

# How to use and install

## bfs battery filling system

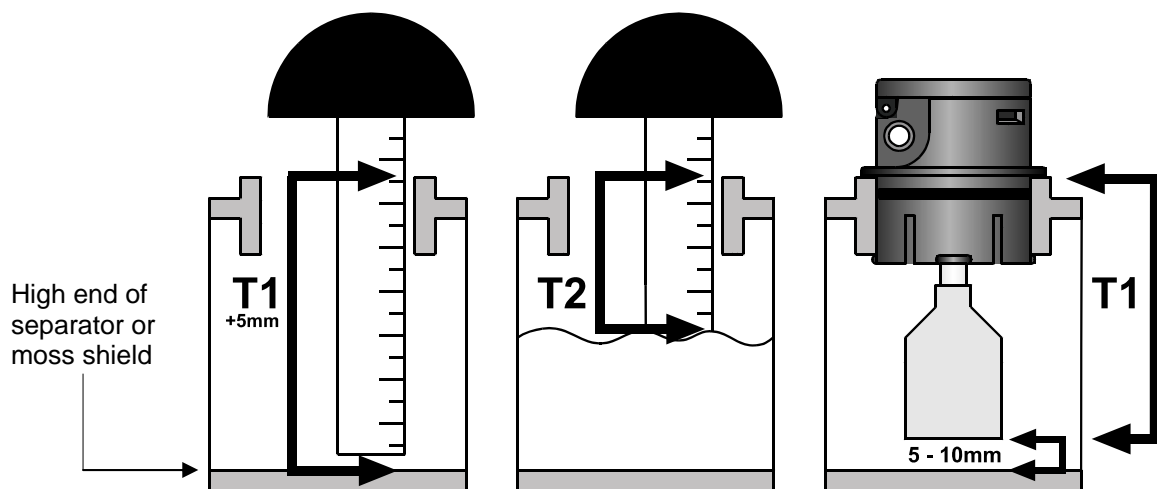
### 1. General remarks

Before any of the bfs products (watering plugs, floats, 6 and 10mm hoses, hose clamps, crosses and t-pieces, filters, flow indicators and quick disconnectors) are assembled and used on motive or standby battery cells, please make sure that the batteries and all bfs parts are free of any dust and dirt particles.

### 2. Floats

The bfs company offers quite a large variety of float sizes. According to the individual cell design, that is cell cover opening, height of separator, moss shield yes or no, depth of vent well and the desired height of electrolyte, the right float height has to be selected. It is quite important to find enough space between pole bridges, moss shield and vent well.

Only if the right float size has been chosen will the bfs watering system work to all expectations. At least 5 mm, 3/16 of an inch space should be provided between the lower end of the float and the high end of the separator.



float no.	072612	072214	072220	072224	072229	072234	072239	072244	072249	072259	071432	071441
	T1 / T2 (mm)											
push-in plug III	42/31	41/29	47/34	51/39	56/42	61/46	66/50	71/53	76/57	86/68	57/35	66/39
bayonet/clip plug III	---	27/14	33/23	37/26	42/30	47/34	52/38	57/42	62/45	72/53	45/22	54/26
threaded plug III	---	30/17	36/26	40/29	45/33	50/37	55/41	60/45	65/48	75/56	48/25	57/29

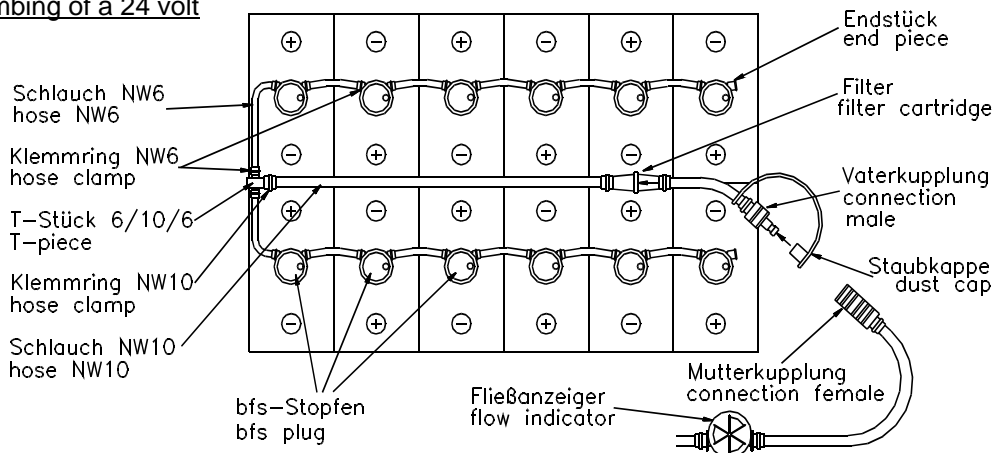
float No.	071926	071933	071942
	T1 / T2 (mm)		
push-in plug III	54/38	60/44	69/49
quarter turn plug III	39/24	46/30	55/35
threaded plug III	43/27	49/33	58/38

When assembling float and plug, watch out for the loud “click” at the very moment of pushing float to float stem.

### 3. Plumbing

bfs can supply plumbing suggestions depending on number of cells per battery. When connecting hoses with either plugs, crossings or t-pieces, make sure to use the special bfs hose clamps. They secure a tight fit not allowing any leaks to occur later on.

Sample for the plumbing of a 24 volt



Quant.	Description	Part No.	Quant.	Description	Part No.
12	bfs push-in plug III *)	A51000	2	end piece	08END6
12	float	07.....	1	connection female	09KUM1
1	t-piece	08T616	1	connection male	09KUV1
3m	hose NW6	08SCH6	1	dust cap	09STAC
24	hose clamp NW6	08KLE6	1	flow indicator	09FLI1
2m	hose NW10	08SCH1	1	filter cartridge	09FIL1
7	hose clamp NW10	08KLE1			

\*) also available are bayonet and different threaded plugs III

### 4. Topping up

To ensure a fault free operation of the bfs watering system, we highly recommend to install the bfs fine filter directly on the battery, a filter of 100 micron, to capture all remaining water impurities. Waterpressure can be up to 3.8bar – 53psi, but should not be lower than 0.2bar – 3.0psi, the optimum range is from 0,3bar – 4psi to 1,8bar – 25psi.

**It is recommended to water the batteries toward the end of the charging time.**

**Never fill distilled water in a battery before it has been charged.**

The topping up of battery water should only be done if needed. If you water too often there is a danger of creeping overfill the battery cells.

### 5. Cleaning

Only use plain water when cleaning any of the bfs products. Do not use detergents.