



<b>Laparoskope Laparoscopes</b>	<b>1</b>
<b>Trokarhülsen und Zubehör Trocar sleeves and accessories</b>	<b>2</b>
<b>Faßzangen Grasping Forceps</b>	<b>3</b>
<b>Scheren / Biopsie Scissors / Biopsy</b>	<b>4</b>
<b>Nadelhalter Needleholder</b>	<b>5</b>
<b>HF-Instrumente HF instruments</b>	<b>6</b>
<b>Saug- / Spülinstrumente Suction- / Irrigation instruments</b>	<b>7</b>
<b>Cholangiographie Cholangiography</b>	<b>8</b>
<b>Tasthaken und Retraktoren Palpation and retractors</b>	<b>9</b>
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<b>CO<sup>2</sup> Insufflatoren CO<sup>2</sup> Insufflators</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.

### 1. Laparoscopes

Containing Devices: Laparoscope

### 2. Trocar Sleeves and Accessories

Containing Devices: Trocars  
 Trocar sleeves

### 3. Grasping Forceps

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

### 4. Biopsie

Containing Devices: Handles with HF-connections  
 Scissors

### 5. Needle Holder

Containing Devices: Needle Holder  
 Handles with HF-connections  
 Forceps

### 6. HF Instruments

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

### 7. Suction- and Irrigation Instruments

Containing Devices: Suction and irrigation instruments containing

- Handle
- Tube
- Guide insert
- different needles

### 8. 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

### 9. Palpation and Retractors

Containing Devices: Palpations  
 Retractors  
 Specula

### 10. Diagnostic and Pediatric

Containing Devices: Laparoscopes  
 Trocars  
 Forceps

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

### 11. Thorax

Containing Devices: Hysteroscopes  
 Trocars  
 Trocar Sleeves  
 Clamps  
 Forceps

### 12. Gynecology

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

### 13. Urology

Containing Devices: Retractors

### 14. Light Sources

Containing Devices: Light source

### 15. Video System

In case of demand please contact us.

### 16. 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

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

Containing Devices: Devices for Insufflation  
 Accessories for the Device

### 18. 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.

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

**REDA** INSTRUMENTE GMBH Gänssäcker 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> SSSRI004	
Cust.-Art.	Kundenartikelnummer	
Descript.	Kundenartikelbeschreibung	

Etching    Precisa CE, Kat-Nr, Germany Stainless, LOT nr

00277750022000020

LBL-001 Rev 01

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

**REDA** INSTRUMENTE GMBH Gänssäcker 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> SSSRI004	
Cust.-Art.	Kundenartikelnummer	
Descript.	Kundenartikelbeschreibung	

Etching    Precisa CE, Kat-Nr, Germany Stainless, LOT nr

00277750022000020

LBL-002 Rev 01

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

**REDA** INSTRUMENTE GMBH Gänssäcker 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> SSSRI004	
Cust.-Art.	Kundenartikelnummer	
Descript.	Kundenartikelbeschreibung	

Etching    Precisa CE, Kat-Nr, Germany Stainless, LOT nr

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
<b>REF</b>	Reference Number
<b>LOT</b>	Lot Number / Serial Number
	Take account to the warnings in the accompanying document
	Non-sterile
	Single use produkt
<b>CE</b>	CE-symbol for class I devices according to 93/42/EC, annex IX
<b>CE 0297</b>	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

Light port adaptor	ACMI®, Wolf®, Storz® / Olympus®
Eyepiece	Ocular according DIN 58105 threaded
Objective	Tension-free objective composed-objective
Image transmission	CAD-designed rodence system for optimal sharpness, colorsync and resolution
Light-guiding system	High quality light fibers
Optical glass	Distal and proximal Sapphire
Biocompatibility	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	R010-050302-000	R010-050302-030
5,0 mm	490 mm	R010-050490-000	R010-050490-030
10,0 mm	310 mm	R010-100309-000	R010-100309-030
10,0 mm	350 mm	R010-100350-000	R010-100350-030
10,0 mm	430 mm	R010-100430-000	R010-100430-030

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



**Compatibility**

Light port adaptor	ACMI®, Wolf®, Storz® / Olympus®
Eyepiece	Ocular according DIN 58105 threaded
Objective	Tension-free objective composed-objective
Image transmission	CAD-designed rodence system for optimal sharpness, colorsync and resolution
Light-guiding system	High quality light fibers
Optical glass	Distal and proximal Sapphire
Biocompatibility	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
			0°
10,0 mm	266,3 mm	6,0 mm (18 Char.)	R011-100273-060

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**

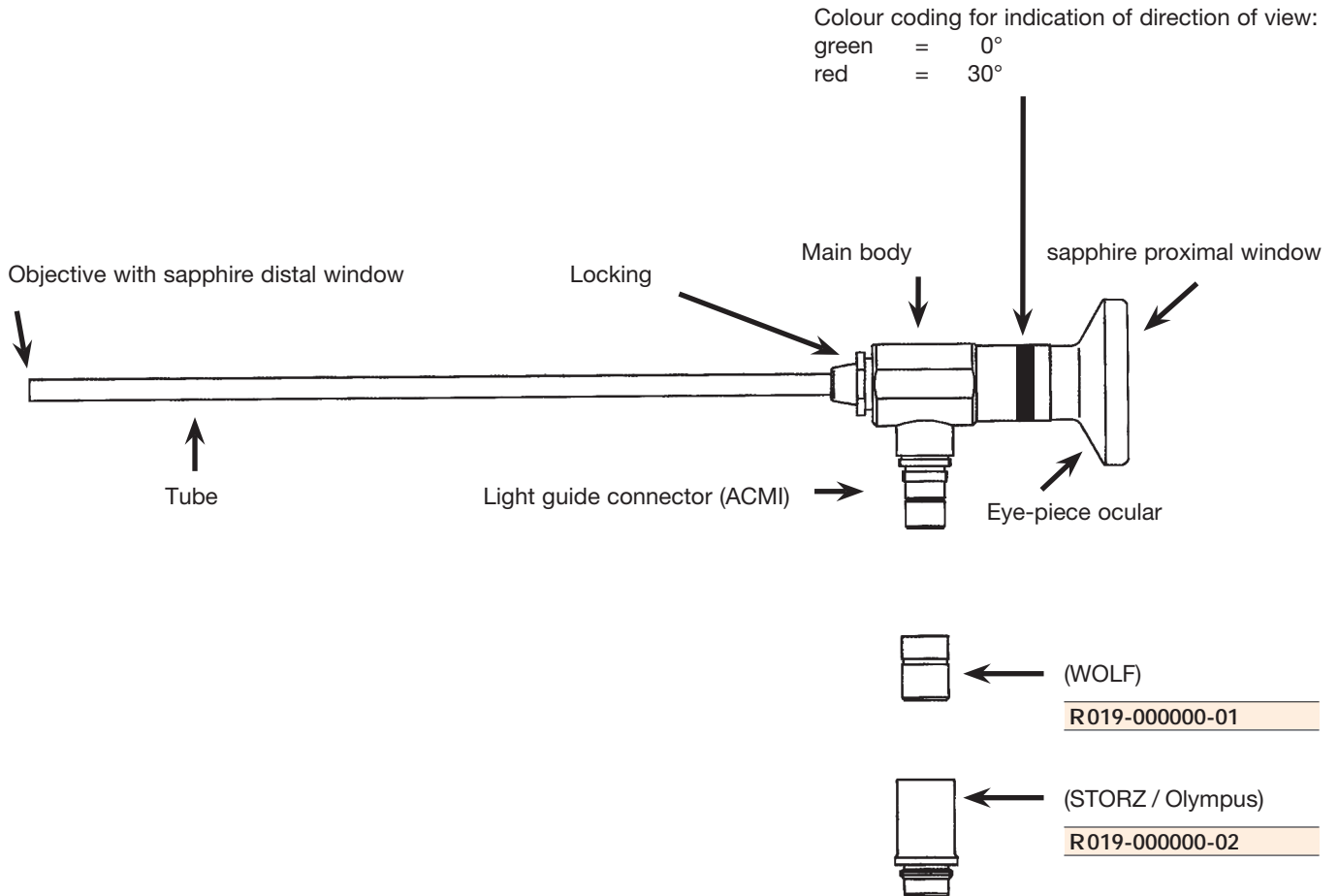
Light port adaptor	ACMI®, Wolf®, Storz® / Olympus®
Eyepiece	Ocular according DIN 58105 threaded
Objective	Tension-free objective composed-objective
Image transmission	CAD-designed rodence system for optimal sharpness, colorsync and resolution
Light-guiding system	High quality light fibers
Optical glass	Distal and proximal Sapphire
Biocompatibility	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
			0°
10,0 mm	266,3 mm	6,0 mm (18 Char.)	<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

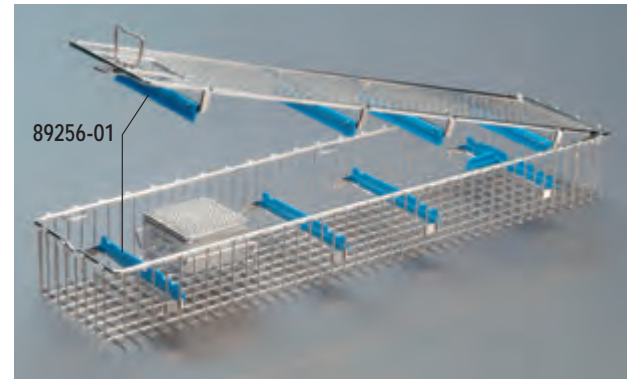
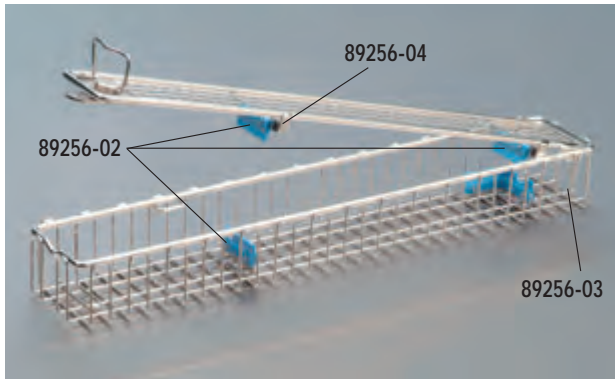


Cleaning paste, 6gr. f. distal and proximal windows and fiber optic port of endoscopes

98002-06

Wire basket for endoscopes

Wire basket for uretero-renoscopes



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

640 x 150 x 77 mm

**89256-46**

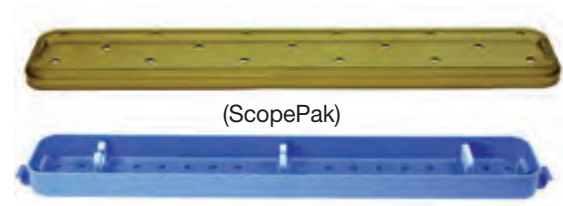
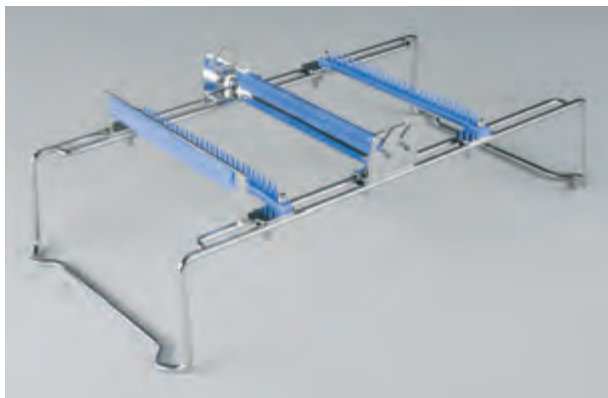
**89255-64**

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

**89257-46**

Storage- and sterilization rack

Container for Endoscopes



470 x 250 x 125 mm  
5 / 10 mm Ø  
for 15 MIS instruments

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**


Scope Holder

4 cm / 1,5"




R019-5350	15 mm Ø
R019-5353	12 mm Ø


7 cm / 2,8"



R019-5340	15 mm/8 mm Ø
R019-5343	15 mm/12 mm Ø



R019-5351	8 mm Ø
R019-5352	12 mm Ø
R019-5354	6 mm Ø
R019-5355	4 mm Ø




R019-5341	12 mm Ø
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Instrument Bar

Holder


18 cm / 7.0" + 7 cm / 2,8"




R019-5373	long
R019-5333	short



R019-5374	long
R019-5334	short



R019-5375	long
R019-5335	short



R019-5210	R019-5200
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bonded for Halogen Light	Ø	length cm	fused for Xenon Light
R900-035180-00	3,5	180	R901-035180-00
R900-035230-00	3,5	230	R901-035230-00
R900-035300-00	3,5	300	R901-035300-00
R900-035350-00	3,5	350	R901-035350-00
R900-048180-00	4,8	180	R901-048180-00
R900-048230-00	4,8	230	R901-048230-00
R900-048250-00	4,8	250	R901-048250-00
R900-048300-00	4,8	300	R901-048300-00
R900-048350-00	4,8	350	R901-048350-00

Other length on request

Connector to light source



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



R900-000000-09  
Pentax



R900-000000-11  
Fuji



R900-000000-13  
Heine-Optotechnik



R900-000000-15  
Winter+IBE

Endoscope-side



OUT



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



R900-000000-04  
Wolf



R900-000000-06  
ACM / British / Codman



S-retractor



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



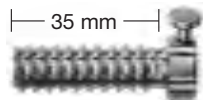
Ø 5 mm

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

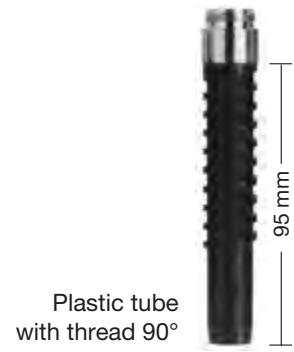
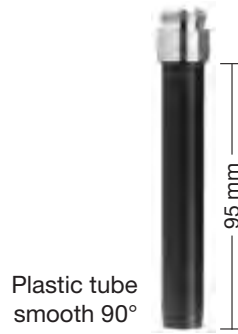
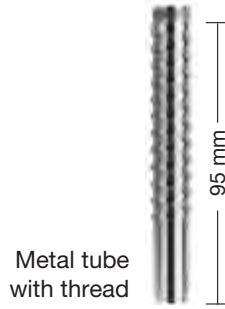
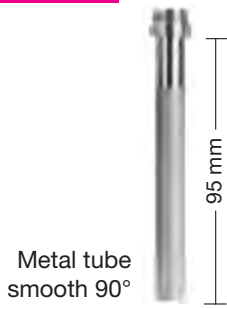
R020-050092-025

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



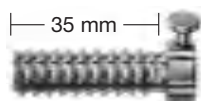
R025-055095-001

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

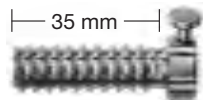
Ø 10 mm

Multi function trocar sleeve,  
valvehousing with thread lock

R025-100097-001

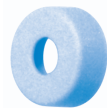


Trocar stop



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

R026-100055-001



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

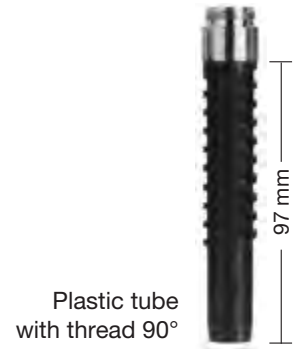
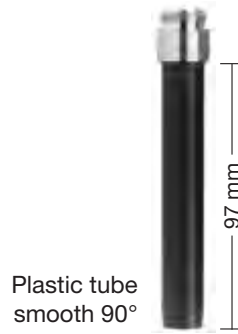
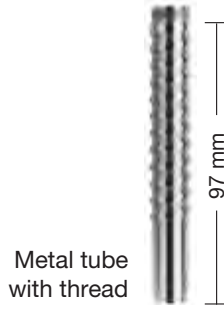
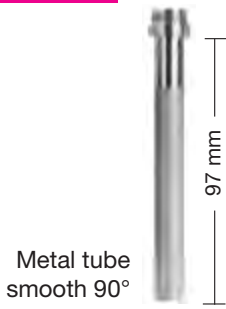


with halfmoon grinding  
and V-formed tip

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



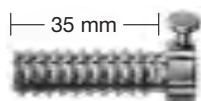
R025-110101-001

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

R026-110055-001



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

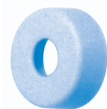


Multi function trocar sleeve,  
valvehousing with thread lock

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

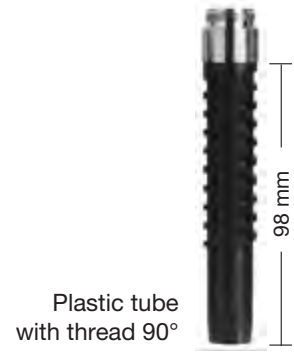
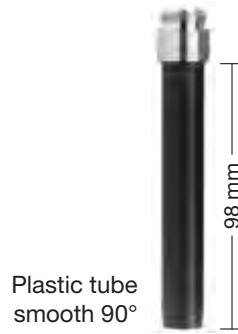
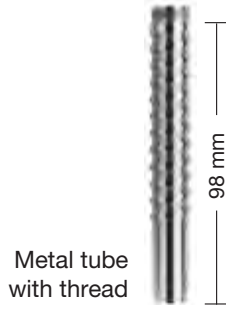
Safety trocar with automatic locking



with pyramidal grinding  
and rounded tip

R020-110150-011

Ø 12,5 mm



Multi function trocar sleeve, valvehousing with thread lock



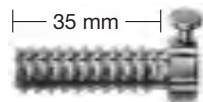
R025-125098-001

R025-125102-002

R025-125098-003

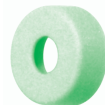
R025-125102-004

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



reducer with silicone Latch



12,5 > 10 mm	R026-125100-001	R026-125100-002	R026-125100-004
12,5 > 5,5 mm	R026-125055-001	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

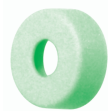
Ø 12,5 mm / 150 mm WL

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



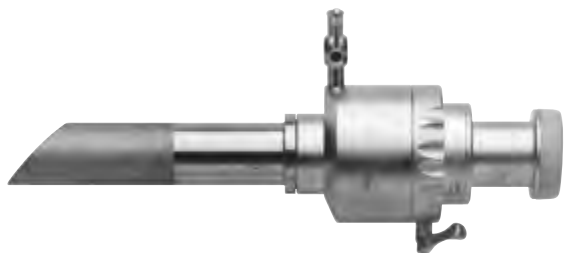
with pyramidal grinding  
and rounded tip

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

Plastic reducer



15 > 10 mm

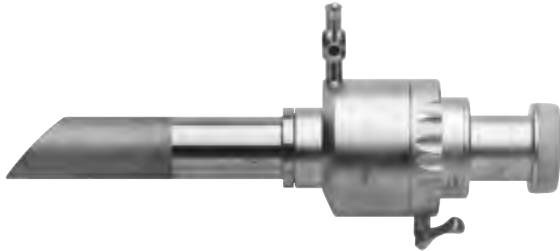
R026-150100-001

15 > 5,5 mm

R026-150055-001

**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

Plastic reducer



20 > 10 mm



R026-200100-001

20 > 5,5 mm

R026-200055-001

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



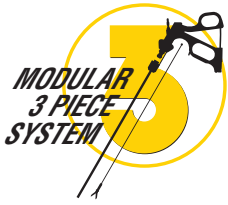
Ø	Sleeve with Cone	 Cone alone	 Cone alone
3,5 mm	R028-035070-021	R020-035500-001	
5,5 mm	R028-055095-021	R020-055500-001	
11,0 mm	R028-110101-021	R020-110500-001	R020-110700-001
12,5 mm	R028-125098-021	R020-125500-001	

Standard trocar



conical blunt

R020-035070-003	Ø 3,5 mm
R020-055095-003	Ø 5,5 mm
R020-110101-003	Ø 11,0 mm
R020-125098-003	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 !

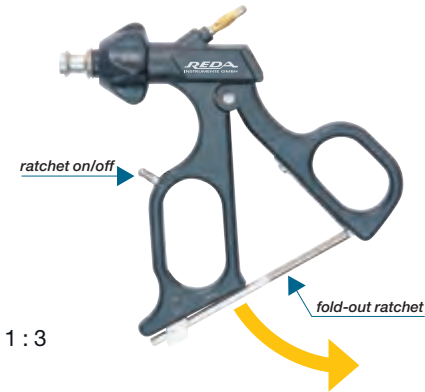


### Nut stopper

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



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

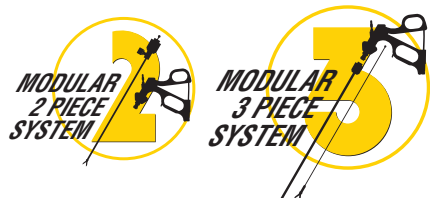
R034 - 000000 - 000



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

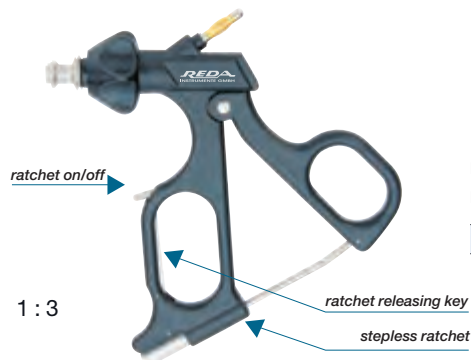
R032M - 000000 - 000



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

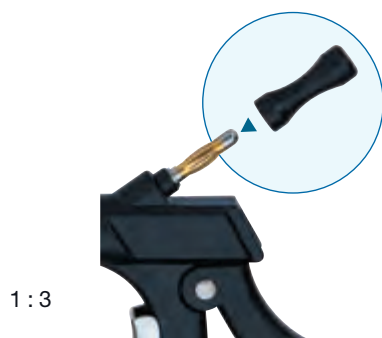


Ø 3 / 5 / 10 mm



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, metal not insulated

R038 - 000000 - 000



1 : 3

Axial handle, with spreading spring

R048 - 000000 - 000



1 : 3

Axial handle with rings and ratchet, metal not insulated

R037 - 000000 - 000



1 : 3

Axial ring handle

R047 - 000000 - 000



Axial handle, v-shaped angled, type with spreading spring and ratchet, metal not insulated

R039 - 000000 - 000



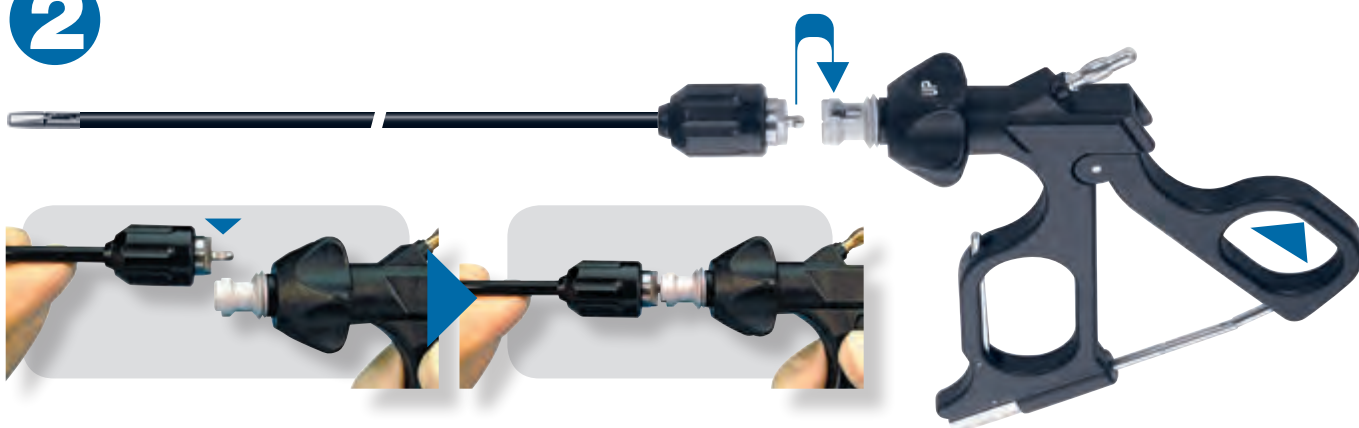
Axial handle, angled, with spreading spring

R040 - 000000 - 000

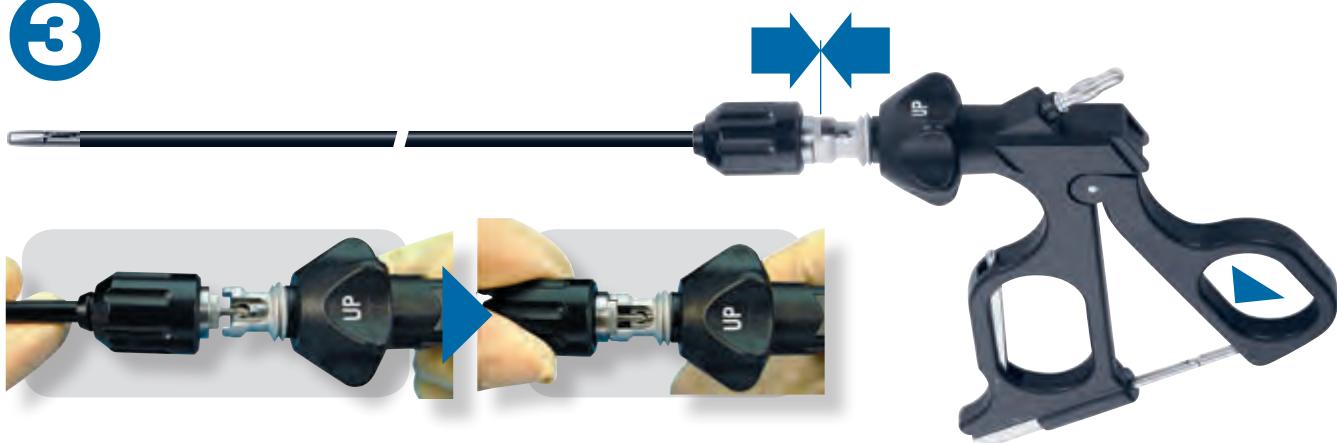
1



2



3



4

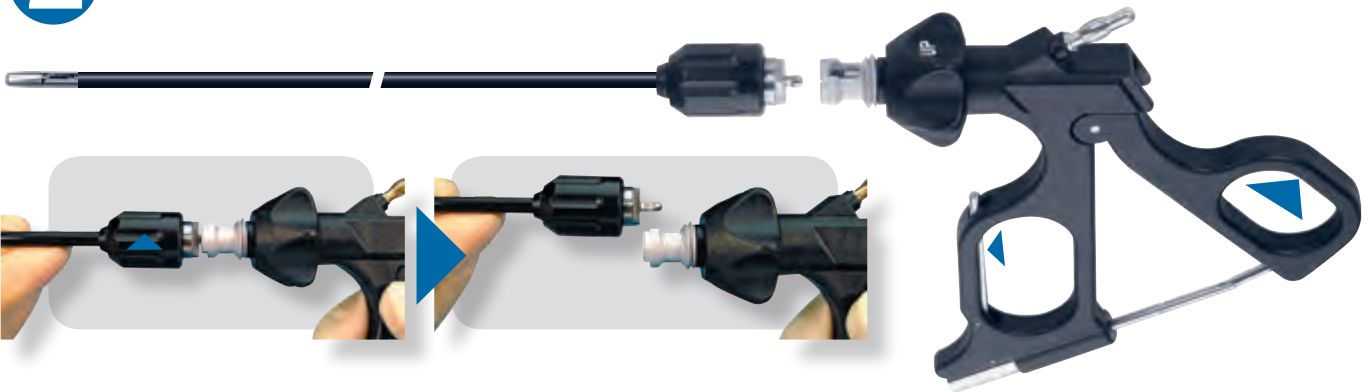




1



2

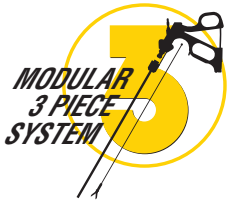


3




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>



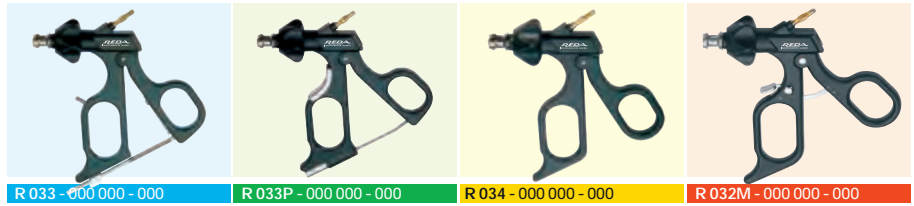
Tube Shaft, insulated, for adipose patients	shaft length: <b>360 mm</b>
cylindrical	reduce to Ø 5 mm
<b>R030 - 100360 - 000</b>	<b>R030 - 100360 - 000 5</b>



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>

**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



Universal grasping forceps, double action jaws

Working length	Working insert alone	Complete instrument			
<b>330 mm</b>	R030-050330-210	R033-050330-210	R033P-050330-210	R034-050330-210	R032M-050330-210
<b>360 mm</b>	R030-050360-210	R033-050360-210	R033P-050360-210	R034-050360-210	R032M-050360-210
<b>450 mm</b>	R030-050450-210	R033-050450-210	R033P-050450-210	R034-050450-210	R032M-050450-210



Maryland grasping and dissecting forceps, double action jaws

Working length	Working insert alone	Complete instrument			
<b>330 mm</b>	R030-050330-212	R033-050330-212	R033P-050330-212	R034-050330-212	R032M-050330-212
<b>360 mm</b>	R030-050360-212	R033-050360-212	R033P-050360-212	R034-050360-212	R032M-050360-212
<b>450 mm</b>	R030-050450-212	R033-050450-212	R033P-050450-212	R034-050450-212	R032M-050450-212



Dissecting forceps, fenestrated, double action jaws

Working length	Working insert alone	Complete instrument			
<b>330 mm</b>	R030-050330-213	R033-050330-213	R033P-050330-213	R034-050330-213	R032M-050330-213
<b>360 mm</b>	R030-050360-213	R033-050360-213	R033P-050360-213	R034-050360-213	R032M-050360-213
<b>450 mm</b>	R030-050450-213	R033-050450-213	R033P-050450-213	R034-050450-213	R032M-050450-213



Dissecting forceps, fenestrated, oval, double action jaws

Working length	Working insert alone	Complete instrument			
<b>330 mm</b>	R030-050330-214	R033-050330-214	R033P-050330-214	R034-050330-214	R032M-050330-214
<b>360 mm</b>	R030-050360-214	R033-050360-214	R033P-050360-214	R034-050360-214	R032M-050360-214
<b>450 mm</b>	R030-050450-214	R033-050450-214	R033P-050450-214	R034-050450-214	R032M-050450-214

**Carbon Handles**

more details at the beginning of the chapter



Ø 5 mm



Duck Bill-forceps, fenestrated, single action jaws

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



Dissecting grasping forceps, slim, fenestrated, double action jaws

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



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

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

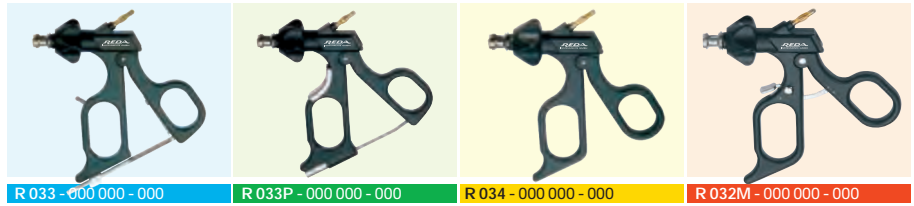


Grasping forceps with 2 x 4 teeth cobra, single action jaws

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

**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



Grasping forceps with reservoir, tip blunt, double action jaws

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



Grasping forceps with reservoir, tip conical, double action jaws

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



Delphin grasping forceps, double action jaws

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

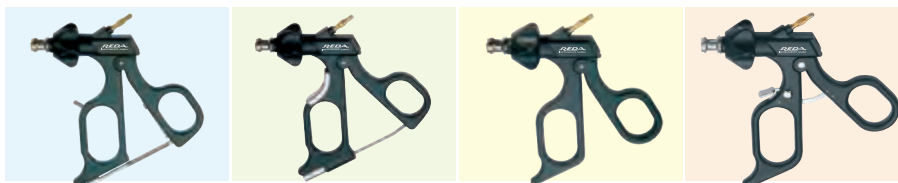


Delphin grasping forceps with reservoir, long, double action jaws

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

### 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



Fallopian tube grasping forceps, double action jaws

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



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

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



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

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

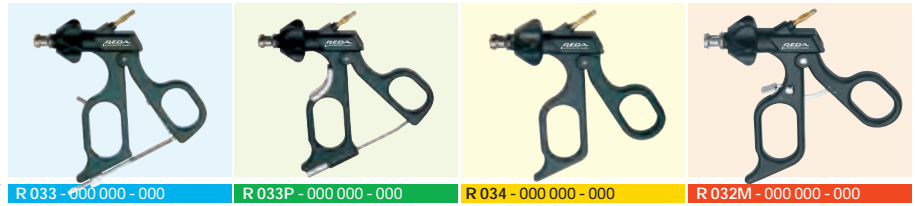


Mahnes grasping forceps, distal fine crosswise teeth, single action jaws

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

**Carbon Handles**

more details at the beginning of the chapter



Ø 5 mm



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

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



Grasping forceps, double action jaws

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



Reddick-Olsen grasping forceps, strong, double action jaws

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



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

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

**Carbon Handles**

more details at the beginning of the chapter



Ø 5 mm

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R 033P-000 000-000

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R 032M-000 000-000



Mahnes grasping forceps 1 x 2 teeth, double action jaws

Working length	Working insert alone	Complete instrument			
<b>330 mm</b>	R030-050330-240	R033-050330-240	R033P-050330-240	R034-050330-240	R032M-050330-240
<b>360 mm</b>	R030-050360-240	R033-050360-240	R033P-050360-240	R034-050360-240	R032M-050360-240
<b>450 mm</b>	R030-050450-240	R033-050450-240	R033P-050450-240	R034-050450-240	R032M-050450-240



Grasping forceps with mouse teeth, single action jaws

Working length	Working insert alone	Complete instrument			
<b>330 mm</b>	R030-050330-241	R033-050330-241	R033P-050330-241	R034-050330-241	R032M-050330-241
<b>360 mm</b>	R030-050360-241	R033-050360-241	R033P-050360-241	R034-050360-241	R032M-050360-241
<b>450 mm</b>	R030-050450-241	R033-050450-241	R033P-050450-241	R034-050450-241	R032M-050450-241



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

Working length	Working insert alone	Complete instrument			
<b>330 mm</b>	R030-050330-242	R033-050330-242	R033P-050330-242	R034-050330-242	R032M-050330-242
<b>360 mm</b>	R030-050360-242	R033-050360-242	R033P-050360-242	R034-050360-242	R032M-050360-242
<b>450 mm</b>	R030-050450-242	R033-050450-242	R033P-050450-242	R034-050450-242	R032M-050450-242



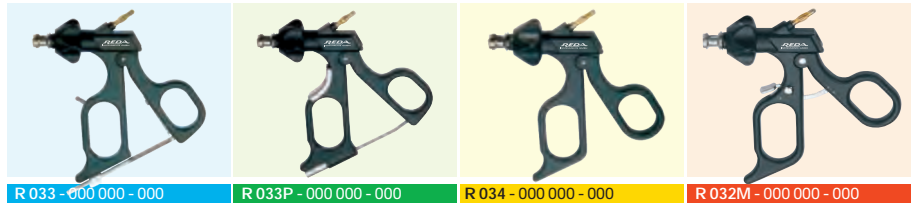
Claw Grasping forceps „AGRESSIV“, double action jaws

Working length	Working insert alone	Complete instrument			
<b>330 mm</b>	R030-050330-243	R033-050330-243	R033P-050330-243	R034-050330-243	R032M-050330-243
<b>360 mm</b>	R030-050360-243	R033-050360-243	R033P-050360-243	R034-050360-243	R032M-050360-243
<b>450 mm</b>	R030-050450-243	R033-050450-243	R033P-050450-243	R034-050450-243	R032M-050450-243



**Carbon Handles**

more details at the beginning of the chapter



Ø 5 mm

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Grasping forceps distal with DeBakey teeth, double action jaws

Working length | Working insert alone | Complete instrument

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



Extracting forceps with retrograd teeth, double action jaws

Working length | Working insert alone | Complete instrument

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



Dorsey intestinal grasping forceps, jaw length 20 mm, double action jaws

Working length | Working insert alone | Complete instrument

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



Dorsey intestinal grasping forceps, jaw length 20 mm, single action jaws

Working length | Working insert alone | Complete instrument

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

**Carbon Handles**

more details at the beginning of the chapter



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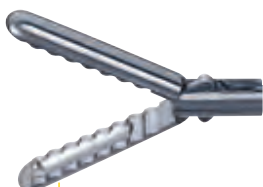
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Ø 5 mm



Davis & Geek grasping forceps with reservoir, single action jaws

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



Davis & Geek grasping forceps with reservoir, double action jaws

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



Davis & Geek grasping forceps with 3 x 2 teeth, single action jaws

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

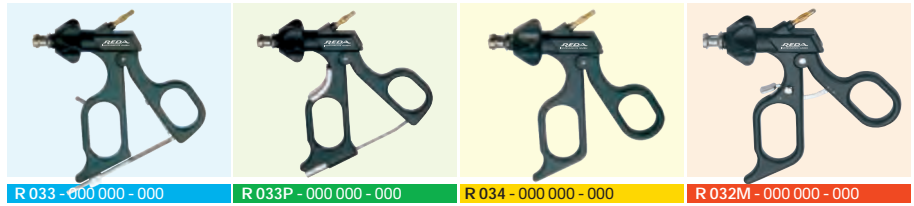


Mixer grasping forceps 90°, double action jaws

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

**Carbon Handles**

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Ø 5 mm

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Mixer grasping forceps 45°, double action jaws

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



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

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



DeBaKey clamp, jaw length 30 mm, double action jaws

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



Grasping forceps Kelly, double action jaws

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

**Carbon Handles**

more details at the beginning of the chapter



Ø 5 mm

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Babcock clamp, double action jaws

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



Grasping Forceps, straight with crosswise teeth, jaw length 18 mm, single action jaws

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



Grasping forceps „WAVE“, fenestrated, double action jaws

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

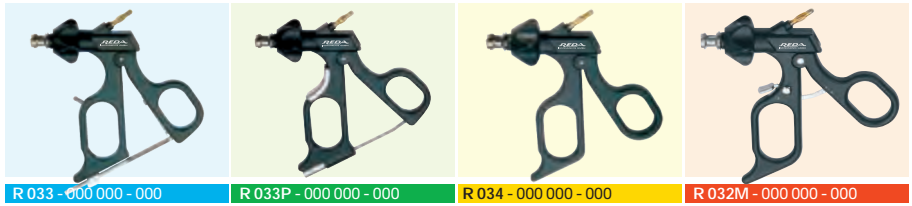


Grasping forceps „MAXIGRIP“, double action jaws

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

**Carbon Handles**

more details at the beginning of the chapter



Ø 5 mm



Tenaculum forceps, double action jaws

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

### Carbon Handles

more details at the beginning of the chapter



R 033M - 000 000 - 000

Ø 5 mm



Universal grasping forceps, double action jaws

Working length	Working insert alone	Complete instrument
<b>330 mm</b>	R030-050330-210	R033M-050330-210
<b>360 mm</b>	R030-050360-210	R033M-050360-210
<b>450 mm</b>	R030-050450-210	R033M-050450-210



Maryland grasping and dissecting forceps, double action jaws

Working insert alone	Complete instrument
R030-050330-212	R033M-050330-212
R030-050360-212	R033M-050360-212
R030-050450-212	R033M-050450-212



Dissecting forceps, fenestrated, double action jaws

Working length	Working insert alone	Complete instrument
<b>330 mm</b>	R030-050330-213	R033M-050330-213
<b>360 mm</b>	R030-050360-213	R033M-050360-213
<b>450 mm</b>	R030-050450-213	R033M-050450-213



Dissecting forceps, fenestrated, oval, double action jaws

Working insert alone	Complete instrument
R030-050330-214	R033M-050330-214
R030-050360-214	R033M-050360-214
R030-050450-214	R033M-050450-214



Duck Bill-forceps, fenestrated, single action jaws

Working length	Working insert alone	Complete instrument
<b>330 mm</b>	R030-050330-215	R033M-050330-215
<b>360 mm</b>	R030-050360-215	R033M-050360-215
<b>450 mm</b>	R030-050450-215	R033M-050450-215



Dissecting grasping forceps, slim, fenestrated, double action jaws

Working insert alone	Complete instrument
R030-050330-216	R033M-050330-216
R030-050360-216	R033M-050360-216
R030-050450-216	R033M-050450-216



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

Working length	Working insert alone	Complete instrument
<b>330 mm</b>	R030-050330-218	R033M-050330-218
<b>360 mm</b>	R030-050360-218	R033M-050360-218
<b>450 mm</b>	R030-050450-218	R033M-050450-218



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

Working insert alone	Complete instrument
R030-050330-219	R033M-050330-219
R030-050360-219	R033M-050360-219
R030-050450-219	R033M-050450-219

**Carbon Handles**

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Ø 5 mm



Grasping forceps with reservoir, tip blunt, double action jaws



Grasping forceps with reservoir, tip conical, double action jaws

Working length	Working insert alone	Complete instrument
<b>330 mm</b>	R030-050330-220	R033M-050330-220
<b>360 mm</b>	R030-050360-220	R033M-050360-220
<b>450 mm</b>	R030-050450-220	R033M-050450-220

Working insert alone	Complete instrument
R030-050330-222	R033M-050330-222
R030-050360-222	R033M-050360-222
R030-050450-222	R033M-050450-222



Delphin grasping forceps, double action jaws



Delphin grasping forceps with reservoir, long, double action jaws

Working length	Working insert alone	Complete instrument
<b>330 mm</b>	R030-050330-224	R033M-050330-224
<b>360 mm</b>	R030-050360-224	R033M-050360-224
<b>450 mm</b>	R030-050450-224	R033M-050450-224

Working insert alone	Complete instrument
R030-050330-225	R033M-050330-225
R030-050360-225	R033M-050360-225
R030-050450-225	R033M-050450-225



Fallopian tube grasping forceps, double action jaws



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

Working length	Working insert alone	Complete instrument
<b>330 mm</b>	R030-050330-226	R033M-050330-226
<b>360 mm</b>	R030-050360-226	R033M-050360-226
<b>450 mm</b>	R030-050450-226	R033M-050450-226

Working insert alone	Complete instrument
R030-050330-228	R033M-050330-228
R030-050360-228	R033M-050360-228
R030-050450-228	R033M-050450-228



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



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

Working length	Working insert alone	Complete instrument
<b>330 mm</b>	R030-050330-230	R033M-050330-230
<b>360 mm</b>	R030-050360-230	R033M-050360-230
<b>450 mm</b>	R030-050450-230	R033M-050450-230

Working insert alone	Complete instrument
R030-050330-231	R033M-050330-231
R030-050360-231	R033M-050360-231
R030-050450-231	R033M-050450-231

### Carbon Handles

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R 033M - 000 000 - 000

Ø 5 mm



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

Working length	Working insert alone	Complete instrument
<b>330 mm</b>	R030-050330-232	R033M-050330-232
<b>360 mm</b>	R030-050360-232	R033M-050360-232
<b>450 mm</b>	R030-050450-232	R033M-050450-232



Grasping forceps, double action jaws

Working insert alone	Complete instrument
R030-050330-234	R033M-050330-234
R030-050360-234	R033M-050360-234
R030-050450-234	R033M-050450-234



Reddick-Olsen grasping forceps, strong, double action jaws

Working length	Working insert alone	Complete instrument
<b>330 mm</b>	R030-050330-236	R033M-050330-236
<b>360 mm</b>	R030-050360-236	R033M-050360-236
<b>450 mm</b>	R030-050450-236	R033M-050450-236



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

Working insert alone	Complete instrument
R030-050330-238	R033M-050330-238
R030-050360-238	R033M-050360-238
R030-050450-238	R033M-050450-238



Mahnes grasping forceps 1 x 2 teeth, double action jaws

Working length	Working insert alone	Complete instrument
<b>330 mm</b>	R030-050330-240	R033M-050330-240
<b>360 mm</b>	R030-050360-240	R033M-050360-240
<b>450 mm</b>	R030-050450-240	R033M-050450-240



Grasping forceps with mouse teeth, single action jaws

Working insert alone	Complete instrument
R030-050330-241	R033M-050330-241
R030-050360-241	R033M-050360-241
R030-050450-241	R033M-050450-241



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

Working length	Working insert alone	Complete instrument
<b>330 mm</b>	R030-050330-242	R033M-050330-242
<b>360 mm</b>	R030-050360-242	R033M-050360-242
<b>450 mm</b>	R030-050450-242	R033M-050450-242



Claw Grasping forceps „AGRESSIV“, double action jaws

Working insert alone	Complete instrument
R030-050330-243	R033M-050330-243
R030-050360-243	R033M-050360-243
R030-050450-243	R033M-050450-243



**Carbon Handles**

more details at the beginning of the chapter



R 033M-000 000-000

Ø 5 mm



Grasping forceps distal with DeBakey teeth, double action jaws



Extracting forceps with retrograd teeth, double action jaws

Working length	Working insert alone	Complete instrument
<b>330 mm</b>	R030-050330-244	R033M-050330-244
<b>360 mm</b>	R030-050360-244	R033M-050360-244
<b>450 mm</b>	R030-050450-244	R033M-050450-244

Working insert alone	Complete instrument
R030-050330-246	R033M-050330-246
R030-050360-246	R033M-050360-246
R030-050450-246	R033M-050450-246



Dorsey intestinal grasping forceps, jaw length 20 mm, double action jaws



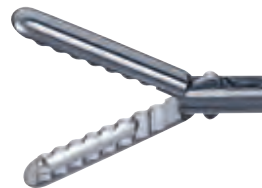
Dorsey intestinal grasping forceps, jaw length 20 mm, single action jaws

Working length	Working insert alone	Complete instrument
<b>330 mm</b>	R030-050330-248	R033M-050330-248
<b>360 mm</b>	R030-050360-248	R033M-050360-248
<b>450 mm</b>	R030-050450-248	R033M-050450-248

Working insert alone	Complete instrument
R030-050330-249	R033M-050330-249
R030-050360-249	R033M-050360-249
R030-050450-249	R033M-050450-249



Davis & Geek grasping forceps with reservoir, single action jaws



Davis & Geek grasping forceps with reservoir, double action jaws

Working length	Working insert alone	Complete instrument
<b>330 mm</b>	R030-050330-250	R033M-050330-250
<b>360 mm</b>	R030-050360-250	R033M-050360-250
<b>450 mm</b>	R030-050450-250	R033M-050450-250

Working insert alone	Complete instrument
R030-050330-251	R033M-050330-251
R030-050360-251	R033M-050360-251
R030-050450-251	R033M-050450-251



Davis & Geek grasping forceps with 3 x 2 teeth, single action jaws



Mixer grasping forceps 90°, double action jaws

Working length	Working insert alone	Complete instrument
<b>330 mm</b>	R030-050330-252	R033M-050330-252
<b>360 mm</b>	R030-050360-252	R033M-050360-252
<b>450 mm</b>	R030-050450-252	R033M-050450-252

Working insert alone	Complete instrument
R030-050330-258	R033M-050330-258
R030-050360-258	R033M-050360-258
R030-050450-258	R033M-050450-258

### Carbon Handles

more details at the beginning of the chapter



R 033M - 000 000 - 000

Ø 5 mm



Mixer grasping forceps 45°, double action jaws

Working length	Working insert alone	Complete instrument
<b>330 mm</b>	R030-050330-259	R033M-050330-259
<b>360 mm</b>	R030-050360-259	R033M-050360-259
<b>450 mm</b>	R030-050450-259	R033M-050450-259



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

Working insert alone	Complete instrument
R030-050330-262	R033M-050330-262
R030-050360-262	R033M-050360-262
R030-050450-262	R033M-050450-262



DeBaKey clamp, jaw length 30 mm, double action jaws

Working length	Working insert alone	Complete instrument
<b>330 mm</b>	R030-050330-264	R033M-050330-264
<b>360 mm</b>	R030-050360-264	R033M-050360-264
<b>450 mm</b>	R030-050450-264	R033M-050450-264



Grasping forceps Kelly, double action jaws

Working insert alone	Complete instrument
R030-050330-266	R033M-050330-266
R030-050360-266	R033M-050360-266
R030-050450-266	R033M-050450-266



Babcock clamp, double action jaws

Working length	Working insert alone	Complete instrument
<b>330 mm</b>	R030-050330-270	R033M-050330-270
<b>360 mm</b>	R030-050360-270	R033M-050360-270
<b>450 mm</b>	R030-050450-270	R033M-050450-270



Grasping Forceps, straight with crosswise teeth, jaw length 18 mm, single action jaws

Working insert alone	Complete instrument
R030-050330-272	R033M-050330-272
R030-050360-272	R033M-050360-272
R030-050450-272	R033M-050450-272



Grasping forceps „WAVE“, fenestrated, double action jaws

Working length	Working insert alone	Complete instrument
<b>330 mm</b>	R030-050330-274	R033M-050330-274
<b>360 mm</b>	R030-050360-274	R033M-050360-274
<b>450 mm</b>	R030-050450-274	R033M-050450-274



Grasping forceps „MAXIGRIP“, double action jaws

Working insert alone	Complete instrument
R030-050330-276	R033M-050330-276
R030-050360-276	R033M-050360-276
R030-050450-276	R033M-050450-276

**Carbon Handles**

more details at the beginning of the chapter



R 033M - 000 000 - 000

Ø 5 mm

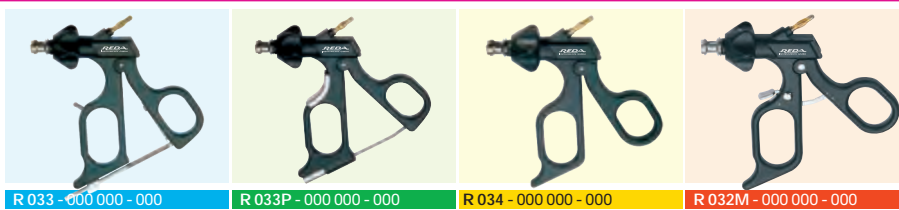


Tenaculum forceps, double action jaws

Working length	Working insert alone	Complete instrument
<b>330 mm</b>	R030-050330-284	R033M-050330-284
<b>360 mm</b>	R030-050360-284	R033M-050360-284
<b>450 mm</b>	R030-050450-284	R033M-050450-284

**Carbon Handles**

more details at the beginning of the chapter



Ø 10 mm

R 033-000 000-000

R 033P-000 000-000

R 034-000 000-000

R 032M-000 000-000



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

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



Maryland grasping and dissecting forceps, double action jaws

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

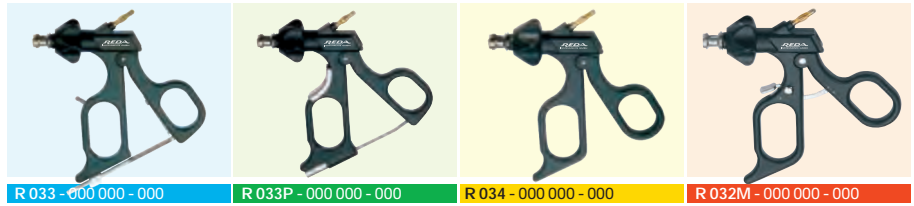


Grasping forceps distal with DeBaKey teeth, double action jaws

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

**Carbon Handles**

more details at the beginning of the chapter



Ø 10 mm



Babcock grasping forceps, strong, double action jaws

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



Grasping forceps with crosswise teeth, double action jaws

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



Mixer grasping forceps, double action jaws

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



Dorsey intestinal grasping forceps, double action jaws

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

**Carbon Handles**

more details at the beginning of the chapter



Ø 10 mm



Kocher clamp, jaw length 30 mm, double action jaws

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



DeBaKey clamp, jaw length 30 mm, double action jaws

<b>330 mm</b>	R030-100330-627	R033-100330-627	R033P-100330-627	R034-100330-627	R032M-100330-627
<b>360 mm</b>	R030-100360-627	R033-100360-627	R033P-100360-627	R034-100360-627	R032M-100360-627
jaw length 40 mm					
<b>330 mm</b>	R030-100330-628	R033-100330-628	R033P-100330-628	R034-100330-628	R032M-100330-628
<b>360 mm</b>	R030-100360-628	R033-100360-628	R033P-100360-628	R034-100360-628	R032M-100360-628
jaw length 50 mm					
<b>330 mm</b>	R030-100330-629	R033-100330-629	R033P-100330-629	R034-100330-629	R032M-100330-629
<b>360 mm</b>	R030-100360-629	R033-100360-629	R033P-100360-629	R034-100360-629	R032M-100360-629

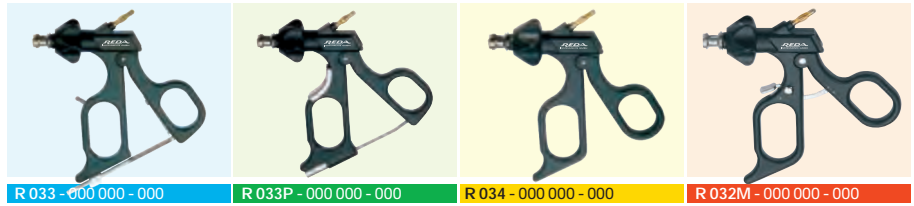


DeBaKey clamp, double teeth, jaw length 30 mm, double action jaws

<b>330 mm</b>	R030-100330-631	R033-100330-631	R033P-100330-631	R034-100330-631	R032M-100330-631
<b>360 mm</b>	R030-100360-631	R033-100360-631	R033P-100360-631	R034-100360-631	R032M-100360-631
jaw length 40 mm					
<b>330 mm</b>	R030-100330-632	R033-100330-632	R033P-100330-632	R034-100330-632	R032M-100330-632
<b>360 mm</b>	R030-100360-632	R033-100360-632	R033P-100360-632	R034-100360-632	R032M-100360-632
jaw length 50 mm					
<b>330 mm</b>	R030-100330-633	R033-100330-633	R033P-100330-633	R034-100330-633	R032M-100330-633
<b>360 mm</b>	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



Ø 10 mm

R 033 - 000 000 - 000

R 033P - 000 000 - 000

R 034 - 000 000 - 000

R 032M - 000 000 - 000



Babcock grasping forceps fine, double action jaws

Working length | Working insert alone | Complete instrument

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



Collin clamp, double action jaws

Working length | Working insert alone | Complete instrument

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



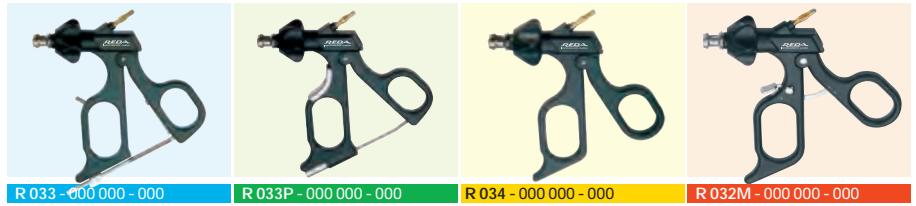
Pennington clamp, double action jaws

Working length | Working insert alone | Complete instrument

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

**Carbon Handles**

more details at the beginning of the chapter



Ø 10 mm

R 033 - 000 000 - 000

R 033P - 000 000 - 000

R 034 - 000 000 - 000

R 032M - 000 000 - 000



Overhold clamp with fine teeth, curved, double action jaws

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



Tenaculum forceps, double action jaws

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





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INSTRUMENTE GMBH

... with two handle versions

All plastic handles with rotating modul, LUER lock cleaning port and HF-connector

**CLASSIC  
NONMODULAR  
1 PIECE  
SYSTEM**



easy clean  
LUER-Lock connector



**R 031 - R**  
Handle

**R 032 - R**  
Handle with ratchet

**DISCONTINUED MODEL - DELIVERABLE  
AS LONG AS STOCK LASTS**

**Plastic Handles**  
with 360 mm tube shafts

**360 mm**  
Working length

**Ø 5 mm**



R 031 - 00 00 - 000 - R



R 032 - 00 00 - 000 - R



Dorsey grasping forceps,  
fenestrated, jaw length  
20 mm, double action jaws

Complete instrument

R031-0536-248-R

R032-0536-248-R



Grasping forceps with 2+4  
teeth, double action jaws

Complete instrument

R031-0536-218-R

R032-0536-218-R



Grasping forceps with  
reservoir, tip blunt, double  
action jaws

Complete instrument

R031-0536-220-R

R032-0536-220-R



Delphin grasping forceps  
with reservoir, double  
action jaws

Complete instrument

R031-0536-224-R

R032-0536-224-R



Grasping forceps distal  
with DeBaKey teeth, double  
action jaws

Complete instrument

R031-0536-244-R

R032-0536-244-R

**Plastic Handles**  
with 360 mm tube shafts

**360 mm**  
Working length

**Ø 5 mm**



R 031 - 00 00 - 000 - R

R 032 - 00 00 - 000 - R

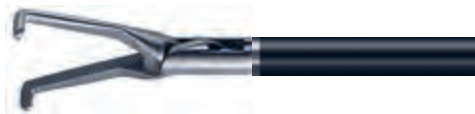


Extracting forceps with a  
row of retrograde teeth,  
double action jaws

Complete instrument

R031-0536-246-R

R032-0536-246-R

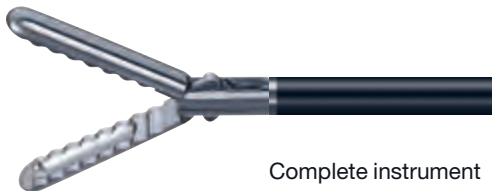


Mixer grasping forceps  
90°, double action jaws

Complete instrument

R031-0536-258-R

R032-0536-258-R

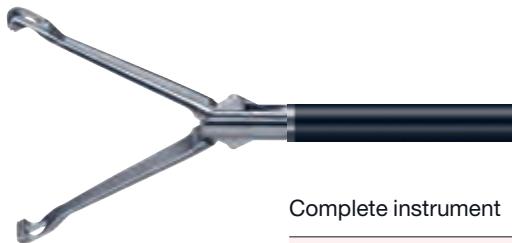


Davis & Geek grasping  
forceps with reservoir,  
double action jaws

Complete instrument

R031-0536-251-R

R032-0536-251-R

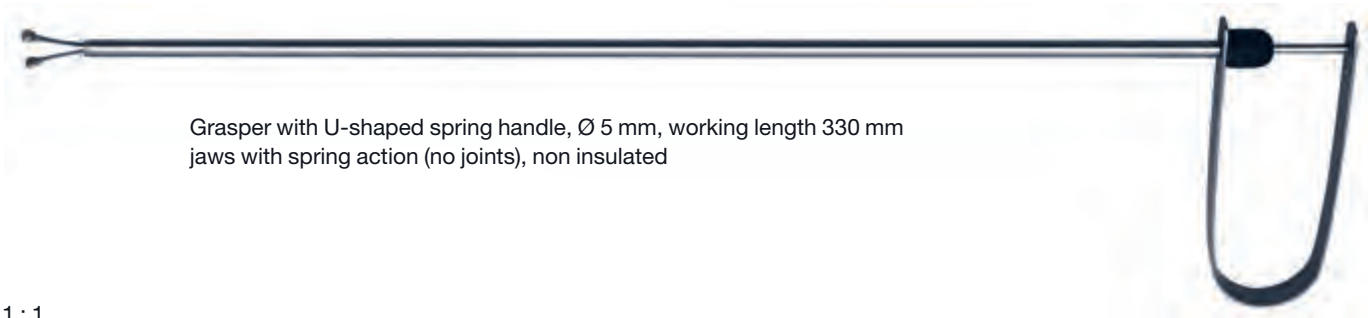


Babcock clamp, double  
action jaws

Complete instrument

R031-0536-270-R

R032-0536-270-R



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 grasper

R039 - 0533 - 006



1 x 2 teeth grasper slim

R039 - 0533 - 007



Bowlgrasper 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



INSTRUMENTE GMBH

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## 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.

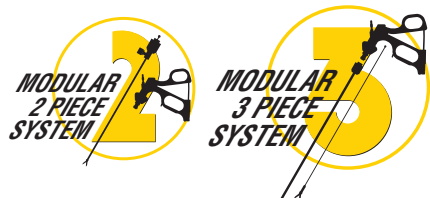
REDA - simplicity is so clever !



#### **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

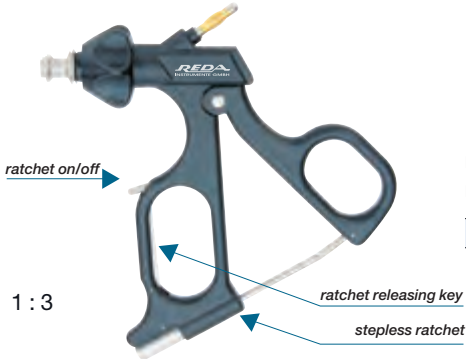
R034 - 000000 - 000



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

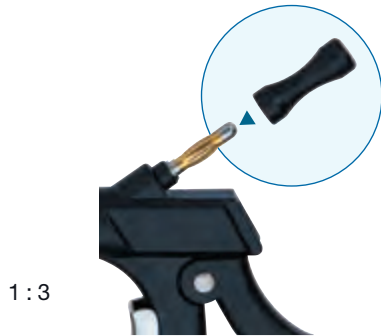
R032M - 000000 - 000

Ø 3 / 5 / 10 mm



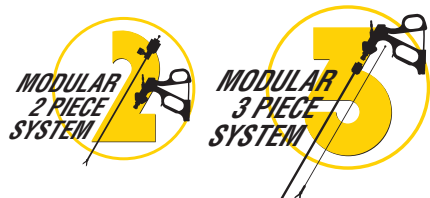
Ergonomic carbon handle with stepless ratchet,  
ratchet activating / release lever, HF-connector Ø 4 mm male 45° lateral,  
rotating head 360°, autoclavable

R033M - 000000 - 000



Protection cap for HF-connector Ø 4 mm

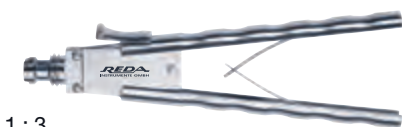
R030 - 000000



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, metal not insulated

R038 - 000000 - 000



1:3

Axial handle, with spreading spring

R048 - 000000 - 000



1:3

Axial handle with rings and ratchet, metal not insulated

R037 - 000000 - 000



1:3

Axial ring handle

R047 - 000000 - 000



Axial handle, v-shaped angled, type with spreading spring and ratchet, metal not insulated

R039 - 000000 - 000



Axial handle, angled, with spreading spring

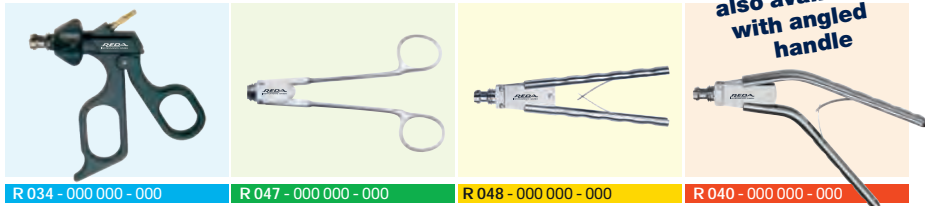
R040 - 000000 - 000

**Carbon Handles**

more details at the beginning of the chapter

**Stainless steel Handles**

more details at the beginning of the chapter



Ø 5 mm



Metzenbaum preparation scissors, straight, double 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>	R040-050330-110	R044-050330-110	R057-050330-110	R058-050330-110
<b>360 mm</b>	R040-050360-110	R044-050360-110	R057-050360-110	R058-050360-110
<b>450 mm</b>	R040-050450-110	R044-050450-110	R057-050450-110	R058-050450-110



Metzenbaum preparation scissors, curved, double action jaws

Working length | Working insert alone | Complete instrument

<b>330 mm</b>	R040-050330-112	R044-050330-112	R057-050330-112	R058-050330-112
<b>360 mm</b>	R040-050360-112	R044-050360-112	R057-050360-112	R058-050360-112
<b>450 mm</b>	R040-050450-112	R044-050450-112	R057-050450-112	R058-050450-112



Preparation scissors „WONDERCUT“, curved, double action jaws

Working length | Working insert alone | Complete instrument

<b>330 mm</b>	R040-050330-113	R044-050330-113	R057-050330-113	R058-050330-113
<b>360 mm</b>	R040-050360-113	R044-050360-113	R057-050360-113	R058-050360-113
<b>450 mm</b>	R040-050450-113	R044-050450-113	R057-050450-113	R058-050450-113



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

Working length | Working insert alone | Complete instrument

<b>330 mm</b>	R040-050330-125	R044-050330-125	R057-050330-125	R058-050330-125
<b>360 mm</b>	R040-050360-125	R044-050360-125	R057-050360-125	R058-050360-125
<b>450 mm</b>	R040-050450-125	R044-050450-125	R057-050450-125	R058-050450-125



Metzenbaum preparation scissors, soft, curved, double action jaws

Working length | Working insert alone | Complete instrument

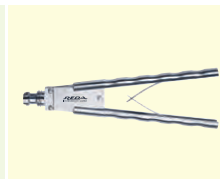
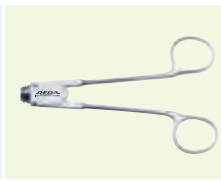
<b>330 mm</b>	R040-050330-122	R044-050330-122	R057-050330-122	R058-050330-122
<b>360 mm</b>	R040-050360-122	R044-050360-122	R057-050360-122	R058-050360-122
<b>450 mm</b>	R040-050450-122	R044-050450-122	R057-050450-122	R058-050450-122

**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



Peritoneal scissors, serrated, straight, single action jaws

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



Hook scissors, single action jaws

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



Micro scissors, straight, single action jaws

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



Micro scissors, curved, single action jaws

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



also available  
with angled  
handle

**Carbon Handles**

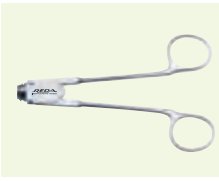
more details at the beginning of the chapter

**Stainless steel Handles**

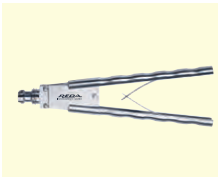
more details at the beginning of the chapter



R 034 - 000 000 - 000



R 047 - 000 000 - 000



R 048 - 000 000 - 000



R 040 - 000 000 - 000

Ø 10 mm



Mayo OP scissors, single action jaws

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

**Carbon Handles**

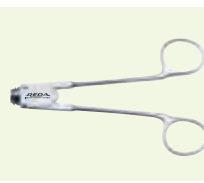
more details at the beginning of the chapter

**Stainless steel Handles**

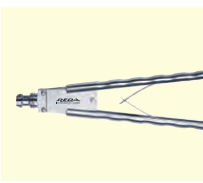
more details at the beginning of the chapter



R 034 - 000 000 - 000



R 047 - 000 000 - 000



R 048 - 000 000 - 000



R 040 - 000 000 - 000

also available  
with angled  
handle

Ø 5 mm



Blakesley tumor forceps, pointed, single action jaws

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



Biopsy cup, sharp, without thorn, double action jaws

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



Biopsy cup, sharp, with thorn, double action jaws

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



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

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



**Carbon Handles**

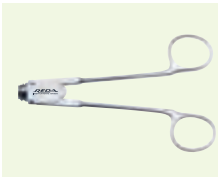
more details at the beginning of the chapter

**Stainless steel Handles**

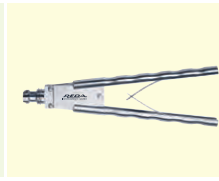
more details at the beginning of the chapter



R 034 - 000 000 - 000



R 047 - 000 000 - 000



R 048 - 000 000 - 000



R 040 - 000 000 - 000

Ø 5 mm



Biopsy cup, long, single action jaws

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



Biopsy cup, long, with thorn, single action jaws

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



Biopsy cup, tapering, fenestrated, single action jaws

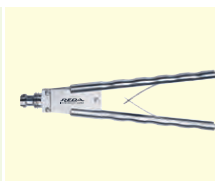
Working length	Working insert alone	Complete instrument		
<b>330 mm</b>	R040-050330-320	R044-050330-320	R057-050330-320	R058-050330-320
<b>360 mm</b>	R040-050360-320	R044-050360-320	R057-050360-320	R058-050360-320
<b>450 mm</b>	R040-050450-320	R044-050450-320	R057-050450-320	R058-050450-320

**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 5 mm

R 034 - 000 000 - 000

R 047 - 000 000 - 000

R 048 - 000 000 - 000

R 040 - 000 000 - 000



Biopsy punch without thorn, single action jaws

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



Biopsy punch with thorn, single action jaws

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



also available  
with angled  
handle

**Carbon Handles**

more details at the beginning of the chapter

**Stainless steel Handles**

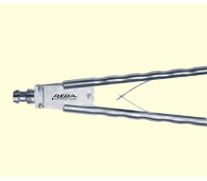
more details at the beginning of the chapter



R 034 - 000 000 - 000



R 047 - 000 000 - 000



R 048 - 000 000 - 000



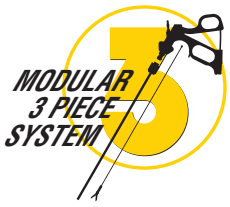
R 040 - 000 000 - 000

Ø 10 mm



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

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



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 !

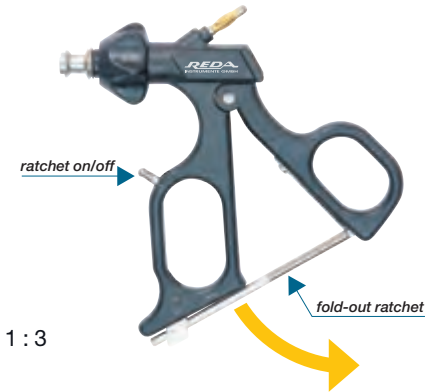


### Nut stopper

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



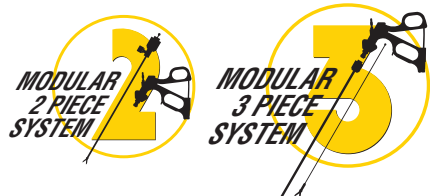
Ergonomic carbon handle,  
HF-connector Ø 4 mm male 45° lateral, rotating head 360°, autoclavable

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, metal not insulated

R038 - 000000 - 000



1 : 3

Axial handle, with spreading spring

R048 - 000000 - 000



1 : 3

Axial handle with rings and ratchet, metal not insulated

R037 - 000000 - 000



1 : 3

Axial ring handle

R047 - 000000 - 000



Axial handle, v-shaped angled, type with spreading spring and ratchet, metal not insulated

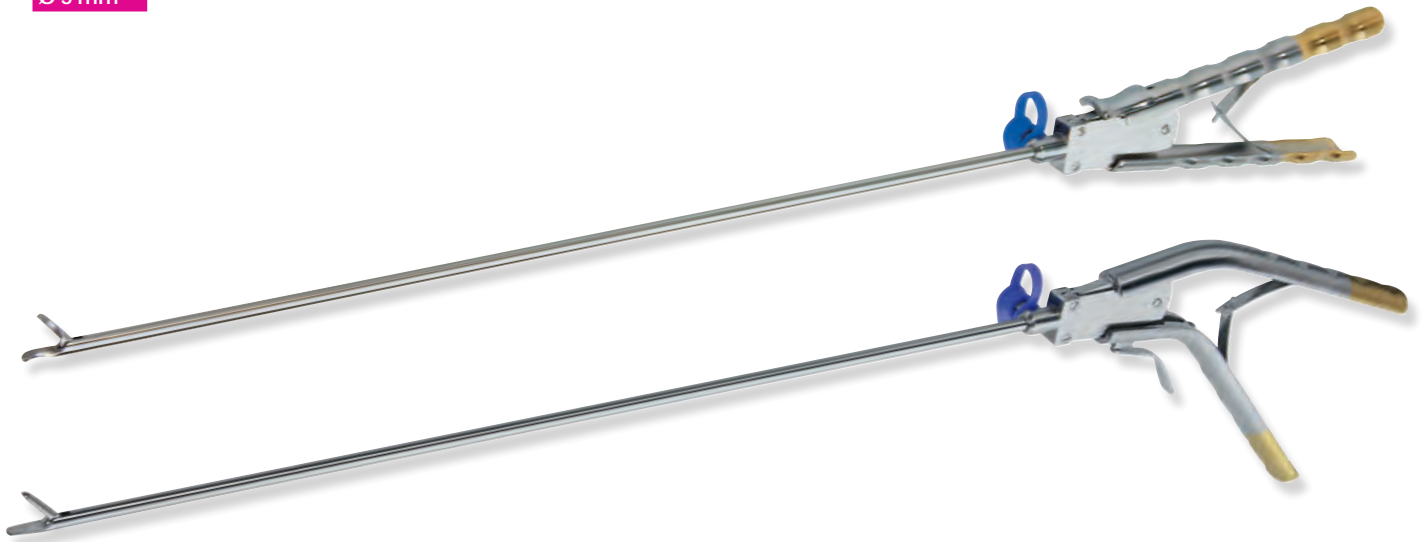
R039 - 000000 - 000



Axial handle, angled, with spreading spring

R040 - 000000 - 000

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

Handle	straight	angled
Art. No.	<b>R058-0533-350</b>	<b>R059-0533-350</b>



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

Handle	straight	angled
Art. No.	<b>R058-0533-352</b>	<b>R059-0533-352</b>



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

Handle	straight	angled
Art. No.	<b>R058-0533-354</b>	<b>R059-0533-354</b>



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

Handle	straight	angled
Art. No.	<b>R058-0533-360</b>	<b>R059-0533-360</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 032M - 000 000 - 000

R 033M - 000 000 - 000



Needleholder with inserted tungsten carbide, straight, single action jaws

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



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

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



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

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

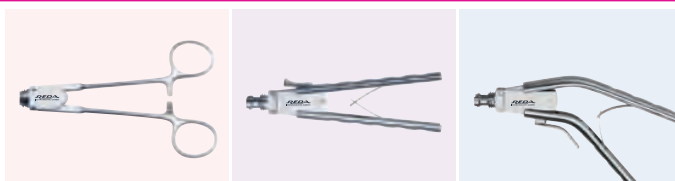


Needleholder/-positioner insert, convex/concav shaped jaws with fixation-teeth, Wolfram-Karbit finish, single action jaws

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

**Stainless steel Handles**

more details at the beginning of the chapter



R 037 - 000 000 - 000

R 038 - 000 000 - 000

R 039 - 000 000 - 000

Ø 5 mm



Needleholder with inserted tungsten carbide, straight, single action jaws

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

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

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

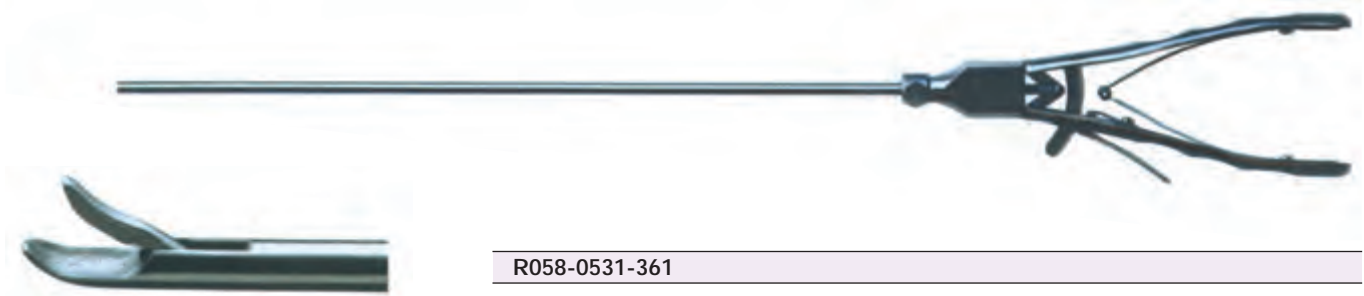


Needleholder/-positioner insert, convex/concav shaped jaws with fixation-teeth, Wolfram-Karbit finish, single action jaws

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

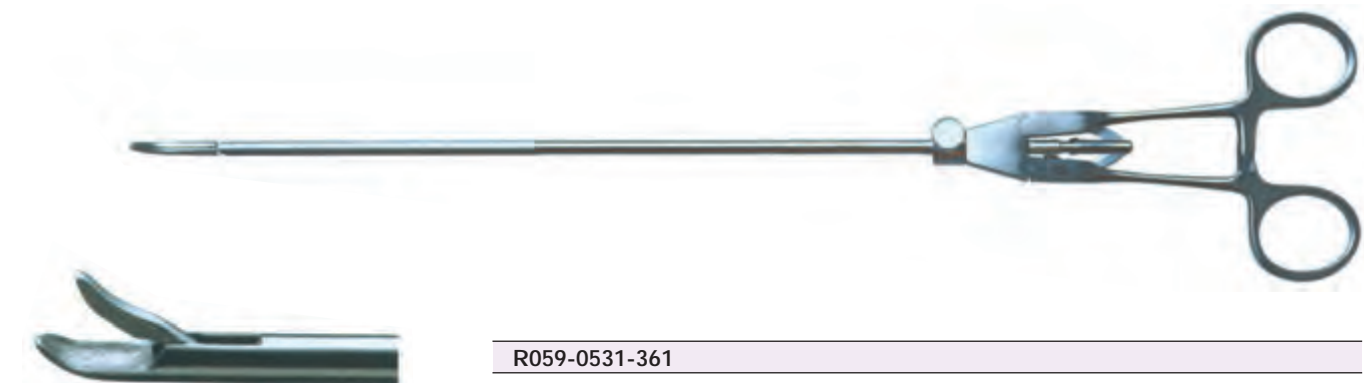
Romeo needleholder convex/concav  
for optimum grasp of needles 5 mm Ø, 310 mm working length, axial handle open w. ratchet, LL-cleaning-port



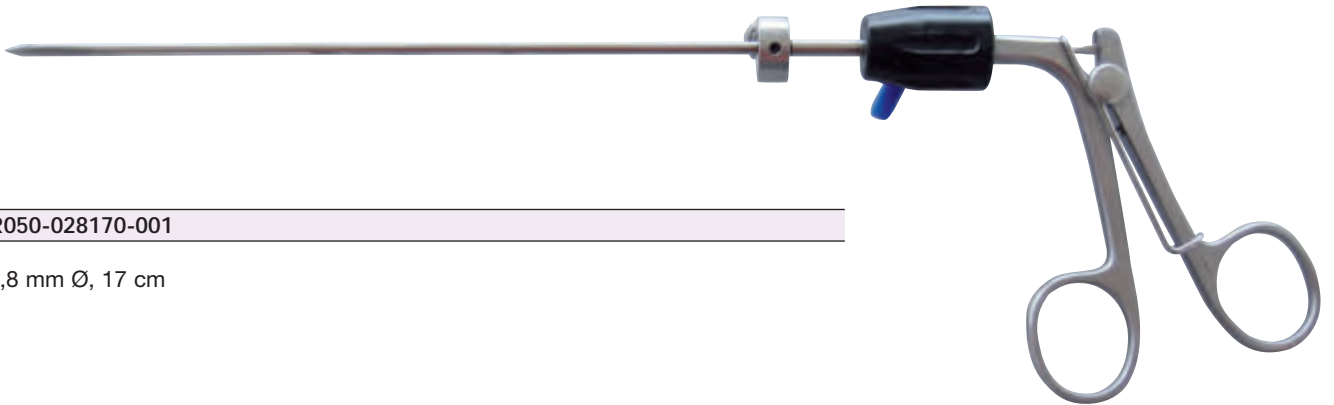
Romeo needleholder convex/concav  
for optimum grasp of needles 5 mm Ø, 310 mm working length, ergonomic axial handle w. rings and ratchet, LL-cleaning-port



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



Ø 2,8 mm



R050-028170-001

2,8 mm Ø, 17 cm



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

Fascial-Closure device (FCD)

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“

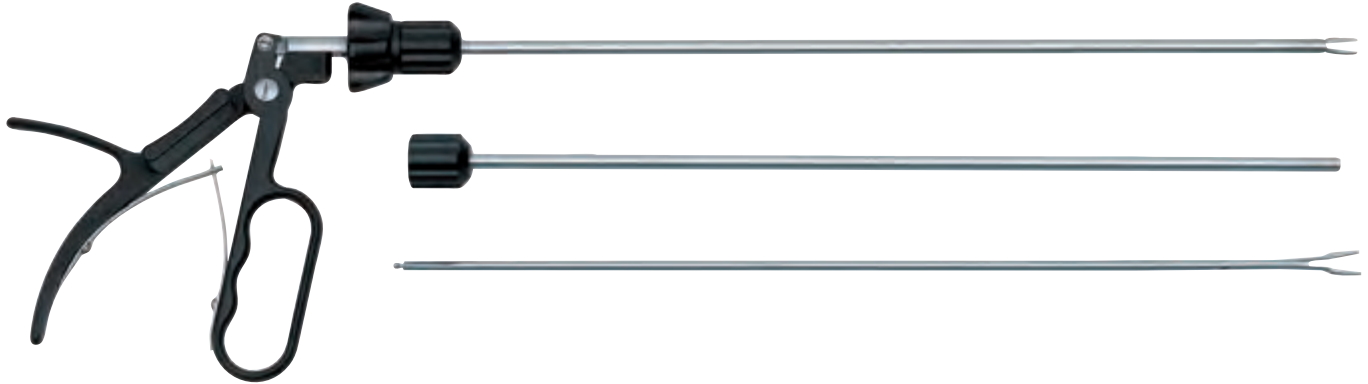
Pic. 4



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	R056-050330-01	R056-050000-01	R056-050000-00	R056-050330-00
Ethicon - medium	R056-050330-02	R056-050000-02		
Weck - small	R056-050330-11	R056-050000-11		
Weck - medium	R056-050330-12	R056-050000-12		
Pilling - small	R056-050330-21	R056-050000-21		
Pilling - medium	R056-050330-22	R056-050000-22		
Horizon - small	R056-050330-41	R056-050000-41		
Horizon - medium	R056-050330-42	R056-050000-42		

Ø 10 mm

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



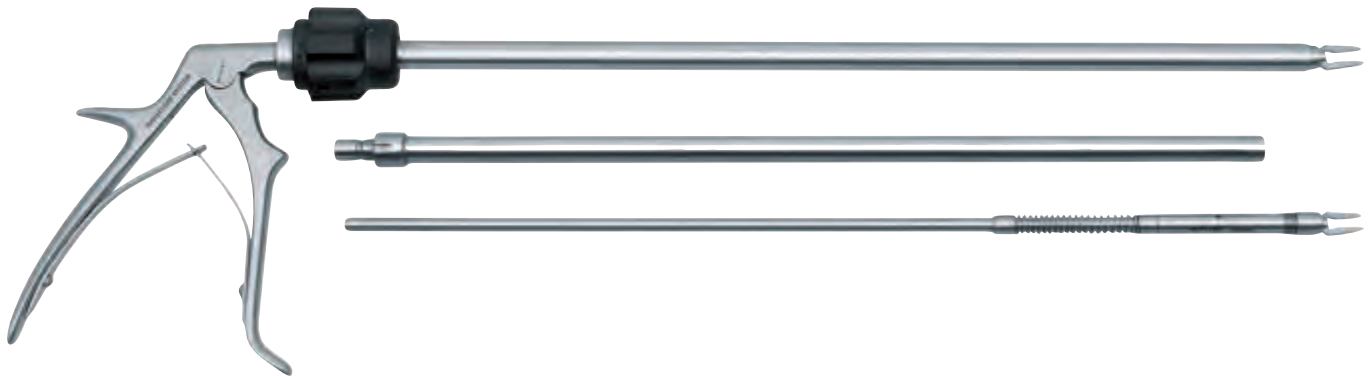
for Clips-Type	
Ethicon - small	R055-100330-01
Ethicon - medium	R055-100330-02
Ethicon - medium-large	R055-100330-03
Ethicon - large	R055-100330-04
Weck - small	R055-100330-11
Weck - medium	R055-100330-12
Weck - medium-large	R055-100330-13
Pilling - small	R055-100330-21
Pilling - medium	R055-100330-22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

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



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 5 mm






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



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

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



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








R060-000000-000  
Safety handle optional for more safety for users

Ø 5 mm

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



	Type	Working length 340 mm	Working length 450 mm
	Button type electrode	R061-050340-001	R061-050450-001
	J-hook electrode	R061-050340-002	R061-050450-002
	L-hook electrode	R061-050340-003	R061-050450-003
	Spatula electrode	R061-050340-004	R061-050450-004
	Needle electrode	R061-050340-005	R061-050450-005






Needle electrode 5 mm Ø, 310 mm Nutzlänge



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	R063-050330-001	R063-050450-001
	J-hook electrode	R063-050330-002	R063-050450-002
	L-hook electrode	R063-050330-003	R063-050450-003
	Spatula electrode	R063-050330-004	R063-050450-004
	Needle electrode	R063-050330-005	R063-050450-005

Ø 5 mm

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



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



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

R064-050000-001



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

R064-050000-002



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



R064-050000-022

**Handle with Double Trumpet Valve**  
and removeable handle plate for exchangeable electrodes, with rotatable adapter and sidewise HF-Connector, one Luer-Lock as well as a 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

Monopolar electrodes with exchangeable tip, dismountable 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

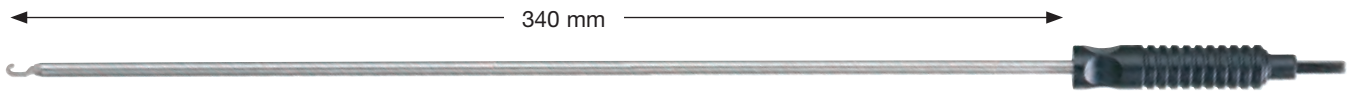
R062-050000-006



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



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



Bipolare 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



Handle alone  
R065-000000-100



Carbon shaft alone R065-050340-199  
Metal shaft alone with ceramic tip R065-050340-198



Jaws smooth, 3 mm

R065-000340-103  
Insert alone

R065-050340-103  
Complete with carbon shaft

R065-050340-303  
Complete with metal shaft



Jaws smooth long  
insulated, 1,0 mm

R065-000340-107  
Insert alone

R065-050340-107  
Complete with carbon shaft

R065-050340-307  
Complete with metal shaft



Jaws cross serrated, 3 mm

R065-000340-104  
Insert alone

R065-050340-104  
Complete with carbon shaft

R065-050340-304  
Complete with metal shaft



Jaws fenestrated with  
wave wire

R065-000340-101  
Insert alone

R065-050340-101  
Complete with carbon shaft

R065-050340-301  
Complete with metal shaft



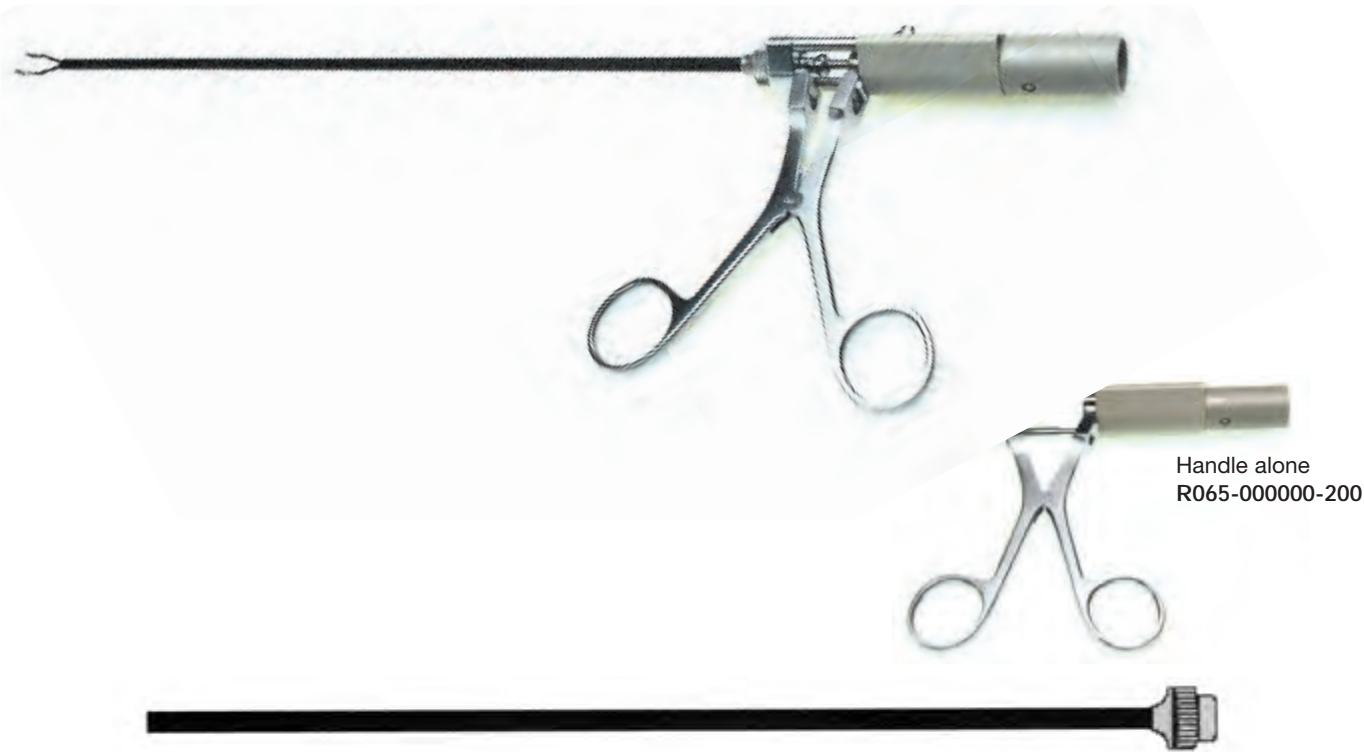
Jaws smooth, short  
insulated, 1,0 mm

R065-000340-105  
Insert alone

R065-050340-105  
Complete with carbon shaft






R065-050340-305  
Complete with metal shaft

Ø 5 mm



Handle alone  
R065-000000-200

Carbon shaft alone R065-050340-199  
Metal shaft alone with ceramic tip R065-050340-198

 Jaws smooth, 3 mm	<table border="1"> <tr> <td>R065-000340-103 Insert alone</td> </tr> <tr> <td>R065-050340-203 Complete with carbon shaft</td> </tr> <tr> <td>R065-050340-403 Complete with metal shaft</td> </tr> </table>	R065-000340-103 Insert alone	R065-050340-203 Complete with carbon shaft	R065-050340-403 Complete with metal shaft	 Jaws smooth long insulated, 1,0 mm	<table border="1"> <tr> <td>R065-000340-107 Insert alone</td> </tr> <tr> <td>R065-050340-207 Complete with carbon shaft</td> </tr> <tr> <td>R065-050340-407 Complete with metal shaft</td> </tr> </table>	R065-000340-107 Insert alone	R065-050340-207 Complete with carbon shaft	R065-050340-407 Complete with metal shaft
R065-000340-103 Insert alone									
R065-050340-203 Complete with carbon shaft									
R065-050340-403 Complete with metal shaft									
R065-000340-107 Insert alone									
R065-050340-207 Complete with carbon shaft									
R065-050340-407 Complete with metal shaft									
 Jaws cross serrated, 3 mm	<table border="1"> <tr> <td>R065-000340-104 Insert alone</td> </tr> <tr> <td>R065-050340-204 Complete with carbon shaft</td> </tr> <tr> <td>R065-050340-404 Complete with metal shaft</td> </tr> </table>	R065-000340-104 Insert alone	R065-050340-204 Complete with carbon shaft	R065-050340-404 Complete with metal shaft	 Jaws fenestrated with wave wire	<table border="1"> <tr> <td>R065-000340-101 Insert alone</td> </tr> <tr> <td>R065-050340-201 Complete with carbon shaft</td> </tr> <tr> <td>R065-050340-401 Complete with metal shaft</td> </tr> </table>	R065-000340-101 Insert alone	R065-050340-201 Complete with carbon shaft	R065-050340-401 Complete with metal shaft
R065-000340-104 Insert alone									
R065-050340-204 Complete with carbon shaft									
R065-050340-404 Complete with metal shaft									
R065-000340-101 Insert alone									
R065-050340-201 Complete with carbon shaft									
R065-050340-401 Complete with metal shaft									
 Jaws smooth, short insulated, 1,0 mm	<table border="1"> <tr> <td>R065-000340-105 Insert alone</td> </tr> <tr> <td>R065-050340-205 Complete with carbon shaft</td> </tr> <tr> <td>R065-050340-405 Complete with metal shaft</td> </tr> </table>	R065-000340-105 Insert alone	R065-050340-205 Complete with carbon shaft	R065-050340-405 Complete with metal shaft					
R065-000340-105 Insert alone									
R065-050340-205 Complete with carbon shaft									
R065-050340-405 Complete with metal shaft									

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	R066-000200-510	R066-050200-510	R066-050200-610
340 mm	R066-000340-510	R066-050340-510	R066-050340-610
450 mm	R066-000450-510	R066-050450-510	R066-050450-610

Maryland



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

Outer shaft tube



Working length	
200 mm	R066-050200-001
340 mm	R066-050340-001
450 mm	R066-050450-001

Inner shaft tube



Working length	
200 mm	R066-050200-000
340 mm	R066-050340-000
450 mm	R066-050450-000



Adapter for european flat plug

R066-000000-002



Adapter for US-cables

R066-000000-012



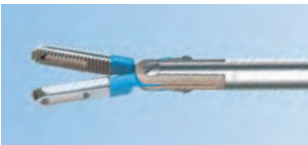
Ø 5 mm



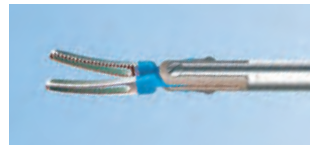
Handle  
R067-000000-700



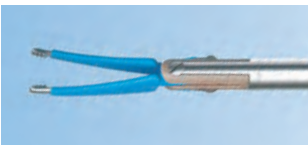
Shaft  
R067-050340-700



Large grasping forceps  
R067-000340-713



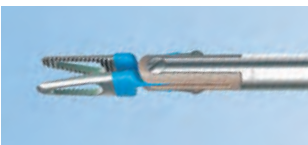
Grasping forceps, curved  
R067-000340-724



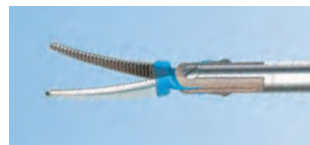
Forceps, curved  
R067-000340-722



Scissors, curved  
R067-000340-709









Delta Grasper  
R067-000340-723



Maryland dissector, curved  
R067-000340-721

Unit side

Instrument side

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



**ORBITARIS bipolar forceps with rotating handle.**

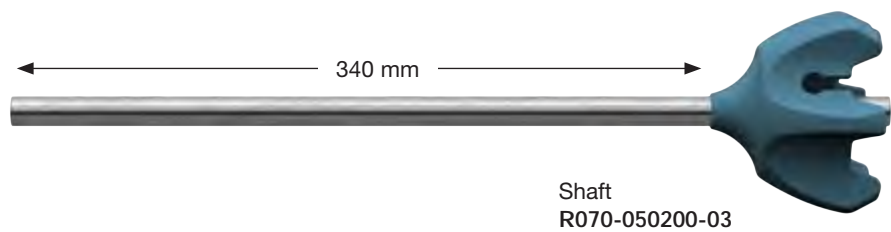
This new innovative design provides the surgeon with comfortable ergonomic handling in all working positions.

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. All P-Coat electrodes are fully compatible with both the ORBITARIS and the Powergrip bipolar instruments.



Handle, lockable  
R070-050200-02

function by design  
**ORBITARIS**  
bipolar forceps with rotatable handle



Large grasping forceps  
R070-050200-04



Scissors, curved  
R070-050200-05



Grasping forceps,  
fenestrated, curved  
R070-050200-06



Maryland dissector, curved  
R070-050200-07



Micro needle electrode for monopolar cutting, 32 cm

R068-050320-01



Micro needle electrode for monopolar cutting, 42 cm

R068-050420-01



Combined micro needle electrode for cutting and coagulation, 32 cm

R069-050320-01



Combined micro needle electrode for cutting and coagulation, 42 cm

R069-050420-01

Spare cutting needle for micro needle electrode 12 pieces

R068-050000-00

Spare cutting needle for combined micro needle cutting and coagulation electrode 12 pieces

R069-050000-00

The monopolar wire loop electrode has been designed for laparoscopic supracervical hysterectomy (HSL). It is used, to rapidly and safely remove the uterus supracervically.



Hysterectomy instrument with one wire loop electrode

R067-050320-01



Spare wire loop electrode for single use, non-sterile, ø 100 mm

R067-050100-00



Spare wire loop electrode for single use, non-sterile, ø 125 mm

R067-050125-00



Spare wire loop electrode for single use, non-sterile, ø 65 mm

R067-050065-00

Ø 5,0 mm

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



working length	complete
330 mm	R072-050330-004 D

Handle with Sliding Valve
R072-000000-000

Roundhole Sucker with 4 Drillings and Handle
R070-050330-004 D

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

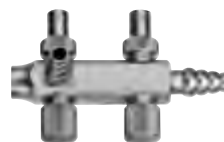


working length

330 mm R075-050330-004

Ø 5,0 mm

Suction-Irrigation-Handle  
with Tube Connection



R071-000000-000

Suction-Irrigation-Handle  
with Luer-Lock-Connection



R073-000000-000

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 with		
330 mm	R070-050330-004	4 Drillings, Ø 5 mm	R073-050330-004	R071-050330-004	R072-050330-004
330 mm	R070-050330-016	16 Drillings, Ø 5 mm	R073-050330-016	R071-050330-016	R072-050330-016
330 mm	R070-050330-032	32 Drillings, Ø 10 mm	R073-050330-032	R071-050330-032	R072-050330-032



working length	Shaft tube alone		Roundhole-Bee Hive Sucker		
330 mm	R070-050330-048	48 Drillings, Ø 5 mm	R073-050330-048	R071-050330-048	R072-050330-048



working length	Shaft tube alone		Stump Bee Hive Sucker		
330 mm	R070-050330-049	48 Drillings, Ø 5 mm	R073-050330-049	R071-050330-049	R072-050330-049
500 mm	R070-050500-049	48 Drillings, Ø 5 mm	R073-050500-049	R071-050500-049	R072-050500-049



working length	Shaft tube alone		Punction Needle Sucker		
330 mm	R070-050330-002	Ø 5 mm	R073-050330-002	R071-050330-002	R072-050330-002



working length	Shaft tube alone		Aqua Dissector Cannula		
330 mm	R070-050330-001	Ø 5 mm	R073-050330-001	R071-050330-001	R072-050330-001



working length	Shaft tube alone		Stump Sucker		
330 mm	R070-050330-012	12 Drillings, Ø 5 mm	R073-050330-012	R071-050330-012	R072-050330-012



Ø 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 sidewise 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  
sidewise Tube-Luer-Lock-Connection



with small Tube-Connection and sidewise 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

240 mm	R070-035240-116	Ø 3,5 mm
330 mm	R070-050330-116	Ø 5 mm
330 mm	R070-100330-116	Ø 10 mm

Suction-Irrigation-Handle  
with 1 trumpet valve



R076-000000-200

Suction-Irrigation-Handle  
with 2 trumpet valves,  
ergonomic design



R078-000000-200

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 sidwise drillings		
340 mm	R070-030340-204	R076-030340-204	R078-030340-204	R079-030340-204
340 mm	R070-030340-216	R076-030340-216	R078-030340-216	R079-030340-216

**Ø 5,0 mm**



working length	Shaft tube alone	complete with 4 sidwise drillings		
340 mm	R070-050340-204	R076-050340-204	R078-050340-204	R079-050340-204
340 mm	R070-050340-216	R076-050340-216	R078-050340-216	R079-050340-216

**Ø 10 mm**



working length	Shaft tube alone	complete with 4 sidwise drillings		
340 mm	R070-100340-204	R076-100340-204	R078-100340-204	R079-100340-204
340 mm	R070-100340-216	R076-100340-216	R078-100340-216	R079-100340-216

**Suction-Irrigation-Handle**  
with sliding valve and rotatable adapter  
for tubes with large Luer-Lock, two  
combined Luer-Lock / Tube Connectors



R076-000000-300

Ø 3,0 mm

**Suction-Irrigation-Tubes**



working length **Shaft tube alone** complete with large Luer-Lock and 4 sidewise drillings

340 mm R070-030340-304 R076-030340-304

complete with large Luer-Lock and 16 sidewise drillings

340 mm R070-030340-316 R076-030340-316

Ø 5,0 mm



working length **Shaft tube alone** complete with large Luer-Lock and 4 sidewise drillings

340 mm R070-050340-304 R076-050340-304

complete with large Luer-Lock and 16 sidewise drillings

340 mm R070-050340-316 R076-050340-316

Ø 10 mm



working length **Shaft tube alone** complete with large Luer-Lock and 4 sidewise drillings

340 mm R070-100340-304 R076-100340-304

complete with large Luer-Lock and 16 sidewise drillings

340 mm R070-100340-316 R076-100340-316

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

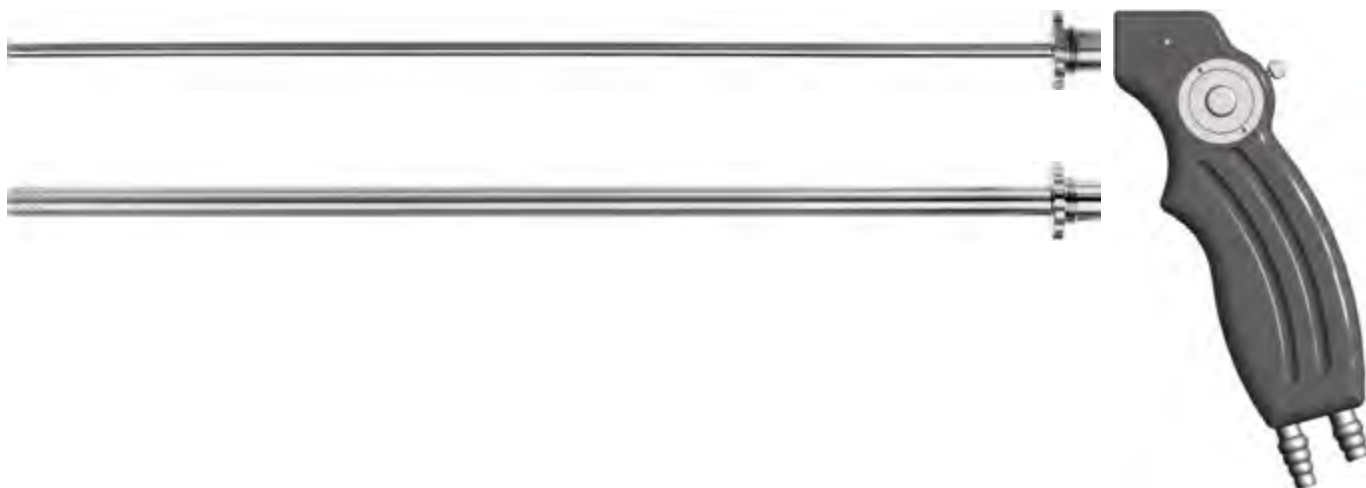
Suction-Irrigation

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	
330 mm	R070-030330-416	complete with Tube Ø 3,0 mm with distal 4x4 hole R079-030330-416
330 mm	R070-050330-416	complete with Tube Ø 5,0 mm with distal 4x4 hole R079-050330-416
330 mm	R070-100330-416	complete with Tube Ø 10 mm with distal 4x4 hole R079-100330-416

Ø 5 mm



R075-050 340 - 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



R075-020 390 - 000

Laser fiber guide insert alone, 391 mm

R075-050 340 - 000

Complete set

**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	R075-050330-007	
0,9 mm	R075-050330-009	
1,2 mm	R075-050330-012	R075-050450-012
1,4 mm	R075-050330-014	R075-050450-014
1,5 mm	R075-050330-015	R075-050450-015
1,8 mm	R075-050330-018	R075-050450-018

**Ø 6 mm**

Puncture Tube for NaCl - Fluid, 6 mm Ø



working length	
160 mm	R940-5130-160
190 mm	R940-5130-190
235 mm	R940-5130-235

**Ø 2 mm**

Insufflation cannula 2 mm Ø, with LL-adapter



Needle working length

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

**Ø 2,7 mm**

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



Needle working length

100 mm	R075-027100-001
120 mm	R075-027120-001
150 mm	R075-027150-001
170 mm	R075-027170-001

**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





INSTRUMENTE GMBH

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Ø 5 mm

Cholangiography guide tube 5 mm Ø, with LL-adapter, 330 mm working length



R080-050330-001

Cholangiography guide probe with hook 5 mm Ø, 330 mm working length



R080-050330-101

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	R090-050330-001
450 mm	R090-050450-001

Two-Way-Stopcock for Contrast Medium

R070-000040-003

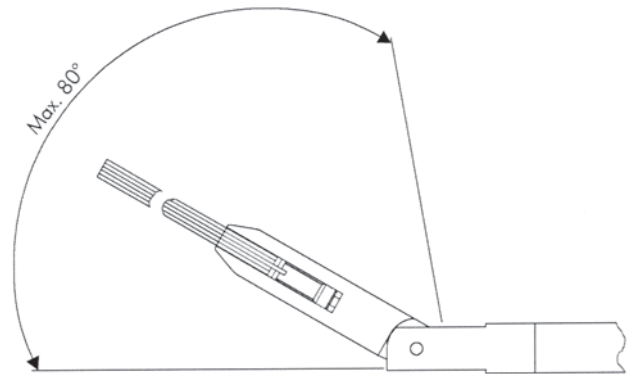
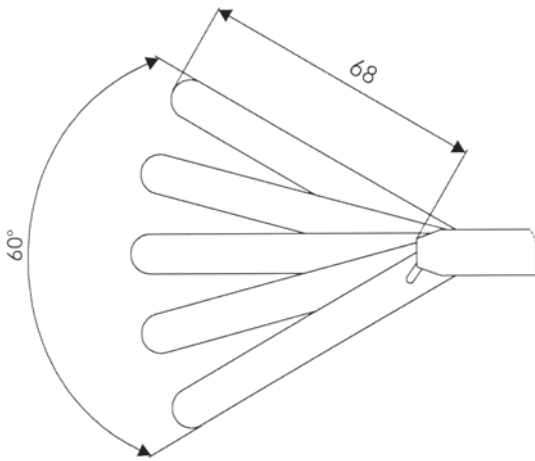


Ø 10 mm

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



R091-100330-005



Ø 5 mm

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



R091-050340-005

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



R092-050340-005

Ø 5 mm



R093-050550-001

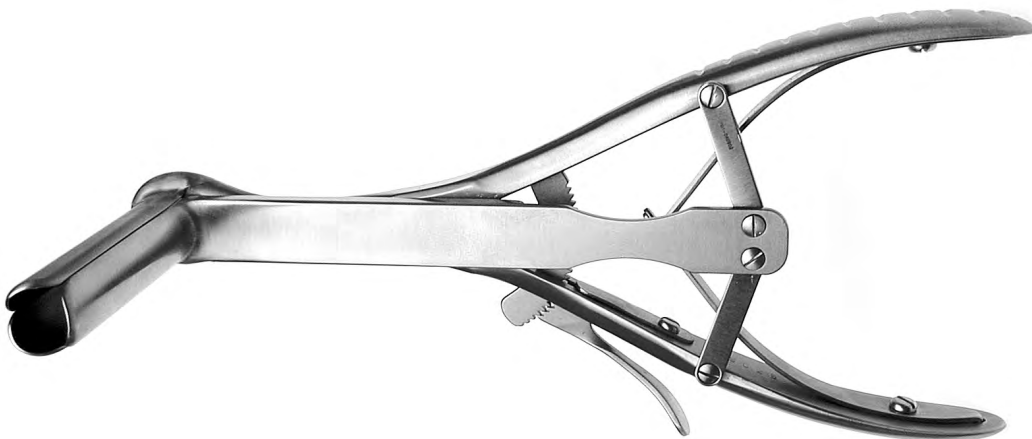


R093-050470-001



Speculum retractor, 3 blades for gall bladder extraction

R099-000250-003



**Ø 2,9/2,7/2,0 mm**

Laparoscopes with integrated fiberoptic  
for illumination, autoclaveable



diameter	working length	direction of view 0°
<b>Ø 2,9 mm</b>	<b>302 mm</b>	R010-030302-000
<b>Ø 2,7 mm</b>	<b>302 mm</b>	R010-027302-000
<b>Ø 2,7 mm</b>	<b>260 mm</b>	R010-027260-000
<b>Ø 2,0 mm</b>	<b>302 mm</b>	R010-020302-000
<b>Ø 2,0 mm</b>	<b>260 mm</b>	R010-020260-000
<b>Ø 2,0 mm</b>	<b>187,5 mm</b>	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

Ø 3,5 mm

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	132 mm	R020-035070-023

Ø 3,5 mm

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



Ø	Sleeve with Cone	Cone alone
3,5 mm	R028-035070-021	R020-035500-001

Standard trocar  
conical blunt



R020-035070-003

Ø 3,5 mm



Ø 3 mm



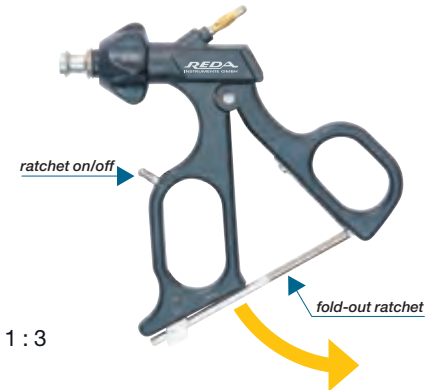
**The working insert and tube shaft form a single component. Namely the Working Part with a LUER lock irrigation adapter**

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



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



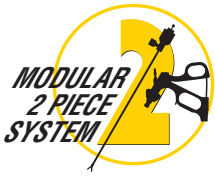
Ergonomic carbon handle,  
HF-connector Ø 4 mm male 45° lateral, rotating head 360°, autoclavable

R034 - 000000 - 000

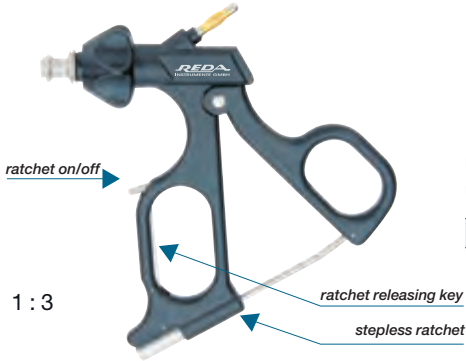


Ergonomic universal carbon handle with ratchet,  
Button for active or unactive ratchet, HF-connector Ø 4 mm male 45° lateral,  
rotating head 360°, autoclavable

R032M - 000000 - 000

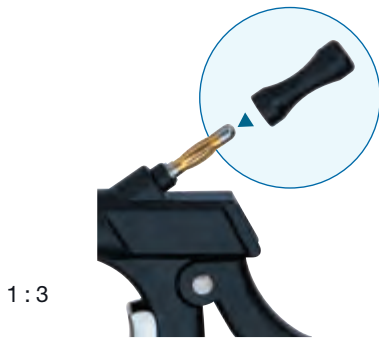


Ø 3 / 5 / 10 mm



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

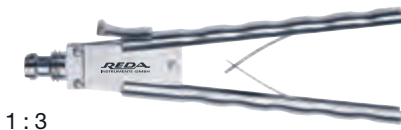


Protection cap for HF-connector Ø 4 mm

R030 - 000000



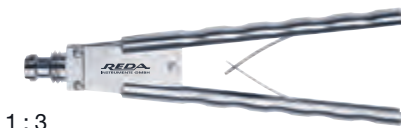
Ø 3 / 5 / 10 mm



1 : 3

Axial handle, v-shaped type with spreading spring and ratchet, metal not insulated

R038 - 000000 - 000



1 : 3

Axial handle, with spreading spring

R048 - 000000 - 000



1 : 3

Axial handle with rings and ratchet, metal not insulated

R037 - 000000 - 000



1 : 3

Axial ring handle

R047 - 000000 - 000



Axial handle, v-shaped angled, type with spreading spring and ratchet, metal not insulated

R039 - 000000 - 000

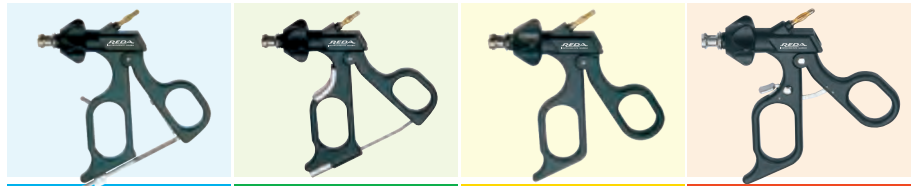


Axial handle, angled, with spreading spring

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>	R100-030180-210	R103-030180-210	R103P-030180-210	R104-030180-210	R102M-030180-210
<b>210 mm</b>	R100-030210-210	R103-030210-210	R103P-030210-210	R104-030210-210	R102M-030210-210
<b>330 mm</b>	R100-030330-210	R103-030330-210	R103P-030330-210	R104-030330-210	R102M-030330-210



Maryland grasping forceps, curved, double action jaws

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



Dissections forceps, fenestrated, oval, double action jaws

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



Grasping forceps with reservoir, tip blunt, double action jaws

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

**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



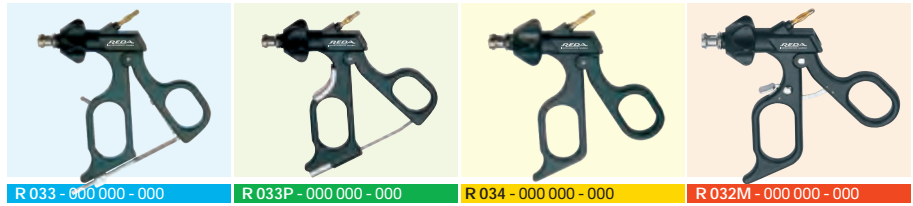
Grasping forceps with reservoir, tip blunt, double action jaws

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>	R100-030180-222	R103-030180-222	R103P-030180-222	R104-030180-222	R102M-030180-222
<b>210 mm</b>	R100-030210-222	R103-030210-222	R103P-030210-222	R104-030210-222	R102M-030210-222
<b>330 mm</b>	R100-030330-222	R103-030330-222	R103P-030330-222	R104-030330-222	R102M-030330-222



Delphin grasping forceps with reservoir, double action jaws

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



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

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



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

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

**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



R 034 - 000 000 - 000

R 047 - 000 000 - 000

R 048 - 000 000 - 000

Ø 3 mm



Metzenbaum scissors, straight, double action jaws

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



Metzenbaum scissors, curved, double action jaws

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



Peritoneal scissors, serrated, straight, single action jaws

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

**Carbon Handles**

more details at the beginning of the chapter

**Stainless steel Handles**

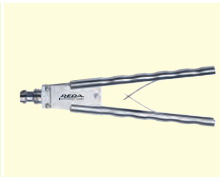
more details at the beginning of the chapter



R 034 - 000 000 - 000



R 047 - 000 000 - 000



R 048 - 000 000 - 000

Ø 3 mm



Hook scissors, straight, single action jaws

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



Micro scissors, straight, single action jaws

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

### 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>	R100-030180-310	R104-030180-310
<b>210 mm</b>	R100-030210-310	R104-030210-310
<b>330 mm</b>	R100-030330-310	R104-030330-310



Biopsy cup, sharp, with thorn, double action jaws

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

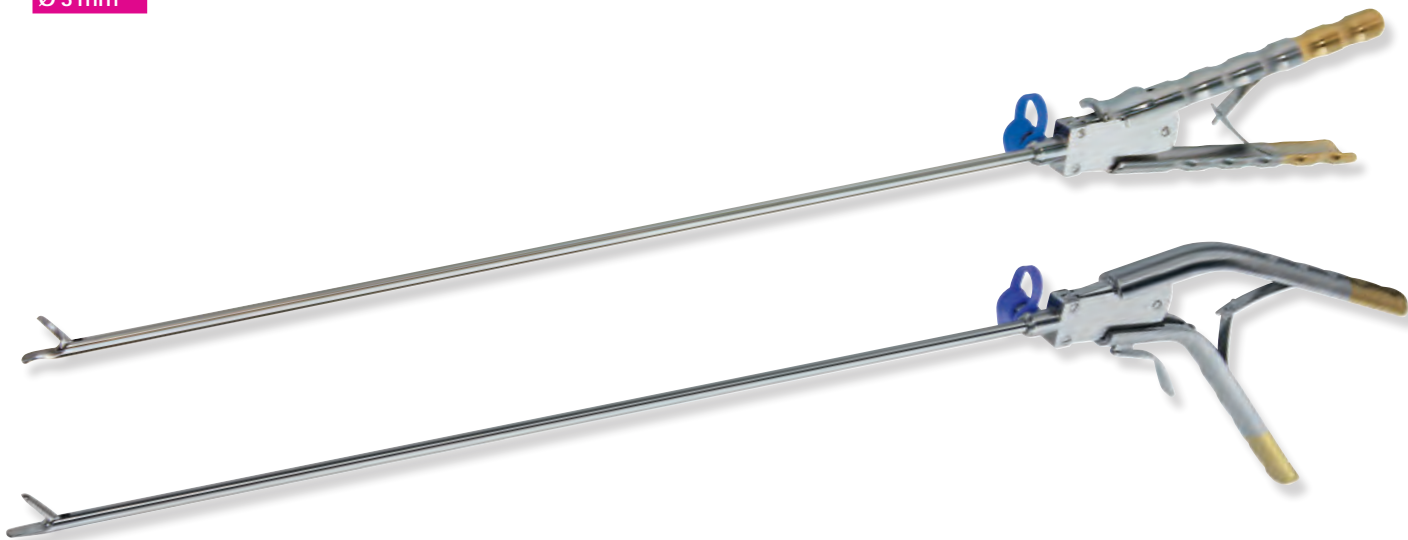




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INSTRUMENTE GMBH

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
Art. No.	<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
Art. No.	<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
Art. No.	<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
Art. No.	<b>R158-0533-360</b>	<b>R159-0533-360</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

Ø 3 mm



Needleholder with inserted tungsten carbide, straight, single action jaws

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



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

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



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

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



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

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

**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

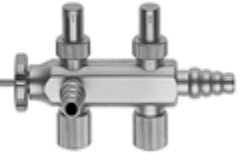


working length

330 mm	R 090-028330-001
250 mm	R 090-028250-001

Ø 2,8 mm

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



working length roundhole Sucker with 8 drillings

330 mm	R070-028330-008
250 mm	R070-028250-008

Handle with trumpet valve  
R071-000000-000

working length complete with handle

330 mm	R071-028330-008
250 mm	R071-028250-008

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



working length roundhole Sucker with 8 drillings

330 mm	R070-028330-008
250 mm	R070-028250-008

Handle with sliding valve  
R072-000000-000

working length complete with handle

330 mm	R072-028330-008
250 mm	R072-028250-008

Ø 2,8 mm

Suction-Irrigation-Cannula  
with trumpet valves  
and Square Handle



working length

330 mm	R075-028330-016
250 mm	R075-028250-016

Ø 1,2 mm

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



working length    Nadel / Needle

330 mm	R075-028330-012
250 mm	R075-028250-012



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

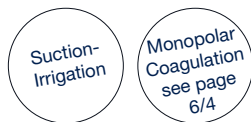
R078-000000-100

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



Handle with sliding valve

R064-050000-001

complete (handle and tube)

R079-030330-416

working length Tube only Ø 3,0 mm

330 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, autoclaveable



diameter	working length	direction of view	
		0°	30°
Ø 10,0 mm	180 mm	R110-100180-000	R110-100178-030

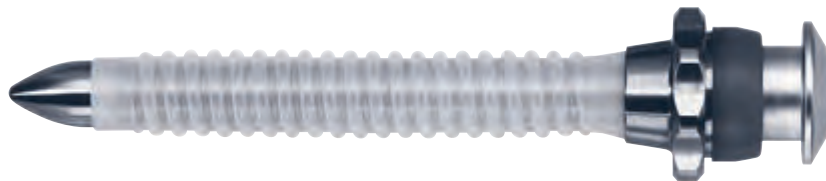
Ø 6 / 11 / 13 mm

**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

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

Working length: 9" (23 cm)  
Total length: 13 1/4" (33.5 cm)



6 mm width jaws  
7 mm shaft

R119-93527-13



Working length: 6 7/8" (17.5 cm)  
Total length: 9 3/4" (24.8 cm)



without ratchet  
10 mm shaft

R119-93527-17

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

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**

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

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

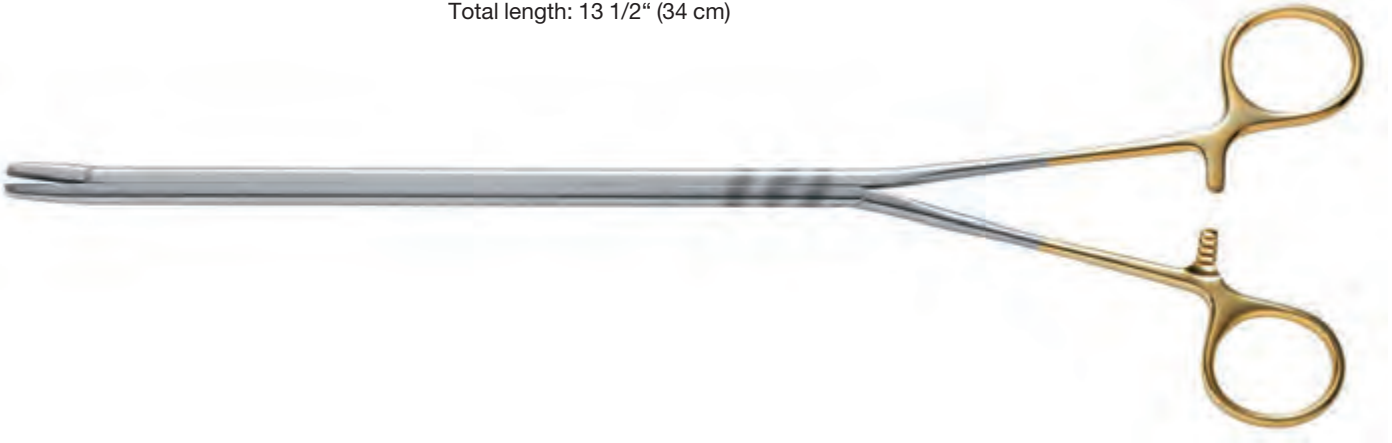
**R119-93527-11**



**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**

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

R119-93527-16

Ø 5,0 mm


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



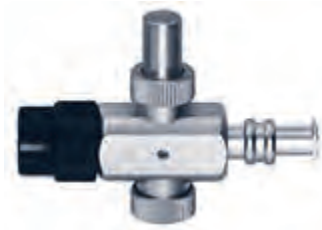
	type	working length
	<b>Ø 5 mm</b>	<b>330 mm</b>
	L-hook electrode	R116-050330-003
	Spatula electrode	R116-050330-004

**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

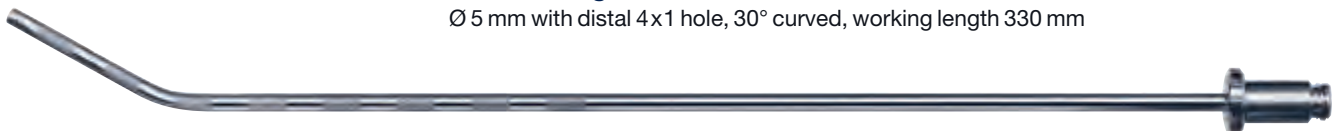
R 118-000000-500



**Suction-irrigation handle**  
2-way-valves

R 117-000000-500

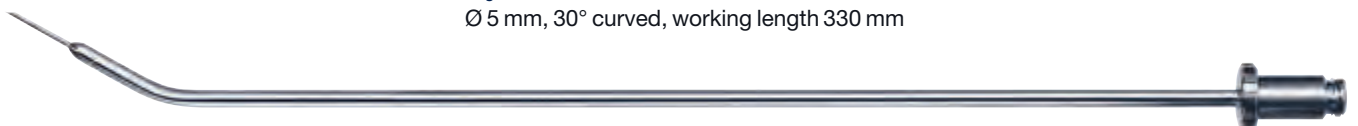
Ø 5 mm



**Suction-irrigation tube**

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

R 117-050330-504



**Injection needle**

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

R 117-050330-501





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INSTRUMENTE GMBH

### Laparoscopes

with integrated fiberoptic for illumination, autoclavable



#### Compatibility

Light port adaptor	ACMI®, Wolf®, Storz® / Olympus®
Eyepiece	Ocular according DIN 58105 threaded
Objective	Tension-free objective composed-objective
Image transmission	CAD-designed rodence system for optimal sharpness, colorsync and resolution
Light-guiding system	High quality light fibers
Optical glass	Distal and proximal Sapphire
Biocompatibility	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°
2,0 mm	260 mm	R010-020260-000	R010-020260-030
2,0 mm	302 mm	R010-020302-000	
2,7 mm	188 mm	R300-027188-000	R300-027188-030
2,7 mm	246 mm	R010-027246-000	R010-027246-030
2,7 mm	302 mm	R010-027302-000	R010-027302-030
4,0 mm	302 mm	R300-040302-000	R300-040302-030

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

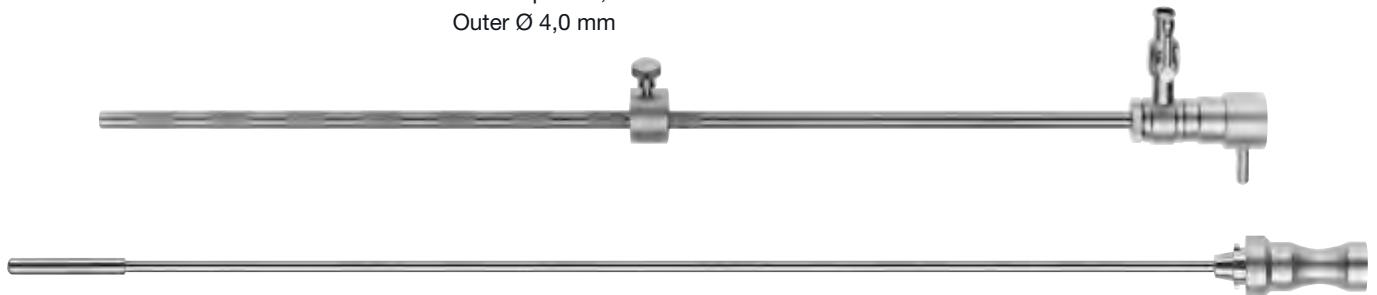


working length conical

95 mm R020-070095-002

## Diagnostic Sheaths

For Scope Ø 2,7 mm  
Outer Ø 4,0 mm



	Stopcock, fixed		Stopcock, rotating	
working length	0° with Distance-Holder		working length	
281 mm	R 210-040281-000		274 mm	R 211-040281-000
	30° with Distance-Holder			
281 mm	R 210-040281-030		274 mm	R 211-040281-030
	30° complete with Obturator and Distance-Holder			
281 mm	R 210-040281-130		274 mm	R 211-040281-130
	Obturator only			
	R 210-040305-00			
	Distance-Holder only			
	R 210-040306-00			

## Diagnostic Sheaths

For Scope Ø 4,0 mm  
Outer Ø 5,0 mm

	Stopcock, fixed		Stopcock, rotating	
working length	0° with Distance-Holder		working length	
281 mm	R 210-050274-000		274 mm	R 211-050274-000
	0° complete with Obturator and Distance-Holder			
281 mm	R 210-050281-001		274 mm	R 211-050274-001
	30° with Distance-Holder			
281 mm	R 210-050274-030		274 mm	R 211-050274-030
	30° complete with Obturator and Distance-Holder			
281 mm	R 210-050274-130		274 mm	R 211-050274-130
	Obturator only			
	R 210-050305-00			
	Distance-Holder only			
	R 210-050306-00			

Operation Sheaths with 1 Working Channel

For Scope Ø 2,7 mm

Outer Ø 5,8 mm

These sheaths have a separate Irrigation- and Working Channel



working length	working channel	Sheath with 1 rotating stopcock	Sheath with 2 rotating stopcocks
211 mm	5 CH.	0° OP - Sheath R211-058211-000	R212-058211-000
211 mm	5 CH.	30° OP - Sheath R211-058211-030	R212-058211-030

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.	0° OP - Sheath R211-075211-000	R212-075211-000
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
193 mm	5 CH.	R 214-060193-000
		30° Continuous-Flow-Sheath
193 mm	5 CH.	R 214-060193-030

**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
193 mm	7 CH.	R 214-080193-000
		30° Continuous-Flow-Sheath
193 mm	7 CH.	R 214-080193-030

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



working length	Diagnostic-Continuous-Flow-Inner Sheath, 1 stopcock, rigid	Outer Ø
0° - 300 mm		4,0
260 mm	R 213-037260-000	4,0
30° - 300 mm		4,0
260 mm	R 213-037260-030	4,0



working length	Diagnostic-Continuous-Flow-Outer Sheath, 1 stopcock, rigid	Outer Ø
0°, 30° - 300 mm, suitable for R213-037260-000, R213-037260-030		5,0
240 mm	R 213-050260-000	5,0

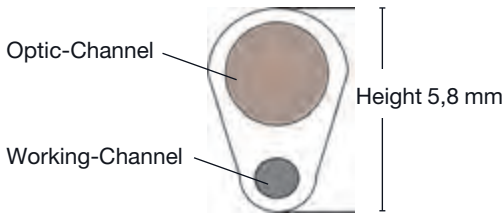


Obturator
suitable for R213-050260-000
R 213-050300-000

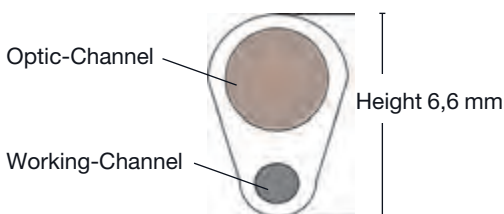
Continuous-Flow Operating Sheaths  
for Hysteroscopes Ø 2,7 mm and Ø 2,9 mm



working length	working channel	1 Instrument Port
228 mm	5 CH.	30° - 300 mm
R 212-038300-000		



		Diagnostic-Continuous-Flow-Outer Sheath, 1 stopcock, rigid
working length		30° - 300 mm, suitable for R212-038300-000
215 mm		R 212-040300-000



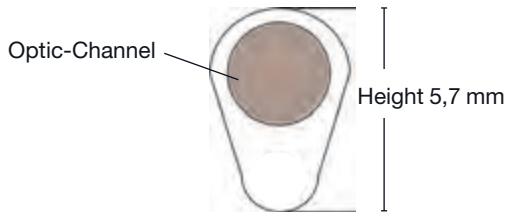


Hysteroscopy - Operating Sheaths  
for Hysteroscopes Ø 2,7 mm and Ø 2,9 mm



1 Instrument Port, 2 stopcock, rigid

working length	working channel	30° - 300 mm
222 mm	5 CH.	R212-035248-101



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



	Diagnostic-Continuous-Flow-Inner Sheath, 1 stopcock, rigid	
working length	0° - 300 mm	Outer Ø
260 mm	R 213-054260-000	5,3
	30° - 300 mm	
260 mm	R 213-054260-030	5,3



	Diagnostic-Continuous-Flow-Outer Sheath, 1 stopcock, rigid	
working length	0°, 30° - 300 mm, suitable for R213-054260-000, R213-0542600-030	Outer Ø
240 mm	R 213-065250-030	6,5



	Obturator
	suitable for R213-065250-030
	R 213-065300-000

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



1 Instrument Port

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



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

working length	30° - 300 mm, suitable for R214-070000-030	Outer Ø
155 mm	R214-070200-030	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 Complete with Loading Device and Conus  
suitable for OP-Laparoscope: STANDARD

327 mm R 120-060330-001



Loading Device

R 120-060000-002



Conus Piece

R 120-060000-001

**Ø 6,5 mm**

**Second Incision**

For use with a regular Trocar Sleeve



working length Complete with Loading Device

300 mm R 120-065340-001



Loading Device

R 120-060000-002



Conus Piece

R 120-060000-001

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

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 alone

R122-250170-001

Manipulator  
alone, without cones



R122-200180-000

working length	Ø
----------------	---



Uterus obturator, thin, short

45 mm	3 mm
-------	------

R122-030045-000



Uterus obturator, thin, long

55 mm	3 mm
-------	------

R122-030055-000



Uterus obturator, medium, long

80 mm	8 mm
-------	------

R122-080080-000



Uterus obturator, thick, extra long

100 mm	10 mm
--------	-------

R122-100100-000



Cone, with short thorn

60 mm	25 mm
-------	-------

R122-250060-000



Cone, with long thorn

70 mm	25 mm
-------	-------

R122-250070-000

Uterus Manipulator  
with 6 different cones

R122-200180-199



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

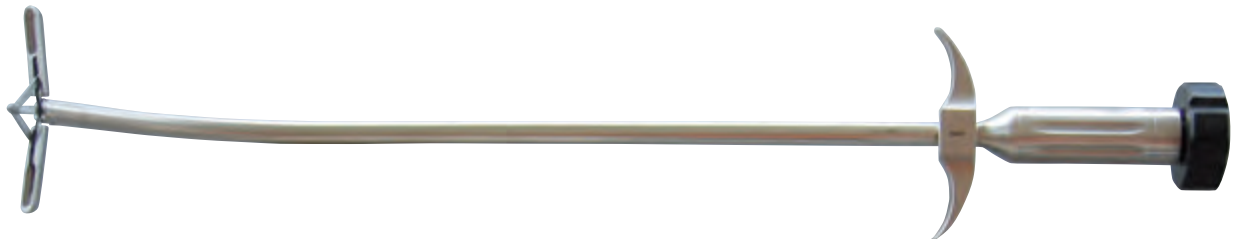
Ø 7,0 mm

Urological Instrument  
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
R900-035180-00	3,5	180	R901-035180-00
R900-035230-00	3,5	230	R901-035230-00
R900-035300-00	3,5	300	R901-035300-00
R900-035350-00	3,5	350	R901-035350-00
R900-048180-00	4,8	180	R901-048180-00
R900-048230-00	4,8	230	R901-048230-00
R900-048250-00	4,8	250	R901-048250-00
R900-048300-00	4,8	300	R901-048300-00
R900-048350-00	4,8	350	R901-048350-00

Other length on request

Connector to light source



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



R900-000000-09  
Pentax



R900-000000-11  
Fuji



R900-000000-13  
Heine-Optotechnik



R900-000000-15  
Winter+IBE

Endoscope-side



OUT



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



R900-000000-04  
Wolf



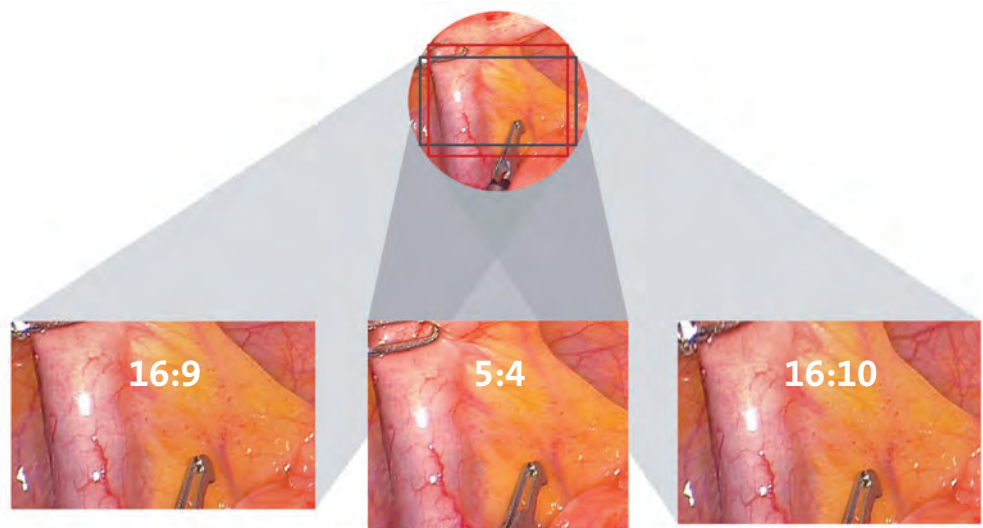
R900-000000-06  
ACM / British / Codman



autoclavable

## Choose your HD format

In terms of image resolution High Definition video technology has been established in the field of Minimally Invasive Surgery. A 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 them all, therefore all users are free to select their personally preferred format.



**1080p/1080i**  
1920 x 1080 pixels

**SXGA**  
1280 x 1024 pixels

**WUXGA**  
1920 x 1200 pixels

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

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

**16:10 – best 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 HDC907*optimum* and HDC407 supports both 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 OSD

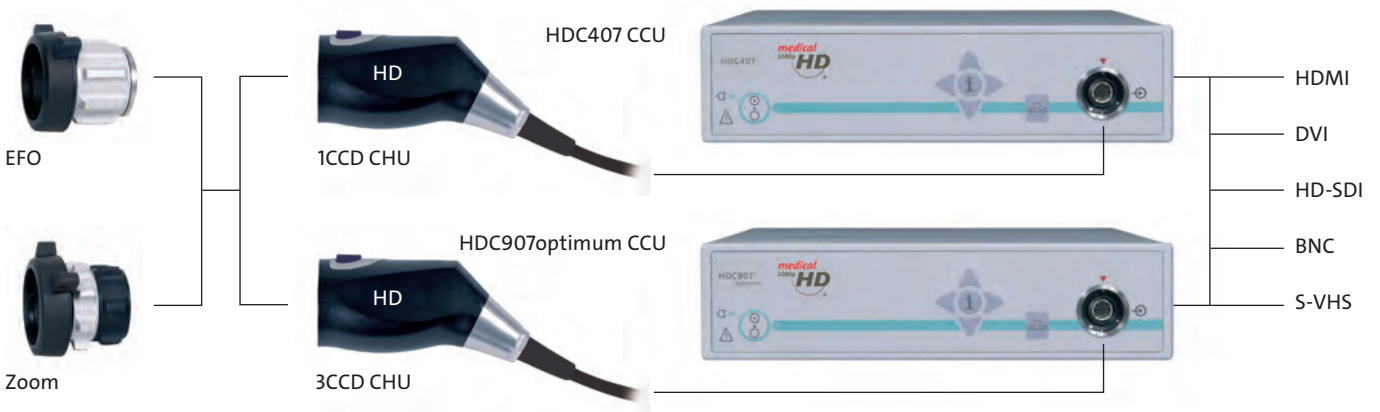
- Appropriate for all MIS applications guaranteed by extraordinary image quality
- Seven selectable application-optimized camera settings
- Ten individually adjustable user settings



### Latest output options

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

### From input to output: the HD chain



\*depends on model variation



# 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
R920-907-N01	HDC Control unit
R920-907-P02	HDC Camera Head PAL (non autoclavable)
R920-907-N02	HDC Camera Head NTSC (non autoclavable)
R920-907-P03	HDC Camera Head PAL (autoclavable)
R920-907-N03	HDC Camera Head NTSC (autoclavable)

### Videocoupler EFO

- Focal length: 18 mm; 22 mm; 25 mm
- Brilliant optic
- Quick coupler
- Waterproof
- C-mount
- Ergonomic Design



Videocoupler EFO

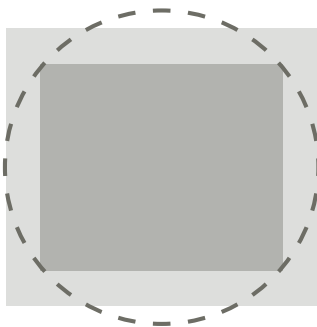
### Videocoupler Zoom

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

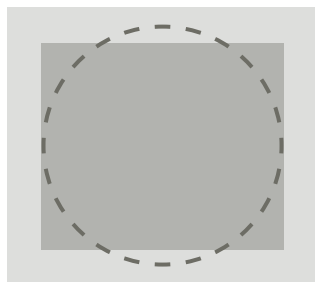


Videocoupler Zoom

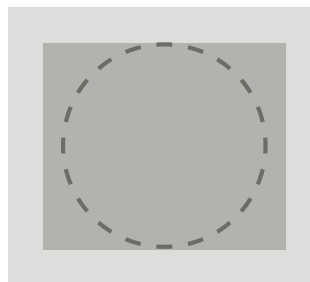
### The right coupler for optimum indication settings



LAP, 25 mm



ENT, 22 mm



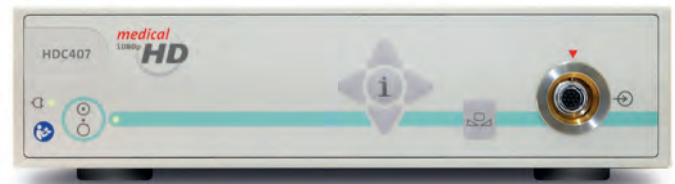
ARTHRO, HYS, URO, 18 mm

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

## HDC407

### 1CCD Medical-HD® Camera

- Fully digital 1CCD Camera Head
- Autoclavable Camera Head
- Exchangeable camera cable
- C-mount thread for easy coupler exchange and free choice of couplers



#### Devices

Item No.	Description
R920-907-N01	HDC407 and HDC907optimum Control Unit
R920-407-N01	HDC407 Camera Head NTSC (autoclavable)
R920-407-P01	HDC407 Camera Head PAL (autoclavable)

#### Accessories

Part No.	Description
R920-EFO-L01	Videocoupler EFO, Focal length = 18 mm (ARTHRO, HYS, URO)
R920-EFO-L02	Videocoupler EFO, Focal length = 22 mm (ENT)
R920-EFO-L03	Videocoupler EFO, Focal length = 25 mm (LAP)
R920-ZOOM-L01	Videocoupler Zoom, Focal length = 16-34 mm, (LAP, ARTHRO, HYS, URO, ENT)
R920-URO-L01	URO-Videocoupler, 18 mm, 90°
R920-CCB-L02	Camera cable, black

Power supply cord and further accessories available upon request.



Technical Data	HDC907 <i>optimum</i>	HDC407
Camera Head Unit (CHU)	Medical-HD® 1080p 3CCD Camera Head	Medical-HD® 1080p 1CCD 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	1 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 (w x h x l)	Ø 40 mm/1.57 in, L = 120/4.72 in (length incl. zoom and quick coupling)	
Weight	170 g/6.0 oz (incl. EFO and quick coupling) 210 g/7.4 oz (incl. zoom and quick coupling)	160 g/5.6 oz (incl. EFO and quick coupling) 200 g/7.1 oz (incl. zoom and quick coupling)
Endo focus objectives (EFO's)	Multiple lens EFO f = 18 mm, f = 22 mm (standard), f = 25 mm, Urocoupler f = 18 mm, easy focusing with focus ring to 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		





## 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.

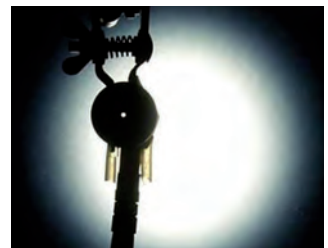
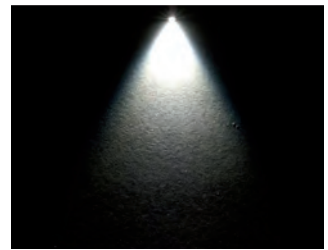
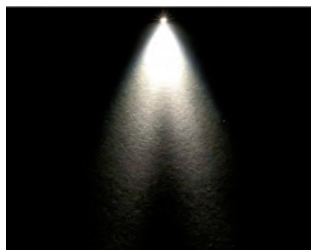
The LED320 exceeds the light output of 180 W Xenon-Light Sources without emitting UV or IR light. This leads to less heat transmission to the endoscope and reduces the risk of burning tissue. Additional advantages of the LED320 are the uniformly distributed illumination and the bright and more homogeneous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



### Device

Item No.	Description
R940-LED320-N01	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
R940-XL300-N01	Light Source with light cable socket, Storz
R940-XL300-N03	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
R901-048230-00	Light cable, 2.3 m, Ø 4.8 mm
R901-048300-00	Light cable, 3.0 m, Ø 4.8 mm
R940-XBO-300	Replacement lamp module XL300

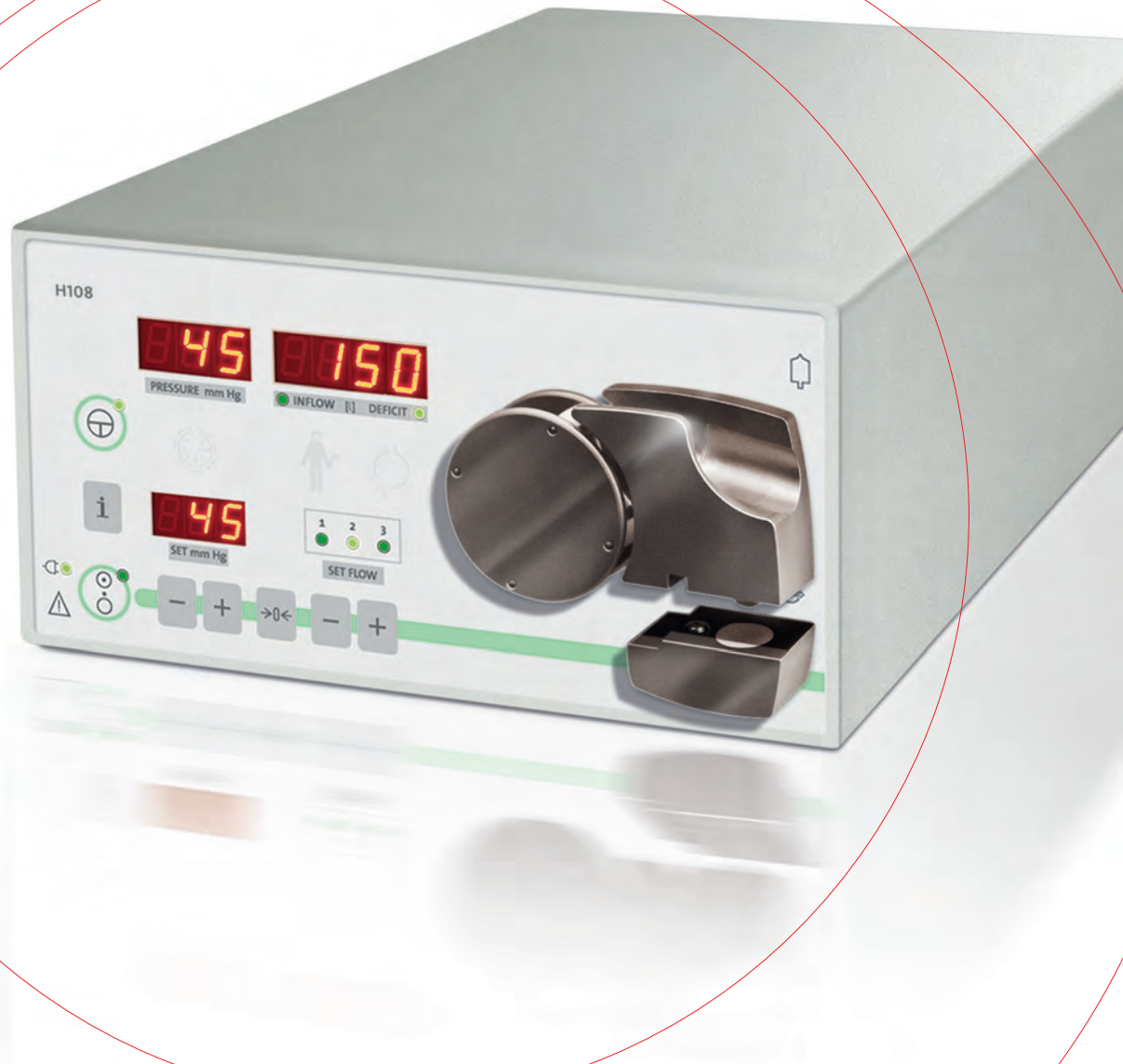
Power supply cord and further accessories available upon request.

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 $\pm$ 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

Light guide cables see page 14/1 and 14/2







# 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



### Device

Item No.	Description
R960-A127-N01	Pump for arthroscopy

### Accessories

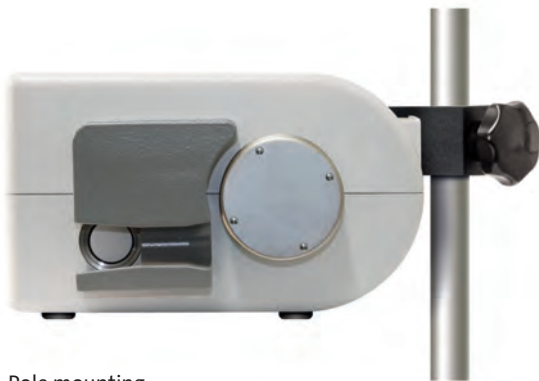
Part No.	Description
R960-1270-00	Tube set with Spike and Luer-Lock connector male: Disposable, only Inflow, transponder protection (1 packaging = 10 pcs.)
R960-1270-01	Reusable tube set, only inflow, 20 uses, transponder protection

Power supply cord and further accessories available upon request.

### Technical Data

Pressure range	5-150 mmHg
Max. flow	1.5 l/min ± 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



Pole mounting

# 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.



### Device

Item No.	Description
R960-A106-N01	Pump for arthroscopy

### Accessories

Part No.	Description
R960-0449-01	Tube set with pressure chamber, Irrigation, with Spike and Luer-Lock connector male: Disposable, sterile (1 packaging = 10 pcs.)
R960-0454-01	Reusable, 20 uses, incl. 10 membranes
R960-1424-01	Disposable, sterile, Safe-Lock (1 packaging = 10 pcs.)
R960-0106-01	Foot pedal for Irrigation Pump for arthroscopy
R960-0545-01	Cable remote control

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

Power supply cord and further accessories available upon request.

### 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

# P101

## Pump for laparoscopy

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



### Devices

Item No.	Description
R960-P101-N01	Pump for laparoscopy, power supply: 220-240 V
R960-P101-N02	Pump for laparoscopy, power supply: 110-115 V

### Accessories

Part No.	Description
	Tube set with pressure chamber, Irrigation, with Spike and Luer-Lock connector male:
R960-0449-01	Disposable, sterile (1 packaging = 10 pcs.)
R960-0454-01	Reusable, 20 uses, incl. 10 membranes
R960-1425-01	Tube set, suction, reusable, 20 uses
R960-1426-01	Tube set, vacuum, reusable, 20 uses
R960-0553-01	Wire Hoop for Bemis Container
R960-0554-01	Bemis Container, 3 L, disposable (1 packaging = 2 pcs.)
R960-0555-01	Bemis Container, 3 L, disposable (1 packaging = 36 pcs.)
R960-0556-01	Filter P06, sterile

### Technical Data

Max. Flow Rate Irrigation	1.8 l/min ( $\pm 10\%$ )
Suction	1.8 l/min (+ 0.4/- 0.1 l/min)
Max. Pump Capacity	400 mmHg ( $\pm 50$ 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

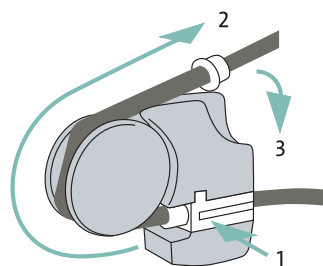
Power supply cord and further accessories available upon request.



# 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.

### Device

Item No.	Description
R960-UP100-N01	Pump for urology

### Accessories

Part No.	Description
	Tube set with pressure chamber, Irrigation, with Spike and Luer-Lock connector male:
R960-0449-01	Disposable, sterile (1 packaging = 10 pcs.)
R960-0454-01	Reusable, 20 uses, incl. 10 membranes
R960-1406-01	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



### Device

Item No.	Description
R960-H108-N01	Pump for hysteroscopy

### Accessories

Part No.	Description
	Tube set with pressure chamber, Irrigation, with Spike and Luer-Lock connector male:
R960-0449-01	Disposable, sterile (1 packaging = 10 pcs.)
R960-1424-01	Disposable, sterile, Safe-Lock (1 packaging = 10 pcs.)
R960-0454-01	Reusable, 20 uses, incl. 10 membranes
R960-1406-01	Tube set, outflow, disposable, sterile (1 packaging = 10 pcs.)
R960-0123-01	Bottle scale
R960-0554-01	Bemis Container, 3 L, disposable (1 packaging = 2 pcs.)
R960-0555-01	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	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

# 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



**Device**

Item No.	Description
R960-HM4-N01	HM4 (H100 – Name of Pump, M100 – Name of scale unit)

**Accessories**

Part No.	Description
	Tube set with pressure chamber, Irrigation, with Spike and Luer-Lock connector male:
R960-0449-01	Disposable, sterile (1 packaging = 10 pcs.)
R960-0454-01	Reusable, 20 uses, incl. 10 membranes
R960-1406-01	Tube set, outflow, disposable, sterile (1 packaging = 10 pcs.)
R960-0553-01	Wire Hoop for Bemis Container
R960-0554-01	Bemis Container, 3 L, disposable (1 packaging = 2 pcs.)
R960-0555-01	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

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Tube set with pressure chamber, Irrigation,  
with Spike and Luer-Lock connector male,  
disposable, sterile  
(R960-1270-00)



Tube set with pressure chamber, Irrigation,  
with Spike and Luer-Lock connector male\*,  
reusable, 20 uses, incl. 10 membranes  
(R960-0454-01)

Accessories A127

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Tube set with Spike and Luer-Lock connector male,  
disposable, only Inflow, transponder protection  
(R960-1270-00)



Tube set with Spike and Luer-Lock connector male,  
reusable, only inflow, 20 uses, transponder protection\*  
(R960-1270-01)

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

### Accessories HM4, H108, P101

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Bottle scale (R960-0123-01, for H108 only)  
and Bemis Container  
(disposable, R960-0554-01 / R960-0555-01)



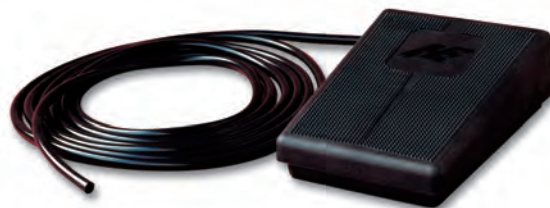
Filter, sterile  
(R960-0556-01, for P101 only)

### Accessories A106

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Cable remote control  
(R960-0545-01)



Foot pedal for Irrigation  
Pump for arthroscopy  
(R960-0106-01)

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

Further accessories available upon request.





# F102

## Insufflator for laparoscopy

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



### Devices

Item No.	Description
R930-F102-US	Insufflator for laparoscopy, gas connection CO <sub>2</sub> , US
R930-F102-DIN	Insufflator for laparoscopy, gas connection CO <sub>2</sub> , DIN
R930-F102-ISO	Insufflator for laparoscopy, gas connection CO <sub>2</sub> , ISO
R930-F102-PIN	Insufflator for laparoscopy, gas connection CO <sub>2</sub> , PIN

### Accessories

Part No.	Description
R930-0452-01	Tube set, insufflation, reusable, 20 uses
R930-1422-01	Tube set, insufflation with filter, disposable, sterile
R930-0536-00	Filter, single use only, sterile, ISO-ISO
R930-5044-01	High pressure tubing CO <sub>2</sub> , Bottle connection: DIN, Device connection: US, Length: 1.5 m
R930-5030-01	High pressure tubing CO <sub>2</sub> for central gas supply, 3 m, NIST/DIN
R930-5031-01	High pressure tubing CO <sub>2</sub> for central gas supply, 5 m, NIST/DIN
R930-5010-01	Connector CO <sub>2</sub> NIST for central gas supply (EU standard)
R930-5020-01	Connector CO <sub>2</sub> DISS for central gas supply (US standard)
R930-5070-01	Gas connector US, angled standard (F102/F104)
R930-5072-01	Sinter filter 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 filter when operating with reusable tube set.

### Technical Data

Insufflation medium	Med. CO <sub>2</sub>
Max. gasflow	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



### Devices

Item No.	Description
R930-F104-US	Insufflator for laparoscopy, gas connection CO <sub>2</sub> , US Language: English, German, French, Spanish

### Accessories

Part No.	Description
R930-0452-01	Tube set, insufflation, reusable, 20 uses
R930-1422-01	Tube set, insufflation with filter, disposable, sterile
R930-1415-00	Tube set, insufflation and gas heating, reusable, 100 uses
R930-0536-00	Filter, single use only, sterile, ISO-ISO
R930-5044-01	High pressure tubing CO <sub>2</sub> , Bottle connection: DIN, Device connection: US, Length: 1.5 m
R930-5030-01	High pressure tubing CO <sub>2</sub> for central gas supply, 3 m, NIST/DIN
R930-5031-01	High pressure tubing CO <sub>2</sub> for central gas supply, 5 m, NIST/DIN
R930-5010-01	Connector CO <sub>2</sub> , NIST for central gas supply (EU standard)
R930-5020-01	Connector CO <sub>2</sub> , DISS for central gas supply (US standard)
R930-5070-01	Gas connector US, angled standard (F102/F104)
R930-5072-01	Sinter filter for universal gas connection (1 packaging = 5 pcs.)

Technical Data	
Insufflation medium	Med. CO <sub>2</sub>
Max. gasflow	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  
(R930-1422-01)



Tube set, insufflation,  
reusable, 20 uses  
(R930-0452-01)



Tube set, insufflation and gas heating,  
reusable, 100 uses  
(R930-1415-01)



Filter, single use only,  
sterile, ISO-ISO  
(R930-0536-00)

**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)  
(R930-0175-01)



Connector CO<sub>2</sub>, NIST for central  
gas supply (EU standard)  
(R930-5010-01)



Connector CO<sub>2</sub>, DISS for central  
gas supply (US standard)  
(R930-5020-01)



High pressure tubing CO<sub>2</sub>,  
Bottle connection: DIN,  
Device connection: US,  
Length: 1.5 m  
(R930-5044-01)



High pressure tubing CO<sub>2</sub>  
for central gas supply,  
NIST/DIN, Length: 3 m  
(R930-5030-01)

Further accessories available upon request.







## 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-26



MD-23

Technical Data	R950-MD2311-LP23	R950-MD2611-LP26	R950-MD3211-LP32
Design	23" TFT-widescreen display	26" 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. 634 x 410 x 70 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)	12 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		
<b>Display module</b>			
Active area	509 x 286 mm	576 x 324 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		
<b>Interface</b>			
Analog	VGA D-SUB-15		
Digital	DVI-I	DVI-D	
S-Video	4-pole mini DIN		
Composite Video	RCA (PAL/NTSC)		
<b>OSD</b>			
Language selection	German (English, French, Italian, Spanish, Polish*)		
VGA	Size and position, clock and phase		
Viewing settings	Brightness, contrast, color temperature, gamma, input signal		
<b>Scope of delivery</b>			
Device	MD-23	MD-26	MD-32
Cable kit	DVI-D (VGA, Component Video, S-Video, Composite-Video*)		
<b>Acceptable ambient conditions</b>			
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		
<b>Supplementary standard</b>			
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

Please note that the monitors are supplied without stand



## OR Trolley

The right solution for every requirement



Maximum dependability, long service life and operational safety are the result of deploying high-quality materials in conjunction with precise manufacture. Quality that is value for money – **Made in Germany**. The product design looks good and demonstrates its many strengths in the details – features like hygiene are particularly important for the medical sector: all surfaces are as smooth as possible, with easy-wipe cleaning and resistant to disinfection agents.

The two-column cart features a load capacity up to 150 kg, easy-roll twin swivel castors measuring 100 mm in diameter for maximum mobility and maneuverability, universal monitor holder with VESA 75/100 adapter – up to 14 kg, Gas bottle holder – up to 38 kg and a lockable drawer.

- Long service life
- Gliding wheels with locking brakes
- Metal-powder coating surface: easy-cleaning, resistant to disinfection agents

### Devices

Item No.	Description
R981-6410-1	OR Trolley

### Technical Data

Dimensions (w x h x d)	710 x 1390 x 700 mm
Distances between stands	185 mm
Space for units (w x d)	600 x 480 mm
Stand for gas bottle (w x d)	180 x 190 mm
Stand for suction/irrigation container (w x d)	225 x 180 mm
Weight	57 kg



# Medical Imaging Made Easy™



- **Medical Video Recorder**  
Records from your endoscope, arthroscope, surgical camera, ultrasound, etc. Saves to a flash drive or hard drive that can be accessed from any computer on your network.
- **Intuitive Use**  
The simplicity in regards to connecting the device and the intuitivity of the menu allow easiest handling.
- **Medical Grade**  
With its steel case and fluid resistant front panel, the USB200 is built to withstand the rigors of the OR, and it's so compact it will fit on any cart.



## MediCap™ USB200

The MediCap USB200 is the medical industry's easiest full-featured video recording solution. Your videos and still images are recorded directly to a USB flash drive or optional hard drive. The recorded videos are DVD-quality, but without all the hassles of DVD disks.



### Powerful Options

compatible – versatile – affordable

- **USB Hard Drive** Perfect for archiving 100+ hours of video on a single device
- **USB Keyboard** Input patient data to organize your photos and videos
- **Network Adapter** Turn your USB200 into a mapped drive on your network
- **Foot Pedal** Connect your USB200 to your scope's trigger or to a foot pedal

## Specifications

<b>Device Type</b>	<b>Medical Video Recorder</b> Records video and still images from standard medical video sources to a USB flash drive or optional USB hard drive
<b>Case</b>	Rugged metal case with high impact plastic faceplate
<b>LCD Monitor</b>	2 1/2", color (for video confirmation only, not for diagnosis)
<b>Speaker</b>	200 Hz - 15 kHz, 1 W (for audio confirmation only, not for diagnosis)
<b>Buttons</b>	Sealed membrane, fluid resistant
<b>Video In/Out</b>	PAL or NTSC format using S-video or composite BNC
<b>Audio In/Out</b>	Standard 3.5 mm stereo phone jacks
<b>USB Support</b>	USB2.0, high speed, 1 front connector, 3 rear connectors (all powered)
<b>Networking</b>	Ethernet T10/100 connection via Network Upgrade Kit (optional)
<b>Footswitch/Trigger</b>	Hands-free capture Standard 3.5mm mini jack
<b>Mechanical</b>	Size: 240 x 200 x 63 mm/9.5 x 7.9 x 2.5" Weight: 1.7 kg/3 lb 12 oz (appx.)
<b>Environmental</b>	Storage: -40 °C to +85 °C Operating: -20 °C to +40 °C
<b>Power</b>	AC 100-240 V 50/60 Hz, 3-prong AC jack
<b>Media</b>	USB flash drives or external USB hard drive
<b>Image Formats</b>	JPEG, TIFF, PNG, DICOM
<b>Image Size</b>	1024 x 768, 800 x 600, 640 x 480 pixels
<b>Video Format</b>	MPEG2 (DVD-quality)
<b>Audio Format</b>	MPEG1 L2, 2 channels
<b>Certifications</b>	CE 93/42/EEC, UL 60601-1, IEC 60601-1, IEC 60601-1-2, CSA C22.2 No.601.1, E 306417, FCC Part 15, FDA Class 1, RoHS
<b>Kit Contents</b>	MediCap USB200, USB flash drive, Video cables, Power cable, User guide

Technical data subject to modification, revision and improvement without notice

Item No. R950-12009-76