

ZETA Magnetic Agitators BMR and BMRT

Powerful Agitators for Use in the Pharmaceutical, Biotech and Food Industries

The ZETA magnetic impellers BMR and BMRT have the following important advantages:

- An open, easy-to-clean design: the hub and the magnetic rotor are connected only by the impeller blades.
- A very large gap between the rotor and the drive shell maximizes flow through the gap and minimizes shear stress.
- The rotor surfaces are designed to drip clean with no product residues.
- Oversized, product-lubricated ceramic bearings (diameter and height) use silicon carbide/zirconium oxide interface for exceptional stability, good emergency running properties, and particle generation below detectable levels.
- Ease of maintenance – ceramic bearing parts can be replaced by users on site; no spare rotor needed.
- CFD-engineered mixing: fluid is drawn from above and pumped outwards. Perfect for mixing solid powders into liquids; rapid breakdown of temperature and concentration gradients, ensures good heating and cooling.

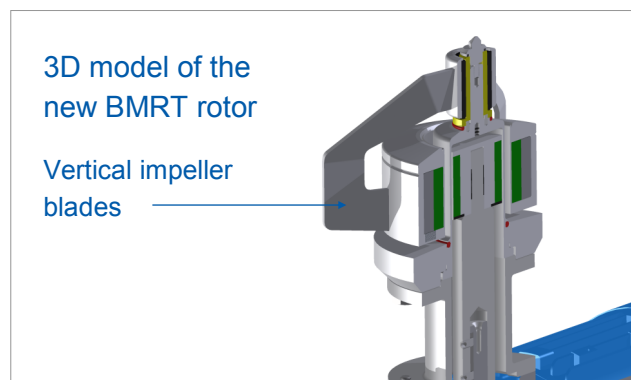
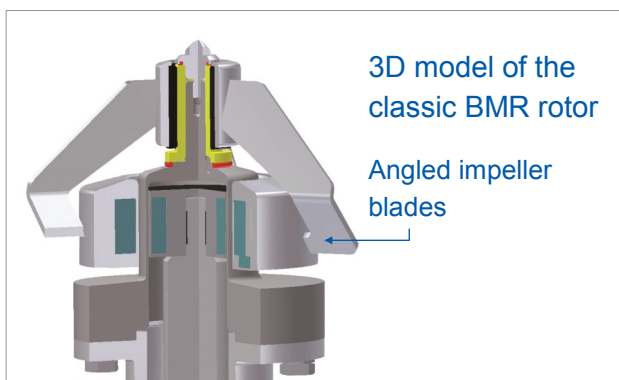
Model-specific advantages:

BMR:

- A special advantage of our classic magnetic impeller BMR is the floating bearing. The kinked shape of the impeller blades causes the impeller to levitate when running in liquid. The head then oscillates on the bearing, which is lubricated by product. The advantages: less load on the axial bearing; product flow through the bearing is improved, which improves lubrication – and cleaning – of the bearing gap.

BMRT:

- The BMRT model agitator features an innovative levitated magnetic impeller. New stronger magnets are used to lift the impeller off the bearing. This greatly improves the agitator's run-dry performance. The vessel can be completely emptied of liquid with the agitator running – mixing to the last drop.
- The BMRT impeller also has vertical blades which allow shorter mixing times to be achieved with the same energy input.



Comparison of BMR and BMRT

Main differences between the new BMRT and the classic BMR

- Higher torque transmission due to new magnetic materials

- Shorter mixing times thanks to new blade design
- Greatly improved run-dry capability due to magnetically levitated impeller

Model no.	Ø Impeller mm	Max. power kW	Max. speed rpm	Mixing capacity (depending on application), in litres
BMR 30 DC	80	0.065	700	2 bis 100
BMRT 35	80	0.065	700	2 bis 100
BMR 30 M	80	0.09	900	2 bis 120
BMRT 50	80	0.09	1000	5 bis 140
BMR 75	105	0.18	850	50 bis 250
BMRT 80 M	105	0.18	950	50 bis 350
BMR 100	125	0.18	525	100 bis 400
BMRT 125	130	0.18	550	100 bis 500
BMR 300	150	0.25	575	200 bis 800
BMRT 400	165	0.37	520	200 bis 1200
BMR 550	175	0.37	530	500 bis 1700
BMR 550 M	110	0.75	1150	800 bis 3000
BMRT 800	190	0.55	520	700 bis 2500
BMR 850	210	0.55	440	800 bis 3000
BMR 1200	250	0.75	325	1000 bis 4000
BMRT 1300	250	0.75	350	1000 bis 4500
BMR 2500	300	1.10	300	2000 bis 8000
BMRT 2600	300	1.50	315	2000 bis 8000
BMR 2500 M	165	2.20	900	3000 bis 10000
BMR 4000	350	1.50	250	3500 bis 12000
BMRT 5000	350	2.20	290	3500 bis 15000
BMR 7500	400	2.20	250	6000 bis 22000
BMRT 10000	400	4.00	290	6000 bis 25000
BMR 13000	450	4.00	240	10000 bis 33000
BMRT 17000	450	5.50	270	10000 bis 40000
BMR 20000	500	7.50	230	15000 bis 50000
BMRT 21000	500	7.50	250	15000 bis 55000