

Berson UV Disinfection Spare Parts Catalogue — InLine 4500+, MPI, LPI, B810H Lamps, Quartz Sleeves, Sensors, Capacitors

cBallast Technical Sourcing · Berson InLine, MPI, LPI, PRO7 & B810H UV disinfection reactors — complete wear-part reference · issued 2026-08-29 · cballast.com/documents/berson-uv-disinfection-spare-parts-catalogue-inline-mpi-lpi-b810h

Complete Berson UV spare part catalogue: replacement UV amalgam and low-pressure lamps for InLine 4500+, MPI, LPI, PRO7 and B810H reactors; quartz sleeves; UV intensity sensors (SR-04, SR-05, MPI intensity monitor); electronic ballasts and lamp drivers; capacitors (P/N 10178-1110 with resistor for LPI series); sensor holders and wipers; power-supply modules; sealing kits; O-rings and gaskets. Sourcing cBallast is a Berson spares stockist for ballast-water and drinking-water treatment operators worldwide — request a quote by reactor tag, serial or family. Fast quotation on scheduled 8,000- and 12,000-hour lamp replacements.

Berson UV disinfection spare parts — complete catalogue reference

Berson UV-technik (part of the Halma UV Group, alongside Hanovia and Aquionics) supplies medium- and low-pressure UV disinfection reactors used in drinking water, ballast water, process water and wastewater applications on ships, in industrial plants and in municipal treatment works worldwide. Every Berson reactor has a scheduled wear-part life of typically 8,000 or 12,000 hours on the UV lamp, plus quartz sleeve replacement on inspection, sensor recalibration and periodic ballast / capacitor replacement. cBallast supplies original Berson wear parts across every current Berson family — use this catalogue to identify the correct part number by reactor family, then request a quote by reactor tag, serial number or the equipment's current build sheet.

Reactor families & typical wear parts

Reactor family | Lamp type | Typical service | Common spare parts |

Berson InLine 4500+ (medium-pressure) | Medium-pressure quartz | Ballast water treatment (BWMS), industrial process water | UV lamp, quartz sleeve, UV intensity sensor, wiper motor and rod, control cabinet PCB, lamp driver |

Berson MPI (medium-pressure) | Medium-pressure amalgam | Drinking water disinfection, wastewater tertiary | UV lamp, quartz sleeve, MPI intensity sensor, sensor holder A30001, sealing gaskets |

Berson LPI (low-pressure amalgam) | Low-pressure amalgam | Drinking water, high-purity industrial water, food/beverage | UV lamp, quartz sleeve, capacitor with resistor (10178-1110), lamp holder, sensor |

Berson PRO7 | Low-pressure amalgam | Municipal drinking-water treatment | UV lamp, quartz sleeve, ballast, sensor, wiper |

Berson B810H (bulb series) | Medium-pressure H (10 kW) | Industrial process, larger flow-rate BWMS | B810H lamp (P/N 130039-8001-03 typical), quartz sleeve, driver, intensity sensor |

Berson Aquada / Multiwave (legacy) | Low-pressure or amalgam | Small-flow drinking-water, POU/POE | Superseded lamps; ask cBallast for compatible-fit reference |

UV lamp replacement — scheduled maintenance

A Berson UV lamp is at end-of-life at 8,000 h of operation (typical medium-pressure) or 12,000 h (typical low-pressure amalgam). End-of-life is defined not by a burn-out but by UV output degradation to 70 % of new-lamp output — measured by the reactor's built-in UV intensity sensor. Replace on either the calendar interval (per operator preference) or on a sensor alarm. Common replacement lamp part numbers:

Reactor | Lamp P/N or type | Rated hours | Wattage | Notes |

Berson InLine 4500+ | ILR-4500 lamp (specify reactor size) | 8,000 h | 4-10 kW medium-pressure | Amalgam variant available for lower operating temperature |

Berson MPI | MPI-3.5, MPI-6 lamp (per module count) | 8,000-12,000 h | 3.5 or 6 kW medium-pressure | Same envelope, different fill pressure per module |

Berson LPI | LPI-150, LPI-250 amalgam lamp | 12,000 h | 150 or 250 W low-pressure amalgam | Requires paired capacitor with resistor (P/N 10178-1110) for stable strike |

Berson B810H | 130039-8001-03 (10 kW MP) | 8,000 h | 10 kW medium-pressure | Cited on drawings as "B810H 24 MWV 036" |

Berson PRO7 | PRO7-320 or PRO7-600 amalgam | 12,000 h | 320-600 W amalgam | Multi-lamp reactor; replace as a set for consistent lamp output |

P/N 10178-1110 — Berson capacitor with resistor is a specific spare on the Berson LPI series and older BWL amalgam reactors. The resistor bleeds the residual charge from the capacitor after lamp switch-off; without it the lamp restrike-current spike accelerates cathode wear. Replace as a scheduled part every second lamp change (typically 24,000 h).

Quartz sleeves — scheduled inspection & replacement

The quartz sleeve encloses the UV lamp and separates it from the flowing water, letting the reactor operate below the lamp's ~40 °C envelope temperature. Quartz sleeves typically last 1-2 lamp cycles (16,000-24,000 h) before UV transmission drops below the 90 % new-quartz threshold and they need replacement. Common Berson quartz-sleeve reference dimensions:

Reactor | Sleeve OD × wall × length | Notes |

Berson InLine 4500+ (medium size) | 30 mm × 2 mm × 900-1200 mm | Long medium-pressure lamp sleeve; end-caps at both ends |

Berson MPI (small size) | 30 mm × 2 mm × 400-600 mm | Shorter modular sleeve |

Berson LPI (amalgam) | 25 mm × 1.5 mm × 900-1200 mm | Low-pressure lamp sleeve; single end-cap |
Berson Wedeco Aquada | Wedeco NLR1825 (superseded to Berson) | Legacy small-flow reactor; contact for spec |
Katadyn K-64 / EK-36 | 18 or 30 mm OD, various lengths | Sister-brand quartz sleeves interchange on request |

Every quartz-sleeve order needs the reactor tag or serial to confirm end-cap type (single vs double, thread vs O-ring) and any customer-specific sealing hardware. Wipers scratch quartz over time — specify the wiper-blade condition when ordering a fresh sleeve.

UV intensity sensors & sensor holders

Every Berson reactor has a UV intensity sensor that measures lamp output through a dedicated observation window in the sleeve. The sensor is a photodiode with a UV-C bandpass filter, calibrated to the specific Berson reactor at manufacture. Sensor part numbers vary by reactor generation:

Berson MPI intensity sensor — matched to the MPI reactor family; ships with a factory calibration certificate. Common Sensor Holder P/N: A30001 (see cBallast Sensor Holder A30001 product page).

Berson InLine 4500+ SR-04 / SR-05 — medium-pressure reactor sensor variants. Both fit the same reactor port; SR-05 has higher sensitivity for lower UV-output configurations.

Berson LPI amalgam sensor — low-pressure variant with narrower filter bandwidth (254 nm peak).

Sensor Holder Window (Aquafides A30100) — the sensor-facing window inside the sensor holder; scheduled cleaning or replacement on scale/foulant deposition.

Sensor Holder for DVGW/ÖNORM sensor — a version conforming to the DVGW W294 / ÖNORM M5873 UV drinking-water certification. Required for regulated drinking-water installations in Germany, Austria and Netherlands.

Sensor recalibration is typically annual, coincident with the lamp change. Berson supplies a factory recalibration service; cBallast can accept sensors on your behalf and coordinate return-to-service with the operator's ISM SMS document flow.

Electronic ballasts, lamp drivers & capacitors

Part | Reactor family | Function | Common P/N |

Electronic ballast | LPI amalgam | Constant-current driver, 250 W amalgam | Berson ballast per lamp; multi-lamp reactors have banked ballast rack |

Lamp driver, medium-pressure | InLine 4500+, MPI, B810H | Ignition and stabilised current control | Berson driver module per lamp |

Capacitor with resistor | LPI amalgam | Restrike stabilisation + bleed resistor for safe restart | P/N 10178-1110 |

Ignitor | MP reactors | Initial high-voltage strike, opens after lamp warms | Ignitor module (per driver) |

Power supply | Sensor and control side | 24 V DC or 48 V DC low-voltage supply | DIN-rail switch-mode PSU; standard IEC 62368 rated |

Wiper systems & wear parts

Every Berson reactor with a wiper system uses a periodic wiper stroke to clean scale, oil and organics from the outside of the quartz sleeve, maintaining UV transmission over multi-year deployments. Wiper-system wear parts:

Wiper motor / gearbox — drive assembly; scheduled service every 5-8 years.

Wiper rod (stang) — the through-shaft carrying the wiper collar; scheduled inspection at every lamp change.

Wiper collar / brush ring — wears against quartz; replace annually or when scoring visible on the sleeve after removal.

Wiper coupling ("koblingsstykke") — couples wiper rod to the motor drive; ProMinent-compatible coupling P/N cited in service notes.

Sealing rings — between the wiper actuator and the reactor body; NBR or Viton depending on service temperature and water chemistry.

Sealing kits, O-rings & hardware

Every scheduled overhaul (lamp + sleeve replacement) requires a fresh set of sealing kits: end-cap O-rings on the quartz sleeve, gaskets at the reactor closure flange, and often a wiper-seal replacement. Berson supplies these as pre-packed overhaul kits, or cBallast can quote against the individual O-ring size (ISO 3601 metric or AS568 imperial) and material (Viton for hot service, EPDM for chloraminated water, NBR for general drinking water).

Common questions

Q: What UV lamp does the Berson B810H reactor take? The B810H is a 10 kW medium-pressure lamp; typical Berson part number 130039-8001-03. Verify against your reactor build sheet for the exact wattage and quartz-envelope specification. cBallast supplies these ex-stock in Europe with 24-48 h lead time.

Q: How often should the Berson LPI capacitor P/N 10178-1110 be replaced? On the LPI amalgam reactor family, replace the capacitor with resistor every second lamp change (typically 24,000 h). Sooner if the LPI reactor shows longer-than-normal strike times or repeated restrike attempts.

Q: Can I use a Wedeco NLR1825 sleeve on a Berson Aquada? The Aquada uses a Wedeco-branded sleeve as the OEM; NLR1825 is interchangeable if the Berson Aquada came from the Wedeco-Berson supply chain. Confirm the specific model year with cBallast — some later-build Aquadas moved to a Berson-branded sleeve with different end-cap thread.

Q: Which Berson reactor is used in BWMS ballast water treatment? Berson's BWMS-labelled units are typically the InLine 4500+ MP family with the ballast-water-approved control cabinet (per IMO Ballast Water Management Convention and USCG Type Approval). Same reactor body as the industrial InLine; the difference is the type-approval certification and the

control-cabinet firmware.

Q: How does cBallast handle Berson OEM warranty on replacement lamps? Berson lamps supplied through cBallast carry the standard 8,000-hour Berson service warranty; register the lamp installation via the standard Berson service portal or ask cBallast for the factory installation ticket at time of shipment.

Related products on cBallast & RFQ instructions

All Berson products on cBallast

Berson MPI replacement sensor

Berson capacitor with resistor P/N 10178-1110

Berson UV lamp replacements

Berson quartz sleeves

Wedeco (Xylem) sister-brand UV spares

Hanovia (Halma) UV spares

Trojan Technologies UV spares

UltraAqua UV spares

Berson brand hub on cBallast

Ballast water & water treatment category

How to request an RFQ from cBallast

To fast-track your Berson RFQ, include: (1) reactor family and model (e.g. "InLine 4500+ ILR-6"); (2) reactor serial number or vessel/plant tag; (3) current build sheet or last spares order; (4) required part list (with any legacy part numbers you have); (5) ship-to address including any port-agent details for marine drops; and (6) required-on-board date. cBallast responds within 8 business hours during EU working days with an itemised quote, lead time and shipping options.

Berson lamp and reactor references above are compiled from the Berson current-catalogue spare-parts data and long-standing service practice. Confirm the exact part number against the reactor build sheet and OEM certificate before ordering. Berson is a trademark of Berson UV-techniek BV; Halma UV Group also brands Hanovia and Aquionics. cBallast is not affiliated with the OEM; original Berson wear parts are supplied under the standard Berson service warranty.

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