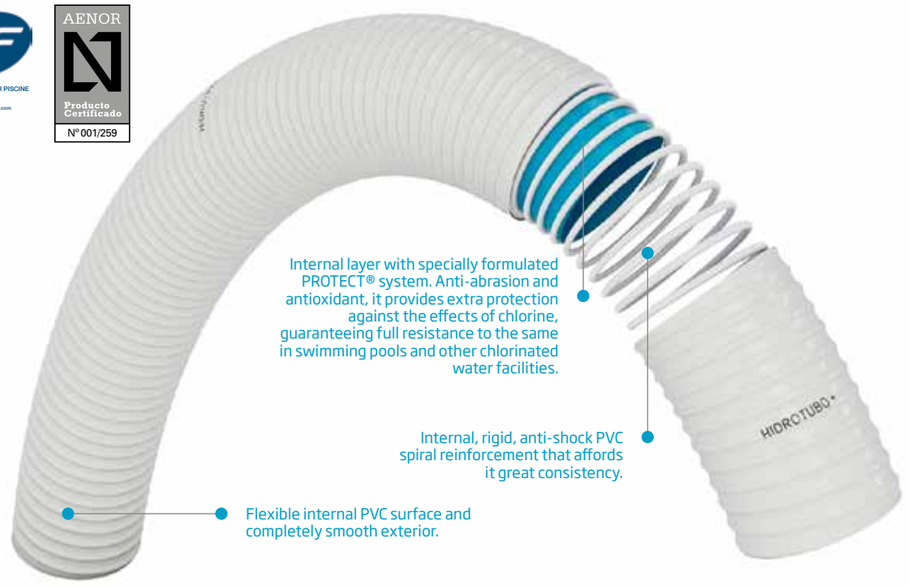
INT ø mm	INT ø in	EXT ø mm	WEIGHT g/m	OPERATING PRESSURE bar	MINIMUM BURST PRESSURE bar	BENDING RADIUS mm	VACUUM m H_2O
13	1/2"	16	100	7	22	39	9
16	5/8"	20	155	7	22	48	9
20	3/4"	25	240	7	22	60	9
25	1"	32	400	7	22	75	9
26	1"	32	370	5	15	78	9
27	1"	32	334	5	15	81	9
34	1" 3/8	40	480	5	15	102	9
35	1" 3/8	40	400	5	15	105	9
42	1" 3/4	50	710	5	15	126	9
43	1" 3/4	50	685	5	15	129	9
55	2" 1/8	63	1000	5	15	165	9
63	1" 1/2	75	1400	4	12	195	9
80	3" 1/8	90	1800	4	12	240	9
102	4"	110	2200	3	9	300	9
110	4" 5/16	125	3700	3	9	330	9

Diameters with Afnor certificate

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters

Hidrotubo® Plus

Flexible, reinforced PVC hose with rigid, anti-shock PVC spiral, manufactured in accordance with UNE-EN ISO 3994 and with an internal, specially formulated layer (PROTECT®) to withstand oxidation and abrasion caused by water with a high chlorine concentration.



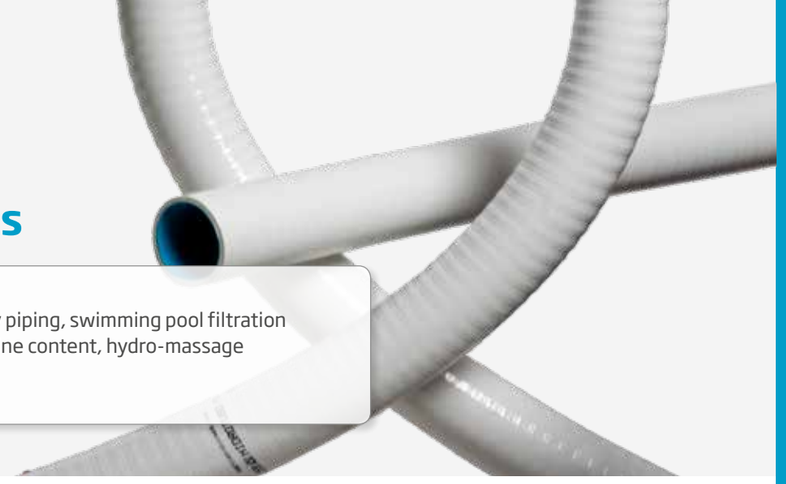
Features

- For industrial use and special use in swimming pools.
- Smooth internal and external surfaces. Highly flexible and light.
- PROTECT® internal surface, made from a material that grants it greater resistance to chlorinated products and abrasion.
- Rigid spiral with an ovate cross-section that provides greater resistance to compression.
- External diameters adjusted for easy assembly on PVC and PE seal fittings.
- Hermetically sealed and resistant at joint up to pressure of 30 bar.
- Withstands temperatures between -10°C and 60°C.
- Hose with good chemical resistance associated with PVC's usual properties.
- Great resistance to waste water and chlorinated swimming pool water with a high level of chlorination (>3500 ppm).
- Hose with AENOR N MARK product certification in accordance with UNE-EN ISO 3994.

USE IN POOLS · CONSTRUCTION · HIGH QUALITY CONTROL · FREE FROM Cd / Pb / Ba

Applications

- Discharge, hydro-sanitary piping, swimming pool filtration systems with a high chlorine content, hydro-massage bathtubs.

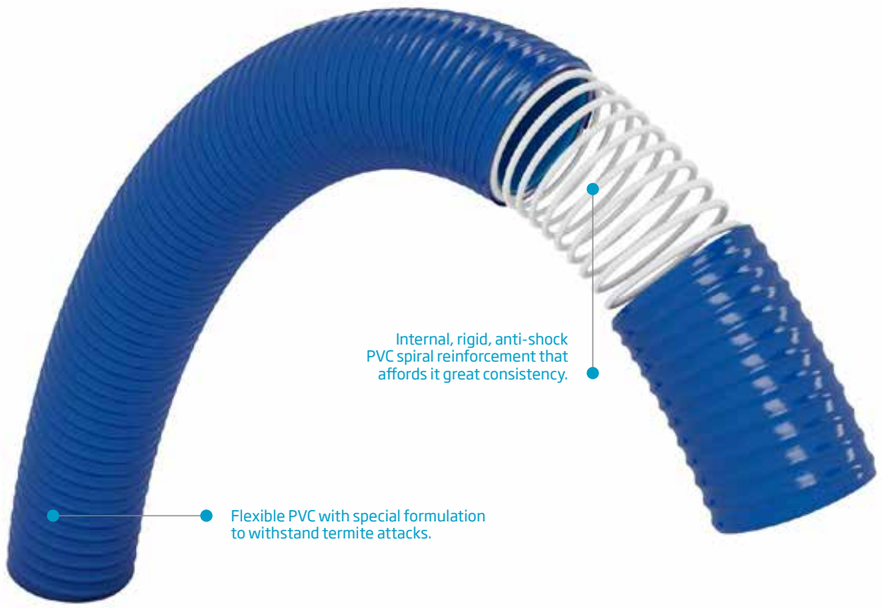


INT ø mm	INT ø in	EXT ø mm	WEIGHT g/m	OPERATING PRESSURE bar	MINIMUM BURST PRESSURE bar	BENDING RADIUS mm	VACUUM m H_2O
42	1" 3/4	50	710	5	15	126	9
55	2" 1/8	63	1000	5	15	165	9

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters

Hidrotubo® Especial Termitas

Hose manufactured via the co-extrusion of flexible, blue PVC with a rigid, anti-shock PVC spiral in accordance with UNE-EN ISO 3994, with protection against termite attacks.



Features

- For industrial and sanitary use.
- The flexible PVC has a special formulation that prevents termite attacks without being toxic for the environment, in compliance with quality standard EN 118.
- Smooth internal and external surfaces. Highly flexible and light.
- External diameters adjusted for easy assembly on PVC and PE seal fittings.
- Hermetically sealed and resistant at joint up to pressure of 30 bar.
- Withstands temperatures between -10°C and 60°C.
- Hose with good chemical resistance associated with PVC's usual properties.
- Great resistance to waste water and chlorinated swimming pool water.

USE IN POOLS · CONSTRUCTION · HIGH QUALITY CONTROL · FREE FROM Cd / Pb / Ba

Applications

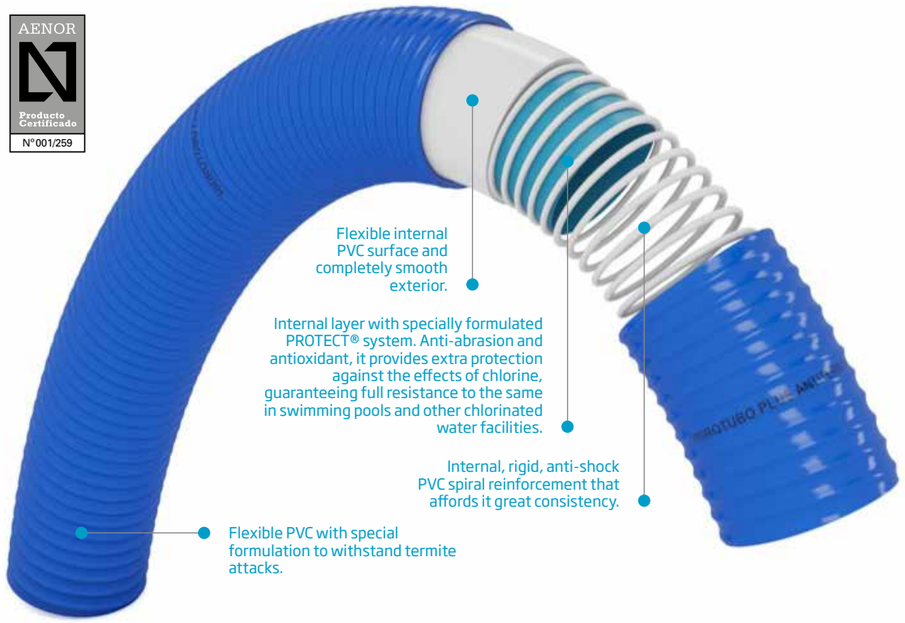
- Discharge, hydro-sanitary piping, swimming pool filtration systems, hydro-massage bathtubs, drains, installed in areas susceptible to underground termite attacks.
- The ground must be free from termites prior to installation.

INT ø mm	INT ø in	EXT ø mm	WEIGHT g/m	OPERATING PRESSURE bar	MINIMUM BURST PRESSURE bar	BENDING RADIUS mm	VACUUM m H_2O
42	1" 3/4	50	710	5	15	126	9
43	1" 3/4	50	685	5	15	129	9
55	2" 1/8	63	1000	5	15	165	9

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters

Hidrotubo® Plus Especial Termitas

Hose manufactured via the co-extrusion of flexible, blue PVC with a rigid, anti-shock PVC spiral in accordance with UNE-EN ISO 3994, with protection against termite attacks.



Features

- For industrial use and special use in swimming pools.
- The flexible PVC has a special formulation that prevents termite attacks without being toxic for the environment, in compliance with quality standard EN 118.
- Smooth internal and external surfaces. Highly flexible and light.
- External diameters adjusted for easy assembly on PVC and PE seal fittings.
- Hermetically sealed and resistant at joint up to pressure of 30 bar.
- Withstands temperatures between -10°C and 60°C.
- Hose with good chemical resistance associated with PVC's usual properties.
- Great resistance to waste water and chlorinated swimming pool water.

USE IN POOLS · CONSTRUCTION · HIGH QUALITY CONTROL · FREE FROM Cd / Pb / Ba

Applications

- Discharge, hydro-sanitary piping, swimming pool filtration systems, hydro-massage bathtubs, drains, installed in areas susceptible to underground termite attacks.
- The ground must be free from termites prior to installation.

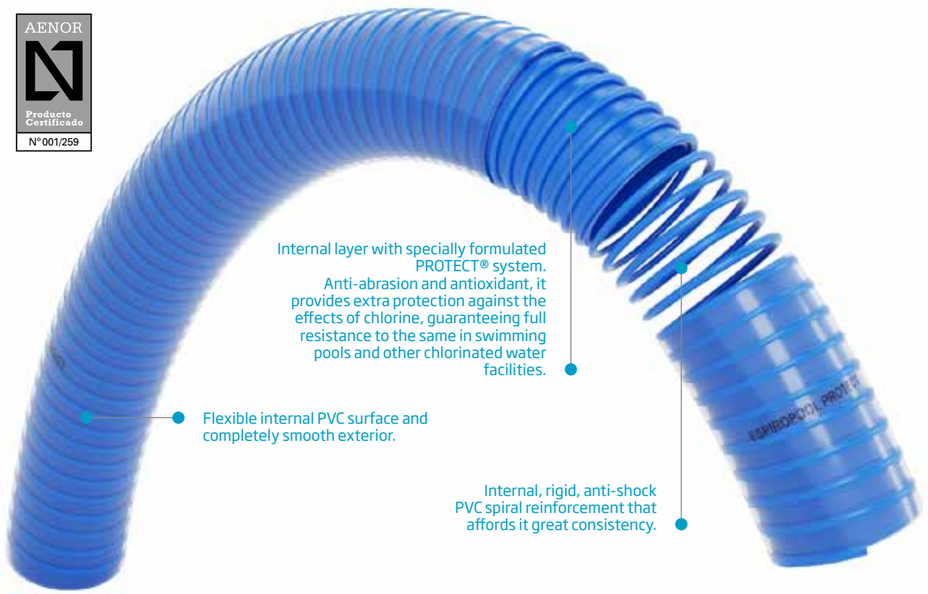
INT ø mm	INT ø in	EXT ø mm	WEIGHT g/m	OPERATING PRESSURE bar	MINIMUM BURST PRESSURE bar	BENDING RADIUS mm	VACUUM m H_2O
42	1" 3/4	50	710	5	15	126	9
43	1" 3/4	50	685	5	15	129	9
55	2" 1/8	63	1000	5	15	165	9

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters

Espiropool Protect®

Flexible, transparent PVC hose that complies with ISO 3994, with a rigid, ovate spiral that is practically incapable of being deformed and an internal PROTECT layer to provide full resistance to abrasion caused by chlorine.

AENOR
Producto Certificado
Nº 001/259



Features

- For industrial use and special use in swimming pools.
- Smooth internal and external surfaces. Highly flexible and light.
- Internal surface covered with PROTECT® technology, a material that grants it greater resistance to chlorinated products and abrasion.
- Rigid spiral with an ovate cross-section that provides greater resistance to compression.
- External diameters adjusted for easy assembly on PVC and PE seal fittings.
- Hermetically sealed and resistant at joint up to pressure of 30 bar.
- Withstands temperatures between -10°C and 60°C.
- Hose with high chemical resistance associated with PVC's usual properties.
- Great resistance to waste water and chlorinated swimming pool water with a high level of chlorination (>3500 ppm).
- Hose with AENOR N MARK product certification in accordance with UNE-EN ISO 3994.

USE IN POOLS | CONSTRUCTION | TEMPERATURE -10°C TO 60°C | HIGH QUALITY CONTROL | FREE FROM Cd / Pb / Ba

Applications

- Discharge, hydro-sanitary piping, swimming pool filtration systems with a high chlorine content, hydro-massage bathtubs.

INT ø mm	INT ø in	EXT ø mm	WEIGHT g/m	OPERATING PRESSURE bar	MINIMUM BURST PRESSURE bar	BENDING RADIUS mm	VACUUM m H_2O
42	1" 3/4	50	710	5	15	85	9
55	2" 1/8	63	1000	5	15	150	9

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters

Transflot®

Floating, opaque, highly flexible hose manufactured based on ethylene-vinyl acetate copolymers.

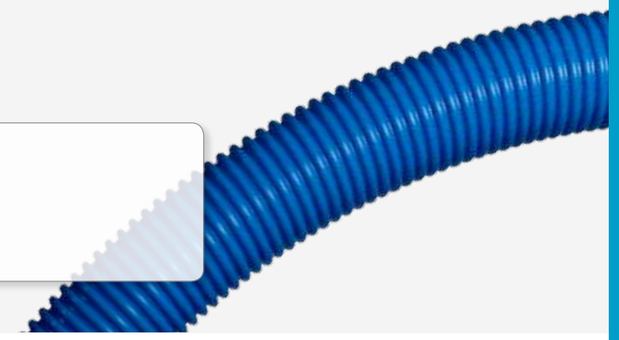
Features

- For domestic use and special use in swimming pools.
- Its corrugated, rounded profile and its specific weight of 0.989g/cm^3 ensure its buoyancy when used.
- Easy to handle in swimming pool cleaners, either manually or automatically.
- Resistant to UV rays, the cold and breakage when extended.
- Its bending radius is twice its internal diameter.
- Extremely watertight in adherence to hose nozzles.
- Withstands temperatures between -25°C and 55°C.

DOMESTIC USE · USE IN POOLS · EASY TO USE · HIGH QUALITY CONTROL · FREE FROM Cd / Pb / Ba

Applications

- Swimming pool cleaner.
- Floating swimming pool cleaner.



Pack 8/10/12/15 m (ø 38)

INT ø mm	INT ø in	EXT ø mm	WEIGHT g/m	BENDING RADIUS mm	VACUUM m H_2O
32	1" ¼	41	180	64	5
38	1" ½	47	220	76	5
51	2"	62	360	100	5

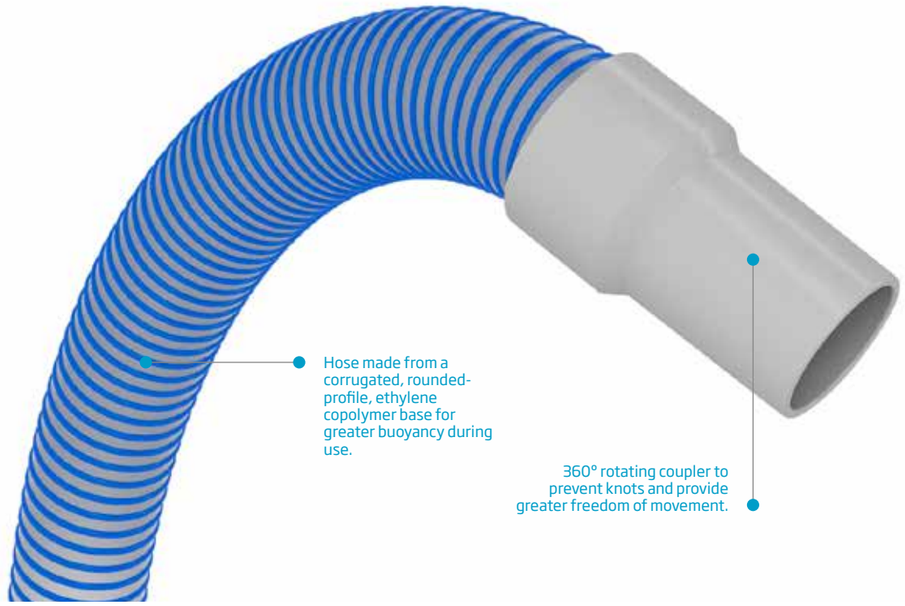
Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters

Transflot® Bicolor

Opaque, floating, highly flexible hose manufactured based on ethylene-vinyl acetate copolymers, with a blue structure, white spiral and rotating coupler.

Applications

- Swimming pool cleaner.
- Floating swimming pool cleaner.



Features

- For domestic use and special use in swimming pools.
- Its corrugated, rounded profile and its specific weight of 0.989 g/cm^3 ensure it floats when used.
- Easy to handle in swimming pool cleaners, either manually or automatically.
- Resistant to UV rays, the cold and breakage when extended.
- Its bending radius is twice its internal diameter.
- Great watertightness in adherence to hose nozzles.
- Withstands temperatures between -25°C and 55°C.

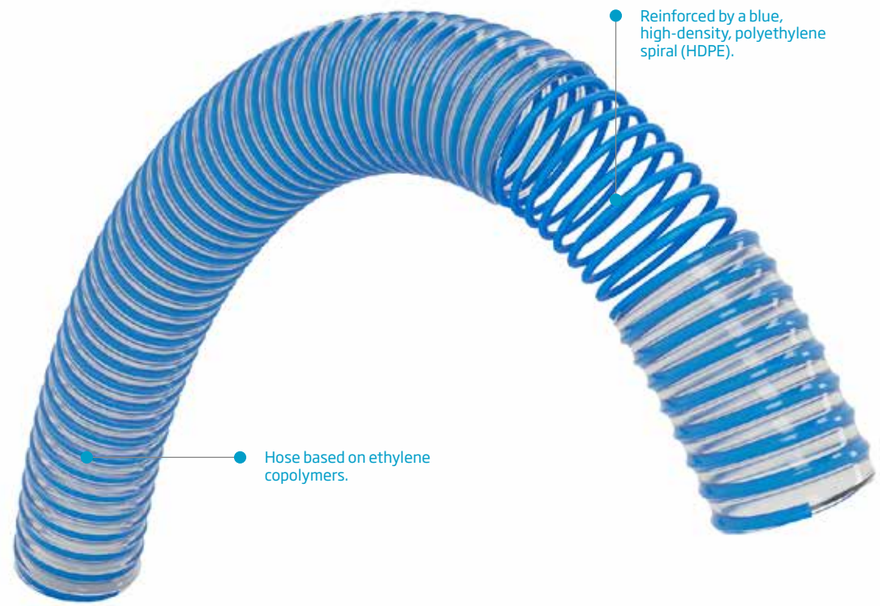
DOMESTIC USE · USE IN POOLS · EASY TO USE · HIGH QUALITY CONTROL · FREE FROM Cd / Pb / Ba

INT ø mm	INT ø in	EXT ø mm	WEIGHT g/m	BENDING RADIUS mm	VACUUM m H_2O
38	1" ½	47	220	76	5

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters

Transflot® E.A.

Transparent, floating, highly flexible hose manufactured based on ethylene copolymers and reinforced by a blue, high-density polyethylene spiral.



Features

- Floating.
- Highly resistant to crushing thanks to it being reinforced by high-density polyethylene (HDPE). Ideal for cleaning large swimming pools, or when superior vacuum levels are required.
- For special use in swimming pools.
- Resistant to UV rays, the cold and breakage when extended.
- Its bending radius is twice its internal diameter.
- Withstands temperatures between -25°C and 55°C.

USE IN POOLS | NON-TOXIC | HIGH QUALITY CONTROL | EASY TO USE | FREE FROM Cd / Pb / Ba

Applications

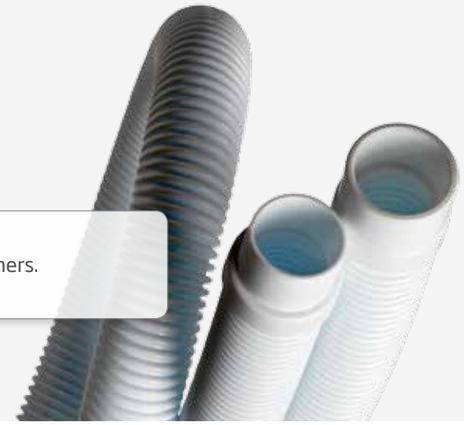
- Professional swimming pool cleaning.

INT ø mm	INT ø in	EXT ø mm	WEIGHT g/m	BENDING RADIUS mm	VACUUM m H_2O
38	1" 1/4	44	250	76	8
51	2"	57	430	100	8

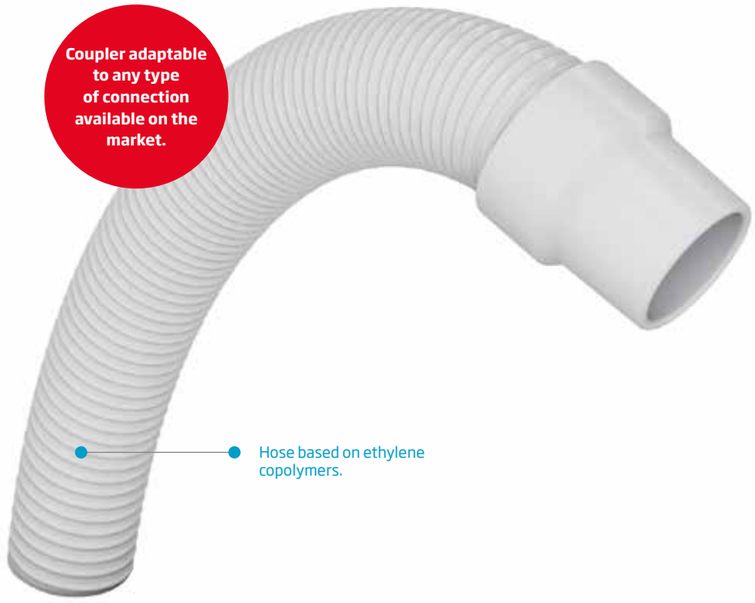
Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters

Espirokit Automatic Cleaner®

Floating, opaque, highly flexible hose manufactured based on ethylene copolymers.



Cleaning of swimming pools with automatic cleaners.



Features

- Its corrugated, rounded profile and its specific weight under 1 (0,989 g/cm^3) ensure it floats when used.
- For special use in swimming pools.
- Resistant to UV rays, the cold and breakage when extended.
- Its bending radius is twice its internal diameter.
- Secures well to hose nozzles when used in assembly.
- Withstands temperatures between -25°C and 55°C.

USE IN POOLS | NON-TOXIC | HIGH QUALITY CONTROL | EASY TO USE | FREE FROM Cd / Pb / Ba

Pack

LENGTH	1 m	1.5 m
UNITS	12	8

INT ø mm	INT ø in	EXT ø mm	WEIGHT g/m	BENDING RADIUS mm	VACUUM m H_2O
38	1" 1/4	45.5	230	76	5

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters

Hardware Sanitation

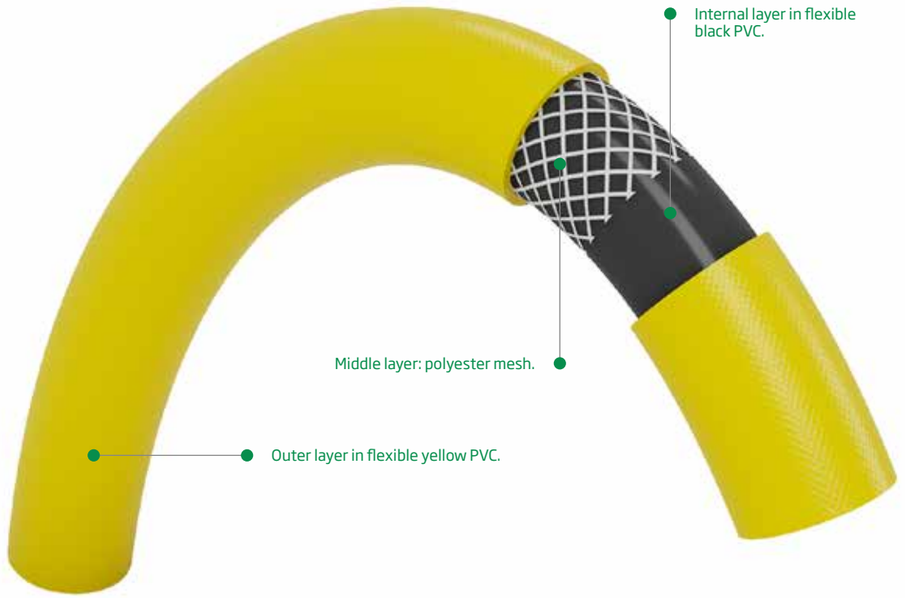
HARDWARE - SANITATION

Gardening

Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features.

Espiroaspersión®

Multi-layer, plasticised PVC hose, reinforced by a polyester mesh.
Specifically for agricultural irrigation.



Features

- For agricultural use and construction.
- Garden hose reinforced with a polyester mesh to resist pressure from the water system.
- Chemical resistance associated with PVC's resistance chart.
- Recommended temperature for use between -10°C and 60°C.

ECONOMIC · CONSTRUCTION · AGRICULTURAL USE · EASY TO USE

HIGH QUALITY CONTROL · FREE FROM Cd / Pb / Ba

Applications

- Irrigation and sprinkling in general, gardening, horticulture and floriculture.

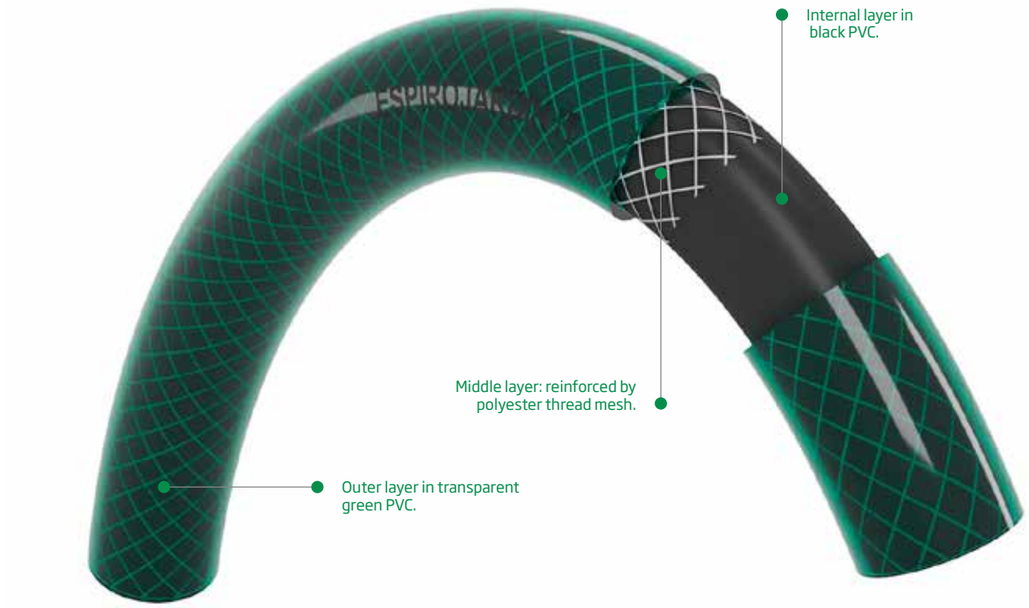
20/25/50 m roll

INT ø mm	INT ø in	WEIGHT g/m	OPERATING PRESSURE bar	MINIMUM BURST PRESSURE bar	ROLL LENGTH m
12.5	1/2"	125	8	24	25-50
15	5/8"	135	8	24	25-25-50
19	3/4"	200	8	24	25-36-50
25	1"	330	7	21	25-50
30	1" 1/8	550	7	21	25-50

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters

Espirojardín®

Multi-layer, flexible PVC hose, reinforced with a polyester mesh.
Specifically designed for domestic irrigation.



Features

- For domestic use.
- Garden hose reinforced with a polyester mesh to resist pressure from the water system.
- Very light and flexible, with a smooth surface.
- Good chemical resistance associated with PVC's resistance chart.
- Recommended temperature for use between -10°C and 60°C.

DOMESTIC USE · ECONOMIC · EASY TO USE · LIGHT

HIGH QUALITY CONTROL · FREE FROM Cd / Pb / Ba

Applications

- Domestic irrigation.
- Gardening, horticulture, floriculture and sport boats.

INT ø mm	INT ø in	EXT ø mm	WEIGHT g/m	OPERATING PRESSURE bar	MINIMUM BURST PRESSURE bar	ROLL LENGTH m
12.5	½"	17	120	10	30	15-20-25-50
15	⅝"	19	150	8	24	15-20-25-50
19	¾"	24.5	250	8	24	25-50
25	1"	32	420	6	18	25-50
30	1" ⅛	38	580	6	18	25-50

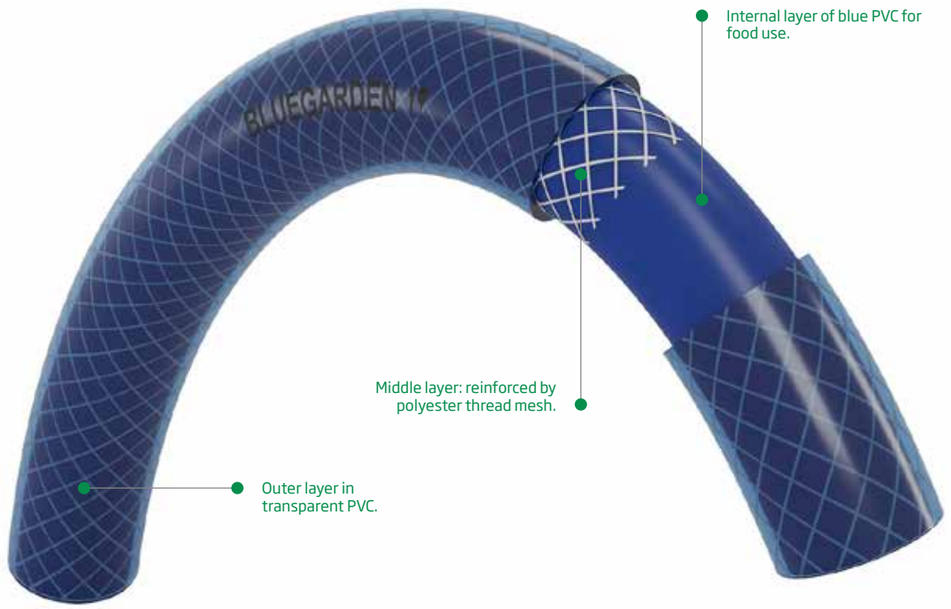
Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters

Espirojardín Azul®

Multi-layer, plasticised PVC hose, reinforced internally by a polyester mesh,

Applications

- Agricultural irrigation, gardening, construction and cleaning of boats.



Features

- For food use in accordance with European regulations EC 1935/2004 and EU 10/2011 (see declaration of conformity).
- Highly flexible and easy to use, with special resistance to torsion.
- Good chemical resistance associated with PVC's resistance chart.
- Withstands temperatures between -10°C and 60°C.

DOMESTIC USE · FOOD USE · ECONOMIC · EASY TO USE

LIGHT · HIGH QUALITY CONTROL · FREE FROM Cd / Pb / Ba

INT ø mm	INT ø in	EXT ø mm	WEIGHT g/m	OPERATING PRESSURE bar	MINIMUM BURST PRESSURE bar
12.5	1/2"	17	130	10	30
15	5/8"	21	220	10	30
19	3/4"	25	270	8	24
25	1"	32	405	8	24

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters

★★★BASIC LINE

Supervinil® Rústica

Monolayer, plasticised PVC hose with a striated surface, designed for gardening, agricultural use and pump systems.

Features

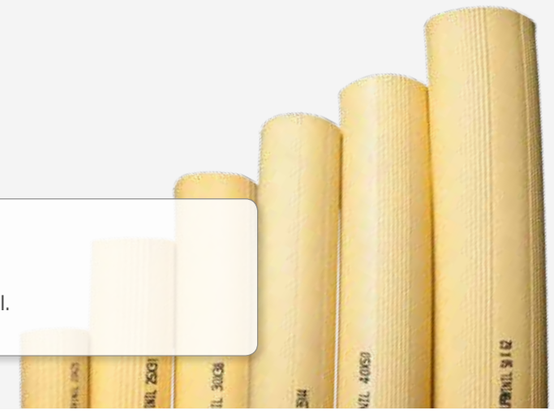
- For agricultural and domestic use.
- Special formulation with rubber feel and resistant to low temperatures.
- Highly flexible and very easy to use.
- Good chemical resistance associated with PVC's resistance chart.
- Withstands temperatures between -25°C and 70°C.
- Easy to recycle once its useful life has ended.

DOMESTIC USE · AGRICULTURAL USE · RUBBER FEEL · STRIATED

ADVERSE SCENARIOS · HIGH QUALITY CONTROL · FREE FROM Cd / Pb / Ba

Applications

- Rural areas with low temperatures.
- Farms and livestock facilities in general.

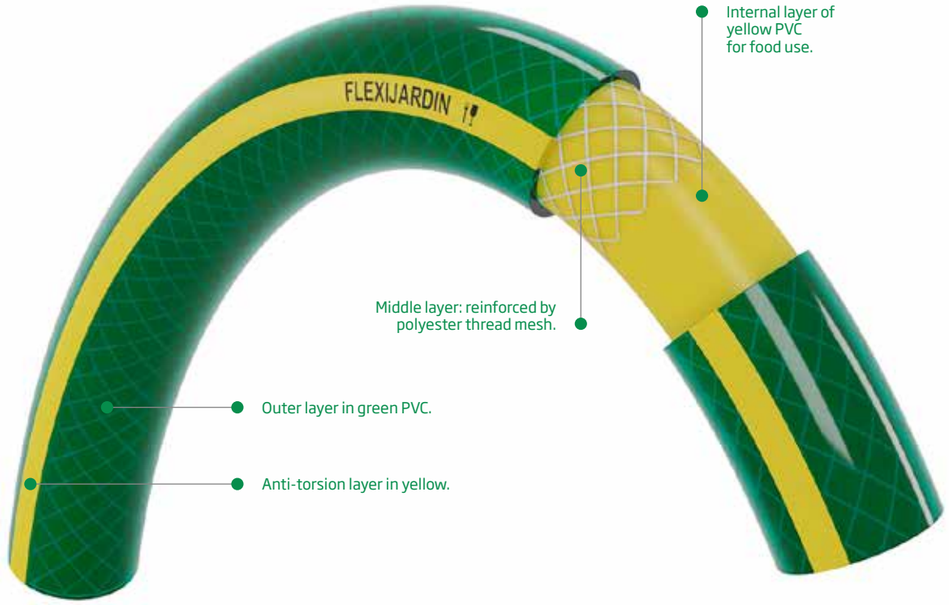


INT ø mm	INT ø in	EXT ø mm	WEIGHT g/m	OPERATING PRESSURE bar	MINIMUM BURST PRESSURE bar	ROLL LENGTH m
10	3/8"	14	100	3.5	10	50
12	1/2"	16	116	3.0	8.5	50
15	5/8"	19	141	2.5	7	50
20	3/4"	25	233	2.2	6.6	50
25	1"	31	348	2.2	6.6	50
30	1" 1/8	38	564	2.2	6.6	50
35	1" 3/8	44	737	2.2	6.6	50
40	1" 5/8	50	933	2.2	6.6	50
45	1" 3/4	56	1152	2.2	6.6	50
51	2"	62	1393	2.2	6.6	50
60	2" 1/32	72	1389	2	6	25

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters

Flexijardín®

Quadruple-layered, plasticised PVC hose, reinforced with a polyester mesh and fitted with an anti-torsion tensor. Highly flexible and easy to use, especially for gardening.



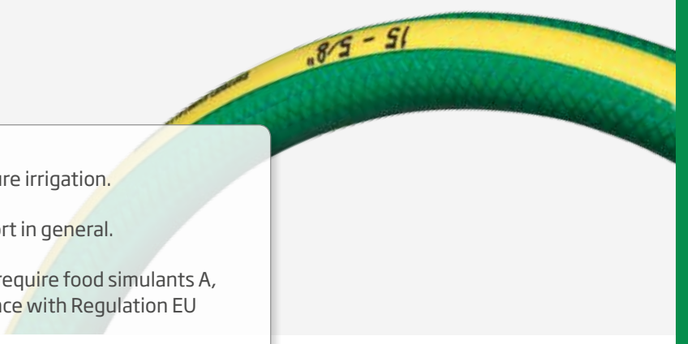
Features

- For food use in accordance with European regulations EC 1935/2004 and EU 10/2011 (see declaration of conformity).
- Highly flexible and easy to handle.
- Chemical resistance associated with PVC's resistance chart.
- Recommended temperature for use between -10°C and 60°C.

DOMESTIC USE · FOOD USE · EASY TO USE · LIGHT

HIGH QUALITY CONTROL · FREE FROM Cd / Pb / Ba (FREE Cd-Pb-Ba)

Applications



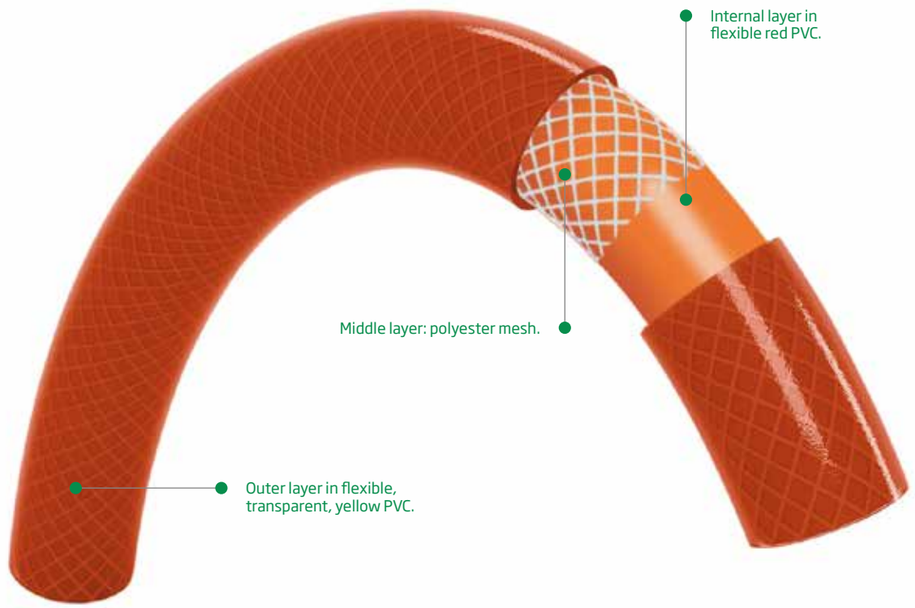
- Gardening, horticulture and floriculture irrigation.
- Domestic facilities and water transport in general.
- Transfer of liquid food products that require food simulants A, B and C in OM2 conditions in accordance with Regulation EU 10/2011.

INT ø mm	INT ø in	WEIGHT g/m	OPERATING PRESSURE bar	MINIMUM BURST PRESSURE bar	ROLL LENGTH m
15	5/8"	180	8	24	25-50
19	3/4"	260	8	24	25-50
25	1"	380	6	18	25-50

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters

Texovinil®

Multi-layer, plasticised PVC hose, reinforced by a polyester mesh.



Features

- For industrial use.
- Very light and flexible, with a smooth surface.
- Good chemical resistance associated with PVC's resistance chart.
- Recommended temperature for use between -10°C and 60°C.

DOMESTIC USE · INDUSTRIAL USE · EASY TO USE · LIGHT

ECONOMIC · HIGH QUALITY CONTROL · FREE FROM Cd / Pb / Ba

Applications

- Domestic irrigation.
- Gardening, horticulture and floriculture.

INT ø mm	INT ø in	WEIGHT g/m	OPERATING PRESSURE bar	MINIMUM BURST PRESSURE bar	ROLL LENGTH m
15	5/8"	135	8	24	25-50
19	3/4"	250	8	24	25-50
25	1"	330	6	18	25-50

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters

Espirolatex®

Monolayer, flexible PVC hose.

Monolayer hose made from material with a latex feel, for food use.

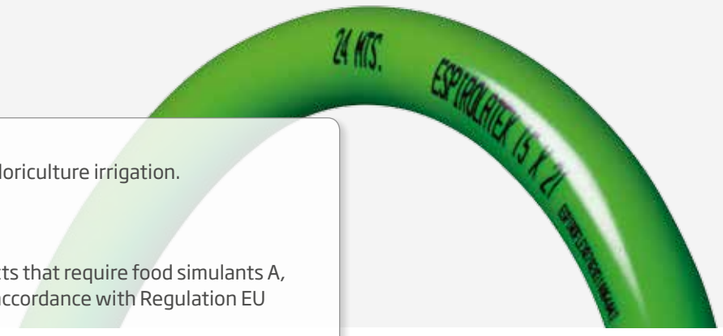
Features

- For food use in accordance with European regulations EC 1935/2004 and EU 10/2011 (see declaration of conformity).
- Highly flexible, monolayer, completely smooth hose.
- Highly resistant to folding and twisting.
- UV protection.
- Good chemical resistance associated with PVC's resistance chart.
- Withstands temperatures between -10°C and 60°C.

DOMESTIC USE · FOOD USE · EASY TO USE · LIGHT · HIGH QUALITY CONTROL

UV PROTECTION · LATEX FEEL · ANTI-FOLDING · FREE FROM Cd / Pb / Ba

Applications



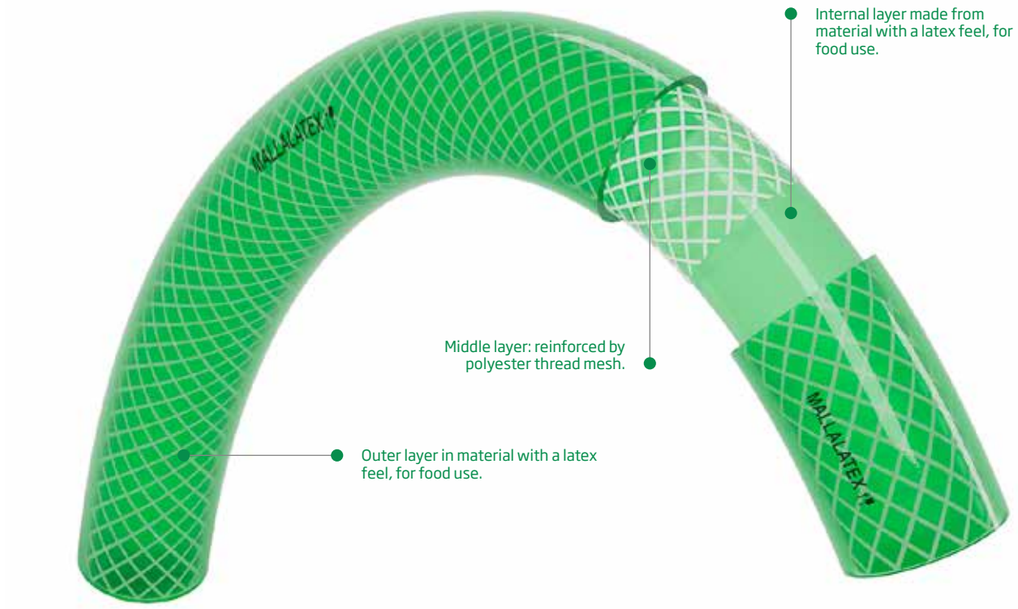
- Gardening, horticulture and floriculture irrigation.
- Cleaning sports boats.
- Transfer of liquid food products that require food simulants A, B and C in OM2 conditions in accordance with Regulation EU 10/2011.

INT ø mm	INT ø in	EXT ø mm	WEIGHT g/m	OPERATING PRESSURE bar	MINIMUM BURST PRESSURE bar	ROLL LENGTH m
15	5/8"	21	205	3	9	25-50
19	3/4"	27	350	3	9	25-50
25	1"	33	440	3	9	25-50
30	1" 1/8	38	515	3	9	25-50

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters

Mallalatex®

Plasticised PVC hose, reinforced internally by a polyester mesh.



Features

- For food use in accordance with European regulations EC 1935/2004 and EU 10/2011 (see declaration of conformity).
- UV protection.
- Good chemical resistance associated with PVC's resistance chart.
- High-quality, highly flexible hose, reinforced internally by a polyester mesh that helps it withstand medium working pressures.
- Withstands temperatures between -10°C and 60°C.

DOMESTIC USE · FOOD USE · ECONOMIC · EASY TO USE · LIGHT · HIGH QUALITY CONTROL

UV PROTECTION · LATEX FEEL · ANTI-FOLDING · GREATER FLEXIBILITY · FREE FROM Cd / Pb / Ba

Applications

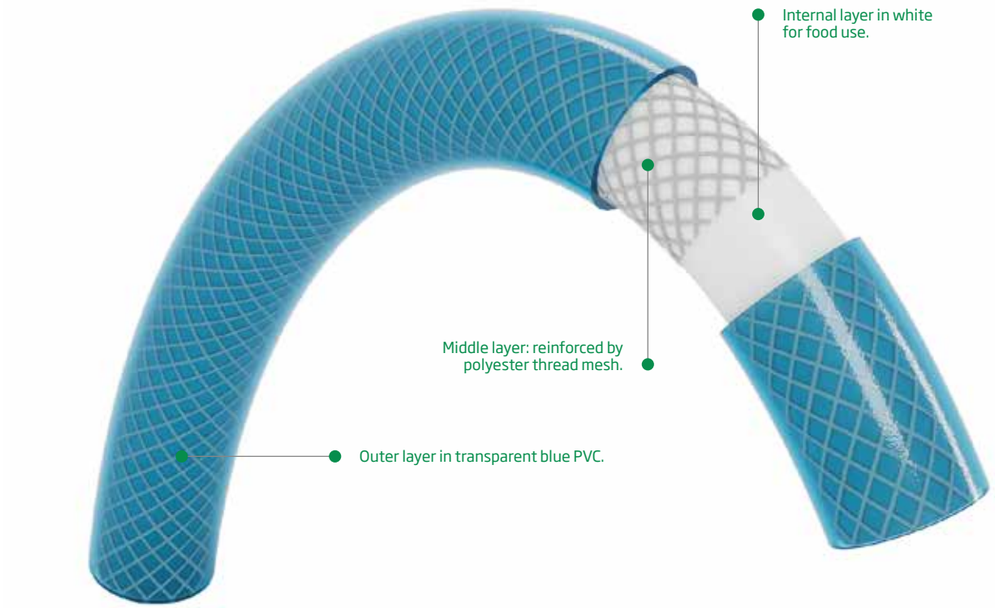
- Gardening, horticulture and floriculture irrigation.
- Cleaning sports boats.
- Transfer of liquid food products that require food simulants A, B and C in OM2 conditions in accordance with Regulation EU 10/2011.

INT ø mm	INT ø in	EXT ø in	WEIGHT g/m	OPERATING PRESSURE bar	MINIMUM BURST PRESSURE bar	ROLL LENGTH m
15	5/8"	21	200	8	24	15-20-25-50
19	3/4"	26	300	8	24	25-50
25	1"	32	370	8	24	25-50

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters

Espirgarden®

Multi-layer, plasticised PVC hose, reinforced by a polyester mesh.
Specifically for gardening and food use.



Features

- For food use in accordance with European regulations EC 1935/2004 and EU 10/2011 (see declaration of conformity).
- UV protection.
- Good chemical resistance associated with PVC's resistance chart.
- Withstands temperatures between -10°C and 60°C.

DOMESTIC USE · FOOD USE · MARITIME USE · AGRICULTURAL USE · EASY TO USE

UV PROTECTION · POLYESTER REINFORCEMENT · HIGH QUALITY CONTROL · FREE FROM Cd / Pb / Ba

Applications

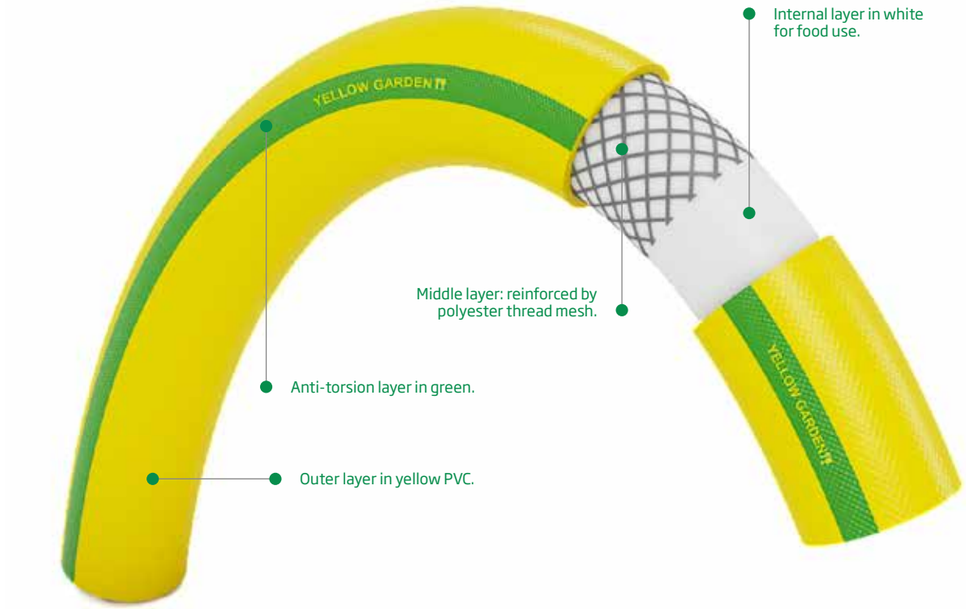
- Gardening, horticulture and floriculture irrigation.
- Cleaning sports boats.
- Transfer of liquid food products that require food simulants A, B and C in OM2 conditions in accordance with Regulation EU 10/2011.

INT ø mm	INT ø in	EXT ø mm	WEIGHT g/m	OPERATING PRESSURE bar	MINIMUM BURST PRESSURE bar	ROLL LENGTH m
12.5	1/2"	17	120	10	30	25-50
15	5/8"	21	200	10	30	25-50
19	3/4"	26	300	10	30	25-50
25	1"	33	465	10	30	25-50

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters

Yellowgarden®

Multi-layer, plasticised PVC hose, reinforced by a polyester mesh, with a fourth layer and a special, anti-folding tensor fitted. Designed especially for gardening and food use.



Features

- For food use in accordance with European regulations EC 1935/2004 and EU 10/2011 (see declaration of conformity).
- UV protection.
- Chemical resistance associated with PVC's usual properties.
- Recommended temperature for use between -10°C and 60°C.

DOMESTIC USE · FOOD USE · EASY TO USE · ANTI-FOLDING

ANTI-TORSION · HIGH QUALITY CONTROL · FREE FROM Cd / Pb / Ba

Applications

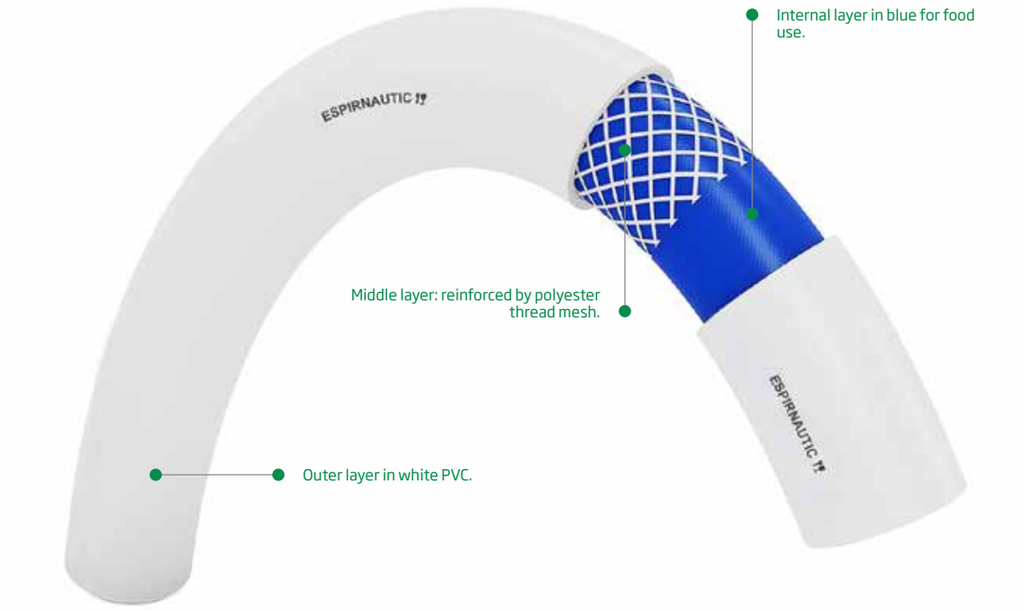
- Gardening, horticulture and floriculture irrigation.
- Transfer of liquid food products that require food simulants A, B and C in OM2 conditions in accordance with Regulation EU 10/2011.

INT ø mm	INT ø in	WEIGHT g/m	OPERATING PRESSURE bar	MINIMUM BURST PRESSURE bar	ROLL LENGTH m
12.5	½"	120	10	30	25-50
15	⅝"	210	10	30	25-50
19	¾"	250	8	24	25-50
25	1"	420	8	24	25-50

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters

Espirnautic®

Multi-layer, flexible, plasticised PVC hose, reinforced with a polyester mesh. Specifically designed for boats and food use. Excellent flexibility, ease of use, resistance to breakage when extended, and anti-folding.



Features

- For food use in accordance with European regulations EC 1935/2004 and EU 10/2011 (see declaration of conformity).
- UV protection.
- Good chemical resistance associated with PVC's resistance chart.
- Withstands temperatures between -10°C and 60°C.

FOOD USE · MARITIME USE · EASY TO USE · UV PROTECTION · HIGH QUALITY CONTROL · FREE FROM Cd / Pb / Ba

Applications

- Cleaning sports boats.
- Transfer of liquid food products that require food simulants A, B and C in OM2 conditions in accordance with Regulation EU 10/2011.

INT ø mm	INT ø in	EXT ø mm	WEIGHT g/m	OPERATING PRESSURE bar	MINIMUM BURST PRESSURE bar	ROLL LENGTH m
15	5/8"	21	210	10	30	25-50
19	3/4"	26	300	10	30	25-50
25	1"	33	465	8	24	25-50

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters

Blackgarden®

Multi-layer, plasticised PVC hose, reinforced internally by a polyester mesh and a fourth layer, fitted with a special, anti-folding tensor. Designed especially for gardening in harsh conditions.

Features

- For food use in accordance with European regulations EC 1935/2004 and EU 10/2011 (see declaration of conformity).
- UV protection.
- Good chemical resistance associated with PVC's resistance chart.
- Withstands temperatures between -10°C and 60°C.

DOMESTIC USE · FOOD USE · UV PROTECTION · EASY TO USE

ANTI-FOLDING · HIGH QUALITY CONTROL · FREE FROM Cd / Pb / Ba

Applications

- Gardening, horticulture and floriculture irrigation.
- High-performance applications, extreme conditions.
- Transfer of liquid food products that require food simulants A, B and C in OM2 conditions in accordance with Regulation EU 10/2011.

INT ø mm	INT ø in	WEIGHT g/m	OPERATING PRESSURE bar	MINIMUM BURST PRESSURE bar	ROLL LENGTH m
12.5	1/2"	120	10	30	50
15	5/8"	210	10	30	50
19	3/4"	250	8	24	50
25	1"	420	8	24	50

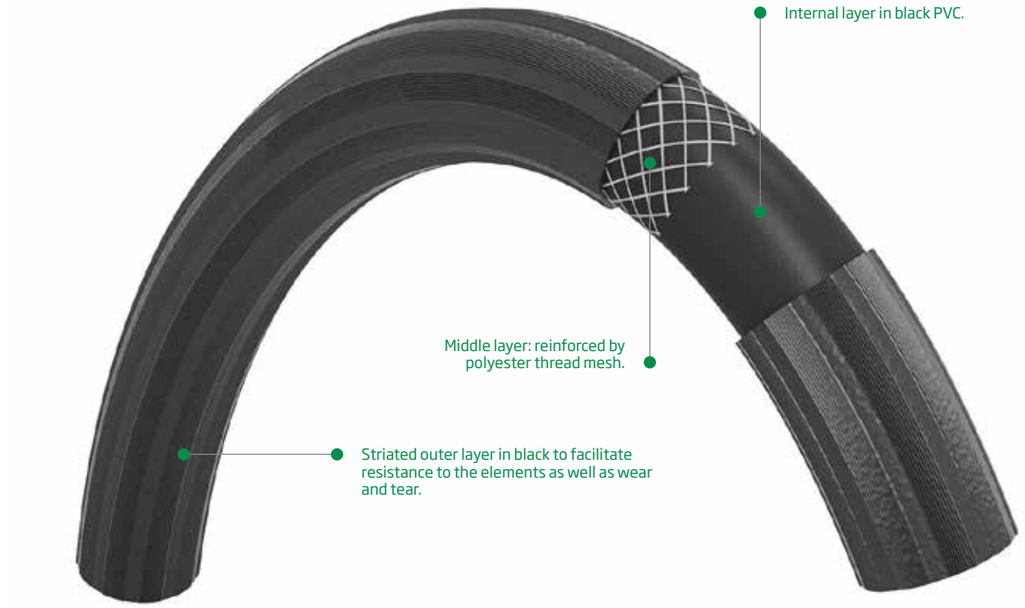
Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters

Aquaobra Plus®

Plasticised PVC hose, reinforced internally
by a polyester mesh.

Applications

- Construction.
- Irrigation and sprinkling in general, gardening, horticulture and floriculture.



Features

- Hose internally reinforced by a polyester mesh that can withstand considerable pressures, affording it resistance to breakage when extended.
- Good chemical resistance associated with PVC's resistance chart.
- Highly flexible and easy to handle.
- Striated outer layer in black to facilitate resistance to the elements as well as wear and tear.
- Withstands temperatures between -10°C and 60°C.

CONSTRUCTION · STRIATED · HIGH PRESSURES · EASY TO USE · HIGH QUALITY CONTROL · FREE FROM Cd / Pb / Ba

INT ø mm	INT ø in	EXT ø mm	WEIGHT g/m	OPERATING PRESSURE bar	MINIMUM BURST PRESSURE bar	ROLL LENGTH m
15	5/8"	21	210	8	24	50
19	3/4"	26	300	8	24	50
25	1"	32	385	7	21	50

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about
the minimum purchase amounts assigned to non-standard diameters

Espirobil®

Multi-layer, plasticised PVC hose, reinforced with a polyester mesh. Specifically designed for use in aggressive working conditions due to its great resistance.

Features

- For industrial use and designed especially for the construction industry.
- Highly flexible and easy to handle.
- Striated outer layer in black to facilitate resistance to the elements as well as wear and tear in extremely difficult working conditions.
- Chemical resistance associated with PVC's resistance chart.
- Recommended temperature for use between -10°C and 60°C.

CONSTRUCTION · STRIATED · EASY TO USE · UV PROTECTION · ADVERSE SCENARIOS · HIGH QUALITY CONTROL · FREE FROM Cd / Pb / Ba

Applications

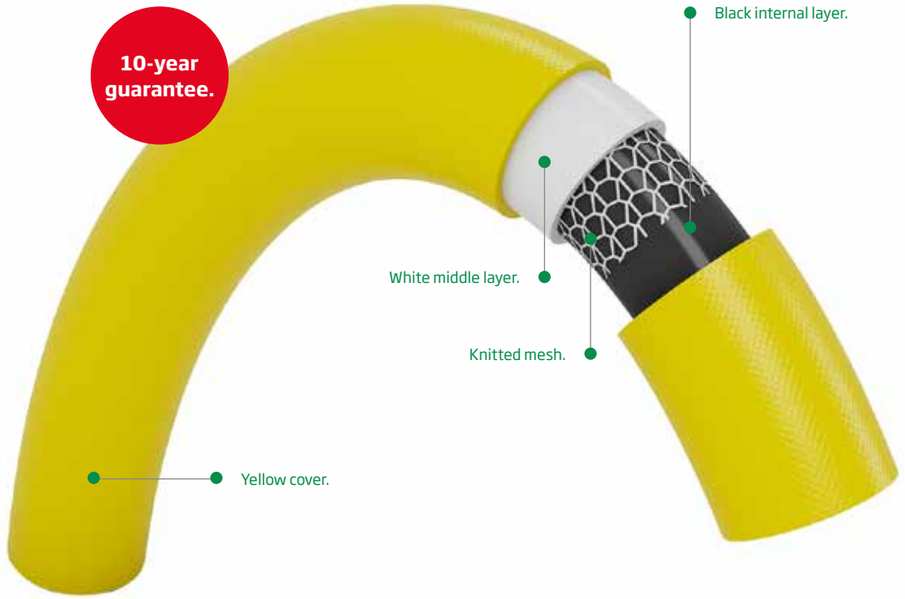
- Irrigation in very difficult working conditions.
- Construction, public works, quarries
- Irrigation and sprinkling in general, gardening, horticulture and floriculture.

INT ø mm	INT ø in	EXT ø mm	WEIGHT g/m	OPERATING PRESSURE bar	MINIMUM BURST PRESSURE bar	ROLL LENGTH m
15	5/8"	21	210	8	24	50
19	3/4"	25	255	8	24	50
25	1"	32	385	8	24	50

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters

Tricoespir®

Multi-layer, plasticised PVC hose, reinforced by a knitted polyester mesh. Designed especially for gardening.



Features

- For domestic use.
- Reinforced internally by ESPIROFLEX NO TORSION TECHNOLOGY, thanks to a knitted polyester mesh that prevents torsion and folding when used. Highly flexible and easy to handle.
- UV protection.
- Good chemical resistance associated with PVC's resistance chart.
- Withstands temperatures between -10°C and 60°C.

Applications

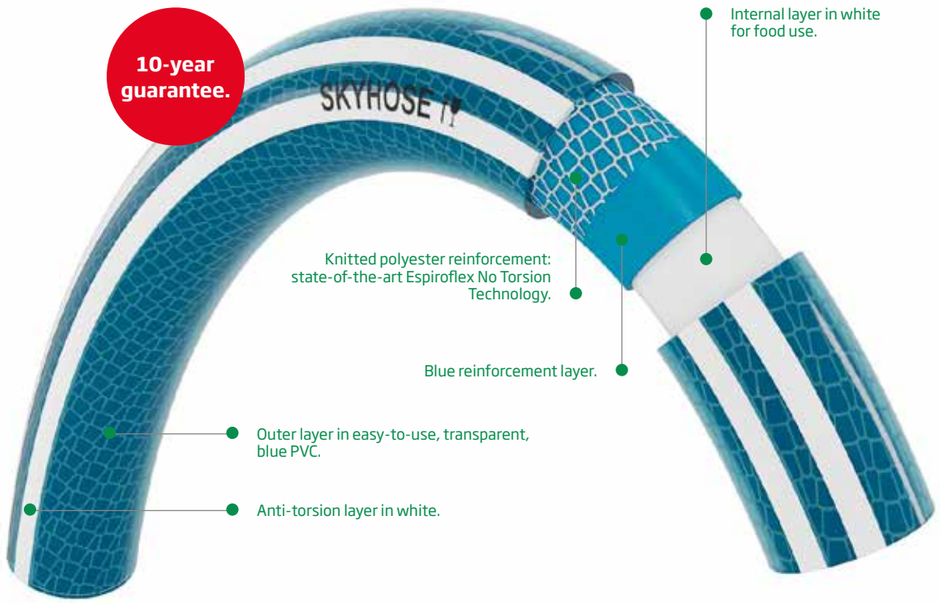
- Gardening, horticulture and floriculture irrigation. Domestic facilities and water transport in general.

INT ø mm	INT ø in	WEIGHT g/m	OPERATING PRESSURE bar	MINIMUM BURST PRESSURE bar	ROLL LENGTH m
12.5	1/2"	155	10	30	25-50
15	5/8"	175	8	24	25-50
19	3/4"	250	8	24	25-50
25	1"	420	6	18	25-50

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters

Skyhose®

Superior-quality, knitted hose designed especially for gardening. For food use, with UV and anti-algae protection. Comprised of five layers and equipped with a special knitted system - ESPIROFLEX SINE TORSION TECHNOLOGY - that makes it completely resistant to knots and folding.



Features

- For food use in accordance with European regulations EC 1935/2004 and EU 10/2011 (see declaration of conformity).
- Good chemical resistance associated with PVC's resistance chart.
- Reinforced internally by ESPIROFLEX NO TORSION TECHNOLOGY, thanks to a knitted polyester mesh that prevents torsion and folding when used.
- Withstands temperatures between -10°C and 60°C.

DOMESTIC USE · FOOD USE · KNITTED HOSE · ANTI-TORSION · GREATER FLEXIBILITY · ANTI-FOLDING · HIGH PRESSURES

5 LAYERS · EASY TO USE · HIGH QUALITY CONTROL · FREE FROM Cd / Pb / Ba · 10-YEAR GUARANTEE

Applications

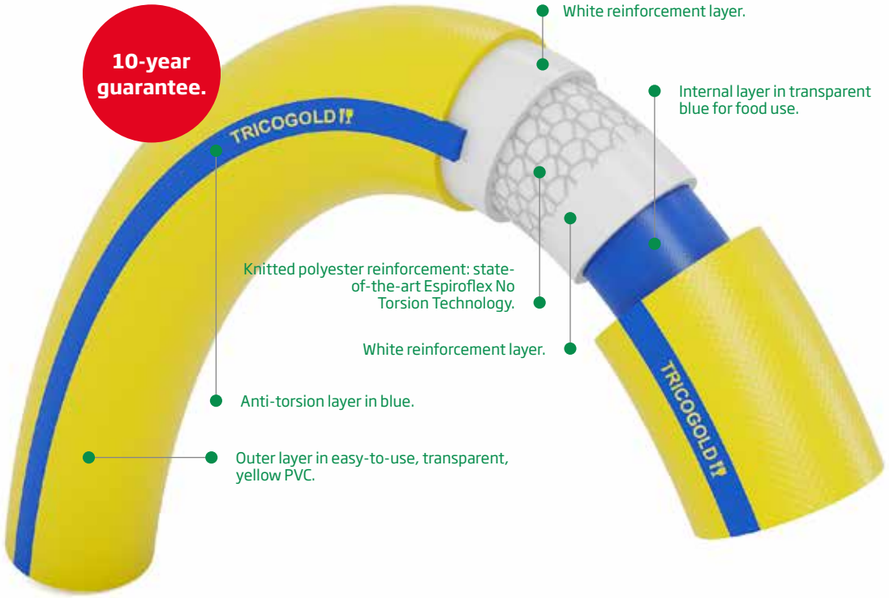
- Intensive gardening, horticulture and floriculture irrigation.
- Domestic facilities and water transport in general.
- Transfer of liquid food products that require food simulants A, B and C in OM2 conditions in accordance with Regulation EU 10/2011.

INT ø mm	INT ø in	WEIGHT g/m	OPERATING PRESSURE bar	MINIMUM BURST PRESSURE bar	ROLL LENGTH m
12.5	1/2"	120	10	30	25-50
15	5/8"	175	10	30	25-50
19	3/4"	250	10	30	25-50
25	1"	420	8	24	25-50

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters

Tricogold®

Superior-quality, knitted hose designed especially for gardening. For food use, with UV and anti-algae protection. Comprised of six layers and equipped with a special knitted system - ESPIROFLEX SINE TORSION TECHNOLOGY - that makes it completely resistant to knots and folding.



Features

- For food use in accordance with European regulations EC 1935/2004 and EU 10/2011 (see declaration of conformity).
- UV protection.
- Good chemical resistance associated with PVC's resistance chart.
- Reinforced internally by ESPIROFLEX NO TORSION TECHNOLOGY, thanks to a knitted polyester mesh that prevents torsion and folding when used.
- Withstands temperatures between -10°C and 60°C.

DOMESTIC USE · FOOD USE · KNITTED HOSE · ANTI-TORSION · GREATER FLEXIBILITY · ANTI-FOLDING · HIGH PRESSURES

6 LAYERS · EASY TO USE · HIGH QUALITY CONTROL · FREE FROM Cd / Pb / Ba · 10-YEAR GUARANTEE

Applications

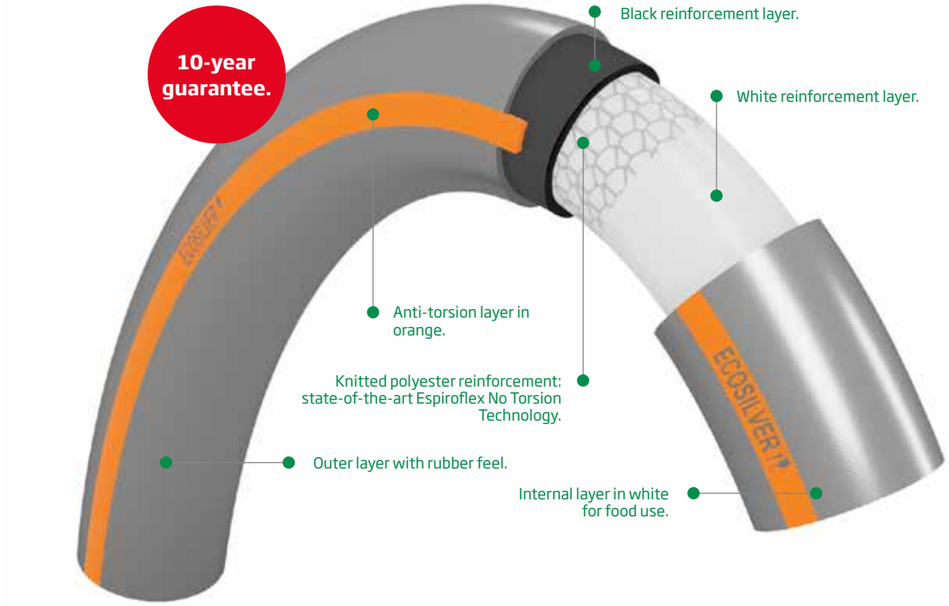
- Intensive gardening, horticulture and floriculture irrigation.
- Domestic facilities and water transport in general.
- Transfer of liquid food products that require food simulants A, B and C in OM2 conditions in accordance with Regulation EU 10/2011.

INT ø mm	INT ø in	WEIGHT g/m	OPERATING PRESSURE bar	MINIMUM BURST PRESSURE bar	ROLL LENGTH m
12.5	1/2"	145	10	30	25-50
15	5/8"	175	10	30	25-50
19	3/4"	250	10	30	25-50
25	1"	420	8	24	25-50

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters

Ecosilver®

Multi-layer hose made with phthalate-free PVC. Designed especially for domestic gardening. Comprised of six layers and equipped with a special knitted system - ESPIROFLEX NO TORSION TECHNOLOGY - that makes it completely resistant to knots and folding.



Features

- For food use in accordance with European regulations EC 1935/2004 and EU 10/2011 (see declaration of conformity).
- UV protection.
- Good chemical resistance associated with PVC's resistance chart.
- Reinforced internally by ESPIROFLEX NO TORSION TECHNOLOGY, thanks to a knitted polyester mesh that prevents torsion and folding when used.
- Withstands temperatures between -10°C and 60°C.

FOOD USE · KNITTED HOSE · ANTI-TORSION · GREATER FLEXIBILITY · ANTI-FOLDING · HIGH PRESSURES · EASY TO USE

6 LAYERS · HIGH QUALITY CONTROL · FREE FROM Cd / Pb / Ba · PHTHALATE-FREE · 10-YEAR GUARANTEE

Applications

- Intensive gardening, horticulture and floriculture irrigation.
- Domestic facilities and water transport in general.
- Transfer of liquid food products that require food simulants A, B, C and D1 in OM2 conditions in accordance with Regulation EU 10/2011.

INT ø mm	INT ø in	WEIGHT g/m	OPERATING PRESSURE bar	MINIMUM BURST PRESSURE bar	ROLL LENGTH m
12.5	1/2"	145	10	30	25-50
15	5/8"	175	10	30	25-50
19	3/4"	250	10	30	25-50

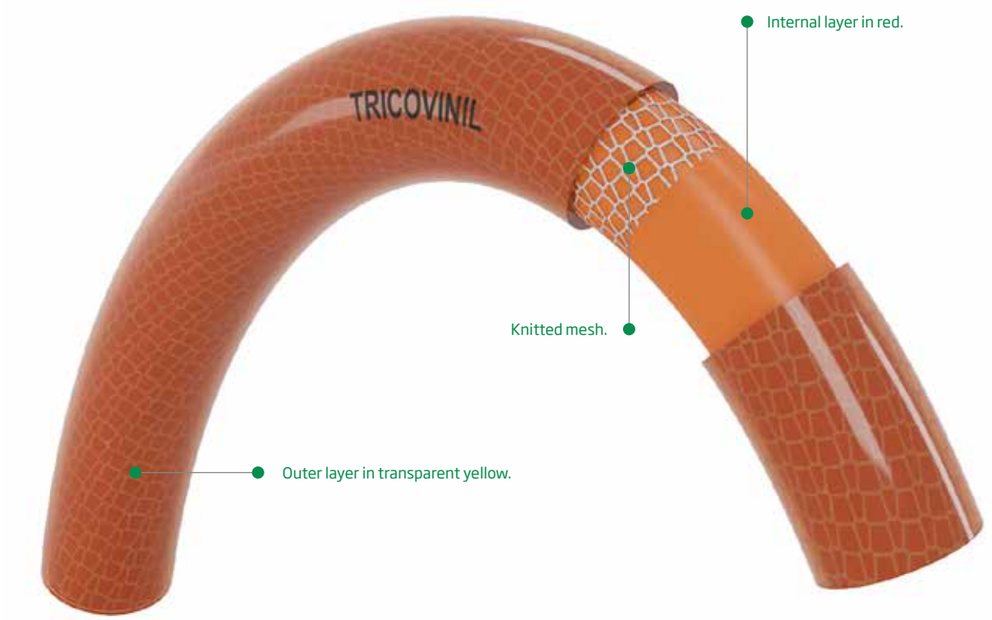
Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters

Tricovinil®

Red, transparent hose manufactured via the extrusion of vinyl compounds.

Applications

- Gardening, horticulture and floriculture irrigation.



Features

- Red, transparent hose manufactured via the extrusion of vinyl compounds, reinforced internally by a knitted polyester mesh that helps it to withstand pressures of up to 7 bar and grants it resistance to breakage when extended.
- Highly flexible and easy to handle.
- UV protection.
- Resistant to the weather and chemical products.
- Non-toxic but not for food use.
- Withstands temperatures between -10°C and 60°C.

INT ø mm	INT ø in	WEIGHT g/m	OPERATING PRESSURE bar	MINIMUM BURST PRESSURE bar	ROLL LENGTH m
15	5/8"	175	7	21	25-50
19	3/4"	260	7	21	25-50

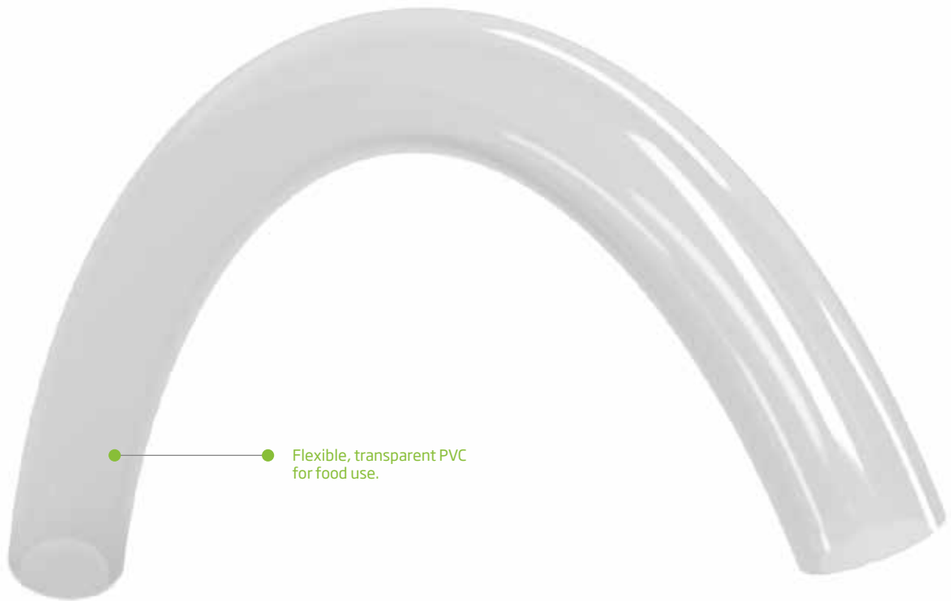
Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about
the minimum purchase amounts assigned to non-standard diameters

Sanitation

Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features.

Espirocristal®

Monolayer, flexible, plasticised, transparent PVC hose especially for levelling in construction and piping liquids at low pressure.



Flexible, transparent PVC for food use.

Features

- For food use in accordance with European regulations EC 1935/2004 and EU 10/2011 (see declaration of conformity).
- Great flexibility and highly resistant to breakage when extended.
- Good chemical resistance associated with PVC's resistance chart.
- Recommended temperature for use between -10°C and 60°C.

DOMESTIC USE · FOOD USE · INDUSTRIAL USE · CONSTRUCTION

LIGHT · HIGH QUALITY CONTROL · FREE FROM Cd / Pb / Ba

Applications

- Transfer of liquid food products that require food simulants A, B and C in OM2 conditions in accordance with Regulation EU 10/2011, such as wine, must, beer, vinegar and alcoholic liquids up to 20°.
- Industry in general and as a level in the construction industry.

INT ø mm	INT ø in	EXT ø mm	WEIGHT g/m	BENDING RADIUS mm
2	5/64"	4	12	8
3	1/8"	5	16	10
4	11/64"	6	20	12
4	11/64"	7	32	15
4	11/64"	8	46	16
5	13/64"	7	24	15
5	13/64"	8	39	16
6	1/4"	8	28	16
6	1/4"	9	45	18
6	1/4"	10	62	20
7	9/32"	10	49	20
8	5/16"	10	35	20
8	5/16"	11	55	25
8	5/16"	12	78	25
9	3/8"	12	61	25
10	3/8"	12	43	25
10	3/8"	13	67	30
10	3/8"	14	93	35
12	1/2"	15	78	35
12	1/2"	16	108	35
14	5/8"	18	124	40
15	5/8"	19	132	40
15	5/8"	20	169	45
16	5/8"	20	139	40
18	5/8"	23	198	50
20	3/4"	25	218	50
25	1"	31	325	60
25	1"	34	514	65

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about
the minimum purchase amounts assigned to non-standard diameters

Espirogas®

Multi-layer, plasticised PVC hose, especially designed to resist aliphatic hydrocarbons, particularly butane and propane, at low pressures.

AENOR
Producto Certificado
Nº 001/259

Features

- Complies with permeability, flexibility and flammability that ensure the product's great quality.
- Highly resistant to breakage when extended, traction (7.5 MPa) and pressure at high temperatures.
- Anti-knotting.
- Hose with product certification awarded by AENOR in accordance with UNE 53539.
- Available for piping liquefied petroleum gases (3rd family), including butane and propane, at low pressures, and for piping natural gas (2nd family version in white) at low pressures.

DOMESTIC USE

HIGH QUALITY CONTROL

FREE Cd-Pb-Ba
FREE FROM Cd / Pb / Ba

Applications

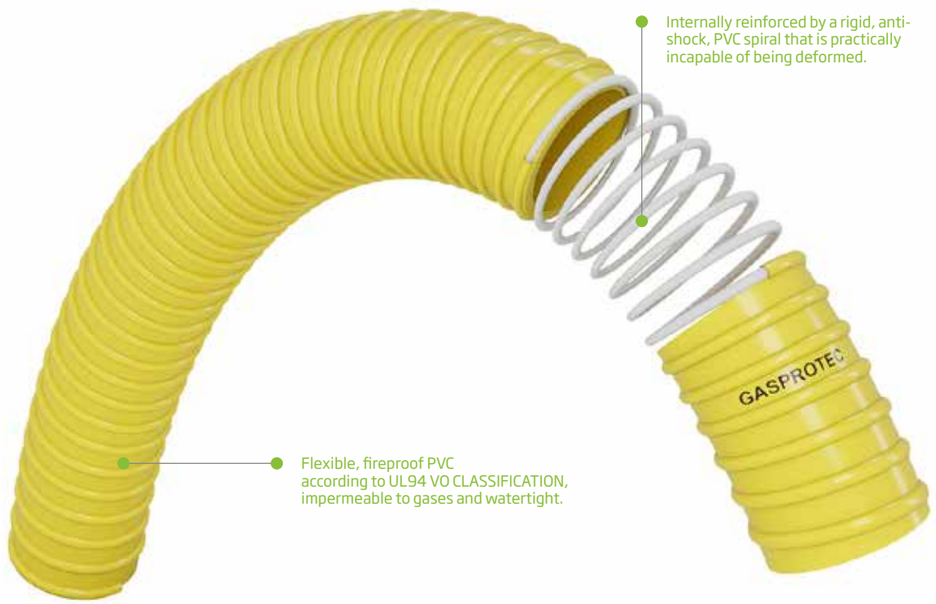
- Piping liquefied petroleum gases (LPG) and natural gas at low pressure.
- Supplying domestic apparatus with butane and outdoor heating.

INT ø mm	INT ø in	WALL THICKNESS mm	WEIGHT g/m	COLOUR	GAS TYPES
9	3/8"	3	138	Orange	Butane/Propane
15	5/8"	3.5	250	White	Natural gas

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters

Gas Protect®

Flexible, PVC hose reinforced with a rigid, anti-shock PVC spiral that is used as a protective sheath in copper piping facilities embedded in walls.



Features

- For industrial use, especially in the construction industry.
- Almost incapable of being deformed by crushing.
- Resistant to blows.
- Self-extinguishing in accordance with UL94 V0 classification.
- Good chemical resistance associated with PVC's resistance chart (including the most common copper strippers).
- Temperature range between -10°C and 60°C.

LIGHT · EASY TO USE · VERY FLEXIBLE · TEMPERATURE -10°C TO 60°C · PVC SPIRAL · HIGH QUALITY CONTROL

Applications

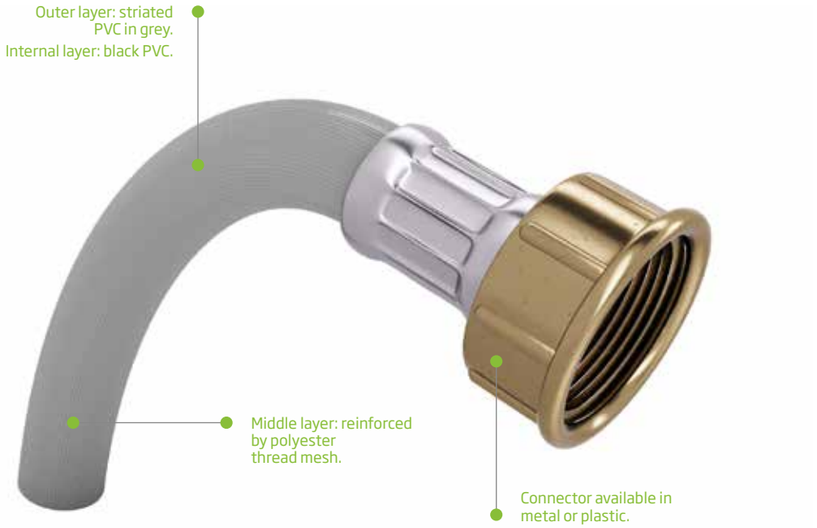
Flexible protective sheath for copper piping facilities embedded in walls. Supplied in rolls of 25 m.
A safety gap 5 mm thick is recommended between the copper pipe and the sheath (see recommended copper piping diameters in the following table).

INT ø mm	INT ø in	EXT ø mm	WEIGHT g/m	BENDING RADIUS mm
27	1"	32	180	27
32	1" 1/4	40	250	32
38	1" 1/2	47	310	38

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters

Washing Machine Inlet

Hose made via the extrusion of plasticised PVC and internally reinforced by a polyester mesh.



Features

- For sanitary use.
- Striated external surface.
- Assembly with perfectly watertight nylon or metal connections.
- Good chemical resistance associated with PVC's resistance chart.
- Recommended temperature for use between -10°C and 25°C.

DOMESTIC USE · INDUSTRIAL USE · STRIATED

HIGH QUALITY CONTROL · FREE FROM Cd / Pb / Ba

Applications

- Supply of water to washing machines and dishwashers.

Pack

LENGTH	1.5 m	2 m	2.5 m	3 m
UNITS	50	50	40	35

INT ø mm	INT ø in	EXT ø mm	WEIGHT g/m	OPERATING PRESSURE bar	MINIMUM BURST PRESSURE bar
11	7/16"	16	150	15	45

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters

Washing Machine Drain

Drain for washing machines and dishwashers. Polypropylene hose with connections in thermoplastic rubber.

Features

- Highly flexible and easy to use.
- 100% recyclable.
- Injected connectors, made from thermoplastic rubber, in the hose to ensure it is perfectly watertight.
- Good chemical resistance associated with polypropylene's resistance chart. Especially to bleaches, detergents and hypochlorites.
- Withstands temperatures between -10°C and 90°C.

DOMESTIC USE · INDUSTRIAL USE · EASY TO USE · HIGH QUALITY CONTROL · FREE FROM Cd / Pb / Ba

Applications

- Drain for washing machines and dishwashers.

Available in bag or blister pack.

INT ø mm	INT ø in	EXT ø mm	INT Ø NOZZLE "A" mm	INT Ø NOZZLE "B" mm
20	¾"	25	19	22

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters

Extendible Washing Machine Drain

Polypropylene hose with connections at its ends.

Applications

- Drain for washing machines and dishwashers.
- Air conditioning apparatuses.

Available in bag or blister pack.

Features

- Hose can be extended from 60cm to 200cm, for use in washing machine outlets that can remain stable in any of the forms adopted in its use.
- Injected connections in EPDM thermo-rubber.
- Highly resistant to bleaches, detergents, hypochlorites and a wide range of chemical products.
- Withstands temperatures between -10°C and 90°C.

DOMESTIC USE · INDUSTRIAL USE · EASY TO USE · HIGH QUALITY CONTROL · FREE FROM Cd / Pb / Ba

INT ø mm	INT ø in	EXT ø mm	INT Ø NOZZLE "A" mm	INT Ø NOZZLE "B" mm
19	¾"	29	19	21

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters

Flexible Toilet Drain

Hose made from flexible PVC with a rigid PVC spiral for toilet drains.

Applications

- Sanitary drains in toilets.

Features

- For sanitary use.
- Smooth internal surface and corrugated exterior.
- Great flexibility (bending radius = internal diameter) and lightness.
- Good chemical resistance associated with PVC's resistance chart.
- Withstands temperatures between -10°C and 60°C.
- Rigid PVC coupler with rubber to adapt to the toilet and a multi-diameter coupler at the other end to be attached with glue. Adaptable to rigid PVC hoses. Can be fixed with PVC or silicone glue.
- Extendible option.

DOMESTIC USE · INDUSTRIAL USE · CONSTRUCTION · EASY TO USE · HIGH QUALITY CONTROL · FREE FROM Cd / Pb / Ba

Flexible toilet drain

EXT ø mm	FITTING	WORKING PRESSURE bar	BURST PRESSURE bar	VACUUM m H_2O
90	Male	1.5	3	9
110	Male	1.5	3	9

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters

Extendible, flexible toilet drain

EXT ø mm	FITTING	INT Ø NOZZLE "A" mm	INT Ø NOZZLE "B" mm
109	Male	70	96

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters

Extendible Siphon Coupler

Extendible, polypropylene hose with injected couplers for sanitary drains.

Features

- Extendible, polypropylene hose with an injected coupler in polypropylene for drain connection, and a metal fitting in brass, or a plastic fitting to connect to a sink.
- Highly flexible, easy to use, and with connections that adapt to any type of sink drain.
- Extendible from 30cm to 80cm.
- Injected connections in the hose such that it is perfectly watertight.
- Good chemical resistance associated with polypropylene's resistance chart, especially to bleaches, detergents and hypochlorites.
- Withstands temperatures between -10°C and 90°C.
- Packaged with two joins.

DOMESTIC USE · INDUSTRIAL USE · CONSTRUCTION · EASY TO USE · HIGH QUALITY CONTROL · FREE FROM Cd / Pb / Ba

Applications

- Sink drains, such as a siphon drain.

INT Ø NOZZLE mm	METAL OR PLASTIC THREAD mm
32	1" 1/4
40	1" 1/2

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters

Espiroflex® Aluminio Compacto

Corrugated, aluminium hose designed for the suction of domestic and industrial gases and smoke, as well as general ventilation.

Applications

- Suction of domestic and industrial gases and smoke.

Can be cut into sections and shrink-wrapped.

Features

- Resistant to bending and watertight at temperatures of 300°C.
- Highly flexible and light, ensuring ease of use.
- Extendible: ratio of 20cm = 1 metre.
- Compacted.

DOMESTIC USE

INDUSTRIAL USE

EASY TO USE

HIGH QUALITY CONTROL

FREE Cd-Pb-Ba

FREE FROM Cd / Pb / Ba

INT ø mm	INT ø in	EXT ø mm	WALL THICKNESS mm	SUPPLY m
80	3" 1/8	89	4.5	150
90	3" 1/2	99	4.5	125
100	4"	109	4.5	100
110	4" 5/16	119	4.5	80
120	4" 3/4	129	4.5	80
127	5"	134	4.5	80
130	5" 1/4	139	4.5	60
140	5" 1/2	149	4.5	45
152	6"	159	4.5	45
160	6" 1/4	169	4.5	45
180	7"	189	4.5	30
203	8"	209	4.5	20
225	9"	234	4.5	20
254	10"	259	4.5	20
305	12"	309	4.5	10
350	14"	359	4.5	5
400	16"	409	4.5	5
450	18"	459	4.5	5

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about
the minimum purchase amounts assigned to non-standard diameters

Clamps

Carbon steel clamps with rounded, deburred edges, treated with antioxidant zinc bath in accordance with DIN-3017.

Features

- Carbon steel.
- With screws of m-6, m-8, m-10, rm-10.
- In accordance with DIN-3017.
- Rounded, deburred edges.
- Treated in an antioxidant zinc bath.
- Three welding points and solid bands (ø).
- Highly efficient, high-performance screws according to ISO 8-8.
- Option of lateral assembly of the opening.

INDUSTRIAL USE

Applications

- Designed for liable facilities.
- In all types of tightening where the hose must be completely watertight at medium and high pressure: industry, agriculture, etc.

REF. M6	REF. M8	REF. M10	REF. RM10	REF. M6	REF. M8
	ø ZINGUE BAND W1 F20			ø S/S BAND. W4	
20x0.8 mm	23x1.2 mm	30x1.7 mm	30x1.7 mm	20x08 mm	23X1.2 mm
	ø SCREW			ø SCREW	
6 mm	8 mm	10 mm	10 mm	6 mm	8 mm
	RESISTANCE			RESISTANCE	
45N/cm	180N/cm	700N/cm	700N/cm	45N/cm	180N/cm
023-025				023-025	
026-028				026-028	
029-031				029-031	
032-035	032-035			032-035	032-035
036-039	036-039			036-039	036-039
040-043	040-043			040-043	040-043
044-047	044-047			044-047	044-047
048-051	048-051			048-051	048-051
052-055	052-055				052-055
056-059	056-059				056-059
060-063	060-063				060-063
064-067	064-067				064-067
068-073	068-073	068-073			068-073
074-079	074-079	074-079	074-079		074-079
	080-085	080-085	080-085		080-085
	086-091	086-091	086-091		086-091
	092-097	092-097	092-097		092-097
	098-103	098-103	098-103		098-103
	104-112	104-112	104-112		104-112
	113-121	113-121	113-121		113-121
	122-130	122-130	122-130		122-130
	131-139	131-139	131-139		131-139
	140-148	140-148	140-148		140-148
	149-161	149-161	149-161		149-161
	162-174	162-174	162-174		162-174
	175-187	175-187	175-187		175-187
	188-200	188-200	188-200		188-200
			200-220		
		201-213			
		214-226			
			220-240		
		227-239			
		240-252			
			240-260		
		248-260			
			260-280		
			280-300		
			300-325		
			325-350		
			350-375		
			375-400		
			400-425		
			425-450		
			450-475		
			475-500		

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about
the minimum purchase amounts assigned to non-standard diameters

Worm Gear Clamps

Carbon steel clamps with rounded, deburred edges, treated with antioxidant zinc bath in accordance with DIN-3017.1.

Features

- Carbon steel.
- With screws of m-6, m-8, m-10, rm-10.
- In accordance with DIN-3017.1.
- Rounded, deburred edges.
- Treated in an antioxidant zinc bath.
- Three welding points and solid bands (ø).
- Highly efficient, high-performance screws according to ISO 8-8.
- Option of lateral assembly of the opening.

INDUSTRIAL USE

Applications

- Designed for liable facilities.
- In all types of tightening where the hose must be completely watertight at medium and high pressure: industry, agriculture, etc.

REF. MZ.9	REF. MI.9	REF. MZ.12	REF. MI.12	REF. MI.9	REF. MI.12
ø W2	ø W4	ø W2	ø W4	ø W5	ø W5
		BAND			
9 mm	9 mm	12 mm	12 mm	9 mm	12 mm
10-17	10-17			10-17	
12-20	12-20			12-20	
15-25	15-25			15-25	15-25
		16-27	16-27	16-27	16-27
		19-28	19-28	19-28	19-28
20-32	20-32	20-32	20-32	20-32	20-32
25-40		25-40	25-40	25-40	25-40
	25-45			25-45	25-45
		32-50	32-50	32-50	32-50
40-60	40-60	40-60	40-60	40-60	40-60
		50-70	50-70	50-70	50-70
58-75	58-75	58-75	58-75	58-75	58-75
			60-80	60-80	60-80
70-90	70-90	70-90	70-90	70-90	70-90
80-100	80-100	80-100	80-100	80-100	80-100
90-110	90-110	90-110	90-110	90-110	90-110
100-120	100-120			100-120	100-120
110-130	110-130	110-130	110-130	110-130	110-130
		130-150	130-150	130-150	130-150
		135-165	135-165	135-165	135-165
		160-180	160-180	160-180	160-180
		175-205	175-205	175-205	175-205
		205-232	205-232		205-232
		220-240	220-240	220-240	220-240
		240-260	240-260	240-260	240-260
		250-280	250-280	250-280	
		280-300	280-300	280-300	
		300-320	300-320	300-320	
		310-340	310-340	310-340	
		330-360	330-360	330-360	
		350-380	350-380		
		370-400	370-400		

Pressure at room temperature in laboratory / Nominal values without considering manufacturing tolerances.
Depending on technical developments, specifications may be modified without advance notice being given.
Consult us for other diameters, colours and features. Ask our Sales Department about the minimum purchase amounts assigned to non-standard diameters

Technical Specifications

TECHNICAL SPECIFICATIONS

Products According to Material

PRODUCT	PVC	PVC OIL	TPU	TPV
Acetylene	•			
Agripres® 20 bar	•			
Agromedium®	•			
Espiro® PU			•	
Espiro® PU Antiestático			•	
Espiroclean® 40 bar	•			
Espiroclean® 80 bar	•			
Espirocristal®	•			
Espirocristal® Gasolina		•		
Espiroflat®	•			
Espirofood® PU			•	
Espirofuel®		•		
Espirofuel® Antiestático		•		
Espirogas®	•			
Espirolayflat®	•			
Espiroliquid® PU			•	
Espiropool Protect®	•			
Espiropreno®				•
Espiropres® 10 bar	•			
Espiropres® 20 bar	•			
Espiropres® 40 bar	•			
Espiroseeder®	•			
Extraflex®	•			
Fishflex®	•			
Gas Protect®	•			
Hidrotubo®	•			
Hidrotubo® Plus	•			
Hidrotubo® Plus Antitermita	•			
Suction Kit	•			
Lisflex®	•			
Mallatrans®	•			
Metalpress® Chemical				•
Metalpress® Food	•			
Metalpress® Milk				•
Metalpress® Oil		•		
Metalpress® Superelastic	•			
Metalpress® Wine	•			
Mineflex®	•			

PRODUCT	PVC	PVC OIL	TPU	TPV
Oxygen	•			
Poliuretano Flex®			•	
Poliuretano Flex® BS			•	
Poliuretano Flex® HD			•	
Poliuretano Flex® M			•	
Poliuretano Flex® RD			•	
Poliuretano Flex RD			•	
Pulveflex®	•			
Superflex Air®	•			
Thermoflex®	•			
Transair®	•			
Transflot®	•			
Transfort® PU			•	
Transfort® Superelastic	•			
Transfort® Superflex	•			
Transliquid®	•			
Transliquid® Antiestático	•			
Transliquid® PU			•	
Transliquid® PU Antiestático			•	
Transliquid® S	•			
Transliquid® Superelastic	•			
Transmetal® Phthalates Free	•			
Transmetal® NT Phthalates Free	•			
Transvin® Phthalates Free	•			
Transvin® Phthalates Free Sliding	•			
Vacumflex®	•			
Waterflat® H	•			
Waterflat® L	•			
Waterflat® M	•			
Waterflat® S	•			

Specific Applications of TPU

Understanding the main characteristics and differences between polyurethane hoses, depending on whether their base is polyester or polyether, allows you to choose the correct product for each specific application, and therefore improve the product's performance and useful life. A comparison chart is shown below.

Polyester base

- Extraction of fatty vapours or vapours containing chemical products.
- Applications that require greater resistance to abrasion in equal hardness (with exceptions).
- Better mechanical properties.

Polyether base

- Extraction in humid environments.
- Applications that require great flexibility at low temperatures.
- High resistance to tearing.

Chemical Product Resistance Chart

CHEMICAL PRODUCTS	PVC	PU	TPV	PVC OIL
1,4-Dioxane			R	
1-Nitropropane			LR	
1-Propanol			R	
2,4-Pentanediol			R	
2-Ethylhexanol			R	
2-Pyrrolidone			R	
Animal oil		NR	LR	
Oil ASTM 1	LR	R		R
Oil ASTM 2	LR	R		R
Oil ASTM 3	NR	R		R
Olive oil			NR	
Castor oil				
Silicone oil		R	NR	
Transformer oil			NR	
Hydraulic oil		R		
Mineral oil	NR	SR	LR	R
Seed oil	LR	SR		R
Lubricating oils (petroleum)	NR	LR		R
Vegetable oils		R		
Acetaldehyde	NR	NR		NR
Acetamide		R		
Allyl acetate				
Aluminium acetate	R			R
Amyl acetate	NR			NR
Butyl acetate			R	
Calcium acetate	R			R
Ethyl acetate	NR		LR	NR
Methyl acetate				
Lead acetate				
Sodium acetate	R			R
Alkyl acetates	NR	NR		NR
Acetone	NR	R	LR	NR
Acetonitrile	NR		LR	NR
Acetic acid 3%	R	R	R	R
Acetic acid 5%	R		R	R
Acetic acid 10%	R		R	R
Acetic acid 30%	LR	NR	R	LR

CHEMICAL PRODUCTS	PVC	PU	TPV	PVC OIL
Acetic acid 50%	LR	NR	R	LR
Acetic acid 80%	LR	NR	R	LR
Conc. acetic acid	NR	NR	R	NR
Adipic acid	R			R
Benzoic acid	LR			LR
Boric acid 10%	R	LR		R
Boric acid 5%	R	R		R
Conc. boric acid	R			R
Hydrobromic acid, aqu. sol. 30%	R			R
Hydrobromic acid, aqu. sol. 50%	R	NR		R
Butyric acid 20%	R		R	R
Conc. butyric acid			R	
Carbonic acid 5%	R	R		R
Conc. carbonic acid	R			R
Hydrocyanic acid				
Citric acid 5%	R	R		R
Citric acid, sat. sol.				
Hydrochloric acid (dry gas)				
Hydrochloric acid 5%	R	R	R	R
Hydrochloric acid 10%	R	LR	R	R
Hydrochloric acid 20%	R	NR	R	R
Hydrochloric acid 22%	R	NR		R
Conc. hydrochloric acid	R	NR	R	R
Chloroacetic acid	NR			NR
Conc. chlorosulfonic acid	NR			NR
Chromic acid 5%	R	R		R
Chromic acid 10%	LR			LR
Chromic acid 50%				
Stearic acid	R			R
Hydrofluoric acid 4%	R			R
Hydrofluoric acid 20%	LR	NR		LR
Hydrofluoric acid 30%	LR	NR		LR
Hydrofluoric acid 40%	NR	NR		NR
Hydrofluoric acid 60%	NR	NR		NR
Hydrofluoric acid 85%				
Formic acid 10%	LR	NR	R	LR
Formic acid 20%	LR	NR	R	LR

NR: No resistance / SR: Specific resistance / LR: Low resistance /: Resistant

CHEMICAL PRODUCTS	PVC	PU	TPV	PVC OIL
Formic acid 25%	NR	NR	R	NR
Formic acid 85%	NR	NR	R	NR
Conc. formic acid	NR	NR	R	NR
Phosphoric acid 5%	R			R
Phosphoric acid 20%	R			R
Phosphoric acid 30%	R			R
Phosphoric acid 50%				
Phosphoric acid 80%				
Phthalic acid	NR	NR		NR
Hypochlorous acid 20%	R			R
Conc. hypochlorous acid, aqu. sol.	R			R
Lactic acid, aqu. sol. 3%	R			R
Lactic acid, aqu. sol. 10%	R	R		R
Nitric acid 5%	R	LR	R	R
Nitric acid 10%	R	NR	R	R
Nitric acid 20%	R	NR	R	R
Nitric acid 30%	R	NR	LR	R
Nitric acid 50%	R	NR	LR	R
Nitric acid 70%	NR	NR	NR	NR
Nitric acid 95%	NR	NR	NR	NR
Oleic acid	NR	NR		R
Oxalic acid	R	NR		R
Peracetic acid	NR	NR	NR	NR
Sulphuric acid 5%	R	R	R	R
Sulphuric acid 20%	R	NR	R	R
Sulphuric acid 25%	R	NR	R	R
Sulphuric acid 50%	LR	NR	R	LR
Sulphuric acid 70%	NR	NR	R	NR
Sulphuric acid 80%	NR	NR	R	NR
Sulphuric acid 96%	NR	NR	R	NR
Sulphuric acid 98%	NR	NR	R	NR
Conc. fuming sulphuric acid	NR	NR		NR
Sulphuric acid				
Uric acid				
Fatty acids (>C6)	R			R
Butyl acrylate				
Ethyl acrylate	NR		R	NR

CHEMICAL PRODUCTS	PVC	PU	TPV	PVC OIL
Methyl acrylate				
Acrylonitrile			R	
Dioctyl adipate			R	
Water	R	R	R	R
Seawater	R	R	R	R
Agua regia				
Air	R	R	R	R
Allyl alcohol (2-propanol-1)	NR		R	NR
Amyl alcohol	R		R	R
Benzyl alcohol	NR			NR
Butyl alcohol	LR	R		LR
Ethyl alcohol 10%	R		R	R
Ethyl alcohol 35%	R		R	R
Ethyl alcohol 40%	R		R	R
Ethyl alcohol 50%	SR	LR	R	R
Ethyl alcohol 96%	NR	NR	R	NR
Ethyl alcohol, max. conc.	NR	NR	R	NR
Furfuryl alcohol				
Isobutyl alcohol	R	LR		R
Isopropyl alcohol	R	LR		R
Methyl alcohol 5%	R		R	R
Methyl alcohol 6%	R	NR	R	R
Methyl alcohol 50%			R	
Methyl alcohol, max. conc.			R	
Aldehydes	NR	NR		NR
Alum	R	R		R
Ammonia (gas)	NR	R		NR
Liquid ammonia			R	
Acetic anhydride	NR	NR		NR
Carbon dioxide	R	R		R
Sulphur dioxide	R	LR		R
Aniline			R	
Asphalt				
Sulphur	R	R		R
Benzene	NR			NR
Benzaldehyde	NR	NR		NR
Sodium bicarbonate				

NR: No resistance / SR: Specific resistance / LR: Low resistance /: Resistant

CHEMICAL PRODUCTS	PVC	PU	TPV	PVC OIL
Potassium bicarbonate				
Sodium dichromate				
Calcium bisulphate	R	NR		R
Sodium bisulphate	R	NR		R
Bisulphates and met. bisulphates	R			R
Borax 5%	R	R		R
Conc. borax	R			R
Bromine	NR	NR		NR
Alkyl bromide	NR	NR		NR
Ethylene bromide	NR			NR
Potassium bromide				
Sodium bromide				
Zinc bromide				
Butadiene				
Butane				
Butanediol 10%				
Butanediol 50%				
Butanediol 100%	NR			NR
Butanol (water)				
Butylamine		LR		
Coffee				
Caprolactone			R	
Calcium carbonate	R	R		R
Ammonium carbonate	R			R
Potassium carbonate				
Sodium carbonate	R	R		R
Zinc carbonate				
Magnesium carbonate	R	R		R
Casein	R			R
Beer	R	R		R
Ketones	NR	NR		NR
Copper cyanide				
Potassium cyanide				
Sodium cyanide	R	R		R
Cycloalkanes	NR	NR		NR
Cyclic alcohols	NR	NR		NR
Cyclic ketones	NR	NR		NR

CHEMICAL PRODUCTS	PVC	PU	TPV	PVC OIL
Cyclohexane	NR	LR	NR	NR
Cyclohexanol		NR	R	
Cyclohexanone	NR	NR		NR
Chlorine 100%, dry gas	NR	NR		NR
Wet chlorine		NR		
Liquid chlorine				
Chlorobenzene				
Chloroform	NR			NR
Chloroparaffins c14-c17	NR		R	NR
Acetyl chloride			LR	
Aluminium chloride 25%		R		
Aluminium chloride, all conc.				
Amyl chloride				
Ammonium chloride 25%		R		
Ammonium chloride, sat. sol.				
Barium chloride				
Calcium chloride 20%	R	R	R	R
Calcium chloride 25%	R	R		R
Calcium chloride, sat. sol.	R			R
Copper chloride				
Tin(II) chloride				
Tin(IV) chloride				
Ethyl chloride			NR	
Mercury chloride	NR	R		NR
Methylene chloride		NR	NR	
Methyl chloride		NR		
Nickel chloride				
Potassium chloride		R		
Sodium chloride 20%	R		R	R
Sodium chloride 25%	R	LR		R
Conc. sodium chloride	R			R
Zinc chloride 20%	R		R	R
Conc. zinc chloride	R			R
Iron(III) chloride		R		
Iron(II) chloride				
Cresol	NR	NR		NR
Potassium chromate				

NR: No resistance / SR: Specific resistance / LR: Low resistance /: Resistant

CHEMICAL PRODUCTS	PVC	PU	TPV	PVC OIL
Decalin			NR	
Concentrated detergents	R	R	R	R
Synthetic detergents				
Dextrin	R			R
Dextrose	R			R
Dibromomethane			NR	
Dibutyl ether			R	
Dichlorobenzene				
Dichloroethane		R		
Propylene dichloride (100%)				
Potassium dichromate 40%	R	R		R
Potassium dichromate, all conc.	R	R		R
Diethylamine		NR		
Diethyl ketone	NR			NR
Diethylene glycol		LR	R	
Diisobutylene			NR	
Diisopropyl ether			LR	
Dimethylformamide	NR	NR	R	NR
Dimethylamine				
Dimethylformamide			R	
Dimethyl sulfoxide				
Dioctyl sebacate		R		
Dioxane	NR			NR
Sulphur dioxide (aqueous)				
Carbon dioxide	R	R		R
Dipropylene glycol			R	
Chlorinated solvents	NR			NR
Carbon disulphide			LR	
Dodecanol	R			R
Emulsifiers	R			R
Zinc stearate				
Adipic acid esters				
Aliphatic esters	NR			NR
Ethane		LR		
Diethyl ether		NR		
Diethyl ether			R	
Ethyl ether		NR		

CHEMICAL PRODUCTS	PVC	PU	TPV	PVC OIL
Isopropyl ether		R		
Ethylbenzene				
Phenylamine		R		
Phenol		NR	R	
Sodium ferrocyanide				
Fluorine (gaseous)				
Fluoride	NR			NR
Aluminium fluoride, all conc.				
Ammonium fluoride				
Copper fluoride				
Potassium fluoride				
Sodium fluoride				
Formaldehyde 20%		LR		
Formaldehyde 30%	R	LR		R
Formaldehyde 37%	R	NR		R
Formaldehyde 40%	LR	NR		LR
Formamide			R	
Disodium phosphate				
Trisodium phosphate				
Freon 11 (coolant)		NR	NR	
Freon 12 (coolant)		R	NR	
Freon 22 (coolant)		NR	NR	
Fructose	R			R
Phthalates	SR	R		R
Fuel oil	NR	LR	R	R
Furan			LR	
Furfural				
Liquefied petroleum gas (LPG)	LR			LR
Natural gas		LR		
Natural gas, technical grade				
Diesel and biodiesel	NR	R		R
Gasoline		LR		
Gelatin		R		
Glycerine	R	R		R
Glycerol	R		R	R
Butyl glycol				
Ethylene glycol	R	R	R	R

NR: No resistance / SR: Specific resistance / LR: Low resistance /: Resistant

CHEMICAL PRODUCTS	PVC	PU	TPV	PVC OIL
Propylene glycol				
Glycols		LR		
Glucose				
Animal fats		R		
Lithium, sodium and calcium fats		R		
Silicone fats		R		
Heptane				
Hexachlorobenzene				
Hexane	NR	R		NR
Hexanol, tertiary				
Hydrazine	NR	NR		NR
Aromatic hydrocarbons	NR		NR	NR
Hydrogen		R		
Hydroquinone	R	NR		R
Aluminium hydroxide	R			R
Ammonium hydroxide 5%	R		R	R
Ammonium hydroxide 10%	R		R	R
Ammonium hydroxide 25%	R		R	R
Ammonium hydroxide 28%	R		R	R
Ammonium hydroxide 30%			R	
Conc. ammonium hydroxide			R	
Barium hydroxide				
Calcium hydroxide	R			R
Potassium hydroxide 5%	R	R	R	R
Potassium hydroxide 10%	R		R	R
Potassium hydroxide 50%	R			R
Conc. potassium hydroxide	R			R
Sodium hydroxide (soda) 5%	R	R	R	R
Sodium hydroxide (soda) 10%	R	LR		R
Sodium hydroxide (soda) 20%	R	NR	R	R
Sodium hydroxide (soda) 50%		NR		
Conc. sodium hydroxide (soda)		NR		
Calcium hypochlorite	R	LR		R
Potassium hypochlorite, sat. sol.				
Sodium hypochlorite 14% Cl2	R	NR	R	R
Sodium hypochlorite 15% Cl2	R	NR		R
Sodium hypochlorite, sat. sol.	R			R

CHEMICAL PRODUCTS	PVC	PU	TPV	PVC OIL
Liquid soaps	R	NR		R
Solvent-based varnishes		R		
Lanolin	R			R
Milk				
Bleach				
Bleach, alkaline sol.		R		
Yeast				
Potassium manganate	R	R		R
Mercury				
Methyl methacrylate			R	
Aluminium metaphosphate				
Methane		R		
Butanone		R	LR	
Carbon monoxide				
Naphtha		LR		
Naphthalene			NR	
Nicotine				
Ammonium nitrate 25%	R	R		R
Ammonium nitrate, sat. sol.	R			R
Calcium nitrate 50%		R		
Conc. calcium nitrate		R		
Copper nitrate				
Copper nitrate, sat. sol.				
Sodium nitrate	R	R		R
Sodium nitrite	NR	NR		NR
Nitrogen	R	R	R	R
Oleum		NR		
Urine				
Ethyl oxalate		R		
Calcium oxide				
Propylene oxide			LR	
Zinc oxide				
Sulphur oxides	R	R		R
Oxygen	R	R	R	R
Ozone	LR	R		LR
Paraffin	R	R		R
Pentane		NR		

NR: No resistance / SR: Specific resistance / LR: Low resistance /: Resistant

CHEMICAL PRODUCTS	PVC	PU	TPV	PVC OIL
Sodium perborate	R	R		R
Perchloroethylene		NR	NR	
Potassium permanganate 10%	R	LR		R
Hydrogen peroxide, 30 vol	R	LR		R
Ammonium persulphate	R			R
Potassium persulphate				
Petroleum		LR		
Pyridine			R	
Tetraethyllead	R	R		R
Potassium	R	R		R
Potassium hexacyanoferrate(II)				
Potassium hexacyanoferrate(III)				
Propane				
Propionitrile			NR	
Fruit pulp				
Kerosene	NR	R		R
Epoxy resin		NR		
Resorcinol				
Diazo salts				
Dioctyl sebacate	NR	NR		NR
Cider	R	R		R
Aluminium silicate	R	R		R
Potassium silicate	R	R		R
Sodium silicate	R	R		R
Silicic acid, aqueous				
Silicone	NR	NR		NR
Soap solution (all conc.)		R		
Serum				
Aluminium sulphate		NR		
Ammonium sulphate, sat. sol.		NR		
Barium sulphate, sat. sol.				
Calcium sulphate				
Copper sulphate, sat. sol.		R		
Magnesium sulphate				
Nickel sulphate				
Potassium sulphate		R		
Sodium sulphate				

CHEMICAL PRODUCTS	PVC	PU	TPV	PVC OIL
Zinc sulphate				
Iron sulphate				
Potassium sulphite (conc.)				
Ammonium sulphide	R			R
Barium sulphide	R	R		R
Barium sulphide, sat. sol.				
Calcium sulphide		R		
Hydrogen sulphide, gaseous	R			R
Potassium sulphide (conc.)				
Sodium sulphide				
Iron sulphide	R	R		R
Tannin	R	NR		R
Carbon tetrachloride			NR	
Carbon tetrachloride	NR	NR		NR
Titanium tetrachloride				
Tetrahydrofuran		NR	LR	
Dye				
Toluene		NR		
Turpentine		R	NR	
Trichloroethylene			NR	
Trichloromethane			NR	
Antimony trichloride	R			R
Triethanolamine		NR		
Triethylene glycol				
Boron trifluoride				
Trioctyl trimellitate (TOTM)	NR		R	NR
Sodium thiosulfate		R		
Urea (AD BLUE) *	NR	R		R
Urea 30%	NR	NR		R
Vinegar	R			R
Wine	R	SR		R
Whisky	SR	SR		R
White spirit	NR	LR		NR
Xylene		NR	NR	
Iodine (potassium iodide sol.)				
Methyl iodide			LR	

NR: No resistance / SR: Specific resistance / LR: Low resistance /: Resistant

European Regulations

Plastic materials in contact with food.

Here at Espiroflex, S.A., we care about the health and well-being of our customers. For this reason, we would like to present all information related to European regulations on plastic materials that come into contact with food so our customers have all possible information available to them and understand which hoses they need to use in each specific case.

Consequently, this section starts with the introduction of Regulation (EU) 10/2011, which explains the food simulants that are used in migration testing, before concluding with an explanatory table taken directly from European Regulation (EU) 10/2011, where you can see which simulant or simulants should be used for each food type.

Food simulants

For demonstration of compliance for plastic materials and articles not yet in contact with foods, the food simulants listed in Table 1 below are assigned.

Table 1 - List of food simulants

Food simulant	Abbreviation
Ethanol 10% (v/v)	Food simulant A
Acetic acid 3% (w/v)	Food simulant B
Ethanol 20% (v/v)	Food simulant C
Ethanol 50% (v/v)	Food simulant D1
Vegetable oil (*)	Food simulant D2
Poly(2,6-diphenyl-p-phenylene oxide), particle size 60-80 mesh, pore size 200 nm	Food simulant E

(*) This may be any vegetable oil with a fatty acid distribution of:

No. of carbon atoms in fatty acid chain: no of unsaturation	6-12	14	16	18:0	18:1	18:2	18:3
Range of fatty acid composition expressed in % (w/w) of methyl esters by gas chromatography	< 1	< 1	1.5-20	< 7	15-85	5-70	< 1.5

General assignment of food simulants to foods

Food simulants A, B and C are assigned for foods that have a hydrophilic character and are able to extract hydrophilic substances. Food simulant B shall be used for those foods which have a pH below 4.5. Food simulant C shall be used for alcoholic foods with an alcohol content of up to 20% and those foods which contain a relevant amount of organic ingredients that render the food more lipophilic.

Food simulants D1 and D2 are assigned for foods that have a lipophilic character and are able to extract lipophilic substances. Food simulant D1 shall be used for alcoholic foods with an alcohol content of above 20% and for oil in water emulsions. Food simulant D2 shall be used for foods which contain free fats at the surface.

Food simulant E is assigned for testing specific migration into dry foods.

Specific assignment of food simulants to foods for migration testing of materials and articles not yet in contact with food

For testing migration from materials and articles not yet in contact with food, the food simulants that corresponds to a certain food category shall be chosen according to Table 2 below

For testing overall migration from materials and articles intended to come into contact with different food categories or a combination of food categories, the food simulant assignment in point 4 is applicable.

Table 2 contains the following information:
- Column 1 (Reference number): contains the reference number of the food category.
- Column 2 (Description of food): contains a description of the foods covered by the food category.
- Column 3 (Food simulants): contains sub-columns for each of the food simulants.

The food simulant for which a cross is contained in the respective sub-column of column 3 shall be used when testing migration of materials and articles not yet in contact with food.

For food categories where in sub-column D2 the cross is followed by an oblique stroke and a figure, the migration test result shall be divided by this figure before comparing the result with the migration limit. The figure is the correction factor referred to in point 4.2 of Annex V to this Regulation.

For food category 01.04 food simulant D2 shall be replaced by 95% ethanol.

For food categories where in sub-column B the cross is followed by (*) the testing in food simulant B can be omitted if the food has a pH of more than 4.5.

For food categories where in sub-column D2 the cross is followed by (**) the testing in food simulant D2 can be omitted if it can be demonstrated by means of an appropriate test that there is no 'fatty contact' with the plastic food contact material.

Table 2 - Food category specific assignment of food simulants

(1) Reference number	(2) Description of food	(3) Food simulants A	B	C	D1	D2	E
01	**Beverages**						
01.01	Soft drinks or alcoholic beverages of an alcoholic strength lower than or equal to 6% vol:						
	A. Clear drinks: Water, ciders, clear fruit or vegetable juices of normal strength or concentrated, fruit nectars, lemonades, syrups, bitters, infusions, coffee, tea, beers, soft drinks, energy drinks and the like, flavoured water, liquid coffee extract.		X(*)	X			
	B. Cloudy drinks: Juices, nectars and soft drinks containing fruit pulp, musts containing fruit pulp, liquid chocolate.		X(*)		X		
01.02	Alcoholic beverages of an alcoholic strength of between 6% and 20% vol.			X			
01.03	Alcoholic beverages of an alcoholic strength above 20% and all cream liqueurs				X		
01.04	Miscellaneous: undenatured ethyl alcohol		X(*)			Replace with ethanol 95%	
02	**Cereals, cereal products, pastry, biscuits, cakes and other bakers' wares**						
02.01	Starches						X
02.02	Cereals, unprocessed, puffed, in flakes (including popcorn, corn flakes and the like)						X
02.03	Cereal flour and meal						X
02.04	Dry pasta, for example, macaroni, spaghetti and similar products, and fresh pasta						X
02.05	Pastry, biscuits, cakes, bread and other bakers' wares, dry:						
	A. With fatty substances on the surface					X/3	
	B. Other						X
02.06	Pastry, cakes, bread, dough and other bakers' wares, fresh:						
	A. With fatty substances on the surface					X/3	
	B. Other						X

Table 2 - Food category specific assignment of food simulants (continued)

(1) Reference number	(2) Description of food	(3) Food simulants A	B	C	D1	D2	E
03	**Chocolate, sugar and products thereof Confectionery products**						
03.01	Chocolate, chocolate-covered products, substitutes and products coated with substitutes					X/3	
03.02	Confectionery products:						X
	A. In solid form:						
	I. With fatty substances on the surface					X/3	
	II. Other						X
	B. In paste format:						
	I. With fatty substances on the surface					X/2	
	II. Moist			X			
03.03	Sugar and sugar products:						
	A. In solid form: crystal or powder						X
	B. Molasses, sugar syrups, honey and the like	X					
04	**Fruit, vegetables and products thereof**						
04.01	Whole fruit, fresh or chilled, unpeeled						
04.02	Processed fruit:						
	A. Dried or dehydrated fruits, whole, sliced, flour or powder						X
	A. Fruit in the form of purée, preserves, pastes or in its own juice or in sugar syrup (jams, compote, and similar products)		X(*)	X			
	C. Fruit preserved in a liquid medium:						
	I. In an oily medium					X	
	II. In an alcoholic medium				X		
04.03	Nuts (peanuts, chestnuts, almonds, hazelnuts, walnuts, pine kernels and others):						
	A. Shelled, dried, flaked or powdered						X
	B. Shelled and roasted						X
	C. In paste or cream form	X				X	
04.04	Whole vegetables, fresh or chilled, unpeeled						

Table 2 - Food category specific assignment of food simulants (continued)

(1) Reference number	(2) Description of food	(3) Food simulants A	B	C	D1	D2	E
04	**Fruit, vegetables and products thereof (continued)**						
04.05	Processed vegetables:						
	A. Dried or dehydrated vegetables whole, sliced or in the form of flour or powder						X
	B. Fresh vegetables, peeled or cut	X					
	C. Vegetables in the form of purée, preserves, pastes or in their own juice (including pickled and in brine)		X(*)	X			
	D. Preserved vegetables:						
	I. In an oily medium	X				X	
	II. In an alcoholic medium				X		
05	**Fats and oils**						
05.01	Animals and vegetable fats and oils, whether natural or treated (including cocoa butter, lard, resolidified butter)					X	
05.02	Margarine, butter and other fats and oils made from water emulsions in oil					X/2	
06	**Animal products and eggs**						
06.01	Fish:						
	A. Fresh, chilled, processed, salted or smoked including fish eggs	X				X/3(**)	
	B. Preserved fish						
	I. In an oily medium	X				X	
	II. In an aqueous medium		X(*)	X			
06.02	Crustaceans and molluscs (including oysters, mussels and snails)						
	A. Fresh within the shell						
	B. Shell removed, processed, preserved or cooked with the shell:						
	I. In an oily medium	X				X	
	II. In an aqueous medium		X(*)	X			

Table 2 - Food category specific assignment of food simulants (continued)

(1) Reference number	(2) Description of food	(3) Food simulants A	B	C	D1	D2	E
06	**Animal products and eggs (continued)**						
06.03	Meat of all zoological species (including poultry and game):						
	A. Fresh, chilled, salted, smoked	X				X/4(**)	
	B. Processed meat products (such as ham, salami, bacon, sausages and other) or in the form of paste or creams	X				X/4(**)	
	C. Marinated meat products in an oily medium	X				X	
06.04	Preserved meat:						
	A. In a fatty or oily medium	X				X/3	
	B. In an aqueous medium		X(*)		X		
06.05	Whole eggs, egg yolk, egg white						
	A. Powdered, dried or frozen						X
	B. Liquid or cooked				X		
07	**Milk products**						
07.01	Milk						
	A. Milk and milk-based drinks whole, partly dried and skimmed or partly skimmed				X		
	B. Milk powder including infant formula (based on whole milk powder)						X
07.02	Fermented milk such as yoghurt, buttermilk and similar products		X(*)		X		
07.03	Cream and sour cream		X(*)		X		
07.04	Cheeses:						
	A. Whole with inedible rind						X
	B. Natural cheese without rind or with edible rind (gouda, camembert and the like) and melting cheese					X/3(**)	
	C. Processed cheese (soft cheese, cottage cheese and similar)		X(*)		X		
	D. Preserved cheese:						
	I. In an oily medium	X				X	
	II. In an aqueous medium (feta, mozzarella and similar)		X(*)		X		

Table 2 - Food category specific assignment of food simulants (continued)

(1)	(2)	(3)					
Reference number	Description of food	Food simulants					
		A	B	C	D1	D2	E
08	**Miscellaneous products**						
08.01	Vinegar		X				
08.02	Fried or roasted foods:						
	A. Fried potatoes, fritters and the like	X				X/5	
	B. Of animal origin	X				X/4	
08.03	Preparations for soups, broths, sauces, in liquid, solid or powder form (extracts, concentrates); homogenised composite food preparations, prepared dishes including yeast and raising agents						
	A. Powdered or dried:						
	I. With fatty character					X/5	
	II. Other						X
	B. Any other form than powdered or dried:						
	I. With fatty character	X	X(*)			X/3	
	II. Other		X(*)	X			
08.04	Sauces:						
	A. With aqueous character		X(*)	X			
	B. With fatty character, e.g. mayonnaise, sauces derived from mayonnaise, salad creams and other oil/water mixtures, e.g. coconut-based sauces	X	X(*)			X	
08.05	Mustard (except powdered mustard under heading 08.14)	X	X(*)			X3(**)	
08.06	Sandwiches, toasted bread, pizza and the like containing any kind of foodstuff						
	A. With fatty substances on the surface	X				X/5	
	B. Other						X
08.07	Ice creams			X			
08.08	Dried foods:						
	A. With fatty substances on the surface					X/5	
	B. Other						X

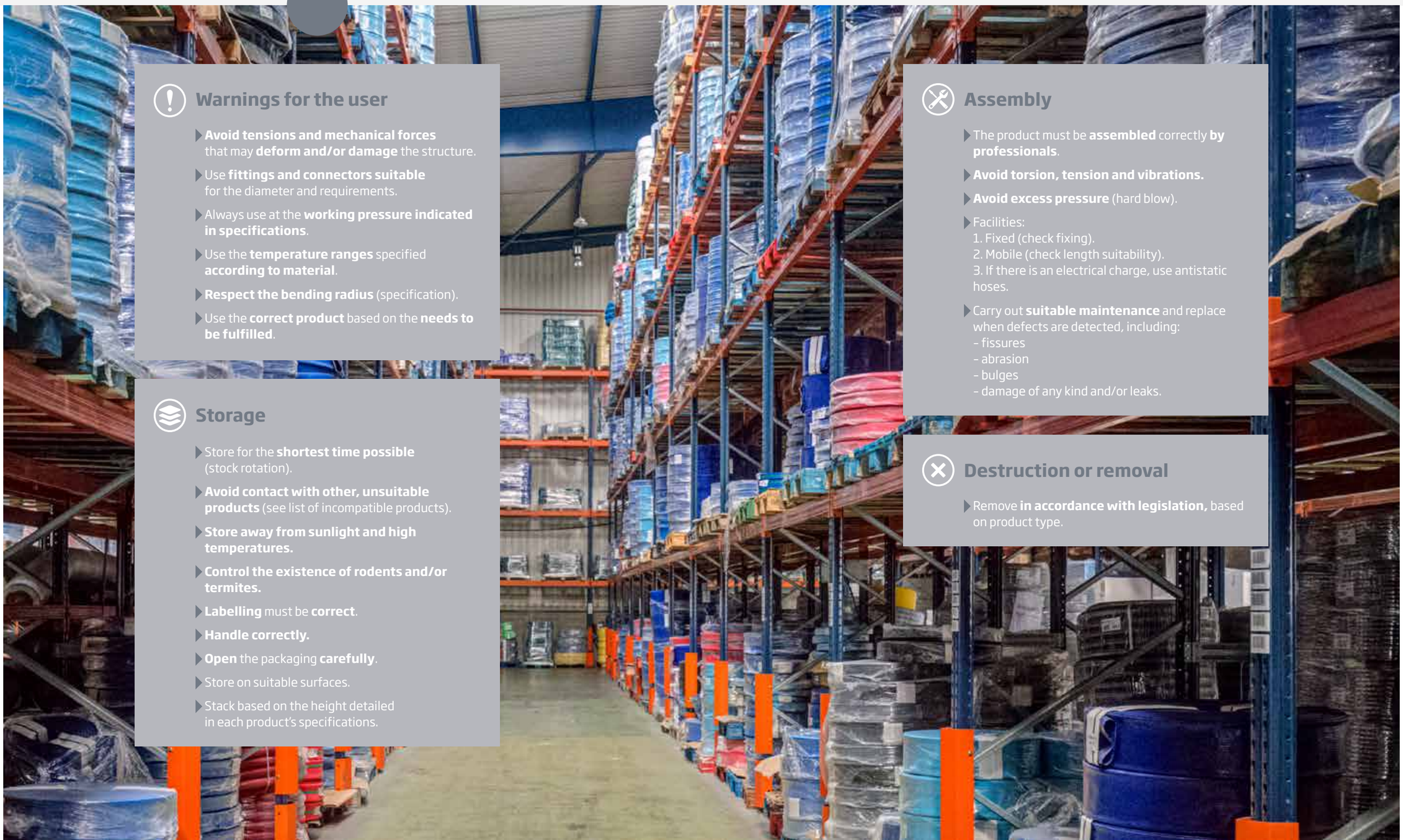
Table 2 - Food category specific assignment of food simulants (continued)

(1)	(2)	(3)					
Reference number	Description of food	Food simulants					
		A	B	C	D1	D2	E
08	**Miscellaneous products (continued)**						
08.09	Frozen or deep-frozen foods						X
08.10	Concentrated extracts of an alcoholic strength equal to or exceeding 6% vol		X(*)		X		
08.11	Cocoa:						
	A. Cocoa powder, including fat-reduced and highly fat-reduced						X
	B. Cocoa paste					X/3	
08.12	Coffee, whether roasted or not, decaffeinated or soluble, coffee substitutes, granulated or powdered						X
08.13	Aromatic herbs and other herbs such as camomile, mallow, mint, tea, lime blossom and others						X
08.14	Spices and seasoning in the natural state such as cinnamon, cloves, powdered mustard, pepper, vanilla, saffron, salt and other						X
08.15	Spices and seasoning in oily medium such as pesto and curry paste					X	

Recommendations

Offering customers the best service possible is a priority for Espiroflex. Not only is our aim to deliver a high-quality product, but we also seek to advise customers as to how to use and handle the product to ensure a better experience.

If you have any questions, consult Espiroflex's technical team.



Warnings for the user

- **Avoid tensions and mechanical forces** that may **deform and/or damage** the structure.
- Use **fittings and connectors suitable** for the diameter and requirements.
- Always use at the **working pressure indicated in specifications**.
- Use the **temperature ranges** specified **according to material**.
- **Respect the bending radius** (specification).
- Use the **correct product** based on the **needs to be fulfilled**.

Storage

- Store for the **shortest time possible** (stock rotation).
- **Avoid contact with other, unsuitable products** (see list of incompatible products).
- **Store away from sunlight and high temperatures.**
- **Control the existence of rodents and/or termites.**
- **Labelling** must be **correct**.
- **Handle correctly.**
- **Open** the packaging **carefully**.
- Store on suitable surfaces.
- Stack based on the height detailed in each product's specifications.

Assembly

- The product must be **assembled** correctly **by professionals**.
- **Avoid torsion, tension and vibrations.**
- **Avoid excess pressure** (hard blow).
- Facilities:
  1. Fixed (check fixing).
  2. Mobile (check length suitability).
  3. If there is an electrical charge, use antistatic hoses.
- Carry out **suitable maintenance** and replace when defects are detected, including:
  - fissures
  - abrasion
  - bulges
  - damage of any kind and/or leaks.

Destruction or removal

- Remove **in accordance with legislation,** based on product type.

Certificates

Quality management certificates ISO 9001-2019

Certified products

Hidrotubo® (only Ø 43 and Ø 55)

Hidrotubo® Plus

Hidrotubo® Plus Especial Termitas

Espiropool® Protect

Espirogas®

R.I.A®

Hidrotubo®

Hidrotubo® Plus

Espiropool® Protect

Espirogas® Portugal

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