

# Aviation

*Our composite hose developed for the aviation industry is suitable for the aromatic hydrocarbons present in Avgas or Jet A1 fuel. Fuel for piston engine powered aircraft is usually a high octane aviation gasoline known as Avgas, it has a low flash point to improve its ignition characteristics. Jet A1 fuel gets used in turbine engines, these engines handle fuel with higher flash point, which are less flammable and therefore safer to transport and handle.*

*The Aviation industry has developed special end connections to avoid mixing up the two different fuels.*

*The Avgas and Jet A1 fuel are the most commercially common fuels in aviation industry but there are various other blends used such as Kerosene, JP-1, JP-2, JP-3(Mil-J 5624), JP-4(Mil-J 5624), JP-5 (Mil-J 5624), JP-6 (Mil-J 25656) and JP-x (Mil-F 25604). It is of most importance that the composite hose reinforcement wires are compatible with the product handled by the hose.*

*The range of composite hose suitable for the safe handling and transfer of aviation aromatic hydrocarbon products includes:*

- *Aviation 700 SG transfer hoses suitable for the suction and delivery of aviation fuels, constructed with a stainless steel inner and galvanized steel outer wire.*
- *Aviation 700 SS is used for the same applications but in this hose the inner and outer wire are stainless steel*
- *Aviation 400 AG is used for the same applications but at a lower working pressure with a better flexibility characteristic.*

## Australian Industry Standards

### **AS 2683 Title of Standard:**

*Hose and hose assemblies for distribution of petroleum and petroleum products. (Excepting LPG)*

### **AS 1180 Title of Standard:**

*Methods of test for hose made from elastomeric materials.*

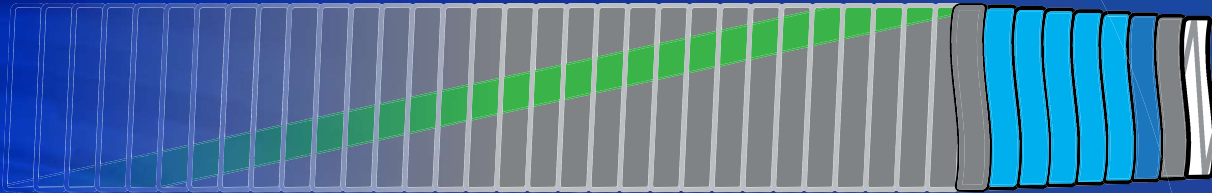
## International Industry Standards

### **BS3492 Title of Standard:**

*Specification for road and rail tanker hoses and hose assemblies for petroleum products, including aviation fuels.*



# Aviation Code 700 SG



## Construction

**Inner Materials:** Polypropylene fabrics and film selected according to chemical resistance strength.

**Reinforcement:** Internal wire of stainless steel.  
External wire of galvanised steel.

**Outer Cover:** Black PVC coated Fabric with green stripe.

## Applications

Transfer hoses suitable for the suction and delivery of aviation fuels.

## Australian Industry Standard

Complies with the AS 2683

**Type:** 1

**Grade:** 1

**Electrical kind:** 1

**Test Pressure:** 2 x working pressure

**Burst Pressure:** 6 x working pressure

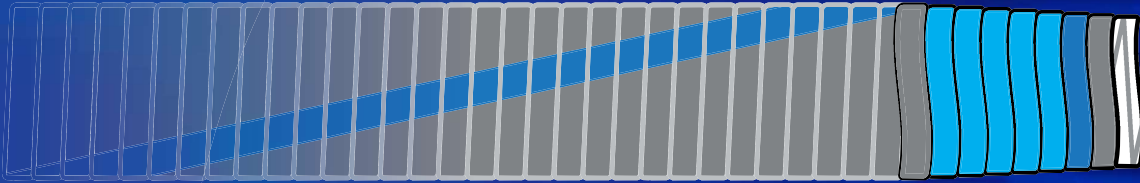
**Temperature Range:** -20 up to 55°C

Product Number	Nominal ID		OD	Pressure Bar			Minimum Bend Radius	Weight	Standard Coil Length
				at 20°C as per AS 2683					
	in	mm	mm	working	test	burst	mm	Kg/m	m
CHAVSG-025	1	25	37	7	14	42	60	0.91	25
CHAVSG-032	1 1/4	32	43	7	14	42	75	1.05	25
CHAVSG-040	1 1/2	40	51	7	14	42	75	1.58	25
CHAVSG-050	2	50	63	7	14	42	90	1.71	25
CHAVSG-065	2 1/2	63	76	7	14	42	100	2.64	25
CHAVSG-080	3	76	90	7	14	42	125	3.19	25
CHAVSG-100	4	100	114	7	14	42	200	4.10	25

Note: Other coil lengths can be manufactured on request

- Standard end connections used for these types of hoses are made of Aluminium, Stainless Steel and Brass
- We stock our own Aluminium Petro-Lock, Avgas and Jet A1 end connections, specifically developed for the loading and unloading of aviation hydrocarbon products
- Always check chemical compatibility for the inner and outer wire, the hose lining, the end connections and seals.

# Aviation Code 700 SS



## Construction

**Inner Materials:** Polypropylene fabrics and film selected according to chemical resistance strength.

**Reinforcement:** Internal wire of stainless steel.  
External wire of stainless steel.

**Outer Cover:** Black PVC coated Fabric with blue stripe.

## Applications

Transfer hoses suitable for the suction and delivery of aviation fuels.

## Australian Industry Standard

Complies with the AS 2683

**Type:** 1

**Grade:** 1

**Electrical kind:** 1

**Test Pressure:** 2 x working pressure

**Burst Pressure:** 6 x working pressure

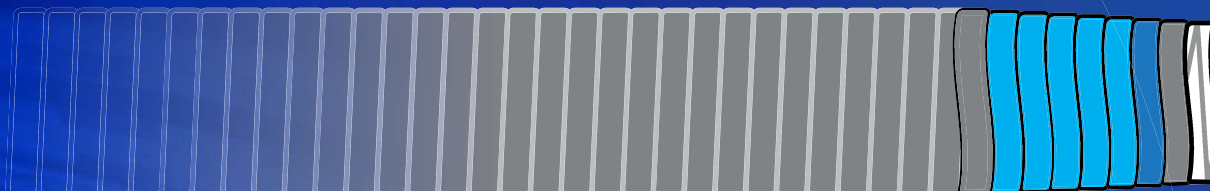
**Temperature Range:** -20 up to 55°C

Product Number	Nominal ID		OD mm	Pressure Bar at 20°C as per AS 2683			Minimum Bend Radius mm	Weight Kg/m	Standard Coil Length m
	in	mm		working	test	burst			
	CHAVSS-025	1		25	37	7			
CHAVSS-032	1 1/4	32	43	7	14	42	75	1.07	25
CHAVSS-040	1 1/2	40	51	7	14	42	75	1.61	25
CHAVSS-050	2	50	63	7	14	42	90	1.74	25
CHAVSS-065	2 1/2	63	76	7	14	42	100	2.69	25
CHAVSS-080	3	76	90	7	14	42	125	3.20	25
CHAVSS-100	4	100	114	7	14	42	200	4.15	25

Note: Other coil lengths can be manufactured on request

- Standard end connections used for these types of hoses are made of Aluminium, Stainless Steel and Brass
- We stock our own Aluminium Petro-Lock, Avgas and Jet A1 end connections, specifically developed for the loading and unloading of aviation hydrocarbon products
- Always check chemical compatibility for the inner and outer wire, the hose lining, the end connections and seals.

# Aviation Code 400 AG



## Construction

**Inner Materials:** Polypropylene fabrics and film selected according to chemical resistance strength.

**Reinforcement:** Internal wire of aluminium.  
External wire of galvanised steel.

**Outer Cover:** Black PVC coated Fabric.

## Applications

Light weight transfer hoses suitable for the suction and delivery of aviation fuels.

## Australian Industry Standard

Complies with the AS 2683

**Type:** 1

**Grade:** 1

**Electrical kind:** 1

**Test Pressure:** 2 x working pressure

**Burst Pressure:** 6 x working pressure

**Temperature Range:** -20 up to 55°C

Product Number	Nominal ID		OD	Pressure Bar			Minimum Bend Radius	Weight	Standard Coil Length
				at 20°C as per AS 2683					
	in	mm	mm	working	test	burst	mm	Kg/m	m
CHAVAG-065	2 1/2	63	74	4	8	24	90	1.94	25
CHAVAG-080	3	76	88	4	8	24	115	2.37	25
CHAVAG-100	4	100	112	4	8	24	190	2.93	25

Note: Other coil lengths can be manufactured on request

- Standard end connections used for these types of hoses are made of Aluminium, Stainless Steel and Brass
- We stock our own Aluminium Petro-Lock, Avgas and Jet A1 end connections, specifically developed for the loading and unloading of aviation hydrocarbon products
- Always check chemical compatibility for the inner and outer wire, the hose lining, the end connections and seals.