sepmag®
Smart & Scalable
Magnetic Bead Separators

sepmag® Q5L

TECHNICAL DATA SHEET

Sepmag Systems SL
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Technical Data Sheet

SAFETY INSTRUCTIONS

IMPORTANT: READ THESE INSTRUCTIONS BEFORE OPENING THE PACKAGE

KEEP INSTRUCTIONS IN A SAFE PLACE

- BEFORE MOVING THE SEPMAG SYSTEM FROM ONE PLACE TO ANOTHER, REVIEW THESE PROCEDURES AND ENSURE THAT ALL NECESSARY PRECAUTIONS ARE TAKEN.
- IT IS ESSENTIAL THAT ALL SYSTEM USERS ARE FAMILIAR WITH THE DEFINITIONS OF 'CAUTION AREA' AND 'DANGER AREA', UNDERSTAND THEIR RANGE, AND DO NOT ALTER THE SYSTEM'S POSITION WITHOUT AUTHORIZATION.

SEPMAG IS A SYSTEM CONTAINING PERMANENT MAGNETS. ITS DESIGN MINIMIZES THE RISKS ASSOCIATED WITH USAGE AND TRANSPORTATION, BUT CERTAIN PRECAUTIONS SHOULD STILL BE FOLLOWED. THE ATTACHED CHART INDICATES THE CAUTION AREA AND DANGER AREA WICH MUST BE RESPECTED AROUND THE SYSTEM.

IMPORTANT

- **IF ANY OPERATIONAL DEFECT OR DAMAGE TO THE STRUCTURE IS OBSERVED, WHETHER DURING TRANSPORTATION OR USAGE, PLEASE CONTACT SEPMAG SYSTEMS IMMEDIATELY (TEL. +34 935 820 161 - EMAIL contact@sepmag.eu).**
- **NEVER OPEN THE SYSTEM OR TOUCH THE PARTS INSIDE MAGNETIC FORCES. MAGNETIC FORCES INSIDE ONLY HIGHLY QUALIFIED PERSONNEL AUTHORIZED BY SEPMAG SYSTEMS MAY CONDUCT REPAIRS TO AVOID ACCIDENTS.**

SEPMAG SYSTEMS SHALL NOT BE HELD RESPONSIBLE FOR ANY CLAIMS OR DAMAGES RESULTING FROM FAILURE TO COMPLY WITH THE SAFETY REGULATIONS SET OUT IN THIS DOCUMENT

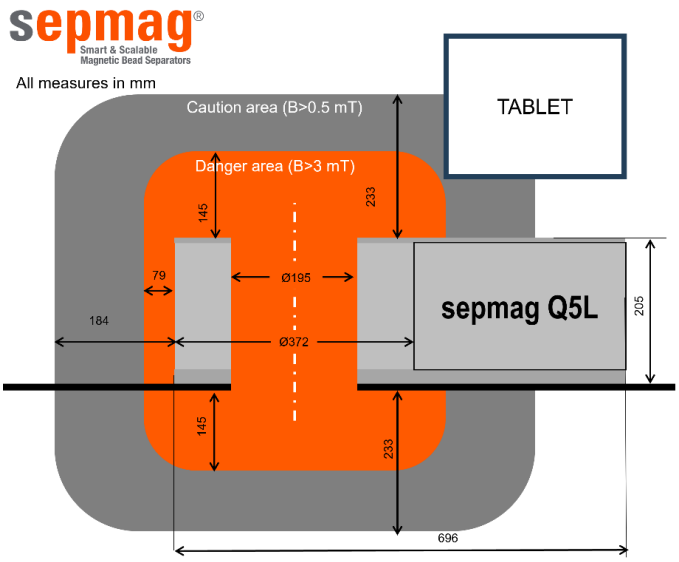
Definition and level of risk due to the presence of strong magnetic fields

CAUTION AREA (B>0.5 mT , 5 Gauss)

- People fitted with pacemakers or other electronic medical implants must NEVER enter this area.
- Damage may occur to watches, instruments and magnetic recording materials placed in this area.

DANGER AREA (B>3 mT, 30 Gauss)

- Magnetizable objects and tools must NEVER enter this area.
- People fitted with medical implants must NEVER enter this area without the explicit authorization of the safety and hygiene services.



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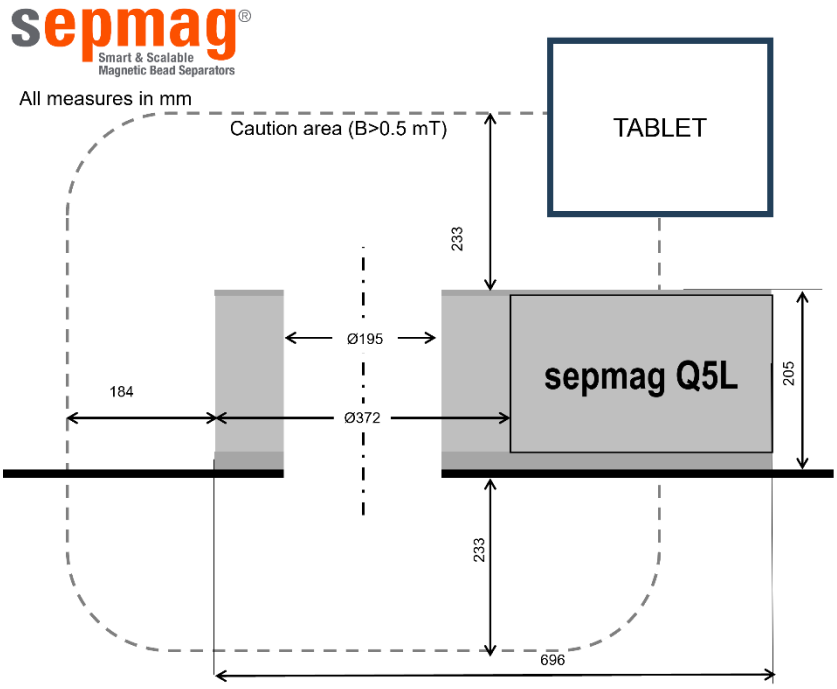
Characteristics

Serial Number SEPMAG Q5L	ID Number	Magnetic Force	Dimensions and weight			
			Øint	Øext	Height	Weight
			195 mm	372 mm	205 mm	68 kg

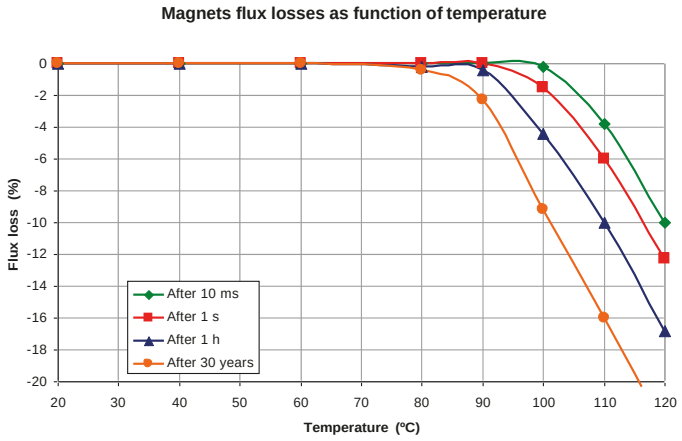


Long-term stability of the magnetic characteristics

The magnetic field pattern generated by **Sepmag** devices is generated by high-performance permanent magnets. Due to the intrinsic properties of these magnetic materials, the value of the magnetic field remains stable for hundreds of years, except if:

- The device (or part of it) is heated over 80ºC (figure1).
- The device (or part of it) is exposed to a magnetic field of 1 Tesla (T) or more.

NOTE: A magnetic field of 1 T is over 20,000 times higher than the typical Earth Magnetic field. A field higher than 1 T is only achievable by superconductive coils or very large electromagnets, like the ones used by MRI medical devices.



Adapted from: IEEE TRANSACTIONS ON MAGNETICS, VOL. 46, NO. 9, SEPTEMBER 2010
Time Dependence of Demagnetization and Flux Losses Occurring in Sintered Nd-Fe-B Permanent Magnets. Minna Haavisto.

EU Declaration of Conformity

SEPMAG SYSTEMS SL, with registered office at Edifici CENT, Parc Tecnològic del Vallès, E 08290 Cerdanyola del Vallès (Barcelona) and VAT-number ES-B65758831

DECLARES:

Under its sole responsibility, that the following equipment:

Magnetic Bead Separation system

Mark: sepmag®

Model:

Serial number:

Electronic ID:

and in conformity with **the relevant Union legislation:**

• DIRECTIVE 2014/30/EU of the European Parliament and of the Council of 26 February 2014 on electromagnetic compatibility (EMC).
• REGULATION (EU) 2023/1230 of 14 June 2023 on machinery and repealing Directive 2006/42/EC.
• DIRECTIVE 2011/65/EU of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS).
• DIRECTIVE 2012/19/EU of 4 July 2012 on waste electrical and electronic equipment (WEEE).
• DIRECTIVE 2013/35/EU of the European Parliament and of the Council of 26 June 2013 on the minimum health and safety requirements regarding the exposure of workers to the risks arising from physical agents (electromagnetic fields).
• DIRECTIVE 2014/35/EU of 26 February 2014 on electrical equipment designed for use within certain voltage limits (LVD).

Harmonized Standards applied:

• UNE-EN ISO 12100:2012: Safety of machinery – General principles for design – Risk assessment and risk reduction.
• EN 61000-6-1 / EN 61000-6-3: Electromagnetic compatibility (EMC) – Generic standards.

Signed for and on behalf of:

Parc Tecnològic del Vallès, March 15th, 2025

Lluís M. Martínez, Ph.D.
Technical Director

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