



## **ROOF DRAIN SYSTEMS**

## **FLEXIBLE HOSE DRAIN JOINT**



# THE SOLUTION BEST SUITED TO YOUR EXTERNAL FLOATING ROOF DRAIN SYSTEMS

## FLEXIBLE HOSE DRAIN JOINT

### *Characteristics and Applications*

ATECO® DRAIN HOSE is manufactured according to the requirement specified by the European Standards EN 13765:2003 Type 3 (BS 5842:1980), and in accordance with the recommendations of NAHAD Guidelines (NAHAD 600/2005).

Extremely flexible, easy to handle and bend, ATECO® DRAIN HOSE hose is used for immersion inside storage tanks, for water drainage from the floating roofs. ATECO® DRAIN HOSE hoses are specifically designed to resist immersion in high aromatic or corrosive liquids with a temperature range from -40 to +100°C and, thanks to its construction, prevent any possible collapse due to the external pressure. The hose is specifically engineered to have a negative buoyancy, this to prevent the hose floating in the tank liquid. Upon request it is possible to apply a longitudinal coloured stripe on each hose, to ensure correct alignment. Clamps and chains for roof attachment are supplied on request. All hoses are 100% aromatic resistant, electrically continuous, antistatic and can be used for suction or discharge.

ATECO® DRAIN HOSE are used in full length, as complete system for water drainage, or in many cases, thanks to the great flexibility, it is used as well in short lengths, as a rotating bend on elbow connection for "pantograph" systems.

ATECO® DRAIN HOSE assemblies are fitted with an extensive range of couplings readily available, externally swaged with Stainless Steel ferrules and Viton® seals.



### *Safety*

ATECO® DRAIN HOSE assemblies are tested at 1 ½ times rated working pressures for safety and reliability, in accordance with BS 5842:1980 clause 6.4 (EN ISO 1402). The securing ferrule, at one end of the hose, is permanently marked by embossing, with manufacturer's name, nominal bore, serial number and the test date. Full test certification can be supplied on request.

Burst pressure indicated, is at ambient temperature when tested in accordance with BS 5173 section 102.10:1990. (EN ISO 1402)

Electrical continuity is achieved by the two wires bonded to the end fittings, this helps dissipate accumulated charge and to avoid static flash. The electric resistance of hose assemblies is less than 10 ohms, as required by BS 5842:1980 clause 6.2 (EN ISO 8031). A special conductive swaging seal is used to guarantee the hose is electrically continuous through both the inner and outer helices.

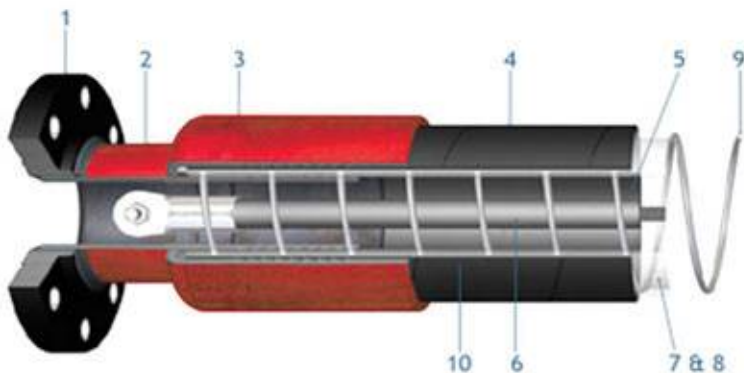
All hoses are available in an assortment of colours and it is possible, on request, and with a minimum purchase order, to add a "customer labelling" or "product labelling" to the outside wall.

Burst pressure indicated is at ambient temperature. Maximum temperature rating can only be maintained when working within limits of working pressure. Each hose assembly is permanently marked on the ferrule at one end according to EN 13765:2003 clause 10.1 – 10.2

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HOSE MATERIAL FOR %100 AROMATICS	
COLOUR	White
WIRES	304 Stainless steel internal wire (X) or Galvanised (Z)
	304 Stainless steel external wire (X) or Galvanised (Z) Also available with antistatic PP coated 304 Stainless Steel wires (XP)
CONSTRUCTION	ATECO® DRAIN HOSE is a multi-layer thermoplastic hose manufactured from Polypropylene, Polyethylene and Polyester films and Polypropylene fabrics, with an outer cover specifically engineered to withstand at the full immersion in aggressive fluids. ATECO® DRAIN HOSE includes in the construction an High Density PLT tubular extruded film to avoid any possible leak both, from inside to outside, as well as from the outside to the inside of the hose. All the different layers are wrapped together and tensioned between internal and external wire spirals.



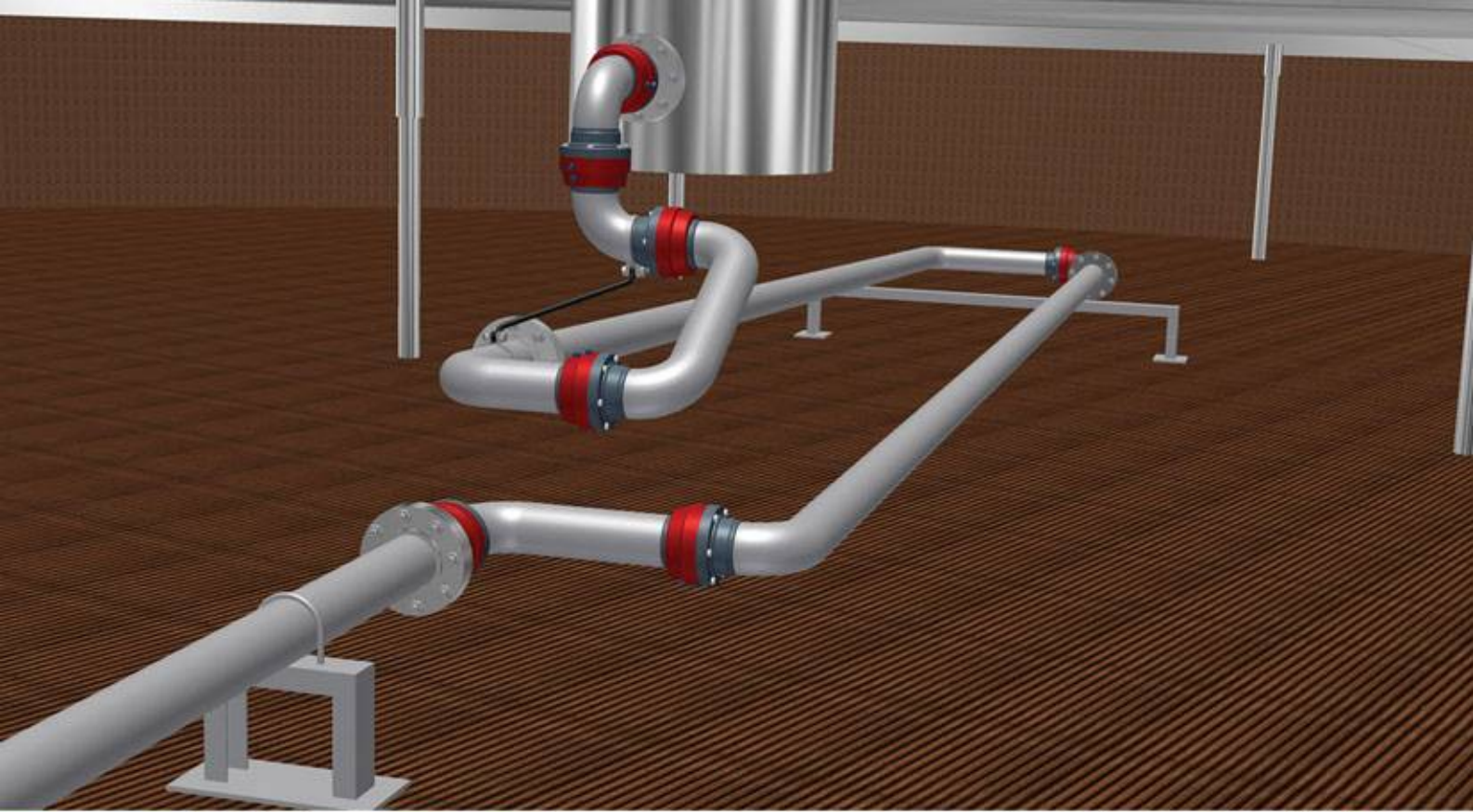
HOSE CONSTRUCTION PARTS	
1	ANSI 150# Flanges
2	Hose Nipple
3	Hose Ferrule
4	Hose Outer Cover
5	Hose Inner Cover
6	Lead Ballast (with steel inner core)
7	Inner Reinforcing Ply
8	Outer Reinforcing Ply
9	High Tensile (heli-coil) Reinforcing Wire
10	White Reinforcing Stripe

PRODUCT DATA	
Electrical Continuity	Hoses are normally supplied electrically continuous by connecting the end flanges together via the embedded wire helix. Discontinuous hoses can be supplied if required.
Burst / Test Pressure	In service the hose is often under a slight negative pressure but the hose has a design burst pressure of 20 bar (300lbs/sq inch) and every hose is tested before despatch to 5 bar (75lbs/sq inch).
Aromatic Resistance	This product is suitable for service in products having an aromatic content of up to 100% which includes crude oil, gasoline and all of the normal bulk petrochemical products.

FITTINGS	
End Flanges	The hoses are normally supplied complete with attached ASA 150 RF Carbon Steel flanges with one flange modified to enable the attachment to the lead ballast cable.
Ballast Cable	To stop the hose floating inside the product and therefore ensuring that the rainwater flows smoothly away through the hose, a lead covered high tensile steel cable is fixed inside the bore of the hose.
Clevis Clamp / Chain	To ensure that the top flanges are not strained when the hose is in service, a clevis clamp/chain is supplied and fixed to the hose at a convenient point about 1 metre from the top flange to support the hose.

HOSE MATERIALS For %70 Aromatics	
Inner Lining	High Quality Nitrile Rubber
Reinforcement	Synthetic textile materials together with a high tensile wire in a helical form are embedded in synthetic rubber.
Cover	High quality nitrile rubber applied in a number of layers to give maximum protection. A white rubber stripe is placed along the length of the hose to avoid twisting during installation.

Size		Max. W.P.	Min. Burst	Bend Radius	Weight	Max.
mm	Inch	Bar	Bar	mm	Kg / mt	mt
40	1 1/2"	20	75	85	1,2	25
50	2"	20	75	125	2,0	25
63	2 1/2"	20	75	150	2,8	30
76	3"	20	75	175	3,5	30
100	4"	20	75	250	4,3	30
150	6"	20	75	500	15,3	20
200	8"	20	75	700	22,5	20



Geodesic  
Dome Roof

Internal  
Floating Roof

Floating  
Roof Seal

Floating  
Suction System

Roof  
Drain System

Emission  
Control Systems

Special  
Products

Engineering



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