



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 nozzel 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.

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Technical data ZETA AMR

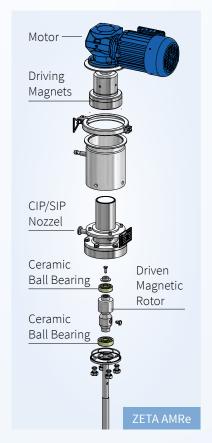
| PRODUCT-WETTED PARTS | | | MOTORS | | |
|--|-------------|-----------------------------|-----------------------------------|----------|---|
| Ceramic ball bearing: | | ZrO2/SI4N3/PEEK | Construction: | | direct |
| Agitator head around shaft: | Standard | 1.4435 | - | | angulate |
| | Optional | 1.4539 | Coating: | Standard | RAL5015 – 2 Komp. |
| | | 1.4529 | | Optional | FDA-varnish, further colours |
| | | Hastelloy-C22 | | Standard | IP 55 |
| Fixation of impeller: | Standard | Welded to the shaft | | Optional | IP 65 |
| | Optional | Mounted with sliding hub | | | IP 66 |
| | | Sealed sliding hub | | - | |
| O-Rings: | Standard | EPDM | AGITATOR FIXATION | Standard | Removeable containment shell (Plug-in-flange) |
| | Optional | FEP | | Optional | Welding flange |
| | | Silicone | | | |
| | | Viton | ROTATIONAL SPEED MEASUREMENT | | available |
| Standards: | accordingly | USP-Cl.VI, AD 2000-W2, ASME | | | |
| Certificates: | Standard | 2.2, 3.1 Mat. Certificates | MAX. OPERATING TEMPERATURE 130 °C | | 130 °C |
| Surface quality of product-wetted parts: | Standard | Ra: < 0,8 µm | | | |
| | Optional | bis zu Ra: <0,2µm | SURFACE TREATMENT n | | manual & e-polished |

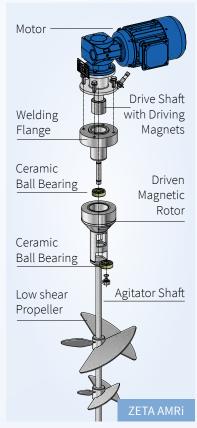
Further options are available on demand.

Current/Available types:

| AMRe (external magnetic coupling) | | | |
|-----------------------------------|-------------------------|--|--|
| MODELS | MAX. TRANSMITTED TORQUE | | |
| AMRe 300 | 300 Ncm | | |
| AMRe 550 | 550 Ncm | | |
| AMRe 850 | 850 Ncm | | |
| AMRe 1800 | 1800 Ncm | | |
| AMRe 2500 | 2500 Ncm | | |

| AMRi (internal magnetic coupling) | | | |
|-----------------------------------|-------------------------|--|--|
| MODELS | MAX. TRANSMITTED TORQUE | | |
| AMRi 30 | 30 Ncm | | |
| AMRi 100 | 100 Ncm | | |
| AMRi 300 | 300 Ncm | | |
| AMRi 550 | 550 Ncm | | |





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