

# ELAFLEX AIRCRAFT REFUELLING HOSE

## Introduction.

It is essential that the hoses used to refuel aircraft are of the highest quality due to the critical nature of the application. The refuelling hose has a direct impact on fuel quality and operational safety, as well as being a major influence on your operational costs. These hoses are all subject to approval by the major fuel suppliers AFTER they have been tested to the international standards EN1361 (formerly BS3158) and API1529. Following laboratory testing the hose then has to undergo an extensive field trial period.

## General Description.

Elaflex HD-C is a soft wall textile reinforced hose, and is approved by the major oil companies and air forces. It is recommended for all aircraft refuelling applications including reel hoses, platform (deck) hoses, hydrant dispenser inlet hoses, and fueller loading hoses. It can be used for Jet Fuel and Aviation Gasoline, and it is suitable for the majority of defuelling operations but not for exceptionally high defuelling rates.

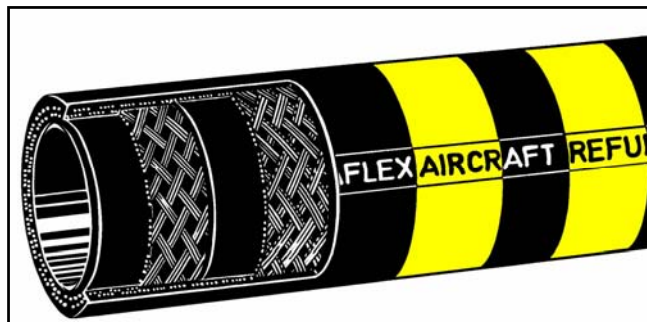
HD-C hose is manufactured by the Continental Rubber Company, who only market their aviation refuelling hose through their branded dealer, Elaflex, and it has been the market leader for many years.

## Why Choose Elaflex HD-C ?

Because it is the market leader. Elaflex hose has been PROVEN in service over many years. There are numerous approved hoses but only one market leader, Continental/Elaflex.

## Consider The Following Advantages:-

- ⇒ **Reliability.** No quality problems such as cover delamination, blistering, or inconsistent wall thickness.
- ⇒ **Long Life.** Excellent abrasion resistance. Elaflex hoses commonly last for 10 years.
- ⇒ **Easy Handling.** Lightweight and flexible, even at low temperatures.

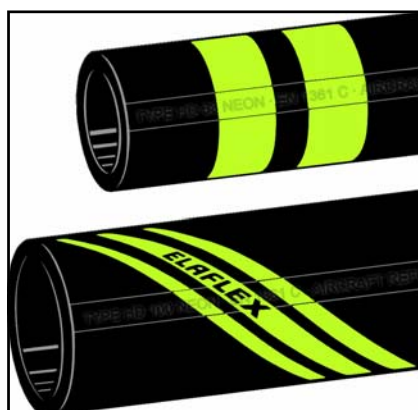


- ⇒ **Kink Resistance.** An important safety consideration, and even if kinking does occur Elaflex hoses resist layer separation.
- ⇒ **Standard Hosetails/Clamps.** Hoses with inch bore sizes or differing wall thickness can cause problems when end fittings are exchanged in the field.
- ⇒ **Recent Manufacture.** Because this hose is the market leader stock turns over very quickly, which is important because there is a maximum permitted storage life of 2 years.
- ⇒ **Short Delivery Time.** Elaflex hose is available from stock.

## The Latest Development. NEON.

As you would expect from the market leader, Elaflex are constantly improving their product, and the latest development concentrates on hose visibility. In low light conditions hoses can present a very serious trip hazard, and are also very vulnerable to damage from airfield vehicles. So Continental have produced the Neon hose, where the bands (or spiral on the HD100-C) are formed from a light emitting material. This makes the hose

much more visible in low light conditions as shown in this picture. We recognise this as an important safety advance so HD-C Neon is now our preferred stock hose.



### The Aljac FCL Service.

Aljac Fuelling Components now distributes all sizes of Elaflex HD-C hose from stock with the exception of 19mm and 32mm, which is available to special order. To complement our hose we also stock a full range of approved bolted or pinned Aluminium hose clamps and Brass hosedetails. We will supply hose in coils or cut lengths, and can supply hosedetails and clamps either fitted to the hose, or loose. Our staff have been trained to fit hose ends in accordance with EN1361, and we can tip dip hosedetails to special order if this is specified.

As standard all hoses and hose assemblies are supplied with our Certificate Of Conformity. This certifies that the ends have been correctly fitted (if fitted by AFCL), and permits all of the parts to be traced back to the point and date of manufacture. If required we can pressure test the assembled hose using Jet A1 as the test media, but an additional charge will be made. The combination of Elaflex and Aljac Fuelling Components provides our customers with the world's leading hose brand supported by the most complete supply and testing service.

### Dimensional Data.

Hose Type	Inside Diameter (mm)	Wall Thickness (mm)	Outside Diameter (mm)	Minimum Reel Diameter (mm)	Allowable Vacuum (Bar)	Approx Weight (Kg/m)	Part Number
HD-19C	19.0	6.0	31.0	225	-0.6	0.60	12BDVC0019
HD-25C	25.0	6.0	37.0	300	-0.5	0.80	12BDVC0025
HD-32C	32.0	6.0	44.0	350	-0.4	1.00	12BDVC0032
HD-38C	38.0	6.5	51.0	400	-0.3	1.20	12BDVC0038
HD-50C	50.0	8.0	66.0	500	-0.2	1.90	12BDVC0050
HD-63C	63.0	8.0	79.0	550	-0.15	2.40	12BDVC0065
HD-75C	75.0	8.0	91.0	600	N/A	2.80	12BDVC0075
HD-100C	100.0	8.0	116.0	N/A	N/A	3.70	12BDVC0100

### Technical Details.

#### Specification.

Aircraft refuelling hose, EN1361 type C (replaces BS3158), API1529, German Military Standard VG95955 Type D, TRbF 131.2, NFPA 407, AS2683.

#### Approvals.

BP, Shell, Esso (Exxon), Mobil, Gulf, Petrofina, Total, major air forces.

#### Construction.

Black NBR (Nitrile) smooth bore seamless fuel resistant tube. Two off synthetic textile reinforcing braids with non metallic ultra conductive intermediate layer. CR Neoprene black semi conductive abrasion, oil and weather resistant cover.

#### Properties.

Electrical resistance less than 1000 Ohms per metre.  
Working temperature minus 30 degC to plus 70 degC.  
Working pressure 20 Bar.  
Test Pressure 40 Bar.  
Burst pressure greater than 80 Bar.