

INDUSTRIAL HOSES - floating hoses and elements

Floating hoses



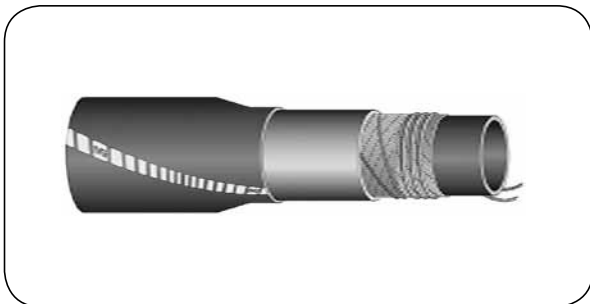
Floating hoses are widely used on all kinds of water basins. Their most common applications are as follows: reloading of oil in ports, transfer of crude oil from an oil rig to a ship, dredging, etc. There are several techniques that can be used to keep a hose afloat so as to protect it against damage by the ship's propeller and allow the vessel to be steered. Floating hoses are perfectly visible even in adverse weather conditions. They are made of foam which does not absorb water or sink in any operation conditions.

Floating hoses with floaters



Floaters (floats) are placed at proper, regular intervals along the hose. High buoyancy prevents sinking and vivid colours ensure excellent visibility. The floating devices are fastened to the hose by clamps, wire prevents their sliding along the hose. There are several types of rubber hoses that can be used with floaters, e.g. FUEL HARDWALL, FUEL SOFTWALL, POTABLE.

Floating hoses - integrated foam



FUEL HARDWALL FLOAT®

Internal layer: Black synthetic rubber
Reinforcement: Synthetic braid, steel wire helix
External layer: Black synthetic rubber
Working temp.: From -20°C up to +90°C

Delivery hose designed to transfer drilling fluid and liquid petrochemical products with aromatic content up to 50%. The hose features copper wire to ensure electrical conductivity. External layer resistant to abrasion, oil, sea water and weather conditions. Intended to serve oil-rigs in particular. Other diameters are also available.

code	I.D. [mm]	working pressure [bar]	bursting pressure [bar]	bending radius [mm]	weight [kg/m]	standard length [m]
IV-FUEL/HWFLOAT-051	51	20	80	1000	8	120
IV-FUEL/HWFLOAT-076	76	20	80	1500	10	120
IV-FUEL/HWFLOAT-102	102	20	80	2000	16	60
IV-FUEL/HWFLOAT-127	127	20	80	2300	25	60

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CARCASS floating hoses

SINGLE CARCASS - the primary hose solution intended for offshore media transfer. Further, as a result of continuous and laborious work to improve the properties of these hoses, their strength and flexibility was significantly enhanced. However recently they are replaced by **DOUBLE CARCASS** hoses - a hose surrounded by a hose (a hose within a hose). When used under water, they link pipelines with CALM buoys. When used as **CATENARY LOADING HOSES**, the medium is transferred vertically, usually on ships and oil rigs. They are highly resistant to elongation and twisting. Suitable for hose reels.

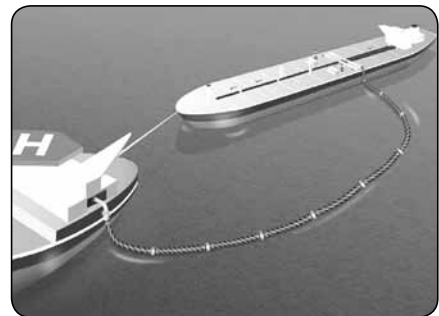
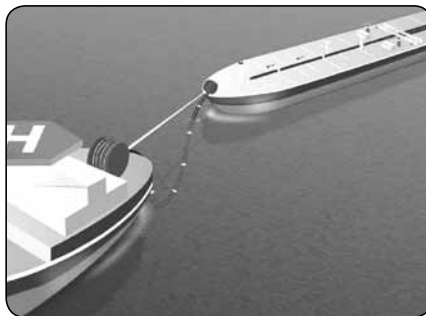
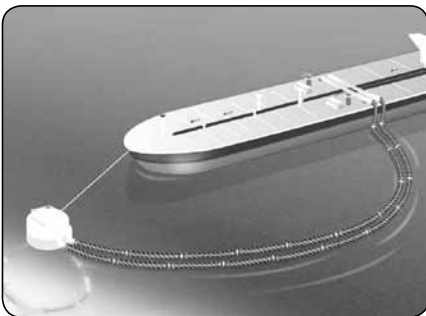


DOUBLE CARCASS - hoses of a carcass type were introduced to protect environment and for safety reasons in case of medium leakage. If the hose breaks, the medium leaks to the space between two hose layers. The resilience of both carcasses is similar. If the internal carcass breaks, the space between layers fills with the medium. Depending on the density of the medium, the damaged part of the hose goes slightly below or over the surface of water indicating the leakage. There are other warning systems as well.

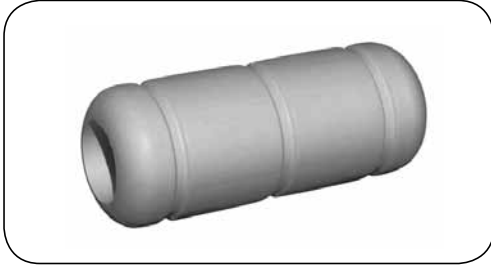
Examples of DOUBLE CARCASS floating hose application

Depending on the place of application within an oil transfer line, there are several types of double carcass hoses:

- highly flexible hose assembly designed to connect a CALM buoy to a ship,
- floating hose with consistent parameters along the whole length,
- robust and flexible hose in its tail part (a tanker is constantly moving during reloading),
- very flexible hose that goes over the ship's board and connects to a tanker.



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FLOWSAFE

Material: Bacell® - special foam, made from EVA plastic
Net buoyancy: 16 kg
Weight: 2 kg
Volume: 18 dm³

FLOWSAFE floating devices designed to fit all hoses for offshore applications especially supply hoses used between ships and rigs. With floats on supply hoses, the transfer between ships and rigs becomes much safer. The hose stays afloat so it is clearly visible, which prevents its damage by the ship's propeller and avoids the problem of the ship becoming unable to manoeuvre. The floats protect the hose against wear and tear and therefore they are excellent fenders for both delivery hoses (without steel wire) and suction-delivery hoses (with steel wire) of 3", 4" and 5" in diameter. There are plastic bands placed in the grooves of the floats so they can be easily fastened. When the floating devices are applied for the delivery hoses a special wire strap should be used. The strap prevents the float from being displaced when the hose is being handled and without pressure. The floats are flexible, do not sink or absorb any water (the cells of foam are closed in 100%). They do not shrink or deform. UV radiation resistant.

picture	code	hose I.D. [inch]	dimensions					
			A	B	C	D	E	H
	TZ-90620-48	3	68	94	230	80	490	600
	TZ-90620-64	4	55	120	230	90	182	600
	TZ-90620-80	5	53	143	250	90	182	600

description	code	float size [inch]	wire diameter [mm]	wire length [mm]
Stainless steel, plastic coated braid clamping for delivery hoses	TZ-90622-01	3 and 4	3	480
	TZ-90622-02	5	3	640



MINIFLOAT

Material: Bacell® - special foam, made from EVA plastic
Net buoyancy: 3 kg
Weight: 0.42 kg

MINIFLOAT floating devices designed for 4" and 5" diameter hoses (both delivery and suction-delivery hoses). They are threaded on a hose and set close together so as to obtain required buoyancy. The floats are flexible, do not sink or absorb any water (the cells of foam are closed in 100%). They do not shrink or deform. UV radiation resistant. A unique version of floats that reflects both light according to SOLAS requirements and UV radiation (so called dark light) - visible in hard weather conditions, available on special request.

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