

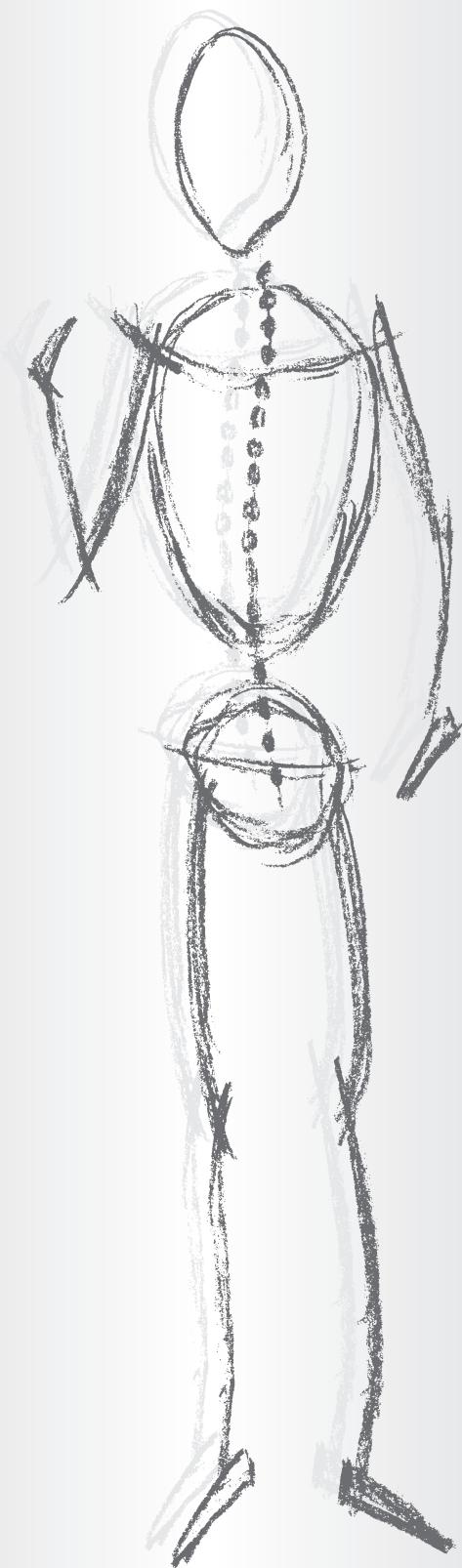


LAPAROSCOPY

**REDA**

INSTRUMENTE GMBH





<b>Laparoscopes</b>	1
<b>Trocars sleeves and accessories</b>	2
<b>Forceps</b>	3
<b>Scissors and biopsy forceps</b>	4
<b>Needleholder and suture instruments</b>	5
<b>HF-Instruments and accessories</b>	6
<b>Suction-Irrigation-Systems and accessories</b>	7
<b>Cholangiography</b>	8
<b>Palpation and retractors</b>	9
<b>Pediatric instruments</b>	10
<b>Thoracic instruments</b>	11
<b>Gynecology instruments</b>	12
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<b>Light Cable and connectors</b>	14
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<b>Monitors and Trolley</b>	18



**Preface**

This is a short listing of the groups of medical devices at the different chapters.

The intended use of those product groups are described in the glossary.

Handles with HF-connection

HF-connectors

Cannulas

Suction and Irrigation Instruments

**Laparoscopes**

Containing Devices: Laparoscope

**Trocars and Accessories**

Containing Devices: Trocars  
Trocars sleeves

**Grasping Forceps**

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

**Biopsie**

Containing Devices: Handles with HF-connections  
Scissors

**Needle Holder**

Containing Devices: Needle Holder  
Handles with HF-connections  
Forceps

**HF Instruments**

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

**Suction- and Irrigation Instruments**

Containing Devices: Suction and irrigation instruments containing  
▪ Handle  
▪ Tube  
▪ Guide insert  
▪ different needles

**Cholangiography****Preface**

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

Containing Devices: Tubes  
Guide Probes  
Cholangiography-Catheters  
Fixation Clamps

**Palpation and Retractors**

Containing Devices: Palpations  
Retractors  
Specula

**Diagnostic and Pediatric**

Containing Devices: Laparoscopes  
Trocars  
Forceps

**Thorax**

Containing Devices: Hysteroscopes  
Trocars  
Trocar Sleeves  
Clamps  
Forceps

**Gynecology**

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

**Urology**

Containing Devices: Retractors

**Light Sources**

Containing Devices: Light source

**Video System**

In case of demand please contact us.

**Suction and Irrigation Devices****Preface**

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

Containing Devices: Purgator  
Tubes  
Glasses / Cups  
Suction Lids

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

Containing Devices: Devices for Insufflation  
Accessories for the Device

**Video Trolleys**

In case of demand please contact us.

**Annex**

Chapters

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

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

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

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

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



Gänsäcker 34 - 78532 Tuttlingen - 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
Cust.-Art.	: Kundenartikelnummer
Descript.	: Kundenartikelbeschreibung



Etching



00277750022000020

LBL-001 Rev.01

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



Gänsäcker 34 - 78532 Tuttlingen - 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
Cust.-Art.	: Kundenartikelnummer
Descript.	: Kundenartikelbeschreibung



Etching



00277750022000020

LBL-003 Rev.01

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



Gänsäcker 34 - 78532 Tuttlingen - 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
Cust.-Art.	: Kundenartikelnummer
Descript.	: Kundenartikelbeschreibung



Etching



00277750022000020

LBL-002 Rev.01

**Explanation of the used Symbols**



Explanation of the symbols can be seen in the accompanying document



Address of the manufacturer



Reference Number



Lot Number / Serial Number



Take account to the warnings in the accompanying document



Non-sterile



Single use produkt



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



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

## IMPORTANT INFORMATION CONCERNING PREPARING AND STERILIZING SURGICAL INSTRUMENTS

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

### 1. INITIAL USE

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

### 2. TREATING INSTRUMENTS AFTER USAGE

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

### 3. TESTING FOR CORRECT FUNCTIONING

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

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

### 4. STERILIZATION

- a.) All stainless steel surgical instruments supplied by us may be sterilized in an autoclave.
- b.) Please follow the manufacturer's operating instructions when using autoclave. All machines used must comply with all current quality and other standards.
- c.) Instruments are being sterilized/ autoclaved at a temperature of 134°C.
- d.) Sterilization packing material must comply with all current standards.
- e.) Instruments with ratchets or self-retaining mechanisms should be sterilized opened or in the firest 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 porperly used, all guarantee claims become void and any consequences must be borne by yourselves.

REV. 2005/01

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



#### Compatibility

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

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

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



#### Compatibility

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

Ø outer tube	working length	working channel Ø	direction of view
10,0 mm	266,3 mm	6,0 mm (18 Char.)	0°

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

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



### Compatibility

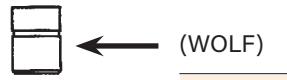
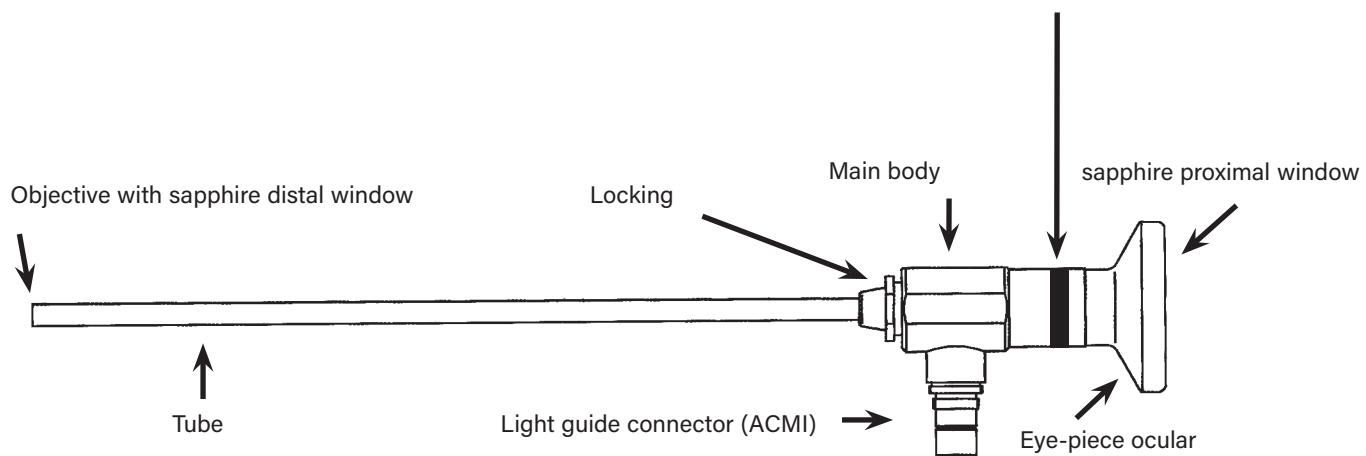
<b>Light port adapter</b>	ACMI®, Wolf®, Storz® / Olympus®
<b>Eyepiece</b>	Ocular according DIN 58105 threaded
<b>Objective</b>	Tension-free objective composed-objective
<b>Image transmission</b>	CAD-designed rodience system for optimal sharpness, colorsync and resolution
<b>Light-guiding system</b>	High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

Ø outer tube	working length	working channel Ø	direction of view
			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 convenient for use.

**Endoscope**

Colour coding for indication of direction of view:  
 green = 0°  
 red = 30°



(WOLF)

R019-000000-01



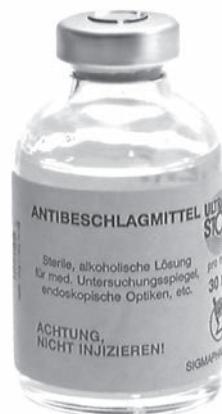
(STORZ / Olympus)

R019-000000-02



Anti Fog liquid Ultra Stop 25ml non sterile

**R019-000000-025**



Anti Fog liquid Ultra Stop sterile incision bottle 30ml

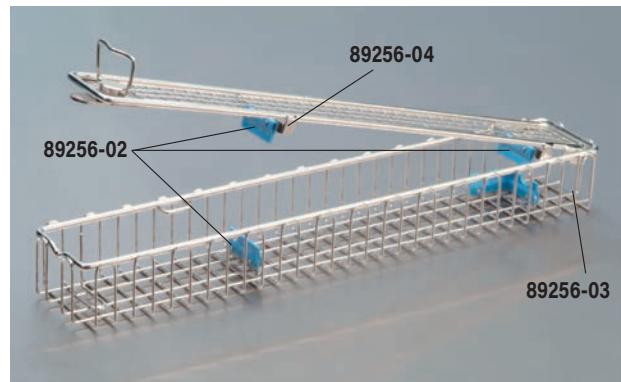
**R019-000000-030**



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

**98002-06**

## Wire basket for endoscopes



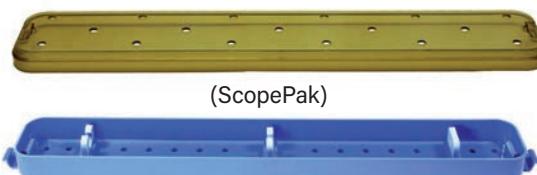
460 x 80 x 52 mm  
for 1 laparoscope or 1 hysteroscope or 1 cystoscope

**89256-46**

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

**89257-46**

## Container for Endoscopes



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

**R019-9317**

511 x 76 x 33 mm  
for 1 laparoscope

**R019-9321**

813 x 132 x 79 mm  
for 1 extra long endoscope

**R019-9331**

## Storage- and sterilization rack



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

**89258-47**

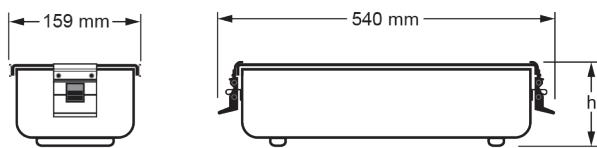
## Endoscope Basket (with stand)



Outside dimensions 500 x 135 x 50 mm

**89450-50**

## Containers for Endoscopy



540 x 159 x 80 mm

540 x 159 x 80 mm

R 614.08
R 624.08
R 634.08
R 644.08
R 654.08
R 664.08

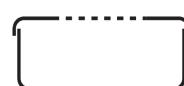
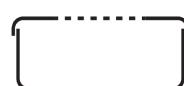
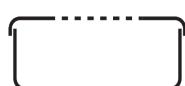
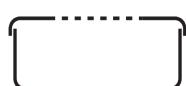
R 614.10
R 624.10
R 634.10
R 644.10
R 654.10
R 664.10

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

270 x 70 x 65 mm



475 x 80 x 65 mm



R 516.07
R 526.07
R 536.07
R 546.07
R 556.07
R 566.07

R 517.07
R 527.07
R 537.07
R 547.07
R 557.07
R 567.07

R 516.08
R 526.08
R 536.08
R 546.08
R 556.08
R 566.08

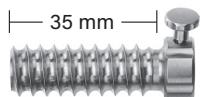
R 517.08
R 527.08
R 537.08
R 547.08
R 557.08
R 567.08



S-retractor



7 mm / 2 pcs. <b>R020-000000-007</b>	10 mm / 2 pcs. <b>R020-000000-010</b>	13 mm / 2 pcs. <b>R020-000000-013</b>	16 mm / 2 pcs. <b>R020-000000-016</b>
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**Ø 5 mm****Multi function trocar sleeve,  
valvehousing with thread lock****R025-050092-001****Trocar stop****R020-050035-001****Dilation set**

5 &lt; 10 mm

**R027-050100-000**

5 &lt; 11 mm

**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	conical
<b>R020-050092-001</b>	<b>R020-050092-002</b>

**Standard trocar with hole, permeable**


pyramidal	conical
<b>R020-050092-051</b>	<b>R020-050092-052</b>

**Safety trocar with automatic locking**


with pyramidal grinding and rounded tip	with halfmoon grinding and oblique tip
<b>R020-050092-011</b>	<b>R020-050092-016</b>

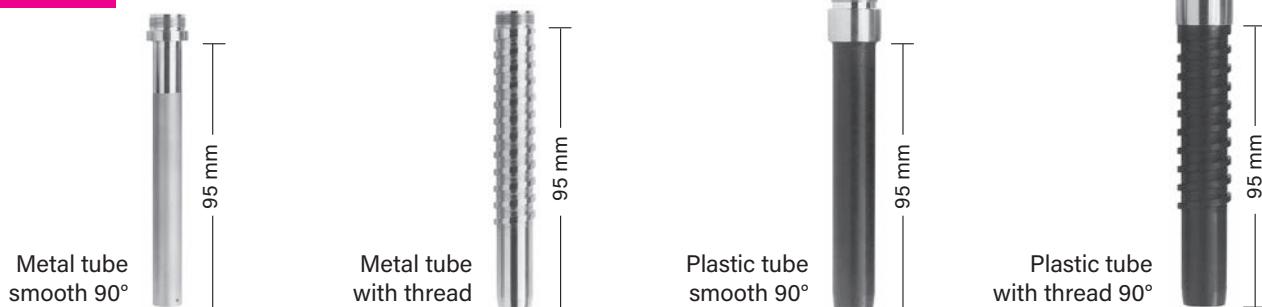
**Protection trocar**


with halfmoon grinding and oblique tip	with halfmoon grinding and V-formed tip
<b>R020-050092-024</b>	<b>R020-050092-025</b>

**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



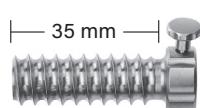
R025-055095-001

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**

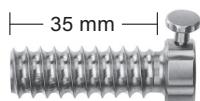
Ø 10 mm

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



190 mm

R026-100055-003

Plastic reducer for multi function trocar sleeve only



reducer with silicone latch

R026-100055-002

Ø 10 mm

Standard trocar



pyramidal

**R020-100097-001**

conical

**R020-100097-002**

Standard trocar with hole, permeable



pyramidal

**R020-100097-051**

conical

**R020-100097-052**

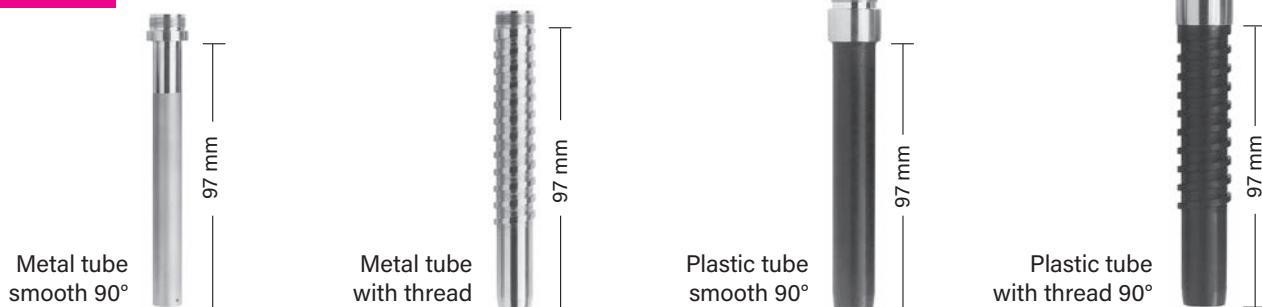
Safety trocar with automatic locking

with pyramidal grinding  
and rounded tip**R020-100097-011**with halfmoon grinding  
and oblique tip**R020-100097-016**

Protection trocar

with halfmoon grinding  
and oblique tip**R020-100097-024**with halfmoon grinding  
and V-formed tip**R020-100097-025**

Ø 11 mm



Drap door valve trocar sleeve



R022-110101-001

R022-110105-002

R022-110101-003

R022-110105-004

Silicone valve trocar sleeve



R024-110101-001

R024-110105-002

R024-110101-003

R024-110105-004

Multi function trocar sleeve, valvehousing with thread lock



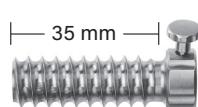
R025-110101-001

R025-110105-002

R025-110101-003

R025-110105-004

Trocar stop



R020-110035-001

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



Ø 11,0 mm

R020-110000-009

Spare part set consisting of 10 pcs per box



Ø 11,0 mm

R022-110000-000

Ø 11 mm

**Standard trocar**



pyramidal

R020-110101-001

conical

R020-110101-002

**Standard trocar with hole, permeable**



pyramidal

R020-110101-051

conical

R020-110101-052

**Safety trocar with automatic locking**



with pyramidal grinding  
and rounded tip

R020-110101-011

with halfmoon grinding  
and oblique tip

R020-110101-016

**Safety trocar with Knife**



Obturator tip "KNIFE DESIGN"

R020-110101-028

**Protection trocar**



with halfmoon grinding  
and oblique tip

R020-110101-024

with halfmoon grinding  
and V-formed tip

R020-110101-025

**Reducer sleeve 11 > 5,5 mm**



190 mm

R026-110055-003

**Plastic reducer for multi function trocar sleeve only**



reducer with silicone Latch

R026-110055-002



R026-125055-004

Ø 11 mm / 150 mm WL

Drap door valve trocar sleeve

R022-110150-001



Silicone valve trocar sleeve

R024-110150-001



Multi function trocar sleeve,  
valvehousing with thread lock

R025-110150-001



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



Ø 11,0 mm

R020-110000-009

Spare part set consisting of 10 pcs per box



Ø 11,0 mm

R022-110000-000

**Ø 11 mm / 150 mm WL****Standard trocar**

pyramidal

**R020-110150-001**

conical

**R020-110150-002****Standard trocar with hole, permeable**

pyramidal

**R020-110150-051**

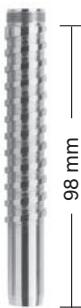
conical

**R020-110150-052****Safety trocar with automatic locking**with pyramidal grinding  
and rounded tip**R020-110150-011**

Ø 12,5 mm



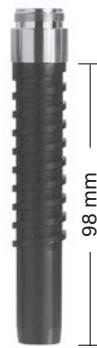
Metal tube  
smooth 90°



Metal tube  
with thread



Plastic tube  
smooth 90°



Plastic tube  
with thread 90°

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



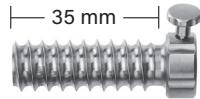
R025-125098-001

R025-125102-002

R025-125098-003

R025-125102-004

**Trocars stop**



35 mm

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**



190 mm

R026-125055-003

**Plastic reducer for multi function trocar sleeve only**



reducer with silicone latch

12,5 > 10 mm

R026-125100-002

R026-125100-004

12,5 > 5,5 mm

R026-125055-002

R026-125055-004

Ø 12,5 mm

**Standard trocar**



pyramidal

R020-125098-001

conical

R020-125098-002

**Standard trocar with hole, permeable**



pyramidal

R020-125098-051

conical

R020-125098-052

**Safety trocar with automatic locking**



with pyramidal grinding  
and rounded tip

R020-125098-011

with halfmoon grinding  
and oblique tip

R020-125098-016

**Safety trocar with Knife**



Obturator tip "KNIFE DESIGN"

R020-125098-028

**Protection trocar**



with halfmoon grinding  
and oblique tip

R020-125098-024

with halfmoon grinding  
and V-formed tip

R020-125098-025

Ø 12,5 mm / 150 mm WL

Multi function trocar sleeve,  
valvehousing with thread lock

R025-125150-001



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



Ø 12,5 mm

R020-125000-011

Spare part set consisting of 10 pcs per box



Ø 12,5 mm

R022-125000-000

Ø 12,5 mm / 150 mm WL

Standard trocar



pyramidal

R020-125150-001

conical

R020-125150-002

Standard trocar with hole, permeable



pyramidal

R020-125150-051

conical

R020-125150-052

Safety trocar with automatic locking

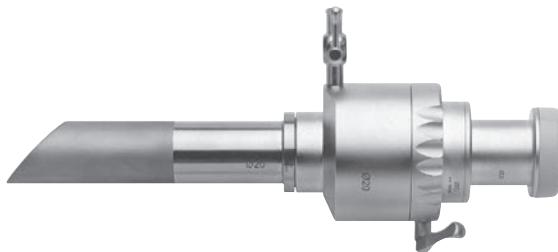


with pyramidal grinding  
and rounded tip

R020-125150-011

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

**Trocar sleeve, smooth metal tube**



15 mm Ø / WL 110 mm

**R025-150095-011**

**Standard trocar 15 mm Ø**



pyramidal

**R020-150096-001**



conical

**R020-150096-002**

**Dilatation sleeve with guide rod**



Ø 5,0 mm - 15,0 mm

**R027-050150-000**

Ø 10,0 mm - 15,0 mm

**R027-110150-000**

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



Ø 15,0 mm

**R020-150000-013**

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



Ø 15,0 mm

**R022-150000-000**

**Reducer sleeve**



15 > 5,5 mm

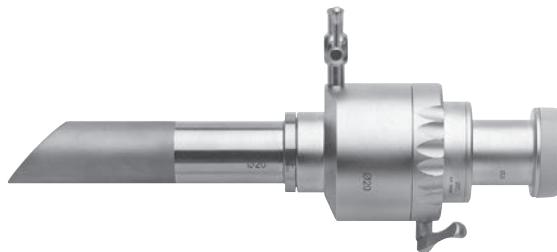
**R026-150055-003**

15 > 10 mm

**R026-150100-003**

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

**Trocar sleeve, smooth metal tube**



20 mm Ø / WL 119 mm

**R025-200095-011**

**Standard trocar 20 mm Ø**



**R020-200096-001**

**R020-200096-002**

**Dilatation sleeve with guide rod**



Ø 5,0 mm - 20,0 mm

**R027-050200-000**

Ø 10,0 mm - 20,0 mm

**R027-110200-000**

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



Ø 20,0 mm

**R020-200000-018**

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



Ø 20,0 mm

**R022-200000-000**

**Reducer sleeve**



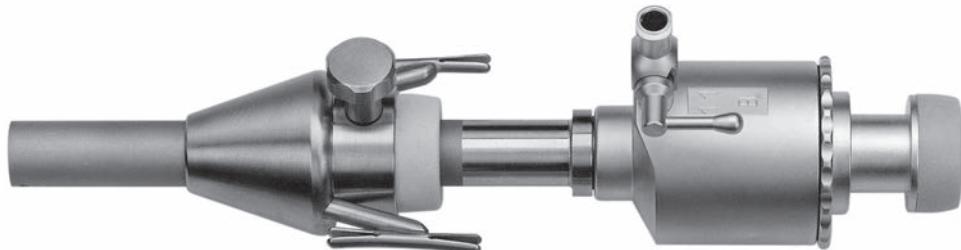
20 > 5,5 mm

**R026-200055-003**

20 > 10 mm

**R026-200100-003**

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



$\emptyset$	Sleeve with Cone	Cone alone	Cone alone
3,5 mm		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

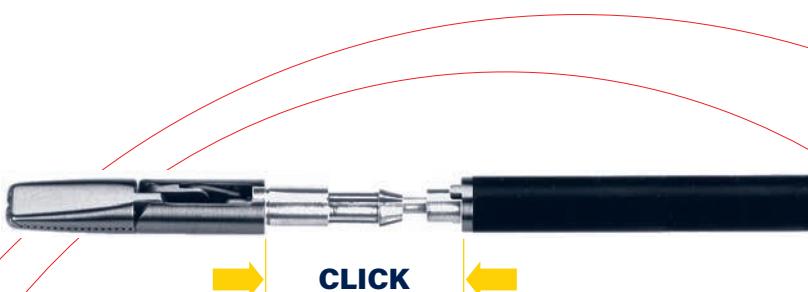


conical blunt

R020-035070-003	$\emptyset$ 3,5 mm
R020-055095-003	$\emptyset$ 5,5 mm
R020-110101-003	$\emptyset$ 11,0 mm
R020-125098-003	$\emptyset$ 12,5 mm



Ø 5 und 10 mm

**Mechanical snap-action coupling !**

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

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

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

REDA - simplicity is so clever !

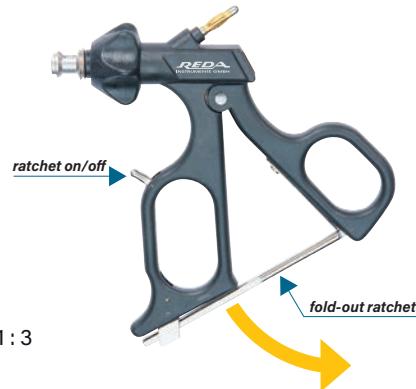
**Nut stopper**

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

REDA - detail is the decisive factor !



Ø 3 / 5 / 10 mm



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

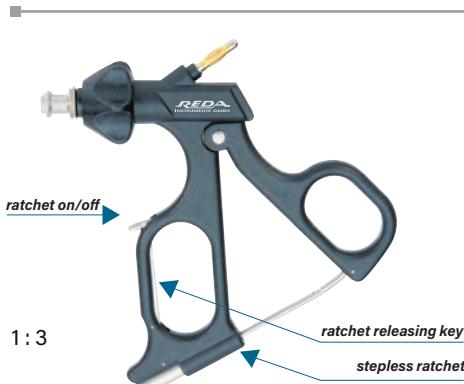
**R032M - 000000 - 000**



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

**REDA**  
INSTRUMENTE GMBH

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**

1:3



Ø 3 / 5 / 10 mm



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

**R038 - 000000 - 000**

1:3



Axial handle, with spreading spring

**R048 - 000000 - 000**

1:3



Axial handle with rings and ratchet

**R037 - 000000 - 000**

1:3



Axial ring handle

**R047 - 000000 - 000**

1:3



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

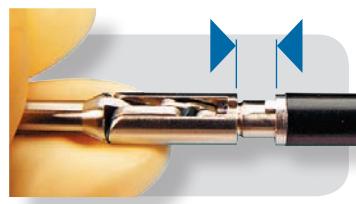
**R039 - 000000 - 000**



Axial handle, angled, with spreading spring

**R040 - 000000 - 000**

1



**CLICK**

2

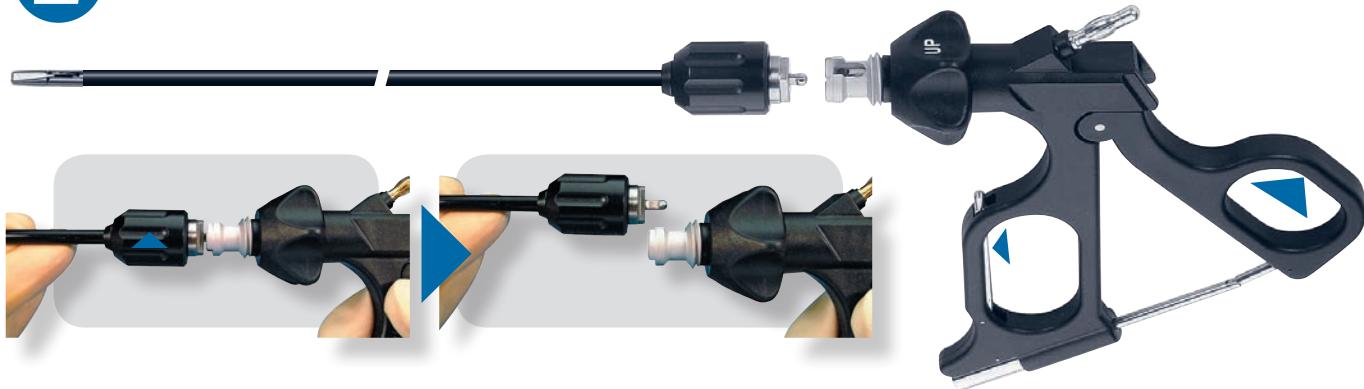


3



4



**1****2****3****4**

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

without LUER Lock

**R030 - 050330 - 000**

with LUER Lock

**R030 - 050330 - 000 L**Tube Shaft, insulated shaft length: **360 mm**

without LUER Lock

**R030 - 050360 - 000**

with LUER Lock

**R030 - 050360 - 000 L**Tube Shaft, insulated shaft length: **450 mm**

without LUER Lock

**R030 - 050450 - 000**

with LUER Lock

**R030 - 050450 - 000 L****Ø 10 mm**Tube Shaft, insulated shaft length: **330 mm**

cylindrical

reduce to Ø 5 mm

**R030 - 100330 - 000****R030 - 100330 - 000 5**Tube Shaft, insulated, for adipose patients shaft length: **360 mm**

cylindrical

reduce to Ø 5 mm

**R030 - 100360 - 000****R030 - 100360 - 000 5**Tube Shaft, insulated, for adipose patients shaft length: **450 mm**

cylindrical

reduce to Ø 5 mm

**R030 - 100450 - 000****R030 - 100450 - 000 5**


**Carbon Handles**

more details at the beginning of the chapter


**Ø 5 mm**


Universal grasping forceps, double action jaws

Working length	Working insert alone	Complete instrument			
330 mm	R030-050330-210	R033-050330-210	R033P-050330-210	R034-050330-210	R032M-050330-210
360 mm	R030-050360-210	R033-050360-210	R033P-050360-210	R034-050360-210	R032M-050360-210
450 mm	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			
330 mm	R030-050330-212	R033-050330-212	R033P-050330-212	R034-050330-212	R032M-050330-212
360 mm	R030-050360-212	R033-050360-212	R033P-050360-212	R034-050360-212	R032M-050360-212
450 mm	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			
330 mm	R030-050330-213	R033-050330-213	R033P-050330-213	R034-050330-213	R032M-050330-213
360 mm	R030-050360-213	R033-050360-213	R033P-050360-213	R034-050360-213	R032M-050360-213
450 mm	R030-050450-213	R033-050450-213	R033P-050450-213	R034-050450-213	R032M-050450-213

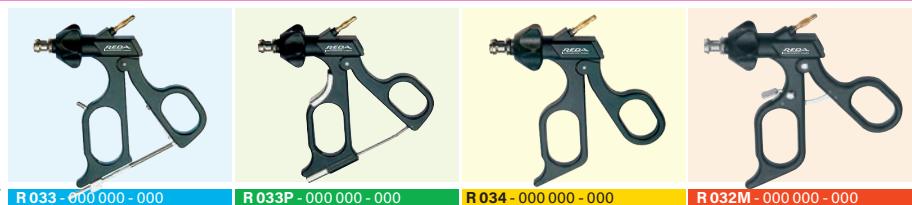


Dissecting forceps, fenestrated, oval, double action jaws

Working length	Working insert alone	Complete instrument			
330 mm	R030-050330-214	R033-050330-214	R033P-050330-214	R034-050330-214	R032M-050330-214
360 mm	R030-050360-214	R033-050360-214	R033P-050360-214	R034-050360-214	R032M-050360-214
450 mm	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

R 033 - 000 000 - 000

R 033P - 000 000 - 000

R 034 - 000 000 - 000

R 032M - 000 000 - 000



Duck Bill-forceps, fenestrated, single action jaws

Working length	Working insert alone	Complete instrument
----------------	----------------------	---------------------

330 mm	R 030-050330-215	R 033-050330-215	R 033P-050330-215	R 034-050330-215	R 032M-050330-215
360 mm	R 030-050360-215	R 033-050360-215	R 033P-050360-215	R 034-050360-215	R 032M-050360-215
450 mm	R 030-050450-215	R 033-050450-215	R 033P-050450-215	R 034-050450-215	R 032M-050450-215



Dissecting grasping forceps, slim, fenestrated, double action jaws

Working length	Working insert alone	Complete instrument
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330 mm	R 030-050330-216	R 033-050330-216	R 033P-050330-216	R 034-050330-216	R 032M-050330-216
360 mm	R 030-050360-216	R 033-050360-216	R 033P-050360-216	R 034-050360-216	R 032M-050360-216
450 mm	R 030-050450-216	R 033-050450-216	R 033P-050450-216	R 034-050450-216	R 032M-050450-216



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

Working length	Working insert alone	Complete instrument
----------------	----------------------	---------------------

330 mm	R 030-050330-218	R 033-050330-218	R 033P-050330-218	R 034-050330-218	R 032M-050330-218
360 mm	R 030-050360-218	R 033-050360-218	R 033P-050360-218	R 034-050360-218	R 032M-050450-218
450 mm	R 030-050450-218	R 033-050450-218	R 033P-050450-218	R 034-050450-218	R 032M-050450-218



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

Working length	Working insert alone	Complete instrument
----------------	----------------------	---------------------

330 mm	R 030-050330-219	R 033-050330-219	R 033P-050330-219	R 034-050330-219	R 032M-050330-219
360 mm	R 030-050360-219	R 033-050360-219	R 033P-050360-219	R 034-050360-219	R 032M-050360-219
450 mm	R 030-050450-219	R 033-050450-219	R 033P-050450-219	R 034-050450-219	R 032M-050450-219


**Carbon Handles**

more details at the beginning of the chapter



Ø 5 mm



Grasping forceps with reservoir, tip blunt, double action jaws

Working length	Working insert alone	Complete instrument			
330 mm	R030-050330-220	R033-050330-220	R033P-050330-220	R034-050330-220	R032M-050330-220
360 mm	R030-050360-220	R033-050360-220	R033P-050360-220	R034-050360-220	R032M-050360-220
450 mm	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			
330 mm	R030-050330-222	R033-050330-222	R033P-050330-222	R034-050330-222	R032M-050330-222
360 mm	R030-050360-222	R033-050360-222	R033P-050360-222	R034-050360-222	R032M-050360-222
450 mm	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			
330 mm	R030-050330-224	R033-050330-224	R033P-050330-224	R034-050330-224	R032M-050330-224
360 mm	R030-050360-224	R033-050360-224	R033P-050360-224	R034-050360-224	R032M-050360-224
450 mm	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			
330 mm	R030-050330-225	R033-050330-225	R033P-050330-225	R034-050330-225	R032M-050330-225
360 mm	R030-050360-225	R033-050360-225	R033P-050360-225	R034-050360-225	R032M-050360-225
450 mm	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



Ø 5 mm

R 033 - 000 000 - 000

R 033P - 000 000 - 000

R 034 - 000 000 - 000

R 032M - 000 000 - 000



Fallopian tube grasping forceps, double action jaws

Working length	Working insert alone	Complete instrument
330 mm	R 030-050330-226	R 033-050330-226 R 033P-050330-226 R 034-050330-226 R 032M-050330-226
360 mm	R 030-050360-226	R 033-050360-226 R 033P-050360-226 R 034-050360-226 R 032M-050360-226
450 mm	R 030-050450-226	R 033-050450-226 R 033P-050450-226 R 034-050450-226 R 032M-050450-226



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

Working length	Working insert alone	Complete instrument
330 mm	R 030-050330-228	R 033-050330-228 R 033P-050330-228 R 034-050330-228 R 032M-050330-228
360 mm	R 030-050360-228	R 033-050360-228 R 033P-050360-228 R 034-050360-228 R 032M-050360-228
450 mm	R 030-050450-228	R 033-050450-228 R 033P-050450-228 R 034-050450-228 R 032M-050450-228



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

Working length	Working insert alone	Complete instrument
330 mm	R 030-050330-230	R 033-050330-230 R 033P-050330-230 R 034-050330-230 R 032M-050330-230
360 mm	R 030-050360-230	R 033-050360-230 R 033P-050360-230 R 034-050360-230 R 032M-050360-230
450 mm	R 030-050450-230	R 033-050450-230 R 033P-050450-230 R 034-050450-230 R 032M-050450-230



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

Working length	Working insert alone	Complete instrument
330 mm	R 030-050330-231	R 033-050330-231 R 033P-050330-231 R 034-050330-231 R 032M-050330-231
360 mm	R 030-050360-231	R 033-050360-231 R 033P-050360-231 R 034-050360-231 R 032M-050360-231
450 mm	R 030-050450-231	R 033-050450-231 R 033P-050450-231 R 034-050450-231 R 032M-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			
330 mm	R030-050330-232	R033-050330-232	R033P-050330-232	R034-050330-232	R032M-050330-232
360 mm	R030-050360-232	R033-050360-232	R033P-050360-232	R034-050360-232	R032M-050360-232
450 mm	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			
330 mm	R030-050330-234	R033-050330-234	R033P-050330-234	R034-050330-234	R032M-050330-234
360 mm	R030-050360-234	R033-050360-234	R033P-050360-234	R034-050360-234	R032M-050360-234
450 mm	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			
330 mm	R030-050330-236	R033-050330-236	R033P-050330-236	R034-050330-236	R032M-050330-236
360 mm	R030-050360-236	R033-050360-236	R033P-050360-236	R034-050360-236	R032M-050360-236
450 mm	R030-050450-236	R033-050450-236	R033P-050450-236	R034-050450-236	R032M-050450-236

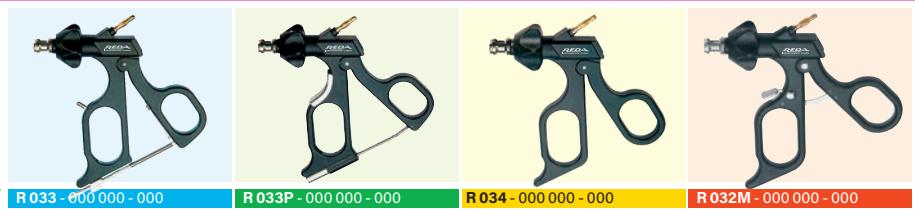


Grasping forceps, distal with atraumatic row of teeth, double action jaws

Working length	Working insert alone	Complete instrument			
330 mm	R030-050330-238	R033-050330-238	R033P-050330-238	R034-050330-238	R032M-050330-238
360 mm	R030-050360-238	R033-050360-238	R033P-050360-238	R034-050360-238	R032M-050360-238
450 mm	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

R 033 - 000 000 - 000

R 033P - 000 000 - 000

R 034 - 000 000 - 000

R 032M - 000 000 - 000



MAHNES grasping forceps 1x 2 teeth, double action jaws

Working length	Working insert alone	Complete instrument
----------------	----------------------	---------------------

330 mm	R 030-050330-240	R 033-050330-240	R 033P-050330-240	R 034-050330-240	R 032M-050330-240
360 mm	R 030-050360-240	R 033-050360-240	R 033P-050360-240	R 034-050360-240	R 032M-050360-240
450 mm	R 030-050450-240	R 033-050450-240	R 033P-050450-240	R 034-050450-240	R 032M-050450-240



Grasping forceps with mouseteeth, single action jaws

Working length	Working insert alone	Complete instrument
----------------	----------------------	---------------------

330 mm	R 030-050330-241	R 033-050330-241	R 033P-050330-241	R 034-050330-241	R 032M-050330-241
360 mm	R 030-050360-241	R 033-050360-241	R 033P-050360-241	R 034-050360-241	R 032M-050360-241
450 mm	R 030-050450-241	R 033-050450-241	R 033P-050450-241	R 034-050450-241	R 032M-050450-241



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

Working length	Working insert alone	Complete instrument
----------------	----------------------	---------------------

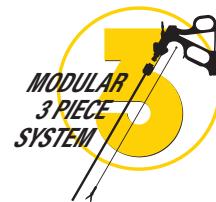
330 mm	R 030-050330-242	R 033-050330-242	R 033P-050330-242	R 034-050330-242	R 032M-050330-242
360 mm	R 030-050360-242	R 033-050360-242	R 033P-050360-242	R 034-050360-242	R 032M-050360-242
450 mm	R 030-050450-242	R 033-050450-242	R 033P-050450-242	R 034-050450-242	R 032M-050450-242



„AGRESSIV“, Claw Grasping forceps, double action jaws

Working length	Working insert alone	Complete instrument
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330 mm	R 030-050330-243	R 033-050330-243	R 033P-050330-243	R 034-050330-243	R 032M-050330-243
360 mm	R 030-050360-243	R 033-050360-243	R 033P-050360-243	R 034-050360-243	R 032M-050360-243
450 mm	R 030-050450-243	R 033-050450-243	R 033P-050450-243	R 034-050450-243	R 032M-050450-243


**Carbon Handles**

more details at the beginning of the chapter



Ø 5 mm



Grasping forceps distal with DEBAKEY teeth, double action jaws

Working length	Working insert alone	Complete instrument			
330 mm	R030-050330-244	R033-050330-244	R033P-050330-244	R034-050330-244	R032M-050330-244
360 mm	R030-050360-244	R033-050360-244	R033P-050360-244	R034-050360-244	R032M-050360-244
450 mm	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			
330 mm	R030-050330-246	R033-050330-246	R033P-050330-246	R034-050330-246	R032M-050330-246
360 mm	R030-050360-246	R033-050360-246	R033P-050360-246	R034-050360-246	R032M-050360-246
450 mm	R030-050450-246	R033-050450-246	R033P-050450-246	R034-050450-246	R032M-050450-246



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

Working length	Working insert alone	Complete instrument			
330 mm	R030-050330-248	R033-050330-248	R033P-050330-248	R034-050330-248	R032M-050330-248
360 mm	R030-050360-248	R033-050360-248	R033P-050360-248	R034-050360-248	R032M-050360-248
450 mm	R030-050450-248	R033-050450-248	R033P-050450-248	R034-050450-248	R032M-050450-248



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

Working length	Working insert alone	Complete instrument			
330 mm	R030-050330-249	R033-050330-249	R033P-050330-249	R034-050330-249	R032M-050330-249
360 mm	R030-050360-249	R033-050360-249	R033P-050360-249	R034-050360-249	R032M-050360-249
450 mm	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



Ø 5 mm



DAVIS &amp; GEEK grasping forceps with reservoir, single action jaws

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



DAVIS &amp; GEEK grasping forceps with reservoir, double action jaws

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



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

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



MIXTER grasping forceps 90°, double action jaws

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


**Carbon Handles**

more details at the beginning of the chapter



Ø 5 mm



MIXTER grasping forceps 45°, double action jaws

Working length	Working insert alone	Complete instrument			
330 mm	R030-050330-259	R033-050330-259	R033P-050330-259	R034-050330-259	R032M-050330-259
360 mm	R030-050360-259	R033-050360-259	R033P-050360-259	R034-050360-259	R032M-050360-259
450 mm	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			
330 mm	R030-050330-262	R033-050330-262	R033P-050330-262	R034-050330-262	R032M-050330-262
360 mm	R030-050360-262	R033-050360-262	R033P-050360-262	R034-050360-262	R032M-050360-262
450 mm	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			
330 mm	R030-050330-264	R033-050330-264	R033P-050330-264	R034-050330-264	R032M-050330-264
360 mm	R030-050360-264	R033-050360-264	R033P-050360-264	R034-050360-264	R032M-050360-264
450 mm	R030-050450-264	R033-050450-264	R033P-050450-264	R034-050450-264	R032M-050450-264



KELLY Grasping forceps, double action jaws

Working length	Working insert alone	Complete instrument			
330 mm	R030-050330-266	R033-050330-266	R033P-050330-266	R034-050330-266	R032M-050330-266
360 mm	R030-050360-266	R033-050360-266	R033P-050360-266	R034-050360-266	R032M-050360-266
450 mm	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

R 033 - 000 000 - 000

R 033P - 000 000 - 000

R 034 - 000 000 - 000

R 032M - 000 000 - 000



BABCOCK clamp, double action jaws

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



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

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



Grasping forceps „WAVE“, fenestrated, double action jaws

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



Grasping forceps „MAXIGRIP“, double action jaws

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


**Carbon Handles**

more details at the beginning of the chapter

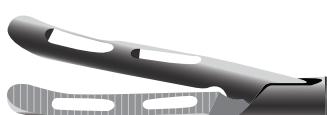


Ø 5 mm



Tenaculum forceps, double action jaws

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



CROCE-OLMI grasping forceps, atrumatic, fenestrated, curved

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

**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
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330 mm	R 030-100330-610	R 033-100330-610	R 033P-100330-610	R 034-100330-610	R 032M-100330-610
360 mm	R 030-100360-610	R 033-100360-610	R 033P-100360-610	R 034-100360-610	R 032M-100360-610
450 mm	R 030-100450-610	R 033-100450-610	R 033P-100450-610	R 034-100450-610	R 032M-100450-610



MARYLAND grasping and dissecting forceps, double action jaws

Working length	Working insert alone	Complete instrument
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330 mm	R 030-100330-612	R 033-100330-612	R 033P-100330-612	R 034-100330-612	R 032M-100330-612
360 mm	R 030-100360-612	R 033-100360-612	R 033P-100360-612	R 034-100360-612	R 032M-100360-612
450 mm	R 030-100450-612	R 033-100450-612	R 033P-100450-612	R 034-100450-612	R 032M-100450-612



Grasping forceps distal with DEBAKEY teeth, double action jaws

Working length	Working insert alone	Complete instrument
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330 mm	R 030-100330-614	R 033-100330-614	R 033P-100330-614	R 034-100330-614	R 032M-100330-614
360 mm	R 030-100360-614	R 033-100360-614	R 033P-100360-614	R 034-100360-614	R 032M-100360-614
450 mm	R 030-100450-614	R 033-100450-614	R 033P-100450-614	R 034-100450-614	R 032M-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			
330 mm	R 030-100330-616	R 033-100330-616	R 033P-100330-616	R 034-100330-616	R 032M-100330-616
360 mm	R 030-100360-616	R 033-100360-616	R 033P-100360-616	R 034-100360-616	R 032M-100360-616
450 mm	R 030-100450-616	R 033-100450-616	R 033P-100450-616	R 034-100450-616	R 032M-100450-616



Grasping forceps, cross-serrated teeth, double action jaws

Working length	Working insert alone	Complete instrument			
330 mm	R 030-100330-642	R 033-100330-642	R 033P-100330-642	R 034-100330-642	R 032M-100330-642
360 mm	R 030-100360-642	R 033-100360-642	R 033P-100360-642	R 034-100360-642	R 032M-100360-642
450 mm	R 030-100450-642	R 033-100450-642	R 033P-100450-642	R 034-100450-642	R 032M-100450-642



MIXTER grasping forceps, double action jaws

Working length	Working insert alone	Complete instrument			
330 mm	R 030-100330-646	R 033-100330-646	R 033P-100330-646	R 034-100330-646	R 032M-100330-646
360 mm	R 030-100360-646	R 033-100360-646	R 033P-100360-646	R 034-100360-646	R 032M-100360-646
450 mm	R 030-100450-646	R 033-100450-646	R 033P-100450-646	R 034-100450-646	R 032M-100450-646



DORSEY intestinal grasping forceps, double action jaws

Working length	Working insert alone	Complete instrument			
330 mm	R 030-100330-648	R 033-100330-648	R 033P-100330-648	R 034-100330-648	R 032M-100330-648
360 mm	R 030-100360-648	R 033-100360-648	R 033P-100360-648	R 034-100360-648	R 032M-100360-648
450 mm	R 030-100450-648	R 033-100450-648	R 033P-100450-648	R 034-100450-648	R 032M-100450-648

**Carbon Handles**

more details at the beginning of the chapter



KOCHER clamp, jaw length 30 mm, double action jaws

Working length	Working insert alone	Complete instrument			
330 mm	R 030-100330-622	R 033-100330-622	R 033P-100330-622	R 034-100330-622	R 032M-100330-622
360 mm	R 030-100360-622	R 033-100360-622	R 033P-100360-622	R 034-100360-622	R 032M-100360-622
jaw length 40 mm					
330 mm	R 030-100330-623	R 033-100330-623	R 033P-100330-623	R 034-100330-623	R 032M-100330-623
360 mm	R 030-100360-623	R 033-100360-623	R 033P-100360-623	R 034-100360-623	R 032M-100360-623
jaw length 50 mm					
330 mm	R 030-100330-624	R 033-100330-624	R 033P-100330-624	R 034-100330-624	R 032M-100330-624
360 mm	R 030-100360-624	R 033-100360-624	R 033P-100360-624	R 034-100360-624	R 032M-100360-624



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

Working length	Working insert alone	Complete instrument			
330 mm	R 030-100330-631	R 033-100330-631	R 033P-100330-631	R 034-100330-631	R 032M-100330-631
360 mm	R 030-100360-631	R 033-100360-631	R 033P-100360-631	R 034-100360-631	R 032M-100360-631
jaw length 40 mm					
330 mm	R 030-100330-632	R 033-100330-632	R 033P-100330-632	R 034-100330-632	R 032M-100330-632
360 mm	R 030-100360-632	R 033-100360-632	R 033P-100360-632	R 034-100360-632	R 032M-100360-632
jaw length 50 mm					
330 mm	R 030-100330-633	R 033-100330-633	R 033P-100330-633	R 034-100330-633	R 032M-100330-633
360 mm	R 030-100360-633	R 033-100360-633	R 033P-100360-633	R 034-100360-633	R 032M-100360-633


**Carbon Handles**

more details at the beginning of the chapter



Ø 10 mm



BABCOCK grasping forceps fine, double action jaws

Working length	Working insert alone	Complete instrument
330 mm	R030-100330-618	R033-100330-618   R033P-100330-618   R034-100330-618   R032M-100330-618
360 mm	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
330 mm	R030-100330-620	R033-100330-620   R033P-100330-620   R034-100330-620   R032M-100330-620
360 mm	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
330 mm	R030-100330-650	R033-100330-650   R033P-100330-650   R034-100330-650   R032M-100330-650
360 mm	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
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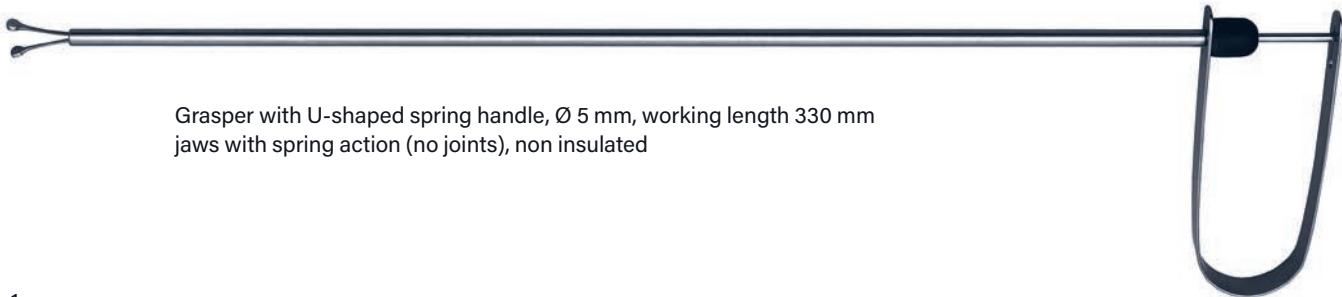
<b>330 mm</b>	<b>R030-100330-654</b>	<b>R033-100330-654</b>	<b>R033P-100330-654</b>	<b>R034-100330-654</b>	<b>R032M-100330-654</b>
<b>360 mm</b>	<b>R030-100360-654</b>	<b>R033-100360-654</b>	<b>R033P-100360-654</b>	<b>R034-100360-654</b>	<b>R032M-100360-654</b>



Tenaculum forceps, double action jaws

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



1:1



Atraumatic grasper

**R039 - 0533 - 001**

Bowl grasper, square pattern jaws

**R039 - 0533 - 002**

Bowl grasper, T-shaped jaws

**R039 - 0533 - 003**

Tissue and bowel grasper, ball and socket type

**R039 - 0533 - 004**

Fallopian tube grasper

**R039 - 0533 - 006**

1x2 teeth grasper slim

**R039 - 0533 - 007**

Bowel grasper, round

**R039 - 0533 - 010**

Atraumatic grasper, fenestrated

**R039 - 0533 - 013**

1:1



Tissue grasper, U-shaped jaws

**R039 - 0533 - 014**



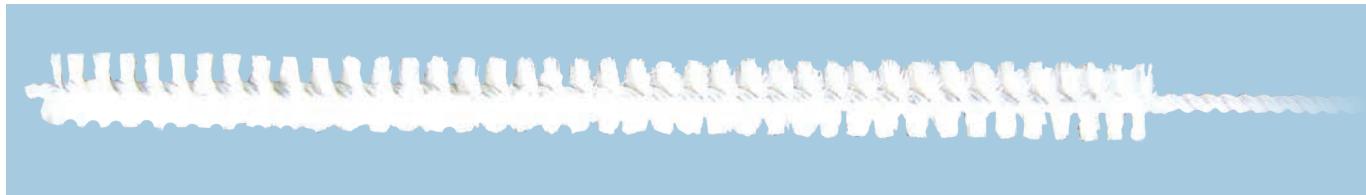
Grasper, blunt

**R039 - 0533 - 015**



Fallopian grasper, blunt

**R039 - 0533 - 016**



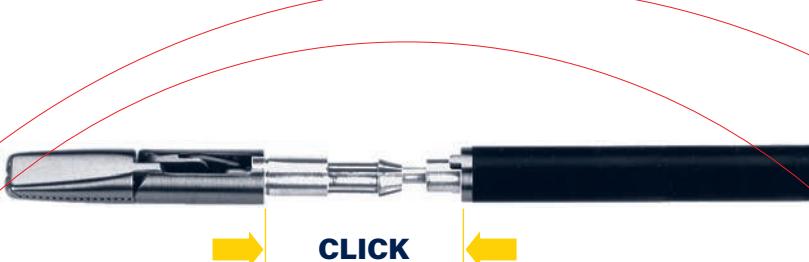
length, diameter	
480 mm, Ø 3 mm	<b>96000-03</b>
480 mm, Ø 5 mm	<b>96000-05</b>
480 mm, Ø 7 mm	<b>96000-07</b>
480 mm, Ø 12 mm	<b>96000-12</b>

## Scissors / Biopsy forceps





Ø 5 und 10 mm



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

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

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

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

REDA - simplicity is so clever !



#### **Nut stopper**

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

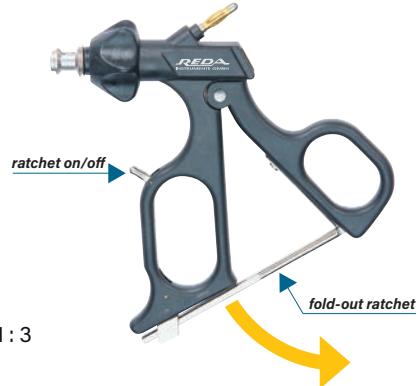
REDA - detail is the decisive factor !



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

**REDA**  
INSTRUMENTE GMBH

Ø 3 / 5 / 10 mm



Ergonomic universal carbon handle with ratchet,  
Lever for active or unactiv 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**

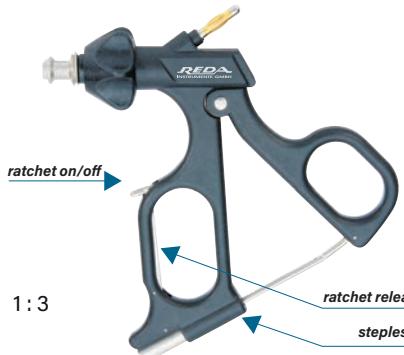


Ergonomic universal carbon handle with ratchet,  
Button for active or unactiv ratchet, HF-connector Ø 4 mm male 45° lateral,  
rotating head 360°, autoclavable

**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**

1:3

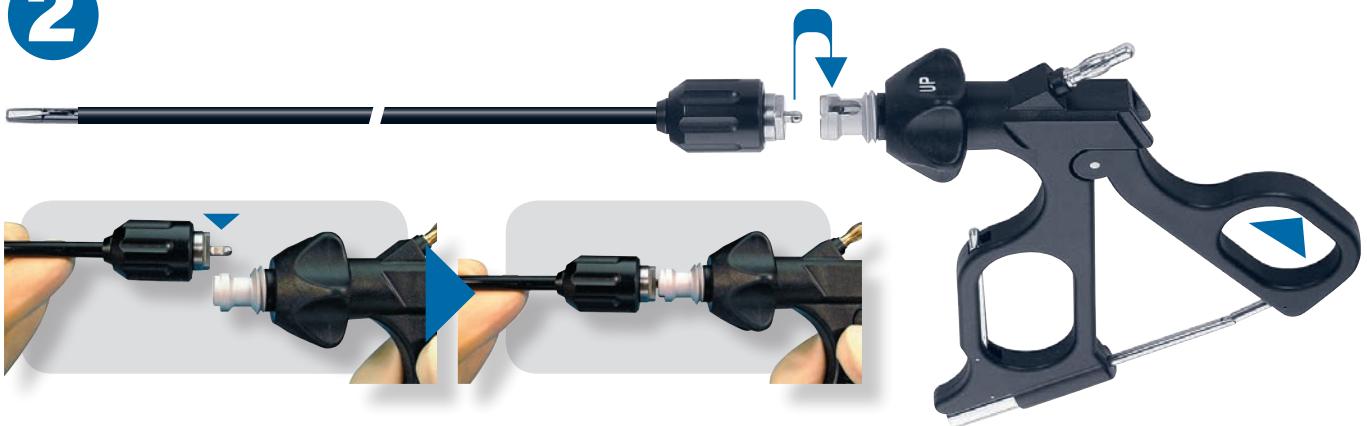
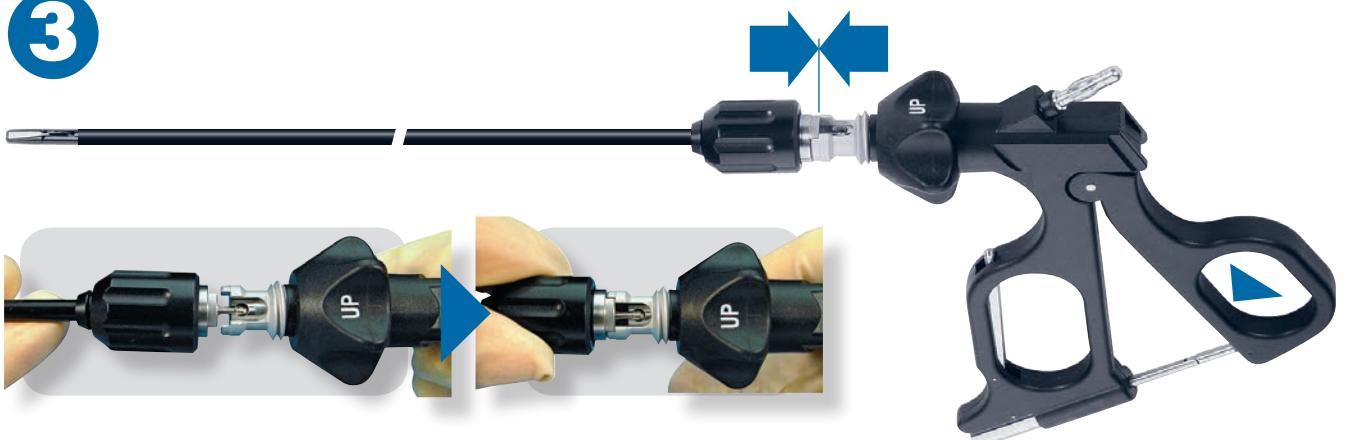
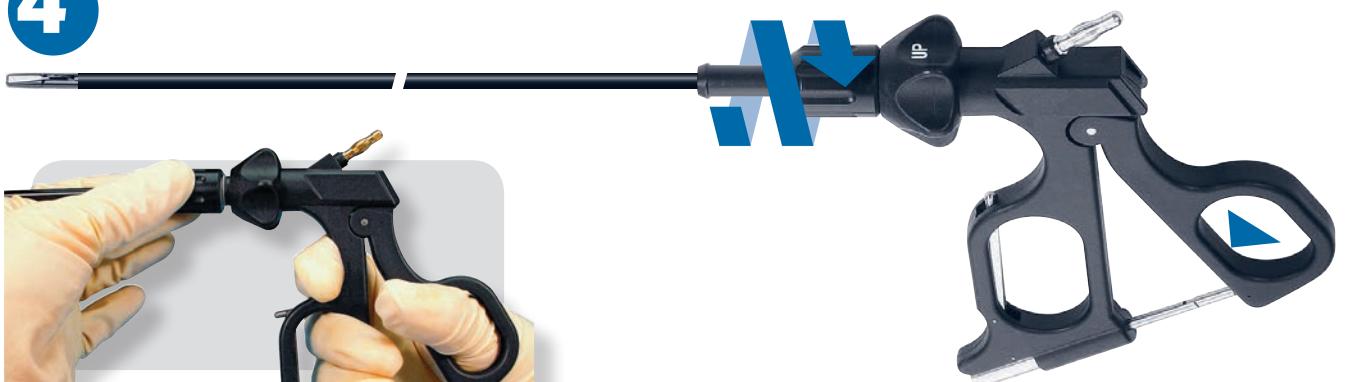


**Laparoscopy -  
Handles for Ø 3 / 5 / 10 mm tube shafts**

**REDA**  
INSTRUMENTE GMBH

**Ø 3 / 5 / 10 mm**

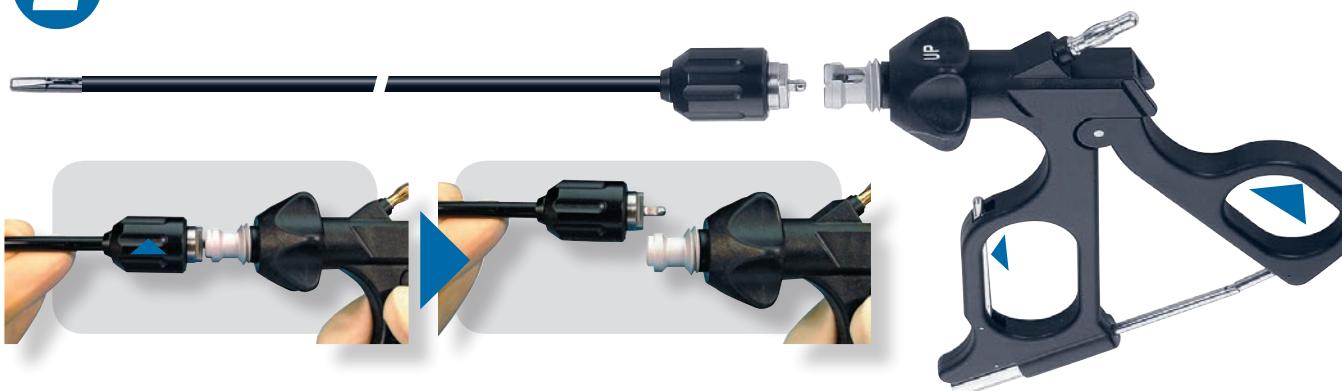
 1:3	<b>Axial handle, v-shaped type with spreading spring and ratchet</b> <b>R038 - 000000 - 000</b>
 1:3	<b>Axial handle, with spreading spring</b> <b>R048 - 000000 - 000</b>
 1:3	<b>Axial handle with rings and ratchet</b> <b>R037 - 000000 - 000</b>
 1:3	<b>Axial ring handle</b> <b>R047 - 000000 - 000</b>
 1:3	<b>Axial handle, v-shaped angled, type with spreading spring and ratchet</b> <b>R039 - 000000 - 000</b>
 1:3	<b>Axial handle, angled, with spreading spring</b> <b>R040 - 000000 - 000</b>

**1****2****3****4**

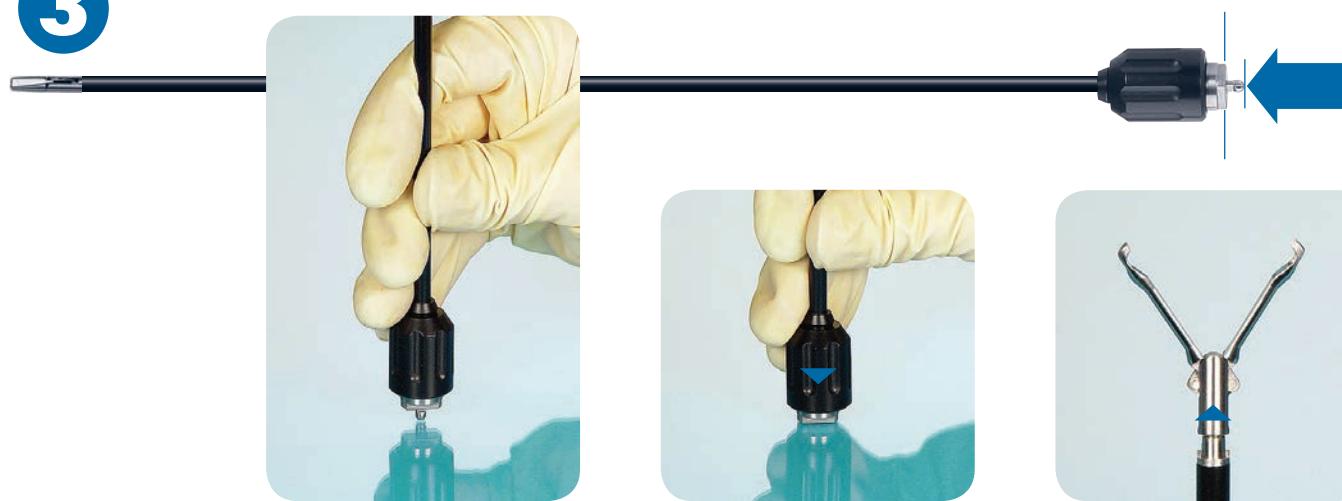
**1**



**2**



**3**



**4**





**Ø 5 mm**



Tube Shaft, insulated      shaft length: **330 mm**

without LUER Lock

**R030 - 050330 - 000**

with LUER Lock

**R030 - 050330 - 000 L**



Tube Shaft, insulated      shaft length: **360 mm**

without LUER Lock

**R030 - 050360 - 000**

with LUER Lock

**R030 - 050360 - 000 L**



Tube Shaft, insulated      shaft length: **450 mm**

without LUER Lock

**R030 - 050450 - 000**

with LUER Lock

**R030 - 050450 - 000 L**

**Ø 10 mm**



Tube Shaft, insulated      shaft length: **330 mm**

cylindrical

reduce to Ø 5 mm

**R030 - 100330 - 000**

**R030 - 100330 - 000 5**



Tube Shaft, insulated, for adipose patients

shaft length: **360 mm**

cylindrical

reduce to Ø 5 mm

**R030 - 100360 - 000**

**R030 - 100360 - 000 5**



Tube Shaft, insulated, for adipose patients

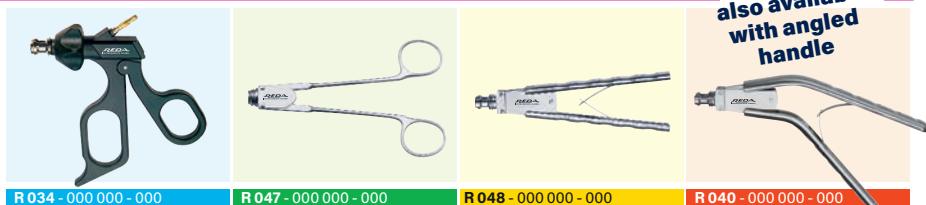
shaft length: **450 mm**

cylindrical

reduce to Ø 5 mm

**R030 - 100450 - 000**

**R030 - 100450 - 000 5**


**Carbon Handles**  
 more details at the beginning of the chapter
also available  
with angled  
handle

Ø 5 mm



METZENBAUM preparation scissors, straight, double action jaws

Working length	Working insert alone	Complete instrument
----------------	----------------------	---------------------

330 mm	R040-050330-110	R044-050330-110	R057-050330-110	R058-050330-110
360 mm	R040-050360-110	R044-050360-110	R057-050360-110	R058-050360-110
450 mm	R040-050450-110	R044-050450-110	R057-050450-110	R058-050450-110



METZENBAUM preparation scissors, curved, double action jaws

Working length	Working insert alone	Complete instrument
----------------	----------------------	---------------------

330 mm	R040-050330-112	R044-050330-112	R057-050330-112	R058-050330-112
360 mm	R040-050360-112	R044-050360-112	R057-050360-112	R058-050360-112
450 mm	R040-050450-112	R044-050450-112	R057-050450-112	R058-050450-112



Preparation scissors „WONDERCUT“, curved, double action jaws

Working length	Working insert alone	Complete instrument
----------------	----------------------	---------------------

330 mm	R040-050330-113	R044-050330-113	R057-050330-113	R058-050330-113
360 mm	R040-050360-113	R044-050360-113	R057-050360-113	R058-050360-113
450 mm	R040-050450-113	R044-050450-113	R057-050450-113	R058-050450-113



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

Working length	Working insert alone	Complete instrument
----------------	----------------------	---------------------

330 mm	R040-050330-125	R044-050330-125	R057-050330-125	R058-050330-125
360 mm	R040-050360-125	R044-050360-125	R057-050360-125	R058-050360-125
450 mm	R040-050450-125	R044-050450-125	R057-050450-125	R058-050450-125



METZENBAUM preparation scissors, soft, curved, double action jaws

Working length	Working insert alone	Complete instrument
----------------	----------------------	---------------------

330 mm	R040-050330-122	R044-050330-122	R057-050330-122	R058-050330-122
360 mm	R040-050360-122	R044-050360-122	R057-050360-122	R058-050360-122
450 mm	R040-050450-122	R044-050450-122	R057-050450-122	R058-050450-122


**Carbon 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

330 mm      R040-050330-114      R044-050330-114      R057-050330-114      R058-050330-114

360 mm      R040-050360-114      R044-050360-114      R057-050360-114      R058-050360-114

450 mm      R040-050450-114      R044-050450-114      R057-050450-114      R058-050450-114



Hook scissors, single action jaws

Working length      Working insert alone      Complete instrument

330 mm      R040-050330-116      R044-050330-116      R057-050330-116      R058-050330-116

360 mm      R040-050360-116      R044-050360-116      R057-050360-116      R058-050360-116

450 mm      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

330 mm      R040-050330-118      R044-050330-118      R057-050330-118      R058-050330-118

360 mm      R040-050360-118      R044-050360-118      R057-050360-118      R058-050360-118

450 mm      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

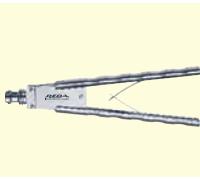
330 mm      R040-050330-120      R044-050330-120      R057-050330-120      R058-050330-120

360 mm      R040-050360-120      R044-050360-120      R057-050360-120      R058-050360-120

450 mm      R040-050450-120      R044-050450-120      R057-050450-120      R058-050450-120

**Carbon Handles**

more details at the beginning of the chapter


*also available  
with angled  
handle*
**Ø 10 mm****R 034 - 000 000 - 000****R 047 - 000 000 - 000****R 048 - 000 000 - 000****R 040 - 000 000 - 000**

MAYO operating scissors, single action jaws

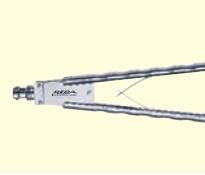
Working length	Working insert alone	Complete instrument		
<b>330 mm</b>	<b>R040-100330-710</b>	<b>R044-100330-710</b>	<b>R057-100330-710</b>	<b>R058-100330-710</b>
<b>360 mm</b>	<b>R040-100360-710</b>	<b>R044-100360-710</b>	<b>R057-100360-710</b>	<b>R058-100360-710</b>
<b>450 mm</b>	<b>R040-100450-710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



also available  
with angled  
handle

**Carbon 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



BLAKESLEY tumor forceps, pointed, single action jaws

Working length	Working insert alone	Complete instrument		
330 mm	R040-050330-268	R044-050330-268	R057-050330-268	R058-050330-268
360 mm	R040-050360-268	R044-050360-268	R057-050360-268	R058-050360-268
450 mm	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		
330 mm	R040-050330-310	R044-050330-310	R057-050330-310	R058-050330-310
360 mm	R040-050360-310	R044-050360-310	R057-050360-310	R058-050360-310
450 mm	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		
330 mm	R040-050330-312	R044-050330-312	R057-050330-312	R058-050330-312
360 mm	R040-050360-312	R044-050360-312	R057-050360-312	R058-050360-312
450 mm	R040-050450-312	R044-050450-312	R057-050450-312	R058-050450-312

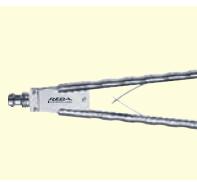


Alligator, cup, grasping and biopsy forceps, double action jaws

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

**Carbon 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



Biopsy cup, long, single action jaws

Working length	Working insert alone	Complete instrument
330 mm	R 040-050330-316	R 044-050330-316 R 057-050330-316 R 058-050330-316
360 mm	R 040-050360-316	R 044-050360-316 R 057-050360-316 R 058-050360-316
450 mm	R 040-050450-316	R 044-050450-316 R 057-050450-316 R 058-050450-316



Biopsy cup, long, with thorn, single action jaws

Working length	Working insert alone	Complete instrument
330 mm	R 040-050330-318	R 044-050330-318 R 057-050330-318 R 058-050330-318
360 mm	R 040-050360-318	R 044-050360-318 R 057-050360-318 R 058-050360-318
450 mm	R 040-050450-318	R 044-050450-318 R 057-050450-318 R 058-050450-318



Biopsy cup, tapering, fenestrated, single action jaws

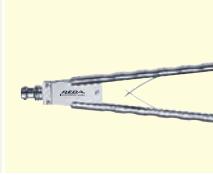
Working length	Working insert alone	Complete instrument
330 mm	R 040-050330-320	R 044-050330-320 R 057-050330-320 R 058-050330-320
360 mm	R 040-050360-320	R 044-050360-320 R 057-050360-320 R 058-050360-320
450 mm	R 040-050450-320	R 044-050450-320 R 057-050450-320 R 058-050450-320


**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

R 040 - 000 000 - 000

Ø 5 mm

R 034 - 000 000 - 000

R 047 - 000 000 - 000

R 048 - 000 000 - 000



Biopsy punch without thorn, single action jaws

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

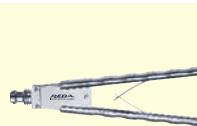


Biopsy punch with thorn, single action jaws

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

**Carbon Handles**

more details at the beginning of the chapter


*also available  
with angled  
handle*
**Stainless steel Handles**

more details at the beginning of the chapter

**Ø 10 mm****R 034 - 000 000 - 000****R 047 - 000 000 - 000****R 048 - 000 000 - 000****R 040 - 000 000 - 000**

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

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





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 !



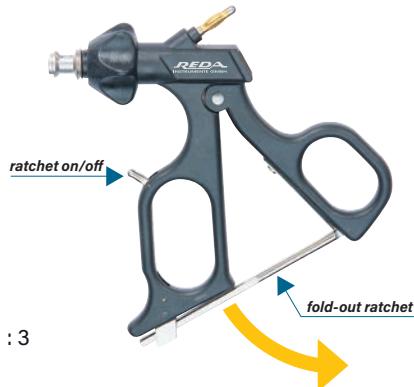
#### Nut stopper

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 unactiv 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 unactiv ratchet, HF-connector Ø 4 mm male 45° lateral,  
rotating head 360°, autoclavable

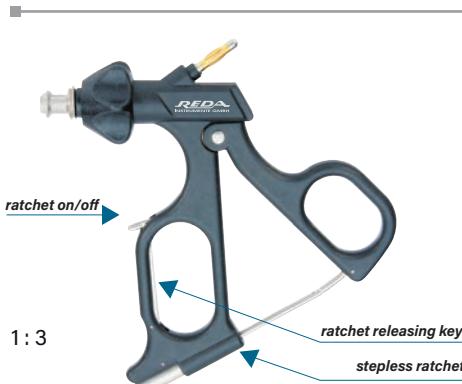
**R032M - 000000 - 000**



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

**REDA**  
INSTRUMENTE GMBH

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**

1: 3



Ø 3 / 5 / 10 mm



1: 3

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

**R038 - 000000 - 000**



1: 3

Axial handle, with spreading spring

**R048 - 000000 - 000**



1: 3

Axial handle with rings and ratchet

**R037 - 000000 - 000**



1: 3

Axial ring handle

**R047 - 000000 - 000**



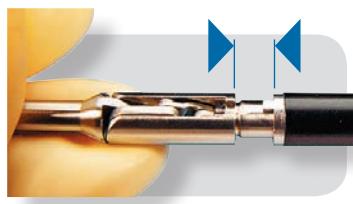
Axial handle, v-shaped angled, type with spreading spring and ratchet

**R039 - 000000 - 000**

Axial handle, angled, with spreading spring

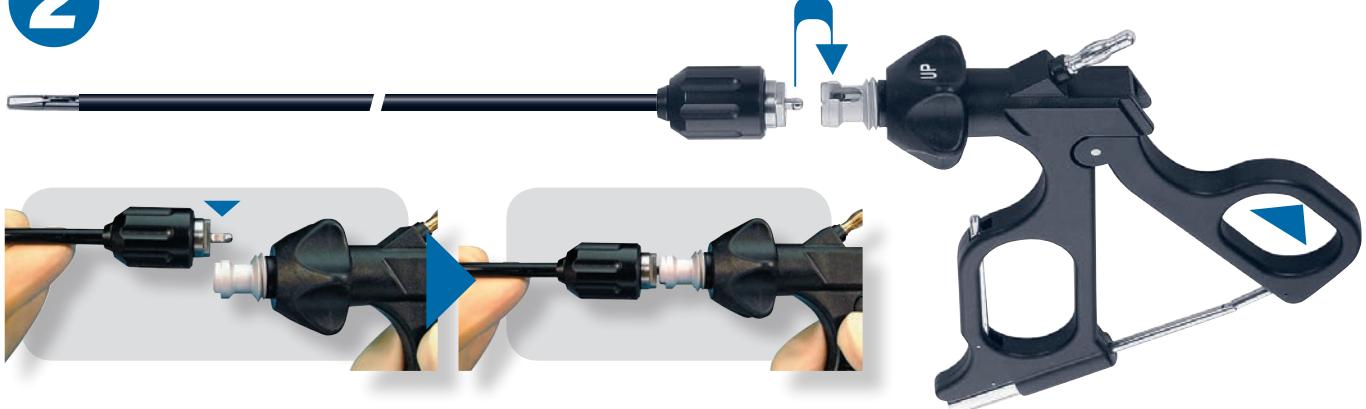
**R040 - 000000 - 000**

**1**

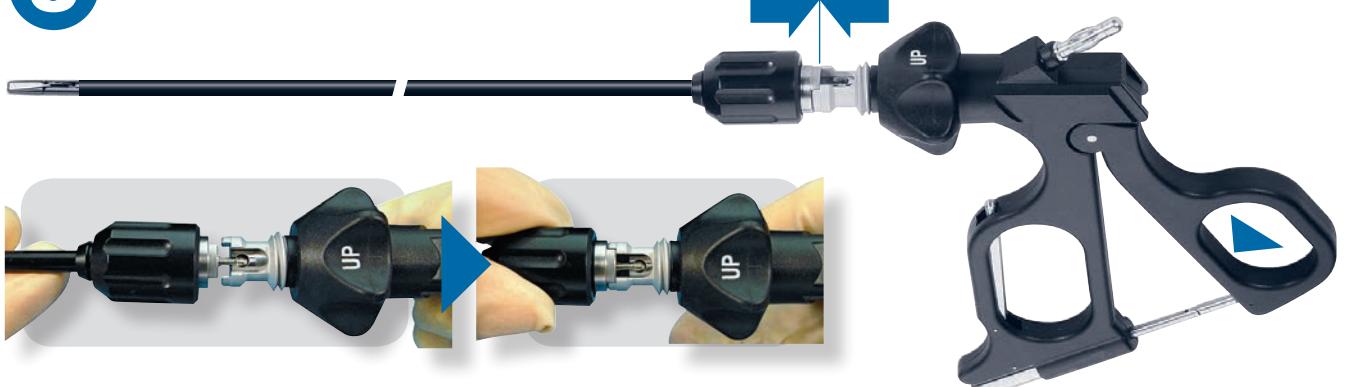


**CLICK**

**2**

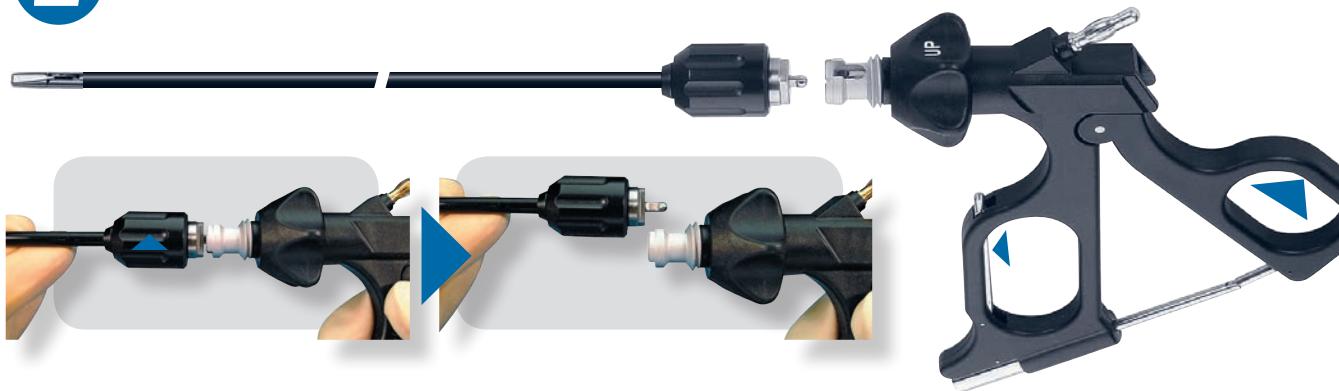
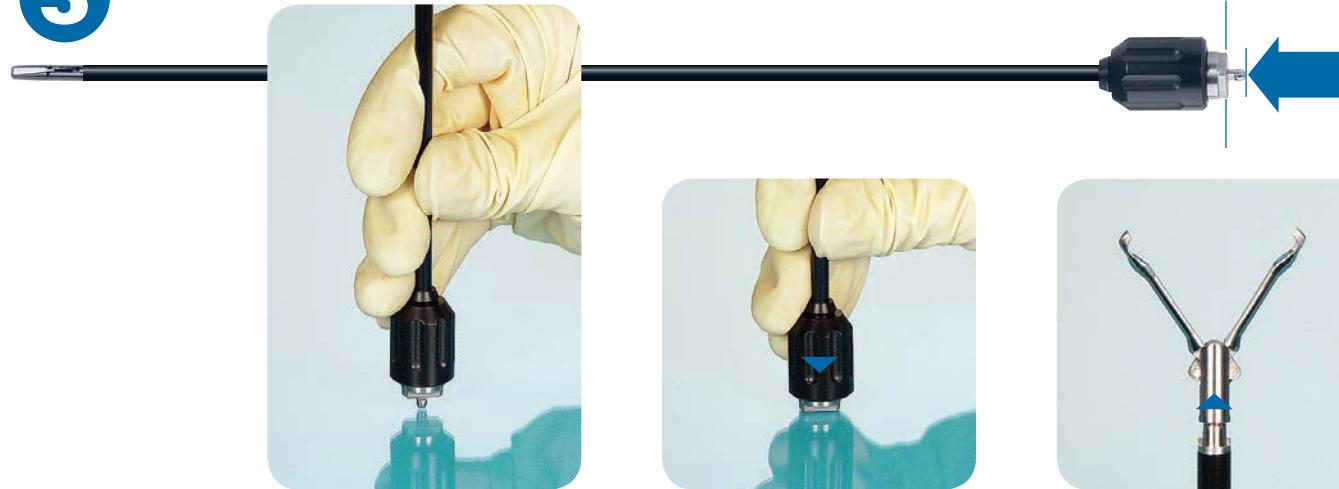


**3**



**4**



**1****2****3****4**

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

without LUER Lock

with LUER Lock

**R030 - 050330 - 000****R030 - 050330 - 000 L**Tube Shaft, insulated shaft length: **360 mm**

without LUER Lock

with LUER Lock

**R030 - 050360 - 000****R030 - 050360 - 000 L**Tube Shaft, insulated shaft length: **450 mm**

without LUER Lock

with LUER Lock

**R030 - 050450 - 000****R030 - 050450 - 000 L****Ø 10 mm**Tube Shaft, insulated shaft length: **330 mm**

cylindrical

reduce to Ø 5 mm

**R030 - 100330 - 000****R030 - 100330 - 000 5**Tube Shaft, insulated, for adipose patients shaft length: **360 mm**

cylindrical

reduce to Ø 5 mm

**R030 - 100360 - 000****R030 - 100360 - 000 5**Tube Shaft, insulated, for adipose patients shaft length: **450 mm**

cylindrical

reduce to Ø 5 mm

**R030 - 100450 - 000****R030 - 100450 - 000 5**



**Ø 5 mm****Needle holder**

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



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

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



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

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



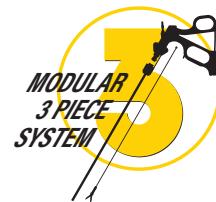
Needle holder, curved right,  
 with inserted tungsten carbide, crosswise teeth, single action jaws

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



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

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


**Carbon Handles**

more details at the beginning of the chapter



Ø 5 mm



Needleholder with inserted tungsten carbide, straight, single action jaws

Working length	Working insert alone	Complete instrument			
330 mm	R050-050330-350	R053-050330-350	R053P-050330-350	R051-050330-350	R052-050330-350
360 mm	R050-050360-350	R053-050360-350	R053P-050360-350	R051-050360-350	R052-050360-350
450 mm	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			
330 mm	R050-050330-352	R053-050330-352	R053P-050330-352	R051-050330-352	R052-050330-352
360 mm	R050-050360-352	R053-050360-352	R053P-050360-352	R051-050360-352	R052-050360-352
450 mm	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			
330 mm	R050-050330-354	R053-050330-354	R053P-050330-354	R051-050330-354	R052-050330-354
360 mm	R050-050360-354	R053-050360-354	R053P-050360-354	R051-050360-354	R052-050360-354
450 mm	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			
330 mm	R050-050330-360	R053-050330-360	R053P-050330-360	R051-050330-360	R052-050330-360
360 mm	R050-050360-360	R053-050360-360	R053P-050360-360	R051-050360-360	R052-050360-360
450 mm	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



Ø 5 mm

R 037 - 000 000 - 000

R 038 - 000 000 - 000

R 039 - 000 000 - 000



Needleholder with inserted tungsten carbide, straight, single action jaws

## Complete instrument

R 057-050330-350	R 058-050330-350	R 059-050330-350	Working length mm
R 057-050360-350	R 058-050360-350	R 059-050360-350	360
R 057-050450-350	R 058-050450-350	R 059-050450-350	450



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

## Complete instrument

R 057-050330-352	R 058-050330-352	R 059-050330-352	Working length mm
R 057-050360-352	R 058-050360-352	R 059-050360-352	360
R 057-050450-352	R 058-050450-352	R 059-050450-352	450



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

## Complete instrument

R 057-050330-354	R 058-050330-354	R 059-050330-354	Working length mm
R 057-050360-354	R 058-050360-354	R 059-050360-354	360
R 057-050450-354	R 058-050450-354	R 059-050450-354	450



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

## Complete instrument

R 057-050330-360	R 058-050330-360	R 059-050330-360	Working length mm
R 057-050360-360	R 058-050360-360	R 059-050360-360	360
R 057-050450-360	R 058-050450-360	R 059-050450-360	450

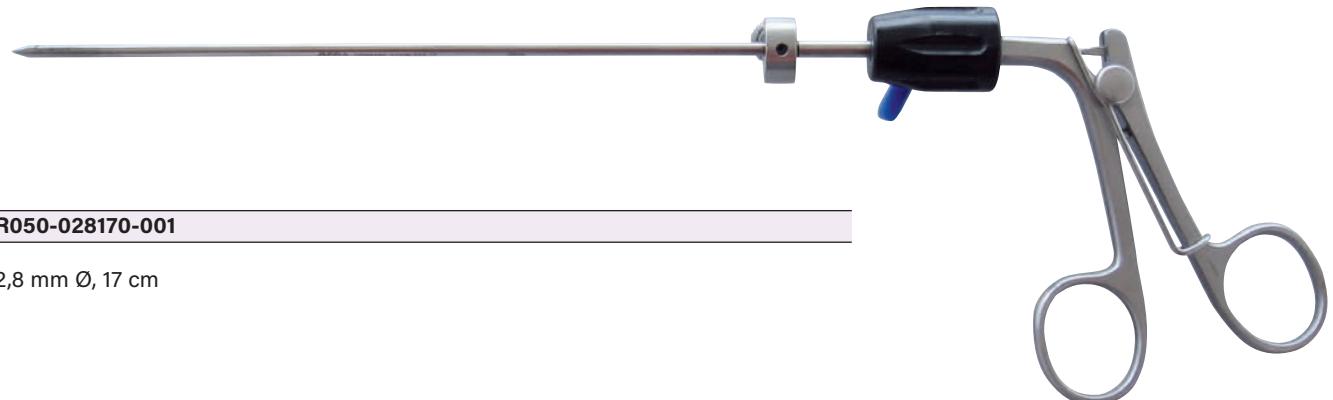
Ø 5 mm

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



R058-0531-361

Ø 2,8 mm



R050-028170-001

2,8 mm Ø, 17 cm

**Ø 4 mm**



**R050-050330-01**

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



**R050-050330-02**

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



**R050-050330-03**

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

**Ø 2,3 mm****R050-050340-00**

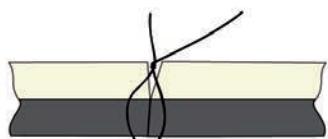
The fascia-suture assisting device („fsad“)      2,3 mm Ø, 140 mm working length

**Pic. 1**

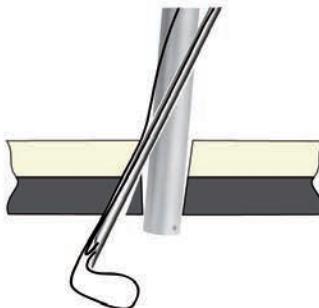
Push down the ring handle so that the needle is positioned outside the cannula. Set the thread into the „fsad“ and make sure that the thread is positioned in the middle. Pull back the ring handle with your thumb so that the catcher hook will be retracted into the cannula.

**Pic. 3**

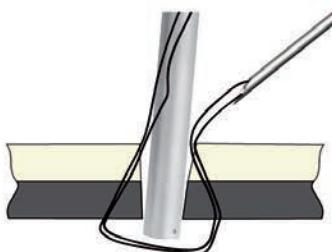
Now penetrate the „fsad“ on the other side of the Trocar (Pic. 2). - Please make sure again that the catcher hook is retracted during this procedure. When you have come through the subcutaneous tissue push down the ring handle so that the catcher hook comes out. Take the loose end of the thread by making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

**Pic. 5**

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

**Pic. 2**

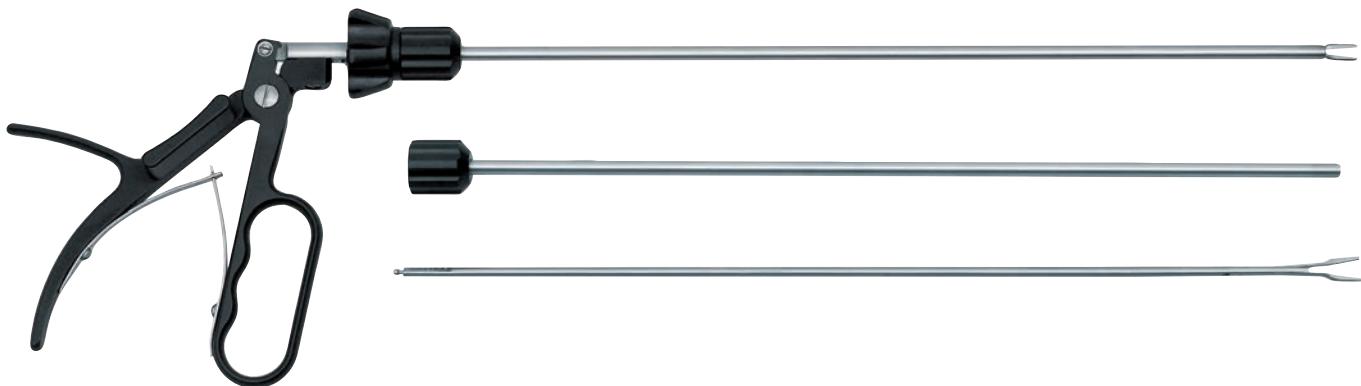
Penetrate the „fsad“ through the subcutaneous tissue (using the incision of the trocar) in the abdominal wall. Make sure that the catcher hook is always retracted during this procedure. After that, push down the ring handle so that the catcher hook comes out of the cannula. Now you can release the thread.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

**Pic. 4**

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

**Ø 5 mm**

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



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

**Ø 10 mm**

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

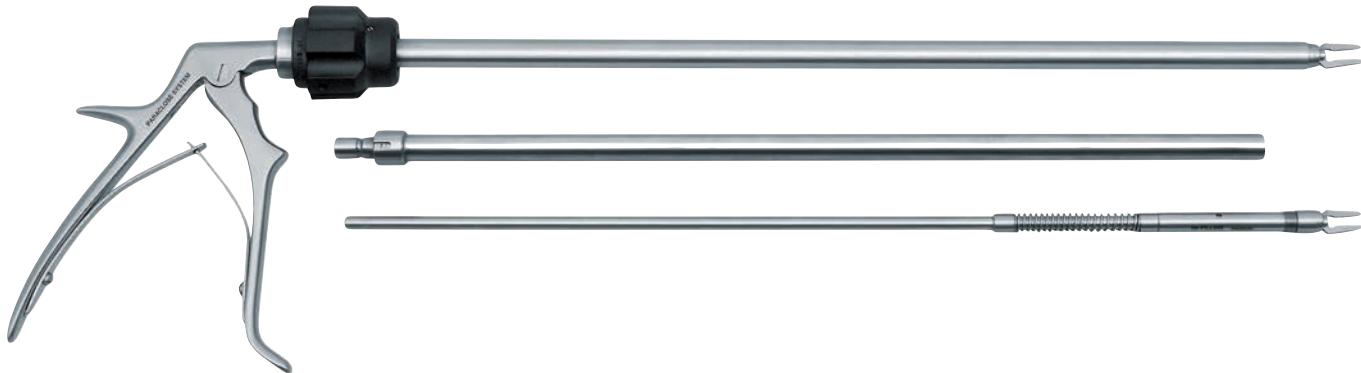


for Clips-Type	
Ethicon - small	<b>R055-100330-01</b>
Ethicon - medium	<b>R055-100330-02</b>
Ethicon - medium-large	<b>R055-100330-03</b>
Ethicon - large	<b>R055-100330-04</b>
Weck - small	<b>R055-100330-11</b>
Weck - medium	<b>R055-100330-12</b>
Weck - medium-large	<b>R055-100330-13</b>
Pilling - small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

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

**Ø 10 mm**

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

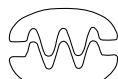


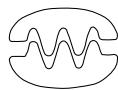
for Clips-Type	Forceps complete	Insert alone	Handle alone	Shaft tube alone
Ethicon - small	R056-100330-01	R056-100000-01	R056-100000-00	R056-100330-00
Ethicon - medium	R056-100330-02	R056-100000-02		
Ethicon - medium-large	R056-100330-03	R056-100000-03		
Ethicon - large	R056-100330-04	R056-100000-04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

**Ø 10 mm**

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



Bulldog clamps	Jaws length	Straight	Curved
	17 mm	<b>R059-100-17</b>	<b>R059-101-17</b>
	25 mm	<b>R059-100-25</b>	<b>R059-101-25</b>
	45 mm	<b>R059-100-45</b>	<b>R059-101-45</b>
	60 mm	<b>R059-100-60</b>	<b>R059-101-60</b>

Bulldog clamps (Satinsky) 2 x 3 teeth	Jaws length	Curved	Angled upwards
	60 mm	<b>R059-102-01</b>	<b>R059-103-01</b>
			



**Ø 5 mm**

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



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

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



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



**R060-000000-000**  
Safety handle

**Ø 5 mm**

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



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

**Ø 5 mm**

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



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

**Ø 5 mm**

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



	type	Working length 330 mm
	Button type electrode	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**

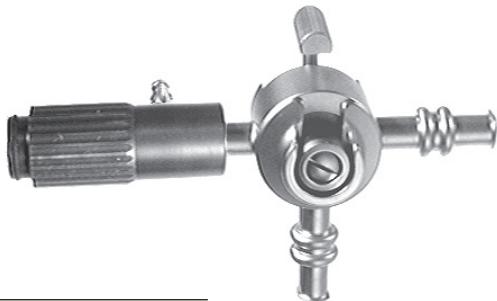

**Adapter** for electrode handle for connecting monopolar  
electrodes modular

**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

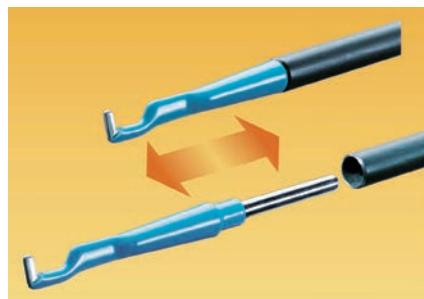


R064-050000-011

**Trumpet Valve with Electrode Adapter**  
for exchangeable electrodes, with rotatable adapter and side  
HF-Connector combined Luer-Lock / Tube Connector

**Ø 5 mm**

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



Handle alone

**R062-050320-000**

Outer tube insulated

**R062-050320-099**


Ball electrode

**R062-050320-001**
**R062-050000-001**


J-hook electrode

**R062-050320-002**
**R062-050000-002**


L-hook electrode

**R062-050320-003**
**R062-050000-003**


Spatula electrode

**R062-050320-004**
**R062-050000-004**


Needle electrode

**R062-050320-005**
**R062-050000-005**


Lanzette electrode

**R062-050320-006**
**R062-050000-006**

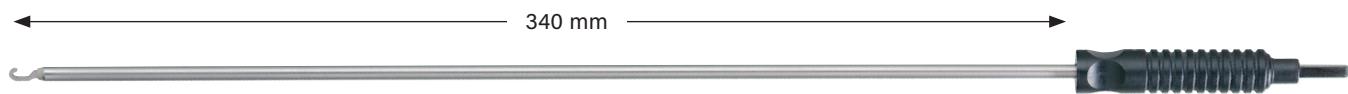
**Monopolar****Unit side**

	Cable length Meter	Instrument side
		female 4 mm Ø
	3	R060-050040-003
	5	R060-050040-005
	3	R060-040040-003
	5	R060-040040-005
	3	R060-080040-003
	5	R060-080040-005
	3	R060-040040-203
	5	R060-040040-205



BIPOLAR



**Ø 5 mm**

Bipolar electrodes 340 mm working length



Ball electrode

**R067-050340-001**

J-hook electrode

**R067-050340-002**

L-hook electrode

**R067-050340-003**

Spatula electrode

**R067-050340-004**

Plate electrode

**R067-050340-005**

Ø 3 mm



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



L-hook electrode

**R068-030340-003**



Needle electrode

**R068-030340-010**



V-shaped electrode

**R068-030340-012**

**Ø 5 mm**

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

Standard handle  
**R066-000000-500**



Ring handle  
**R066-000000-600**


**HIRSCH**


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

**Micro**


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

**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	<b>R066-000200-508</b>	<b>R066-050200-508</b>	<b>R066-050200-608</b>
340 mm	<b>R066-000340-508</b>	<b>R066-050340-508</b>	<b>R066-050340-608</b>
450 mm	<b>R066-000450-508</b>	<b>R066-050450-508</b>	<b>R066-050450-608</b>

**Atraumatic 3 mm smooth**

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

**METZENBAUM** scissors curved

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

Ø 5 mm

Standard handle  
**R066-000000-500**

Ring handle  
**R066-000000-600**



**METZENBAUM** scissors curved TC blades



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

**MARYLAND**



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

**Outer shaft tube**



Working length

200 mm	<b>R066-050200-001</b>
--------	------------------------

340 mm	<b>R066-050340-001</b>
--------	------------------------

450 mm	<b>R066-050450-001</b>
--------	------------------------

**Inner shaft tube**



Working length

200 mm	<b>R066-050200-000</b>
--------	------------------------

340 mm	<b>R066-050340-000</b>
--------	------------------------

450 mm	<b>R066-050450-000</b>
--------	------------------------



Adapter for european flat plug

**R066-000000-002**



Adapter for US-cables

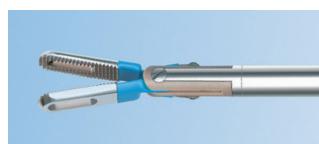
**R066-000000-012**

Ø 5 mm



Shaft  
**R067-050340-700**

#### Insert alone



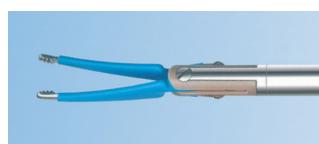
Large grasping forceps

**R067-000340-713**



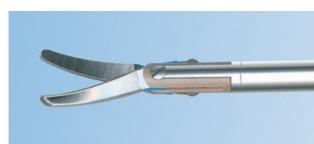
Grasping forceps, curved

**R067-000340-724**



Forceps, curved

**R067-000340-722**



Scissors, curved

**R067-000340-709**



Delta Grasper

**R067-000340-723**



MARYLAND dissector, curved

**R067-000340-721**

**Bipolar****Unit / Equipment side****Instrument side**

Cable length Meter	Europe flat plug	
3	<b>R065-040125-003</b>	<b>R065-040125-103</b>
5	<b>R065-040125-005</b>	<b>R065-040125-105</b>
3	<b>R065-020080-003</b>	<b>R065-020080-103</b>
5	<b>R065-020080-005</b>	<b>R065-020080-105</b>
3	<b>R065-040285-003</b>	<b>R065-040285-103</b>
5	<b>R065-040285-005</b>	<b>R065-040285-105</b>
3	<b>R065-040000-003</b>	<b>R065-040000-103</b>
5	<b>R065-040000-005</b>	<b>R065-040000-105</b>

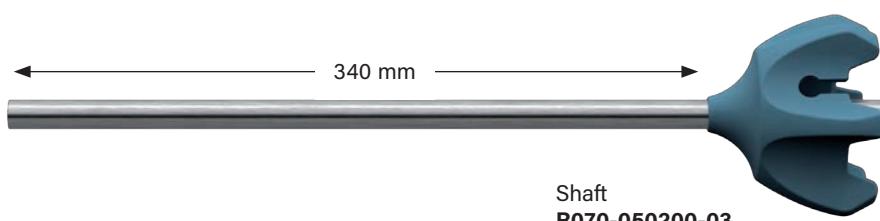
**Bipolar forceps with rotating handle**

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

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

**Ø 5 mm**

bipolar forceps with rotatable handle

**Insert alone**

Large grasping forceps

**R070-050200-04**

Scissors, curved

**R070-050200-05**Grasping forceps,  
fenestrated, curved**R070-050200-06**

MARYLAND dissector, curved

**R070-050200-07**



**Ø 5,0 mm**

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



working length complete

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

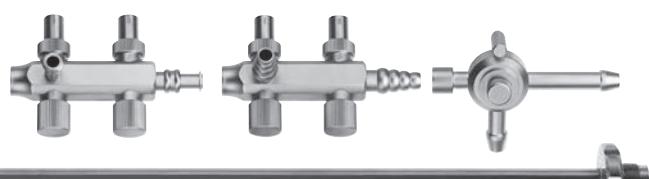


working length

330 mm R075-050330-004

**Ø 5,0 mm**Suction-Irrigation-Handle  
with Luer-Lock-Connection**R073-000000-000**Suction-Irrigation-Handle  
with Tube Connection**R071-000000-000**Suction-Irrigation-Handle  
with Sliding Valve and  
Tube Connection**R072-000000-000****Ø 5 / 10 mm**

Suction-Irrigation-Tubes



working length   Shaft tube alone

Roundhole Sucker, complete with handle

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, complete with handle

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, complete with handle

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, complete with handle

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, complete with handle

330 mm   **R070-050330-001**   Ø 5 mm   **R073-050330-001**   **R071-050330-001**   **R072-050330-001**

working length   Shaft tube alone

Stump Sucker, complete with handle

330 mm   **R070-050330-012**   12 Drillings, Ø 5 mm   **R073-050330-012**   **R071-050330-012**   **R072-050330-012**

**Ø 3,5 / 5 / 10 mm**

- Suction-Irrigation-Handle  
with color-coding
- **20% less weight**
  - **less individual parts**
  - **color-coding**  
blue - irrigation  
green - suction



with large Tube-Connection and 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	<b>R070-035240-116</b>	Ø 3,5 mm
330 mm	<b>R070-050330-116</b>	Ø 5 mm
330 mm	<b>R070-100330-116</b>	Ø 10 mm
450 mm	<b>R070-050450-116</b>	Ø 5 mm
450 mm	<b>R070-100450-116</b>	Ø 10 mm

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 Suction-Irrigation-Handle  
 with 1 trumpet valve


R076-000000-200

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


R079-000000-200

**Ø 3,0 mm**


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 Suction-Irrigation-Tubes


Ø 3 mm

working length Shaft tube alone

340 mm R070-030340-204

complete with 4 sidewise drillings

R076-030340-204

R079-030340-204

340 mm R070-030340-216

complete with 16 sidewise drillings

R076-030340-216

R079-030340-216

**Ø 5,0 mm**


Ø 5 mm

working length Shaft tube alone

340 mm R070-050340-204

complete with 4 sidewise drillings

R076-050340-204

R079-050340-204

340 mm R070-050340-216

complete with 16 sidewise drillings

R076-050340-216

R079-050340-216

**Ø 10 mm**


Ø 10 mm

working length Shaft tube alone

340 mm R070-100340-204

complete with 4 sidewise drillings

R076-100340-204

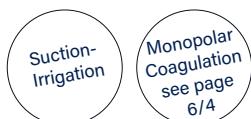
R079-100340-204

340 mm R070-100340-216

complete with 16 sidewise drillings

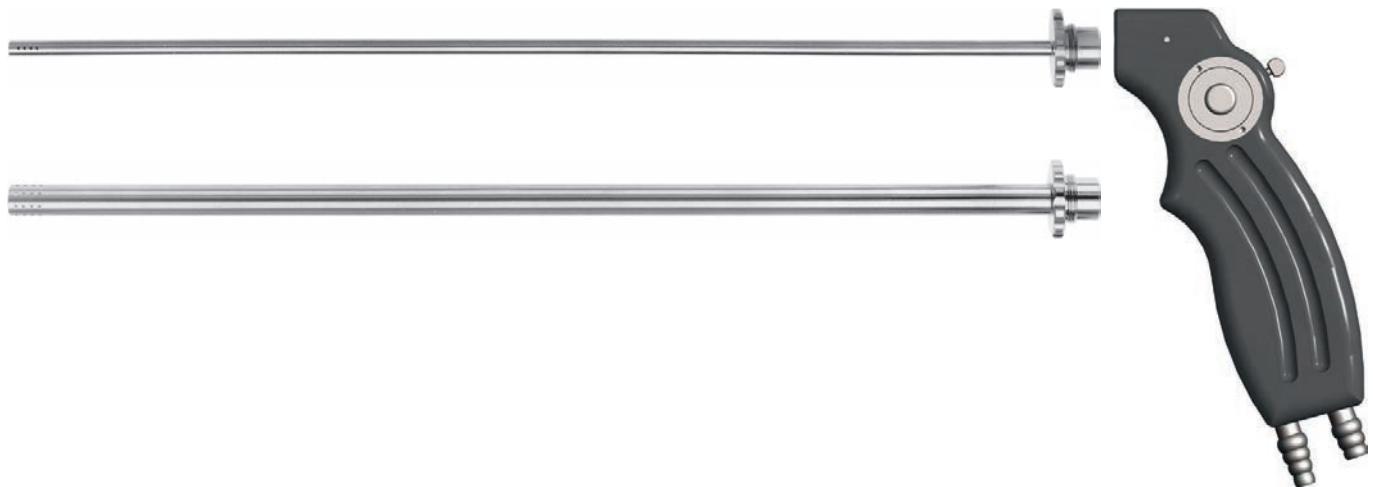
R076-100340-216

R079-100340-216

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

**Suction-Irrigation-Pistol-Handle**

with two-way sliding valve and tube connections

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



Handle

**R064-050000-001**
**Ø 3 / 5 / 10 mm**
**Suction-Irrigation-Tubes**

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

Ø 5 mm



R075-050340-000

Complete set



R075-050340-016

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



R075-020390-000

Laser fiber guide insert alone, 391 mm

**Ø 5 mm**

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



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

**Ø 6 mm**

Puncture Tube for NaCl - Fluid, 6 mm Ø

Luer-Lock = Pressure



Tube = Suction

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

**Ø 2 mm**

Insufflation cannula 2 mm Ø, with LL-adapter



Needle working length

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

**Ø 2,7 mm**

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



Needle working length

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

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

working length

100 mm	<b>R080-020100-001</b>
120 mm	<b>R080-020120-001</b>
150 mm	<b>R080-020150-001</b>

**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	<b>R080-027100-001</b>
120 mm	<b>R080-027120-001</b>
150 mm	<b>R080-027150-001</b>

Ø 6 FR



Cholangiography-catheter, 600 mm long

R080-020600-201

Ø 5 mm

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



R081-050330-001

**Ø 5 mm**

Palpation probe graduated 5 mm Ø

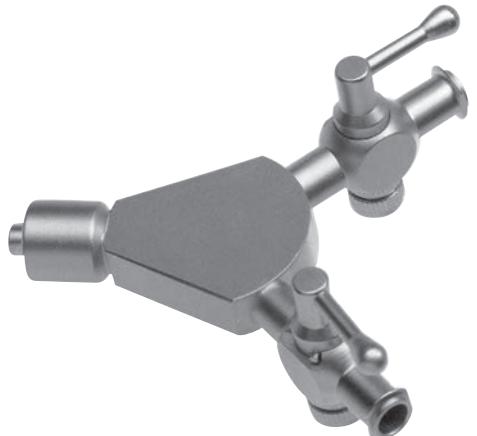


working length

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

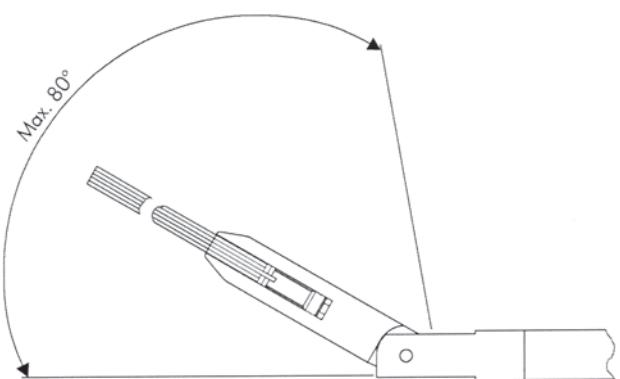
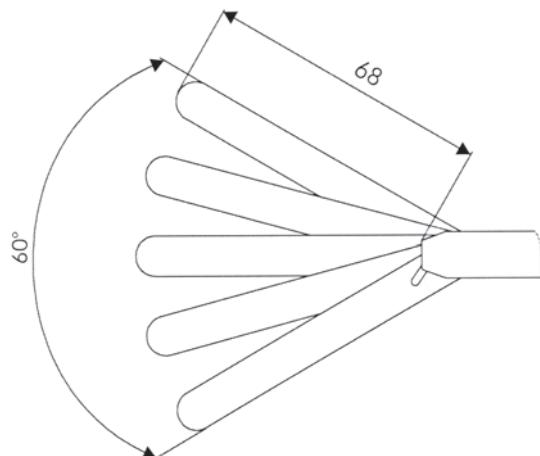
Two-Way-Stopcock for Contrast Medium

**R070-000040-003**



**Ø 10 mm**

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

**R091-100330-005**

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

**Ø 5 mm****R094-050360-001****Ø 10 mm****R094-100360-001**

**Ø 5 mm**

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

**R091-050340-003**

adjustable

**R092-050340-003****Ø 10 mm**

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

**R091-100380-005**

adjustable

**R092-100380-005**

**Ø 5 mm**

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

**R091-050340-005**

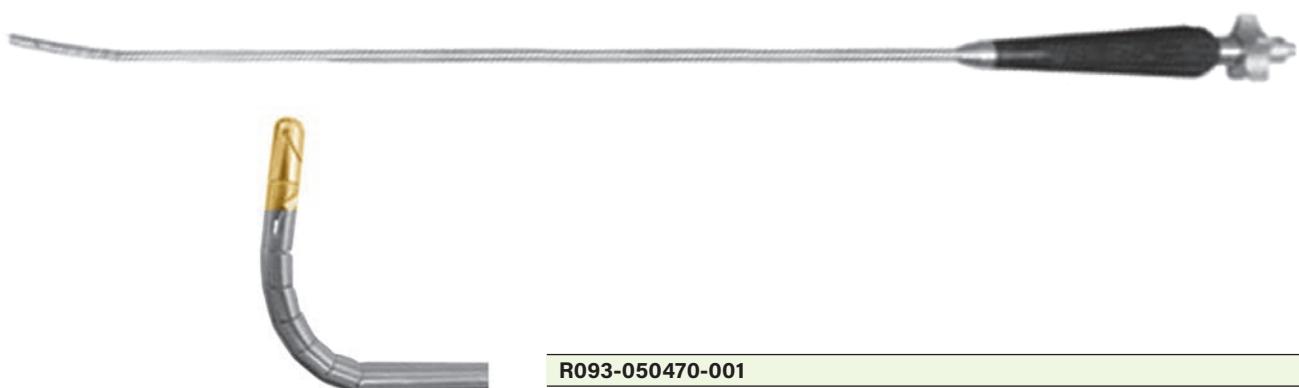
Endo-Retractor 5 mm Ø with 5 fingers spreadable a. adjustable, 340 mm working length, 55 mm spreader, LL-adapter for cleaning

**R092-050340-005**

Ø 5 mm



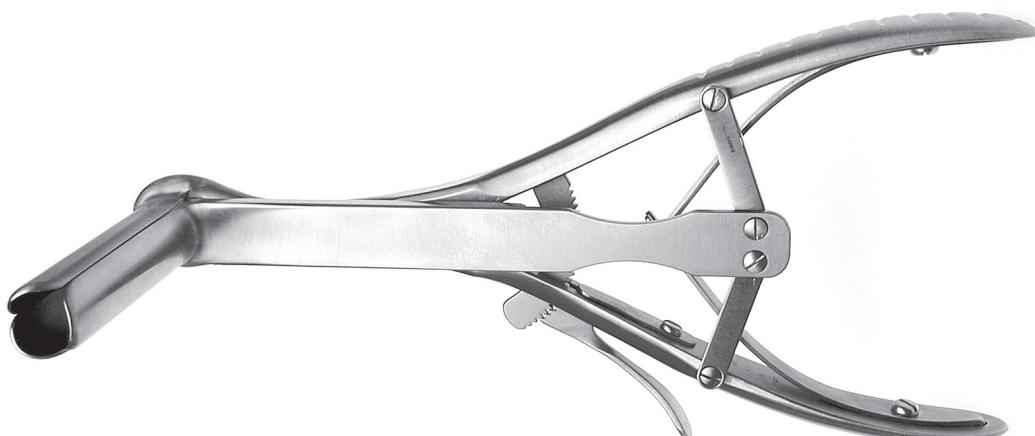
R093-050550-001



R093-050470-001

Speculum retractor, 3 blades for gall bladder extraction

R099-000250-003



Ø 2,0

Laparoscopes with integrated fiberoptic  
for illumination, autoclavable



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

**Ø 3,5 mm**

Multi function valve trocar sleeve



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

Standard trocar



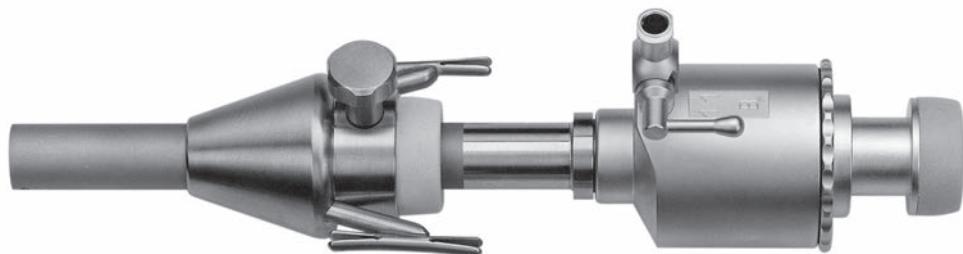
diameter	for tube length	pyramidal	conical	conical blunt
<b>Ø 3,5 mm</b>	<b>70 mm</b>	<b>R020-035070-001</b>	<b>R020-035070-002</b>	<b>R020-035070-003</b>

 Safety trocar  
 oblique end, conical blunt


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

**Ø 3,5 mm**

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



Ø	Cone alone
3,5 mm	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**

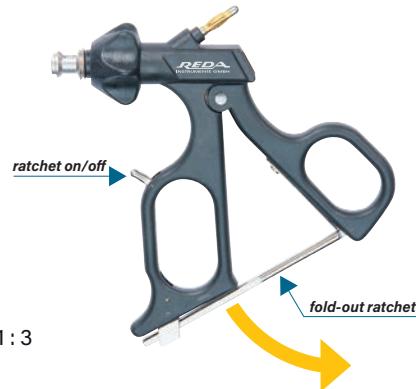
The working insert and tube shaft form a single component in 3 mm instruments, contrary to the arrangement in modular 5 and 10 mm REDA tube shaft instruments.

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 unactiv 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**

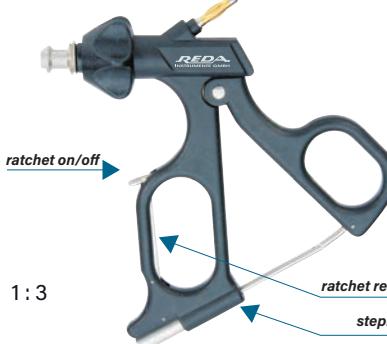


Ergonomic universal carbon handle with ratchet,  
Button for active or unactiv ratchet, HF-connector Ø 4 mm male 45° lateral,  
rotating head 360°, autoclavable

**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

**R038 - 000000 - 000**



1:3

Axial handle, with spreading spring

**R048 - 000000 - 000**



1:3

Axial handle with rings and ratchet

**R037 - 000000 - 000**



1:3

Axial ring handle

**R047 - 000000 - 000**



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

**R039 - 000000 - 000**



Axial handle, angled, with spreading spring

**R040 - 000000 - 000**

**Carbon Handles**

more details at the beginning of the chapter



Ø 3 mm



Universal grasping forceps, straight, double action jaws

Working length    Working insert alone    Complete instrument

180 mm	R100-030180-210	R103-030180-210	R103P-030180-210	R104-030180-210	R102M-030180-210
210 mm	R100-030210-210	R103-030210-210	R103P-030210-210	R104-030210-210	R102M-030210-210
330 mm	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

180 mm	R100-030180-212	R103-030180-212	R103P-030180-212	R104-030180-212	R102M-030180-212
210 mm	R100-030210-212	R103-030210-212	R103P-030210-212	R104-030210-212	R102M-030210-212
330 mm	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

180 mm	R100-030180-214	R103-030180-214	R103P-030180-214	R104-030180-214	R102M-030180-214
210 mm	R100-030210-214	R103-030210-214	R103P-030210-214	R104-030210-214	R102M-030210-214
330 mm	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

180 mm	R100-030180-220	R103-030180-220	R103P-030180-220	R104-030180-220	R102M-030180-220
210 mm	R100-030210-220	R103-030210-220	R103P-030210-220	R104-030210-220	R102M-030210-220
330 mm	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


**Ø 3 mm**
**R 037 - 000 000 - 000      R 038 - 000 000 - 000**


Universal grasping forceps, straight, double action jaws

**Working length**

## Complete instrument

**mm**

<b>R107-030180-210</b>	<b>R108-030180-210</b>	<b>180</b>
<b>R107-030210-210</b>	<b>R108-030210-210</b>	<b>210</b>
<b>R107-030330-210</b>	<b>R108-030330-210</b>	<b>330</b>



MARYLAND grasping forceps, curved, double action jaws

**Working length**

## Complete instrument

**mm**

<b>R107-030180-212</b>	<b>R108-030180-212</b>	<b>180</b>
<b>R107-030210-212</b>	<b>R108-030210-212</b>	<b>210</b>
<b>R107-030330-212</b>	<b>R108-030330-212</b>	<b>330</b>



Dissections forceps, fenestrated, oval, double action jaws

**Working length**

## Complete instrument

**mm**

<b>R107-030180-214</b>	<b>R108-030180-214</b>	<b>180</b>
<b>R107-030210-214</b>	<b>R108-030210-214</b>	<b>210</b>
<b>R107-030330-214</b>	<b>R108-030330-214</b>	<b>330</b>



Grasping forceps with reservoir, tip blunt, double action jaws

**Working length**

## Complete instrument

**mm**

<b>R107-030180-220</b>	<b>R108-030180-220</b>	<b>180</b>
<b>R107-030210-220</b>	<b>R108-030210-220</b>	<b>210</b>
<b>R107-030330-220</b>	<b>R108-030330-220</b>	<b>330</b>

**Carbon Handles**

more details at the beginning of the chapter



Ø 3 mm

R 033 - 000 000 - 000

R 033P - 000 000 - 000

R 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
180 mm	R100-030180-222	R103-030180-222 R103P-030180-222 R104-030180-222 R102M-030180-222
210 mm	R100-030210-222	R103-030210-222 R103P-030210-222 R104-030210-222 R102M-030210-222
330 mm	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
180 mm	R100-030180-224	R103-030180-224 R103P-030180-224 R104-030180-224 R102M-030180-224
210 mm	R100-030210-224	R103-030210-224 R103P-030210-224 R104-030210-224 R102M-030210-224
330 mm	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
180 mm	R100-030180-230	R103-030180-230 R103P-030180-230 R104-030180-230 R102M-030180-230
210 mm	R100-030210-230	R103-030210-230 R103P-030210-230 R104-030210-230 R102M-030210-230
330 mm	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
180 mm	R100-030180-242	R103-030180-242 R103P-030180-242 R104-030180-242 R102M-030180-242
210 mm	R100-030210-242	R103-030210-242 R103P-030210-242 R104-030210-242 R102M-030210-242
330 mm	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**

<b>R107-030180-222</b>	<b>R108-030180-222</b>	<b>180</b>
<b>R107-030210-222</b>	<b>R108-030210-222</b>	<b>210</b>
<b>R107-030330-222</b>	<b>R108-030330-222</b>	<b>330</b>



Delphin grasping forceps with reservoir, double action jaws

## Working length

## Complete instrument

**mm**

<b>R107-030180-224</b>	<b>R108-030180-224</b>	<b>180</b>
<b>R107-030210-224</b>	<b>R108-030210-224</b>	<b>210</b>
<b>R107-030330-224</b>	<b>R108-030330-224</b>	<b>330</b>



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

## Working length

## Complete instrument

**mm**

<b>R107-030180-230</b>	<b>R108-030180-230</b>	<b>180</b>
<b>R107-030210-230</b>	<b>R108-030210-230</b>	<b>210</b>
<b>R107-030330-230</b>	<b>R108-030330-230</b>	<b>330</b>



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

## Working length

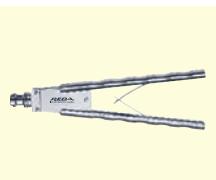
## Complete instrument

**mm**

<b>R107-030180-242</b>	<b>R108-030180-242</b>	<b>180</b>
<b>R107-030210-242</b>	<b>R108-030210-242</b>	<b>210</b>
<b>R107-030330-242</b>	<b>R108-030330-242</b>	<b>330</b>

**Carbon 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****Stainless steel Handles**

more details at the beginning of the chapter



METZENBAUM scissors, straight, double action jaws

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



METZENBAUM scissors, curved, double action jaws

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



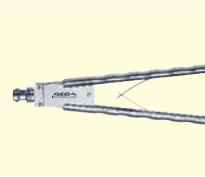
Peritoneal scissors, serrated, straight, single action jaws

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


**Carbon Handles**

more details at the beginning of the chapter


**Stainless steel Handles**

more details at the beginning of the chapter

**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>	<b>R100-030180-116</b>	<b>R104-030180-116</b>
<b>210 mm</b>	<b>R100-030210-116</b>	<b>R104-030210-116</b>
<b>330 mm</b>	<b>R100-030330-116</b>	<b>R104-030330-116</b>
		<b>R147-030180-116</b>
		<b>R147-030210-116</b>
		<b>R148-030180-116</b>
		<b>R148-030210-116</b>
		<b>R148-030330-116</b>



Micro scissors, straight, single action jaws

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

**Carbon Handles**

more details at the beginning of the chapter



R 034 - 000 000 - 000

Ø 3 mm



Biopsy cup, sharp, without thorn, double action jaws

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

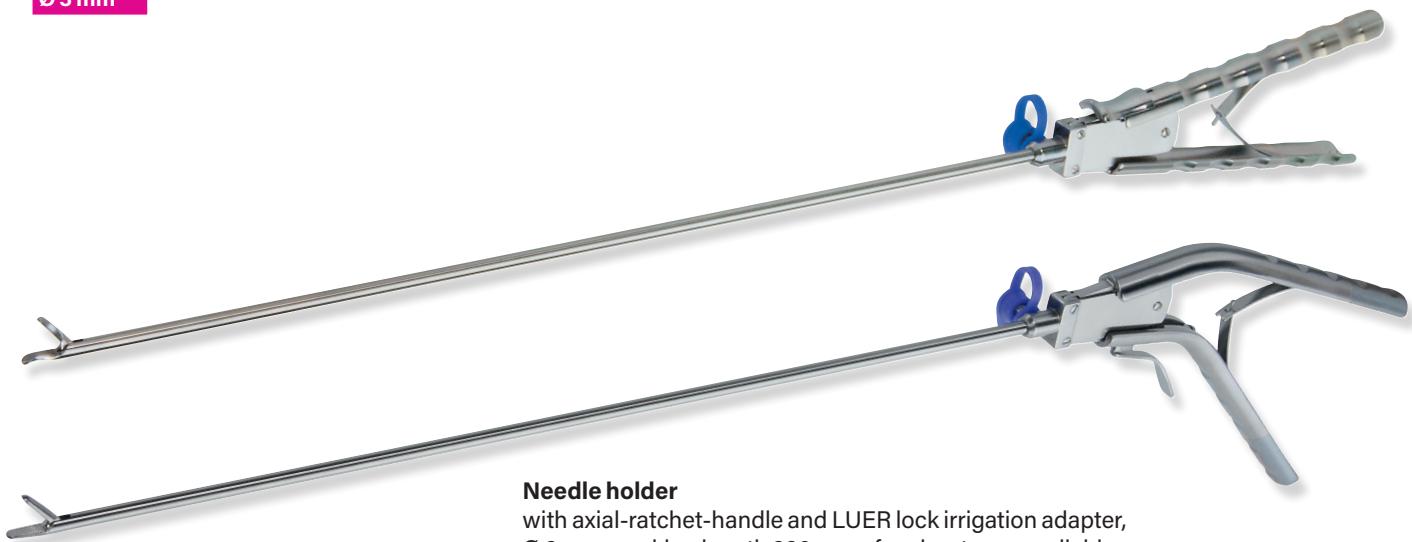


Biopsy cup, sharp, with thorn, double action jaws

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



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
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R158-0533-350	R159-0533-350
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Needle holder, curved left,  
 with inserted tungsten carbide, crosswise teeth, single action jaws

Handle	straight	angled
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R158-0533-352	R159-0533-352
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Needle holder, curved right,  
 with inserted tungsten carbide, crosswise teeth, single action jaws

Handle	straight	angled
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R158-0533-354	R159-0533-354
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Needle holder/-positioner, convex/concave shaped jaws, with fixation teeth,  
 straight, with wolfram-carbide-coated tips, single action jaws

Handle	straight	angled
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R158-0533-360	R159-0533-360
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**Carbon Handles**

more details at the beginning of the chapter



Ø 3 mm



Needleholder with inserted tungsten carbide, straight, single action jaws

Working length	Working insert alone	Complete instrument
210 mm	R150-030210-350	R153-030210-350    R153P-030210-350    R151-030210-350
330 mm	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
210 mm	R150-030210-352	R153-030210-352    R153P-030210-352    R151-030210-352
330 mm	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
210 mm	R150-030210-354	R153-030210-354    R153P-030210-354    R151-030210-354
330 mm	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
210 mm	R150-030210-360	R153-030210-360    R153P-030210-360    R151-030210-360
330 mm	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****R 037 - 000 000 - 000****R 038 - 000 000 - 000****R 039 - 000 000 - 000**

Needleholder with inserted tungsten carbide, straight, single action jaws

## Complete instrument

Working length  
mm

<b>R157-030210-350</b>	<b>R158-030210-350</b>	<b>R159-030210-350</b>	<b>210</b>
<b>R157-030330-350</b>	<b>R158-030330-350</b>	<b>R159-030330-350</b>	<b>330</b>



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

## Complete instrument

Working length  
mm

<b>R157-030210-352</b>	<b>R158-030210-352</b>	<b>R159-030210-352</b>	<b>210</b>
<b>R157-030330-352</b>	<b>R158-030330-352</b>	<b>R159-030330-352</b>	<b>330</b>



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

## Complete instrument

Working length  
mm

<b>R157-030210-354</b>	<b>R158-030210-354</b>	<b>R159-030210-354</b>	<b>210</b>
<b>R157-030330-354</b>	<b>R158-030330-354</b>	<b>R159-030330-354</b>	<b>330</b>



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

## Complete instrument

Working length  
mm

<b>R157-030210-360</b>	<b>R158-030210-360</b>	<b>R159-030210-360</b>	<b>210</b>
<b>R157-030330-360</b>	<b>R158-030330-360</b>	<b>R159-030330-360</b>	<b>330</b>

**Ø 2,8 mm**

 Monopolar electrode with small handle,  
 Ø 2,8 mm


Type	working length <b>330 mm</b>	working length <b>250 mm</b>
	R060-028330-001	R060-028250-001
	R060-028330-002	R060-028250-002
	R060-028330-003	R060-028250-003
	R060-028330-004	R060-028250-004
	R060-028330-005	R060-028250-005

**Ø 2,8 mm**

Palpation probe  
Ø 2,8 mm



working length

330 mm R090-028330-001

250 mm R090-028250-001

**Ø 2,8 mm**

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



working length complete with handle

330 mm R071-028330-008

250 mm R071-028250-008

Handle with trumpet valve

R071-000000-000

working length roundhole Sucker with 8 drillings

330 mm R070-028330-008

250 mm R070-028250-008

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



working length complete with handle

330 mm R072-028330-008

250 mm R072-028250-008

Handle with sliding valve

R072-000000-000

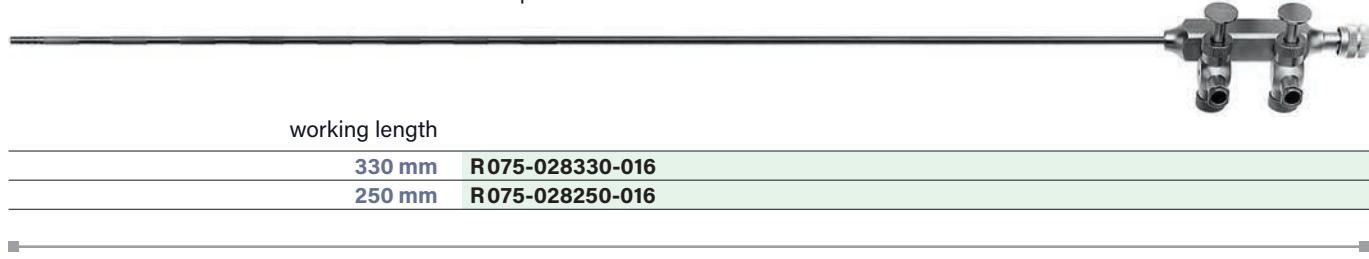
working length roundhole Sucker with 8 drillings

330 mm R070-028330-008

250 mm R070-028250-008

**Ø 2,8 mm**

Suction-Irrigation-Cannula  
with trumpet valves  
and Square Handle

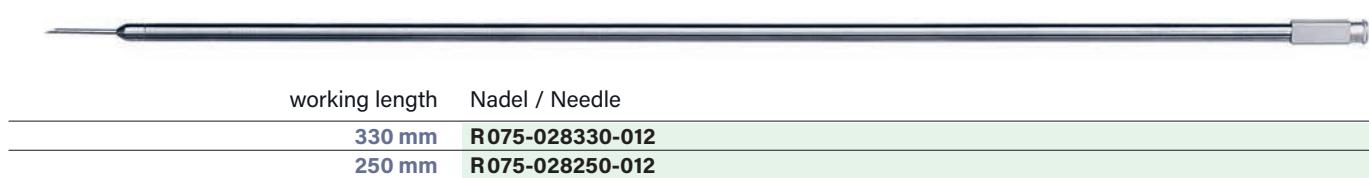


working length

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**

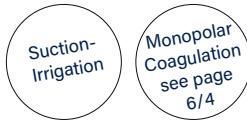
**Ø 3,5 mm****Suction-Irrigation-Handle**

with color-coding

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

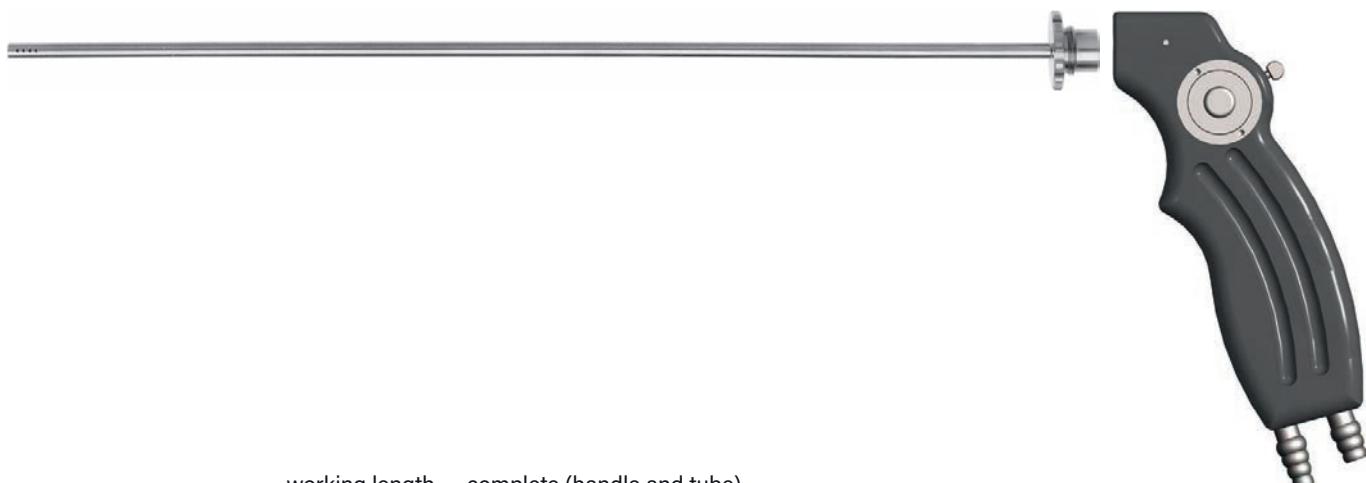


**Suction-Irrigation-Handle 10 mm**  
 with large Tube-Connection and sidewise Tube-Luer-Lock-Connection

**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**

working length **complete (handle and tube)****330 mm R079-030330-416**

Handle with sliding valve

**R064-050000-001**

Tube only Ø 3,0 mm

**R070-030330-416**

## Valve Handle for Shaft M8 x 1

Suction-Irrigation-Handle  
with Trumpet Valvefor exchangeable shafts with threads M8 x 1  
combined Luer-Lock / Tube connector**R076-000000-200**Suction-Irrigation-Pistol-Handle  
with Sliding Valvefor exchangeable shafts with threads M8 x 1  
two combined Luer-Lock / Tube connector**R079-000000-200****Ø 3,0 mm**Exchangeable Suction-Irrigation-Tube  
with threads M8 x 1

working length 4 side drill holes

**340 mm R070-030340-204**

working length 16 side drill holes

**340 mm R070-030340-216**

**Ø 10 mm****Thoracoscope with integrated fiberoptic**  
for illumination, autoclavable

diameter	working length	direction of view
<b>Ø 10,0 mm</b>	<b>180 mm</b>	<b>30°</b>

**Ø 6 / 11 / 13 mm**

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



diameter	working length	Trocarsleeve only	Obturator only
<b>Ø 6 mm</b>	<b>50 mm</b>	<b>R111-060050-006</b>	<b>R111-060050-003</b>
<b>Ø 11 mm</b>	<b>50 mm</b>	<b>R111-110050-006</b>	<b>R111-110050-003</b>
<b>Ø 13 mm</b>	<b>50 mm</b>	<b>R111-130050-006</b>	<b>R111-130050-003</b>

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



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

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**DENNIS** dissector

Working length: 9" (23 cm)

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



Serrated jaws

7 mm shaft

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R119-93527-04

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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

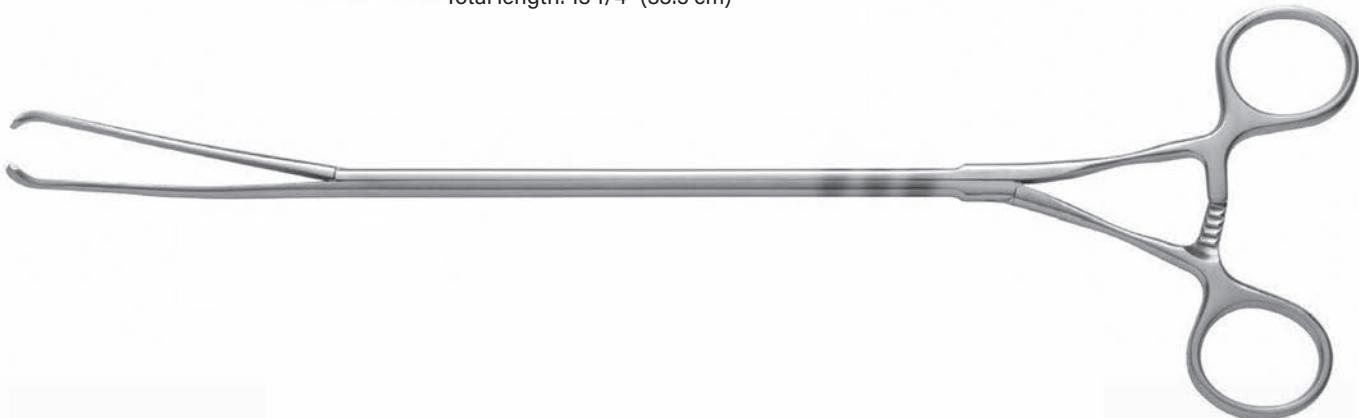
**R119-93527-01**

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**ALLIS** forceps

Working length: 9" (23 cm)

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



6 mm width jaws

7 mm shaft

**R119-93527-13**



**STERN** chest tube passer  
Working length: 6 7/8" (17.5 cm)  
Total length: 9 3/4" (24.8 cm)



without ratchet  
10 mm shaft

**R119-93527-21**



**STERN** chest tube passer  
Working length: 11" (28 cm)  
Total length: 14" (35.6 cm)



with ratchet  
10 mm shaft

**R119-93527-18**



without ratchet  
10 mm shaft

**R119-93527-19**

**DEBAKEY COOLEY** forceps

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

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



without ratchet

DeBakey Cooley jaws

10 mm shaft

**R119-93527-06**

with ratchet

DeBakey Cooley jaws

10 mm shaft

**R119-93527-10**

**HARKEN** clamps

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

Total length: 14" (35.5 cm)



without ratchet

HARKEN #1

DEBAKEY jaws

10 mm shaft

**R119-93527-14**



without ratchet

HARKEN #2

DEBAKEY jaws

10 mm shaft

**R119-93527-15**



**DEBAKEY clamps**

Working length: 10" (25.4 cm)

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



6.5 cm jaw length

1x 2 DEBAKEY jaws

10 mm shaft

**R119-93527-05**

10 cm jaw length

1x 2 DEBAKEY jaws

10 mm shaft

**R119-93527-12**

10 cm jaw length

2 x 3 DEBAKEY jaws

10 mm shaft

**R119-93527-11**

**Needle Holders for 2-0 Suture**

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

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



2-0 and smaller suture

Straight, Carbon-inlay jaws

10 mm shaft

**R119-93527-07**

2-0 and smaller suture

Curved, Carbon-inlay jaws

10 mm shaft

**R119-93527-08**

**DUVAL** clamps

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

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



DUVAL clamp

2.5 cm width jaws

10 mm shaft

**R119-93527-20**



Ø 5,0 mm

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



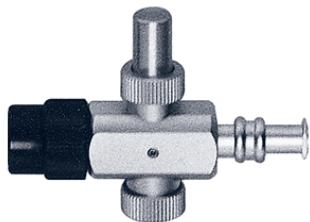
type	working length
Ø 5 mm	330 mm
	L-hook electrode
	Spatula electrode

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



type	working length
Ø 5 mm	330 mm
	L-hook electrode

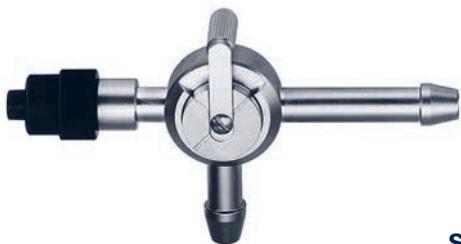
Handles see next page



**Suction-irrigation handle**

1 trumpet valve with LL-adapter

**R118-000000-500**

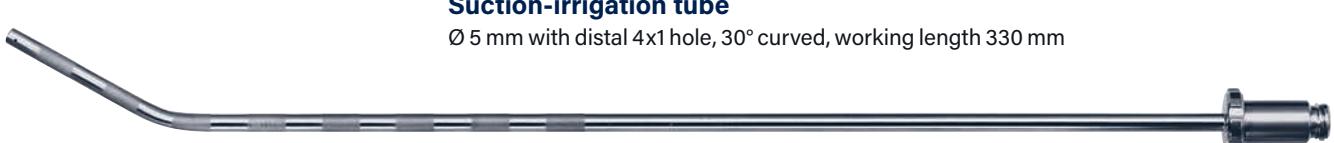


**Suction-irrigation handle**

2-way-valves

**R117-000000-500**

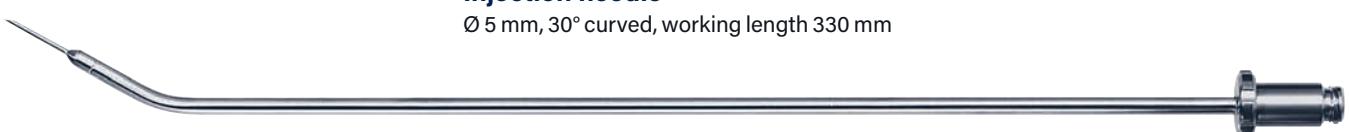
Ø 5 mm



**Suction-irrigation tube**

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

**R117-050330-504**



**Injection needle**

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

**R117-050330-501**



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



**Compatibility**

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

Ø	working length	direction of view	
		0°	30°
4,0 mm	302 mm	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

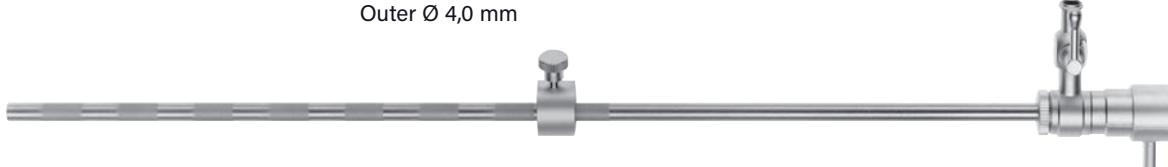
95 mm R020-070095-001



working length conical

95 mm R020-070095-002

## Diagnostic Sheaths

 For Scope Ø 2,7 mm  
 Outer Ø 4,0 mm
**Stopcock, fixed**

working length	0° with Distance-Holder
281 mm	R210-040281-000

 working length  
 274 mm R211-040281-000

30° complete with Obturator and Distance-Holder

281 mm	R210-040281-130	274 mm	R211-040281-130
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30° with Distance-Holder

281 mm	R210-040281-030	274 mm	R211-040281-030
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Obturator only

	R210-040305-00
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Distance-Holder only

	R210-040306-00
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## Diagnostic Sheaths

 For Scope Ø 4,0 mm  
 Outer Ø 5,0 mm
**Stopcock, fixed**

working length	0° complete with Obturator and Distance-Holder	working length	Stopcock, rotating
281 mm	R210-050281-001	274 mm	R211-050274-001

0° with Distance-Holder

281 mm	R210-050274-000	274 mm	R211-050274-000
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30° complete with Obturator and Distance-Holder

281 mm	R210-050274-130	274 mm	R211-050274-130
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30° with Distance-Holder

281 mm	R210-050274-030	274 mm	R211-050274-030
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Obturator only

	R210-050305-00
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Distance-Holder only

	R210-050306-00
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## Operation Sheaths with 1 Working Channel

For Scope Ø 4,0 mm

Outer Ø 7,5 mm

**Sheath with 1 rotating stopcock****Sheath with 2 rotating stopcocks**

working length <b>211 mm</b>	working channel <b>7 CH.</b>	30° OP - Sheath <b>R211-075211-030</b>	<b>R212-075211-030</b>
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**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.	R214-060193-000
193 mm	5 CH.	30° Continuous-Flow-Sheath R214-060193-030

**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.	R214-080193-000
193 mm	7 CH.	30° Continuous-Flow-Sheath R214-080193-030

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



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

working length	0° - 300 mm	Outer Ø
260 mm	R213-037260-000	4,0
	30° - 300 mm	
260 mm	R213-037260-030	4,0



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

working length	0°, 30° - 300 mm, suitable for R213-037260-000, R213-037260-030	Outer Ø
240 mm	R213-050260-000	5,0



**Obturator**

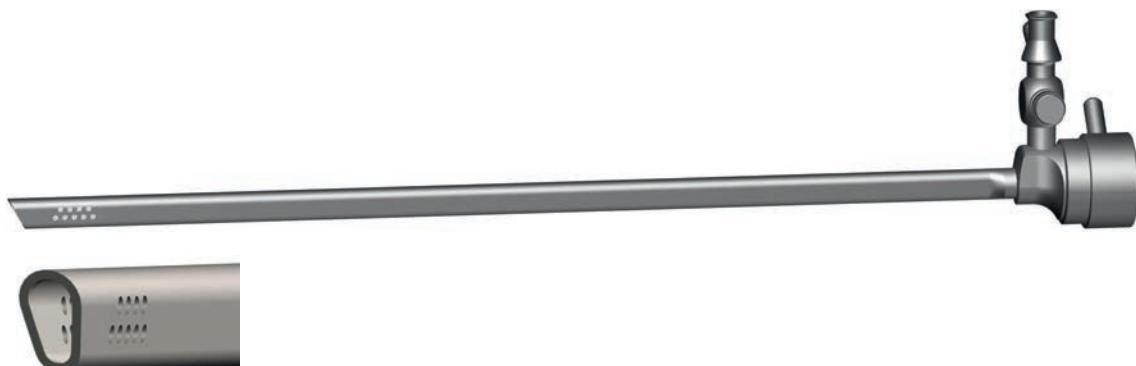
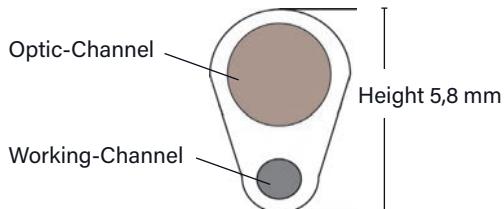
suitable for R213-050260-000

**R213-050300-000**

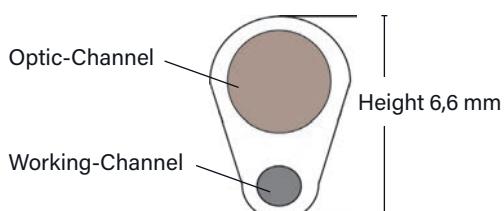
Continuous-Flow Operating Sheaths  
for Hysteroscopes Ø 2,7 mm and Ø 2,9 mm

**1 Instrument Port**

working length	working channel	30° - 300 mm
228 mm	5 CH.	R212-038300-000

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

working length	30° - 300 mm, suitable for R212-038300-000
215 mm	R212-040300-000

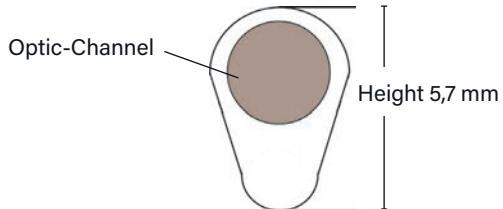


Hysteroscopy - Operating Sheaths  
for Hysteroscopes Ø 2,7 mm and Ø 2,9 mm



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

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



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
<b>260 mm</b>	<b>R213-054260-000</b>	5,3
	30° - 300 mm	
<b>260 mm</b>	<b>R213-054260-030</b>	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
<b>240 mm</b>	<b>R213-065250-030</b>	6,5



**Obturator**

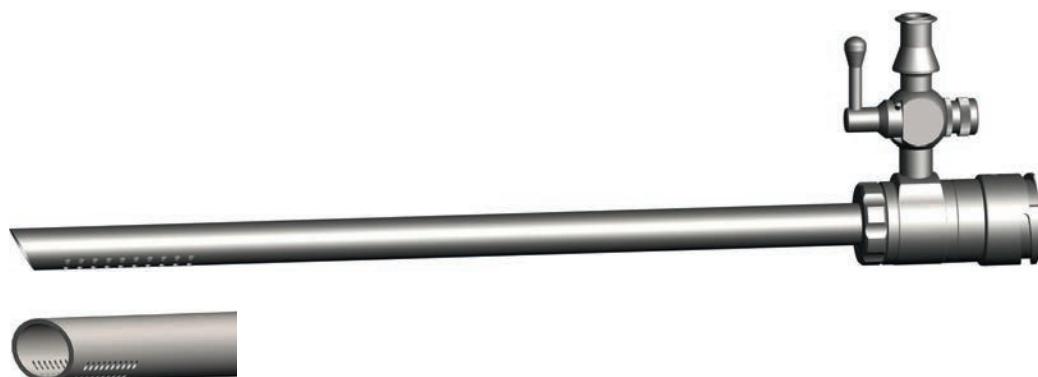
suitable for R213-065250-030	
<b>R213-065300-000</b>	

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

Grasping Forceps, cup serrated

**Ø 5 [Char]**  
**R292-017400-003**
**Ø 7 [Char]**


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**

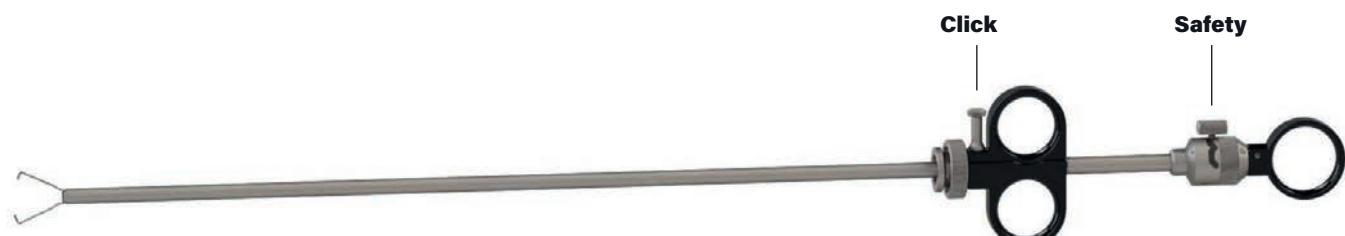
Position 1 = 1st ring

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

**R120-060330-001**


Loading Device

**R120-060000-002**


Conus Piece

**R120-060000-001**
**Ø 6,5 mm**
**Second Incision**

For use with a regular Trocar Sleeve



working length

Complete with Loading Device

300 mm

**R120-065340-001**


Loading Device

**R120-060000-002**


Conus Piece

**R120-060000-001**

**Ø 5 / 10 mm**

Myoma Drill



working length    Ø 5,0 mm

**330 mm**    R121-050320-01

Ø 10,0 mm

**330 mm**    R121-100330-01

**COHEN** Intra Uterine Cannula

with spring-loaded fixation, one large and one small cone



working length    Complete

**170 mm    R122-250170-000**

Cone alone, Ø 19 mm, small

**R122-190056-000**

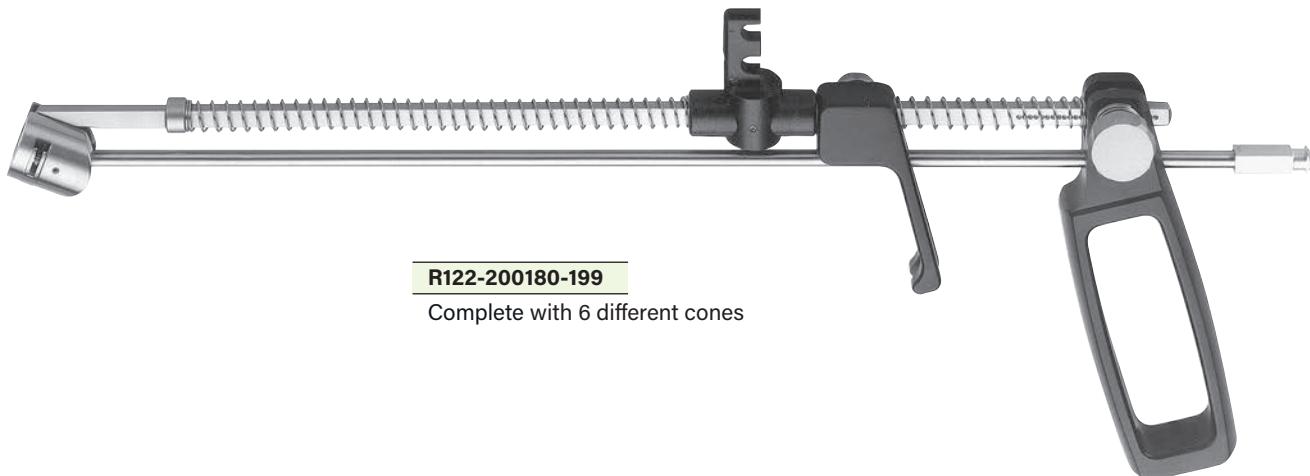
Cone alone, Ø 25 mm, large

**R122-250056-000**

Uterine Cannula allone

**R122-250170-001**

## Uterus Manipulator

**R122-200180-199**

Complete with 6 different cones

working length | 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**
**Manipulator**  
 alone, without cones
**R122-200180-000**

## Coagulation electrodes, flexible, monopolar

470 mm

Ball end



Ø 5 [Char]

Ø 7 [Char]

Ø 9 [Char]

**R395-017450-001****R395-023450-001****R395-030450-001**

Needle type

**R395-017450-021****R395-023450-021**

Loop

**R395-023450-011**

## Bipolar electrodes, flexible

360 mm



Ball end



Ø 5 [Char]

**R396-000360-001**

Needle type



Ø 5 [Char]

**R396-000360-002**

**Ø 7,0 mm**

**LOWSLEY retractor**  
for manipulation of the bladder  
for perineal prostatectomy



working length

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



working length

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





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

Other lengths available on demand.

**IN****R900-000000-01**

Storz / Aesculap

**R900-000000-03**Wolf / Henke Sass /  
Dyonics / Medicon /  
Comeg**R900-000000-05**

ACM / British / Codman

**R900-000000-07**

Olympus

Endoscope-side

**R900-000000-09**

Pentax

**OUT****R900-000000-11**

Fuji

**R900-000000-13**

Heine-Optotechnik

**R900-000000-15**

Winter+IBE

**R900-000000-16**

Stryker

**R900-000000-02**Storz / Winter+IBE /  
Aesculap**R900-000000-04**

Wolf

**R900-000000-06**

ACM / British / Codman

**R900-000000-08**

Olympus

# FULL HD-Camera



## Full HD-Camera

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

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

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

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

We offer services worldwide for the Full HD-Camera.

The right product for  
the right market.



## Full HD-Camera

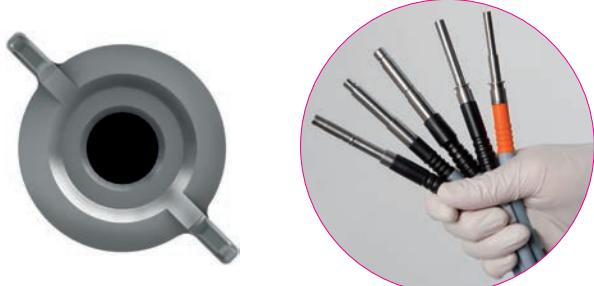
The Camera head features an ergonomic design and is ideally suited for all indications. The pre-set application profiles make the camera a plug and play device. The brilliant image quality makes it the perfect camera for the main endoscopic applications. However, the user has the possibility to adjust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



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## LED-Light Source

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



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## HD-Capturing

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



## HD-Camera

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

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

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

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

The device is approved worldwide and service is available globally.



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

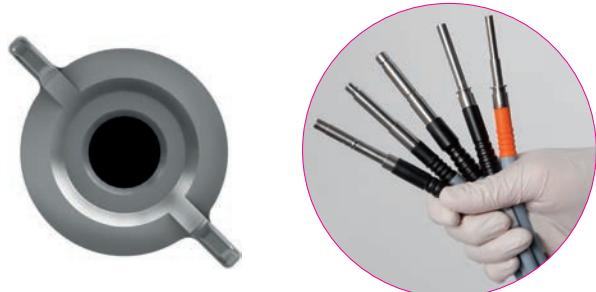
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## HD-Capturing

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



## Zoom coupler

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



## Keyboard

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



## HD-Capturing

- Autoclavable
- Flexible
- Light weighted
- Bend protected



## Accessories

### Devices

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

### Accessories

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

Power supply cord and further accessories available upon request.

<b>Technical Data</b>	<b>Full HD-Camera</b>	<b>HD-Camera</b>
Frame rate	60 Hz	60 Hz
Image sensor	1/3" CMOS-Chip	1/3" CMOS-Chip
Resolution (h x v)	1920 x 1080 pixels, output	1280 x 720 pixels, output
Dimensions	Ø = 39.5 mm, L = 123.5 mm	Ø = 39.5 mm, L = 123.5 mm
Weight	300 g/10.5 oz (incl. cable)	300 g/10.5 oz (incl. cable)
Coupling mechanism	C-mount	C-mount
Cable length	3 m/9.8 ft	3 m/9.8 ft
Disinfection/Sterilization	Soakable, STERRAD®	Soakable, STERRAD®
Power supply	100-240 V~	100-240 V~
Power consumption	148 VA	148 VA
Outputs	HDMI, DVI for Full HD, S-Video for ext. capture/printers, PC interface USB 2.0, PS/2, Remote	2x HDMI, PC interface USB 2.0, PS/2, Remote
<b>LED-Light Source</b>		
Lamp	LED	LED
Color temperature	6.500 K	6.500 K
Lumen maintenance	90 % after 10,000 hours	90 % after 10,000 hours
Size	Optimized for light guides 4.8 mm	Optimized for light guides Ø 4.8 mm
Adapter compatibility	Storz, Olympus, Wolf, ACMI	Storz, Olympus, Wolf, ACMI
<b>HD-Capturing</b>		
Memory interface	Records to USB flash drive and/or external USB hard drive	SD memory card
Image format	JPEG	JPEG
Video Codec	MPEG-4, H.264	MPEG-4, H.264
Resolution	1920 x 1080 pixels	1920 x 1080 pixels
<b>Complete system</b>		
Operating conditions	10-40 °C/50-104 °F	10-40 °C/50-104 °F
Protection against electrical shock	Body Float	Body Float
Video Codec Means of protection against electrical shock	Class I	Class I
Dimensions (w x h x d)	381 x 149 x 379 mm	381 x 149 x 379 mm
Weight	5.8 kg	5.8 kg

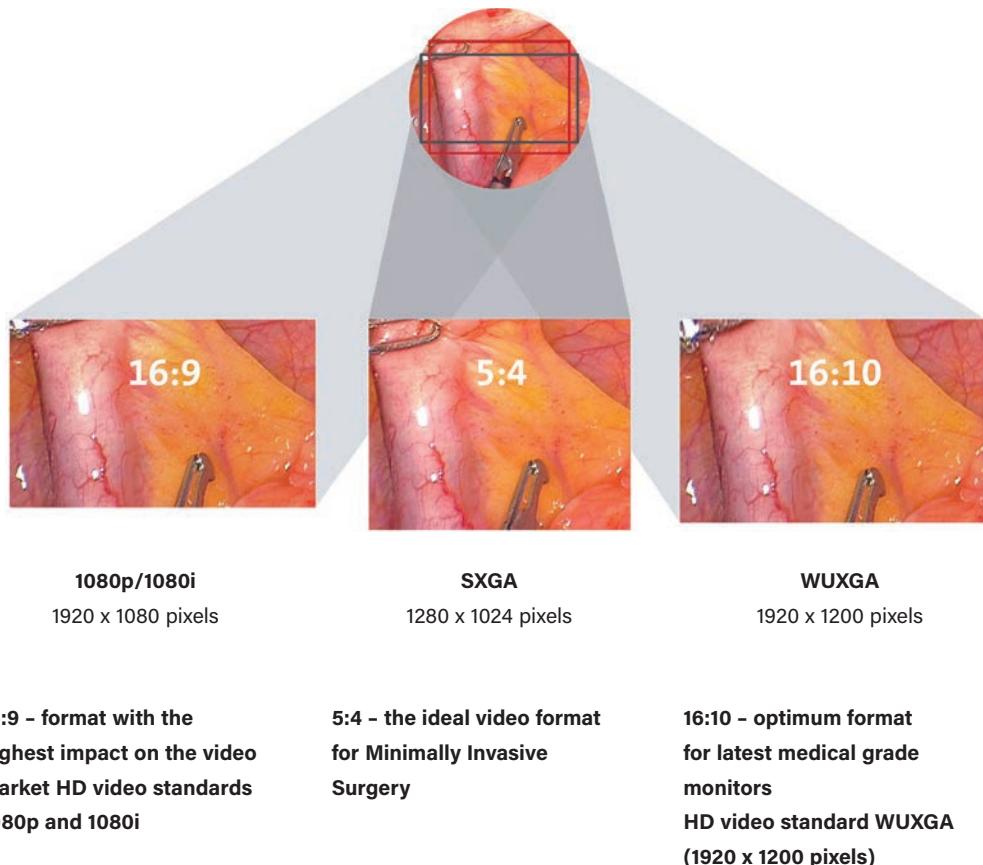
# HD CAMERAS

## Classic Line



## Choose your HD format

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



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

## Video modes

The HDC907optimum supports 1080i and 1080p. **Progressive scan (p)** is a method transmitting moving images in which all the lines of each frame are drawn in sequence. Benefits of this technology are higher vertical resolution video images.

It is the ideal mode for LCD monitors, but unfortunately not supported by current HD capture systems, which are limited to 1080i. With the interlace (i) technology only every second horizontal line per frame is transmitted.

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



Interlace      Progressive scan

## Intuitive user guidance via optimized on screen display

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



## Latest output options

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

\*depends on model variation

### From input to output: the HD chain



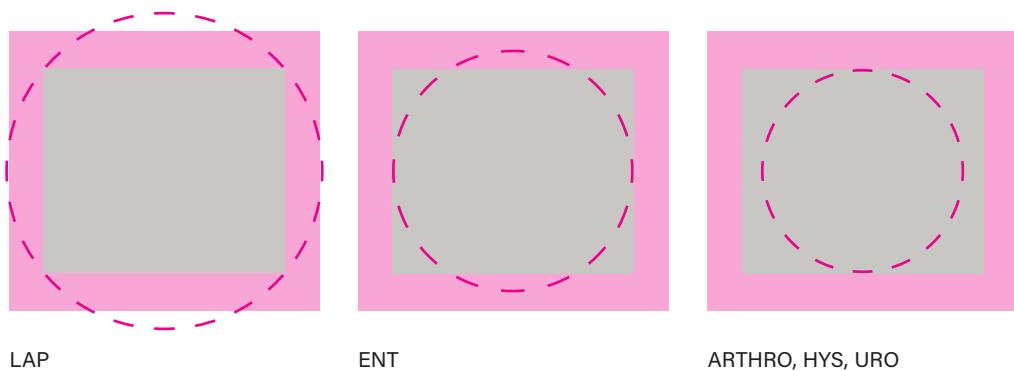
### Videocoupler Zoom

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



Videocoupler Zoom

### One coupler for optimum indication settings



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

## HDC907optimum

### 3CCD Medical-HD® Camera

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



#### Devices

Item No.	Description
----------	-------------

<b>RHDC907-L01</b>	HDC907optimum Control Unit
<b>RHDC907-L02</b>	HDC907optimum Camera Head PAL or NTSC (non-autoclavable)
<b>RHDC907-L03</b>	HDC907optimum Camera Head PAL or NTSC (autoclavable)

#### Accessories

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

Power supply cord and further accessories available upon request.



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

\*depends on model variation

# LIGHT SOURCE

## Classic Line





## LED320

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

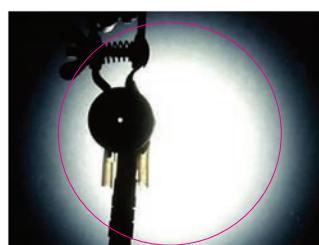
The **LED320** exceeds the light output of 180 W Xenon-Light Sources without emitting UV or IR light. This leads to less heat transmission to the endoscope and reduces the risk of burning tissue. Additional advantages of the LED320 are the uniformly distributed illumination and the bright and more homogeneous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

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

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

### LED vs. Xenon

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



180 W Xenon

LED320

## High performance endoscopic LED-Light Source

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



### Accessories

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

Power supply cord and further accessories available upon request.

## Ease of use

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



### Technical Data

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

## XL300

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

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



### Devices

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

### Accessories

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

Power supply cord and further accessories available upon request.

**Technical Data**

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

**Combination example**

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

# LED 3000

## HIGH INTENSITY LIGHTSOURCE

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

### Devices

#### Item No. Description

<b>RLED3000S</b>	Storz (standard) adapter, automatic light intensity control
<b>RLED3000W</b>	Wolf adapter, automatic light intensity control
<b>RLED3000O</b>	Olympus adapter, automatic light intensity control
<b>RLED3000T</b>	Turret adapter, automatic light intensity control



#### Turret, multi connector (optional):

Olympus	
ACMI	
Wolf	
Stroz	

#### Multi connector option



#### Technical Data

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



Light guide connection  
Storz, (standard)

# LED 1000

## HIGH INTENSITY LIGHTSOURCE

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



### Devices

Item No.	Description
RLED1000S	Storz (standard) adapter, automatic light intensity co
RLED1000W	Wolf adapter, automatic light intensity control
RLED1000O	Olympus adapter, automatic light intensity control

### Technical Data

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

## HALOGEN HL 150

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



### Devices

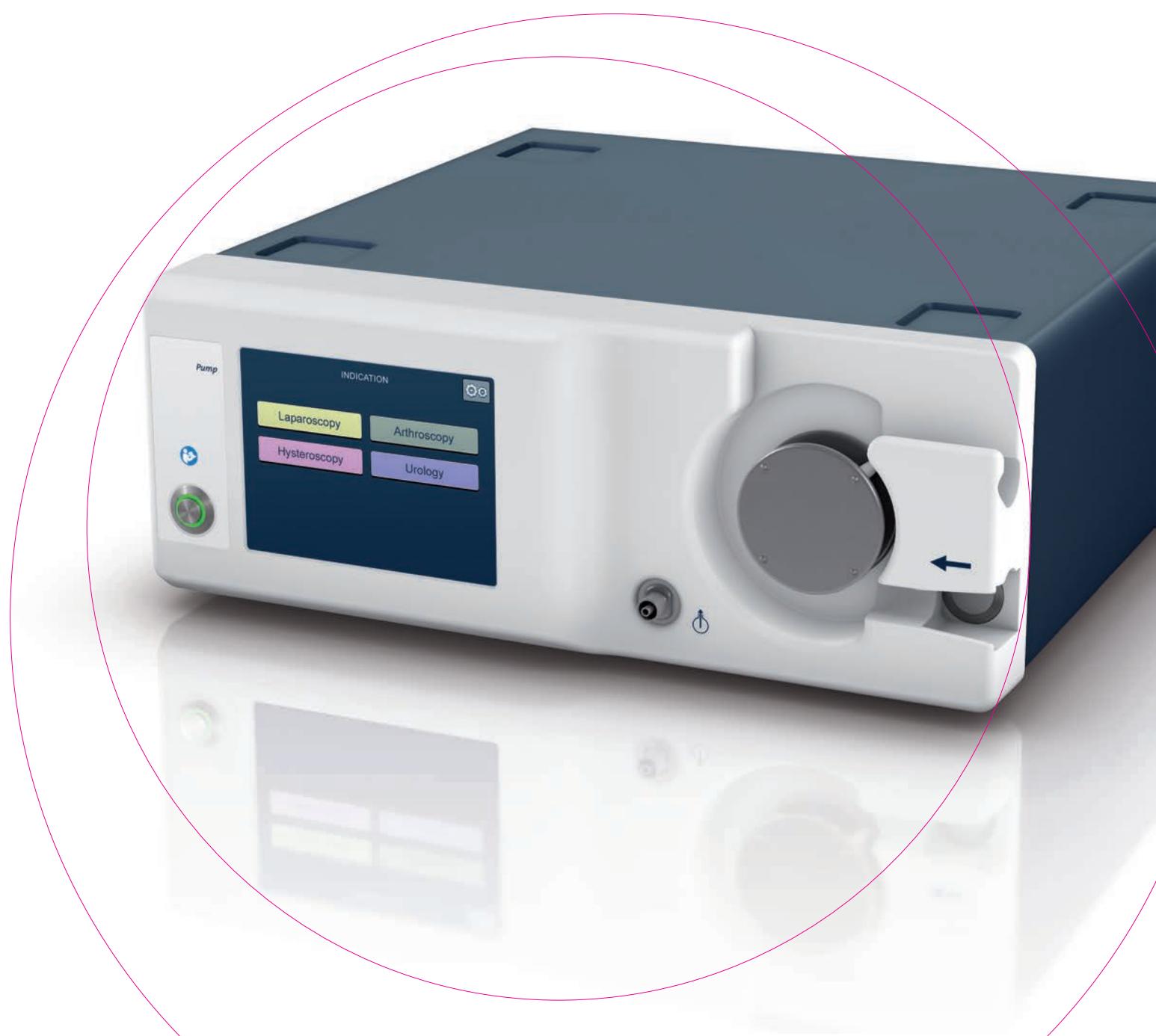
Item No.	Description
RHL150	Storz (standard) adapter

### Technical Data

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

# PUMP SYSTEM

## Multi - Indication Pump



## Multi-Indication Pump

**Thinking ahead: Four devices in one**

**4 in 1**

- Laparoscopy
- Arthroscopy
- Hysteroscopy
- Urology

Resource-saving, simple, innovative

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

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

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



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

## Patient safety

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



An original tube set with transponder protection.

## Accessories

Part No.	Description
RAPUH302-L01	Pump

## Accessories

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



②

Tube set for Irrigation,  
disposable  
(RT0505-01)



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



Transponder



Differential volume scale  
(RZ0223-01)

\*Indications LAP, ARTHRO

Power supply cord and further accessories available upon request.

**Technical Data**

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

## Laparoscopy

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



## Arthroscopy

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



## Hysteroscopy

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



## Urology

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





# PUMP Systems



## A127

### Pump for arthroscopy

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



#### Accessories

Part No.	Description
RA127-L01	Pump for arthroscopy

#### Accessories

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

Power supply cord and further accessories available upon request.

#### 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.



### Accessories

Part No.	Description
----------	-------------

**RA106-L01** Pump for arthroscopy

### Accessories

Part No.	Description
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RZ0449-01	Tube set with pressure chamber, Irrigation, with Spike and Luer-Lock connector male:
RZ0454-01	Disposable, sterile (1 packaging = 10 pcs.)
RZ1424-01	Reusable, 20 uses, incl. 10 membranes
RZ1016-01	Disposable, sterile, Safe-Lock (1 packaging = 10 pcs.)
RZ0545-01	Foot pedal for Irrigation Pump for arthroscopy
RZ0545-01	Cable remote control

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

### Technical Data

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

Power supply cord and further accessories available upon request.

## P101

### Pump for laparoscopy

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



#### Accessories

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

#### Accessories

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

#### Technical Data

Max. Flow Rate Irrigation	1.8 l/min ( $\pm 10\%$ )
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

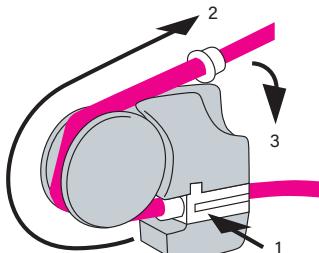
Power supply cord and further accessories available upon request.



# UP100

## Pump for urology

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



### Accessories

#### Part No. Description

**RUP100-L01** Pump for arthroscopy

Easy to load tube set in three steps.

### Accessories

#### Part No. Description

	Tube set with pressure chamber, Irrigation, with Spike and Luer-Lock connector male:
<b>RZ0449-01</b>	Disposable, sterile (1 packaging = 10 pcs.)
<b>RZ0454-01</b>	Reusable, 20 uses, incl. 10 membranes
<b>RZ1406-01</b>	Tube set, outflow, disposable, sterile (1 packaging = 10 pcs.)

Power supply cord and further accessories available upon request.

### Technical Data

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

# H108

## Pump for hysteroscopy

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



### Accessories

Part No.	Description
RH108-L01	Pump for hysteroscopy

### Accessories

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

### Technical Data

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

Power supply cord and further accessories available upon request.

## HM4

### Fluid Management System for hysteroscopy

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

#### Accessories

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

#### Accessories

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

Power supply cord and further accessories available upon request.



#### Technical Data

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

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

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



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

Accessories **A127**

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



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

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

Accessories HM4, H108, P101



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



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

Accessories A106



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



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

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

Further accessories available upon request.



# INSUFFLATOR

## 50L - Insufflator



## 50 L-Insufflator

### Multi-mode Powerhouse

**50 L**

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

Higher performance enhances safety in the operating room

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

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

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



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

## Accessories



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



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



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



NIST adapter for universal  
gas connector **(RZ5074-01)**

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

## Devices

Item No.	Description
<b>RFM134-L01</b>	50 L-Insufflator

## Accessories

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

## Technical Data

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

Power supply cord and further accessories available upon request.



# INSUFFLATOR

## 30L - Insufflator



## 30 L-Insufflator

**Safe technology that adapts to the patient**

**30 L**

- Reliable base unit
- Highest safety
- Mature technology

**Easy to use, universal, efficient**

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

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



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

## Accessories



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



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



Gas connector, angled  
**(RZ5071-01)**



NIST adapter for universal  
gas connector **(RZ5074-01)**

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

## Devices

Item No.	Description
<b>RF128-L01</b>	30 L-Insufflator

## Accessories

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

## Technical Data

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

Power supply cord and further accessories available upon request.



# INSUFFLATOR

## Classic Line



## F102

### Insufflator for laparoscopy

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



#### Accessories

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

#### Accessories

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

#### Technical Data

Insufflation medium	Med. CO <sub>2</sub>
Max. gas flow	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

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.

# F104

## Insufflator for laparoscopy

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



### Accessories

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

### Accessories

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

### Technical Data

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

\*with reusable heater tubing

Power supply cord and further accessories available upon request.

## Tube sets and filter



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



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



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



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

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

Further accessories available upon request.

## Gas connectors and high pressure tubes



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



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



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



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



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

Further accessories available upon request.



# MEDICAL

## Monitors



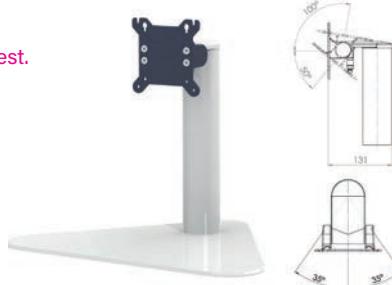
## Medical Monitors

### The solution you are looking for

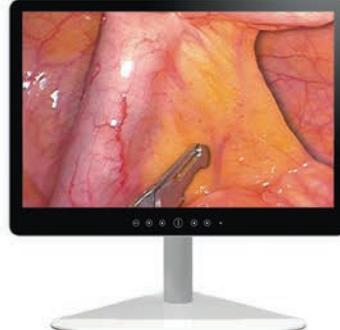
- TFT-Displays with wide-screen-format
- Display with all-round viewing angle
- Hygienic design with full glass front

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

Monitor stand available upon request.



**MD-32**



**MD-27**



**MD-23**

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

\*optional

## PP Trolley

### PROFESSIONAL POWER TROLLEY



#### Basic structure

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

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

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

#### Devices

Item No.	Description
RPP600 RI	OR Trolley

#### Technical Data

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

### **SET/9500004: Standard Laparoscopic Instruments Set**

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

### **SET/9502000: Set for gynaecology**

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

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