

# Hoses + Fittings (SAT Department)

Changes and Improvements

### Hose Assemblies for 'Ad Blue'

To meet Euro emission targets the use of a urea solution, commonly known as 'AdBlue' is being introduced to reduce exhaust emission on Heavy Duty diesel engines. For more details see Info 4.04.

Road tankers supplying filling points require special hoses:

- To prevent damaging the catalytic converter the liquid for automotive use has to be to a high purity. The hose lining should not contain any components that can leech out.
- Hose end fittings must be resistant to corrosion from the urea solution.

Hoses proven to be suitable for this application are ELAFLON PLUS FEP (page 125) or UTS (page 121a). For hose fittings we recommend stainless steel and aluminium. Brass or unprotected steel are not suitable.

### It does not always have to be 'UNIVERSAL' hose

Following some improvements our Lilac band and Blue Band hoses offer an economical alternative:

Since 03.03 '<u>Blue Band</u>' solvent hoses have been produced with an antistatic hose lining. These hoses now are also suitable for water based emulsions and water laquer. Open steam cleaning up to 130°C. The application range remains unchanged.

Since 02.04 'Lilac Band' multi purpose hoses offer improved flexibility. The application range for more than 75% of industry chemicals remains unchanged.

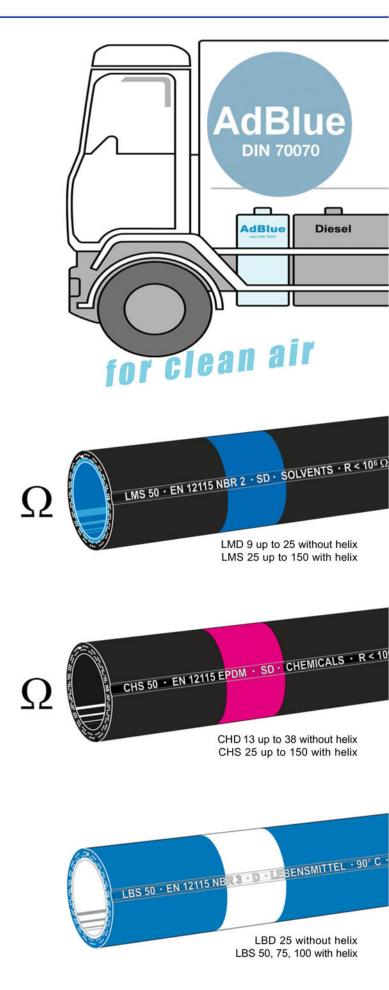
If the chemical resistance of these hoses is sufficient, users have three crucial advantages:

- Significantly better handling and more resistant to mechanical strain because it is a complete rubber construction.
- Significantly better priced compared to universal hoses with plastic lining
- Significantly easier assembly of clamp type end fittings, as the hoses are OHM conductive according to EN 12115.

For more details see our new catalogue page 117.

### 'White Band' - now with a blue cover

At customer request the black cover of our foodstuff hoses has been replaced with a high quality blue NBR/PVC quality from production date 10.04. The material has been proven with other hoses, especially when in contact with animal oils and fats, and does not cause any dark scuffing marks on the ground. The white lining remains unchanged. -For details and available sizes see page 123.



# 'Orange Band' hoses for L.P. gas - a safe choice

L.P. gas is amongst the most dangerous petroleum based products handled with rubber hoses. For decades Conti-ELAFLEX LPG hoses have set the benchmark for safety. EN 1762 : 2003 is the current hose standard. Our hoses not only meet but exceed the requirements of the standard. -For reeling hoses, tanker drivers always prefer improved handling and cold flexibility - especially on wintry days. This now has been made possible without having to compromise on quality or servicelife. The temperature range has been increased from -30° C to -40° C. Part numbers remain unchanged.

<u>Special type LPGS with helix</u>: some operators require large bore LPG hoses with an increased resistance to kinking. For this the LPGS with stainless steel helix is available. Even when humidity intrudes into the hose because of the mandatory pricking holes a permanently safe operation is assured.

On request please request the current catalogue page 115 from SAT department.

# New reel hose for Biodiesel

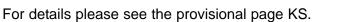
With time, Diesel fuels containing more than 30% 'Biodiesel' (estered vegetable oil to EN 14214) will damage the cover of standard hoses, especially through direct contact or diffusion when the reeling hose is permanently filled. Biodiesel is much more aggressive against some rubber materials than heating oil or Diesel. For this application we recommend the new type marked HD 38 BIO, which now is available ex stock. It is suitable for Biodiesel and also for heating oil and Diesel. It is not suitable for gasoline.

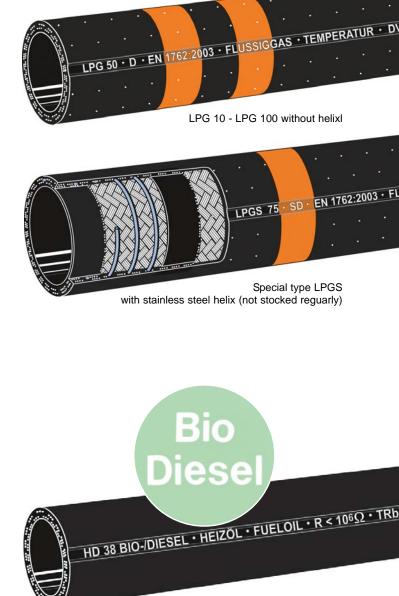
For the occasional dry hose delivery of Biodiesel good experiences have been made with standard TW and LTW Yellow Band hoses, provided that the hose is emptied and -if necessary- cleaned immediately after use.

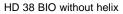
### **Durable Compressor Hose for hot air**

This hose for pressurised air is made of a special heat resistant EPDM. We have already produced this hose successfully for some years which in the main has been used by customers manufacturing silo tank trucks and hauliers.

Type KS has an exterior, rubberised braid and is used for the emptying of silo vehicles. SPANNFIX and SPANNLOC clamp type hose fittings can be used and are easy and safe to assemble.









# ELAFLON PLUS FEP now also with grey cover

This universal hose with its <u>seamless</u>, <u>smooth bore</u> lining of Teflon® FEP enjoys ever increasing popularity. Hence it was possible to fulfil the special requirement of many customers: from 2003 all small dimensions up to FEP 50 are produced with a grey cover and do not not leave any dark abrasion marks on clean factory floors. At customer request the previous version with a black cover can still be produced.

The specified electrical conductivity of the cover for the attachment of the hose end fittings is guaranteed by the external conductive spiral which has been field proven on the 'Polypal Clean' hose for many years.

The large bore hoses for the transfer and tankand railcar defuelling continue to be manufactured with a black outer cover. Order numbers remain unchanged. For further details please refer to catalogue page 125.

# Fittings with Teflon® PFA coating

If the chemical resistance of stainless steel is insufficient (e.g. for hydrochloric acid) the problem of protecting all media-wetted parts can safely be solved with our PFA coating which has been in extensive use. For details on the exceptional chemical and thermal resistance, please refer to Information 5.03.

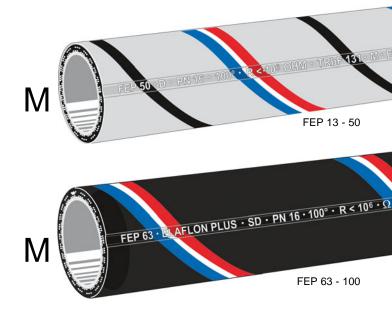
The surprisingly thin red-coloured coating ensures a good fit with the use of standard fittings, including the manufacturing of 'OHM'- or 'M'- type conductive hose assemblies. Please contact SAT for a list of stocked items.

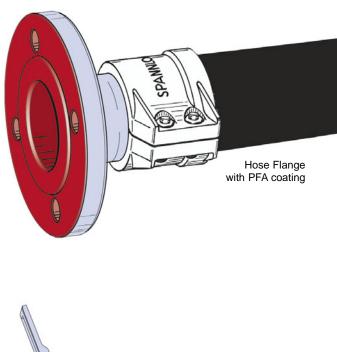
# False economy, do not compromise on quality

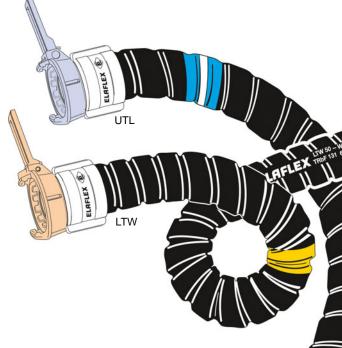
LTW hoses, popular for their high flexibility, are now increasingly copied by manufacturers from abroad. Comparative test analysis have shown that the originals from Continental-ELAFLEX are still the best choice, because they

- Offer better service life, as the hose lining is seamlessly extruded and not wrapped for costs reasons.
- have two braided reinforcements and are not simply wrapped for costs reasons.
- will safely hold the entire test pressure as the wall thickness was not 'compromised' for price reasons.
- will not kink as the steel helix are stable we do not use thin, soft material wire for costs reasons.

The same comments are valid for UTL hoses with the exception of its UPE lining which is fused.







# POLYPAL CLEAN : once again cleaner !

This universal hose was introduced four years ago. It was mainly supplied as a reel hose to 'PAL' distributors. Our information 6.2000 is still valid and all promised properties have been fulfilled. -There were some minor reservation from some customers; as even the slim black external conductivity spiral was too broad and 'too black'. Through our research with ContiTech we encouraged development of the light-grey cover *without* any external conductivity spiral and make it antistatic as it is done on the blue lining of the solvent hose (see page 1). By doing this, all requirements for an OHM-hose to EN 12115 could still be met. This has been achieved. For details please see our new catalogue page 127 which can be obtained from SAT department.

# COMPOSITE hoses type FWS

At long last EN 13765 has been created for these hose types which are extremely flexible. Our daughter company in Belgium, ELAFLEX NV based in Antwerp, has many years of experience producing these types of hoses. We have now officially included them in our catalogue. The product range and all technical details about PP- and PTFE types can be seen in our new catalogue page 181. The requirements of EN 13765 are met.

There are wide-spread opinions about the advantages and disadvantages of this type of hose. Many operators are convinced that for sizes 100, 150 and 200 there no better alternatives if a highly flexible chemical hose is needed.

The hose assemblies are manufactured from composite hose material and the required fittings. ELAFLEX NV Belgium has swaging machines to produce and test all sizes up to DN 200. Please ask SAT department for details.

# **Pressure Equipment Directive (PED)**

As is known since 2002 all hose assemblies for pressures of more than 0,5 bar are 'pressure equipment' according to European directive 97/23/EG.

The manufacturer of the hose assembly is responsible for the adherence. Hoses or fittings themselves are not pressure equipment.

ELAFLEX has been certified as manufacturer by the 'Germanische Lloyd'. A copy of certificate no. 43670-02HH is available on request.

For detailed information please see catalogue page 197. Declarations of conformity can be downloaded under www.elaflex.de/english/certificates/index.asp in the internet.

