
ZETA BMRT

BOTTOM MOUNTED AGITATOR BMRT

Powerful agitators for applications in Pharma, Biotech and Food Industry.

The AGITATOR is the heart of a reactor for liquid processes. Invisible but essential for an efficient and powerful mixing process, ZETA magnetically-driven agitators are designed and manufactured to meet and exceed the exceptional high expectations and specifications of our client base at all times.

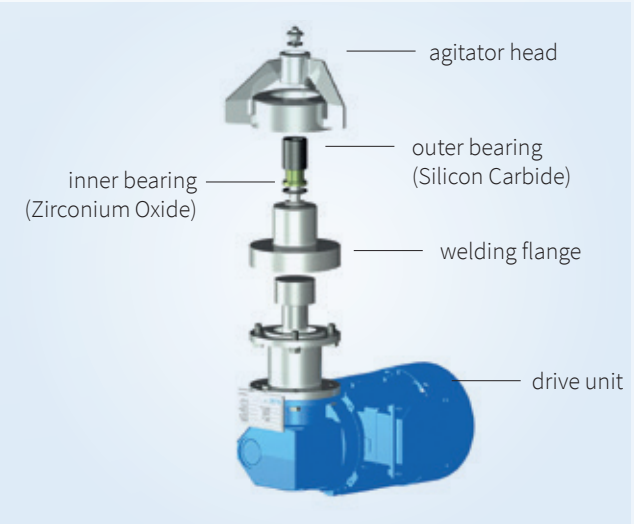
Function:

Our innovative impeller is the first choice for even distribution of temperature and concentration gradients in aqueous solutions. It is characterized by the fact that it draws in liquid from above and drives it outwards in a predominantly radial pattern. The range for the working volume reaches from 2 till 60.000 L.

Standard agitator:

As per standard, the ZETA magnetic agitators consist of a drive unit, extension flange between drive and weld plate, weld plate including female bearing and agitator head (impeller). The weld plate ensures the hermetically sealing between vessel atmosphere and environment.
An important feature is the big gap between containment shell and rotor (impeller), for better cleanability and reduced shear forces. Together with the open impeller design, these agitators allow for perfect CIP and SIP results.

ZETA experts assist with the selection of the right agitator for the specific process, the choice of drive and the use of either a weld-plate or plug-in version of the containment.



Technical Data ZETA BMRT:

PRODUCT WETTED PARTS:			DRIVE UNITS:		
Male bearing:	Standard	ZrO_2	**Painting:**	Standard	RAL5015 - 2 comp.
	Optional	SSiC		Optional	FDA painting & other colors
		TC-6N	**Protection class:**	Standard	IP 55
		TC-NB		Optional	IP 65
Female bearing:	Standard	SSiC			IP 66
	Optional	TC-6N			IP 67
		TC-NB			
			Other drive option:		ATEX, Stainless Steel
Steel grade:	Standard	1.4435	**MOUNTING OPTIONS:**		
	Optional	1.4539		Standard	welding flange
		1.4529		Optional	removeable containment shell (Plug In)
		Hastelloy-C22	**SPEED MEASUREMENT:**		optional available
O-Rings:	Standard	EPDM			
	Optional	FEP	**MAX. VISCOSITY:**		500 cp
		Silicone	**MAX. OPERATION TEMPERATURE:**		130°C
		Viton			
Standards:	according to	FDA, USP-Cl.VI, AD 2000-W2, ASME	**DRY-RUN POSSIBILITY:**		for 15 min after emptying the vessel, at reduced speed
Certificates:	Standard	2.2 & 3.1 Mat. certificates			
	Optional	3.2 Mat. certificates			
Surface roughness:	Standard	Ra: <0,6 µm	**SURFACE FINISHING:**		grinding, polishing and in-house e-polishing, to customer specification
	Optional	min. Ra: <0,2µm			

Further options are available on demand.

Standard Types:

MODELL	IMPELLER [mm]	DRIVE	MOTOR POWER [kW]	MIN. SPEED [rpm]	MAX. SPEED [rpm]	GEARRATIO	GAP* [mm]	MAX. MIXING VOLUME AT 1 mPas [L]
BMRT 35	80	GS-D	0.065	70	700	–	2.0	100
BMRT 50	80	DS	0.09	125	1000	–	2.0	140
BMRT 80	105	DS	0.18	125	950	–	3.3	350
BMRT 125	130	DS-SG	0.18	75	550	7	3.3	500
BMRT 400	165	DS-SG	0.37	75	520	7	3.5	1.200
BMRT 800	190	DS-SG	0.55	75	500	7	4.5	2.500
BMRT 1300	250	DS-SG	0.75	50	340	10	7.0	14.500
BMRT 2600	300	DS-SG	1.50	50	300	4.83	7.0	28.000
BMRT 5000	350	DS-SG	2.20	50	285	6	7.0	31.000
BMRT 10000	400	DS-SG	4.00	50	260	5	7.0	25.000
BMRT 17000	450	DS-KG	5.50	50	260	6.39	7.0	40.000
BMRT 21000	500	DS-KG	7.50	50	236	6.39	7.0	60.000

GS-D … DC Motor, directly driven
DS … Three phase a.c. motor, directly driven
DS-SG … Three phase worm geared motor
DS-KG … Three phase bevel gear motor
*) gap between containment shell and magnetic rotor