

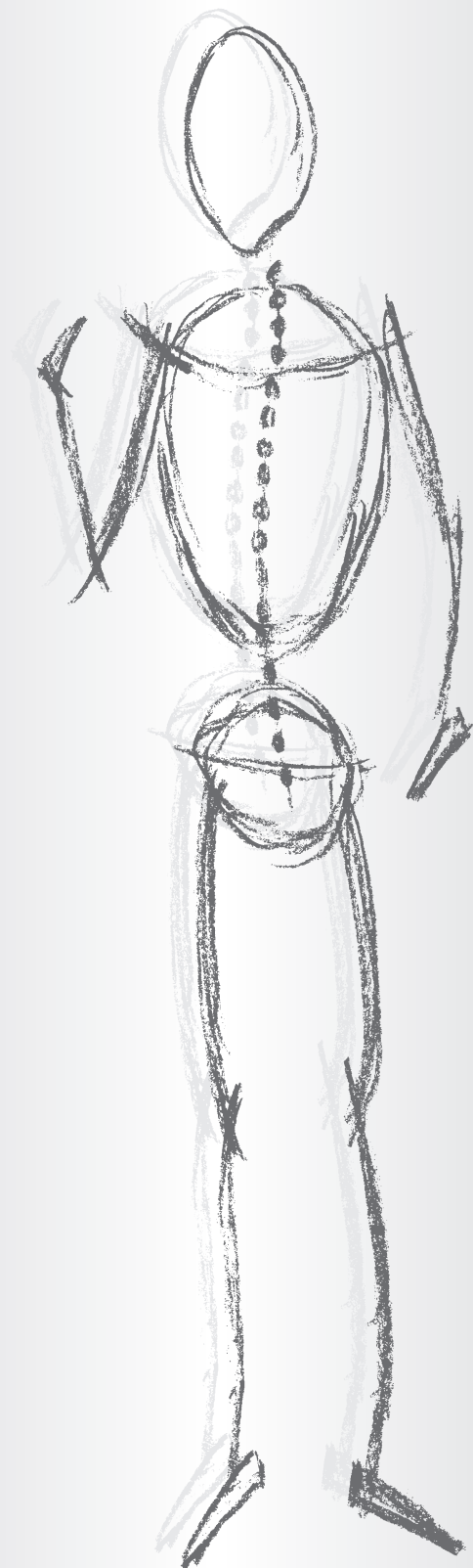


LAPAROSCOPY

**REDA**

INSTRUMENTE GMBH





<b>Laparoscopes</b>	<b>1</b>
<b>Trocar sleeves and accessories</b>	<b>2</b>
<b>Forceps</b>	<b>3</b>
<b>Scissors and biopsy forceps</b>	<b>4</b>
<b>Needleholder and suture instruments</b>	<b>5</b>
<b>HF-Instruments and accessories</b>	<b>6</b>
<b>Suction-Irrigation-Systems and accessories</b>	<b>7</b>
<b>Cholangiography</b>	<b>8</b>
<b>Palpation and retractors</b>	<b>9</b>
<b>Pediatric instruments</b>	<b>10</b>
<b>Thoracic instruments</b>	<b>11</b>
<b>Gynecology instruments</b>	<b>12</b>
<b>Urology retractor</b>	<b>13</b>
<b>Light Cable and connectors</b>	<b>14</b>
<b>Cameras and Light Sources</b>	<b>15</b>
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<b>Insufflators and accessories</b>	<b>17</b>
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### Preface

This is a short listing of the groups of medical devices at the different chapters.  
The intended use of those product groups are description in the glossary.

Handles with HF-connection  
HF-connectors  
Cannulas  
Suction and Irrigation Instruments

### Laparoscopes

Containing Devices:: Laparoscope

### Trocar Sleeves and Accessories

Containing Devices:: Trocars  
Trocar sleeves

### Grasping Forceps

Containing Devices: Tube Shafts  
Forceps  
Clamps  
Handles with HF-connections

### Biopsie

Containing Devices: Handles with HF-connections  
Scissors

### Needle Holder

Containing Devices: Needle Holder  
Handles with HF-connections  
Forceps

### HF Instruments

Containing Devices: HF-electrodes  
Electrode handle  
Connecting Cables  
Connecting parts

### Suction- and Irrigation Instruments

Containing Devices: Suction and irrigation instruments containing

- Handle
- Tube
- Guide insert
- different needles

### Cholangiography

#### Preface

For cholangiography tubes, guide probes, cholangiography-catheters and fixation clamps are used. This system is used for diagnosis in the biliary ducts.

Containing Devices: Tubes  
Guide Probes  
Cholangiography-Catheters  
Fixation Clamps

### Palpation and Retractors

Containing Devices: Palpations  
Retractors  
Specula

### Diagnostic and Pediatric

Containing Devices: Laparoscopes  
Trocars  
Forceps

### Thorax

Containing Devices: Hysteroscopes  
Trocars  
Trocar Sleeves  
Clamps  
Forceps

### Gynecology

Containing Devices: Applicators  
Trocars  
Trocar Sleeves  
Clamps  
Forceps  
Myoma Drills  
Cannulas

### Urology

Containing Devices: Retractors

### Light Sources

Containing Devices: Light source

### Video System

In case of demand please contact us.

### Suction and Irrigation Devices

#### Preface

The listed products are limited to accessories of suction and irrigation instruments. The respective instruments themselves are listed in chapter 7.

Containing Devices: Purgator  
Tubes  
Glasses / Cups  
Suction Lids

### CO<sup>2</sup>-Insufflator

Containing Devices: Devices for Insufflation  
Accessories for the Device

### Video Trollys

In case of demand please contact us.

### Annex

Chapters

**Glossary** containing the intended use of the products / product groups.

**Labels and Symbols** showing the labels for class I, class II and implantable class II devices according to 93/42/EC, annex IX.




**Explanation of the used Symbols** according to ISO 15233:2007.

<b>Device</b>	<b>Intended Use</b>
<b>Applicators</b>	Application is the insert of material into the body. Applicators are supporting devices for hard accessible areas
<b>CO<sup>2</sup>-Insufflator</b>	Uncovering of the laparoscopy application field in the respective hollow organs by in insufflation of CO <sup>2</sup> gas
<b>HF-connections</b>	The HF connections prevent irritating pivoting motions aids well-balance handling
<b>Hysteroscope</b>	optical devices for the gynaecological diagnoses and/or operation
<b>Instruments for HF-Surgery</b>	cut and/or coagulate tissue by HF-voltage
<b>Clamps</b>	clamps grasp different material like tissue or skin
<b>Laparoscopes</b>	Laparoscopes are optical devices for diagnosis and surgical operations in abdominal and pelvic cavities
<b>Myoma Drill</b>	removal of myomas after a laparoscopic myomectomy
<b>Needle Holder</b>	Needle holder grasp, hold and guide surgical needles during the suture
<b>Devices for Cholangiography</b>	For cholangiography tubes, guide probes, cholangiography-catheters and fixation clamps are used. This system is used for diagnosis in the biliary ducts
<b>Retractors</b>	Spreading instruments to fix tissue or vessels etc. at surgical body orifice and wounds for free access to the operation area
<b>Suction and Irrigation Instruments</b>	Suction and irrigation instruments remove fluid out of the operation area during a biopsy
<b>Scissors</b>	Scissors are cutting instruments to separate materials like tissues, skin, suture and dressing material, plasters and/or bones.
<b>Cannulas</b>	Cannulas are diagnostic instruments used to examine and/or record body functions and/or structures
<b>Specula</b>	Spreading instruments to fix tissue or vessels etc. at surgical body orifice and wounds for free access to the operation area
<b>Palpations</b>	Palpations are used for diagnosis of body functions at areas with difficult access
<b>Trocars</b>	Trocars are piercing the skin to enable access to the operating field
<b>Trocar Sleeves</b>	Trocar sleeves are used together with trocars and enable MIS at the operating field after removal of the trocar
<b>Forceps</b>	Forceps grasp different material like tissue or skin
<b>Light Source</b>	light cable with adapters for its connection to different endoscopes

**1. Form for Labels of Class I Products according to 93/42/EWG, Annex IX**



Gänsäcker 34 - 78532 Tuttingen - Germany  
Phone +49 7462 94450 Fax +49 7462 944520

Name	Kundenname	
Customer	: Kundennummer	
Ordner No.	: Bestellnummer	
Conf. No.	: Auftragsnummer	
<b>REF</b>	: Katalognummer	
Quantity	: xx pcs <b>LOT</b>	
Cust.-Art.	: Kundenartikelnummer	
Descript.	: Kundenartikelbeschreibung	

Etching






00277750022000020

LBL-001 Rev.01

**2. Form for Labels of Products higher than Class I according to 93/42/EWG, Annex IX**



Gänsäcker 34 - 78532 Tuttingen - Germany  
Phone +49 7462 94450 Fax +49 7462 944520

Name	Kundenname	
Customer	: Kundennummer	
Ordner No.	: Bestellnummer	
Conf. No.	: Auftragsnummer	
<b>REF</b>	: Katalognummer	
Quantity	: xx pcs <b>LOT</b>	
Cust.-Art.	: Kundenartikelnummer	
Descript.	: Kundenartikelbeschreibung	

Etching






00277750022000020

LBL-002 Rev.01

**3. Form for Labels of implantable Class II Products according to 93/42/EWG, Annex IX**



Gänsäcker 34 - 78532 Tuttingen - Germany  
Phone +49 7462 94450 Fax +49 7462 944520

Name	Kundenname	
Customer	: Kundennummer	
Ordner No.	: Bestellnummer	
Conf. No.	: Auftragsnummer	
<b>REF</b>	: Katalognummer	
Quantity	: xx pcs <b>LOT</b>	
Cust.-Art.	: Kundenartikelnummer	
Descript.	: Kundenartikelbeschreibung	

Etching



00277750022000020

LBL-003 Rev.01

**Explanation of the used Symbols**



Explanation of the symbols can be seen in the accompanying document



Address of the manufacturer



Reference Number



Lot Number / Serial Number



Take account to the warnings in the accompanying document



Non-sterile



Single use produkt



CE-symbol for class I devices according to 93/42/EC, annex IX



CE-symbol for class I devices according to 93/42/EC, annex IX

## IMPORTANT INFORMATION CONCERNING PREPARING AND STERILIZING SURGICAL INSTRUMENTS

Dear Sirs,  
please read the following instructions very carefully before using the instruments.

### 1. INITIAL USE

All instruments which are being used for the first time must be thoroughly cleaned, rinsed and then sterilized before using.

### 2. TREATING INSTRUMENTS AFTER USAGE

- a.) The instruments might be immediately thoroughly cleaned and disinfected. Please follow the manufacturer's instructions when using cleaning agents and disinfectants.
- b.) Instruments which may be dismantled must be cleaned and disinfected after being taken apart.
- c.) Cleaning may be carried out either manually or with a machine. Care should be taken that only cleaning agents and disinfectants are used, which are changed daily.
- d.) Following chemical disinfection and manual cleaning, all instruments must always be thoroughly rinsed under running water.
- e.) The temperature of water used in a machine for cleaning should not exceed 45°C.
- f.) Whether cleaning is carried out manually or by machine, we especially ask you to ensure that the correct dosage for cleaning solutions or the correct combination of disinfectant and cleaning solution, is employed. Similar importance should be applied to the length of time the agents require to perform properly and to the temperature set.
- g.) Hinged instruments should be opened before cleaning.
- h.) Please ensure that the perforated instrument trays, when loaded, do not exceed 10 kg in weight.
- i.) Please take care that when instruments are being cleaned they are arranged proper in a manne that fluids can circulate freely.
- j.) Deposits remaining after the cleaning process must be completely removed in the first rinse which now follows. The optimum temperature for final rinsing has proved to be between 70° and 90° C. Please use only purified water in this final cleaning stage.
- k.) The instruments must be carefully dried after cleaning and rinsing is completed.
- l.) Moving parts and the cutting edges of shears and scissors must be treated with preservatives which are both suitable and physiologically safe.

### 3. TESTING FOR CORRECT FUNCTIONING

- a.) Instruments must be carefully and thoroughly checked before every occasion that they are used.
- b.) After each time they are cleaned, the instruments must be macroscopically clean, i.e., visibly free from proteinbased residues and other soiling.
- c.) Care should be taken so that cracks, breakages and corrosion are noticed.
- d.) Instruments with flecks should be separated and taken out for special treatment.

- e.) All moving parts as well as working tips and blades should be checked with special care.
- f.) Checking should be carried out according to the extent to which the instruments will be used.
- g.) Instruments which are in any way defective or damaged should be immediately sorted out from the others.

### 4. STERILIZATION

- a.) All stainless steel surgical instruments supplied by us may be sterilized in an autoclave.
- b.) Please follow the manufacturer's operating instructions when using autoclave. All machines used must comply with all current quality and other standards.
- c.) Instruments are being sterilized/ autoclaved at a temperature of 134°C.
- d.) Sterilization packing material must comply with all current standards.
- e.) Instruments with ratchets or self-retaining mechanisms should be sterilized opened or in the first ratchet position.
- f.) Please ensure that perforated instrument trays, when loaded do not exceed 10 kg in weight.

### 5. IN GENERAL

- a.) All surgical instruments supplied by us have been thoroughly inspected before dispatch and leave our factory in perfect condition. Damage which can arise as a result of transporting, cleaning, preserving, sterilizing or storing, must be prevented.
- b.) Please handle surgical instruments always with the utmost care.
- c.) Instruments must be stored in a clean and dry place.
- d.) If you have any queries or problems please contact us at any time:

We should like to point out that, if the above-mentioned directions are not followed or the instruments supplied by us are not properly used, all guarantee claims become void and any consequences must be borne by yourselves.

REV. 2005/01



Laparoscopes with integrated fiberoptic for illumination, autoclavable suitable for HD Systems

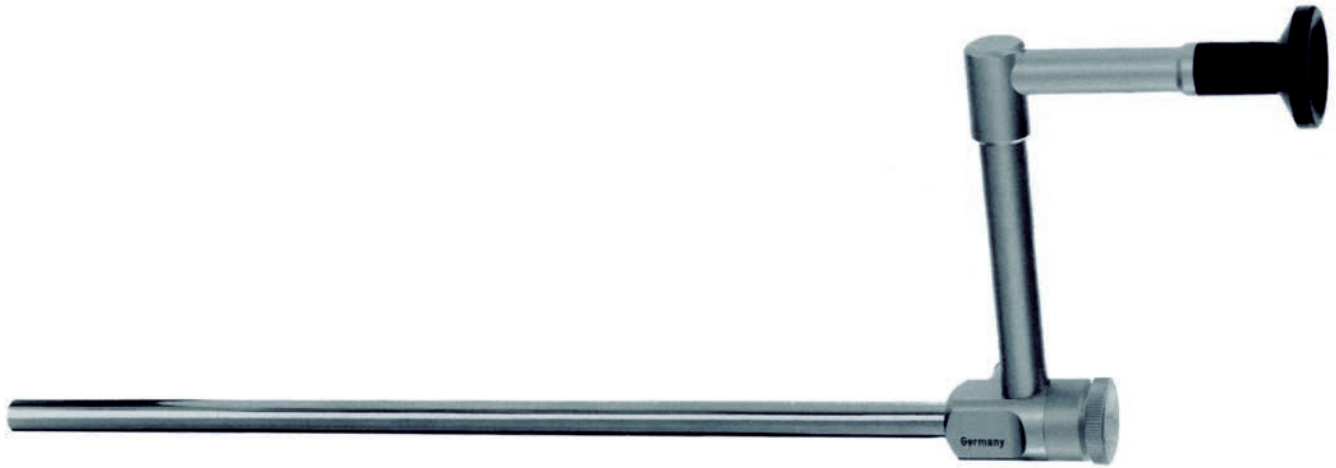


### Compatibility

<b>Light port adapter</b>	ACMI <sup>®</sup> -, Wolf <sup>®</sup> -, Storz <sup>®</sup> / Olympus <sup>®</sup>
<b>Eyepiece</b>	Ocular according DIN 58105 threaded
<b>Objective</b>	Tension-free objective composed-objective
<b>Image transmission</b>	CAD-designed rodence system for optimal sharpness, colorsync and resolution
<b>Light-guiding system</b>	High quality light fibers
<b>Optical glass</b>	Distal and proximal Sapphire
<b>Biocompatibility</b>	All materials that come in contact with the body are biocompatible. All outside metal parts are made of high quality stainless steel.

Ø	working length	direction of view	
		0°	30°
5,0 mm	302 mm	<b>R010-050302-000</b>	<b>R010-050302-030</b>
10,0 mm	310 mm	<b>R010-100309-000</b>	<b>R010-100309-030</b>
10,0 mm	350 mm	<b>R010-100350-000</b>	<b>R010-100350-030</b>

Operating-Laparoscopes with working channel, integrated fiberoptic for illumination Parallel eye piece (2 x 90°)



#### Compatibility

<b>Light port adapter</b>	ACMI <sup>®</sup> -, Wolf <sup>®</sup> -, Storz <sup>®</sup> / Olympus <sup>®</sup>
<b>Eyepiece</b>	Ocular according DIN 58105 threaded
<b>Objective</b>	Tension-free objective composed-objective
<b>Image transmission</b>	CAD-designed rodence system for optimal sharpness, colorsync and resolution
<b>Light-guiding system</b>	High quality light fibers
<b>Optical glass</b>	Distal and proximal Sapphire
<b>Biocompatibility</b>	All materials that come in contact with the body are biocompatible. All outside metal parts are made of high quality stainless steel.

Ø outer tube	working length	working channel Ø	direction of view
10,0 mm	266,3 mm	6,0 mm (18 Char.)	0°
			<b>R011-100273-060</b>

Only instruments with min. 420 mm working length are convenable for use.

Operating-Laparoscopes with working channel, integrated fiberoptic for illumination 45° angled view



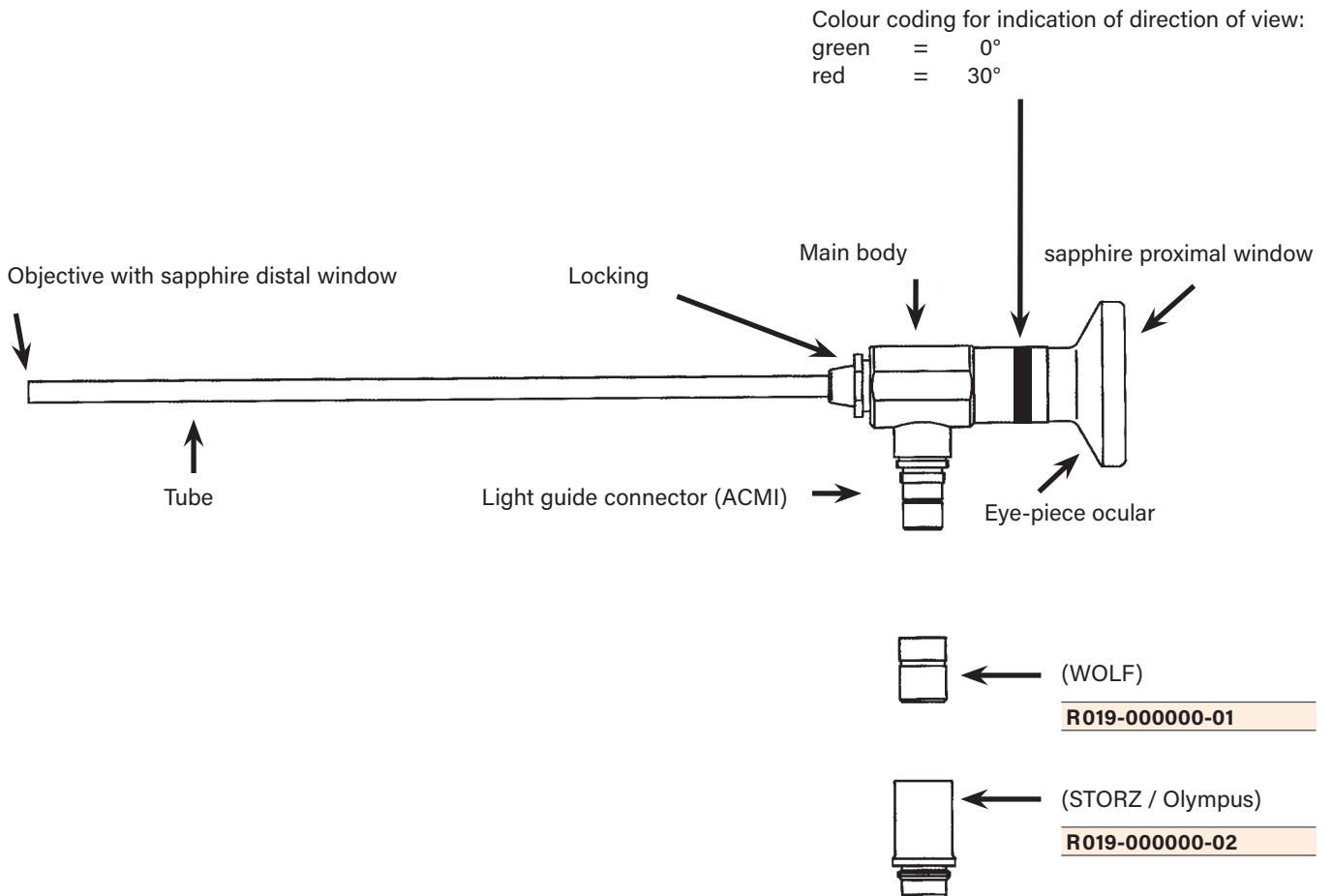
**Compatibility**

<b>Light port adapter</b>	ACMI <sup>®</sup> -, Wolf <sup>®</sup> -, Storz <sup>®</sup> / Olympus <sup>®</sup>
<b>Eyepiece</b>	Ocular according DIN 58105 threaded
<b>Objective</b>	Tension-free objective composed-objective
<b>Image transmission</b>	CAD-designed rodence system for optimal sharpness, colorsync and resolution
<b>Light-guiding system</b>	High quality light fibers
<b>Optical glass</b>	Distal and proximal Sapphire
<b>Biocompatibility</b>	All materials that come in contact with the body are biocompatible. All outside metal parts are made of high quality stainless steel.

Ø outer tube	working length	working channel Ø	direction of view
10,0 mm	266,3 mm	6,0 mm (18 Char.)	0°
			<b>R012-100273-060</b>

Only instruments with min. 420 mm working length are convenable for use.

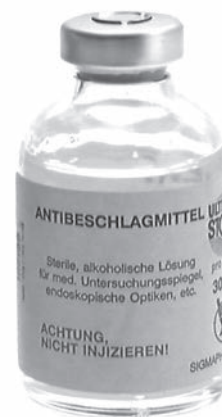
Endoscope





Anti Fog liquid Ultra Stop 25ml non sterile

**R019-000000-025**



Anti Fog liquid Ultra Stop sterile incision bottle 30ml

**R019-000000-030**

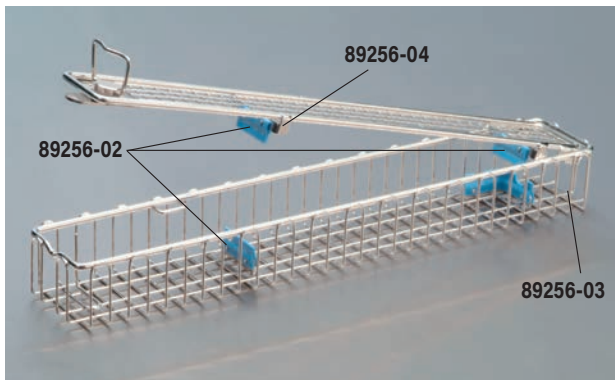


Cleaning paste, 6gr. f. distal and proximal windows and fiber optic port of endoscopes

**98002-06**

Wire basket for endoscopes

Container for Endoscopes

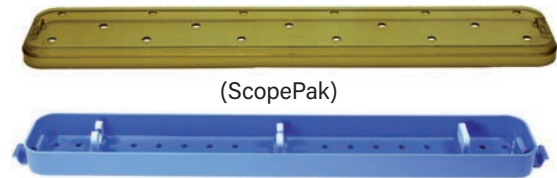


460 x 80 x 52 mm  
for 1 laparoscope or 1 hysteroscope or 1 cystoscope

**89256-46**

460 x 80 x 52 mm  
for 2 laparoscopes or 2 hysteroscopes or 2 cystoscopes

**89257-46**



432 x 76 x 33 mm  
for 1 hysteroscope or 1 cystoscope

**R019-9317**

511 x 76 x 33 mm  
for 1 laparoscope

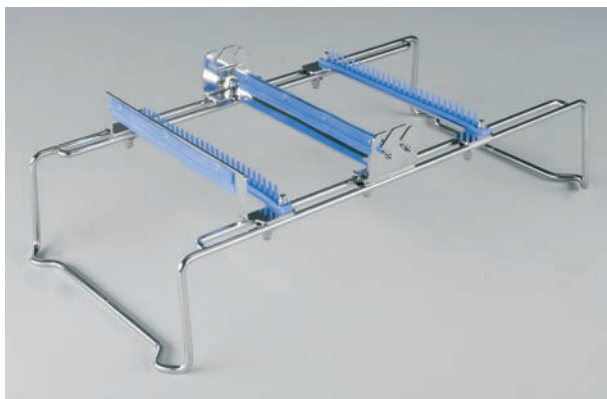
**R019-9321**

813 x 132 x 79 mm  
for 1 extra long endoscope

**R019-9331**

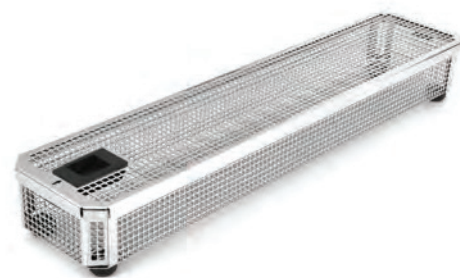
Storage- and sterilization rack

Endoscope Basket (with stand)



470 x 250 x 125 mm  
5 / 10 mm Ø  
for 15 MIS instruments suitable for container R 110.20

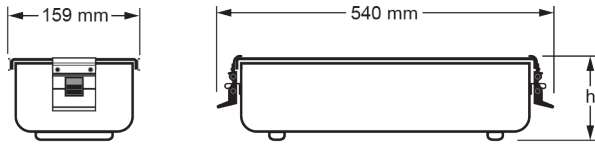
**89258-47**



Outside dimensions 500 x 135 x 50 mm

**89450-50**

Containers for Endoscopy



540 x 159 x 80 mm

540 x 159 x 80 mm

R 614.08	R 614.10
R 624.08	R 624.10
R 634.08	R 634.10
R 644.08	R 644.10
R 654.08	R 654.10
R 664.08	R 664.10



Containers for Endoscopes  
(with silicone stand, lock and label)

270 x 70 x 65 mm



475 x 80 x 65 mm



R 516.07	R 517.07
R 526.07	R 527.07
R 536.07	R 537.07
R 546.07	R 547.07
R 556.07	R 557.07
R 566.07	R 567.07



R 516.08	R 517.08
R 526.08	R 527.08
R 536.08	R 537.08
R 546.08	R 547.08
R 556.08	R 557.08
R 566.08	R 567.08





S-retractor

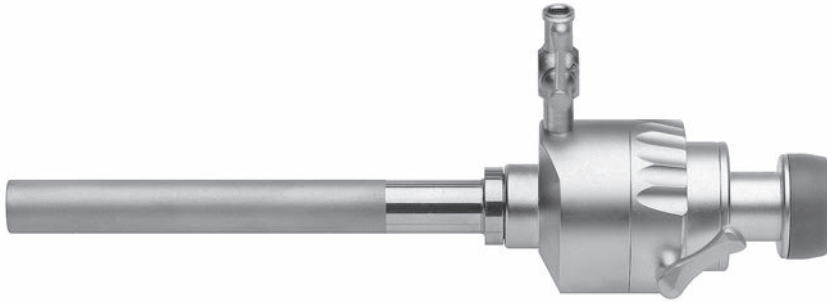


7 mm / 2 pcs.	10 mm / 2 pcs.	13 mm / 2 pcs.	16 mm / 2 pcs.
<b>R020-000000-007</b>	<b>R020-000000-010</b>	<b>R020-000000-013</b>	<b>R020-000000-016</b>

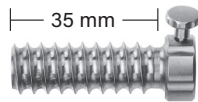
Ø 5 mm

Multi function trocar sleeve,  
valvehousing with thread lock

R025-050092-001



Trocar stop



R020-050035-001

Dilation set



5 < 10 mm

5 < 11 mm

R027-050100-000

R027-050110-000

Rubber washer for proximal instrument port suitable to lap. trocar sleeves / 10 pcs per box



Ø 5,0 mm

R020-050000-004

Spare part set consisting of 10 pcs per box



Ø 5,0 mm

R022-050000-000

Ø 5 mm

**Standard trocar**



pyramidal

**R020-050092-001**



conical

**R020-050092-002**

**Standard trocar with hole, permeable**



pyramidal

**R020-050092-051**



conical

**R020-050092-052**

**Safety trocar with automatic locking**



with pyramidal grinding  
and rounded tip

**R020-050092-011**



with halfmoon grinding  
and oblique tip

**R020-050092-016**

**Protection trocar**



with halfmoon grinding  
and oblique tip

**R020-050092-024**



with halfmoon grinding  
and V-formed tip

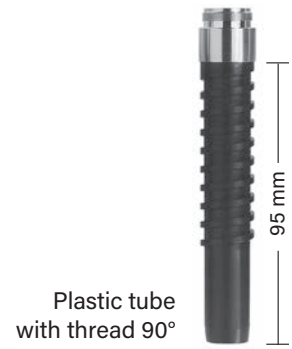
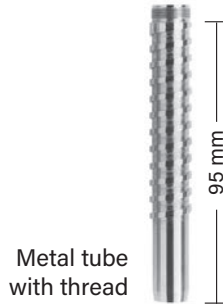
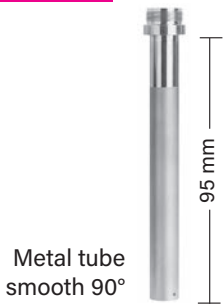
**R020-050092-025**

**Reducer sleeve 5 > 4 mm**



**R026-055030-003**

Ø 5,5 mm



**Drap door valve trocar sleeve**



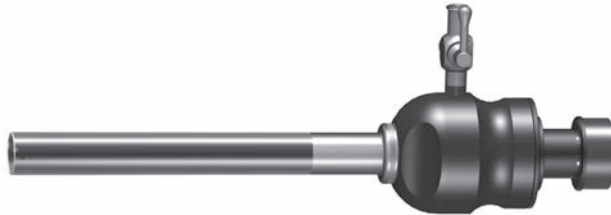
R022-055095-001

R022-055098-002

R022-055095-003

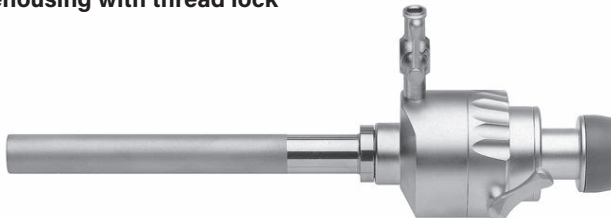
R022-055098-004

**Silicone valve trocar sleeve**



R024-055095-001

**Multi function trocar sleeve, valvehousing with thread lock**



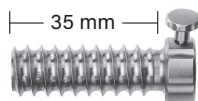
R025-055095-001

R025-055098-002

R025-055095-003

R025-055098-004

**Trocar stop**



R020-055035-001

**Rubber washer for proximal instrument port suitable to lap. trocar sleeves / 10 pcs per box**



Ø 5,5 mm

R020-050000-004

**Spare part set consisting of 10 pcs per box**



Ø 5,5 mm

R022-055000-000

Ø 5,5 mm

**Standard trocar**



pyramidal

**R020-055095-001**



conical

**R020-055095-002**

**Standard trocar with hole, permeable**



pyramidal

**R020-055095-051**



conical

**R020-055095-052**

**Safety trocar with automatic locking**



with pyramidal grinding and rounded tip

**R020-055095-011**



with halfmoon grinding and oblique tip

**R020-055095-016**

**Safety trocar with Knife**



Obturator tip "KNIFE DESIGN"

**R020-055095-028**

**Protection trocar**



with halfmoon grinding and oblique tip

**R020-055095-024**



with halfmoon grinding and V-formed tip

**R020-055095-025**

Ø 5,5 mm / 150 mm WL

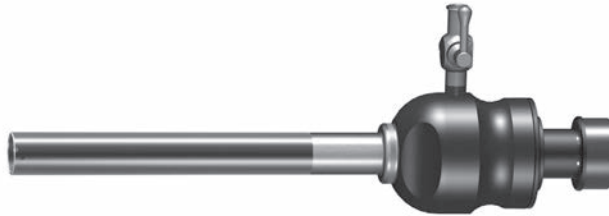
Drap door valve trocar sleeve

R022-055150-001



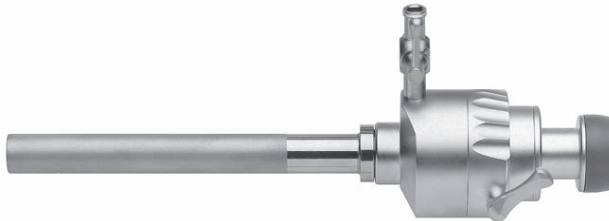
Silicone valve trocar sleeve

R024-055150-001



Multi function trocar sleeve,  
valvehousing with thread lock

R025-055150-001



Rubber washer for proximal instrument port suitable to lap. trocar sleeves / 10 pcs per box



Ø 5,5 mm

R020-050000-004

Spare part set consisting of 10 pcs per box



Ø 5,5 mm

R022-055000-000

Ø 5,5 mm / 150 mm WL

**Standard trocar**



pyramidal

**R020-055150-001**



conical

**R020-055150-002**

**Standard trocar with hole, permeable**



pyramidal

**R020-055150-051**



conical

**R020-055150-052**

**Safety trocar with automatic locking**



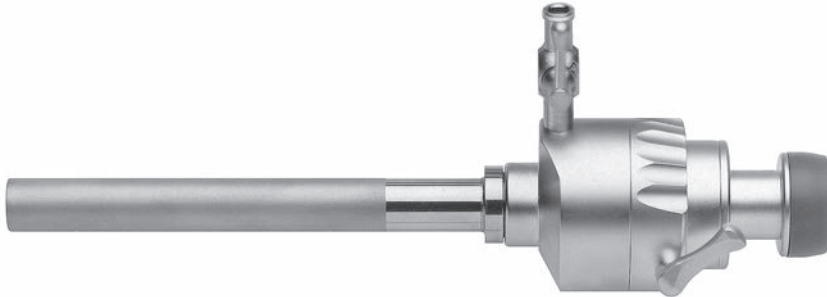
with pyramidal grinding  
and rounded tip

**R020-055150-011**

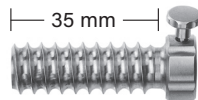
Ø 10 mm

Multi function trocar sleeve,  
valvehousing with thread lock

R025-100097-001

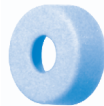


Trocar stop



R020-100035-001

Rubber washer for proximal instrument port suitable to lap. trocar sleeves / 10 pcs per box



Ø 10,0 mm

R020-100000-008

Spare part set consisting of 10 pcs per box



Ø 10,0 mm

R022-100000-000

Reducer sleeve 10 > 5,5 mm

Plastic reducer for multi function trocar sleeve only



190 mm

R026-100055-003



reducer with silicone latch

R026-100055-002



Ø 10 mm

**Standard trocar**



pyramidal

**R020-100097-001**



conical

**R020-100097-002**

**Standard trocar with hole, permeable**



pyramidal

**R020-100097-051**



conical

**R020-100097-052**

**Safety trocar with automatic locking**



with pyramidal grinding  
and rounded tip

**R020-100097-011**



with halfmoon grinding  
and oblique tip

**R020-100097-016**

**Protection trocar**



with halfmoon grinding  
and oblique tip

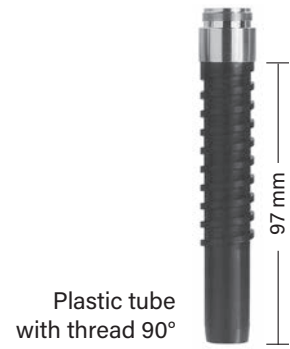
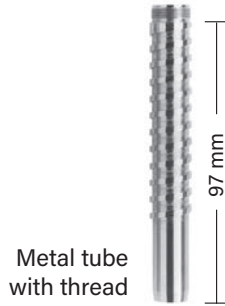
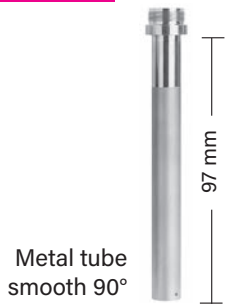
**R020-100097-024**



with halfmoon grinding  
and V-formed tip

**R020-100097-025**

Ø 11 mm



**Drap door valve trocar sleeve**



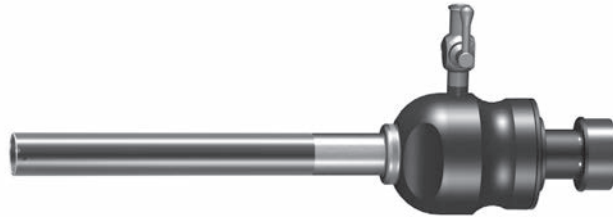
R022-110101-001

R022-110105-002

R022-110101-003

R022-110105-004

**Silicone valve trocar sleeve**



R024-110101-001

R024-110105-002

R024-110101-003

R024-110105-004

**Multi function trocar sleeve, valvehousing with thread lock**



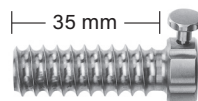
R025-110101-001

R025-110105-002

R025-110101-003

R025-110105-004

**Trocar stop**



R020-110035-001

**Rubber washer for proximal instrument port suitable to lap. trocar sleeves / 10 pcs per box**



Ø 11,0 mm

R020-110000-009

**Spare part set consisting of 10 pcs per box**



Ø 11,0 mm

R022-110000-000

Ø 11 mm

Standard trocar



pyramidal

**R020-110101-001**



conical

**R020-110101-002**

Standard trocar with hole, permeable



pyramidal

**R020-110101-051**



conical

**R020-110101-052**

Safety trocar with automatic locking



with pyramidal grinding and rounded tip

**R020-110101-011**



with halfmoon grinding and oblique tip

**R020-110101-016**

Safety trocar with Knife



Obturator tip "KNIFE DESIGN"

**R020-110101-028**

Protection trocar



with halfmoon grinding and oblique tip

**R020-110101-024**



with halfmoon grinding and V-formed tip

**R020-110101-025**

Reducer sleeve 11 > 5,5 mm



190 mm

**R026-110055-003**

Plastic reducer for multi function trocar sleeve only



reducer with silicone Latch

**R026-110055-002**



**R026-125055-004**

Ø 11 mm / 150 mm WL

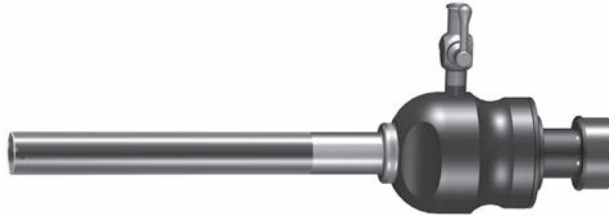
Drap door valve trocar sleeve

R022-110150-001



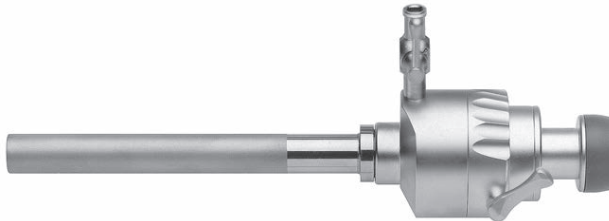
Silicone valve trocar sleeve

R024-110150-001

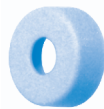


Multi function trocar sleeve,  
valvehousing with thread lock

R025-110150-001



Rubber washer for proximal instrument port suitable to lap. trocar sleeves / 10 pcs per box



Ø 11,0 mm

R020-110000-009

Spare part set consisting of 10 pcs per box



Ø 11,0 mm

R022-110000-000

Ø 11 mm / 150 mm WL

**Standard trocar**



pyramidal

**R020-110150-001**



conical

**R020-110150-002**

**Standard trocar with hole, permeable**



pyramidal

**R020-110150-051**



conical

**R020-110150-052**

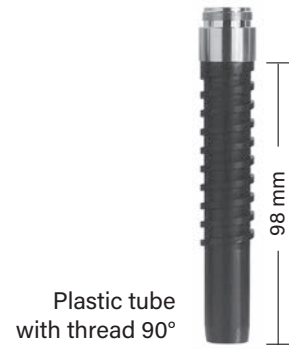
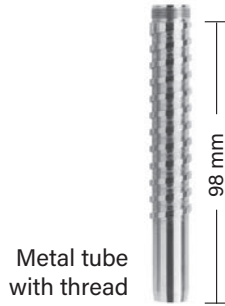
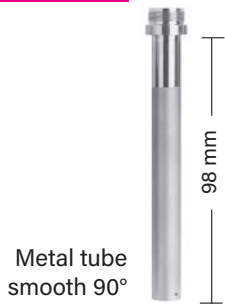
**Safety trocar with automatic locking**



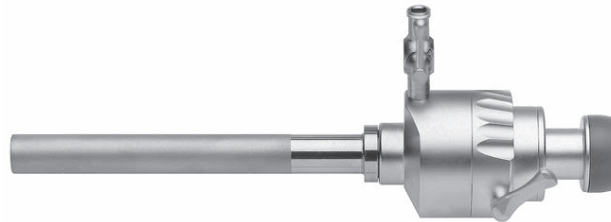
with pyramidal grinding  
and rounded tip

**R020-110150-011**

Ø 12,5 mm

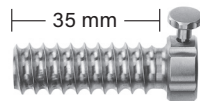


Multi function trocar sleeve, valvehousing with thread lock



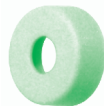
- R025-125098-001
- R025-125102-002
- R025-125098-003
- R025-125102-004

Trocar stop



R020-125035-001

Rubber washer for proximal instrument port suitable to lap. trocar sleeves / 10 pcs per box



Ø 12,5 mm  
R020-125000-011

Spare part set consisting of 10 pcs per box



Ø 12,5 mm  
R022-125000-000

Reducer sleeve 12,5 > 5,5 mm

Plastic reducer for multi function trocar sleeve only



190 mm

R026-125055-003



reducer with silicone latch

12,5 > 10 mm	R026-125100-002	R026-125100-004
12,5 > 5,5 mm	R026-125055-002	R026-125055-004

Ø 12,5 mm

**Standard trocar**



pyramidal

**R020-125098-001**



conical

**R020-125098-002**

**Standard trocar with hole, permeable**



pyramidal

**R020-125098-051**



conical

**R020-125098-052**

**Safety trocar with automatic locking**



with pyramidal grinding and rounded tip

**R020-125098-011**



with halfmoon grinding and oblique tip

**R020-125098-016**

**Safety trocar with Knife**



Obturator tip "KNIFE DESIGN"

**R020-125098-028**

**Protection trocar**



with halfmoon grinding and oblique tip

**R020-125098-024**



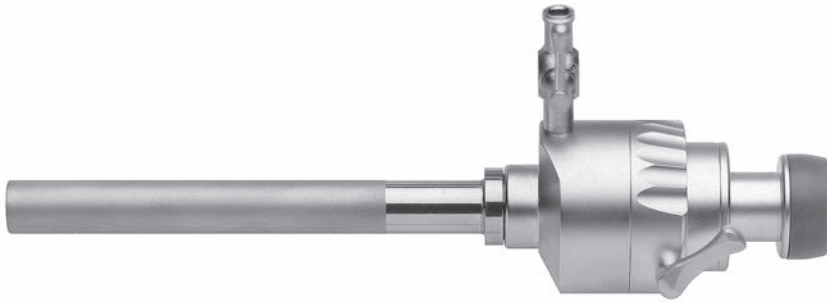
with halfmoon grinding and V-formed tip

**R020-125098-025**

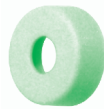
Ø 12,5 mm / 150 mm WL

Multi function trocar sleeve,  
valvehousing with thread lock

R025-125150-001



Rubber washer for proximal instrument port suitable to lap. trocar sleeves / 10 pcs per box



Ø 12,5 mm

R020-125000-011

Spare part set consisting of 10 pcs per box



Ø 12,5 mm

R022-125000-000



Ø 12,5 mm / 150 mm WL

**Standard trocar**



pyramidal

**R020-125150-001**



conical

**R020-125150-002**

**Standard trocar with hole, permeable**



pyramidal

**R020-125150-051**



conical

**R020-125150-052**

**Safety trocar with automatic locking**

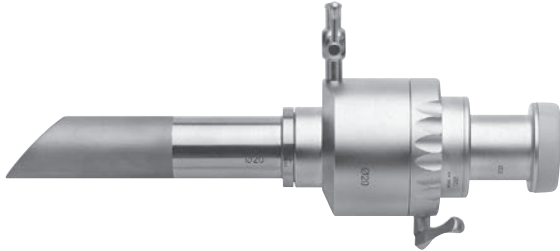


with pyramidal grinding  
and rounded tip

**R020-125150-011**

**Ø 15 mm** Automatic trocar sleeve with smooth metal tube, housing with winding locking and stopcock

**Trocar sleeve, smooth metal tube**



15 mm Ø / WL 110 mm

**R025-150095-011**

**Standard trocar 15 mm Ø**



pyramidal

**R020-150096-001**



conical

**R020-150096-002**

**Dilatation sleeve with guide rod**



Ø 5,0 mm - 15,0 mm

**R027-050150-000**

Ø 10,0 mm - 15,0 mm

**R027-110150-000**

**Rubber washer for proximal instrument port suitable to lap. trocar sleeves / 10 pcs per box**



Ø 15,0 mm

**R020-150000-013**

**Spare part set consisting of 10 pcs per box**



Ø 15,0 mm

**R022-150000-000**

**Reducer sleeve**



15 > 5,5 mm

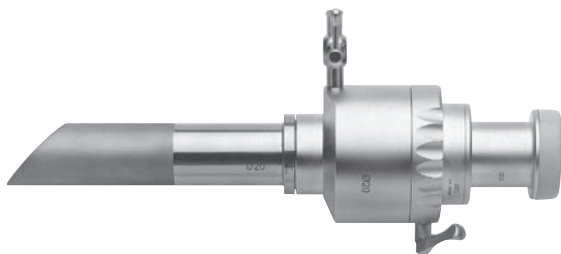
**R026-150055-003**

15 > 10 mm

**R026-150100-003**

**Ø 20 mm** Automatic trocar sleeve with smooth metal tube, housing with winding locking and stopcock

**Trocar sleeve, smooth metal tube**



20 mm Ø / WL 119 mm

**R025-200095-011**

**Standard trocar 20 mm Ø**



pyramidal

**R020-200096-001**



conical

**R020-200096-002**

**Dilatation sleeve with guide rod**



Ø 5,0 mm - 20,0 mm

**R027-050200-000**

Ø 10,0 mm - 20,0 mm

**R027-110200-000**

**Rubber washer for proximal instrument port suitable to lap. trocar sleeves / 10 pcs per box**



Ø 20,0 mm

**R020-200000-018**

**Spare part set consisting of 10 pcs per box**



Ø 20,0 mm

**R022-200000-000**

**Reducer sleeve**



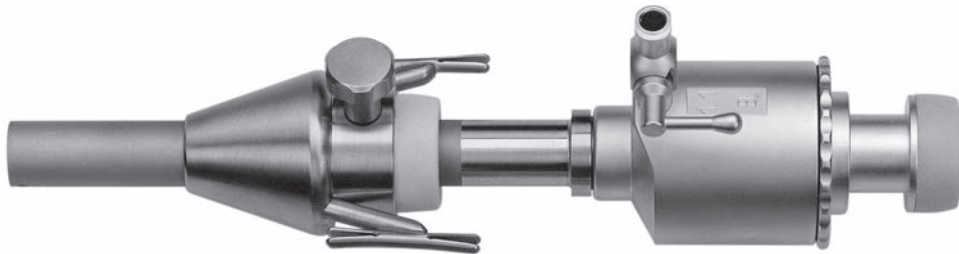
20 > 5,5 mm



**R026-200055-003**

20 > 10 mm

**R026-200100-003**

Hasson automatic trocar sleeve with stopcock, adjustable cone and suture holder at cone



Ø	Sleeve with Cone	 Cone alone	 Cone alone
3,5 mm		<b>R020-035500-001</b>	
5,5 mm	<b>R028-055095-021</b>	<b>R020-055500-001</b>	
11,0 mm	<b>R028-110101-021</b>	<b>R020-110500-001</b>	<b>R020-110700-001</b>
12,5 mm	<b>R028-125098-021</b>	<b>R020-125500-001</b>	

Standard trocar



conical blunt

<b>R020-035070-003</b>	Ø 3,5 mm
<b>R020-055095-003</b>	Ø 5,5 mm
<b>R020-110101-003</b>	Ø 11,0 mm
<b>R020-125098-003</b>	Ø 12,5 mm



Ø 5 und 10 mm



### **Mechanical snap-action coupling !**

The Ø 5 and 10 mm modular REDA laparoscopic instruments have a unique snap-action coupling which, offering the combined advantage of the speediest possible assembly and a long service life.

The union of the working insert and sleeve shaft is achieved by simply inserting the components axially into each other. A simple click and you are ready!

The groove-and-tongue principle practically rules out the possibility of the locking mechanism coming undone, as is the case with conventional screw or bayonet connections.

REDA - simplicity is so clever !

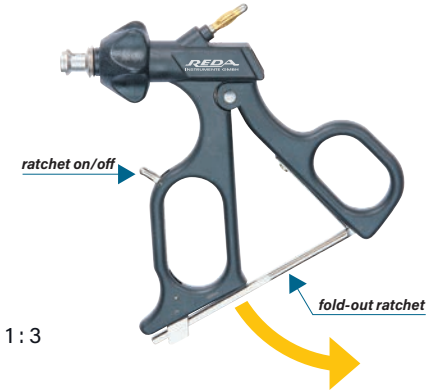


### **Nut stopper**

An nut on the sleeve shaft of REDA modular instruments prevents bothersome slipping or even the loss of the union nut.

REDA - detail is the decisive factor !

Ø 3 / 5 / 10 mm



Ergonomic universal carbon handle with ratchet,  
Lever for active or unactive ratchet, HF-connector Ø 4 mm male 45° lateral,  
rotating head 360°, autoclavable

**R033** - 000000 - 000



Ergonomic carbon handle with stepless ratchet,  
ratchet by finger press resolve, HF-connector Ø 4 mm male 45° lateral,  
rotating head 360°, autoclavable

**R033P** - 000000 - 000



Ergonomic carbon handle,  
HF-connector Ø 4 mm male 45° lateral, rotating head 360°, autoclavable

**R034** - 000000 - 000



Ergonomic universal carbon handle with ratchet,  
Button for active or unactive ratchet, HF-connector Ø 4 mm male 45° lateral,  
rotating head 360°, autoclavable

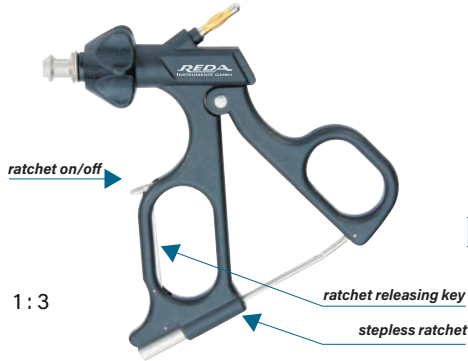
**R032M** - 000000 - 000



Laparoscopy -  
Carbon Handles for Ø 3 / 5 / 10 mm tube shafts



Ø 3 / 5 / 10 mm



Ergonomic carbon handle with stepless ratchet,  
ratchet activating / release lever, HF-connector Ø 4 mm male 45° lateral,  
rotating head 360°, autoclavable

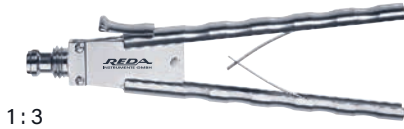
**R033M - 000000 - 000**



Protection cap for HF-connector Ø 4 mm

**R030 - 000000**

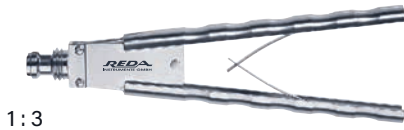
Ø 3 / 5 / 10 mm



1:3

Axial handle, v-shaped type with spreading spring and ratchet

**R038** - 000000 - 000



1:3

Axial handle, with spreading spring

**R048** - 000000 - 000



1:3

Axial handle with rings and ratchet

**R037** - 000000 - 000



1:3

Axial ring handle

**R047** - 000000 - 000



Axial handle, v-shaped angled, type with spreading spring and ratchet

**R039** - 000000 - 000

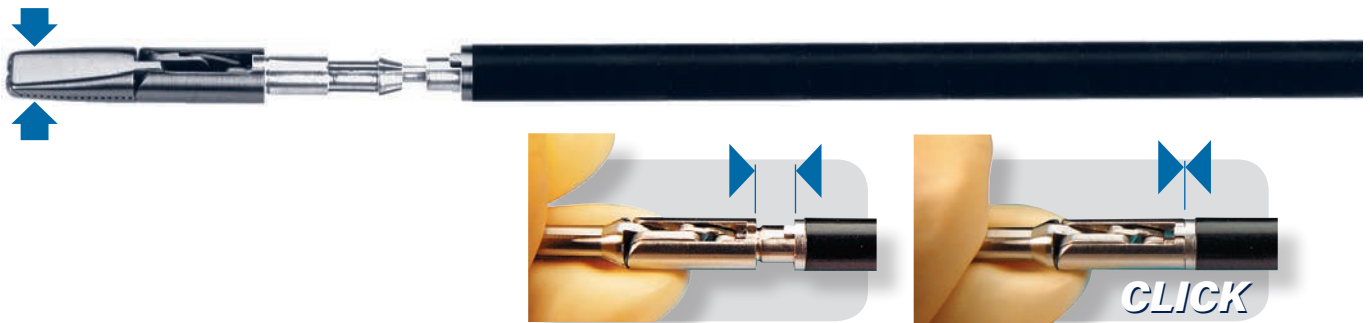


Axial handle, angled, with spreading spring

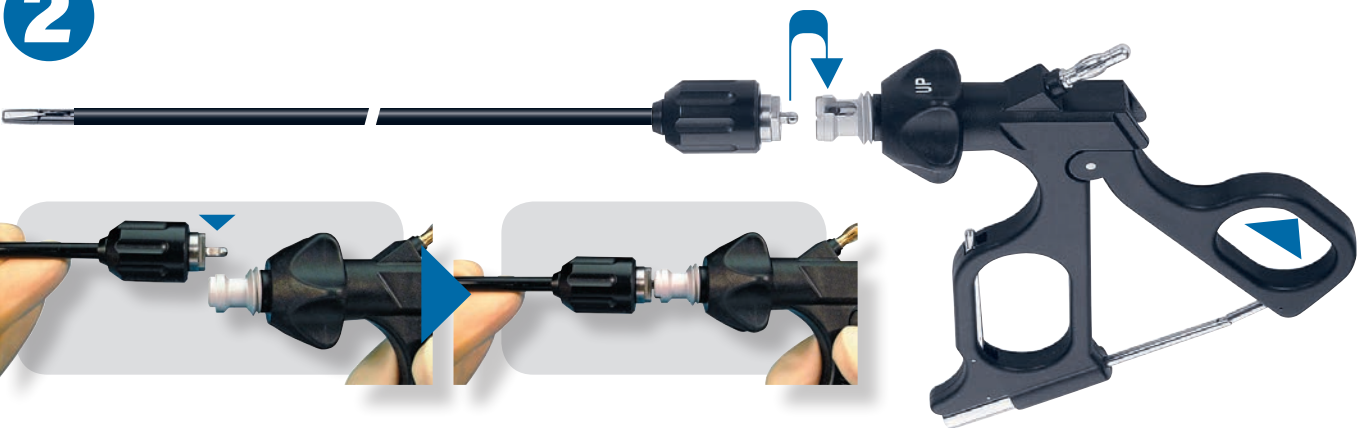
**R040** - 000000 - 000



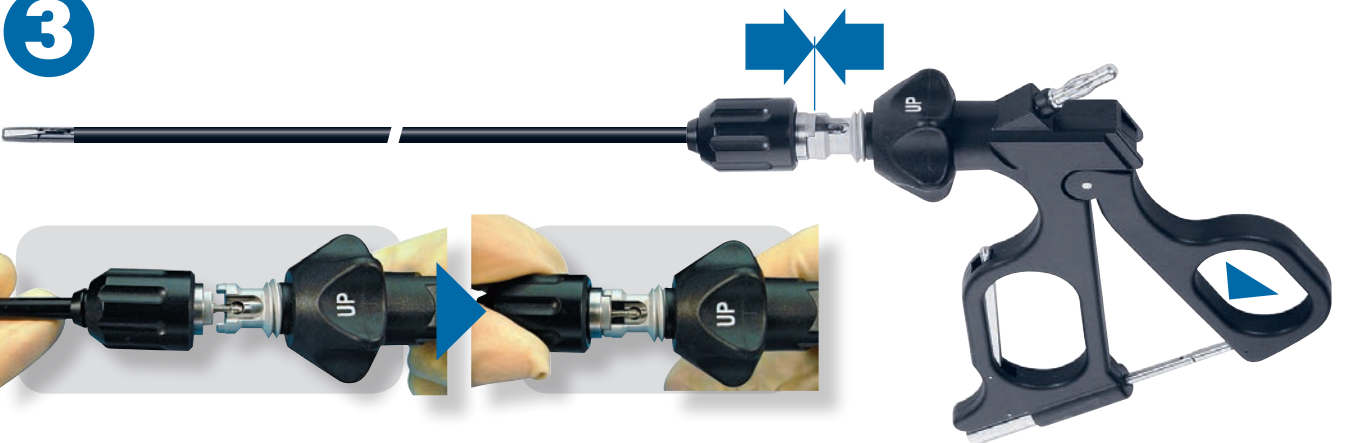
**1**



**2**



**3**



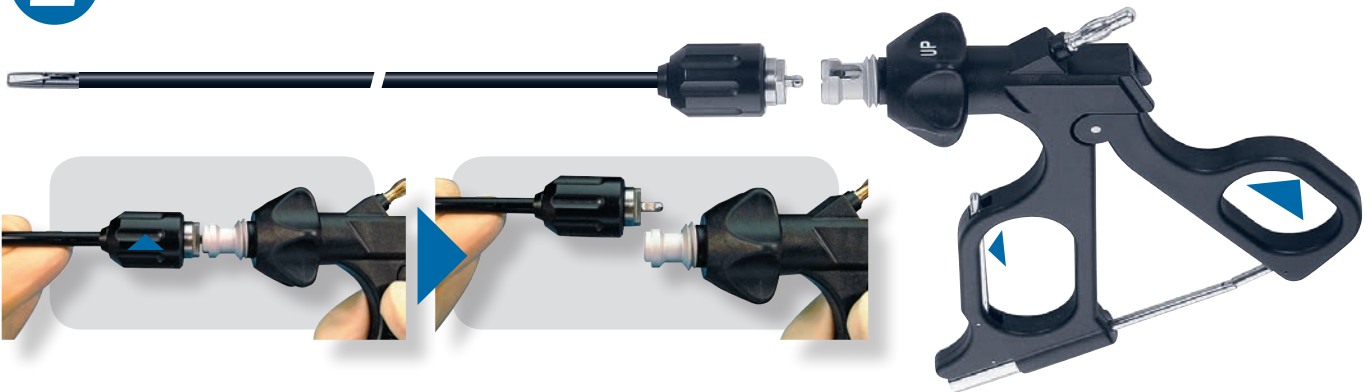
**4**



1



2



3




4








**Ø 5 mm**



Tube Shaft, insulated shaft length: **330 mm**  
 without LUER Lock with LUER Lock  
**R030 - 050330 - 000** **R030 - 050330 - 000 L**

Tube Shaft, insulated shaft length: **360 mm**  
 without LUER Lock with LUER Lock  
**R030 - 050360 - 000** **R030 - 050360 - 000 L**





Tube Shaft, insulated shaft length: **450 mm**  
 without LUER Lock with LUER Lock  
**R030 - 050450 - 000** **R030 - 050450 - 000 L**



**Ø 10 mm**




Tube Shaft, insulated shaft length: **330 mm**  
 cylindrical reduce to Ø 5 mm  
**R030 - 100330 - 000** **R030 - 100330 - 000 5**

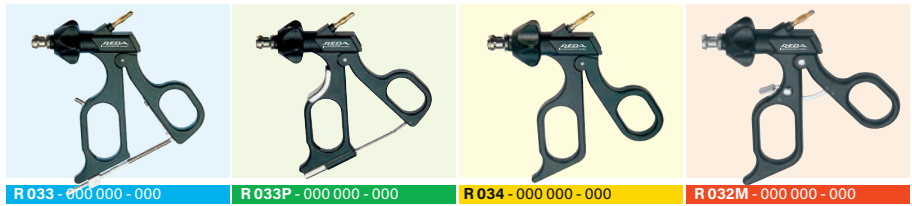
Tube Shaft, insulated, for adipose patients shaft length: **360 mm**  
 cylindrical reduce to Ø 5 mm  
**R030 - 100360 - 000** **R030 - 100360 - 000 5**

Tube Shaft, insulated, for adipose patients shaft length: **450 mm**  
 cylindrical reduce to Ø 5 mm  
**R030 - 100450 - 000** **R030 - 100450 - 000 5**

**Carbon Handles**

more details at the beginning of the chapter



Ø 5 mm



Universal grasping forceps, double action jaws

↔ 17,5 mm

Working length | Working insert alone | Complete instrument

<b>330 mm</b>	<b>R030-050330-210</b>	<b>R033-050330-210</b>	<b>R033P-050330-210</b>	<b>R034-050330-210</b>	<b>R032M-050330-210</b>
<b>360 mm</b>	<b>R030-050360-210</b>	<b>R033-050360-210</b>	<b>R033P-050360-210</b>	<b>R034-050360-210</b>	<b>R032M-050360-210</b>
<b>450 mm</b>	<b>R030-050450-210</b>	<b>R033-050450-210</b>	<b>R033P-050450-210</b>	<b>R034-050450-210</b>	<b>R032M-050450-210</b>

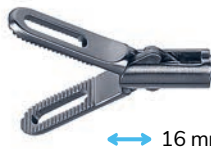


MARYLAND grasping and dissecting forceps, double action jaws

↔ 17,5 mm

Working length | Working insert alone | Complete instrument

<b>330 mm</b>	<b>R030-050330-212</b>	<b>R033-050330-212</b>	<b>R033P-050330-212</b>	<b>R034-050330-212</b>	<b>R032M-050330-212</b>
<b>360 mm</b>	<b>R030-050360-212</b>	<b>R033-050360-212</b>	<b>R033P-050360-212</b>	<b>R034-050360-212</b>	<b>R032M-050360-212</b>
<b>450 mm</b>	<b>R030-050450-212</b>	<b>R033-050450-212</b>	<b>R033P-050450-212</b>	<b>R034-050450-212</b>	<b>R032M-050450-212</b>

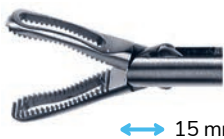


Dissecting forceps, fenestrated, double action jaws

↔ 16 mm

Working length | Working insert alone | Complete instrument

<b>330 mm</b>	<b>R030-050330-213</b>	<b>R033-050330-213</b>	<b>R033P-050330-213</b>	<b>R034-050330-213</b>	<b>R032M-050330-213</b>
<b>360 mm</b>	<b>R030-050360-213</b>	<b>R033-050360-213</b>	<b>R033P-050360-213</b>	<b>R034-050360-213</b>	<b>R032M-050360-213</b>
<b>450 mm</b>	<b>R030-050450-213</b>	<b>R033-050450-213</b>	<b>R033P-050450-213</b>	<b>R034-050450-213</b>	<b>R032M-050450-213</b>



Dissecting forceps, fenestrated, oval, double action jaws

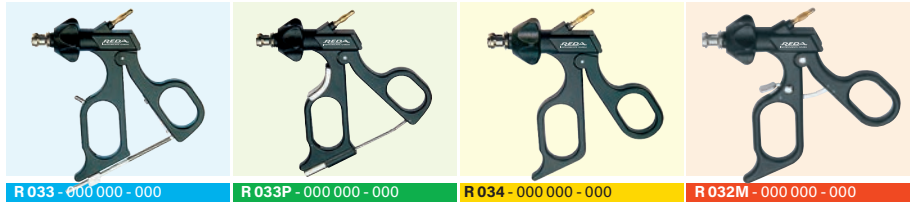
↔ 15 mm

Working length | Working insert alone | Complete instrument

<b>330 mm</b>	<b>R030-050330-214</b>	<b>R033-050330-214</b>	<b>R033P-050330-214</b>	<b>R034-050330-214</b>	<b>R032M-050330-214</b>
<b>360 mm</b>	<b>R030-050360-214</b>	<b>R033-050360-214</b>	<b>R033P-050360-214</b>	<b>R034-050360-214</b>	<b>R032M-050360-214</b>
<b>450 mm</b>	<b>R030-050450-214</b>	<b>R033-050450-214</b>	<b>R033P-050450-214</b>	<b>R034-050450-214</b>	<b>R032M-050450-214</b>

**Carbon Handles**

more details at the beginning of the chapter



R 033 - 000 000 - 000

R 033P - 000 000 - 000

R 034 - 000 000 - 000

R 032M - 000 000 - 000

Ø 5 mm



Duck Bill-forceps, fenestrated, single action jaws

↔ 15 mm

Working length	Working insert alone	Complete instrument			
<b>330 mm</b>	<b>R030-050330-215</b>	<b>R033-050330-215</b>	<b>R033P-050330-215</b>	<b>R034-050330-215</b>	<b>R032M-050330-215</b>
<b>360 mm</b>	<b>R030-050360-215</b>	<b>R033-050360-215</b>	<b>R033P-050360-215</b>	<b>R034-050360-215</b>	<b>R032M-050360-215</b>
<b>450 mm</b>	<b>R030-050450-215</b>	<b>R033-050450-215</b>	<b>R033P-050450-215</b>	<b>R034-050450-215</b>	<b>R032M-050450-215</b>



Dissecting grasping forceps, slim, fenestrated, double action jaws

↔ 10 mm

Working length	Working insert alone	Complete instrument			
<b>330 mm</b>	<b>R030-050330-216</b>	<b>R033-050330-216</b>	<b>R033P-050330-216</b>	<b>R034-050330-216</b>	<b>R032M-050330-216</b>
<b>360 mm</b>	<b>R030-050360-216</b>	<b>R033-050360-216</b>	<b>R033P-050360-216</b>	<b>R034-050360-216</b>	<b>R032M-050360-216</b>
<b>450 mm</b>	<b>R030-050450-216</b>	<b>R033-050450-216</b>	<b>R033P-050450-216</b>	<b>R034-050450-216</b>	<b>R032M-050450-216</b>



Grasping forceps with 2 x 4 teeth cobra, double action jaws

↔ 13 mm

Working length	Working insert alone	Complete instrument			
<b>330 mm</b>	<b>R030-050330-218</b>	<b>R033-050330-218</b>	<b>R033P-050330-218</b>	<b>R034-050330-218</b>	<b>R032M-050330-218</b>
<b>360 mm</b>	<b>R030-050360-218</b>	<b>R033-050360-218</b>	<b>R033P-050360-218</b>	<b>R034-050360-218</b>	<b>R032M-050450-218</b>
<b>450 mm</b>	<b>R030-050450-218</b>	<b>R033-050450-218</b>	<b>R033P-050450-218</b>	<b>R034-050450-218</b>	<b>R032M-050450-218</b>



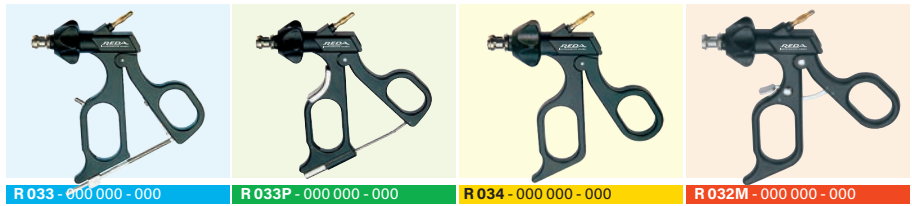
Grasping forceps with 2 x 4 teeth cobra, single action jaws

↔ 11 mm

Working length	Working insert alone	Complete instrument			
<b>330 mm</b>	<b>R030-050330-219</b>	<b>R033-050330-219</b>	<b>R033P-050330-219</b>	<b>R034-050330-219</b>	<b>R032M-050330-219</b>
<b>360 mm</b>	<b>R030-050360-219</b>	<b>R033-050360-219</b>	<b>R033P-050360-219</b>	<b>R034-050360-219</b>	<b>R032M-050360-219</b>
<b>450 mm</b>	<b>R030-050450-219</b>	<b>R033-050450-219</b>	<b>R033P-050450-219</b>	<b>R034-050450-219</b>	<b>R032M-050450-219</b>

**Carbon Handles**

more details at the beginning of the chapter



Ø 5 mm



Grasping forceps with reservoir, tip blunt, double action jaws

↔ 13,5 mm

Working length	Working insert alone	Complete instrument			
<b>330 mm</b>	<b>R030-050330-220</b>	<b>R033-050330-220</b>	<b>R033P-050330-220</b>	<b>R034-050330-220</b>	<b>R032M-050330-220</b>
<b>360 mm</b>	<b>R030-050360-220</b>	<b>R033-050360-220</b>	<b>R033P-050360-220</b>	<b>R034-050360-220</b>	<b>R032M-050360-220</b>
<b>450 mm</b>	<b>R030-050450-220</b>	<b>R033-050450-220</b>	<b>R033P-050450-220</b>	<b>R034-050450-220</b>	<b>R032M-050450-220</b>



Grasping forceps with reservoir, tip conical, double action jaws

↔ 13,5 mm

Working length	Working insert alone	Complete instrument			
<b>330 mm</b>	<b>R030-050330-222</b>	<b>R033-050330-222</b>	<b>R033P-050330-222</b>	<b>R034-050330-222</b>	<b>R032M-050330-222</b>
<b>360 mm</b>	<b>R030-050360-222</b>	<b>R033-050360-222</b>	<b>R033P-050360-222</b>	<b>R034-050360-222</b>	<b>R032M-050360-222</b>
<b>450 mm</b>	<b>R030-050450-222</b>	<b>R033-050450-222</b>	<b>R033P-050450-222</b>	<b>R034-050450-222</b>	<b>R032M-050450-222</b>



Delphin grasping forceps, double action jaws

↔ 17,5 mm

Working length	Working insert alone	Complete instrument			
<b>330 mm</b>	<b>R030-050330-224</b>	<b>R033-050330-224</b>	<b>R033P-050330-224</b>	<b>R034-050330-224</b>	<b>R032M-050330-224</b>
<b>360 mm</b>	<b>R030-050360-224</b>	<b>R033-050360-224</b>	<b>R033P-050360-224</b>	<b>R034-050360-224</b>	<b>R032M-050360-224</b>
<b>450 mm</b>	<b>R030-050450-224</b>	<b>R033-050450-224</b>	<b>R033P-050450-224</b>	<b>R034-050450-224</b>	<b>R032M-050450-224</b>



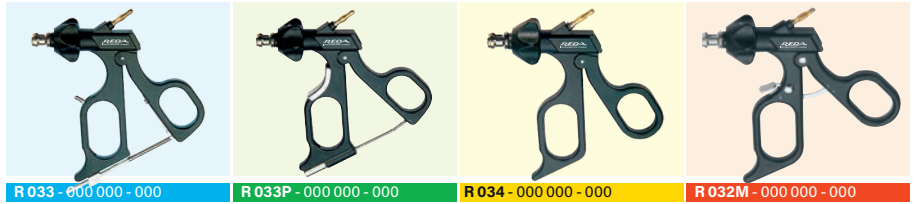
Delphin grasping forceps with reservoir, long, double action jaws

↔ 26 mm

Working length	Working insert alone	Complete instrument			
<b>330 mm</b>	<b>R030-050330-225</b>	<b>R033-050330-225</b>	<b>R033P-050330-225</b>	<b>R034-050330-225</b>	<b>R032M-050330-225</b>
<b>360 mm</b>	<b>R030-050360-225</b>	<b>R033-050360-225</b>	<b>R033P-050360-225</b>	<b>R034-050360-225</b>	<b>R032M-050360-225</b>
<b>450 mm</b>	<b>R030-050450-225</b>	<b>R033-050450-225</b>	<b>R033P-050450-225</b>	<b>R034-050450-225</b>	<b>R032M-050450-225</b>

**Carbon Handles**

more details at the beginning of the chapter



Ø 5 mm

R 033 - 000 000 - 000

R 033P - 000 000 - 000

R 034 - 000 000 - 000

R 032M - 000 000 - 000



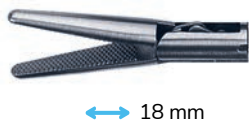
Fallopian tube grasping forceps, double action jaws

Working length	Working insert alone	Complete instrument			
<b>330 mm</b>	<b>R030-050330-226</b>	<b>R033-050330-226</b>	<b>R033P-050330-226</b>	<b>R034-050330-226</b>	<b>R032M-050330-226</b>
<b>360 mm</b>	<b>R030-050360-226</b>	<b>R033-050360-226</b>	<b>R033P-050360-226</b>	<b>R034-050360-226</b>	<b>R032M-050360-226</b>
<b>450 mm</b>	<b>R030-050450-226</b>	<b>R033-050450-226</b>	<b>R033P-050450-226</b>	<b>R034-050450-226</b>	<b>R032M-050450-226</b>



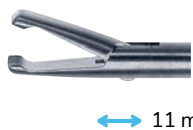
Grasping forceps crosswise teeth, jaw length 14 mm, conical, double action jaws

Working length	Working insert alone	Complete instrument			
<b>330 mm</b>	<b>R030-050330-228</b>	<b>R033-050330-228</b>	<b>R033P-050330-228</b>	<b>R034-050330-228</b>	<b>R032M-050330-228</b>
<b>360 mm</b>	<b>R030-050360-228</b>	<b>R033-050360-228</b>	<b>R033P-050360-228</b>	<b>R034-050360-228</b>	<b>R032M-050360-228</b>
<b>450 mm</b>	<b>R030-050450-228</b>	<b>R033-050450-228</b>	<b>R033P-050450-228</b>	<b>R034-050450-228</b>	<b>R032M-050450-228</b>



Grasping forceps crosswise teeth, jaw length 18 mm, conical, double action jaws

Working length	Working insert alone	Complete instrument			
<b>330 mm</b>	<b>R030-050330-230</b>	<b>R033-050330-230</b>	<b>R033P-050330-230</b>	<b>R034-050330-230</b>	<b>R032M-050330-230</b>
<b>360 mm</b>	<b>R030-050360-230</b>	<b>R033-050360-230</b>	<b>R033P-050360-230</b>	<b>R034-050360-230</b>	<b>R032M-050360-230</b>
<b>450 mm</b>	<b>R030-050450-230</b>	<b>R033-050450-230</b>	<b>R033P-050450-230</b>	<b>R034-050450-230</b>	<b>R032M-050450-230</b>

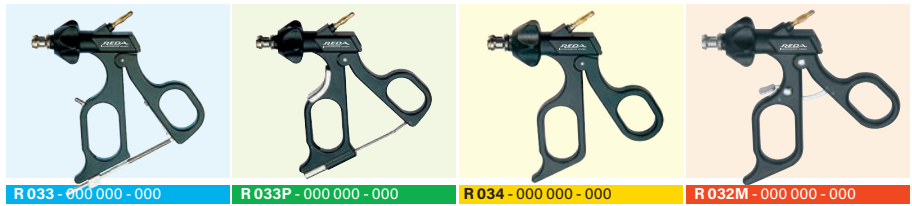


MAHNES grasping forceps, distal fine crosswise teeth, single action jaws

Working length	Working insert alone	Complete instrument			
<b>330 mm</b>	<b>R030-050330-231</b>	<b>R033-050330-231</b>	<b>R033P-050330-231</b>	<b>R034-050330-231</b>	<b>R032M-050330-231</b>
<b>360 mm</b>	<b>R030-050360-231</b>	<b>R033-050360-231</b>	<b>R033P-050360-231</b>	<b>R034-050360-231</b>	<b>R032M-050360-231</b>
<b>450 mm</b>	<b>R030-050450-231</b>	<b>R033-050450-231</b>	<b>R033P-050450-231</b>	<b>R034-050450-231</b>	<b>R032M-050450-231</b>

**Carbon Handles**

more details at the beginning of the chapter



Ø 5 mm

R 033 - 000 000 - 000

R 033P - 000 000 - 000

R 034 - 000 000 - 000

R 032M - 000 000 - 000



MAHNES grasping forceps, distal fine crosswise teeth, double action jaws

↔ 11,5 mm

Working length	Working insert alone	Complete instrument			
<b>330 mm</b>	<b>R030-050330-232</b>	<b>R033-050330-232</b>	<b>R033P-050330-232</b>	<b>R034-050330-232</b>	<b>R032M-050330-232</b>
<b>360 mm</b>	<b>R030-050360-232</b>	<b>R033-050360-232</b>	<b>R033P-050360-232</b>	<b>R034-050360-232</b>	<b>R032M-050360-232</b>
<b>450 mm</b>	<b>R030-050450-232</b>	<b>R033-050450-232</b>	<b>R033P-050450-232</b>	<b>R034-050450-232</b>	<b>R032M-050450-232</b>



Grasping forceps, double action jaws

↔ 20 mm

Working length	Working insert alone	Complete instrument			
<b>330 mm</b>	<b>R030-050330-234</b>	<b>R033-050330-234</b>	<b>R033P-050330-234</b>	<b>R034-050330-234</b>	<b>R032M-050330-234</b>
<b>360 mm</b>	<b>R030-050360-234</b>	<b>R033-050360-234</b>	<b>R033P-050360-234</b>	<b>R034-050360-234</b>	<b>R032M-050360-234</b>
<b>450 mm</b>	<b>R030-050450-234</b>	<b>R033-050450-234</b>	<b>R033P-050450-234</b>	<b>R034-050450-234</b>	<b>R032M-050450-234</b>



REDDICK-OLSEN grasping forceps, strong, double action jaws

↔ 9,5 mm

Working length	Working insert alone	Complete instrument			
<b>330 mm</b>	<b>R030-050330-236</b>	<b>R033-050330-236</b>	<b>R033P-050330-236</b>	<b>R034-050330-236</b>	<b>R032M-050330-236</b>
<b>360 mm</b>	<b>R030-050360-236</b>	<b>R033-050360-236</b>	<b>R033P-050360-236</b>	<b>R034-050360-236</b>	<b>R032M-050360-236</b>
<b>450 mm</b>	<b>R030-050450-236</b>	<b>R033-050450-236</b>	<b>R033P-050450-236</b>	<b>R034-050450-236</b>	<b>R032M-050450-236</b>



Grasping forceps, distal with a atraumatic row of teeth, double action jaws

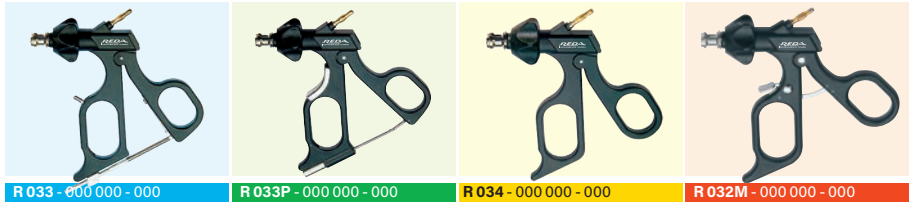
↔ 29 mm

Working length	Working insert alone	Complete instrument			
<b>330 mm</b>	<b>R030-050330-238</b>	<b>R033-050330-238</b>	<b>R033P-050330-238</b>	<b>R034-050330-238</b>	<b>R032M-050330-238</b>
<b>360 mm</b>	<b>R030-050360-238</b>	<b>R033-050360-238</b>	<b>R033P-050360-238</b>	<b>R034-050360-238</b>	<b>R032M-050360-238</b>
<b>450 mm</b>	<b>R030-050450-238</b>	<b>R033-050450-238</b>	<b>R033P-050450-238</b>	<b>R034-050450-238</b>	<b>R032M-050450-238</b>



**Carbon Handles**

more details at the beginning of the chapter



R 033 - 000 000 - 000

R 033P - 000 000 - 000

R 034 - 000 000 - 000

R 032M - 000 000 - 000

Ø 5 mm



↔ 13,5 mm

MAHNES grasping forceps 1 x 2 teeth, double action jaws

Working length | Working insert alone | Complete instrument

<b>330 mm</b>	<b>R030-050330-240</b>	<b>R033-050330-240</b>	<b>R033P-050330-240</b>	<b>R034-050330-240</b>	<b>R032M-050330-240</b>
<b>360 mm</b>	<b>R030-050360-240</b>	<b>R033-050360-240</b>	<b>R033P-050360-240</b>	<b>R034-050360-240</b>	<b>R032M-050360-240</b>
<b>450 mm</b>	<b>R030-050450-240</b>	<b>R033-050450-240</b>	<b>R033P-050450-240</b>	<b>R034-050450-240</b>	<b>R032M-050450-240</b>



↔ 13,5 mm

Grasping forceps with mouseteeth, single action jaws

Working length | Working insert alone | Complete instrument

<b>330 mm</b>	<b>R030-050330-241</b>	<b>R033-050330-241</b>	<b>R033P-050330-241</b>	<b>R034-050330-241</b>	<b>R032M-050330-241</b>
<b>360 mm</b>	<b>R030-050360-241</b>	<b>R033-050360-241</b>	<b>R033P-050360-241</b>	<b>R034-050360-241</b>	<b>R032M-050360-241</b>
<b>450 mm</b>	<b>R030-050450-241</b>	<b>R033-050450-241</b>	<b>R033P-050450-241</b>	<b>R034-050450-241</b>	<b>R032M-050450-241</b>

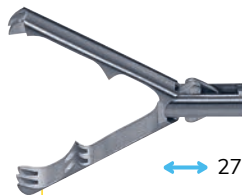


↔ 22 mm

Claw grasping forceps, 3 x 2 teeth, single action jaws

Working length | Working insert alone | Complete instrument

<b>330 mm</b>	<b>R030-050330-242</b>	<b>R033-050330-242</b>	<b>R033P-050330-242</b>	<b>R034-050330-242</b>	<b>R032M-050330-242</b>
<b>360 mm</b>	<b>R030-050360-242</b>	<b>R033-050360-242</b>	<b>R033P-050360-242</b>	<b>R034-050360-242</b>	<b>R032M-050360-242</b>
<b>450 mm</b>	<b>R030-050450-242</b>	<b>R033-050450-242</b>	<b>R033P-050450-242</b>	<b>R034-050450-242</b>	<b>R032M-050450-242</b>



↔ 27 mm

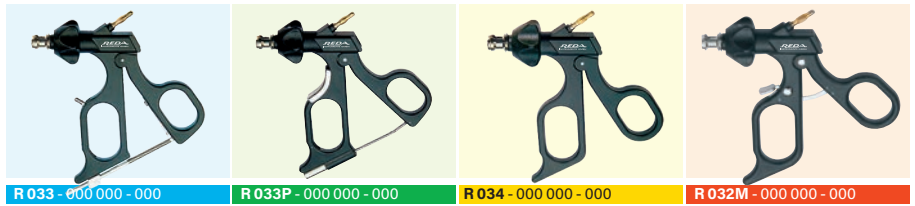
„AGRESSIV“, Claw Grasping forceps, double action jaws

Working length | Working insert alone | Complete instrument

<b>330 mm</b>	<b>R030-050330-243</b>	<b>R033-050330-243</b>	<b>R033P-050330-243</b>	<b>R034-050330-243</b>	<b>R032M-050330-243</b>
<b>360 mm</b>	<b>R030-050360-243</b>	<b>R033-050360-243</b>	<b>R033P-050360-243</b>	<b>R034-050360-243</b>	<b>R032M-050360-243</b>
<b>450 mm</b>	<b>R030-050450-243</b>	<b>R033-050450-243</b>	<b>R033P-050450-243</b>	<b>R034-050450-243</b>	<b>R032M-050450-243</b>

**Carbon Handles**

more details at the beginning of the chapter



Ø 5 mm



Grasping forceps distal with DEBAKEY teeth, double action jaws

↔ 24 mm

Working length | Working insert alone | Complete instrument

<b>330 mm</b>	<b>R030-050330-244</b>	<b>R033-050330-244</b>	<b>R033P-050330-244</b>	<b>R034-050330-244</b>	<b>R032M-050330-244</b>
<b>360 mm</b>	<b>R030-050360-244</b>	<b>R033-050360-244</b>	<b>R033P-050360-244</b>	<b>R034-050360-244</b>	<b>R032M-050360-244</b>
<b>450 mm</b>	<b>R030-050450-244</b>	<b>R033-050450-244</b>	<b>R033P-050450-244</b>	<b>R034-050450-244</b>	<b>R032M-050450-244</b>

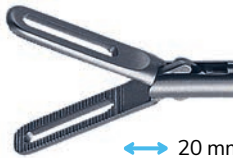


Extracting forceps with retrograd teeth, double action jaws

↔ 13,5 mm

Working length | Working insert alone | Complete instrument

<b>330 mm</b>	<b>R030-050330-246</b>	<b>R033-050330-246</b>	<b>R033P-050330-246</b>	<b>R034-050330-246</b>	<b>R032M-050330-246</b>
<b>360 mm</b>	<b>R030-050360-246</b>	<b>R033-050360-246</b>	<b>R033P-050360-246</b>	<b>R034-050360-246</b>	<b>R032M-050360-246</b>
<b>450 mm</b>	<b>R030-050450-246</b>	<b>R033-050450-246</b>	<b>R033P-050450-246</b>	<b>R034-050450-246</b>	<b>R032M-050450-246</b>



DORSEY (JOHANN) intestinal grasping forceps, jaw length 20 mm, double action jaws

↔ 20 mm

Working length | Working insert alone | Complete instrument

<b>330 mm</b>	<b>R030-050330-248</b>	<b>R033-050330-248</b>	<b>R033P-050330-248</b>	<b>R034-050330-248</b>	<b>R032M-050330-248</b>
<b>360 mm</b>	<b>R030-050360-248</b>	<b>R033-050360-248</b>	<b>R033P-050360-248</b>	<b>R034-050360-248</b>	<b>R032M-050360-248</b>
<b>450 mm</b>	<b>R030-050450-248</b>	<b>R033-050450-248</b>	<b>R033P-050450-248</b>	<b>R034-050450-248</b>	<b>R032M-050450-248</b>



DORSEY (JOHANN) intestinal grasping forceps, jaw length 20 mm, single action jaws

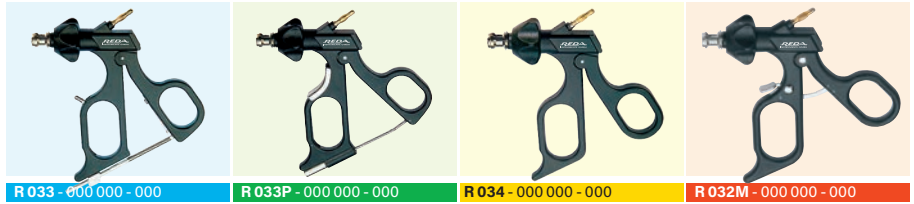
↔ 20 mm

Working length | Working insert alone | Complete instrument

<b>330 mm</b>	<b>R030-050330-249</b>	<b>R033-050330-249</b>	<b>R033P-050330-249</b>	<b>R034-050330-249</b>	<b>R032M-050330-249</b>
<b>360 mm</b>	<b>R030-050360-249</b>	<b>R033-050360-249</b>	<b>R033P-050360-249</b>	<b>R034-050360-249</b>	<b>R032M-050360-249</b>
<b>450 mm</b>	<b>R030-050450-249</b>	<b>R033-050450-249</b>	<b>R033P-050450-249</b>	<b>R034-050450-249</b>	<b>R032M-050450-249</b>

**Carbon Handles**

more details at the beginning of the chapter



R 033 - 000 000 - 000

R 033P - 000 000 - 000

R 034 - 000 000 - 000

R 032M - 000 000 - 000

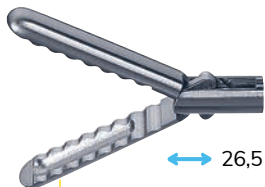
Ø 5 mm



↔ 21,5 mm

DAVIS & GEEK grasping forceps with reservoir, single action jaws

Working length	Working insert alone	Complete instrument			
<b>330 mm</b>	<b>R030-050330-250</b>	<b>R033-050330-250</b>	<b>R033P-050330-250</b>	<b>R034-050330-250</b>	<b>R032M-050330-250</b>
<b>360 mm</b>	<b>R030-050360-250</b>	<b>R033-050360-250</b>	<b>R033P-050360-250</b>	<b>R034-050360-250</b>	<b>R032M-050360-250</b>
<b>450 mm</b>	<b>R030-050450-250</b>	<b>R033-050450-250</b>	<b>R033P-050450-250</b>	<b>R034-050450-250</b>	<b>R032M-050450-250</b>



↔ 26,5 mm

DAVIS & GEEK grasping forceps with reservoir, double action jaws

Working length	Working insert alone	Complete instrument			
<b>330 mm</b>	<b>R030-050330-251</b>	<b>R033-050330-251</b>	<b>R033P-050330-251</b>	<b>R034-050330-251</b>	<b>R032M-050330-251</b>
<b>360 mm</b>	<b>R030-050360-251</b>	<b>R033-050360-251</b>	<b>R033P-050360-251</b>	<b>R034-050360-251</b>	<b>R032M-050360-251</b>
<b>450 mm</b>	<b>R030-050450-251</b>	<b>R033-050450-251</b>	<b>R033P-050450-251</b>	<b>R034-050450-251</b>	<b>R032M-050450-251</b>



↔ 22 mm

DAVIS & GEEK grasping forceps with 3 x 2 teeth, single action jaws

Working length	Working insert alone	Complete instrument			
<b>330 mm</b>	<b>R030-050330-252</b>	<b>R033-050330-252</b>	<b>R033P-050330-252</b>	<b>R034-050330-252</b>	<b>R032M-050330-252</b>
<b>360 mm</b>	<b>R030-050360-252</b>	<b>R033-050360-252</b>	<b>R033P-050360-252</b>	<b>R034-050360-252</b>	<b>R032M-050360-252</b>
<b>450 mm</b>	<b>R030-050450-252</b>	<b>R033-050450-252</b>	<b>R033P-050450-252</b>	<b>R034-050450-252</b>	<b>R032M-050450-252</b>



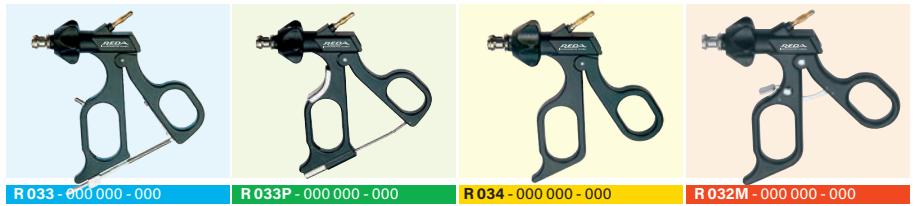
↔ 20 mm

MIXTER grasping forceps 90°, double action jaws

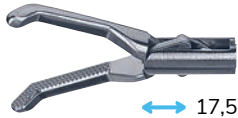
Working length	Working insert alone	Complete instrument			
<b>330 mm</b>	<b>R030-050330-258</b>	<b>R033-050330-258</b>	<b>R033P-050330-258</b>	<b>R034-050330-258</b>	<b>R032M-050330-258</b>
<b>360 mm</b>	<b>R030-050360-258</b>	<b>R033-050360-258</b>	<b>R033P-050360-258</b>	<b>R034-050360-258</b>	<b>R032M-050360-258</b>
<b>450 mm</b>	<b>R030-050450-258</b>	<b>R033-050450-258</b>	<b>R033P-050450-258</b>	<b>R034-050450-258</b>	<b>R032M-050450-258</b>

**Carbon Handles**

more details at the beginning of the chapter



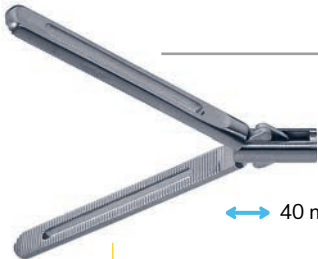
Ø 5 mm



MIXTER grasping forceps 45°, double action jaws

↔ 17,5 mm

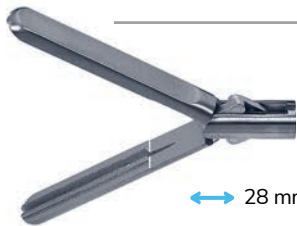
Working length	Working insert alone	Complete instrument			
<b>330 mm</b>	<b>R030-050330-259</b>	<b>R033-050330-259</b>	<b>R033P-050330-259</b>	<b>R034-050330-259</b>	<b>R032M-050330-259</b>
<b>360 mm</b>	<b>R030-050360-259</b>	<b>R033-050360-259</b>	<b>R033P-050360-259</b>	<b>R034-050360-259</b>	<b>R032M-050360-259</b>
<b>450 mm</b>	<b>R030-050450-259</b>	<b>R033-050450-259</b>	<b>R033P-050450-259</b>	<b>R034-050450-259</b>	<b>R032M-050450-259</b>



DORSEY intestinal grasping forceps, jaw length 40 mm, double action jaws

↔ 40 mm

Working length	Working insert alone	Complete instrument			
<b>330 mm</b>	<b>R030-050330-262</b>	<b>R033-050330-262</b>	<b>R033P-050330-262</b>	<b>R034-050330-262</b>	<b>R032M-050330-262</b>
<b>360 mm</b>	<b>R030-050360-262</b>	<b>R033-050360-262</b>	<b>R033P-050360-262</b>	<b>R034-050360-262</b>	<b>R032M-050360-262</b>
<b>450 mm</b>	<b>R030-050450-262</b>	<b>R033-050450-262</b>	<b>R033P-050450-262</b>	<b>R034-050450-262</b>	<b>R032M-050450-262</b>



DEBAKEY clamp, jaw length 30 mm, double action jaws

↔ 28 mm

Working length	Working insert alone	Complete instrument			
<b>330 mm</b>	<b>R030-050330-264</b>	<b>R033-050330-264</b>	<b>R033P-050330-264</b>	<b>R034-050330-264</b>	<b>R032M-050330-264</b>
<b>360 mm</b>	<b>R030-050360-264</b>	<b>R033-050360-264</b>	<b>R033P-050360-264</b>	<b>R034-050360-264</b>	<b>R032M-050360-264</b>
<b>450 mm</b>	<b>R030-050450-264</b>	<b>R033-050450-264</b>	<b>R033P-050450-264</b>	<b>R034-050450-264</b>	<b>R032M-050450-264</b>



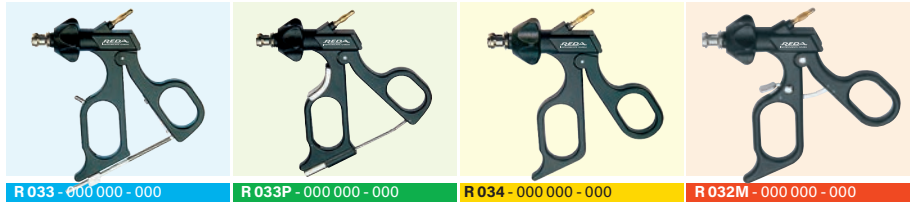
KELLY Grasping forceps, double action jaws

↔ 11 mm

Working length	Working insert alone	Complete instrument			
<b>330 mm</b>	<b>R030-050330-266</b>	<b>R033-050330-266</b>	<b>R033P-050330-266</b>	<b>R034-050330-266</b>	<b>R032M-050330-266</b>
<b>360 mm</b>	<b>R030-050360-266</b>	<b>R033-050360-266</b>	<b>R033P-050360-266</b>	<b>R034-050360-266</b>	<b>R032M-050360-266</b>
<b>450 mm</b>	<b>R030-050450-266</b>	<b>R033-050450-266</b>	<b>R033P-050450-266</b>	<b>R034-050450-266</b>	<b>R032M-050450-266</b>

**Carbon Handles**

more details at the beginning of the chapter



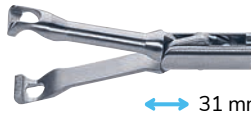
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R 033P - 000 000 - 000

R 034 - 000 000 - 000

R 032M - 000 000 - 000

Ø 5 mm



BABCOCK clamp, double action jaws

↔ 31 mm

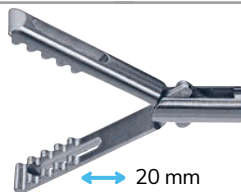
Working length	Working insert alone	Complete instrument			
<b>330 mm</b>	<b>R030-050330-270</b>	<b>R033-050330-270</b>	<b>R033P-050330-270</b>	<b>R034-050330-270</b>	<b>R032M-050330-270</b>
<b>360 mm</b>	<b>R030-050360-270</b>	<b>R033-050360-270</b>	<b>R033P-050360-270</b>	<b>R034-050360-270</b>	<b>R032M-050360-270</b>
<b>450 mm</b>	<b>R030-050450-270</b>	<b>R033-050450-270</b>	<b>R033P-050450-270</b>	<b>R034-050450-270</b>	<b>R032M-050450-270</b>



Grasping Forceps, straight, cross-serrated, jaw length 18 mm, single action jaws

↔ 18 mm

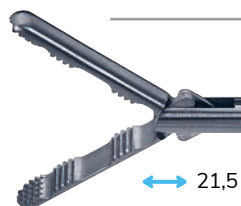
		Working length	Working insert alone	Complete instrument	
<b>330 mm</b>	<b>R030-050330-272</b>	<b>R033-050330-272</b>	<b>R033P-050330-272</b>	<b>R034-050330-272</b>	<b>R032M-050330-272</b>
<b>360 mm</b>	<b>R030-050360-272</b>	<b>R033-050360-272</b>	<b>R033P-050360-272</b>	<b>R034-050360-272</b>	<b>R032M-050360-272</b>
<b>450 mm</b>	<b>R030-050450-272</b>	<b>R033-050450-272</b>	<b>R033P-050450-272</b>	<b>R034-050450-272</b>	<b>R032M-050450-272</b>



Grasping forceps „WAVE“, fenestrated, double action jaws

↔ 20 mm

Working length	Working insert alone	Complete instrument			
<b>330 mm</b>	<b>R030-050330-274</b>	<b>R033-050330-274</b>	<b>R033P-050330-274</b>	<b>R034-050330-274</b>	<b>R032M-050330-274</b>
<b>360 mm</b>	<b>R030-050360-274</b>	<b>R033-050360-274</b>	<b>R033P-050360-274</b>	<b>R034-050360-274</b>	<b>R032M-050360-274</b>
<b>450 mm</b>	<b>R030-050450-274</b>	<b>R033-050450-274</b>	<b>R033P-050450-274</b>	<b>R034-050450-274</b>	<b>R032M-050450-274</b>



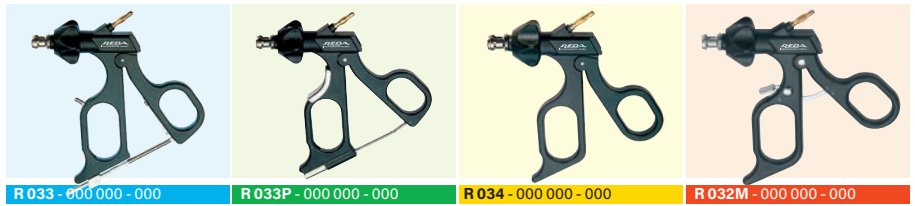
Grasping forceps „MAXIGRIP“, double action jaws

↔ 21,5 mm

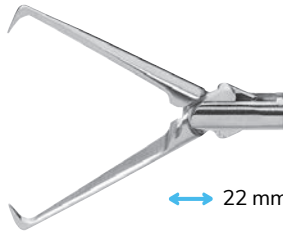
Working length	Working insert alone	Complete instrument			
<b>330 mm</b>	<b>R030-050330-276</b>	<b>R033-050330-276</b>	<b>R033P-050330-276</b>	<b>R034-050330-276</b>	<b>R032M-050330-276</b>
<b>360 mm</b>	<b>R030-050360-276</b>	<b>R033-050360-276</b>	<b>R033P-050360-276</b>	<b>R034-050360-276</b>	<b>R032M-050360-276</b>
<b>450 mm</b>	<b>R030-050450-276</b>	<b>R033-050450-276</b>	<b>R033P-050450-276</b>	<b>R034-050450-276</b>	<b>R032M-050450-276</b>

**Carbon Handles**

more details at the beginning of the chapter



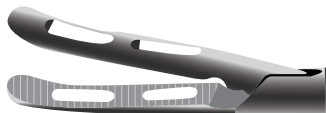
Ø 5 mm



Tenaculum forceps, double action jaws

↔ 22 mm

Working length	Working insert alone	Complete instrument			
<b>330 mm</b>	<b>R030-050330-284</b>	<b>R033-050330-284</b>	<b>R033P-050330-284</b>	<b>R034-050330-284</b>	<b>R032M-050330-284</b>
<b>360 mm</b>	<b>R030-050360-284</b>	<b>R033-050360-284</b>	<b>R033P-050360-284</b>	<b>R034-050360-284</b>	<b>R032M-050360-284</b>
<b>450 mm</b>	<b>R030-050450-284</b>	<b>R033-050450-284</b>	<b>R033P-050450-284</b>	<b>R034-050450-284</b>	<b>R032M-050450-284</b>



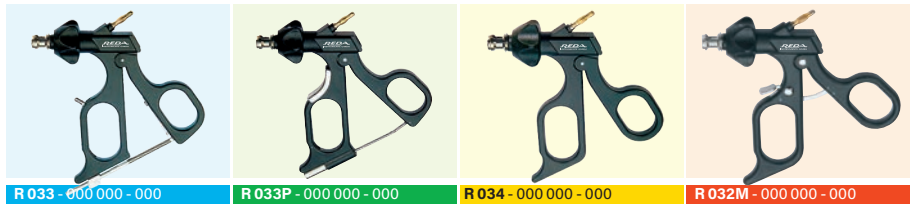
CROCE-OLMI grasping forceps, atrumatic, fenestrated, curved

↔ 22 mm

Working length	Working insert alone	Complete instrument			
<b>330 mm</b>	<b>R030-050330-217</b>	<b>R033-050330-217</b>	<b>R033P-050330-217</b>	<b>R034-050330-217</b>	<b>R032M-050330-217</b>
<b>360 mm</b>	<b>R030-050360-217</b>	<b>R033-050360-217</b>	<b>R033P-050360-217</b>	<b>R034-050360-217</b>	<b>R032M-050360-217</b>
<b>450 mm</b>	<b>R030-050450-217</b>	<b>R033-050450-217</b>	<b>R033P-050450-217</b>	<b>R034-050450-217</b>	<b>R032M-050450-217</b>

**Carbon Handles**

more details at the beginning of the chapter



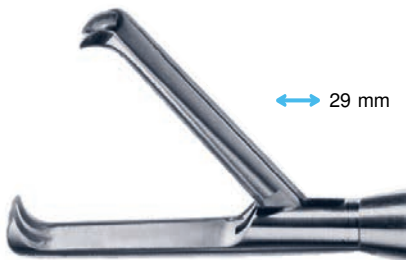
R 033 - 000 000 - 000

R 033P - 000 000 - 000

R 034 - 000 000 - 000

R 032M - 000 000 - 000

Ø 10 mm



↔ 29 mm

Claw grasping forceps, 3 x 2 teeth, single action jaws

Working length	Working insert alone	Complete instrument			
<b>330 mm</b>	<b>R030-100330-610</b>	<b>R033-100330-610</b>	<b>R033P-100330-610</b>	<b>R034-100330-610</b>	<b>R032M-100330-610</b>
<b>360 mm</b>	<b>R030-100360-610</b>	<b>R033-100360-610</b>	<b>R033P-100360-610</b>	<b>R034-100360-610</b>	<b>R032M-100360-610</b>
<b>450 mm</b>	<b>R030-100450-610</b>	<b>R033-100450-610</b>	<b>R033P-100450-610</b>	<b>R034-100450-610</b>	<b>R032M-100450-610</b>



↔ 24 mm

MARYLAND grasping and dissecting forceps, double action jaws

Working length	Working insert alone	Complete instrument			
<b>330 mm</b>	<b>R030-100330-612</b>	<b>R033-100330-612</b>	<b>R033P-100330-612</b>	<b>R034-100330-612</b>	<b>R032M-100330-612</b>
<b>360 mm</b>	<b>R030-100360-612</b>	<b>R033-100360-612</b>	<b>R033P-100360-612</b>	<b>R034-100360-612</b>	<b>R032M-100360-612</b>
<b>450 mm</b>	<b>R030-100450-612</b>	<b>R033-100450-612</b>	<b>R033P-100450-612</b>	<b>R034-100450-612</b>	<b>R032M-100450-612</b>



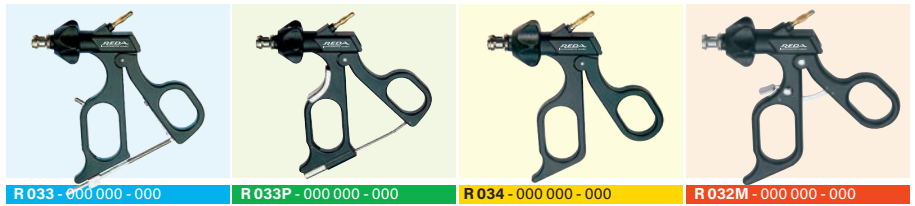
↔ 27,5 mm

Grasping forceps distal with DEBAKEY teeth, double action jaws

Working length	Working insert alone	Complete instrument			
<b>330 mm</b>	<b>R030-100330-614</b>	<b>R033-100330-614</b>	<b>R033P-100330-614</b>	<b>R034-100330-614</b>	<b>R032M-100330-614</b>
<b>360 mm</b>	<b>R030-100360-614</b>	<b>R033-100360-614</b>	<b>R033P-100360-614</b>	<b>R034-100360-614</b>	<b>R032M-100360-614</b>
<b>450 mm</b>	<b>R030-100450-614</b>	<b>R033-100450-614</b>	<b>R033P-100450-614</b>	<b>R034-100450-614</b>	<b>R032M-100450-614</b>

**Carbon Handles**

more details at the beginning of the chapter



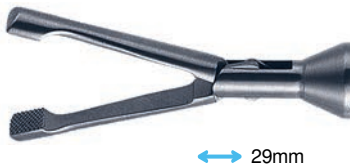
Ø 10 mm



BABCOCK grasping forceps, strong, double action jaws

↔ 27mm

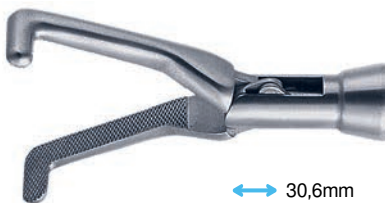
Working length	Working insert alone	Complete instrument			
<b>330 mm</b>	<b>R030-100330-616</b>	<b>R033-100330-616</b>	<b>R033P-100330-616</b>	<b>R034-100330-616</b>	<b>R032M-100330-616</b>
<b>360 mm</b>	<b>R030-100360-616</b>	<b>R033-100360-616</b>	<b>R033P-100360-616</b>	<b>R034-100360-616</b>	<b>R032M-100360-616</b>
<b>450 mm</b>	<b>R030-100450-616</b>	<b>R033-100450-616</b>	<b>R033P-100450-616</b>	<b>R034-100450-616</b>	<b>R032M-100450-616</b>



Grasping forceps, cross-serrated teeth, double action jaws

↔ 29mm

Working length	Working insert alone	Complete instrument			
<b>330 mm</b>	<b>R030-100330-642</b>	<b>R033-100330-642</b>	<b>R033P-100330-642</b>	<b>R034-100330-642</b>	<b>R032M-100330-642</b>
<b>360 mm</b>	<b>R030-100360-642</b>	<b>R033-100360-642</b>	<b>R033P-100360-642</b>	<b>R034-100360-642</b>	<b>R032M-100360-642</b>
<b>450 mm</b>	<b>R030-100450-642</b>	<b>R033-100450-642</b>	<b>R033P-100450-642</b>	<b>R034-100450-642</b>	<b>R032M-100450-642</b>



MIXTER grasping forceps, double action jaws

↔ 30,6mm

Working length	Working insert alone	Complete instrument			
<b>330 mm</b>	<b>R030-100330-646</b>	<b>R033-100330-646</b>	<b>R033P-100330-646</b>	<b>R034-100330-646</b>	<b>R032M-100330-646</b>
<b>360 mm</b>	<b>R030-100360-646</b>	<b>R033-100360-646</b>	<b>R033P-100360-646</b>	<b>R034-100360-646</b>	<b>R032M-100360-646</b>
<b>450 mm</b>	<b>R030-100450-646</b>	<b>R033-100450-646</b>	<b>R033P-100450-646</b>	<b>R034-100450-646</b>	<b>R032M-100450-646</b>



DORSEY intestinal grasping forceps, double action jaws

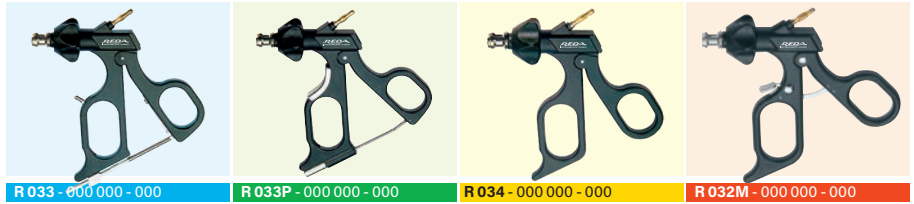
↔ 27mm

Working length	Working insert alone	Complete instrument			
<b>330 mm</b>	<b>R030-100330-648</b>	<b>R033-100330-648</b>	<b>R033P-100330-648</b>	<b>R034-100330-648</b>	<b>R032M-100330-648</b>
<b>360 mm</b>	<b>R030-100360-648</b>	<b>R033-100360-648</b>	<b>R033P-100360-648</b>	<b>R034-100360-648</b>	<b>R032M-100360-648</b>
<b>450 mm</b>	<b>R030-100450-648</b>	<b>R033-100450-648</b>	<b>R033P-100450-648</b>	<b>R034-100450-648</b>	<b>R032M-100450-648</b>



**Carbon Handles**

more details at the beginning of the chapter



Ø 10 mm



↔ 30mm

KOCHER clamp, jaw length 30 mm, double action jaws

Working length	Working insert alone	Complete instrument			
330 mm	R030-100330-622	R033-100330-622	R033P-100330-622	R034-100330-622	R032M-100330-622
360 mm	R030-100360-622	R033-100360-622	R033P-100360-622	R034-100360-622	R032M-100360-622
jaw length 40 mm					
330 mm	R030-100330-623	R033-100330-623	R033P-100330-623	R034-100330-623	R032M-100330-623
360 mm	R030-100360-623	R033-100360-623	R033P-100360-623	R034-100360-623	R032M-100360-623
jaw length 50 mm					
330 mm	R030-100330-624	R033-100330-624	R033P-100330-624	R034-100330-624	R032M-100330-624
360 mm	R030-100360-624	R033-100360-624	R033P-100360-624	R034-100360-624	R032M-100360-624



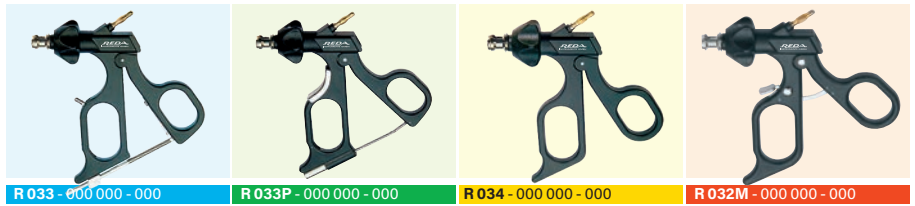
↔ 30mm

DEBAKEY clamp, double teeth, jaw length 30 mm, double action jaws

Working length	Working insert alone	Complete instrument			
330 mm	R030-100330-631	R033-100330-631	R033P-100330-631	R034-100330-631	R032M-100330-631
360 mm	R030-100360-631	R033-100360-631	R033P-100360-631	R034-100360-631	R032M-100360-631
jaw length 40 mm					
330 mm	R030-100330-632	R033-100330-632	R033P-100330-632	R034-100330-632	R032M-100330-632
360 mm	R030-100360-632	R033-100360-632	R033P-100360-632	R034-100360-632	R032M-100360-632
jaw length 50 mm					
330 mm	R030-100330-633	R033-100330-633	R033P-100330-633	R034-100330-633	R032M-100330-633
360 mm	R030-100360-633	R033-100360-633	R033P-100360-633	R034-100360-633	R032M-100360-633

**Carbon Handles**

more details at the beginning of the chapter



R 033 - 000 000 - 000

R 033P - 000 000 - 000

R 034 - 000 000 - 000

R 032M - 000 000 - 000

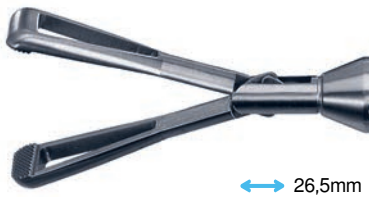
Ø 10 mm



BABCOCK grasping forceps fine, double action jaws

Working length | Working insert alone | Complete instrument

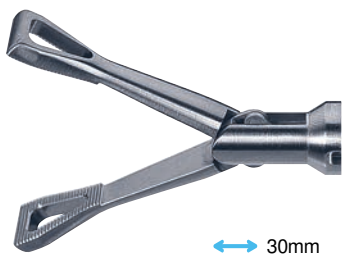
<b>330 mm</b>	<b>R030-100330-618</b>	<b>R033-100330-618</b>	<b>R033P-100330-618</b>	<b>R034-100330-618</b>	<b>R032M-100330-618</b>
<b>360 mm</b>	<b>R030-100360-618</b>	<b>R033-100360-618</b>	<b>R033P-100360-618</b>	<b>R034-100360-618</b>	<b>R032M-100360-618</b>



COLLIN clamp, double action jaws

Working length | Working insert alone | Complete instrument

<b>330 mm</b>	<b>R030-100330-620</b>	<b>R033-100330-620</b>	<b>R033P-100330-620</b>	<b>R034-100330-620</b>	<b>R032M-100330-620</b>
<b>360 mm</b>	<b>R030-100360-620</b>	<b>R033-100360-620</b>	<b>R033P-100360-620</b>	<b>R034-100360-620</b>	<b>R032M-100360-620</b>



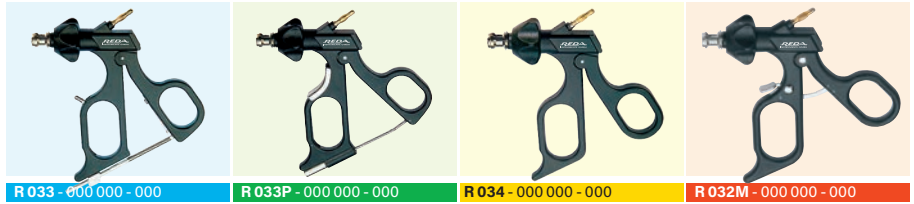
PENNINGTON clamp, double action jaws

Working length | Working insert alone | Complete instrument

<b>330 mm</b>	<b>R030-100330-650</b>	<b>R033-100330-650</b>	<b>R033P-100330-650</b>	<b>R034-100330-650</b>	<b>R032M-100330-650</b>
<b>360 mm</b>	<b>R030-100360-650</b>	<b>R033-100360-650</b>	<b>R033P-100360-650</b>	<b>R034-100360-650</b>	<b>R032M-100360-650</b>

**Carbon Handles**

more details at the beginning of the chapter



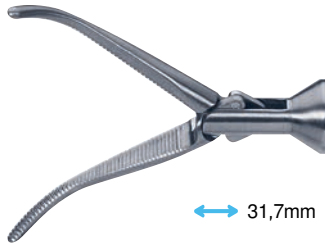
R 033 - 000 000 - 000

R 033P - 000 000 - 000

R 034 - 000 000 - 000

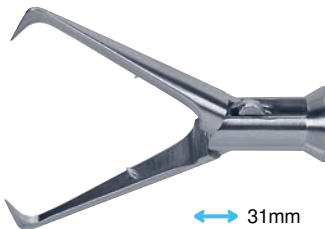
R 032M - 000 000 - 000

Ø 10 mm



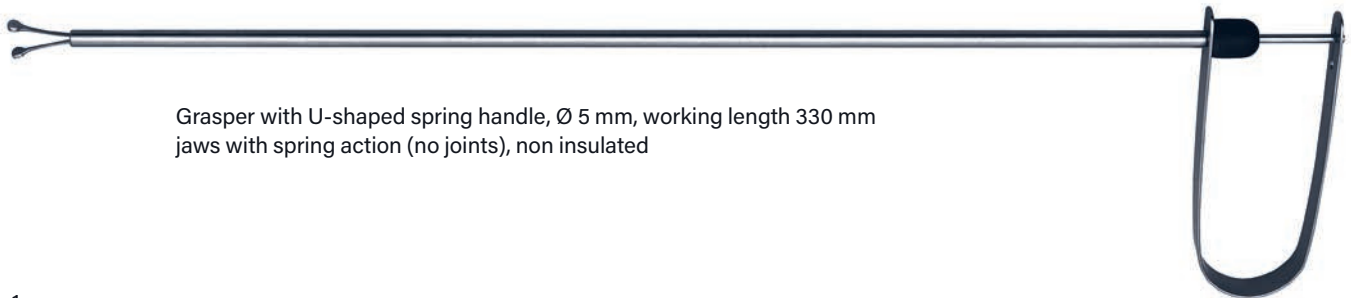
OVERHOLD clamp with fine teeth, curved, double action jaws

Working length	Working insert alone	Complete instrument			
<b>330 mm</b>	<b>R030-100330-654</b>	<b>R033-100330-654</b>	<b>R033P-100330-654</b>	<b>R034-100330-654</b>	<b>R032M-100330-654</b>
<b>360 mm</b>	<b>R030-100360-654</b>	<b>R033-100360-654</b>	<b>R033P-100360-654</b>	<b>R034-100360-654</b>	<b>R032M-100360-654</b>



Tenaculum forceps, double action jaws

Working length	Working insert alone	Complete instrument			
<b>330 mm</b>	<b>R030-100330-656</b>	<b>R033-100330-656</b>	<b>R033P-100330-656</b>	<b>R034-100330-656</b>	<b>R032M-100330-656</b>
<b>360 mm</b>	<b>R030-100360-656</b>	<b>R033-100360-656</b>	<b>R033P-100360-656</b>	<b>R034-100360-656</b>	<b>R032M-100360-656</b>



Grasper with U-shaped spring handle, Ø 5 mm, working length 330 mm  
jaws with spring action (no joints), non insulated

1:1



Atraumatic grasper

**R039 - 0533 - 001**



Bowl grasper, square pattern jaws

**R039 - 0533 - 002**



Bowl grasper, T-shaped jaws

**R039 - 0533 - 003**



Tissue and bowel grasper, ball and socket type

**R039 - 0533 - 004**



Fallopian tube grasper

**R039 - 0533 - 006**



1 x 2 teeth grasper slim

**R039 - 0533 - 007**



Bowel grasper, round

**R039 - 0533 - 010**



Atraumatic grasper, fenestrated

**R039 - 0533 - 013**

1:1



Tissue grasper, U-shaped jaws

**R039** - 0533 - 014



Grasper, blunt

**R039** - 0533 - 015



Falopian grasper, blunt

**R039** - 0533 - 016



length, diameter	
480 mm, Ø 3 mm	<b>96000-03</b>
480 mm, Ø 5 mm	<b>96000-05</b>
480 mm, Ø 7 mm	<b>96000-07</b>
480 mm, Ø 12 mm	<b>96000-12</b>

## Scissors / Biopsy forceps



Ø 5 und 10 mm



### **Mechanical snap-action coupling !**

The Ø 5 and 10 mm modular REDA laparoscopic instruments have a unique snap-action coupling which, offering the combined advantage of the speediest possible assembly and a long service life.

The union of the working insert and sleeve shaft is achieved by simply inserting the components axially into each other. A simple click and you are ready!

The groove-and-tongue principle practically rules out the possibility of the locking mechanism coming undone, as is the case with conventional screw or bayonet connections.

REDA - simplicity is so clever !



### **Nut stopper**

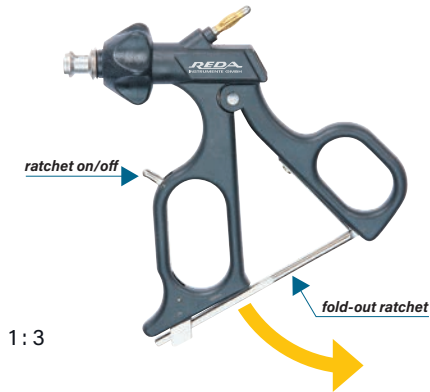
An nut on the sleeve shaft of REDA modular instruments prevents bothersome slipping or even the loss of the union nut.

REDA - detail is the decisive factor !





Ø 3 / 5 / 10 mm



Ergonomic universal carbon handle with ratchet,  
Lever for active or unactive ratchet, HF-connector Ø 4 mm male 45° lateral,  
rotating head 360°, autoclavable

**R033** - 000000 - 000



Ergonomic carbon handle with stepless ratchet,  
ratchet by finger press resolve, HF-connector Ø 4 mm male 45° lateral,  
rotating head 360°, autoclavable

**R033P** - 000000 - 000



Ergonomic carbon handle,  
HF-connector Ø 4 mm male 45° lateral, rotating head 360°, autoclavable

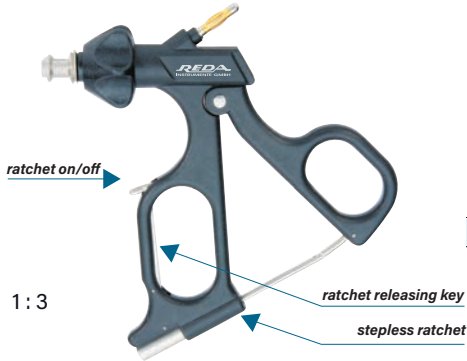
**R034** - 000000 - 000



Ergonomic universal carbon handle with ratchet,  
Button for active or unactive ratchet, HF-connector Ø 4 mm male 45° lateral,  
rotating head 360°, autoclavable

**R032M** - 000000 - 000

Ø 3 / 5 / 10 mm



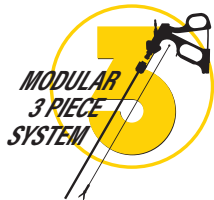
Ergonomic carbon handle with stepless ratchet,  
ratchet activating / release lever, HF-connector Ø 4 mm male 45° lateral,  
rotating head 360°, autoclavable

**R033M - 000000 - 000**



Protection cap for HF-connector Ø 4 mm

**R030 - 000000**



Laparoscopy -  
Handles for Ø 3 / 5 / 10 mm tube shafts



Ø 3 / 5 / 10 mm



1:3

Axial handle, v-shaped type with spreading spring and ratchet

**R038** - 000000 - 000



1:3

Axial handle, with spreading spring

**R048** - 000000 - 000



1:3

Axial handle with rings and ratchet

**R037** - 000000 - 000



1:3

Axial ring handle

**R047** - 000000 - 000



Axial handle, v-shaped angled, type with spreading spring and ratchet

**R039** - 000000 - 000



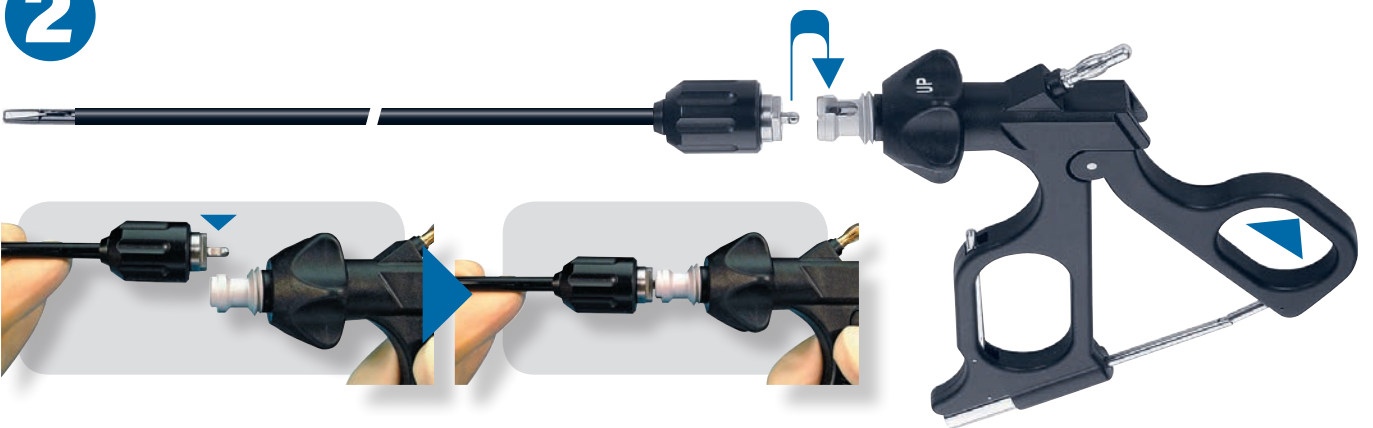
Axial handle, angled, with spreading spring

**R040** - 000000 - 000

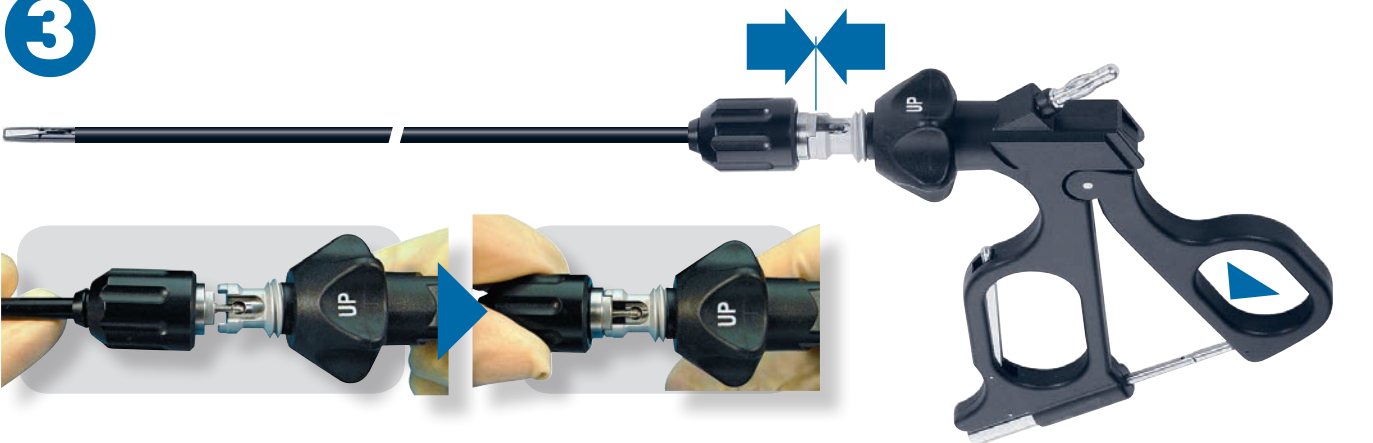
1



2



3



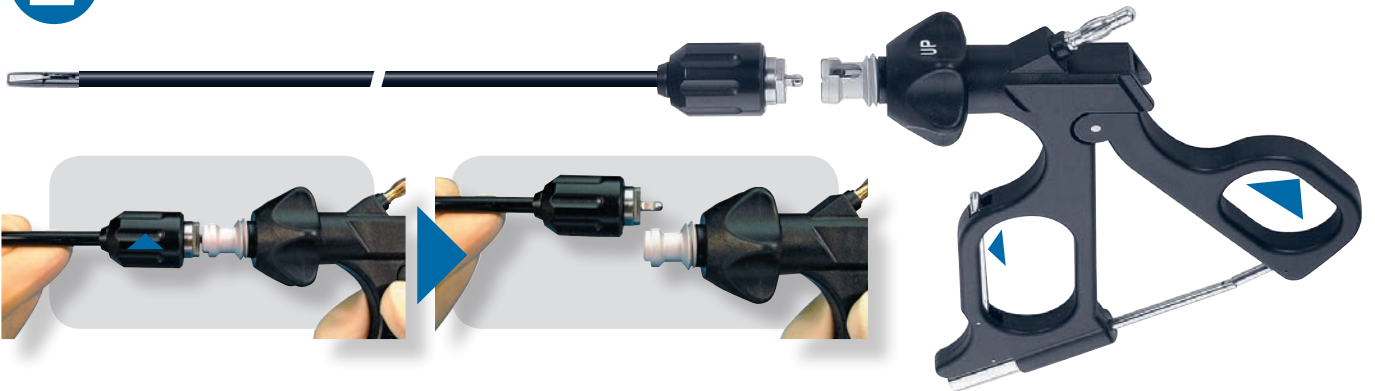
4



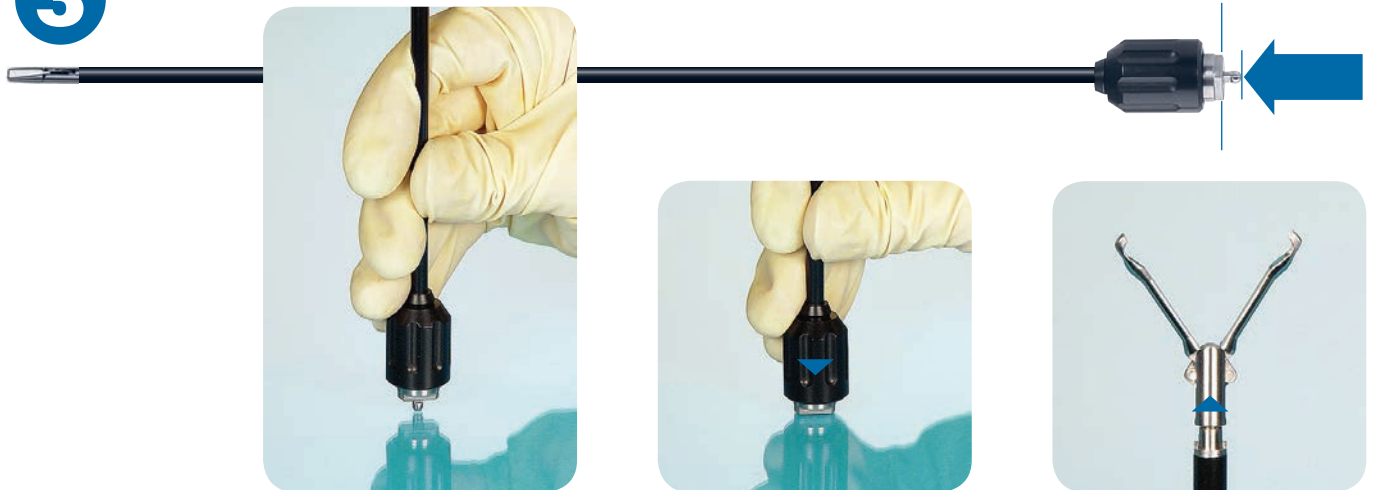
1



2



3



4



**Ø 5 mm**

Tube Shaft, insulated    shaft length: **330 mm**  
without LUER Lock                      with LUER Lock

<b>R030 - 050330 - 000</b>	<b>R030 - 050330 - 000 L</b>
----------------------------	------------------------------

Tube Shaft, insulated    shaft length: **360 mm**  
without LUER Lock                      with LUER Lock

<b>R030 - 050360 - 000</b>	<b>R030 - 050360 - 000 L</b>
----------------------------	------------------------------

Tube Shaft, insulated    shaft length: **450 mm**  
without LUER Lock                      with LUER Lock

<b>R030 - 050450 - 000</b>	<b>R030 - 050450 - 000 L</b>
----------------------------	------------------------------

**Ø 10 mm**

Tube Shaft, insulated    shaft length: **330 mm**  
cylindrical                                      reduce to Ø 5 mm

<b>R030 - 100330 - 000</b>	<b>R030 - 100330 - 000 5</b>
----------------------------	------------------------------

Tube Shaft, insulated, for adipose patients    shaft length: **360 mm**  
cylindrical                                      reduce to Ø 5 mm

<b>R030 - 100360 - 000</b>	<b>R030 - 100360 - 000 5</b>
----------------------------	------------------------------

Tube Shaft, insulated, for adipose patients    shaft length: **450 mm**  
cylindrical                                      reduce to Ø 5 mm

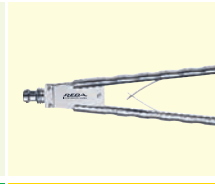
<b>R030 - 100450 - 000</b>	<b>R030 - 100450 - 000 5</b>
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**Carbon Handles**

more details at the beginning of the chapter

**Stainless steel Handles**

more details at the beginning of the chapter



also available  
with angled  
handle

R 034 - 000 000 - 000

R 047 - 000 000 - 000

R 048 - 000 000 - 000

R 040 - 000 000 - 000

Ø 5 mm



METZENBAUM preparation scissors, straight, double action jaws

↔ 18 mm

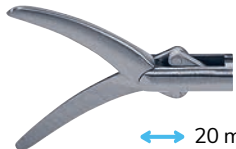
Working length	Working insert alone	Complete instrument		
330 mm	R040-050330-110	R044-050330-110	R057-050330-110	R058-050330-110
360 mm	R040-050360-110	R044-050360-110	R057-050360-110	R058-050360-110
450 mm	R040-050450-110	R044-050450-110	R057-050450-110	R058-050450-110



METZENBAUM preparation scissors, curved, double action jaws

↔ 17 mm

Working length	Working insert alone	Complete instrument		
330 mm	R040-050330-112	R044-050330-112	R057-050330-112	R058-050330-112
360 mm	R040-050360-112	R044-050360-112	R057-050360-112	R058-050360-112
450 mm	R040-050450-112	R044-050450-112	R057-050450-112	R058-050450-112



Preparation scissors „WONDERCUT“, curved, double action jaws

↔ 20 mm

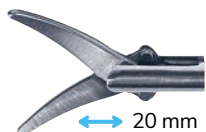
Working length	Working insert alone	Complete instrument		
330 mm	R040-050330-113	R044-050330-113	R057-050330-113	R058-050330-113
360 mm	R040-050360-113	R044-050360-113	R057-050360-113	R058-050360-113
450 mm	R040-050450-113	R044-050450-113	R057-050450-113	R058-050450-113



METZENBAUM preparation scissors, strong version, serrated, curved, double action jaws

↔ 17 mm

Working length	Working insert alone	Complete instrument		
330 mm	R040-050330-125	R044-050330-125	R057-050330-125	R058-050330-125
360 mm	R040-050360-125	R044-050360-125	R057-050360-125	R058-050360-125
450 mm	R040-050450-125	R044-050450-125	R057-050450-125	R058-050450-125



METZENBAUM preparation scissors, soft, curved, double action jaws

↔ 20 mm

Working length	Working insert alone	Complete instrument		
330 mm	R040-050330-122	R044-050330-122	R057-050330-122	R058-050330-122
360 mm	R040-050360-122	R044-050360-122	R057-050360-122	R058-050360-122
450 mm	R040-050450-122	R044-050450-122	R057-050450-122	R058-050450-122



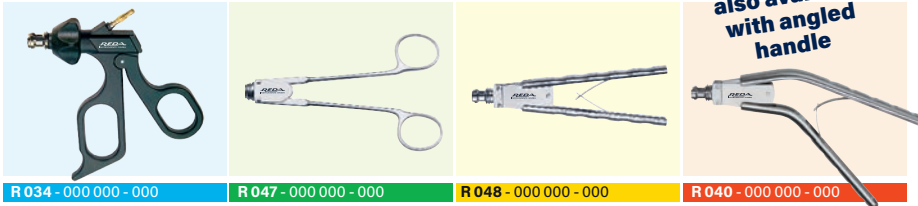
also available  
with angled  
handle

**Carbon Handles**

more details at the beginning of the chapter

**Stainless steel Handles**

more details at the beginning of the chapter



Ø 5 mm



10,5 mm

Peritoneal scissors, serrated, straight, single action jaws

R 034 - 000 000 - 000

R 047 - 000 000 - 000

R 048 - 000 000 - 000

R 040 - 000 000 - 000

Working length	Working insert alone	Complete instrument		
<b>330 mm</b>	<b>R040-050330-114</b>	<b>R044-050330-114</b>	<b>R057-050330-114</b>	<b>R058-050330-114</b>
<b>360 mm</b>	<b>R040-050360-114</b>	<b>R044-050360-114</b>	<b>R057-050360-114</b>	<b>R058-050360-114</b>
<b>450 mm</b>	<b>R040-050450-114</b>	<b>R044-050450-114</b>	<b>R057-050450-114</b>	<b>R058-050450-114</b>



9 mm

Hook scissors, single action jaws

Working length	Working insert alone	Complete instrument		
<b>330 mm</b>	<b>R040-050330-116</b>	<b>R044-050330-116</b>	<b>R057-050330-116</b>	<b>R058-050330-116</b>
<b>360 mm</b>	<b>R040-050360-116</b>	<b>R044-050360-116</b>	<b>R057-050360-116</b>	<b>R058-050360-116</b>
<b>450 mm</b>	<b>R040-050450-116</b>	<b>R044-050450-116</b>	<b>R057-050450-116</b>	<b>R058-050450-116</b>



5,5 mm

Micro scissors, straight, single action jaws

Working length	Working insert alone	Complete instrument		
<b>330 mm</b>	<b>R040-050330-118</b>	<b>R044-050330-118</b>	<b>R057-050330-118</b>	<b>R058-050330-118</b>
<b>360 mm</b>	<b>R040-050360-118</b>	<b>R044-050360-118</b>	<b>R057-050360-118</b>	<b>R058-050360-118</b>
<b>450 mm</b>	<b>R040-050450-118</b>	<b>R044-050450-118</b>	<b>R057-050450-118</b>	<b>R058-050450-118</b>



5,3 mm

Micro scissors, curved, single action jaws

Working length	Working insert alone	Complete instrument		
<b>330 mm</b>	<b>R040-050330-120</b>	<b>R044-050330-120</b>	<b>R057-050330-120</b>	<b>R058-050330-120</b>
<b>360 mm</b>	<b>R040-050360-120</b>	<b>R044-050360-120</b>	<b>R057-050360-120</b>	<b>R058-050360-120</b>
<b>450 mm</b>	<b>R040-050450-120</b>	<b>R044-050450-120</b>	<b>R057-050450-120</b>	<b>R058-050450-120</b>

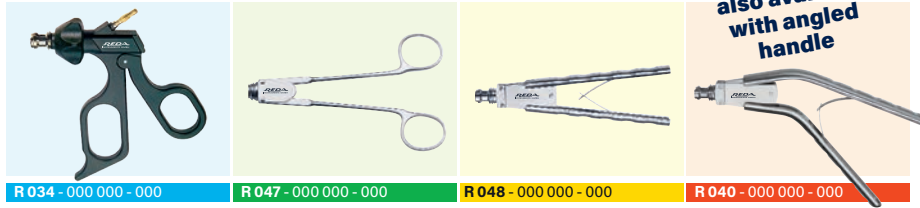


**Carbon Handles**

more details at the beginning of the chapter

**Stainless steel Handles**

more details at the beginning of the chapter



also available  
with angled  
handle

Ø 10 mm



↔ 18mm

MAYO operating scissors, single action jaws

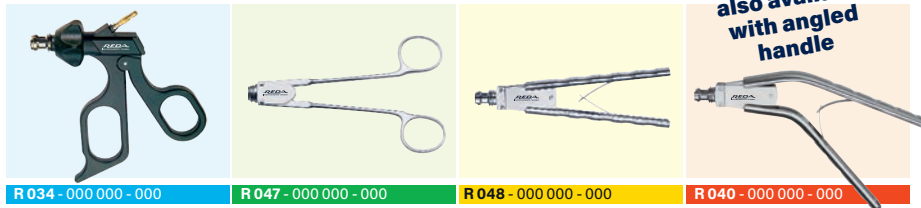
Working length	Working insert alone	Complete instrument		
<b>330 mm</b>	<b>R040-100330-710</b>	<b>R044-100330-710</b>	<b>R057-100330-710</b>	<b>R058-100330-710</b>
<b>360 mm</b>	<b>R040-100360-710</b>	<b>R044-100360-710</b>	<b>R057-100360-710</b>	<b>R058-100360-710</b>
<b>450 mm</b>	<b>R040-100450-710</b>	<b>R044-100450-710</b>	<b>R057-100450-710</b>	<b>R058-100450-710</b>

**Carbon Handles**

more details at the beginning of the chapter

**Stainless steel Handles**

more details at the beginning of the chapter



Ø 5 mm



BLAKESLEY tumor forceps, pointed, single action jaws

↔ 15 mm

Working length	Working insert alone	Complete instrument		
<b>330 mm</b>	<b>R040-050330-268</b>	<b>R044-050330-268</b>	<b>R057-050330-268</b>	<b>R058-050330-268</b>
<b>360 mm</b>	<b>R040-050360-268</b>	<b>R044-050360-268</b>	<b>R057-050360-268</b>	<b>R058-050360-268</b>
<b>450 mm</b>	<b>R040-050450-268</b>	<b>R044-050450-268</b>	<b>R057-050450-268</b>	<b>R058-050450-268</b>



Biopsy cup, sharp, without thorn, double action jaws

↔ 8 mm

Working length	Working insert alone	Complete instrument		
<b>330 mm</b>	<b>R040-050330-310</b>	<b>R044-050330-310</b>	<b>R057-050330-310</b>	<b>R058-050330-310</b>
<b>360 mm</b>	<b>R040-050360-310</b>	<b>R044-050360-310</b>	<b>R057-050360-310</b>	<b>R058-050360-310</b>
<b>450 mm</b>	<b>R040-050450-310</b>	<b>R044-050450-310</b>	<b>R057-050450-310</b>	<b>R058-050450-310</b>



Biopsy cup, sharp, with thorn, double action jaws

↔ 8 mm

Working length	Working insert alone	Complete instrument		
<b>330 mm</b>	<b>R040-050330-312</b>	<b>R044-050330-312</b>	<b>R057-050330-312</b>	<b>R058-050330-312</b>
<b>360 mm</b>	<b>R040-050360-312</b>	<b>R044-050360-312</b>	<b>R057-050360-312</b>	<b>R058-050360-312</b>
<b>450 mm</b>	<b>R040-050450-312</b>	<b>R044-050450-312</b>	<b>R057-050450-312</b>	<b>R058-050450-312</b>



Alligator, cup, grasping and biopsy forceps, double action jaws

↔ 11 mm

Working length	Working insert alone	Complete instrument		
<b>330 mm</b>	<b>R040-050330-314</b>	<b>R044-050330-314</b>	<b>R057-050330-314</b>	<b>R058-050330-314</b>
<b>360 mm</b>	<b>R040-050360-314</b>	<b>R044-050360-314</b>	<b>R057-050360-314</b>	<b>R058-050360-314</b>
<b>450 mm</b>	<b>R040-050450-314</b>	<b>R044-050450-314</b>	<b>R057-050450-314</b>	<b>R058-050450-314</b>

**Carbon Handles**

more details at the beginning of the chapter

**Stainless steel Handles**

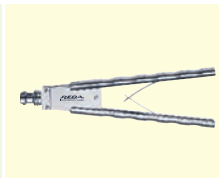
more details at the beginning of the chapter



R 034 - 000 000 - 000



R 047 - 000 000 - 000



R 048 - 000 000 - 000



also available with angled handle

R 040 - 000 000 - 000

Ø 5 mm



Biopsy cup, long, single action jaws

↔ 14,5 mm

Working length	Working insert alone	Complete instrument		
<b>330 mm</b>	<b>R040-050330-316</b>	<b>R044-050330-316</b>	<b>R057-050330-316</b>	<b>R058-050330-316</b>
<b>360 mm</b>	<b>R040-050360-316</b>	<b>R044-050360-316</b>	<b>R057-050360-316</b>	<b>R058-050360-316</b>
<b>450 mm</b>	<b>R040-050450-316</b>	<b>R044-050450-316</b>	<b>R057-050450-316</b>	<b>R058-050450-316</b>



Biopsy cup, long, with thorn, single action jaws

↔ 14,5 mm

Working length	Working insert alone	Complete instrument		
<b>330 mm</b>	<b>R040-050330-318</b>	<b>R044-050330-318</b>	<b>R057-050330-318</b>	<b>R058-050330-318</b>
<b>360 mm</b>	<b>R040-050360-318</b>	<b>R044-050360-318</b>	<b>R057-050360-318</b>	<b>R058-050360-318</b>
<b>450 mm</b>	<b>R040-050450-318</b>	<b>R044-050450-318</b>	<b>R057-050450-318</b>	<b>R058-050450-318</b>



Biopsy cup, tapering, fenestrated, single action jaws

↔ 10 mm

Working length	Working insert alone	Complete instrument		
<b>330 mm</b>	<b>R040-050330-320</b>	<b>R044-050330-320</b>	<b>R057-050330-320</b>	<b>R058-050330-320</b>
<b>360 mm</b>	<b>R040-050360-320</b>	<b>R044-050360-320</b>	<b>R057-050360-320</b>	<b>R058-050360-320</b>
<b>450 mm</b>	<b>R040-050450-320</b>	<b>R044-050450-320</b>	<b>R057-050450-320</b>	<b>R058-050450-320</b>



also available  
with angled  
handle

**Carbon Handles**

more details at the beginning of the chapter

**Stainless steel Handles**

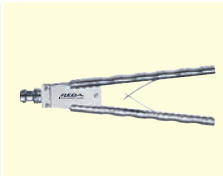
more details at the beginning of the chapter



R 034 - 000 000 - 000



R 047 - 000 000 - 000



R 048 - 000 000 - 000



R 040 - 000 000 - 000

Ø 5 mm



Biopsy punch without thorn, single action jaws

Working length	Working insert alone	Complete instrument		
<b>330 mm</b>	<b>R040-050330-410</b>	<b>R044-050330-410</b>	<b>R057-050330-410</b>	<b>R058-050330-410</b>
<b>360 mm</b>	<b>R040-050360-410</b>	<b>R044-050360-410</b>	<b>R057-050360-410</b>	<b>R058-050360-410</b>
<b>450 mm</b>	<b>R040-050450-410</b>	<b>R044-050450-410</b>	<b>R057-050450-410</b>	<b>R058-050450-410</b>



Biopsy punch with thorn, single action jaws

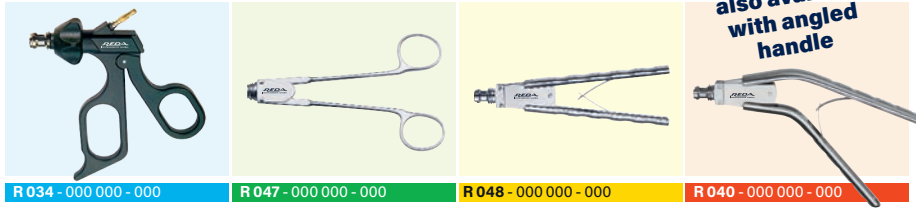
Working length	Working insert alone	Complete instrument		
<b>330 mm</b>	<b>R040-050330-412</b>	<b>R044-050330-412</b>	<b>R057-050330-412</b>	<b>R058-050330-412</b>
<b>360 mm</b>	<b>R040-050360-412</b>	<b>R044-050360-412</b>	<b>R057-050360-412</b>	<b>R058-050360-412</b>
<b>450 mm</b>	<b>R040-050450-412</b>	<b>R044-050450-412</b>	<b>R057-050450-412</b>	<b>R058-050450-412</b>

**Carbon Handles**

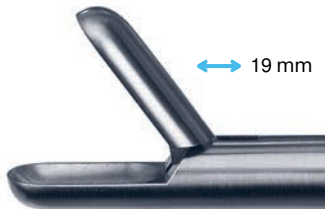
more details at the beginning of the chapter

**Stainless steel Handles**

more details at the beginning of the chapter



**Ø 10 mm**



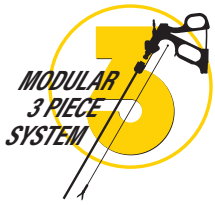
Cup forceps, big, sharp, without thorn, single action jaws

Working length	Working insert alone	Complete instrument		
<b>330 mm</b>	<b>R040-100330-810</b>	<b>R044-100330-810</b>	<b>R057-100330-810</b>	<b>R058-100330-810</b>
<b>360 mm</b>	<b>R040-100360-810</b>	<b>R044-100360-810</b>	<b>R057-100360-810</b>	<b>R058-100360-810</b>
<b>450 mm</b>	<b>R040-100450-810</b>	<b>R044-100450-810</b>	<b>R057-100450-810</b>	<b>R058-100450-810</b>



INSTRUMENTE GMBH

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Ø 5 und 10 mm



### **Mechanical snap-action coupling !**

The Ø 5 and 10 mm modular REDA laparoscopic instruments have a unique snap-action coupling which, offering the combined advantage of the speediest possible assembly and a long service life.

The union of the working insert and sleeve shaft is achieved by simply inserting the components axially into each other. A simple click and you are ready!

The groove-and-tongue principle practically rules out the possibility of the locking mechanism coming undone, as is the case with conventional screw or bayonet connections.

REDA - simplicity is so clever !

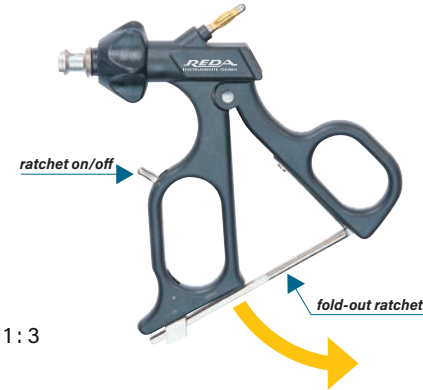


### **Nut stopper**

An nut on the sleeve shaft of REDA modular instruments prevents bothersome slipping or even the loss of the union nut.

REDA - detail is the decisive factor !

Ø 3 / 5 / 10 mm



1:3

Ergonomic universal carbon handle with ratchet,  
Lever for active or unactive ratchet, HF-connector Ø 4 mm male 45° lateral,  
rotating head 360°, autoclavable

**R033** - 000000 - 000



1:3

Ergonomic carbon handle with stepless ratchet,  
ratchet by finger press resolve, HF-connector Ø 4 mm male 45° lateral,  
rotating head 360°, autoclavable

**R033P** - 000000 - 000



1:3

Ergonomic carbon handle,  
HF-connector Ø 4 mm male 45° lateral, rotating head 360°, autoclavable

**R034** - 000000 - 000



1:3

Ergonomic universal carbon handle with ratchet,  
Button for active or unactive ratchet, HF-connector Ø 4 mm male 45° lateral,  
rotating head 360°, autoclavable

**R032M** - 000000 - 000

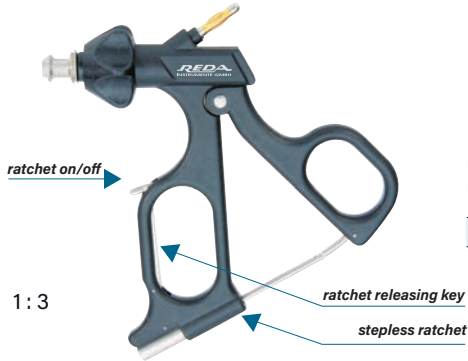




Laparoscopy -  
Carbon Handles for Ø 3 / 5 / 10 mm



Ø 3 / 5 / 10 mm



Ergonomic carbon handle with stepless ratchet,  
ratchet activating / release lever, HF-connector Ø 4 mm male 45° lateral,  
rotating head 360°, autoclavable

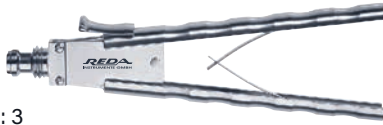
**R033M - 000000 - 000**



Protection cap for HF-connector Ø 4 mm

**R030 - 000000**

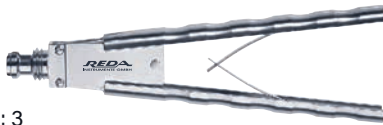
Ø 3 / 5 / 10 mm



1:3

Axial handle, v-shaped type with spreading spring and ratchet

**R038** - 000000 - 000



1:3

Axial handle, with spreading spring

**R048** - 000000 - 000



1:3

Axial handle with rings and ratchet

**R037** - 000000 - 000



1:3

Axial ring handle

**R047** - 000000 - 000



Axial handle, v-shaped angled, type with spreading spring and ratchet

**R039** - 000000 - 000



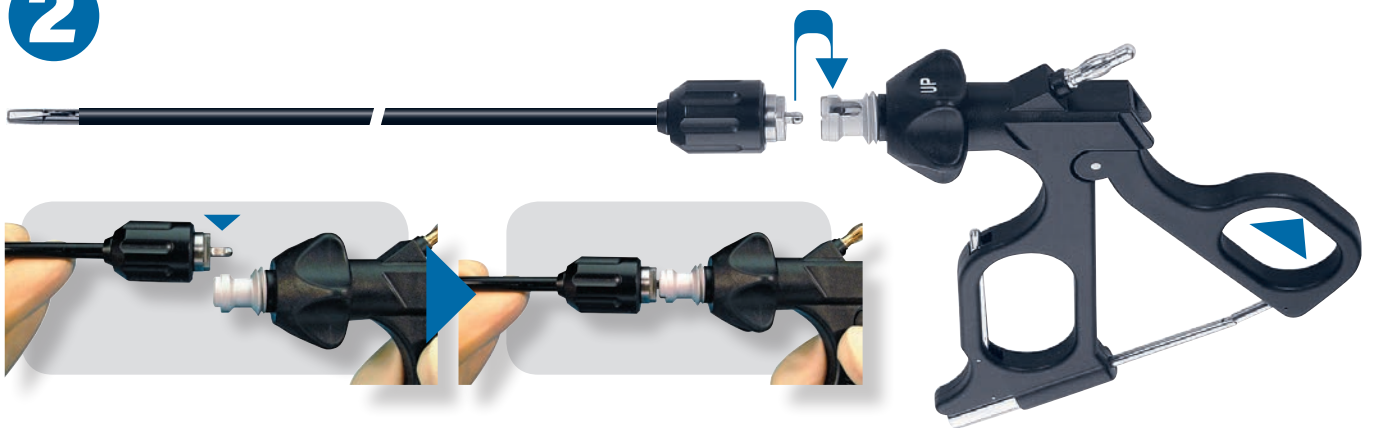
Axial handle, angled, with spreading spring

**R040** - 000000 - 000

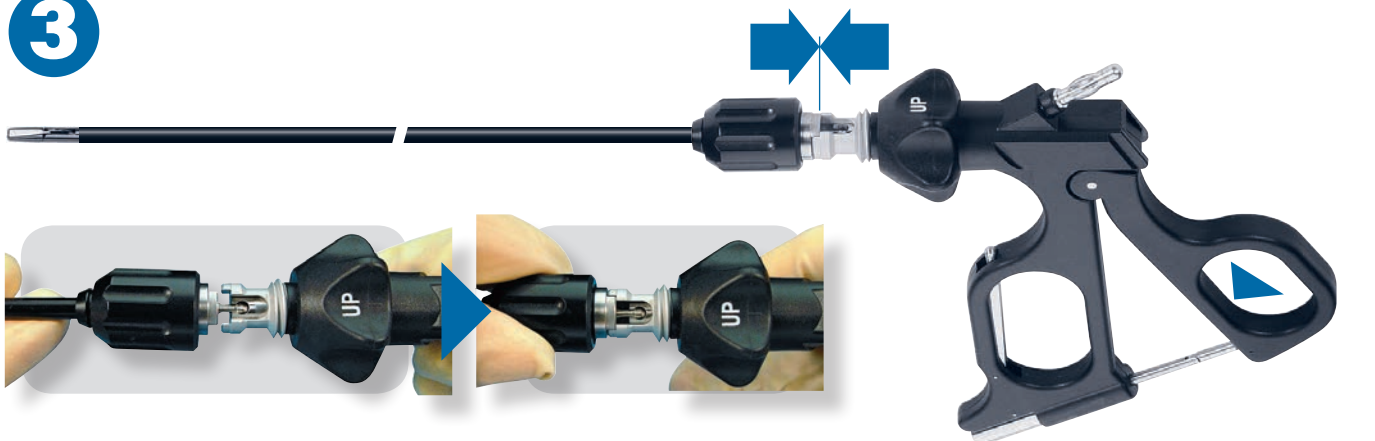
**1**



**2**



**3**



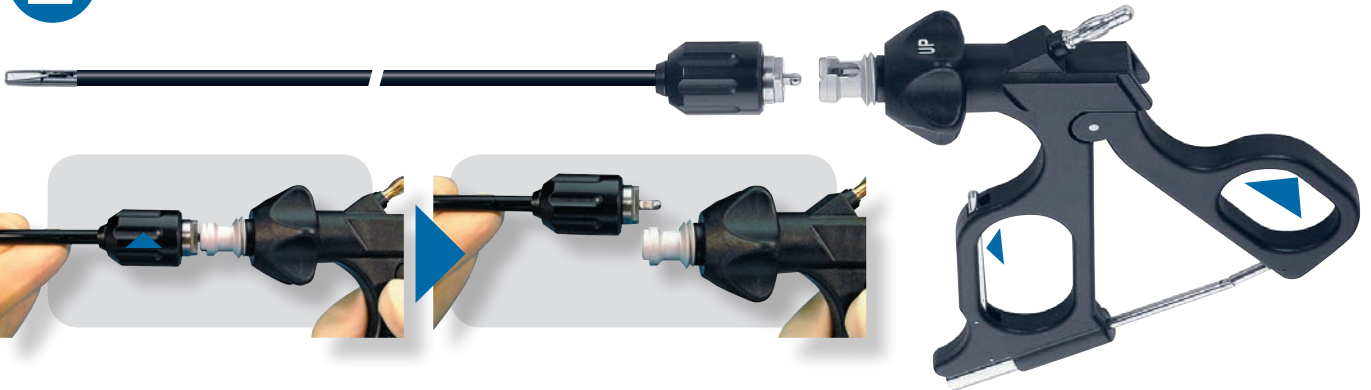
**4**



1



2



3




4






**Ø 5 mm**



Tube Shaft, insulated	shaft length: <b>330 mm</b>
without LUER Lock	with LUER Lock
<b>R030 - 050330 - 000</b>	<b>R030 - 050330 - 000 L</b>




Tube Shaft, insulated	shaft length: <b>360 mm</b>
without LUER Lock	with LUER Lock
<b>R030 - 050360 - 000</b>	<b>R030 - 050360 - 000 L</b>




Tube Shaft, insulated	shaft length: <b>450 mm</b>
without LUER Lock	with LUER Lock
<b>R030 - 050450 - 000</b>	<b>R030 - 050450 - 000 L</b>


**Ø 10 mm**



Tube Shaft, insulated	shaft length: <b>330 mm</b>
cylindrical	reduce to Ø 5 mm
<b>R030 - 100330 - 000</b>	<b>R030 - 100330 - 000 5</b>



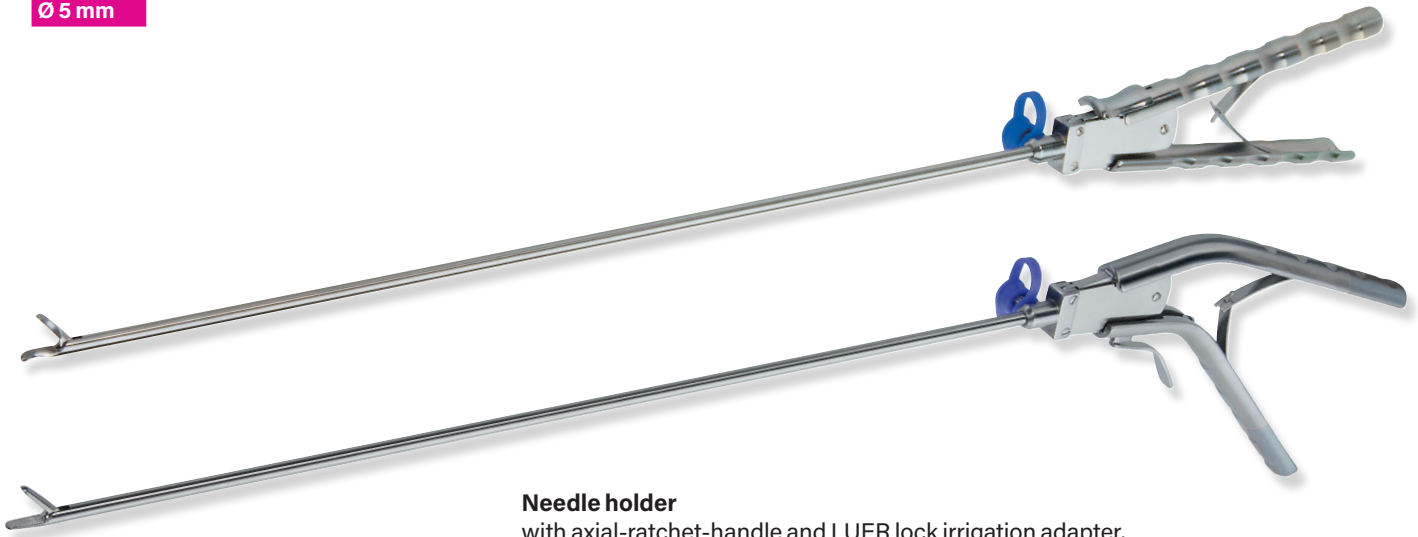
Tube Shaft, insulated, for adipose patients	shaft length: <b>360 mm</b>
cylindrical	reduce to Ø 5 mm
<b>R030 - 100360 - 000</b>	<b>R030 - 100360 - 000 5</b>



Tube Shaft, insulated, for adipose patients	shaft length: <b>450 mm</b>
cylindrical	reduce to Ø 5 mm
<b>R030 - 100450 - 000</b>	<b>R030 - 100450 - 000 5</b>



Ø 5 mm



**Needle holder**  
with axial-ratchet-handle and LUER lock irrigation adapter,  
Ø 5 mm, working length 330 mm - four jaw types available.



Needle holder, straight,  
with inserted tungsten carbide, crosswise teeth, single action jaws

Working length	Handle, straight	Handle, angled
<b>330 mm</b>	<b>R058-0533-350</b>	<b>R059-0533-350</b>
<b>450 mm</b>	<b>R058-0545-350</b>	<b>R059-0545-350</b>



Needle holder, curved left,  
with inserted tungsten carbide, crosswise teeth, single action jaws

Working length	Handle, straight	Handle, angled
<b>330 mm</b>	<b>R058-0533-352</b>	<b>R059-0533-352</b>
<b>450 mm</b>	<b>R058-0545-352</b>	<b>R059-0545-352</b>



Needle holder, curved right,  
with inserted tungsten carbide, crosswise teeth, single action jaws

Working length	Handle, straight	Handle, angled
<b>330 mm</b>	<b>R058-0533-354</b>	<b>R059-0533-354</b>
<b>450 mm</b>	<b>R058-0545-354</b>	<b>R059-0545-354</b>



Needle holder/-positioner, convex/concave shaped jaws, with fixation teeth,  
straight, with wolfram-carbide-coated tips, single action jaws

Working length	Handle, straight	Handle, angled
<b>330 mm</b>	<b>R058-0533-360</b>	<b>R059-0533-360</b>

**Carbon Handles**

more details at the beginning of the chapter



R 033 - 000 000 - 000

R 033P - 000 000 - 000

R 032M - 000 000 - 000

R 033M - 000 000 - 000

Ø 5 mm



↔ 15 mm

Needleholder with inserted tungsten carbide, straight, single action jaws

Working length	Working insert alone	Complete instrument			
<b>330 mm</b>	<b>R050-050330-350</b>	<b>R053-050330-350</b>	<b>R053P-050330-350</b>	<b>R051-050330-350</b>	<b>R052-050330-350</b>
<b>360 mm</b>	<b>R050-050360-350</b>	<b>R053-050360-350</b>	<b>R053P-050360-350</b>	<b>R051-050360-350</b>	<b>R052-050360-350</b>
<b>450 mm</b>	<b>R050-050450-350</b>	<b>R053-050450-350</b>	<b>R053P-050450-350</b>	<b>R051-050450-350</b>	<b>R052-050450-350</b>



↔ 11 mm

Needleholder with inserted tungsten carbide, curved left, single action jaws

Working length	Working insert alone	Complete instrument			
<b>330 mm</b>	<b>R050-050330-352</b>	<b>R053-050330-352</b>	<b>R053P-050330-352</b>	<b>R051-050330-352</b>	<b>R052-050330-352</b>
<b>360 mm</b>	<b>R050-050360-352</b>	<b>R053-050360-352</b>	<b>R053P-050360-352</b>	<b>R051-050360-352</b>	<b>R052-050360-352</b>
<b>450 mm</b>	<b>R050-050450-352</b>	<b>R053-050450-352</b>	<b>R053P-050450-352</b>	<b>R051-050450-352</b>	<b>R052-050450-352</b>



↔ 13 mm

Needleholder with inserted tungsten carbide, curved right, single action jaws

Working length	Working insert alone	Complete instrument			
<b>330 mm</b>	<b>R050-050330-354</b>	<b>R053-050330-354</b>	<b>R053P-050330-354</b>	<b>R051-050330-354</b>	<b>R052-050330-354</b>
<b>360 mm</b>	<b>R050-050360-354</b>	<b>R053-050360-354</b>	<b>R053P-050360-354</b>	<b>R051-050360-354</b>	<b>R052-050360-354</b>
<b>450 mm</b>	<b>R050-050450-354</b>	<b>R053-050450-354</b>	<b>R053P-050450-354</b>	<b>R051-050450-354</b>	<b>R052-050450-354</b>



↔ 14,5 mm

Needleholder/-positioner insert, convex/concav shaped jaws with fixation-teeth, Wolfram-Karbit finish, single action jaws

Working length	Working insert alone	Complete instrument			
<b>330 mm</b>	<b>R050-050330-360</b>	<b>R053-050330-360</b>	<b>R053P-050330-360</b>	<b>R051-050330-360</b>	<b>R052-050330-360</b>
<b>360 mm</b>	<b>R050-050360-360</b>	<b>R053-050360-360</b>	<b>R053P-050360-360</b>	<b>R051-050360-360</b>	<b>R052-050360-360</b>
<b>450 mm</b>	<b>R050-050450-360</b>	<b>R053-050450-360</b>	<b>R053P-050450-360</b>	<b>R051-050450-360</b>	<b>R052-050450-360</b>



**Stainless steel Handles**  
more details at the beginning of the chapter



Ø 5 mm



Needleholder with inserted tungsten carbide, straight, single action jaws

¼

Complete instrument

Complete instrument			Working length mm
R057-050330-350	R058-050330-350	R059-050330-350	330
R057-050360-350	R058-050360-350	R059-050360-350	360
R057-050450-350	R058-050450-350	R059-050450-350	450



Needleholder with inserted tungsten carbide, curved left, single action jaws

¼

Complete instrument

Complete instrument			Working length mm
R057-050330-352	R058-050330-352	R059-050330-352	330
R057-050360-352	R058-050360-352	R059-050360-352	360
R057-050450-352	R058-050450-352	R059-050450-352	450



Needleholder with inserted tungsten carbide, curved right, single action jaws

¼

Complete instrument

Complete instrument			Working length mm
R057-050330-354	R058-050330-354	R059-050330-354	330
R057-050360-354	R058-050360-354	R059-050360-354	360
R057-050450-354	R058-050450-354	R059-050450-354	450



Needleholder/-positioner insert, convex/concav shaped jaws with fixation-teeth, Wolfram-Karbit finish, single action jaws

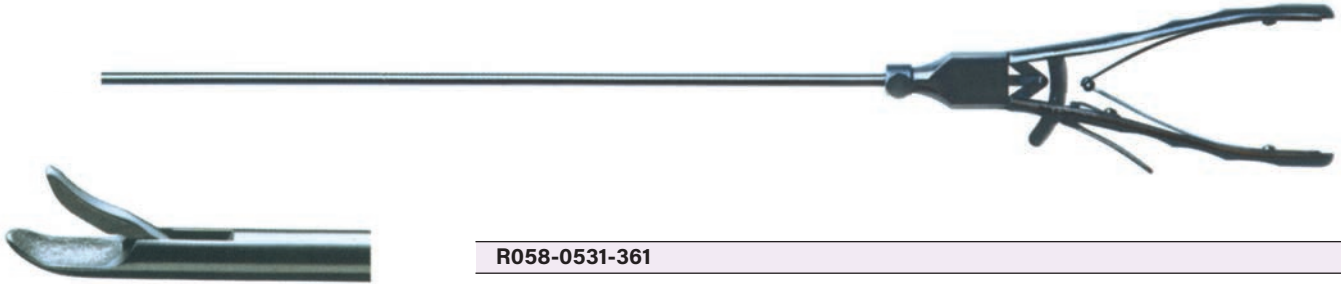
¼

Complete instrument

Complete instrument			Working length mm
R057-050330-360	R058-050330-360	R059-050330-360	330
R057-050360-360	R058-050360-360	R059-050360-360	360
R057-050450-360	R058-050450-360	R059-050450-360	450

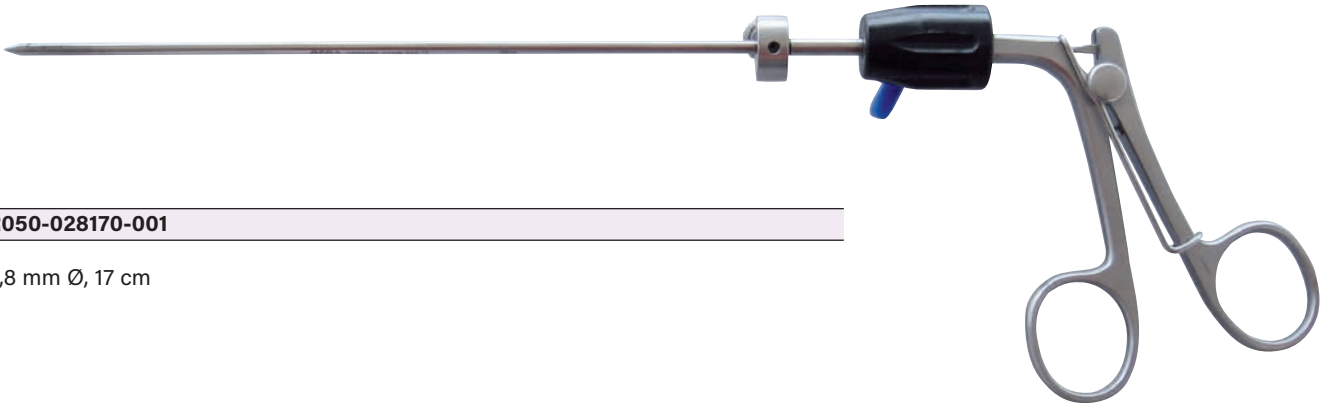
Ø 5 mm

Romeo needleholder convex/concav  
for optimum grasp of needles 5 mm Ø, 310 mm working length, axial handle open w. ratchet, LL-cleaning-port



R058-0531-361

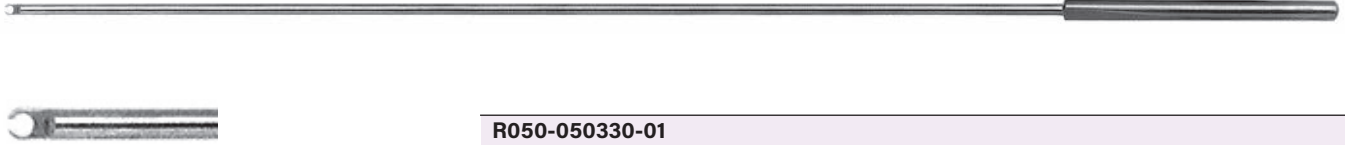
Ø 2,8 mm



R050-028170-001

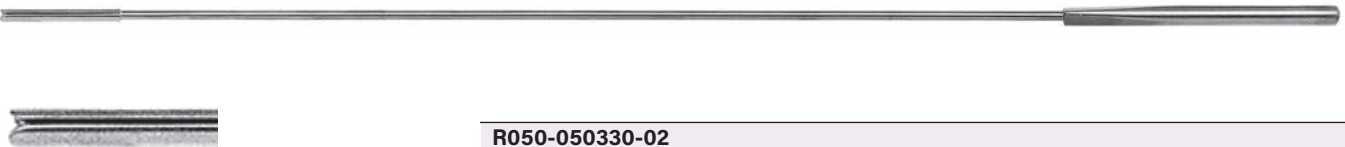
2,8 mm Ø, 17 cm

Ø 4 mm



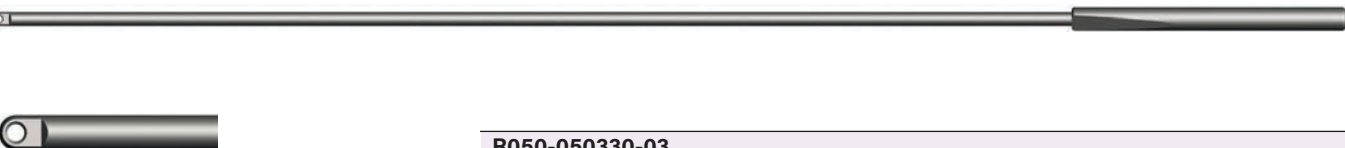
**R050-050330-01**

Knot tier with eye 4 mm Ø, 330 mm working length



**R050-050330-02**

Knot guide with slot 4 mm Ø, 330 mm working length



**R050-050330-03**

Knot pusher with closed eye 4 mm Ø, 330 mm working length

Ø 2,3 mm



R050-050340-00

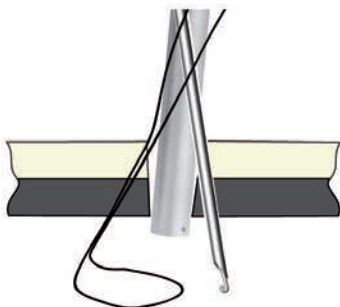
The fascia-suture assisting device („fsad“) 2,3 mm Ø, 140 mm working length

Pic. 1



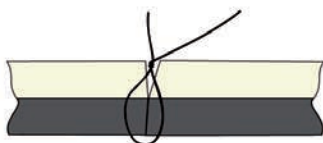
Push down the ring handle so that the needle is positioned outside the cannula. Set the thread into the „fsad“ and make sure that the thread is positioned in the middle. Pull back the ring handle with your thumb so that the catcher hook will be retracted into the cannula.

Pic. 3



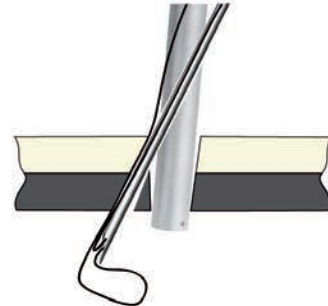
Now penetrate the „fsad“ on the other side of the Trocar (Pic. 2). - Please make sure again that the catcher hook is retracted during this procedure. When you have come through the subcutaneous tissue push down the ring handle so that the catcher hook comes out. Take the loose end of the thread by making use of the catcher-hook.

Pic. 5



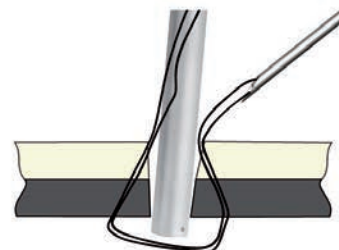
Knot the thread tightly in the subcutaneous tissue. This ensures an easy and safe handling of the abdominal wall closure.

Pic. 2



Penetrate the „fsad“ through the subcutaneous tissue (using the incision of the trocar) in the abdominal wall. Make sure that the catcher hook is always retracted during this procedure. After that, push down the ring handle so that the catcher hook comes out of the cannula. Now you can release the thread. Then retract the catcher hook by pulling the ring handle and extract the „fsad“

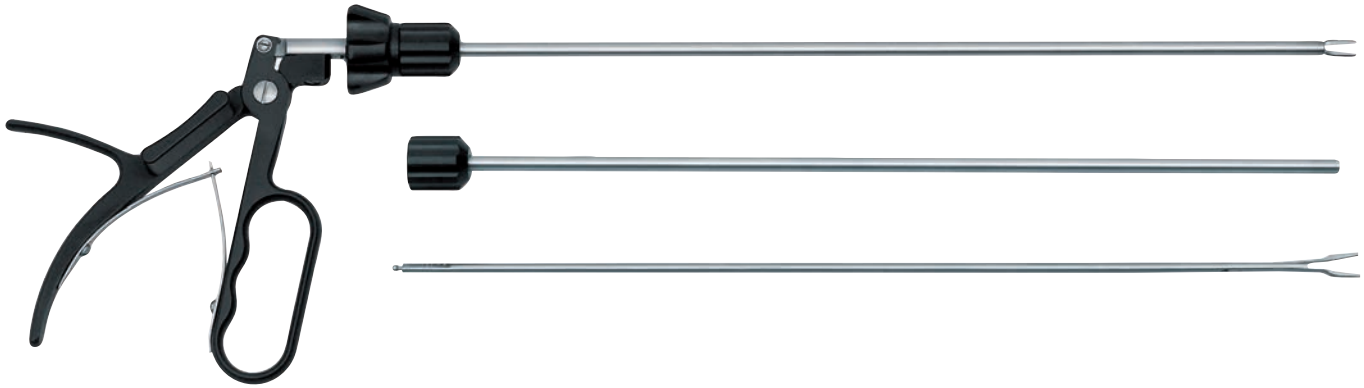
Pic. 4



Pull the ring handle to retract the catcher hook again. Then remove the „fsad“ with the thread followed by the extraction of the trocar sleeve.

Ø 5 mm

Clip applying forceps, 5 mm Ø, 330 mm working length, detachable (3-parts), 360° rotatable, for TITAN-Clips



for Clips-Type	Forceps complete	Insert alone	Handle alone	Shaft tube alone
Ethicon - small	<b>R056-050330-01</b>	<b>R056-050000-01</b>	<b>R056-050000-00</b>	<b>R056-050330-00</b>
Ethicon - medium	<b>R056-050330-02</b>	<b>R056-050000-02</b>		
Weck - small	<b>R056-050330-11</b>	<b>R056-050000-11</b>		
Weck - medium	<b>R056-050330-12</b>	<b>R056-050000-12</b>		
Pilling - small	<b>R056-050330-21</b>	<b>R056-050000-21</b>		
Pilling - medium	<b>R056-050330-22</b>	<b>R056-050000-22</b>		
Horizon - small	<b>R056-050330-41</b>	<b>R056-050000-41</b>		
Horizon - medium	<b>R056-050330-42</b>	<b>R056-050000-42</b>		

Ø 10 mm

Clip applying forceps, 10 mm Ø, 330 mm working length, 360° rotatable, with LL-rinsing channel, for TITAN-Clips

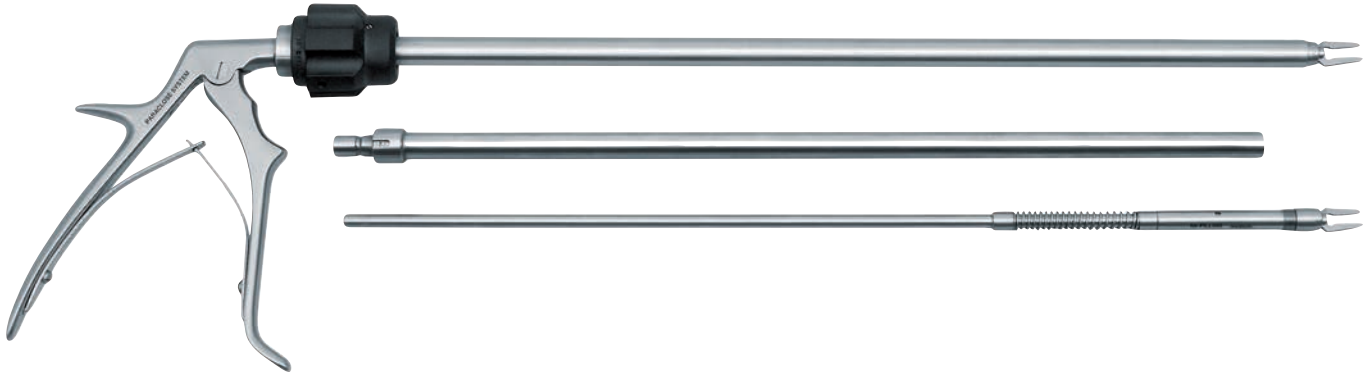


for Clips-Type	
Ethicon - small	<b>R055-100330-01</b>
Ethicon - medium	<b>R055-100330-02</b>
Ethicon - medium-large	<b>R055-100330-03</b>
Ethicon - large	<b>R055-100330-04</b>
Weck - small	<b>R055-100330-11</b>
Weck - medium	<b>R055-100330-12</b>
Weck - medium-large	<b>R055-100330-13</b>
Pilling - small	<b>R055-100330-21</b>
Pilling - medium	<b>R055-100330-22</b>
Pilling - medium-large	<b>R055-100330-23</b>

for Clips-Type	
SLS - small	<b>R055-100330-31</b>
SLS - medium	<b>R055-100330-32</b>
SLS - medium-large	<b>R055-100330-33</b>
SLS - large	<b>R055-100330-34</b>
Horizon - small	<b>R055-100330-41</b>
Horizon - medium	<b>R055-100330-42</b>
Horizon - medium-large	<b>R055-100330-43</b>
Horizon - large	<b>R055-100330-44</b>

Ø 10 mm

Clip applying forceps, 10 mm Ø, 330 mm working length, detachable (3-parts), 360° rotatable, for TITAN-Clips



for Clips-Type	Forceps complete	Insert alone	Handle alone	Shaft tube alone
Ethicon - small	R056-100330-01	R056-100000-01	R056-100000-00	R056-100330-00
Ethicon - medium	R056-100330-02	R056-100000-02		
Ethicon - medium-large	R056-100330-03	R056-100000-03		
Ethicon - large	R056-100330-04	R056-100000-04		
Weck - small	R056-100330-11	R056-100000-11		
Weck - medium	R056-100330-12	R056-100000-12		
Weck - medium-large	R056-100330-13	R056-100000-13		
Weck - large	R056-100330-14	R056-100000-14		
Pilling - small	R056-100330-21	R056-100000-21		
Pilling - medium	R056-100330-22	R056-100000-22		
Pilling - medium-large	R056-100330-23	R056-100000-23		
SLS - small	R056-100330-31	R056-100000-31		
SLS - medium	R056-100330-32	R056-100000-32		
SLS - medium-large	R056-100330-33	R056-100000-33		
SLS - large	R056-100330-34	R056-100000-34		
Horizon - small	R056-100330-41	R056-100000-41		
Horizon - medium	R056-100330-42	R056-100000-42		
Horizon - medium-large	R056-100330-43	R056-100000-43		

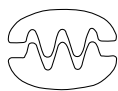


Ø 10 mm


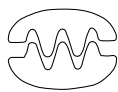
Endoscopic bulldog clamp applier, 10 mm Ø, 330 mm working length, 360° rotatable, with LL-rinsing channel



Bulldog clamps

	Jaws length	Straight	Curved
 <b>2 x 3 Teeth</b>	17 mm	<b>R059-100-17</b>	<b>R059-101-17</b>
	25 mm	<b>R059-100-25</b>	<b>R059-101-25</b>
	45 mm	<b>R059-100-45</b>	<b>R059-101-45</b>
	60 mm	<b>R059-100-60</b>	<b>R059-101-60</b>

Bulldog clamps (Satinsky) 2 x 3 teeth

	Jaws length	Curved	Angled upwards
  <b>2 x 3 Teeth</b>	60 mm	<b>R059-102-01</b>	<b>R059-103-01</b>








INSTRUMENTE GMBH

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Ø 5 mm






Monopolar electrode with small handle, HF-connector 5 mm male



	Type	Working length 330 mm	Working length 450 mm
	Button type electrode	<b>R062-050330-001</b>	<b>R062-050450-001</b>
	J-hook electrode	<b>R062-050330-002</b>	<b>R062-050450-002</b>
	90°-hook electrode	<b>R062-050330-003</b>	<b>R062-050450-003</b>
	Spatula electrode	<b>R062-050330-004</b>	<b>R062-050450-004</b>
	Needle electrode	<b>R062-050330-005</b>	<b>R062-050450-005</b>

Monopolar electrode with small handle, HF-connector 5 mm male



	Type	Working length 330 mm	Working length 450 mm
	Button type electrode	<b>R060-050330-001</b>	<b>R060-050450-001</b>
	J-hook electrode	<b>R060-050330-002</b>	<b>R060-050450-002</b>
	L-hook electrode	<b>R060-050330-003</b>	<b>R060-050450-003</b>
	Spatula electrode	<b>R060-050330-004</b>	<b>R060-050450-004</b>
	Needle electrode	<b>R060-050330-005</b>	<b>R060-050450-005</b>







**R060-000000-000**  
Safety handle

Ø 5 mm

Monopolar electrode with large handle, HF-connector 5 mm male








	Type	Working length 340 mm	Working length 450 mm
	J-hook electrode	<b>R061-050340-002</b>	<b>R061-050450-002</b>
	L-hook electrode	<b>R061-050340-003</b>	<b>R061-050450-003</b>
	Spatula electrode	<b>R061-050340-004</b>	<b>R061-050450-004</b>
	Needle electrode	<b>R061-050340-005</b>	<b>R061-050450-005</b>

Ø 5 mm

Monopolar electrode with trumpet valve and LL-adapter, HF-connector 5 mm male








	type	Working length 330 mm	Working length 450 mm
	Button type electrode	<b>R063-050330-001</b>	<b>R063-050450-001</b>
	J-hook electrode	<b>R063-050330-002</b>	<b>R063-050450-002</b>
	L-hook electrode	<b>R063-050330-003</b>	<b>R063-050450-003</b>
	Spatula electrode	<b>R063-050330-004</b>	<b>R063-050450-004</b>
	Needle electrode	<b>R063-050330-005</b>	<b>R063-050450-005</b>

Ø 5 mm

Monopolar electrode modular, adaptable on handles (see page 6/5, LL-connector)



	type	Working length 330 mm
	Button type electrode	<b>R064-050330-001</b>
	J-hook electrode	<b>R064-050330-002</b>
	L-hook electrode	<b>R064-050330-003</b>
	Spatula electrode	<b>R064-050330-004</b>
	Needle electrode	<b>R064-050330-005</b>



**R064-050000-001**

**Electrode handle** ergonomic design, with 2-way-valve



**R064-050000-002**

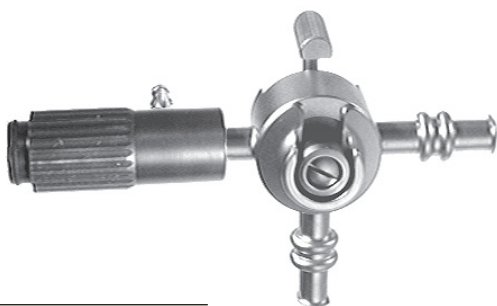
**Adapter** for electrode handle for connecting monopolar electrodes modular



R064-050000-006

**Pistol Handle with Sliding Valve**

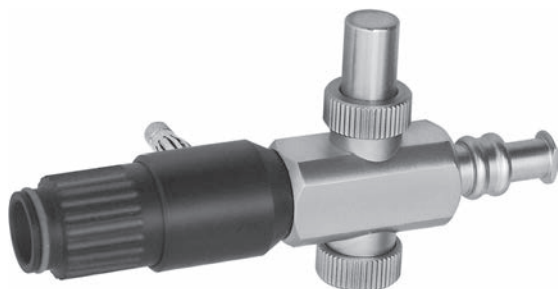
for exchangeable electrodes, with rotatable adapter and sidewise HF-Connector two combined Luer-Lock / Tube Connectors



R064-050000-010

**Suction-Irrigation-Sliding Valve with Electrode Adapter**

for exchangeable electrodes, with rotatable adapter and side HF-Connector combined Luer-Lock / Tube Connector



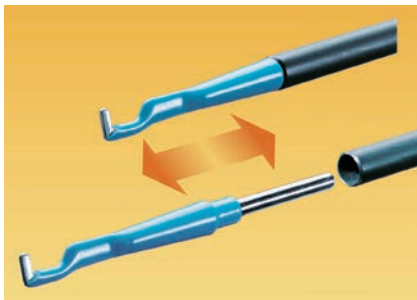
R064-050000-011

**Trumpet Valve with Electrode Adapter**

for exchangeable electrodes, with rotatable adapter and side HF-Connector combined Luer-Lock / Tube Connector

Ø 5 mm

Monopolar electrodes with exchangeable tip, dismantlable 5 mm Ø, 320 mm working length



Handle alone

**R062-050320-000**

Outer tube insulated

**R062-050320-099**



Ball electrode

**complete**

**assembly alone**

**R062-050320-001**

**R062-050000-001**



J-hook electrode

**R062-050320-002**

**R062-050000-002**



L-hook electrode

**R062-050320-003**

**R062-050000-003**



Spatula electrode

**R062-050320-004**

**R062-050000-004**



Needle electrode

**R062-050320-005**

**R062-050000-005**



Lanzette electrode

**R062-050320-006**






**R062-050000-006**



**Monopolar**

**Unit side**

**Instrument side**

	Cable length Meter	female 4 mm Ø 
Erbe / Storz 5 mm Ø 	3	<b>R060-050040-003</b>
	5	<b>R060-050040-005</b>
Aesculap / Martin / Berchtold 4 mm Ø 	3	<b>R060-040040-003</b>
	5	<b>R060-040040-005</b>
Valleylab / Conmed / Soering Bowa / Bovie 8 mm Ø 	3	<b>R060-080040-003</b>
	5	<b>R060-080040-005</b>
Eschmann / Erbe T-Serie alte Geräte / old units 	3	<b>R060-040040-203</b>
	5	<b>R060-040040-205</b>



**BIPOLAR**



Ø 5 mm



Bipolar electrodes 340 mm working length



Ball electrode

**R067-050340-001**



J-hook electrode

**R067-050340-002**



L-hook electrode

**R067-050340-003**



Spatula electrode

**R067-050340-004**



Plate electrode

**R067-050340-005**

Ø 3 mm



Bipolar electrodes 3 mm Ø, 340 mm working length for fine coagulation of tissue and vessels



L-hook electrode

**R068-030340-003**



Needle electrode

**R068-030340-010**



V-shaped electrode

**R068-030340-012**

**Ø 5 mm**

For use in laparoscopy for grasping or cutting tissue during bipolar coagulation. This instrument is for connecting to the bipolar output of HF-generators with maximum power output 60 Watt. The electrode is 360° rotatable, there is no receding of the jaws when closing. This allows precise grasping or cutting of the tissue.

Standard handle  
R066-000000-500



Ring handle  
R066-000000-600



**HIRSCH**



Working length	Working insert alone	complete with handle	complete with handle
200 mm	R066-000200-501	R066-050200-501	R066-050200-601
340 mm	R066-000340-501	R066-050340-501	R066-050340-601
450 mm	R066-000450-501	R066-050450-501	R066-050450-601

**Micro**



Working length	Working insert alone	complete with handle	complete with handle
200 mm	R066-000200-507	R066-050200-507	R066-050200-607
340 mm	R066-000340-507	R066-050340-507	R066-050340-607
450 mm	R066-000450-507	R066-050450-507	R066-050450-607

Ø 5 mm

Standard handle  
R066-000000-500



Ring handle  
R066-000000-600



**KLEPPINGER**



Working length	Working insert alone	complete with handle	complete with handle
200 mm	R066-000200-508	R066-050200-508	R066-050200-608
340 mm	R066-000340-508	R066-050340-508	R066-050340-608
450 mm	R066-000450-508	R066-050450-508	R066-050450-608

**Atraumatic 3 mm smooth**



Working length	Working insert alone	complete with handle	complete with handle
200 mm	R066-000200-503	R066-050200-503	R066-050200-603
340 mm	R066-000340-503	R066-050340-503	R066-050340-603
450 mm	R066-000450-503	R066-050450-503	R066-050450-603

**METZENBAUM** scissors curved



Working length	Working insert alone	complete with handle	complete with handle
200 mm	R066-000200-509	R066-050200-509	R066-050200-609
340 mm	R066-000340-509	R066-050340-509	R066-050340-609
450 mm	R066-000450-509	R066-050450-509	R066-050450-609

Ø 5 mm

Standard handle  
R066-000000-500



Ring handle  
R066-000000-600



**METZENBAUM** scissors curved TC blades



Working length	Working insert alone	complete with handle	complete with handle
200 mm	<b>R066-000200-510</b>	<b>R066-050200-510</b>	<b>R066-050200-610</b>
340 mm	<b>R066-000340-510</b>	<b>R066-050340-510</b>	<b>R066-050340-610</b>
450 mm	<b>R066-000450-510</b>	<b>R066-050450-510</b>	<b>R066-050450-610</b>

**MARYLAND**



Working length	Working insert alone	complete with handle	complete with handle
200 mm	<b>R066-000200-521</b>	<b>R066-050200-521</b>	<b>R066-050200-621</b>
340 mm	<b>R066-000340-521</b>	<b>R066-050340-521</b>	<b>R066-050340-621</b>
450 mm	<b>R066-000450-521</b>	<b>R066-050450-521</b>	<b>R066-050450-621</b>



**Outer shaft tube**



Working length	
200 mm	<b>R066-050200-001</b>
340 mm	<b>R066-050340-001</b>
450 mm	<b>R066-050450-001</b>

**Inner shaft tube**



Working length	
200 mm	<b>R066-050200-000</b>
340 mm	<b>R066-050340-000</b>
450 mm	<b>R066-050450-000</b>



Adapter for european flat plug

**R066-000000-002**



Adapter for US-cables

**R066-000000-012**

Ø 5 mm

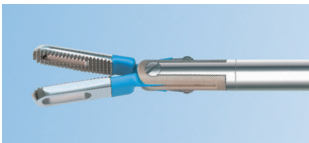


Handle  
R067-000000-700



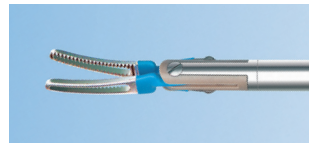
Shaft  
R067-050340-700

**Insert alone**



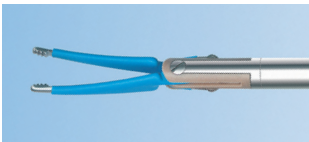
Large grasping forceps

R067-000340-713



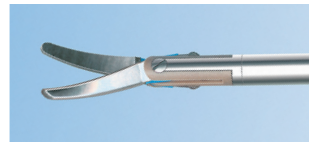
Grasping forceps, curved

R067-000340-724



Forceps, curved

R067-000340-722



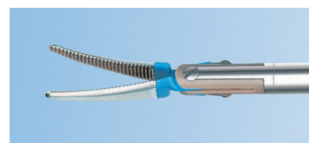
Scissors, curved

R067-000340-709



Delta Grasper

R067-000340-723









MARYLAND dissector, curved

R067-000340-721

**Bipolar**

**Unit / Equipment side**

**Instrument side**

	Cable length Meter	Europe flat plug	
			
Erbe / Storz 12,5 mm Ø 	3	<b>R065-040125-003</b>	<b>R065-040125-103</b>
	5	<b>R065-040125-005</b>	<b>R065-040125-105</b>
Martin / Berchtold 8 mm Ø AESCULAP Wolf 	3	<b>R065-020080-003</b>	<b>R065-020080-103</b>
	5	<b>R065-020080-005</b>	<b>R065-020080-105</b>
Valleylab / Lamidey / EMC 	3	<b>R065-040285-003</b>	<b>R065-040285-103</b>
	5	<b>R065-040285-005</b>	<b>R065-040285-105</b>
2-Pin U.S. Standard Eschmann 	3	<b>R065-040000-003</b>	<b>R065-040000-103</b>
	5	<b>R065-040000-005</b>	<b>R065-040000-105</b>



**Bipolar forceps with rotating handle**

This new innovative design provides the surgeon with comfortable ergonomic handling in all working positions.

The handles rotate independently of the shaft, so the instrument can be controlled in a relaxed natural way, reducing fatigue and enabling precise handling and control during surgery.

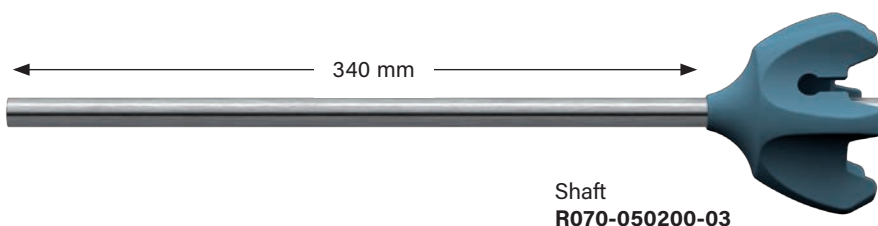
Ø 5 mm

bipolar forceps with rotatable handle



Handle  
R070-050200-01

Handle, lockable  
R070-050200-02



Shaft  
R070-050200-03

Insert alone



Large grasping forceps  
R070-050200-04



Scissors, curved  
R070-050200-05



Grasping forceps,  
fenestrated, curved  
R070-050200-06



MARYLAND dissector, curved  
R070-050200-07



Ø 5,0 mm

Suction-Irrigation-Cannula  
with Sliding Valve and Roundhole  
Sucker with Handle and 4 Holes



working length	complete
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<b>330 mm</b>	<b>R072-050330-004 D</b>
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Handle with Sliding Valve
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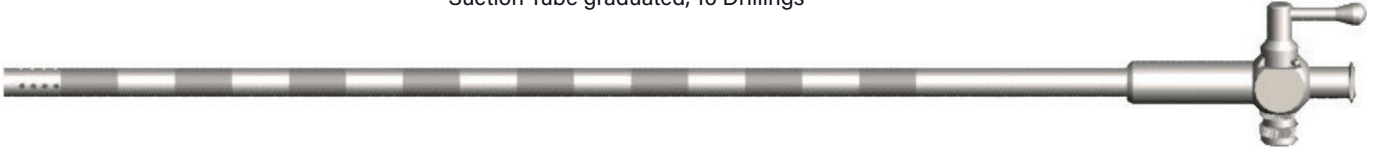
<b>R072-000000-000</b>
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Roundhole Sucker with 4 Drillings and Handle
--

<b>R070-050330-004 D</b>
--------------------------

Ø 5,0 mm

Suction-Irrigation-Cannula  
Roundhole Sucker  
with Luer-Lock-Connection and Stop Cock  
Suction Tube graduated, 16 Drillings



working length

**450 mm** R074-050450-016

working length

**330 mm** R074-050330-016

Suction-Irrigation-Tube  
with Luer-Lock-Connection, 4 Drillings



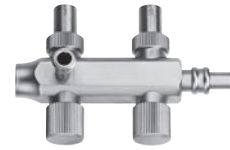
working length

**330 mm** R075-050330-004



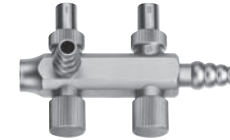
**Ø 5,0 mm**

Suction-Irrigation-Handle  
with Luer-Lock-Connection



**R073-000000-000**

Suction-Irrigation-Handle  
with Tube Connection



**R071-000000-000**

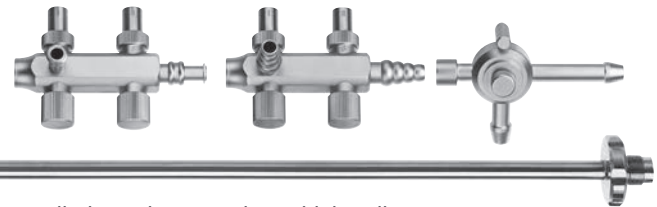
Suction-Irrigation-Handle  
with Sliding Valve and  
Tube Connection



**R072-000000-000**

**Ø 5 / 10 mm**

Suction-Irrigation-Tubes



working length	Shaft tube alone		Roundhole Sucker, complete with handle
<b>330 mm</b>	<b>R070-050330-004</b>	4 Drillings, Ø 5 mm	<b>R073-050330-004 R071-050330-004 R072-050330-004</b>
<b>330 mm</b>	<b>R070-050330-016</b>	16 Drillings, Ø 5 mm	<b>R073-050330-016 R071-050330-016 R072-050330-016</b>
<b>330 mm</b>	<b>R070-050330-032</b>	32 Drillings, Ø 10 mm	<b>R073-050330-032 R071-050330-032 R072-050330-032</b>



working length	Shaft tube alone		Roundhole-Bee Hive Sucker, complete with handle
<b>330 mm</b>	<b>R070-050330-048</b>	48 Drillings, Ø 5 mm	<b>R073-050330-048 R071-050330-048 R072-050330-048</b>



working length	Shaft tube alone		Stump Bee Hive Sucker, complete with handle
<b>330 mm</b>	<b>R070-050330-049</b>	48 Drillings, Ø 5 mm	<b>R073-050330-049 R071-050330-049 R072-050330-049</b>
<b>500 mm</b>	<b>R070-050500-049</b>	48 Drillings, Ø 5 mm	<b>R073-050500-049 R071-050500-049 R072-050500-049</b>



working length	Shaft tube alone		Punction Needle Sucker, complete with handle
<b>330 mm</b>	<b>R070-050330-002</b>	Ø 5 mm	<b>R073-050330-002 R071-050330-002 R072-050330-002</b>



working length	Shaft tube alone		Aqua Dissector Cannula, complete with handle
<b>330 mm</b>	<b>R070-050330-001</b>	Ø 5 mm	<b>R073-050330-001 R071-050330-001 R072-050330-001</b>



working length	Shaft tube alone		Stump Sucker, complete with handle
<b>330 mm</b>	<b>R070-050330-012</b>	12 Drillings, Ø 5 mm	<b>R073-050330-012 R071-050330-012 R072-050330-012</b>

Ø 3,5 / 5 / 10 mm

**Suction-Irrigation-Handle**

with color-coding

- **20% less weight**
- **less individual parts**
- **color-coding**  
blue - irrigation  
green - suction



with large Tube-Connection and sidwise Tube-Luer-Lock-Connection

**R078-000000-100** Handle

complete with both Suction-Irrigation-Tubes complete with Tube-Set Ø 5 mm / 10 mm

**R078-000000-199** **R078-050330-116** **R078-100330-116**

- **two in one**  
**sidwise Tube-Luer-Lock-Connection**



with small Tube-Connection and sidwise Tube-Luer-Lock-Connection

**R079-000000-100** Handle

complete with both Suction-Irrigation-Tubes complete with Tube-Set Ø 5 mm / 10 mm

**R079-000000-199** **R079-050330-116** **R079-100330-116**



working length

<b>240 mm</b>	<b>R070-035240-116</b>	Ø 3,5 mm
<b>330 mm</b>	<b>R070-050330-116</b>	Ø 5 mm
<b>330 mm</b>	<b>R070-100330-116</b>	Ø 10 mm
<b>450 mm</b>	<b>R070-050450-116</b>	Ø 5 mm
<b>450 mm</b>	<b>R070-100450-116</b>	Ø 10 mm

Suction-Irrigation-Handle  
with 1 trumpet valve



**R076-000000-200**

Suction-Irrigation-Pistol-Handle  
with sliding valve for exchangeable  
shafts, two combined Luer-Lock,  
Tube Connectors



**R079-000000-200**

**Ø 3,0 mm**

Suction-Irrigation-Tubes



working length Shaft tube alone

complete with 4 sidewise drillings

**340 mm R070-030340-204**

**R076-030340-204**

**R079-030340-204**

complete with 16 sidewise drillings

**340 mm R070-030340-216**

**R076-030340-216**

**R079-030340-216**

**Ø 5,0 mm**



working length Shaft tube alone

complete with 4 sidewise drillings

**340 mm R070-050340-204**

**R076-050340-204**

**R079-050340-204**

complete with 16 sidewise drillings

**340 mm R070-050340-216**

**R076-050340-216**

**R079-050340-216**

**Ø 10 mm**



working length Shaft tube alone

complete with 4 sidewise drillings

**340 mm R070-100340-204**

**R076-100340-204**

**R079-100340-204**

complete with 16 sidewise drillings

**340 mm R070-100340-216**

**R076-100340-216**

**R079-100340-216**

**1 Handle**  
**2 Functions**

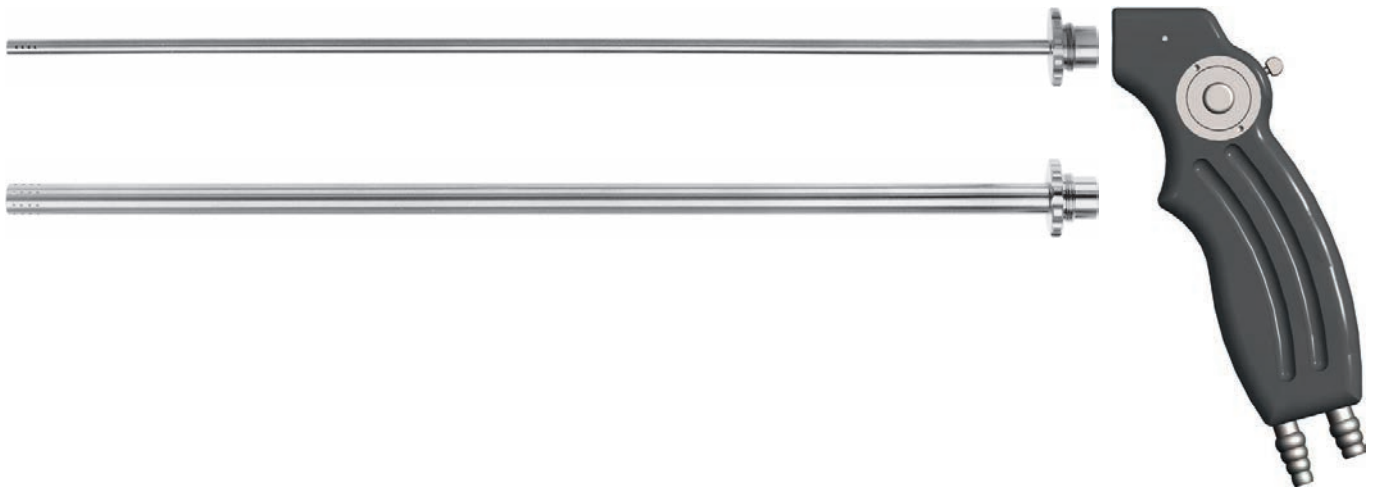
Suction-Irrigation

Monopolar Coagulation see page 6/4

**Suction-Irrigation-Pistol-Handle**

with two-way sliding valve and tube connections

- **ergonomic handle design**
- **enlarged suction channel**
- **straight passages for suction-irrigation liquid**
- **comfortable operation due to short swivel movement of sliding valve**



Handle

**R064-050000-001**

**Ø 3 / 5 / 10 mm**

**Suction-Irrigation-Tubes**

working length	Shaft tube alone	complete with Tube Ø 3,0 m with distal 4x4 hole
<b>330 mm</b>	<b>R070-030330-416</b>	<b>R079-030330-416</b>
		complete with Tube Ø 5,0 mm with distal 4x4 hole
<b>330 mm</b>	<b>R070-050330-416</b>	<b>R079-050330-416</b>
		complete with Tube Ø 10 mm with distal 4x4 hole
<b>330 mm</b>	<b>R070-100330-416</b>	<b>R079-100330-416</b>

Ø 5 mm



**R075-050340-000**

Complete set

**R075-050340-016**

Suction-Irrigation Tube 5 mm Ø with 2 lateral trumpet valves with LL-adapters, 340 mm working length, distal 4x1 hole, proximal with LL-adapter for laser fiber guide insert



**R075-020390-000**

Laser fiber guide insert alone, 391 mm

**Ø 5 mm**

Puncture- and Injection Needle 5 mm Ø distal with needle, proximal with LL-adapter



Needle Ø	330 mm working length	450 mm working length
0,7 mm	<b>R075-050330-007</b>	
0,9 mm	<b>R075-050330-009</b>	
1,2 mm	<b>R075-050330-012</b>	<b>R075-050450-012</b>
1,4 mm	<b>R075-050330-014</b>	<b>R075-050450-014</b>
1,5 mm	<b>R075-050330-015</b>	<b>R075-050450-015</b>
1,8 mm	<b>R075-050330-018</b>	<b>R075-050450-018</b>

**Ø 6 mm**

Puncture Tube for NaCl - Fluid, 6 mm Ø



working length	
160 mm	<b>R940-5130-160</b>
190 mm	<b>R940-5130-190</b>
235 mm	<b>R940-5130-235</b>

**Ø 2 mm**

Insufflation cannula 2 mm Ø, with LL-adapter



Needle working length

55 mm	<b>R075-020055-001</b>
70 mm	<b>R075-020070-001</b>
80 mm	<b>R075-020080-001</b>
100 mm	<b>R075-020100-001</b>
120 mm	<b>R075-020120-001</b>
130 mm	<b>R075-020130-001</b>
140 mm	<b>R075-020140-001</b>
150 mm	<b>R075-020150-001</b>
170 mm	<b>R075-020170-001</b>
180 mm	<b>R075-020180-001</b>
200 mm	<b>R075-020200-001</b>
230 mm	<b>R075-020230-001</b>

**Ø 2,7 mm**

High-Flow insufflation cannula 2,7 mm Ø, with LL-adapter



Needle working length

100 mm	<b>R075-027100-001</b>
120 mm	<b>R075-027120-001</b>
150 mm	<b>R075-027150-001</b>
170 mm	<b>R075-027170-001</b>

**Ø 2 mm**

Insufflation cannula acc. to Veress with stopcock and Luer-Lock-Connection **Stainless Steel**, 2 mm Ø



working length	
100 mm	R080-020100-001
120 mm	R080-020120-001
150 mm	R080-020150-001

**Ø 2,7 mm**

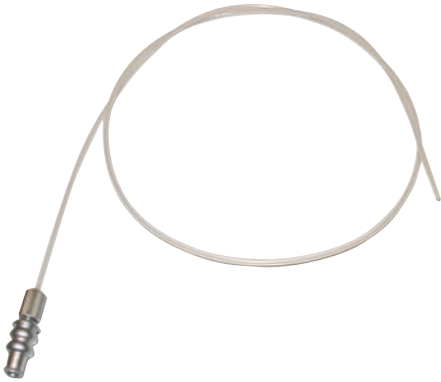
Insufflation cannula acc. to Veress **High-Flow**, stopcock and Luer-Lock-Connection **Stainless Steel**, 2,7 mm Ø



working length	
100 mm	R080-027100-001
120 mm	R080-027120-001
150 mm	R080-027150-001



Ø 6 FR



Cholangiography-catheter, 600 mm long

**R080-020600-201**

Ø 5 mm

Cholangiography fixation clamp with ratchet 5 mm Ø, with working channel, 330 mm working length



R081-050330-001

**Ø 5 mm**

Palpation probe graduated 5 mm Ø

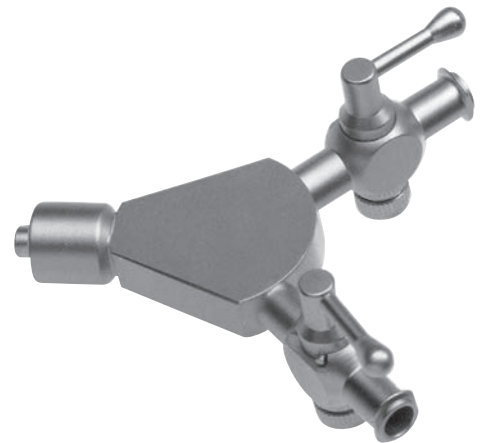


working length

330 mm	<b>R090-050330-001</b>
450 mm	<b>R090-050450-001</b>

Two-Way-Stopcock for Contrast Medium

**R070-000040-003**

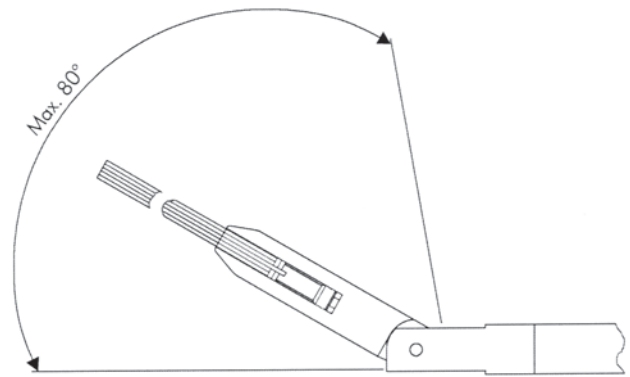
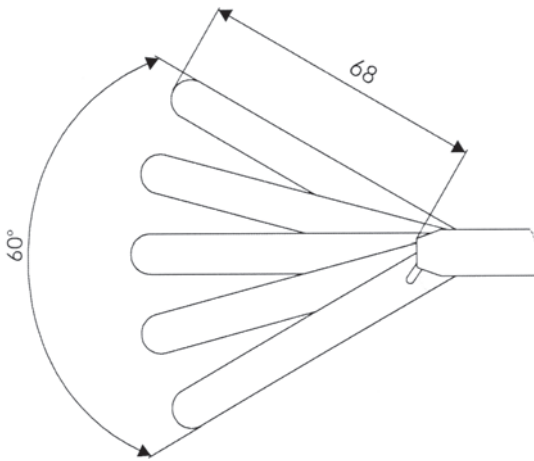


Ø 10 mm

Lever retractor 5-fingers spreadable, distal 80° movable, 10 mm Ø, 330 mm working length



R091-100330-005



Endo-Retractor for elastic abdominal bands, blunt fenestrated tip, adjustable, 360 mm working length, LL-adpater for cleaning



Ø 5 mm



R094-050360-001

Ø 10 mm



R094-100360-001

**Ø 5 mm**

Endo-Retractor 5 mm Ø with 3 fingers spreadable 340 mm working length, LL-adapter for cleaning



**R091-050340-003**



adjustable

**R092-050340-003**

**Ø 10 mm**

Endo-Retractor 10 mm Ø with 5 fingers spreadable 380 mm working length, LL-adapter for cleaning



**R091-100380-005**



adjustable

**R092-100380-005**

Ø 5 mm

Endo-Retractor 5 mm Ø with 5 fingers spreadable, 340 mm working length rigid, 42 mm spreader, LL-adapter for cleaning



R091-050340-005

Endo-Retractor 5 mm Ø with 5 fingers spreadable a. adjustable, 340 mm working length, 55 mm spreader, LL-adapter for cleaning



R092-050340-005

Ø 5 mm



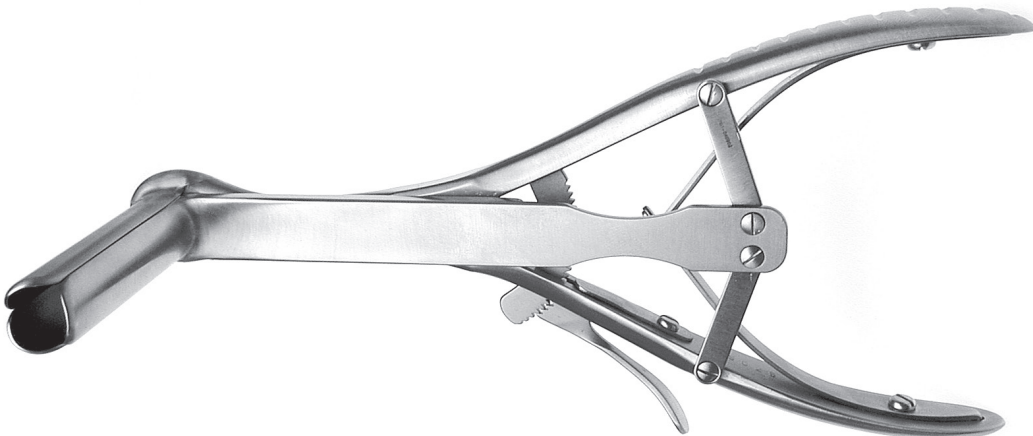
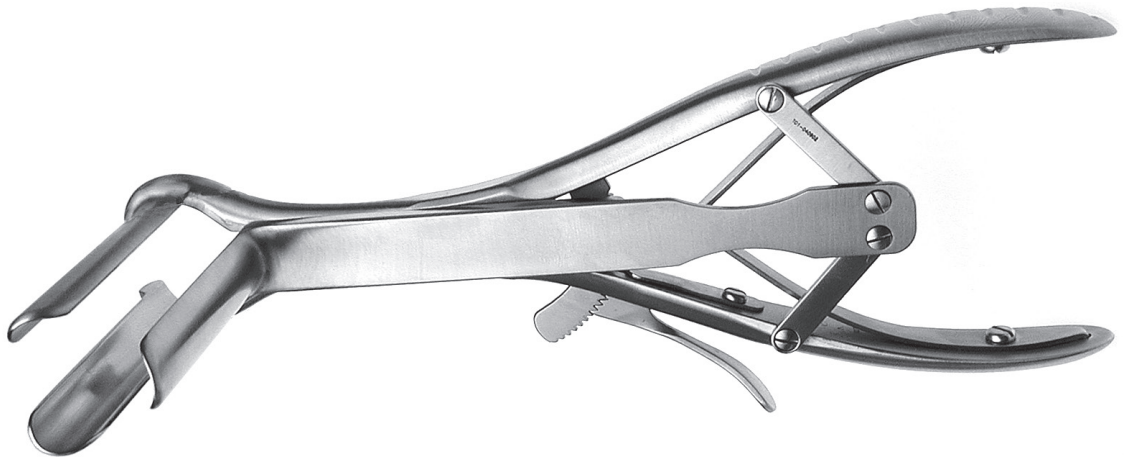
R093-050550-001



R093-050470-001

Speculum retractor, 3 blades for gall bladder extraction

R099-000250-003





Ø 2,0

Laparoscopes with integrated fiberoptic  
for illumination, autoclavable



diameter	working length	direction of view 0°
Ø 2,0 mm	187,5 mm	R010-020187-000

Ø 3,5 mm

Multi function valve trocar sleeve



diameter	working length	Art. No.
Ø 3,5 mm	70 mm	R023-035070-001

Standard trocar



diameter	for tube length	pyramidal	conical	conical blunt
Ø 3,5 mm	70 mm	R020-035070-001	R020-035070-002	R020-035070-003

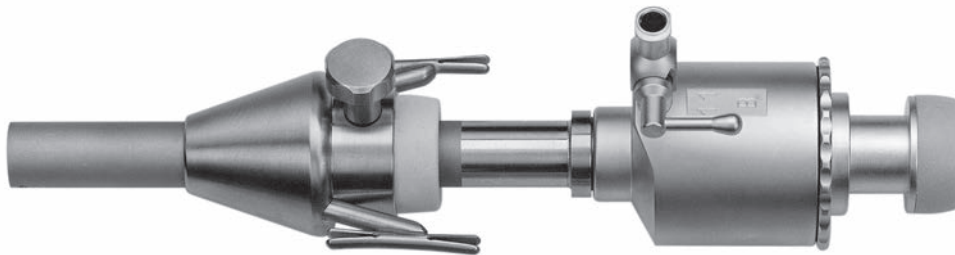
Safety trocar  
oblique end, conical blunt



diameter	for tube length	Art. No.
Ø 3,5 mm	70 mm	R020-035070-023

Ø 3,5 mm

HASSON automatic trocar sleeve with stopcock,  
adjustable cone and suture holder at cone



Ø	Cone alone
3,5 mm	<b>R020-035500-001</b>

Standard trocar  
conical blunt



**R020-035070-003**

Ø 3,5 mm



Ø 3 mm



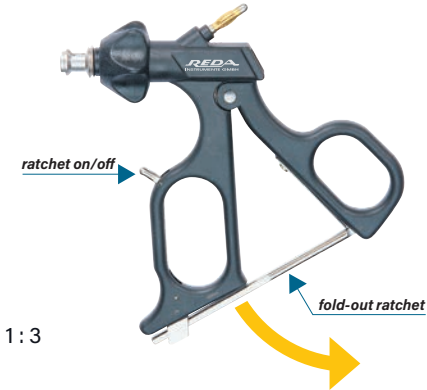
**The working insert and tube shaft form a single component. Namely the Working Part with a LUER lock irrigation adapter**

The working insert and tube shaft form a single component in 3 mm instruments, contrary to the arrangement in modular 5 and 10 mm REDA tube shaft instruments.

3 mm instruments have been developed principally for use in pediatrics and diagnostic laparoscopy and are fitted with a LUER lock irrigation adapter which achieves optimum cleansing results.

REDA - uncompromising safety !

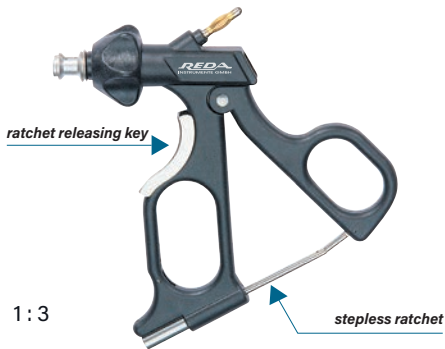
Ø 3 / 5 / 10 mm



1:3

Ergonomic universal carbon handle with ratchet, Lever for active or unactive ratchet, HF-connector Ø 4 mm male 45° lateral, rotating head 360°, autoclavable

**R033 - 000000 - 000**



1:3

Ergonomic carbon handle with stepless ratchet, ratchet by finger press resolve, HF-connector Ø 4 mm male 45° lateral, rotating head 360°, autoclavable

**R033P - 000000 - 000**



1:3

Ergonomic carbon handle, HF-connector Ø 4 mm male 45° lateral, rotating head 360°, autoclavable

**R034 - 000000 - 000**



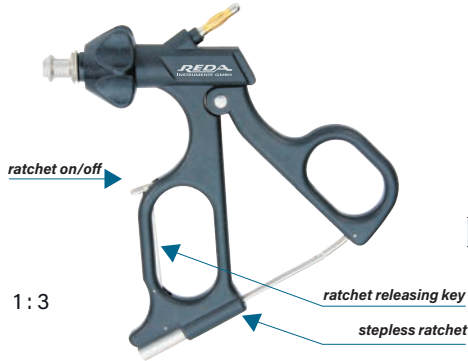
1:3

Ergonomic universal carbon handle with ratchet, Button for active or unactive ratchet, HF-connector Ø 4 mm male 45° lateral, rotating head 360°, autoclavable

**R032M - 000000 - 000**

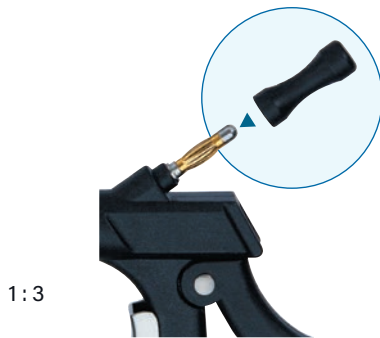


Ø 3 / 5 / 10 mm



Ergonomic carbon handle with stepless ratchet, ratchet activating / release lever, HF-connector Ø 4 mm male 45° lateral, rotating head 360°, autoclavable

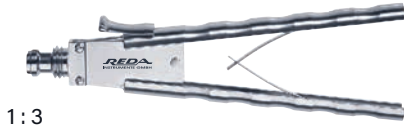
**R033M - 000000 - 000**



Protection cap for HF-connector Ø 4 mm

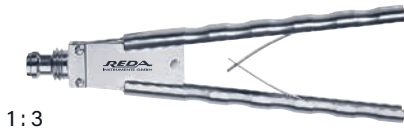
**R030 - 000000**

Ø 3 / 5 / 10 mm



Axial handle, v-shaped type with spreading spring and ratchet

**R038** - 000000 - 000



Axial handle, with spreading spring

**R048** - 000000 - 000



Axial handle with rings and ratchet

**R037** - 000000 - 000



Axial ring handle

**R047** - 000000 - 000



Axial handle, v-shaped angled, type with spreading spring and ratchet

**R039** - 000000 - 000



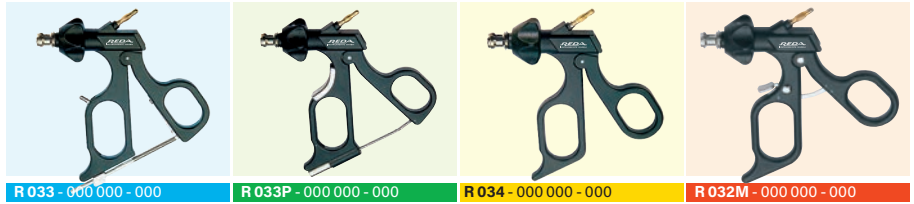
Axial handle, angled, with spreading spring

**R040** - 000000 - 000



**Carbon Handles**

more details at the beginning of the chapter



R 033 - 000 000 - 000

R 033P - 000 000 - 000

R 034 - 000 000 - 000

R 032M - 000 000 - 000

Ø 3 mm



Universal grasping forceps, straight, double action jaws

Working length	Working insert alone	Complete instrument			
<b>180 mm</b>	<b>R100-030180-210</b>	<b>R103-030180-210</b>	<b>R103P-030180-210</b>	<b>R104-030180-210</b>	<b>R102M-030180-210</b>
<b>210 mm</b>	<b>R100-030210-210</b>	<b>R103-030210-210</b>	<b>R103P-030210-210</b>	<b>R104-030210-210</b>	<b>R102M-030210-210</b>
<b>330 mm</b>	<b>R100-030330-210</b>	<b>R103-030330-210</b>	<b>R103P-030330-210</b>	<b>R104-030330-210</b>	<b>R102M-030330-210</b>



MARYLAND grasping forceps, curved, double action jaws

Working length	Working insert alone	Complete instrument			
<b>180 mm</b>	<b>R100-030180-212</b>	<b>R103-030180-212</b>	<b>R103P-030180-212</b>	<b>R104-030180-212</b>	<b>R102M-030180-212</b>
<b>210 mm</b>	<b>R100-030210-212</b>	<b>R103-030210-212</b>	<b>R103P-030210-212</b>	<b>R104-030210-212</b>	<b>R102M-030210-212</b>
<b>330 mm</b>	<b>R100-030330-212</b>	<b>R103-030330-212</b>	<b>R103P-030330-212</b>	<b>R104-030330-212</b>	<b>R102M-030330-212</b>



Dissections forceps, fenestrated, oval, double action jaws

Working length	Working insert alone	Complete instrument			
<b>180 mm</b>	<b>R100-030180-214</b>	<b>R103-030180-214</b>	<b>R103P-030180-214</b>	<b>R104-030180-214</b>	<b>R102M-030180-214</b>
<b>210 mm</b>	<b>R100-030210-214</b>	<b>R103-030210-214</b>	<b>R103P-030210-214</b>	<b>R104-030210-214</b>	<b>R102M-030210-214</b>
<b>330 mm</b>	<b>R100-030330-214</b>	<b>R103-030330-214</b>	<b>R103P-030330-214</b>	<b>R104-030330-214</b>	<b>R102M-030330-214</b>



Grasping forceps with reservoir, tip blunt, double action jaws

Working length	Working insert alone	Complete instrument			
<b>180 mm</b>	<b>R100-030180-220</b>	<b>R103-030180-220</b>	<b>R103P-030180-220</b>	<b>R104-030180-220</b>	<b>R102M-030180-220</b>
<b>210 mm</b>	<b>R100-030210-220</b>	<b>R103-030210-220</b>	<b>R103P-030210-220</b>	<b>R104-030210-220</b>	<b>R102M-030210-220</b>
<b>330 mm</b>	<b>R100-030330-220</b>	<b>R103-030330-220</b>	<b>R103P-030330-220</b>	<b>R104-030330-220</b>	<b>R102M-030330-220</b>

**Stainless steel Handles**  
more details at the beginning of the chapter



R 037 - 000 000 - 000

R 038 - 000 000 - 000

Ø 3 mm



Universal grasping forceps, straight, double action jaws

Working length

Complete instrument		mm
R107-030180-210	R108-030180-210	180
R107-030210-210	R108-030210-210	210
R107-030330-210	R108-030330-210	330



MARYLAND grasping forceps, curved, double action jaws

Working length

Complete instrument		mm
R107-030180-212	R108-030180-212	180
R107-030210-212	R108-030210-212	210
R107-030330-212	R108-030330-212	330



Dissections forceps, fenestrated, oval, double action jaws

Working length

Complete instrument		mm
R107-030180-214	R108-030180-214	180
R107-030210-214	R108-030210-214	210
R107-030330-214	R108-030330-214	330



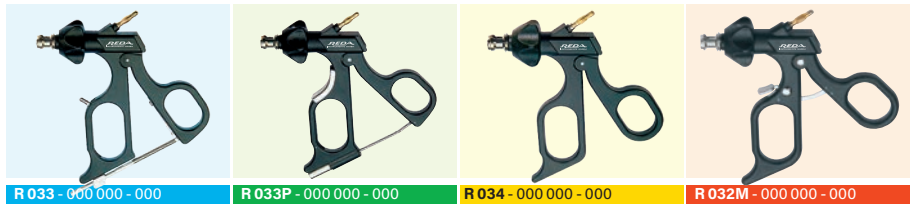
Grasping forceps with reservoir, tip blunt, double action jaws

Working length

Complete instrument		mm
R107-030180-220	R108-030180-220	180
R107-030210-220	R108-030210-220	210
R107-030330-220	R108-030330-220	330

**Carbon Handles**

more details at the beginning of the chapter



Ø 3 mm

R 033 - 000 000 - 000

R 033P - 000 000 - 000

R 034 - 000 000 - 000

R 032M - 000 000 - 000



Grasping forceps with reservoir, tip conical, double action jaws

Working length	Working insert alone	Complete instrument			
<b>180 mm</b>	<b>R100-030180-222</b>	<b>R103-030180-222</b>	<b>R103P-030180-222</b>	<b>R104-030180-222</b>	<b>R102M-030180-222</b>
<b>210 mm</b>	<b>R100-030210-222</b>	<b>R103-030210-222</b>	<b>R103P-030210-222</b>	<b>R104-030210-222</b>	<b>R102M-030210-222</b>
<b>330 mm</b>	<b>R100-030330-222</b>	<b>R103-030330-222</b>	<b>R103P-030330-222</b>	<b>R104-030330-222</b>	<b>R102M-030330-222</b>



Delphin grasping forceps with reservoir, double action jaws

Working length	Working insert alone	Complete instrument			
<b>180 mm</b>	<b>R100-030180-224</b>	<b>R103-030180-224</b>	<b>R103P-030180-224</b>	<b>R104-030180-224</b>	<b>R102M-030180-224</b>
<b>210 mm</b>	<b>R100-030210-224</b>	<b>R103-030210-224</b>	<b>R103P-030210-224</b>	<b>R104-030210-224</b>	<b>R102M-030210-224</b>
<b>330 mm</b>	<b>R100-030330-224</b>	<b>R103-030330-224</b>	<b>R103P-030330-224</b>	<b>R104-030330-224</b>	<b>R102M-030330-224</b>



Grasping forceps, crosswise teeth, jaw length 14 mm, conical, double action jaws

Working length	Working insert alone	Complete instrument			
<b>180 mm</b>	<b>R100-030180-230</b>	<b>R103-030180-230</b>	<b>R103P-030180-230</b>	<b>R104-030180-230</b>	<b>R102M-030180-230</b>
<b>210 mm</b>	<b>R100-030210-230</b>	<b>R103-030210-230</b>	<b>R103P-030210-230</b>	<b>R104-030210-230</b>	<b>R102M-030210-230</b>
<b>330 mm</b>	<b>R100-030330-230</b>	<b>R103-030330-230</b>	<b>R103P-030330-230</b>	<b>R104-030330-230</b>	<b>R102M-030330-230</b>

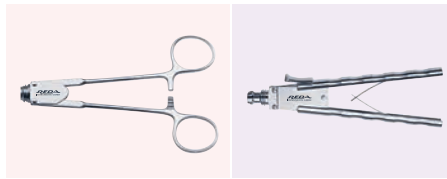


Claw grasping forceps, 3 x 2 teeth, single action jaws

Working length	Working insert alone	Complete instrument			
<b>180 mm</b>	<b>R100-030180-242</b>	<b>R103-030180-242</b>	<b>R103P-030180-242</b>	<b>R104-030180-242</b>	<b>R102M-030180-242</b>
<b>210 mm</b>	<b>R100-030210-242</b>	<b>R103-030210-242</b>	<b>R103P-030210-242</b>	<b>R104-030210-242</b>	<b>R102M-030210-242</b>
<b>330 mm</b>	<b>R100-030330-242</b>	<b>R103-030330-242</b>	<b>R103P-030330-242</b>	<b>R104-030330-242</b>	<b>R102M-030330-242</b>

**Stainless steel Handles**

more details at the beginning of the chapter



R 037 - 000 000 - 000

R 038 - 000 000 - 000

Ø 3 mm



Grasping forceps with reservoir, tip conical, double action jaws

Working length

Complete instrument		mm
R107-030180-222	R108-030180-222	180
R107-030210-222	R108-030210-222	210
R107-030330-222	R108-030330-222	330



Delphin grasping forceps with reservoir, double action jaws

Working length

Complete instrument		mm
R107-030180-224	R108-030180-224	180
R107-030210-224	R108-030210-224	210
R107-030330-224	R108-030330-224	330



Grasping forceps, crosswise teeth, jaw length 14 mm, conical, double action jaws

Working length

Complete instrument		mm
R107-030180-230	R108-030180-230	180
R107-030210-230	R108-030210-230	210
R107-030330-230	R108-030330-230	330



Claw grasping forceps, 3 x 2 teeth, single action jaws

Working length

Complete instrument		mm
R107-030180-242	R108-030180-242	180
R107-030210-242	R108-030210-242	210
R107-030330-242	R108-030330-242	330

**Carbon Handles**

more details at the beginning of the chapter

**Stainless steel Handles**

more details at the beginning of the chapter



Ø 3 mm



METZENBAUM scissors, straight, double action jaws

Working length	Working insert alone	Complete instrument		
<b>180 mm</b>	<b>R100-030180-110</b>	<b>R104-030180-110</b>	<b>R147-030180-110</b>	<b>R148-030180-110</b>
<b>210 mm</b>	<b>R100-030210-110</b>	<b>R104-030210-110</b>	<b>R147-030210-110</b>	<b>R148-030210-110</b>
<b>330 mm</b>	<b>R100-030330-110</b>	<b>R104-030330-110</b>	<b>R147-030330-110</b>	<b>R148-030330-110</b>



METZENBAUM scissors, curved, double action jaws

Working length	Working insert alone	Complete instrument		
<b>180 mm</b>	<b>R100-030180-112</b>	<b>R104-030180-112</b>	<b>R147-030180-112</b>	<b>R148-030180-112</b>
<b>210 mm</b>	<b>R100-030210-112</b>	<b>R104-030210-112</b>	<b>R147-030210-112</b>	<b>R148-030210-112</b>
<b>330 mm</b>	<b>R100-030330-112</b>	<b>R104-030330-112</b>	<b>R147-030330-112</b>	<b>R148-030330-112</b>



Peritoneal scissors, serrated, straight, single action jaws

Working length	Working insert alone	Complete instrument		
<b>180 mm</b>	<b>R100-030180-114</b>	<b>R104-030180-114</b>	<b>R147-030180-114</b>	<b>R148-030180-114</b>
<b>210 mm</b>	<b>R100-030210-114</b>	<b>R104-030210-114</b>	<b>R147-030210-114</b>	<b>R148-030210-114</b>
<b>330 mm</b>	<b>R100-030330-114</b>	<b>R104-030330-114</b>	<b>R147-030330-114</b>	<b>R148-030330-114</b>

**Carbon Handles**

more details at the beginning of the chapter

**Stainless steel Handles**

more details at the beginning of the chapter



Ø 3 mm



Hook scissors, straight, single action jaws

Working length	Working insert alone	Complete instrument		
<b>180 mm</b>	<b>R100-030180-116</b>	<b>R104-030180-116</b>	<b>R147-030180-116</b>	<b>R148-030180-116</b>
<b>210 mm</b>	<b>R100-030210-116</b>	<b>R104-030210-116</b>	<b>R147-030210-116</b>	<b>R148-030210-116</b>
<b>330 mm</b>	<b>R100-030330-116</b>	<b>R104-030330-116</b>	<b>R147-030330-116</b>	<b>R148-030330-116</b>



Micro scissors, straight, single action jaws

Working length	Working insert alone	Complete instrument		
<b>180 mm</b>	<b>R100-030180-118</b>	<b>R104-030180-118</b>	<b>R147-030180-118</b>	<b>R148-030180-118</b>
<b>210 mm</b>	<b>R100-030210-118</b>	<b>R104-030210-118</b>	<b>R147-030210-118</b>	<b>R148-030210-118</b>
<b>330 mm</b>	<b>R100-030330-118</b>	<b>R104-030330-118</b>	<b>R147-030330-118</b>	<b>R148-030330-118</b>

**Carbon Handles**

more details at the beginning of the chapter



R 034 - 000 000 - 000

Ø 3 mm



Biopsy cup, sharp, without thorn, double action jaws

Working length	Working insert alone	Complete instrument
<b>180 mm</b>	<b>R100-030180-310</b>	<b>R104-030180-310</b>
<b>210 mm</b>	<b>R100-030210-310</b>	<b>R104-030210-310</b>
<b>330 mm</b>	<b>R100-030330-310</b>	<b>R104-030330-310</b>



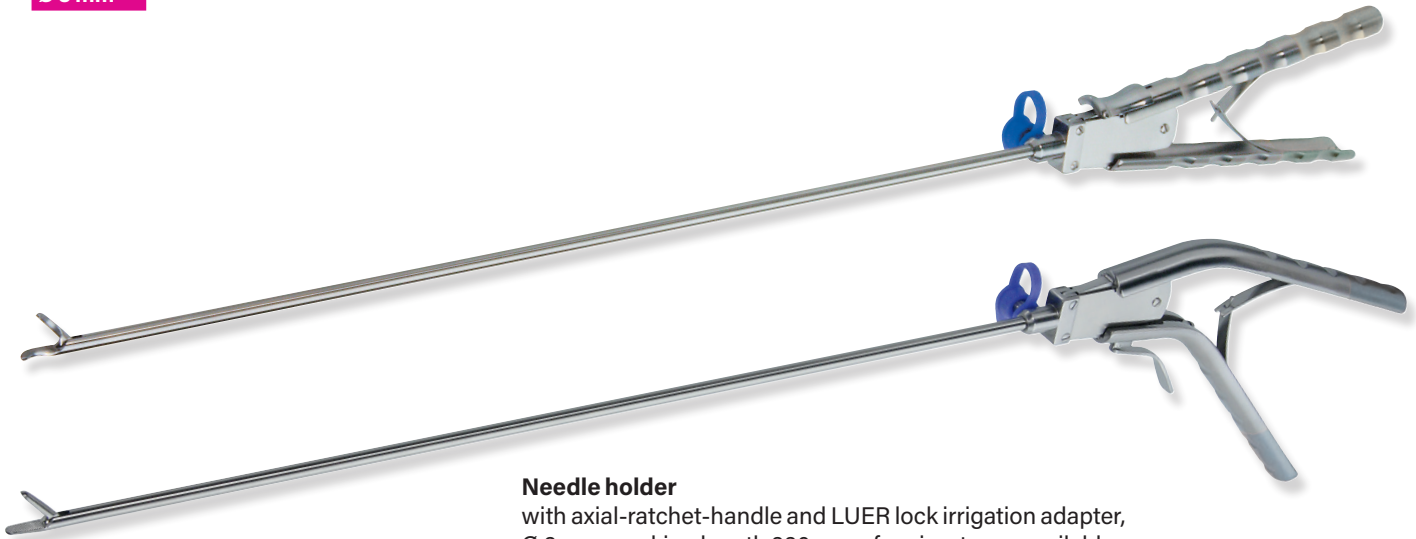
Biopsy cup, sharp, with thorn, double action jaws

Working length	Working insert alone	Complete instrument
<b>180 mm</b>	<b>R100-030180-312</b>	<b>R104-030180-312</b>
<b>210 mm</b>	<b>R100-030210-312</b>	<b>R104-030210-312</b>
<b>330 mm</b>	<b>R100-030330-312</b>	<b>R104-030330-312</b>





Ø 3 mm



**Needle holder**  
with axial-ratchet-handle and LUER lock irrigation adapter,  
Ø 3 mm, working length 330 mm - four jaw types available.



Needle holder, straight,  
with inserted tungsten carbide, crosswise teeth, single action jaws

Handle	straight	angled
	<b>R158-0533-350</b>	<b>R159-0533-350</b>



Needle holder, curved left,  
with inserted tungsten carbide, crosswise teeth, single action jaws

Handle	straight	angled
	<b>R158-0533-352</b>	<b>R159-0533-352</b>



Needle holder, curved right,  
with inserted tungsten carbide, crosswise teeth, single action jaws

Handle	straight	angled
	<b>R158-0533-354</b>	<b>R159-0533-354</b>



Needle holder/-positioner, convex/concave shaped jaws, with fixation teeth,  
straight, with wolfram-carbide-coated tips, single action jaws

Handle	straight	angled
	<b>R158-0533-360</b>	<b>R159-0533-360</b>

**Carbon Handles**

more details at the beginning of the chapter



Ø 3 mm

R 033 - 000 000 - 000

R 033P - 000 000 - 000

R 032M - 000 000 - 000



Needleholder with inserted tungsten carbide, straight, single action jaws

Working length | Working insert alone | Complete instrument

Working length	Working insert alone	Complete instrument		
<b>210 mm</b>	<b>R150-030210-350</b>	<b>R153-030210-350</b>	<b>R153P-030210-350</b>	<b>R151-030210-350</b>
<b>330 mm</b>	<b>R150-030330-350</b>	<b>R153-030330-350</b>	<b>R153P-030330-350</b>	<b>R151-030330-350</b>



Needleholder with inserted tungsten carbide, curved left, single action jaws

Working length | Working insert alone | Complete instrument

Working length	Working insert alone	Complete instrument		
<b>210 mm</b>	<b>R150-030210-352</b>	<b>R153-030210-352</b>	<b>R153P-030210-352</b>	<b>R151-030210-352</b>
<b>330 mm</b>	<b>R150-030330-352</b>	<b>R153-030330-352</b>	<b>R153P-030330-352</b>	<b>R151-030330-352</b>



Needleholder with inserted tungsten carbide, curved right, single action jaws

Working length | Working insert alone | Complete instrument

Working length	Working insert alone	Complete instrument		
<b>210 mm</b>	<b>R150-030210-354</b>	<b>R153-030210-354</b>	<b>R153P-030210-354</b>	<b>R151-030210-354</b>
<b>330 mm</b>	<b>R150-030330-354</b>	<b>R153-030330-354</b>	<b>R153P-030330-354</b>	<b>R151-030330-354</b>



Needleholder/-positioner insert, convex/concave with teeth, TC

Working length | Working insert alone | Complete instrument

Working length	Working insert alone	Complete instrument		
<b>210 mm</b>	<b>R150-030210-360</b>	<b>R153-030210-360</b>	<b>R153P-030210-360</b>	<b>R151-030210-360</b>
<b>330 mm</b>	<b>R150-030330-360</b>	<b>R153-030330-360</b>	<b>R153P-030330-360</b>	<b>R151-030330-360</b>

**Stainless steel Handles**  
more details at the beginning of the chapter



Ø 3 mm



Needleholder with inserted tungsten carbide, straight, single action jaws

Complete instrument			Working length mm
R157-030210-350	R158-030210-350	R159-030210-350	210
R157-030330-350	R158-030330-350	R159-030330-350	330



Needleholder with inserted tungsten carbide, curved left, single action jaws

Complete instrument			Working length mm
R157-030210-352	R158-030210-352	R159-030210-352	210
R157-030330-352	R158-030330-352	R159-030330-352	330



Needleholder with inserted tungsten carbide, curved right, single action jaws

Complete instrument			Working length mm
R157-030210-354	R158-030210-354	R159-030210-354	210
R157-030330-354	R158-030330-354	R159-030330-354	330








Needleholder/-positioner insert, convex/concave with teeth, TC

Complete instrument			Working length mm
R157-030210-360	R158-030210-360	R159-030210-360	210
R157-030330-360	R158-030330-360	R159-030330-360	330

Ø 2,8 mm

Monopolar electrode with small handle,  
Ø 2,8 mm



	Type	working length	
		330 mm	250 mm
	Button type electrode	R060-028330-001	R060-028250-001
	J-hook electrode	R060-028330-002	R060-028250-002
	L-hook electrode	R060-028330-003	R060-028250-003
	Spatula electrode	R060-028330-004	R060-028250-004
	Needle electrode	R060-028330-005	R060-028250-005

Ø 2,8 mm

Palpation probe  
Ø 2,8 mm

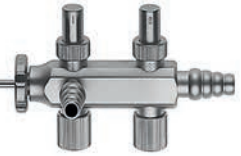


working length

330 mm	R090-028330-001
250 mm	R090-028250-001

Ø 2,8 mm

**Suction-Irrigation-Cannula**  
with Tube Connection  
roundhole Sucker with 8 drillings



working length complete with handle

**330 mm R071-028330-008**

**250 mm R071-028250-008**

Handle with trumpet valve

**R071-000000-000**

working length roundhole Sucker with 8 drillings

**330 mm R070-028330-008**

**250 mm R070-028250-008**

**Suction-Irrigation-Cannula**  
with sliding valves  
and tube with 8 drillings



working length complete with handle

**330 mm R072-028330-008**

**250 mm R072-028250-008**

Handle with sliding valve

**R072-000000-000**

working length roundhole Sucker with 8 drillings

**330 mm R070-028330-008**

**250 mm R070-028250-008**

**Ø 2,8 mm**

**Suction-Irrigation-Cannula**  
with trumpet valves  
and Square Handle



working length

<b>330 mm</b>	<b>R075-028330-016</b>
<b>250 mm</b>	<b>R075-028250-016</b>

**Ø 1,2 mm**

**Puncture- and Injection Needle**  
distal with needle,  
proximal with LL-adapter



working length    Nadel / Needle

<b>330 mm</b>	<b>R075-028330-012</b>
<b>250 mm</b>	<b>R075-028250-012</b>

Valve with Adapter for Tubes  
with large Luer-Lock-Connection

Suction-Irrigation-Handle  
with sliding valve and turnable  
adapter for large Luer-Lock  
Tube connection  
two combined Luer-Lock /  
Tube Connectors



**R076-000000-300**

**Ø 3,0 mm**

Exchangeable Suction-Irrigation-Tube  
with large Luer-Lock-Connection



working length 4 sidewise drillings

**340 mm R070-030340-304**

working length 16 sidewise drillings

**340 mm R070-030340-316**



**Ø 3,5 mm**

**Suction-Irrigation-Handle**

with color-coding

- **20% less weight**
- **less individual parts**
- **color-coding**  
blue - irrigation  
green - suction
- **two in one**  
**sidewise Tube-Luer-Lock-Connection**



**Suction-Irrigation-Handle 10 mm**

with large Tube-Connection and sidewise Tube-Luer-Lock-Connection

**R078-000000-100**

working length **Tube for 10 mm Suction-Irrigation-Handle, Ø 3,5 mm**

**240 mm R070-035240-116**

**Ø 3 mm**

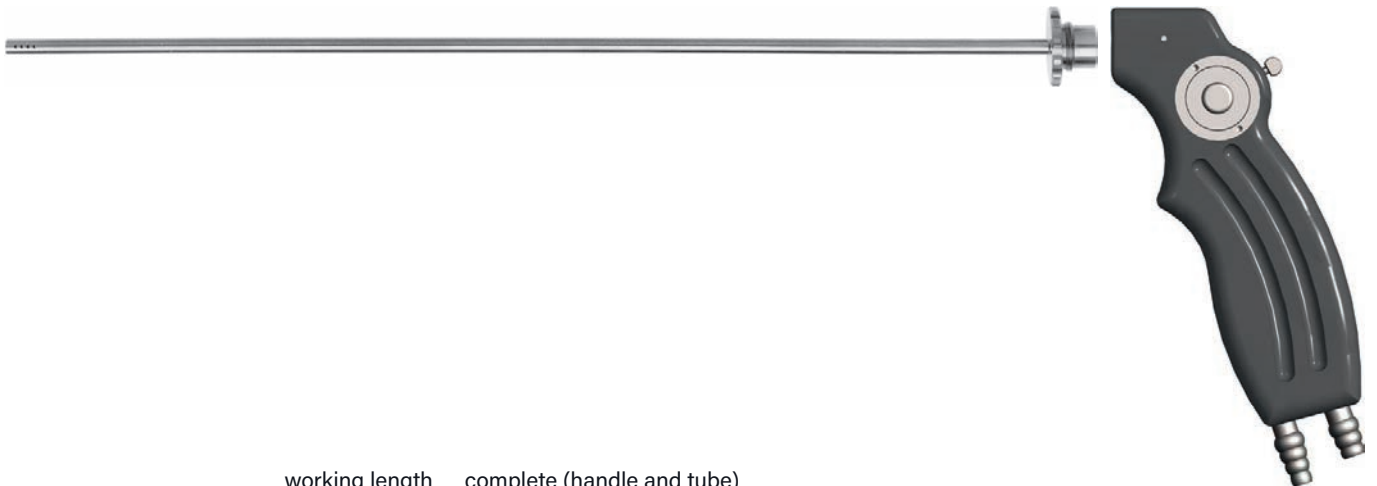
**1 Handle**  
**2 Functions**



**Suction-Irrigation-Handle**

with two-way sliding valve and tube connections

- **ergonomic handle design**
- **enlarged suction channel**
- **straight passages for suction-irrigation liquid**
- **comfortable operation due to short swivel movement of the valve**



working length complete (handle and tube)

**330 mm R079-030330-416**

Handle with sliding valve

**R064-050000-001**

Tube only Ø 3,0 mm

**R070-030330-416**

Valve Handle for Shaft M8 x 1

Suction-Irrigation-Handle  
with Trumpet Valve

for exchangeable shafts with threads M8 x 1  
combined Luer-Lock / Tube connector



**R076-000000-200**

Suction-Irrigation-Pistol-Handle  
with Sliding Valve

for exchangeable shafts with threads M8 x 1  
two combined Luer-Lock / Tube connector



**R079-000000-200**

**Ø 3,0 mm**

Exchangeable Suction-Irrigation-Tube  
with threads M8 x 1



working length 4 side drill holes

**340 mm R070-030340-204**

working length 16 side drill holes

**340 mm R070-030340-216**

Ø 10 mm

**Thoracoscope with integrated fiberoptic**  
for illumination, autoclavable



diameter	working length	direction of view
Ø 10,0 mm	180 mm	30° R110-100178-030

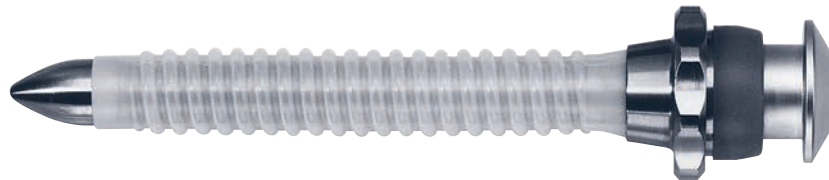
Ø 6 / 11 / 13 mm

**Thorax trocar sleeve rigid,**  
metal tube with thread



diameter	working length	Trocar sleeve only	Obturator only
Ø 6 mm	50 mm	R111-060050-006	R111-060050-003
Ø 11 mm	50 mm	R111-110050-006	R111-110050-003
Ø 13 mm	50 mm	R111-130050-006	R111-130050-003

**Thorax trocar sleeve flexible,**  
plastic tube with thread, exchangeable



diameter	working length	Trocar sleeve only	Obturator only	flexible silicon tubes 5 pcs. /pack
Ø 6 mm	100 mm	R112-060100-006	R112-060100-003	R112-060100-606
Ø 6 mm	70 mm	R112-060070-006	R112-060070-003	R112-060070-606
Ø 11 mm	100 mm	R112-110100-006	R112-110100-003	R112-110100-606
Ø 11 mm	70 mm	R112-110070-006	R112-110070-003	R112-110070-606

**DENNIS** dissector

Working length: 9" (23 cm)

Total length: 13 1/4" (33.5 cm)



Serrated jaws

7 mm shaft



**R119-93527-04**

Working length: 9 1/2" (24 cm)  
Total length: 13 1/4" (33.5 cm)



sliding shaft  
10 mm, straight

**R119-93527-17**



sliding shaft  
slim 7 mm, curved

**R119-93527-16**

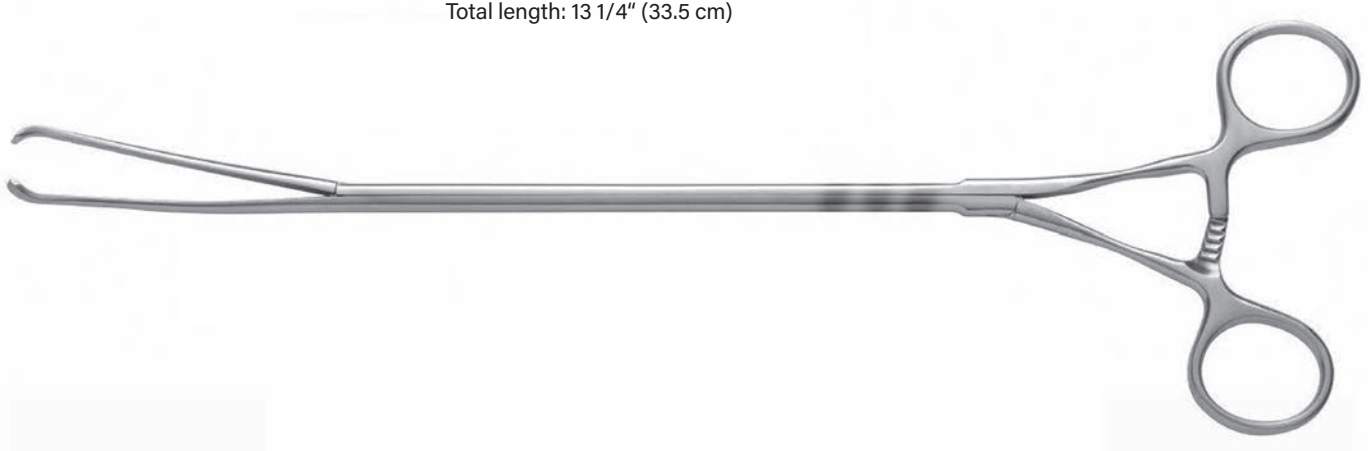
sliding shaft  
regular 10 mm, curved

**R119-93527-01**

**ALLIS forceps**

Working length: 9" (23 cm)

Total length: 13 1/4" (33.5 cm)



6 mm width jaws

7 mm shaft

**R119-93527-13**

**STERN** chest tube passer

Working length: 6 7/8" (17,5 cm)

Total length: 9 3/4" (24,8 cm)



without ratchet  
10 mm shaft

**R119-93527-21**

**STERN** chest tube passer

Working length: 11" (28 cm)

Total length: 14" (35,6 cm)



with ratchet  
10 mm shaft

**R119-93527-18**

without ratchet  
10 mm shaft

**R119-93527-19**



**DEBAKEY COOLEY** forceps

Working length: 9 1/2" (24 cm)

Total length: 13 1/2" (34 cm)



without ratchet  
DeBakey Cooley jaws  
10 mm shaft

**R119-93527-06**

with ratchet  
DeBakey Cooley jaws  
10 mm shaft

**R119-93527-10**

**HARKEN** clamps

Working length: 9 7/8" (24.8 cm)

Total length: 14" (35.5 cm)



without ratchet  
HARKEN #1  
DEBAKEY jaws  
10 mm shaft



**R119-93527-14**

without ratchet  
HARKEN #2  
DEBAKEY jaws  
10 mm shaft



**R119-93527-15**

**DEBAKEY** clamps

Working length: 10" (25.4 cm)

Total length: 14 1/4" (36 cm)



6.5 cm jaw length  
1 x 2 DEBAKEY jaws  
10 mm shaft

**R119-93527-05**



10 cm jaw length  
1 x 2 DEBAKEY jaws  
10 mm shaft

**R119-93527-12**



10 cm jaw length  
2 x 3 DEBAKEY jaws  
10 mm shaft

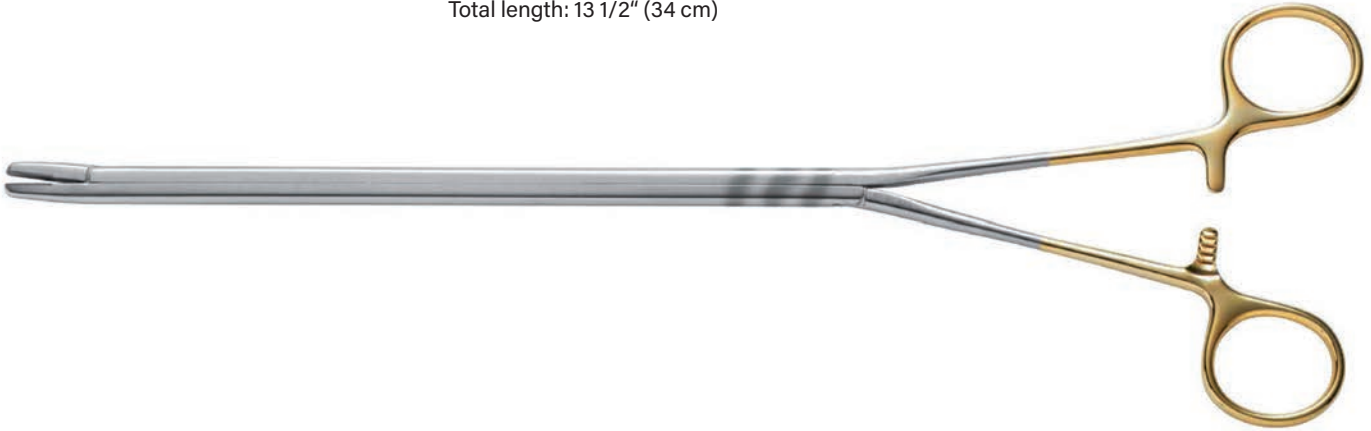
**R119-93527-11**



**Needle Holders for 2-0 Suture**

Working length: 8 1/4" (21 cm)

Total length: 13 1/2" (34 cm)



2-0 and smaller suture  
Straight, Carbon-inlay jaws  
10 mm shaft

**R119-93527-07**



2-0 and smaller suture  
Curved, Carbon-inlay jaws  
10 mm shaft

**R119-93527-08**

**DUVAL clamps**

Working length: 9 1/4" (23.5 cm)

Total length: 13 1/2" (34 cm)





DUVAL clamp  
2.5 cm width jaws  
10 mm shaft

**R119-93527-20**

Ø 5,0 mm


**Monopolar thoracic electrode,**  
30° curved, HF-connector Ø 4 mm male



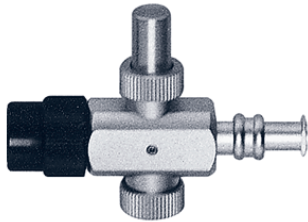
	type	working length
	<b>Ø 5 mm</b>	<b>330 mm</b>
	L-hook electrode	R116-050330-003
	Spatula electrode	R116-050330-004

**Monopolar thoracic electrode,**  
30° curved, with suction/irrigation channel, Electrode assembly alone without handle



	type	working length
	<b>Ø 5 mm</b>	<b>330 mm</b>
	L-hook electrode	R116-050330-103

Handles see next page



**Suction-irrigation handle**

1 trumpet valve with LL-adaptor

R118-000000-500



**Suction-irrigation handle**

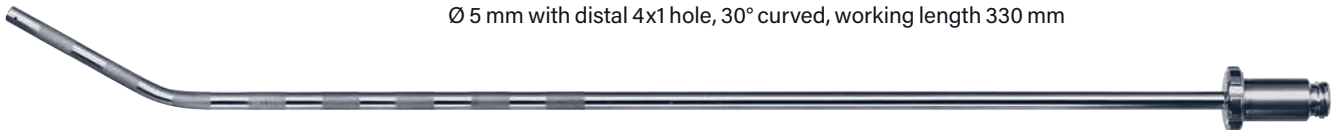
2-way-valves

R117-000000-500

Ø 5 mm

**Suction-irrigation tube**

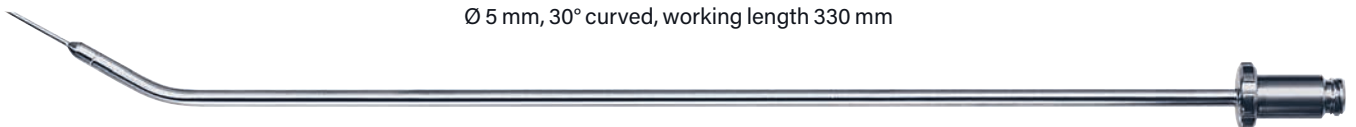
Ø 5 mm with distal 4x1 hole, 30° curved, working length 330 mm



R117-050330-504

**Injection needle**

Ø 5 mm, 30° curved, working length 330 mm



R117-050330-501



INSTRUMENTE GMBH

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**Hysteroscopes**

with integrated fiberoptic for illumination, autoclavable



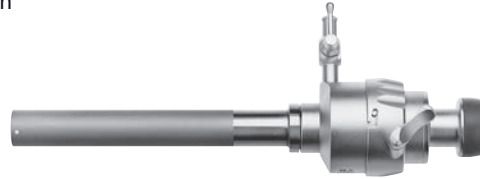
**Compatibility**

<b>Light port adapter</b>	ACMI-, Wolf-, Storz / Olympus
<b>Eyepiece</b>	Ocular according DIN 58105 threaded
<b>Objective</b>	Tension-free objective composed-objective
<b>Image transmission</b>	CAD-designed rodence system for optimal sharpness, colorsync and resolution
<b>Light-guiding system</b>	High quality light fibers
<b>Optical glass</b>	Distal and proximal Sapphire
<b>Biocompatibility</b>	All materials that come in contact with the body are biocompatible. All outside metal parts are made of high quality stainless steel.

Ø	working length	direction of view	
		0°	30°
4,0 mm	302 mm	<b>R300-040302-000</b>	<b>R300-040302-030</b>

Ø 7,0 mm

Multi function valve trocar sleeve,  
metal sleeve, smooth



working length

95 mm R023-070095-001

Standard trocar



working length pyramidal

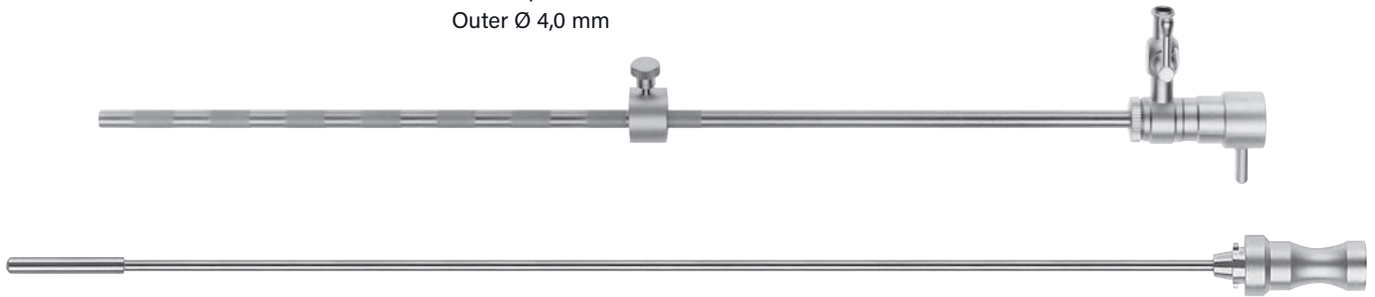
95 mm R020-070095-001



working length conical

95 mm R020-070095-002

**Diagnostic Sheaths**  
For Scope Ø 2,7 mm  
Outer Ø 4,0 mm



	<b>Stopcock, fixed</b>		<b>Stopcock, rotating</b>
working length	0° with Distance-Holder		working length
<b>281 mm</b>	<b>R210-040281-000</b>		<b>274 mm</b> <b>R211-040281-000</b>
	30° complete with Obturator and Distance-Holder		
<b>281 mm</b>	<b>R210-040281-130</b>		<b>274 mm</b> <b>R211-040281-130</b>
	30° with Distance-Holder		
<b>281 mm</b>	<b>R210-040281-030</b>		<b>274 mm</b> <b>R211-040281-030</b>
	Obturator only		
	<b>R210-040305-00</b>		
	Distance-Holder only		
	<b>R210-040306-00</b>		

**Diagnostic Sheaths**  
For Scope Ø 4,0 mm  
Outer Ø 5,0 mm

	<b>Stopcock, fixed</b>		<b>Stopcock, rotating</b>
working length	0° complete with Obturator and Distance-Holder		working length
<b>281 mm</b>	<b>R210-050281-001</b>		<b>274 mm</b> <b>R211-050274-001</b>
	0° with Distance-Holder		
<b>281 mm</b>	<b>R210-050274-000</b>		<b>274 mm</b> <b>R211-050274-000</b>
	30° complete with Obturator and Distance-Holder		
<b>281 mm</b>	<b>R210-050274-130</b>		<b>274 mm</b> <b>R211-050274-130</b>
	30° with Distance-Holder		
<b>281 mm</b>	<b>R210-050274-030</b>		<b>274 mm</b> <b>R211-050274-030</b>
	Obturator only		
	<b>R210-050305-00</b>		
	Distance-Holder only		
	<b>R210-050306-00</b>		

Operation Sheaths with 1 Working Channel

For Scope Ø 4,0 mm

Outer Ø 7,5 mm



working length	working channel	Sheath with 1 rotating stopcock	Sheath with 2 rotating stopcocks
211 mm	7 CH.	30° OP - Sheath R211-075211-030	R212-075211-030

**Continuous-Flow-Sheaths**

For Scope Ø 2,7 mm

Outer Ø 6,0

These sheaths have a separate Irrigation- and Working Channel.

The Outer Tube is detachable.



**Sheath complete with 2 separate rotating stopcocks**

working length	working channel	0° Continuous-Flow-Sheath
<b>193 mm</b>	<b>5 CH.</b>	<b>R214-060193-000</b>
		30° Continuous-Flow-Sheath
<b>193 mm</b>	<b>5 CH.</b>	<b>R214-060193-030</b>

**Continuous-Flow-Sheaths**

For Scope Ø 4,0 mm

Outer Ø 8,0 mm

**Sheath complete with 2 separate rotating stopcocks**

working length	working channel	0° Continuous-Flow-Sheath
<b>193 mm</b>	<b>7 CH.</b>	<b>R214-080193-000</b>
		30° Continuous-Flow-Sheath
<b>193 mm</b>	<b>7 CH.</b>	<b>R214-080193-030</b>

Continuous-Flow Operating Sheaths  
for Hysteroscopes Ø 2,7 mm and Ø 2,9 mm



**Diagnostic-Continuous-Flow-Inner Sheath, 1 stopcock, rigid**

working length		Outer Ø
0° - 300 mm		4,0
<b>260 mm</b>	<b>R 213-037260-000</b>	
30° - 300 mm		4,0
<b>260 mm</b>	<b>R 213-037260-030</b>	



**Diagnostic-Continuous-Flow-Outer Sheath, 1 stopcock, rigid**

working length		Outer Ø
0°, 30° - 300 mm, suitable for R213-037260-000, R213-037260-030		5,0
<b>240 mm</b>	<b>R 213-050260-000</b>	



**Obturator**

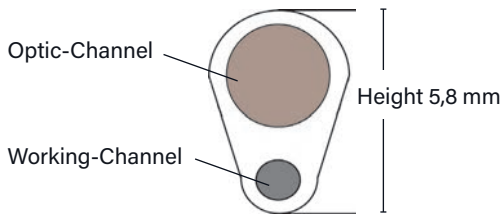
suitable for R213-050260-000

**R 213-050300-000**

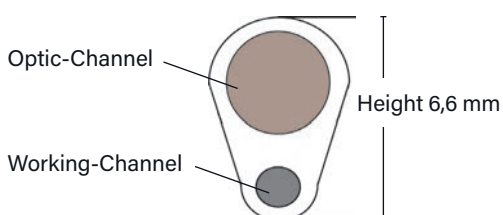
Continuous-Flow Operating Sheaths  
for Hysteroscopes Ø 2,7 mm and Ø 2,9 mm



working length	working channel	1 Instrument Port
<b>228 mm</b>	<b>5 CH.</b>	<b>R212-038300-000</b>



working length	Diagnostic-Continuous-Flow-Outer Sheath, 1 stopcock, rigid
<b>215 mm</b>	<b>30° - 300 mm, suitable for R212-038300-000</b> <b>R212-040300-000</b>

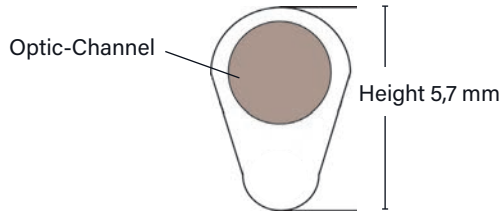


Hysteroscopy - Operating Sheaths  
for Hysteroscopes Ø 2,7 mm and Ø 2,9 mm



**1 Instrument Port, 2 stopcock, rigid**

working length	working channel	30° - 300 mm
<b>222 mm</b>	<b>5 CH.</b>	<b>R212-035248-101</b>





Continuous-Flow Operating Sheaths  
for Hysteroscopes Ø 4,0 mm



<b>Diagnostic-Continuous-Flow-Inner Sheath, 1 stopcock, rigid</b>		
working length		Outer Ø
0° - 300 mm		5,3
<b>260 mm</b>	<b>R213-054260-000</b>	
30° - 300 mm		5,3
<b>260 mm</b>	<b>R213-054260-030</b>	



<b>Diagnostic-Continuous-Flow-Outer Sheath, 1 stopcock, rigid</b>		
working length		Outer Ø
0°, 30° - 300 mm, suitable for R213-054260-000, R213-0542600-030		6,5
<b>240 mm</b>	<b>R213-065250-030</b>	



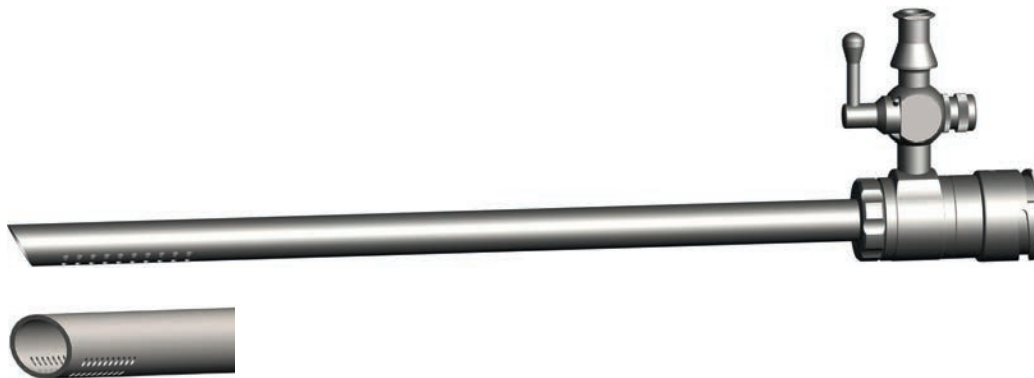
**Obturator**  
suitable for R213-065250-030  
**R213-065300-000**

Continuous-Flow Operating Sheaths  
for Hysteroscopes Ø 4,0 mm



**1 Instrument Port**

working length	working channel	30° - 300 mm	Outer Ø
<b>175 mm</b>	<b>7 CH.</b>	<b>R214-070000-030</b>	5,4



**Diagnostic-Continuous-Flow-Outer Sheath, 1 stopcock, rigid**

working length	30° - 300 mm, suitable for R214-070000-030	Outer Ø
<b>155 mm</b>	<b>R214-070200-030</b>	7,6



**Obturator**

suitable for R214-070200-030

**R214-070000-000**

WL 41 cm

Hysteroscopy Forceps,  
semi-rigid



Ø 5 [Char]

Ø 7 [Char]



Grasping Forceps, cup serrated

R292-017400-003



Cutting Biopsy Punch

R292-017400-002

R292-023400-002



PE-Forceps, cup, sharp

R292-017400-001

R292-023400-001



Alligator Forceps

R292-017400-011

R292-023400-011



Scissors, pointed tips

R292-017400-022

R292-023400-022



Grasping Forceps, cup serrated

R292-017400-004

R292-023400-004



Scissors, blunt tips

R292-017400-021

R292-023400-021

### Ring Applicator

with advanced handling: more safety for the user due to 3-Positions-System.

Position 0 = **Safety**

Position 1 = 1st ring

Position 2 = 2nd ring

Simplified assembly and disassembly due to **Click**-mechanism on the sliding bar.

Ø 6,0 mm

### First Incision

For use with Operating-Laparoscope



working length

327 mm

Complete with Loading Device and Conus suitable for OP-Laparoscope: STANDARD

**R120-060330-001**



Loading Device

**R120-060000-002**



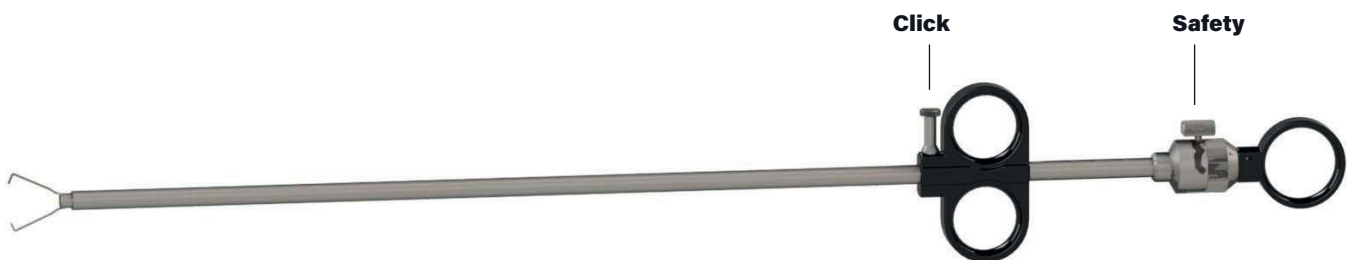
Conus Piece

**R120-060000-001**

Ø 6,5 mm

### Second Incision

For use with a regular Trocar Sleeve



working length

300 mm

Complete with Loading Device

**R120-065340-001**



Loading Device

**R120-060000-002**



Conus Piece

**R120-060000-001**

Ø 5 / 10 mm

Myoma Drill



working length    Ø 5,0 mm

**330 mm    R121-050320-01**

Ø 10,0 mm

**330 mm    R121-100330-01**

**COHEN Intra Uterine Cannula**  
with spring-loaded fixation, one large and one small cone



working length Complete

**170 mm R122-250170-000**

Cone alone, Ø 19 mm, small

**R122-190056-000**

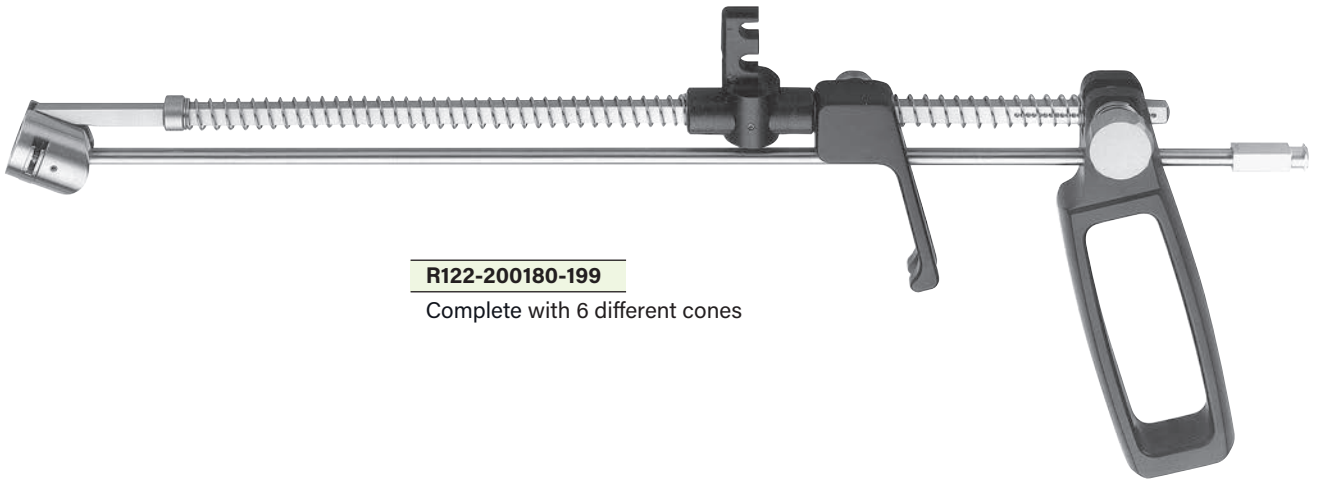
Cone alone, Ø 25 mm, large

**R122-250056-000**

Uterine Cannula allone







**R122-250170-001**

Uterus Manipulator



**R122-200180-199**

Complete with 6 different cones

	working length	∅	
	45 mm	3 mm	<b>R122-030045-000</b>
	55 mm	3 mm	<b>R122-030055-000</b>
	80 mm	8 mm	<b>R122-080080-000</b>
	100 mm	10 mm	<b>R122-100100-000</b>
	60 mm	25 mm	<b>R122-250060-000</b>
	70 mm	25 mm	<b>R122-250070-000</b>
	<b>Manipulator</b> alone, without cones		<b>R122-200180-000</b>

Coagulation electrodes, flexible, monopolar  
470 mm

Ball end



Ø 5 [Char]

R395-017450-001

Ø 7 [Char]

R395-023450-001

Ø 9 [Char]

R395-030450-001

Needle type



R395-017450-021

R395-023450-021

Loop



R395-023450-011

Bipolar electrodes, flexible  
360 mm



Ball end



Ø 5 [Char]

R396-000360-001

Needle type



Ø 5 [Char]

R396-000360-002



Ø 7,0 mm

**LOWSLEY retractor**

for manipulation of the bladder  
for perineal prostatectomy



working length

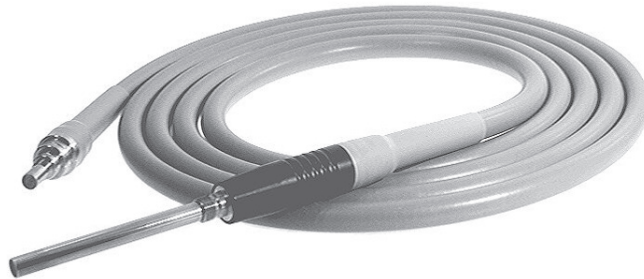
**210 mm** R139-070210-001 straight



working length

**300 mm** R139-070300-011 curved



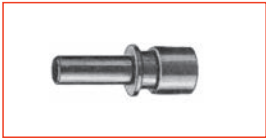


bonded for Halogen Light	Ø	length cm	fused for Xenon Light
<b>R900-035180-00</b>	3,5	180	<b>R901-035180-00</b>
<b>R900-035230-00</b>	3,5	230	<b>R901-035230-00</b>
<b>R900-035300-00</b>	3,5	300	<b>R901-035300-00</b>
<b>R900-035350-00</b>	3,5	350	<b>R901-035350-00</b>
<b>R900-048180-00</b>	4,8	180	<b>R901-048180-00</b>
<b>R900-048230-00</b>	4,8	230	<b>R901-048230-00</b>
<b>R900-048250-00</b>	4,8	250	<b>R901-048250-00</b>
<b>R900-048300-00</b>	4,8	300	<b>R901-048300-00</b>
<b>R900-048350-00</b>	4,8	350	<b>R901-048350-00</b>

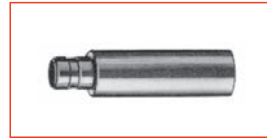
Other lengths available on demand.



IN



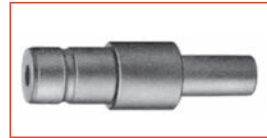
**R900-000000-01**  
Storz / Aesculap



**R900-000000-21**  
MLW



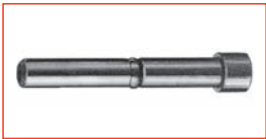
**R900-000000-03**  
Wolf / Henke Sass /  
Dyonics / Medicon /  
Comeg



**R900-000000-31**  
Volpi / Schöilly / RFO



**R900-000000-05**  
ACM / British / Codman



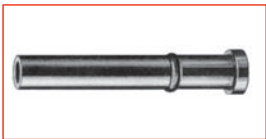
**R900-000000-07**  
Olympus

Endoscope-side



**R900-000000-09**  
Pentax

OUT



**R900-000000-11**  
Fuji



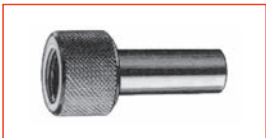
**R900-000000-02**  
Storz / Winter+IBE /  
Aesculap



**R900-000000-13**  
Heine-Optotechnik



**R900-000000-04**  
Wolf



**R900-000000-15**  
Winter+IBE



**R900-000000-06**  
ACM / British / Codman



**R900-000000-16**  
Stryker



**R900-000000-08**  
Olympus

# FULL HD-Camera



## Full HD-Camera

**What matters today: Full HD resolution,  
impressive handling, good economical solution**

- Full HD-Camera
- Integrated LED-Light-Source
- Photo and video documentation in Full HD

What the players in the field of minimally invasive medicine expect today from a camera is the combination of great resolution, natural color reproduction, high quality manufacturing, and the greatest ease of use possible. The Full HD-Camera is the result of all these requirements. It produces sharp, true-color images, and is characterized by a high degree of user-friendliness. The Full HD-Camera provides targeted profiles that enable the diagnosis and treatment of the most important medical applications: laparoscopy, arthroscopy, hysteroscopy and urology.

The 3-in-1 solution, combining camera, light source and HD capturing, means only one device is needed. This saves space in the operating room and relieves budget pressures. Rounding out the benefits of the Full HD-Camera is a contemporary, sophisticated design. The compelling, reliable technology makes the Full HD-Camera the perfect choice for demanding target groups.

We offer services worldwide for the Full HD-Camera.



The right product for  
the right market.

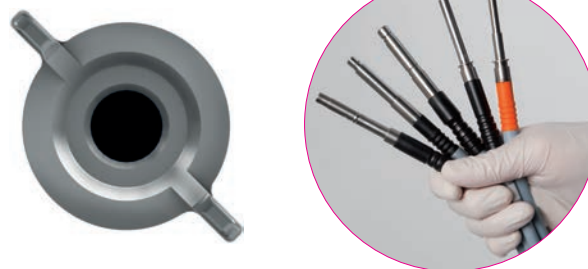
## Full HD-Camera

The Camera head features an ergonomic design and is ideally suited for all indications. The pre-set application profiles make the camera a plug and play device. The brilliant image quality makes it the perfect camera for the main endoscopic applications. However, the user has the possibility to adjust the image as desired.



## LED-Light Source

The LED-Light Source has a universal fiber optic cable receptacle compatible with Storz, Olympus, ACMI, and Wolf light cable adapters. The intensity of the Light Source is adjustable. The light intensity is 1,400 lumens. After an operating time of 10,000 hours, We guarantees a minimum light output of at least 90 %.



## HD-Capturing

The capture unit comes with a USB flash/hard drive interface in which images and videos are recorded in Full HD quality. An external keyboard is used to conveniently input patient data. In addition, every image and video has a time stamp as well as the patient data on it. Through the "New Patient" function it is easy to separate cases and to summarize all videos and photos.



## HD-Camera

**The one for all cases: high quality, easy to use,  
best cost**

- HD-Camera
- Integrated LED-Light-Source
- Photo and video documentation in HD

The classic three-in-one HD Camera for cost-sensitive markets in proven quality. New customer demands require new solutions. In fast growing markets, device costs can be adjusted flexibly to the individual circumstances of the hospital or doctor's practice.

The new HD-Camera does exactly this. It is suitable for the fields of laparoscopy, arthroscopy, hysteroscopy and urology. The three-in-one solution: HD-Camera, LED-Light Source and HD-Capturing are available in one device. The HD-Camera, however, is still user friendly and intuitive to use. The picture quality is brilliant.

The device is approved worldwide and service is available globally.



Three connections for three devices in one, easily aligned for quick set up.



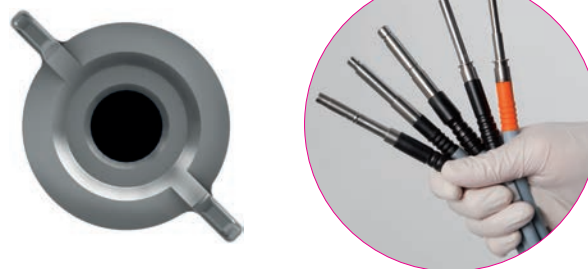
## HD-Camera

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## HD-Capturing

An SD storage card interface is available when selecting the capture option to record camera and video images. Photos and videos are saved in HD quality. The amount of memory needed and the speed of saving the data are reduced with an optimal image quality.



## Zoom coupler

- Focal length: 16-34 mm
- Image size from circular to full size
- C-Mount camera connection
- Sterilization methods: autoclavation



## Keyboard

- Medical keyboard (english)  
for patient data input
- Housing material: Silicon
- Interface: PS/2
- Color: grey



## HD-Capturing

- Autoclavable
- Flexible
- Light weighted
- Bend protected



## Accessories

### Devices

Item No.	Description
RHDC1100-L04	Full HD-Camera Head
RHDC1100-L01	Full HD-Camera Control Unit, LED-Light Source, HD-Capturing
RHDC1000-L04	HD-Camera Head
RHDC1000-L01	HD-Camera Control Unit, LED-Light Source, HD-Capturing

### Accessories

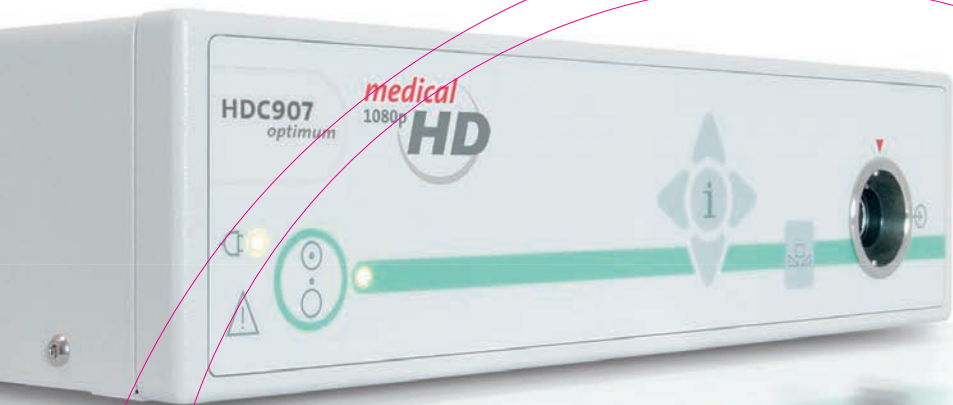
Part No.	Description
RZOOM-L01	Videocoupler Zoom, Focal length = 16-34 mm (LAP, ARTHRO, HYS, URO, ENT), autoclavable
RURO-L01	URO-Videocoupler 18 mm, 90°
RKeyboard-L01	Medical Keyboard (EN)
R900-000000-07	Adapter for light cable, Light Source, Olympus
R900-000000-01	Adapter for light cable, Light Source, Storz
R900-000000-03	Adapter for light cable, Light Source, Wolf
R900-000000-02	Adapter for light cable, endoscope, Storz/Olympus
R900-000000-04	Adapter for light cable, endoscope, Wolf
R900-000000-06	Adapter for light cable, endoscope, ACMI
R900-048180-00	Light cable, 1.8 m, Ø 4.8 mm
R900-048230-00	Light cable, 2.3 m, Ø 4.8 mm
R900-048300-00	Light cable, 3.0 m, Ø 4.8 mm

Power supply cord and further accessories available upon request.

Technical Data	Full HD-Camera	HD-Camera
Frame rate	60 Hz	60 Hz
Image sensor	1/3" CMOS-Chip	1/3" CMOS-Chip
Resolution (h x v)	1920 x 1080 pixels, output	1280 x 720 pixels, output
Dimensions	Ø = 39,5 mm, L = 123,5 mm	Ø = 39,5 mm, L = 123,5 mm
Weight	300 g/10,5 oz (incl. cable)	300 g/10,5 oz (incl. cable)
Coupling mechanism	C-mount	C-mount
Cable length	3 m/9,8 ft	3 m/9,8 ft
Disinfection/Sterilization	Soakable, STERRAD®	Soakable, STERRAD®
Power supply	100-240 V~	100-240 V~
Power consumption	148 VA	148 VA
Outputs	HDMI, DVI for Full HD, S-Video for ext. capture/printers, PC interface USB 2.0, PS/2, Remote	2x HDMI, PC interface USB 2.0, PS/2, Remote
LED-Light Source		
Lamp	LED	LED
Color temperature	6.500 K	6.500 K
Lumen maintenance	90 % after 10,000 hours	90 % after 10,000 hours
Size	Optimized for light guides 4,8 mm	Optimized for light guides Ø 4,8 mm
Adapter compatibility	Storz, Olympus, Wolf, ACMI	Storz, Olympus, Wolf, ACMI
HD-Capturing		
Memory interface	Records to USB fl ash drive and/ or external USB hard drive	SD memory card
Image format	JPEG	JPEG
Video Codec	MPEG-4, H.264	MPEG-4, H.264
Resolution	1920 x 1080 pixels	1920 x 1080 pixels
Complete system		
Operating conditions	10-40 °C/50-104 °F	10-40 °C/50-104 °F
Protection against electrical shock	Body Float	Body Float
Video Codec Means of protection against electrical shock	Class I	Class I
Dimensions (w x h x d)	381 x 149 x 379 mm	381 x 149 x 379 mm
Weight	5,8 kg	5,8 kg

# HD CAMERAs

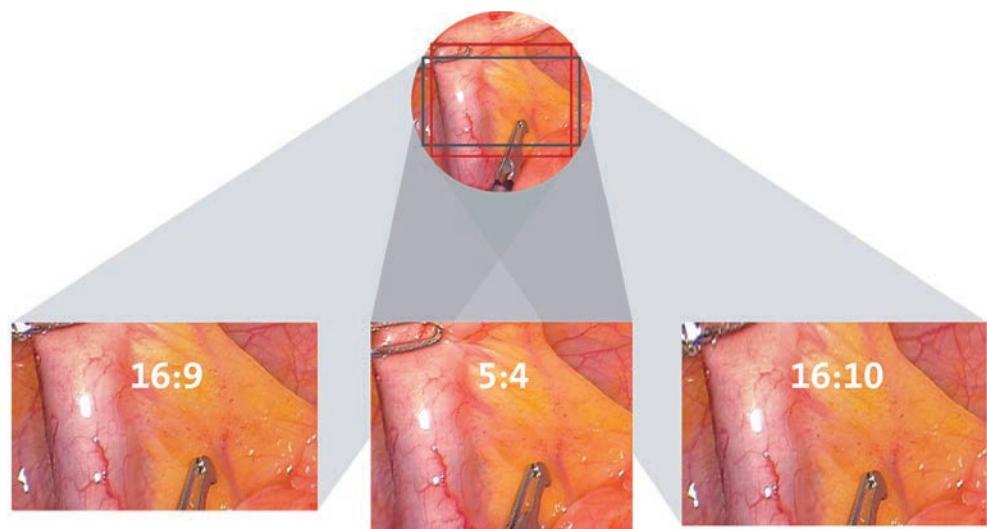
## Classic Line



autoclavable

## Choose your HD format

In terms of image resolution High Definition video technology has been established in the field of Minimally Invasive Surgery. The switch from the classic 5:4 monitor format to the latest 16:9 or 16:10 widescreen monitors is ongoing. Thus customers find different HD video formats on the market, each with individual benefits and pitfalls for endoscopic imaging. The Cameras offer all formats, so users are free to select their personally preferred format.



**1080p/1080i**

1920 x 1080 pixels

**16:9 - format with the highest impact on the video market HD video standards 1080p and 1080i**

**SXGA**

1280 x 1024 pixels

**5:4 - the ideal video format for Minimally Invasive Surgery**

**WUXGA**

1920 x 1200 pixels

**16:10 - optimum format for latest medical grade monitors HD video standard WUXGA (1920 x 1200 pixels)**



Further information: [www.Medical-HD.com](http://www.Medical-HD.com)

## Video modes

The HDC907optimum supports 1080i and 1080p.

**Progressive scan (p)** is a method transmitting moving images in which all the lines of each frame are drawn in sequence. Benefits of this technology are higher vertical resolution video images.

It is the ideal mode for LCD monitors, but unfortunately not supported by current HD capture systems, which are limited to 1080i.

With the interlace (i) technology only every second horizontal line per frame is transmitted.

Two serial complementary images in sequence deliver the necessary visual information needed for a complete video image. Pitfalls of this technology are several "interlaced" effects, e. g. motion artifacts, interline twitter and blurring.



Interlace

Progressive scan

## Intuitive user guidance via optimized on screen display

- Appropriate for all MIS applications guaranteeing excellent image quality
- Seven selectable application-optimized camera settings
- Ten individually adjustable user settings



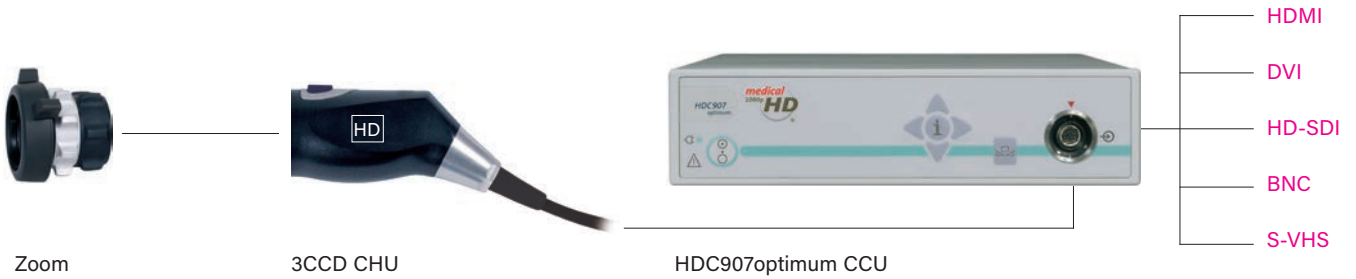
Easy to change: objective, camera head and camera cable

## Latest output options

- Digital output of image data for modern capture systems and clinical networks
- 2x HDMI/1x HDMI\*, 1x DVI, 1x HD-SDI

\*depends on model variation

From input to output: the HD chain



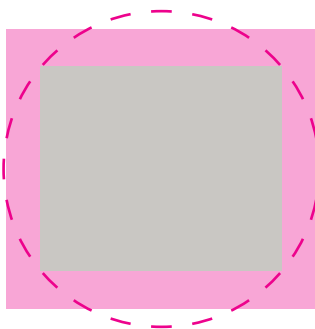
Videocoupler Zoom

- Focal length: 16-34 mm
- Parfocal\*
- Brilliant optic
- Quick coupler
- Waterproof
- Autoclavable
- C-mount
- Ergonomic Design

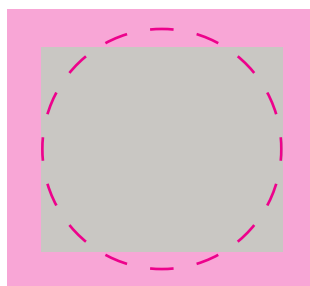


Videocoupler Zoom

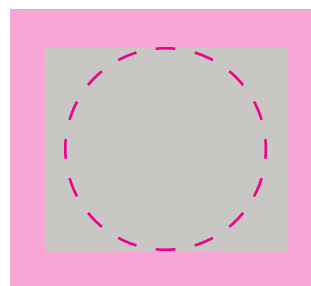
One coupler for optimum indication settings



LAP



ENT



ARTHRO, HYS, URO

\*A parfocal lens is a lens that stays in focus when magnification/focal length is changed



## HDC907optimum

### 3CCD Medical-HD® Camera

- Fully digital 3CCD Camera Head
- Optional: autoclavable Camera Head
- Moderate operating temperature
- Exchangeable camera cable
- C-mount thread for easy coupler exchange and free choice of couplers



#### Devices

Item No.	Description
RHDC907-L01	HDC907optimum Control Unit
RHDC907-L02	HDC907optimum Camera Head PAL or NTSC (non-autoclavable)
RHDC907-L03	HDC907optimum Camera Head PAL or NTSC (autoclavable)

#### Accessories

Part No.	Description
RZOOM-L01	Videocoupler Zoom, Focal length = 16-34 mm, (LAP, ARTHRO, HYS, URO, ENT), autoclavable
RURO-L01	URO-Videocoupler, 18 mm, 90°
RCCB-L02	Camera cable, black

Power supply cord and further accessories available upon request.

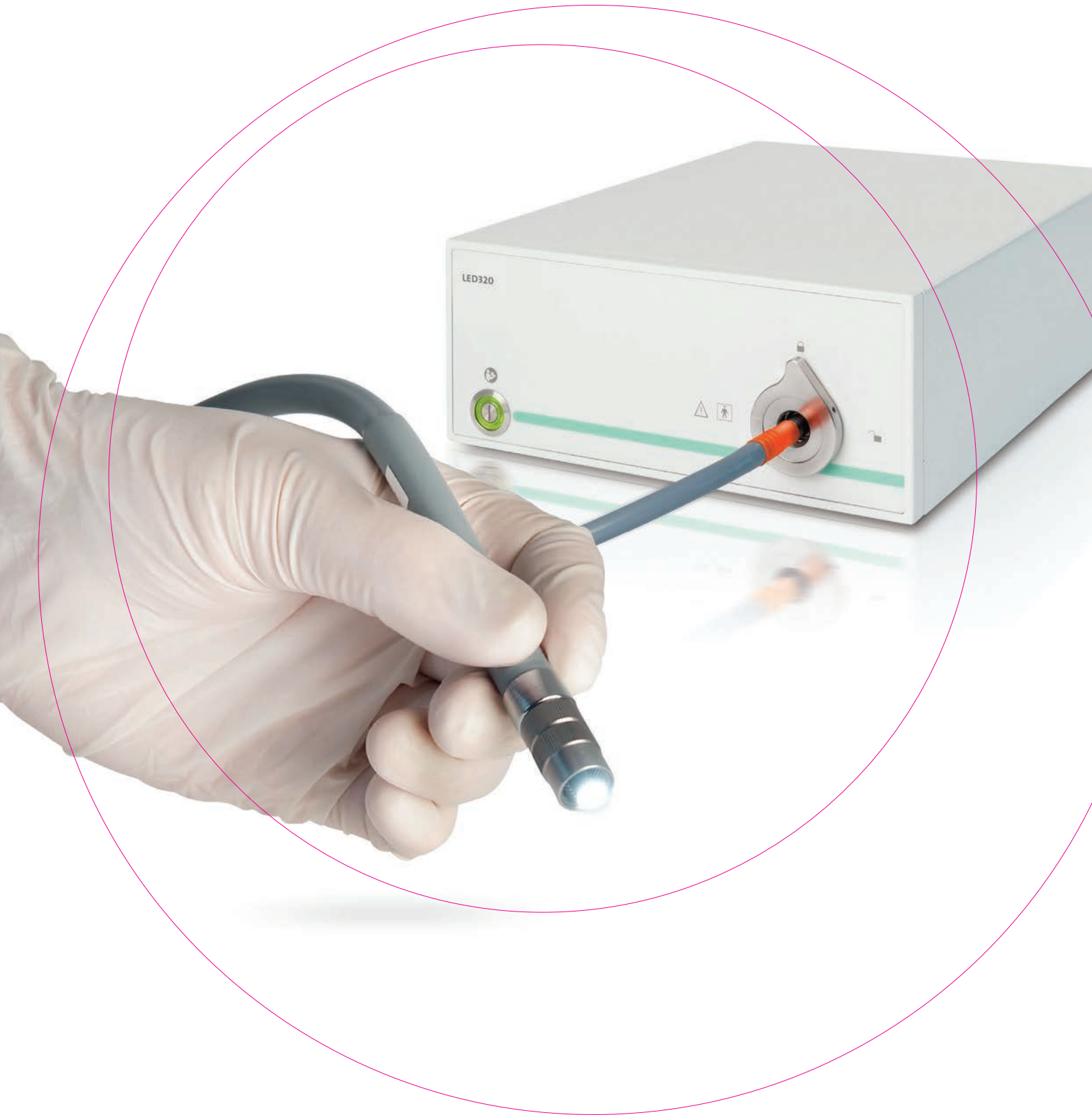


Technical Data	HDC907optimum
Camera Head Unit (CHU)	Medical-HD® 1080p 3CCD Camera Head
Video standards	SXGA 1280 (H) x 1024 (V), horizontal resolution 1024 lines WUXGA 1920 (H) x 1200 (V), horizontal resolution 1200 lines 1080p 1920 (H) x 1080 (V), horizontal resolution 1080 lines
Sensitivity	1.5 lux
Minimum illumination	3 x 0.9 lux
AGC-Max	+18 dB
Operation	2 programmable remote head keys (user defined settings with 10 variable key functions)
Safety	Waterproofed according to IEC529, classification IPX7, completely soakable with attached EFO and camera cable (with screwed on sealing cap), Classification CF (Degree of protection against electric shock: applied part of type CF), Isolation resistance test max 500 V DC between applied part and CCU housing, autoclavable
Dimension	Ø 40 mm, L = 120 mm/Ø 1.57 in, L = 4.72 in (length incl. zoom and quick coupling)
Weight	210 g/7.4 oz (incl. zoom and quick coupling)
URO-Videocoupler	f = 18 mm, easy focusing – focus ring can be operated from left or right
Zoom objective	f = 16-34 mm
Digital zoom	2 x
Quick coupling	Fits rigid endoscopes (ocular), ISO eye piece compatible (ISO 8600-1)
Camera cable	3 m/9.8 ft highly flexible special cable, waterproof, replaceable w/o special tools short circuit proof
Camera Control Unit (CCU)	Digital signal process, +6 dB with interference suppression, continuous shutter: 1/50 to 1/16000 s, automatic signal amplification up to 400 %, automatic system check routine, setup menu for all settings, automatic white balance with digital long time memory. COLORAMA color adjustments, measuring areas SPOT and INTEGRAL, adjustable video
Signal/Noise ratio	> 62 dB
Horizontal resolution	1024 lines (SXGA), 1080 (1080i/1080p), 1200 (WUXGA)
Operation	Easy operation with membrane key: ON/OFF, WHITE BALANCE, 3 measuring areas selectable (SPOT large/small, INTEGRAL), test pattern, video level, manual COLORAMA color fine balance
Outputs	1x HD-DVI, 2x HDMI/1x HDMI*, 1x HD-SDI, 2x BNC (FBAS), 2x Y/C (S-VHS)
Interfaces	PC Interface RS 232 C, Remote (3.5 mm/1/8 in stereo jack)
Mains	Medical global power adapter 100-240 V AC +/-10 %, 50-60 Hz
Current consumption	Max. 400 mA
Classifications	Protection Class I, Type CF, IP 20
Fuses	2 x 250 V, T 0.8 A
Dimensions (w x h x d)	267 x 69 x 360 mm/10.5 x 2.7 x 14.2 in
Weight	3.9 kg/8.6 lb

\*depends on model variation

# LIGHT SOURCE

## Classic Line





## LED320

**LED320** is a high brightness single white light LED Light Source for Minimally Invasive Medicine. It's lumen output surpasses 180 W Xenon-Light Sources. Due to its extremely long life expectancy (up to 10 years) the cost intensive bulb replacements as known from Xenon-Light Sources are no longer necessary.

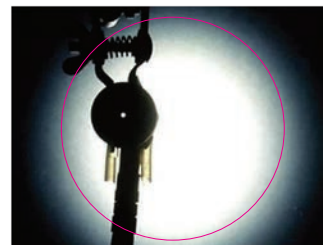
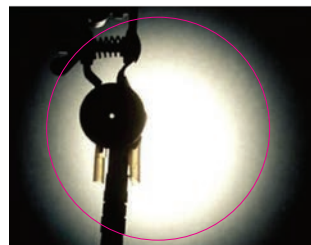
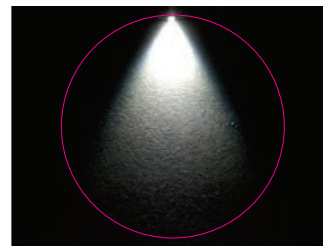
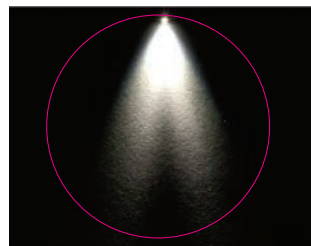
The **LED320** exceeds the light output of 180 W Xenon-Light Sources without emitting UV or IR light. This leads to less heat transmission to the endoscope and reduces the risk of burning tissue. Additional advantages of the LED320 are the uniformly distributed illumination and the bright and more homogeneous light spot.

The **LED320** is instantly ready for use as no warm up or cool down is necessary. The multi light cable socket enables the use of light cables from different manufacturers.

**LED320** has not only reduced the need for service while increasing performance, additionally it also contributes to saving the environment as no Lead (Pb) or Mercury (Hg) is used.

## LED vs. Xenon

- LED light spot is brighter and more homogeneous than Xenon
- Brighter and whiter light; optimized for CCD and CMOS sensors
- Uniformly distributed illumination
- Reduced heat transmission to the endoscope due to the elimination of UV and IR light



180 W Xenon

LED320

## High performance endoscopic LED-Light Source

- High lumen output (superior to 180 W Xenon)
- Cost savings due to extremely long life expectancy and power saving
- No annual bulb change is necessary
- Instant ON/OFF (no warm up or cool down)
- Applicable for all endoscopic indications
- Up to 10 years of bulb life



### Accessories

Part No.	Description
RLED-L01	Light Source LED320 with multi light cable socket

Power supply cord and further accessories available upon request.

### Ease of use

- Multi light cable socket enables use of light cables from different manufacturers (Storz, Wolf, ACMI, Olympus)
- Single-handed exchange of light cable



### Technical Data

Lamp	LED
Color temperature	6.500 K
Lumen maintenance	90 % after 10.000 h
Operation	Power switch ON/OFF
Mains	Medical world power supply, 100 to 120 V AC and 220 to 240 V AC $\pm$ 10 %, 47/63 Hz
Power consumption	175 VA
Current consumption	115 V: 1.4 A 230 V: 0.8 A
Fuse designation	T 4.0 AH, 250 V, UL-recognized
Classifications	Protection Class I, Type BF, IP 20
Dimensions (w x h x d)	268 x 122 x 370 mm
Weight	4.9 kg

## XL300

Top performance endoscopic Xenon-Light Source with micro processor control and LCD display

- 300 W Xenon lamp
- Lamp-Life LCD display and electronic lamp change indicator
- Multi standard exchangeable light cable socket
- Easy lamp replacement
- Brightness control



### Devices

Item No.	Description
RXL300-L01	Light Source with light cable socket, Storz
RXL300-L03	Light Source with light cable socket, Wolf

### Accessories










Part No.	Description
R900-000000-07	Adapter for light cable, Light Source, Olympus
R900-000000-01	Adapter for light cable, Light Source, Storz
R900-000000-03	Adapter for light cable, Light Source, Wolf
R900-000000-02	Adapter for light cable, endoscope, Storz/Olympus
R900-000000-04	Adapter for light cable, endoscope, Wolf
R900-000000-06	Adapter for light cable, endoscope, ACMI
R901-048180-00	Light cable for Xenon light sources, 1.8 m, Ø 4.8 mm
R901-048230-00	Light cable for Xenon light sources, 2.3 m, Ø 4.8 mm
R901-048300-00	Light cable for Xenon light sources, 3.0 m, Ø 4.8 mm
RXBO-L03	Replacement lamp module XL300

Power supply cord and further accessories available upon request.

**Technical Data**

Lamp	Cermax Xenon LX 300 BF 300 W
Color temperature	5.600 K
Service life	Min. 600 h
Operation	Membrane keys OFF Xenon (ON)
Mains	Medical world power supply, (AVS: automatic voltage switch), 100 to 120 V AC and 220 to 240 V AC ± 10 %, 50/60 Hz
Current consumption	4.8 to 2 A (at the end of the Xenon lamp lifespan up to 6 to 2.7 A)
Peak current	Max. 10 to 5 A (on ignition)
Fuses	2 x 250 V T 6.3 A (SB)
Classifications	Protection Class I, Type CF, IP 20
Dimensions (w x h x d)	267 x 138 x 360 mm/10.5 x 5.4 x 14.2 in
Weight	7.8 kg/17.2 lb

## Combination example

Light Source	Light Cable	Endoscope
		
<b>R900-000000-07, Olympus</b>		<b>R900-000000-06, ACMI</b>
		
<b>R900-000000-01, Storz</b>		<b>R900-000000-02, Storz</b>
		
<b>R900-000000-03, Wolf</b>		<b>R900-000000-04, Wolf</b>

# LED 3000

## HIGH INTENSITY LIGHTSOURCE





- PHASER® Technology Included
- Turret multi connector (optional)
- Low noise, low heat conduction
- Pure daylight quality

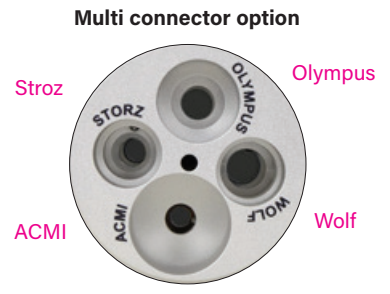
### Devices

Item No.	Description
<b>RLED3000S</b>	Storz (standard) adapter, automatic light intensity control
<b>RLED3000W</b>	Wolf adapter, automatic light intensity control
<b>RLED3000O</b>	Olympus adapter, automatic light intensity control
<b>RLED3000T</b>	Turret adapter, automatic light intensity control



### Turret, multi connector (optional):

Olympus	
ACMI	
Wolf	
Storz	



### Technical Data

Lamp	Daylight quality, 6000 K (+/-500 K) Lifetime: ≤30.000 hr
Voltage range (current consumption)	100-240 V (130 VA)
Frequency	50-60 Hz
Device protection	2x T6, 3 A
Video In	1x Video
Protection class (acc. to IEC 60601-1)	I
Safety class	BF
IP Code	20
Standard	IEC 60601-1-2
Device classification (acc. to MDD 93/42/EEC)	I
Dimensions (w x h x d)	355 x 120 x 340 mm
Weight	approx. 10 kg
Delivery contains	Light source, mains cable, user manual, BNC cable



Light guide connection  
Storz, (standard)



## LED 1000

### HIGH INTENSITY LIGHTSOURCE

- Low noise, low heat conduction
- Electronical light control via buttons
- Pure daylight quality
- Waterproof touch control panel

#### Devices

Item No.	Description
<b>RLED1000S</b>	Storz (standard) adapter, automatic light intensity control
<b>RLED1000W</b>	Wolf adapter, automatic light intensity control
<b>RLED1000O</b>	Olympus adapter, automatic light intensity control



#### Technical Data

Lamp	Daylight quality, 6500 K Lifetime: > 20.000 hr
Light guide connection	Storz, Wolf adapter
Voltage range (current consumption)	100-240 V (130 VA)
Frequency	50-60 Hz
Device protection	2x T3, 15 A
Video In	1x Video
Protection class (acc.to IEC 60601-1)	I
Safety class	BF
IP code	20
Standard	IEC 60601-1-2
Device classification (acc. to MDD 93/42/EEC)	I
Dimensions (w x h x d)	355 x 103 x 253 mm
Weight	approx. 4,5 kg
Delivery contains	Light source, mains cable, user manual, BNC cable (optional)

## HALOGEN HL 150

- Small compact design
- Exchangeable lightguide adapter
- Mechanical diaphragm
- Low heat conduction

### Devices

Item No.	Description
RHL150	Storz (standard) adapter



### Technical Data

Lamp	150 W (1 Halogen reflector lamp), 15 V
Light guide connection	Storz (standard), Wolf, Olympus, ACMI
Intensity control	Stepless, mechanical diaphragm
System	Power supply: 115/230 V (+/- 10%) switchable Fine fuses: 5x20mm (230 V: T1,6 A   115 V: T3,15 A) Power consumption: max. 190 VA
Protection class (acc. to IEC 60601-1)	I
Safety class	BF
IP Code	20
Standard	IEC 60601-1-2
Device classification (acc. to MDD 93/42/EEC)	I
Dimensions (w x h x d)	175 x 82,5 x 202 mm
Weight	approx. 2,5 kg
Delivery contains	Light source, mains cable, user manual, BNC cable

# PUMP SYSTEM

## Multi - Indication Pump



## Multi-Indication Pump

### Thinking ahead: Four devices in one

4 in 1

- Laparoscopy
- Arthroscopy
- Hysteroscopy
- Urology

### Resource-saving, simple, innovative

Different Pump Systems have been used for each indication up until now. This means hospitals increasingly face problems pertaining to training time and effort, as well as logistics.

The Multi-Indication Pump facilitates everyday routine hospital activities. The ingenious device combines a streamlined design, easy operation, and maximum safety. Key parameters are seen at a glance, allowing for quick and correct actions by personnel. Clinical tests have shown that the device – and with all four indications – can be operated with confidence after just one training session.

Stringent safety measures reliably prevent overpressure in the application area. Each device is the culmination of over 40 years of expertise and experience in the field of developing pumps.



Innovative: The Pump head is integrated in the housing and allows easy insertion of the tube.

## Patient safety

The Pump can be used with up to four indications. Each indication can be unlocked individually as well as combined with one another. The automatic instrument recognition optimally adjusts the Pump to the instrument to be used. A transponder in the tube ensures the highest level of patient safety and maximizes pump output. The device is also equipped with a vacuum pump for suction, a 5.7" touch screen display, and an optional foot switch. The Pump is designed for more than 15 languages.



An original tube set with transponder protection.

### Accessories

Part No.	Description
RAPUH302-L01	Pump

### Accessories

Part No.	Description
RT0505-01	Tube set for Irrigation, disposable
RT0506-01	Tube set for Irrigation, reusable, 20 uses
RT0500-01	Day patient tube set for Irrigation, disposable*
RT0501-01	Day tube for Irrigation, disposable*
RT0502-01	Tube set for Suction, disposable
RT0503-01	Tube set for Suction, 2 connectors, disposable
RT0504-01	Tube set for Vacuum, incl. Filter, disposable
RT0550-01	Transponder, Indications LAP, ARTHRO, HYS and URO
RT0551-01	Transponder, Indication LAP
RT0552-01	Transponder, Indication ARTHRO
RT0553-01	Transponder, Indication HYS
RT0554-01	Transponder, Indication URO
RZ0223-01	Differential volume scale for HYS and URO



Tube set for Irrigation, disposable  
(RT0505-01)



Tube set for Irrigation, reusable, 20 uses  
(RT0506-01)



Transponder

\*Indications LAP, ARTHRO

Power supply cord and further accessories available upon request.



Differential volume scale  
(RZ0223-01)

**Technical Data**

Pressure range	Laparoscopy: not adjustable Arthroscopy: 5-150 mmHg Hysteroscopy: 15-150 mmHg Urology: 15-150 mmHg
Flow range	Laparoscopy: 1.0-1.8 l/min Arthroscopy: 0.1-1.8 l/min Hysteroscopy: 50-500 ml/min Urology: 50-500 ml/min
Suction capacity	Max. 2 l/min (depending on outflow cannula)
Power supply	100-240 V~
Frequency	50-60 Hz
Power consumption	80 VA
Current consumption	100 V: 0.8 A 240 V: 0.3 A
Classifications	Protection Class I, Type BF, IP 41
Dimensions (w x h x d)	381 x 149 x 379 mm
Weight	6.3 kg

## Laparoscopy

All functions required of the Pump can be adjusted via the touch screen with easy to use controls. Unambiguousness ensures maximum safety during surgery.



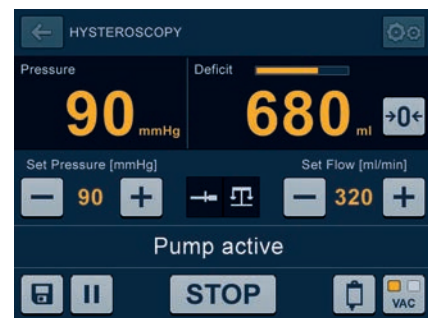
## Arthroscopy

The clearly arranged and intuitive graphical user interface makes it possible to see all key parameters at a glance. The wash function optimizes the visual conditions in the joint. Flow and pressure are adjustable. Highly stringent safety standards prevent overpressure within the joint.



## Hysteroscopy

Pressure and flow are controlled intuitively via setting keys. A scale to measure the deficit is an available option. The display prominently depicts the status of the fluid deficit.



## Urology

Security is the alpha and omega in the field of Minimally Invasive Surgery. The display design optimally supports handling of the Pump. Important data immediately catch the eye and action prompts facilitate proper operation of the Pump, thereby increasing safety considerably. A deficit measurement is an available option.







# PUMP

## Systems



## A127

### Pump for arthroscopy

- 1.5 l/min max. flow
- Optimized flow regulation done by automatic instrument detection and software control
- Wash function to improve visibility
- within the joint
- Flexible use due to pole mounting
- Highest patient safety due to transponder protected tube set



#### Accessories

Part No.	Description
RA127-L01	Pump for arthroscopy

#### Accessories

Part No.	Description
RT0449-01	Tube set with Spike and Luer-Lock connector male: Disposable, only Inflow, transponder protection (1 packaging = 10 pcs.)
RT0454-01	Reusable tube set, only inflow, 20 uses, transponder protection

Power supply cord and further accessories available upon request.



Pole mounting

#### Technical Data

Pressure range	5-150 mmHg
Max. flow	1.5 l/min $\pm$ 10 %
Mains	Medical world power supply, 100-240 V AC, 50-60 Hz
Power consumption	60 VA
Current consumption	100 V: 1.2 A 240 V: 0.6 A
Fuse designation	2x T 3.15 AH, 250 V
Classifications	Protection class I, Type BF, IP 41
Dimensions (w x h x d)*	240 x 103 x 221 mm
Weight	2.8 kg

\*without toggle screw

## A106

### Pump for arthroscopy

- Easy set up
- Automatic instrument calibration
- Clear visualization of operating site
- High safety standards avoid overpressure in the joint
- Remote control from sterile field

**Note:** The automatic instrument calibration finds the perfect set-up for each instrument.



#### Accessories

Part No.	Description
RA106-L01	Pump for arthroscopy

#### Accessories

Part No.	Description
RZ0449-01	Tube set with pressure chamber, Irrigation, with Spike and Luer-Lock connector male: Disposable, sterile (1 packaging = 10 pcs.)
RZ0454-01	Reusable, 20 uses, incl. 10 membranes
RZ1424-01	Disposable, sterile, Safe-Lock (1 packaging = 10 pcs.)
RZ0106-01	Foot pedal for Irrigation Pump for arthroscopy
RZ0545-01	Cable remote control

**Note:** Wash function only available when remote control or foot pedal is connected.

#### Technical Data

Pressure range	0-200 mmHg
Flow range	0.1-1.5 l/min
High pressure safety	300 mmHg
Power supply	100-240 V~
Frequency	50-60 Hz
Power consumption	75 VA
Current consumption	100 V: 1.0 A 240 V: 0.2 A
Classifications	Protection Class I, Type BF, IP 20
Dimensions (w x h x d)	265 x 137 x 390 mm
Weight	7.1 kg

Power supply cord and further accessories available upon request.

# P101

## Pump for laparoscopy

- Simple set up and operation
- Easy to load tube set
- Vacuum suction included



### Accessories

Part No.	Description
RP101-L01	Pump for laparoscopy, power supply: 220-240 V
RP101-L02	Pump for laparoscopy, power supply: 110-115 V

### Accessories

Part No.	Description
RZ0449-01	Tube set with pressure chamber, Irrigation, with Spike and Luer-Lock connector male: Disposable, sterile (1 packaging = 10 pcs.)
RZ0454-01	Reusable, 20 uses, incl. 10 membranes
RZ1425-01	Tube set, suction, reusable, 20 uses
RZ1426-01	Tube set, vacuum, reusable, 20 uses
RZ0553-01	Wire Hoop for Bemis Container
RZ0554-01	Bemis Container, 3 L, disposable (1 packaging = 2 pcs.)
RZ0555-01	Bemis Container, 3 L, disposable (1 packaging = 36 pcs.)
RZ0556-01	Filter P06, sterile

### Technical Data

Max. Flow Rate Irrigation	1.8 l/min (± 10 %)
Suction	1.8 l/min (+ 0.4/- 0.1 l/min)
Max. Pump Capacity	400 mmHg (± 50 mmHg)
Suction	Between -50 kpa and -60 kpa
Power Supply	100 V~/110-115 V~/220-240 V~
Frequency	50-60 Hz
Power consumption	55 VA
Current consumption	100 V: 0.5 A 230 V: 0.3 A
Classifications	Protection Class I, Type BF, IP 41
Dimensions (w x h x d)	280 x 137 x 408 mm
Weight	5.9 kg

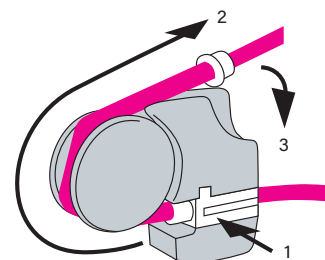
Power supply cord and further accessories available upon request.



# UP100

## Pump for urology

- Easy set up
- Automatic instrument calibration
- Precise control and regulation of pressure
- Clear visualization of operating site



Easy to load tube set in three steps.

### Accessories

Part No.	Description
RUP100-L01	Pump for arthroscopy

### Accessories

Part No.	Description
RZ0449-01	Tube set with pressure chamber, Irrigation, with Spike and Luer-Lock connector male: Disposable, sterile (1 packaging = 10 pcs.)
RZ0454-01	Reusable, 20 uses, incl. 10 membranes
RZ1406-01	Tube set, outflow, disposable, sterile (1 packaging = 10 pcs.)

Power supply cord and further accessories available upon request.

Technical Data	
Pressure range	15-150 mmHg
Flow range	30-500 ml/min
High pressure safety	200 mmHg
Power supply	100-240 V~
Frequency	50-60 Hz
Power consumption	82 VA
Current consumption	100 V: 0.9 A 240 V: 0.3 A
Classifications	Protection Class I, Type BF, IP 41
Dimensions (w x h x d)	360 x 130 x 305 mm
Weight	6.3 kg

# H108

## Pump for hysteroscopy

- Easy set up and quickest start-up time
- Automatic instrument calibration
- Advanced safety for pressure and flow meeting highest international standards
- Optional fluid deficit monitoring



### Accessories

Part No.	Description
RH108-L01	Pump for hysteroscopy

### Accessories

Part No.	Description
RZ0449-01	Tube set with pressure chamber, Irrigation, with Spike and Luer-Lock connector male: Disposable, sterile (1 packaging = 10 pcs.)
RZ1424-01	Disposable, sterile, Safe-Lock (1 packaging = 10 pcs.)
RZ0454-01	Reusable, 20 uses, incl. 10 membranes
RZ1406-01	Tube set, outflow, disposable, sterile (1 packaging = 10 pcs.)
RZ0123-01	Bottle scale
RZ0554-01	Bemis Container, 3 L, disposable (1 packaging = 2 pcs.)
RZ0555-01	Bemis Container, 3 L, disposable (1 packaging = 36 pcs.)

### Technical Data

Pressure range	15-150 mmHg
Flow range	30-500 ml/min
High pressure safety	200 mmHg
Power supply	100-240 V~
Frequency	50-60 Hz
Power consumption	45 VA
Current consumption	100 V: 0.3 A 240 V: 0.2 A
Classifications	Protection Class I, Type BF, IP 41
Dimensions (w x h x d)	265 x 137 x 390 mm
Weight	4 kg

Power supply cord and further accessories available upon request.

## HM4

### Fluid Management System for hysteroscopy

- Optimized flow using FluidMatic
- Easy use and patient safety
- Large deficit and volume display for precise monitoring of fluid loss
- Several bag hooks and container holder
- Easy bag and container change

#### Accessories

Part No.	Description
RHM4-L01	RHM4 (RH100 – Name of Pump, RM100 – Name of scale unit)

#### Accessories

Part No.	Description
RZ0449-01	Tube set with pressure chamber, Irrigation, with Spike and Luer-Lock connector male: Disposable, sterile (1 packaging = 10 pcs.)
RZ0454-01	Reusable, 20 uses, incl. 10 membranes
RZ1406-01	Tube set, outflow, disposable, sterile (1 packaging = 10 pcs.)
RZ0553-01	Wire Hoop for Bemis Container
RZ0554-01	Bemis Container, 3 L, disposable (1 packaging = 2 pcs.)
RZ0555-01	Bemis Container, 3 L, disposable (1 packaging = 36 pcs.)

Power supply cord and further accessories available upon request.



#### Technical Data

Pressure range	15-150 mmHg
Flow range	30-500 ml/min
High pressure safety	200 mmHg
Power supply	100-240 V~
Frequency	50-60 Hz
Power consumption	82 VA
Current consumption	100 V: 0.9 A 240 V: 0.3 A
Classifications	Protection Class 1, Type BF, IP 41 (pump), IP 21 (scale)
Dimensions (w x h x d)	710 x 1400 x 810 mm
Weight	27 kg

Accessories available for **A106, P101, UP100, H108 and HM4**



Tube set with pressure chamber, Irrigation, with Spike and Luer-Lock connector male, disposable, sterile  
**(RZ0449-01)**



Tube set with pressure chamber, Irrigation, with Spike and Luer-Lock connector male\*, reusable, 20 uses, incl. 10 membranes  
**(RZ0454-01)**

Accessories **A127**



Tube set with Spike and Luer-Lock connector male, disposable, only Inflow, transponder protection  
**(RT0449-01)**



Tube set with Spike and Luer-Lock connector male, reusable, only inflow, 20 uses, transponder protection\*  
**(RT0454-01)**

\* Spikes, Luer-Lock and membranes as separate spareparts available  
Further accessories available upon request.



Accessories **HM4, H108, P101**

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Bottle scale (**RZ0123-01, for RH108 only**)  
and Bemis Container  
(disposable, **RZ0554-01 / RZ0555-01**)



Filter, sterile  
(**RZ0556-01, for RP101 only**)

Accessories **A106**

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Cable remote control  
(**RZ0545-01**)



Foot pedal for Irrigation  
Pump for arthroscopy  
(**RZ0106-01**)

**Note:** Wash function only available when remote control or foot pedal is connected.

Further accessories available upon request.



# INSUFFLATOR

## 50L - Insufflator



## 50 L-Insufflator

### Multi-mode Powerhouse

50 L

- Three additional modes – Bariatric, Pediatric and Vessel Harvesting
- High-end performance
- Gas heating – reusable and disposable

### Higher performance enhances safety in the operating room

The new **50 L-Insufflator** adds even more safety during minimally invasive surgeries delivering the performance needed – even under extreme conditions such as obesity of the patient to maintain a stable pneumoperitoneum.

In pediatric or vessel harvesting mode, the insufflator optimally controls according to the different anatomical requirements.

Another plus for all surgical procedures is its ease of use. The **50 L-Insufflator** has a color touchscreen for a high degree of user-friendliness.



A connector for standard insufflation tube sets. Disposable and autoclavable tube sets available.

## Accessories



Tube set, insufflation and gas heating, reusable, 100 uses  
(RZ0280)



High pressure hose CO<sub>2</sub>, gas connection, bottle DIN/device US (RZ5044-01)



CO<sub>2</sub> gas connector, angled  
(RZ5077-01)



NIST adapter for universal gas connector (RZ5074-01)

The gas port can be connected with all major gas supply systems. Various adapters and supply hoses are available for this purpose. Opening the device is not required.

### Devices

Item No.	Description
RFM134-L01	50 L-Insufflator

### Accessories

Part No.	Description
RZ0452-01	Tube set, insufflation, reusable, 20 uses
RZ0280	Tube set, insufflation and gas heating, reusable, 100 uses
RZ0293	Tube set, insufflation with filter, disposable, sterile
RZ0260	Tube set, insufflation and gas heating, disposable, sterile
RZ0536	Filter, single use, sterile, ISO-ISO
RZ5044-01	Hose for CO <sub>2</sub> gas bottle DIN/US, 1.5 m
RZ0499-01	Hose for CO <sub>2</sub> gas bottle Pin/US, 1.5 m
RZ5030-01	Hose for CO <sub>2</sub> central gas DIN/NIST, 3 m
RZ5031-01	Hose for CO <sub>2</sub> central gas DIN/NIST, 5 m
RZ5074-01	NIST adapter for universal gas connector (central gas supply EU)
RZ5077-01	CO <sub>2</sub> gas connector, angled
RZ5072-01	Sinter filter for universal gas connector (5 pcs.)

### Technical Data

Insufflation medium	Med. CO <sub>2</sub>
Max. gas flow	50 l/min
Pressure range	1-30 mmHg
Power supply	100-240 V~
Frequency	50-60 Hz
Power consumption	150 VA
Current consumption	100 V: 0.8 A 240 V: 0.3 A
Classifications	Protection Class I, Type BF, IP 21
Dimensions (w x h x d)	406 x 150 x 395 mm
Weight	10 kg

Power supply cord and further accessories available upon request.



# INSUFFLATOR

## 30L - Insufflator



## 30 L-Insufflator

### Safe technology that adapts to the patient

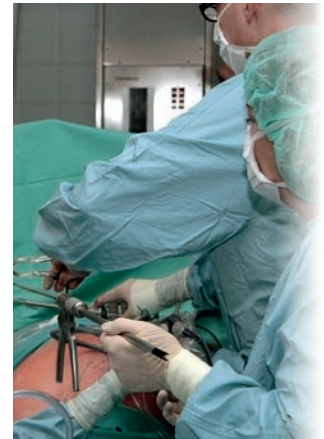
30 L

- Reliable base unit
- Highest safety
- Mature technology

### Easy to use, universal, efficient

A highly reliable device for demand of daily hospital routines. Easy to use by the staff and comprehensive safety components to protect patients.

The maximum flow capacity is 30 liters per minute. The start settings for flow and pressure are customized individually. The Insufflator has a reliable venting system that safely reduces excess pressure in the abdomen. A exchangeable gas filter protects the device from gas supply contamination.



A connector for almost all standard insufflation tubes. Disposable and autoclavable tube sets available.





## Accessories



Tube set, insufflation and gas heating, reusable, 100 uses  
(RZ1422-01)



High pressure hose CO<sub>2</sub>, gas connection, bottle DIN/device US (RZ5044-01)



Gas connector, angled  
(RZ5071-01)



NIST adapter for universal gas connector (RZ5074-01)

The gas port can be connected with all major gas supply systems. Various adapters and supply hoses are available for this purpose. Opening the device is not required.

### Devices

Item No.	Description
RF128-L01	30 L-Insufflator

### Accessories

Part No.	Description
RZ0452-01	Tube set, insufflation, reusable, 20 uses
RZ1422-01	Tube set, insufflation with filter, disposable, sterile
RZ0536	Filter, single use, sterile, ISO-ISO
RZ5044-01	Hose for CO <sub>2</sub> gas bottle DIN/US, 1.5 m
RZ0499-01	Hose for CO <sub>2</sub> gas bottle Pin/US, 1.5 m
RZ5030-01	Hose for CO <sub>2</sub> central gas DIN/NIST, 3 m
RZ5031-01	Hose for CO <sub>2</sub> central gas DIN/NIST, 5 m
RZ5074-01	NIST adapter for universal gas connector (central gas supply EU)
RZ5071-01	Gas connector, angled
RZ5072-01	Sinterfilter for universal gas connector (5 pcs.)

### Technical Data

Insufflation medium	Med. CO <sub>2</sub>
Max. gas flow	30 l/min
Pressure range	1-30 mmHg
Power supply	100-240 V~
Frequency	50-60 Hz
Power consumption	150 VA
Current consumption	100 V: 0.5 A 240 V: 0.2 A
Classifications	Protection Class I, Type BF, IP 41
Dimensions (w x h x d)	381 x 149 x 379 mm
Weight	7.5 kg

Power supply cord and further accessories available upon request.



# INSUFFLATOR

## Classic Line



## F102

### Insufflator for laparoscopy

- 20 l/min flow
- Easy set up
- High safety
- ISO standard at patient exit
- User-programmable



#### Accessories

Item No.	Description
RF102-L04	Insufflator for laparoscopy, gas connection CO <sub>2</sub> , US

#### Accessories

Part No.	Description
RZ0452-01	Tube set, insufflation, reusable, 20 uses
RZ1422-01	Tube set, insufflation with fi lter, disposable, sterile
RZ0536	Filter, single use only, sterile, ISO-ISO
RZ5044-01	High pressure hose CO <sub>2</sub> , Bottle connection: DIN, Device connection: US, Length: 1.5 m
RZ5030-01	High pressure hose CO <sub>2</sub> for central gas supply, 3 m, NIST/DIN
RZ5031-01	High pressure hose CO <sub>2</sub> for central gas supply, 5 m, NIST/DIN
RZ5010-01	Connector CO <sub>2</sub> NIST for central gas supply (EU standard)
RZ5020-01	Connector CO <sub>2</sub> DISS for central gas supply (US standard)
RZ5070-01	Gas connector US, angled standard (F102/F104)
RZ5072-01	Sinter fi lter for universal gas connection (1 packaging = 5 pcs.)

Power supply cord and further accessories available upon request.

**Note:** The use of non-medical CO<sub>2</sub> may damage the device.  
Always use sterile fi lter when operating with reusable tube set.

#### Technical Data

Insufflation medium	Med. CO <sub>2</sub>
Max. gas fl ow	20 l/min
Pressure range	1-30 mmHg
Power supply	100-240 V~
Frequency	50-60 Hz
Power consumption	75 VA
Current consumption	100 V: 0.7 A 240 V: 0.3 A
Classifications	Protection Class I, Type BF, IP 41
Dimensions (w x h x d)	267 x 138 x 410 mm
Weight	7 kg

# F104

## Insufflator for laparoscopy

- 40 l/min flow
- High safety
- Easy set up
- Large text display (multi-lingual)
- User-programmable
- Integrated gas heating
- Pressure relief system and integrated fluid sensor



### Accessories

Item No.	Description
RF104-L01	Insufflator for laparoscopy, gas connection CO <sub>2</sub> , US <b>Language:</b> English, German, French, Spanish
RF104-L02	Insufflator for laparoscopy, gas connection CO <sub>2</sub> , US <b>Language:</b> Italian, Greek, Danish, Dutch

### Accessories

Part No.	Description
RZ0452-01	Tube set, insufflation, reusable, 20 uses
RZ1422-01	Tube set, insufflation with filter, disposable, sterile
RZ1415-01	Tube set, insufflation and gas heating, reusable, 100 uses
RZ0536	Filter, single use only, sterile, ISO-ISO
RZ5044-01	High pressure hose CO <sub>2</sub> , Bottle connection: DIN, Device connection: US, Length: 1.5 m
RZ5030-01	High pressure hose CO <sub>2</sub> for central gas supply, 3 m, NIST/DIN
RZ5031-01	High pressure hose CO <sub>2</sub> for central gas supply, 5 m, NIST/DIN
RZ5010-01	Connector CO <sub>2</sub> , NIST for central gas supply (EU standard)
RZ5020-01	Connector CO <sub>2</sub> , DISS for central gas supply (US standard)
RZ5070-01	Gas connector US, angled standard (F102/F104)
RZ5072-01	Sinterfilter for universal gas connection (1 packaging = 5 pcs.)

### Technical Data

Insufflation medium	Med. CO <sub>2</sub>
Max. gas flow	40 l/min
Pressure range	1-30 mmHg
Power supply	100-240 V~
Frequency	50-60 Hz
Power consumption	145 VA
Current consumption	110 V: 1.3 A* 230 V: 0.6 A*
Classifications	Protection Class I, Type BF, IP 40
Dimensions (w x h x d)	267 x 138 x 410 mm
Weight	7 kg

\*with reusable heater tubing

Power supply cord and further accessories available upon request.

## Tube sets and filter

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Tube set, insufflation with filter,  
disposable, sterile  
**(RZ1422-01)**



Tube set, insufflation,  
reusable, 20 uses  
**(RZ0452-01)**



Tube set, insufflation and gas  
heating, reusable, 100 uses  
**(RZ1415-01)**



Filter, single use only,  
sterile, ISO-ISO  
**(RZ0536)**

**Note:** Always use sterile filter when operating with reusable tube set.

Further accessories available upon request.

## Gas connectors and high pressure tubes

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Connector CO<sub>2</sub>, US  
(broad standard)  
**(RZ0175-01)**



Connector CO<sub>2</sub>, NIST for central  
gas supply (EU standard)  
**(RZ5010-01)**



Connector CO<sub>2</sub>, DISS for central  
gas supply (US standard)  
**(RZ5020-01)**



High pressure hose CO<sub>2</sub>,  
bottle connection: DIN/  
device connection: US,  
length: 1.5 m  
**(RZ5044-01)**



High pressure hose CO<sub>2</sub>  
for central gas supply,  
NIST/DIN, length: 3 m  
**(RZ5030-01)**

Further accessories available upon request.





# MEDICAL Monitors



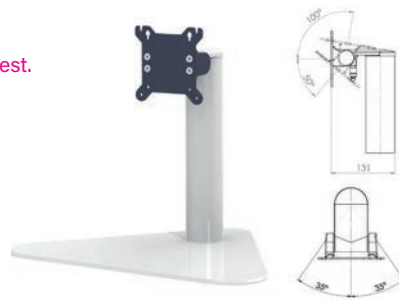
## Medical Monitors

### The solution you are looking for

- TFT-Displays with wide-screen-format
- Display with all-round viewing angle
- Hygienic design with full glass front

Due to the completely closed metal housing, hygienic optimized design and the anti-reflective coated safety glass, these displays provide you with the ability to easily disinfect the monitor as well as offering perfect protection for the high-performance hardware inside.

Monitor stand available upon request.



MD-32



MD-27



MD-23

Technical Data	RMD-23	RMD-27-Slim	RMD-32
Design	23" TFT-widescreen display	27" TFT-widescreen display	32" TFT-widescreen display
Protective pane	integrated (touchscreen/in planning*)		
Dimensions (w x h x d)	ca. 557 x 357 x 60 mm	ca. 655 x 432 x 60 mm	ca. 770 x 510 x 70 mm
Mounting	Built-in VESA-100 interface extensive mounting solutions available as accessories		
Weight	7.4 kg (without accessory)	10.5 kg (without accessory)	17 kg (without accessory)
Power supply unit	100-240 V/ 50-60 Hz intern 80 W		
Front keypad	ON/OFF button, six controls for OSD		
Display module			
Active area	509 x 286 mm	597 x 335 mm	698.4 x 392.9 mm
Native resolution	1920 x 1080 pixel	1920 x 1080 pixel	1920 x 1080 pixel
Brightness	250 cd/m <sup>2</sup>	350 cd/m <sup>2</sup>	400 cd/m <sup>2</sup>
Contrast	1000:1		1300:1
Viewing angle (h/v)	178°/178°		
Response time	< 14 ms (G-to-G)	8 ms (G-to-G)	8 ms (G-to-G)
Colors	16.7 millions		
Interface			
Analog	VGA D-SUB-15		
Digital	DVI-I		DVI-D
S-Video	4-pole mini DIN		
Composite Video	RCA (PAL/NTSC)		
OSD			
Language selection	German (English, French, Italian, Spanish, Polish*)		
VGA	Size and position, clock and phase		
Viewing settings	Brightness, contrast, color temperature, gamma, input signal		
Scope of delivery			
Device	MD-23	MD-27	MD-32
Cable kit	DVI-D (VGA, Component Video, S-Video, Composite-Video*)		
Acceptable ambient conditions			
Temperature	0 to +60 °C/+5 to +35 °C when stored/in operation		
Relative humidity	5 % to 95 %/ 20 % to 80 % non-condensing when stored/in operation		
Supplementary standard			
DIN EN 60601-1: 2007	Medical electrical equipment: General requirements for basic safety and essential performance		
DIN EN 60601-1-2: 2007	Medical electrical equipment: General requirements for basic safety and essential performance Collateral standard: Electromagnetic compatibility – Requirements and tests		

\*optional

## PP Trolley

### PROFESSIONAL POWER TROLLEY

#### Basic structure

The **PROFESSIONAL POWER** trolley is made up of:

- Base made of steel sheets coated with baked RAL 7035 epoxy powder
- Shelf-holder columns made of aluminum painted with RAL 7035 epoxy powder, with colored stripes
- Cables holder column, made of aluminum, coated with baked epoxy powder, RAL 7035, equipped with removable closure for cables allocation and their easy inspection
- Shelves made of steel sheet coated with baked epoxy powder, suitably shaped in order to avoid accidental falls of objects
- Shelves can be easily mounted and adjusted at different heights (step 2.5 cm), according to the Customer's needs
- Handle with anti-slip grip for a better mobility
- No. 4 twinned wheels with a diameter of 125 mm (2 with brake) anti-noise and anti-tracking

The **PROFESSIONAL POWER** trolley can be enriched with many accessories, due to the specific use of the trolley (keyboard holder shelves, mouse pad, drawers, infusion stand holder, endoscope holder, cylinders holder, monitor holder, swiveling arms, etc.).



#### Devices

Item No.	Description
RPP600 RI	OR Trolley

#### Technical Data

Dimensions (w x h x d)	745 x 691 x 1479 mm
1 Shelf	600 x 300 mm
4 Shelves	600 x 500 mm
1 Drawer	600 x 500 mm
1 Oxygen bottle holder	Ø 150 mm
1 Keyboard holder	
1 Monitor holder	

### SET/9500004: Standard Laparoscopic Instruments Set

1x	R010-100309-000	Laparoscope 10 mm Ø, 0°, autoclavable intergrated fiber optic for illumination 316 mm working length
2x	R025-110101-001	Multi function trocarsleeve 11 mm Ø, Insufflation stop cock, interchangeable metal tube smooth 101 mm working length
2x	R020-110101-024	Safetytrocar 11 mm Ø oblique end f. trocar sleeve w. 101 mm working length
3x	R020-055095-024	Safetytrocar 5,5 mm Ø oblique end f. trocar sleeve w. 95 mm working length
3x	R025-055095-001	Multi function trocarsleeve 5,5 mm Ø, Insufflation stop cock, interchangeable metal tube smooth 95 mm working length
1x	R026-110055-002	Reducing adapter w. silicon drape 11 > 5,5 mm
1x	R027-050110-000	Dilation set 5 < 11 mm guide probe and dilation sleeve
1x	R033-050330-236	Reddick-Olsen Grasping forceps 5 mm Ø, 330 mm lg., ergo uni ratchet handle w. HF rotatable, dismantable, mod. lap. inst.
1x	R034-050330-250	Davis & Geak forceps w. reservoir, 5 mm Ø, 330 mm working length, ergo handle w. HF rotatable, dismantable, mod. lap. inst.
1x	R033-050330-212	MARYLAND disector curved 5 mm Ø, atraum. 330 mm lg., ergo uni ratchet handle w. HF rotatable, dismantable, mod. lap. inst.
1x	R044-050330-116	Hook scissors straight, 5 mm Ø, 330 mm lg., ergo handle w. HF dismantable, rotatable, mod. lap. Inst.
1x	R044-050330-112	Metzenbaum scissors left curved, 5 mm Ø, 330 mm lg., ergo handle w. HF dismantable, rotatable, mod. lap. Inst.
1x	R044-050330-120	Micro scissors curved, 5 mm Ø, 330 mm lg., ergo handle w. HF dismantable, rotatable, mod. lap. Inst.
1x	R064-050000-006	Suction-irrigation handle ergonomic 2-way stop-cock, HF-connector 4 mm male LL-connector for adaptable elektrodes
1x	R064-050330-003	L-hook-electrode-shaft assembly, monopole 5 mm Ø, 330 mm working length, adaptable on valvehandles of serie R064-
1x	R060-050330-001	Button electrode monopolar 5 mm Ø, 340 mm working length handle small HF-connector male
1x	R060-080040-003	Monopolar HF-connecting cable, 3 mtr. lg. 8 mm PIN for US HF-units 4 mm socket instrument side
1x	R066-050340-601	Bipolar grasper Hirsch 5 mm Ø, 340 mm working length, jaws fenestrated wave wire, ring plastic handle, modular instrument system rotatable, dismantable
1x	R067-050340-003	Hook electrode L-shaped, 5 mm Ø, bipolar, 340 mm working length small handle, HF-connector european
1x	R065-040000-003	Bipolar connecting cable 3 m lg. 2 banana plugs f. US generators, euro flat plug round f. bipolar instruments with protection
1x	R081-050330-001	Cholangiography fixation clamp 5 mm Ø, channel for 6 Fr. catheters, 330 mm working length, handle with ratchet
1x	R080-020600-201	Cholangiographiy-Catheter 2 mm Ø, 60 cm long LL-connector female
1x	R058-050330-361	Needleholder/-positioner str.serrated, 5 mm Ø, 330 mm lg., axial ratchet handle o. HF dismantable, rotatable, mod. lap. inst.
1x	R058-050330-352	Needle holder left curved, w. TC, 5 mm Ø, 330 mm lg., axial ratchet handle o. HF dismantable, rotatable, mod. lap. inst.
1x	R050-050330-01	Knot tier with eye 5 mm Ø, 330 mm working length
1x	R056-100330-03	Clip Applier for Ethicon Titan Clips LT300 medium/large, "Paraclose-system", 10 mm Ø, 330 mm working length 360° rotatable, dismantable ( 3-parts )
1x	R078-000000-199	Irrigation-suction set 5 / 10 mm Ø, 330 mm long handle w. 2 large trumpet valves tubes 5 + 10 mm Ø, 4 x 4 holes
1x	R090-050330-001	Palpation Probe graduated 5 mm Ø, 330 mm working length
1x	R092-100380-005	Endo -Retractor 10 mm Ø with 5 fingers spreadable and angleable, 340 mm working length, LL-adapter for cleaning
1x	R099-000250-003	Speculum retractor, 3 blades 60 mm working length, f. gall bladder extraction suitable for 11 mm trocar sleeve
1x	R050-028170-001	Suture instrument for subcutaneous facial closure, 2,8 mm Ø, 17 cm

### SET/9502000: Set for gynaecology

1x	R075-020120-001	Insufflations-needle acc. to Veress 2,00 x 120 mm
1x	R010-100309-030	Laparoscope 10 mm Ø, 30°, autoclavable intergrated fiber optic for illumination 316 mm working length
2x	R025-110101-001	Multi function trocarsleeve 11 mm Ø, Insufflation stop cock, interchangeable metal tube smooth 101 mm working length
2x	R020-110101-001	Trocar pyramidal tip 11 mm Ø, f. trocar sleeve w. 101 mm working length
2x	R025-055095-001	Multi function trocarsleeve 5,5 mm Ø, Insufflation stop cock, interchangeable metal tube smooth 95 mm working length
2x	R020-055095-011	Safetytrocar pyramidal tip, 5,5 mm Ø, autom. cutting protection w. obturator, f. trocar sleeve w. 95 mm working length
1x	R075-050330-014	Puncture- and injection needle 5 mm Ø, 330 mm working length, LL-adapter proximal distal needle 1,4 mm ( 17G) Ø 330 mm
2x	R026-110055-001	Reducing adapter 11 > 5,5 mm
1x	R033-050360-240	Mahnes-Grasping forceps, w. mouse teeth 360 mm lg., ergo uni ratchet handle w. HF rotatable, dismantable, mod. lap. inst.
1x	R033-050360-242	Claw grasper 3 x 2 teeth, 5 mm Ø, 360 mm lg., ergo uni ratchet handle w. HF rotatable, dismantable, mod. lap. inst.
1x	R033-050360-243	Claw grasper long 3 x 2 teeth, 5 mm Ø, 360 mm lg., ergo uni ratchet handle w. HF rotatable, dismantable, mod. lap. inst.
1x	R033-050360-216	Dissecting frcps fenestrated, slim 5 mm Ø, 360 mm lg., ergo uni ratchet handle w. HF rotatable, dismantable, mod. lap. inst.
1x	R033-050360-212	MARYLAND disector curved 5 mm Ø, atraum. 360 mm lg., ergo uni ratchet handle w. HF rotatable, dismantable, mod. lap. inst.
1x	R033-050360-225	DOLPHIN grasper, bottle nose, 5 mm Ø, 360 mm lg., ergo uni ratchet handle w. HF rotatable, dismantable, mod. lap. inst.
1x	R044-050360-114	Peritoneal scsr serrated straight, 5 mm Ø, 360 mm lg., ergo handle w. HF dismantable, rotatable, mod. lap. Inst.
1x	R044-050360-112	Metzenbaum scissors left curved, 5 mm Ø, 360 mm lg., ergo handle w. HF dismantable, rotatable, mod. lap. Inst.
1x	R044-050360-410	Biopsy punch without thorn, 5 mm Ø, 360 mm lg., ergo handle w. HF dismantable, rotatable, mod. lap. Inst.
1x	R044-100360-710	MAYO Large OP- Scissors, 10 mm Ø, 360 mm lg., ergo handle w. HF dismantable, rotatable, mod. lap. Inst.
1x	R067-000000-700	Ringhandle for bipolar laparoscopic instruments, handle alone w/o accessories POWERGRIP
1x	R067-050340-700	Shaft tube 5 mm Ø, 340 mm working length f. Powergrip bipolar forceps
1x	R067-000340-713	Bipolare forceps fenestrated 5 mm Ø, 340 mm working length insert alone POWERGRIP
1x	R065-040125-005	Bipolar connecting cable 5 mtr. long for Erbe / Storz HF-generators european plug for instruments
1x	R061-050340-003	Hook electrode L-shaped, 5 mm Ø, monopolar, 340 mm working length HF-connector male
1x	R061-050340-004	Spatula electrode monopolar 5 mm Ø, 340 mm working length HF-connector male
1x	R079-050340-204	Suction-irrigation set 5 mm Ø, 340 mm lg. pistol handle w. 2-way valve, olives shaft w. 4 holes
1x	R079-100340-204	Suction-irrigation set 10 mm Ø, 340 mm lg. pistol handle w. 2-way valve, olives shaft w. 4 holes
1x	R090-050330-001	Palpation Probe graduated 5 mm Ø, 330 mm working length
1x	R099-000250-003	Speculum retractor, 3 blades 60 mm working length, f. gall bladder extraction suitable for 11 mm trocar sleeve
1x	R058-050360-360	Needleholder/-positioner straight, 5 mm Ø, 330 mm lg., axial ratchet handle o. HF dismantable, rotatable, mod. lap. inst.
1x	R050-028170-001	Suture instrument for subcutaneous facial closure, 2,8 mm Ø, 17 cm
1x	R050-050330-01	Knot tier with eye 5 mm Ø, 330 mm working length
1x	R050-050340-00	Fascia Closure Device 2,3 mm Ø, 140 mm working length

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