

STEAM

NAVY

HYDROCARBONS

AIR & GAZ

WATER

# Tecalemit flexibles™



Tenir au Temps

Rubber hoses







# Tecalemit flexibles™



Tenir au Temps

TECALEMIT FLEXIBLES®, with its strong brand name and patents, driven and supported by professionals, is your security-guaranteed supplier of flexible pipes and tubes, hoses and fittings provided by three departments.

## Tecalemit RCMH™



Rubber hoses  
Crimped industrials hoses

## flexibles Tecalemit™



Hydraulic hoses and fittings  
Hoses fitted

## tubes Tecalemit™



Technical tubes  
Thermoformed tubes & multitubes





## Historic TECALEMIT FLEXIBLES®



E.Piquerez



J.Christe

Emile Piquerez had invented his famous forced lubrication with a simply attached coupler clip and given it the name "TECHLA".

As for Joseph Christe, he had struck an agreement in the United States with the company "ALEMITE" through which the Piquerez patents were sold to this company for America in exchange for its own lubrication patents with bayonet connector for Europe.

This was the starting point of the company TECALEMIT, its offices, shops, workshops and service stations were set up by its two founders 18 Rue de Brunel in Paris in May 1922.

The name "TECALEMIT", a combination of "TECHLA" and "ALEMITE", was to remind users of forced lubrication that they would find here devices by both brands.

Car owners came in their droves to get their lubricators replaced in only 15 or 20 minutes for just 100 Francs, which at the time was about £5 or \$20.

But TECALEMIT did not rest on its laurels. From the lubrication pump with a flexible hose and coupler clip, they moved on to the pushing pump with rigid hose and articulated clip, then onto LUB and ZERK lubrication, and finally to an even more perfected system that is still used today in almost all cars and machines built anywhere in the world: the "Hydraulic" system.

1946 saw the first "TELECAMIT" rubber hoses with crimped connections, then the flexible pipework "TECALEMIT-AEROQUIP" with dismountable connections were released in 1950, followed by flexible polyamide 11 pipes or flexible polyurethane 12 pipes that were manufactured in the Orly plant under the brand name TECALAN® from 1961.

In 1972, a factory fully dedicated to these products was built in Blois, where TECALEMIT FLEXIBLES® (brand registered in 1980) had its head office Avenue de Châteaudun.

In January 2006, all activities, except those dedicated to aerospace, were transferred to Pont l'Abbé, Route de Combrit, in Brittany.

TECALEMIT FLEXIBLES®, ISO 9001 certified and with its approved economic operator status, offers a complete range of pipework and hoses with dismountable or crimped connections for remote hydraulic controls in addition to all the pneumatic tubes manufactured in Pont l'Abbé under the brands MANURIL®, MANULAN® and MALUFORM®.

All these devices were primarily designed for the automotive market but have also conquered aviation, railways, the marine, civil engineering and the industry as a whole.



Y. Tromelin

The sister companies **TECALEMIT RCMH®** and **TECAMEC®** are located only 800m away from the complete technical and sales offer.

**TECALEMIT RCMH®** designs and manufactures flexible elastomer hoses used to transfer fluids in industry. The company has approved economic operator status and is ISO 9001 certified and also benefits from authorisations from DREAL (French Environment, Development, and Housing Directorate) via its AFNOR certification to manufacture hoses for dangerous substances for clients in civil defence.

**TECAMEC®** manufactures connectors, hose caps and standoffs, as well as flexible hoses in stainless steel. These products are aimed at civil defence, welding, and energy industry (oil & gas, nuclear, off-shore rigs, FPSO LNG), civil engineering, sewers, and the steel industry.

Y. Tromelin , the President of **TECALEMIT FLEXIBLES®**

Aerial view of the town of Pont l'Abbé









Photo Credit Claude BUHANNIC

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The function of a hose is to convey different solid, liquid or gaseous products either by suction or by discharge. The large range of TECALEMIT RCMH® flexible hoses responds to many diverse applications as these are designed in a different way according to their use. For the choice of an industrial hose, the user or prescriber should take a certain number of elements into consideration.

## 1 RUBBER HOSES SELECTION

### 1 1 Hose structure

A hose is comprised of 3 elements :

- the inner tube ensuring tightness is made from homogenous polymer presenting excellent resistance to the conveyed product. It must have the best possible surface finish.
- the reinforcement gives the hose its physical and mechanical properties : resistance to both positive and negative pressure, resistance to kinking, traction; this reinforcement can combine several technical solutions to adapt to conditions of use : metal or textile braids or plies, metal or plastic spirals, cable plies, electrical conductors. It also guarantees the dimensional stability of the inner tube thereby contributing to tightness of the hose.
- the outer cover is made from homogenous polymer and intended to isolate the reinforcing structure from the environment.

### 1 2 Nature of conveyed products

These are extremely varied and have been classified into 7 main families :

- Water (part N°s beginning with 1)
- Air and gasses (part N°s beginning with 2)
- Hydrocarbons (part N°s beginning with 4)
- Steam (part N°s beginning with 5)
- Chemical products (part N°s beginning with 6)
- Abrasive products (part N°s beginning with 7)
- Liquid food products (part N°s beginning with 8)
- hoses intended for use with hydraulic oils can be found in the FLEXIBLES TECALEMIT® hose catalogue.

### 1 3 Environment

- Safety of operators
- Protection of the environment
- Ambient temperature
- Atmospheric conditions
- Possibility of impacts or abrasion
- Presence of corrosive products

### 1 4 State of conveyed product

Liquid, gaseous, solid or mixture of same.

### 1 5 Working method

By suction, under pressure or by gravity.

### 1 6 Working conditions

Pressure and temperature of fluid, pressure surges, pressure peaks, frequency of use.

### 1 7 Characteristics of use

Flexibility and ease of handling are considered and also :

- Imposed bend radius
- Vibrations of the system
- Applied traction
- Flexions
- Acceptable connections

### 1 8 Standards and regulatory constraints

The outer diameter of the hose indicates its outer size. It is also necessary to know it in order to select mounting devices and certain types of fittings.

### 1 9 Outer diameter (mm)

The outer diameter of the hose indicates its outer size.

It is also necessary to know it in order to select mounting devices and certain types of fittings.

## 1 10 Inner diameter of hose (mm)

The inner hose diameter is without doubt the first criterion of choice.

Choosing too small a diameter provokes important pressure losses and an increase in fluid velocity detrimental to hose service life in the case of abrasive products.

Choosing too large a diameter gives way to a needless increase in weight, size and cost of the installation and a reduction in ease of handling.

This diameter can depend only on the type of end-connection used, variable according to the application. This diameter is often used to designate the hose.

## 1 11 Working pressure

Expressed in bars by the abbreviations PS (working pressure), PMS (maximum working pressure), PMO (maximum service pressure), WP (working pressure), PMA (maximum admissible pressure). TECALEMIT RCMH® hoses are designed and manufactured for continuous service at the working pressure indicated on each data sheet.

## 1 12 Test pressure

Expressed in bars by the abbreviations PE (pression d'épreuve - test pressure) or TP (test pressure) the test pressure is very variable according to requirements of the applicable standards or those of the customer.

Generally it is obtained by multiplying the working pressure by a safety factor (1.5 or 2 for example).

## 1 13 Burst pressure

Expressed in bars by the abbreviations PLNE (pression limite de non-éclatement - pressure limit before bursting) or BP (burst pressure).

The values indicated in TECALEMIT RCMH® data sheets are those of the limit before bursting.

They are guaranteed for hoses before use and having been equipped with end-fittings in the preceeding month.

## 1 14 Working temperatures

The temperatures specified in TECALEMIT RCMH® data sheets are the maximum admissible temperatures of the hose for the fluid for which the hose is designed.

Please consult our technical department for the use of the hose with any other fluids.

Hoses may be used in different ambient temperatures after having been priorly fitted with a heat-resistant sheath, without which the hose outer cover would rapidly age, harden and become brittle.

## 1 15 Bend radius

Expressed in millimeters, minimum bend radii are indicated by measuring at hose centre line, at maximum working pressure and without hose flexion.

In the case of a hose without internal metal spiral, it defines the radius at which the hose may be rolled with a reduction of 15% of its internal section.

## 1 16 Resistance to traction

Any traction on a hose must be exerted in the centre line of the end-fittings.

Only metal reinforced hoses can reasonable support any off centre-line tractions.

Tractions on suction hoses with metal spiral (helix) must be avoided.

They reduce working pressure and the internal section of the hose.

## 1 17 Resistance to vacuum

All our suction hoses have maximum resistance to vacuum.

Kinking or crushing are particularly detrimental to the resistance of hoses to negative pressure.

## 1 18 Length

It is defined by the working length between connections, the length from fitting joint to fitting joint and the overall length from one end-fitting to the other.

## 1 19 Torsion

Torsions must absolutely be avoided.

They give way to a rapid deterioration of hoses.

## 1 20 Products or fluids conveyed

It must be ascertained that the fluid conveyed is compatible with the hose inner tube material, taking into account its concentration and temperature.

Please consult the chemical compatibility chart at the end of this catalogue or contact our technical department.

## 1 21 Electrical conductivity

Hoses may, or may not, be comprised of conductive mixtures.

Resistances per metre of the inner tube and of the outer cover must be taken into consideration, as well as that between the inner tube and the outer cover.

Moreover, copper braids or small cables may be spirally embedded into the hose wall to ensure electrical conductivity. For difficult cases and for ease of use, hoses may have the braids overhanging the hose ends by a few centimeters.

## 1 22 External conditions

Environmental conditions of where the hose is to be used should be taken into account in order to protect it from high temperatures, abrasion, contact with detergents or oils.

The latter generate swelling of the rubber comprising the outer cover, reducing its properties.

Hoses may be used in different ambient temperatures after having been priorly fitted with a heat-resistant sheath, without which the hose outer cover would rapidly age, harden and become brittle.

## 2 RUBBER HOSES USE AND MAINTENANCE

During use a hose can be subjected to many effects which have not been foreseen.

Obviously it is recommended to use the hose in accordance with our indications concerning working pressure, temperature, bend radius.

In case of doubt, please contact our technical department.

### 2 1 Handling

Hoses should be handled with precaution, they should not be dragged over sharp or abrasive surfaces, tied in knots, trampled or flattened by vehicles.

### 2 2 Products conveyed

It is preferable to consult our technical department for any use other than for which it has been designed.

Even so, a chemical compatibility chart according to the different types of elastomers comprising the hose inner tubes of our range can be found in this catalogue.

### 2 3 Torsion

Should the relative movement of the hose give way to a torsion, the end-fittings and/or connections should be modified in such a way as to give flexion rather than torsion.

### 2 4 Resistance to traction

It is advised to consult our technical department for any traction effects to which the hose may be subject, as we are in a position to carry out traction tests.

### 2 5 Maintenance

Once per year, hoses should undergo visual inspection after cleaning with soapy water or tensioactive-product based detergents.

The hose must be rejected should any of the following defects be revealed :

- traces of leaks
- ripped or torn outer cover
- slipping of end-fitting
- abrasion or slash revealing the reinforcement structure

### 2 6 Hoses intended for food products

Users must apply necessary rules concerning cleaning operations (usually with steam) and their frequency.

### 2 7 Hoses used with steam

Should the use be intermittent, that is used alternatively with steam and water following periods of cooling for example, the inner tube is subjected to thermal shocks leading to the phenomena of "pop-corning", characterised by localised swelling.

In effect, the steam conveyed through the tube passes through the tube wall (it is for this reason that our hoses have their outer covers micro-perforated to eliminate the build-up of gasses and avoid swellings).

When the steam circulation is interrupted or during the cooling phase, the steam condenses through the inner tube wall. When the temperature increases, this water then vaporises again with an increase in pressure.

The alternating effects of these thermal shocks creating localised swellings, deteriorate the inner tube.

In all cases, the hose should be maintained in such a position as to prevent water from stagnating during halts.

## 2 8 Hoses for corrosive or aggressive products

It is obviously necessary to consult the chemical compatibility chart at the end of this catalogue, taking into account temperature and concentration. In case of doubt, contact the technical department.

It is preferable to avoid stagnation of the product in the hose, particularly with regards to solutions or emulsions as decantation can lead to concentrations above the admissible limits.

## 2 9 Hoses intended for abrasive products

Abrasive products remove only a small part of the inner tube material in straight sections.

Consequently, abrasive product handling hoses should be maintained as straight as possible. In situations where bends cannot be avoided, these should have a radius as large as possible.

Small radii give way to localised wear. It is the same for sections reduced by an external force, where the abrasive product is accelerated.

It is also necessary to ensure good electrical conductivity in order to evacuate static electrical charges produced by the rubbing of particles against the inner tube, otherwise leading to a perforation of the tube wall.

## 2 10 Hoses for inflammable products

This particularly concerns liquid hydrocarbons, liquids or gases. Road transport rules impose a monitoring sheet, which must be furnished by the manufacturer, with annual inspections and replacement after 6 years.

## 3 RUBBER HOSES STORAGE CONDITIONS

Over a long period of storage, and particularly when they are subjected to certain factors described hereinafter, physical properties of hoses are modified in such a way as to lose their initial characteristics.

The correct storage conditions ensure maximum protection and reduce deterioration of polymers.

### 3 1 Duration of storage

The duration recommendations that we will indicate are valid when the storage conditions listed in the following paragraphs are respected.

- Up to 3 years : use without restrictions
- From 3 to 6 years : make visual inspection. take samples and carry out hydrostatic test at twice working pressure
- From 6 to 8 years : complete visual inspection. take samples and carry out destructive tests
- Over 8 years : do not use

All Tecalemit rcmh hoses are marked with a date or number indicating date of production and date of placing into stock.

### 3 2 Method of storage

The principal to follow is to store hose in straight lengths, layed flat on supports, with should the hose be stored in reels, it is preferable to avoid stacking them in piles, as this could create a permanent deformation of the hose. Hoses should not be suspended on hooks and in general any flexions or tractions should be avoided.

### 3 3 Temperature

The ideal storage temperature is 15°C and the acceptable range is from 0°C to +35°C.

Hoses must not therefore be placed near a source of heat. In all cases, stored hoses should not be subjected to temperatures over +50°C or under -30°C.

Moreover, large fluctuations in temperature during storage lead to premature ageing of hoses. cracking caused by ozone increases with temperature.

### 3 4 Environment

Hoses should also be kept away from workshop areas where they could be exposed to projections of oil, solvents, detergents or rodents.

### 3 5 Humidity

It is recommended to avoid relative humidity above 65%.

### 3 6 Ultraviolet light

Direct light is one of the main sources of ageing.

In all cases, it is necessary to keep articles away from sunlight or strong artificial lighting.

Should the storage area have large bay windows, these should be covered with red, orange or white coating, or the items should be packed in an opaque wrapping.

## 3 7 Ozone

Ozone is an ageing factor which must be taken into account.

It is therefore necessary that storage areas are exempt of ozone generating equipment such as mercury vapour lamps or spark-producing equipment such as alternative current electrical motors.

Also, the circulation of air around and inside the hoses should be limited, for example, by keeping the, original packing and plugging hose ends.

## 3 8 Bend radius in storage

Ozone is a major factor of aging which creates cracking in the rubber.

When the hose is curved, the tension exerted on the outer cover has a tendency to enlarge them. consequently, the smaller the bend radius, the more likely it is that cracking will appear.

## 4 IMPLEMENTATION

Tecalemit's industrial rubber hoses are either manufactured by spiral wrapping, consisting of adding the successive components of the hose on a metal mandrel, or continuously by extrusion and braiding the textile reinforcement.

### 4 1 Manufacture on automated mandrels

This type of manufacturing requires factories equipped with overhead traveling cranes with a range of 200 meters. The metal mandrel of maximum 61 m is towed inside a machine which has rotating reels used to lay the constituent elements of the pipe: Rubber strips laid in a helical manner, strips of textile or steel wires, metal spirals, transfer band bearing the Tecalemit Flexibles by Sel brand, polyethylene strip for marking the inlaid batch numbers, and finally the strips of finishing fabric which will hold the constituent elements of the pipe.

This reels turn in both directions.

The mandrel is then inserted into a 60 meter long autoclave oven for vulcanisation.

When it is removed from the oven, the finishing fabric strip is removed and the hose is removed from the mandrel.

This manufacturing process can be used with metal wire or textile thread braiding.

It also allows the association of one or several metal spirals with textile strips.

The minimum manufacturing batch is 10 mandrels. The maximum inside diameter is 152.4 mm.

### 4 2 Manufactured on manual and semi-automated mandrels

The operator stands on a cart, the advance of which is controlled by the rotation of the metal mandrel.

The operator lays the various strips of rubber, the textile wire layers, the metal spirals, the commercial marking and the traceability bands and the strips of finishing fabric on a metal cylinder.

This covered cylinder is then inserted in an autoclave oven.

This manufacturing technique allows for a great flexibility in the use of the various constituent elements of the hose.

The making can be done with a transfer band, incrustated, or both.

The maximum inside diameter is 508 mm.

### 4 3 Manufacture on flexible mandrels

This manufacturing technique allows pipes with one or several textile or metal braids to be made.

The mandrels are made of polyethylene with an internal steel wire.

The marking is done with ink, by incrustation or by transfer band.

This technique is usually reserved for hydraulic hoses but is also used when the length of the requested hoses is greater than 61 meters.

The maximum diameter is 31.8 mm.

### 4 4 Continuous manufacturing

This manufacturing technique can be used to extrude pipes with a diameter of up to 25 mm with a smooth surface (unlike pipes manufactured on mandrels which have a striped appearance following their vulcanisation under a strip of fabric in the autoclave).

The internal tube is extruded and immediately braided and covered in rubber with a square head extruder.

The marking is done with ink or incrustated.

The pipe is then rolled onto a revolving plate that is inserted into an autoclave oven underground.

## 4 5 List of the diameters of our rigid mandrels

The quantity of available mandrels in January was around 2,800.

- 61 meters mandrels for diametres (in mm): 10, 12, 12.7, 15.8, 17, 19.1, 20, 22, 25.4, 26, 28, 30, 31.8, 35, 38, 40, 42, 44.5, 48, 50, 50.8, 53, 54, 55, 57, 60, 63.5, 65, 70, 73, 75, 76.2, 80, 83, 90, 95, 100, 101.6, 110, 114.5, 120, 127, 152.4

- Mandrels of other lengths for the diameters (in mm): 14, 15, 18, 24, 25, 25.6, 68, 85, 92, 105, 130, 133, 140, 146, 150, 162, 168, 175, 180, 190, 203, 219, 230, 245, 254, 273, 298, 304.8, 323, 336, 355.6, 390, 406.4, 445, 457, 508.

- Stainless steel mandrels to manufacture food-grade hoses (mm) : 15, 15.8, 19.1, 25.4, 31.8, 38.1, 40, 44.5, 50.8, 60, 63.5, 70, 75, 76.2, 80, 90, 101.6, 110, 114.5, 168, 203.

## 4 6 Standard dimensional tolerances on the inside diameter of rubber hoses manufactured on mandrels

Inside diametre in mm - Dimensional tolerances for pipes manufactured on a rigid mandrel, in mm

Manufacture on flexible mandrels 3.2 +/- 0.3 +0.50/-0.30 From 4 to 10 +/- 0.4 +0.60/-0.40 From 12 to 16 +/- 0.6 +0.70/-0.50 From 19 to 20 +/- 0.8 +0.90/-0.70 25 +/- 1.0 +0.90/-0.70 From 30 to 40 +/- 1.20 +1.20/-0.80 From 50 to 65 +/- 1.40 From 70 to 90 +/- 1.60 From 100 to 125 +/- 1.60 From 150 +/- 2.0 to 200 +/- 2.5 From 250 to 400 +/- 3.00

## 4 7 Manufacture of hoses fitted with connectors

Modern equipment makes it possible to carry out the various operations required for the preparation of the finished product: Cutting, boring, stripping, handling, crimping, proofing and marking.

The metal connectors and crimping skirts are produced in-house as per TECALEMIT RCMH® drawings.

A traction bench, a cyclic pulse pressure bench of 1000 bars, 150 ° C fire test and hydrostatic test of 22 meters are used to check the reliability of the assemblies.

## 5 ELASTOMER HOSES CHEMICAL COMPATIBILITY CHART

The indications in this chart are according to NFT 40-106 but given without guarantee.

They present the classes of chemical or physical alterations of the elastomers with the chemical products (physical penetration, hydrolysis, oxydation, specific effects, etc...)

they do present the effects of the elastomer on the chemical product concerned.

### Elastomeres used

ASTM : common name

NR : natural rubber - natural isoprene

BR : butadiene

SBR : styrene butadiene rubber - buna-s

IIR : butyl - isobutylene-isoprene rubber

CIIR : chlorobutyl - chlorinated isobutylene-isoprene

EPDM : pdm - ethylene-propylene-diene rubber

EPM : epr - ethylene-propylene copolymer

NBR : nitrile - acrylonitrile butadiene - buna-n

CR : neoprene - chloroprene rubber

CSM : hypalon - chlorosulfonated polyethylene

AU : polyurethane - polyesterurethane rubber

T : thiol - polysulfide rubber

Q : (quartz) - rubbers containing silicon

FKM : viton - fpm - fluorocarbon rubber

ACM : polyacrylic - polyacrylate rubber

EACM : ethyleneacrylate rubber - vamac

MFQ : fluorsilicone rubber - polysiloxane

ECO : epichlorhydrine copolymer rubber

CO : epichlorohydrine homopolymer rubber

GPO : propylene polyxide rubber

CM : cpe - chlorinated polyethylene rubber

EVM : vinyl ethylene-acetate rubber







# TECHNICAL GUIDE

class 1 : littel or no effects

class 2 : minor effects

class 3 : moderate effects

class 4 : severe effects

Elastomer	CONC %	Temp °C	NR	BR	SBR	IR	CIIR	EPDM	EPM	NBR	CR	CSM	AU	EU	T	Q	FQM	ACM	EACM	MFQ	ECO	CO	GPO	CM	VM		
Ethanol		50	1	1	1	1	1	1	1	1	1	1	2	3	1	1	1	4	3	1	2	1	4		3		
Ether		TA	4	4	4	3	3	3	4	2	4	3	2	3	1	4	4	4	4	4	2	3	4				
Ethylbenzene		TA	4	4	4	4		4	4	4	4	4			3	4	1			1	4	4					
Ethyl cellulose		TA	1	1	1	4				1	1				2	3	4	4		4							
Ethylene										1							1			1							
Ethylene chlorhydrin		TA				3		3		1	4	3					4										
Ethylenediamine			1	2	2	1		1	1	2	1	2			4	4	3				1	1					
Ethyl éther		See ether																									
Ethyle mercaptan			4	4	4	4		4	4	4	4	2			4		2										
Ethylpentachlorobenzene			4	4	4	4		4	4	3	4	4	4	4	1	2	1			2	3	3					
Ethyle formate			4	4	4	2		2	2	4	2	2					1			1							
Ethyl oxalate			1	1	1	1		1	1	4	3	4			1		1				4	4					
Ethylene oxide		TA				3		3	3	4	4	4				3	4			4							
Ethyl silicate			2	2	2	1		1	1	1	1	2			2	1	1				1	1					
Fluoroboric acid			1	1	1	1		1	1	1	1	1					3										
Fluosilicic acid	50	TA	1			3		2	2	3	2	1					3										
Formic acid	SAT	TA	3		2	1		2		3	2	2	4	4	4	2	3	4		2	4	3	4	1			
Formic acid	SAT	70	4		2	2		2	3	3	3	3	4	4	4	4	4		2	4	4	4	4				
Fumaric acid			1	1	1	4				1	2	2				2	1	4		1							
Furfurylic alcohol		TA				3		3		4	3						4										
Fluid 101 (diester oil)		100	4	4	4	4	4	4	4	1	4	4	3	4	4	2	1	3	4	1	2	3	4				
Fluorbenzene			4	4	4	4		4		4	4					4	4	1			2						
Fluorchloroethylene						3				4																	
Formaldehyde	40	TA	1	1	1	1				1	1	1	4	4	1	1	1							1	2		
Formaldehyde	40	70								4		4															
Formamide		TA				1		1		1	1	1					3										
Freon 11		TA	2		2	4		4		1	1	1	3	3	1	4	3										
Freon 12		TA	1		1	1		2		1	1	1			1	4	2		2		1						
Freon 13b1		TA	1	1	1	1		1	1	1	1	1	1	1	1	4	2										
Freon 21		TA	4		4	3		3	3	4	3	4			3		3				3	3					
Freon 22		TA	1		1	1		1		3	1	1															
Freon 31		TA	2	2	2	1		1	1	4	1	2			2		4										
Freon 32		TA	1	1	1	1		1	1	1	1	1			1		3										
Freon 112		TA	4		4	4		4	4	2	3	2			1		1										
Freon 113		TA	3	2	2	3		3	3	1	1	1	2	2	1	4	2		4	4	1	1					
Freon 114		TA	1	1		1		1		1	1	1			1	3	2										
Freon 114b2		TA	4	3	3	4		4	4	2	1	1			1		2										
Freon 115		TA	1	1	1	1		1	1	1	1	1			1		2										
Freon 142b		TA	2	1	1	1		1	1	1	1	1			1		4										
Freon 152a		TA	1	1	1	1		1	1	1	1	3			1		4										
Freon 218		TA	1	1	1	1		1	1	1	1	1			1		1										
Freon c 316		TA	1	1	1	1		1	1	1	1	1															
Freon c 318		TA	1	1	1	1		1	1	1	1	1			1		1										
Freon 502			1	1	1					2	1						2										
Freon bf			4	4	4	4				2	2	2	1	1													
Freon mf			4	2	2	4				1	3	4	3	3	1												
Freon ta			1	1	1	1		1	1	1	1	1	1	1	1	1	3										
Freon tc			4	2	2	1		2	2	1	1	1	1	1	1	1	1										
Freon tf			3	2	2	4		4	4	4	4	4	4	4	4	4	4				1	1					
Freon tmc			2	3	3	1		2	2	2	2	2	2	2	1	3	1										
Freon t.P 35		1	1	1	1		1	1	1	1	1	1	1	1	1	1	1										
Freon t.Wd 60 2		3	2	2	1		2	2	2	2	2	1	1	1	4	1											
Furan	tA		4	4	4	3		3	3	4	4	4		2													
Furfural	tA		3	3	3	2		2	2	4	4	3		3	3	3	4	4			4						
Gallic acid			1	2	2	1		2	2	3	2	2	4	4				1		1							
Glycolic acid	37	TA				1		1		1	1						1										
Glycol ethylene		100	2	1	1	1	1	1	1	1	2	1	4	4	4	1	1	4	1	1	1	1	1	1	1	1	
Gasoil	70		4	4	4	4	4	4	1	2	2	2	2	1	4	1	1		1	1	1						
Gelatine	40		1	1	1	1	1	1	1	1	1			1	1	1											
Glucose (liquid)	80		1	1	1	1		1	1	1	1			1	1	1				1							
Glycerine	100		1	1	1	1	1	1	1	1	1	1	1	1	1	1	2		1	1	1	1					

# TECHNICAL GUIDE

class 1 : littel or no effects    class 2 : minor effects    class 3 : moderate effects    class 4 : severe effects

Elastomer	class 1 : littel or no effects    class 2 : minor effects    class 3 : moderate effects    class 4 : severe effects																									
	C O N C %	T e m p °C	N R	B R	S B R	I I R	C I I R	E P D M	E P M	N B R	C R	C S M	A U	E U	T	Q	F Q M	A C M	E A C M	M F Q	E C O	C O	G P O	C M M	E V M	
Glycine	10	TA						1		1						1										
Glycols	see ethylene glycol																									
Glycol monobutylether (butylcellosolve)		TA	4	4	4	2		2	2	4	4	4			1	3	4		4	4						
Glycol monoethylether (cellosolve)		TA	1	1	1	1		1	1	1	1	1	4	4		1	1	4		1						
Glycol monoethylether acetate	tA		3	3	3	1		1		4	4	4	3		1		4	4								
Hydrogen bromide	37	TA	1	2	2	1		1	1	4	1	1	4	4		4	1	4		3						
Hydrochloric acid	10	100	4		3	2		4		3	1	1	4	4	4	4	1				1					
Hydrochloric acid	21	50	3		2	1		2		2	1	1	4	2		4	1									
Hydrochloric acid	37	TA	2	2	2	1		1	1	3	2	1	4	4		4	1									
Hydrogen cyanide	20		2	3	3	1		1	1	3	3	1			4		1	4	2							
Hydrofluoric acid	48	TA	3	3	3	1		1	1	3	1	1	4	4	4	4	1				2					
Hydrofluoric acid	75		3	3	3	1				4	3	1	4	4	4	4	2									
Hypochlorous acid			2	2	2	2		3	3	4	3	2					2	2								
Hydrogen peroxide	30	TA	1		1	1		1		1	1	1	1	1		1	1									
Hydrogen peroxide	10	TA	4	4	4	3		3	3	4	4	3			4	1	2			2						
Hexachlorobutadiene	tA		4	4	4	4	4	4	1	4	4	1	4	2	4	1	4									
Haxane	tA		4	4	4	4		4		1	1	2	1	2		4	1	1		2	1	1	4			
Hexanol	tA		1	1	2	2		3	3	2	2	2	2	4	4	1	3	1	4		1					
Hexene			4	4	4	4		4	4	2	2	2	1	1	1	4	1	1		1						
Hydrazine (solution)		TA				1	1	1	4	4	2	4	4	4	3	1										
Hydrogen		100	1	1	1	1	1	1	1	1	1	1			1	1	1									
Hydroquinone			2	2	2				3						3		4			2						
Isopropyl acetate			3	4	4	2		2	2	4	4	1	1	1	1		4	4								
Isobutyl alcohol		TA	1	1	1			1	1	2	1	1	4	4	2	1	1	4		2				1	4	
Isopropyl alcohol		40	1	2	2	1		1	1	2	1	1			1	1	1	4						1	4	
Isopropyl chloride			4	4	4	4		4	4	4	4				4	3	1			2						
Isopropyl ether		TA	4	4	4	4				4	4	4				1										
Iodoform						1		1	1																	
Isooctane (solvant a)		TA	4	3	3	4	4	4	4	1	1	2	1	1	1	4	1	1	2	2	2	1	4	1	4	
Isopropyl nitrate	See Nitrate de propyle																									
Iodine pentafluoride			4	4	4	4		4	4	4	4	4	4	4	4	4	4			4	4	4				
Inorganic salt solutions (non-oxidizing)	SAT	70	1	1	1	1		1	1	1	1	1	4	4	1	1	1	4	1	1	1	1				
Kerosene			1	1	2	1		1		3	2	2			1	4	1	4								
Lacticid acid solution	10	70	1	1	1	1		1	1	1	1	1				4	1									
Linoleic acid		70				4		4		2	4	4	2	2		1	2									
Liquid fluoride						3		3				4				4	4	2								
Liquified petroleum gas			4	4	4	4		4	4	1	2	2	1	1	1	3	1	3			1	1				
Lubricating oil n° 2	100		4	4	4	4		4	4	1	2	2	1	1	4	1	1	1	2	1	1	1	3			
Linseed oil		TA	4	4	3	1		1	1	1	2	2			1	4	1	1		1						
Liquid oxide						1				3							3									
Lard		70	4	4	4	2	3	3	3	1	2	3			4	3	1	1		1	1	1				
Maleic anhydride			2	2	2	3		3	3		3	4					1									
Methly bromide		TA				4		4		4	4	2					2			1						
Methyl chloride			4	4	4	3		3	4	4	4	4				3	2	4								
Methylene chloride		TA	4	4	4	4	4	3	4	4	4	4	4	4	4	4	2	4		3	4	4	4			
Metacrylic dimethylester		125	4	4	4	2	2	2	2	4	4	4	4	4	4	2	4	4								
Methyl formate			3	3	3	2		2	2	4	2	2				2	2	3			4	4				
Mineral oil n° 1	100		4	4	3	4	4	4	4	1	1	1	1	4	1	1	1	1	1	1	1	1	1	1	3	
Mineral oil n° 2	100		4	4	4	4	4	4	4	1	2	3	1	1	4	1	1	1	2	1	1	1	3	1	4	
Mineral oil n° 3	100		4	4	4	4	4	4	4	1	4	4	1	2	4	2	1	1	3	1	1	1	4	2	4	
Magnesia (hydroxide)						1		1	1	4				2	2		4									
Mercury			1	1	1	1				1	1	1			3											
Methyl metacrylate			1	1	1	1				1	1	1														
Methane		TA	4	4	4	3		3	2	4	3	4			2	3	4	4								
Methanol		TA	4	4	4	4		4	4	1	3	3	2	2	1	4	1	1		2	1	1				
Methylamine		50	1	1	1	1	1	1	1	1	1	1	4	4	1	1	3	4		1	2	2	4			
Methylbutylcetone	32	TA				1		1		4	1	1					1									
Methylcyclopentane			4	4	4	2		2		4	4	4			1	1	4									
Methylisobutylcetone			4	4	4	4		4	4		3				2		1			2						
Monobromobenzene		TA	3	3	3	1	2	1	1	4	3	4	3	4	2	4	4	4		4	4	4	4			

# TECHNICAL GUIDE

class 1 : littel or no effects     class 2 : minor effects     class 3 : moderate effects     class 4 : severe effects

Elastomer	C O N C %	T e m p °C	N R	B R	S B R	I I R	C I I R	E P D M	E P M	N B R	C R	C S M	A U	E U	T	Q	F Q M	A C M	E A C M	M F Q	E C O	C O	G P O	C M M	E V M
Monochlorobenzeene			4	4	4	4				4					1	4									
Milk		TA	4	4	4	4		4	4	4	4	4	3	4	4	4	2	4		2	4	4	4		
Monoethanolamine		70	4	4	4	4				1	3	3	2	2	1	4	1	2	3	1	1	1			
Monoéthanolamine		70	2	1	1	1		1	1	1	2	3	4	3	2	2	4	4			2	2		1	
Monoethylether of glycol (cellosolve)		TA	3	3	3	1		2		1	1				1		3								
Monomethylaniiline	4			4	4				1	4	4	4					2								
Monomethylether	See Monoethylether																								
Monovinylcetylene		20	2	2	2	1		1	1		2	2			3	3	1								
Morpholine		TA				2		2		4	2	2					1								
Methyl oleate			4	4	4	2		2	2	4	4						1			2					
Mesityl oxide		TA	4	4	4	2		2	2	4	4	4			2	4	4			4					
Methyl salicylate						2		2	2	4	4	4													
Napthenic acid			4	4	4	4		4	4	2					2		1			1					
Nitric acid concentrated	65	TA	4	4	4	4		4	4	4	4	2	4	4	4	4	1			4	4	4		4	4
Nitric acid diluted	10	50	2		2	1		1	1	2	3	1	4	4	4	4	1				4			4	4
Nitric acid fuming	100	20	4	4	4	4		4	4	4	4	4	4		4	4	3			4					
Natural gas		3	3	3	4		4	4	1	1	1	2	2	2	3	1			3	1	1				
Naphtha		TA	4	4	4	4		4	4	1	4	4	3		2	4	1			1	1				
Naphthalene	80		4	4	4	4		4	4	4	4	4	2	2	3		1			1					
Nitrobenzene		50	4	4	4	1	2	1	1	4	4	4	4	4	4	1	2	4			4				
Nitroethane			2	2	2	2		2	2	4	3	2			1	4	4	4		4					
Nitromethane			2	2	1	1		2	2	4	2	3			1	1	4	4		4					
Nitropropane		TA	3	3	3	1		1		4					1	3	4								
N-octane			4	4	4	4		4	4						2	4	4			2					
Nitrogen tetraoxide			4	4	4	3		3	3	4	4	4				3	4			4					
Oleic acid		TA	4		4	4		3	3	1	4	3	1	2	2	1	1	1		1	1	1	4		
Oxalic acid	25	70	1		1	1		1	1	3	2	1			4	3	1				3	3		1	
Olive oil	50	4	4	3	2	2	3	3	1	2	2	1	1	1	1	1	1			2	2		1	4	
Octachlorotoluene			4	4	4	4		4	4	4	4	4	4	4	4	4	1	4		2					
Octanol			2	2	2	1		1	1	2	1	1	4	4	2	2	1	4		2					
Orthocresol		70	4	4	4	1		2	2	4	2	4			4	1	1	4							
Oxygen		TA	1	1	1	1		1	1	1	1	1			1	1	1		1						
Ozone	50 Pphm	40	4	4	4	2		1	1	4	2	1	1	1	1	1	1	1		1	1	1	1	1	1
Oxidizing salt solution (based on k mn O4)	25	70	4					4			2	3					1	4							
Propyl acetate		TA	4	4	4	2		2	2	4	4	4			2	3	4	4		4					
Palmitic acid		70	3	3	3	2		2	2	2	2	3	1	1	3	3	1			1	2	2			
Perchloric acid	70	TA	2			1		1		4	3	2				4	1								
Phosphoric acid	60	50	2		1	1		1	1	3	2	1			4	1	1				4			1	
Phthalic acid	SAT	TA				1		1		4	1	1					4								
Picric cid	10	100	2	2	2	1		1	1	2	2	1			4	4	1			2	4				
Propionic acid		TA				1		1		4	4						1								
Phenylphenylic ether			4	4	4	4		4	4	4	4	4			2	3	4								
Petrol	See solvent B																								
Pine oil	70	4	4	4	4		4	4	2	4	4			2		1			1						
Pentanol																									
Perchlorethylene		TA	4	4	4	4	4	4	4	3	4	4	2	4	2	4	1	4			4	4			
Potassium permanganate	25	70	4					4		3	2	3				1	4								
Phenol		100	4		4	2		2	1	4	4	4	4	4	4	2	1	4		1	4	4	4		
Phenylbenzene	See Diphenyle																								
Phenylhydrazine		TA 1		3	3	2		2		4	4	4			4		1								
Phorone		TA	4	4	4	2		2	2	4	4	4			3		4								
Phosgene		TA				1		1		2	1	1					1								
Pinene		70	4	4	4	4		4	4	2	4	3			3	4	1			2					
Piperidine			4	4	4	4		4	4	4	4	4					4			4					
Propane liquid		TA	4	4	4	4		4	4	1	2	3	2	2	1	3	1	1		2	1	1			
Propanol		50	1	1	1	1	1	1	1	2	1	1	2	4	1	2	1	4							
Propylamine		TA	4	4	4	3	3	3	3	4	4	4	4	4	4	4	4	4							
Propylene			4	4	4	4		4	4	3	4	4			2		1			2					
Hydraul f-9		80	4	4	4	3	4	2	2	3	4	4	4	4	3	1	1	4		2					
Pyrol			3	3	3	4		3	3	4	4	4			4	2	4	4		2					

# TECHNICAL GUIDE

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Elastomer	C O N C %	T e m p °C	N R	B R	S B R	I I R	C I I R	E P D M	E P M	N B R	C R	C S M	A U	E U	T	Q	F Q M	A C M	E A C M	M F Q	E C O	C O	G P O	C M M	E V M
Phosphorous trichloride		TA	4	4	4	4	4	4	4	4	4	4	4	4	4	4	1	4	4	2	4	4	4		
Rapeseed oil		100	4	4	4	3			2	2	1	3	1	1	4	1	1	1			1	1	1	4	
Salicylic acid			1			1		1	1	1	1						1			1					
Stearic acid		70	3	3	3	4		2	2	2	2	2	1	1		1									4
Sulfurous acid																									
Sulfuric acid	10	100	1	1	1	1	1	1	1	3	1	1	4	4	4	4	1	4							
Sulfuric acid	50	100	1	1	1	1	1		1	4	1	1	4	4	4	4	1	4							
Sulfuric acid	60	100	3		3	1			4	4	4	4	4	4	4	4	1								
Sulfuric acid	96	TA	4	4	4	4		4		4	4	4	4	4	4	4	1	4	4						
Sulfuric acid	75	100	4	4	4	4	4	3	3	4	4	4	4	4	4	4	1								
Sodium bicarbonate			1	1	1	1		1		1	1	1			1	1	1					1			
Sodium carbonate	20	100	1	1	1	1		1	1	1	1	1	4	1		1	1				1	1			
Sulfuryle chloride		TA				2		2		4	2	1					1								
Sulfur dioxide		TA	3	3	3	1		1	1	3	3	3			4	3	1	4		2					1
Silicate ester			4	4	4	4		4	4	2	1	1	1	1		4	1			1					
Silicone fats					1		1		1	2	2				2	1	1	1	1						
Sulfur hexafluoride			1	1	1		1	1	1	1	2				1	1									
Silicon oil	60				1		1		1	1	1				3	1	1		1	1	1				
Soybean oil	tA	4	4	3	3		3	3	1	2	2	2	2	1	1	1	1		1	1	1				
Sodium hydroxide	10	100	1	1	1	1	1	1	1	1	1	1	4	4	4	4	4	4						1	1
Sodium hydroxide	25	100	1	1	1	1	1	1	1	4	1	1	4	4	4	4	4	4							
Sodium hypochloride	10	50	2		2	1			1	1	3	3	1	4	4	4	2	1					2		
Sodium peroxide			2	2	2	1		1	1		2	2	4	4		4	1	4		1					
Skydrol 500 (phosphate ester)		70	4	4	4	2		1	1	4	4	4			3	2	4	4	4	2	4	4			
Soap solution				1	1	1		1	1	1	1	1				1	1	4		1	1	1			
Sucrose solution		80	1	1	1	1		1		1	1	1			1										
Sulphur			4	4	4	1		1	1	4	1	1			4	1	1	4		4	3	3			
Styrene		TA	4	4	4	4		4		4	4	4			3	3	1	4							
Steam		TA	4	4	4	4	4	4	4	4	4	4	3	4	4	4	2	4	4	2	4	4	4		
Tannic acid			1	2	2	1		1	1	1	1	1				1	1	4							
Tartric acid	10	100	1	1	1	1		2		1	1	1				1	1				1				
Trichloroacetic acid		TA	3	2		2		2		4	4	4					3	4							
Thionyl chloride		TA	4	4	4	4		4	4		4	4					2								
Toluene diisocyanates		70	4	3	3	1		1	3		4	4	4	4	4	2	2	4							
Transformer oil			4	4	4	4	4	4	1	2	3	1				2	1	1		1			1		
Tributoxyethyl phosphate			3	3	3	2		2	2	4	4	4			1		1			2					
Tetraethyl lead		TA				4		4	4		2	4					1				2				
Terpineol		TA	4	4	4	3		3		1	4	4			1		1				1				
Tetrachlorethane		TA			4	4				4	4					4	3	1	4						
Tetrabromomethane			4	4	4	4		4	4	4							1			2					
Titanium tetrachloride			4	4	4	4		4	4	3	4	4				3				2					
Tetraline		TA	4	4	4	4		4	4	4	4	4	2	3	4	3	1	4		1	4	4	4		
Tetrahydrofuran		TA	4	4	4	4	4	4	4	4	4	4	3	4	4	4	4	4			4				
Tetrabutyl titanate		TA	2	2	2	2		1	1	1	1						1			1					
Triaryl phosphate			4	4	4	1		1	1	4	3	3	2	2	2	3	1	4		2					
Triacetine			2	3	3	1		1	1	2	2	2	4	4	2		4	4		4					
Tributylmercaptan			4	4	4	4		4	4	4	4	4					4								
Tributyl phosphate		100	3	3	3	3		1	1	4	4	4	4	4	1	3	4	4		4					
Tricresyl phosphate		TA	4	4	4	1		1	1	4	4	1					1			1					
Triethanolamine		70	3	3	3	1		1	1	4	4	4	2	3	2	1	1	4	4	1	4	4	4		
Triethylamine		TA	2	2	2	2		2	2	3	1	1	4	4	4	1	2	4	1	4					1
Triethylborane		TA	4	4	4	4	4	4	4	4	3	3	1	3	1	4	2	2							
Triocetyl phosphate			4	4	4	4		4	4	4	2	2			2	2	2			2					
Toluene			4	4	4	1		1	1	4	4	4	4		2	3	2	4		2					
Urea (solution)		3				1		3	3		3	1				1	1								
Urée (solution)	30	TA				1		1		1	1	1					1								
Xylene		sup 100	3	3	3	1		1	1	1	2	2	4	4	4	4	2	4		2					
Yperite		TA	4	4	4			4	4	4	4	4	3		1	4	2	4		2	3				

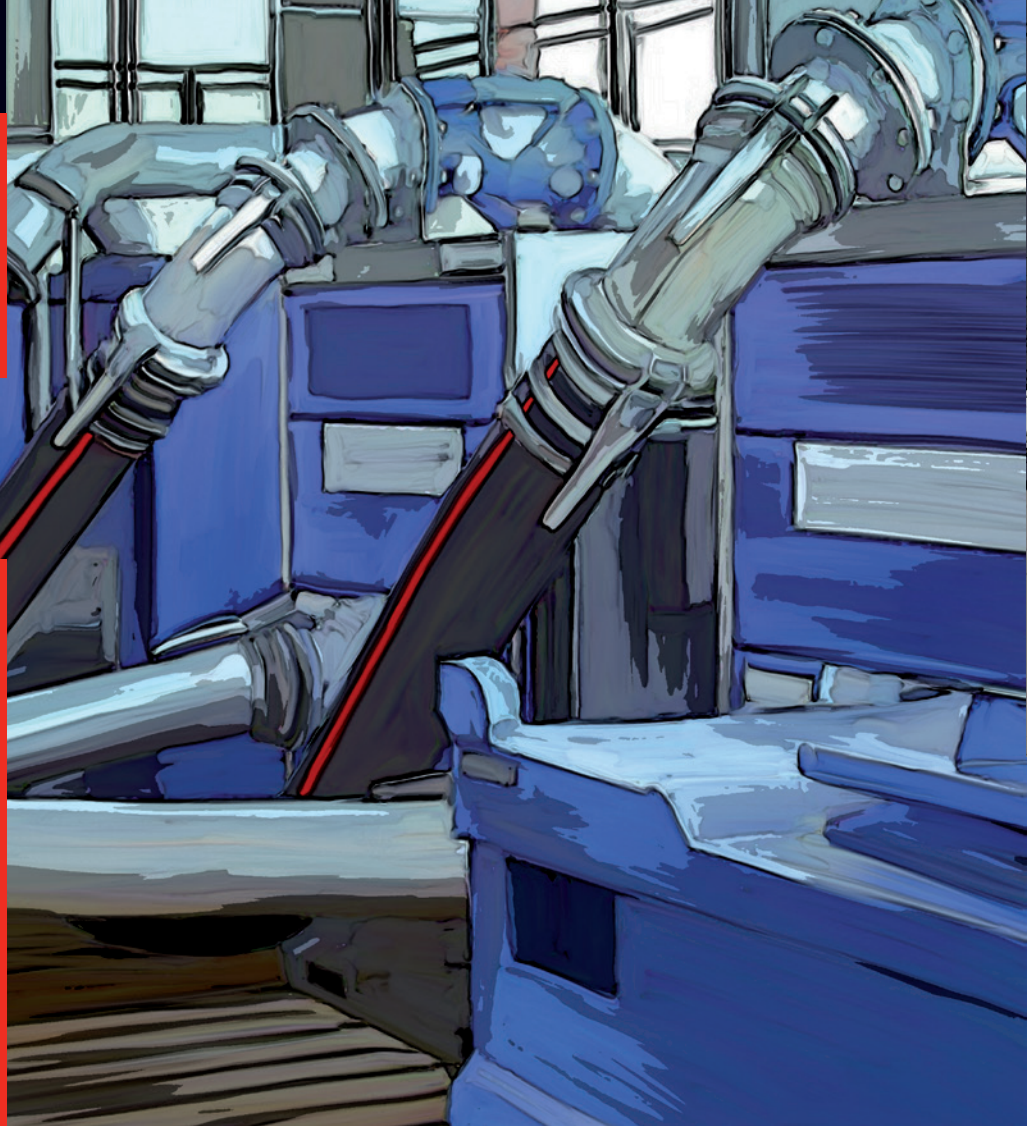


## WATER DELIVERY RUBBER HOSES



TECALEMIT FLEXIBLES® - Parc d'activités de Kermaria, 29120 Pont l'Abbé - France  
 Tel : (33) 02 98 66 05 05 - E-mail : info@tecalemit.com

"All the specifications are given as an indication , they may be updated in the interest of our customers"

**INDUSTRIAL WATER PRODUCT  
DELIVERY HOSE**
**10 BARS**


- Inner tube : SBR smooth rubber
- Reinforcement : 6 textile plies
- Outer cover : SBR / EPDM rubber
- Outer finish : wrapped
- Temperature : 90°C max
- Production length : 60 m up to diameter 150, 40 m above
- Colour : black

Robust and resistant to temperature, hose 111 is destined for delivery of industrial waters. Its outer cover is a mixture of SBR / EPDM rubbers resisting aging and ultra-violet effects as well as numerous detergents and diluted acids. His 6 textile plies gives it excellent resistance to round.



Part N°	Inner diameter		Outer diameter	Wall thickness	Working pressure	Burst pressure	Bend radius	Weight
	mm	Inch						
111 100	102	4"	120	9	10	30	900	4,3
111 127	127	5"	147	10	10	30	1100	5,4
111 150	152	6"	172	10	9,5	38	1350	6,3
111 200	203	8"	225	11	10	30	1800	8,11

Possible end-fittings : Guillemin, flange, camlock, storz  
See also 111, 131, 119

INDUSTRIAL WATER PRODUCT  
DELIVERY HOSE

10 BARS



- Inner tube : SBR smooth rubber
- Reinforcement : textile plies
- Outer cover : SBR / EPDM rubber
- Outer finish : wrapped
- Temperature : 90°C
- Production length : 20 metres, possibility of 60 metres on request
- Colour : red

Robust and resistant to temperature, hose 113 is destined for delivery of industrial waters.

Its outer cover is a mixture of SBR / EPDM rubbers resisting aging and ultra-violet effects as well as numerous detergents and diluted acids.



Part N°	Inner diameter		Outer diameter	Wall thickness	Working pressure	Burst pressure	Bend radius	Weight
	mm	Inch						
113 13	13	1/2"	21	4	10	30	120	0,25
113 16	16	5/8"	24	4	10	30	160	0,35
113 19	19	3/4"	27	4	10	30	190	0,4
113 22	22	7/8"	30	4	10	30	220	0,45
113 25	25,4	1"	33	4	10	30	254	0,5
113 30	30	1" 3/16	39	4,5	10	30	300	0,67
113,32	32	1" 1/4	40	4	10	30	320	0,75
113 35	35	1" 3/8	45	5	10	30	350	0,8
113 40	40	1" 9/16	50	5	10	30	400	0,9
113 45	45	1" 3/4	55	5	10	30	450	1
113 50	50,8	2"	61	5,1	10	30	508	1,1
113 55	55	2 3/16	67	5	10	30	560	1,3
113 60	60	2" 3/8	71	5,5	10	30	600	1,5
113 70	70	2" 3/4	81	5,5	10	30	700	1,7
113 75	75	3"	89	7	10	30	750	2,2
113 80	80	3" 5/32	92	6	10	30	800	2,2
113 90	90	3" 1/2	104	7	10	30	900	3
113 100	101,6	4"	115	6,7	10	30	101	3,1
113 110	110	4" 11/32	122	6	10	30	1100	2,91
113 120	120	4" 23/32	134	7	10	30	1200	3,5
113 127	127	5"	141	7	10	30	1270	4,2
113 150	152,4	6"	165	6,3	10	30	1254	4,18
113 168	168	6" 5/8	184	8	10	30	1400	6,5
113 200	203,2	8"	218	7,4	10	30	2032	6,75
113 219	219	8" 3/4	235	8	10	30	2200	8,2
113 250	254	10"	272	9	10	30	2504	10,22

Possible end-fittings : Guillemin, flange, camlock, storz  
See also 111, 131

**INDUSTRIAL WATER PRODUCT  
DELIVERY HOSE**
**7 BARS**


- Inner tube : white EPDM rubber
- Reinforcement : 2 textile plies
- Outer cover : EPDM rubber
- Outer finish : wrapped
- Temperature : 95°C maximum
- Production lengths : 20 meters
- Colour : red

The water delivery hose 117 is used on fishing vessel decks.  
Its EPDM rubber cover ensures long life and flexibility in cold temperatures.  
Its thickness gives excellent dimensional stability.  
A high quality water delivery hose, it is used for many chemical products.



Part N°	Inner diameter		Outer diameter	Wall thickness	Working pressure	Burst pressure	Bend radius	Weight
	mm	Inch						
117 30	30	1" 3/16	42	6	7	31	240	1
117 35	35	1" 3/8	47	6	7	31	280	1,1
117 40	40	1" 9/16	52	6	7	31	320	1,25
117 50	50,8	2"	62	6	7	31	406	1,42
117 60	60	2" 3/8	72	6	7	31	540	1,7

Possible end-fittings : Guillemin  
See also 113, 119



**PARA-BLOND WATER  
DELIVERY HOSE**
**5 BARS**


- Inner tube : parablond rubber
- Reinforcement : 2 textile plies
- Outer cover : parablond rubber
- Admissible negative pressure : 0.9 bar
- Outer finish : wrapped
- Temperature : 60°C maximum
- Production lengths : 20 meters
- Particularity : very flexible
- Colour : light beige

The water delivery hose 119 has excellent flexibility even during very low colds. Its dimensional stability is ideal also. A high quality water delivery hose, it is appreciated in the shipping industry, in mussel farming (its resistance to abrasion is excellent) and in fishing. It is also used for many diluted acids.



Part N°	Inner diameter		Outer diameter	Wall thickness	Working pressure	Burst pressure	Bend radius	Weight
	mm	Inch						
119 19	19	3/4"	28	4.5	5	15	152	0,36
119 25	25,4	1"	34	4.5	5	15	203	0,5
119 30	30	1"3/16	41	5	5	15	240	0,65
119 32	32	1" 1/4	42	5	5	15	260	0,7
119 35	35	1"3/8	46	5	5	15	280	0,75
119 40	40	1"9/16	52	6	5	15	320	0,95
119 45	45	2"3/4	57	6	5	15	360	1
119 50	50,8	2"	62	6	5	15	406	1,1
119 57	57	2"1/4	69	6	5	15	456	1,2
119 60	60	2"3/8	72	6	5	15	480	1,3
119 80	80	3"5/32	92	6	5	15	640	2,2
119 100	101,6	4"	114	6.5	5	15	813	2,8

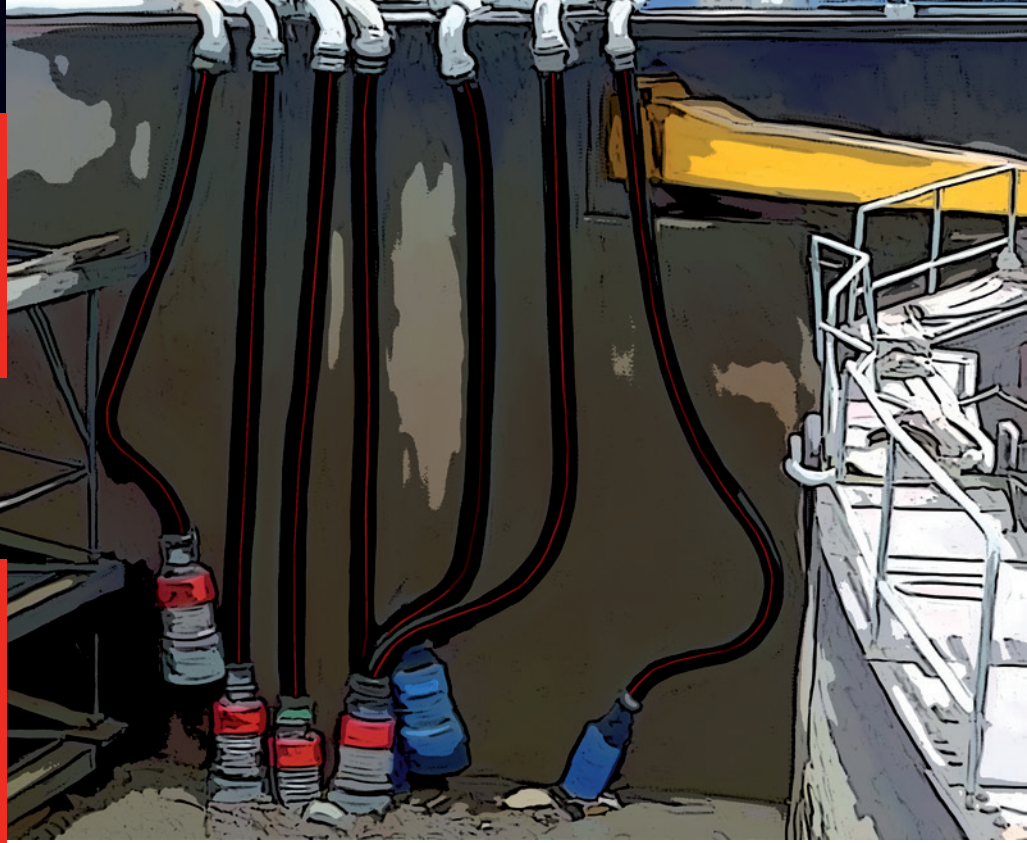
Possible end-fittings : Threaded, guillemin  
See also part 113, 117

LAY-FLAT WATER DELIVERY HOSE  
FOR SUBMERSIBLE PUMPS IN  
INDUSTRY AND PUBLIC WORKS

5 BARS



- Inner tube : black SBR rubber
- Reinforcement : 2 or 4 textile plies according to diameter
- Outer cover : abrasion and weather resistant SBR rubber
- Outer finish : wrapped
- Temperature : 90°C max
- Production lengths :  
Ø 200 : 45 m, Ø 250 & 300 : 25 m  
Ø 400 : 12 m, au dessus : 6 m
- Colour : black
- Particularity : can be rolled flat



This lay-flat hose 131 intended for water delivery is mainly used for submersible pumps in industry and public works. Its light weight and sturdiness are its main qualities, along with its temperature resistance allowing use in hot regions during summer.



Part N°	Inner diameter		Outer diameter	Wall thickness	Working pressure	Burst pressure	Bend radius	Weight
	mm	Inch						
131 45	45	1" 3/4	51	3	5	15	-	0,5
131 50	50	2"	58	3	5	15	-	0,96
131 60	60	2" 3/8	67	3,5	5	15	-	1
131 65	63,5	2" 1/2	70	3,5	5	15	-	1,05
131 70	70	2" 3/4	77	3,5	5	15	-	1,15
131 75	76,2	3"	83	3,5	5	15	-	1,27
131 80	80	3" 5/32	88	10,0	5	15	-	1,5
131 90	90	3" 9/16	98	3,5	5	15	-	1,62
131 100	101,6	4"	108	4	5	15	-	1,34
131 110	110	4" 11/32	118	4	5	15	-	1,5
131 114	114,3	4" 1/2	122	4	5	15	-	1,7
131 120	120	4" 23/32	128	4	5	15	-	2
131 140	140	5" 1/2	150	5	5	15	-	2,3
131 150	152,4	6"	162	4	5	15	-	3,18
131 168	168	6" 5/8	177	4,5	5	15	-	3,5
131 200	203,2	8"	212	5	5	15	-	3,81
131 219	219	8" 5/8	229	5	5	15	-	5
131 250	254	10"	265	5,5	5	15	-	6,28
131 273	273	10" 3/4	283	5	5	15	-	6,1
131 300	304,8	12"	316	5,5	5	15	-	7,1
131 323	323	12" 3/4	335	6	5	15	-	8
131 386	386	15" 3/4	402	8	5	15	-	9

Possible end-fittings : globe-type, flange  
See also 132, 277

**CUT-OFF TYPE WATER  
SUCTION/DELIVERY HOSE**
**10 BARS**


DIN 13411



- Inner tube : smooth SBR rubber
- Reinforcement : 4 textile plies and metal spiral
- Outer cover : abrasion and weather resistant SBR rubber
- Admissible negative pressure : 0.9 bar
- Outer finish : wrapped
- Temperature : 90°C maximum
- Particularity : cuff-ends possible
- Production lengths : 20 or 40 meters
- Colour : black

Extremely robust, hose 141 is intended for industrial water suction. With 4 textile layers, it accepts high peak pressures and can be used for delivery where a low bend radius is required. It can accept negative pressure over 0.9 bar. Its resistance to abrasion and aging in water are excellent. In diameter 45, 70 and 110, it allows the production of suction lengths NF EN ISO 14557 (formerly NF S 61 113) for civil protection equipment.

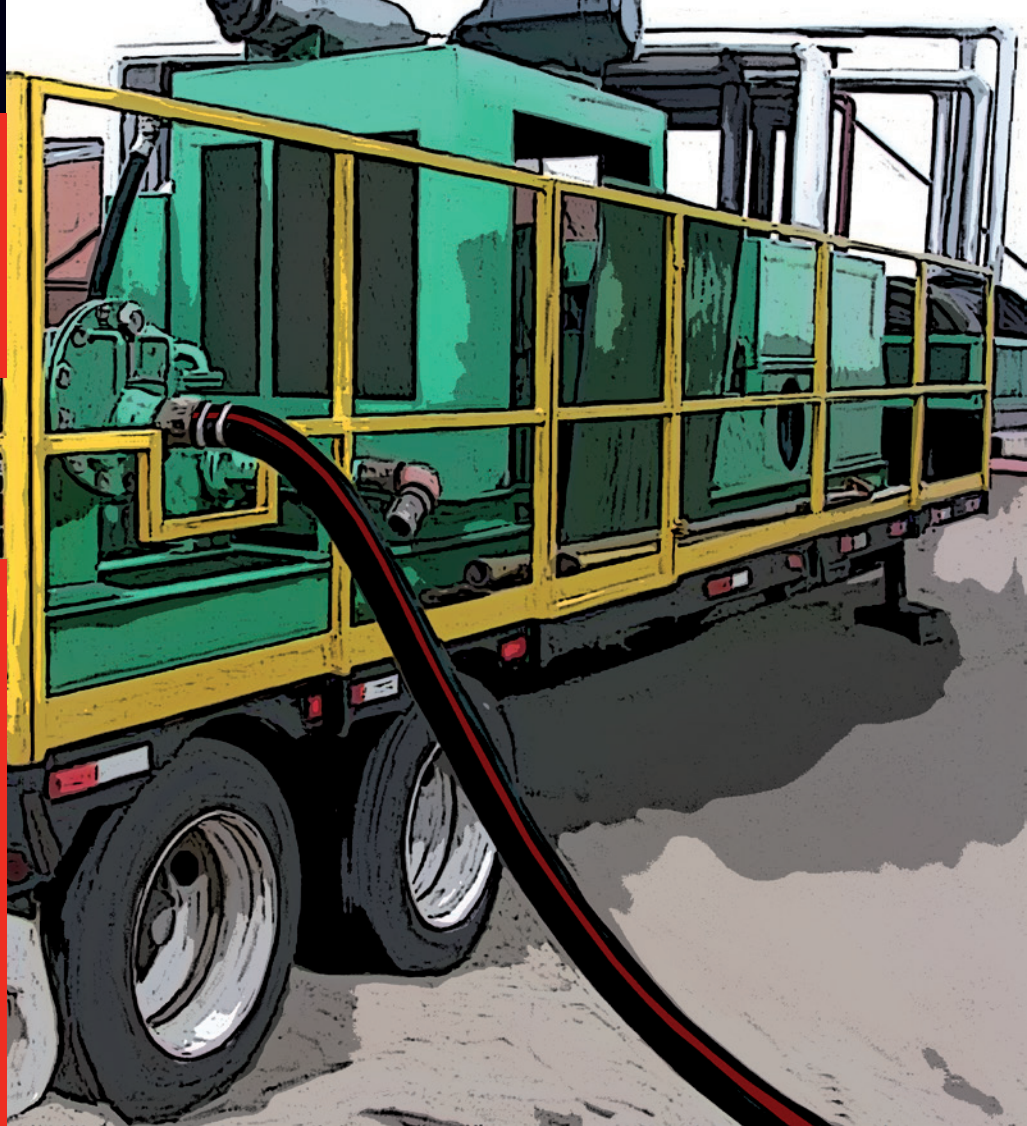


Part N°	Inner diameter		Outer diameter	Wall thickness	Working pressure	Burst pressure	Bend radius	Weight
	mm	Inch						
141 19	19	3/4"	30	5,5	10	30	76	0,64
141 25	25,4	1"	37	5,5	10	30	102	0,86
141 30	30	1" 3/16	41	5,5	10	30	120	0,9
141 35	35	1" 3/8	47	6	10	30	140	1,2
141 40	40	1" 9/16	53	6,5	10	30	160	1,5
141 42	42	1" 21/32	55	6,5	10	30	168	1,4
141 45	45	1" 3/4	57	6	10	30	180	1,5
141 50	50,8	2"	63	6,5	10	30	203	1,8
141 55	55	4" 11/32	70	6,5	10	30	220	2,3
141 60	60	2" 3/8	74	7	10	30	240	2,4
141 65	63,5	2" 1/2	77	7	10	30	254	2,4
141 70	70	2" 3/4	84	7	10	30	315	2,7
141 75	76,2	3"	91	7,5	10	30	343	3,2
141 80	80	3" 5/32	96	8	10	30	360	3,5
141 90	90	3" 1/2	106	8	10	30	405	3,9
141 100	101,6	4"	118	8	10	30	508	4,5
141 110	110	4" 11/32	128	9	10	30	550	5,4
141 120	120	4" 23/32	138	9	10	30	600	6
141 125	127	5"	145	9	10	30	635	6,4
141 140	140	5" 1/2	160	10	10	30	700	8,2
141 150	152,4	6"	172	10	10	30	762	8,7
141 168	168	6" 5/8	190	11	10	30	924	10,5
141 200	203,2	8"	229	13	10	30	1118	15,2
141 250	254	10"	280	13	10	30	1524	18,3
141 300	304	12"	329	12,5	10	30	1900	20,5

Possible end-fittings : Guillemin, flange, cam-lock, storz  
See also 142

## CUT-OFF TYPE WATER SUCTION/DELIVERY HOSE

5 BARS



- Inner tube : smooth SBR rubber
- Reinforcement : 4 textile plies and metal spiral
- Outer cover : abrasion and weather resistant SBR rubber
- Admissible negative pressure : 0.9 bar
- Outer finish : wrapped
- Temperature : 90°C maximum
- Particularity : cuff-ends possible
- Production lengths : 20 or 40 meters
- Colour : black

Extremely robust, hose 142 is intended for industrial water suction.

With its 4 textile layers, it can accept high pressure peaks and is used in delivery where a low bend radius is required.

It can accept negative pressures above 0.9 bar.

Its resistance to abrasion and aging in water are excellent.



Part N°	Inner diameter		Outer diameter	Wall thickness	Working pressure	Burst pressure	Bend radius	Weight
	mm	Inch						
142 19	19	3/4	30	5,5	5	15	76	0,7
142 25	25	1	37	6	5	15	102	0,8
142 40	40	1 9/16	50	5	5	15	160	1,2
142 45	45	1 3/4	55	5	5	15	180	1,4
142 50	50,8	2"	62	6	5	15	210	1,67
142 55	55	2" 11/32	69	6	5	15	220	1,62
142 60	60	2" 3/8	71	5,5	5	15	240	1,90
142 70	70	2 3/4	82	6	5	15	315	2,2
142 75	76,2	3"	87	6	5	15	342	2,40
142 80	80	3" 5/32	92	6	5	15	360	2,76
142 100	101,6	4"	116	7	5	15	457	4,11
142 105	105	4 1/8	120	7,5	5	15	460	4,5
142 110	110	4" 11/32	125	7,5	5	15	495	5

Possible end-fittings : Guillemín, flange, cam-lock, storz

See also 141

**HOT WATER DISCHARGE HOSE  
DIN 73411**
**10 BARS**


DIN 73411



- Inner tube : smooth EPDM rubber
- Reinforcement : 1 textile braid
- Outer cover : EPDM rubber
- Outer finish : smooth
- Temperature : - 40°C to 125°C
- Production lengths : 50 meters and variable
- Colour : black

The hose 163 is intended for hot water connections for thermal engine cooling systems. Its inner tube is resistant to glycol and glycol solutions. This hose is manufactured continuously, its outer-cover is smooth and are marked by white ink projection. Compliant with DIN 73411, the hose can be produced according to SAE J20 R3.

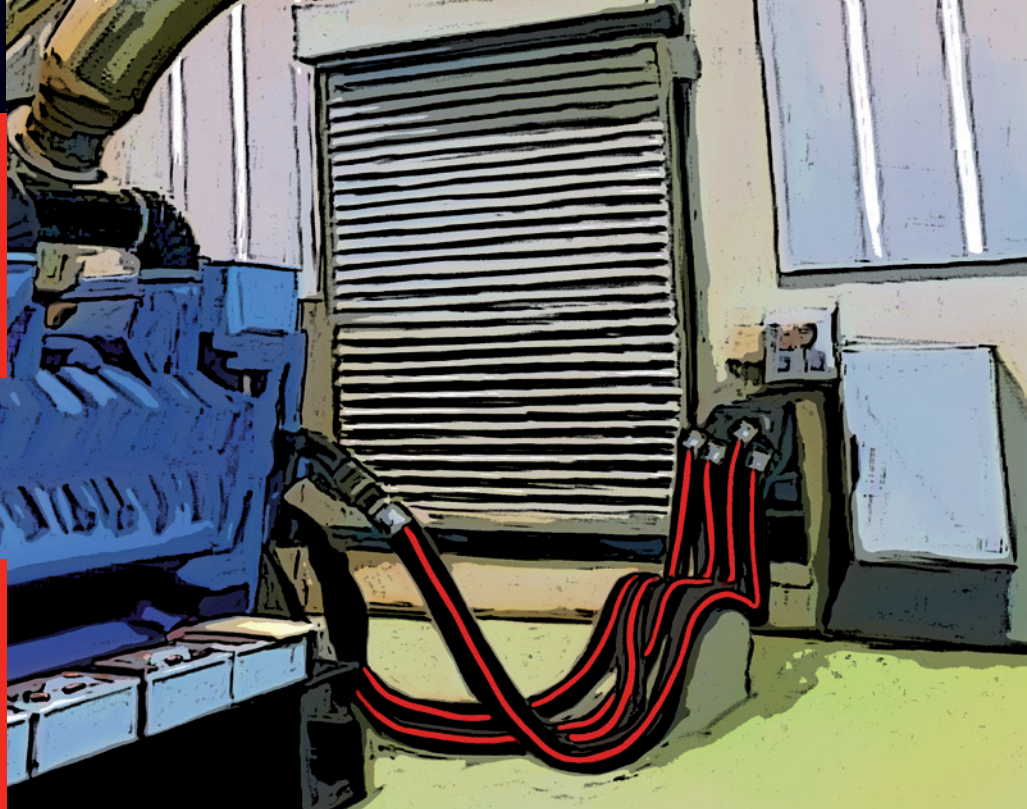


Part N°	Inner diameter		Outer diameter	Wall thickness	Working pressure	Burst pressure	Bend radius	Weight
	mm	Inch						
163 6x12	6	1/4"	12.0	3.0	10	30	60	0,12
163 7x13	7		13.0	3	10	30	60	0,13
163 8x14	8	5/16"	14.0	3.0	10	30	80	0,15
163 10x16	10	3/8"	16.0	3.0	10	30	100	0,18
163 12x19	12	1/2"	19.0	3.5	10	30	120	0,2
163 14x21	14		21.0	3.5	10	30	140	0,22
163 15x23	15		23.0	4	10	30	150	0,28
163 16x23	16	5/8"	23.0	3.5	10	30	160	0,25
163 19x26	19	3/4 "	26.0	3.5	10	30	190	0,29
163 22x29	22	7/8"	29	3.5	10	30	200	0,31
163 25x33	25	1"	33.0	4	10	30	250	0,43

Possible end-fittings : Threaded  
See also 162, 164

## HOT WATER HOSE WITH METAL SPIRAL

10 BARS



- Inner tube : smooth EPDM rubber
- Reinforcement : 4 textile plies, 2 metal spiral
- Outer cover : Flat corrugated EPDM rubber
- Outer finish : wrapped
- Temperature : - 40°C to 125° C
- Production lengths : 40 or 60 meters
- Colour : black

The hose 164 is intended for hot water connections for thermal engine cooling systems.

Its double metal spiral gives it a small bend radius.

Its external appearance is described by the term 'flat corrugated'.

Its inner tube is resistant to glycol and glycol solutions.

Since it is made entirely of EPDM, it can be used for many suction and discharge applications for a wide variety of fluids, such as seawater or acid solutions.

It is available on stock in many diameters.



Part N°	Inner diameter		Outer diameter	Working pressure	Burst pressure	Bend radius	Weight
	mm	Inch					
164 19	19	3/4"	27	10	30	50	0,45
164 25	25,4	1"	34	10	30	65	0,60
164 40	40		50	10	30	90	0,90
164 50	50	2"	62	10	30	120	1,50
164 60	60		70	10	30	150	1,70
164 63	63	2" 1/2	74	10	30	160	1,75
164 76	76	3"	88	10	30	200	2,30
164 80	80		93	10	30	220	2,70
164 85	85		99	10	30	230	2,85
164 90	90		105	10	30	250	3,20
164 102	102	4"	117	10	30	280	3,70
164 114	114		129	10	30	310	4,20
164 120	120		136	10	30	340	5,10
164 127	127	5"	143	10	30	350	5,70
164 139	139		157	10	30	460	6,40
164 150	152,4	6"	169	10	30	580	7,30
164 168	168		188	10	30	700	10,00
164 200	203		225	10	30	900	14,50

Possible end-fittings : Threaded, Flanges, Victaulic, specials

**HOT WATER HOSE WITH METAL SPIRAL  
1 METRE LENGTH**
**4 BARS**


- Inner tube : smooth EPDM rubber
- Reinforcement : textile plies, metal spiral
- Outer cover : EPDM rubber
- Outer finish : wrapped and corrugated
- Temperature : - 30°C to 120°C
- Production lengths : 1 meter
- Colour : black

The hose 167 is intended for cooling water circuits on thermal engines. Its inner tube is resistant to glycolated water and diluted acids. Cut in lengths of 1 meter to manufacture. It is extremely flexible and light, its outer cover is corrugated.



Part N°	Inner diameter		Outer diameter	Wall thickness	Working pressure	Burst pressure	Bend radius	Weight
	mm	Inch						
167 22x30	22	7/8"	30	4,0	4	12	50	0,40
167 25x34	25,4	1"	34	4,5	4	12	60	0,45
167 28x36	28,5	1" 1/8	36	4,0	4	12	65	0,50
167 30x38	30	1" 3/16	38	4,0	4	12	70	0,55
167 32x41	31,8	1" 1/4	41	4,5	4	12	70	0,60
167 35x45	35	1" 3/8	45	5,0	4	12	75	0,65
167 38x47	38,1	1" 1/2	47	4,5	4	12	80	0,70
167 40x49	40	1" 9/16	49	4,5	4	12	80	0,75
167 42x52	42	1" 21/32	52	5,0	4	12	85	0,80
167 45x55	45	1" 3/4	55	5,0	4	12	90	0,90
167 48x58	48	1" 7/8	58	5,0	4	12	100	0,95
167 51x61	50,8	2"	61	5,0	4	12	110	1,0
167 57x67	57,1	2" 1/4	67	5,0	4	12	120	1,2
167 60x70	60	2" 3/8	70	5,0	4	12	130	1,3
167 63x73	63,5	2" 1/2	73	5,0	4	12	140	1,4
167 70x80	70	2" 3/4	80	5,0	4	12	150	1,6
167 76x86	76,2	3"	86	5,0	4	12	150	1,8
167 102x112	101,6	4"	112	5,0	4	12	200	2,1

Possible end-fittings : Threaded

**HOSES IN LARGE LENGTHS FOR SEWER CLEANING**



**Inner tube : black SBR rubber**  
**Reinforcement : 2 textile braids**  
**Outer cover : abrasion resistant SBR / NR rubber**  
**Outer finish : smooth**  
**Temperature : - 40°C to +90° C**  
**Production lengths : 240 meters max**  
**Colour : black**

On this sheet we present 2 hydrodynamic cleaning hoses for sewers or very different industrial construction establishments:

- The hose of Part N° 191 has an aramid reinforcement and that of Part N° 321B a reinforcement composed of 2 braids of steel wires brassy. This hose is specially designed for this application.

The smooth coating of hose 191 consists of an extremely anti-abrasive rubber (also used for sandblasting hoses) which greatly increases the life of the hoses.

In addition, it is lighter and does not present a danger of injury to operators.

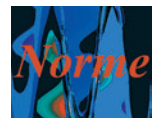
- Part N° 321B is an hose from the oleo-hydraulic power transmission market which is satisfactory in many countries for this hydrocuring application.



Part N°	Inner diameter		Outer diameter	Wall thickness	Working pressure	Burst pressure	Bend radius	Weight
	mm	Inch						
191 19	19	3/4"	31,6	6,5	250	625	90	0,55
191 25	25	1"	39,3	7	250	625	105	0,78

**321B - Reinforcing steel hose EN 853 in great lengths :**

- Inner tube : black nitrile rubber
- Reinforcement : 1 or 2 metal braids
- Outer cover : abrasion and weather resistant neoprene rubber
- Outer finish : wrapped
- Temperature : - 40°C to +90°C
- Production lengths : 240 meters max.



NF EN 853

Part N°	Inner diameter		Outer diameter	Wall thickness	Working pressure	Burst pressure	Bend radius	Weight
	mm	Inch						
93 45 03	13	1/2"	21,4	4,5	203	640	178	0,34
93 95 09	13	1/2"	23	5,1	349	1100	178	0,62
93 36 02	19	3/4"	28,5	4,8	133	420	240	0,64
93 77 09	19	3/4"	30,1	5,6	269	850	240	0,98
93 68 09	25	1"	38,9	6,8	206	650	300	1,38
93 68 40	25	1"	36	5,3	209	650	250	1,22

Possible end-fittings : Threaded



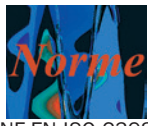


## AIR & GAS DELIVERY RUBBER HOSES

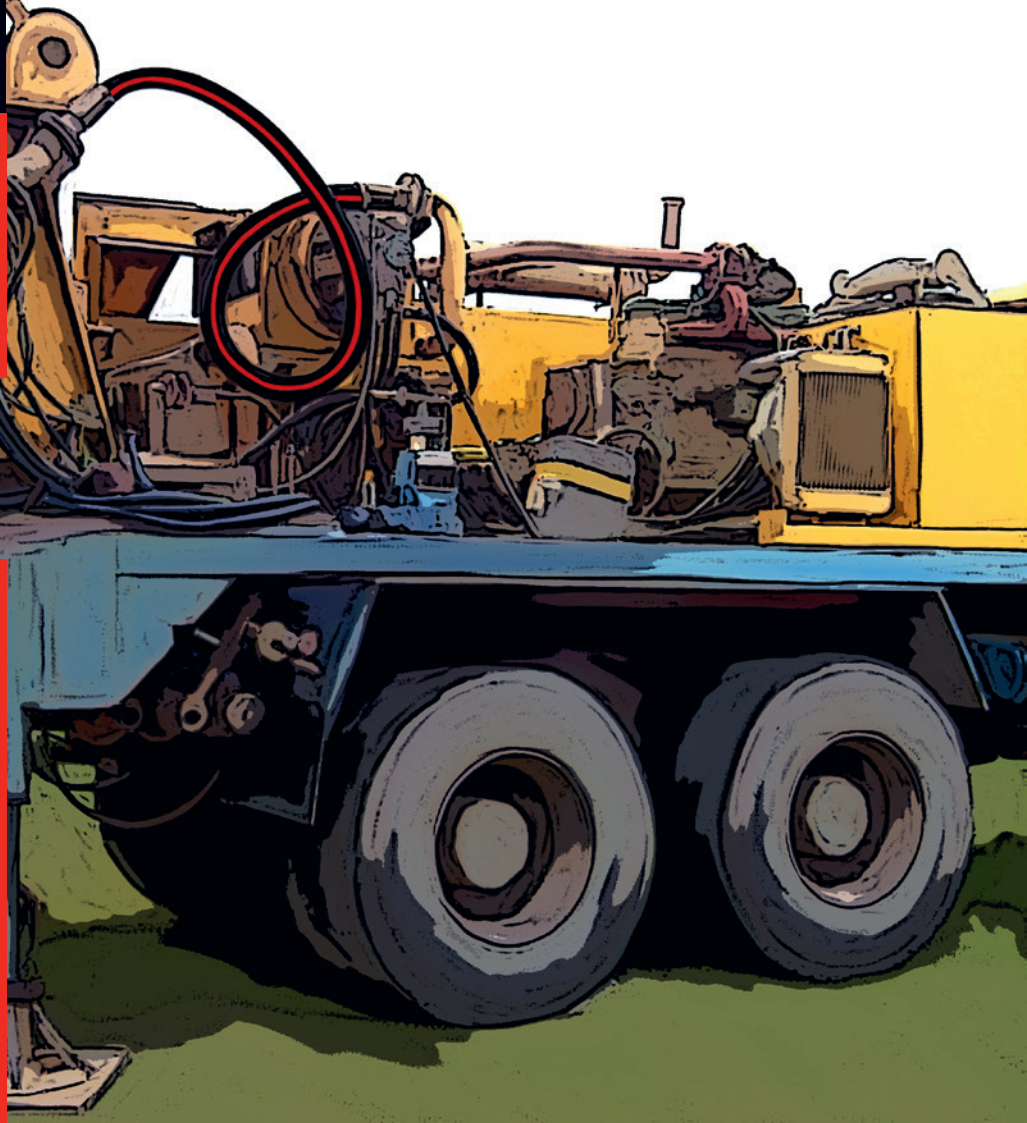


## METAL SPIRAL COMPRESSED AIR HOSE

40 BARS

NF EN ISO 2398  
3/C/NT

- Inner tube : smooth oil resistant NBR rubber
- Reinforcement : 2 or 4 metal spirals
- Outer cover : abrasion and weather resistant neoprene rubber
- Outer finish : fine tape wrapped
- Temperature - 40°C to + 70° C
- Production lengths : 60 meters
- Colour : black



The hose 201 is used for compressed air at high pressures.

It has characteristics superior to the international standard ISO 2398 type 3 (high pressure), class C (resistant to oil), NT (normal temperature).

Its nitrile inner tube is resistant to compressor oil. its outer cover is resistant to abrasion.

Its metal wire spirals give good flexibility.

It can be found in mining and public works.

It can be equipped with swaged fittings and also anti-whip cables or safety stockings.



Part N°	Inner diameter		Outer diameter	Wall thickness	Working pressure	Burst pressure	Bend radius	Weight
	mm	Inch						
201 13	12,7	1/2"	23	5	40	160	180	0,6
201 16	15,9	5/8"	27	5,5	40	160	200	0,8
201 19	19	3/4"	31	6	40	160	220	0,9
201 25	25,4	1"	39	7	40	160	250	1,1
201 32	31,8	1"1/4	46	7	40	160	300	1,6
201 38	38,1	1"1/2	53	7,5	40	160	350	1,9
201 50	50,8	2"	68	9	40	160	450	2,8
201 60	60	2" 3/8	77	8,5	40	160	300	3,2
201 75	76,2	3"	95	9	40	160	650	4,3
201 100	101,6	4"	120	9	40	160	900	5,9

Possible end-fittings : Male threaded, female BSP, robur, weco, flangee

See also 223, 224

## ANTI-STATIC COMPRESSED AIR HOSE

16 BARS

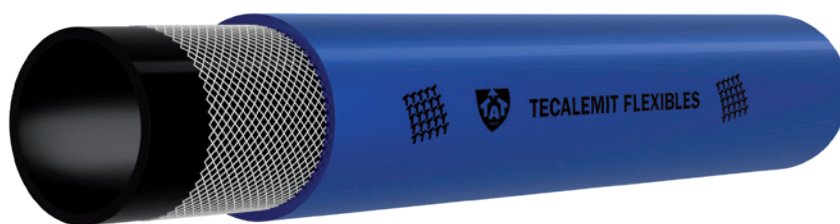


ISO 2398 2-A-LT



- Inner tube : electrically conductive EPDM
- Reinforcement : textile braid
- Outer cover : EPDM
- Outer finish : smooth
- Temperature : -40° C to 70°C maximum
- Production lengths : 20 and 40 meters
- Colour : blue

As flexible in winter as in summer, compressed air hose 203 is used in workshops and particularly in garages. Its electrically-conductive inner tube eliminates static electricity. It can be produced in all diameters up to ID 19mm. It conforms with ISO 2398 2-A-LT : medium pressure, non-oil resistant and low temperature.



Part N°	Inner diameter		Outer diameter	Wall thickness	Working pressure	Burst pressure	Bend radius	Weight
	mm	Inch						
203 6x12	6	1/4"	12	3	16	64	30	0,13
203 8x15	8	5/16"	15	3,5	16	64	35	0,16
203 10x17	10	3/8"	17	3,5	16	64	50	0,23

Possible end-fittings : Express, coupling  
See also 222, 234

MARKING : TECALEMIT - PART N° - TUYAU AIR CONDUCTEUR/AIR CONDUCTIVE HOSE  
NF ISO 2398 - 2A - Ø - PS/WP 2 MPA/16 BAR/300PSI - DATE - BATCH N°

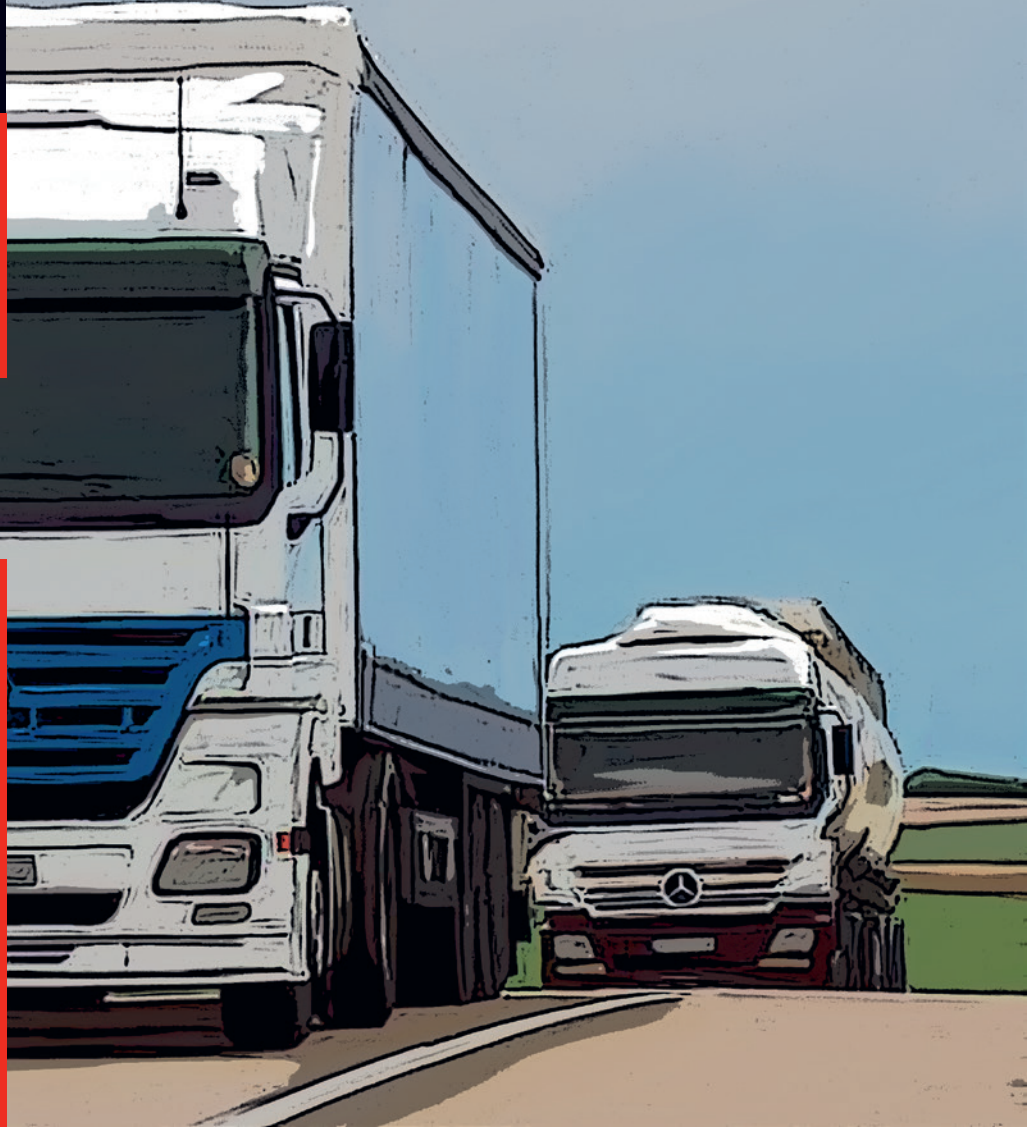
**HOSE FOR AIR-BRAKES  
ACCORDING TO UTAC ST 954-02**

**10 BARS**



UTAC ST 954-02

- Inner tube : SBR/NR
- Reinforcement : textile braids
- Outer cover : SBR EPDM rubber
- Outer finish : smooth
- Temperature : - 30°C to +70°C
- Production lengths : variable
- Colour : black



This hose is used in replacement of polyamide 12 brake tubes according to DIN 74324 for repairs of road trailers. It gives increased safety to braking systems.



Part N°	Inner diameter	Outer diameter	Wall thickness	Working pressure	Pression L,N,E	Bend radius	Weight
	mm	mm	mm	bar	bar	mm	kg/m
207 8	8	18	5	10	65	70	0,30
207 10	10	18	4	10	65	80	0,24
207 13	13	22	4,5	10	65	120	0,34

Possible end-fittings : Threaded  
See also : Tube PA12 DIN 74324

WELDING HOSES  
EN ISO 3821

20 BARS

EN ISO 3821  
EN 559

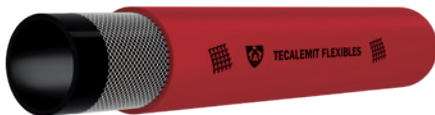
- Inner tube : NBR/SR
- Reinforcement : synthetic yarns
- Outer cover : abrasion and weather resistant synthetic rubber
- Outer finish : smooth
- Temperature : - 30°C to +80°C
- Production lengths : 40 meters

These hoses comply with the international standards EN 559 and ISO 3821 in single duct version or in twin version.

They are light and manageable.

their safety coefficients are very high and their resistance to hot spots and to the flame are excellent.

212R - Acetylene



212B - Oxygene

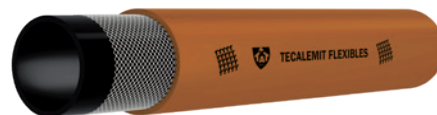


212J - Twinned



Part N°			Inner diameter		Outer diameter	Wall thickness	Working pressure	Burst pressure	Bend radius	Weight
Acetylene	Oxygene	Twinned	mm	Inch	mm	mm	bar	bar	mm	kg/m
212 R 5	212 B 5	212 J 5	5	3/16"	12	3,5	20	60	45	0,13
212 R 6	212 B 6	212 J 6	6,3	1/4"	13	3,8	20	60	60	0,14
212 R 8	212 B 8	212 J 8	8	5/16"	15	3,5	20	60	75	0,17
212 R 10	212 B 10	212 J 10	10	3/8"	17	3,5	20	60	90	0,21
212 R 12	212 B 12	212 J 12	12	1/2"	22	4,7	20	60	110	0,34

213 - Propane



Part N°	Inner diameter		Outer diameter	Wall thickness	Working pressure	Burst pressure	Bend radius	Weight
	mm	Inch						
213 6	6,3	1/4"	13	3,8	20	60	60	0,14
213 8	8	5/16"	15	3,5	20	60	75	0,17
213 10	10	3/8"	17	3,5	20	60	90	0,21

Possible end-fittings : Threaded, coupling

**SMOOTH BRAIDED  
COMPRESSED AIR HOSE  
ISO 2398 TYPE 1 B**

**15 BARS**



ISO 2398 TYPE 1 B

- Inner tube : smooth SBR / NBR rubber
- Reinforcement : textile braid
- Outer cover : SBR rubber
- Outer finish : smooth
- Temperature : - 30°C to +70°C maximum
- Production lengths : 40 meters, possibility of 100 meters
- Colour : black or other



Compressed air hose 222 is used in workshops.

Hose 222 has characteristics above 2398 Type 1 (operating pressure 10 bar), Class B (resistant to compressor oils), and category NT (for normal temperature).

It is also chosen for air supply of jackhammers on worksites for its competitiveness.

It can be produced in any inner diameter up to 25mm.



Part N°	Inner diameter		Outer diameter	Wall thickness	Working pressure	Burst pressure	Bend radius	Weight
	mm	Inch						
222 5x11	5	-	11	2,8	15	45	25	0,11
222 6x12	6	-	12	3,0	15	45	30	0,13
222 7x13	7	-	13	3,0	15	45	32	0,14
222 8x15	8	-	15	3,5	15	45	35	0,16
222 9x16	9	-	16	3,5	15	45	40	0,22
222 10x17	10	-	17	3,5	15	45	50	0,23
222 13x19	13	-	19	3,5	15	45	65	0,35
222 16x23	16	-	23	5,0	15	45	65	0,35
222 16x26	16	-	26	5,0	15	45	80	0,51
222 19x29	19	-	29	5,0	15	45	100	0,60
222 25x32	25	-	36	5,5	15	45	150	0,80

Possible end-fittings : Express, coupling  
See also 221, 234

## COMPRESSED AIR HOSE WRAPPED

15 BARS



ISO 2398 TYPE 2B

- Inner tube : SBR / NBR rubber
- Reinforcement : textile plies
- Outer cover : abrasion and weather resistant SBR rubber
- Outer finish : fine tape wrapped
- Temperature : - 30°C to +70°C
- Production lengths : 40, 60 meters
- Colour : black

Hose 223 has characteristics above Standard 2398 Type 1 (operating pressure 10 bar), Class B (resistant to compressor oils), and Category NT (for normal temperature)

Its inner tube is resistant to compressor oil.

its outer cover is abrasion resistant.

Its life span and inter-layer are excellent.

Produced from diameter 30mm upwards, it can be found on high rate air compressors

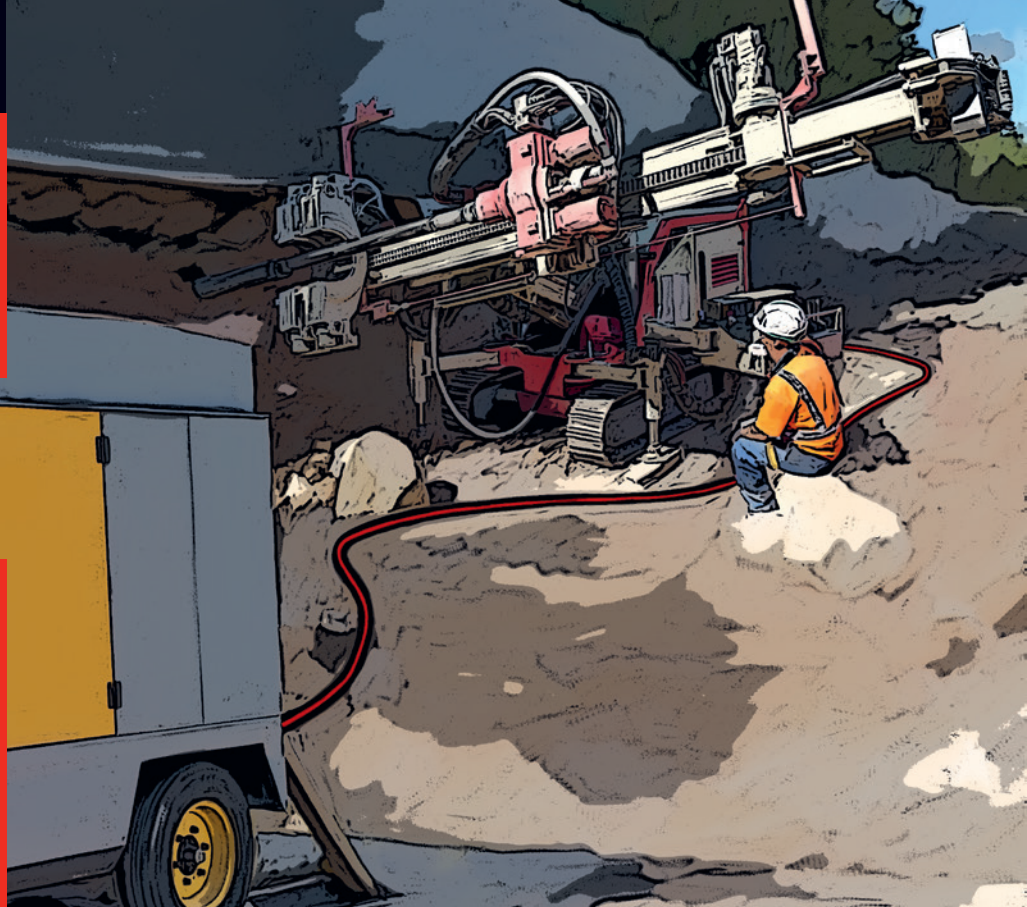


Part N°	Inner diameter		Outer diameter	Wall thickness	Working pressure	Burst pressure	Bend radius	Weight
	mm	Inch						
223 30x42	30	1" 3/16	42	6,0	15	50	210	0,8
223 35x46	35	1" 3/8	47	6,0	15	50	250	0,9
223 40x53	40	1" 9/16	53	6,0	15	50	300	1,5
223 40x58	40	1" 9/16	58	9,0	15	50	300	1,5
223 45x57	45	1" 3/4	57	6,0	15	50	350	1,6
223 50x65	50,8	2"	65	7,0	15	50	400	1,72
223 60x76	60	2" 3/8	76	8,0	15	50	500	2,4
223 63x79	63,5	2" 1/2	78	7,5	15	50	530	2,1
223 70x85	70	2" 3/4	85	7,5	15	50	580	2,54
223 76x90	76,2	3"	90	7,0	15	50	620	3,2
223 80x95	80	3" 5/32	95	8,0	15	50	660	3,4
223 90x104	90	3" 1/2	104	8,0	15	50	750	3,8
223 102x118	101,6	4"	118	8,0	15	50	1000	3,77
223 110x126	110	4" 11/32	126	8,0	15	50	1080	4,5
223 152x173	152,4	6" 3/16	173	9,0	15	45	1520	7,48

Possible end-fittings : male BSP taper, robur, cam-lock, weco  
See also 224

**COMPRESSED AIR HOSE WRAPPED  
ISO 2398 TYPE 2B**

**20 BARS**



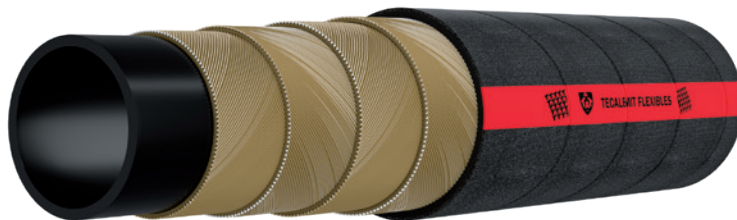
ISO 2398 TYPE 2B

- Inner tube : oil resistant SBR/NBR rubber
- Reinforcement : textile plies
- Outer cover : abrasion and weather resistant SBR rubber
- Outer finish : fine tape wrapped
- Temperature : -30° C to +70° C max
- Production lengths : 60 meters
- Colour : black

Hose 224 is without doubt one of the toughest hoses on the market. Its inner tube is resistant to compressor oil and its outer cover is abrasion resistant.

It has an excellent life span.

Moreover, its heavy textile reinforcement and its superior thickness increase its mechanical resistance to traction, flexion and other constraints.



Part N°	Inner diameter		Outer diameter	Wall thickness	Working pressure	Burst pressure	Bend radius	Weight
	mm	Inch						
224 13x21	13	1/2"	21	4	20	64	65	0,4
224 16x27	16	5/8"	27	5,5	20	64	160	0,5
224 19x32	19	3/4"	32	6,5	20	64	190	0,73
224 25x38	25,4	1"	39	6,5	20	64	254	0,96
224 28x44	28	1" 1/8	44	8	20	64	180	1,1
224 30x44	30	1"3/16	44	7,0	20	64	300	1,23
224 35x50	35	1"3/8	50	7,5	20	64	350	1,36
224 40x56	40	1"9/16	56	8,0	20	64	400	1,9
224 45x61	45	1"3/4	61	8,0	20	64	450	2
224 50x70	50,8	2"	68	9,0	20	64	508	2,3
224 60x78	60	2"3/8	78	9,0	20	64	600	2,7
224 63x81	63,5	2"1/2	81	9,0	20	64	635	2,9
224 70x88	70	2"3/4	88	9,0	20	64	700	3,2
224 75x96	76	3"	96	10,0	20	64	760	3,7

Possible end-fittings : male threaded, Robur, Cam-lock, Weco  
See also 223, 2011



**SPECIAL HOSE LOW TEMPERATURE  
-54°C**
**20 BARS**


- Inner tube : black smooth oil, air, and gaz special resistant rubber designed for low temperatures
- Reinforcement : 2 high tensile synthetic textile layers
- Outer cover : black abrasion and weather special resistant rubber to low temperatures
- Outer finish : fine tape wrapped
- Temperature - 54°C to + 70° C
- Colour : black
- Production lengths : 61 meters

Hose 254 is used for many fluids down to -54 ° C in continuous service.

Originally designed for low temperature air and nitrogen service application, it can likewise be used for many other fluids such as water, mineral oils and gas-oil and thus be considered a multiservice hose.

With great flexibility, it can be equipped with swaged fittings and also anti-whip cables or safety stockings.



Part N°	Inner diameter		Outer diameter	Wall thickness	Working pressure	Burst pressure	Bend radius	Weight
	mm	Inch						
254 19x31	19	3/4"	31	6,0	20	60	190	0,58
254 25X37	25	1"	37	6.0	20	60	250	0.73

## FLAT-LAY COMPRESSED AIR HOSE



- Inner tube : elastomer NBR - PVC
- Reinforcement : textile braid
- Outer cover : abrasion and weather resistant nitrile - PVC
- Outer finish : smooth with longitudinal ribs
- Temperature : - 20°C to 70°C maximum
- Production lengths : 20 and 40 meters, up to 200 meters to order
- Colour : black for Ø 20, 25, 50, 75, 100 and 150

Although extremely lightweight, hose REF 277 can accept high working pressures.

It is used for light compressed air service or wherever its weight and compact dimensions are the determining factors.

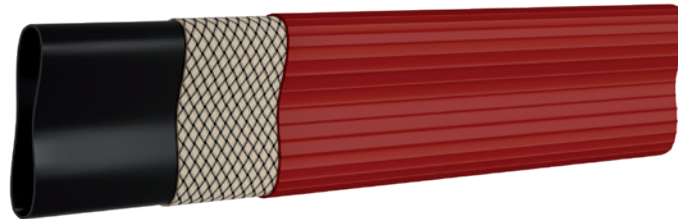
Its outer cover and inner tube are produced with one single induction which interpenetrates the braiding, rendering ideal adherence between the layers.

The proportion of elastomer nitrile-PVC is 70/30%.

It benefits from the NSFS 61 112 approval for diameters 25, 45, 70 and 110. Diameter 51, for severe applications, this hose is available with a greater thickness.

It therefore has better abrasion resistance.

Part N° 279 50 and Part N° 280 50 with an operation pressure of 25 bars.

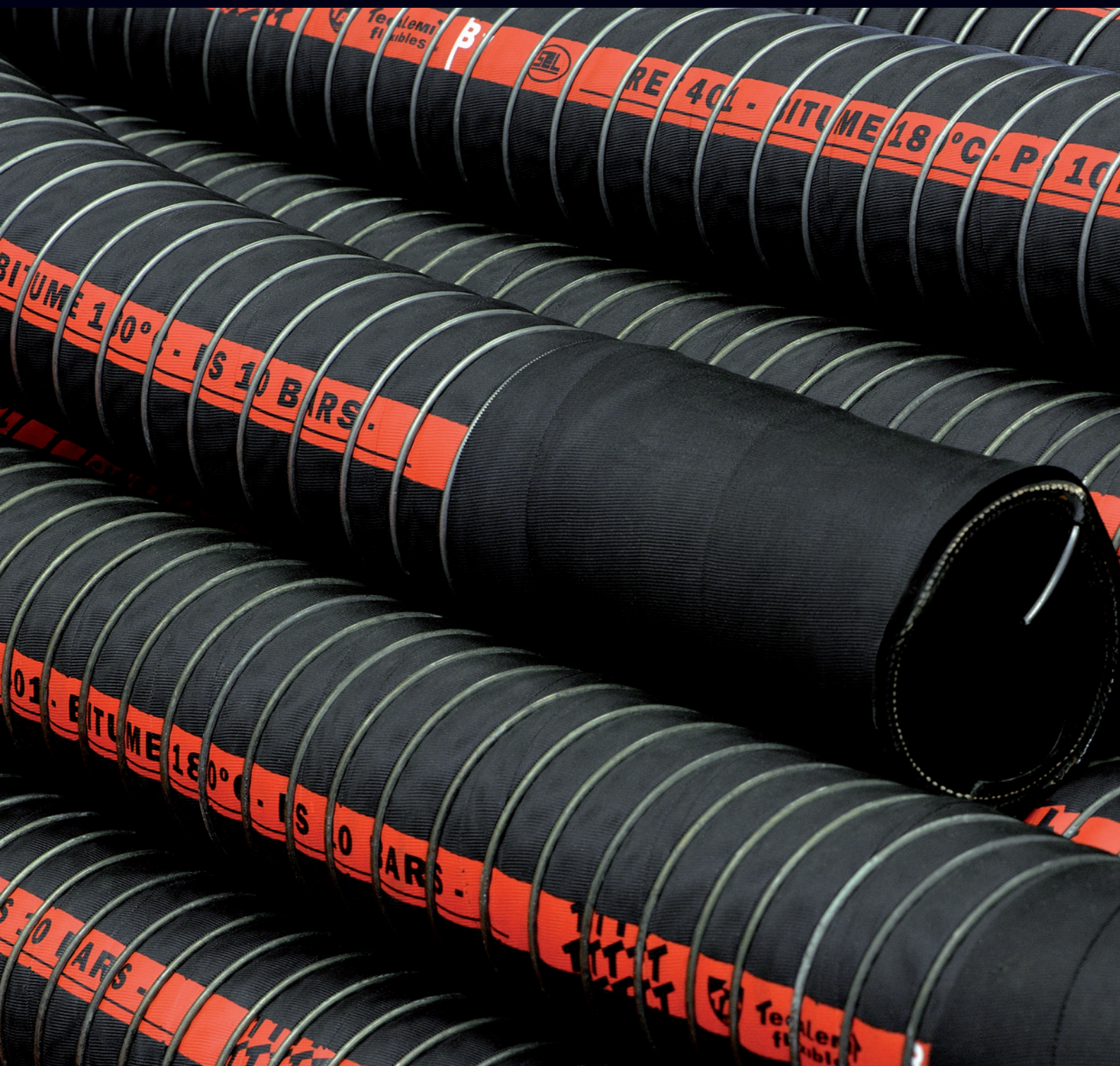


Part N°	Inner diameter		Outer diameter	Wall thickness	Working pressure	Burst pressure	Bend radius	Weight
	mm	Inch						
277 20	20		24,0	2,0	25	80	-	0,16
277 25	25	1"	29,0	2,0	25	75	-	0,18
277 38	39	1"1/2	40,5	2,2	18	55	-	0,28
277 40	40	1"9/16	44,5	2,2	18	55	-	0,30
277 42	42	1"21/32	46,5	2,2	18	50	-	0,34
277 45	45	1"3/4	49,5	2,3	18	50	-	0,37
277 50	52	2"	55,0	2,3	18	50	-	0,44
279 50	52	2"	59	3,5	18	60	-	0,65
280 50	52	2"	59	3,5	25	90	-	0,65
277 55	55		60,0	2,4	18	50	-	0,47
277 60	60	2"3/8	65,0	2,4	18	50	-	0,51
277 65	64	2"1/2	68,5	2,5	18	50	-	0,53
277 70	70	2"3/4	75,0	2,5	18	50	-	0,60
277 75	75	3"	81,0	2,5	18	50	-	0,70
277 80	80		85,5	2,7	18	50	-	0,77
277 90	90	3"1/2	95,5	2,8	18	50	-	0,95
277 100	102	4"	107,5	3,0	15	45	-	1,05
277 110	110	4"11/32	116,0	3,0	15	45	-	1,20
277 125	127	5"	133,0	3,2	10	30	-	1,42
277 150	152	6"	158,0	3,2	10	30	-	1,71

Possible end-fittings : Guillemín, Robur, Cam-lock  
See also 223



## HYDROCARBON DELIVERY RUBBER HOSES



TECALEMIT FLEXIBLES® - Parc d'activités de Kermaria, 29120 Pont l'Abbé - France  
Tel : (33) 02 98 66 05 05 - E-mail : info@tecalemitle.com

"All the specifications are given as an indication , they may be updated in the interest of our customers"

**BITUMEN AND TAR SUCTION  
AND DELIVERY HOSE 180°C**
**10 BARS**


**Inner tube : smooth black synthetic rubber**  
**Reinforcement : fibreglass protection, textile plies and metal spiral**  
**Outer cover : abrasion and weather resistant CR / NBR rubber**  
**Outer finish :**  
 - Ø19, Ø 38, Ø 50 et Ø 63 : smooth  
 - Ø 25 : corrugated (external metal protection spiral for Ø 25 and 50)  
**Temperature : + 180°C max**  
**Production lengths : 40 m. Ø 25 : 5, 8, 15 m**  
**Electrical conductivity : 1 copper braid or external spiral**  
**Colour : black**  
**Particularities : oversized cuff-ends Ø 25, 50**

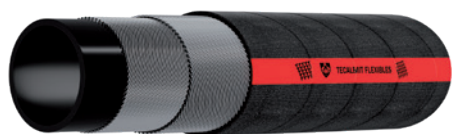
Intended for suction and delivery of tar, bitumen and hot petroleum products, hose 401 has excellent resistance to ozone and bituminous products thanks to the quality of its covering.

The hose structure is protected from heat by a fibreglass interlayer and it has a low bend radius.

It can be supplied equipped with half-symmetrical, threaded or flange fittings along and deliver certificates in accordance with Appendix IV-1 of the amended TDG Order of May 29 2009.

- In Ø 19, its reinforcement consists of two metal wire spirals.
- In Ø 25 is protected by an external metal spiral and produced in predetermined lengths with flexible cuff-ends.
- In Ø 38, 50 and 63 have a smooth outer cover and can be cropped to length.
- In Ø 50, we offer a variant identical to Ø 25.

Part N°	Inner diameter		Outer diameter	Wall thickness	Working pressure	Burst pressure	Bend radius	Weight
	mm	Inch						
* 401 19	19	3/4"	32	6,5	10	40	130	1,0
* 401 25	25,4	1"	43	8,5	10	40	200	1,3
* 401 38	38,1	1"1/2	56	9	10	40	260	1,89
* 401 50	50,8	2"	70	10	10	40	300	2,60
* 401 63	63,5	2"1/2	81	9	10	40	400	3



401 Ø 19


 401 Ø 38  
 401 Ø 50  
 401 Ø 63

 401 Ø 25  
 401 Ø 50

\* In accordance with Appendix IV.1 of the modified TMD Order of May 29, 2009

Possible end-fittings : Male threaded, Guillemain

See also 402, 411

## HYDROCARBON DELIVERY HOSE

16 BARS



TS EN 1360 TYPE 1 - CAT:M  
ISO 1307

- Inner tube : black NBR noir rubber conductor
- Reinforcement : 2 textile plies
- Recouvrement : caoutchouc synthétique
- Outer finish : wrapped
- Electrical resistance : less than 1 Mega  $\Omega$  per meter
- Temperature : - 30°C to 70°C
- Production length: 50, 60 meters
- Colour : black

The hose 403 is intended for the equipment of the reels of the fuel distribution tankers. Manufactured in accordance with the EN 1360: 2013 standard, in the lightest possible way, it has a very thin striped rubber coating very resistant to abrasion. We deliver it fitted with male or female male or female BSPP fittings 1"1/2 in steel and certificates in accordance with Appendix IV-1 of the amended TDG Order of May 29 2009. The male threaded end is equipped with a bending spring.

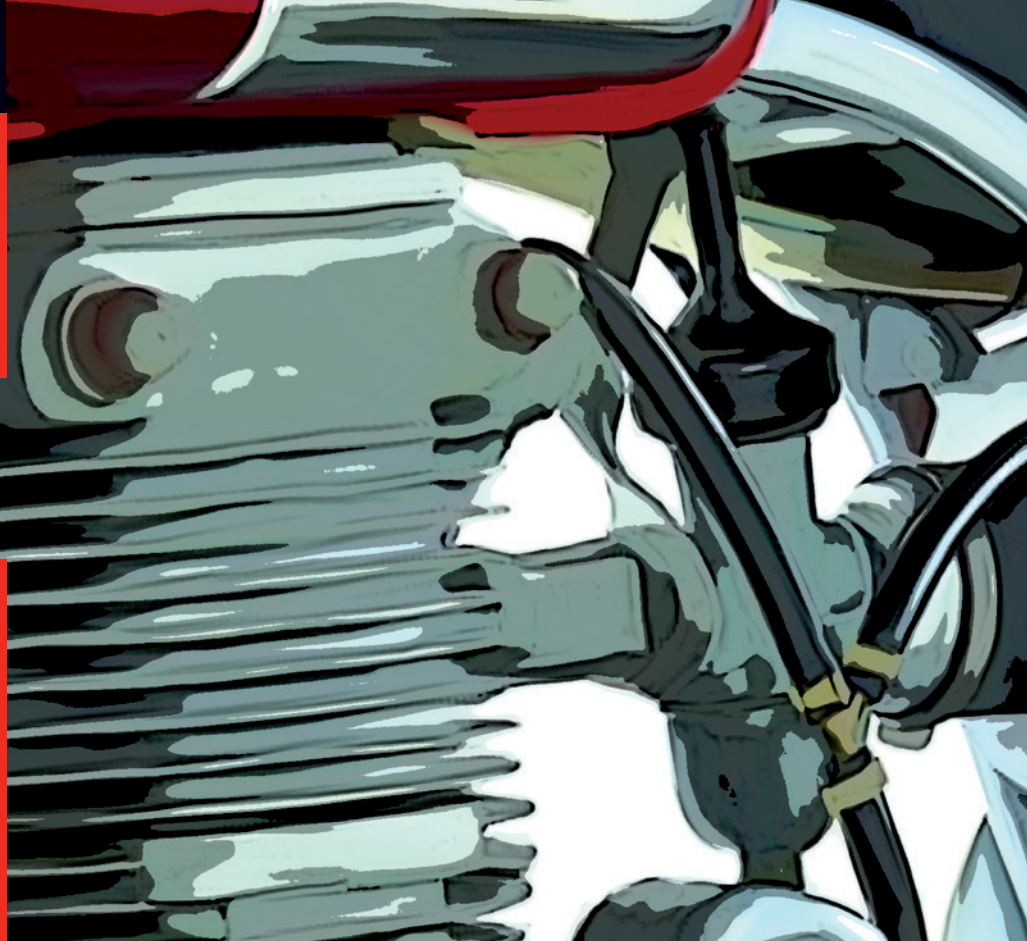


Part N°	Inner diameter		Outer diameter	Working pressure	Burst pressure	Bend radius	Weight
	mm	Inch					
* 403 32	32	1"1/4	45	16	48	175	1100
* 403 35	35	1"3/8	48	16	48	175	1100
403 38	38	1"1/2	51	16	48	225	1235
403 40	40	1"9/16	53	16	48	225	1292

\* In accordance with Appendix IV.1 of the modified TMD Order of May 29, 2009

**FUEL HOSE  
DIN 73379 TYPE 2A**

**10 BARS**



DIN 73379 TYPE 2A

- Inner tube : black antistatic NBR rubber
- Reinforcement : textile braid
- Outer cover : CR rubber
- Outer finish : smooth
- Temperature : - 30°C to + 90°C
- Production lengths : 50 meters
- Colour : black
- Particularity : antistatic

Hose 405 is intended for conveying fuels with up to 50% aromatic content (lead-free fuel).

It complies with DIN 73379: 1997 type 2A

Its inner tube is antistatic and is available in coils for automobile garages and builders



Part N°	Inner diameter	Outer diameter	Wall thickness	Working pressure	Burst pressure	Bend radius	Weight
	mm	mm	mm	bar	bar	mm	kg/m
405 4,5X10,5	4,5	10,5	3	10	30	45	0,09
405 5x11	5	11	3	10	30	50	0,10
405 6x12	6	12	3	10	30	60	0,10
405 7x13	7	13	3	10	30	70	0,12
405 7,5X13,5	7,5	13,5	3	10	30	70	0,12
405 8x14	8	14	3	10	30	80	0,13
405 9,5x15,5	9,5	15,5	3	10	30	80	0,14
405 12x19	12	19	3,5	10	30	100	0,20
405 17x24	17	24	3,5	10	30	125	0,32

Dimensions reel :

- width : 115 mm
- ext. diameter : 185 mm
- spindle diameter : 45 mm



Part N°	Inner diameter	Outer diameter	length	Weight
	mm	mm	m	kg/m
405 D5 15 M	5	11	15	1,9
405 D6 15M	6	12	15	1,97
405 D7 10M	7	13	10	1,48
405 D8 10M	8	14	10	1,67
405 D10 15M	9,5	15,5	15	1,82
405 D12 8M	12	19	8	1,51

Possible end-fittings : Threaded, CB range  
See also 406, 407

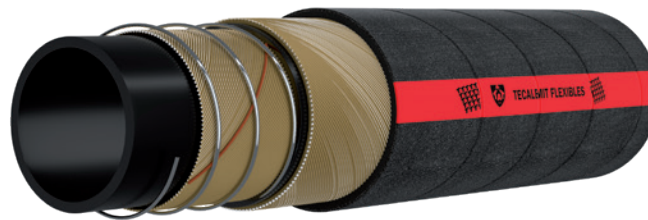
**TAR, BITUMEN AND  
HOT PETROLEUM PRODUCTS HOSE  
80°C**

**5 BARS**



- Inner tube : black synthetic rubber
- Reinforcement : textile plies and metal spiral
- Outer cover : abrasion and weather resistant microperforated CR/NBR rubber
- Outer finish : wrapped
- Temperature : +80°C
- Production lengths : 40 meters
- Electrical conductivity : 1 copper braid
- Colour : black

Hose 411 is intended for suction and delivery of tar, bitumen and hot petroleum products. The quality of its outer cover affords excellent resistance to ozone and bitumenous products. It has a low bend radius. it can be swaged with threaded fittings.



Part N°	Inner diameter		Outer diameter	Wall thickness	Working pressure	Burst pressure	Bend radius	Weight
	mm	Inch						
411 19	19	3/4"	30	5,5	5	80	50	0,9
411 25	25	1"	36,5	5,5	5	70	60	1,1

Possible end-fittings : Male threaded with male union 1"1/4, male threaded 3/4 with female union 1"1/4

**HYDROCARBON SUCTION  
AND DELIVERY HOSE  
EN 13765 TYPE 2**

**10 BARS / 14 BARS**

**Tecalemit  
RCMH**



**EN 13765 TYPE 2**

- Inner tube : polypropylene film
- Reinforcement : Multiple polyester films between two helical turns in galvanized steel
- Reinforcement : textile PVC coated
- Outer finish : smooth with external metal protection spiral
- Temperature : - 30°C to + 100°C
- Production lengths : 30 meters
- Colour : black with red stripe

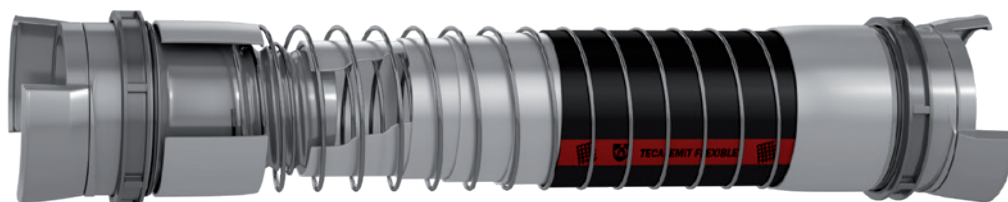


Hose 416 is intended for suction and delivery hydrocarbon whatever aromatic content.

Its exceptional flexibility and its extremely small radius makes it very handy. Its resistance to vacuum is 0.9 bar.

Accordingly, it is installed on most tankers for delivery of oil at service stations. It comes equipped with end-fittings (helical barbed tail) and two electrical coils providing the electrical conductivity.

This hose can be swaged with threaded fittings and supplied with certificates in accordance with Appendix IV-1 of the amended TDG Order of May 29 2009.



Part N°	Inner diameter		Working pressure	Burst pressure	Bend radius	Weight
	mm	Inch				
* 416 GGE 14 40	38,1	1"1/2	14	70	105	1,8
* 416 GGE 14 50	50	2"	14	70	190	2,06
* 416 GGE 14 65	63,5	2"1/2	14	70	225	2,7
* 416 GGE 10 65	63,5	2"1/2	10	50	225	2,7
* 416 GGE 14 75	76,2	3"	14	70	290	3,5
* 416 GGE 10 75	76,2	3"	10	50	290	3,5
* 416 GGE 14 100	101,6	4"	14	70	320	5,44
* 416 GGE 10 100	101,6	4"	10	50	320	5,44
416 GGE 14 150	152	6	14	70	497	11,9
416 GGE 14 200	203	8	14	70	740	21,5
416 GGE 14 250	254	10	14	70	920	25

\* In accordance with Appendix IV.1 of the modified TMD Order of May 29, 2009  
Possible end-fittings : Guillemín, Camlock, Flanges, BSP



## FUEL DISPENSER HOSE FOR FUEL PUMPS

16 BARS



EN 1360



- Inner tube : NBR black
- Reinforcement : Textile braid (443T)  
Steel braid (443M)
- Outer cover : Oil-resistant and weather resistant rubber
- Outer finish : Smooth or wrapped
- Temperature : -30°C to +55°C (on request -54°C to +85°C)
- Production lengths : variables
- Colour : black, green, red or blue

The hose 443 is intended for the equipment of petrol pumps for diesel, biofuels, standard gasoline , "super" as well as unleaded gasoline.

The 443T version has a textile reinforcement and complies with EN 1360 type 1.

The 443M version has a metal braid and complies with EN 1360 type 3.

The hose is available in different colors and with a conductive tube of electricity (resistance to the meter less than 1 Ω m).

443T



Part N°	Inner diameter		Outer diameter	Wall thickness	Working pressure	Burst pressure	Bend radius	Weight
	mm	Inch						
443T 13	12,7	1/2"	21,5	4,5	16	48	60	0,295
443T 16	16	5/8"	26	5	16	48	80	0,425
443T 19	19	3/4"	29	5	16	48	100	0,475
443T 25	25,4	1"	36,5	5,5	16	48	150	0,690

443M



Part N°	Inner diameter		Outer diameter	Wall thickness	Working pressure	Burst pressure	Bend radius	Weight
	mm	Inch						
443M 13	12,7	1/2"	21,5	4,5	16	48	60	0,385
443M 16	16	5/8"	26	5	16	48	80	0,525
443M 19	19	3/4"	29	5	16	48	100	0,595
443M 25	25,4	1"	36,5	5,5	16	48	150	0,860

Possible end-fittings : Threaded

## MULTIPURPOSE HOSE

25 BARS



- Inner tube : antistatic NBR rubber
- Reinforcement : textile braid
- Outer cover : CR / SBR rubber
- Outer finish : smooth
- Temperature : - 30°C to +70°C max
- Production lengths : 25 or 50 meters
- Colour : black

Hose 462 is particularly appreciated by industrial site maintenance services. It accepts hot glycol water, compressed air, oil and hydrocarbons up to 40% aromatic content. It has static electricity conductiveness. Its reinforcement and thickness give it excellent bend radius.

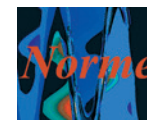


Part N°	Inner diameter		Outer diameter	Wall thickness	Working pressure	Burst pressure	Bend radius	Weight
	mm	Inch						
462 6x14	6	1/4"	14	4	25	85	20	0,16
462 8x16	8	5/16"	16	4	25	85	25	0,21
462 10x18	10	3/8"	18	4	25	85	30	0,26
462 13x21	13	1/2"	21	4	25	85	45	0,33
462 16x25	16	5/8"	25	4,5	25	85	65	0,40
462 19x29	19	3/4"	29	5	25	85	100	0,55
462 25x35	25	1"	35	5	25	85	180	0,60

Possible end-fittings : Threaded, CB range  
See also 461, 362, 405

HYDROCARBON SUCTION  
AND DELIVERY HOSES

5 BARS



EN 1361



- Inner tube : aviation gasolines and jet fuels resistant,conductive NBR rubber.
- Outercover:abrasion,ozone,weather,heat and oil resistant special synthetic rubber
- Production lengths : 40 & 60 meters
- Temperature : -30°C to +65°C
- Electrical conductivity :  $< = 10^6 \Omega/m$
- Outer finish : smooth
- Colour : black

Hoses 489, 496, 498 are especially conceived for the ground refuelling of aircrafts having an aromatic content up to 50 %.

- Reinforcement 489 : 2 high tensile synthetic textile and 2 antistatic copper wire.

- Reinforcement 496 : high tensile synthetic textile braid

- Reinforcement 498 : high tensile synthetic textile, 2 steel wire helix and 2 antistatic copper wire. This hose can be produced with a thermoplastic spiral.

489 : EN 1361 TYPE B



496 : EN 1361 TYPE C



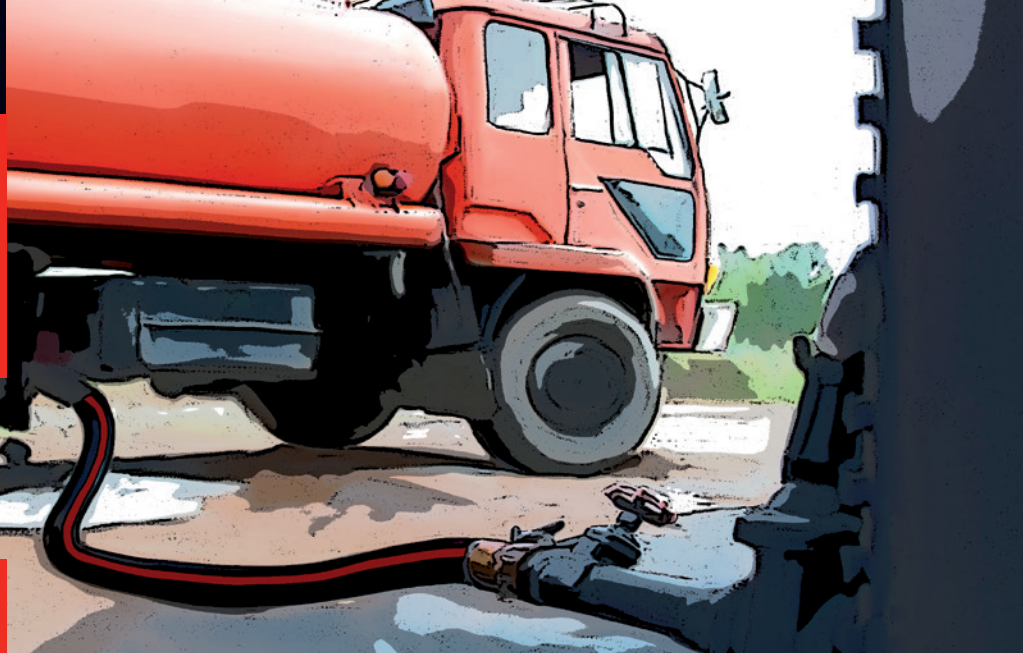
498 : EN 1361 TYPE E



Part N°	Inner diameter		Outer diameter	Working pressure	Test pressure	Burst pressure	Vacuum	Wall thickness	Weight
	mm	Inch							
<b>489 : EN 1361 TYPE B</b>									
489 19	3/4"	19	29	20	40	80		113	0,522
489 25	1"	25,4	38	20	40	80		150	0,842
489 32	1"1/4	32	45	20	40	80		200	1,003
489 38	1"1/2	38	51	20	40	80		230	1,162
489 50	2"	50,8	65	20	40	80		305	1,699
489 65	2"1/2	63,5	79	20	40	80		390	2,063
489 75	3"	76,2	92	20	40	80		460	2,562
489 100	4"	101,6	120	20	40	80		610	3,734
<b>496 : EN 1361 TYPE C</b>									
496 19	3/4"	19	29	20	40	80		113	0,522
496 25	1"	25,4	38	20	40	80		150	0,84
496 32	1"1/4	32	45	20	40	80		200	1
496 38	1"1/2	38	51	20	40	80		230	1,155
496 50	2"	50,8	65	20	40	80		305	1,71
496 65	2"1/2	63,5	79	20	40	80		390	2,07
496 75	3"	76,2	92	20	40	80		460	2,58
496 100	4"	101,6	120	20	40	80		610	3,76
<b>498 : EN 1361 TYPE E</b>									
498 19	3/4"	19	31	20	40	80	-0,92	85	0,686
498 25	1"	25,4	39	20	40	80	-0,92	115	0,972
498 32	1"1/4	32	46	20	40	80	-0,92	150	1,218
498 38	1"1/2	38	53	20	40	80	-0,92	180	1,592
498 50	2"	50,8	67	20	40	80	-0,92	250	2,32
498 65	2"1/2	63,5	81	20	40	80	-0,92	325	2,86
498 75	3"	76,2	95	20	40	80	-0,92	400	3,701
498 100	4"	101,6	123	20	40	80	-0,92	550	5,166

HYDROCARBON SUCTION  
AND DELIVERY HOSE

10 BARS



- Inner tube : black NBR nitrile rubber
- Reinforcement : 4 textile plies and one metal spiral
- Outer cover : abrasion and weather resistant neoprene rubber
- Electrical conductivity : 1 copper braid
- Outer finish : wrapped
- Temperature : - 40°C to +70°C max
- Production lengths : 20 meters
- Colour : black

Intended for suction and discharge of hydrocarbons, hose 491 has 4 textile plies and a metal spiral.

It is a very robust suction hose.

It can be used over a wide range of temperatures and its neoprene outer cover ensures excellent resistance to ozone.

It is used for discharge when a low bend radius is necessary.

This versatile hose, available in many diameters, can be cut to order.

This hose can be built in several variants, with corrugated flat, corrugated or crenellated coating as well as with an operating temperature of -55 °C to + 80 °C.



Part N°	Inner diameter		Outer diameter	Wall thickness	Working pressure	Burst pressure	Bend radius	Weight
	mm	Inch						
491 19	19	3/4"	32	6,5	10	80	120	0,9
491 25	25,4	1"	38	6,5	10	70	150	1,0
491 28	28	1"1/8	41	6,5	10	30	170	1,0
491 30	30	1" 3/16	43	6,5	10	60	190	1,1
491 32	31,8	1" 1/4	45	6,5	10	60	200	1,1
491 35	35	1" 3/8	48	6,5	10	50	220	1,1
491 38	38,1	1" 1/2	52	7	10	50	250	1,2
491 40	40	1" 9/16	54	7	10	40	280	1,3
491 42	42	1" 21/32	56	7	10	40	300	1,3
491 45	45	1"3/4	57	6	10	40	300	1,4
491 50	50,8	2"	64	7	10	40	300	1,7
491 55	55	2"3/16	69	7	10	30	310	1,8
491 60	60	2" 3/8	74	7	10	30	320	2,0
491 65	63,5	2" 1/2	77	7	10	30	540	2,1
491 70	70	2" 3/4	84	7	10	30	570	2,8
491 75	76,2	3"	90	7	10	30	600	2,9
491 80	80	3"5/32	95	7,5	10	30	700	3,2
491 90	90	3" 1/2	104	7	10	30	720	3,6
491 100	101,6	4"	116	7	10	30	800	4,1
491 110	110	4" 11/32	127	8,5	10	30	890	5,3
491 114	114,3	4" 1/2	131	8,5	10	30	940	5,8
491 120	120	4" 23/32	138	9	10	30	980	6,0
491 125	127	5"	145	9	10	30	1100	6,2
491 140	139,7	5" 1/2	158	9	10	30	1250	7,4
491 150	152,4	6"	172	10	10	30	1500	7,7
491 160	160		182	11	10	30	1700	9,0
491 200	203,2	8"	230	14	10	30	2000	12,5

Possible end-fittings : Threaded, Guillemin, Tankwagen, Flange, storz  
See also 492

**HYDROCARBON SUCTION  
AND DELIVERY HOSE**
**5 BARS**


- Inner tube : black nitrile rubber
- Reinforcement : 4 textile plies and one metal spiral
- Outer cover : abrasion and weather resistant neoprene rubber
- Electrical conductivity : 1 copper braid
- Outer finish : wrapped
- Temperature : - 40°C to +70°C max
- Production lengths : 40 meters
- Colour : black

Hose 492 is intended for suction of oil on hydraulic powerpacks. Economic, it can be used over a wide range of temperatures and its neoprene outer cover ensures excellent resistance to ozone. It is used for discharge when a low bend radius is necessary. For diameters 19, 25, 32, 38, 50, 63, 76, 100, it complies with the SAE J517 version 100R4 standard which applies to suction hoses for hydraulic oils.



Part N°	Inner diameter		Outer diameter	Wall thickness	Working pressure	Burst pressure	Bend radius	Weight
	mm	Inch						
492 19	19	3/4"	29	5,5	5	15	130	0,70
492 25	25	1"	37	6	5	15	180	0,80
492 30	30	1"3/16	41	5,5	5	15	210	0,91
492 32x45	32	1"1/4	44,5	6,25	5	15	230	1,0
492 35	35	1"3/16	46	5,5	5	15	245	1,10
492 38	38	1"1/2	52	7	5	15	270	1,2
492 40	40	1"9/16	51	5,5	5	15	280	1,28
492 42	42	1"21/32	53	5,5	5	15	295	1,32
492 45	45	1"3/4	56	5,5	5	15	315	1,40
492 48	48	-	60	6	5	15	325	1,50
492 50	50,8	2"	63,2	5,5	5	15	350	1,60
492 55	55	-	66	5,5	5	15	380	1,90
492 60	60	2"3/8	72	6	5	15	420	2,30
492 63	63,5	2"1/2	75	6	5	15	450	2,50
492 70	70	2"3/4	82	6	5	15	500	2,80
492 76	76	3"	89	6,5	5	15	550	3,10
492 80	80	3"5/32	93	6,5	5	15	600	3,50
492 90	90	3"1/2	103	6,5	5	15	650	3,90
492 100	101,6	4"	113	6,5	5	15	690	4,30
492 80	80	3"5/32	93	6,5	5	15	600	3,50
492 90	90	3"1/2	103	6,5	5	15	650	3,90
492 100	101,6	4"	113	6,5	5	15	690	4,30

Possible end-fittings : Threaded  
See also 491

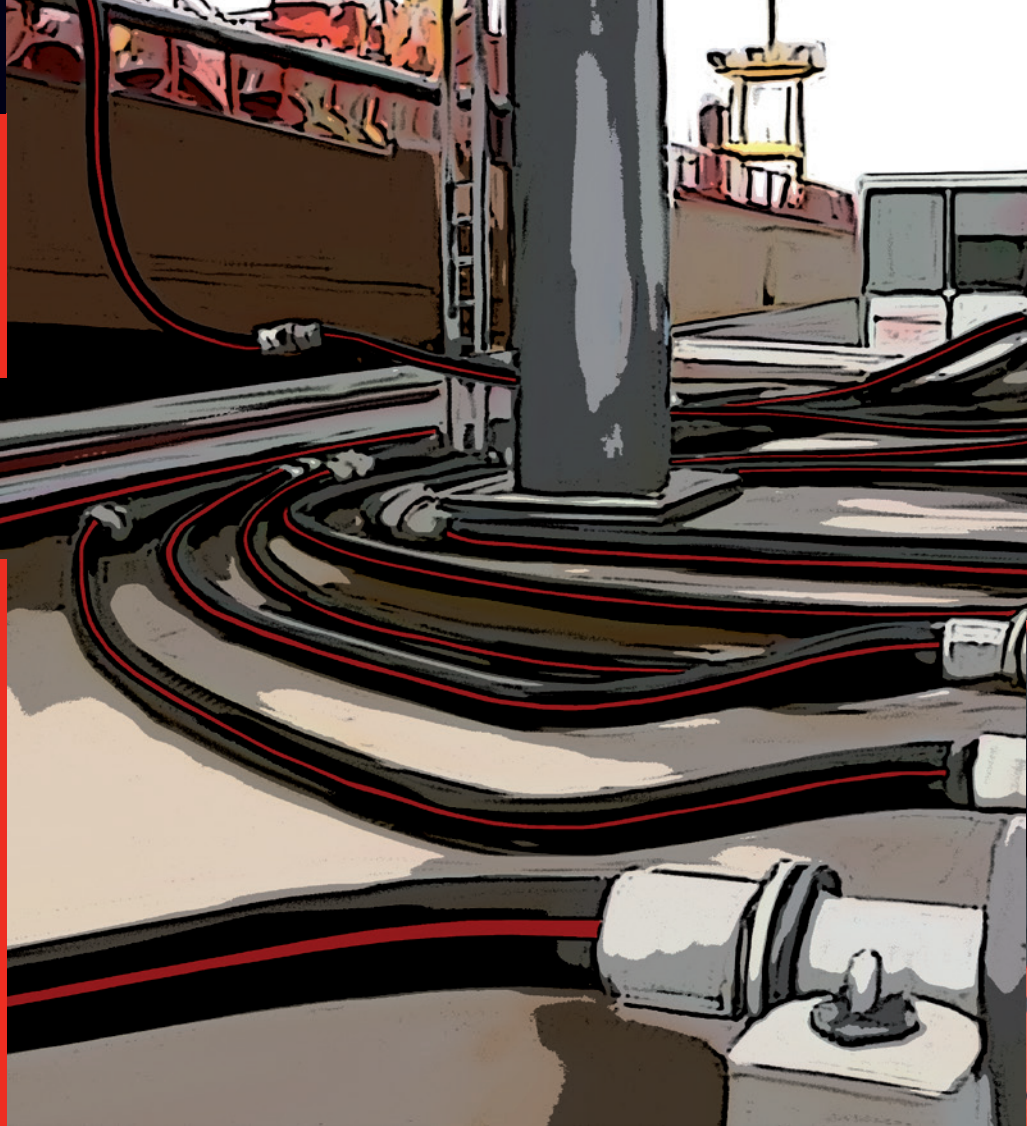
**HYDROCARBON SUCTION  
AND DELIVERY HOSE  
EN 1761 : 1999 SD**

**10 BARS**



NF EN 1761 TYPE  
SD

- Inner tube : black nitrile NBR rubber
- Reinforcement : 4 textile plies and one metal spiral
- Outer cover : abrasion and weather resistant neoprene rubber
- Electrical conductivity : 2 copper braid (<math>< 106 \Omega/m</math>)
- Outer finish : wrapped
- Temperature : -40°C to +70°C
- Production lengths : 40 meters



Intended for suction and discharge of hydrocarbons, hose 495 has 4 textile plies and a metal spiral. It is a very robust suction hose.

It can be used over a wide range of temperatures and its neoprene outer cover ensures excellent resistance to ozone.

It is intended for the delivery of oil by truck - tank.

It meets NF EN 1761 type SD (suction and delivery) standard.

this hose can be swaged with guillemin end-fittings and supplied with TMD modificate (29/05/09) test certificate for which we have a flexible type approval.



Part N°	Inner diameter		Outer diameter	Wall thickness	Working pressure	Burst pressure	Bend radius	Weight
	mm	Inch						
495 70	70	2" 3/4	84	7	10	48	300	2,8
* 495 75	75	3"	91	7,5	10	48	350	2,6
* 495 90	90	3" 1/2	106	8	10	48	400	4,2
* 495 100	101,6	4"	116	8	10	48	450	5,8
* 495 120	120	4"3/4	138	9	10	40	600	5,1
* 495 125	127,4	5"	146	10	10	40	635	5,8
* 495 150	152,4	6"	175	11,5	10	48	750	9

\*\* In accordance with Appendix IV.1 of the modified TMD Order of May 29, 2009

Possible end-fittings : Threaded, Guillemin, Tankwagen, Flange, Storz

**RED TAPE MARKING : TECALEMIT - Part N° - HYDROCARBURES 10 BARS**

**INLAY MARKING : TECALEMIT - REFERENCE - HYDROCARBURES 10 BARS - EN 1761 : 1999 SD (Ø) - PMS10 - Ω/M - CL**



## HOSES FOR THE NAVY



## PLEASURE CRAFT EXHAUST HOSE



SAE J2006 TYPE  
R2

- Inner tube : smooth black EPDM rubber
- Reinforcement : 1 textile plie and 1 spiral
- Outer cover : EPDM rubber
- Outer finish : wrapped and corrugated
- Production lengths : 60 meters, 20 meters from Ø 127
- Colour : black

Extremely flexible and light, hose M42 is particularly intended for pleasure boats.

It passes easily from engine compartment through bulkheads to exhaust outlet valve.

Yacht racers appreciate its linear mass.

It replies to sae J2006 type R2 (10/2003) standards relative to pleasure boat wet exhausts, which defines burst pressure, admissible elongation, adherence of components, abrasion and aging resistance of the hose, which must resist exhaust gases during 2 minutes without water cooling.



Part N°	Inner diameter		Outer diameter	Wall thickness	Working pressure	Burst pressure	Vacuum	Bend radius	Weight
	mm	Inch							
M42 40	40	1"9/16	46	3	4	12	0.8	80	0.71
M42 42	42		50	4	4	12	0.8	90	0.82
M42 45	44.5	1"3/4	51	3.25	4	12	0.8	100	0.79
M42 50	50.8	2"	58	3.6	3.3	10	0.8	110	0.92
M42 54	54	2"1/8	61	3.5	3.3	10	0.8	120	0.97
M42 55	55		61	3	3.3	10	0.8	110	1.04
M42 60	60	2"3/8	67	3.5	3.3	10	0.8	125	1.07
M42 63	63	2"1/2	71	3.5	3.3	10	0.8	150	1.15
M42 76	76	3"	85	4.5	2	6	0.8	180	1.65
M42 80	80	3"5/32	88	4	2	6	0.8	190	1.75
M42 90	90	3"1/2	98	4	2	6	0.8	210	1.93
M42 102	101.6	4"	110	4	2	6	0.8	230	2.14
M42 104	104		110	3	2	6	0.8	220	2.35
M42 114	114	4"1/2	121	3.5	2	6	0.8	230	2.49
M42 127	127	5"	137	5	2	6	0.7	250	3.18
M42 140	140	5"1/2	150	5	2	6	0.7	300	3.75
M42 150	152.4	6"	163	5	2	6	0.7	335	4.44
M42 200	203	8"	215	6	2	6	0.6	500	6.35
M42 270	273	11"	290	8.5	2	6	-	-	10.66



FUEL HOSES ISO 7840 A1

10 BARS



ISO 7840 TYPE A1

- Inner tube : hydrocarbons resistant NBR rubber
- Reinforcement 407: textile braid
- Reinforcement : 4 textile plies and 1 spiral
- Recouvrement : caoutchouc CR
- Outer finish 407 : smooth
- Outer finish 493 : wrapped
- Temperature 407 : -30°C to +70°C max
- Temperature 493 : -40°C to +80°C max
- Production lengths : 407 : 40 metres
- Production lengths 493 : 61 metres
- Colour : black

Intended for supply of fuel to marine engines on pleasure craft, hose 407 corresponds to the international standard ISO 7840 type A1.

This rating defines the inner tube's lowest permeability to fuels according to that standard.

The quality of the outer cover protects the hose from projections within the engine compartment.

Swaged with end-fittings, this hose can be supplied "ready-to-use".

In diameter 54, it has 4 textile plies as well as a steel spiral and is intended for the connection between bilge drain plug and the fuel tank.



Part N°	Inner diameter	Outer diameter	Wall thickness	Working pressure	Burst pressure	Bend radius	Weight
	mm	mm	mm	bar	bar	mm	kg/m
407 8X16	8	16	4	10	30	70	0,20
407 10X18	10	18	4	10	30	90	0,23
407 13X22	13	22	4,5	10	30	120	0,36
407 16X25	16	25	4,5	10	30	150	0,40
407 19X29	19	29	5	10	30	190	0,48

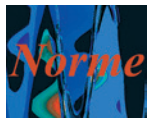


Part N°	Inner diameter	Outer diameter	Wall thickness	Working pressure	Burst pressure	Bend radius	Weight
	mm	mm	mm	bar	bar	mm	g/m
493 54	54	9,5	64	10	30	320	1500

Possible end-fittings : Male or female threaded  
See also 362, 441

## ANTI-ODOURS SANITARY HOSE

5 BARS



ISO 2398 TYPE 2

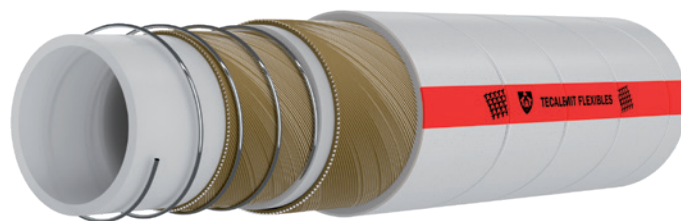


- Inner tube : white butyl (IIR) rubber
- Reinforcement : 2 textile layers and 1 metal spiral
- Outer cover : EPDM rubber
- Outer finish : smooth wrapped
- Temperature : -30°C to +70°C
- Production lengths : 20 meters
- Colour : white

Designed specifically for pleasure boats, hose 817 has a butyl rubber inner tube which has the best impermeability to gasses in the range of elastomers.

Consequently, it is destined to connect effluent circuits on yachts.

With its smooth finish, it has an excellent bend radius allowing different types of mounting inside confined cockpits. Its white colour allows easy incorporation into sanitary environments.



Part N°	Inner diameter		Outer diameter	Wall thickness	Working pressure	Burst pressure	Bend radius	Weight
	mm	Inch						
817 19X29	19	3/4"	29	5	5	15	40	0,6
817 25X35	25	1"	35	5	5	15	50	0,7
817 38X48	38	1"1/2	38	5	5	15	80	1,1
817 50,8X61	50	2"	61	5	5	15	100	1,5

## WATER DISCHARGE HOSE



- Inner tube : flexible PVC
- Reinforcement : steel helix
- Outer cover : flexible PVC
- Outer finish : slightly corrugated
- Temperature : - 5°C to +60°C
- Production lengths : 30 meters
- Colour : white

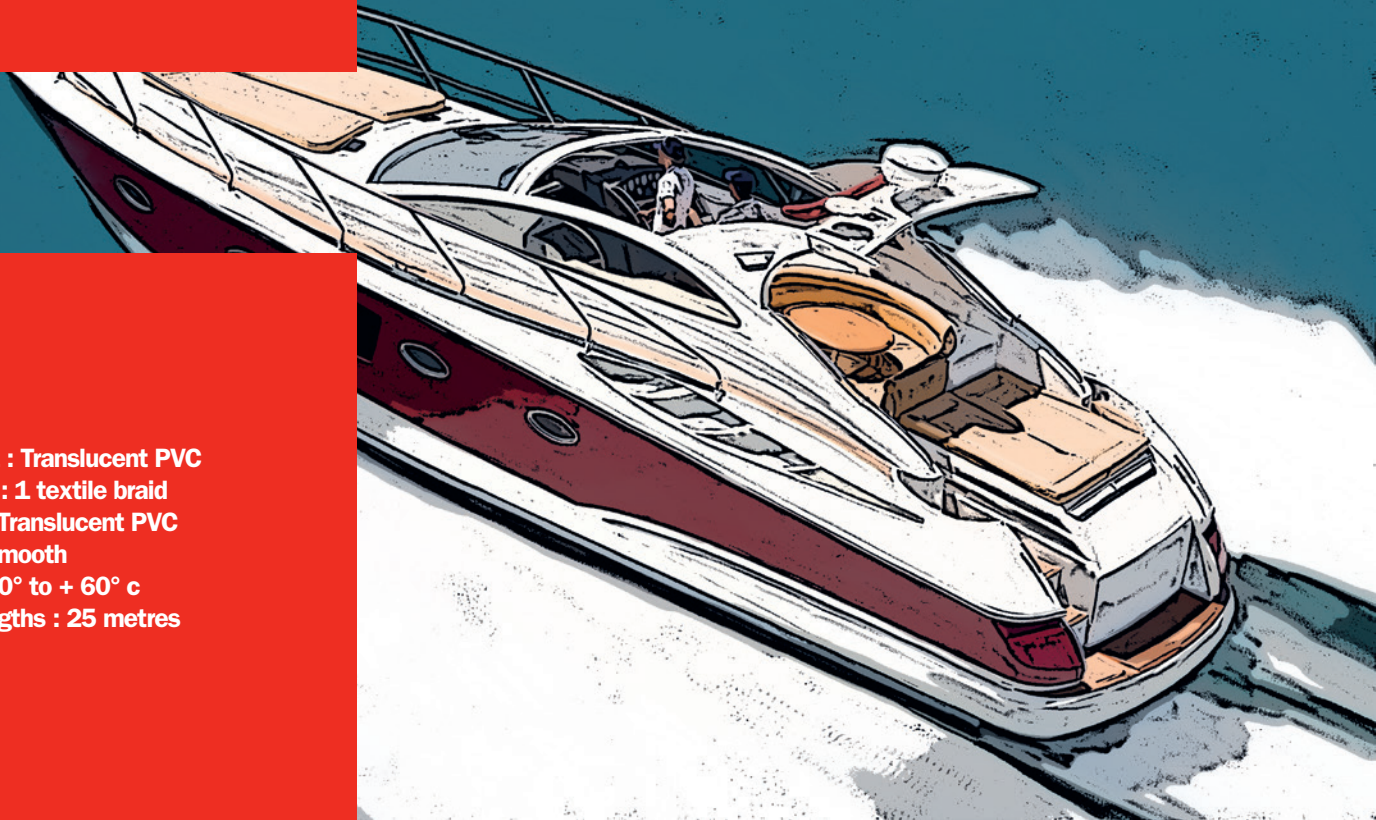
This PVC hose is used for the discharge of wastewater.  
It is also appreciated for its excellent flexibility.  
The pressures indicated in the table are given at 20 °C.



Part N°	Inner diameter		Vacuum bar	Working pressure bar	Burst pressure bar	Bend radius mm	Weight kg/m
	mm	Inch					
900B 10	10	3/8"	- 0,9	8	21	20	0,16
900B 12	12	1/2"	- 0,9	8	21	25	0,18
900B 14	14		- 0,9	7	18	30	0,20
900B 16	16	5/8"	- 0,9	7	18	35	0,22
900B 18	18		- 0,9	7	18	40	0,28
900B 20	20		- 0,9	6	15	50	0,34
900B 25	25	1"	- 0,9	6	15	60	0,51
900B 30	30	1" 3/16	- 0,9	5	13	70	0,60
900B 32	32	1" 1/4	- 0,9	5	13	75	0,65
900B 35	35	1" 3/8	- 0,9	4,5	12	80	0,73
900B 38	38	1" 1/2	- 0,9	4,5	12	90	0,80
900B 40	40	1" 9/16	- 0,9	3,5	9	95	0,87
900B 45	45	1" 3/4	- 0,8	3,5	9	105	1,10
900B 51	51	2"	- 0,8	3,5	9	125	1,20
900B 60	60	2" 3/8	- 0,7	3	7	135	1,80
900B 65	65	2" 1/2	- 0,7	3	7	150	1,95
900B 70	70	2" 3/4	- 0,7	3	7	180	2,20
900B 76	76	3"	- 0,7	3	7	195	2,50
900B 80	80	3" 5/32	- 0,7	3	7	220	2,70
900B 90	90	3" 1/2	- 0,6	2,5	6	260	3,00
900B 102	102	4"	- 0,6	2,5	6	300	3,40
900B 152	152	6"	- 0,6	2,5	6	460	6,35

## SUCTION AND DISCHARGE HOSE

15 BARS

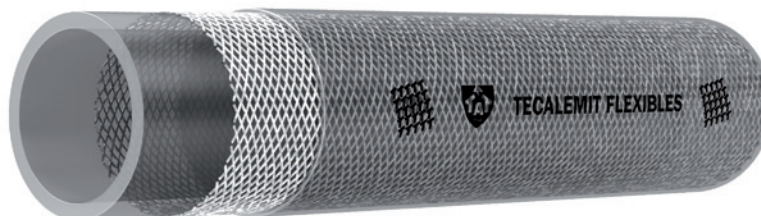


- Reinforcement : Translucent PVC
- Reinforcement : 1 textile braid
- Outer covert : Translucent PVC
- Outer finish : smooth
- Temperature : 0° to + 60° c
- Production lengths : 25 metres

MANUCLAIR® braided pvc tubes are comprised of a flexible translucent PVC inner tube (abbreviation of soft polyvinyl chloride), a single braid of white polyester yarn and a flexible PVC coating. The inner tube is obtained by extrusion. It is then cooled before passing through a vertical braider and an angle extrusion head which deposits the outer cover. MANUCLAIR® tubes are :

- Food quality.
- Translucent rendering the conveyed product visible.
- Flexible.
- Resistant to many common products.

Even though they are less flexible, less sturdy and accept lower working temperatures than their rubber counterparts, MANULEF® tubes are universally used for their main qualities : food compatibility, translucent aspect and resistance to many fluids.



Part N°	Outer diameter	Inner diameter	Wall thickness	Working pressure 23 °C	Burst pressure 23°c	Bend radius	Weight
	mm	mm	mm	bar	bar	mm	gr/mm
0011005000	11	6,3	2,4	15	60	45	85
0011010000	13	8	2,5	15	60	60	130
0011015000	15	10	2,5	15	60	70	160
0011025000	18	12,5	2,8	15	60	90	180
0011030000	22	16	3	15	60	120	230
0011035000	26	19	3,5	15	60	140	320
0011040000	33	25	4	15	60	180	450



## ABRASIVE DELIVERY RUBBER HOSES



TECALEMIT FLEXIBLES® - Parc d'activités de Kermaria, 29120 Pont l'Abbé - France

Tel : (33) 02 98 66 05 05 - E-mail : info@tecalemi.com

"All the specifications are given as an indication , they may be updated in the interest of our customers"

**POLYURETHANE SHEATH  
FOR ABRASIVE PRODUCTS**



- Constitution : translucid polyurethane
- Reinforcement : coppered steel spiral
- Temperature : -25°C to +75°C
- Production lengths : 10 to 30 metres
- Colour : translucid

The polyurethane sheath 618 is remarkable by its lightweight and excellent bend radius.

The high abrasion-resistance rating of polyurethane allows the combination of light weight, flexibility and long life span of the hose.

It can be produced with wall thicknesses up to 1.8 mm.



Part N°	Inner diameter		Outer diameter	Wall thickness	Working pressure	Burst pressure	Bend radius	Weight
	mm	Inch						
618 30	30	1" 3/16	-	0,5	0,60	-	21	0,171
618 35	35	1" 3/8	-	0,5	0,55	-	24	0,199
618 40	40	1" 9/16	-	0,5	0,50	-	28	0,228
618 45	45	1" 3/4	-	0,5	0,45	-	31	0,261
618 50	50	2"	-	0,5	0,40	-	35	0,295
618 55	55	2"1/4	-	0,5	0,40	-	39	0,318
618 60	60	2"3/8	-	0,5	0,40	-	42	0,342
618 65	65	2"1/2	-	0,5	0,37	-	45	0,370
618 70	70	2"3/4	-	0,5	0,35	-	49	0,399
618 75	75	3"	-	0,5	0,30	-	53	0,427
618 80	80	3"5/32	-	0,5	0,27	-	56	0,456
618 90	90	3"9/16	-	0,5	0,25	-	58	0,486
618 100	100	4"	-	0,5	0,20	-	70	0,515
618 110	110	4"11/32	-	0,5	0,20	-	77	0,566
618 120	120	4"23/32	-	0,5	0,20	-	84	0,618
618 125	125	5"	-	0,5	0,20	-	88	0,644
618 130	130	5" 3/16	-	0,5	0,17	-	91	0,669
618 140	140	5" 1/2	-	0,5	0,13	-	98	0,720
618 150	150	6"	-	0,5	0,10	-	105	0,772
618 160	160	6" 3/8	-	0,5	0,10	-	112	0,823
618 175	175	7"	-	0,5	0,09	-	123	0,901
618 180	180	7" 3/8	-	0,5	0,09	-	127	0,925
618 200	200	8"	-	0,5	0,08	-	140	1,024
618 250	250	10"	-	0,5	0,05	-	175	1,280
618 300	300	12"	-	0,5	0,03	-	210	1,540
618 350	350	14"	-	0,6	0,02	-	245	1,792
618 400	400	16"	-	0,6	0,02	-	280	2,048
618 450	450	18"	-	0,6	0,01	-	315	2,304
618 500	500	20"	-	0,6	0,01	-	350	2,560

## HOPPER HOSE FOR CONCRETE

5 BARS



- Inner tube : black anti-abrasive SBR rubber
- Reinforcement : 2 textile plies
- Outer cover : abrasion and weather resistant SBR rubber
- Outer finish : wrapped
- Temperature : - 30°C to +70°C
- Production lengths : 20, 30 metres
- Colour : black
- Particularity : can be rolled flat



This hopper hose is used as a discharge spout for concrete on worksites. Light and easy to handle, it allows user to easily pour the product. Production of this hose on mandrils avoids having a longitudinal seam.



Part N°	Inner diameter		Outer diameter	Wall thickness	Working pressure	Burst pressure	Bend radius	Weight
	mm	Inch						
701 150	150	6"	60	4	5	5	-	2,4
701 200	200	8"	213	5	5	5	-	2,9
701 250	250	10"	265	5,5	5	5	-	4,3
701 300	300	12"	316	5,5	5	5	-	7,1

SANDBLASTING HOSE

12 BARS



DIN 53416

Inner tube : black electrically conductive anti-abrasive SBR rubber  
 Reinforcement : 2 textile plies  
 Outer cover : abrasion and weather resistant SBR rubber  
 Outer finish : wrapped  
 Temperature : - 30°C to +70°C  
 Production lengths : 20 metres except Ø 32x48, 50x70, 65x85 : 40 metres  
 Colour : black with yellow stripe  
 - Particularity : additional micro-perforation of the outer cover

Hose 711 is intended for shotblasting metallic pieces, building fronts, ships, etc.  
 Its abrasion rating is under 60mm<sup>3</sup> according to DIN 53416 standards.  
 It is appreciated by operators for 3 qualities :  
 - Its excellent dimensional stability during pressure variations  
 - Its constant external diameter allowing the mounting of fittings  
 - The electrical conductivity of its inner tube for safety and ease of fitting connections.



Part N°	Inner diameter		Outer diameter	Wall thickness	Working pressure	Burst pressure	Bend radius	Weight
	mm	Inch						
711 13x25	13	1/2"	25,0	6,0	12	36	65	0,41
711 19x33	19	3/4"	33,0	7,0	12	36	90	0,65
711 25x39	25,4	1"	39,0	7,0	12	36	125	0,81
711 25x44	25,4	1"	44,0	9,5	12	36	120	1,10
711 32x48	31,8	1" 1/4	48,0	8,0	12	36	160	1,16
711 32x52	31,8	1" 1/4	52,0	10,0	12	36	180	1,35
711 40x60	40	1" 9/16	60,0	10,0	12	36	260	1,60
711 50x70	50,8	2"	70,0	10,0	12	36	320	2,10
711 60x80	60	2" 3/8	80,0	10,0	12	36	380	2,40
711 63x83	63,5	2" 1/2	83,0	10,0	12	36	400	2,60
711 65x85	65		85,0	10,0	12	36	400	2,60
711 80x108	80	3" 5/32	108,0	14,0	12	36	460	4,60
711 90x118	90	3" 1/2	118,5	14,0	12	36	530	4,90
711 100x123	101,6	4"	123,0	11,0	12	36	600	4,22

Possible end-fittings : specifics to sandblasting  
 See also 791, 798



## ABRASIVE PRODUCT DELIVERY HOSE

5 BARS



DIN 53416



**Inner tube : black anti-abrasive SBR / NR rubber**

**Reinforcement : 2 textile plies**

**Outer cover : abrasion and weather resistant SBR rubber**

**Electrical conductivity : steel wire placed between textile plies**

**Outer finish : wrapped**

**Temperature : - 30°C to +70°C**

**Production lengths : 40 metres**

**Colour : black**

**Particularity : can be rolled flat with 5mm thick wall with additional micro-perforation of the outer cover**

Hose 731 distinguishes itself by the anti-abrasion qualities of its inner tube.

The abrasion rating of 60mm 3 according to DIN 53516 is an excellent result.

In 7mm wall thickness, long life is due to its inner tube of 5mm thickness but also through its excellent “round-shape memory” avoiding kinking which increases the speed of abrasive products and outer wear by rubbing.

It can be equipped with Guillemin fittings swaged with aluminium or stainless steel ferrules.

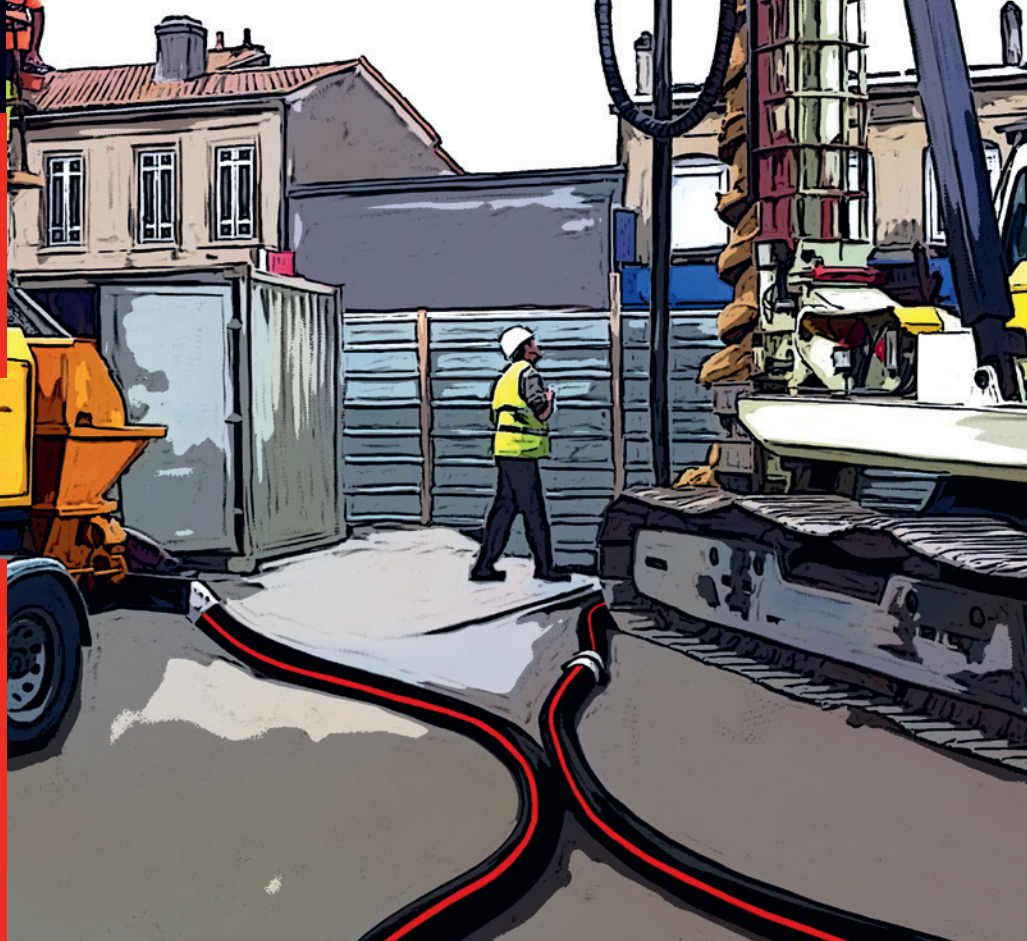


Part N°	Inner diameter		Outer diameter	Wall thickness	Working pressure	Burst pressure	Bend radius	Weight
	mm	Inch						
731 90x102	90	3"9/16	102	6	5	15	-	1,8
731 90x104	90	3"9/16	104	6	5	15	-	2,0
731 100x112	100	4"	112	6	5	15	-	2,0
731 110x122	110	4"11/32	122	6	5	15	-	2,1

Possible end-fittings : Guillemin, Storz

ABRASIVE SUCTION AND DELIVERY HOSE

10 BARS



DIN 53416

- Inner tube : black anti-abrasive SBR / NR rubber
- Reinforcement : 2 textile plies and 1 metal spiral
- Outer cover : abrasion and weather resistant SBR rubber
- Electrical conductivity : copper braid inserted between textile braids
- Outer finish : wrapped
- Temperature : - 30°C to +70°C
- Production lengths : 20 metres
- Colour : black
- Particularity : additional micro-perforation of the outer cover

Hose 741 is used for suction and delivery of abrasive products having an abrasion rating of 60mm<sup>3</sup> according to DIN 53516. It can be supplied with a parablond inner tube. It can also be used for sand, shot, gravel, etc...



Part N°	Inner diameter		Outer diameter	Wall thickness	Working pressure	Test pressure	Burst pressure	Bend radius	Weight
	mm	Inch							
741 40	40	1"9/16	58	9	10	15	30	140	2,0
741 50	50,8	2"	70	10	10	15	30	240	2,6
741 60	60	2"3/8	80	10	10	15	30	250	2,8
741 65	63,5	2"1/2	85	10	10	15	30	280	3,2
741 70	70	2"3/4	90	10	10	15	30	300	3,4
741 75	76,2	3"	96	10	10	15	30	325	4,1
741 80	80	3"5/32	101	10,5	10	15	30	400	4,8
741 90	90	3"9/16	113	11,5	10	15	30	430	5,8
741 100	101,6	4"	123	11	10	15	30	480	6,4
741 110	110	4"11/32	134	12	10	15	30	560	6,9
741 120	120	4"23/32	144	12	10	15	30	600	7,9
741 125	127	5"	151	12	10	15	30	625	8,2
741 125 x155	127	5"	155	14	10	15	30	625	8,9
741 140	140	5"1/2	162	11	10	15	30	720	10,0
741 150	152,4	6"	175	12	10	15	30	780	11,0
741 200	203,2	8"	230	14	10	15	30	1150	14,0
741 219	219	8"5/8	250	15,5	10	15	30	1300	15,0
741 250	254	10"	288	16	10	15	30	1550	22,0

Possible end-fittings : Flange, steel male thread

## ABRASIVE PRODUCT HANDLING HOSE

10 BARS



- Inner tube : abrasion resistant antistatic natural rubber.
- Reinforcement : high tensile synthetic textile, steel wire helix and antistatic copper wire
- Outer cover : abrasion, ozone and wather resistant corrugated special synthetic rubber
- Outer finish : corrugated
- Temperature : - 40°C to +70°C
- Production lengths : variable depending on the diameter
- Colour : black

This hose allows the assembly of flexible conducts for pneumatic handling of abrasive products, using 1/2 ISO PN cast aluminum flange shells that attach to the outside of the hose.

Assembly does not require particular formation nor specific tools.

No particular protection is necessary for its outdoor use and a simple regular visual control is sufficient.

The couplings are reusable, the replacement of the used lengths is quickly made.



Part N°	Inner diameter		Outer diameter	Vacuum	Working pressure	Burst pressure	Bend radius	Weight
	mm	Inch						
744 80x113	80	3"1/8	113	-0,92	10	30	350	6,584
744 101x133	101,6	4"	133	-0,92	10	30	500	7,663
744 127x158	127	5"	158	-0,92	10	30	650	9,817
744 152x183	152,4	6"	183	-0,92	10	30	750	12,117
744 203x234	203,2	8"	234	-0,92	10	30	1750	16,586
744 254x286	254	10"	286	-0,92	10	30	2000	22,175
744 304x341	304,8	12"	341	-0,92	10	30	2500	26,518

INDUSTRIAL VACUUM CLEANER HOSES  
PARA-BLOND OR PARA-BLACK TUBE



- Inner tube : beige natural rubber
- Reinforcement : 2 textile plies and 1 interlayered metal spiral
- Outer cover : abrasion and weather resistant rubber
- Electrical conductivity : copper braid interlayered between textile plies visible at cuff-ends
- Outer finish : wrapped and corrugated with flexible cuff-ends
- Temperature : - 30°C to +70°C
- Production lengths : 40 metres or to order
- Colour : 772 black, 777 natural

Hose 772 & 777 are used for pneumatically handling abrasive products. Light and with low bend radius, there intended for vacuuming industrial dust and shavings on mobile equipments. The 777 hose with a para-blond tube is softer than the 772. It can be supplied in predetermined lengths with flexible cuff-ends.

772 - Para-black



777 - Para-blond



Part N°		Inner diameter		Outer diameter	Wall thickness	Vacuum	Burst pressure	Bend radius	Weight
Para-black	Para-blond	mm	Inch	mm	mm	bar	bar	mm	kg/m
772 25	777 25	25	1"	32	3,5	- 0,9	-	150	0,5
772 38	777 38	38	1"1/2	46	4,0	- 0,9	-	220	0,6
772 50	777 50	50,8	2"	60	4,5	- 0,9	-	270	0,8
772 60	777 60	60	2"3/8	69	4,5	- 0,9	-	330	0,9
772 70	777 70	70	2"3/4	79	4,5	- 0,9	-	350	1,0
772 75	777 75	76,2	3"	85	4,5	- 0,9	-	410	1,1
772 80	777 80	80	3"5/32	90	5,0	- 0,9	-	440	1,5
772 100	777 100	101,6	4"	112	5,5	- 0,9	-	550	1,8
772 125	777 125	127	5"	138	5,5	- 0,9	-	600	2,8
772 150	777 150	152,4	6"	163	5,5	- 0,9	-	790	3,5
772 200	777 200	203,2	8"	216	6,5	- 0,9	-	1000	5,1
772 300	777 300	305	12"	318	6,5	- 0,9	-	1600	9,3

Possible end-fittings : Guillemín, manufacturer accessories

PARABLACK & PARABLOND  
SUCTION AND DELIVERY HOSE

3 BARS



- Inner tube: abrasion resistant natural rubber, thickness 5mm.
- Reinforcement : high tensile synthetic textile, steel wire helix and antistatic copper wire.
- Outer cover: abrasion, ozone and weather resistant special synthetic rubber.
- Outer finish : corrugated.
- Temperature: - 40°C to +70°C
- Production lengths: crowns or fixed lengths with flexible cuff-ends.
- Colour : black

Hoses 787 and 788 are used for pneumatically handling abrasive products: they can be delivered in length predetermined with flexible cuff-ends.

The braids of copper going out before the flexible cuff-ends allow one easier connection and of better quality.

787 - Para-blond



788 - Para-black



Part N°		Inner diameter		Outer diameter	Working pressure	Burst pressure	Vacuum	Bend radius	Weight
Para-blond	Para-black	mm	Inch	mm	bar	bar	bar	mm	kg/m
787 25	788 25	25,4	1"	37,5	3	9	- 0,92	50	0,80
787 32	788 32	32	1" 1/4	44	3	9	- 0,92	65	0,91
787 38	788 38	38	1" 1/2	51	3	9	- 0,92	80	1,23
787 50	788 50	50,8	2"	64,5	3	9	- 0,92	130	1,69
787 65	788 65	63,5	2" 1/2	77,5	3	9	- 0,92	175	2,28
787 70	788 70	70	3"	86	3	9	- 0,92	220	2,96
787 75	788 75	76,2	3"	90,5	3	9	- 0,92	250	2,96
787 80	788 80	80	3" 5/32	95	3	9	- 0,92	280	3,40
787 90	788 90	90	3" 1/2	106	3	9	- 0,92	300	3,71
787 100	788 100	101,6	4"	119	3	9	- 0,92	350	4,49
787 125	788 125	127	5"	147	3	9	- 0,92	450	6,56
787 150	788 150	152,4	6"	173	3	9	- 0,92	630	8,64
787 200	788 200	203,2	8"	227	3	9	- 0,80	950	13,6
787 250	788 250	254	10"	279	3	9	- 0,80	1200	16,7

ABRASIVE PRODUCT DELIVERY HOSE

40 BARS



- Inner tube : smooth black natural rubber based anti-abrasive SBR / NR rubber
- Reinforcement : textile braid
- Outer cover : abrasion and weather resistant SBR rubber
- Electrical conductivity : inner tube is conductive
- outer finish : wrapped
- Temperature : -30°C to +70°C max
- Production lengths : 40 metres
- Colour : black

Hose 791 is used for the projection of various abrasive products : mortar, concrete, other coatings. Where there is no risk of high traction, it can be used for concrete injection at 40 bars. Its abrasion rating, according to 53516 standards, is 60mm<sup>3</sup>. It can be equipped with swaged end-fittings.



Part N°	Inner diameter		Outer diameter	Wall thickness	Working pressure	Burst pressure	Bend radius	Weight
	mm	Inch						
791 25x38	25	1"	38	6,5	40	120	100	0,75
791 35x49	35	1"3/8	49	7	40	120	180	1,1
791 50x68	50,8	2"	68	8,5	40	120	280	1,95
791 65x85	65	-	85	10,0	40	120	380	2,9
791 76x96	76	3"	96	10,0	40	120	600	3,14
791 90x112	90	3"1/2	112	10,0	40	120	800	4,1

Possible end-fittings : steel Cam-lock, threaded  
See also 711, 798

## CONCRETE PUMPING HOSE

85 BARS



- Inner tube : smooth black anti-abrasive SBR/NR rubber
- Reinforcement : 2 or 4 brass-clad metal spirals
- Outer cover : abrasion and weather resistant SBR rubber
- Outer finish : fine tape wrapped
- Temperature : -30°C to +70°C maximum
- Production lengths : 40 metres
- Colour : black with yellow stripe

In its smaller diameters, hose 798 is intended for discharge of abrasive products : mortars, plaster, cement concrete, drilling muds.

From diameter 75mm up, it is intended for spreading of pumped concrete under high pressure (80 bars).

Its metallic structure ensures it is very robust.

Its abrasion index is less than 60 mm<sup>3</sup> according to DIN 5351G.

Very flexible, it also has a low bend radius.

It can be equipped with swaged end-fittings machined from steel ST 52 DIN 1629 / ST 52.3 DIN 17121 / ST 52.4 DIN 1630 and having undergone a hardening heat treatment.

In order to have a full flow, hose end are reamed out.

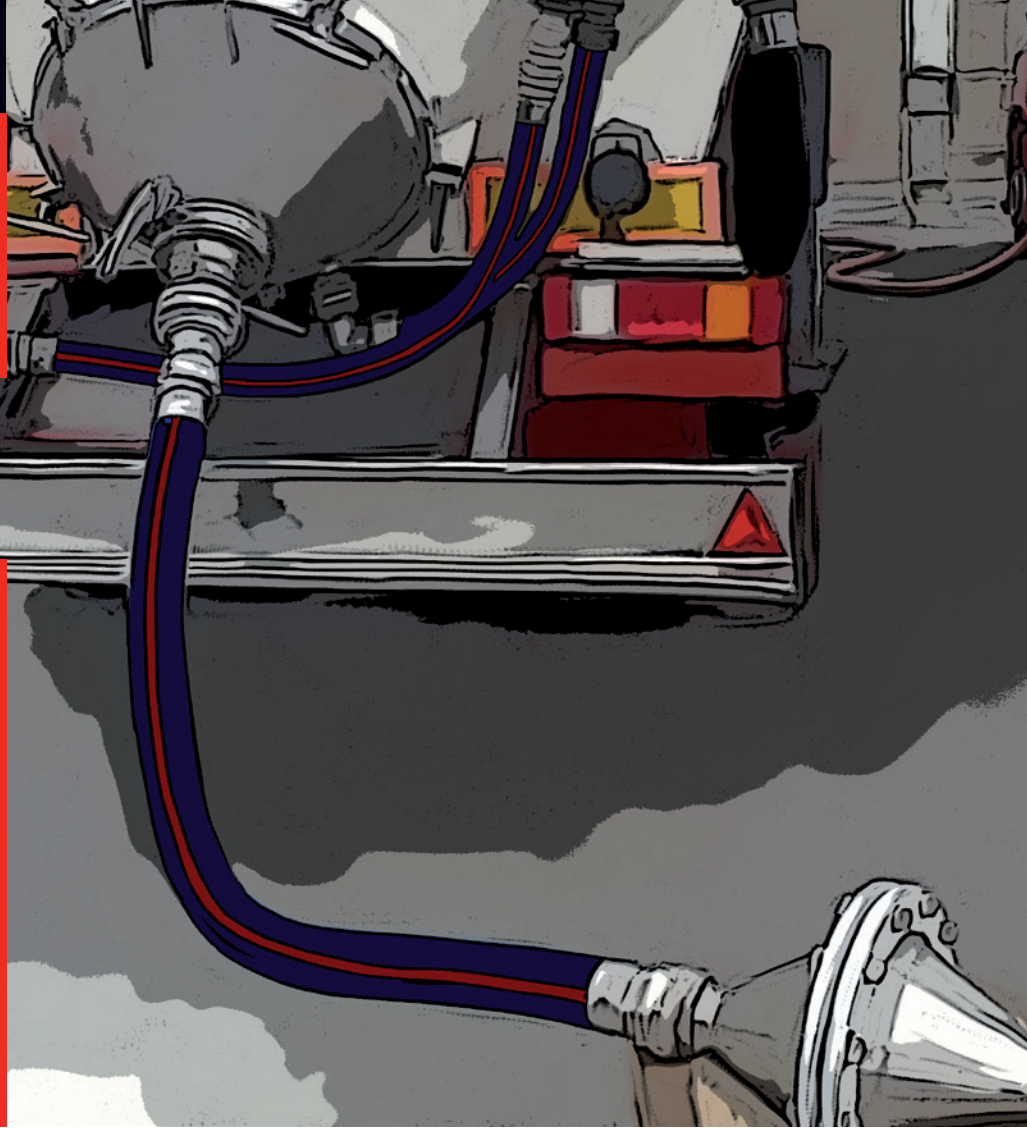


Part N°	Inner diameter		Outer diameter	Wall thickness	Working pressure	Burst pressure	Bend radius	Weight
	mm	Inch						
798 50	50,8	2"	68	9	85	200	250	3
798 63	63,5	2"1/2	85	11	85	232	280	4,5
798 75	76	3"	102	13	85	250	310	5,5
798 100	101,6	4"	130	14	85	225	400	8,4
798 127	127	5"	155	14	85	200	520	9,6
798 150	152,4	6"	185	17	60	175	580	11,0

Possible end-fittings : Victaulic, a gorge (constructeur)

**ABRASIVE FOOD PRODUCT  
DELIVERY HOSE**

**5 BARS**

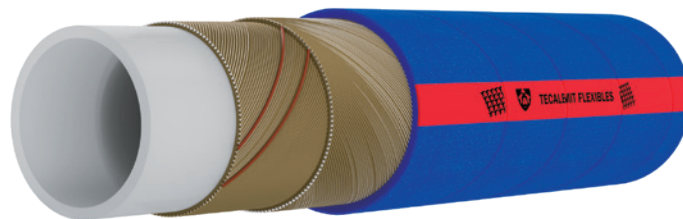


- Inner tube : white anti-abrasive food quality NR rubber
- Reinforcement : 2 textile plies
- Outer cover : abrasion and weather resistant CR rubber
- Electrical conductivity : copper braid inserted between textile plies
- Outer finish : wrapped
- Temperature : -30°C to +60°C
- Production lengths : 20 metres
- Colour : blue or black

Hose 831 is intended for discharging food products such as suger, powdered milk and flour. it is also used for discharging pvc granulates. in 5mm thickness, it can be rolled flat.

In 7mm thickness, its life span is increased by using a 5mm thick inner tube and through its “round-shape memory” which avoids kinking.

It can be delivered in lengths equipped with Guillemin fitting in aluminum or stainless steel set with socket aluminum or stainless steel.



Part N°	Inner diameter		Outer diameter	Wall thickness	Working pressure	Burst pressure	Bend radius	Weight
	mm	Inch						
831 76x86	76,4	3"	86	5	5	15	-	1,3
831 90x100	90	3"1/2	100	5	5	15	-	1,5
831 90x104	90	3"1/2	104	7	5	15	900	2,0
831 101x116	101,6	4"	112	5	5	15	1000	3,0
831 110x122	110	4"11/32	122	6	5	15	1100	2,9

Possible end-fittings : Guillemin, Storz





## STEAM DELIVERY RUBBER HOSES



## 125°C FOOD INDUSTRY STEAM HOSE

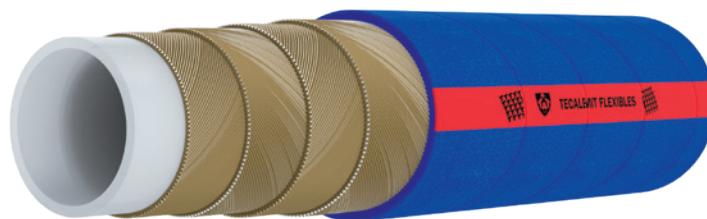
5 BARS



Inner tube : white EPDM rubber  
 Reinforcement : textile plies  
 Outer cover : blue EPDM rubber  
 Outer finish : fine tape wrapped  
 Temperature : -40°C to +125° C, dawning  
 in 170°C acceptable  
 Production lengths : 40 meters  
 Colour : blue



Hose 513 is high quality hose intended for the food industry.  
 It is suitable for steaming in a food environment in an environment without fatty substances.  
 Its blue outer cover does not mark floors.  
 Its resistance to aging is excellent.  
 Its thick wall ensures keeping a round shape.  
 Non conductive of electricity, it is also used in industrial applications.



Part N°	Inner diameter		Outer diameter	Wall thickness	Working pressure	Burst pressure	Bend radius	Weight
	mm	Inch						
513 8x17	8	5/16"	17	4,5	5	50	60	0,3
513 10x18	10	3/8"	18	4,0	5	50	90	0,3
513 13x22	12,7	1/2"	22	4,5	5	50	110	0,4
513 16x28	15,9	5/8"	28	6,0	5	50	140	0,6
513 19x31	19	3/4"	31	6,0	5	50	160	0,7
513 25x38	25,4	1"	38	6,5	5	50	210	0,9
513 30x42	30	1" 3/16	42	6,0	5	50	270	1,0
513 32x45	31,8	1" 1/4	45	6,5	5	50	280	1,1
513 35x48	35	1" 3/8	48	6,5	5	50	300	1,2
513 38x51	38,1	1" 1/2	51	6,5	5	50	350	1,3
513 40x53	40	1" 9/16	53	6,5	5	50	380	1,4
513 42x55	42	1" 5/8	55	6,5	5	50	400	1,5

Possible end-fittings : Threaded

232°C STEAM HOSE  
EN ISO 6134 2/A

17,5 BARS



EN ISO 6134 2/A

- Inner tube : black EPDM rubber
- Reinforcement : metal spirals
- Outer cover : black EPDM rubber
- Outer finish : fine tape wrapped
- Temperature : -40°C to +232°C
- Production lengths :  
Ø 13, 16, 32, 38, 50, 53 : 40 meters  
Ø 19, 25: 60 meters
- Colour : black with red stripe

Hose 532 is intended to convey superheated steam at 17 bars and 232°C (in accordance with type 2 of standard ISO 6134 and with type 3 of standard NFT 47263) with an EPDM coating not resistant to oils and hydrocarbons (in accordance with class A of standard ISO 6134 and the category 1 of NFT 47263).

It is used in refineries and in the chemical industry for steam cleaning and for the circulation of superheated and saturated steam.

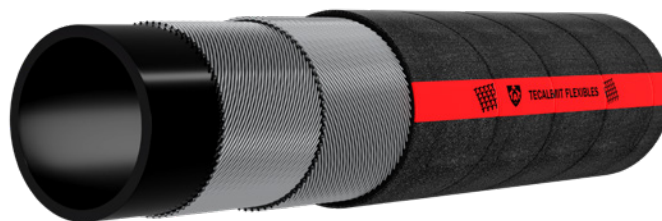
It is used for the circulation of steam or hot water, but cannot do it alternately.

Consequently, to avoid its deterioration by the effect of „Pop-corning“ it is necessary to remove the condensates after use.

Its wire spiral reinforced structure gives it an excellent bend radius.

The EPDM rubber ensures long life.

It can be equipped with swaged or clamp-type fittings.



Part N°	Inner diameter		Outer diameter	Wall thickness	Working pressure	Burst pressure	Bend radius	Weight
	mm	Inch						
532 13	12,7	1/2"	25	6,0	18	180	120	0,6
532 16	15,9	5/8"	29	6,5	18	180	160	0,8
532 19	19	3/4"	32	6,5	18	180	190	0,9
532 25	25,4	1"	38	6,5	18	180	250	1,2
532 32	31,8	1" 1/4	46	7,0	18	180	320	1,5
532 38	38,1	1" 1/2	54	8,0	18	180	200	1,7
532 51	50,8	2"	68	8,5	18	180	500	2,3
532 55	55	2"3/8	71	8,5	18	180	532	2,4
532 63	63,5	2"1/2	80	8,0	18	180	630	2,6
532 75	76	3"	93	8,5	18	180	750	3,1
532 100	101,6	4"	124	10,0	18	180	1000	6,2
532 125	127	5"	141	12,0	18	180	1300	8,1

Possible end-fittings : Threaded, boss, Weco, Flanges

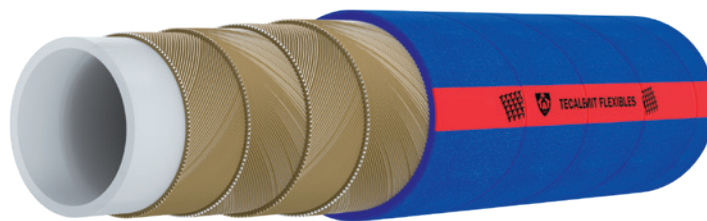
95°C STEAM HOSE FOR CLEANING  
IN THE FOOD INDUSTRY

15 BARS



- Inner tube : white NBR rubber
- Reinforcement : textile plies
- Inner tube : blue NBR rubber
- Outer finish : fine tape wrapped
- Temperature : -40°C to +95°C
- Production lengths : 40 meters
- Colour : blue

Hose 851 is a premium, non-conductive hose for hot water cleaning in the food industry. Its blue outer cover does not mark floors and resist to plant and animal grease . His smooth tube is rubber white of food quality. It complies with European directives N°93/11.



Part N°	Inner diameter		Outer diameter	Wall thickness	Working pressure	Burst pressure	Bend radius	Weight
	mm	Inch						
851 13x22	13	1/2"	22	4,5	15	50	110	0,4
851 16x28	15,9	5/8"	28	6,0	15	50	140	0,6

Possible end-fittings : Threaded



## FOOD DELIVERY RUBBER HOSES



**SUCTION AND DELIVERY HOSE  
FOR BEVERAGES (FDA)**
**10 BARS**


**Inner tube : white EPDM rubber**  
**Reinforcement : 2 textile plies and 1 steel spiral**  
**Outer cover: abrasion, ozone and weather resistant special synthetic rubber**  
**Outer finish : smooth**  
**Temperature : -40°C to +120° C**  
**Production lengths : 40 or 60 meters**  
**Colour : red**



The food-grade hose 800 (ISO 1307) is designed for the suction and discharge of beverages such as wine, beer, liquors, mineral water, fruit juice, etc.

Its internal pipe in white EPDM is non-toxic, anti-odour and does not pass on any taste.

Its coating is resistant to external aggressions such as abrasion, ozone and atmospheric agents.

The inside of the hose is reinforced with two textile braids and one metal coil.

It complies with European and FDA food standards.

The hose can be sanitised at max 130°C for 15 minutes with steam at 60°C, or with soda for 15 minutes.



Part N°	Inner diameter		Outer diameter	Wall thickness	Working pressure	Burst pressure	Vacuum	Bend radius	Weight
	mm	Inch							
800 19	19	3/4"	30	5,5	10	30	- 0,92	60	0,55
800 25	25,4	1"	37	6	10	30	- 0,92	75	0, 71
800 32	32	1" 1/4	44	6	10	30	- 0,92	95	0, 94
800 38	38	1" 1/2	51	6,5	10	30	- 0,92	110	1,18
800 40	40	1"9/16	52	6	10	30	- 0,92	120	1,43
800 45	44,5	1" 3/4	57,5	6,5	10	30	- 0,92	130	1,36
800 50	50,8	2"	65	7	10	30	- 0,92	150	1,65
800 63	63,5	2" 1/2	77,5	7	10	30	- 0,92	280	2,07
800 75	76,2	3"	92	8	10	30	- 0,92	340	2,68
800 100	101,6	4"	117,5	8	10	30	- 0,92	450	3,54

**SUCTION AND DELIVERY HOSE  
FOR FOOD LIQUID**
**8 BARS**


- Inner tube : white EPDM rubber
- Reinforcement : 2 textile plies and 1 steel spiral
- Outer cover : UV-resistant EPDM rubber
- Outer finish : smooth wrapped
- Temperature : -40°C to +120°C
- Production lengths : 40 meters
- Colour : blue

Designed for the transfer of food fluids, it also equips bulk transport road tanks, hose 842 withstands a compressed air temperature of 120 °C.

With a smooth outer finish, it has an excellent bend radius allowing different installations on truck rears. It can be equipped with swaged guillemin end-fittings using aluminium or stainless steel ferrules.



Part N°	Inner diameter		Outer diameter	Wall thickness	Working pressure	Burst pressure	Bend radius	Weight
	mm	Inch						
842 19	19	3/4"	29	5	8	24	95	0,70
842 25	25,4	1"	36	5,5	8	24	127	0,71
842 32	31,8	1"1/4	43	5,5	8	24	159	1,00
842 38	38	1"1/2	50	6	8	24	190	1,12
842 40	40	-	52	6	8	24	200	1,25
842 45	45	-	57	6	8	24	225	1,59
842 51	50,8	2"	65	7,1	8	24	254	2,00
842 53	53	-	65	6	8	24	265	1,60
842 63	63,5	2"1/2	76	6,5	8	24	317	2,07
842 70	70	2"3/4	83	6,5	8	24	350	2,04
842 76	76,2	3"	92	8	8	24	381	3,18
842 90	90	3"9/16	104	7	8	24	450	3,42
842 102	101,6	4"	116	7	8	24	508	3,80
842 110	110	4"11/32	124	7	8	24	510	4,20

Possible end-fittings : Guillemin, Storz, DIN, SMS



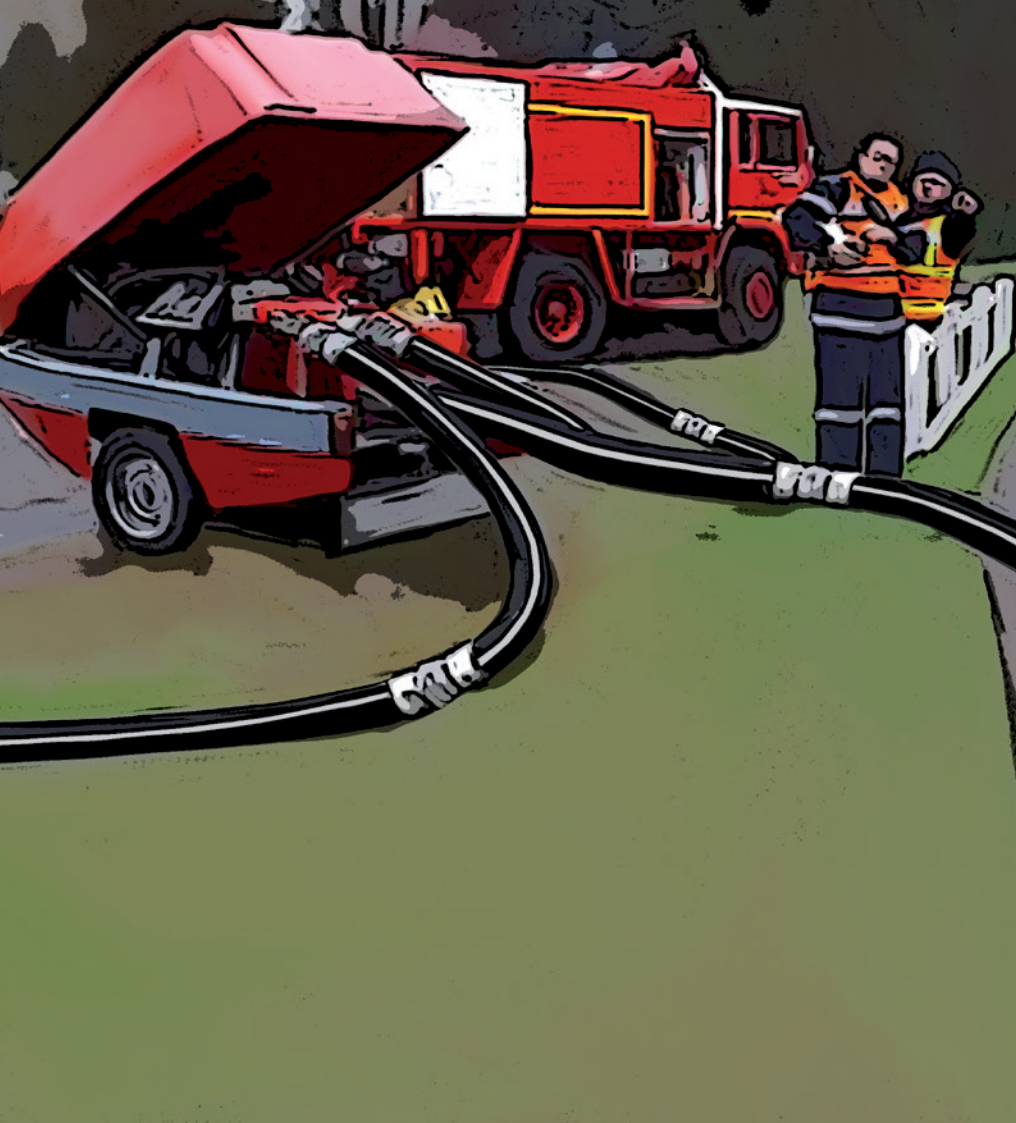
## CIVIL SECURITY DELIVERY RUBBER HOSES



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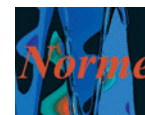
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**CROPPABLE WATER  
SUCTION AND DELIVERY HOSE  
NF EN ISO 14557**

**6 BARS**



ISO 14557



- Inner tube : smooth SBR rubber
- Reinforcement : 4 textile plies and metal spiral
- Outer cover : abrasion and weather resistant SBR rubber
- Admissible negative pressure : 0.9 bars
- Outer finish : wrapped
- Temperature : 90°C max
- Production lengths : 2 meters
- Colour : black

This very robust hose is swaged with half-symmetrical guillemin fittings in diameters 40 and 70, and with AR fittings in diameter 100 in order to obtain hose assemblies for civil protection equipment. These are in accordance with NFS 61113 and the new NF EN ISO 14557 standard. The conformity of these products with the ISO 14557 standard is guaranteed by AFNOR Certification who have authorised the NF logo on these hoses.



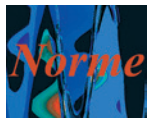
Firefighters materials  
N° : 111.TA.06

Part N°	Inner diameter		Outer diameter	Wall thickness	Working pressure	Burst pressure	Bend radius	Weight
	mm	Inch						
ASPIRAL DN 40	45	1"3/4"	55	5	6	17	320	1,2
ASPIRAL DN 60	70	2" 3/4	82	6	6	17	570	2,8
ASPIRAL DN 100	110	4"11/32	124	7	6	17	800	4,5

Possible end-fittings : half-symmetrical guillemin fitting dia. 40 & 65 & ar setting dia. 100

## HOSE NF EN 1947 FOR FIRE DEPARTMENT HOSE REELS

40 BARS



NF EN 1947

- Inner tube : black SBR rubber
- Reinforcement : textile plies
- Outer cover : black CR abrasion resistant rubber
- Outer finish : fine tape-wrapped
- Temperature : 0°C to 90°C
- Production lengths : 60 meters
- Colour : black



Hose 114 is used on fire department hose reels for delivery of water at 40 bars.

This hose has been approved by the French interior ministry for use by civil protection services.

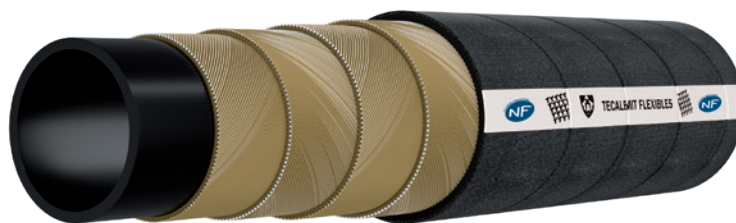
This hose conforms to NF EN 1947 class 1 standards (its inner tube and outer cover are in rubber) category 2 and type C (wp 40 bars and minimum burst pressure 120 bars) : it is therefore a high quality hose.

Compared with the red PVC hose which is usually found on booster lines, this hose has many advantages : same flexibility during high summer temperatures or during the winter colds, same working pressure at 20°C or 90°C, better fire-resistance, bend radius and resistance to deformation.

It has less "reel-shape memory", which facilitates use in stairways during interventions on fires in garbage chutes.



Firefighters materials  
N° : 111.TSR.06



Part N°	Inner diameter		Outer diameter	Wall thickness	Working pressure	Burst pressure	Bend radius	Weight
	mm	Inch						
114 25	25,4	1"	36	5,5	40	120	90	0,7

Possible end-fittings : GFR, threaded

EMBOSSED MARKING : ACCORDING TO THE NORM  
WHITE LAYLINE MARKING : ACCORDING TO THE NORM

**HOSES NF EN 1947 +A1  
FOR FIRE FIGHTING APPLICATION  
IN FIRE REELS**



NF EN 1947+A1



- Inner tube : black PVC
- Reinforcement : 1 textile braid
- Outer cover : PVC, flame resistant
- Outer finish : smooth
- Temperature : -20°C to + 60°C
- Production lengths : 20, 30, 40 meters
- Colour : red or black on request

The semi-rigid (TSR) hoses REF 995 25 and REF 996 25 are used for fire fighting application in fire reels. These are in accordance with NF EN 1947 + A1 classe 2 standard. Hose 995 25 is Class 1 and hose 996 25 is Class 2.



Firefighters materials  
N° : 111.TSR.07

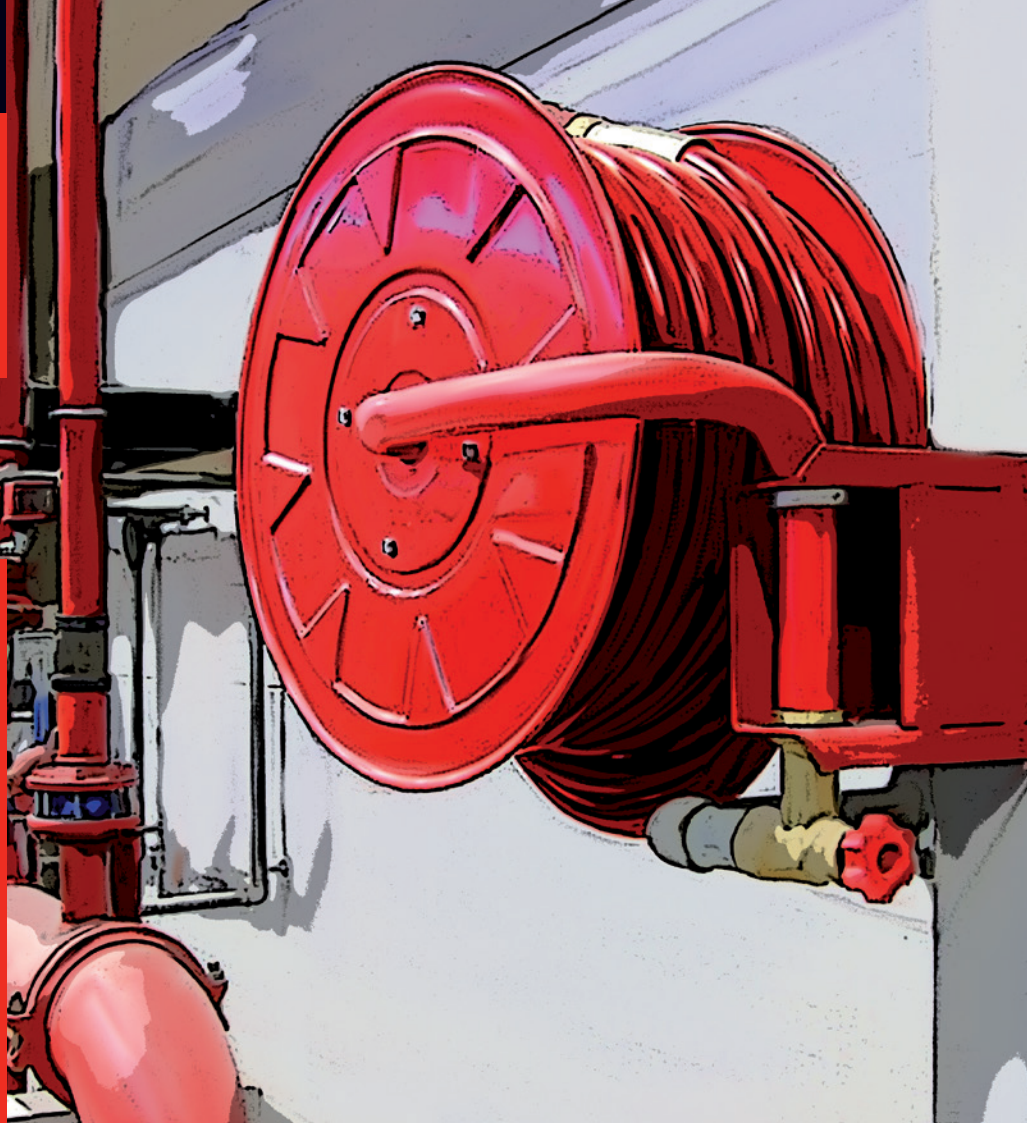
Part N°	Inner diameter		Outer diameter	Wall thickness	Working pressure	Burst pressure	Bend radius	Weight
	mm	Inch						
995 25	25	1"	34	4,3	15	45	120	0,56
996 25	25	1"	35,5	5,2	40	100	120	0,75

Possible end-fittings : threaded, GFR, Half-symetrical guillemin

**HOSE FOR FIRE TAPS REINFORCED  
AND FIRE STATIONS ADDITIVE  
EN 694+A1**

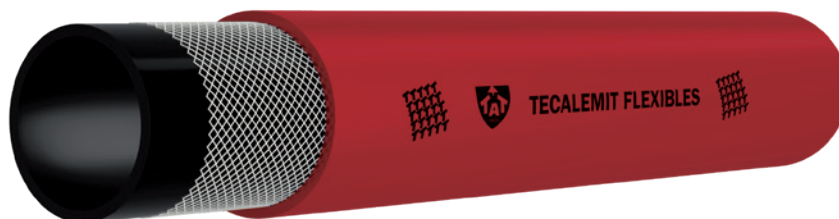


- Inner tube : black PVC
- Reinforcement : 1 textile braid
- Outer cover : PVC, flame resistant
- Outer finish : smooth
- Temperature : -20°C to + 60°C
- Production lengths : 20 meters
- Colour : red



The hose 997 are intended for RIA equipment (fire taps reinforced) and PIA (fire stations additive) found in some place of public assembly.

These are in accordance NF EN694 + A1 (NFS 61 115) type A classe 2 standard.



Part N°	Inner diameter		Outer diameter	Wall thickness	Working pressure	Burst pressure	Bend radius	Weight
	mm	Inch						
997 19	19	3/4"	26	3,5	12	42	230	0,385
997 25	25	1"	33	4	12	42	300	0,565
997 33	33		43	5	7	25	385	0,910

Possible end-fittings : threaded, GFR, Half-symmetrical guillemin



## STEEL INDUSTRY DELIVERY RUBBER HOSES

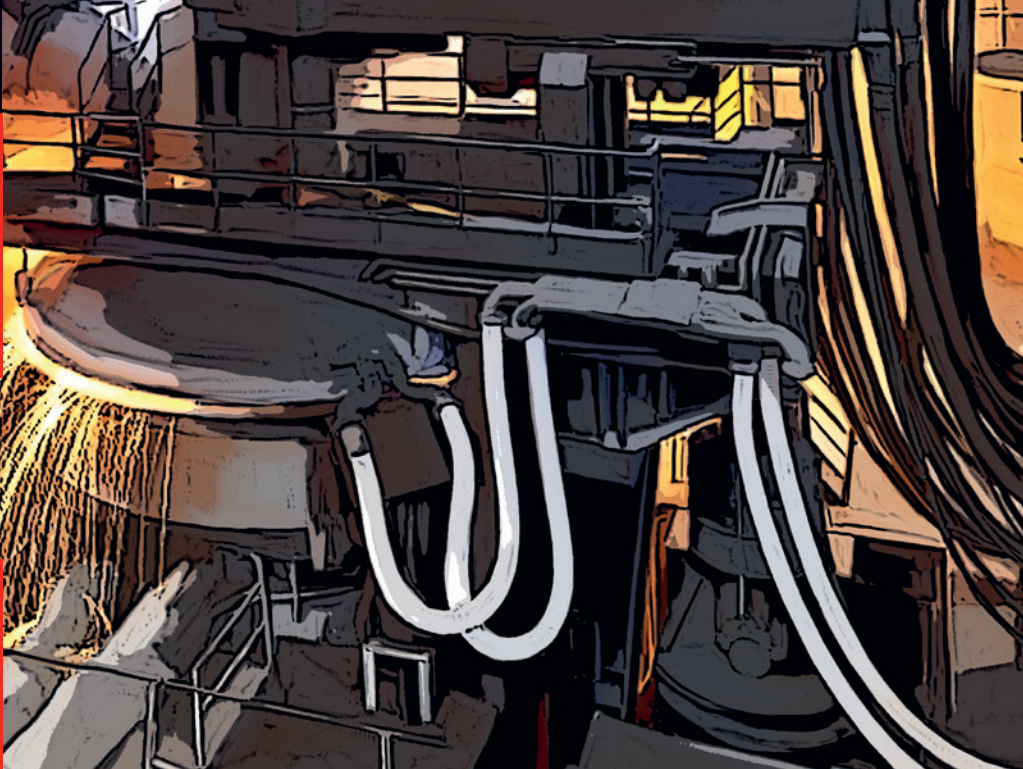


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**BLAST FURNACE HOSE**

**15 BARS**



- Inner tube : white insulating EPDM rubber
- Reinforcement : textile plies
- Outer cover : white auto-extinguishing insulating neoprene rubber with vulcanised glass fibre coating
- Inner tube working temperature : -40°C to +120°C
- Outer tube working temperature : +540°C, peaks to 1000°C
- Outer finish : glass fibre
- Production lengths : 40 meters
- Colour : white

Hose 854 is intended for the discharge of blast furnace door cooling water as well as applications where hose resistance to ambient temperatures is necessary.

It can also be used as a sheath to protect cables and other hoses from heat radiation.

This high quality hose is electrically insulating. It can be equipped with swaged end-fittings.



Part N°	Inner diameter		Outer diameter	Wall thickness	Working pressure	Burst pressure	Bend radius	Weight
	mm	Inch						
854 13	13	1/2"	24	5,5	15	50	100	0,4
854 16	16	5/8"	29	6,5	15	50	120	0,5
854 19	19	3/4"	32	6,5	15	50	140	0,7
854 25	25	1"	38	6,5	15	50	180	0,8
854 30	30	1" 3/16	44	7,0	15	50	210	1,0
854 32	32	1" 1/4	47	7,5	15	50	230	1,1
854 35	35	1" 3/8	50	7,5	15	50	240	1,3
854 38	38,1	1" 1/2	53	7,5	15	50	260	1,4
854 40	40	1" 9/16	55	7,5	15	50	280	1,5
854 42	42	1" 5/8	57	7,5	15	50	300	1,6
854 45	45	1" 3/4	60	7,5	15	50	320	1,7
854 50	50,8	2"	66	8,0	15	50	350	2,0
854 53	53	-	73	10	15	50	400	2,5
854 57	57	2"1/4	73	8	15	50	500	2,2
854 60	60	2" 3/8	76	8,0	15	50	420	2,2
854 65	65	-	85	10,0	15	50	440	2,8
854 70	70	2" 3/4	87	8,5	15	50	490	2,9
854 76	76,2	3"	94	9,0	15	50	530	3,0
854 90	90	3" 5/8	113	11,5	15	50	630	5,0
854 100	101,6	4"	120	10,0	15	50	700	5,2
854 127	127	5"	147	10,0	15	50	780	7,2
854 140	140	5" 1/2	160	10,0	15	50	900	8,0
854 150	152,4	6"	174	11,0	15	50	1050	8,6
854 160	160	6" 5/16"	180	10,0	15	50	1200	9,7
854 200	203,2	8"	228	12,0	15	50	1400	14,0

Possible end-fittings : Male threaded, Flange, Cam type  
See also 855

## BLAST FURNACE HOSES

15 BARS



- Inner tube : white insulating EPDM rubber
- Reinforcement : textile plies and metal spiral
- Outer cover : white insulating fire-resistant CR rubber with vulcanised glass fibre coating
- Inner tube working temperature :  
-40°C to +120°C
- Outer tube working temperature :  
+540°C, peaks to 1000°C
- Outer finish : glass fibre
- Production lengths : 40 meters
- Colour : white

Hose 855 is intended for suction and delivery of water for cooling blast furnace doors and in applications where the outer cover must resist ambient temperatures.

Its metal spiral gives excellent bend radius.

This hose can also have a galvanised steel braid sheath to mechanically protect the glass fibre coating.

It can be equipped with swaged end-fittings in all diameters.

Hose 856 has a polyester spiral which allows it to be used in electromagnetic environments.

855 - metal spiral



856 - polyester spiral



Part N°	Inner diameter		Outer diameter	Wall thickness	Working pressure	Burst pressure	Bend radius	Weight
	mm	Inch						
855 30	30	1" 3/16	45	7,5	15	50	130	1,0
855 32	32	1" 1/4	47	7,5	15	50	180	1,2
855 35	35	1" 3/8	51	8	15	50	200	1,3
855 38	38	1" 1/2	54	8	15	50	220	1,4
855 40	40	1" 9/16	56	8	15	50	230	1,7
855 42	42	1" 5/8	58	8	15	50	250	1,8
855 50	50,8	2"	66	8	15	50	280	2,2
855 60	60	2" 3/8	76	8	15	50	300	2,4
855 63,5	63,5	2" 1/2	81	8,5	15	50	350	2,5
855 70	70	2" 3/4	89	9,5	15	50	380	2,6
855 76	76,2	3"	95	9,5	15	50	400	3,4
855 90	90	3" 5/8	109	9,5	15	50	500	4,0
855 100	100	4"	121	10,5	15	50	550	4,5
855 110	110	4" 11/32	130	10	15	50	670	5,5
855 127	127	5"	147	10	15	50	700	6,0
855 150	152,4	6"	174	10	15	50	750	8,0
855 200	203,2	8"	236	17	15	50	1000	18,2

Possible end-fittings : Male threaded, Flange, Cam type  
See also 854



## CHEMICAL DELIVERY RUBBER HOSES



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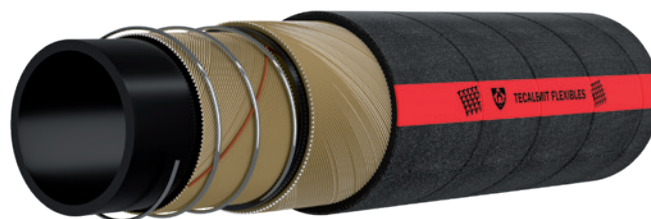


**SUCTION AND DELIVERY HOSE  
CHEMICALS AND CORROSIVES**
**10 BARS**

**EN 12115**

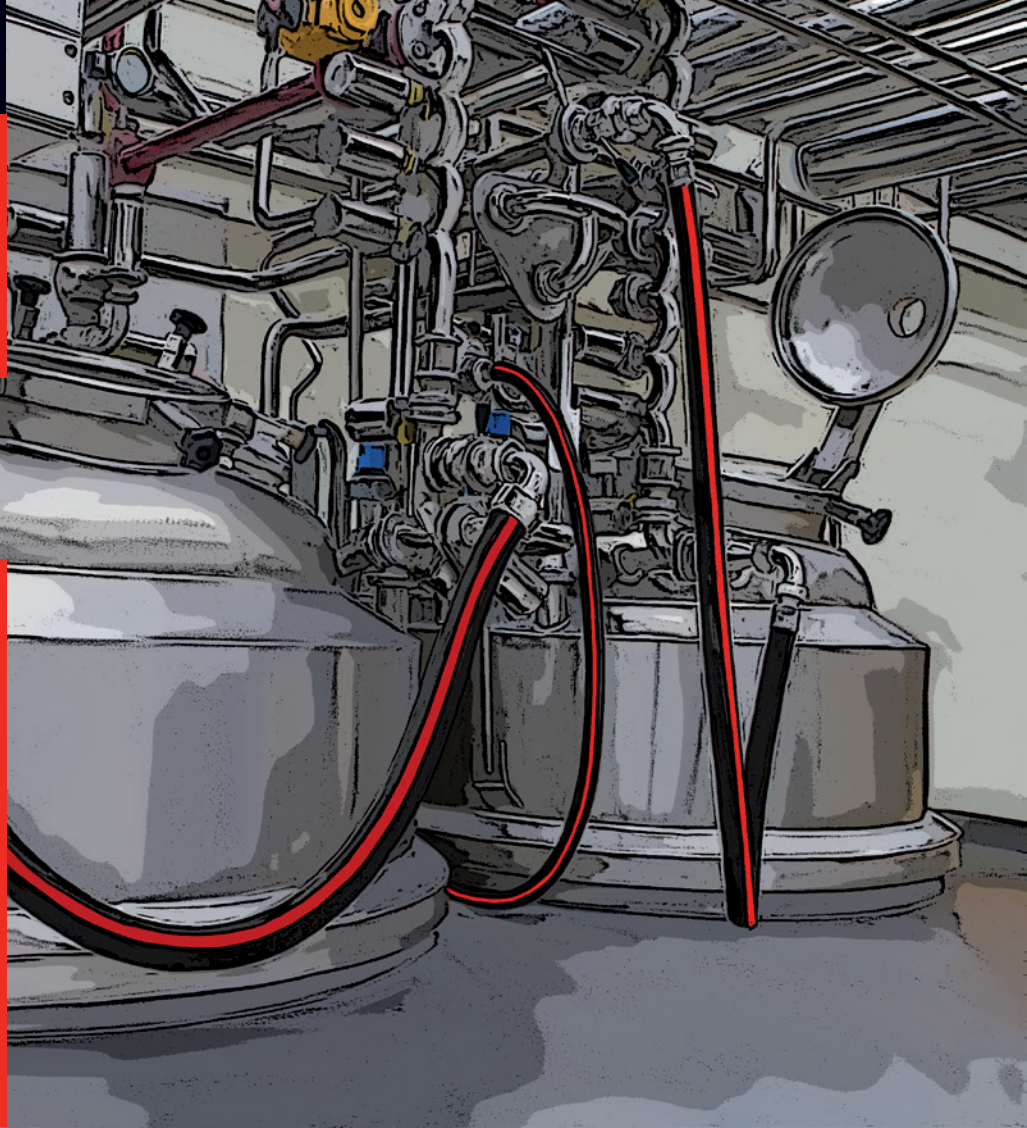

- Inner tube : Ultra high molecular weight polyethylene
- Reinforcement : high tensile synthetic textile, steel wire helix and antistatic copper wire
- Outer cover : black EPDM rubber abrasion and weather resistant
- Outer finish : wrapped
- Temperature : -40°C to +80°C max
- Production lengths : 40 meters
- Colour : black

This hose 610 is suitable for the transfer of the majority of corrosive chemicals: concentrated acids, oxygenated solvents, chlorinated or with high aromatic content, as well as hydrocarbons with high aromatic content. It is used in road and rail transport. It can be steam cleaned at 120 °C. It is produced in accordance with standard EN 12115.



Part N°	Inner diameter		Outer diameter	Wall thickness	Working pressure	Burst pressure	Vacuum	Bend radius	Weight
	mm	Inch							
610 19	19	3/4"	31	6	10	40	-0,92	80	0,7
610 25	25,4	1"	37	5,8	10	40	-0,92	110	0,8
610 32	32	1"1/4	45	6,5	10	40	-0,92	165	1,1
610 38	38	1"1/2	52	7	10	40	-0,92	225	1,5
610 45	44,5	1"3/4	59	7,25	10	40	-0,92	285	1,8
610 50	50,8	2"	67	8,1	10	40	-0,92	350	2,3
610 63	63,5	2"1/2	80	8,25	10	40	-0,92	450	2,3
610 70	70	2"3/4	87	8,5	10	40	-0,92	550	3,2
610 75	76,2	3"	93	8,4	10	40	-0,92	800	3,3
610 100	101,6	4"	120	9,2	10	40	-0,92	1200	4,9

Possible end-fittings : Threaded, Guillemin, Storz

**SUCTION AND DELIVERY HOSE  
CHEMICALS AND CORROSIVES**
**10 BARS**


EN 12115

- Inner tube : white PTFE
- Reinforcement : high tensile synthetic textile, steel wire helix and antistatic copper wire
- Outer cover : EPDM conductive
- Outer finish : wrapped semi-corrugated
- Temperature : -40°C to + 150°C
- Production lengths : 40 meters
- Colour : black

Hose 680 is suitable for the transfer of most chemicals, depending on the compatibility chart.  
Its PTFE tube is coextruded in white and smooth color.

Its coating is slightly wavy.

This hose is used in the chemical industry but also in the pharmaceutical, food and cosmetic industries.  
It is produced in accordance with standard EN 12115.



Part N°	Inner diameter		Outer diameter	Wall thickness	Working pressure	Burst pressure	Bend radius	Weight
	mm	Inch						
680 13	13	1/2"	25	6	10	40	55	0,5
680 19	19	3/4"	31	6	10	40	75	0,6
680 25	25	1"	37	6	10	40	95	0,8
680 32	32	1"1/4	44	6	10	40	115	0,9
680 38	38	1"1/2	51	6,5	10	40	140	1,2
680 50	50	2"	66	8	10	40	190	2,0
680 63,5	63,5	2"1/2	79,5	8	10	40	245	2,5
680 75	75	3"	91	8	10	40	330	3,0
680 100	100	4"	116	8	10	40	475	3,8

Possible end-fittings : Guillemín, Flange, Todo, Threaded

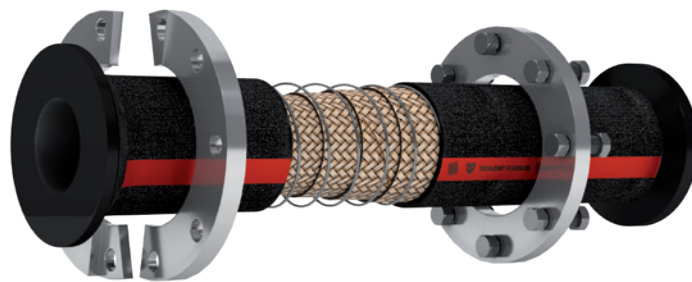
**MATERIAL HANDLING RUBBER  
BEADED END WITH FLANGE**
**10 BARS**


- Inner tube: special synthetic rubber EPDM or UHMWPE or XLPE
- Reinforcement : high tensile synthetic textile, steel wire helix and antistatic copper wire
- Outer cover: abrasion, ozone and weather resistant special synthetic rubber
- Outer finish : smooth
- Temperature: -40°C to +65°C
- Production lengths: 1,5 m to 20 m until 8". 1,5 m to 10 m for 10" and 12"
- Colour : black

This hose is intended for aspiration and delivery chemical corrosive products of certain solvents.

The rubber collars molded at the tips prevent contact of the corrosive fluid with the metal clamp consisting of two half clamps, made indifferently according to EN 1092 (PN designated flanges) or EN 1759 (Class designated flanges) or ASME B16.5.

The lengths can be produced with a UHMWPE (high molecular weight polyethylene) tube, or EPDM or XLPE (film coated polyethylene) depending on the fluid conveyed.



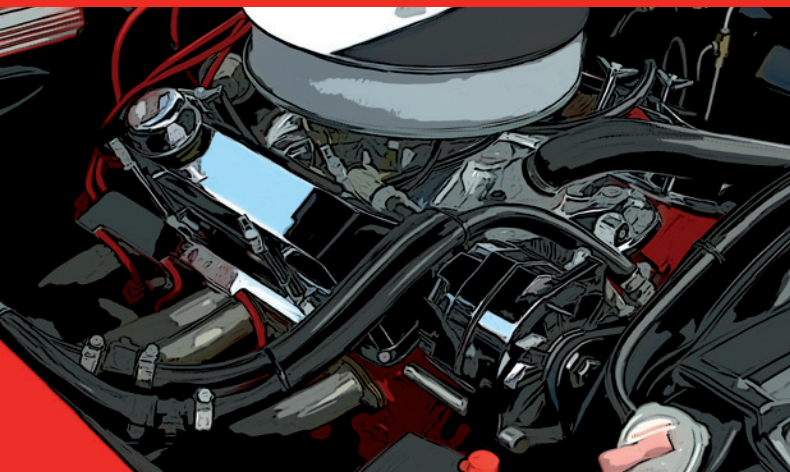
Part N°	Inner diameter		Outer diameter	Working pressure	Burst pressure	Vacuum	Bend radius	Weight
	mm	Inch						
687 80	80	3"1/8	103	10	40	-0,80	350	4,1
687 100	101,6	4"	126	10	40	-0,80	500	5,5
687 127	127	5"	155	10	40	-0,80	600	8,1
687 150	152,4	6"	183	10	40	-0,80	750	10,4
687 200	203	8"	236	10	40	-0,80	1100	15,3
687 250	254	10"	291	10	40	-0,80	1500	20,7
687 300	298	12"	336	10	40	-0,80	1800	26,0

Possible end-fittings : Flange



## MISCELLANEOUS HOSES



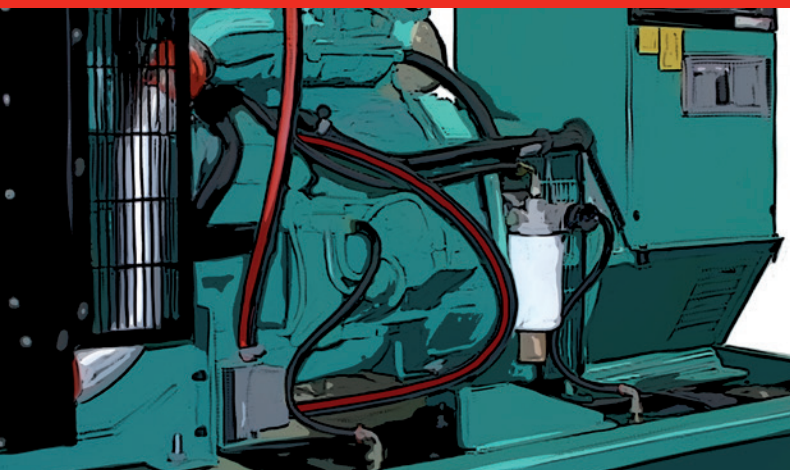


Inner tube : smooth EPDM rubber  
 Outer cover : wrapped EPDM rubber  
 Application : hot water delivery for cooling thermal engines  
 Temperature : -40°C to +125°C  
 1m long production  
 WP 3 bars - BP 12 bars



## HOT WATER SUCTION AND DELIVERY HOSE

166

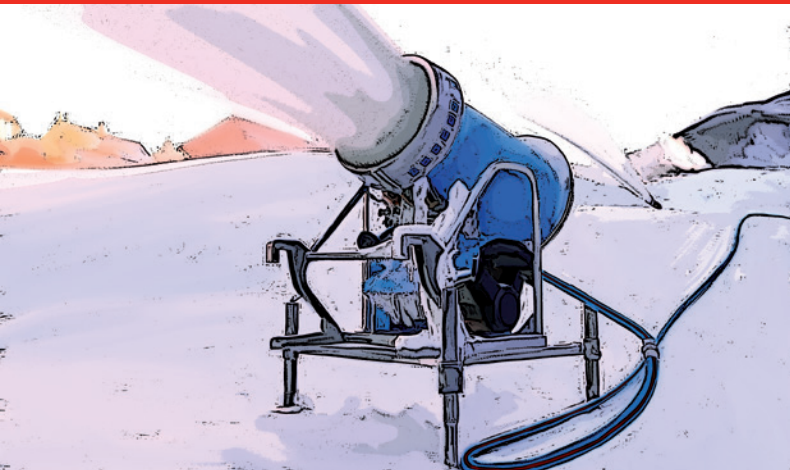


Inner tube : smooth EPDM rubber  
 Outer cover : crenellated and wrapped EPDM rubber  
 Application : for suction and delivery of hot water even with a low concentration additive.  
 Temperature : -40°C to +125°C  
 1m long production

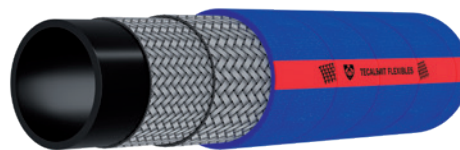


## SNOW CANON HOSE

202

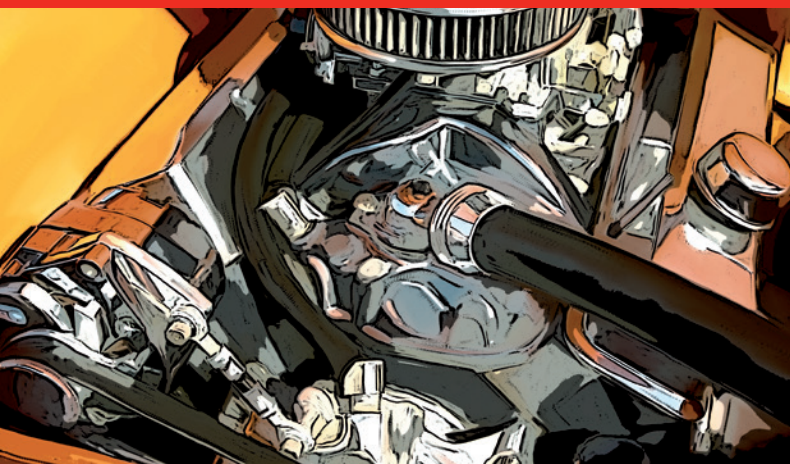


Inner tube: black SBR / EPDM rubber  
 Outer cover : smooth SBR/EPDM rubber  
 Application : for snow cannons  
 Temperature : -40°C to +80°C  
 WP 50 bars - BP 160 bars



## FUEL HOSE DIN 73379 TYPE 2B - 10 BARS

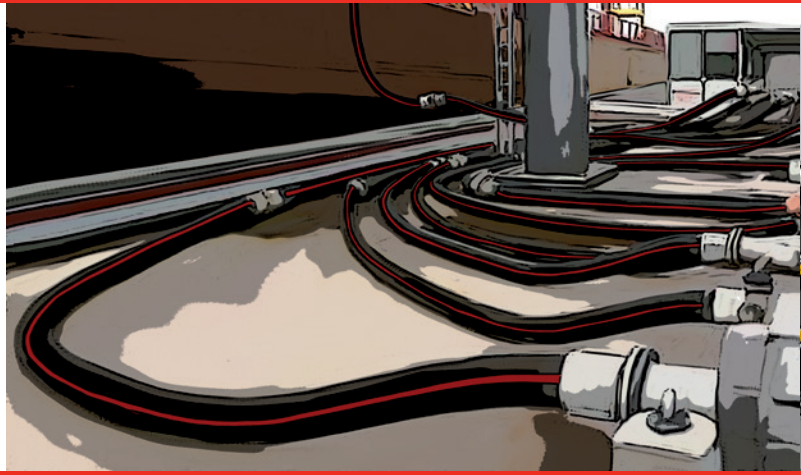
406



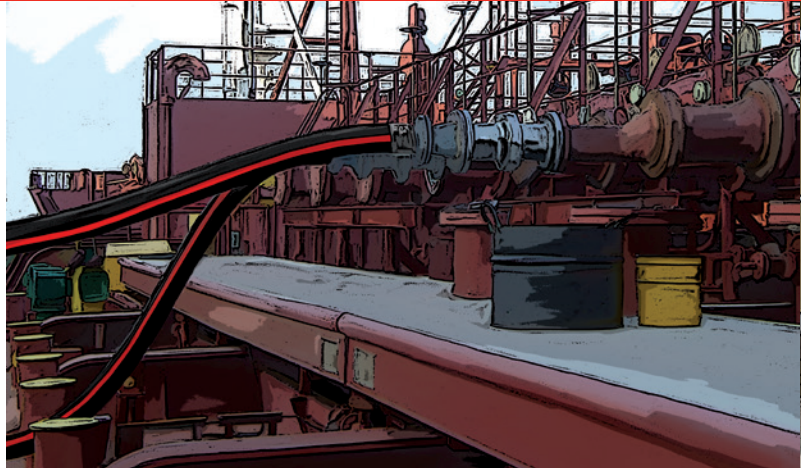
Inner tube: black anti-static NBR rubber  
 Outer cover : smooth CSM (Hypalon)  
 Application : for the transfer of gasolines with a content of aromatic up to 50%  
 Temperature : - 30°C to + 90°C  
 WP 10 bars - BP 30 bars



Inner tube : black nitrile NBR rubber  
 Outer cover : wrapped neoprene rubber  
 Application : for suction and deliver fuels  
 Temperature : -40°C to +70°C max  
 WP 10 bars - BP 30 bars



Inner tube : black NBR nitrile rubber  
 Reinforcement : 4 textile plies and one metal spiral  
 Outer cover : abrasion and weather resistant neoprene rubber  
 Electrical conductivity : 1 copper braid  
 Outer finish : wrapped  
 Temperature : -40°C to +70°C max  
 WP 20 bars - BP 60 bars

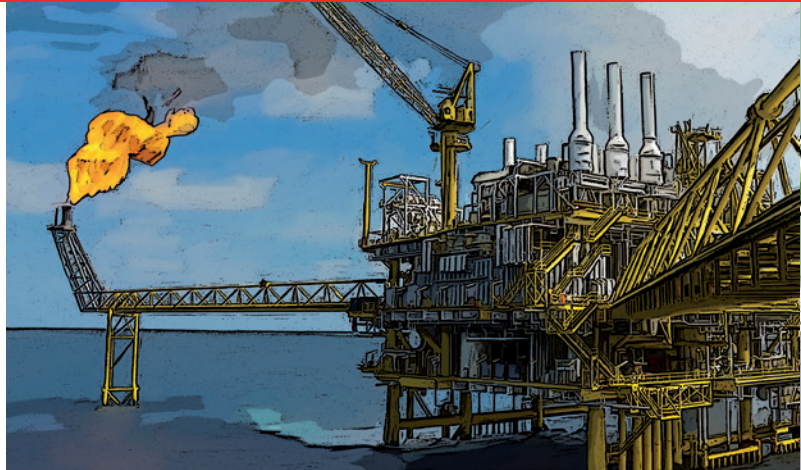


Inner tube : smooth black NBR rubber  
 Reinforcement : 2 or 4 metal wire spirals  
 Outer cover : CR flame-extinguishing  
 Outer finish : fine tape-wrapped  
 Temperature : -40°C to +70°C  
 WP 30 bars - BP 120 bars

Type Approval

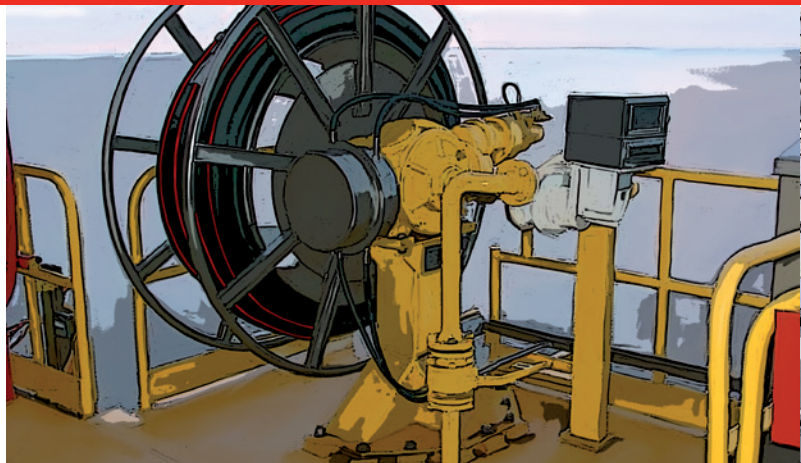


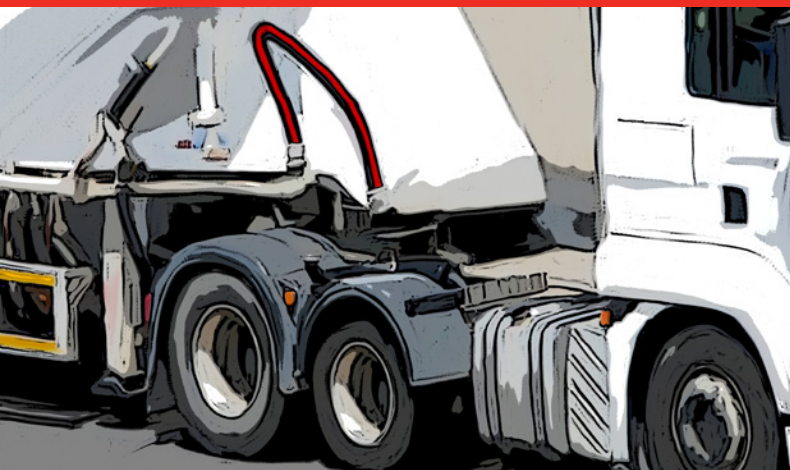
Fire resistant according to ISO 15541 (30 minutes - 800°C)



Inner tube : black nitrile rubber  
 Reinforcement : synthetic textile plies  
 Outer cover : abrasion, weather, seawater, oil resistant neoprene rubber  
 Application : for the delivery of hydrocarbons with a content of aromatic up to 50%  
 Temperature : -37°C to +80°C  
 WP 13 bars - BP 70 bars

Type Approval





Inner tube : black EPDM rubber  
 Outer cover : wrapped black EPDM rubber  
 Reinforcement : metal plies  
 Application : to convey hot compressed air exempt of oil  
 Temperature : -40°C to +208°C  
 WP 20 bars - BP 175 bars



## HIGH PRESSURE CLEANING HOSE 120°C - 400 BARS

567

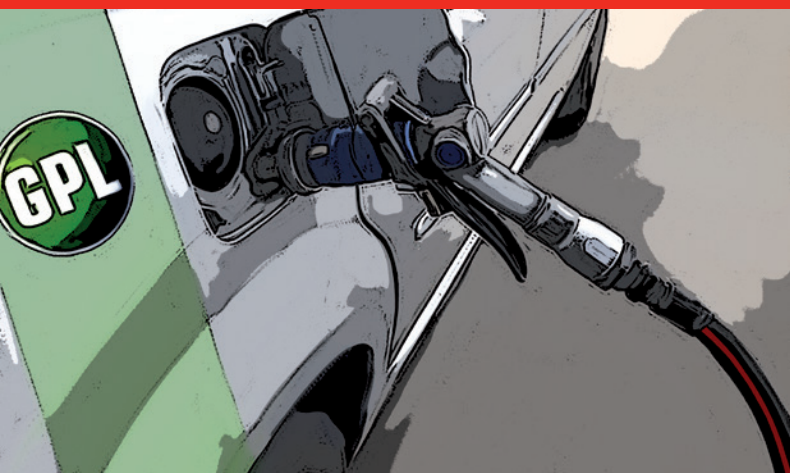


Inner tube : high temperature black nitrile rubber  
 Outer cover : abrasion resistant neoprene rubber blue or black  
 Application : for high pressure cleaning at 400 bar  
 Temperature : -30°C to +120°C, intermittent 150°C  
 WP 400 bars - BP 1200 bars



## LPG SUCTION AND DELIVERY HOSE - 25 BARS

603 SD

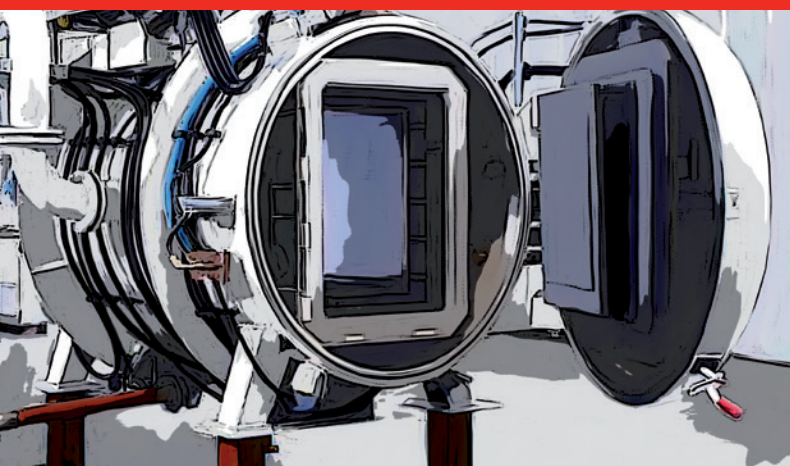


Inner tube : conductive NBR rubber  
 Outer cover : special synthetic rubber  
 Application : for the suction and delivery of hydrocarbons  
 Temperature : -30°C to +70°C  
 WP 25 bars - BP 100 bars



## NON-CONDUCTING DELIVERY HOSE - 15 BARS

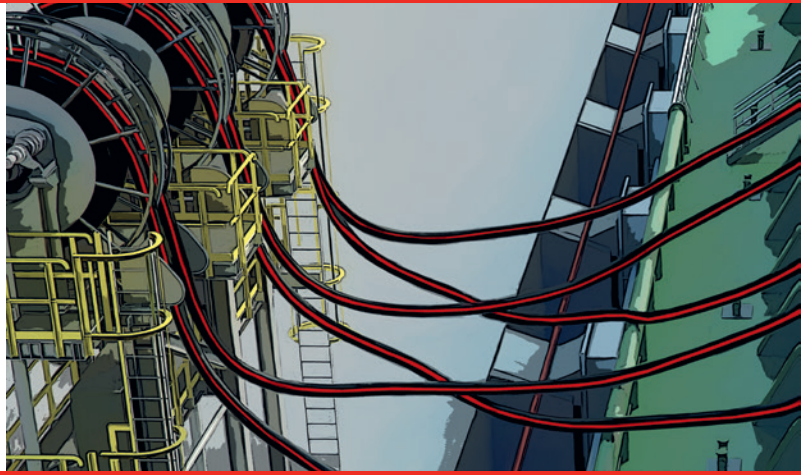
853



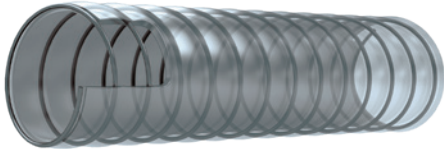
Inner tube: White EPDM rubber  
 Outer cover : Smooth blue EPDM rubber  
 Application : for the cooling circuits of induction furnaces  
 Temperature : -40°C to +170°C  
 WP 15 bars - BP 50 bars



Inner tube: white NBR rubber  
 Outer cover : abrasion, weather, seawater, oil resistant neoprene rubber  
 Application : for the delivery of drinking water  
 Temperature : 0°C to +95°C  
 WP 13 bars - BP 70 bars



Construction : flexible translucent PVC  
 Reinforcement : steel helix  
 Application : for many fluids in lightweight use  
 Temperature : - 5°C to +60°C



Construction : PVC - nitrile superelastic  
 Reinforcement : anti shock PVC helix  
 Application : for suction and discharge of pure, salted or chemical solution water  
 Temperature : -40° to +50°c



Inner tube: special synthetic rubber  
 Outer cover : MSHA resistant synthetic rubber  
 Application : for the circulation of hydraulic fluids based on mineral oils, glycols and vegetables  
 Temperature : -40°C to +100°C - peaks to 125°C  
 From 5/8" to 2"1/2 : WP 350 bars - BP 1400 bars  
 3" : WP 210 bars - BP 900 bars



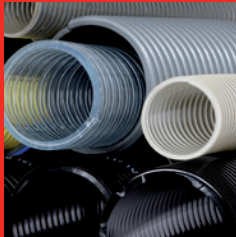




**Rubber hoses**

**Hydraulic hoses**

Hydraulic couplings



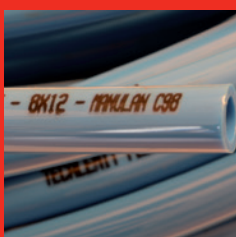
Swage fittings & ferrules



Hydraulic couplings



Technical tubes



**Hydraulic adapters**

**Rubber hoses off-shore**

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[www.flexible-hose-and-coupling-tecalemit.com](http://www.flexible-hose-and-coupling-tecalemit.com)



# Tecalemit RCMH™



**Rubber hoses**  
**Crimped industrial hoses**

The **TECALEMIT RCMH®** department at **TECALEMIT FLEXIBLES®**, offers a full range of PVC and rubber hoses to ensure the safe conveyance of various fluids and abrasive materials.

Thanks to its official approvals, certifications, wide experience and the development of a large capacity crimping press **TECALEMIT RCMH®** offers a wide range of large-diameter and non-standard crimped hoses.





# flexibles TECALEMIT™



Hydraulic hoses and fittings  
Hoses fitted

The FLEXIBLES TECALEMIT® department at TECALEMIT FLEXIBLES® offers a full range of low, medium, high and very high pressure hydraulic hoses.

TECALEMIT FLEXIBLES® equips and crimps all types of flexible hoses in compliance with official standards.

Thanks to the Protocalan secured flexible hose system, we provide products with an additional protection for operators.





# flexibles TECALEMIT™



**Swage fittings for hydraulic hoses, hydraulic adapters, hydraulic couplings  
BSPT & Metric ring fittings for hydraulic tubes, grease nipples**

The FLEXIBLES TECALEMIT® department at TECALEMIT FLEXIBLES® offers a wide range of hydraulic & industrial fittings which comply with the numerous technical constraints relating to hydraulic connectors.

For a better understanding of the field of hydraulics TECALEMIT FLEXIBLES® provides a specific technical guide to our product range.





# tubes TECALEMIT™



**Technical tubes, thermoformed on plan, multitubes  
Connectors & accessories tubes TUBES TECALEMIT®**

The TUBES TECALEMIT® department at TECALEMIT FLEXIBLES® offers a full range of pneumatic pipes ensuring the conveyance of power or various fluids as well as cable protection.

The TUBES TECALEMIT® range of pneumatic products also includes monotubes, multitubes, MANURIL® & MANULAN® workshop spiral tubing and pneumatic connectors.





## General terms & conditions of sale

### Terms of Sales

The information were concerned catalogs, notes and scales are given only as a rough guide and do not commit the seller. The seller is bound by the commitments of his representatives or employees only subject to confirmation emanating from himself. The offers are valid only within the limits of the deadline of option. Unless otherwise stipulated, this deadline is of 1 month. The additional stationery are the object of a new offer of the seller. It is that after express acceptance by the seller of order of the buyer that both parts are bound by the sale contract. Except special convention noticed, the acceptance of the offer by the customer involves its membership in the present general terms of sale. In the hypothesis where the buyer would intend to take advantage of opposite clauses, he will have to send to our company a registered letter with recorded delivery in 15 days following his knowledge of the present general terms of sale. A negotiation can then make a commitment to reach a possible agreement between the parties. Since the deadline of 15 days will be sold without appearance of will on behalf of the buyer, the present general terms of sale will be considered as irrevocably accepted without any reserve.

### Terms of delivery

Goods are sold, taken and approved in factories or store of the seller, even if the postage-paid is granted. If the shipping is delayed by the buyer and the seller grants it, goods are stored and handled at expenses and risks of the buyer without responsibility for the seller. These measures modify not at all the obligations for payment of the supply and establish no novation to the sale contract. Goods always travel at the risks and the dangers of the buyer, except his recourse against the carrier. It falls to the buyer, when he is himself an addressee of the sending, or to his representative when the buyer makes manage the sending to a third party, to receipt dated to the carrier only having made sure that stationery were delivered to him for the normal deadlines and good state. In case of damage or of absent person, the addressee has to achieve all the formalities of law (in particular reserves on it). The choice of the carrier by the seller does not modify these obligations of the buyer. Except the case where the buyer wishes to choose the carrier or to define condition of the carrier, the shipping are made according to the seller by every possible means by transport, in the most reduced rate. If the buyer imposes his carrier or conditions of transport particular, the seller is entitled to charge him the supplement of the transport costs which he can be brought to support of this fact.

### Packaging

The seller incurs no responsibility of the fact that stationery would not have been packed, in the absence of precise commitment of its part on this point in the sale contract.

### Property reserve

Ownership transfer of the goods is suspended from the complete payment of their price, in main thing and accessories, the risks, the loss or the deterioration of these goods as well as the damage which they could cause falling however to the buyer from the stake of these at his disposal. The seller will benefit from the right of resumption, consequence of the transfer postponed from the property and if he is put obstacle to this resumption address Mister President of the Commercial court of Quimper ruling in emergency proceeding, so that he orders it. The buyer will have to watch that the identification of the goods is always possible. Products in stock are presumed to be the ones to pay.

### Studies and projects

The studies and documents of all kinds transmitted by the seller always stay its whole property. They must be restored to him on his demand. The seller preserves entirely the intellectual property of these projects which can be neither communicated nor executed without his written authorization.

### Delivered quantities

The charged quantities are the ones which were really delivered. They can postpone ordered quantities without this fact can entail a contesting on behalf of the buyer.

### Delivery deadlines

The delivery deadlines indicated by the seller get on from the date of the acknowledgement of receipt of order. Except express agreement these deadlines are given only as a rough guide and are not rigorous, their overtaking can entail neither cancellation of the order, nor compensation. Even in the case of formal acceptance by the seller, of deadlines the overtaking of which would entail penalties, the execution of stationery can be suspended or delayed without compensation chargeable to the seller if the terms of payment are not observed by the buyer or if the information to be supplied by this last one did not reach the seller in due course. The war, the strikes, the epidemics, the total or partial interruption of transport, the shortage of raw materials, the hindrances resulting from measures of the authority regarding import of responsibility or internal economic regulations, the incidents or accidents of any causes



## General terms & conditions of sale

entailing the unemployment of everything of all or any factories, the fire, the flood, the breaking of machine, the difficulties of transport, the accident of manufacturing, the imperfection of the raw material as a result of the deficiency of a supplier, quite other accident or the not attributable event to the seller and presenting an irresistible and unpredictable character which prevents or reduces the manufacturing, is considered as cases of absolute necessity and unload our company of the obligation to deliver, without compensation neither damage interests and, in a general way, any coincidences or of circumstances outside one's control authorizing by rights the suspension of the current contracts or their late execution without compensation(allowance) nor damage.

### Prices

Prices are established on the basis of the economic conditions indicated in the offers. They are revisable according to the variation of the costs of their constituent elements within the framework of the legislation in force. Charged prices are the ones current, in particular if necessary according to price lists or scales, the day of the provision of stationery. The variations of price can be, on no account, a motive for termination of the order. Minimum order and postage-paid: these conditions are defined on our price lists.

### Payment

The fact that the product is made available to the client triggers invoicing. Supplies shall be paid to the head-office of the vendor within 30 days, or if a specific agreement has been made, by the date stated on the invoice. For any payment made before the due date, the vendor shall offer a discount, the conditions of which are indicated on the invoice. Any amount due and not paid in time shall be subject to interests as a matter of law, and a final notice shall be issued. Interests shall be applied at the legal rate in force plus 50%. These interests shall be invoiced separately at the end of the month. If the buyer does not pay an invoice by its due date, all other invoices become due immediately, even if they had previously given rise to commercial agreements and all sales not yet fully completed and paid shall be void as a matter of law, if this is the choice of the vendor, after a final notice to pay indicating the vendor intends to invoke this clause has been issued and has not been immediately followed by a response from the buyer. The vendor shall then be entitled to repossess or mandate someone to repossess the supplies if their sale has been cancelled as a matter of law. If the buyer objects to this repossession, the vendor can contact the President of the Trade Court of Quimper, ruling in summary proceedings, so that an order is issued. In application to what is mentioned above, received payments shall be applied in priority to supplies not recovered in kind. For any future order, the vendor shall be entitled to demand full payment is made prior to shipping. Any change in the situation of the buyer, such as the sale or placement in collateral of all or part of the business, death, incapacity, dissolution or change in company status, even after the partial execution of the contract or order, shall lead to the application of the same provisions as those mentioned in case of non-payment of invoices.

### Warranty

Unless otherwise stipulated, orders are executed according to the standards it exists and with tolerances of use in current quality and without respect in the special use there for which the buyer intends them. The desk clerk has to verify immediately the quantity, the weight, the dimensions and the quality. Goods are guaranteed against the not visible defects of material and manufacturing and against the latent defects during 12 months as from their starting, and at the latest 18 months after the date of provision. During this warranty period, any complaint will necessarily have to be formulated by registered letter with recorded delivery at the latest within one month after the discovery of the defects or the vices and any action must, to be acceptable, be instituted for the deadline of use of 2 months following the complaint. The seller can have only in the pure and simple replacement, in the price list of the most reduced transport, the defective recognized goods without other allowance, so replaced stationery staying its property. The imperfections resulting from a storage, from an assembly or from a use of goods by the clientele in abnormal conditions are excluded from any guarantees, or not corresponding to the rules of art. The seller accepts no return without having authorized him previously.

### Test and reception

Goods are checked in the factories of the seller only on the express demand of the buyer and according to the methods suited during the order. The corresponding expenses, in particular the expenses of vacation and report are chargeable to the buyer

### Attribution of jurisdiction

In case of contesting, the French law is only application and the courts of the head office of the company are only competent, whatever are the terms of sale and the method of payment suited even in case of call in guarantee or of plurality of applicants or defendants.









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