



## TOP MOUNTED MAGNETIC AGITATORS AMR

Powerful Agitators for Application in Pharma, Biotech and Food Industry.

The ZETA top mounted magnetic agitators AMRe and AMRi are an essential improvement of the conventional magnetic agitator technology. A significant advantage of the practical application is the easy and, thus, cost-efficient maintenance compared to agitators with a mechanical seal.

AMR agitators avoid the problems of conventional agitators with mechanical seals and permit the use of almost any type of impeller. The impellers can be welded to the shaft or mounted with the aid of a sliding hub (optional: in sterile design). The fixation at the vessel lid is performed according to the customer's order (e.g. dead-space-free bearing flange, TriClamp- or bayonet connection). The particular impeller is then fixed to the shaft according to the process specifications.

For smaller vessel sizes a direct current motor with integrated speed control is used, otherwise a polyphase motor with integrated FU is applied.

### AMRe – external magnetic coupling

The hermetic sealing of the interior of the vessel is achieved by means of an external magnetic coupling. The containment shell is aerated via a side nozzle at the vessel wall. This nozzle allows a cleaning and sterilization.

### AMRi – internal magnetic coupling

In this case the magnetic coupling and the dry running ball bearings are installed inside the vessel and hence are easy to clean and sterilize in situ.

## Technical data ZETA AMR

PRODUCT-WETTED PARTS			MOTORS			
<b>Ceramic ball bearing:</b>		ZrO2/Si4N3/PEEK	<b>Construction:</b>		direct	
<b>Agitator head around shaft:</b>	Standard	1.4435	<b>Coating:</b>	Standard	angulate	
	Optional	1.4539		Standard	RAL5015 – 2 Komp.	
		1.4529		Optional	FDA-varnish, further colours	
<b>Fixation of impeller:</b>		Hastelloy-C22	<b>Agitator fixation:</b>	Standard	IP 55	
	Standard	Welded to the shaft		Optional	IP 65	
	Optional	Mounted with sliding hub			IP 66	
<b>O-Rings:</b>		Sealed sliding hub	<b>AGITATOR FIXATION</b>	Standard	Removeable containment shell (Plug-in-flange)	
	Standard	EPDM		Optional	Welding flange	
	Optional	FEP			<b>ROTATIONAL SPEED MEASUREMENT</b>	available
		Silicone				
Viton						
<b>Standards:</b>	accordingly	USP-CI.VI, AD 2000-W2, ASME				
<b>Certificates:</b>	Standard	2.2, 3.1 Mat. Certificates	<b>MAX. OPERATING TEMPERATURE</b>	130 °C		
<b>Surface quality of product-wetted parts:</b>	Standard	Ra: < 0,8 µm	<b>SURFACE TREATMENT</b>			
	Optional	bis zu Ra: <0,2µm				manual & e-polished

Further options are available on demand.

## Current/Available types:

AMRe (external magnetic coupling)	
MODELS	MAX. TRANSMITTED TORQUE
<b>AMRe 300</b>	300 Ncm
<b>AMRe 550</b>	550 Ncm
<b>AMRe 850</b>	850 Ncm
<b>AMRe 1800</b>	1800 Ncm
<b>AMRe 2500</b>	2500 Ncm

  

AMRi (internal magnetic coupling)	
MODELS	MAX. TRANSMITTED TORQUE
<b>AMRi 30</b>	30 Ncm
<b>AMRi 100</b>	100 Ncm
<b>AMRi 300</b>	300 Ncm
<b>AMRi 550</b>	550 Ncm

