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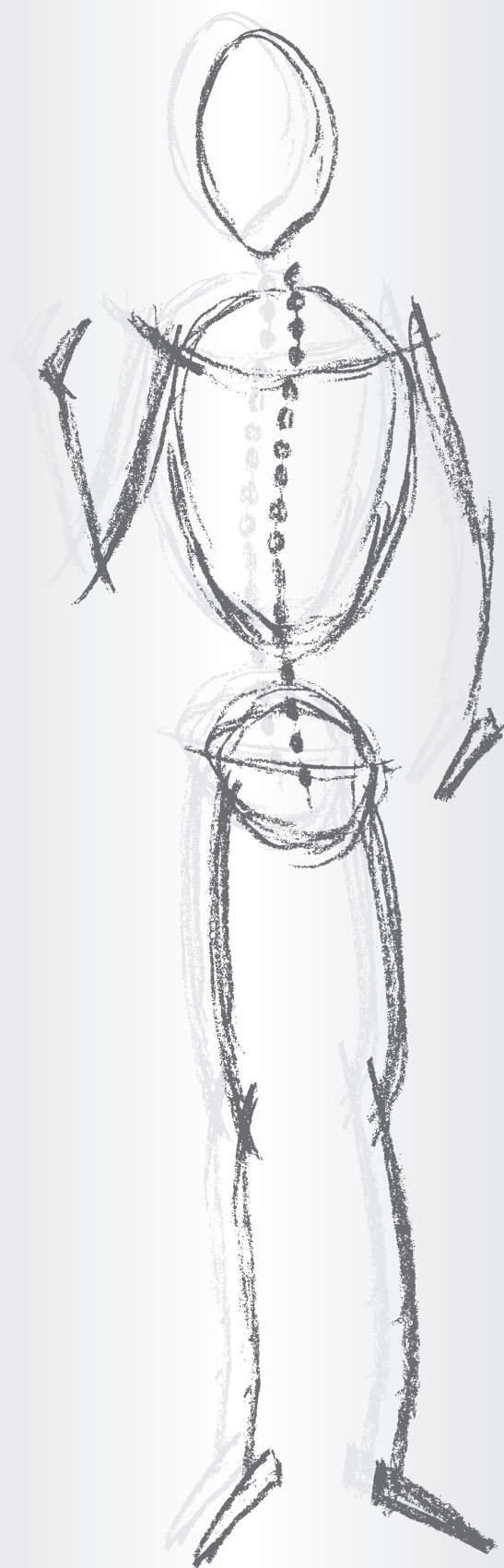
3B instruments
— lékařské nástroje —

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LAPAROSCOPY

REDA

INSTRUMENTE GMBH



Laparoskope Laparoscopes	1
Trokarhülsen und Zubehör Trocars sleeves and accessories	2
Faßzangen Grasping Forceps	3
Scheren / Biopsie Scissors / Biopsy	4
Nadelhalter Needleholder	5
HF-Instrumente HF instruments	6
Saug- / Spülinstrumente Suction- / Irrigation instruments	7
Cholangiographie Cholangiography	8
Tasthaken und Retraktoren Palpation and retractors	9
Diagnostik und Pediatrie Diagnostic and Pediatric	10
Thorax Thoracic	11
Gynaekologie - Zubehör Gynecology - accessories	12
Urologie-Zubehör Urology-accessories	13
Lichtkabel / Lichtquellen Light Cable / Light Sources	14
Video System Video System	15
Saug-Spülgeräte Suction and irrigation units	16
CO² Insufflatoren CO² Insufflators	17
Gerätewagen Video Trollys	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 description in the glossary.

1. Laparoscopes

Containing Devices:: Laparoscope

2. Trocar Sleeves and Accessories

Containing Devices:: Trocars
Trocar sleeves

3. Grasping Forceps

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

4. Biopsie

Containing Devices: Handles with HF-connections
Scissors

5. Needle Holder

Containing Devices: Needle Holder
Handles with HF-connections
Forceps

6. HF Instruments

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

7. Suction- and Irrigation Instruments

Containing Devices: Suction and irrigation instruments containing

- Handle
- Tube
- Guide insert
- different needles

8. Cholangiography

Preface

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

Containing Devices: Tubes
Guide Probes
Cholangiography-Catheters
Fixation Clamps

9. Palpation and Retractors

Containing Devices: Palpations
Retractors
Specula

10. Diagnostic and Pediatric

Containing Devices: Laparoscopes
Trocars
Forceps

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

11. Thorax

Containing Devices: Hysteroscopes
Trocars
Trocar Sleeves
Clamps
Forceps

12. Gynecology

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

13. Urology

Containing Devices: Retractors

14. Light Sources

Containing Devices: Light source

15. Video System

In case of demand please contact us.

16. Suction and Irrigation Devices

Preface

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

Containing Devices: Purgator
Tubes
Glasses / Cups
Suction Lids

17. CO²-Insufflator

Containing Devices: Devices for Insufflation
Accessories for the Device

18. Video Trollys

In case of demand please contact us.

Annex

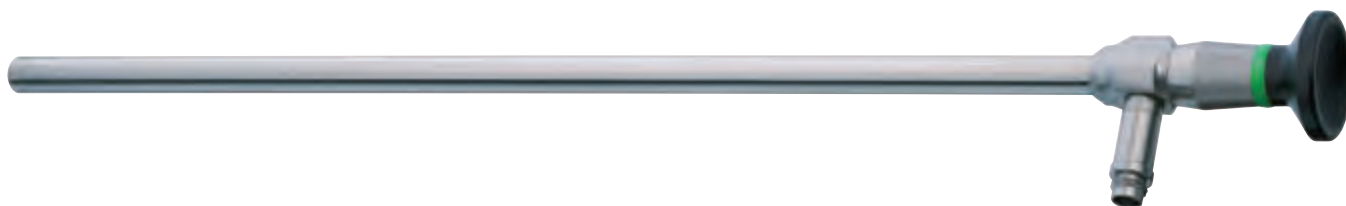
Chapters

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

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

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

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



Compatibility

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

Ø	working length	direction of view	
		0°	30°
5,0 mm	302 mm	R010-050302-000	R010-050302-030
5,0 mm	490 mm	R010-050490-000	R010-050490-030
10,0 mm	310 mm	R010-100309-000	R010-100309-030
10,0 mm	350 mm	R010-100350-000	R010-100350-030
10,0 mm	430 mm	R010-100430-000	R010-100430-030

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



Compatibility

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

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

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

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



Compatibility

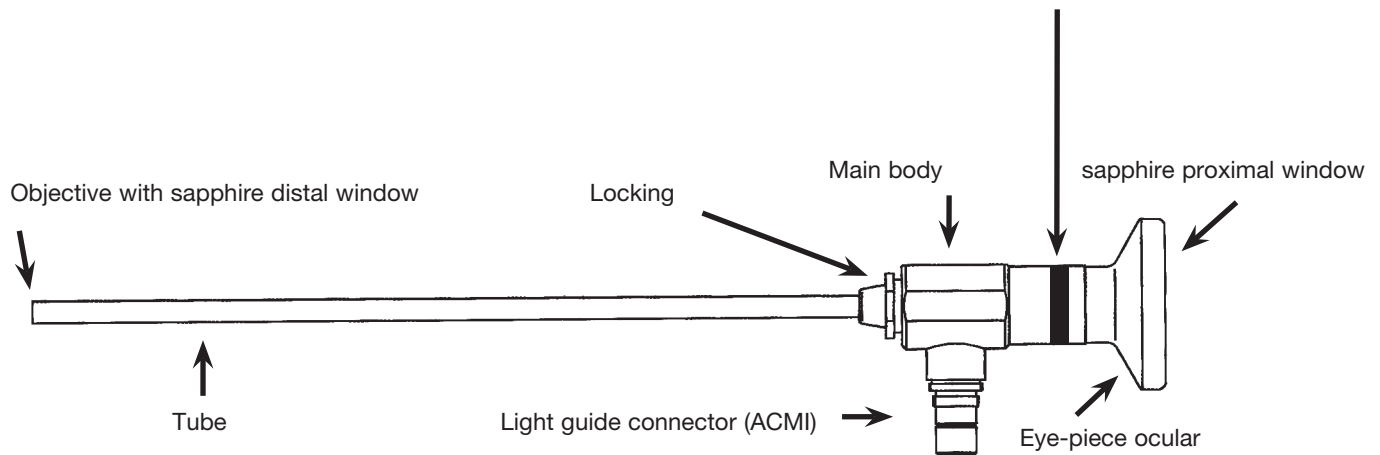
Light port adaptor	ACMI®, Wolf®, Storz® / Olympus®
Eyepiece	Ocular according DIN 58105 threaded
Objective	Tension-free objective composed-objective
Image transmission	CAD-designed rodence system for optimal sharpness, colorsync and resolution
Light-guiding system	High quality light fibers
Optical glass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

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

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

Endoscope

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



(WOLF)

R019-000000-01



(STORZ / Olympus)

R019-000000-02



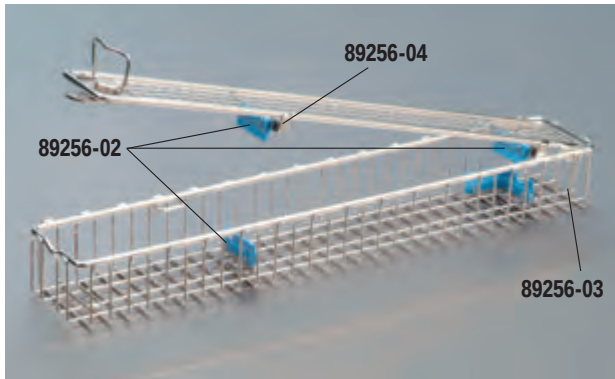
Anti Fog liquid Ultra Stop sterile incision bottle 30ml

R019-000000-030



98002-06

Wire basket for endoscopes



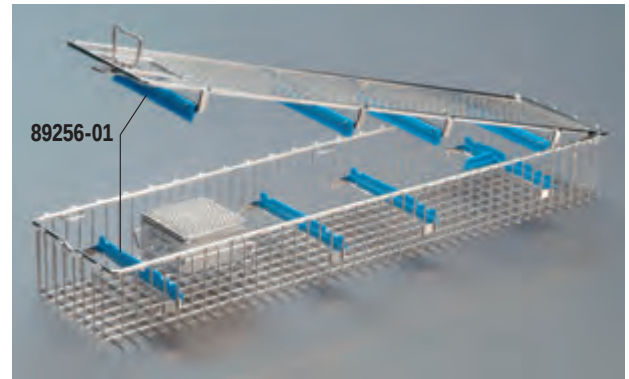
460 x 80 x 52 mm
for 1 laparoscope or 1 hysteroscope or 1 cystoscope

89256-46

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

89257-46

Wire basket for uretero-renoscopes



640 x 150 x 77 mm

89255-64

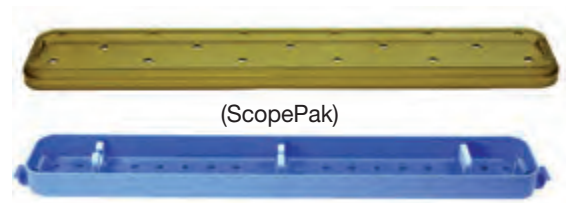
Storage- and sterilization rack



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

89258-47

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

Scope Holder



4 cm / 1,5"

R019-5350 15 mm Ø**R019-5353** 12 mm Ø

7 cm / 2,8"

R019-5340 15 mm/8 mm Ø**R019-5343** 15 mm/12 mm Ø**R019-5351** 8 mm Ø**R019-5352** 12 mm Ø**R019-5354** 6 mm Ø**R019-5355** 4 mm Ø**R019-5341** 12 mm Ø

Instrument Bar

Holder

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

**R019-5373** long**R019-5333** short**R019-5374** long**R019-5334** short**R019-5375** long**R019-5335** short**R019-5210****R019-5200**



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

Other length on request

Connector to light source

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

Storz / Aesculap

**R900-000000-21**

MLW

**R900-000000-03**Wolf / Henke Sass /
Dyonics / Medicon /
Comeg**R900-000000-31**

Volpi / Schölly / RFO

**R900-000000-05**

ACM / British / Codman

**R900-000000-07**

Olympus

**R900-000000-09**

Pentax

**R900-000000-11**

Fuji

**R900-000000-13**

Heine-Optotechnik

**R900-000000-15**

Winter+IBE

Endoscope-side

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

Wolf

**R900-000000-06**

ACM / British / Codman

S-retractor



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

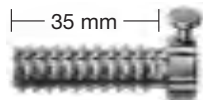
Ø 5 mm

Multi function trocar sleeve,
valvehousing with thread lock

R025-050092-001



Trocar stop



R020-050035-001

Dilation set



5 < 10 mm

R027-050100-000

5 < 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

R020-050092-001

conical

R020-050092-002

Standard trocar with hole, permeable



pyramidal

R020-050092-051

conical

R020-050092-052

Safety trocar with automatic locking

with pyramidal grinding
and rounded tip**R020-050092-011**with halfmoon grinding
and oblique tip**R020-050092-016**

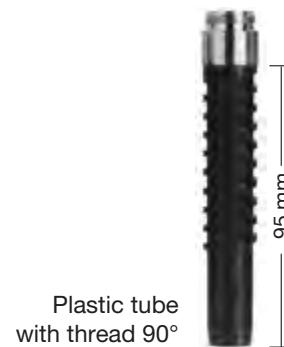
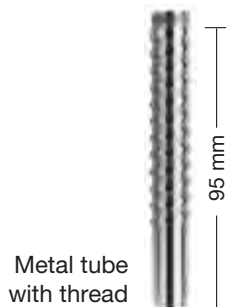
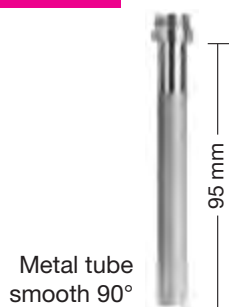
Protection trocar

with halfmoon grinding
and oblique tip**R020-050092-024**with halfmoon grinding
and V-formed tip**R020-050092-025**

Reducer sleeve 5 > 4 mm

**R026-055030-003**

Ø 5,5 mm



Drap door valve trocar sleeve



R022-055095-001

R022-055098-002

R022-055095-003

R022-055098-004

Silicone valve trocar sleeve



R024-055095-001

Multi function trocar sleeve, valvehousing with thread lock



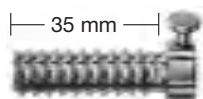
R025-055095-001

R025-055098-002

R025-055095-003

R025-055098-004

Trocar stop



R020-055035-001

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



Ø 5,5 mm

R020-050000-004

Spare part set consisting of 10 pcs per box



Ø 5,5 mm

R022-055000-000

Ø 5,5 mm

Standard trocar

pyramidal

R020-055095-001

conical

R020-055095-002**Standard trocar with hole, permeable**

pyramidal

R020-055095-051

conical

R020-055095-052**Safety trocar with automatic locking**with pyramidal grinding
and rounded tip**R020-055095-011**with halfmoon grinding
and oblique tip**R020-055095-016****Safety trocar with Knife**

Obturator tip "KNIFE DESIGN"

R020-055095-028**Protection trocar**with halfmoon grinding
and oblique tip**R020-055095-024**with halfmoon grinding
and V-formed tip**R020-055095-025**

Ø 5,5 mm / 150 mm WL

Drap door valve trocar sleeve

R022-055150-001



Silicone valve trocar sleeve

R024-055150-001



Multi function trocar sleeve,
valvehousing with thread lock

R025-055150-001



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



Ø 5,5 mm

R020-050000-004

Spare part set consisting of 10 pcs per box



Ø 5,5 mm

R022-055000-000

Ø 5,5 mm / 150 mm WL

Standard trocar



pyramidal

R020-055150-001



conical

R020-055150-002

Standard trocar with hole, permeable



pyramidal

R020-055150-051



conical

R020-055150-052

Safety trocar with automatic locking



with pyramidal grinding
and rounded tip

R020-055150-011

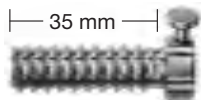
Ø 10 mm

Multi function trocar sleeve,
valvehousing with thread lock

R025-100097-001

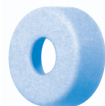


Trocar stop



R020-100035-001

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



Ø 10,0 mm

R020-100000-008

Spare part set consisting of 10 pcs per box



Ø 10,0 mm

R022-100000-000

Reducer sleeve 10 > 5,5 mm

Plastic reducer for multi function trocar sleeve only



190 mm

R026-100055-003



reducer

R026-100055-001



reducer with silicone Latch

R026-100055-002

Ø 10 mm

Standard trocar

pyramidal

R020-100097-001

conical

R020-100097-002**Standard trocar with hole, permeable**

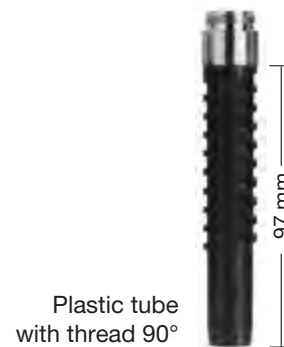
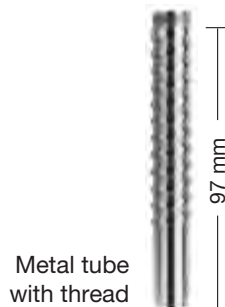
pyramidal

R020-100097-051

conical

R020-100097-052**Safety trocar with automatic locking**with pyramidal grinding
and rounded tip**R020-100097-011**with halfmoon grinding
and oblique tip**R020-100097-016****Protection trocar**with halfmoon grinding
and oblique tip**R020-100097-024**with halfmoon grinding
and V-formed tip**R020-100097-025**

Ø 11 mm



Drap door valve trocar sleeve



R022-110101-001

R022-110105-002

R022-110101-003

R022-110105-004

Silicone valve trocar sleeve



R024-110101-001

R024-110105-002

R024-110101-003

R024-110105-004

Multi function trocar sleeve, valvehousing with thread lock



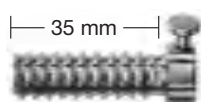
R025-110101-001

R025-110105-002

R025-110101-003

R025-110105-004

Trocar stop



R020-110035-001

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



Ø 11,0 mm

R020-110000-009

Spare part set consisting of 10 pcs per box



Ø 11,0 mm

R022-110000-000

Ø 11 mm

Standard trocar

pyramidal

R020-110101-001

conical

R020-110101-002**Standard trocar with hole, permeable**

pyramidal

R020-110101-051

conical

R020-110101-052**Safety trocar with automatic locking**with pyramidal grinding
and rounded tip**R020-110101-011**with halfmoon grinding
and oblique tip**R020-110101-016****Safety trocar with Knife**

Obturator tip "KNIFE DESIGN"

R020-110101-028**Protection trocar**with halfmoon grinding
and oblique tip**R020-110101-024**with halfmoon grinding
and V-formed tip**R020-110101-025****Reducer sleeve 11 > 5,5 mm**

190 mm

R026-110055-003

reducer

R026-110055-001

reducer with silicone Latch

R026-110055-002**R026-125055-004****Plastic reducer for multi function trocar sleeve only**

Ø 11 mm / 150 mm WL

Drap door valve trocar sleeve

R022-110150-001



Silicone valve trocar sleeve

R024-110150-001



Multi function trocar sleeve,
valvehousing with thread lock

R025-110150-001



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



Ø 11,0 mm

R020-110000-009

Spare part set consisting of 10 pcs per box



Ø 11,0 mm

R022-110000-000

Ø 11 mm / 150 mm WL

Standard trocar



pyramidal

R020-110150-001



conical

R020-110150-002

Standard trocar with hole, permeable



pyramidal

R020-110150-051



conical

R020-110150-052

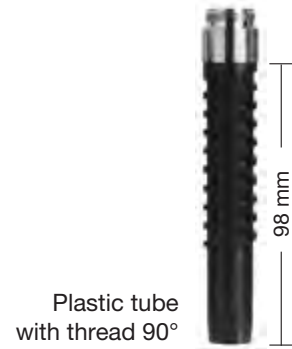
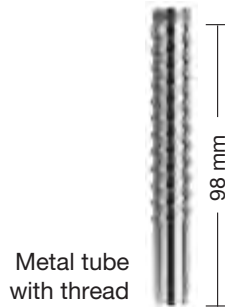
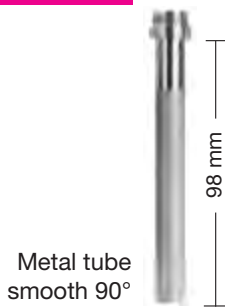
Safety trocar with automatic locking



with pyramidal grinding
and rounded tip

R020-110150-011

Ø 12,5 mm



Multi function trocar sleeve, valvehousing with thread lock



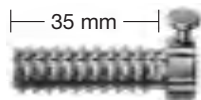
R025-125098-001

R025-125102-002

R025-125098-003

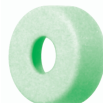
R025-125102-004

Trocar stop



R020-125035-001

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



Ø 12,5 mm

R020-125000-011

Spare part set consisting of 10 pcs per box



Ø 12,5 mm

R022-125000-000

Reducer sleeve 12,5 > 5,5 mm

Plastic reducer for multi function trocar sleeve only



190 mm



reducer



reducer with silicone Latch



R026-125055-003

12,5 > 10 mm R026-125100-001

R026-125100-002

R026-125100-004

12,5 > 5,5 mm R026-125055-001

R026-125055-002

R026-125055-004

Ø 12,5 mm
Standard trocar


pyramidal

R020-125098-001

conical

R020-125098-002
Standard trocar with hole, permeable


pyramidal

R020-125098-051

conical

R020-125098-052
Safety trocar with automatic locking
with pyramidal grinding
and rounded tip**R020-125098-011**with halfmoon grinding
and oblique tip**R020-125098-016**
Safety trocar with Knife


Obturator tip "KNIFE DESIGN"

R020-125098-028
Protection trocar
with halfmoon grinding
and oblique tip**R020-125098-024**with halfmoon grinding
and V-formed tip**R020-125098-025**

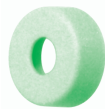
Ø 12,5 mm / 150 mm WL

Multi function trocar sleeve,
valvehousing with thread lock

R025-125150-001



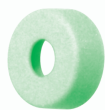
Rubber washer for proximal instrument port suitable to lap. trocar sleeves / 10 pcs per box



Ø 12,5 mm

R020-125000-011

Spare part set consisting of 10 pcs per box



Ø 12,5 mm

R022-125000-000

Ø 12,5 mm / 150 mm WL

Standard trocar



pyramidal

R020-125150-001



conical

R020-125150-002

Standard trocar with hole, permeable



pyramidal

R020-125150-051



conical

R020-125150-052

Safety trocar with automatic locking

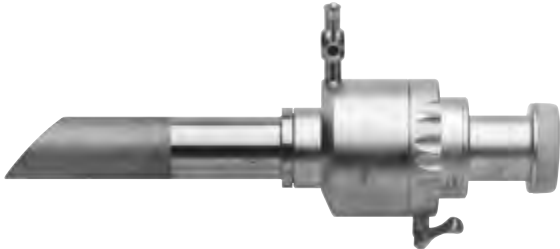


with pyramidal grinding
and rounded tip

R020-125150-011

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

Trocar sleeve, smooth metal tube



15 mm Ø / WL 110 mm

R025-150095-011

Standard trocar 15 mm Ø



pyramidal

R020-150096-001



conical

R020-150096-002



Dilatation sleeve with guide rod



Ø 5,0 mm - 15,0 mm

R027-050150-000

Ø 10,0 mm - 15,0 mm

R027-110150-000

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



Ø 15,0 mm

R020-150000-013

Spare part set consisting of 10 pcs per box



Ø 15,0 mm

R022-150000-000

Reducer sleeve



15 > 5,5 mm

R026-150055-003

15 > 10 mm

R026-150100-003

Plastic reducer



15 > 10 mm

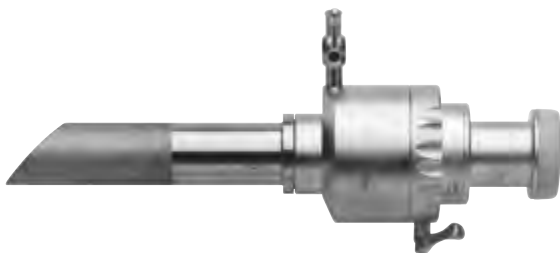
R026-150100-001

15 > 5,5 mm

R026-150055-001

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

Trocar sleeve, smooth metal tube



20 mm Ø / WL 119 mm

R025-200095-011

Standard trocar 20 mm Ø



pyramidal

R020-200096-001



conical

R020-200096-002

Dilatation sleeve with guide rod



Ø 5,0 mm - 20,0 mm

R027-050200-000

Ø 10,0 mm - 20,0 mm

R027-110200-000

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



Ø 20,0 mm

R020-200000-018

Spare part set consisting of 10 pcs per box



Ø 20,0 mm

R022-200000-000

Reducer sleeve



20 > 5,5 mm

R026-200055-003

20 > 10 mm

R026-200100-003

Plastic reducer



20 > 10 mm

R026-200100-001

20 > 5,5 mm

R026-200055-001

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



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

Standard trocar



conical blunt

R020-035070-003	Ø 3,5 mm
R020-055095-003	Ø 5,5 mm
R020-110101-003	Ø 11,0 mm
R020-125098-003	Ø 12,5 mm

Ø 5 und 10 mm



Mechanical snap-action coupling !

The Ø 5 and 10 mm modular REDA laparoscopic instruments have a unique snap-action coupling which, offering the combined advantage of the speediest possible assembly and a long service life. The union of the working insert and sleeve shaft is achieved by simply inserting the components axially into each other. A simple click and you are ready!

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

REDA - simplicity is so clever !

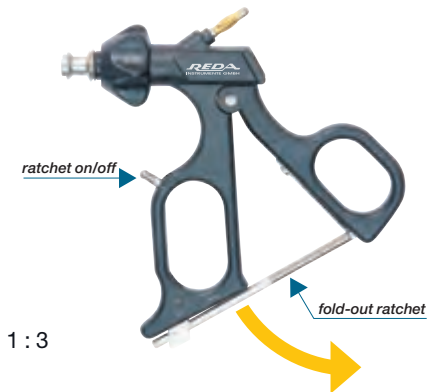


Nut stopper

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

REDA - detail is the decisive factor !

Ø 3 / 5 / 10 mm



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

R033 - 000000 - 000



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

R033P - 000000 - 000



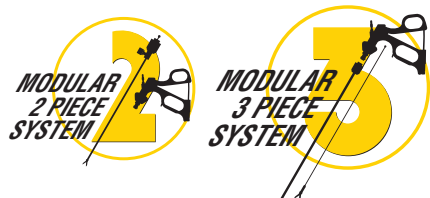
Ergonomic carbon handle,
HF-connector Ø 4 mm male 45° lateral, rotating head 360°, autoclavable

R034 - 000000 - 000



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

R032M - 000000 - 000



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

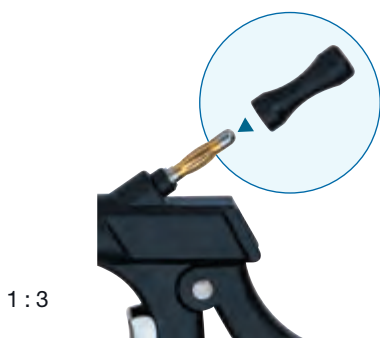


Ø 3 / 5 / 10 mm



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

R033M - 000000 - 000



Protection cap for HF-connector Ø 4 mm

R030 - 000000

Ø 3 / 5 / 10 mm



1 : 3

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

R038 - 000000 - 000



1 : 3

Axial handle, with spreading spring

R048 - 000000 - 000



1 : 3

Axial handle with rings and ratchet, metal not insulated

R037 - 000000 - 000



1 : 3

Axial ring handle

R047 - 000000 - 000



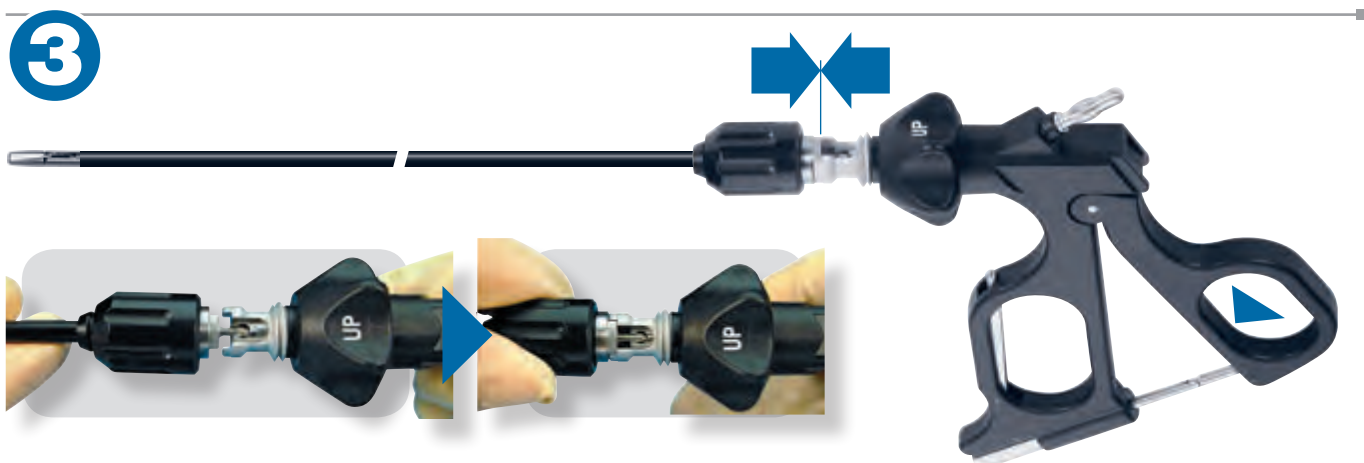
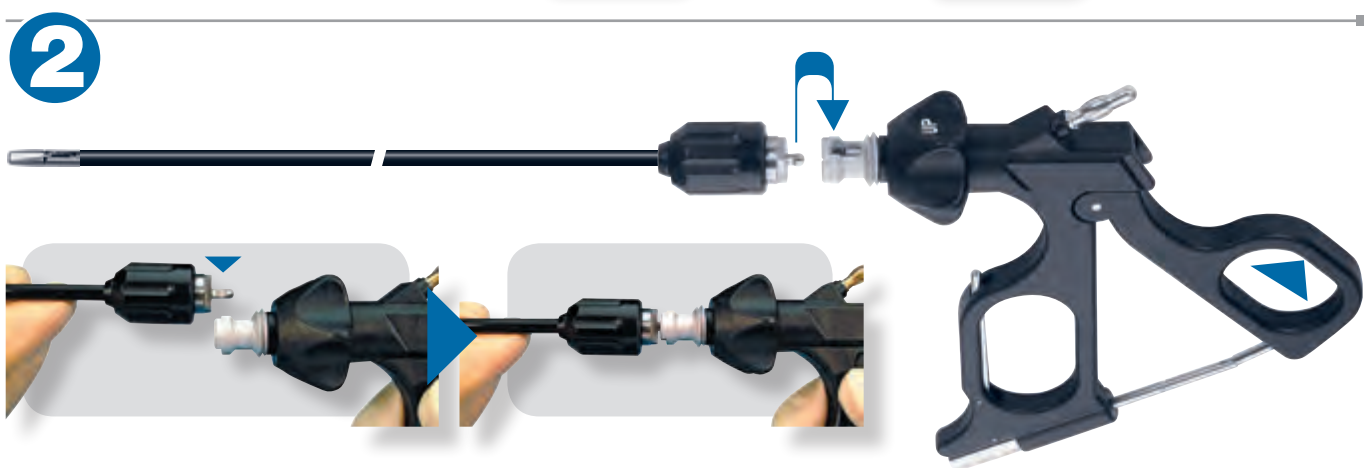
Axial handle, v-shaped angled, type with spreading spring and ratchet, metal not insulated

R039 - 000000 - 000



Axial handle, angled, with spreading spring

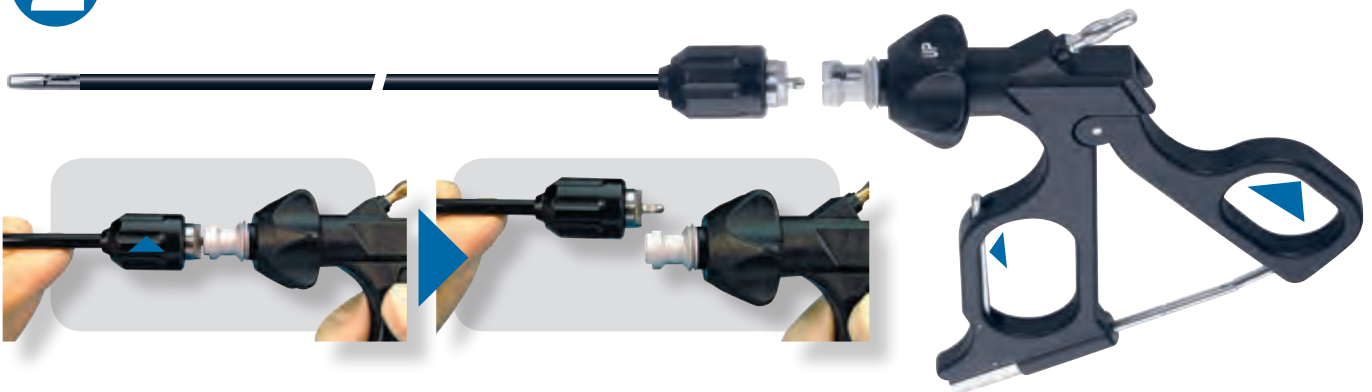
R040 - 000000 - 000



1



2

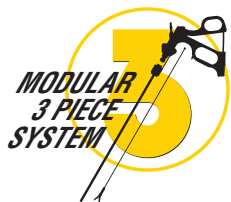


3



4





Ø 5 mm



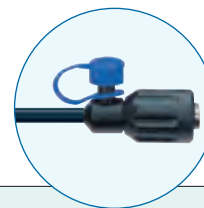
Tube Shaft, insulated shaft length: **330 mm**

without LUER Lock

with LUER Lock

R030 - 050330 - 000

R030 - 050330 - 000 L



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

without LUER Lock

with LUER Lock

R030 - 050360 - 000

R030 - 050360 - 000 L



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

without LUER Lock

with LUER Lock

R030 - 050450 - 000

R030 - 050450 - 000 L

Ø 10 mm



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

cylindrical

reduce to Ø 5 mm

R030 - 100330 - 000

R030 - 100330 - 000 5



Tube Shaft, insulated, for adipose patients shaft length: **360 mm**

cylindrical

reduce to Ø 5 mm

R030 - 100360 - 000

R030 - 100360 - 000 5



Tube Shaft, insulated, for adipose patients shaft length: **450 mm**

cylindrical

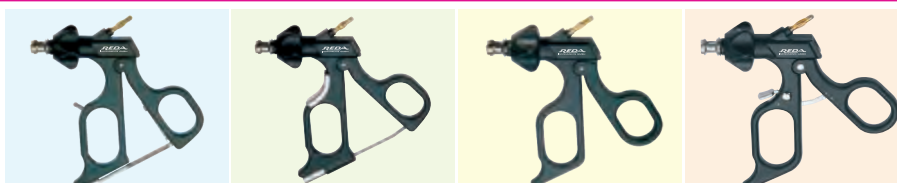
reduce to Ø 5 mm

R030 - 100450 - 000

R030 - 100450 - 000 5

Carbon Handles

more details at the beginning of the chapter



R 033 - 000 000 - 000

R 033P - 000 000 - 000

R 034 - 000 000 - 000

R 032M - 000 000 - 000

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**

Duck Bill-forceps, fenestrated, single action jaws

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



Dissecting grasping forceps, slim, fenestrated, double action jaws

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



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

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

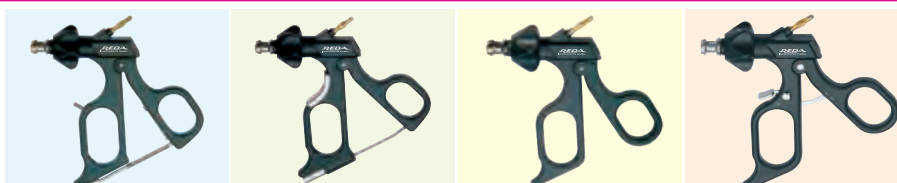


Grasping forceps with 2 x 4 teeth cobra, single action jaws

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

Carbon Handles

more details at the beginning of the chapter



R 033 - 000 000 - 000

R 033P - 000 000 - 000

R 034 - 000 000 - 000

R 032M - 000 000 - 000

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	R030-050330-226	R033-050330-226	R033P-050330-226	R034-050330-226	R032M-050330-226
360 mm	R030-050360-226	R033-050360-226	R033P-050360-226	R034-050360-226	R032M-050360-226
450 mm	R030-050450-226	R033-050450-226	R033P-050450-226	R034-050450-226	R032M-050450-226



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

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



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

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

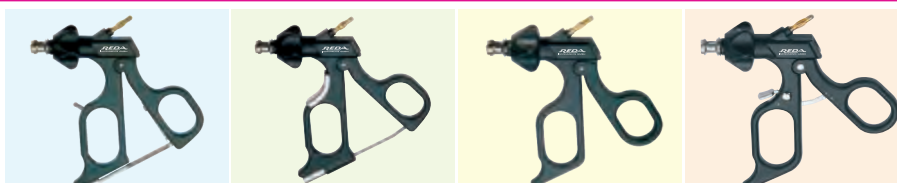


Mahnes grasping forceps, distal fine crosswise teeth, single action jaws

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

Carbon Handles

more details at the beginning of the chapter



R 033 - 000 000 - 000

R 033P - 000 000 - 000

R 034 - 000 000 - 000

R 032M - 000 000 - 000

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 a 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

**R 033** - 000 000 - 000**R 033P** - 000 000 - 000**R 034** - 000 000 - 000**R 032M** - 000 000 - 000**Ø 5 mm**

Mahnes grasping forceps 1 x 2 teeth, double action jaws

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



Grasping forceps with mouseteeth, single action jaws

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



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

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



Claw Grasping forceps „AGRESSIV“, double action jaws

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

Carbon Handles

more details at the beginning of the chapter



Ø 5 mm



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 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 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

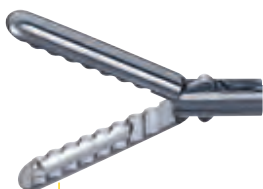
Carbon Handles

more details at the beginning of the chapter

**Ø 5 mm**

Davis & 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 & 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 & 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



Mixer 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



Mixer 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



Grasping forceps Kelly, 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			
330 mm	R030-050330-270	R033-050330-270	R033P-050330-270	R034-050330-270	R032M-050330-270
360 mm	R030-050360-270	R033-050360-270	R033P-050360-270	R034-050360-270	R032M-050360-270
450 mm	R030-050450-270	R033-050450-270	R033P-050450-270	R034-050450-270	R032M-050450-270



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

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



Grasping forceps „WAVE“, fenestrated, double action jaws

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



Grasping forceps „MAXIGRIP“, double action jaws

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

Carbon Handles

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R 032M - 000 000 - 000

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

Carbon Handles

more details at the beginning of the chapter



R 033M - 000 000 - 000

Ø 5 mmUniversal grasping forceps,
double action jaws

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

Maryland grasping and
dissecting forceps, double
action jaws

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

Dissecting forceps,
fenestrated, double action
jaws

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

Dissecting forceps,
fenestrated, oval, double
action jaws

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

Duck Bill-forceps,
fenestrated, single action
jaws

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

Dissecting grasping
forceps, slim, fenestrated,
double action jaws

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

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

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

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

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

Carbon Handles

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R 033M - 000 000 - 000

Ø 5 mm



Grasping forceps with reservoir, tip blunt, double action jaws



Grasping forceps with reservoir, tip conical, double action jaws

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

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



Delphin grasping forceps, double action jaws



Delphin grasping forceps with reservoir, long, double action jaws

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

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



Fallopian tube grasping forceps, double action jaws



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

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

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



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



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

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

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

Carbon Handles

more details at the beginning of the chapter



R 033M - 000 000 - 000

Ø 5 mm



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

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



Grasping forceps, double
action jaws

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



Reddick-Olsen grasping
forceps, strong, double
action jaws

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



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

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



Mahnes grasping forceps
1 x 2 teeth, double action
jaws

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



Grasping forceps with
mouse teeth, single action
jaws

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



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

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



Claw Grasping forceps
„AGRESSIV“, double action
jaws

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

Carbon Handles

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R 033M - 000 000 - 000

Ø 5 mm



Grasping forceps distal with DeBakey teeth, double action jaws



Extracting forceps with retrograd teeth, double action jaws

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

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



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



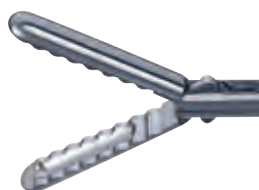
Dorsey intestinal grasping forceps, jaw length 20 mm, single action jaws

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

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



Davis & Geek grasping forceps with reservoir, single action jaws



Davis & Geek grasping forceps with reservoir, double action jaws

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

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



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



Mixer grasping forceps 90°, double action jaws

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

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

Carbon Handles

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R 033M - 000 000 - 000

Ø 5 mm



Mixer grasping forceps 45°, double action jaws

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



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

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



DeBakey clamp, jaw length 30 mm, double action jaws

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



Grasping forceps Kelly, double action jaws

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



Babcock clamp, double action jaws

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



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

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



Grasping forceps „WAVE“, fenestrated, double action jaws

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



Grasping forceps „MAXIGRIP“, double action jaws

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

Carbon Handles

more details at the beginning of the chapter



R 033M - 000 000 - 000

Ø 5 mm



Tenaculum forceps, double
action jaws

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

Carbon Handles

more details at the beginning of the chapter

**Ø 10 mm****R 033 - 000 000 - 000****R 033P - 000 000 - 000****R 034 - 000 000 - 000****R 032M - 000 000 - 000**

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

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



Maryland grasping and dissecting forceps, double action jaws

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



Grasping forceps distal with DeBakey teeth, double action jaws

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

Carbon Handles

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R 033P - 000 000 - 000



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Ø 10 mm



Babcock grasping forceps, strong, double action jaws

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



Grasping forceps with crosswise teeth, double action jaws

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



Mixer grasping forceps, double action jaws

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



Dorsey intestinal grasping forceps, double action jaws

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

Carbon Handles

more details at the beginning of the chapter



R 033 - 000 000 - 000



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R 034 - 000 000 - 000



R 032M - 000 000 - 000

Ø 10 mm



Kocher clamp, jaw length 30 mm, double action jaws

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



DeBaKey clamp, jaw length 30 mm, double action jaws

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



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

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

Carbon Handles

more details at the beginning of the chapter



Ø 10 mm

R 033 - 000 000 - 000

R 033P - 000 000 - 000

R 034 - 000 000 - 000

R 032M - 000 000 - 000



Babcock grasping forceps fine, double action jaws

Working length	Working insert alone	Complete instrument			
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

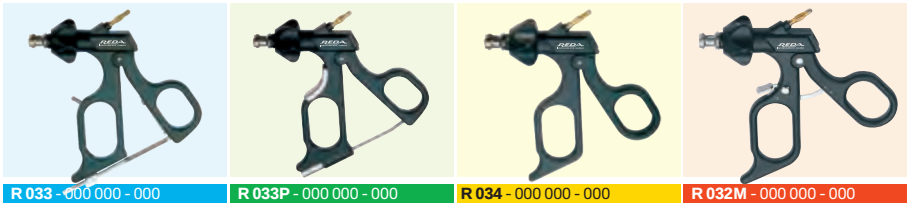


Pennington clamp, double action jaws

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			
330 mm	R030-100330-654	R033-100330-654	R033P-100330-654	R034-100330-654	R032M-100330-654
360 mm	R030-100360-654	R033-100360-654	R033P-100360-654	R034-100360-654	R032M-100360-654



Tenaculum forceps, double action jaws

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

. . . with two handle versions

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

*CLASSIC
NONMODULAR
1 PIECE
SYSTEM*



easy clean
LUER-Lock connector



R 031 - R
Handle

R 032 - R
Handle with ratchet

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

Plastic Handles
with 360 mm tube shafts

360 mm
Working length

Ø 5 mm



R 031-00 00-000-R



R 032-00 00-000-R



Complete instrument

R031-0536-248-R

R032-0536-248-R

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



Complete instrument

R031-0536-218-R

R032-0536-218-R

Grasping forceps with 2+4
teeth, double action jaws



Complete instrument

R031-0536-220-R

R032-0536-220-R

Grasping forceps with
reservoir, tip blunt, double
action jaws



Complete instrument

R031-0536-224-R

R032-0536-224-R

Delphin grasping forceps
with reservoir, double
action jaws



Complete instrument

R031-0536-244-R

R032-0536-244-R

Grasping forceps distal
with DeBaKey teeth, double
action jaws

Plastic Handles
with 360 mm tube shafts

360 mm
Working length

Ø 5 mm



R 031-00 00-000-R



R 032-00 00-000-R



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

Complete instrument

R031-0536-246-R

R032-0536-246-R

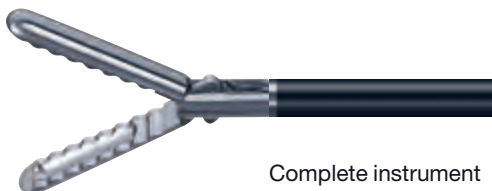


Mixer grasping forceps
90°, double action jaws

Complete instrument

R031-0536-258-R

R032-0536-258-R

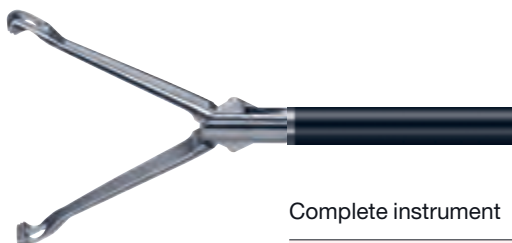


Davis & Geek grasping
forceps with reservoir,
double action jaws

Complete instrument

R031-0536-251-R

R032-0536-251-R

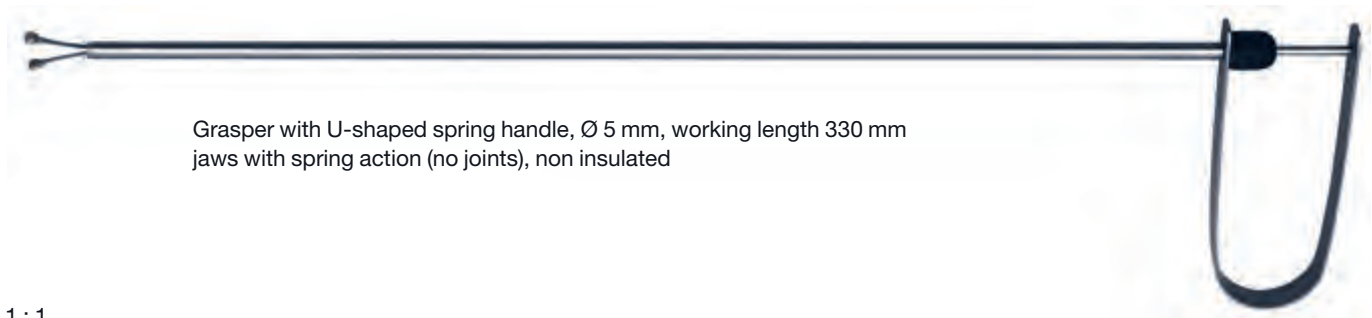


Babcock clamp, double
action jaws

Complete instrument

R031-0536-270-R

R032-0536-270-R



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

1 : 1



Atraumatic grasper

R039 - 0533 - 001



Bowl grasper square pattern jaws

R039 - 0533 - 002



Bowl grasper T-shaped jaws

R039 - 0533 - 003



Tissue and bowel grasper, ball and socket type

R039 - 0533 - 004



Fallopian grasper

R039 - 0533 - 006



1 x 2 teeth grasper slim

R039 - 0533 - 007



Bowlgrasper round

R039 - 0533 - 010



Atraumatic grasper, fenestrated

R039 - 0533 - 013

1 : 1



Tissue grasper U-shaped jaws

R039 - 0533 - 014



Grasper blunt

R039 - 0533 - 015



Falopian grasper blunt

R039 - 0533 - 016

Scissors / Biopsy forceps



Ø 5 und 10 mm



Mechanical snap-action coupling !

The Ø 5 and 10 mm modular REDA laparoscopic instruments have a unique snap-action coupling which, offering the combined advantage of the speediest possible assembly and a long service life. The union of the working insert and sleeve shaft is achieved by simply inserting the components axially into each other. A simple click and you are ready!

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

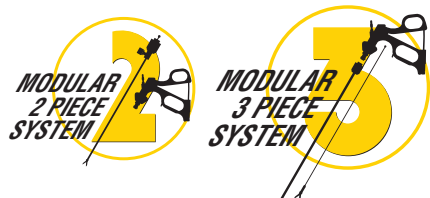
REDA - simplicity is so clever !



Nut stopper

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

REDA - detail is the decisive factor !



Ø 3 / 5 / 10 mm



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

R033 - 000000 - 000



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

R033P - 000000 - 000



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

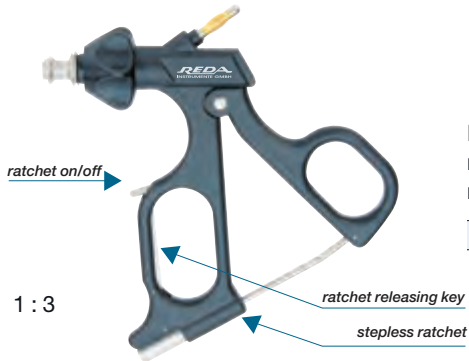
R034 - 000000 - 000



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

R032M - 000000 - 000

Ø 3 / 5 / 10 mm



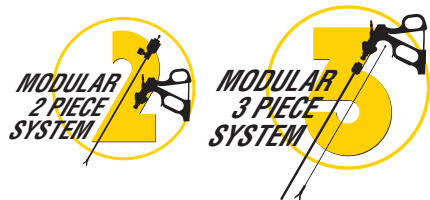
Ergonomic carbon handle with stepless ratchet,
ratchet activating / release lever, HF-connector Ø 4 mm male 45° lateral,
rotating head 360°, autoclavable

R033M - 000000 - 000



Protection cap for HF-connector Ø 4 mm

R030 - 000000



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



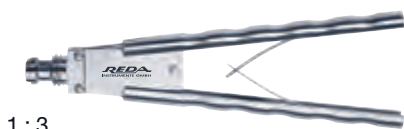
Ø 3 / 5 / 10 mm



1 : 3

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

R038 - 000000 - 000



1 : 3

Axial handle, with spreading spring

R048 - 000000 - 000



1 : 3

Axial handle with rings and ratchet, metal not insulated

R037 - 000000 - 000



1 : 3

Axial ring handle

R047 - 000000 - 000



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

R039 - 000000 - 000



Axial handle, angled, with spreading spring

R040 - 000000 - 000

Carbon Handles

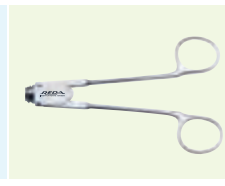
more details at the beginning of the chapter

Stainless steel Handles

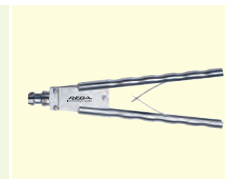
more details at the beginning of the chapter



R 034 - 000 000 - 000



R 047 - 000 000 - 000



R 048 - 000 000 - 000



R 040 - 000 000 - 000

Ø 5 mm



Metzenbaum preparation scissors, straight, double action jaws

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

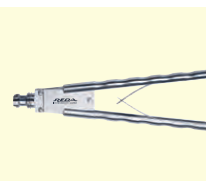
Working length	Working insert alone	Complete instrument		
330 mm	R040-050330-122	R044-050330-122	R057-050330-122	R058-050330-122
360 mm	R040-050360-122	R044-050360-122	R057-050360-122	R058-050360-122
450 mm	R040-050450-122	R044-050450-122	R057-050450-122	R058-050450-122

Carbon Handles

more details at the beginning of the chapter

Stainless steel Handles

more details at the beginning of the chapter

**R 034 - 000 000 - 000****R 047 - 000 000 - 000****R 048 - 000 000 - 000****R 040 - 000 000 - 000****also available
with angled
handle****Ø 5 mm**

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

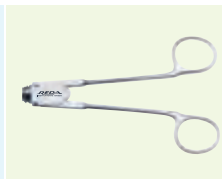
more details at the beginning of the chapter

Stainless steel Handles

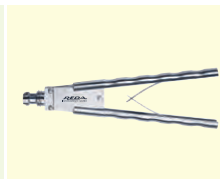
more details at the beginning of the chapter



R 034 - 000 000 - 000



R 047 - 000 000 - 000



R 048 - 000 000 - 000



R 040 - 000 000 - 000

Ø 10 mm



Mayo OP scissors, single action jaws

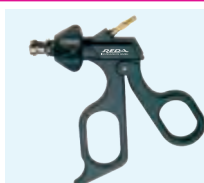
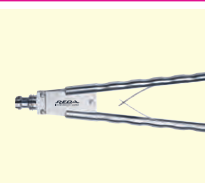
Working length	Working insert alone	Complete instrument		
330 mm	R040-100330-710	R044-100330-710	R057-100330-710	R058-100330-710
360 mm	R040-100360-710	R044-100360-710	R057-100360-710	R058-100360-710
450 mm	R040-100450-710	R044-100450-710	R057-100450-710	R058-100450-710

Carbon Handles

more details at the beginning of the chapter

Stainless steel Handles

more details at the beginning of the chapter

**R 034 - 000 000 - 000****R 047 - 000 000 - 000****R 048 - 000 000 - 000****R 040 - 000 000 - 000****also available
with angled
handle****Ø 5 mm**

Blakesley tumor forceps, pointed, single action jaws

Working length	Working insert alone	Complete instrument		
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

Stainless steel Handles

more details at the beginning of the chapter

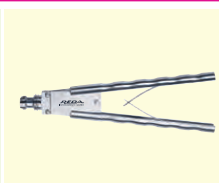
Ø 5 mm



R 034 - 000 000 - 000



R 047 - 000 000 - 000



R 048 - 000 000 - 000



R 040 - 000 000 - 000



Biopsy cup, long, single action jaws

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



Biopsy cup, long, with thorn, single action jaws

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



Biopsy cup, tapering, fenestrated, single action jaws

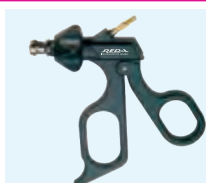
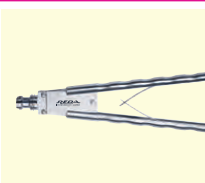
Working length	Working insert alone	Complete instrument		
330 mm	R040-050330-320	R044-050330-320	R057-050330-320	R058-050330-320
360 mm	R040-050360-320	R044-050360-320	R057-050360-320	R058-050360-320
450 mm	R040-050450-320	R044-050450-320	R057-050450-320	R058-050450-320

Carbon Handles

more details at the beginning of the chapter

Stainless steel Handles

more details at the beginning of the chapter

**R 034** - 000 000 - 000**R 047** - 000 000 - 000**R 048** - 000 000 - 000**R 040** - 000 000 - 000**also available
with angled
handle****Ø 5 mm**

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

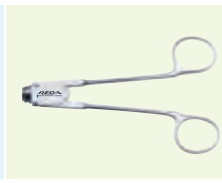
more details at the beginning of the chapter

Stainless steel Handles

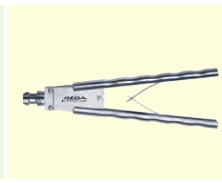
more details at the beginning of the chapter



R 034 - 000 000 - 000



R 047 - 000 000 - 000



R 048 - 000 000 - 000



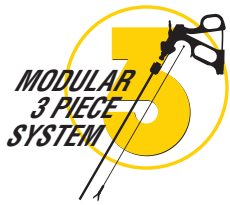
R 040 - 000 000 - 000

Ø 10 mm



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

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



Ø 5 und 10 mm



Mechanical snap-action coupling !

The Ø 5 and 10 mm modular REDA laparoscopic instruments have a unique snap-action coupling which, offering the combined advantage of the speediest possible assembly and a long service life. The union of the working insert and sleeve shaft is achieved by simply inserting the components axially into each other. A simple click and you are ready!

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

REDA - simplicity is so clever !



Nut stopper

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

REDA - detail is the decisive factor !

Ø 3 / 5 / 10 mm



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

R033 - 000000 - 000



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

R033P - 000000 - 000



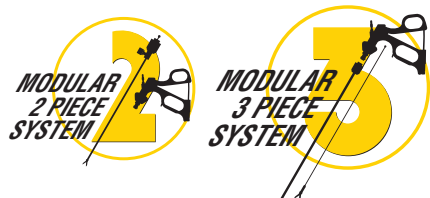
Ergonomic carbon handle,
HF-connector Ø 4 mm male 45° lateral, rotating head 360°, autoclavable

R034 - 000000 - 000



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

R032M - 000000 - 000



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

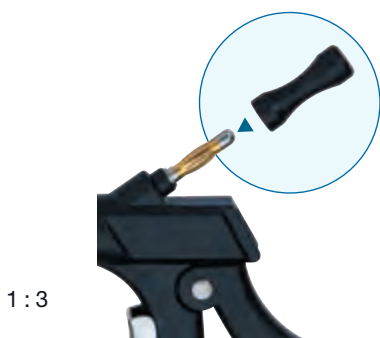


Ø 3 / 5 / 10 mm



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

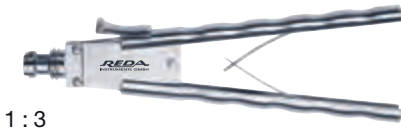
R033M - 000000 - 000



Protection cap for HF-connector Ø 4 mm

R030 - 000000

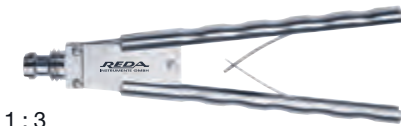
Ø 3 / 5 / 10 mm



1 : 3

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

R038 - 000000 - 000



1 : 3

Axial handle, with spreading spring

R048 - 000000 - 000



1 : 3

Axial handle with rings and ratchet, metal not insulated

R037 - 000000 - 000



1 : 3

Axial ring handle

R047 - 000000 - 000



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

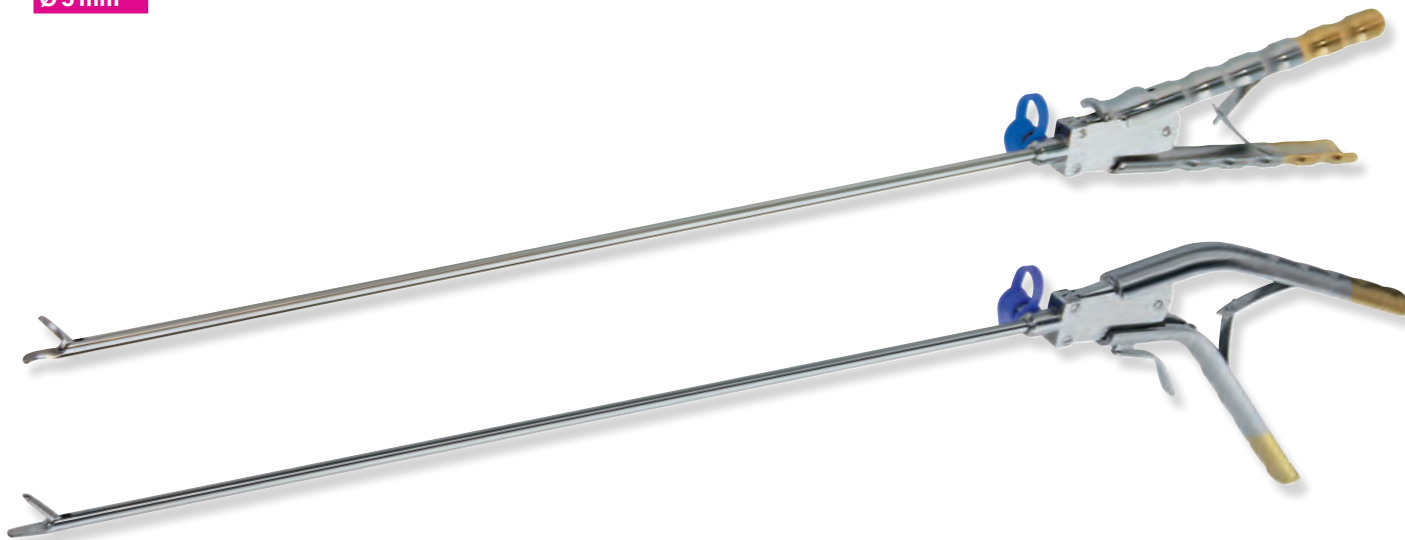
R039 - 000000 - 000



Axial handle, angled, with spreading spring

R040 - 000000 - 000

Ø 5 mm



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



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

Handle	straight	angled
Art. No.	R058-0533-350	R059-0533-350



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

Handle	straight	angled
Art. No.	R058-0533-352	R059-0533-352



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

Handle	straight	angled
Art. No.	R058-0533-354	R059-0533-354



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

Handle	straight	angled
Art. No.	R058-0533-360	R059-0533-360

Carbon Handles

more details at the beginning of the chapter



R 033 - 000 000 - 000

R 033P - 000 000 - 000

R 032M - 000 000 - 000

R 033M - 000 000 - 000

Ø 5 mm



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



R 037 - 000 000 - 000



R 038 - 000 000 - 000



R 039 - 000 000 - 000

Ø 5 mm



Needleholder with inserted tungsten carbide, straight, single action jaws

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



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

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



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

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

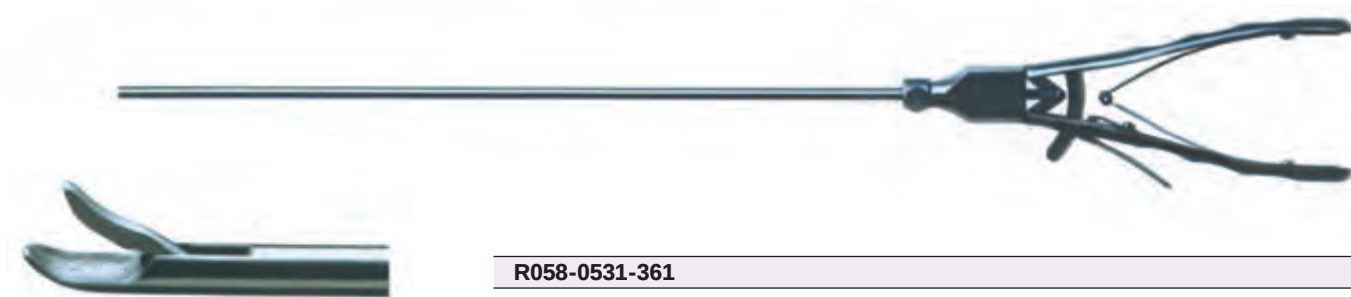


Needleholder/-positioner insert, convex/concav shaped jaws with fixation-teeth, Wolfram-Karbit finish, single action jaws

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

Ø 5 mm

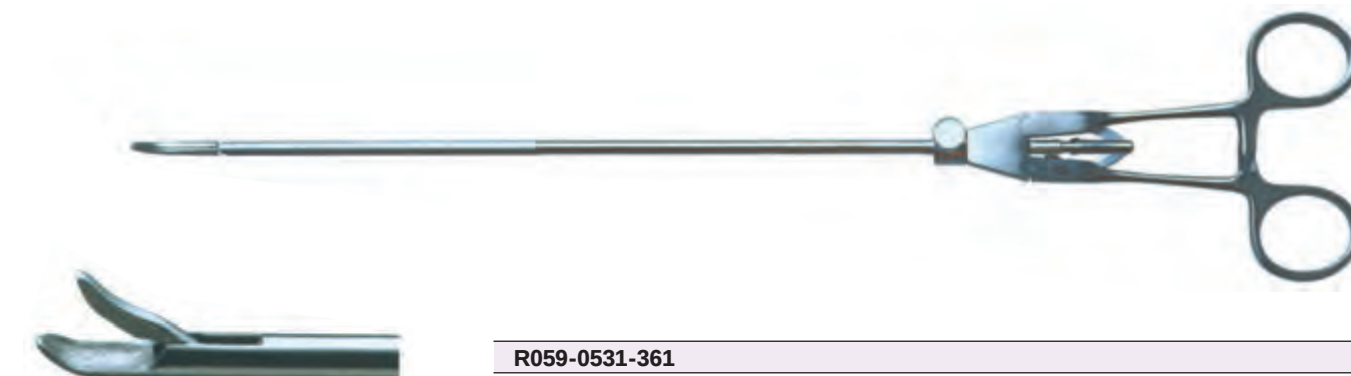
Romeo needleholder convex/concav
for optimum grasp of needles 5 mm Ø, 310 mm working length, axial handle open w. ratchet, LL-cleaning-port



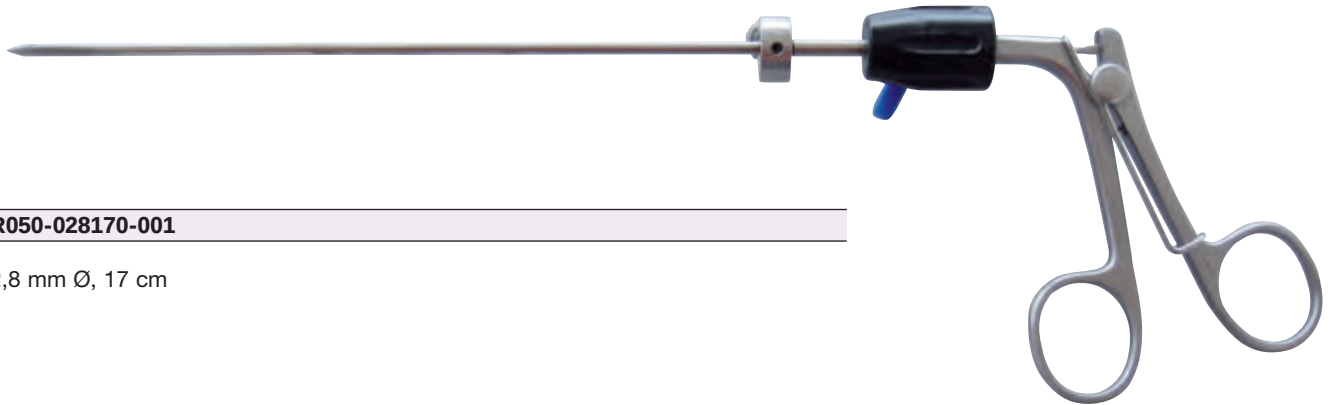
Romeo needleholder convex/concav
for optimum grasp of needles 5 mm Ø, 310 mm working length, ergonomic axial handle w. rings and ratchet, LL-cleaning-port



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



Ø 2,8 mm



R050-028170-001

2,8 mm Ø, 17 cm



R050-050330-01

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



R050-050330-02

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



R050-050330-03

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

Ø 2,3 mm



R050-050340-00

Fascial-Closure device (FCD)

2,3 mm Ø, 140 mm working length

Pic. 1



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

Pic. 3



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

Pic. 5



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

Pic. 2



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

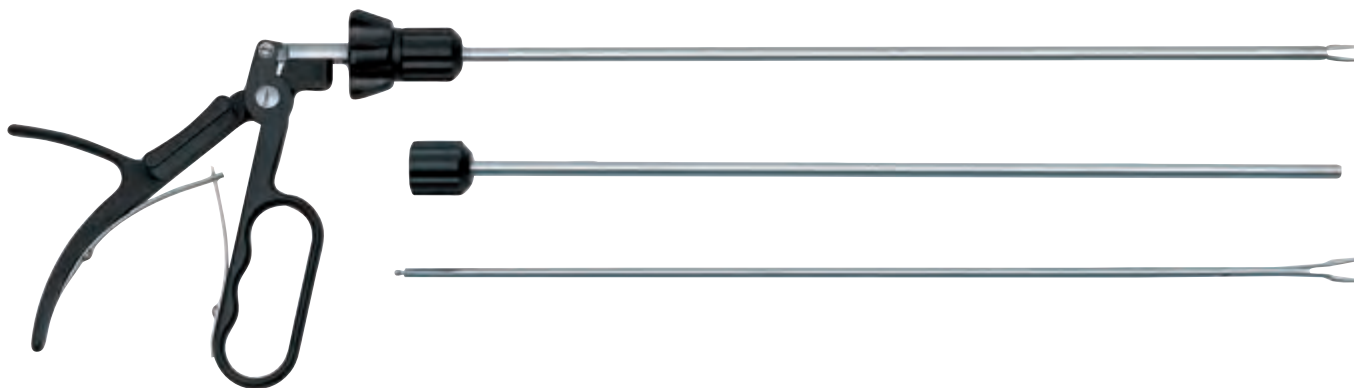
Pic. 4



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

Ø 5 mm

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



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

Ø 10 mm

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

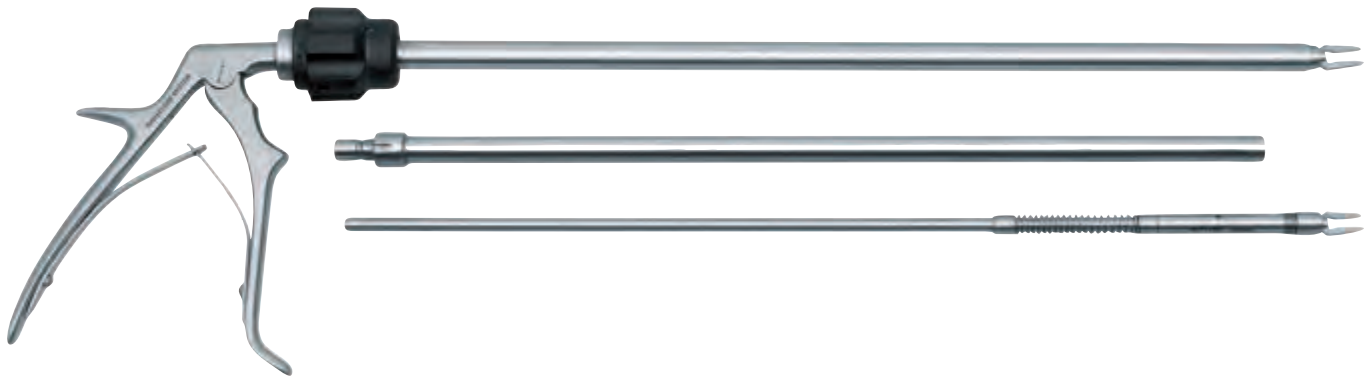


for Clips-Type	
Ethicon - small	R055-100330-01
Ethicon - medium	R055-100330-02
Ethicon - medium-large	R055-100330-03
Ethicon - large	R055-100330-04
Weck - small	R055-100330-11
Weck - medium	R055-100330-12
Weck - medium-large	R055-100330-13
Pilling - small	R055-100330-21
Pilling - medium	R055-100330-22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

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

Ø 10 mm

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



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

Ø 5 mm

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



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

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



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


R060-000000-000

Safety handle optional for more safety for users

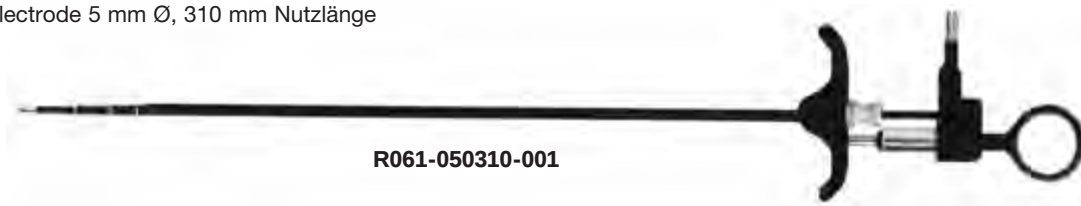
Ø 5 mm

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



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

Needle electrode 5 mm Ø, 310 mm Nutzlänge



Ø 5 mm

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



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

Ø 5 mm

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



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



Electrode handle ergonomic design,
with 2-way-valve

R064-050000-001



Adapter for electrode handle for connecting monopolar
electrodes modular

R064-050000-002



R064-050000-006

Pistol Handle with Sliding Valve

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



R064-050000-010

Suction-Irrigation-Sliding Valve with Electrode Adapter

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



R064-050000-022

Handle with Double Trumpet Valve

and removeable handle plate for exchangeable electrodes, with rotatable adapter and sideways HF-Connector, one Luer-Lock as well as a combined Luer-Lock / Tube Connector



R064-050000-011

Trumpet Valve with Electrode Adapter

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

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



Handle alone

R062-050320-000

Outer tube insulated

R062-050320-099



Ball electrode

complete

assembly alone

R062-050320-001

R062-050000-001



J-hook electrode

R062-050320-002

R062-050000-002



L-hook electrode

R062-050320-003

R062-050000-003



Spatula electrode

R062-050320-004

R062-050000-004



Needle electrode

R062-050320-005

R062-050000-005



Lanzette electrode

R062-050320-006

R062-050000-006



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

Ø 5 mm



Bipolar electrodes 340 mm working length



Ball electrode

R067-050340-001



J-hook electrode

R067-050340-002



L-hook electrode

R067-050340-003



Spatula electrode

R067-050340-004



Plate electrode

R067-050340-005

Ø 3 mm



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



L-hook electrode

R068-030340-003



Needle electrode

R068-030340-010



V-shaped electrode

R068-030340-012

Ø 5 mm



Handle alone
R065-000000-100

Carbon shaft alone
Metal shaft alone with ceramic tip

R065-050340-199
R065-050340-198



Jaws smooth, 3 mm

R065-000340-103 Insert alone
R065-050340-103 Complete with carbon shaft
R065-050340-303 Complete with metal shaft



Jaws smooth long
insulated, 1,0 mm

R065-000340-107 Insert alone
R065-050340-107 Complete with carbon shaft
R065-050340-307 Complete with metal shaft



Jaws cross serrated, 3 mm

R065-000340-104 Insert alone
R065-050340-104 Complete with carbon shaft
R065-050340-304 Complete with metal shaft



Jaws fenestrated with
wave wire

R065-000340-101 Insert alone
R065-050340-101 Complete with carbon shaft
R065-050340-301 Complete with metal shaft



Jaws smooth, short
insulated, 1,0 mm

R065-000340-105 Insert alone
R065-050340-105 Complete with carbon shaft
R065-050340-305 Complete with metal shaft

Ø 5 mm



Jaws smooth, 3 mm

R065-000340-103
Insert alone

R065-050340-203
Complete with carbon shaft

R065-050340-403
Complete with metal shaft



Jaws smooth long
insulated, 1,0 mm

R065-000340-107
Insert alone

R065-050340-207
Complete with carbon shaft

R065-050340-407
Complete with metal shaft



Jaws cross serrated, 3 mm

R065-000340-104
Insert alone

R065-050340-204
Complete with carbon shaft

R065-050340-404
Complete with metal shaft



Jaws fenestrated with
wave wire

R065-000340-101
Insert alone

R065-050340-201
Complete with carbon shaft

R065-050340-401
Complete with metal shaft



Jaws smooth, short
insulated, 1,0 mm

R065-000340-105
Insert alone

R065-050340-205
Complete with carbon shaft

R065-050340-405
Complete with metal shaft

Ø 5 mm

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

Standard handle
R066-000000-500



Ring handle
R066-000000-600



Hirsch



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

Micro



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

Ø 5 mm

Standard handle
R066-000000-500Ring handle
R066-000000-600**Kleppinger**

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

Atraumatic 3 mm smooth

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

Metzenbaum scissors curved

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

Ø 5 mm

Standard handle
R066-000000-500



Ring handle
R066-000000-600



Metzenbaum scissors curved TC blades



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

Maryland



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

Outer shaft tube



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

Inner shaft tube



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



Adapter for european flat plug

R066-000000-002



Adapter for US-cables

R066-000000-012

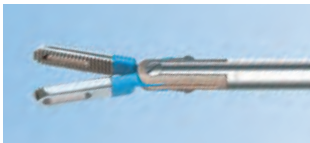
Ø 5 mm



Handle
R067-000000-700

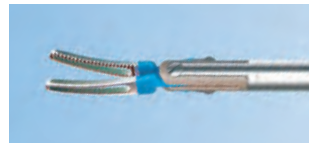


Shaft
R067-050340-700



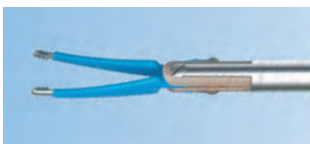
Large grasping forceps

R067-000340-713



Grasping forceps, curved

R067-000340-724



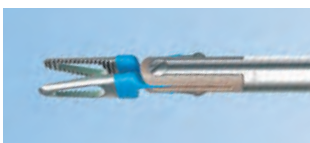
Forceps, curved

R067-000340-722



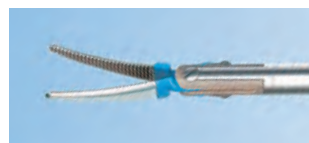
Scissors, curved

R067-000340-709



Delta Grasper

R067-000340-723



Maryland dissector, curved

R067-000340-721

Unit side

Instrument side

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



ORBITARIS bipolar forceps with rotating handle.

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

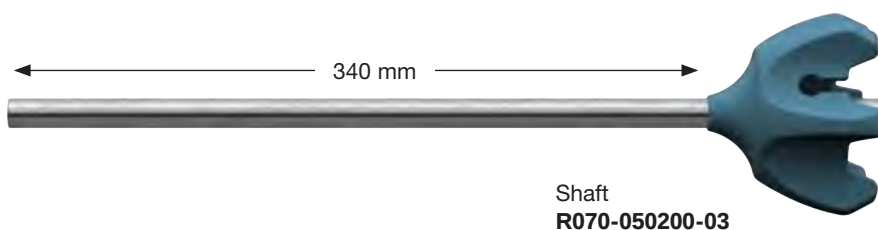
The handles rotate independently of the shaft, so the instrument can be controlled in a relaxed natural way, reducing fatigue and enabling precise handling and control during surgery. All P-Coat electrodes are fully compatible with both the ORBITARIS and the Powergrip bipolar instruments.



Handle
R070-050200-01

Handle, lockable
R070-050200-02

function by design
ORBITARIS
bipolar forceps with rotatable handle



Shaft
R070-050200-03



Large grasping forceps
R070-050200-04



Scissors, curved
R070-050200-05



Grasping forceps,
fenestrated, curved
R070-050200-06



Maryland dissector, curved
R070-050200-07



Micro needle electrode for monopolar cutting, 32 cm

R068-050320-01



Micro needle electrode for monopolar cutting, 42 cm

R068-050420-01



Combined micro needle electrode for cutting and coagulation, 32 cm

R069-050320-01



Combined micro needle electrode for cutting and coagulation, 42 cm

R069-050420-01

Spare cutting needle for micro needle electrode 12 pieces

R068-050000-00

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

R069-050000-00

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



Hysterectomy instrument with one wire loop electrode

R067-050320-01



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

R067-050100-00



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

R067-050125-00



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

R067-050065-00

Ø 5,0 mm

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



working length	complete
330 mm	R072-050330-004 D
	Handle with Sliding Valve
	R072-000000-000
	Roundhole Sucker with 4 Drillings and Handle
	R070-050330-004 D

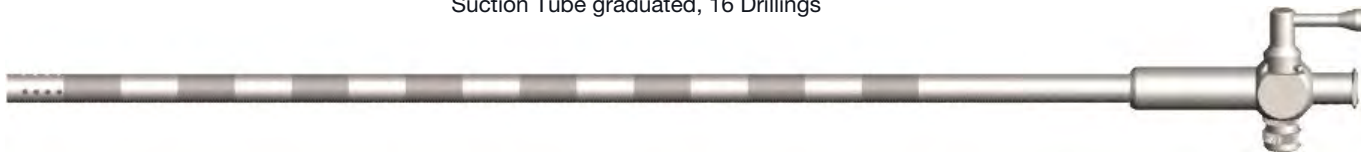
Ø 5,0 mm

Suction-Irrigation-Cannula

Roundhole Sucker

with Luer-Lock-Connection and Stop Cock

Suction Tube graduated, 16 Drillings



working length

450 mm R074-050450-016

working length

330 mm R074-050330-016

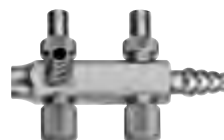
Suction-Irrigation-Tube

with Luer-Lock-Connection, 4 Drillings



working length

330 mm R075-050330-004

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

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



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



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



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



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



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

Ø 5 / 10 mm

Suction-Irrigation-Handle

with color-coding

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



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

R078-000000-100 Handle

complete with both Suction-Irrigation-Tubes

complete with Tube-Set Ø 5 mm

/ 10 mm

R078-000000-199

R078-050330-116

R078-100330-116

- two in one
sidewise Tube-Luer-Lock-Connection



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

R079-000000-100 Handle

complete with both Suction-Irrigation-Tubes

complete with Tube-Set Ø 5 mm

/ 10 mm

R079-000000-199

R079-050330-116

R079-100330-116

working length

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

Suction-Irrigation-Handle
with 1 trumpet valve

R076-000000-200



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

R078-000000-200



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

R079-000000-200



Ø 3,0 mm

Suction-Irrigation-Tubes



working length	Shaft tube alone	complete with 4 sidewise drillings		
340 mm	R070-030340-204	R076-030340-204	R078-030340-204	R079-030340-204
		complete with 16 sidewise drillings		
340 mm	R070-030340-216	R076-030340-216	R078-030340-216	R079-030340-216

Ø 5,0 mm



working length	Shaft tube alone	complete with 4 sidewise drillings		
340 mm	R070-050340-204	R076-050340-204	R078-050340-204	R079-050340-204
		complete with 16 sidewise drillings		
340 mm	R070-050340-216	R076-050340-216	R078-050340-216	R079-050340-216

Ø 10 mm



working length	Shaft tube alone	complete with 4 sidewise drillings		
340 mm	R070-100340-204	R076-100340-204	R078-100340-204	R079-100340-204
		complete with 16 sidewise drillings		
340 mm	R070-100340-216	R076-100340-216	R078-100340-216	R079-100340-216

Suction-Irrigation-Handle

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



R076-000000-300

Ø 3,0 mm

Suction-Irrigation-Tubes



working length **Shaft tube alone**

complete with large Luer-Lock and 4 sidewise drillings

340 mm

R070-030340-304

R076-030340-304

complete with large Luer-Lock and 16 sidewise drillings

340 mm

R070-030340-316

R076-030340-316

Ø 5,0 mm



working length **Shaft tube alone**

complete with large Luer-Lock and 4 sidewise drillings

340 mm

R070-050340-304

R076-050340-304

complete with large Luer-Lock and 16 sidewise drillings

340 mm

R070-050340-316

R076-050340-316

Ø 10 mm



working length **Shaft tube alone**

complete with large Luer-Lock and 4 sidewise drillings

340 mm

R070-100340-304

R076-100340-304

complete with large Luer-Lock and 16 sidewise drillings

340 mm

R070-100340-316

R076-100340-316

1 Handle
2 Functions

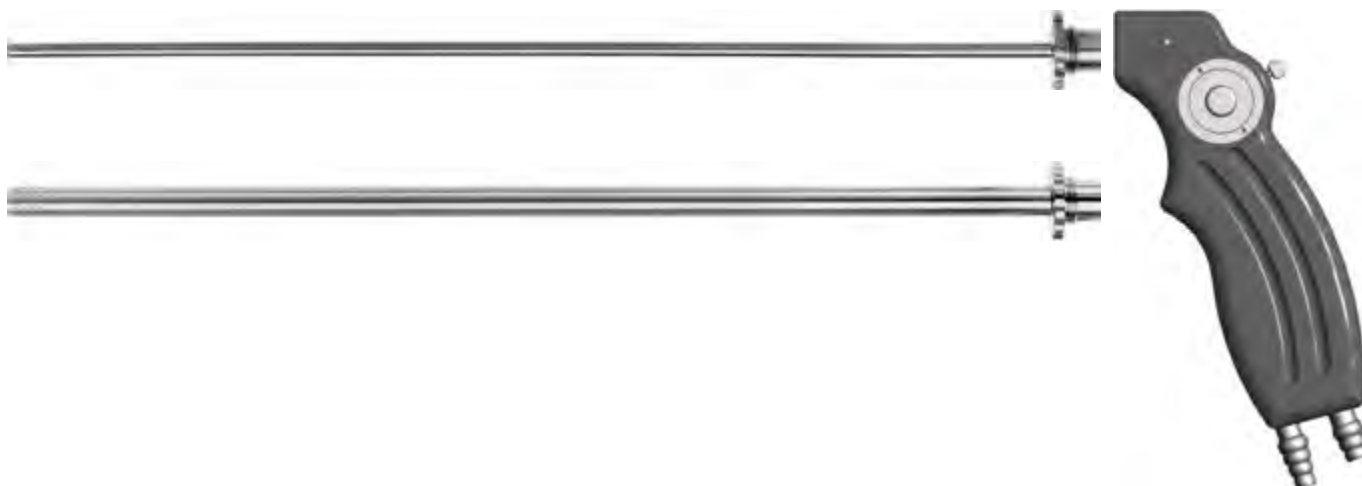
 Suction-
Irrigation

 Monopolar
Coagulation
see page
6/4

Suction-Irrigation-Pistol-Handle

with two-way sliding valve and tube connections

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



Handle

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

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

Ø 5 mm



R075-050 340 - 016

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



R075-020 390 - 000

Laser fiber guide insert alone, 391 mm

R075-050 340 - 000

Complete set

Ø 5 mm

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



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

Ø 6 mm

Puncture Tube for NaCl - Fluid, 6 mm Ø



Luer-Lock = Pressure

Tube = Suction

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

Ø 2 mm

Insufflation cannula 2 mm Ø, with LL-adaptor



Needle working length

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

Ø 2,7 mm

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



Needle working length

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

Ø 2 mm

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



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

Ø 2,7 mm

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



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

Ø 5 mm

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



R080-050330-001

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



R080-050330-101

Ø 6 FR



Cholangiography-catheter, 600 mm long

R080-020600-201

Ø 5 mm

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



R081-050330-001

Ø 5 mm

Palpation probe graduated 5 mm Ø

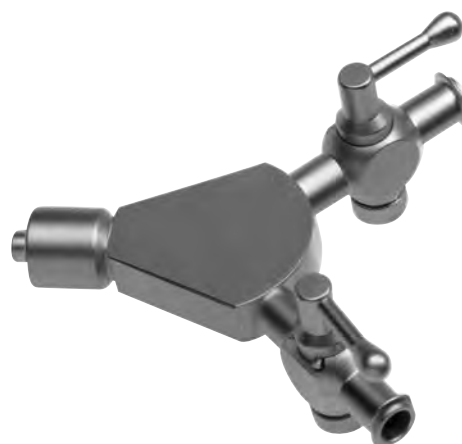


working length

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

Two-Way-Stopcock for Contrast Medium

R070-000040-003

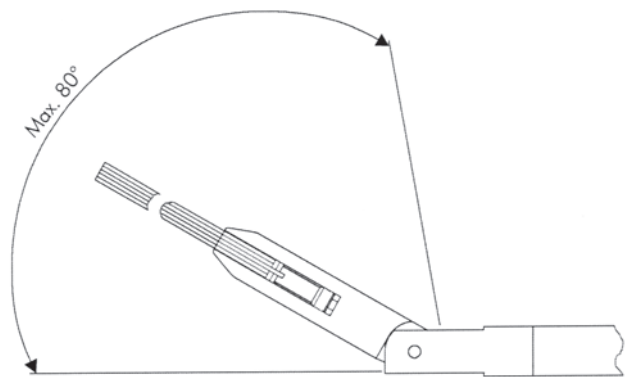
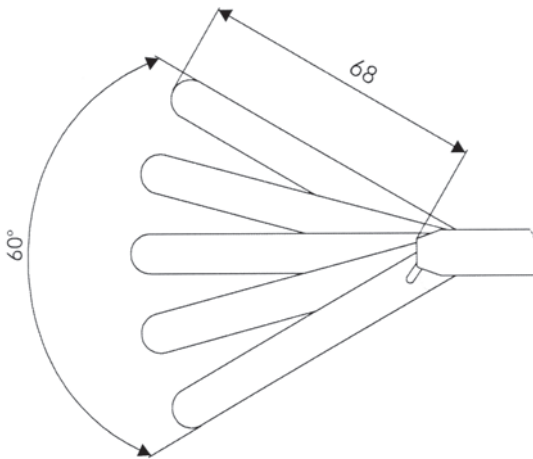


Ø 10 mm

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



R091-100330-005



Ø 5 mm

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

**R091-050340-003**

adjustable

R092-050340-003**Ø 10 mm**

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

**R091-100380-005**

adjustable

R092-100380-005

Ø 5 mm

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



R091-050340-005

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



R092-050340-005

Ø 5 mm



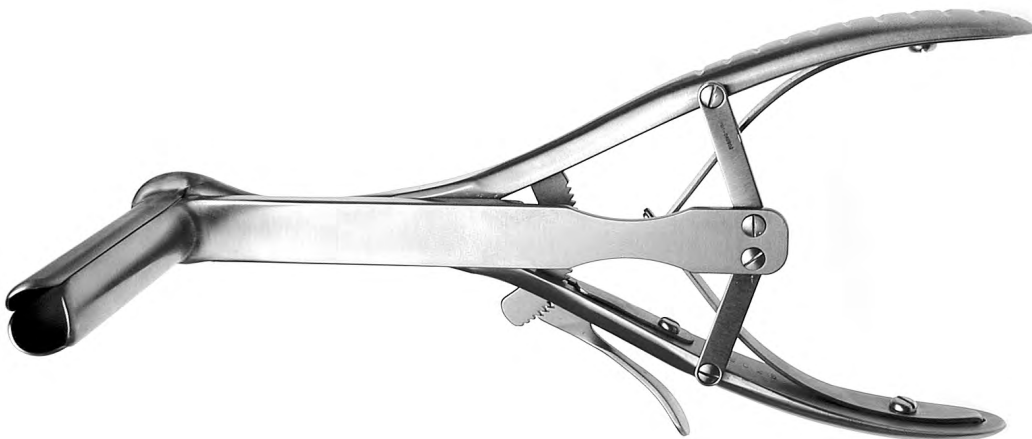
R093-050550-001



R093-050470-001

Speculum retractor, 3 blades for gall bladder extraction

R099-000250-003



Ø 2,9 / 2,7 / 2,0 mm

Laparoscopes with integrated fiberoptic
for illumination, autoclaveable



diameter	working length	direction of view 0°
Ø 2,9 mm	302 mm	R010-030302-000
Ø 2,7 mm	302 mm	R010-027302-000
Ø 2,7 mm	260 mm	R010-027260-000
Ø 2,0 mm	302 mm	R010-020302-000
Ø 2,0 mm	260 mm	R010-020260-000
Ø 2,0 mm	187,5 mm	R010-020187-000

Ø 3,5 mm

Multi function valve trocar sleeve



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

Ø 3,5 mm

Standard trocar



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

Safety trocar
oblique end, conical blunt



diameter	for tube length	Art. No.
Ø 3,5 mm	132 mm	R020-035070-023

Ø 3,5 mm

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



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

Standard trocar
conical blunt



R020-035070-003

Ø 3,5 mm

Ø 3 mm



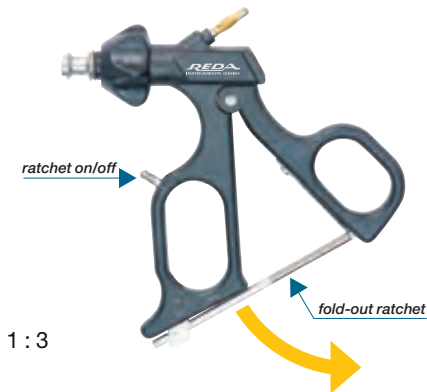
The working insert and tube shaft form a single component. Namely the Working Part with a LUER lock irrigation adapter

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

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

REDA - uncompromising safety !

Ø 3 / 5 / 10 mm



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

R033 - 000000 - 000



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

R033P - 000000 - 000



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

R034 - 000000 - 000



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

R032M - 000000 - 000

Ø 3 / 5 / 10 mm



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

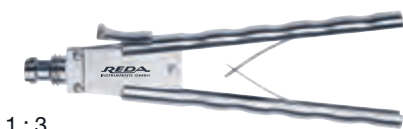
R033M - 000000 - 000



Protection cap for HF-connector Ø 4 mm

R030 - 000000

Ø 3 / 5 / 10 mm



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

R038 - 000000 - 000

1 : 3



Axial handle, with spreading spring

R048 - 000000 - 000

1 : 3



Axial handle with rings and ratchet, metal not insulated

R037 - 000000 - 000

1 : 3



Axial ring handle

R047 - 000000 - 000

1 : 3



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

R039 - 000000 - 000



Axial handle, angled, with spreading spring

R040 - 000000 - 000

Carbon Handles

more details at the beginning of the chapter



Ø 3 mm

R 033 - 000 000 - 000

R 033P - 000 000 - 000

R 034 - 000 000 - 000

R 032M - 000 000 - 000



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



R 037 - 000 000 - 000

R 038 - 000 000 - 000

Ø 3 mm



Universal grasping forceps, straight, double action jaws

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



Maryland grasping forceps, curved, double action jaws

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



Dissections forceps, fenestrated, oval, double action jaws

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



Grasping forceps with reservoir, tip blunt, double action jaws

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

Carbon Handles

more details at the beginning of the chapter



Ø 3 mm

R 033 - 000 000 - 000

R 033P - 000 000 - 000

R 034 - 000 000 - 000

R 032M - 000 000 - 000



Grasping forceps with reservoir, tip conical, double action jaws

Working length	Working insert alone	Complete instrument			
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

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



Delphin grasping forceps with reservoir, double action jaws

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



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

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



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

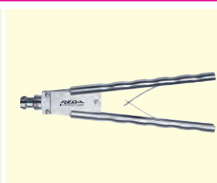
Complete instrument		Working length mm
R107-030180-242	R108-030180-242	180
R107-030210-242	R108-030210-242	210
R107-030330-242	R108-030330-242	330

Carbon Handles

more details at the beginning of the chapter

Stainless steel Handles

more details at the beginning of the chapter

**R 034 - 000 000 - 000****R 047 - 000 000 - 000****R 048 - 000 000 - 000****Ø 3 mm**

Metzenbaum scissors, straight, double action jaws

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



Metzenbaum scissors, curved, double action jaws

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



Peritoneal scissors, serrated, straight, single action jaws

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

Carbon Handles

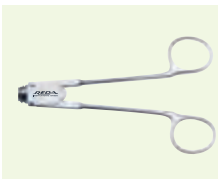
more details at the beginning of the chapter

Stainless steel Handles

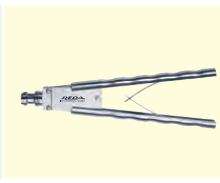
more details at the beginning of the chapter



R 034 - 000 000 - 000



R 047 - 000 000 - 000



R 048 - 000 000 - 000

Ø 3 mm



Hook scissors, straight, single action jaws

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



Micro scissors, straight, single action jaws

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

Carbon Handles

more details at the beginning of the chapter



R 034 - 000 000 - 000

Ø 3 mm



Biopsy cup, sharp, without thorn, double action jaws

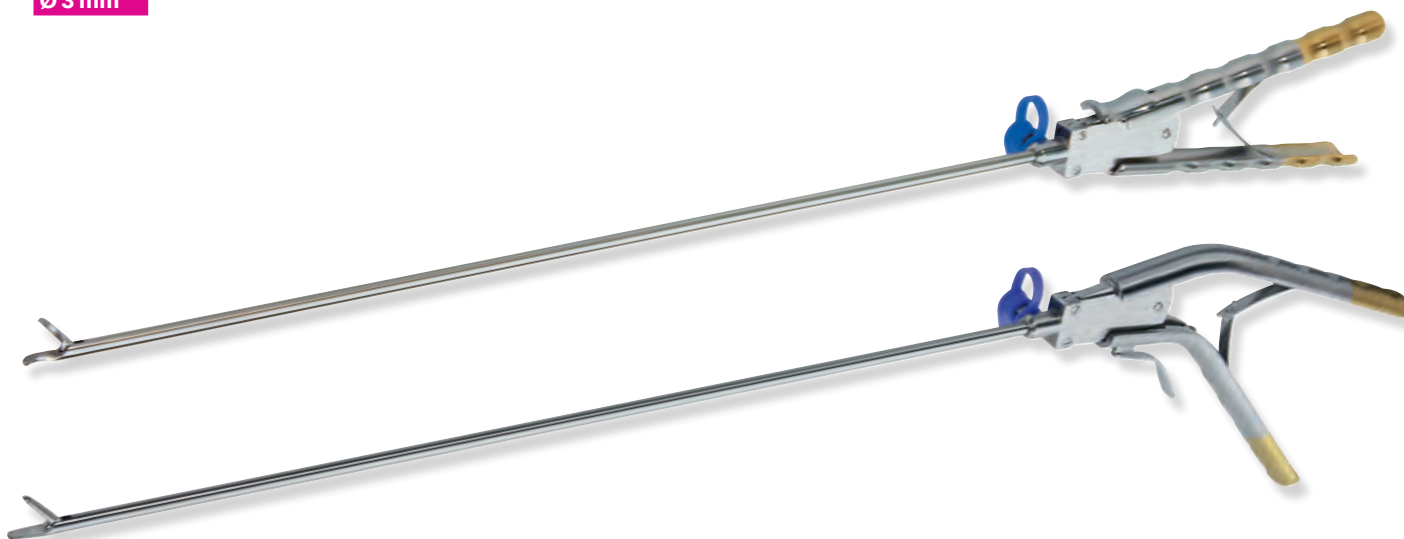
Working length	Working insert alone	Complete instrument
180 mm	R100-030180-310	R104-030180-310
210 mm	R100-030210-310	R104-030210-310
330 mm	R100-030330-310	R104-030330-310



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
Art. No.	R158-0533-350	R159-0533-350



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

Handle	straight	angled
Art. No.	R158-0533-352	R159-0533-352



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

Handle	straight	angled
Art. No.	R158-0533-354	R159-0533-354



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

Handle	straight	angled
Art. No.	R158-0533-360	R159-0533-360

Carbon Handles

more details at the beginning of the chapter



R 033 - 000 000 - 000

R 033P - 000 000 - 000

R 032M - 000 000 - 000

Ø 3 mm



Needleholder with inserted tungsten carbide, straight, single action jaws

Working length	Working insert alone	Complete instrument		
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

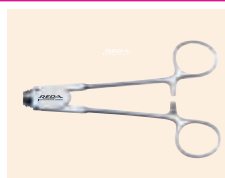


Needleholder/-positioner insert, convex/concave with teeth, TC

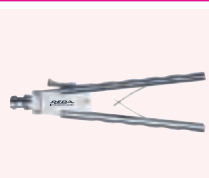
Working length	Working insert alone	Complete instrument		
210 mm	R150-030210-360	R153-030210-360	R153P-030210-360	R151-030210-360
330 mm	R150-030330-360	R153-030330-360	R153P-030330-360	R151-030330-360

Stainless steel Handles

more details at the beginning of the chapter



R 037 - 000 000 - 000



R 038 - 000 000 - 000



R 039 - 000 000 - 000

Ø 3 mm



Needleholder with inserted tungsten carbide, straight, single action jaws

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



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

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



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

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



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

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

Ø 2,8 mm

Monopolar electrode with small handle,
Ø 2,8 mm



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

Ø 2,8 mm

Palpation probe
Ø 2,8 mm

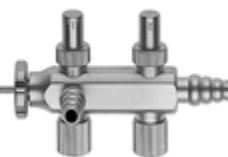


working length

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

Ø 2,8 mm

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



working length roundhole Sucker with 8 drillings

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

Handle with trumpet valve
R071-000000-000

working length complete with handle

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

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



working length roundhole Sucker with 8 drillings

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

Handle with sliding valve
R072-000000-000

working length complete with handle

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

Ø 2,8 mm

Suction-Irrigation-Cannula
with trumpet valves
and Square Handle



working length

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

Ø 1,2 mm

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



working length Nadel / Needle

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

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

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



R076-000000-300

Ø 3,0 mm

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



working length 4 sidewise drillings

340 mm R070-030340-304

working length 16 sidewise drillings

340 mm R070-030340-316

Ø 3,5 mm**Suction-Irrigation-Handle**

with color-coding

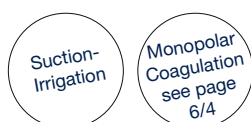
- 20% less weight
- less individual parts
- color-coding
blue - irrigation
green - suction
- two in one
sidewise Tube-Luer-Lock-Connection

**Suction-Irrigation-Handle 10 mm**

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

R078-000000-100

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

240 mm R070-035240-116**Ø 3 mm**
1 Handle
2 Functions
**Suction-Irrigation-Handle**

with two-way sliding valve and tube connections

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



Handle with sliding valve

R064-050000-001

complete (handle and tube)

R079-030330-416

working length Tube only Ø 3,0 mm

330 mm R070-030330-416

Valve Handle for Shaft M8 x 1

Suction-Irrigation-Handle with Trumpet Valve

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



R076-000000-200

Suction-Irrigation-Pistol-Handle with Sliding Valve

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



R079-000000-200

Ø 3,0 mm

Exchangeable Suction-Irrigation-Tube with threads M8 x 1



working length 4 side drill holes

340 mm R070-030340-204

working length 16 side drill holes

340 mm R070-030340-216

Ø 10 mm

Thoracoscope with integrated fiberoptic
for illumination, autoclaveable



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

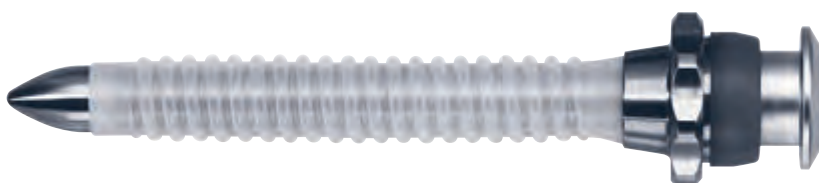
Ø 6 / 11 / 13 mm

Thorax trocar sleeve rigid,
metal tube with thread



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

Thorax trocar sleeve flexible,
plastic tube with thread, exchangeable



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

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



Serrated jaws
7 mm shaft

R119-93527-04

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



sliding shaft
10 mm, straight

R119-93527-17



sliding shaft
slim 7 mm, curved

R119-93527-16

sliding shaft
regular 10 mm, curved

R119-93527-01

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



6 mm width jaws
7 mm shaft

R119-93527-13

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



without ratchet
10 mm shaft

R119-93527-17

Working length: 11" (28 cm)
Total length: 14" (35.6 cm)



with ratchet
10 mm shaft

R119-93527-18

without ratchet
10 mm shaft

R119-93527-19

Working length: 9 1/2" (24 cm)
Total length: 13 1/2" (34 cm)



without ratchet
DeBakey Cooley jaws
10 mm shaft

R119-93527-06

with ratchet
DeBakey Cooley jaws
10 mm shaft

R119-93527-10

Working length: 9 7/8" (24.8 cm)
Total length: 14" (35.5 cm)



without ratchet
Harken #1
DeBakey jaws
10 mm shaft



R119-93527-14

without ratchet
Harken #2
DeBakey jaws
10 mm shaft



R119-93527-15

Working length: 10" (25.4 cm)
Total length: 14 1/4" (36 cm)



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

R119-93527-05



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

R119-93527-12



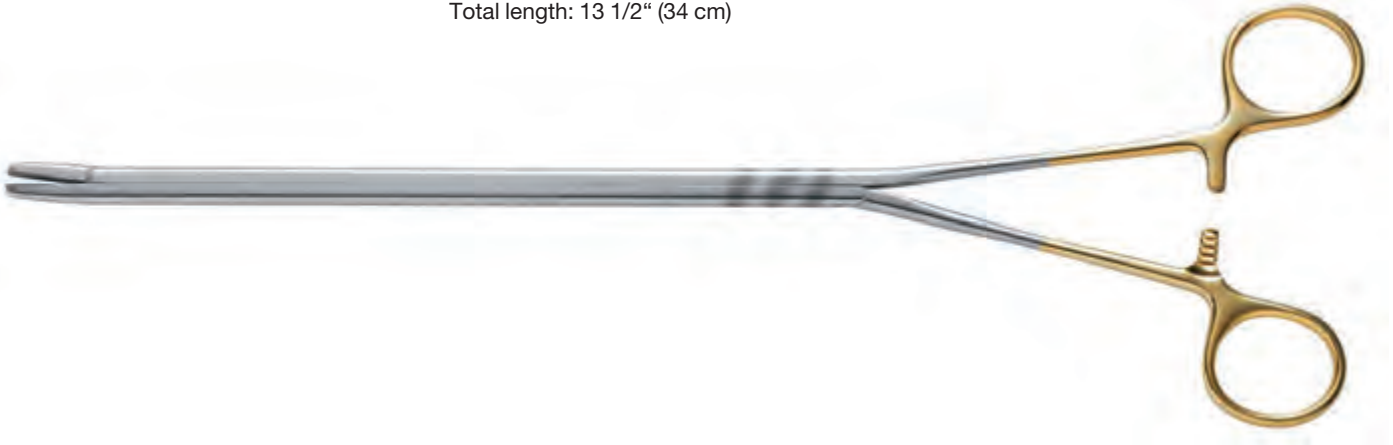
10 cm jaw length
2 x 3 DeBakey jaws
10 mm shaft

R119-93527-11

Needle Holders for 2-0 Suture

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

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



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



R119-93527-07

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



R119-93527-08

Working length: 9 1/4" (23.5 cm)
Total length: 13 1/2" (34 cm)



Duval Clamp
2.5 cm width jaws
10 mm shaft

R119-93527-16

Ø 5,0 mm

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



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

Monopolar thoracic electrode,

30° curved, with suction/irrigation channel, Electrode assembly alone without handle



	type	working length
	Ø 5 mm	330 mm
	L-hook electrode	R116-050330-103

Handles see next page



Suction-irrigation handle

1 trumpet valve with LL-adaptor

R118-000000-500



Suction-irrigation handle

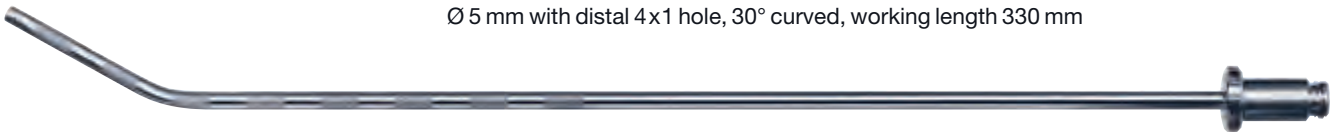
2-way-valves

R117-000000-500

Ø 5 mm

Suction-irrigation tube

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



R117-050330-504

Injection needle

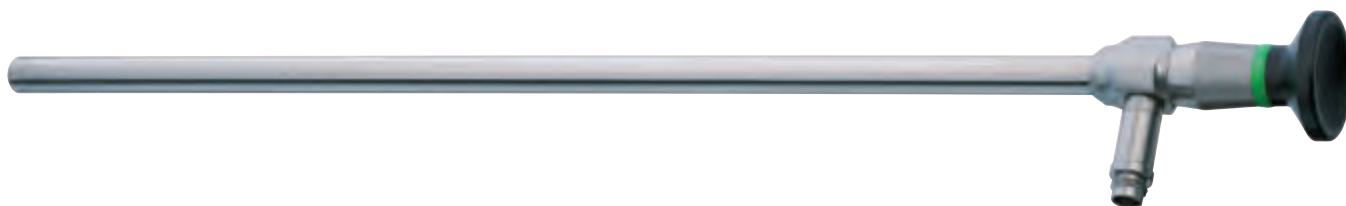
Ø 5 mm, 30° curved, working length 330 mm



R117-050330-501

Laparoscopes

with integrated fiberoptic for illumination, autoclavable



Compatibility

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

Ø	working length	direction of view	
		0°	30°
2,0 mm	260 mm	R010-020260-000	R010-020260-030
2,0 mm	302 mm	R010-020302-000	
2,7 mm	188 mm	R300-027188-000	R300-027188-030
2,7 mm	246 mm	R010-027246-000	R010-027246-030
2,7 mm	302 mm	R010-027302-000	R010-027302-030
4,0 mm	302 mm	R300-040302-000	R300-040302-030

Ø 7,0 mm

Multi function valve trocar sleeve,
metal sleeve, smooth



working length

95 mm R023-070095-001

Standard trocar



working length pyramidal

95 mm R020-070095-001

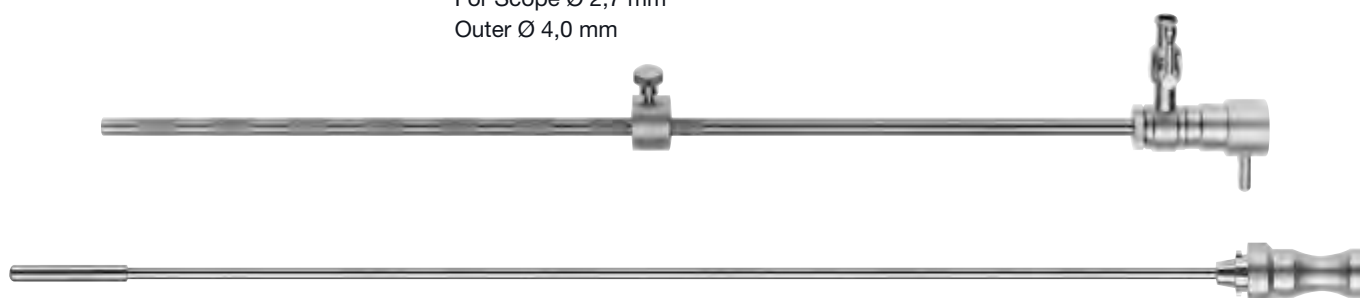


working length conical

95 mm R020-070095-002

Diagnostic Sheaths

For Scope Ø 2,7 mm
Outer Ø 4,0 mm



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

Diagnostic Sheaths

For Scope Ø 4,0 mm
Outer Ø 5,0 mm

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

Operation Sheaths with 1 Working Channel

For Scope Ø 2,7 mm

Outer Ø 5,8 mm

These sheaths have a separate Irrigation- and Working Channel



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

Operation Sheaths with 1 Working Channel

For Scope Ø 4,0 mm

Outer Ø 7,5 mm

working length	working channel	Sheath with 1 rotating stopcock	Sheath with 2 rotating stopcocks
		0° OP - Sheath	
211 mm	7 CH.	R211-075211-000	R212-075211-000
		30° OP - Sheath	
211 mm	7 CH.	R211-075211-030	R212-075211-030

Continuous-Flow-Sheaths

For Scope Ø 2,7 mm

Outer Ø 6,0

These sheaths have a separate Irrigation- and Working Channel.

The Outer Tube is detachable.



Sheath complete with 2 separate rotating stopcocks

working length	working channel	0° Continuous-Flow-Sheath
193 mm	5 CH.	R214-060193-000
30° Continuous-Flow-Sheath		
193 mm	5 CH.	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
30° Continuous-Flow-Sheath		
193 mm	7 CH.	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

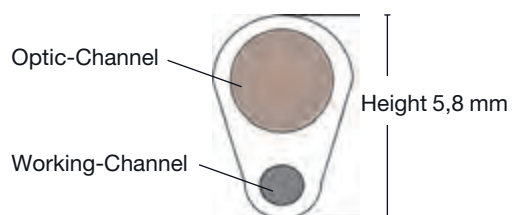
suitable for R213-050260-000

R213-050300-000

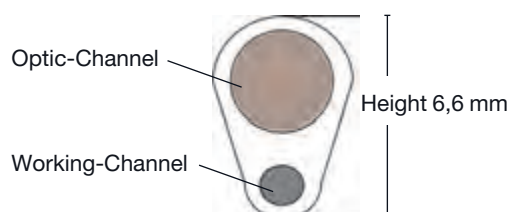
Continuous-Flow Operating Sheaths for Hysteroscopes Ø 2,7 mm and Ø 2,9 mm



working length	working channel	1 Instrument Port
228 mm	5 CH.	30° - 300 mm
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

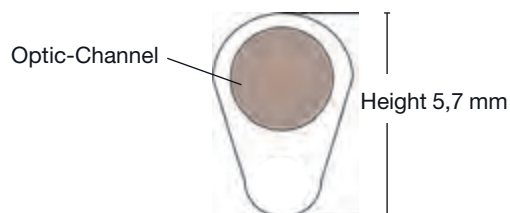
222 mm

working channel

5 CH.

30° - 300 mm

R212-035248-101



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



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



	working length	Diagnostic-Continuous-Flow-Outer Sheath, 1 stopcock, rigid	Outer Ø
	240 mm	R213-065250-030	6,5



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

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



1 Instrument Port

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



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

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



Obturator

suitable for R214-070200-030

R214-070000-000

WL 41 cm

Hysteroscopy Forceps,
 semi-rigid

Ø 5 [Char]

Ø 7 [Char]



Grasping Forceps, cup serrated

R292-017400-003

Cutting Biopsy Punch

R292-017400-002**R292-023400-002**

PE-Forceps, cup, sharp

R292-017400-001**R292-023400-001**

Alligator Forceps

R292-017400-011**R292-023400-011**

Scissors, pointed tips

R292-017400-022**R292-023400-022**

Grasping Forceps, cup serrated

R292-017400-004**R292-023400-004**

Scissors, blunt tips

R292-017400-021**R292-023400-021**

Ring Applicator

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

Position 0 = **Safety**

Position 1 = 1st ring

Position 2 = 2nd ring

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

Ø 6,0 mm

First Incision

For use with Operating-Laparoscope



working length

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

327 mm

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

170 mm **R122-250170-000**

Cone alone, Ø 19 mm, small

R122-190056-000

Cone alone, Ø 25 mm, large

R122-250056-000

Uterine Cannula alone

R122-250170-001

Manipulator alone, without cones



R122-200180-000

working length

Ø



Uterus obturator, thin, short

45 mm

3 mm

R122-030045-000



Uterus obturator, thin, long

55 mm

3 mm

R122-030055-000



Uterus obturator, medium, long

80 mm

8 mm

R122-080080-000



Uterus obturator, thick, extra long

100 mm

10 mm

R122-100100-000



Cone, with short thorn

60 mm

25 mm

R122-250060-000



Cone, with long thorn

70 mm

25 mm

R122-250070-000

Uterus Manipulator
with 6 different cones

R122-200180-199

Coagulation electrodes, flexible, monopolar
470 mm

Ball end



Ø 5 [Char]

R395-017450-001

Ø 7 [Char]

R395-023450-001

Ø 9 [Char]

R395-030450-001

Needle type



R395-017450-021

R395-023450-021

Loop



R395-023450-011

Bipolar electrodes, flexible
360 mm



Ball end



Ø 5 [Char]

R396-000360-001

Needle type



Ø 5 [Char]

R396-000360-002

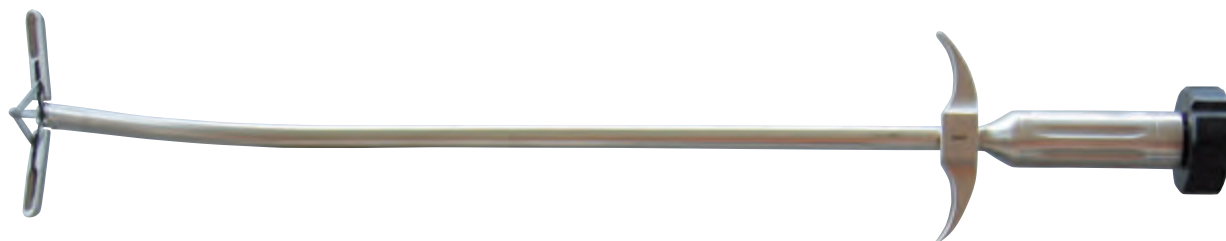
Ø 7,0 mm

Urological Instrument
for manipulation of the bladder for
perineal prostatectomy



working length

210 mm R139-070210-001 straight



working length

300 mm R139-070300-011 curved



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

Other length on request

Connector to light source



IN



R900-000000-01

Storz / Aesculap



R900-000000-03

Wolf / Henke Sass /
Dyonics / Medicon /
Comeg



R900-000000-05

ACM / British / Codman



R900-000000-07

Olympus



R900-000000-09

Pentax



R900-000000-11

Fuji



R900-000000-13

Heine-Optotechnik



R900-000000-15

Winter+IBE



R900-000000-21

MLW



R900-000000-31

Volpi / Schöilly / RFO

Endoscope-side



OUT



R900-000000-02

Storz / Winter+IBE /
Aesculap / Olympus



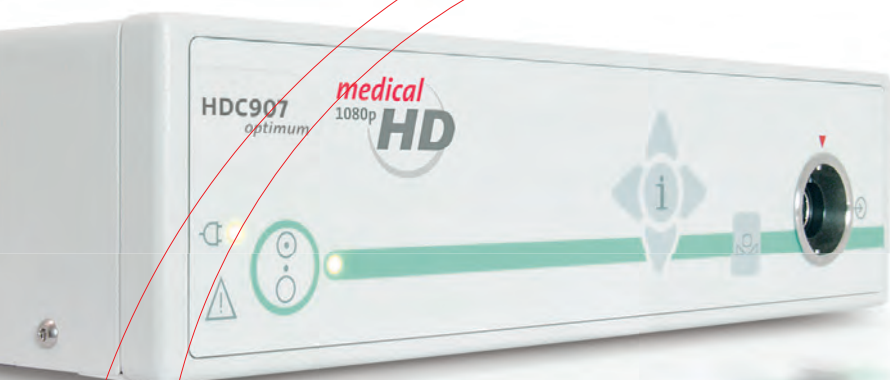
R900-000000-04

Wolf



R900-000000-06

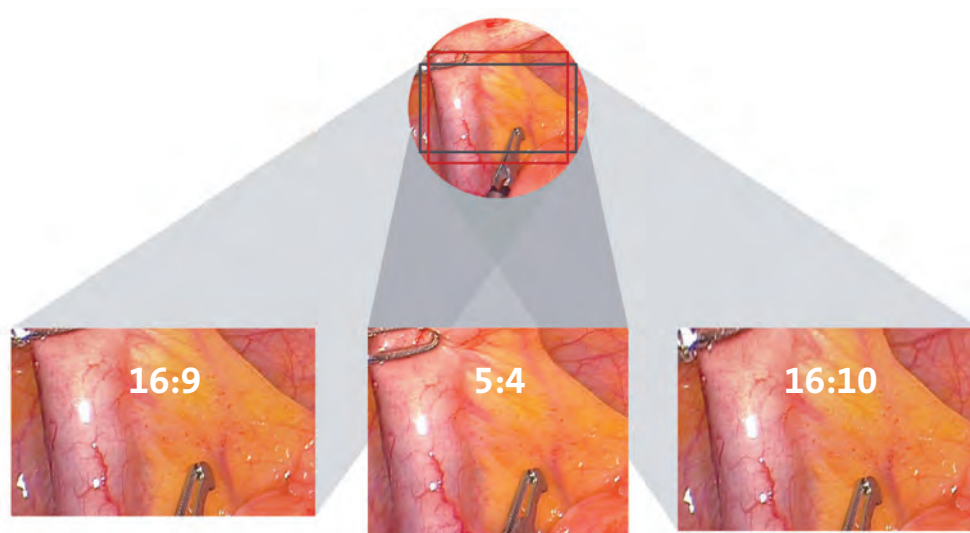
ACM / British / Codman



autoclavable

Choose your HD format

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



1080p/1080i
1920 x 1080 pixels

SXGA
1280 x 1024 pixels

WUXGA
1920 x 1200 pixels

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

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

16:10 – best format for latest medical grade monitors HD video standard WUXGA (1920 x 1200 pixels)



Further information: www.Medical-HD.com

Video modes

The HDC907*optimum* and HDC407 supports both 1080i and 1080p. **Progressive scan (p)** is a method transmitting moving images in which all the lines of each frame are drawn in sequence. Benefits of this technology are higher vertical resolution video images.

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

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



Interlace

Progressive scan

Intuitive user guidance via optimized OSD

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

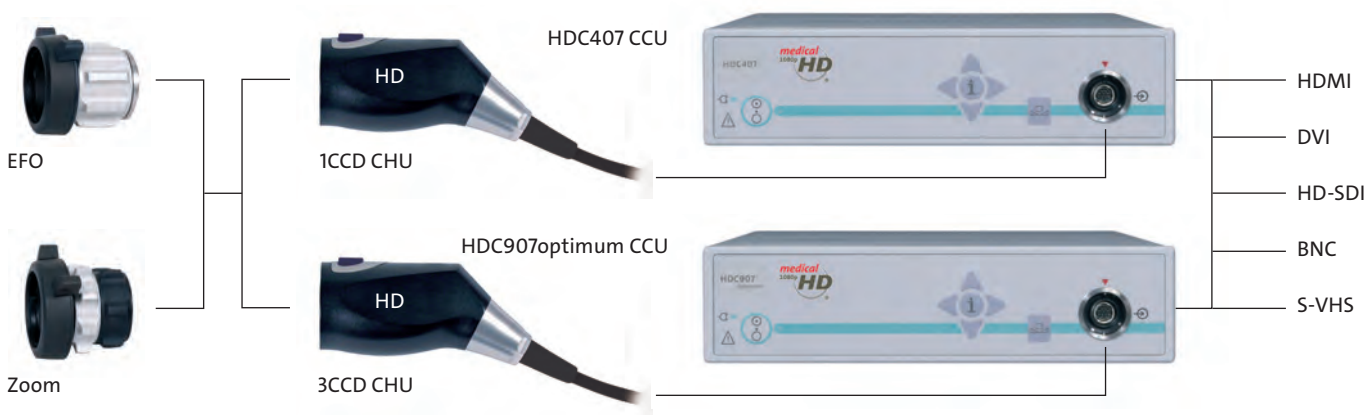
Latest output options

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



Easy to change: objective, camera head and camera cable

From input to output: the HD chain



*depends on model variation

HDC907optimum

3CCD Medical-HD® Camera

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

Devices

Item No.	Description
R920-907-N01	HDC Control unit
R920-907-P02	HDC Camera Head PAL (non autoclavable)
R920-907-N02	HDC Camera Head NTSC (non autoclavable)
R920-907-P03	HDC Camera Head PAL (autoclavable)
R920-907-N03	HDC Camera Head NTSC (autoclavable)



Videocoupler EFO

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



Videocoupler EFO

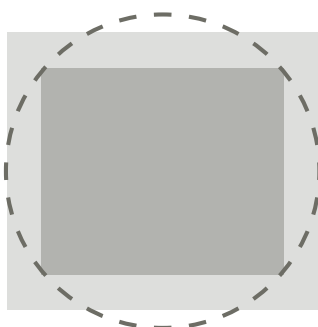
Videocoupler Zoom

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

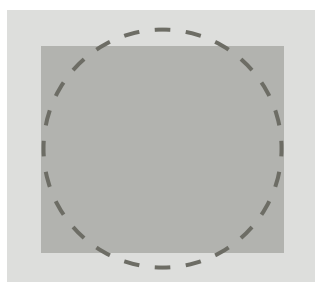


Videocoupler Zoom

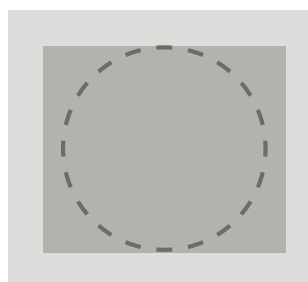
The right coupler for optimum indication settings



LAP, 25 mm



ENT, 22 mm



ARTHRO, HYS, URO, 18 mm

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

HDC407

1CCD Medical-HD® Camera

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



Devices

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

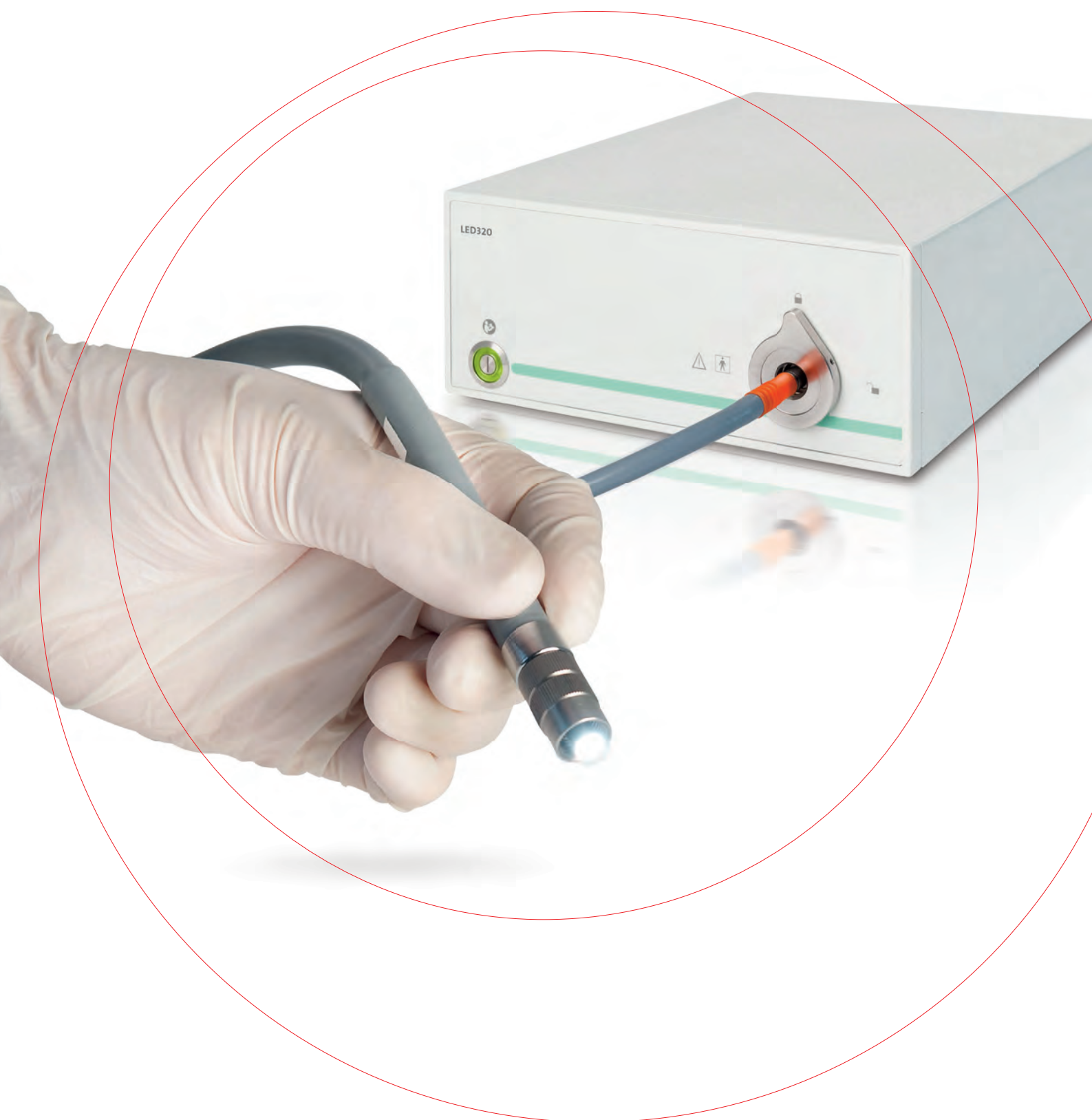
Accessories

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

Power supply cord and further accessories available upon request.



Technical Data	HDC907 <i>optimum</i>	HDC407
Camera Head Unit (CHU)	Medical-HD® 1080p 3CCD Camera Head	Medical-HD® 1080p 1CCD Camera Head
Video standards	SXGA 1280 (H) x 1024 (V), horizontal resolution 1024 lines WUXGA 1920 (H) x 1200 (V), horizontal resolution 1200 lines 1080p 1920 (H) x 1080 (V), horizontal resolution 1080 lines	
Sensitivity	1.5 lux	
Minimum illumination	3 x 0.9 lux	1 x 0.9 lux
AGC-Max	+18 dB	
Operation	2 programmable remote head keys (user defined settings with 10 variable key functions)	
Safety	Waterproofed according to IEC529, classification IPX7, completely soakable with attached EFO and camera cable (with screwed on sealing cap), Classification CF (Degree of protection against electric shock: applied part of type CF), Isolation resistance test max 500 V DC between applied part and CCU housing, autoclavable	
Dimension (w x h x l)	Ø 40 mm/1.57 in, L = 120/4.72 in (length incl. zoom and quick coupling)	
Weight	170 g/6.0 oz (incl. EFO and quick coupling) 210 g/7.4 oz (incl. zoom and quick coupling)	160 g/5.6 oz (incl. EFO and quick coupling) 200 g/7.1 oz (incl. zoom and quick coupling)
Endo focus objectives (EFO's)	Multiple lens EFO f = 18 mm, f = 22 mm (standard), f = 25 mm, Urocoupler f = 18 mm, easy focusing with focus ring to be operated from left or right	
Zoom objective	f = 16-34 mm	
Digital zoom	2 x	
Quick coupling	Fits rigid endoscopes (ocular), ISO eye piece compatible (ISO 8600-1)	
Camera cable	3 m/9.8 ft highly flexible special cable, waterproof, replaceable w/o special tools short circuit proof	
Camera Control Unit (CCU)	Digital signal process, +6 dB with interference suppression, continuous shutter: 1/50 to 1/16000 s, automatic signal amplification up to 400 %, automatic system check routine, setup menu for all settings, automatic white balance with digital long time memory. COLORAMA color adjustments, measuring areas SPOT and INTEGRAL, adjustable video	
Signal/Noise ratio	> 62 dB	
Horizontal resolution	1024 lines (SXGA), 1080 (1080i/1080p), 1200 (WUXGA)	
Operation	Easy operation with membrane key: ON/OFF, WHITE BALANCE, 3 measuring areas selectable (SPOT large/small, INTEGRAL), test pattern, video level, manual COLORAMA color fine balance	
Outputs	1x HD-DVI, 2x HDMI/1x HDMI*, 1x HD-SDI, 2x BNC (FBAS), 2x Y/C (S-VHS)	
Interfaces	PC Interface RS 232 C, Remote (3.5 mm/1/8 in stereo jack)	
Mains	Medical global power adapter 100-240 V AC +/-10 %, 50-60 Hz	
Current consumption	Max. 400 mA	
Classifications	Protection Class I, Type CF, IP 20	
Fuses	2 x 250 V, T 0.8 A	
Dimensions (w x h x d)	267 x 69 x 360 mm/10.5 x 2.7 x 14.2 in	
Weight	3.9 kg/8.6 lb	
*depends on model variation		





LED320

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

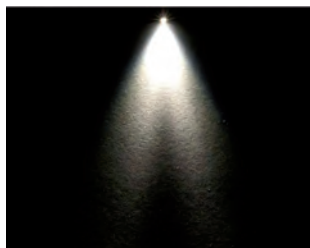
The LED320 exceeds the light output of 180 W Xenon-Light Sources without emitting UV or IR light. This leads to less heat transmission to the endoscope and reduces the risk of burning tissue. Additional advantages of the LED320 are the uniformly distributed illumination and the bright and more homogeneous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

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

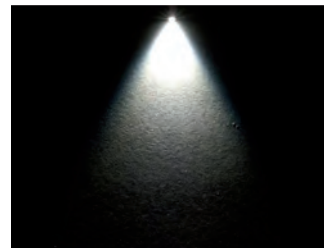
LED320 has not only reduced the need for service while increasing performance, additionally it also contributes to saving the environment as no Lead (Pb) or Mercury (Hg) is used.

LED vs. Xenon

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



180 W Xenon



LED320

High performance endoscopic LED-Light Source

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



Device

Item No.	Description
R940-LED320-N01	Light Source LED320 with multi light cable socket

Power supply cord and further accessories available upon request.

Ease of use

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



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

XL300

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

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



Devices

Item No.	Description
R940-XL300-N01	Light Source with light cable socket, Storz
R940-XL300-N03	Light Source with light cable socket, Wolf

Accessories

Part No.	Description
R900-000000-07	Adapter for light cable, Light Source, Olympus
R900-000000-01	Adapter for light cable, Light Source, Storz
R900-000000-03	Adapter for light cable, Light Source, Wolf
R900-000000-02	Adapter for light cable, endoscope, Storz/Olympus
R900-000000-04	Adapter for light cable, endoscope, Wolf
R900-000000-06	Adapter for light cable, endoscope, ACMI
R901-048230-00	Light cable, 2.3 m, Ø 4.8 mm
R901-048300-00	Light cable, 3.0 m, Ø 4.8 mm
R940-XBO-300	Replacement lamp module XL300

Power supply cord and further accessories available upon request.

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

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



A127

Pump for arthroscopy

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



Device

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

Accessories

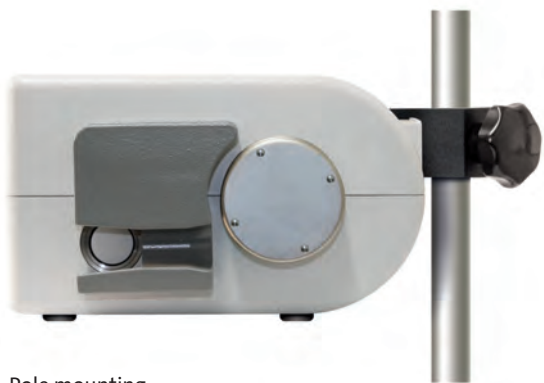
Part No.	Description
	Tube set with Spike and Luer-Lock connector male:
R960-1270-00	Disposable, only Inflow, transponder protection (1 packaging = 10 pcs.)
R960-1270-01	Reusable tube set, only inflow, 20 uses, transponder protection

Power supply cord and further accessories available upon request.

Technical Data

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

*without toggle screw



Pole mounting

A106

Pump for arthroscopy

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

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



Device

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

Accessories

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

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

Power supply cord and further accessories available upon request.

Technical Data

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

P101

Pump for laparoscopy

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



Devices

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

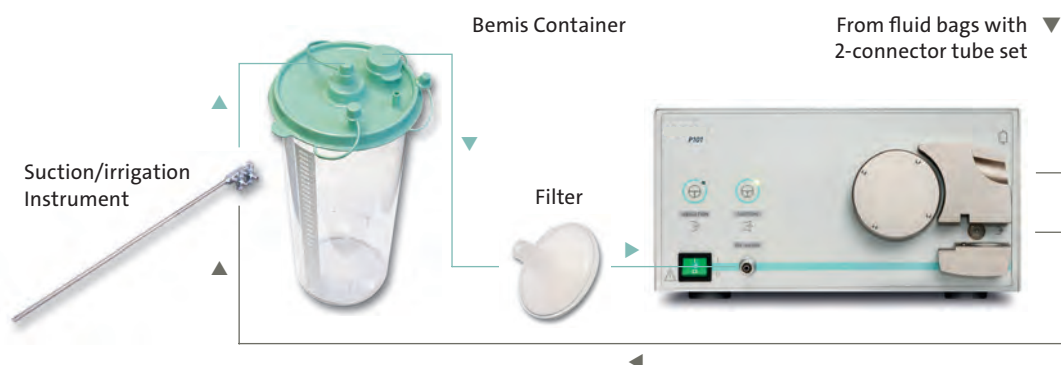
Accessories

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

Technical Data

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

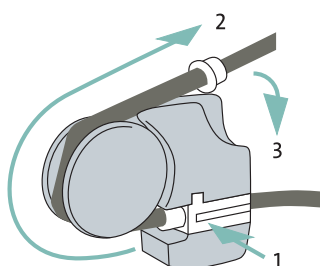
Power supply cord and further accessories available upon request.



UP100

Pump for urology

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



Easy to load tube set in three steps.

Device

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

Accessories

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

Power supply cord and further accessories available upon request.

Technical Data

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

H108

Pump for hysteroscopy

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



Device

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

Accessories

Part No.	Description
	Tube set with pressure chamber, Irrigation, with Spike and Luer-Lock connector male:
R960-0449-01	Disposable, sterile (1 packaging = 10 pcs.)
R960-1424-01	Disposable, sterile, Safe-Lock (1 packaging = 10 pcs.)
R960-0454-01	Reusable, 20 uses, incl. 10 membranes
R960-1406-01	Tube set, outflow, disposable, sterile (1 packaging = 10 pcs.)
R960-0123-01	Bottle scale
R960-0554-01	Bemis Container, 3 L, disposable (1 packaging = 2 pcs.)
R960-0555-01	Bemis Container, 3 L, disposable (1 packaging = 36 pcs.)

Power supply cord and further accessories available upon request.

Technical Data

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

HM4

Fluid Management System for hysteroscopy

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



Device

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

Accessories

Part No.	Description
	Tube set with pressure chamber, Irrigation, with Spike and Luer-Lock connector male:
R960-0449-01	Disposable, sterile (1 packaging = 10 pcs.)
R960-0454-01	Reusable, 20 uses, incl. 10 membranes
R960-1406-01	Tube set, outflow, disposable, sterile (1 packaging = 10 pcs.)
R960-0553-01	Wire Hoop for Bemis Container
R960-0554-01	Bemis Container, 3 L, disposable (1 packaging = 2 pcs.)
R960-0555-01	Bemis Container, 3 L, disposable (1 packaging = 36 pcs.)

Power supply cord and further accessories available upon request.

Technical Data

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

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



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



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

Accessories A127



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



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

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

Accessories HM4, H108, P101



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

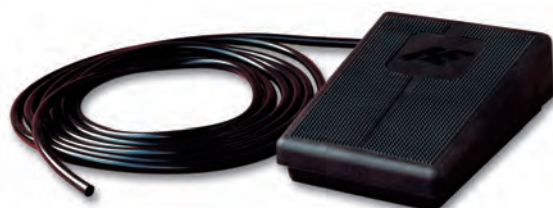


Filter, sterile
(R960-0556-01, for P101 only)

Accessories A106



Cable remote control
(R960-0545-01)



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

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

Further accessories available upon request.



F102

Insufflator for laparoscopy

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



Devices

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

Accessories

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

Technical Data

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

Power supply cord and further accessories available upon request.

Note: The use of non-medical CO₂ 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



Devices

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

Accessories

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

Technical Data

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

*with reusable heater tubing

Power supply cord and further accessories available upon request.

Tube sets and filter



Tube set, insufflation with filter,
disposable, sterile
(R930-1422-01)



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



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



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

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

Further accessories available upon request.

Gas connectors and high pressure tubes



Connector CO₂, US
(broad standard)
(R930-0175-01)



Connector CO₂, NIST for central
gas supply (EU standard)
(R930-5010-01)



Connector CO₂, DISS for central
gas supply (US standard)
(R930-5020-01)



High pressure tubing CO₂,
Bottle connection: DIN,
Device connection: US,
Length: 1.5 m
(R930-5044-01)



High pressure tubing CO₂
for central gas supply,
NIST/DIN, Length: 3 m
(R930-5030-01)

Further accessories available upon request.



Medical Monitors

The solution you are looking for

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

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

Monitor stand available upon request.



MD-32



MD-26



MD-23

Technical Data	R950-MD2311-LP23	R950-MD2611-LP26	R950-MD3211-LP32
Design	23" TFT-widescreen display	26" TFT-widescreen display	32" TFT-widescreen display
Protective pane	integrated (touchscreen/in planning*)		
Dimensions (w x h x d)	ca. 557 x 357 x 60 mm	ca. 634 x 410 x 70 mm	ca. 770 x 510 x 70 mm
Mounting	Built-in VESA-100 interface extensive mounting solutions available as accessories		
Weight	7.4 kg (without accessory)	12 kg (without accessory)	17 kg (without accessory)
Power supply unit	100-240 V/ 50-60 Hz intern 80 W		
Front keypad	ON/OFF button, six controls for OSD		
Display module			
Active area	509 x 286 mm	576 x 324 mm	698.4 x 392.9 mm
Native resolution	1920 x 1080 pixel	1920 x 1080 pixel	1920 x 1080 pixel
Brightness	250 cd/m²	350 cd/m²	400 cd/m²
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-26	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

Please note that the monitors are supplied without stand



OR Trolley

The right solution for every requirement



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

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

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

Devices

Item No.	Description
R981-6410-1	OR Trolley

Technical Data

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

Medical Imaging Made Easy™



■ Medical Video Recorder

Records from your endoscope, arthroscope, surgical camera, ultrasound, etc. Saves to a flash drive or hard drive that can be accessed from any computer on your network.

■ Intuitive Use

The simplicity in regards to connecting the device and the intuitivity of the menu allow easiest handling.

■ Medical Grade

With its steel case and fluid resistant front panel, the USB200 is built to withstand the rigors of the OR, and it's so compact it will fit on any cart.

MediCap™ USB200

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



Powerful Options compatible – versatile – affordable

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

Specifications

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

Technical data subject to modification, revision and improvement without notice

Item No. R950-12009-76