

# Float

## For bypass level indicators

### Model BFT for nuclear power plants

KSR data sheet BFT for NPP

#### Applications

- Float for the monitoring of liquids in bypass level indicators
- Individual design and corrosion resistant materials make the products suitable for a broad range of applications
- Chemical, petrochemical, natural gas, offshore, shipbuilding, machine building, power generating equipment, power plants
- Process water and drinking water treatment, food industry, pharmaceutical industry

#### Special features

- Sealed, pressure retaining design
- Density range from 340 kg/m<sup>3</sup>
- Pressures up to 400 bar
- Medium temperatures from -196 ... +450 °C
- Versions for interface layer



Fig. left: Corrugated float, model BFT-S  
 Fig. centre: Cylindrical float, model BFT-H  
 Fig. right: Ball-segment float, model BFT-K

#### Description

The model BFT float serves for the monitoring of liquids in bypass level indicators. The magnetic system built into the float transmits the liquid level, contact-free, to externally mounted displays, switches and sensors. Due to its omnidirectional, radial magnetic field, a guide within the tube is not needed.

The design will depend on the application, chemical resistance and the 3 physical quantities of pressure, temperature and density.

## Model overview

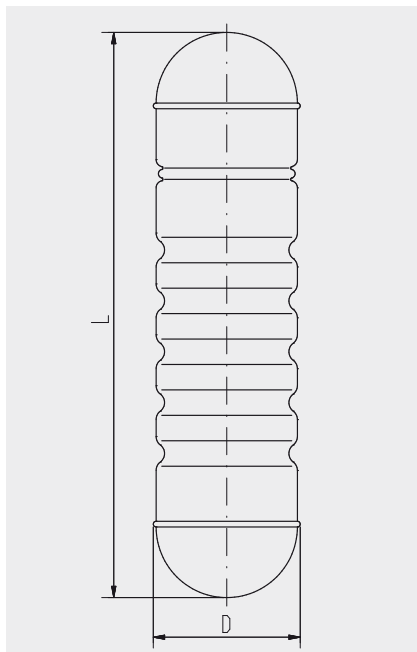
Float	Material	Density range	Pressure range	Temperature range
Cylindrical float, model BFT-H	Stainless steel 1.4571	> 470 kg/m <sup>3</sup>	Vacuum ... 100 bar	-200 ... +450 °C
	Titanium 3.7035	> 340 kg/m <sup>3</sup>		
Corrugated float, model BFT-S	Stainless steel 1.4571	> 470 kg/m <sup>3</sup>	Vacuum ... 25 bar	-50 ... +200 °C
	Titanium 3.7035	> 340 kg/m <sup>3</sup>		
Ball-segment float, model BFT-K	Titanium 3.7065	> 400 kg/m <sup>3</sup>	Vacuum ... 250 bar	-200 ... +450 °C

## Classification of the floats

Bypass level indicator	Suitable float		
	Model BFT-S	Model BFT-H	Model BFT-K
Standard version, model BNA-S	x	x	
High-pressure version, model BNA-H		x	x
DUPlus version, model BNA-SD	x	x	

## Corrugated float, model BFT-S50 (with order no.)

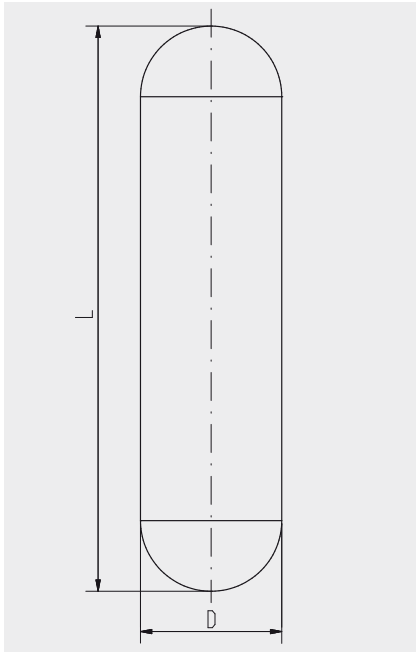
Permissible temperature: -50 ... +200 °C



PN	Density range in kg/m <sup>3</sup>	Diameter in mm	Length in mm	Material
25	990 ... 2,000	50	150	Stainless steel (1.4571)
	830 ... 1,000	50	185	Stainless steel (1.4571)
	730 ... 840	50	225	Stainless steel (1.4571)
	640 ... 730	50	275	Stainless steel (1.4571)
	590 ... 650	50	335	Stainless steel (1.4571)
	550 ... 600	50	400	Stainless steel (1.4571)
	520 ... 560	50	470	Stainless steel (1.4571)
	490 ... 530	50	555	Stainless steel (1.4571)
	470 ... 500	50	650	Stainless steel (1.4571)
	820 ... 2,000	50.8	150	Titanium (3.7035)
	710 ... 850	50.8	180	Titanium (3.7035)
	600 ... 710	50.8	215	Titanium (3.7035)
	540 ... 610	50.8	250	Titanium (3.7035)
	480 ... 540	50.8	300	Titanium (3.7035)
	430 ... 490	50.8	355	Titanium (3.7035)
400 ... 440	50.8	410	Titanium (3.7035)	
380 ... 410	50.8	465	Titanium (3.7035)	
370 ... 390	50.8	525	Titanium (3.7035)	
360 ... 380	50.8	595	Titanium (3.7035)	
340 ... 370	50.8	680	Titanium (3.7035)	

## Cylindrical float, model BFT-H

Permissible temperature: -200 ... +450 °C

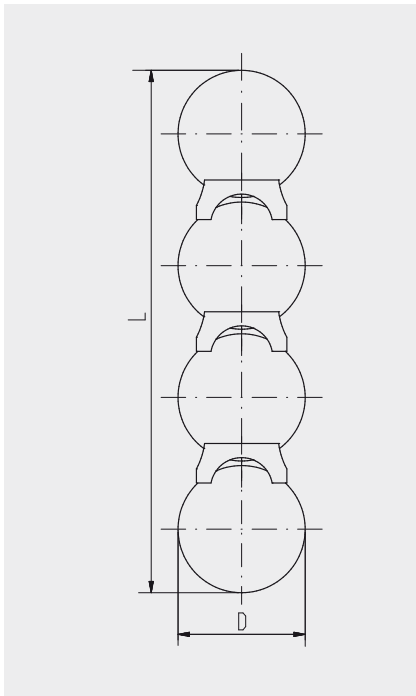


**Material:** Stainless steel 1.4571  
**Diameter:** 50 mm  
**Length:** 150 ... 650 mm (depending on pressure, density and temperature)  
**Weight:** depending on pressure, density and temperature  
**Magnetic system:** depending on pressure, density and temperature  
**Nominal density:** depending on pressure, density and temperature  
**Density range:** depending on pressure, density and temperature  
**Max. pressure:** < 40 bar

**Material:** Titanium 3.7035  
**Diameter:** 45, 50.8 or 60 mm  
**Length:** 150 ... 650 mm (depending on pressure, density and temperature)  
**Weight:** depending on pressure, density and temperature  
**Magnetic system:** depending on pressure, density and temperature  
**Nominal density:** depending on pressure, density and temperature  
**Density range:** depending on pressure, density and temperature  
**Max. pressure:** < 100 bar

## Ball-segment float, model BFT-K

Permissible temperature: -200 ... +450 °C



**Material:** Titanium 3.7065  
**Diameter:** 45, 50.8 or 60 mm  
**Length:** 150 ... 700 mm (depending on pressure, density and temperature)  
**Weight:** depending on pressure, density and temperature  
**Magnetic system:** depending on pressure, density and temperature  
**Nominal density:** depending on pressure, density and temperature  
**Density range:** depending on pressure, density and temperature  
**Max. pressure:** < 250 bar

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