

Hydraulic Magnet



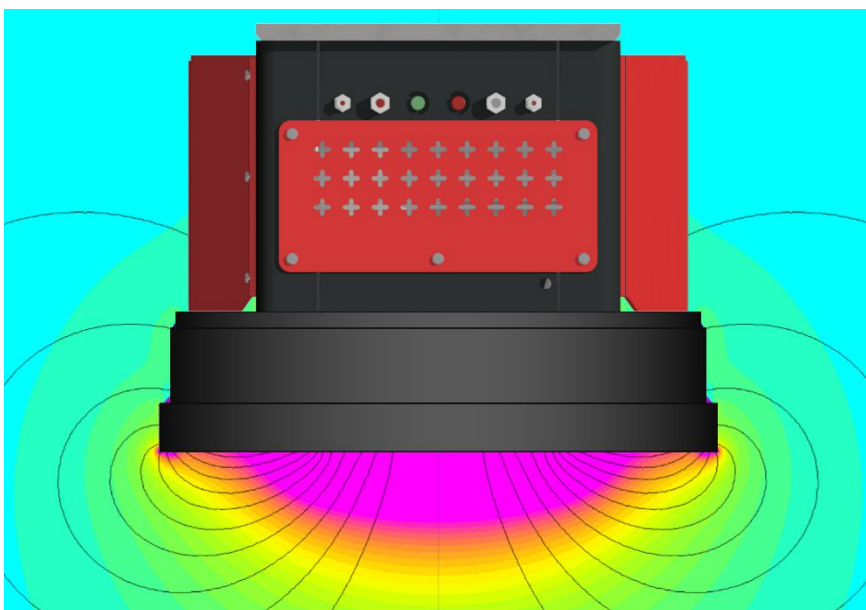
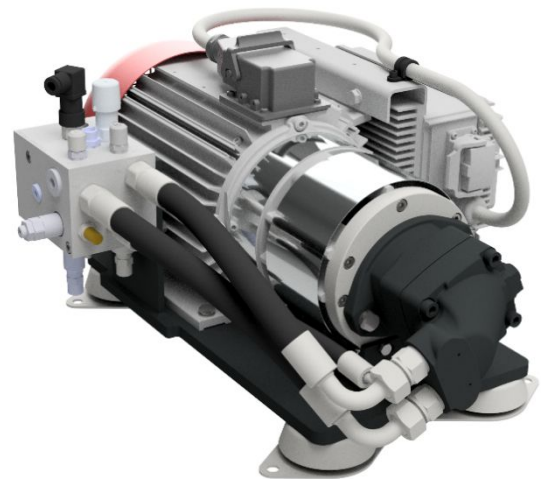
MR



The hydraulic magnet is used to separate steel parts from the bulk material in order to be recycled or to protect subsequent machines. The hydraulic lines of the excavator are connected to the hydraulic magnet. The hydraulic oil drives the generator via the integrated hydraulic motor. This generates the required electric current, which feeds the coil of the magnet plate. The magnetic fields emerge at the bottom of the magnet plate and attract iron parts such as reinforcing bars or profiles and only release them when the control of the generator no longer supplies any electrical current by means of the switch-off command. The intelligent control accelerates the switch-on and switch-off process. This optimises the attraction and release properties and keeps the fuel as low as possible.



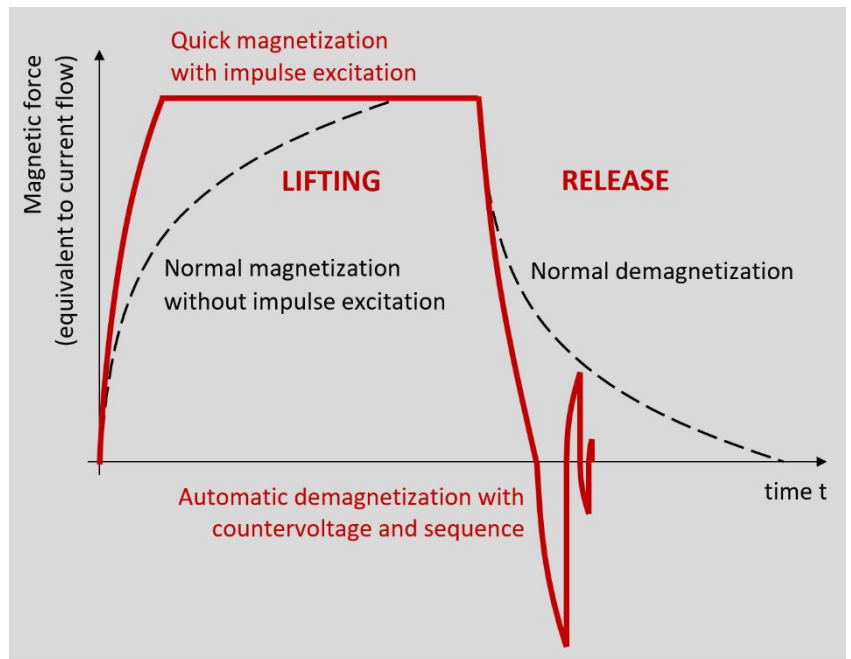
The drive unit is mounted on vibration dampers to be protected against vibration. The integrated valve block has several advantages: the residual volume of media in the system is measurably minimized, the flow is optimized and emptying is improved. This increases the performance of the overall system and reduces media consumption. The valve block also has the advantage that it forms nodes in the system. This simplifies cleaning and maintenance. At the same time, the number of fittings is minimized, which leads to a reduction in potential leaks.

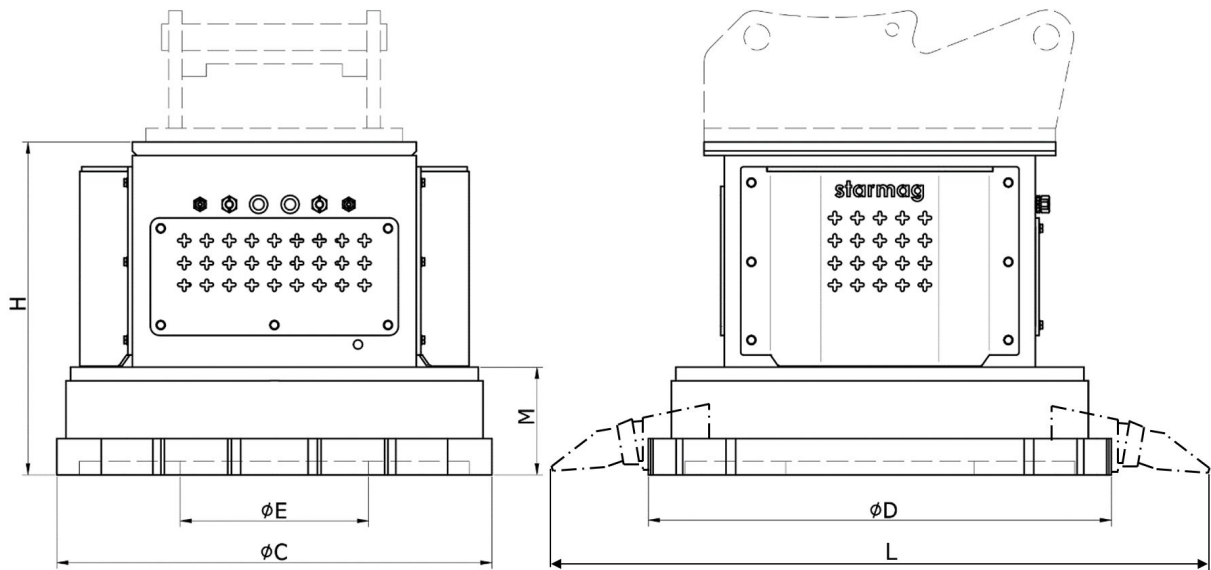


« The highly qualified staff, modern software tools (3D CAD, FEM) and efficient manufacturing methods ensure that we can offer holistic solutions - from technical advice to the finished product. »

The hydraulic connections are made via quick couplers or directly on the external screw connections of the housing. The integrated generator (IP 54) is protected by the robust housing of the hydraulic magnet and is driven directly by an inclined-axis hydraulic motor via a claw coupling. The motor can easily withstand high speed accelerations thanks to its robust roller bearings. The controller, which is mounted directly on the generator, limits the power output and reduces the output voltage in the event of an overload. The electronic components in the controller are encapsulated in the housing to protect against vibrations. The CAN bus connection helps the user to locate and eliminate sources of error. The generator is cooled by self-ventilation (no external cooling). The hydraulic magnet is delivered on a robust steel frame for safe transport.

« The special discharge control enables a quick load release: the cycle times are reduced and the throughput is increased by up to 25%. »

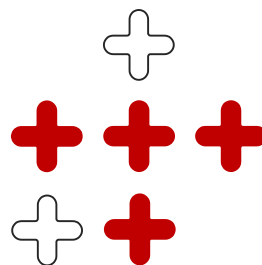




| Technical specifications | MR-88 | MR-98 | MR-118 |
|---|-------|-----------|--------|
| øC [mm] | 870 | 980 | 1'140 |
| øD [mm] | 910 | 1040 | 1'200 |
| øE [mm] | 300 | 420 | 460 |
| H [mm] | 785 | 750 | 810 |
| L [mm] | | 1'625 | 1'790 |
| M [mm] | 200 | 250 | 310 |
| Generator power [kW] | 8.0 | 13.0 | 17.0 |
| Magnet power [kW] | 5.0 | 7.3 | 10.6 |
| Pressure (recommended) [bar] | | 250 - 350 | |
| Nominal flow rate [l/min] | | 62 | |
| Flow rate (recommended) [l/min] | | 65 - 80 | |
| Max. pressure return line [bar] | | 25 | |
| Max. pressure leak oil [bar] | | 8 | |
| Tear-off force [kg] ¹⁾ | 7'173 | 11'865 | 24'614 |
| Weight without teeth [kg] ²⁾ | 780 | 1'190 | 1'805 |
| Weight with teeth [kg] ²⁾ | | 1'280 | 1'905 |
| Carrier weight class [to] | 14+ | 18+ | 24+ |

¹⁾ According to VDE 0580 in cold condition with air gap øC/300 (FEM calculation)

²⁾ Weight specifications without adapter / quick coupler



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