



When you purchase these instruments, you are receiving high-quality products. Proper handling and use are described in this instruction for use.

Product Group	Cutting Instruments	Retaining Instruments	Abrasive-removal Instruments	Retracting, spreading, and dilating Instruments	Application instruments
Basic UDI-DI	4046826;B;R001;01;ag;2U 4046826;B;R001;02;ag;37 4046826;B;R001;03;ag;3J 4046826;B;R001;04;ag;3V 4046826;B;R001;05;ag;48	4046826;B;R002;01;ah;3J 4046826;B;R002;02;ah;3V 4046826;B;R002;03;ah;48 4046826;B;R002;04;ah;4K 4046826;B;R002;05;ah;4W 4046826;B;R002;06;ah;59	4046826;B;R003;01;ai;48 4046826;B;R003;02;ai;4K 4046826;B;R003;03;ai;4W 4046826;B;R003;04;ai;59 4046826;B;R003;05;ai;5L 4046826;B;R003;06;ai;5X	4046826;B;R004;01;aj;4W 4046826;B;R004;02;aj;59 4046826;B;R004;03;aj;5L 4046826;B;R004;04;aj;5X 4046826;B;R004;05;aj;6A 4046826;B;R004;06;aj;6M	4046826;B;R005;01;ak;5L 4046826;B;R005;02;ak;5X 4046826;B;R005;03;ak;6A 4046826;B;R005;04;ak;6M
Description	All reusable medical devices for cutting tissue and bone	All reusable medical devices for holding tissue and bone	All reusable medical devices for the abrasive removal of tissue and bone	All reusable medical devices for the holding away, retracting, and dilating of tissue and bone.	All reusable medical devices intended for application.
Intended purpose	An instrument (scissors, knives, needles/awls, cutting forceps, and trocars) intended for surgical procedures and used without an active medical device, the temporary use of which is to cut through tissue and bone during surgical procedures. These medical devices may only be used by surgeons with sufficient experience regarding the intended use and function of the instruments during surgical procedures in hospitals and medical practices. They are used on patients regardless of age, weight, health status, or nationality. The surgical instrument may be reused after undergoing appropriate cleaning and sterilization procedures.	An instrument intended for surgical procedures (forceps, tweezers, clamps, clips, snares) that is not used in conjunction with an active medical device, and whose temporary use involves holding tissue and bone—or, in the case of needle holders, holding needles—during surgical procedures. These medical devices may only be used by surgeons with sufficient experience regarding the intended use and function of the instruments during surgical procedures in hospitals and medical practices. They are used on patients regardless of age, weight, health status, or nationality. The surgical instrument may be reused after undergoing appropriate cleaning and sterilization procedures.	An instrument intended for surgical procedures (chisels, osteotomes, spoons, curettes, files, raspatories, saws, drills, cutters, taps, punches, rongeurs) that is not used in conjunction with an active medical device, and whose temporary application involves the abrasive removal of tissue and bone during surgical procedures. These medical devices may only be used by surgeons with sufficient experience regarding the intended use and function of the instruments during surgical procedures in hospitals and medical practices. They are used on patients regardless of age, weight, health status, or nationality. The surgical instrument may be reused after undergoing appropriate cleaning and sterilization procedures.	An instrument intended for surgical procedures (dilators, spreaders, gags, contractors, retractors, dissectors, elevators, probes) that is not used in conjunction with an active medical device, and whose temporary use is intended to hold away, spread, and dilate tissue and bone during surgical procedures. These medical devices may only be used by surgeons with sufficient experience regarding the intended use and function of the instruments during surgical procedures in hospitals and medical practices. They are used on patients regardless of age, weight, health status, or nationality. The surgical instrument may be reused after undergoing appropriate cleaning and sterilization procedures.	An application instrument (forceps, templates, gauges, insertion device, tampers, pestles, and holders) intended for surgical procedures but not used in conjunction with an active medical device, whose temporary use involves bending, holding, transferring shapes and sizes, and inserting implants and medical devices during surgical procedures. These medical devices may only be used by surgeons with sufficient experience regarding the intended use and function of the application instruments during surgical procedures in hospitals and medical practices. They are used on patients regardless of age, weight, health status, or nationality. The application instruments may be reused after undergoing appropriate cleaning and sterilization procedures.
Indication	Use during surgical procedures to cut or remove tissue.	Use during surgical procedures to hold tissue.	Use during surgical procedures to abrade tissue and bone.	For use in surgical procedures to hold tissue and bone away, to retract, or to dilate.	Used in surgical procedures to apply other instruments and implants.
Contraindications	These medical devices are not intended for direct contact with the heart, the central nervous system (CNS), or the central circulatory system. Use contrary to the intended purpose.	These medical devices are not intended for direct contact with the heart, the central nervous system (CNS), or the central circulatory system. Use contrary to the intended purpose.	These medical devices are not intended for direct contact with the heart, the central nervous system (CNS), or the central circulatory system. Use contrary to the intended purpose.	These medical devices are not intended for direct contact with the heart, the central nervous system (CNS), or the central circulatory system. Use contrary to the intended purpose.	These medical devices are not intended for direct contact with the heart, the central nervous system (CNS), or the central circulatory system. Use contrary to the intended purpose.

Manufacturer in accordance with EU MDR 2017/745



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1 General Information



The medical devices are reusable, are supplied non-sterile, and must therefore be cleaned, disinfected, and sterilized prior to first use in accordance with the instructions described in the "Reprocessing" section. The product and accessories should only be operated and used by persons who have the necessary training, knowledge, or experience regarding use, functional testing, and cleaning/sterilization.

2 Possible Side Effects and Complications



The surgical instruments must not be used contrary to their intended purpose and scope of application. Complications may result from instruments that are inoperable or have been reprocessed incorrectly.

Note regarding intrauterine procedures (Asherman's syndrome)

During intrauterine procedures, particularly curettage, injuries to the uterine lining (endometrium) can lead to the formation of adhesions within the uterine cavity (intrauterine adhesions). These may be associated with menstrual irregularities, including the absence of menstruation, pain, reduced fertility, or recurrent miscarriages (Asherman's syndrome). This risk exists even when the instruments are used as intended.

3 Warning / Safety Precautions



- The surgical instruments are reusable, are supplied non-sterile, and must therefore be cleaned, disinfected, and sterilized before first use, in accordance with the instructions described in the instruction for use.
- The reusable surgical instruments are manufactured from stainless steel and materials approved for medical use. The materials are corrosion-resistant and exhibit excellent properties in a biological environment.
- The product and accessories may only be operated and used by persons who have the necessary training, knowledge, or experience regarding their use, functional testing, and cleaning/sterilization.
- The user and the relevant qualified personnel agree to familiarize themselves with the instruments before they are used.
- Read and follow the instructions for use.
- Use the product only as intended (see Intended Use).
- Clean the brand-new product after removing the shipping packaging and before the first sterilization.
- Store brand-new or unused products in a dry, clean, and protected location.
- Before each use, qualified personnel must:
 - Visually inspect for: loose, bent, broken, cracked, worn, or chipped parts.
 - Check for proper function.
- Do not use a damaged or defective product. Immediately sort out damaged products or send them to the service center specified in these instructions for use.
- Replace damaged parts immediately with original replacement parts.
- All instruments that can be disassembled must be disassembled for reprocessing and sterilization.
- All serious incidents related to the product must be reported to the manufacturer and the competent authority of the Member State in where the user and/or patient is based.

4 MRI Precautions



The use of these medical devices poses a risk in an MRI environment. The individual medical devices must not be in the immediate vicinity of the MRI equipment during the use of these procedures.

5 Use and Handling



The surgeon is responsible for the proper selection of the medical devices to be used.

Reusable medical devices are subject to wear and mechanical stress even under normal use, but especially when excessive force is applied.

To avoid risks related to product compatibility, use only accessories and instruments specifically approved by MEDICON eG.

6 Decontamination, Cleaning, and Sterilization



For detailed and product-specific reprocessing (cleaning, disinfection, and sterilization) instructions, please refer to the applicable MPK in the “Special Notes” section

Here you will find one of the following reprocessing instructions; please follow the specific reprocessing instructions for your product:

MPK01-1 / MPK03-1 / MPK04-1 / MPK05-1 / MPK07-1 / MPK08-1 / MPK11-1 / MPK12-1 / MPK13-1 / MPK14-1 / MPK16-1 / MPK20-1 / MPK20-2 / MPK21-1 / MPK22-1 / MPK23-1 / MPK24-1

Note on Transmissible Spongiform Encephalopathies (e.g., Creutzfeldt-Jakob Disease, CJD/vCJD)

For patients with confirmed or probable CJD/vCJD, special requirements for the reprocessing of medical devices must be observed. Standardized cleaning, disinfection, and sterilization procedures may not be sufficient to reliably inactivate prions.

If the use of single-use devices is not possible, medical devices that may have been contaminated with prions or where such contamination cannot be ruled out must be handled in accordance with applicable national and international recommendations (e.g., RKI, WHO). Depending on the risk assessment, this may also include disposal as infectious waste.

In cases of suspected contamination, proceed in accordance with the relevant recommendations. Reuse is permitted only if contamination can be reliably ruled out.

Even in cases of undiagnosed CJD/vCJD, it must be taken into account that certain tissues (e.g., CNS, eye, lymphatic tissue) may pose an increased risk of prion contamination. In such cases, additional or modified reprocessing procedures may be necessary. The selection of suitable procedures is the responsibility of the operator, taking into account the applicable guidelines.

The reprocessing procedures described in these instructions for use have not been specifically validated for their effectiveness against prions.



Cleaning solutions containing hydrogen peroxide and/or washing solutions with high alkalinity may cause discoloration. This may result in the loss of the coding function. Only cleaned and disinfected implants may be sterilized.

6.1 Preparation for Decontamination

Preparation serves to ensure effective cleaning and disinfection. It must be performed before both machine and manual cleaning.

- Instruments must be removed from the instrument tray and placed on suitable instrument holders (e.g., wire mesh trays) in a manner suitable for rinsing.
- The arrangement must ensure that subsequent cleaning is not impaired by rinsing dead zones or concealed surfaces.
- Products with multiple components must be completely disassembled before cleaning.
- Movable parts must be opened.
- Coarse contaminants must be removed immediately after use to prevent organic residues from drying on the instruments.

These include, in particular:

- Removing coarse contaminants by rinsing under cold water (< 35 °C)
- Operate moving parts to expose all relevant surfaces
- Ensure the patency of lumina, channels, and cavities (e.g., by flushing with suitable tools)

During transport and temporary storage, the instruments must be kept moist (e.g., using damp cloths or suitable pretreatment solutions) to prevent drying.



Damaged or non-functional products must not be reprocessed and must be discarded.

6.2 Machine Cleaning and Disinfection

Cleaning must be performed mechanically in a washer-disinfector (WD). The WD must meet the requirements of DIN EN ISO 15883-1.

Cleaning process (example of a validated cycle):

Process step	Parameters
Pre-rinse	< 45 °C, ≥ 2 minutes
Cleaning	at least 40 °C, 10 minutes, alkaline detergent (e.g., at least Neodisher MediClean forte 0.2%)
Intermediate rinse	< 30 °C, ≥ 2 minutes, deionized water
Thermal disinfection	≥ 90 °C, ≥ 5 minutes (A0 ≥ 3000)
Drying	100 °C, 25 minutes

6.3 Manual cleaning



Note:

Manual cleaning was tested as part of the manufacturer's validation. However, its effectiveness is confirmed only within the validated parameters described below. Deviations (e.g., different concentrations, chemicals, times, or temperatures) must be validated by the operator in accordance with DIN EN ISO 17664-1.

1. Pre-cleaning

- Remove coarse contaminants under cold tap water.
- Fully operate all moving parts.
- Flush the lumens, threads, and bores at least 5 times using a syringe or flushing lance.
- Keep instruments moist until cleaning to prevent organic contaminants from drying onto them.

2. Enzymatic Cleaning (Soaking + Brushing + Ultrasonic Cleaning)

- Prepare an enzymatic cleaner (e.g., Cidezyme®/Enzol® 0.8%).
- Soak the instruments for 1 minute **without** ultrasonic agitation.
- Brush all surfaces and lumens (at least 1 minute).
- **Run** the ultrasonic bath **for** 5 minutes at a temperature of 37–40 °C.

3. Rinsing

- Rinse thoroughly under running water.
- Rinse the lumens at least 5 times.
- Completely remove any remaining cleaning solution from the instruments.

4. Manual Disinfection

- Place the instruments in an OPA solution (e.g., Cidex® OPA).
- Observe the application time specified by the disinfectant manufacturer.
- Fill the lumen with disinfectant.

5. Final rinsing

- Rinse the instruments at least 5 times with tap water.
- Finally, rinse with deionized or demineralized water to prevent residue.
- Rinse the lumen at least 3 times.

6. Drying

- Dry the instruments completely with compressed air.
- Blow the products dry using filtered compressed air.
- If necessary, dry thoroughly with a lint-free cloth.

6.4 Inspection and Testing

After cleaning, disinfection, and drying, all products must be inspected visually and functionally. The inspection serves to ensure that the medical device has been thoroughly cleaned, is intact, and is in working order.

The following criteria must be checked:

- Cleanliness: no visible dirt, no residues of cleaning agents or disinfectants, no moisture in the lumens or joints
- Surfaces: no corrosion, no discoloration, no chipping, no excessive scratches
- Mechanics: free movement of all parts, full functionality, correct alignment
- Lumen: completely unobstructed, with no residues or blockages
- Markings: Part numbers, laser markings, and codes must be fully legible

Action to Take in Case of Deviations:

- If visible residue is present: Clean and disinfect the product again
- In case of functional defects or damage: Reject, repair, or replace the product
- Products with illegible markings or that cannot be identified must not be reused



The inspection must be performed by qualified personnel before each sterilization and before each clinical use.

6.5 Maintenance and Inspection

After inspection, products with moving parts must be maintained in accordance with their respective functional requirements.

Lubrication:

- Joints and moving parts may only be lubricated if necessary for proper function.
- Only biocompatible instrument oils suitable for steam sterilization may be used (e.g., white oils without additional additives).
- Lubricants must be used sparingly and applied only to the designated functional areas.
- Lubricants must not be introduced into lumens, threads, or bores unless explicitly specified.

Maintenance:

- Damaged, worn, or malfunctioning instruments must be removed from service and, if necessary, repaired.
- Products may only be sterilized when fully assembled and in working order.



The operator is responsible for regular functional checks, maintenance, and documentation.

6.6 Packaging

Before sterilization, the medical devices must be packaged in sterilisation containers / single-use sterilisation packs that comply with the requirements of DIN EN ISO 11607-1/-2.

Packaging requirements:

- Use of a validated sterile barrier system (e.g., film/nonwoven pouches, Tyvek pouches, container systems)
- Packaging material must be suitable for the intended sterilization method (e.g., steam sterilization)
- Packaging must be undamaged, clean, and functional
- The packaging must allow for complete sterilization and aseptic retrieval

Loading Instructions (Operator Responsibility):

- Instruments must be completely dry, clean, and free of residues
- Instruments must be arranged in trays, containers, or pouches in accordance with the validated loading instructions of the medical device reprocessing unit
- Instruments must not damage the packaging material
- Loading must ensure that steam can reach all surfaces to be sterilized

Operator's Responsibility:

- The operator is responsible for selecting the sterilization barrier system and validating the packaging process
- The packaging must be inspected for integrity before each sterilization



Only completely dry and properly packaged products may be sterilized.

6.7 Sterilization

A validated steam sterilization procedure must be used to sterilize the implants.

Sterilization procedure:

- Fractional vacuum method (at least three-stage fractional)
- Steam sterilizer in accordance with DIN EN 13060 or DIN EN 285
- Validation in accordance with DIN EN ISO 17665-1

Sterilization parameters:

- Temperature: 134 °C
- Hold time: at least 5 minutes

Additional requirements:

- Sufficient drying of the product must be ensured.
- The method used must be capable of achieving a Sterility Assurance Level (SAL) of 10^{-6} .
- National requirements and guidelines must be taken into account.

6.8 Additional Information on Reprocessing

A validated, machine-based cleaning and disinfection process is generally preferable to manual cleaning, as it ensures greater process reliability. Effective cleaning is a prerequisite for successful sterilization.

The following points must be observed during automated reprocessing:

- Ensure that the sieve trays are loaded in a manner that allows for proper rinsing.
- Trays must not be overloaded.
- Avoid areas where water cannot reach due to large items.

The times and temperatures specified in these instructions for use represent minimum requirements and must not be undercut.

Deviations from the described procedures are permitted only if they have been validated by the operator.

6.9 Cleaning agents

Suitable detergents corresponding to the procedure used must be employed for cleaning.

Machine cleaning:

The validation of the machine-based reprocessing was performed using the following alkaline cleaning agent as an example:

- neodisher® MediClean forte (Dr. Weigert GmbH & Co. KG)

The cleaning agent used must have comparable properties, in particular:

- alkaline pH range (approx. pH 10–11 in the working solution)
- Suitability for removing blood, protein, and tissue residues
- Compatibility with the materials used

Manual cleaning (enzymatic):

Enzymatic cleaning agents must be used for manual cleaning, e.g.:

- Cidezyme® / Enzol®

Recommended parameters:

- Dosage: 0.8%
- pH (working solution): approx. 7.5–8.5

Here, too, alternative cleaning agents must exhibit comparable properties in terms of cleaning performance and material compatibility.



If different cleaning agents are used, it is the operator's responsibility to ensure the effectiveness of the process.

7 Limitations on Reusability

The service life of reusable medical devices is limited by wear, material fatigue, and damage, which can result from both intended use and repeated reprocessing. In addition, a maximum of 500 reprocessing cycles applies when reprocessing is performed in accordance with these instructions for use.

Even under normal handling, the products are subject to mechanical stress, particularly when significant force is applied.

Before each use, the medical device must be carefully inspected by qualified personnel to ensure its mechanical integrity, freedom from deformation, and full functionality. A thorough visual and functional inspection serves to detect damage and wear early on and to prevent failure during the procedure. This inspection is required regardless of the number of reprocessing cycles already completed.

Typical signs of damage or wear:

- Corrosion (e.g., rust, pitting)
- Discoloration or changes in material
- Excessive scratches, abrasions, or chipping
- Cracks or breaks
- bent or deformed instrument parts
- Restricted mobility of joints or mechanisms
- Missing, damaged, or illegible markings (e.g., part numbers, laser markings)

Removal from Service and Replacement:

Medical devices with one or more of the characteristics listed above must not be reused. They must be replaced, repaired, or disposed of properly.

Depending on usage, handling, and reprocessing conditions, the actual service life may end before 500 reprocessing cycles are reached. The operator must monitor and document the number of reprocessing cycles performed. Once 500 reprocessing cycles have been reached, the medical devices must be discarded regardless of the results of the visual and functional inspection and must not be reused.

8 Service

For service and repairs, please contact your local MEDICON eG representative.

9 Storage and Disposal

9.1 Storage

Reprocessed, sterile implants must be stored in such a way that their sterility is maintained until use. They must be stored in a dry place, protected from dust and mechanical damage. Avoid significant temperature fluctuations that could lead to condensation.

The permissible storage period depends on the sterilization barrier system used as well as the storage conditions and must be determined by the operator.

9.2 Disposal

Before disposal, the products must be free of potentially contaminated material. To this end, the products must be reprocessed as necessary in accordance with these instructions for use.

If there are any sharp edges or damage, disposal must be carried out in such a way as to prevent any risk to persons.

10 Liability

Note for the U.S.



Under U.S. federal law, this product may only be purchased in the United States by a physician or with a physician's prescription.

Validity of the Instructions for Use

Always use the most current version of these instructions for use. Due to technical advancements, the instructions for use are updated regularly. The version date and revision number are indicated on the document.

Disclaimer

MEDICON eG assumes no liability for damages resulting from:

- improper use
- use not in accordance with the intended purpose
- incorrect handling, care, or maintenance
- failure to follow these instructions for use
- Modifications or repairs made without the consent of MEDICON eG
- Repairs performed by unauthorized persons or facilities

In addition, liability for defects is void in the event of modifications or unauthorized repairs.

11 Explanation of Symbols and Illustrations



Manufacturer



MR Unsafe



Date of manufacture



Caution



Production Lot Number, Batch



CE Marking



Item Number



Medical device



Non-sterile

Rx only

Prescription-only



Follow the instructions for use

12 Special instructions										
Worst-Case (Code)		MPK01-1	MPK03-1	MPK04-1	MPK05-1	MPK07-1	MPK08-1	MPK11-1	MPK12-1	MPK13-1
Geometric Features		Products with a longer/narrower ring lumen (standard) Can be disassembled for cleaning/disinfection; direct connection not possible	Products with a longer/narrower ring lumen (standard); direct connection not possible	Products with a longer/narrower annular lumen (standard); Can be disassembled for cleaning/disinfection; direct connection not possible	Products with a longer/narrower ring lumen (standard, not flushable)	Products with a longer/narrower annular lumen with a flushing port (Luer-Lock) and protective cap, disassembly not possible	Tube Shaft Products with Luer-Lock, disassembly not possible	Products with a longer/narrower single lumen (Luer/Luer-Lock)	Products with very short/wide ring lumens without Luer-Lock; can be disassembled for cleaning/disinfection; direct connection not possible	Segmented products with longer/narrow ring-shaped cannulas; disassembly for cleaning/disinfection is possible; direct connection is not possible
Flushing volume		50 ml (disposable syringe) with cannula attached (for backflushing the blind lumen)	50 ml (disposable syringe) Flushing gun	5 ml (disposable syringe)	n/a	10 ml (disposable syringe)	10 ml (disposable syringe)	5 ml (disposable syringe)	50 ml (disposable syringe / flushing gun)	n/a
Brush		Standard brushes	Standard brushes Long brush (length > 320 mm, diameter approx. 6 mm)	Standard brushes Long brush (length > 320 mm, diameter approx. 4 mm)	Standard brushes	Standard brushes	Standard brushes	Standard brushes	Standard Brushes: Long Brush (Length > 510 mm, Diameter approx. 4 mm)	Standard brushes
Special/additional procedure for	Disassemble, rinse the interior five times, brush the exterior and interior	Standard brushes	Disassemble, open and close five times, and place in the open position during ultrasonic treatment	Disassemble, flush the inside five times, brush the inside and outside, and move the wire eyelet back and forth five times.	Brush the exterior, open and close five times, place in the open position during ultrasonic treatment	Open and close five times; place in the open position during ultrasonic cleaning	Brush the outside, rinse the inside at least 5 times; move the joint five times while soaking and rinsing	Flush five times on the inside, connection via LuerLock, brush on the outside	Disassemble; rinse the interior five times; brush the interior and exterior	Disassemble; brush the inside and outside; rinse the inside and outside at least 5 times
	Disassemble, rinse the inside five times, brush the outside and inside	Disassembled; rinse the inside five times; brush the outside and inside	Disassembled: Open and close five times; place in the open position during ultrasonic cleaning	Flush the inside five times, brush the inside and outside, and move the wire eyelet back and forth five times.	Open and close five times; place in the open position for ultrasonic treatment	Open and close five times; place in the open position for ultrasonic treatment	Brush the outside, rinse the inside at least 5 times, move the joint five times while soaking and rinsing	Rinse the inside five times (via Luer-Lock connection), brush the outside	Disassemble, rinse the inside five times, and brush the outside	Disassembled: Brush inside and outside; rinse inside and outside at least 5 times
	Disassembled: Place the outer tube on the rinsing mandrel; place small parts in the small parts basket; use the standard basket for other parts	Disassembled; rinse the inside five times; brush the outside and inside	Standard Disassembled	Standard Disassembled	In the standard basket	Connection to flushing connection	Connection to rinse port mouth part in open position	Connection via Luer-Lock	Disassembled standard basket, coupling sleeve in the small parts basket	Disassembled basket for small parts
Packaging		Assemble loosely; lubricate the inner shaft and threads	Reassemble; lubrication not permitted	Reassemble (only flushing wire, not protective cap for flush connection); lubrication not permitted	Loop shifted backward; lubrication not permitted	Standard procedure: Lubricate the joint, open the cap on the flushing tube, apply the protective cap	Lubricate the joints, close open Luer-Lock mouth part	Reassemble; lubrication not permitted	Reassemble; lubricate the threads and inner shafts	Almost closed, but still mounted a little loosely; lubricate the threads
Sterilization		Loosely assembled, lubricated	Assembled	Assembled (only the flushing wire, not the protective cap for the flushing port)	Standard	Standard procedure: Protective cap applied, cap on the flushing hose open, mouth parts closed	Lubricated protective cap open, jaw closed	Standard	Assembled, lubricated	Almost closed, but still mounted a little loosely, lubricated
Maximum permissible number of cycles		See "Limitations and Reusability"								
Classification recommendation in accordance with KRINKO/RKI/BfArM guidelines (Germany only, when used as intended): Critical B										

Special instructions									
Worst-Case (Code)		MPK14-1	MPK16-1	MPK20-1	MPK20-2	MPK21-1	MPK22-1	MPK23-1	MPK24-1
Geometric Features		Products with a longer/narrower single lumen and a flushing tube connector	Products with very narrow cavities without Luer-Lock, minimally open	segmented products with longer / extremely narrow annular cannulas and complex mechanisms Can be disassembled for cleaning/disinfection; direct connection not possible	Self-opening articulated instruments with sliding surfaces; disassemblable	Products with a joint, can be disassembled	Products with a joint / threads	Self-closing Articulated instruments	Retractors Dismantlable
Flushing volume		50 ml (disposable syringe) / Flushing gun	10 ml (disposable syringe)	50 ml (disposable syringe)/ flushing gun)	n/a	n/a	n/a	n/a	n/a
Brush		Standard brushes: flexible long brush (length ≥ 700 mm, diameter approx. 4 mm)	Standard brushes	Standard brushes Long brushes (Length > 510 mm, diameter approx. 4 and 5 mm)	Standard brushes	Standard brushes Long brush (Length > 400 mm; diameter approx. 12 mm)	Standard brushes	Standard brushes	Standard brushes
Special/Additional Procedure for	Disassemble, rinse the interior five times, and brush the exterior and interior	Brush inside and outside, rinse the inside at least 5 times	Rinse the inside five times; brush the outside (Do not brush the inside!)	Disassemble, brush the inside and outside, and rinse the inside and outside at least 5 times	Disassemble, brush the inside and outside, rinse inside and outside at least 5 times	Disassemble, rinse the handle tubes under running water, open and close the joint five times; for ultrasonic cleaning, place the joint in the open position	Brush the exterior and the crevices, open and close five times , and for ultrasonic cleaning, place the joint in the open position	Brush the inside and outside; open and close five times. For ultrasonic cleaning, place the joint in the open position. If there is no locking mechanism, keep the joint open using a rubber band or stainless steel wire loop around the handles.	Disassemble and brush the inside and outside. Move the crank at least five times during soaking and flushing.
	Disassemble, rinse the interior five times, and brush the exterior and interior	Brush on the inside and outside, flush on the inside at least 5 times	Rinse the inside five times, brush the outside	Disassemble, brush inside and outside, rinse inside and outside at least 5 times	Brush inside and outside, open and close five times; place in the ultrasonic tank in a disassembled state for treatment	Disassemble, joint; open and close five times; during ultrasound treatment, place the joint in the open position	Brush the exterior and the gaps; open and close five times open and close five times; for ultrasonic treatment, place the joint in the open position	Brush the inside and outside; open and close five times; for ultrasonic treatment, place the joint in the open position (if there is no locking mechanism, keep the joint open by rubber band or stainless steel wire loop around the handles)	Brush the inside and outside of the disassembled parts; move crank at least five times during soaking and flushing
	With the unit disassembled, place the outer tube on the rinsing mandrel; place small parts in the small parts basket and other parts in the standard basket	Attach the rinse hose to the olive	Slip the rinse hose over the connector (hose connection)	Disassembled: Use the rinsing lance for cannulated parts; use the standard basket for other parts	Standard basket: Place the disassembled punch on top of the rinsing basket.	Standard basket, disassembled; insert the joint in the open position	Standard basket, insert the joint in the open position	Standard basket: Insert with the joint in the open position (if there is no locking mechanism, secure the hinge by wrapping a rubber band or stainless steel wire loop around the handles to keep it open	Standard basket disassembled
Packaging		Lubrication not permitted	Lubrication not permitted	Reassemble and lubricate all moving parts	Lubricate the joints and sliding surfaces	Install (handle tubes), lubricate joints	Not completely closed, lubricate the joints and the thread of the spindle	Lubricate the joints while the mechanism is slightly open	Lubrication Not permitted
Sterilization		Standard	Standard	Assembled (excluding loading and cone part) Lubricated	Sterilized in assembled state	Assembled Lubricated	Not fully closed	in a slightly open position Joints lubricated	Assembled
Maximum permissible number of cycles		See “Limitations and Reusability”							
Classification recommendation in accordance with KRINKO/RKI/BfArM guidelines (Germany only, when used as intended): Critical B									