

Fluidized Bed Reactor

FBR



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FBR 250

Fluidized Bed Reactors may be filled with extreme fine filter sand without the danger of clogging. The moving filter material ensures that old and useless bacteria films are washed out and the new highly active films retain in the filter. Therewith a constant and extreme high bio-degradation is realized. With air or oxygen aeration the efficiency may be raised.

The AquaCare **FBR** Reactor has following advantages:

- intensive mixing of the filter material
- for fresh and sea water
- micro-organisms are able to settle down at the whole surface of the filter sand
- inactive bio-films are flushed out automatically
- constant degradation capacity
- no rotting places inside of the filter; no channels
- easy handling
- nearly maintenance-free
- possible options
 - air or oxygen aeration
 - oxygen measurement
 - flow meter, flow control

Technical data of the AquaCare **FBR** filter:

size	FBR 250	FBR 315	FBR 400	FBR 630	FBR 800	FBR 1000	FBR 1200	FBR 2400
order number	360-025	360-032	360-040	360-063	360-080	360-100	360-120	360-240
max. tank size in m ³ ca. at loads: 1 kg/m ³	75	120	180	440	700	1.000	1.500	6.500
10 kg/m ³	15	24	36	88	140	200	300	1.300
100 kg/m ³ *	3.0	4,8	7	18	28	40	60	250
flow in m ³ /h	2.0...2.4	3.2...3.8	4.8...5.7	11.9...14.2	19...23	30...36	43...52	183...220
suitable pump	UP7000 MD40RX	MD55R-5	MD70R	MX400	MX401	MX403	MDM40	-
diameter in mm	250	315	400	630	800	1000	1200	2400
setting up	external or in the filter sump							
total height in cm**	185 other heights and therefore other volumes and capacities are possible. At heights of more than 2 m flanges should be mounted to simplify transport and erection.							
required height in cm**	200							
foot print size wide × depths in mm	430 × 370	500 × 450	700 × 500	930 × 730	1100 × 900	1300×1100	1500×1300	2500×2700
materials	PVC transparent, PA, NBR		PE-HD black, PA/VA screws, NBR seals					
connectors	DN32	DN32	DN40	DN65	DN80	DN100	DN125	DN200
operation weight in t, ca.	0.15	0.23	0.3	0.8	1.2	1.9	2.7	6
filter material	sharp-edged quartz sand 0.4...0.8 mm diameter							
max. filter mass in t, ca	0.075	0.12	0.18	0.44	0.7	1.0	1.5	4.4

* aeration with air or oxygen is recommended;

for show tanks with less fish you can calculate 1 kg fish per m³, with high loads take 10 kg/m³.

For smaller systems hobby sized filters are available.