

# Product catalog

- Small Animal
- Equine
- Bovine
- Devices
- Disposables



We are changing  
veterinary endoscopy

# Welcome to Dr. Fritz!

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## Company

Dr. Fritz Endoscopes GmbH was founded in 1993 as an independent manufacturer of endoscopic equipment and is located in Tuttlingen/Southern Germany close to the heart of the Black Forest.



The company's aim is to develop and to distribute high-quality endoscopes and instruments for minimal invasive surgery with the serious ambition to produce and manufacture high-precision equipment offering both functionality and ergonomic qualities.

Surgeons and staff in practices and hospitals will benefit from instruments produced for the user, which in turn will offer better patient care. We place great emphasis on continuing research and development, offering new solutions under strict quality control.

## Quality Control

This combination of product development and quality control enables the company as an independent manufacturer to produce affordable state-of-the-art technology with quality assurance. We supply a fast and reliable service and repair system for all of our products. The staff receive both in-house training as well as external education to continue providing quality products applicable to the latest standards.

## Business Partners

Dr. Fritz GmbH has a well-established network of business partners at its disposal, covering a widespread range within the European Union and neighbouring countries as well as North and South America and the Far East.

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Dr. Fritz Endoscopes GmbH  
88637 Buchheim / Germany



## Small Animal



Endoscopes for general ambulatory use

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# Endoscope overview

## Small Animal

### ■ Otosopes / Rhinoscopes



- HD LED Endoscope wireless
- OD: 3mm
- WL: 6cm
- 90°
- Item number: 98-VCS6



- Compact Rhinoscope/Vaginoscope
- OD: 3,4x2,6mm, 8,5 Charr
- WL: 20cm
- Working channel: 1,2mm
- Luer connection, fully immersible
- Item number: TA20-3SET

### ■ Bronchoscopes



#### ▪ Video Bronchoscope

Itm.-No.:	Length	ø	Working channel	Transmission
TXBH2-36V	36cm	2,9mm	kein Arbeitskanal	Wireless
TXBH4-54V	54cm	3,9mm	1,2mm	Wireless
TXBH5-76V	75cm	5,9mm	1,8mm	Wireless

### ■ Gastroscope



#### ▪ Video Gastroscope

Itm.-No.:	Length	ø	Working channel	Transmission
TG107-8	105cm	7,9mm	2,8mm	Wireless
TG136-9	135cm	9,8mm	2,8mm	Wireless
TG176-9	165cm	9,8mm	2,8mm	Wireless

# Endoscope overview

## Small Animal

### ■ Vaginoscopes



- Compact Video Vaginoscope
  - OD: 4,9x3,6mm, 13 Charr
  - WL: 36cm
  - Working channel: 2,6mm
  - Luer connection
  - Item number: SET-GY-5VI
- Compact Video Vaginoscope
  - OD: 3,4x2,6mm, 8,5 Charr
  - WL: 20cm
  - Working channel: 1,2mm
  - Luer connection
  - Item number: TA20-3SET

### ■ Laparoscopes



- Compact Video Laparoscope
- D: 5,5mm
- EL: 27cm
- Item number: TA27-5

### ■ Arthroscopes



Itm.-No.:	ø	Length		Transmission
TA071-13	1,9mm	7cm	30°	Wireless
TA110-23	2,7mm	11cm	30°	Wireless

# Endoscope overview

## Equine

### ■ Nose, Larynx & Teeth



#### ▪ Video Sinus Endoscope

Item. No.:	Length	ø	Working channel	Transmission
TXBH4-54V	54cm	3,9mm	1,2mm	Wireless
TXBH5-76V	75cm	5,9mm	1,8mm	Wireless



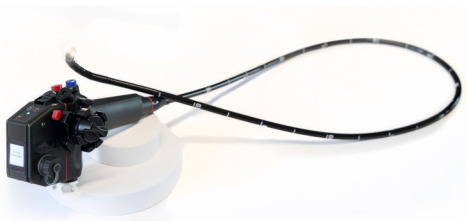
- Dentalstick HD Water Jet
- OD: 12mm
- WL: 46cm
- Field of vision 140°
- With flushing nozzle, Luer connector(fe)
- Item number: TD-92HDS

### ■ Laryngoscopes



- Trainings Laryngoscope
- OD: 13mm
- WL: 100cm
- Flushing pump
- Item number: ETL4-86SET

### ■ Bronchoscopes



#### ▪ Video Bronchoscope

Item. No.:	Length	ø	Working channel	Transmission
TG107-8	105cm	7,9mm	2,8mm	Wireless
TG136-9	135cm	9,8mm	2,8mm	Wireless
TG176-9	165cm	9,8mm	2,8mm	Wireless



# Endoscope overview

## Equine

### ■ Gastroscopes



#### ▪ Video Gastroscope

Item. No.:	Length	ø	Working channel	Transmission
TG326-12	320cm	12mm	3,2mm	Funk/HD

### ■ Laparoscopes



- Video Laparoscope
- OD: 10mm
- WL: 50cm
- Item number: TS50-10SET



- Compact Video Vaginoscope
- OD: 28mm
- WL: 52cm
- Item number: TQ52-28

### ■ Vaginoscopes



- Video Vaginoscope
- OD: 28mm
- WL: 52cm
- Item number: TQ52-28

### ■ Arthroscopy



Item. No.:	ø	Length	Transmission
TA182-43	4mm	18cm	30° Wireless

# Endoscope overview

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## Bovine

### ■ Teat Endoscopes / Theloscopes



- LED Endoscope wireless
- OD: 3,5mm
- WL: 9cm
- Item number: SET-Z6-VIS

### ■ Laparoscopes



- Video Laparoscope
- OD: 10mm
- WL: 50cm
- Item number: TS50-10E



- Video transvaginal Laparoscope
- OD: 28mm
- WL: 52cm
- Item number: TQ52-28

### ■ Vaginoscope



- Video Vaginoscope
- OD: 28mm
- WL: 52cm
- Item number: TQ52-28

Small Animal

**Dr. Fritz®**  
Wireless ■ Endoscopes

- Postrhinoscopy & Otoscopy
- Vaginoscopy
- Bronchoscopy & Gastroscopy
- Gynecology
- Arthroscopy
- Laparoscopy & Thoracoscopy



We are changing  
veterinary endoscopy

Small Animal



# Video Compact System 7

Endoscope for general ambulatory use, pets & exotic species

NEU  
VCS7



# WIRELESS Video Compact System 7

The next generation for your pet practice





# Video Compact System 7

Endoscope for general ambulatory use, pets & exotic species

- ✓ Wireless video transmission
- ✓ Independent of video tower and light source
- ✓ Without cable
- ✓ Easy handling & quick cleaning
- ✓ Integrated LED light

**NEW** ⇒ Integrated working channel Ø 1,2mm  
Ø 3,4mm & WL: 6cm

**NEW** ⇒ Chip-in-the-Tip-Technologie  
robust and unbreakable



General use for small Animal consulting rooms

- Rhinoscopy
- Laryngoscopy
- Dental endoscopy
- Otoscopy
- Vaginoscopy
- Dermoscopy
- Best compliance with the owner

## ■ Set 98-VCS7-SE

- VCS7, Ø 3,4mm, WL: 6cm, working channel Ø1,2mm
- 10" monitor receiver
- Application sheaths for ears and oral examination in pets
- Optical grasping forceps
- Flexible grasping forceps Ø1mm, WL: 16cm
- Ear curette
- Charging station, wall mount
- Antifog, cleaning brushes
- Stainless steel stand for silicone sleeves including charging station
- Inflation pump for dental and gyn





# Video Compact System 7

Endoscope for general ambulatory use, pets & exotic species

## Das Set

VCS 7

Ø 3,4mm, WL:6cm

Working channel Ø 1,2mm

Completely soakable



Stainless steel stand for  
silicone sleeves including  
charging station  
(981-VK-RA5)



Ear curette, oval, rounded end  
OD:2mm WL:14cm  
(B18-121)



Cats sheath  
OD:4,5mm, WL:6,7cm  
(98-VCS6-3)



Silicon sheath  
OD:5mm, WL:7cm  
(98-VCS6-6S)



Dental sheath  
OD:8mm, WL:7,3cm  
(98-VCS6-4)



Tongue spatula  
OD:7,3mm, WL:8cm  
(98-VCS6-5)



Laser sheath  
OD:5,4x5,0mm, WL:6,8cm  
working channel: 3,6mm  
(98-VCS6-9)



Optical grasping forceps  
(98-VCS6-8F)



Antifog  
(E-22-71)



Flexible grasping forceps  
OD: 1mm, WL:16cm  
(F10-160)



Reinigungsbürsten



(F15-181E)



(DE-5-17)

Inflation pump, small  
4L/min., max. 0,2 bar,  
incl. silicon tube  
(H150-1-1)



10" Monitor receiver  
incl. recorder & accu  
(TXM10-58R)





# Several applications

- ✓ Multi receiver capable

- ✓ Automatic radio connection, all types of endoscopes (broncho/arthroscopes/laparoscopes)



## Receiver - monitor



### TXM10-58R

10" Receiver-monitor, recorder

- mSD card slot, automatic scan, battery

### TXM7-60R

7" Receiver-monitor, recorder

- mSD card slot, automatic scan, battery

### TXL2-580M

5" Receiver-monitor, recorder

- mSD card slot, automatic scan, battery
- With arm strap



### M-LCD-22PC

21" LCD PC

- With in-built receiver and recorder

### TXL1-7-NO2

Receiver for Apple & Windows

- Incl. USB grabber



### M-LCD-21SK

21" Video monitor HD

- With in-built receiver for scopes

### TXL1-583

TV receiver for monitor

- Video-Out

### TGR-40

Multi HD radio receiver

- HDMI out



# Additional equipment

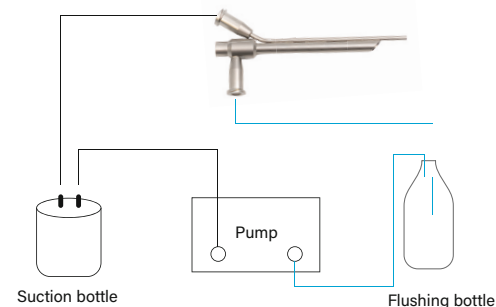
## Video Compact System 7

### Suction-/irrigation pump

For lens cleaning, inflation and suction.  
For small and large animal practice.

#### H140-3S

- Suction & irrigation pump (H140-3)
- 1 li. suction bottle (H160-AB-43)
- 1 li. flushing bottle (H160-AB-7)
- Tubes & transformer
- Sterile filter (AR-10-922)



### Optical suction & irrigation sheath

Suction & irrigation sheath  
for VCS 6  
(98-VCS6-11)



### Flexible biopsy forceps

- Ø1mm, WL:15cm
- Premium quality  
(B10-150)



### Silicon tips

Silicon tips  
Autoklavable  
20 pcs.  
(981-VK-S)



Suitable for silicon sheath  
98-VCS6-6S

### Working funnel

- Big (98-VCS6-7T)
- 9mm
- To take a swap samples (gyn)  
and large foreign body graspers



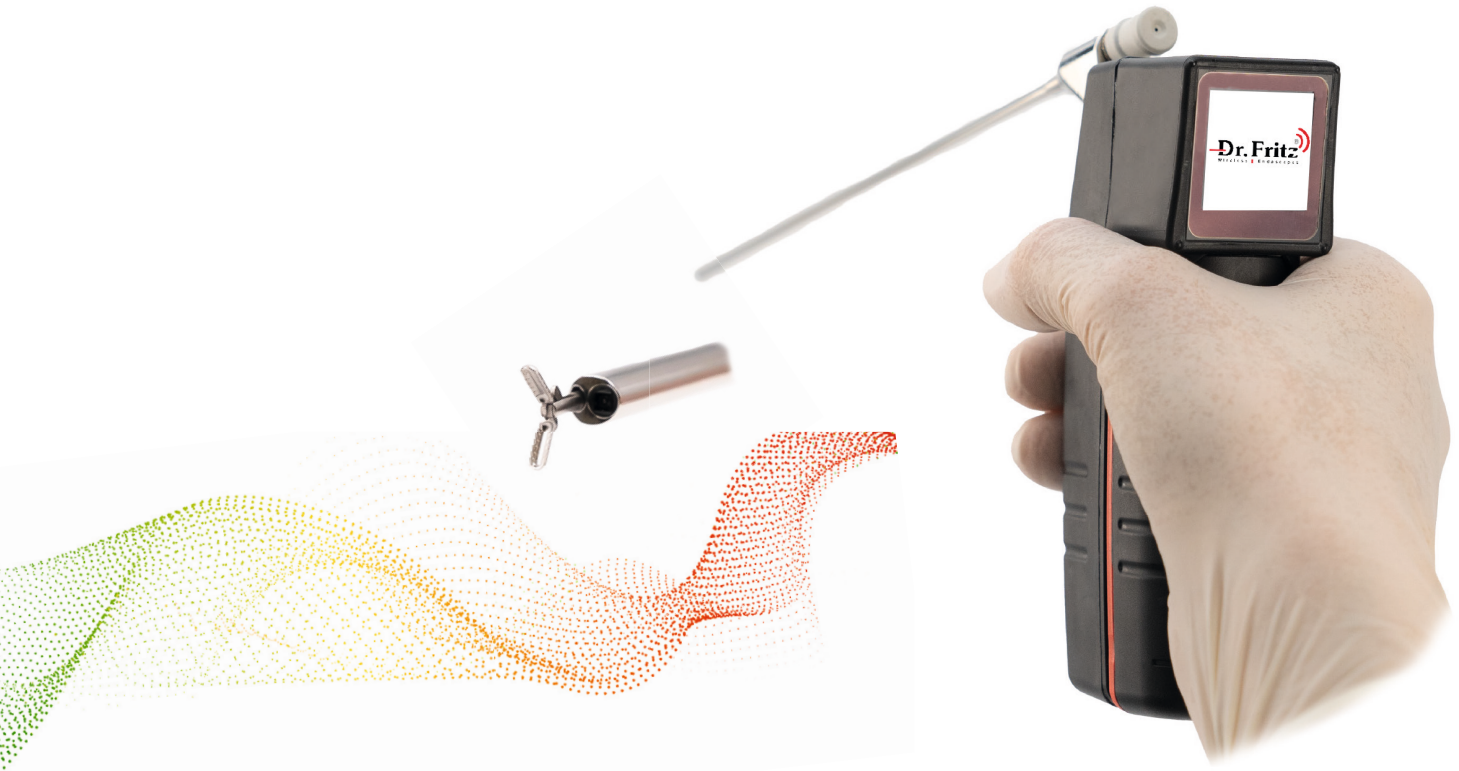


Small Animal



# Compact Rhinoscope-/Vaginoscope

Classic endoscopic equipment for pets- and small animals



## **WIRELESS** Compact Rhinoscope/ Vaginoscope

One of the smallest units with  
working channel worldwide

15 2025

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**Dr. Fritz**  
Wireless ■ Endoscopes



# Compact Rhinoscope/Vaginoscope

Classic endoscopic equipment for pets and small animals



- ✓ Battery replaceable
- ✓ Control display on the endoscope
- ✓ Integrated sender 5,8 GHz
- ✓ Integrated LED light
- ✓ Easy handling & quick cleaning
- ✓ Fully immersible



Control display



Battery replaceable

## ■ Set (TA20-3SET)

Cordless generation with exchangeable battery, in-built LED's, video camera, HD sender for video transmission & 1,5" control display.

- Compact Rhinoscope/Vaginoscope
- 2 spare batteries
- Charging station
- Charger
- Biopsy forceps
- 3 way stopcock
- Catheter, 1,0mm
- Cleaning brush
- Protection sheath
- NEW: enables circulation flushing
- 10" monitor receiver

## ▷ Several applications

see page 13

### Wireless video transmission





# Compact Rhinoscope/Vaginoscope

Classic endoscopic equipment for pets and small animals

## ■ Set (TA20-3SET)

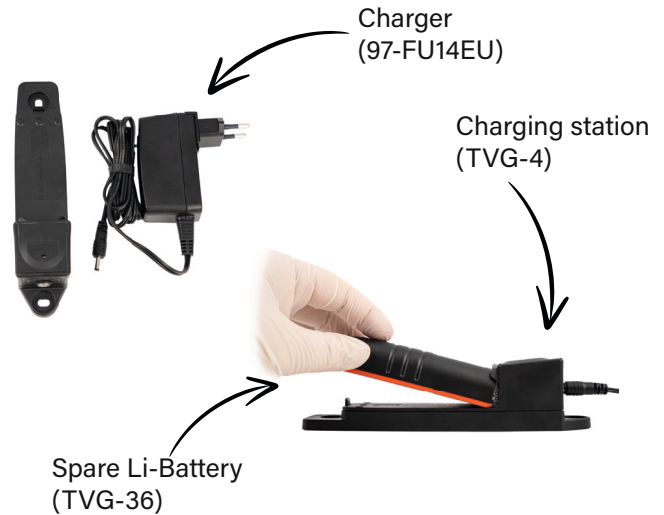
Compact Rhinoscope-/Vaginoscope  
OD: 3,4x2,6mm, 8,5 Charr  
WL: 20cm  
Working channel: 1,2mm  
Luer connection, fully immersible



Charger  
(97-FU14EU)

Charging station  
(TVG-4)

Spare Li-Battery  
(TVG-36)



Biopsy forceps  
OD: 1,0 mm  
WL: 35cm  
(B10-351)



Flushing & protection cannula  
4mm  
enables 2 way suction & irrigation  
(TV20-3SP)



Cleaning brush



3 way stopcock  
(Y-LL-1273H)



Catheter  
OD: 1,0 mm  
WL: 100cm  
(F13-102A)



10" Monitor receiver  
incl. recorder & accu  
(TXM10-58R)





# Additional equipment

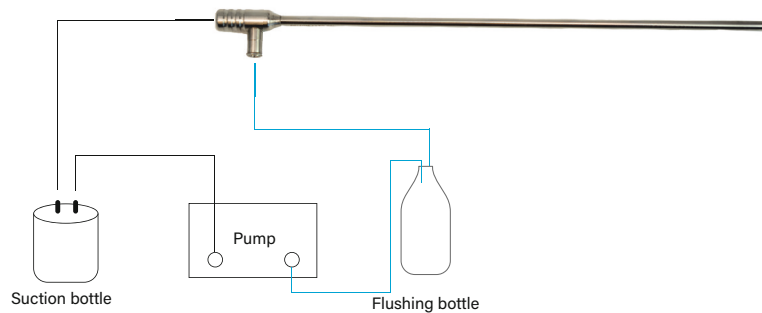
## Compact Video Rhinoscope/Vaginoscope

### Suction-/irrigation pump

#### H140-3S

- Suction & irrigation pump (H140-3)
- 1 li. suction bottle (H160-AB-43)
- 1 li. flushing bottle (H160-AB-7)
- Tubes & transformer
- Sterile filter (AR-10-922)

For lens cleaning, inflation and suction.  
For small and large animal practice.



### NEW! Post rhino video mirror

#### TA20-3P18

OD: 18mm, WL: 20cm  
With soft palate hook

Until now examination of retro pharynx was only possible for clinics and hospitals with appropriate endoscopic equipment. The newly developed video mirror system allows the general practitioners to perform retro pharyngoscopy. Grasping of foreign bodies or biopsies under visual control are possible.







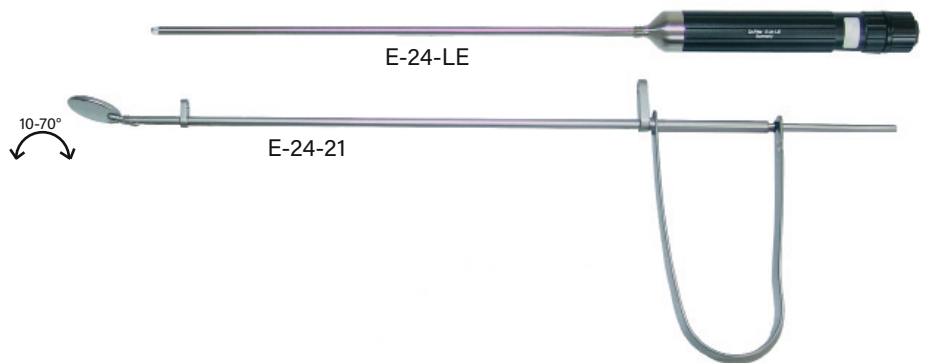
# Post rhinoscopy LED mirror system

for cats and dogs

Until now examination of retro pharynx was only possible for clinics and hospitals with appropriate endoscopic equipment. The newly developed deflecting mirror system allows the average practice to perform retro pharyngoscopy. Grasping of foreign bodies or taking biopsies under visual control are possible.



## Choanae mirror with LED light, independent of endoscopes



**E-24-LE-SET Post rhinoscopy LED set**  
consisting of:

- E-24-LE Light carrier
- E-24-21 Choanae mirror
- E-22-2 Choanae hook
- E-22-71 Antifog

## Zubehör



**E-22-2 Epiglot double hook**  
16 cm, for cats and middle sized dogs



**E-22-71 Antifog fluid**  
for endoscopes and mirrors, 50 ml

**K-3325-61 Special transportation case**  
33x25x6 cm (without picture)

Small Animal



# Video- Bronchoscope

Professional bronchoscopes



# WIRELESS Video Bronchoscope

With integrated video camera  
and LED light

20 2025

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**Dr. Fritz**<sup>®</sup>  
Wireless Endoscopes



# Video Bronchoscope

Professional bronchoscopes



- ✓ Integrated sender for wireless video transmission
- ✓ Easy handling, quick cleaning & disinfection
- ✓ Fully immersible
- ✓ Up/down controlled
- ✓ Working channel

Item No.	Length	ø	Working channel	Transmission
TXBH2-36V	36cm	2,9mm	No working channel	wireless
TXBH4-54V	54cm	3,9mm	1,2mm	wireless
TXBH5-76V	75cm	5,9mm	1,8mm	wireless

## Set TXBH4-54V

- Bronchoscope TXBH4-54
- Charger
- Cleaning brush
- Density tester
- Grasping forceps
- Storage case
- 7" Monitor receiver

## ► Several applications

see page 13



Wireless transmission





# Video Bronchoscope

## ■ Set TXBH4-54V

Bronchoscope  
OD: 3,9mm, WL: 54cm,  
Fully immersible  
(TXBH4-54)



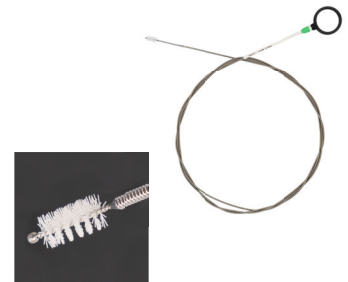
Charger  
(TV27-NET)



Grasping forceps  
(F12-811)



Cleaning brush  
(F10-1107)



Density tester  
(EF-18)



7" Monitor receiver  
(TXM7-58R)



Case  
56x41x11cm  
(K-5041-11)



Small Animal



# Video- Gastroscope

Professional gastroscopes - connection for insufflation, irrigation and suction



WIRELESS

# Video Gastroscope

- NextGen4 -



23 2025

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Wireless Endoscopes





# Video- Gastroscope

Professional gastroscopes - connection for insufflation, irrigation and suction

- ✓ Integrated sender for wireless video transmission
- ✓ Integrated video camera with LED light
- ✓ Integrated DVR
- ✓ Ergonomic body
- ✓ Easy handling, quick cleaning and disinfection

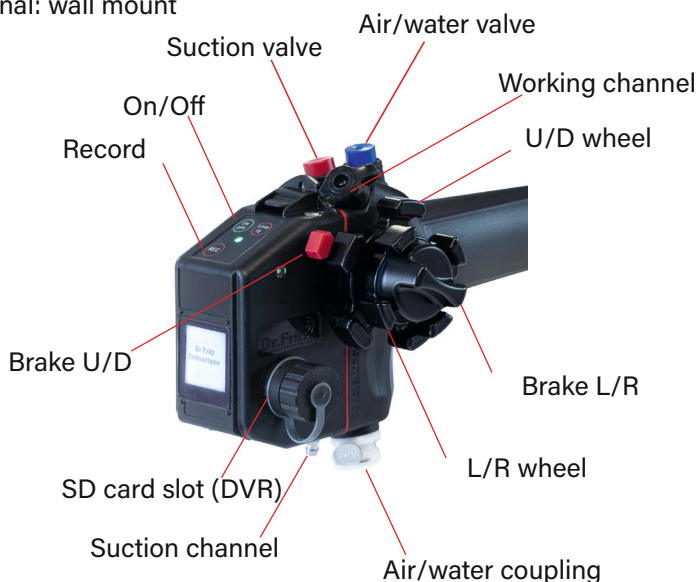
## New Generation - NextGen4

- Integrated control display
- Integrated SD card slot
- Fully soakable
- Truly mobile

Item No.	Length	Ø	Working channel	Transmission
TG107-8	105cm	7,9mm	2,8mm	Wireless
TG136-9	135cm	9,8mm	2,8mm	Wireless
TG176-9	165cm	9,8mm	2,8mm	Wireless

### Set TG136-9G

- Gastroscope TG136-9
- Charger
- Cleaning adaptors
- Cleaning brush
- Density tester
- Biopsy forceps
- 10" receiver-monitor, recorder
- Air/water pump
- Transportation case
- Optional: wall mount



### Wireless HD transmission







## ■ Set TG136-9G

Gastroscope  
OD: 9,8mm  
WL: 1,35m  
(TG136-9)



Charger  
magnetic  
(TV27-NET)



Cleaning adaptors  
(TW132-24S)



5x Cleaning brush  
(F28-280E)



Biopsy forceps  
(B23-180E)



Density tester  
(EF-23)



Air/water pump  
(TW4-250SE)



10" Receiver-monitor,  
recorder  
(TXM10-58R)



Case for NextGen4  
size: 56x41x11cm  
(K-5641-10)





# Several applications

- ✓ Multi receiver capable

- ✓ Automatic radio connection, all types of endoscopes (broncho/arthroscopes/laparoscopes)



## Receiver - monitor



### TXM10-58R

10" Receiver-monitor, recorder

- mSD card slot, automatic scan, battery

### TXM7-60R

7" Receiver-monitor, recorder

- mSD card slot, automatic scan, battery

### TXL2-580M

5" Receiver-monitor, recorder

- mSD card slot, automatic scan, battery
- With arm strap



### M-LCD-22PC

21" LCD PC

- With in-built receiver and recorder

### TXL1-7-NO2

Receiver for Apple & Windows

- Incl. USB grabber



### M-LCD-21SK

21" Video monitor HD

- With in-built receiver for scopes

### TXL1-583

TV receiver for monitor

- Video-Out

### TGR-40

Multi HD radio receiver

- HDMI out



# Additional equipment

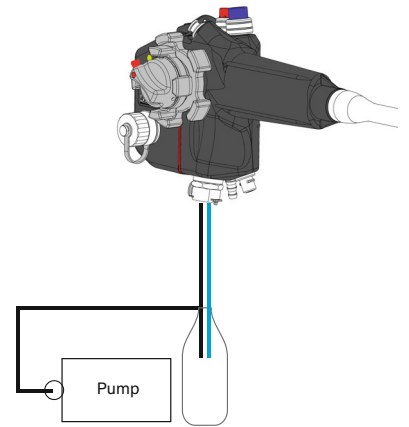
## Video Gastroscope

### Air/water pump

For lens cleaning and inflation

#### TW4-250SE

- Air/water pump (H150-1-1)
- Air/water twin tube (TW4-133)
- Fixation for bottle (TW4-261H)
- Bottle 250ml (TW4-250)

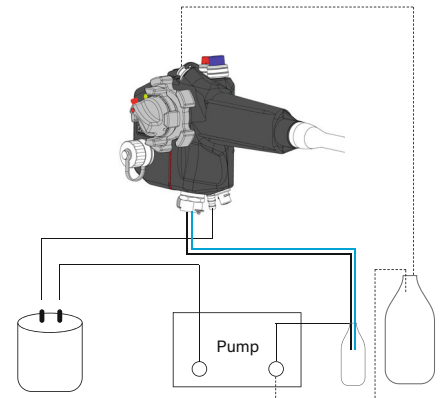


### Suction-/irrigation pump

For lens cleaning, inflation and suction.  
For small and large animal practice.

#### H140-3S

- Suction & irrigation pump (H140-3)
- 1 li. suction bottle (H160-AB-43)
- 1 li. flushing bottle (H160-AB-7)
- Tubes & transformer
- Sterile filter (AR-10-922)



### Wall mount, inductive charging

For perfect storage

#### TGX-25S

- Wall mount
- Power supply





# Additional equipment

## Video Gastroscope

### ■ Catheter, injection needle, guttural pouch probe


**F20-220**

Teflon catheter  
with luer-lock connector

- OD: 2 mm, WL: 235 cm
- autoclavable

**F20-219**

Spare catheter

- OD: 2 mm, WL: 10 m
- autoclavable

**LLW-1220**

Luer-lock connector

- Female OD: 2 mm
- Autoclavable


**F22-16045**

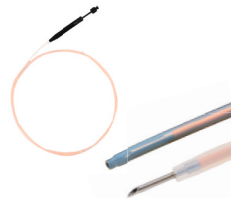
Guttural pouch probe

- OD: 2,2 mm, WL: 165 cm

**F22-22046**

Guttural pouch probe

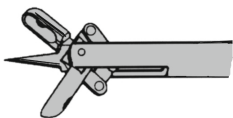
- OD: 2,2 mm, WL: 230 cm


**F231-220**

Injection needle with teflon tube,  
luer-look connector

- OD: 2,2 mm, WL: 235 cm,  
Needle: 0,9x6 mm

### ■ Biopsy-grasping forceps, hooks, brush


**B22-16011**

Biopsy forceps with spike

- OD: 2,4 mm WL: 165 cm

**B22-22011**

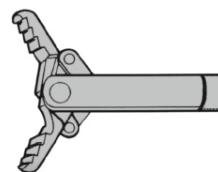
Biopsy forceps with spike

- OD: 2,4 mm WL: 230 cm

**B23-3601**

Biopsy forceps with spike

- OD: 2,3 mm WL: 360 cm


**F22-16041**

Grasping forceps

- OD: 2,2 mm WL: 160 cm

**F22-22041**

Grasping forceps

- OD: 2,2 mm WL: 230 cm

**F23-3604**

Grasping forceps

- OD: 2,3 mm WL: 360 cm


**B23-180E**

Disposable biopsy forceps  
steril

- OD: 2,3 mm WL: 180 cm

**B23-230E**

Disposable biopsy forceps  
steril

- OD: 2,3 mm WL: 230 cm


**F23-16042**

Grasping forceps  
„foreign body“

- OD: 2,3 mm WL: 160 cm

**F23-22042**

Grasping forceps  
„foreign body“

- OD: 2,3 mm WL: 235 cm



# Additional equipment

## Video Gastroscope

### FK23-1635

Basket size: 4,5 x 6cm

6 wires

- OD: 2,2mm WL: 160 cm



### FK23-1637

Basket size: 5 x 10cm

6 wires

- OD: 2,3mm WL: 160 cm

### FK23-2035

Basket size: 4,5 x 6cm

6 wires

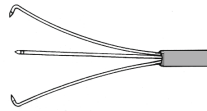
- OD: 2,3mm WL: 230 cm

### F22-16040

Grasping forceps

3 hooks

- OD: 2,2 mm WL: 165 cm



### F22-22040

Grasping forceps

3 hooks

- OD: 2,2 mm WL: 230 cm

### F28-1709

Cleaning brush

- OD: 2,6-3,5mm WL: 150 cm



### F28-2208

Cleaning brush

- OD: 2,6-3,5mm WL: 230 cm



### F28-3008

Cleaning brush

- OD: 2,6-3,5mm WL: 330 cm

### F28-280E

Disposable cleaning brush

steril, 10pcs./pack

- OD: 1,8-2,8mm WL: 210 cm

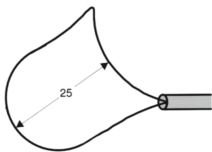


## For high frequency surgery

### SL23-2310

Asymetric polypectomy snare complete with tube, without handle

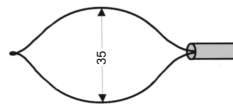
- OD: 2,2mm, WL: 230cm wide: 25mm



### SL23-1612

Symetric polypectomy snare complete with tube, without handle

- OD: 2,2mm, WL: 165cm wide: 35mm



### SL23-2312

Symetric polypectomy snare complete with tube, without handle

- OD: 2,2mm, WL: 220cm wide: 35mm

### HF22-1601

Suction-coagulation electrode monopolar, luer-lock connector

- OD: 2,2 mm, WL: 165 cm



### HF-301-ER

HF- connecting cord

monopolar, com. to Erbe units 4mm

- Lenght: 3 m



### HF22-2301

Suction-coagulation electrode monopolar, luer-lock connector

- OD: 2,2 mm, WL: 235 cm

### HS11-1200

Handle for polypectom, HF snares

- standard connections







# Additional equipment

## Video Gastroscope

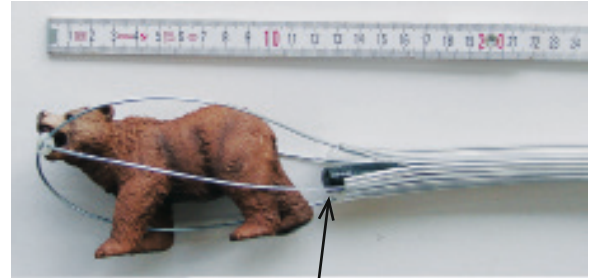
### ■ Brugman's foreign body catcher

for removing of foreign bodies  
compatible to gastroscopes

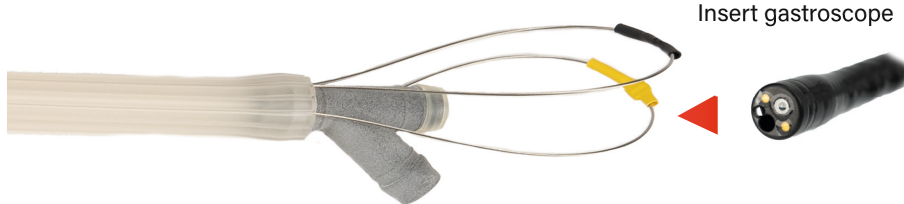
**FK-15-90 Brugman's foreign body catcher, short**  
90cm, OD:24mm, single use, 1 piece

**FK-15-135 Brugman's foreign body catcher, long**  
135cm, OD:24mm, ID:15mm, 1 piece

compatible to gastroscopes  
different manufacturers with OD <13mm



Gastroscope



\* patent pending

- Attention: disposable product  
return shipment not accepted.

**X-46-00 Foreign body protection cap**  
for gastroscopes Ø 9-11 mm





# Additional equipment

## Video Gastroscope

### ■ For rigid and flexible endoscopes

**DE-10-702 Dr. Fritz enzymatic cleaning flex,**  
1,5%, 1 litre, 7 enzymes, 0,5%,  
for daily manual and automated cleaning



**DE-10-300 Disinfection solution ,**  
for flexible and rigid endoscopes.  
for manual and automated use,  
1-3% dilutions, 5 litres

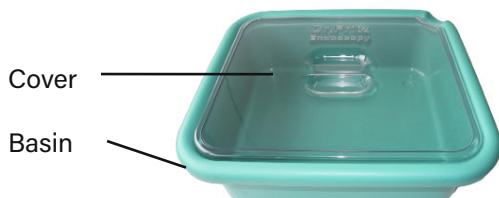


### ■ Option for cleaning of flexible endoscopes in the field

#### Disinfection-, transportation & storage basin

for flexible endoscopes

- For manual & semi-automatic cleaning
- Can also be used for cleaning machines
- Favourable
- For all endoscope types
- Can be integrated as a drawer
- With air vent
- Stackable



Stackable



**DE-17-44S** Basin for cleaning, transportation and  
storage for flexible endoscopes  
50x44x16 cm,

consisting of:  
Basin (DE-17-44)  
Cover, transparent (DE-17-41)



# NEW!

# Video hook grasper

The first video foreign body forceps for small and large patients

- For large item retrieval
- Rounded and self closing jaws
- Distal end curved
- Easy connectable to any video monitor
- Luer air connection



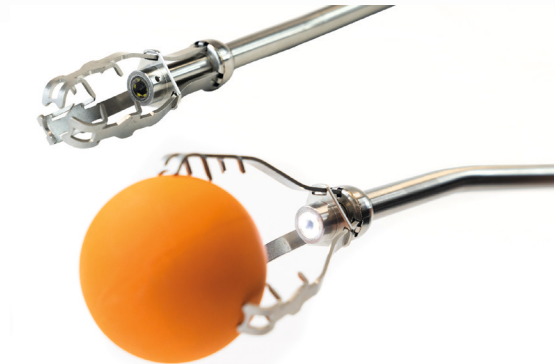
## Video 3-hook grasper set, large

**FK106-21S**

- Ø 22mm, WL: 1,1m
- 3m video-/power cable & power adapter (110-230VAC;50/60Hz)
- Video cable with cinch
- Not soakable

### Set consisting of:

- Video 3-hook grasper (FK106-21)
- Inflation pump (H150-1-1)
- 7" monitor with accu (TXM7-59A)



## Video 2-hook grasper set, small

**FK187-19S**

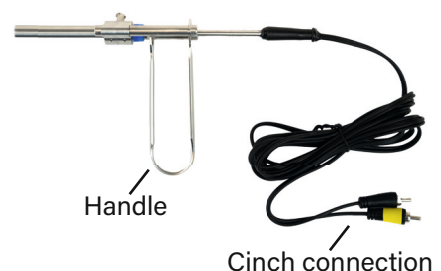
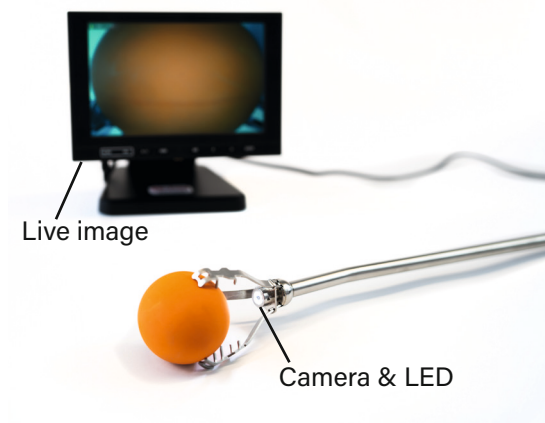
- Ø 25x19mm, 65 Charr, WL: 87cm
- 3m video-/power cable & power adapter (110-230VAC;50/60Hz)
- Video cable with cinch
- Not soakable

### Set consisting of:

- Video 2-hook grasper (FK187-19)
- Inflation pump (H150-1-1)
- 7" monitor with accu (TXM7-59A)



## Video hook grasper also available individually



Small Animal



# Compact Video-Vaginoscope TCI

Set universal for all dog sizes - transcervical insemination acc. to Blendingner



WIRELESS

# Compact Video-Vaginoscope

Special TCI system for transcervical  
insemination acc. to Blendingner



# Compact Video-Vaginoscope TCI

Set universal for all dog sizes - transcervical insemination acc. to Blendingner



- ✓ Battery replaceable
- ✓ Control display on the endoscope
- ✓ Integrated sender 5,8 GHz
- ✓ Integrated LED light
- ✓ Easy handling & quick cleaning
- ✓ Fully immersible



Control display



Battery replaceable

Compact Video-Vaginoscope & special TCI system for transcervical insemination, acc. to Blendingner, 36cm micro endoscope with integrated video camera and LED light and wireless video transmission.

## ■ Set (SET-GY-5VI)

- Compact Video-Vaginoscope
- 2 spare batteries
- Charging station
- Charger
- Sheath D:7mm
- Sheath D: 13mm
- Protection sheath
- 3 way stopcock
- Silicon cap
- Catheter, 1,6mm
- Cleaning brush
- 10" monitor receiver

## ▷ Several applications

see page 13

### Wireless video transmission







# Compact Video-Vaginoscope TCI

Set universal for all dog sizes - transcervical insemination acc. to Blenderg

## Set

Compact Video-Vaginoskop (TA36-4-3)  
OD: 4,9 mm x 3,6mm, 13 Charr  
WL: 36cm  
Working channel: 2,6mm  
Battery replaceable



Charger  
(97-FU14EU)



Charging station  
(TVG-4)



Sheath for vaginostopy  
OD:7mm, 29cm  
(TA36-45S)



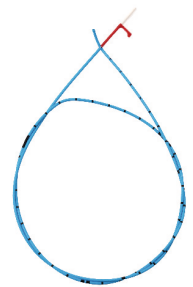
Sheath for vaginostopy  
OD:13mm, 30cm  
(TA36-49S)



3 way stopcock  
(Y-LL-1273H)



Special catheter  
OD: 1,6 mm, WL: 69cm  
Angled tip, olive end  
(F12-69)



10" Monitor receiver  
incl. recorder & accu  
(TXM10-58R)



Cleaning brush  
OD: 2,0 mm  
WL: 115cm  
(F20-181E)



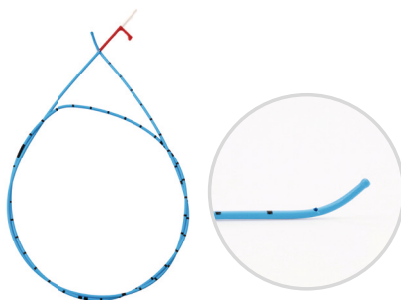


# Accessories

## Video Vaginoscope

Special catheter  
OD: 1,3 mm, WL: 69cm  
angled tip, olive end  
(F11-69)

Special catheter  
OD: 1,6 mm, WL: 69cm  
angled tip, olive end  
(F12-69)



Special catheter for insemination  
OD: 1,6 mm, WL: 50cm  
straight end, connection LL(f)  
(F16-50)



Flexible biopsy forceps  
OD: 2 mm, WL: 35cm  
(B18-33)



Three way stopcock  
plastic, disposable, non steril  
Package of 10 pieces  
(LL-1273H)



One way stopcock  
plastic, disposable, non steril  
Package of 10 pieces  
(LL-1271H)



Sealing cap for working channel  
opening 1mm,  
Package of 5 pieces  
(TR-60-1D)



Transportation case for vaginoscope  
without picture  
(K-3325-62)



# Gynecology, Vaginoscopy & AI

Rigid endoscopes for medium and large dogs

## ■ Video Vaginoscope with sheath



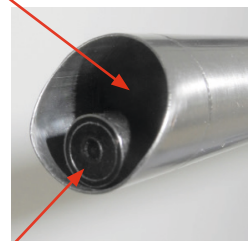
### TV27-5SET

**Video Vaginoscope/Laparoscope**  
0°, OD: 5mm, WL: 27cm,  
cordless generation with exchangeable battery,  
with LED light, 5,8 Ghz

#### Consisting of:

- Compact Vaginoscope/Laparoscope (TA27-5)
- Charging station (TVG-4)
- 2x battery (TVG-36)
- Outer sheath 12mm (STV27-51)  
working channel: 5,6mm, WL: 27cm
- Vaginoscope sheath (STV27-5V)
- Small air pump (H150-1-1)
- Power adapter (TV27-NET)
- 10" Receiver monitor (TXM10-58R)

Working channel



LED light

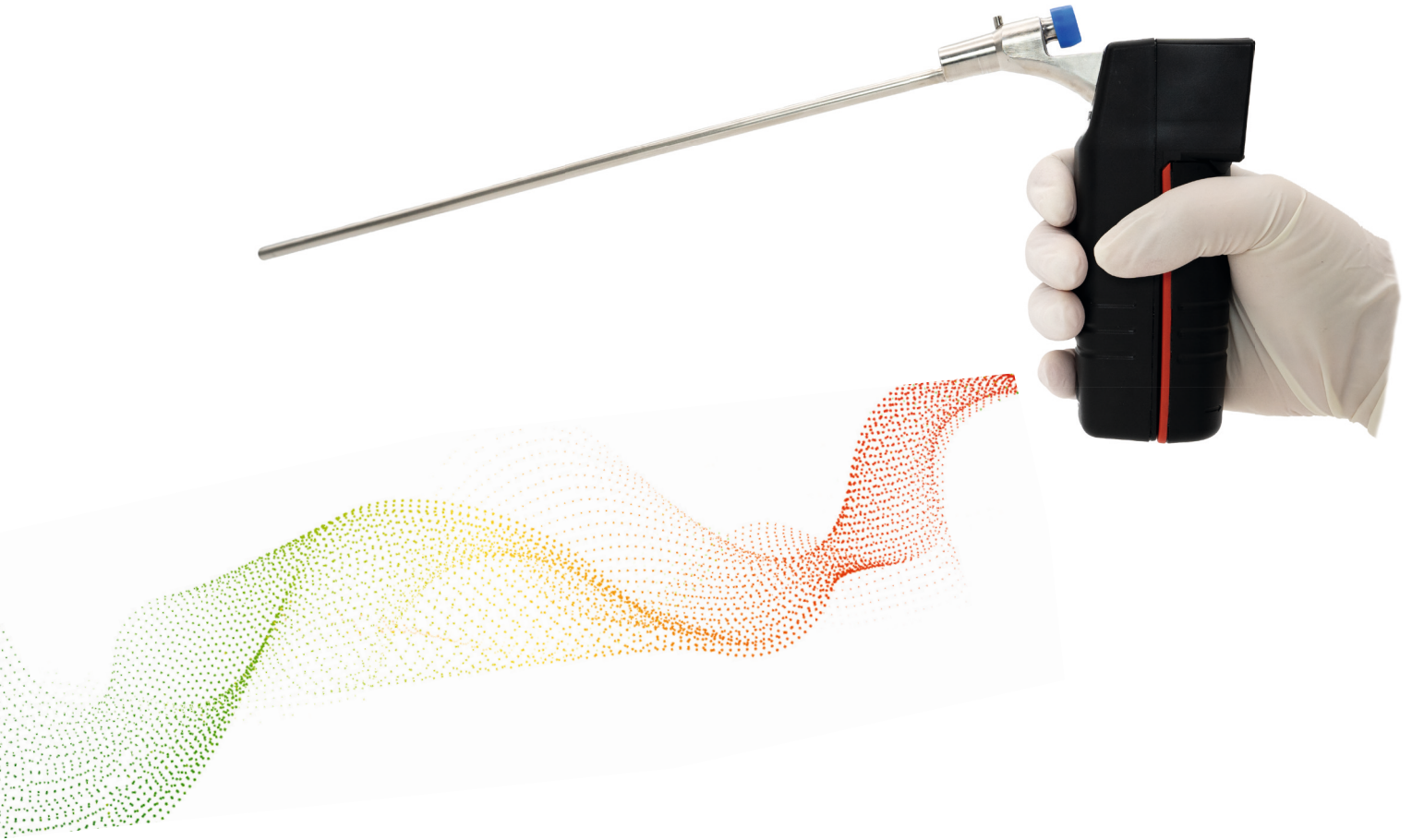


Small Animal



# Laparoscopy / Thoracoscopy

Endoscopes and instruments for minimally invasive surgery



## **WIRELESS** Video-Laparoscope

for small animals



# Laparoscopy / Thoracoscopy

Telescopes for diagnostic and surgery

## ■ Video Laparoscope, wireless



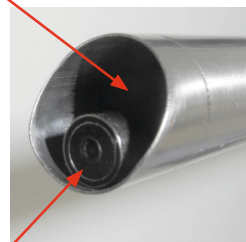
### TV27-5SET

**Video Laparoscope/ Vaginoscope**  
**0°, OD: 5mm, WL: 27cm,**  
**cordless generation with exchangeable battery,**  
**with LED light, 5,8 Ghz**

#### Consisting of:

- Compact Vaginoscope/Laparoscope (TA27-5)
- Charging station (TVG-4)
- 2x battery (TVG-36)
- Outer sheath 12mm (STV27-51)  
     working channel: 5,6mm, WL: 27cm
- Vaginoscope sheath (STV27-5V)
- Small air pump (H150-1-1)
- Power adapter (TV27-NET)
- 10" Receiver monitor (TXM10-58R)

Working channel



LED light







# Laparoscopy / Thoracoscopy

Trocar cannulas with magnetic valve, safety trocars

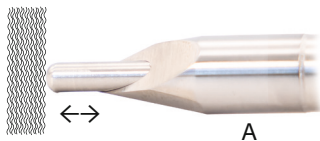
Trocar cannulas are designed with different types of valves to reduce or to avoid CO<sub>2</sub> loss when changing instruments and telescope during laparoscopy and thoracoscopy. Our reusable and patented magnetic valve trocar system has several advantages compared to other valve types. First of all they are light in weight and because of the valve construction, the insertion of instruments and scopes will pass smoothly through with out scratching or touching the front lens like in a ball system or in a so called automatic valve system. In addition there is nearly no gas loss even when changing instruments. There are no mechanical parts to clean inside except the magnetic flap itself which is a great help to your staff.

## Inner diameter 5,5mm

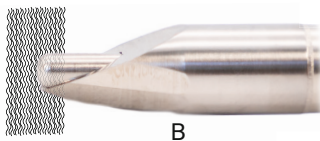
for standard 5mm instruments

- 231-213V** Cannula only with magnetic valve, ID: 5,5 mm, 7 cm, stainless steel, stopcock, 40 g
- 231-212V** Cannula only with magnetic valve, ID: 5,5 mm, 7 cm, 30 g (without picture)
- 231-137V** Safety trocar only "Cavi Safe" cork screw handles, compatible with cannulas ID: 5,5 mm, WL: 7 cm, fully dismantable
- 231-105V** Trocar only with sharp tip, compatible with Canully only ID: 5,5 mm, WL: 7 cm (without picture)

- Light in weight
- Ideal for small animals

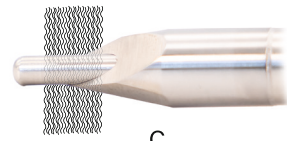


A

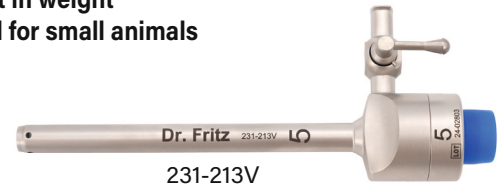


B

Tissue pressure exposes the sharp tip



C



231-213V



231-137V

Safety trocar

## Inner diameter 10mm

for telescopes and 10,, instruments

- 230-212V** Cannula only with magnetic valve, ID:10 mm,WL: 7 cm, inflation stopcock, 55 g
- 230-213V** Cannula only with magnetic valve, ID: 10 mm, WL: 7 cm, 45 g, (without picture)
- 230-137V** Saftey trocar only with cork screw handles, compatible to cannulas ID: 10 mm, WL: 7 cm, fully dismantable
- 230-105V** Trocar only with pyramidal tip for cannulas ID: 10 mm, NL: 7 cm



230-137V



230-212V



230-105V

## Inner diameter 13mm

for telescopes and 13mm instruments

- 637-232** Cannula only with magnetic valve, ID:13 mm, WL: 10 cm, inflation stopcock, Trinox
- 237-173** Canulla only with pyramidal tip for cannulas ID: 13 mm, WL: 10 cm



637-232

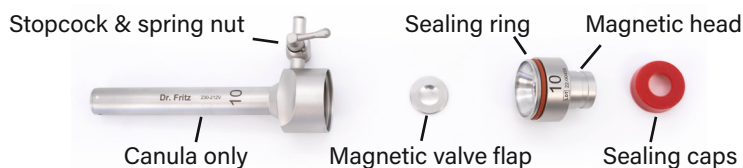
















237-173



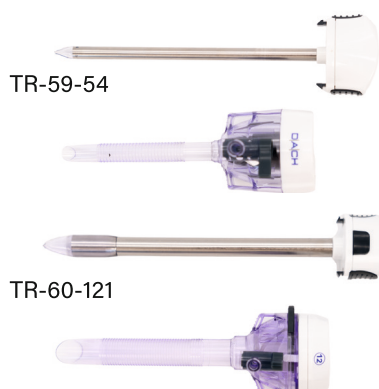
# Laparoscopy / Thoracoscopy

Accessories, Trocar disposable



<b>231-211</b> <b>Sealing caps</b> for Ø 5,5mm, blue Package of 10 pieces		<b>631-901</b> <b>Magnetic valve body</b> , Ø 5mm With Magnetic Head-/valve flap & sealing caps	
<b>234-211</b> <b>Sealing caps</b> for Ø 8mm, white Package of 10 pieces		<b>634-901</b> <b>Magnetic valve body</b> , Ø 8mm With Magnetic Head-/valve flap & sealing caps	
<b>230-211</b> <b>Sealing caps</b> for Ø 10mm, red Package of 10 pieces		<b>630-901</b> <b>Magnetic valve body</b> , Ø 10mm With Magnetic Head-/valve flap & sealing caps	
<b>231-215</b> <b>Magnetic valve flap</b> for Ø 5,5mm cannulas Package of 2 pieces		<b>630-902</b> <b>Spare stopcock</b> Complete with spring nut	
<b>230-215</b> <b>Magnetic valve flap</b> for Ø 8/10/11/12/13 mm cannulas Package of 2 pieces		<b>630-903</b> <b>Spare spring nut</b>	
<b>236-217</b> <b>Sealing ring for Trinox trocar cannulas</b> for Ø 3,5mm & 5,5mm Package of 5 pieces		<b>230-217</b> <b>Sealing ring for Trinox trocar cannulas</b> for Ø 8, 10, 11, 12, 13mm Package of 5 pieces	
<b>230-505</b> <b>Snap reducer</b> for cannulas from Ø 10mm to 5,5mm		<b>237-510</b> <b>Snap reducer</b> for cannulas from Ø 13mm to 10mm	

## Trocar disposable 5,5mm & 12,5mm



**TR-59-54**    **Trocar disposable**, ID: 5,5mm, WL: 7 cm, with spike, LL(f), inflation stopcock, package of 8 pieces

**TR-60-121**    **Trocar disposable**, ID: 12,5mm, WL: 10cm, with optical spike, no blade, 12-8/-5 mm, LL(f) inflation stopcock, package of 6 pieces



# Laparoscopy / Thoracoscopy

## Palpation and Puncture

### Laparoscopy first puncture needle

**L-19-100 Veress needle**  
OD: 2,1 mm, 10 cm, LL(f)



L-218



L-210



L-218R



**Injection cannula**



**Injection system and probe**

**L-210 Injection cannula**  
thin, 1x26 mm, 2 pieces

**L-33-210 Injection system and probe**  
5 mm, 33 cm, protected interchangeable needle, consisting of:

**L-218 Injection cannula**  
large, 1,9x26 mm, 2 pieces

L-33 Inside tube, LL, connector

L-33-2 Outer tube/probe

L-210 Needle, 1 piece (1x26mm)

**L-218R Injection cannula**  
rounded, 1,9x28 mm, 2 pieces

### Mini instrument for two portal technique in laparoscopy, 2,4mm

**L-24-23 Needle with mini grasping forceps**  
OD: 2,4 mm, WL: 23 cm





# Laparoscopy / Thoracoscopy

Standard instruments, 5mm

We are currently optimizing our 5 mm instruments for you.  
Individual components may be available upon request — feel free to contact us!

H 01/H 05

## Plastic handles

- With or without lock
- HF connector
- Colour coding for scissors



- Long life span
- Compatible to 5mm trocar cannulas

## Tubular sheaths

- 5 mm Ø
- Different working lengths
- Rotatable through 360°  
oder feststehend
- Insulated



Each jaw insert and outer sheath can be used with any type of handle.

## Complete instruments, fully dismantable

### Scissors

- 531.04H05V**    **Hook scissors**, 5mm, 33cm, single action jaws, insulated, rotatable, dismantable, high quality, consisting of:  
jaws insert (53M04), sheath (53 R 1)  
handle (H05), color code:white



### Biopsy forceps

- 531.61H01V**    **Biopsy forceps**, 5mm, 33cm, double action jaws, dismantable, consisting of:  
jaws insert (53M60), sheath (53R1)  
handle (H01), color code:black





# Laparoscopy / Thoracoscopy

Standard instruments, 5mm

**We are currently optimizing our 5 mm instruments for you.  
Individual components may be available upon request — feel free to contact us!**

## ■ Universal dissection forceps

**531.40H01V Dissection forceps (Maryland) Ø 5 mm, WL: 33 cm**  
curved, insulated, rotatable, dismantable,  
consisting of:  
jaws insert (53M40), sheath (53R1)  
handle (H01) colour code: black



**Dissecting forceps, strong Ø 5mm, WL: 33cm**  
curved, for use with 8 & 10mm trocars  
consisting of:  
jaws insert (53M37), sheath (53R1)  
handle (H01) colour code: black



**531.22H01V Grasping forceps, universal Ø 5 mm, WL: 33 cm**  
insulated, rotatable, zerlegbar, dismantable  
consisting of:  
jaws insert (53M22), sheath (53R1)  
handle (H01) colour code: black



**Bowel grasping forceps Ø 5 mm, WL: 33 cm**  
insulated, rotatable, zerlegbar, dismantable  
consisting of:  
jaws insert (53M36), sheath (53R1)  
handle (H01) colour code: black



**Grasping forceps insert Ø 5 mm, WL: 33 cm**  
front hooks  
consisting of:  
jaws insert (53M24), sheath (53R1)  
handle (H01) colour code: black



**Atraumatic grasper Taccun, Ø 5 mm, WL: 33 cm**  
insulated, rotatable, zerlegbar, dismantable  
consisting of:  
jaws insert (53M25), sheath (53R1)  
handle (H01) colour code: black



**DeBakey grasping forceps Ø 5mm, WL: 33cm**  
consisting of:  
jaws insert (53M35), sheath (53R1)  
handle (H01) colour code: black







# Laparoscopy / Thoracoscopy

## Palpation

### Knot tier and cutter



**L-19-534**

**Knot tier**, standard version,  
OD: 5 mm, WL: 29 cm, easy filling,  
suture size up to 1metric

Easy handling, easy to tighten, additional cutting

### Needle holders

Axial handle, ergonomic, stable, O D: 5mm

- Easy Clean System
- Needle self positioning



**L-19-561**

**Needle holder, straight**  
Ø 5mm, WL: 22cm, axial handle  
LL cleaning connector



**L-19-563**

**Needle holder, angled upwards**  
Ø 5mm, WL: 22cm, axial handle  
LL cleaning connector





# Special devices - High Frequency Surgery

High frequency unit, High speed, Typ Atom

High frequency unit, High speed - with vessel sealing technique. Parallel usage of all outputs.

- Adapter for instruments other manufacturers on request

- uncomplicated use
- up to date safety regulation
- vessel sealing with confirmation signal
- compatible to all instruments on the market
- program via Touch Screen
- SDS self detecting system

**Vessel Sealing**



**HF-401-TH** HF/Radio frequency unit, High End Thermo Stapling (vessel sealing), touch-screen programmable, latest mono & bipolar technique SDS - self detecting system incl. high speed vessel sealing delivery without accessories, 400W, 230VAC, 50/60Hz

## Specifications:

<b>Monopolar</b>	Cutting	400 W
	Coagulation	200 W
	Soft/Forced	+ / +
<b>Bipolar</b>	Cutting	400 W
	Coagulation	200 W
	Auto Start/Stop	+ / +
<b>Bipolar</b>	Thermo-Stapling	+ 300 W
	Thermo sealing	+
	Auto Stop	+
<b>Weight</b>	7 kg	
<b>max. power</b>		420 W



# Special devices - Inflator

**CO<sub>2</sub> Inflator, electronically monitored**

- small and large animal
- reusable tubing
- bacterial filter
- economical



**741-025V CO<sub>2</sub> Inflator, electronically monitored,**  
max. 20 litre, complete without bottle  
automatic pressure reduction system,  
DIN gas connection type,  
115-230 VAC, 50-60Hz,  
DIN IEC 601/1, DIN VDE 871

## Accessories



**741-009-1 Spare Silicon tube, 3m, for CO<sub>2</sub> inflation,**  
incl. connector, autoclavable

**741-009-FF Sterile filter system for CO<sub>2</sub> -inflator**  
disposable, box with 50 pcs.  
medical connection D:22mm

**741-002 CO<sub>2</sub> high pressure tube, 1m**  
DIN connector, screw both sides

**741-009V-PN CO<sub>2</sub> high pressure tube, 0,8m**  
compatible to PIN Index bottle (without picture)



\* Sterile product -  
return shipment not accepted



# Laparoscopy/Thoracoscopy

Complete set with video laparoscope - wireless

## Basic set without camera system and light source

### SET-K-LA-B1

Laparoscopy set, small animals, conventional for standard 2 portal technique complete, but without video camera and light source

consisting of:

- Wide angle telescope 30°/5mm/28cm (T281-5030)
- Safety trocar complete, 5,5mm (231-213V & 231-137V)
- Safety trocar complete, 10mm (230-212V & 230-137V)
- Trocar reducer 10/5 (230-505)
- Veress needle, 10cm (L-19-100)
- Grasping forceps, 5mm
- Metzenbaum scissors, 5mm
- Preparation forceps, 5mm
- CO2 Inflator, electronically monitored 20l (741-025V)



### Option:

#### SET-K-LA-B2

same as SET-K-LA/VA1 + HF vessel sealing, type Atom incl. sealing MIC instrument 5mm

## Complete set with video Laparoscope - wireless

### SET-K-LA/VA1

Universal Laparo-/Vaginoscope SET, for all laparoscopic approaches in small animals, for 1 & 2/3 portal technique and transvaginal laparoscopy

consisting of:

- LED Video Laparo. 0°/5mm/28cm (TA27-5)
- Working sheath 12mm (STV27-51)
- Safety trocar complete, 5,5mm (231-213V & 231-137V)
- Trocar disposable (TR-60-121)
- Veress needle, 10cm (L-19-100)
- Needle with mini grasping forceps (L-24-23)
- Grasping forceps, 5mm
- Metzenbaum scissors, 5mm
- Preparation forceps, 5mm
- CO2 Inflator, electronically monitored 20l (741-025V)
- 22" receiver/PC/recorder



### Option:

#### SET-K-LA/VA2

same as SET-K-LA/VA1 + HF vessel sealing, type Atom incl. sealing MIC instrument 5mm



# Arthroscopy

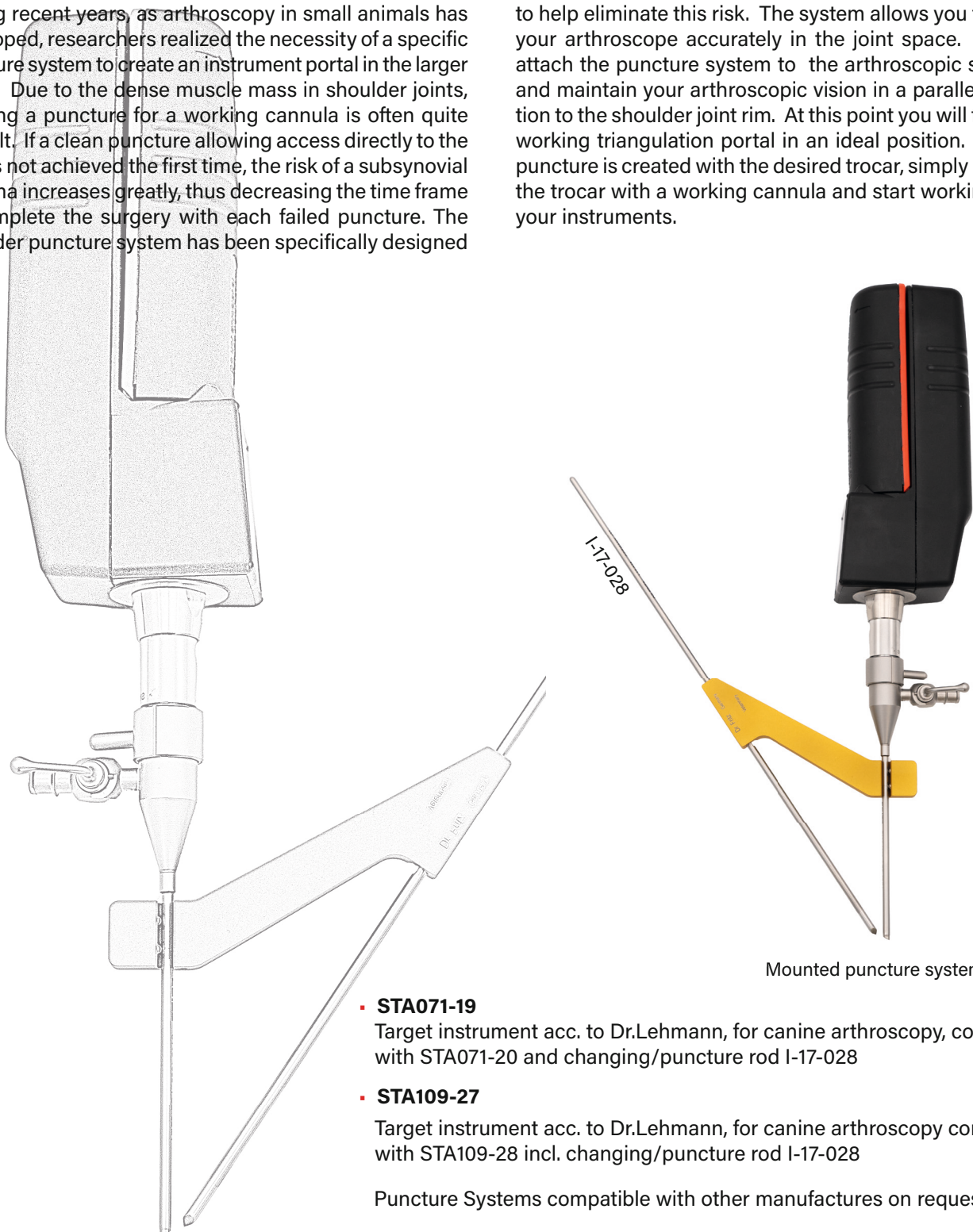
Puncture System acc. to Dr. Lehmann for the canine shoulder joint

## Innovation in small animal arthroscopy

Developed and tested at the Veterinary Faculty of Vienna, Austria

During recent years, as arthroscopy in small animals has developed, researchers realized the necessity of a specific puncture system to create an instrument portal in the larger joints. Due to the dense muscle mass in shoulder joints, creating a puncture for a working cannula is often quite difficult. If a clean puncture allowing access directly to the joint is not achieved the first time, the risk of a subsynovial oedema increases greatly, thus decreasing the time frame to complete the surgery with each failed puncture. The shoulder puncture system has been specifically designed

to help eliminate this risk. The system allows you to align your arthroscope accurately in the joint space. Simply attach the puncture system to the arthroscopic sheaths and maintain your arthroscopic vision in a parallel direction to the shoulder joint rim. At this point you will find the working triangulation portal in an ideal position. After a puncture is created with the desired trocar, simply replace the trocar with a working cannula and start working with your instruments.



- **STA071-19**

Target instrument acc. to Dr. Lehmann, for canine arthroscopy, comp. with STA071-20 and changing/puncture rod I-17-028

- **STA109-27**

Target instrument acc. to Dr. Lehmann, for canine arthroscopy comp. with STA109-28 incl. changing/puncture rod I-17-028

Puncture Systems compatible with other manufactures on request.





# Arthroscopy

## Irrigation and Working Cannulas, Trocar Changing System acc. to VAN BREE

The trocar changing system acc. to VAN BREE allows the specific exchange of different working cannulas. Beginning with the smallest diameter, the surgeon can always change to a bigger diameter by using the changing rods. According to the different joints a so called „elbow set“ (working length 3,5-5 cm) and a „shoulder set“ (7-7,5 cm) is differentiated. In addition it is possible to change the working portal with the telescope portal using the changing rod. The color code system allows easy size differentiation.

### Set I-17-755

Working cannula set „**shoulder and elbow**“ acc. to van BREE consisting of:

- Set I-17-500
- Set I-17-700

Complete set



### Set I-17-500

Working cannula set „**elbow**“ acc. to van Bree, consisting of:

- **I-17-524**  
Working cannula incl. sharp obturator ID: 2,3mm WL 5,5cm, gold
- **I-17-528**  
Working cannula ID: 2,9mm WL 4,8cm, metal
- **I-17-535**  
Working cannula ID: 3,5mm WL 3,5cm, schwarz
- **I-17-024**  
Changing rod 2,3mm round / pointed, gold

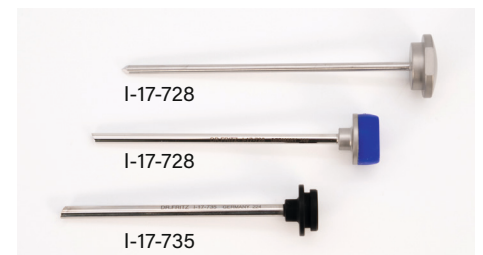


I-17-024

### Set I-17-700

Working cannula set „**shoulder**“ acc. to van Bree, consisting of:

- **I-17-728**  
Working cannula incl. sharp obturator ID: 2,9mm WL 7,5cm, metal
- **I-17-735**  
Working cannula ID: 3,5mm WL 6,8cm, black
- **I-17-028**  
Changing rod 2,9mm round / pointed, metal



I-17-028

### I-17-535-G

Working cannula with thread ID:3,5mm, WL:3cm (can replace I-17-535)



### I-17-735-G

Working cannula with thread ID:3,5mm, WL:6,8cm (can replace I-17-735)



### I-17-002

Sealing caps for small trocar cannulas opening: 2mm 5pcs.





# Arthroscopy

## Hand instruments



Hand instruments with colour coding are easy to recognize and perfectly to use in small and in large joints according to the patient sizes.

- ✓ Easy handling
- ✓ Ergonomic design
- ✓ For universal use
- ✓ Suitable for Dr. Frizu working cannulas



### AR-17-03S

Bajonett knife 2,7mm, silicon handle, autoclavable



### AR-17-05S

Banana knife, 2,7mm, silicon handle, autoclavable



### AR-17-06S

Curette, small 2,7mm, silicon handle, autoclavable



### AR-17-07S

Ring curette, 2,7mm, silicon handle, autoclavable



### AR-17-09S

Hook probe, 2,2mm, silicon handle, autoclavable



### AR-17-11S

Smilie knife, 2,7mm, silicon handle, autoclavable



### AR-17-12S

Mikro picking knife, acc. to Dr. Beale, 2,7mm, silicon handle, autoclavable



### AR-17-19S

Hook knife, 2,7mm, Silicon handle, autoclavable





# Arthroscopy

## Hand instruments

### Elevator

#### AR-17-13

Special elevator, 2,7mm,  
with handle, metal



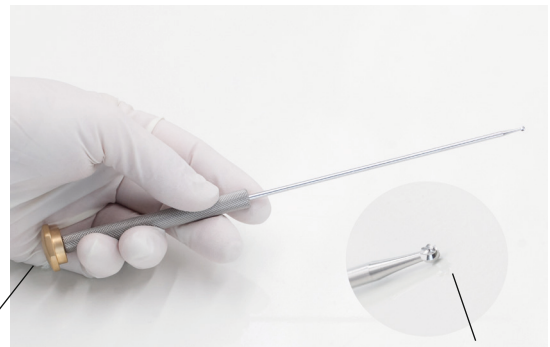
### Milling Drill acc. to VAN RYSEN & VAN BREE

The latest development allows cartilage and bone curettage even through the smallest working cannula

#### I-17-822

Milling drill for arthroscopy, acc.to van RYSEN  
D: 2,2mm, WL: 12cm  
with rotating handpiece, long lasting drill steel, dismantable  
Consisting of: handpiece (I-17-820) and milling drill (I-17-821)

Rotating handpiece



Changeable drill

### Instruments for high frequency

Mono-/Unipolar  
HF/RF cutting electrodes, the electric knife

#### HF-200-055

High frequency connecting cord comp. to arthroscopic  
cutting electrodes, handles length: 5 m,  
for units with 4 mm connector



#### HF-200-45

High frequency cutting electrode for  
arthroscopy, 45°, fine tip 4 mm connector, 12 cm



#### HF-200-90

High frequency cutting electrode for  
arthroscopy, 90°,  
heavy version 4 mm connector, 12 cm



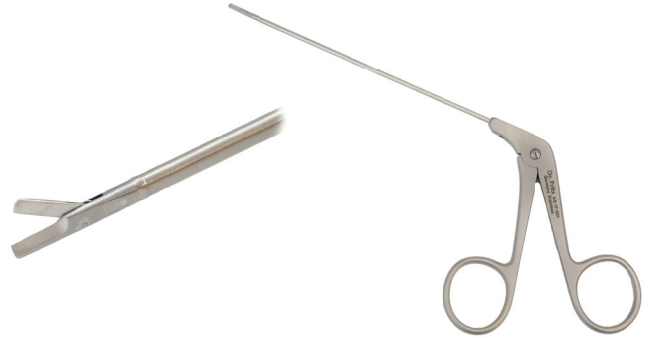


# Arthroscopy

Punches, Biopsy Forceps, Rongeurs and Grasping Forceps

## 2mm Instruments

- **AS-17-521**  
Mini scissors - high performance -  
D: 2mm, WL:11cm



## 2,2/2,7 mm Instruments

- **AT-19-231**  
Mini-Rongeur - high performance -  
D: 2,2/2,7mm, WL:11cm  
Overstraining protection, cleaning connector



## 2,7 mm Instruments

- **AS-17-632**  
Universal rongeur and grasping forceps  
D: 2,7 mm, WL:12cm  
- with overstraining protection -



- **AS-17-641**  
Rongeur and biopsy forceps,  
D: 2,7 mm, WL: 12cm  
- with overstraining protection -



- **AS-17-672**  
Arthroscopic punch,  
D: 2,7 mm, WL:12cm  
- with overstraining protection -



- **AS-17-621**  
Arthroscopic punchh,  
D: 2,7 mm, NL:12cm

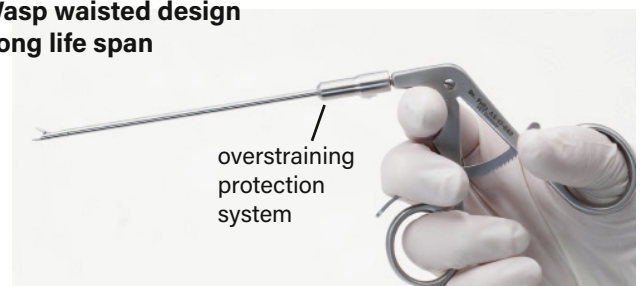


- **AS-17-662 - mit Sperre** -  
Alligator grasping forceps,  
D: 2,7 mm, WL:12cm  
- with overstraining protection -



Handle with ratchet  
ergonomic and  
small grip

- **Overstraining protected**
- **Wasp waisted design**
- **Long life span**





# Arthroscopy

Punches, Biopsy Forceps, Rongeurs and Grasping Forceps

## 3,4 mm Instruments

### AT-19-343

Maxi-Rongeur -high performance-  
D:3,4 mm,WL:12 cm, with overstraining protection,  
cleaning connector



### AS-17-762

Rongeur, universal & grasping  
D:3,4mm,WL:12cm,  
with overstraining protection



## 3,5 mm Instruments

### AY-19-463

Arthro grasper, grooves,  
D:3,5 mm, WL:10 cm,  
conical pointed, with maximum power  
U-shaped construction



- ✓ Easy cleaning
- ✓ Fine and extremely strong
- ✓ Ergonomically adapted with lock

### AY-19-451

Arthro punch, straight,  
D:3,5 mm, W L:10 cm  
conical pointed, with maximum power cut  
U-shaped construction



## 4,0 mm Instruments

### AY-19-452

Arthro punch, bent upwards, D:4 mm, WL:10cm  
conical pointed, with maximum power cut  
U-shaped construction



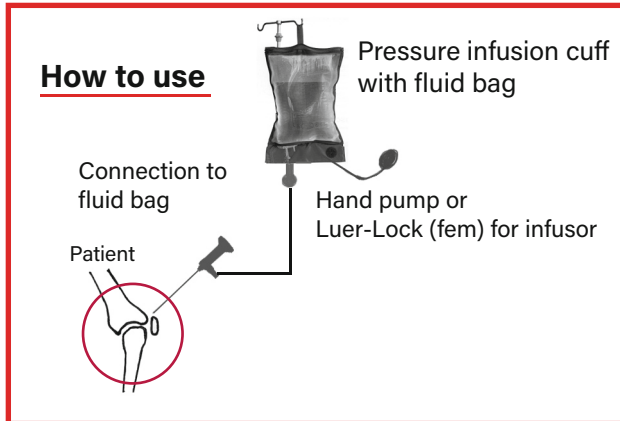




# Arthroscopy

Fluid Supply System for Arthroscopy

## Manual fluid supply system



### Pressure Infusion Cuffs



One of the cheapest options for liquid supply

- **AR-08-100N Pressure infusion cuff** for 500-1000ml with manometer and hand pump reusable high quality manufacturing

▷ For high flow fluid supply, please use big infusion tubes

## Accessories



I-18-518

- **I-18-518 Egress cannula** with sharp trocar stopcock, ID: 2,7mm, WL: 7cm

### Connection: Fluid bag to arthroscope



AR-10-948

- **AR-10-948 Silicon tube** D: 6x2 mm, WL:3 m, autoclavable, Luer-Lock (m), needle f. sterile bags/bottles, large inner diameter

- **X-7-20-10 Silicon spare tube** Silicon spare tube, 100cm, large inner diameter, size: 6x2mm, color: natur



AR-10-9

- **AR-10-9 Needle for infusion bottles/bags** ID: 4 mm, compatible to silicon tubes 3,5-5 mm
- **LLM-1258 Luer-Lock connector, male** 10 mm

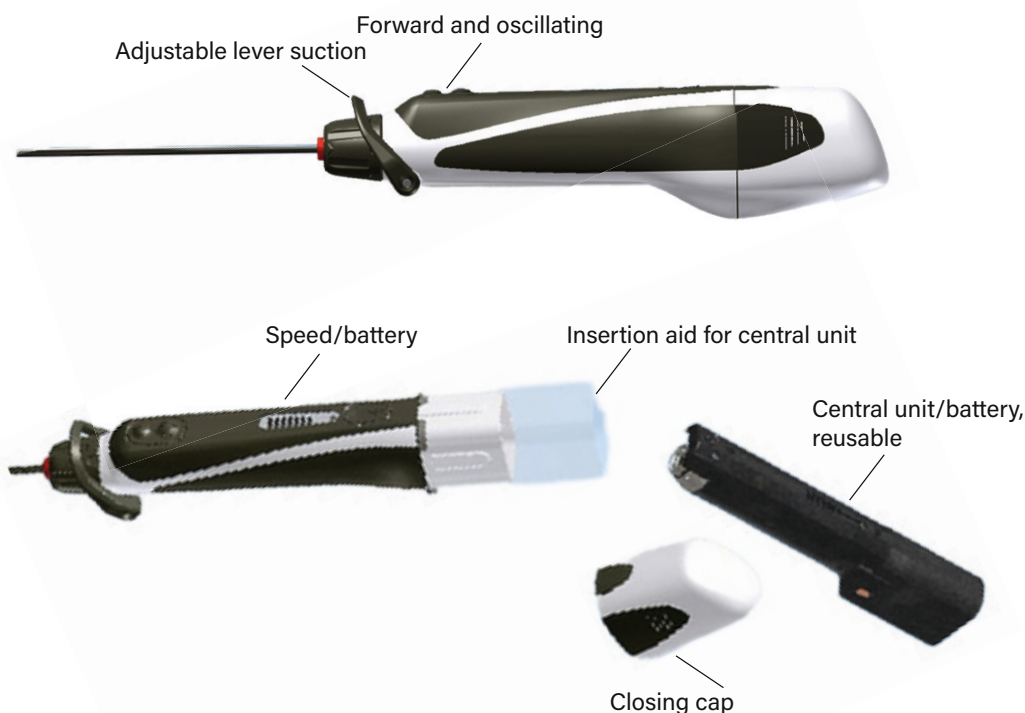
# NEW

Small Animal



# Shaver

Cordless single use shaver system for arthroscopy



## ■ Starter set (SFR-205SET)

Set consistinf of:

- Central unit - motor (SFR-206M)
- Charging station (SFR-205B)
- Burr shaver Ø 4,5mm (SFR-104C)



## ■ SFR-206M Central unit - motor

The reusable central unit, the heart of the system, is equipped with state-of-the-art electronics and a rechargeable battery. It provides the surgeon with both standard and advanced features: a powerful brushless motor ensures optimal torque for all arthroscopic procedures, while the durable battery supports even the longest surgeries.

- 6000 rpm
- Approx. 40min. runnig time



## ■ SFR-205B Charging station

The charging station accommodates up to four central units, though the central units (motors) are not included with the charging station. When a central unit is inserted, it is checked by an intelligent control system. A display then indicates the battery's charge status.



# NEW

Small Animal



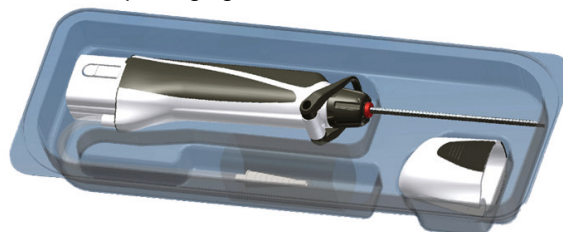
# Shaver

Cordless single use shaver system for arthroscopy

## ■ Disposable shaver

- No preparation or sterilization required
- Ready for immediate use
- Integrated tube connection
- Minimum order quantity: 5 pieces

Sterile packaging



- Aggressive meniscus resection, fast removal of soft tissue during shoulder surgeries.
- Suitable for a combination of soft tissue and bone resection.

Ø	Item No.
3,5mm	SFR-103L
5,0mm	SFR-104L



- Versatile aggressive cutting blade:  
Ideal for extensive tissue removal.

Ø	Item No.
2,9mm	SFR-102N
5,0mm	SFR-104N



- Oval Burr:  
Fast bone resection.
- Suitable for subacromial decompression.

Ø	Item No.
4,5mm	SFR-104E



- Serrated inner blade and smooth outer blade for effective resection of meniscus, cartilage, and synovium.

Ø	Item No.
3,5mm	SFR-103P



- Ball Burr:  
Ideal for notchplasty and osteochondral cleaning.

Ø	Item No.
4,5mm	SFR-104C





# Arthroscopy

## Accessories

### ■ Camera Covers

DE-10-25

#### Camera Covers

disposable, 1 pcs, polyethylen, 1  
3x250 cm, minimal amount  
50 pcs



DE-10-25



### ■ Cleaning accessories

DE-5-17

**Cleaning brush**, small, 17 cm  
for tubes, ID:2-4 mm, autoclavable



DE-10-300

#### Disinfection solution IP

for flexible and rigid endoscopes.  
manual and automated use,  
1-3% dilution, 5 litres



DE-10-425

#### Soak basin

for chemical solution  
disinfection, cons. of basin (perforated)  
tray & cover for basin, size: 42x16x9,5 cm





# Arthroscopy

## Accessories

### Video cart

Completely mounted

- ✓ 50cm unit size
- ✓ Camera fixation knob
- ✓ Drawer
- ✓ Ask for additional accessories

#### WV-54043 Video cart, H: 143 cm

size: 62x63 cm, completely mounted, basic version,  
color: grey, partly blue,  
\*\*drawer inbuilt  
\*\*fixation knob for video camera head  
\*\*specially rust protected  
max. weight: 150kg/330lbs

(Gastroscope bracket, fixation system. devices  
and monitor are separate accessory)



WV-54043

#### WV-53022 Video cart as above but height 110 cm (without pictures)

#### WV-45111 Video cart, H: 112 cm,

size: 54x58cm,  
completely mounted, basic version,  
drawer inbuilt with handle  
max. weight: 50kg/110lbs  
max. unit size: 45cm  
color: grey, partly blue,



WV-45111

### Accessories for Video cart

#### WV-99619 Fixation system for infusion bottles mounting set

#### WV-99618G Gastroscope mount for Dr. Fritz TG series inductive charging, with telescope rod

#### WV-01601 Fixation system for CO<sub>2</sub> bottles mounting set, comp.to video carts for 5-10 litre bottles, max OD: 14,5 c

#### WV-02851 Fixation system for CO<sub>2</sub> bottles mounting set, comp.to video carts for big bottles, max OD: 20,5 cm



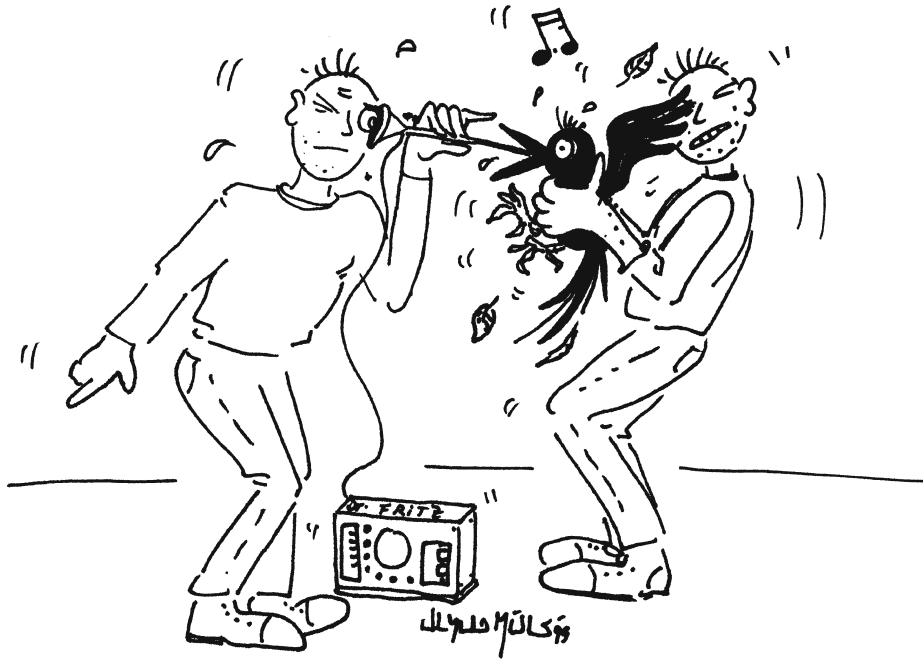
WV-99618G





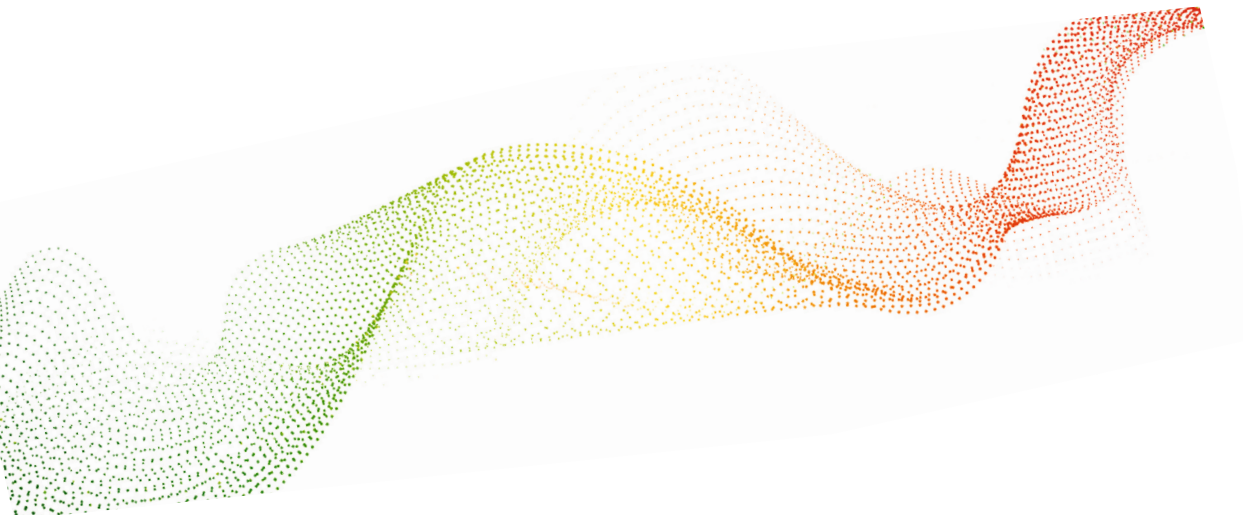
# Dogs, Cats, Birds & Exotic Species

Endoscopic equipment



## Endoscopy

in Pets, Birds and Exotic Species





# Dogs, Cats, Birds & Exotic Species

## Endoscopic equipment

### Video Compact System 7

More information on page 10

- ✓ Wireless video transmission
- ✓ Independent of video tower and light source
- ✓ Without cable
- ✓ Easy handling & quick cleaning
- ✓ Integrated LED light

**NEW** ⇒ Integrated working channel Ø 1,2mm  
Ø 3,4mm & WL: 6cm

**NEW** ⇒ Chip-in-the-Tip-Technologie  
robust and unbreakable



General use for small Animal consulting rooms

- Rhinoscopy
- Laryngoscopy
- Dental endoscopy
- Otoscopy
- Vaginoscopy
- Dermoscopy
- Best compliance with the owner

### Set 98-VCS7-SE

- VCS7, Ø 3,4mm, WL: 6cm, working channel Ø1,2mm
- 10" monitor receiver
- Application sheaths for ears and oral examination in pets
- Optical grasping forceps
- Flexible grasping forceps Ø1mm, WL: 16cm
- Ear curette
- Charging station, wall mount
- Antifog, cleaning brushes
- Stainless steel stand for silicone sleeves including charging station
- Inflation pump for dental and gyn





# Dogs, Cats, Birds & Exotic Species

## Endoscopic equipment

### Compact Rhinoscope/Vaginoscope

More information on page

#### Set (TA20-3SET)

- Compact Rhinoscope/Vaginoscope
- 2 spare batteries
- Charging station
- Charger
- Biopsy forceps
- 3 way stopcock
- Catheter, 1,0mm
- Cleaning brush
- Protection sheath
- NEW: enables circulation flushing
- 10" monitor receiver

Cordless generation with exchangeable battery, in-built LED's, video camera, HD sender for video transmission & 1,5" control display.



### Video Bronchoscope

More information on page

#### Set TXBH4-54V

- Bronchoscope TXBH4-54
- Charger
- Cleaning brush
- Density tester
- Grasping forceps
- Storage case
- 7" Monitor receiver



Item No.	Length	ø	Working channel	Transmission
TXBH2-36V	36cm	2,9mm	No working channel	wireless
TXBH4-54V	54cm	3,9mm	1,2mm	wireless

# Equine

# Dr. Fritz®

Wireless ■ Endoscopes

- Endoscopy of the Nose, Larynx, Teeth
- Dynamic Laryngoscope
- Bronchoscopy
- Gastroscopy
- Laparoscopy / Thoracoscopy
- Vaginoscopy
- Arthroscopy



We are changing  
veterinary endoscopy

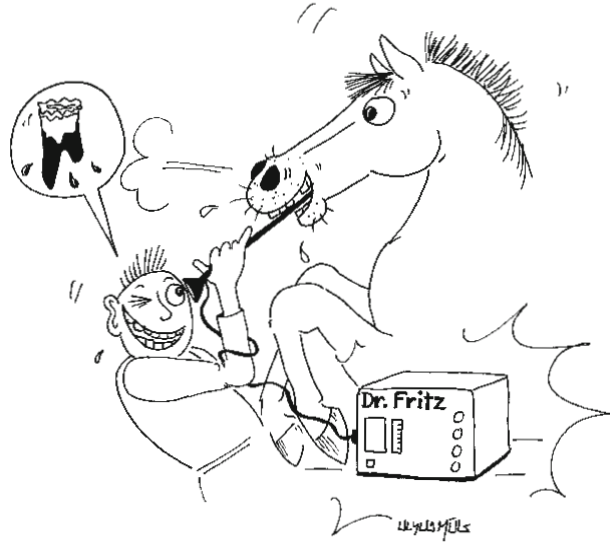


Equine



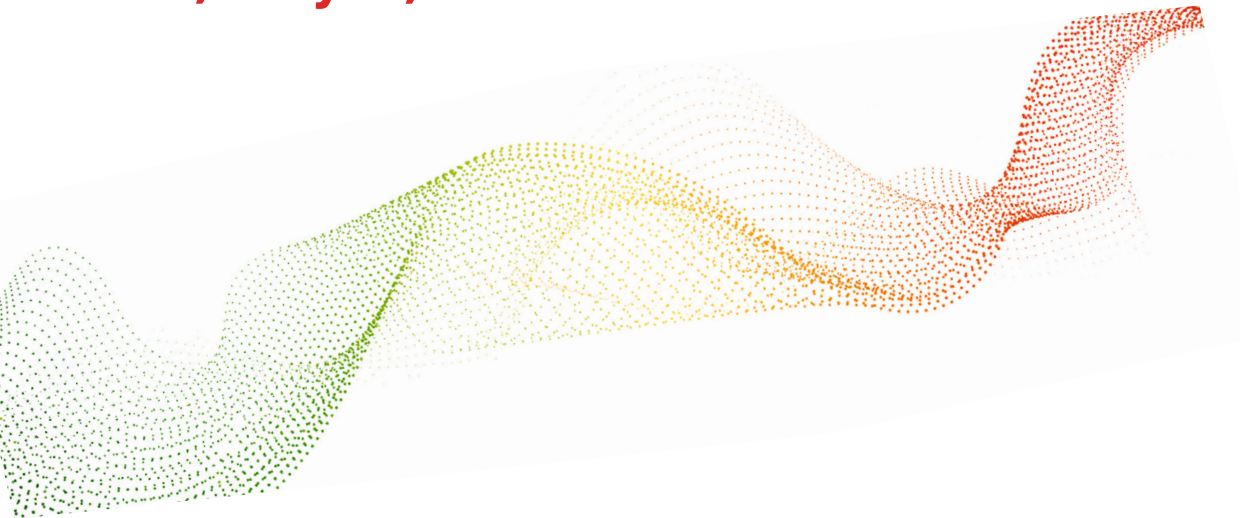
# Endoscopic equipment

Nose, Larynx, Teeth



# Endoscopy

for large Animals, Equine, Bovine & Camels.  
Nose, Larynx, Teeth.







# Dental - Large Animals

special instruments

## LED illuminated mirror

for dental and pharyngeal examination in large animals

- With integrated LED light
- Robust
- Easy handling



Standard version D: 50mm

**EB-95-5SET**

**LED Dental mirror Set large**

D: 50 mm, WL:49 cm, complete with bag, anti-glare construction

**EB-95-3SET**

**LED Dental mirror Set, small**

D: 38 mm, WL:49 cm, complete with bag, anti-glare construction

## Special Elevator

- Robust
- Easy cleaning



**I-18-538**

**Special elevator long**

D: 3mm, WL:20 cm, strong version

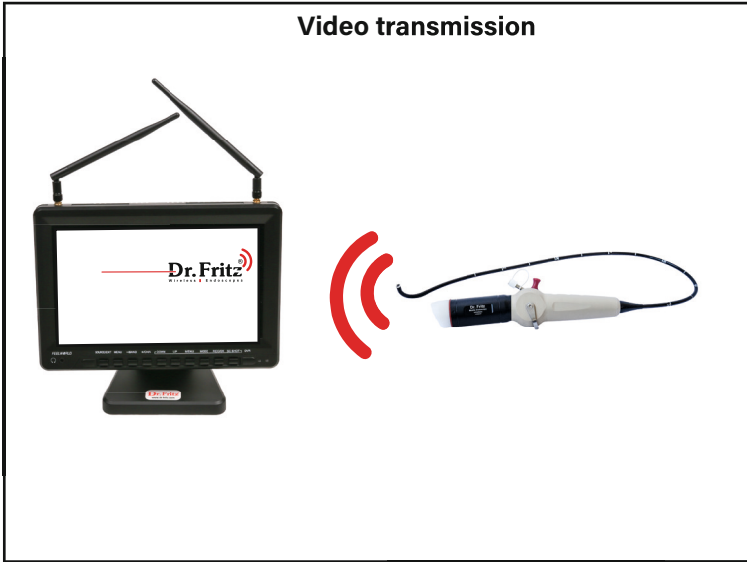


# Flexibles LED Video Sinus Endoscope

Wireless video transmission for monitors or PC (<20m)

- Integrated video transmitter
- 2 way defecating
- 1,8 mm working channel
- Towerless application
- Fully immersible
- Easy and quick reprocessing

Video transmission



## TXBH5-76V

### Wireless video bronchoscope,

OD: 5,9mm, WL: 75cm

in-built 5,8 GHz sender for wireless video transmission and Li Ion battery resolution (400x400)

Set consisting of:

- Bronchoscope
- Charger
- Cleaning brush
- Density tester, case
- 7" receiver monitor





# LED Dentalstick HD „Water Jet“

wireless, digital transmission



↖ Luer connection for manual and automatic flushing

The first dental endoscope with integrated irrigation

- Kabellos
- 5,8 GHz Digitalfunk
- HD Videoqualität
- 3 LEDS für die perfekte Ausleuchtung
- Integrierte Spülung
- Luer Anschluss
- 90° Seitblick und 140° Öffnungswinkel



## ■ Dentalstick professional HD complete set



TD-92HDS

- Dentalstick HD „Water Jet“ set
- Ø 12mm, NL:46cm, Wireless
  - Cordless high end video endoscope, in-built LED light and 5,8GHz sender rechargeable Li battery, resolution: PAL,HD 1280x720pxs
  - 140° field of vision
  - with integrated flushing
  - Luer connector (f)
- Set consisting of:**
- Dentscope HD
  - Charger
  - Short silicone tube with Luer connection on both sides (m/f)
  - 7" receivers monitor, DVR
  - Case
  - 7" Empfänger-Monitor mit Rekorder
  - Transportkoffer

### Schnurlose Videoübertragung



Equine



# Equine Training Laryngoscope

NextGen4 Dynamic and Overground Endoscopy



# WIRELESS Training Laryngoscope

- NextGen4 -





# Equine Training Laryngoscope

NextGen4 dynamic and overground endoscopy



Right side - flushing pump



Left side - laryngoscope

- ✓ Self-holding fixation
- ✓ Head mounted system
- ✓ Direct video and audio recording
- ✓ No data reduction
- ✓ Wireless video control
- ✓ Flushing pump with control
- ✓ Remote controlled recording and flushing
- ✓ Mucus resistant video head

## The dynamic laryngeal examination even easier

Our invention and first publication of an equine training laryngoscope in 2007 was followed by many market requests. Taking our experiences from the first generation, we have developed a completely head mounted and modular system. It will allow even very young horses to be examined.

Additional weight is just 950g on each side of the cheeks. The rider is not involved at all during the exam.

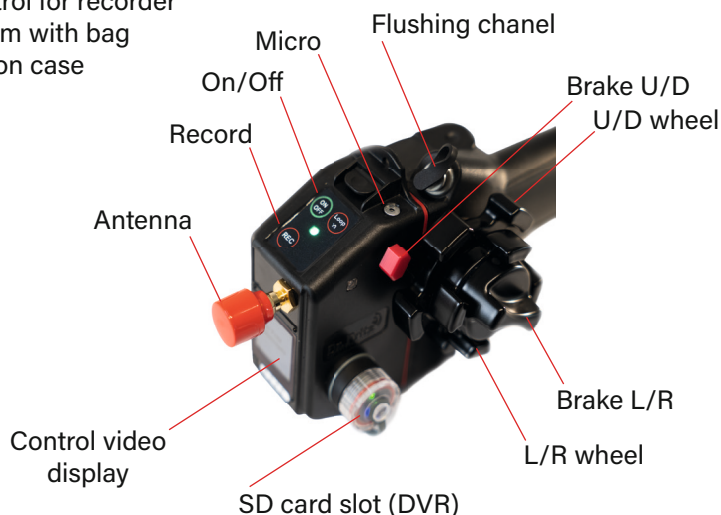
Our recording and video transmission includes automatic audio.

Mounting, fixation and dismounting is fast and uncomplicated.

Service and replacements can be done immediately due to the modular construction.

## Set ETL4-86SET

- Trainings-laryngoscope ETL4-86
- Charger
- Flushing pump with control
- 5" video controle unit
- Remote control for recorder
- Holder system with bag
- Transportation case







## ■ Set ETL4-86SET

Training laryngoscope  
OD: 10mm  
WL: 1m  
(ETL4-86)



Charger  
magnetic  
(TV27-NET)



Video controle unit  
(TXM7-60R-ETL)



Flushing pump  
(ETL4-4NS)



Holder system with bag  
(ETL4-85HT)



Case for NextGen4  
Size: 56x41x11cm  
(K-5641-10)



## ■ Literatur

### **S.H. Franklin (2009)**

Endoscopy of the upper airways during exercise:  
Technique and clinical applications.  
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Geneva(CH), 15-17 December 2009

### **L-M. Desmaizieres & N. Serraud & B. Plainfosse & A. Michel & Y. Tamzali (2009)**

Dynamic respiratory endoscopy without treadmill  
in 68 performance Standardbred, Thoroughbred and  
saddle horses under natural training conditions.  
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### **S.H. Franklin & J.F. Burn & K.J. Allen (2008)**

Clinical trials using a telemetric endoscope for use  
during over-ground exercise: a preliminary study.  
Equine Vet J. 40 (7):712-5.

### **R.M. Fritz (2007)**

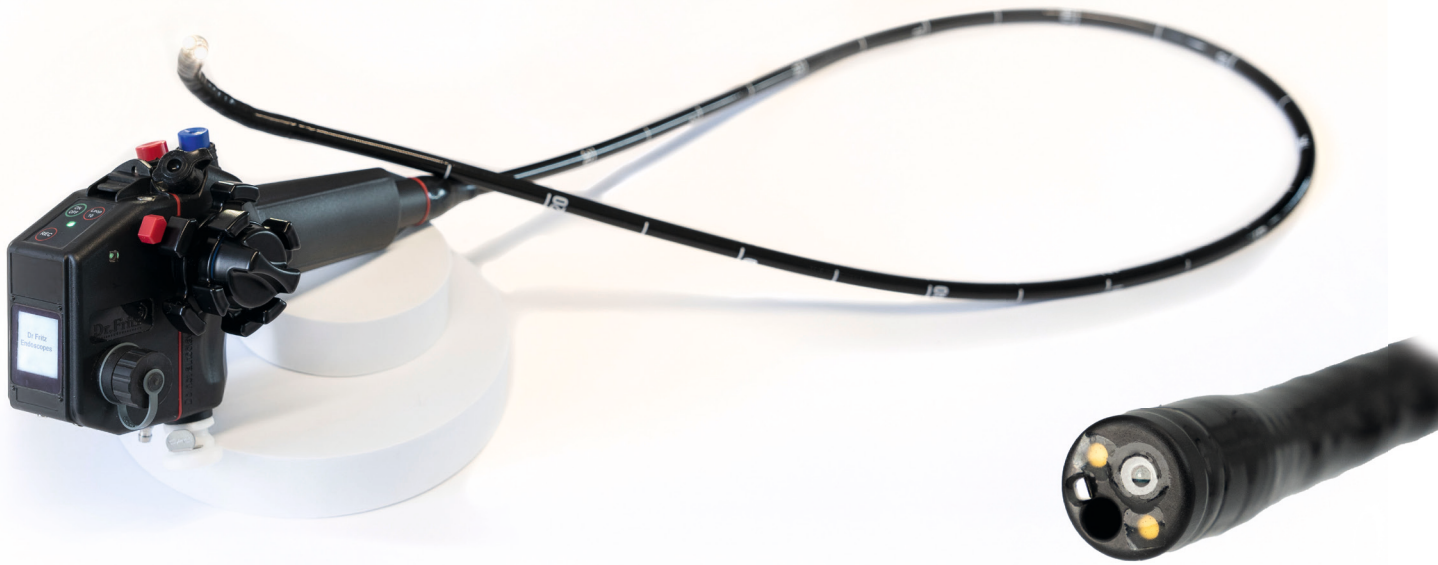
New possibilities of laryngoscopy in the field.  
10th Geneva Congress, 11.-13.12.2007

Equine



# Video- Bronchoscope

Professional bronchoscopes - connection for insufflation, irrigation and suction



# WIRELESS Video Bronchoscope

- NextGen4 -





# Video- Bronchoscope

Professional bronchoscopes - connection for insufflation, irrigation and suction

- ✓ Integrated sender for wireless video transmission
- ✓ Integrated video camera with LED light
- ✓ Integrated DVR
- ✓ Ergonomic body
- ✓ Easy handling, quick cleaning and disinfection

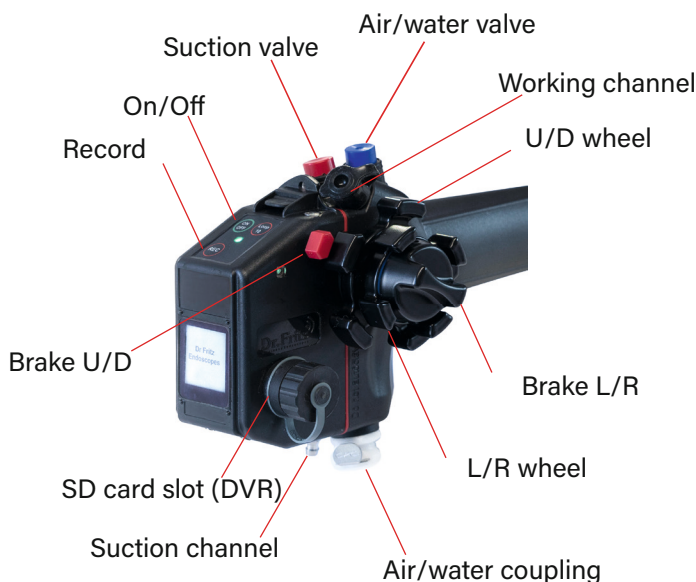
## New Generation - NextGen4

- Integrated control display
- Integrated SD card slot
- Fully soakable
- Truly mobile

Item No.	Length	ø	Working channel	Transmission
TG107-8	105cm	7,9mm	2,3mm	wireless
TG136-9	135cm	9,8mm	2,8mm	wireless
TG176-9	165cm	9,8mm	2,8mm	wireless

## Set TG176-9B

- Bronchoscope TG176-9
  - Charger
  - Cleaning adapters
  - Cleaning brush
  - Density tester
  - Guttural pouch probe
  - 5" Receiver-monitor, recorder
  - Transportation case
- Optional: wall mount



## Wireless HD transmission





## ■ Set TG176-9B

Bronchoscope  
OD: 9,8mm  
WL: 1,65m  
(TG176-9)



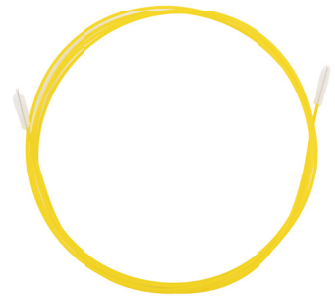
Charger  
magnetic  
(TV27-NET)



Cleaning adapters  
(TW132-24S)



5x Cleaning brush  
(F28-280E)



Density tester  
(EF-23)



Guttural pouch probe  
(F22-22046)



5" Receiver-monitor,  
recorder  
(TXL2-580M)



Case for NextGen4  
Size: 56x41x11cm  
(K-5641-10)





# Several applications

- ✓ Multi receiver capable

- ✓ Automatic radio connection, all types of endoscopes (broncho/arthroscopes/laparoscopes)



## Receiver - monitor



### TXM10-58R

10" Receiver-monitor, recorder

- mSD card slot, automatic scan, battery

### TXM7-60R

7" Receiver-monitor, recorder

- mSD card slot, automatic scan, battery

### TXL2-580M

5" Receiver-monitor, recorder

- mSD card slot, automatic scan, battery
- With arm strap



### M-LCD-22PC

21" LCD PC

- With in-built receiver and recorder

### TXL1-7-NO2

Receiver for Apple & Windows

- Incl. USB grabber



### M-LCD-21SK

21" Video monitor HD

- With in-built receiver for scopes

### TXL1-583

TV receiver for monitor

- Video-Out

### TGR-40

Multi HD radio receiver

- HDMI out





# Additional equipment

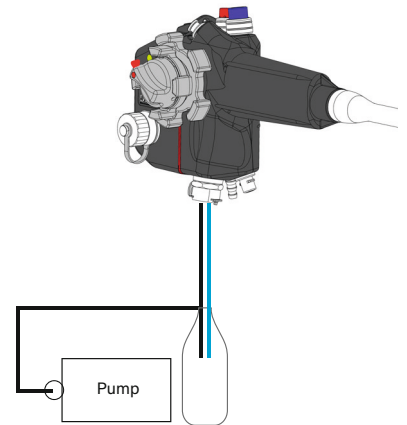
Video Bronchoscope

## Air/water pump

For lens cleaning and inflation

### TW4-250SE

- Air/water pump (H150-1-1)
- Air/water twin tube (TW4-133)
- Fixation for bottle (TW4-261H)
- Bottle 250ml (TW4-250)

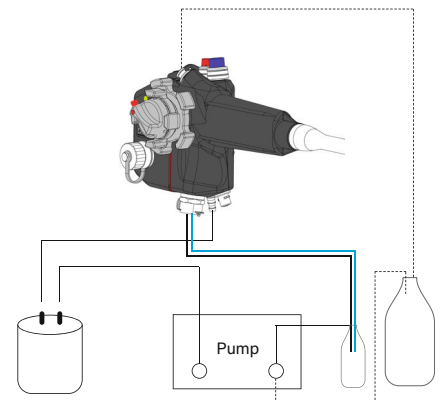


## Suction-/irrigation pump

For lens cleaning, inflation and suction.  
For small and large animal practice.

### H140-3S

- Suction & irrigation pump (H140-3)
- 1 li. suction bottle (H160-AB-43)
- 1 li. flushing bottle (H160-AB-7)
- Tubes & transformer
- Sterile filter (AR-10-922)



## Wall mount, inductive charging

For perfect storage

### TGX-25S

- Wall mount
- Power supply





# Additional equipment

Video Bronchoscope

## ■ Catheter, injection needle, guttural pouch probe



### F20-220

Teflon catheter with luer-lock connector  
 ▪ OD: 2 mm, WL: 235 cm  
 ▪ Autoclavable

### F20-219

Spare catheter  
 ▪ OD: 2 mm, WL: 10 m  
 ▪ Autoclavable

### LLW-1220

Luer-lock connector  
 ▪ Female OD: 2 mm  
 ▪ Autoclavable

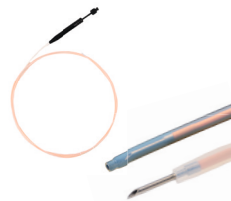


### F22-16045

Guttural pouch probe  
 ▪ OD: 2,2 mm, WL: 165 cm

### F22-22046

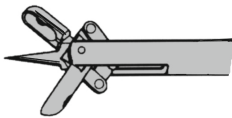
Guttural pouch probe  
 ▪ OD: 2,2 mm, WL: 230 cm



### F231-220

Injection needle with teflon tube, luer-lock connector  
 ▪ OD: 2,2 mm, WL: 235 cm, Needle: 0,9x6 mm

## ■ Biopsy-grasping forceps, hooks, brush



### B22-16011

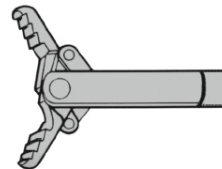
Biopsy forceps with spike  
 ▪ OD: 2,4 mm WL: 165 cm

### B22-22011

Biopsy forceps with spike  
 ▪ OD: 2,4 mm WL: 230 cm

### B23-3601

Biopsy forceps with spike  
 ▪ OD: 2,3 mm WL: 360 cm



### F22-16041

Grasping forceps  
 ▪ OD: 2,2 mm WL: 160 cm

### F22-22041

Grasping forceps  
 ▪ OD: 2,2 mm WL: 230 cm

### F23-3604

Grasping forceps  
 ▪ OD: 2,3 mm WL: 360 cm



### B23-180E

Disposable biopsy forceps steril  
 ▪ OD: 2,3 mm WL: 180 cm

### B23-230E

Disposable biopsy forceps steril  
 ▪ OD: 2,3 mm WL: 230 cm



### F23-16042

Grasping forceps „foreign body“  
 ▪ OD: 2,3 mm WL: 160 cm

### F23-22042

Grasping forceps „foreign body“  
 ▪ OD: 2,3 mm WL: 235 cm



# Additional equipment

## Video Bronchoscope

### FK23-1635

Basket size: 4,5 x 6cm

6 wires

- OD: 2,2mm WL: 160 cm



### FK23-1637

Basket size: 5 x 10cm

6 wires

- OD: 2,3mm WL: 160 cm

### FK23-2035

Basket size: 4,5 x 6cm

6 wires

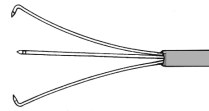
- OD: 2,3mm WL: 230 cm

### F22-16040

Grasping forceps

3 hooks

- OD: 2,2 mm WL: 165 cm



### F22-22040

Grasping forceps

3 hooks

- OD: 2,2 mm WL: 230 cm

### F28-1709

Cleaning brush

- OD: 2,6-3,5mm WL: 150 cm



### F28-2208

Cleaning brush

- OD: 2,6-3,5mm WL: 230 cm



### F28-3008

Cleaning brush

- OD: 2,6-3,5mm WL: 330 cm

### F28-280E

Disposable cleaning brush, steril, 10pcs./pack

- OD: 1,8-2,8mm WL: 210 cm

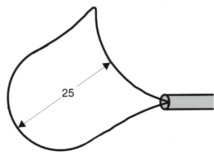


## For high frequency surgery

### SL23-2310

Asymmetric polypectomy snare complete with tube, without handle

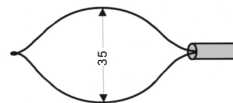
- OD: 2,2mm, WL: 230cm wide: 25mm



### SL23-1612

Symmetric polypectomy snare complete with tube, without handle

- OD: 2,2mm, WL: 165cm wide: 35mm



### SL23-2312

Symmetric polypectomy snare complete with tube, without handle

- OD: 2,2mm, WL: 220cm wide: 35mm

### HF22-1601

Suction-coagulation electrode monopolar, luer-lock connector

- OD: 2,2 mm, WL: 165 cm



### HF-301-ER

HF- connecting cord

monopolar, com. to Erbe units 4mm

- Length: 3 m



### HF22-2301

Suction-coagulation electrode monopolar, luer-lock connector

- OD: 2,2 mm, WL: 235 cm

### HS11-1200

Handle for polypectom, HF snares

- Standard connections





# Cleaning accessories

## Video Bronchoscope

### ■ For rigid & flexible endoscopes / instruments

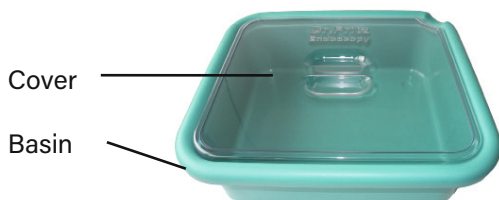
**DE-10-702 Dr. Fritz enzymatic cleaning FLEX 1,5 %**,  
1 x 1 l, 7 enzymes, 0,5%  
specially for flexible endoscopes  
for daily manual cleaning



**DE-10-300 „IP“ Disinfection solution**  
for flexible and rigid endoscopes, manual and  
automated use, 1-3% dilution, 5 litres



### ■ Option for cleaning of flexible endoscopes in the field



- ✓ Close the lid and ready for transport
- ✓ Fast and easy pre-cleaning after the last examination
- ✓ For semi- or fully automatic cleaning
- ✓ For all flexible endoscope types
- ✓ Usefull in drawer cabinets
- ✓ With airing



Stackable



**DE-17-44S Transportation & storage basin**  
for flexible endoscopes, 50x44x16 cm,  
set with cover

consisting of:

- Basin (DE-17-44)
- Cover transparent (DE-17-41)



# Hygiene, cleaning and care

## Pre-cleaning in the external practice



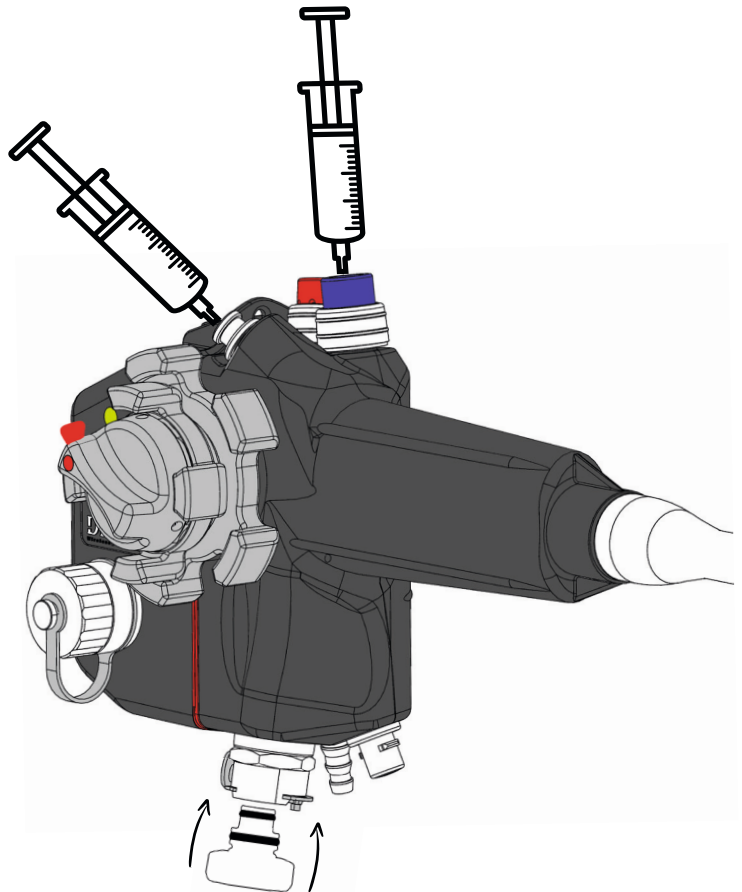
Disinfection without prior pre-cleaning is counterproductive, as it only fixes dirt particles on the surface instead of removing them.

### 1. Preparation

- Cleaning wipes
- Cleaning solution (DE-10-702)
- Alcohol wipes
- Distilled water
- Syringe
- Gloves

### 2. Cleaning

- Fill syringe with cleaning solution.  
Flush channels through:
  - Air/water valve
  - Working channel
- Soak the cleaning wipe with cleaning solution.
- Wipe the exterior with the soaked cleaning wipe.  
Make sure to carefully clean the lens.
- Fill the syringe with distilled water.  
Flush channels through:
  - Air/water valve
  - Working channel
- Wipe the exterior with alcohol wipes.
- Fill the syringe with air and flush the channels.



**The main cleaning in the evening is essential**



Equine



# Video- Gastroscope

Professional gastroscopes - connection for insufflation, irrigation and suction

---



WIRELESS

# Video Gastroscope

- NextGen4 -





# Video- Gastroscope

Professional gastroscope - connection for insufflation, irrigation and suction

- ✓ Integrated sender for wireless video transmission
- ✓ Integrated video camera with LED light
- ✓ Integrated DVR
- ✓ Ergonomic body
- ✓ Easy handling, quick cleaning and disinfection

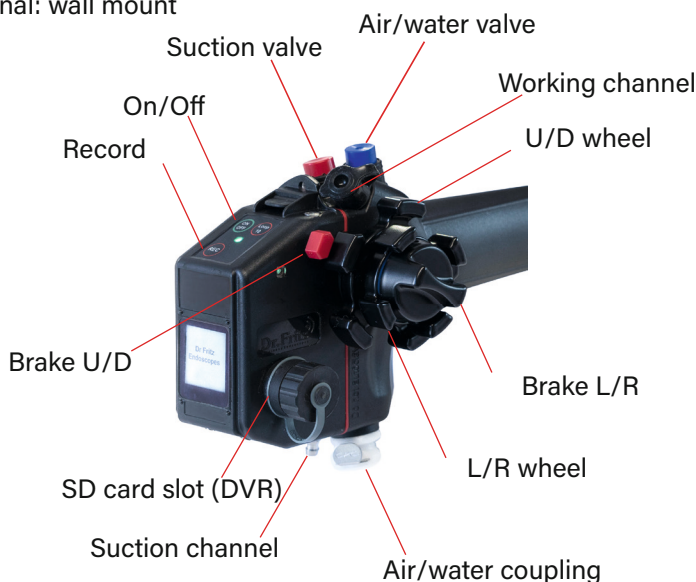
## New Generation - NextGen4

- Integrated control display
- Integrated SD card slot
- Fully soakable
- Truly mobile

Item No.	Length	ø	Working channel	Transmission
TG326-12	320cm	12mm	3,2mm	Wireless

## Set TG326-12G

- Gastroscope TG326-12
  - Charger
  - Cleaning adapters
  - Cleaning brush
  - Density tester
  - Biopsy forceps
  - 10" Receiver-monitor, recorder
  - Air/water pump
  - Transportation case
- Optional: wall mount



### Wireless HD transmission





## ■ Set TG326-12G

Gastroscope  
OD: 12mm  
WL: 3,20m  
(TG326-12)



Charger  
magnetic  
(TV27-NET)



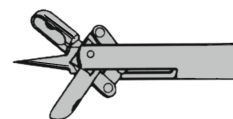
Cleaning adapters  
(TW132-24S)



Cleaning brush  
(F28-3008)



Biopsy forceps  
(B23-3601)



Density tester  
(EF-23)



Air/water pump  
(TW4-250SE)



10" Receiver-monitor,  
recorder  
(TXM10-58R)



Case for NextGen4  
Size: 56x41x11cm  
(K-5641-10)





# Additional equipment

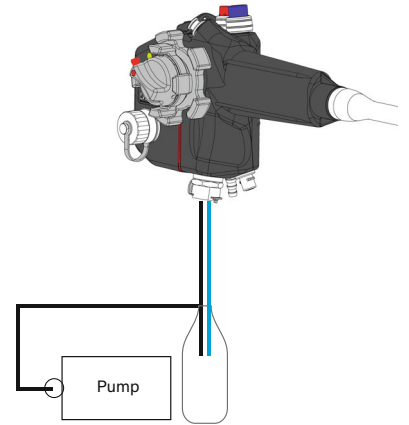
Video Gastroscope

## Air/water pump

For lens cleaning and inflation

### TW4-250SE

- Air/water pump (H150-1-1)
- Air/water twin tube (TW4-133)
- Fixation for bottle (TW4-261H)
- Bottle 250ml (TW4-250)

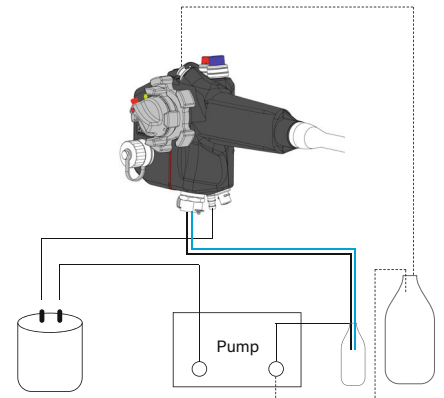


## Suction-/irrigation pump

For lens cleaning, inflation and suction.  
For small and large animal practice.

### H140-3S

- Suction & irrigation pump (H140-3)
- 1 li. suction bottle (H160-AB-43)
- 1 li. flushing bottle (H160-AB-7)
- Tubes & transformer
- Sterile filter (AR-10-922)



## Wall mount, inductive charging

For perfect storage

### TGX-25S

- Wall mount
- Power supply





# Cleaning accessories

Video Bronchoscope

## ■ For rigid & flexible endoscopes / instruments

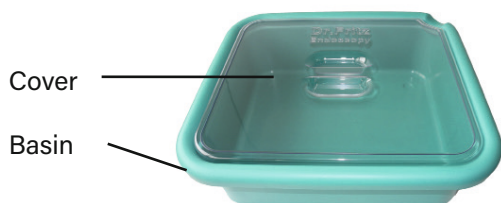
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Stackable



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for flexible endoscopes, 50x44x16 cm,  
set with cover

consisting of:

- Basin (DE-17-44)
- Cover transparent (DE-17-41)



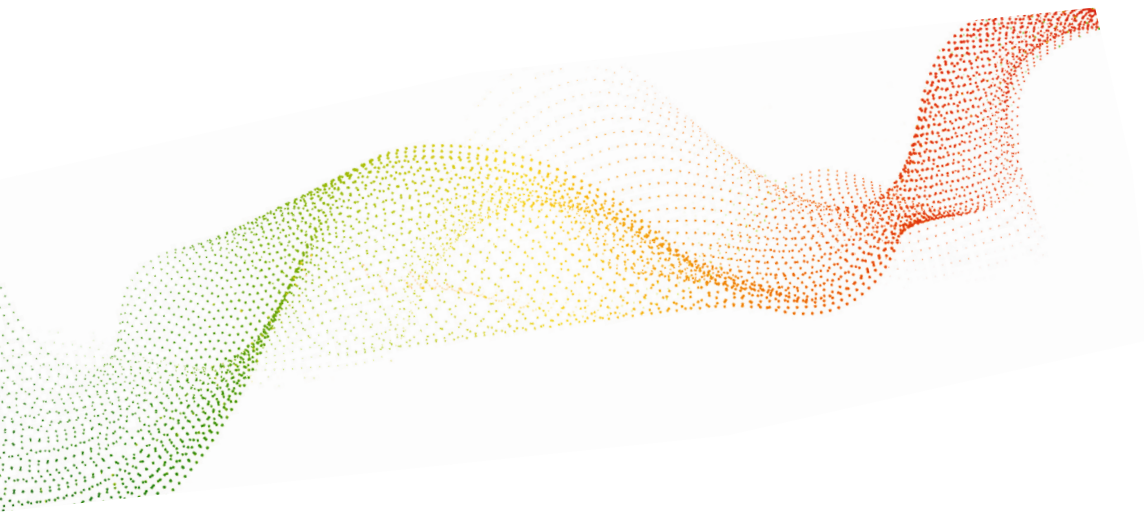
Equine



# Laparoscopy / Thoracoscopy

Endoscopes and instruments for laparoscopic/thoracoscopic surgery

---



## **WIRELESS** Video Laparoscope

**in Large Animals**





# Laparoscopy / Thoracoscopy

Endoscopes for diagnostic and surgical laparoscopy

## Video Version

WL: 50 cm

- Integr. 5,8GHz Videosender
- Ideal for the mobile surgery
- Easy handling
- Fully immersible
- Magnetic self positioning connector



**TS50-10ES** Video laparoscope , 0°, 10 mm, 50 cm, SET  
cordless HD-PAL endoscope for large animals  
with 5,8 HGz radio transmission built-in LED light,  
rechargeable Li battery, fully immersible  
Set consisting of:

- video laparoscope (TS50-10E)
- power adapter (TV27-NET)
- 5" monitor receiver (TXL2-580M)



Magnetic connector

Wireless transmisson





# Laparoscopy & Thoracoscopy

## Trocar cannulas with magnetic valve, safety trocars

Trocar cannulas are designed with different types of valves to reduce or to avoid CO<sup>2</sup> loss when changing instruments and telescope during laparoscopy and thoracoscopy. Our reusable and patented magnetic valve trocar system has several advantages compared to other valve types. First of all they are light in weight and because of the valve construction, the insertion of instruments and scopes will pass smoothly through without scratching or touching the front lense like in a ball system or in a so called automatic valve system. In addition there is nearly no gas loss even when changing instruments. There are no mechanical parts to clean inside except the magnetic flap itself which is a great help to your staff.

### Safety trocar



Tissue pressure exposis the sharp tip



## Inner diameter 5,5mm

for standard 5mm instruments

**231-265V**

**Cannula only, magnetic valve**

ID:5,5mm, WL:20cm,  
inflation stopcock

231-265V



**231-161V**

**Safety trocar only comp. to cannulas**

ID:5,5mm, WL: 20cm,  
fully dismantable, with cork screw handles

231-161V



**231-129**

**Trocar only**

with pyramidal tip for  
trocar with ID: 5.5mm, WL:20cm

231-129



## Inner diameter 10mm

For optical and 10mm instruments

**230-264V**

**Cannula only, magnetic valve**

ID: 10 mm, WL: 20 cm,  
inflation stopcock

**230-161V**

**Safety trocar „Cavi Save“**

ID: 10 mm WL: :20 cm  
only comp. to cannulas,  
with cork screw handles, fully dismantable  
(without picture)





# Laparoscopy & Thoracoscopy

Trocar cannulas with magnetic valve, safety trocars

## Inner diameter 16mm

For stapler and tissue extraction or biopsy

**635-203 Cannula only, magnetic valve**  
ID: 16 mm, WL: 15 cm, without stopcock, trinox (without picture)

**235-111 Trocar only** with sharp tip for trocars  
ID: 16 mm, WL: 15 cm (without picture)

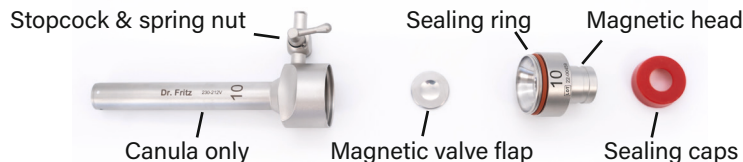
## Special trocar acc. to Dr. Marien

Closing of the spleen-kidney-space in equine

**TR-23-250 Working trocar acc. to Dr. Marien**  
ID: 23 mm, WL: 16 cm, without valve, consisting of:  
cannula (TR-250), sharp trocar (TR-23)



## Accessories



**231-211 Sealing caps** for Ø 5,5mm, blue  
Package of 10 pieces



**631-901 Magnetic valve body, Ø 5mm**  
With Magnetic Head-/valve flap & sealing caps



**234-211 Sealing caps** for Ø 8mm, white  
Package of 10 pieces



**634-901 Magnetic valve body, Ø 8mm**  
With Magnetic Head-/valve flap & sealing caps



**230-211 Sealing caps** for Ø 10mm, red  
Package of 10 pieces



**630-901 Magnetic valve body, Ø 10mm**  
With Magnetic Head-/valve flap & sealing caps



**231-215 Magnetic valve flap**  
for Ø 5,5mm cannulas  
Package of 2 pieces



**630-902 Spare stopcock**  
Complete with spring nut



**230-215 Magnetic valve flap**  
for Ø 8/10/11/12/13 mm cannulas  
Package of 2 pieces



**630-903 Spare spring nut**



**236-217 Sealing ring for Trinox trocar cannulas**  
for Ø 3,5mm & 5,5mm  
Package of 5 pieces



**230-217 Sealing ring for Trinox trocar cannulas**  
for Ø 8, 10, 11, 12, 13mm  
Package of 5 pieces



**230-505 Snap reducer** for cannulas  
from Ø 10mm to 5,5mm



**237-510 Snap reducer** for cannulas  
from Ø 13mm to 10mm





# Laparoscopy & Thoracoscopy

## Palpation, Dissection and Puncture Instruments

### Thoracoscopy first puncture needle

**TR-03-201**    **Puncture needle for thoracoscopy,**  
ID:3 mm, WL:20 cm, incl. sharp trocar



**L-47-210**    **Injection system and probe**  
5mm, WL: 47cm  
protected interchangeable needle  
with outer tube, complete,  
consisting of:  
Inside tube, LL(f) connector (L-47)  
Outer tube/probe L-47-2  
Needle, 1x26mm, 1 piece (L-210)



**L-210**    **Injection cannula**  
spare needle, thin  
size: 1x26 mm, compatible to L-33/47,  
2 pieces



**L-218**    **Injection cannula**  
spare needle, large  
size: 1,9x26 mm, compatible to L-33/47  
2 pieces



**L-218R**    **Injection cannula**  
spare needle, rounded  
size: 2x28 mm, compatible to L-33/47  
2 pieces



### Knot tier

**L-19-544**    **Knot tier, standard version**  
**D: 5mm, WL: 40cm**  
easy filling, suture size up to 1metric



Easy handling, easy  
to tighten, additional  
cutting





# Laparoscopy / Thoracoscopy

Standard instruments, 5mm

**We are currently optimizing our 5 mm instruments for you.  
Individual components may be available upon request — feel free to contact us!**

## Handles

- With or without lock
- HF connector
- Plastic or standard handles



H 01/H 05

- Long life span - one system
- Compatible for 5mm trocar cannulas

## Tubular sheaths

- 5 mm Ø
- Different working lengths
- Rotatable through 360°
- Or fixed
- Insulated



Each jaw insert and outer sheath can be used with any type of handle.

**Instrument can be completely dismantled**

## Scissors

- 531.04H05V** **Hook scissors**, 5mm, 33cm, single action jaws, insulated, rotatable, dismantable, high quality, consisting of:  
jaws insert (53M04), sheath (53 R 1)  
handle (H05), color code:white



## Biopsy forceps

- 531.61H01V** **Biopsy forceps**, 5mm, 33cm, double action jaws, dismantable, consisting of:  
jaws insert (53M60), sheath (53R1)  
handle (H01), color code:black







# Laparoscopy / Thoracoscopy

Standard instruments, 10mm



- 141.11H05B**    **Large surgery scissors, Ø 10mm, WL: 45cm**  
Robust, straight, rotatable,  
Handle isolated



- 141.25H21B**    **Grasping forceps Pennington, Ø 10mm, WL: 45cm**  
Rotatable, handle isolated with ratchet



- 141.26H21B**    **Babcock grasping forceps, Ø 10mm, WL: 45cm**  
Rotatable, handle isolated with ratchet



- 141.48H21B**    **Mixer grasping forceps, long, Ø 10mm, WL: 45cm**  
Rotatable, handle isolated with ratchet



- 146.32H21B**    **Claw grasping forceps, Ø 10mm, WL: 45cm**  
Rotatable, handle isolated with ratchet



## Needle holders

Axial handle, ergonomic, stable, OD: 5mm

- Extremely stable
- Needle self positioning



- L-19-561**    **Needle holder**  
straight, OD: 5mm, WL: 43cm  
axial handle, LL connector

- L-19-563**    **Needle holder**  
angled upwards, OD: 5mm, WL: 43cm  
axial handle, LL cleaning connector

– needle self positioning jaw –



# Laparoscopy / Thoracoscopy

Special devices - suction and irrigation

## ■ Suction-/irrigation pump

For lens cleaning, inflation and suction.  
For small and large animal practice.

- ✓ Easy handling
- ✓ Quiet
- ✓ Fine setting option
- ✓ Ideal for small and large animal practices

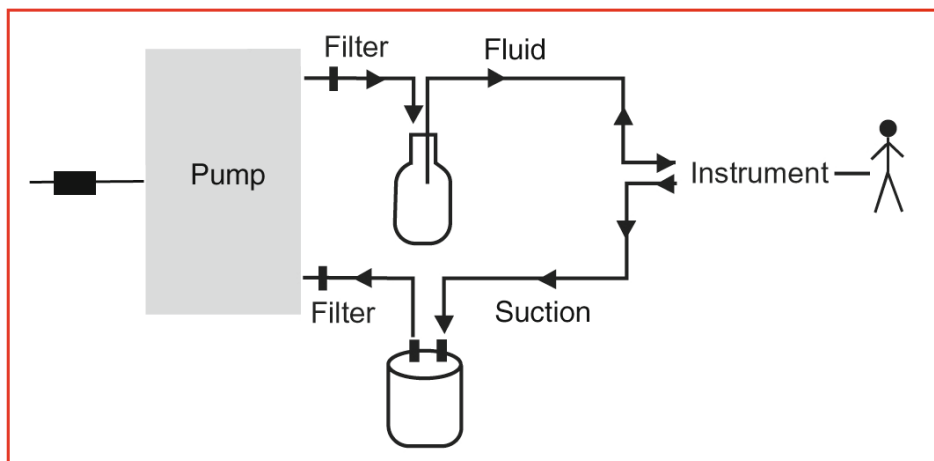


Especially suitable for gastroenterology

**H140-3S Suction-/irrigation pump**  
consisting of:  
Suction & irrigation pump (H140-3)  
1 li. suction bottle (H160-AB-43)  
1 li. flushing bottle (H160-AB-7)  
Tubes & transformer  
Sterile filter (AR-10-922)

**H160-AB-43 Spare suction bottle**  
1 litre with lid

**H160-AB-7 Spare flushing bottle**  
1 litre with lid





# Laparoscopy / Thoracoscopy

CO<sub>2</sub> Inflator, electronically monitored

- small and large animal
- reusable tubing
- bacterial filter
- economical



**741-025V** CO<sub>2</sub> Inflator, electronically monitored,  
max. 20 litre, complete without bottle  
automatic pressure reduction system,  
DIN gas connection type,  
115-230 VAC, 50-60Hz,  
DIN IEC 601/1, DIN VDE 871

## Accessories



**741-009-1** Spare Silicon tube, 3m, for CO<sub>2</sub> inflation,  
incl. connector, autoclavable

**741-009-FF** Sterile filter system for CO<sub>2</sub> -inflator  
disposable, box with 50 pcs.  
medical connection D:22mm

**741-002** CO<sub>2</sub> high pressure tube, 1m  
DIN connector, screw both sides

**741-009V-PN** CO<sub>2</sub> high pressure tube, 0,8m  
compatible to PIN Index bottle (without picture)



\* Sterile product -  
return shipment not accepted



# Laparoscopy / Thoracoscopy

High frequency unit, High speed, Typ Atom

High frequency unit, High speed - with vessel sealing technique. Parallel usage of all outputs.

- Adapter for instruments other manufacturers on request

- uncomplicated use
- up to date safety regulation
- vessel sealing with confirmation signal
- compatible to all instruments on the market
- program via Touch Screen
- SDS self detecting system

**Vessel Sealing**



**HF-401-TH** HF/Radio frequency unit, High End Thermo Stapling (vessel sealing), touch-screen programmable, latest mono & bipolar technique SDS - self detecting system incl. high speed vessel sealing delivery without accessories, 400W, 230VAC, 50/60Hz

## Specifications:

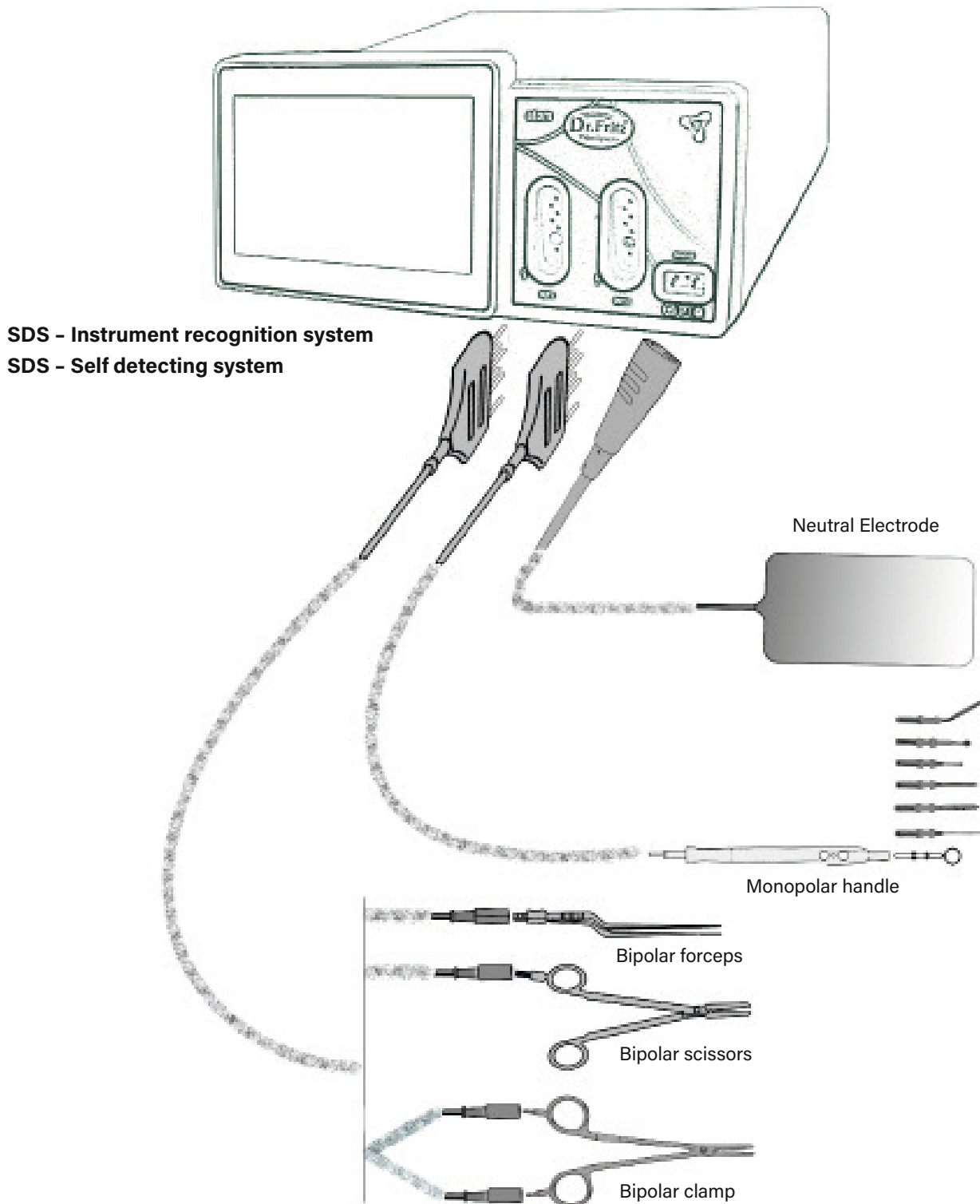
<b>Monopolar</b>	Cutting	400 W
	Coagulation	200 W
	Soft/Forced	+ / +
<b>Bipolar</b>	Cutting	400 W
	Coagulation	200 W
	Auto Start/Stop	+ / +
<b>Bipolar</b>	Thermo-Stapling	+ 300 W
	Thermo sealing	+
	Auto Stop	+
<b>Weight</b>	7 kg	
<b>max. power</b>		420 W



# Laparoscopy / Thoracoscopy

High End with thermo sealing

## ■ Surview







# Laparoscopy / Thoracoscopy

## Recommended Set

### SET-LAP PF BASIC

- **T501-1030**  
Wide angle telescope for large animals
- **231-265V**  
Cannula only, magnetic valve ID: 5,5mm, 20cm
- **231-161V**  
Safety trocar only comp. to cannulas
- **230-264V**  
Cannula only, magnetic valve, ID: 10mm, 20cm
- **230-161V**  
Safety trocar only comp. to cannulas
- **637-202**  
Cannula only, magnetic valve,  
ID: 13mm, 15cm
- **237-103**  
Trocar only with pyramidal tip
- **TR-23-250**  
Working trocar acc. to Dr. Marien, 23mm, 16cm
- **230-505**  
Reducer adapter for trocars 5,5mm
- **237-505**  
Reducer adapter for trocars 10mm
- **237-510**  
Reducer adapter for trocars 15mm
- **L-47-210**  
Injection system and probe, 5mm, 47cm
- **TR-03-201**  
Puncture and irrigation needle, 3mm, 20cm
- **141.48H01V**  
Dissection forceps (Maryland), 10mm, 37cm
- **141.26H11V**  
Babcock grasping forceps, 10mm, 37cm
- **141.32H11V**  
Grasping forceps, 10mm, 37cm
- **141.11H05V**  
Mayo- scissors, 10mm, 37cm, – Super cut –

### SET-LAP PF VIDEO

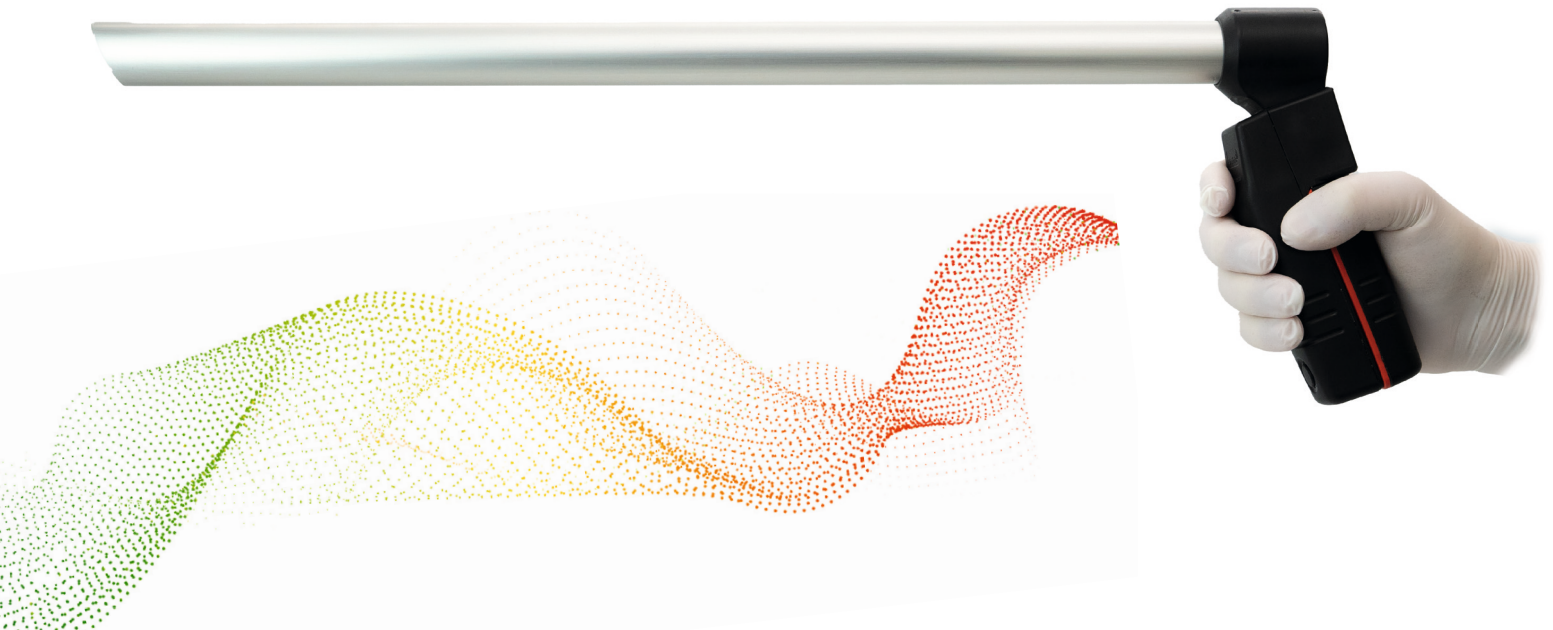
- **TV50-10S**  
Video-Laparoscopy , wireless, 10mm, 50cm
- **TSM10-58N**  
10" Receiver monitor
- **231-265V**  
Cannula only, magnetic valve, ID: 5,5mm, 20cm
- **231-161V**  
Safety trocar only comp. to cannulas
- **230-264V**  
Cannula only, magnetic valve, ID: 10mm, 20cm
- **230-161V**  
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Working trocar acc. to Dr. Marien, 23mm, 16cm,
- **230-505**  
Reducer adapter for trocars 5,5mm
- **237-505**  
Reducer adapter for trocars 10mm
- **237-510**  
Reducer adapter for trocars 15mm
- **L-47-210**  
Injection system and probe, 5mm, 47cm
- **TR-03-201**  
Puncture and irrigation needle, 3mm, 20cm
- **141.48H01V**  
Dissection forceps (Maryland), 10mm, 37cm
- **141.26H11V**  
Babcock grasping forceps, 10mm, 37cm
- **141.32H11V**  
Grasping forceps, 10mm, 37cm
- **141.11H05V**  
Mayo- scissors, 10mm, 37cm, – Super cut –

Equine



# Compact Video Vaginoscope

Professional video vaginoscope, wireless, for diagnostic use and treatment



# **WIRELESS** Compact Video Vaginoscope

worldwide, unique and up to now  
unmatched easy in practical use



Control display



Battery replaceable



# Compact Video Vaginoscope

Professional video vaginoscope, wireless, for diagnostic use and treatment

## For practitioners and universities



- ✓ Battery replaceable
- ✓ Control display on the endoscope
- ✓ Integrated sender 5,8 GHz
- ✓ Integrated LED light
- ✓ Easy handling & quick cleaning
- ✓ Fully immersible

### Set TQ52-28PF

Compact Video Vaginoscope & speculum for equine. Cordless generation with exchangeable battery, built-in camera with 5,8 GHz radio transmission, LED light, 1,5" display. Both completely soakable when vaginoscope and battery are separated.

- Compact Video Vaginoscope
- Obturator, blunt
- 2 spare batteries
- Charging station
- Charger
- Reducer adapter
- 21" monitor receiver

## Accessories to be used as transvaginal laparoscope

### TQ52-65

**Fornix perforator / cross trocar**, 26x570mm. Compatible with TQ52-28PF.

- Trocar & blade guide (TQ52-65-1/2)
- Spare blades, 12 pcs./pack (TQ52-66KL)
- Spare part set, hexagonal wrench, spring, protection caps (TQ52-65ER)



## Spare parts

### Reducer adapter

for TQ52-28, Luer (fem), cap w.5-10mm (234-211), opening and cover cap (234-600) (TQ52-E)

### Scalpel blades

No.20 for trocar TQ52-65, individually packed, 12pcs/pack (TQ52-66KL)



## Individual parts TQ52 series

Compact Video Vaginoscope  
OD: 28mm , WL: 52cm  
fully immersible  
(TQ52-28)



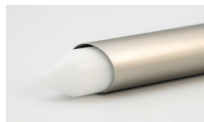
Charger  
(97-FU14EU)

Charging station  
(TVG-4)

Spare Li-Battery  
(TVG-36)



Obturator, blunt  
(TQ52-281)



Reducer adapter  
luer (fem), cap w.5-10mm,  
opening and cover cap  
(TQ52-E)



Scalpel blades, 12pcs.  
(TQ52-66KL)



Fornix perforator/ cross trocar  
(SET: TQ52-65)



Case,  
Case lid can be used as a  
disinfection tray  
Dimensions: 84x27x11cm  
(Y-K-8427-11-1 /  
Y-TQ52-SC)



21" Monitor receiver  
incl. recorder & accu  
(M-LCD-21SK)





# Arthroscopy

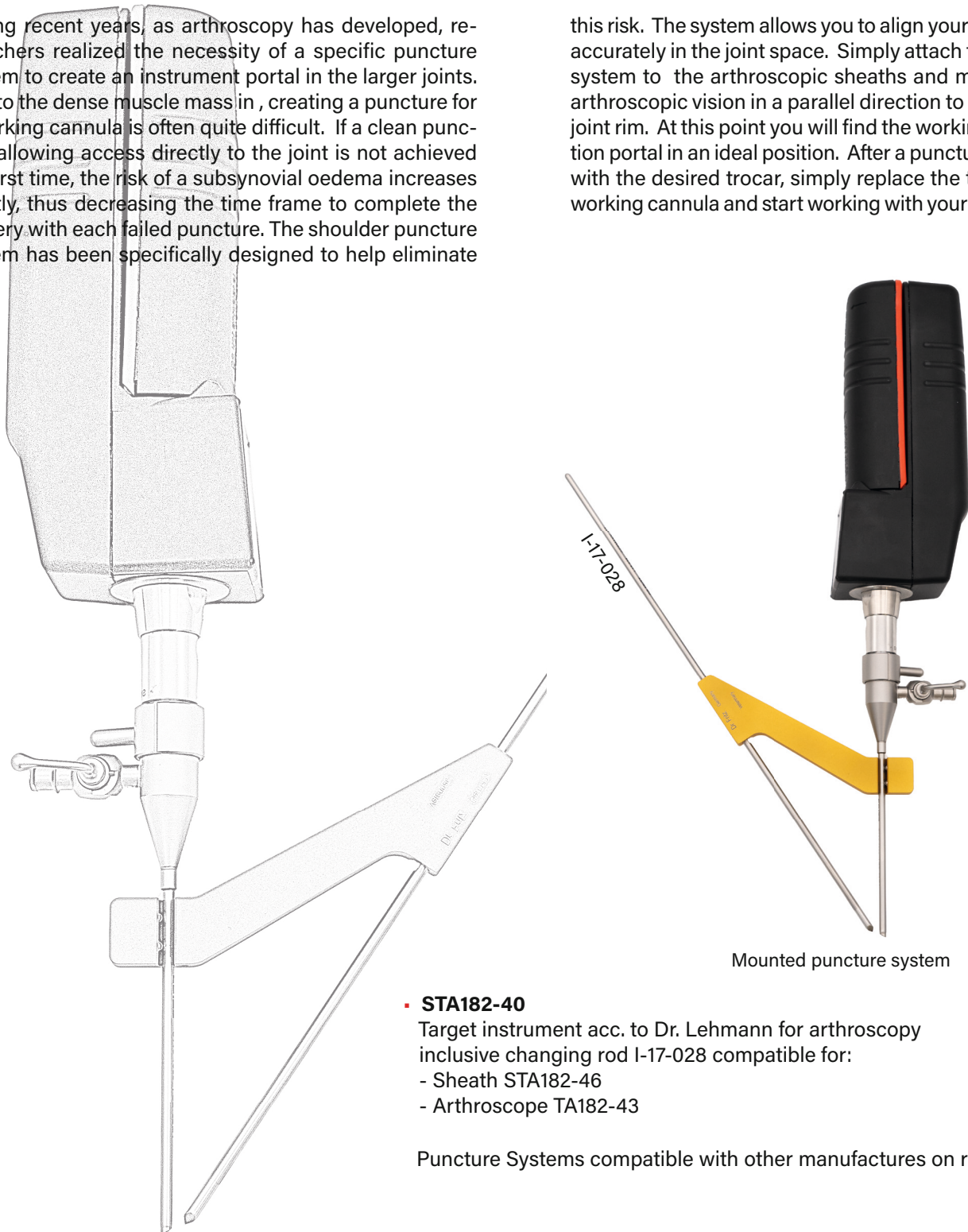
Puncture System acc. to Dr. Lehmann

## Innovation in arthroscopy

Developed and tested at the Veterinary Faculty of Vienna, Austria

During recent years, as arthroscopy has developed, researchers realized the necessity of a specific puncture system to create an instrument portal in the larger joints. Due to the dense muscle mass in, creating a puncture for a working cannula is often quite difficult. If a clean puncture allowing access directly to the joint is not achieved the first time, the risk of a subsynovial oedema increases greatly, thus decreasing the time frame to complete the surgery with each failed puncture. The shoulder puncture system has been specifically designed to help eliminate

this risk. The system allows you to align your arthroscope accurately in the joint space. Simply attach the puncture system to the arthroscopic sheaths and maintain your arthroscopic vision in a parallel direction to the shoulder joint rim. At this point you will find the working triangulation portal in an ideal position. After a puncture is created with the desired trocar, simply replace the trocar with a working cannula and start working with your instruments.



### ▪ STA182-40

Target instrument acc. to Dr. Lehmann for arthroscopy inclusive changing rod I-17-028 compatible for:

- Sheath STA182-46
- Arthroscope TA182-43

Puncture Systems compatible with other manufactures on request.





# Arthroscopy

## Hand instruments

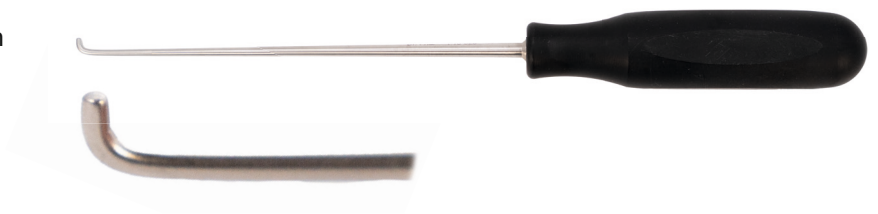
Dr. Fritz hand instruments are especially designed for large animal arthroscopy

### Basic instrument set

- Special design
- Long life span

#### I-18-520 Hook probe

for arthroscopy, OD: 3mm, WL: 12cm  
strong version, heavy handles



#### I-18-521 Special knife

for arthroscopy, OD: 3mm,  
break safe special cut, heavy handles



#### I-18-601 Curette

straight, strong version, cup oval,  
size: 6x4mm



#### I-18-517 Elevator

extra strong, curved  
6mm



#### I-18-110 Osteotome

straight, 4mm





# Arthroscopy

Special hand instruments

- I-18-518 Irrigation cannula with sharp trocar**  
stopcock, ID: 3 mm, WL: 7 cm



- I-18-519 Irrigation cannula with sharp trocar**  
stopcock, ID: 4 mm, WL: 7 cm



- TR-03-201 Puncture needle, big**  
ID: 3 mm, WL: 20 cm  
incl. sharp trocar



- I-18-635 Special curette**  
straight, strong version,  
oval cup: 5,5 mm, 3 mm opening  
and LL(f) suction connector, WL: 12 cm



- Extremely durable
- Easy cleaning
- Bypass opening

- I-18-621 Curette, 35°**  
oblique left, strong version,  
cup oval, size: 6x4 mm



- I-18-622 Curette, 35°**  
oblique right, strong version,  
cup oval, size: 6x4 mm





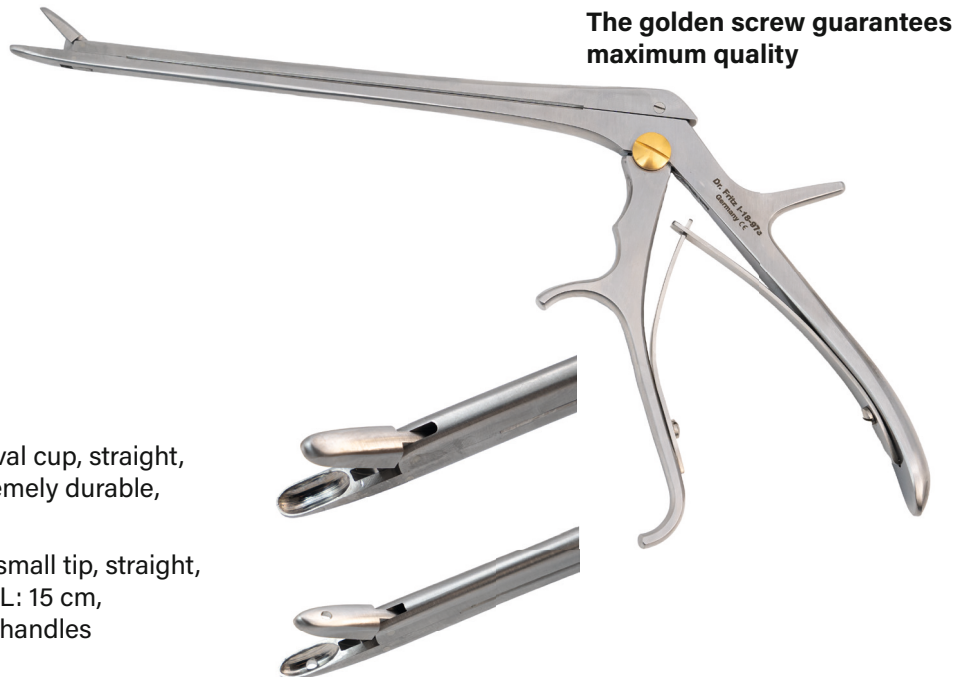
# Arthroscopy

Rongeurs High quality instruments with long life span, extremely durable, especially designed for arthroscopy

## Power line, the strong

- **Heavy handles**
- **Extremely durable**

- I-18-973** Rongeur "Power line", oval cup, straight, 5x10 mm, WL:15 cm, extremely durable, heavy handles
- I-18-974** Rongeur "Power Linie", small tip, straight, fenestrated, 5 x 10 mm, WL: 15 cm, extremely durable, heavy handles



## Instruments for high frequency

### Instruments for high frequency

Mono-/Unipolar  
HF/RF cutting electrodes, the electric knife

- **HF-200-055**  
High frequency connecting cord comp. to arthroscopic cutting electrodes, handles length: 5 m, for units with 4 mm connector



- **HF-200-45**  
High frequency cutting electrode for arthroscopy, 45°, fine tip 4 mm connector, 12 cm



- **HF-200-90**  
High frequency cutting electrode for arthroscopy, 90°, heavy version 4 mm connector, 12 cm





# Arthroscopy

## Special hand instruments

- Robust
- Easy cleaning

**I-18-536**      **Special elevator for the roof joint,**  
acc. to Dr. Zöttl, 3mm, WL: 8cm,  
strong version



**AR-17-19S**      **Hook knife**  
2,7 mm, silicon handle  
autoclavable, colour code



**I-18-534**      **Special elevator for sesamoid fractures**  
acc. to Dr. Foerner, 4 mm curved, long



**Rongeurs instruments with long life span, extremely durable, especially designed for arthroscopy**

### ■ Standard line, the optimally adapted ones

**I-18-662**      **Rongeur „standard line“**  
cup size: 4x8 mm, oval,  
angled upwards, fenestrated  
WL: 11 cm

Ideal shape,  
angled upwards



**I-18-661**      **Rongeur „standard line“**  
cup size: 4x8 mm, oval, straight,  
fenestrated, WL: 11 cm

Jaws tip flat



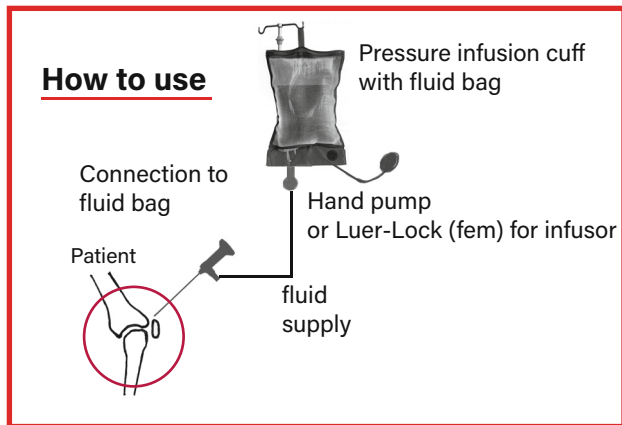


# Arthroscopy

Fluid Supply system for arthroscopy

## Manual fluid supply system

One of the cheapest options for hydration



- **AR-08-100N Pressure infusion cuff** for 500-1000ml with manometer and hand pump reusable high quality manufacturing

► For very high fluid pressure (e.g. hoof joint) a small cuff is recommended (max. 1 liter).

## Automatic fluid supply

The innovative infusion solution for horses

The state-of-the-art system can be effortlessly attached to the horse using a girth strap, allowing the animal to remain fully mobile during the infusion. Particularly practical is the use of the pressure infusor both in the stable and in the operating room: it can be used flexibly without an IV stand, providing added flexibility in the operating room as well as on the premises.

- ✓ **Constant fluid delivery**
- ✓ **Energy free**
- ✓ **No maintenance**
- ✓ **No altitude impact**

### ■ ARM-10

#### Mechanical pressure infusor

Dimensions: 337 mm x 252 mm x 116 mm  
 Weight: 1,8 kg  
 Infusion pressure: 100 to 200 mbar (depending on the bag size)  
 Flow range: 0 bis 8,3 litres/hour  
 (nach ISO 8536-4), 5 litres/hour  
 Empty rate: 95% bis 100%  
 Norms: ISO 8536-4 and ISO 28620





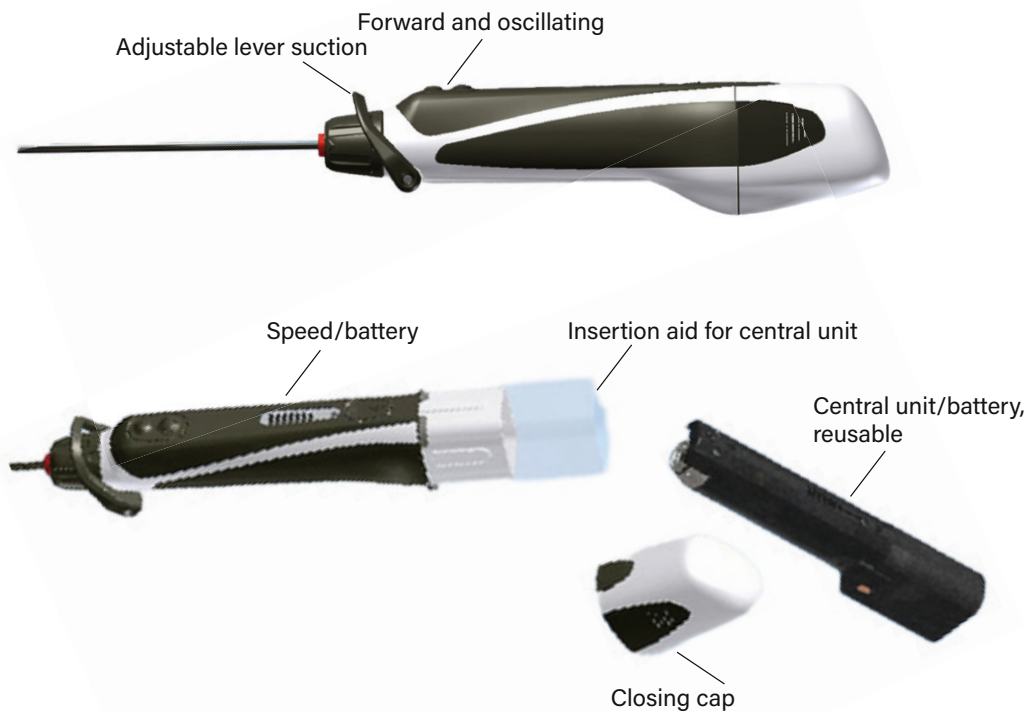
# NEW

Equine



# Shaver

Cordless single use shaver system for arthroscopy



## ■ Starter set (SFR-205SET)

Set consistinf of:

- Central unit - motor (SFR-206M)
- Charging station (SFR-205B)
- Burr shaver Ø 4,5mm (SFR-104C)



## ■ SFR-206M Central unit - motor

The reusable central unit, the heart of the system, is equipped with state-of-the-art electronics and a rechargeable battery. It provides the surgeon with both standard and advanced features: a powerful brushless motor ensures optimal torque for all arthroscopic procedures, while the durable battery supports even the longest surgeries.

- 6000 rpm
- Approx. 40min. runnig time



## ■ SFR-205B Charging station

The charging station accommodates up to four central units, though the central units (motors) are not included with the charging station. When a central unit is inserted, it is checked by an intelligent control system. A display then indicates the battery's charge status.



# NEW

Equine



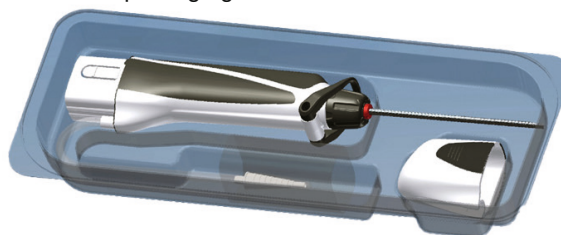
# Shaver

Cordless single use shaver system for arthroscopy

## ■ Disposable shaver

- No preparation or sterilization required
- Ready for immediate use
- Integrated tube connection
- Minimum order quantity: 5 pieces

Sterile packaging



- Aggressive meniscus resection, fast removal of soft tissue during shoulder surgeries.
- Suitable for a combination of soft tissue and bone resection.

Ø	Item No.
3,5mm	SFR-103L
5,0mm	SFR-104L



- Versatile aggressive cutting blade:  
Ideal for extensive tissue removal.

Ø	Item No.
2,9mm	SFR-102N
5,0mm	SFR-104N



- Oval Burr:  
Fast bone resection.
- Suitable for subacromial decompression.

Ø	Item No.
4,5mm	SFR-104E



- Serrated inner blade and smooth outer blade for effective resection of meniscus, cartilage, and synovium.

Ø	Item No.
3,5mm	SFR-103P



- Ball Burr:  
Ideal for notchplasty and osteochondral cleaning.

Ø	Item No.
4,5mm	SFR-104C





# Arthroscopy

## Accessories

I-18-518



- **I-18-518** Irrigation cannula with sharp trocar stopcock, ID: 2,7 mm, WL: 7 cm, luer connection

AR-10-948



**Connection:** Fluid bag to arthroscope

- **AR-10-948** Infusion tube, set complete, with needle for sterile bags/bottles, Luer-Lock (m), silicon, 6x2 mm, 3 m, large inner diameter, autoclavable
- **X-7-20-10** Spare infusion tube, silicon, 1 m, size: 6 x 2 mm, color: natural
- **AR-10-9** Spare needle for infusion bottles/bags ID: 4 mm compatible to tubes ID: 3,5-5 mm
- **LLM-1258** Spare Luer-Lock connector male, 10 mm

AR-10-9



## Camera covers

- **DE-10-25** Camera covers, disposable, 1pcs. polyethylen, 13x250 cm minimum order 25 pieces



DE-10-25



## Cleaning accessories

- **DE-5-17** Cleaning brush for small cannulas with ID: 2-4 mm, WL: 17 cm



- **DE-10-300** Disinfection concentrate IP for rigid and flexible endoscopes. For manual and automated use, 1-3%ige dilution, 5 litres



- **DE-10-425** Soak basin for chemical solution disinfection, consisting of basin (perforated) tray&cover for basin, size: 42x16x9,5 cm





# Arthroscopy

## Accessories

### Video cart

Completely mounted

- ✓ 50cm unit size
- ✓ Camera fixation knob
- ✓ Drawer
- ✓ Ask for additional accessories

**WV-54043**      **Video cart**, H: 143 cm

size: 62x63 cm, completely mounted, basic version,  
color: grey, partly blue,  
\*\*drawer inbuilt  
\*\*fixation knob for video camera head  
\*\*specially rust protected  
max. weight: 150kg/330lbs

(Gastroscope bracket, fixation system. devices  
and monitor are separate accessory)



WV-54043

**WV-53022**      **Video cart**  
as above but height 110 cm (without pictures)

**WV-45111**      **Video cart**, H: 112 cm,

size: 54x58cm,  
completely mounted, basic version,  
drawer inbuilt with handle  
max. weight: 50kg/110lbs  
max. unit size: 45cm  
color: grey, partly blue,



WV-45111

### Accessories for Video cart

**WV-99619**      **Fixation system for infusion bottles**  
mounting set

**WV-99618G**      **Gastroscope mount for Dr. Fritz TG series**  
inductive charging, with telescope rod

**WV-01601**      **Fixation system for CO<sub>2</sub> bottles**  
mounting set, comp.to video carts  
for 5-10 litre bottles, max OD: 14,5 c

**WV-02851**      **Fixation system for CO<sub>2</sub> bottles**  
mounting set, comp.to video carts  
for big bottles, max OD: 20,5 cm



WV-99618G

Equine



# OP Equipment

EquiPorter

## EquiPorter®

by F. Schlöderer & R. Fritz

[www.equiporter.com](http://www.equiporter.com)



- the EquiPorter Pre OR safety sling -



110 2025

+49 (0)7777 / 882300 ■ [dr.fritz@dr-fritz.de](mailto:dr.fritz@dr-fritz.de) ■ [www.dr-fritz.com](http://www.dr-fritz.com)

**Dr. Fritz®**  
Wireless Endoscopes





# OP Equipment

EquiPorter

## ■ Pre OR safety Sling\*\*

A new development of a protection and handling sling system for equine general surgery

- To be mounted before surgery
- To take down patient during sedation and anesthesia
- To handle during surgery
- To assist during recovery/standing after surgery



**EquiPorter®**  
by F. Schlegel & R. Fritz [www.equiporter.com](http://www.equiporter.com)



4 point carrying frame



On-load operation



Belt elongation

- Easy mounting
- 4 point lifting/carrying system
- Individually adjustable
- Two sizes
- Washable

### EP1-6170S

Pre OR safety belt, 170cm,  
small, max.weight: 600kg  
set incl.bag, washable (EP1-63)

### EP1-6140S

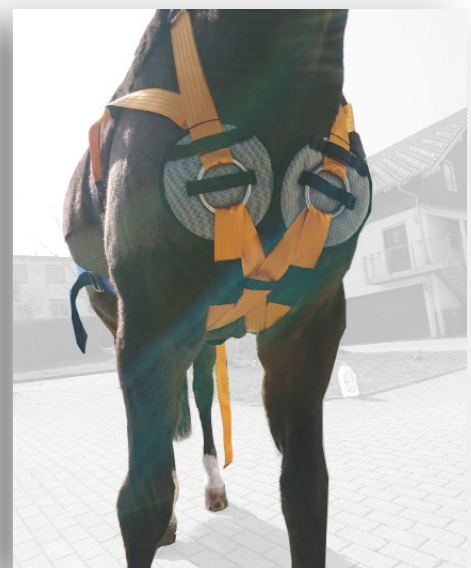
Pre OR safety belt, 150cm,  
small, max.weight: 500kg  
set incl.bag, washable (EP1-63)

### EP-R-63S

Carrying frame for OR safety belt  
set with foam buffer,safety hooks, max. weight: 750kg  
size: 101 x 40 x 15cm, 8,5kg



In combination with a 4 point carrying frame it will be  
an ideal safety accessory for any  
equine hospital with typical hoisting cranes



\*\*Only for short time assisted lifting and weight support procedures (max.5-10min)

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# Bovine

**Dr. Fritz®**  
Wireless ■ Endoscopes

- Teat Endoscopy, Theloscopy
- Teat Products/Keratelin
- Laparoscopy/Thoracoscopy
- Vaginoscopy



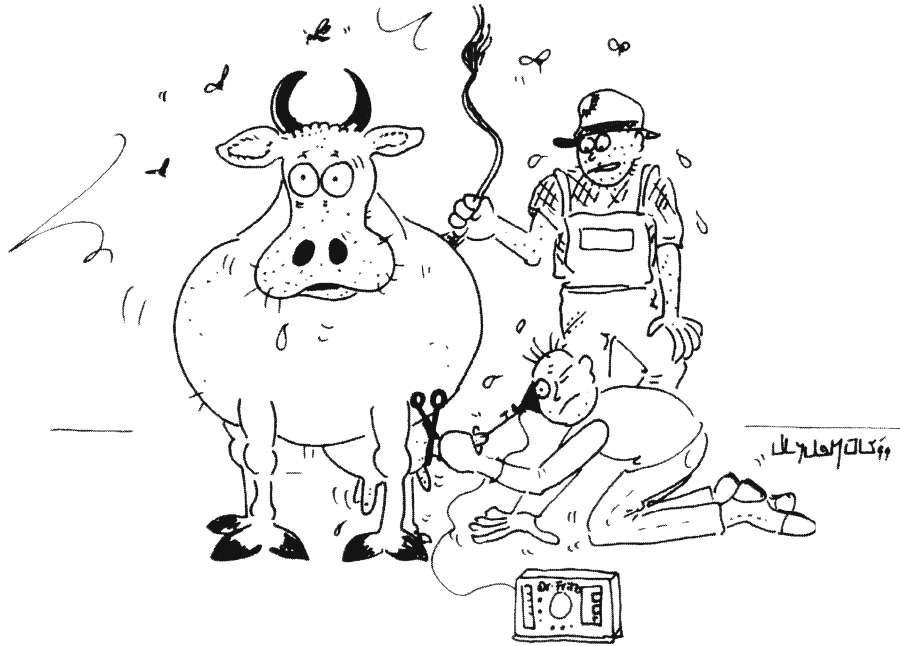
We are changing  
veterinary endoscopy

Bovine



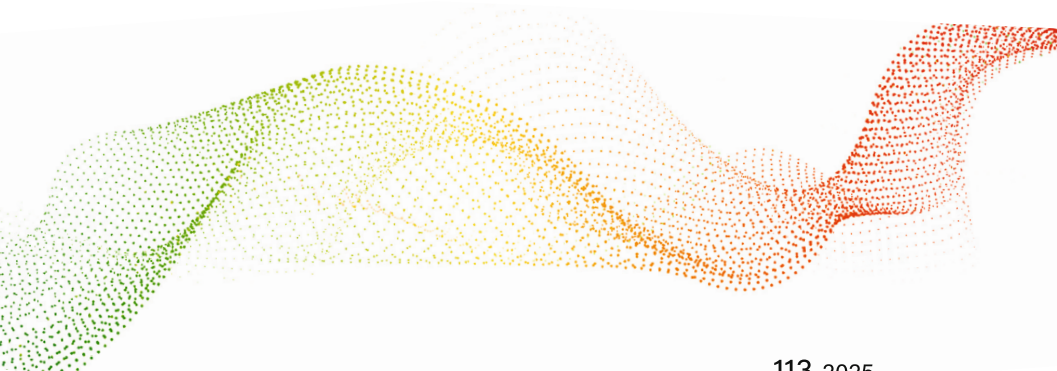
# Teat Endoscopy / Theloscopy

Minimal invasive treatment of teat disorders



## **WIRELESS** Video Teat Endoscopy

Equipment for endoscopic and  
diagnosis in cattle



113 2025

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**Dr. Fritz**<sup>®</sup>  
Wireless Endoscopes





# Teat Endoscopy / Theloscopy

**Treatment of teat disorders using minimal invasive techniques with teat endoscopy**

The use of a lateral portal techniques in teat endoscopy by **Maximilian Medl** and **Klaus Querengässer** in 1994 has created a renaissance in research into teat disorders and treatment. Following their findings specific endoscopic equipment was developed to improve diagnosis and treatment.

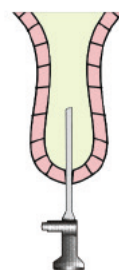
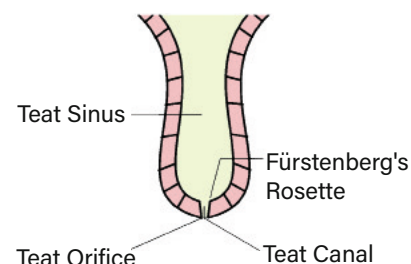


A further new generation of instruments completes the set: first a teat clamp to enable endoscopy, secondly a new teat knife with disposable blades and thirdly our stenosis cutter acc. to Eisenhut. We supply a suitable transport case to protect the scope and the instruments with additional parts. With our new **Keratelin** products we offer excellent and professional after care service.

## Teat Set standard, SET-ZIZ-3

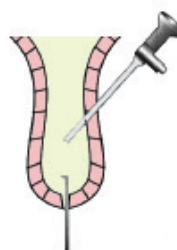
With battery handle, air pump and instruments

<b>T141-3000</b>	<b>Wide angle telescope</b> , 0°, OD: 3mm, WL: 14cm
<b>S140-3001</b>	<b>Sheath</b> , OD: 4mm, WL: 12cm
<b>LED-8-32</b>	<b>Light handle</b> , mignon battery AA, 1,5 VDC
<b>ZB-5-3</b>	<b>Inflation pump</b> , battery operated,
<b>Z-40-05</b>	<b>Special teat probe</b>
<b>Z-44-85</b>	<b>Special teat clamp</b> , with ratchet, size 12cm
<b>Z-55</b>	<b>Teat knife</b> acc.to Dr.Ebner,
<b>Z-47-030</b>	<b>Stenoscutter</b> D: 3,0 mm
<b>Z-47-033</b>	<b>Stenoscutter</b> D: 3,3 mm
<b>DE-5-17</b>	<b>Cleaning brush</b> , small, 17cm
<b>DE2014-41</b>	<b>Sterilizing &amp; storing case</b> , 200x140x40mm
<b>A79-IP6-SET</b>	<b>DIN Okular</b> Lense with cover adaptor
<b>K-4530-10</b>	<b>Special transportation case</b> , for teat endoscopy



### Conventional Technique:

Examination via teat canal  
An examination of the teat sinus is possible but you can not see the Fürstenberg's Rosette, where 95% of the internal lesions occur. Parallel treatment through the teat canal is difficult.



### Medi-Technique:

Examination and treatment via lateral teat wall. Only lateral perforation of the teat wall enables easy examination of the whole teat lumen and especially of the Fürstenberg's Rosette. Via teat canal treatment is possible under endoscopic control.

Please ask us or your customer service for a special quotation for your practice.

Literature: MEDL, M., K. QUERENGÄSSER et al.: Zur Abklärung und Behandlung von Zitzenstenosen mittels Endoskopie, Tierärztl. Prax. 1994, 22:532-7 / QUERENGÄSSER, K.: Diagnose u. Therapie v. Zitzenstenosen beim Rind mittels Endoskopie, Univers. Zürich, Diss. 1998 / SEEH, C., R. HOSPES: Erfahrungen mit einem Theloresektoskop, Tierärztl. Prax. 1998, 26(G):110-8



# Teat Endoscopy /Theloscopy

Treatment of teat disorders using minimal invasive techniques with teat endoscopy

- Wireless video transmission
- For TV, notebook, PC
- Li battery
- Resolution 400x400

## ■ SET-Z6-VE

### Video teat endoscopy set Basic, 3,5 mm

wireless video endoscope with radio transmission 5,8GHz:

97-FU17	Wireless endoscope (VCS3), charger
TXL2-580M	5" monitor, receiver&recorder, battery operated
TR-04-84S	Sheath and trocar
K-4530-10	Transportation case

(without picture)

## ■ SET-Z6-VIS

### Video teat endoscopy set Plus, 3,5 mm

wireless video endoscope with radio transmission 5,8GHz:

97-FU17	Wireless endoscope (VCS3), charger
TXL2-580M	5" monitor, receiver&recorder, battery operated
TR-04-84S	Sheath and trocar
ZB-5-3	Battery air pump/tube
Z-40-05	Palpation probe
Z-44-85	Teat clamp, 12 cm
Z-55	Teat knife acc. to Ebner
Z-47-030	Stenosiscutter D: 3,0 mm
Z-47-033	Stenosiscutter D: 3,3 mm
DE-5-17	Cleaning brush, 17 cm
DE2014-41	Sterilizing tray
K-4530-10	Transportation case



## ■ SET-Z6-EW Additional equipment (only in connection with VCS3, small animals)

to be used in teat endoscopy, consisting of:

TR-04-84S	Sheath and trocar
ZB-5-3	Battery air pump/tube
Z-40-05	Palpation probe
Z-44-85	Teat clamp, 12 cm
Z-55	Teat knife acc. to Ebner
Z-47-030	Stenosiscutter D: 3,0 mm
Z-47-033	Stenosiscutter D: 3,3 mm
DE-5-17	Cleaning brush, 17 cm
DE2014-41	Sterilizing tray
K-4530-10	Transportation case





# Teat Endoscopy / Theloscopy

## Standard instruments

### The new standard



#### Teat knife acc. to EBNER

- handle with disposable blade
- blades easy to change and safe
- for each large animal practice

**Z-55** Teat knife acc. to Dr. Ebner, pat. locking system, handle and 1 blade (disposable)

**Z-55-2** Teat knife acc. to Dr. Ebner, pat. locking system, const. of: handle (Z-55) and 10 spare blades (Z-55-1)

**Z-55-1** Scalpel blades f. teat knife, 10pcs/b individually packed, sterile, comp. to handle type Z-55

### The second generation

#### Stenosis cutter acc. to EISENHUT

- high quality tissue punch
- easy to clean



**Z-47-030** Stenoscutter acc. to EISENHUT, small  
OD: 3mm, WL: 4,5cm,  
color code: metal



**Z-47-033** Stenoscutter acc. to EISENHUT, large  
OD: 3,3mm, WL: 4,5cm,  
color code: gold



**Z-40-05** Special teat probe for teat canal measurement and palpation



**DE-5-17** Cleaning brush small, 17cm, for tubes  
ID:2 - 4mm, autoclavable, 1 pc.



# Keratelin® Products

## ■ Keratelin® Teat products for teat care

### Suture-Bandage Plug the natural solution

**Z-99025-TH**     **KERATELIN „Thelasel“**  
teat dilator, OD: 3 mm, box 24 pcs.,  
sterile\*

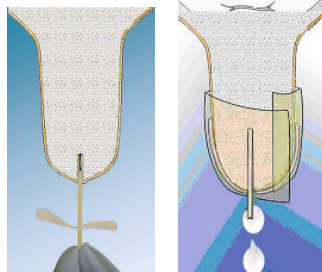
- The revolution in teat dairy care -



#### Breakage safe and stable.

Latest generation of natural teat canal plugs - first choice in any fresh cases of distal teat injuries  
- plug and tape it -

### KERATELIN "P2-Cath" Permanent Catheter



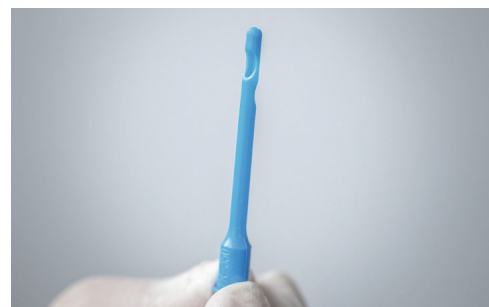
**Z-99027**     **KERATELIN „P2-Cath“**  
acc. to Schlederer, 8 pcs.,  
OD: 2,8mm, LL(w), individually packed,  
sterile\*



- For easy day milk release  
- Easy and gentle to insert  
- Fast milk flons

### KERATELIN Milk Cannula professional teat care

**Z-99055**     **KERATELIN Milk Cancula,**  
disposable, 100 pcs.  
individually packed, sterile\*



Extra large inner  
diameter, available every time.

\*Attention: sterile product -  
return shipment not accepted

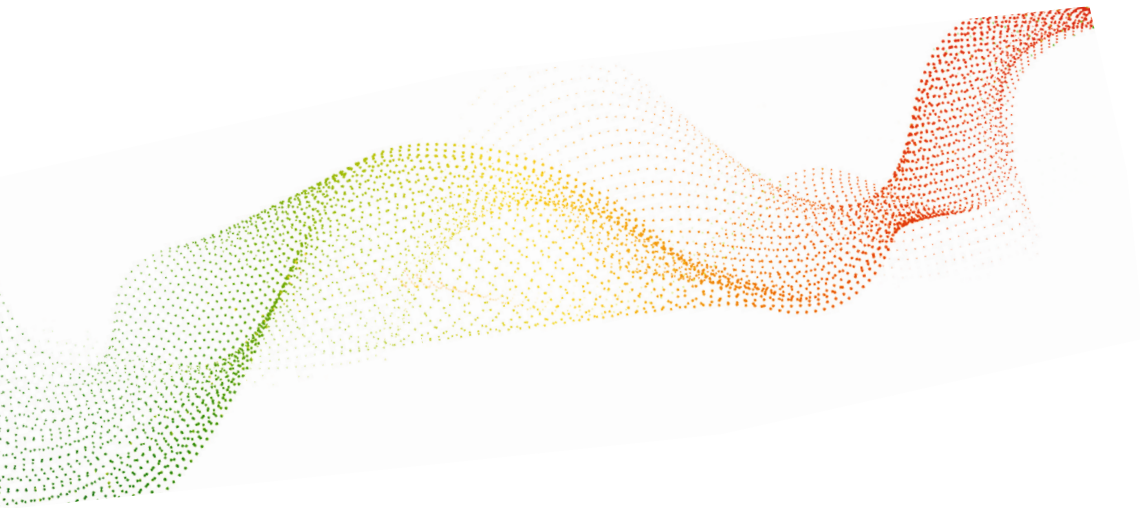
Bovine



# Laparoscopy / Thoracoscopy

Equipment for laparoscopic repositioning and fixation of abomasal displacement  
(acc. to Dr. Janowitz), accessories for standing upright position (acc. to Dr. Christiansen)

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## **WIRELESS** Video- Laparoscopy

in Cattle

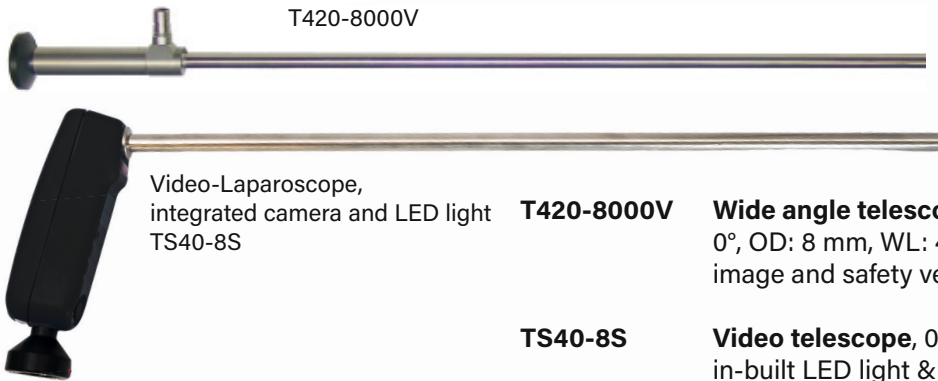


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# Laparoscopy

## Telescope, Trocars and Accessories



T420-8000V

Video-Laparoscope,  
integrated camera and LED light  
TS40-8S

T420-8000V

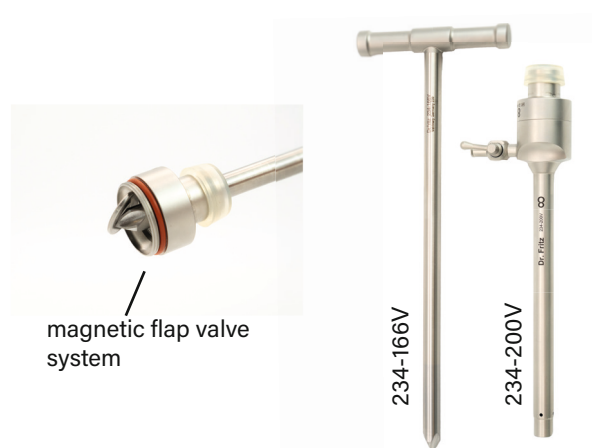
**Wide angle telescope,**

0°, OD: 8 mm, WL: 46 cm. large  
image and safety version, for large animal practices

TS40-8S

**Video telescope, 0°, wireless, OD: 8 mm, WL: 40 cm,**  
in-built LED light & 5,8Ghz sender, rechargeable  
Li battery, fully immersible, resolution: 720x640pxs,  
robust veterinary version, set consisting of:  
video laparoscope (TS40-8), charger(TV27-NET)

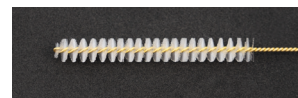
- 234-200V** **Cannula only,** magnetic valve, ID: 8mm,  
WL:12cm, stainless steel, stopcock
- 234-166V** **Trocar, only,** cork screw handle, special  
sharp tip, for cannulas ID: 8mm, WL: 12cm
- 231-201V** **Cannula only,** magnetic valve, ID: 5,5mm,  
WL:12cm, stainless steel, stopcock
- 231-166V** **Trocar, only,** cork screw handle, special  
sharp tip, for cannulas ID: 5,5mm, WL: 12cm



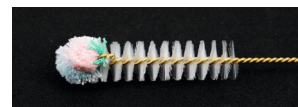
magnetic flap valve  
system

### Accessories:

- 234-211** **Spare sealing caps,** for trocar cannula 8 mm, p. of 10 pcs.
- 231-211** **Spare sealing caps,** for trocar cannula 5,5 mm, p. of 10 pcs.
- 230-215** **Spare magnetic valve flap** 8/10/11/12/13 mm, p. of 2 pcs.
- 231-215** **Spare magnetic valve flap** 5,5 mm, p. of 2 pcs.
- DE-6-21** **Cleaning brush for tubes,** size: 4 to 7 mm, 20 cm
- DE-9-25** **Cleaning brush for tubes,** size: 7 to 10 mm, 25 cm
- DE-6-102** **Cleaning brush, flexible,** for tubes, size: 5 to 8 mm, 70 cm



DE-6-21



DE-9-25



DE-6-102

### Light sources for field practice

- LED-8-35** **LED light handle, accu power set,**  
comp.to Fritz/Wolf, handle water resistant,  
consisting of:  
handle only (LED-8-35G), charger (LED-8-35LA),  
Li accu block 3,7Vx 1Ah (LED-8-35B)



LED-8-35



# Laparoscopy

## Instruments & Accessories

### Safety toggle

- Robust and break resistant(material)
- 90 cmdouble suture material
- With markings along the suture
- Increased stiffness of suture material to assist placement in abdomen

**LO-40-04 Safety toggle pin** acc. to Dr. Janowitz, for laparoscopic abomasal fixation, 5 pcs.



### Needle, puncture system

**L-33-218 Palpation probe and puncture cannula,**  
OD 5 mm, 33 cm

L-33-218



**TR-40-350 Toggle placing trocar set**  
acc to Janowitz,  
OD: 5 mm, WL 35 cm,  
consisting of:  
cannula only (TR-40),  
trocar only (TR-40-3),  
obturator (TR-40-35)

TR-40-350



### Suture grasping forceps

**L-19-757 Suture grasping & preparation forceps**  
acc. to Dr. Janowitz, long version, OD: 5mm, WL: 46 cm,  
cleaning connector

L-19-757



**L-19-461 Suture grasping hook** acc. to Dr. Meyer, 5 mm, 40 cm







# Laparoscopy

Spieker acc. to Christiansen



Repositioning of LDA,  
in a standing upright position

Janowitz and Christiansen,  
Gießen 2003

## TR-78-766 Christiansen-Spieker for large animals

Length: 1m

Consisting of:

- Lancet TR-78-761
- Inner tube only TR-78-762
- Outer tube front part TR-78-763-1
- Grip outer tube TR-78-763-2



## TR-78-761 Lancet only

Suitable for Grip outer tube TR-78-762



## TR-78-762 Inner tube only

Suitable for lancet TR-78-761



## TR-78-763-1 Outer tube, front part only

Suitable for Grip outer tube TR-78-763-2



## TR-78-763-2 Grip outer tube only

Suitable for Outer tube front part  
TR-78-763-1



## TR-13-145 Working trocar

Ø 13mm, WL: 14cm

Consisting of:

- Cannula TR-145
- Sharp trocar TR-13



## 237-505 Reducer adapter

For trocars

- From Ø 13mm to Ø 10mm





# Laparoscopy

## Soak basin



DE-10-426

**Soak basin** for chemical solution disinfection consisting of basin /perforated), tray & cover for basin, size:72,5x20x14 cm

## Suction & inflation pump



H140-3S



H150-1-1

H140-3S

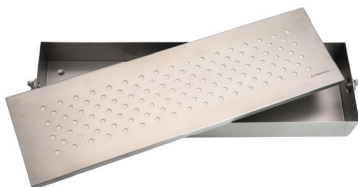
**Suction & irrigation pump**, soft system, complete with 2 bottles (suction/ water) 1 litre each, tubing set autoclavable, vacuum: 3 L/min, max: 0,4 bar pressure: 4 L/min, max.0.5 bar (400mmHg) incl. transformer 115- 240VAC;50/60Hz

H150-1-1

**Inflation pump**, small, 4 litre/min silicon tube, LL(m), 3m, 230VAC, 50/60Hz

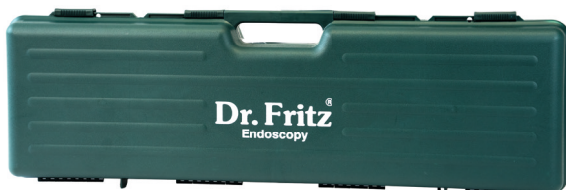
## Transportation case and instruments, container

For safe storage of your cold light source, instruments and telescopes



DE4011-48

**Sterilizing and storing case**, stainless steel, 40x11x6 cm, lid perforated, with textile filter



K-8427-11

**Case for storage and transport of telescopes and instruments**, 84x27x11 cm,

Y-K-8427-13 **Spare inlay for transportation case**

type K-8427-11, washable (without picture)



# Laparoscopy

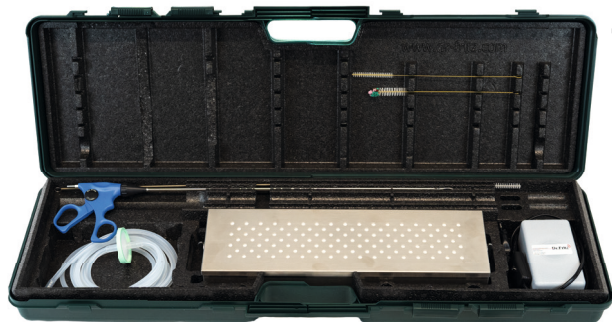
**Set for laparoscopic repositioning and fixation of abomasal displacement in cattle acc. to Dr. Janowitz**

## Sets with lights handle

This set allows the veterinary surgeon to use a quick, and extremely safe technique with no medication requirements as well as quick recovery of the patient. The basic element in the set is a specially developed robust scope with a length designed specifically for this purpose. Instruments are specifically designed for use in large animal field situations and stored in a practical transport case to guarantee a long life. In research programs it emerged that the traditional toggle system often offered inadequate strength and resulted in either rupture of the suture material or breakage of the plastic toggle material. This has led to the development of a new safety toggle with a 90 cm long break safe double suture.

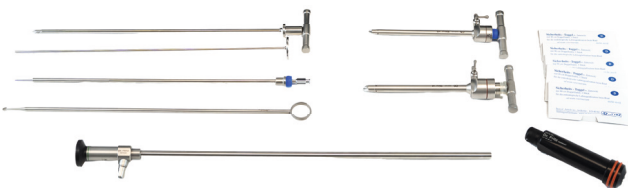
### Basic set (SET-LAB-231)

Set for endoscopic LDA/RDA repositioning



▪ Removeable, washable inlay

▪ Case bottom can also be used as disinfection basin



### 2-step technique (Janowitz-Technik)

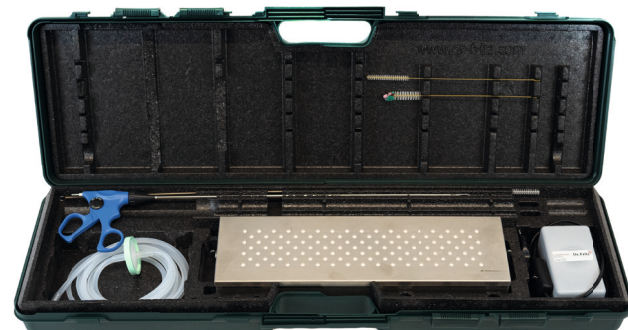
Basic set consisting of:

- Special cattle telescope, Ø 8mm, 0°
- Trocars and trocar cannulas Ø 8mm & 5mm
- Trocars and trocar cannulas Ø 5mm
- Palpation probe and puncture needle
- Abomasal puncture trocar set
- Suture grasping forceps, long
- Suture grasping hook acc.to Meyer
- Safety toggle pins, 5 pieces
- Sterilizing and storage tray
- Inflation pump
- Cleaning brushes
- LED light handle, accu
- Transportation case, can also be used as a disinfection basin

**Set also available with video endoscope - SET-LAB-V41**

### Large set (SET-LAB-232)

Basic set + Spieker acc. to Christiansen



### 2-step + 1-step technique (Janowitz- + Christiansen Technik)

Large set consisting of:

- Basic set
- Trocar and cannula Ø 13mm, large
- Spieker acc. to Christiansen complete

**Set also available with video endoscope - SET-LAB-V42**



# Laparoscopy

Set for laparoscopic repositioning and fixation of  
abomasal displacement in cattle acc. to Dr. Janowitz

## Eco Set (SET-LAB-233)



### 1-step technique (only standing upright position)

Set „Eco“ consisting of:

- Special cattle telescope Ø 8mm, 0°
- Trocar and trocar cannula Ø 8mm
- Abomasal puncture trocar cannula, and blunt obturator
- Safety toggle pins (5pcs)
- LED light handle, battery
- Trocar and cannula, 13mm, large
- Spieker acc.to Christiansen
- Transportation case, can also be used as a disinfection basin

**Set also available with video endoscope - SET-LAB-V43**

## All sets also available with video endoscope

Video „Basic“ set SET-LAB-V41

Video „Large“ set SET-LAB-V42

Video „Eco“ set SET-LAB-V43



### Transmission



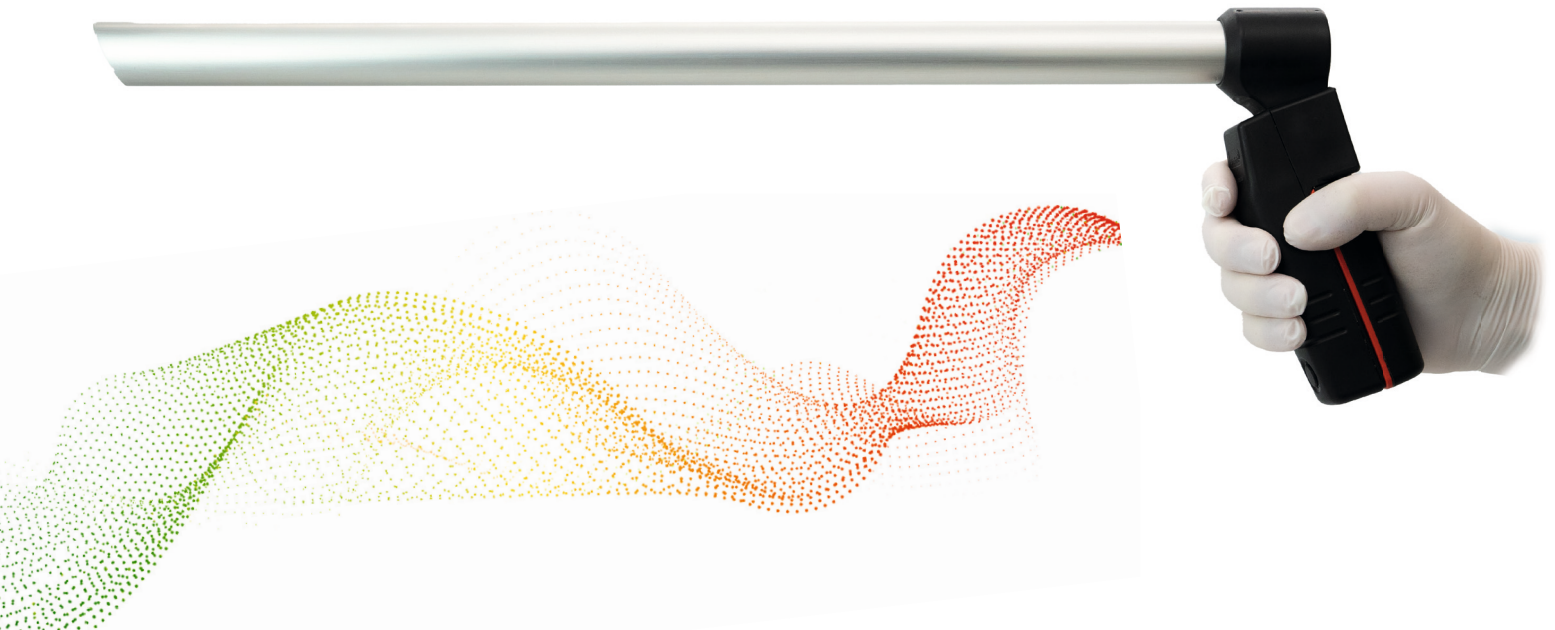


Bovine



# Compact Video Vaginoscope

Professional video vaginoscope, wireless, for diagnostic use and treatment in dairy cattle



# **WIRELESS** Compact Video Vaginoscope

worldwide, unique and up to now  
unmatched easy in practical use



Control display



Battery replaceable

125 2025

+49 (0)7777 / 882300 ■ [dr.fritz@dr-fritz.de](mailto:dr.fritz@dr-fritz.de) ■ [www.dr-fritz.com](http://www.dr-fritz.com)

**Dr. Fritz**<sup>®</sup>  
Wireless ■ Endoscopes





# Compact Video Vaginoscope

Professional video vaginoscope, wireless, for diagnostic use and treatment in dairy cattle

## ■ For practitioners and universities



- ✓ Battery replaceable
- ✓ Control display on the endoscope
- ✓ Integrated sender 5,8 GHz
- ✓ Integrated LED light
- ✓ Easy handling & quick cleaning
- ✓ Fully immersible

### Set TQ52-28RD

Compact Video Vaginoscope & speculum for cattle. Cordless generation with exchangeable battery, built-in camera with 5,8 GHz radio transmission, LED light, 1,5" display. Both completely soakable when vaginoscope and battery a separated.

- Compact Video Vaginoscope
- Obturator, blunt
- 2 spare batteries
- Charging station
- Charger
- Reducer adapter
- 10" monitor receiver

## ■ Accessories to be used as transvaginal laparoscope

### TQ52-65

**Fornix perforator / cross trocar**, 26x570mm. Compatible with TQ52-28RD.

- Trocar & blade guide (TQ52-65-1/2)
- Spare blades, 12 pcs./pack (TQ52-66KL)
- Spare part set, hexagonal wrench, spring, protection caps (TQ52-65ER)



### TQ52-64S

**Ova ligator**, Ring ligator, 64cm. Compatible with TQ52-28RD.

- Main part with handle (TQ52-64G)
- Lifter (TQ52-64H)
- Ligatur rings (TQ52-R50)
- Applicator (TQ52-64Y)





# Compact Video Vaginoscope

Professional video vaginoscope, wireless, for diagnostic use and treatment in dairy cattle

## ■ Complete Set for vaginoscopy and transvaginal laparoscopy and spaying



- ✓ Battery replaceable
- ✓ Control display on the endoscope
- ✓ Integrated sender 5,8 GHz
- ✓ Integrated LED light
- ✓ Easy handling & quick cleaning
- ✓ Fully immersible

### Set TQ52-28RD1

TVC-Set, transvaginal spay/castration.  
Cordless generation with exchangeable battery,  
built-in camera with 5,8 GHz radio transmission, LED light,  
1,5" display. Both completely soakable when vaginoscope  
and battery a separated.

- Compact Video Vaginoscope
- Obturator, blunt
- 2 spare batteries
- Charging station
- Charger
- Reducer adapter
- Fornix perforator/ cross trocar
- 2 x ova ligator
- 50 ligatur rings
- 5" arm monitor

## ■ Spare parts

### Scalpel blades

No.20 for trocar TQ52-65,  
individuallypacked, 12pcs/pack  
(TQ52-66KL)

### Spare rings

Passend zu TQ52-64S,  
production sterile,  
FDA biocompatible, 100pcs/pack  
(TQ52-R100)

### Reducer adapter

For TQ52-28, 28/10mm, luer (fem),  
silicon cap 8mm (234-211),  
and sealing cap (234-600)  
(TQ52-E)

### Wireless HD transmisson





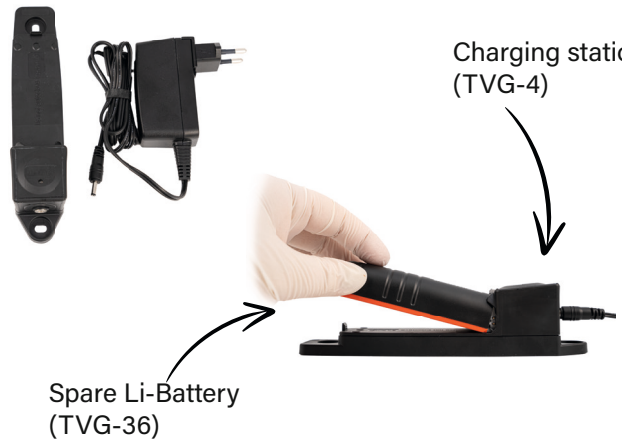
## Individual parts TQ52 series

Compact Video Vaginoscope  
OD: 28mm , WL: 52cm  
fully immersible  
(TQ52-28)



Charger  
(97-FU14EU)

Charging station  
(TVG-4)



Obturator, blunt  
(TQ52-281)



Reducer adapter  
28/10mm, luer (fem)  
(TQ52-E)



Ova ligator, WL:64cm  
(SET: TQ52-64S)



Fornix perforator/ cross trocar  
(SET: TQ52-65)



Spare rings,  
50pcs. (TQ52-R50)  
100pcs. (TQ52-R100)



Scalpel blades, 12pcs.  
(TQ52-66KL)



Case,  
Case lid can be used as a  
disinfection tray  
Dimensions: 84x27x11cm  
(Y-K-8427-11-1 /  
Y-TQ52-SC)



5" Monitor receiver  
incl. recorder & accu  
(TXL2-580M)



10" Monitor receiver  
incl. recorder & accu  
(TXM10-58R)





# Several applications

- ✓ Multi receiver capable

- ✓ Automatic radio connection, all types of endoscopes (broncho/arthroscopes/laparoscopes)



## Receiver - monitor



### TXM10-58R

10" Receiver-monitor, recorder

- mSD card slot, automatic scan, battery

### TXM7-60R

7" Receiver-monitor, recorder

- mSD card slot, automatic scan, battery

### TXL2-580M

5" Receiver-monitor, recorder

- mSD card slot, automatic scan, battery
- With arm strap



### M-LCD-22PC

21" LCD PC

- With in-built receiver and recorder

### TXL1-7-NO2

Receiver for Apple & Windows

- Incl. USB grabber



### M-LCD-21SK

21" Video monitor HD

- With in-built receiver for scopes

### TXL1-583

TV receiver for monitor

- Video-Out

### TGR-40

Multi HD radio receiver

- HDMI out



# Devices

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- Light sources
- Video camera
- Special devices
- Video cart



We are changing  
veterinary endoscopy





# Batterie/LED light Sources

Portable LED light handle

## ■ LED light handle, mini, 1,5V

For endoscopy without video camera.  
Direct coupling with light director.

- Light weight
- Easy handling
- Directly compatible to your telescope

**LED-8-32**     **LED-Endoscope Light Handle,**  
mini, 1,5V, 90g.comp.to Dr.Fritz/Wolf  
including mignon battery, AA  
**Lux: 4.900**  
**Colour temperature 6.100 K**  
**About 60min. working time**



## ■ LED light handle, high power, 3,7V

- Fully immersible
- Waterproof
- Compatible to Dr. Fritz, Wolf

**LED-8-35**     **LED-Light Handle, Accu Power Set,**  
comp. to Dr.Fritz/Wolf  
handle water resistant  
consisting of:  
Handle only (LED-8-35G)  
LI Accu Block 3,7V x 0,7Ah (LED-8-35AC),  
charger (LED-8-35LA)  
**Lux: 7.000**  
**Colour temperature 5.500 K**  
**About 45min. working time**



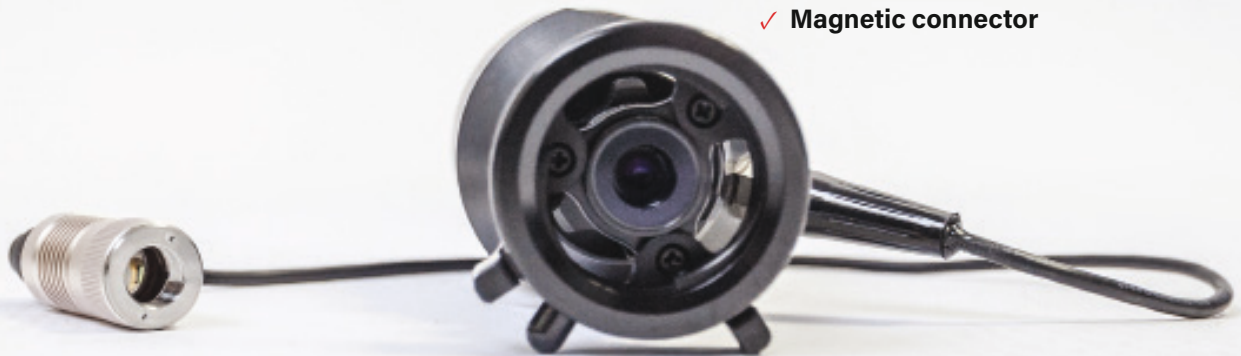


# Endoscopy - Cameras

HD-Radio-Videocamera, wireless, axiale Version, DIN Ocular with LED

## GO WIRELESS

- ✓ Wireless video transmission
- ✓ Ideal for mobile surgery
- ✓ Compatible with standard endoscopes
- ✓ Perfect HD image
- ✓ Fully immersible
- ✓ Magnetic connector

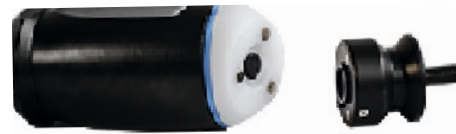


### 51V-C2SET

#### Radio-Axialcamera with LED-light

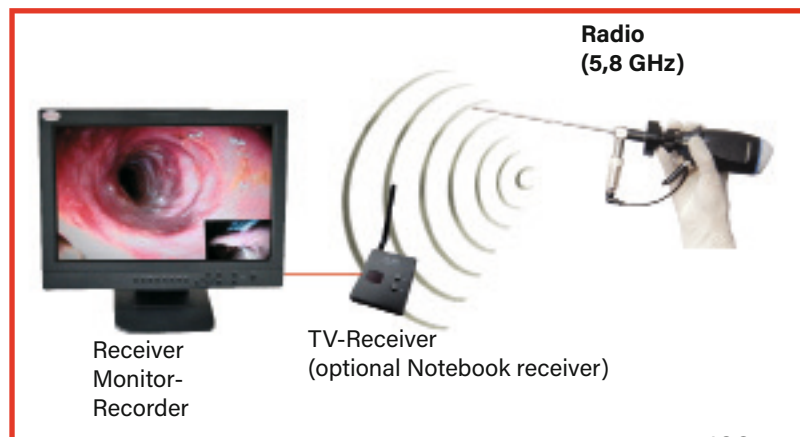
built in 5,8 GHz Sender, LI Accu,  
LED light cable, HD-PAL,  
DIN Ocular, compatible to  
standard Endoscopes  
set complete consisting of:

- Camera (51V-C2-D)), weight 295 gr.
- Stop Button (50VC-78)
- Power adapter (TV27-NET)
- 10" Receiver-Monitor/Recorder (TXM10)



Magnetic connector

### Video transmission





# Endoscopy - Cameras

HD-Radio-Videocamera, wireless, axiale Version, DIN Ocular with LED

## TV27-NET

**Power adapter for Radio laparoscopes, 3m cable, magnetic end connector, fully immersible 110-240 VAC, 50/60Hz**



## TXM10-58R

**10" Monitor receiver & recorder 5,8GHz**  
Micro SD-Card slot, foot for monitor, Li-Io battery, charger, auto scan



## Optional:

### M-LCD-22AP

**Monitor-Apple, 22" with image storage**  
Flat screen, Tastatur, Processor  
For picture and video documentation  
HDMI FBas Video surface  
Network compatible 115-230VAC





# Recorders and storage systems

## ■ Video/image playback & storage

**M-LCD-22PC 22" profesional LCD monitor & PC,**  
high definition, 16:9, with capture device &  
network connection.  
Consisting of:  
PC, receiver, keyboard, Biovision capture software  
with licence, power adapter 110-240VAC



## ■ Digital storage unit

**PC-97-HDE Video/HD Recorder for HDMI & video signals,**  
Foto and video recordings  
Input: HDMI in, Video in  
Output: HDMI out, USB Host  
Power supply unit, remote control, USB stick



## ■ Additional recipients

- a) Monitor receiver with recorder 10" TXM10-58R
- b) Monitor receiver with recorder 5" TXL2-580M
- c) Monitor receiver with recorder 7" TXM7-58R
- d) TV - receiver with Video - Out TXL1-583
- e) Monitor receiver 10" TXM10.58N
- f) Monitor receiver 7" TXM7-59A
- g) Video card, external PC-97-GRA2





# Special devices - Suction and Irrigation

## ■ Suction-/irrigation pump

For lens cleaning, inflation and suction.  
For small and large animal practice.

- ✓ Easy handling
- ✓ Quiet
- ✓ Fine setting option
- ✓ Ideal for small and large animal practices

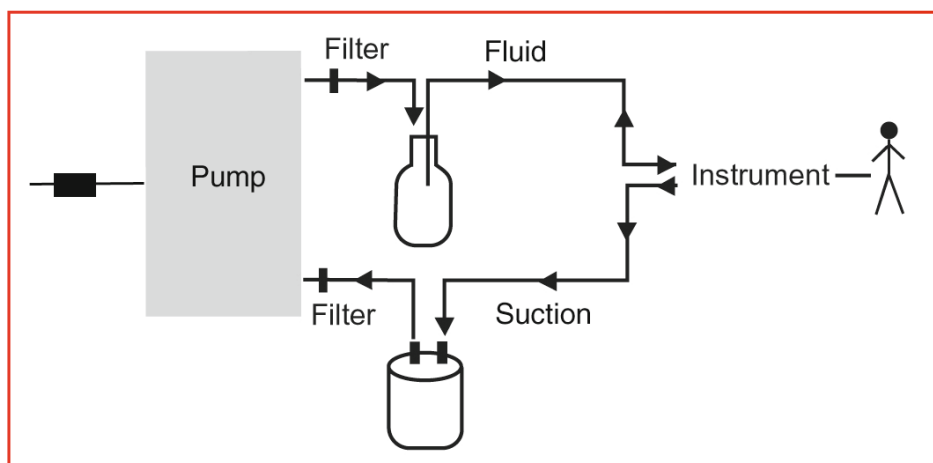


Especially suitable for gastroenterology

**H140-3S Suction-/irrigation pump**  
consisting of:  
Suction & irrigation pump (H140-3)  
1 li. suction bottle (H160-AB-43)  
1 li. flushing bottle (H160-AB-7)  
Tubes & transformer  
Sterile filter (AR-10-922)

**H160-AB-43 Spare suction bottle**  
1 litre with lid

**H160-AB-7 Spare flushing bottle**  
1 litre with lid







# Special devices - Inflator

**CO<sub>2</sub> Inflator, electronically monitored**

- small and large animal
- reusable tubing
- bacterial filter
- economical



**741-025V CO<sub>2</sub> Inflator, electronically monitored,**  
max. 20 litre, complete without bottle  
automatic pressure reduction system,  
DIN gas connection type,  
115-230 VAC, 50-60Hz,  
DIN IEC 601/1, DIN VDE 871

## Accessories



**741-009-1 Spare Silicon tube, 3m, for CO<sub>2</sub> inflation,**  
incl. connector, autoclavable

**741-009-FF Sterile filter system for CO<sub>2</sub> -inflator**  
disposable, box with 50 pcs.  
medical connection D:22mm

**741-002 CO<sub>2</sub> high pressure tube, 1m**  
DIN connector, screw both sides

**741-009V-PN CO<sub>2</sub> high pressure tube, 0,8m**  
compatible to PIN Index bottle (without picture)



\* Sterile product -  
return shipment not accepted



# Special devices - Pressure infusor

Fluid supply for arthroscopy

## Automatic fluid supply

The innovative infusion solution for horses

The state-of-the-art system can be effortlessly attached to the horse using a girth strap, allowing the animal to remain fully mobile during the infusion. Particularly practical is the use of the pressure infusor both in the stable and in the operating room: it can be used flexibly without an IV stand, providing added flexibility in the operating room as well as on the premises.

- ✓ Constant fluid delivery
- ✓ Energy free
- ✓ No maintenance
- ✓ No altitude impact

### ARM-10

#### Pressure infusor

Dimensions:	337 mm x 252 mm x 116 mm
Weight:	1,8 kg
Infusion pressure:	100 to 200 mbar (depending on the bag size)
Flow range:	0 bis 8,3 litres/hour (nach ISO 8536-4), 5 litres/hour
Empty rate:	95% bis 100%
Norms:	ISO 8536-4 and ISO 28620



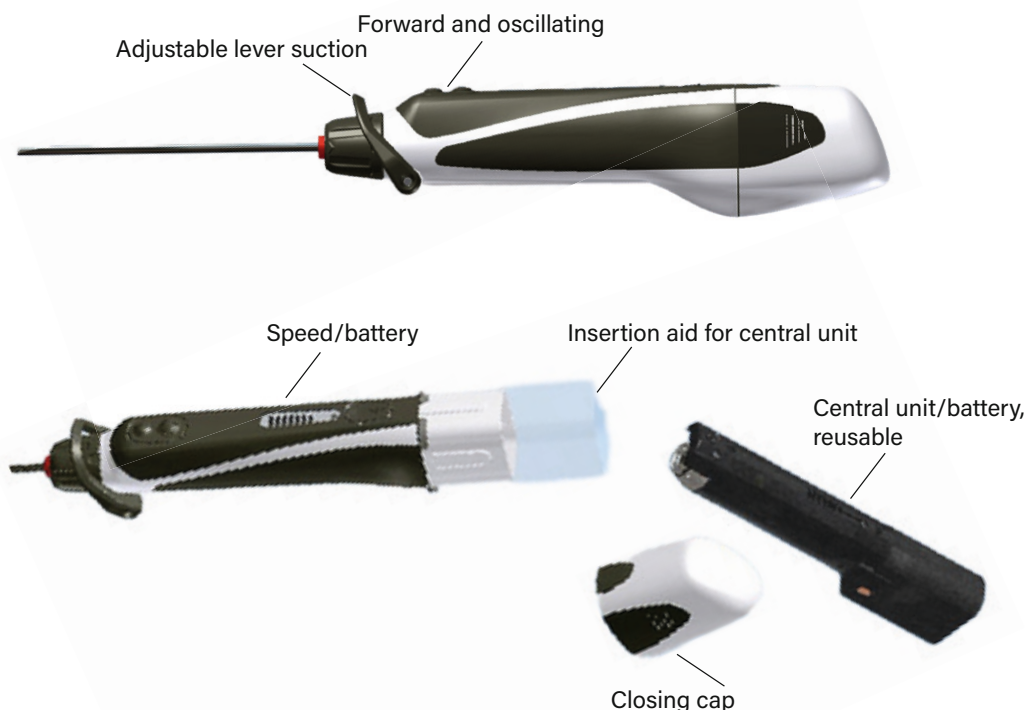
# NEW

Devices



# Shaver

Cordless single use shaver system for arthroscopy



## ■ Starter set (SFR-205SET)

Set consistinf of:

- Central unit - motor (SFR-206M)
- Charging station (SFR-205B)
- Burr shaver Ø 4,5mm (SFR-104C)



## ■ SFR-206M Central unit - motor

The reusable central unit, the heart of the system, is equipped with state-of-the-art electronics and a rechargeable battery. It provides the surgeon with both standard and advanced features: a powerful brushless motor ensures optimal torque for all arthroscopic procedures, while the durable battery supports even the longest surgeries.

- 6000 rpm
- Approx. 40min. running time



## ■ SFR-205B Charging station

The charging station accommodates up to four central units, though the central units (motors) are not included with the charging station. When a central unit is inserted, it is checked by an intelligent control system. A display then indicates the battery's charge status.



**NEW**

Devices



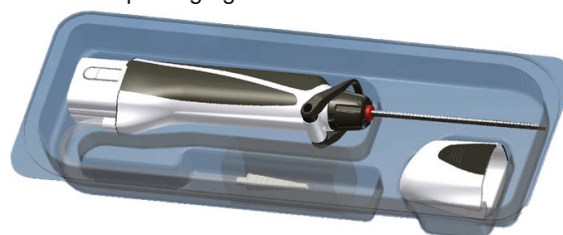
# Shaver

**Cordless single use shaver system for arthroscopy**

## ■ Disposable shaver

- No preparation or sterilization required
- Ready for immediate use
- Integrated tube connection
- Minimum order quantity: 5 pieces

Sterile packaging



- Aggressive meniscus resection, fast removal of soft tissue during shoulder surgeries.
- Suitable for a combination of soft tissue and bone resection.

Ø	Item No.
3,5mm	SFR-103L
5,0mm	SFR-104L



- Versatile aggressive cutting blade:  
Ideal for extensive tissue removal.

Ø	Item No.
2,9mm	SFR-102N
5,0mm	SFR-104N



- Oval Burr:  
Fast bone resection.
- Suitable for subacromial decompression.

Ø	Item No.
4,5mm	SFR-104E



- Serrated inner blade and smooth outer blade for effective resection of meniscus, cartilage, and synovium.

Ø	Item No.
3,5mm	SFR-103P



- Ball Burr:  
Ideal for notchplasty and osteochondral cleaning.

Ø	Item No.
4,5mm	SFR-104C





# Special devices - High Frequency Surgery

High frequency unit, High speed, Typ Atom

High frequency unit, High speed - with vessel sealing technique. Parallel usage of all outputs.

- Adapter for instruments other manufacturers on request

- uncomplicated use
- up to date safety regulation
- vessel sealing with confirmation signal
- compatible to all instruments on the market
- program via Touch Screen
- SDS self detecting system

**Vessel Sealing**



**HF-401-TH** HF/Radio frequency unit, High End Thermo Stapling (vessel sealing), touch-screen programmable, latest mono & bipolar technique SDS - self detecting system incl. high speed vessel sealing delivery without accessories, 400W, 230VAC, 50/60Hz

## Specifications:

<b>Monopolar</b>	Cutting	400 W
	Coagulation	200 W
	Soft/Forced	+ / +
<b>Bipolar</b>	Cutting	400 W
	Coagulation	200 W
	Auto Start/Stop	+ / +
<b>Bipolar</b>	Thermo-Stapling	+ 300 W
	Thermo sealing	+
	Auto Stop	+
<b>Weight</b>	7 kg	
<b>max. power</b>		420 W

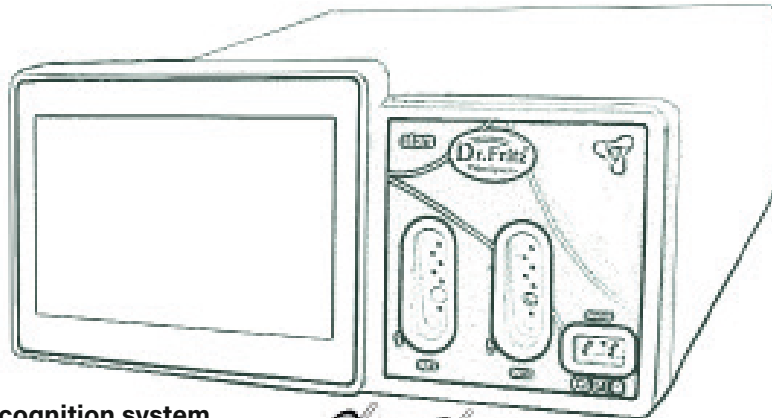




# High Frequency Surgery

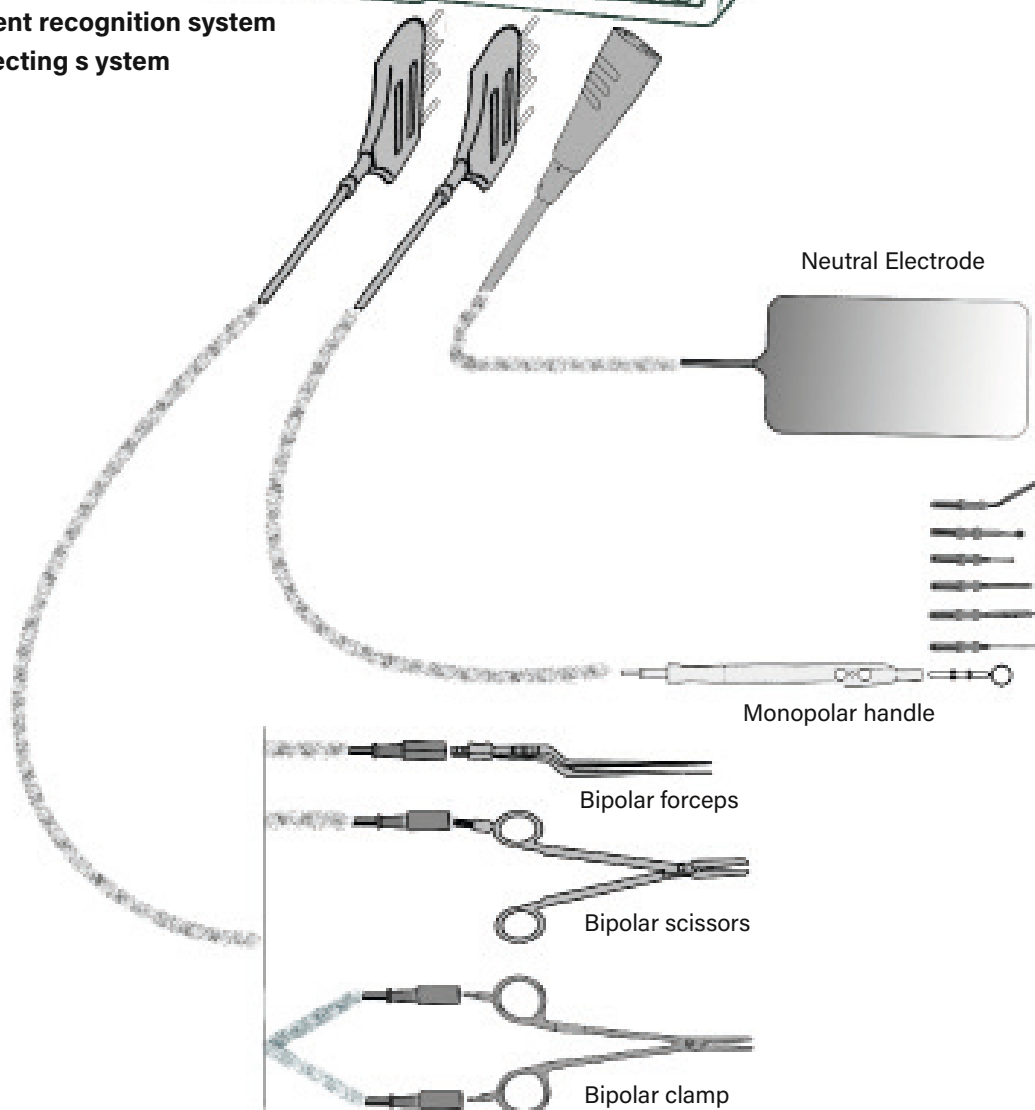
High End with thermo sealing

## Surview



SDS - Instrument recognition system

SDS - Self detecting system





# High Frequency Surgery

Accessories for bipolar applications

**HF-350-EP**

**Double foot switch**

for HF/RF unit for 350-402 series,  
multi switch type, 3m cable



**BP-361-IT-MA**

**Bipolar cable, 3 m,**

device side Emed/ Valleylab/Ellman;  
instruments side: European/Martin  
autoclavable

Device side



Instruments side



**BP-371-IT-BI**

**Bipolar cable, 3 m,**

device side: EMED/VALLEY  
Instruments side: bipolar,round (2/4mm)  
autoclavable

Device side



Instruments side



**BP-37-EM-ET**

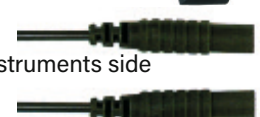
**Bipolar cable, 3 m,,**

device side: Emed-SDS,  
Instruments side: connection (2x3mm),  
vessel sealing, autoclavable

Device side



Instruments side



**BP-37-EM-MA**

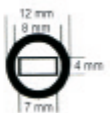
**Bipolar cable, 3 m,**

device side: Emed-SDS  
Instruments side: Europa/Martin,  
autoclavable

Device side



Instruments side



**BP-371-IT-ET**

**Bipolar cable, 3 m,**

device side: EMED/VALLEY  
Instruments side:: 2x 3mm  
(Ethicon,Val) autoclavable

Device side



Instruments side





# Bipolar High Frequency Surgery

Accessories for bipolar applications

## ■ Open surgery

**BP-S-18B** **Bipolar scissors**, Metzenbaum, 21cm, connection: bipolar round (2/4mm)

**BP-S-21B** **Bipolar scissors**, Metzenbaum, 21cm, connection: bipolar round (2/4mm)

• suitable to **BP-37-EM-ET**



**BP-901** **Bipolar coagulation forceps**, blunt, straight • non stick version (without picture)

**BP-902** **Bipolar forceps**, pointed, straight (without picture)

**BP-903** **Bipolar forceps**, pointed, bayonet model 195mm, 1mm tip • non stick version

• Non Stick: special material to reduce adhesion of tissue

• Suitable to **BP-37-EM-MA**

• Pay attention!  
Bipolar forceps are available in different qualities.



# High Frequency Surgery

Thermo Sealing, Vessel Sealing

## Open surgery

**BP-E-K20 Bipolar Clamp**, 20 cm, for thermo sealing connection: 2 x3mm

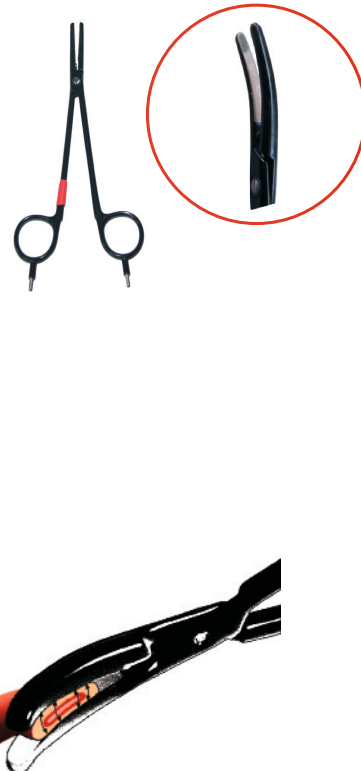
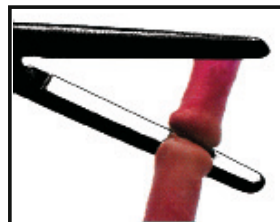
**BP-E-K27 Bipolar Clamp**, 27 cm, for thermo sealing connection: 2 x3mm

Mechanical pressure and higher temperatur seals collagen and elastan tissue of vessels.

Perfect sealing of arterial vessels up to 8 mm diameter.

**Field of use:** Ovaryectomy, Ovar-Hysterectomy  
Castration, small and large animal.

**Thermo sealing**  
Only in conjunction with the device HF-401-TH



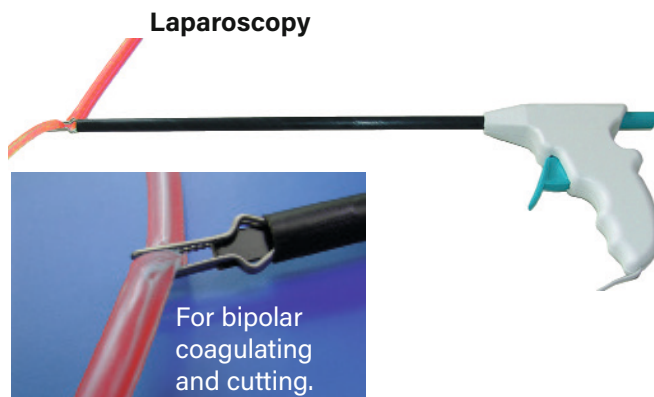
## Minimal invasive surgery

Coagulating and cutting in one instrument

**BP-10-321 Bipolar grasping & cutting forceps**, disposable, 10mm, WL:320mm, European connector

**BP-05-321 Bipolar grasping & cutting forceps**, disposable, 5,6mm, WL:320mm, European connector

- sterile product - return shipment not accepted
- suitable to **BP-37-EM-MA**





# High Frequency Surgery

## Monopolar applications

### ■ Grounding

**HF-100-12 HF neutral electrode,**  
silcon, 4m cable, size: 8 x 15cm, autoclavable

**Large version:**

**HF-100-12-2 HF neutral electrode,**  
silcon, 4m cable, size: 16 x 26cm, autoclavable

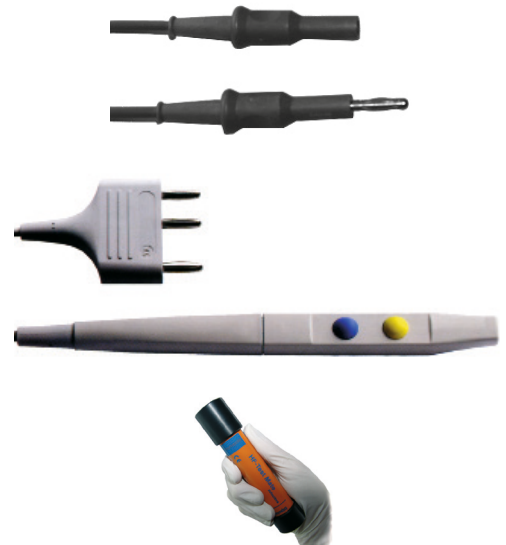


### ■ Open surgery

**HF-301-ER High frequency connecting cord,**  
3 m, monopolar, comp.to Erbe units (4mm type)

**HF-350-145 HF handle,**  
4mm, with button for monop. coagulation,  
comp. to Emed/Martin/Bercht

**HF-8513 HF-Test Mate,**  
autoclavable test unit, inactiv, for mono/  
unipolar and bipolar instruments  
and cables during surgery



### ■ Suitable

**Suitable electrodes:**

**HF-100-17SE HF electrode set,**  
VET, 4mm, monopola incl.8 electrodes and sterilizing box,  
including fixation device







# High Frequency Surgery

Monopolar applications

## Instruments for high frequency

Mono-/Unipolar  
HF/RF cutting electrodes, the electric knife

### HF-200-055

High frequency connecting cord comp. to arthroscopic cutting electrodes, handles length: 5 m, for units with 4 mm connector



### HF-200-45

High frequency cutting electrode for arthroscopy, 45°, fine tip 4 mm connector, 12 cm

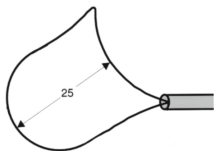


### HF-200-90

High frequency cutting electrode for arthroscopy, 90°, heavy version 4 mm connector, 12 cm

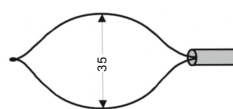


## Gastroenterology and Bronchoscopy, flexible instruments



### SL23-2310

Asymmetric polypectomy snare complete with tube, without handle  
▪ OD: 2,2mm, WL: 230cm wide: 25mm



### SL23-1612

Symmetric polypectomy snare complete with tube, without handle  
▪ OD: 2,2mm, WL: 165cm wide: 35mm

### SL23-2312

Symmetric polypectomy snare complete with tube, without handle  
▪ OD: 2,2mm, WL: 220cm wide: 35mm

### HF22-1601

Suction-coagulation electrode monopolar, luer-lock connector  
▪ OD: 2,2 mm, WL: 165 cm



### HF22-2301

Suction-coagulation electrode monopolar, luer-lock connector  
▪ OD: 2,2 mm, WL: 235 cm



### HF-301-ER

HF- connecting cord monopolar, com. to Erbe units 4mm  
▪ Length: 3 m



### HS11-1200

Handle for polypectomy, HF snares  
▪ Standard connections



# Hygiene, cleaning and care

Special equipment for cleaning of flexible endoscopes

## Endoscope Washer

Semi automated cycling pump for flexible endoscopes and tubes

- Suction and circulating pump system
- Auto stop

### WA42-205

**Gastro-Washer**, Cleaning pump with timer programs for flexible endoscopes and tubes (<4mm), non-drip connectors, wall fastening, comp.to all major endoscopes, mains adaptor: 110-240VAC, 50/60Hz



Reprocessing room  
Wall mounting



\* Example of cleaning adapter of other manufacturer

Wall or cabinet mounting in connection with soak basin



# Hygiene, cleaning and care

Special equipment for cleaning of flexible endoscopes

## ■ Endoscope Dryer

Easy drying of flexible endoscopes and thin tubes

- **Auto stop**
- compatible to endoscopes of other manufacturers\*

**WA41-104 Endoscope-Dryer**, air pump with timer for flexible endoscopes and tubes (<4mm)  
1 bar, air filter, wall mounting, comp.to all major endoscopes, mains adapter: 110-240VAC, 50/60Hz

**AR-10-922 Sterile filter for CO<sup>2</sup> infusor** and air pressure infusor, compatible for tubes with ID: 4-6mm, disposable, 50pcs/box

Cabinet mounting



Drying hanging

Storage room, cabinet mounting



Drying reclining

\* If original cleaning adapter available



# Video cart

## Video cart

Completely mounted

- ✓ 50cm unit size
- ✓ Camera fixation knob
- ✓ Drawer
- ✓ Ask for additional accessories

### WV-54043 Video cart, H: 143 cm

size: 62x63 cm, completely mounted, basic version,  
color: grey, partly blue,  
\*\*drawer inbuilt  
\*\*fixation knob for video camera head  
\*\*specially rust protected  
max. weight: 150kg/330lbs

(Gastroscope bracket, fixation system. devices  
and monitor are separate accessory)



WV-54043

### WV-53022 Video cart as above but height 110 cm (without pictures)

### WV-45111 Video cart, H: 112 cm,

size: 54x58cm,  
completely mounted, basic version,  
drawer inbuilt with handle  
max. weight: 50kg/110lbs  
max. unit size: 45cm  
color: grey, partly blue,



WV-45111

## Accessories for Video cart

### WV-99619 Fixation system for infusion bottles mounting set

### WV-99618G Gastroscope mount for Dr. Fritz TG series inductive charging, with telescope rod

### WV-01601 Fixation system for CO<sub>2</sub> bottles mounting set, comp.to video carts for 5-10 litre bottles, max OD: 14,5 c

### WV-02851 Fixation system for CO<sub>2</sub> bottles mounting set, comp.to video carts for big bottles, max OD: 20,5 cm



WV-99618G

# Disposables

**Dr. Fritz®**  
Wireless ■ Endoscopes

- Hygiene & Cleaning
- Products for daily use
- Keratelin



We are changing  
veterinary endoscopy



# Hygiene, cleaning and storage

## Instruction for cleaning and disinfection

We supply suitable cleaning and disinfection products, effective, environmentally proof and practical solutions for hygiene management.

### Demineralisation

One of the main conditions for best cleaning results - water treatment

**WA-1466-3 Demineralisation container,**  
only connection: 3/4 Zoll,  
total capacity: 1400 Liter

**WA-1466-2 Conductivity measurement unit**  
0-20/ > 20myS, LED control system

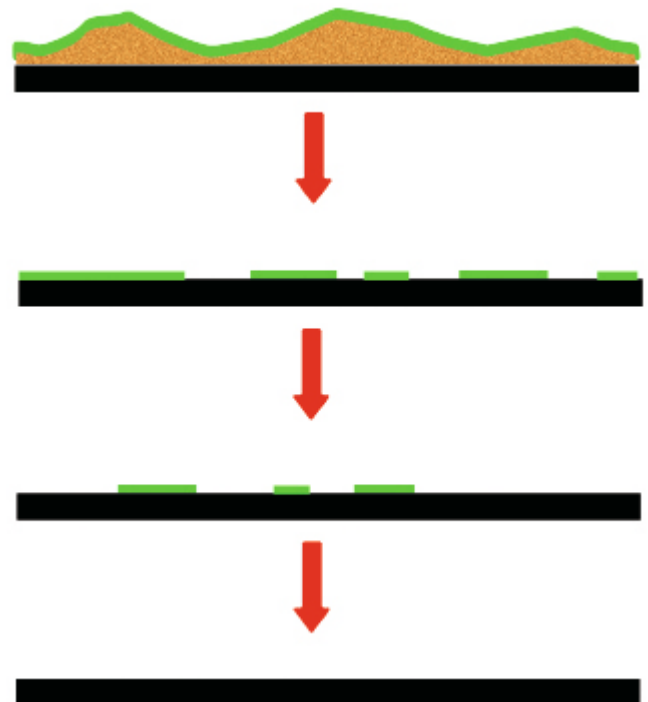


**Cleaning and disinfection are a ubiquitous topic of daily medical routine. The basic aim is to minimize the risk of infection for humans and animals. The thorough cleaning and disinfection of your endoscope influence much its optimum function and durability. Drying is an essential process of the hygiene concept.**

During cleaning dirt is removed. This step is frequently underrated, but is essential for the preparation of all other steps. Put your endoscope in an enzymatic detergent solution (e.g. Dr. Fritz enzymatic cleaning UNIVERSAL for rigid endoscopes and instruments or FLEX for flexible endoscopes) and make a mechanical pre-treatment with the special brush (for example, the instrument channel).

Disinfection takes place chemically. Put your endoscope into a disinfectant that is specifically suitable for endoscopes (e.g. InstruPlus). The existing germ-proof is reduced by 1 million cFU to 10 cFU.

There are different procedures for sterilization (e.g. gas-sterilization, autoclaving). Check that your endoscope is suitable for this procedure. Typically flexible endoscopes are only suitable for gas sterilization but not for steam sterilization. Rigid endoscopes are marked with the word „autoclave“ is distinguished if steam sterilization is possible. The existing germ-proof is further reduced by 10 cFU to 1 CFU.



# Hygiene, cleaning and care

Special equipment for cleaning of flexible endoscopes

## ■ Endoscope Washer

Semi automated cycling pump for flexible endoscopes and tubes

- Suction and circulating pump system
- Auto stop

### WA42-205

**Gastro-Washer**, Cleaning pump with timer programs for flexible endoscopes and tubes (<4mm), non-drip connectors, wall fastening, comp.to all major endoscopes, mains adaptor: 110-240VAC, 50/60Hz



Reprocessing room  
Wall mounting



\* Example of cleaning adapter of other manufacturer

Wall or cabinet mounting in connection with soak basin

# Hygiene, cleaning and care

## Special equipment for cleaning of flexible endoscopes

### ■ Endoscope Dryer

Easy drying of flexible endoscopes and thin tubes

- **Auto stop**
- compatible to endoscopes of other manufacturers\*

**WA41-104 Endoscope-Dryer**, air pump with timer for flexible endoscopes and tubes (<4mm) 1 bar, air filter, wall mounting, comp.to all major endoscopes, mains adapter: 110-240VAC, 50/60Hz

**AR-10-922 Sterile filter for CO<sup>2</sup> infusor** and air pressure infusor, compatible for tubes with ID: 4-6mm, disposable, 50pcs/box

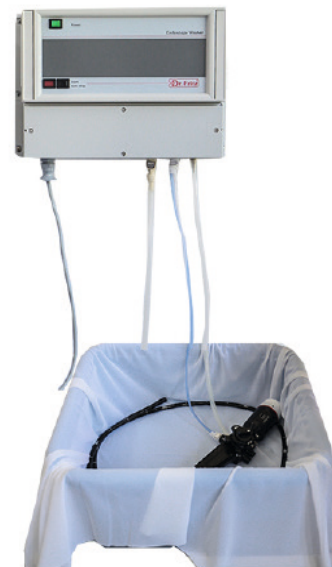


Cabinet mounting



Drying hanging

Storage room, cabinet mounting



Drying reclining

\* If original cleaning adapter available

# Cleaning accessories

## Video Bronchoscope

### ■ For rigid & flexible endoscopes / instruments

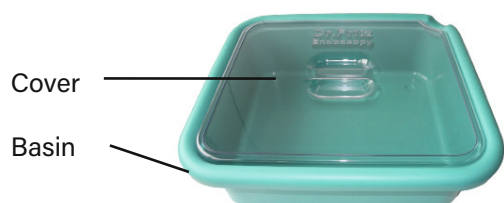
**DE-10-702 Dr. Fritz enzymatic cleaning FLEX 1,5 %**,  
1 x 1 l, 7 enzymes, 0,5%  
specially for flexible endoscopes  
for daily manual cleaning



**DE-10-300 „IP“ Disinfection solution**  
for flexible and rigid endoscopes, manual and  
automated use, 1-3% dilution, 5 litres



### ■ Option for cleaning of flexible endoscopes in the field



- ✓ Close the lid and ready for transport
- ✓ Fast and easy pre-cleaning after the last examination
- ✓ For semi- or fully automatic cleaning
- ✓ For all flexible endoscope types
- ✓ Usefull in drawer cabinets
- ✓ With airing



Stackable



**DE-17-44S Transportation & storage basin**  
for flexible endoscopes, 50x44x16 cm,  
set with cover

consisting of:

- Basin (DE-17-44)
- Cover transparent (DE-17-41)

# Hygiene, cleaning & care

## Soak basin

For different instrument sizes

### DE-10-426

**Soak basin long for chemical disinfection,**  
consisting of:  
basin, tray (perforated), cover, size: 74x22x13cm



### DE-10-425

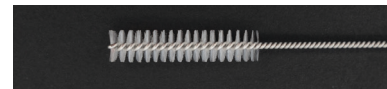
**Soak basin small, for chemical disinfection,**  
consisting of:  
basin, tray (perforated), cover, size: 42x16x9,5cm



## Accessories

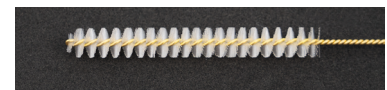
### DE-5-17

**Cleaning brush small, 17cm, for tubes**  
ID size: 2-4 mm, autoclavable, 1 pc.



### DE-6-21

**Cleaning brush, small, 20cm, for tubes**  
ID size: 4-7mm, autoclavable, 1 pc.



### DE-9-25

**Cleaning brush, 25cm, for tubes**  
ID size: 7-10mm, autoclavable, 1 pc.



### DE-3-456-E

**Cleaning brush, 50cm, for long tubes**  
ID size: 2,5 - 5mm, autoclavable, 1 pc.



### DE-6-102

**Cleaning brush, flexible, 70cm, for tubes, ID size: 5-8mm, autoclavable, 1 pc.**





# Hygiene, cleaning & care

## Cleaning and disinfection solutions

### ■ For rigid & flexible endoscopes / instruments

**DE-10-702 Dr. Fritz enzymatic cleaning FLEX 1,5 %**,  
1 x 1 l, 7 enzymes, 0,5%  
specially for flexible endoscopes  
for daily manual cleaning



**DE-10-300 „IP“ Disinfection solution**  
for flexible and rigid endoscopes, manual and  
automated use, 1-3% dilution, 5 litres



**RH99-47 Silicon oil, 15 ml**  
specially for flexible endoscopes

### ■ Additional

**WA-1302-25**  
**Cleaning powder**, alkaline,  
for WA-1402 instrument washers,  
1kg box



**WA-1302-26**  
**Clear rinse** for instruments,  
endoscopes and instrument washer,  
1 litre bottle



**DE-10-65**  
**Lenze polish**  
for telescopes, 5g

**E-22-71**  
**Antifog fluid** for endoscopes and  
mirrors, bottle



# Products for daily use

**X-5-15-10** **Silicon spare tube**, 100cm,  
size: 5 x1,5mm, colour: nature

**X-3-2-7** **Silicon spare tube**, 100cm,  
size: 3 x2mm, colour: nature

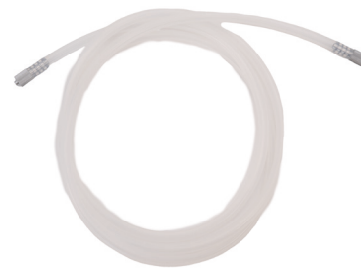
**X-6-30-12** **Silicon spare tube**, size:6 x3mm, 100cm  
suction tube, colour: natur

**X-7-20-10** **Silicon spare tube**, 100cm, large  
inner diameter, size:6 x2mm, colour: natur



**X-180-26** **Silicon tube**, ID:5mm,180cm,  
LLm both.ends

**X-300-26** **Silicon tube**, ID:5mm,300cm,  
LLm both ends



**LLW-1220**  
**Luer-Lock connector**,  
female,2mm



**LLM-1251**  
**Luer-Lock connector**,  
male, 6mm,



**LLM-1250**  
**Luer-Lock connector**,  
male,6mm,



**LLM-1258**  
**Luer-Lock connector**,  
male,10mm,



**LL-1273H**  
**Three way stopcock**,  
disposable non sterile,  
Package with 10 pcs,



**LLW-1263**  
**Luer syringe connector**,  
10 pcs.



**LL-1270**  
**Three way T-adapter**,  
2x LL(f), 1x LL(m), disposable,  
non sterile, Pg with 10 pcs.



**LL-1271H**  
**One way stopcock**,  
disposable, non sterile,  
Package with 10 pcs



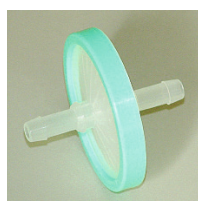
**AR-10-9**  
**Spare needle for infusion**  
bottles/bags ID: 4 mm compatible  
to tubes ID: 3,5-5 mm



**AR-10-948**  
**Silicon tube**,  
6x2mm, 3m, autoclavable,  
Luer-Lock (m), needle f. sterile  
bags/bottles, large inner diameter



**AR-10-922**  
**Sterile filter for CO<sup>2</sup> infusor**  
and air pressure infusor, compati-  
ble for tubes with ID: 4-6mm,  
disposable, 50pcs/box



**741-009-FF**  
**Sterile filter system for**  
**CO<sup>2</sup> -inflator**  
disposable, box with 50 pcs.  
medical connection D:22mm

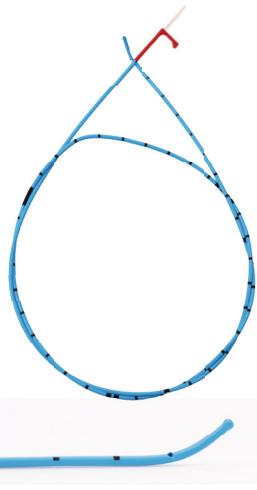


# Products for daily use

**F11-69****Special catheter**

4 Fr., 69cm, selectip UK, olive end, angled tip, y-sterile, Juka 62410110  
 \*\*minimal delivery: 5 pcs.

\*\*sterile item, no refund possible

**F12-69****Special catheter**

5 Fr., 69cm, selectip UK, olive end, angled tip, y-sterile, Juka 62410210  
 \*\*minimal delivery: 5 pcs.

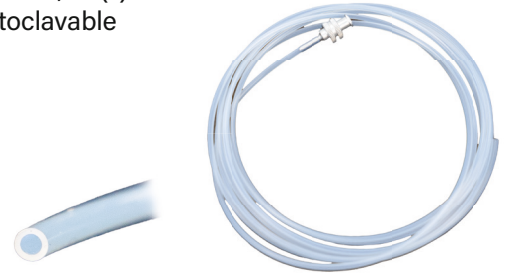
\*\*sterile item, no refund possible

**F20-219****Spare catheter f. gastro fiberscopes,**

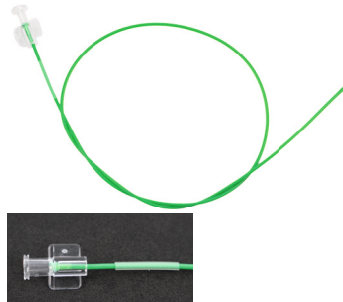
Teflon, OD:2mm, 10 metres, autoclavable

**F20-220****Catheter f. gastro fiberscopes, Teflon**

OD:2mm, WL:235cm, LL(f) connector dismantable, autoclavable

**F16-50****Special catheter**

OD:1,6mm, 50cm, y-sterile,

**981-VK-S**

**Spare silicon tips, black, 30pcs., for**  
 otoscope sheath 981-VK-13/17S  
 autoclavable

**231-211****Sealing caps**

for trocars and reducer adapters,  
 size 5,5mm, pg. of 10 pcs.

**230-211****Sealing caps,**

red, for trocars & reducer adapters,  
 size 10/11/12mm, pg. of 10  
 pcs.

**234-211****Sealing caps**

for trocars and reducer  
 adapters, size 8 (12,5)mm, pg. of 10 pcs.

**TR-78-15**

**Sealing cap f. big trocar cannulas**  
 cap opening D:11,5mm, blue, 5  
 pcs.

**TR-13-145D****Sealing cap**

for big trocar cannulas  
 cap opening D:11,5mm, blue, 5 pcs.

**I-17-002****Sealing cap**

for small trocar cannulas cap  
 opening, round, D:2mm, 5 pcs.

**TR-60-1D****Sealing cap**

small, 1mm opening,  
 for 981-VK-69/ S190-2701, 5 pcs.



# Products for daily use

## Camera covers

**DE-10-25 Camera covers**, disposable, 1 pcs., polyethylen, 13x250cm, minimal amount 50 pcs.



▪ Attention: sterile product - return shipment not accepted

## Bipolar grasping & cutting forceps

**BP-05-321 Bipolar grasping & cutting forceps**, disposable, 5,6mm, WL:320mm, European connector, \*sterile product

**BP-10-321 Bipolar grasping & cutting forceps**, disposable, 10mm, WL:320mm, European connector, \*sterile product



## Disposable biopsy forceps

**B23-180E Disposable biopsy forceps**, 2,3 mm, 180 cm

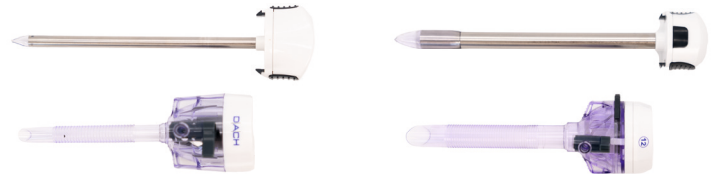
**B23-230E Disposable biopsy forceps**, 2,3 mm, 230 cm  
y-sterile, box with 10 pcs



## Trocar disposable

**TR-59-54 Trocar disposable**, ID:5 mm,WL:6 cm  
inflation stopcock, with trocar only  
box with 25 pcs

**TR-60-121 Trocar disposable**, ID:12 mm,WL:6 cm  
complete with reducer 12-8 mm and 5 mm  
box with 25 pcs



## Cleaning brush

**F28-280E Cleaning brush, flex., 230cm**, disposable, for channels 1,8-2,8mm, 10pcs/pack

**F20-181E Cleaning brush, flex., 180cm**, disposable for channels 1,1-2 mm, 10pcs/pack



**H20-001E Spare lamp halogen**, 8V/20W  
for light source H20-001 (without picture)

**H150-5-E Spare lamp**, XENOPHOT,150W/15V  
for light source 981-VK-100 and  
H150-5-2; H150-5-31



**LO-40-04 Safety toggle pin** acc. to Dr.Janowitz,  
90cm double suture, 5 pcs., for  
laparoscopic abomasal fixation  
\*\*\*extra long version\*\*\*



# Keratelin® Products

## ■ Keratelin® Teat products for teat care

### Suture-Bandage Plug the natural solution

**Z-99025-TH**     **KERATELIN „Thelasel“**  
teat dilator, OD: 3 mm, box 24 pcs.,  
sterile\*

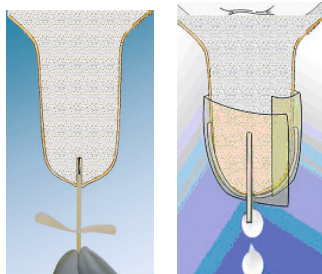
- The revolution in teat dairy care -



#### Breakage safe and stable.

Latest generation of natural teat canal plugs - first choice in any fresh cases of distal teat injuries - plug and tape it -

### KERATELIN "P2-Cath" Permanent Catheter

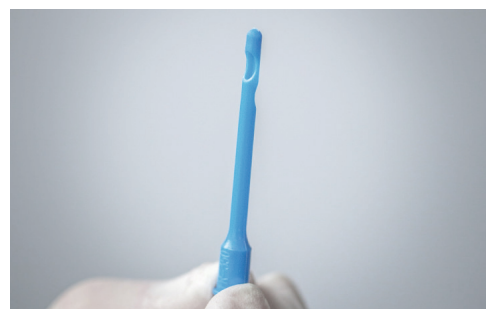


**Z-99027**     **KERATELIN „P2-Cath“**  
acc. to Schlederer, 8 pcs.,  
OD: 2,8mm, LL(w), individually packed,  
sterile\*

- For easy day milk release
- Easy and gentle to insert
- Fast milk flons

### KERATELIN Milk Canula professional teat care

**Z-99055**     **KERATELIN Milk Canula**, disposable,  
100 pcs. individually packed, sterile\*



Extra large inner diameter, available every time.

\*Attention: sterile product -  
return shipment not accepted



## Terms and Conditions

### I. General

1. The following conditions are only valid for offers, deliveries and services of Dr. Fritz Endoscopes GmbH hereafter referred to as the „supplier“ – if no other written agreement has been made that differs from them.
  2. The supplier hereby objects to any purchase provisions made by the purchaser that are contrary to the conditions set by the supplier or from otherwise valid legal regulations established by German law.
- Neither will the supplier recognize such provisions if as a result of a deviation on the part of the supplier no further objections are made.
3. The supplier's general delivery and payment rules remain generally valid even if individual conditions are invalid. The contract partners are required to replace the invalid condition with another provision that in its economic effect is as close as possible to the invalid one.
  4. If production is carried out solely in accordance with the purchaser's plans, the supplier bears no responsibility if the legal trademark rights of third parties are violated. The supplier's claims to redress for goods or services provided up until that point remain in effect.
  5. German law also applies, the CISG, however, does not.

### II. Conditions subject to change

All offers, prices and other stipulations are subject to change unless otherwise explicitly specified. All documents and papers that form part of the offer, such as graphics, diagrams, information as to weight and dimensions, are only approximate provided they have not been explicitly defined as binding. The supplier retains ownership and copyright of all cost estimates, diagrams and other documents, which are not to be made available to third parties without the corresponding approval of the supplier.

### III. Scope of the delivery

1. The supplier's written order confirmation is decisive for the scope of the delivery. Supplementary agreements and changes are only valid with written confirmation by the supplier.
2. The supplier reserves the right to make changes to construction and form that have to do with technological improvements or legal requirements during the delivery period, provided the item is not significantly altered and the change is reasonable for the purchaser.

### IV. Prices and conditions of payment

1. Price calculations are made according to prices valid on the day of delivery and are to be made in Euro/USD.
2. Unless otherwise agreed upon, all prices, products and services are subject to change ex works; this does not include packaging, shipment costs and transport insurance. Added to the price will be any legally required value-added tax or any comparable taxes levied by the country in which the delivery or service is taxable. If no other special agreement has been made, the supplier will determine the method of transport.
3. The supplier reserves the right to make changes and corrections to prices. The minimum order value is EUR 100.00 (net) per order. An additional processing charge of EUR 25.00 (net) per delivery will be added to any preliminary shipments of orders that do not equal the minimum order value.
4. All expenses resulting from monetary transactions are to be paid by the purchaser.
5. Unless otherwise agreed upon all payments are due 30 days after the invoice has been issued (date of invoice) strictly net. The interest rate for delayed payments is 10% per annum over the base rate of the European Central Bank (ECB).
6. Payment by draft is not allowed under any circumstances.
7. Withholding of payments or charging for any counterclaims made by the purchaser and disputed by the supplier is not permitted.
8. If payment is not made on time and there are justified doubts as to the ability of the purchaser to pay or its creditworthiness, the supplier has the right to declare all outstanding charges from the existing business relationship due for payment and only to provide further deliveries and services if paid in advance.
9. Any approved discounts and credits are nullified in the case of judicial or extrajudicial composition proceedings, insolvency, delayed payment or legal prosecution.
10. Custom-made products – in particular so-called „VO articles“ – can be charged for on the basis of final costing. Custom manufactured articles will in general not be taken back. A cancellation of orders of customized products is only permissible with the explicit consent of the supplier. In the case of custom manufactured products excess or short deliveries of up to 15% over or under the ordered amount can be made and charged accordingly.
11. If ordered goods are returned without justification, or due to defects for which the supplier is not responsible, we reserve the right to charge a processing fee of up to 10% of the net invoice value, at least EUR 10.00 per return.
12. Prices are shown without VAT tax. Deliveries within Germany are only possible with added VAT tax.

### V. Delivery period

1. Delivery dates and delivery times are only binding if they have been accepted as binding in writing. The purchaser can claim compensation for losses instead of the product or service after a binding delivery period or a binding delivery time was not complied with only if the supplier or a legal representative or auxiliary person of the supplier can be imputed with wilful or intentional negligence. These liability limitations are not valid in the case of damages to body or health that can be attributed to the supplier.
2. A delivery period begins with the dispatch of the order confirmation, however not before documents, materials, items, authorizations, approvals and compliance with agreed upon payment or other obligations are provided or fulfilled by the purchaser.
3. The delivery period is considered to have been adhered to when by that date the delivery items have left the factory or readiness for shipment has been communicated.
4. If outside forces or other unforeseen obstacles, such as, for example, civil unrest, interruption of operations, strikes, lock-outs, etc. interfere with delivery the delivery time will be accordingly extended. The same applies in the case of delayed delivery of essential materials provided these delays can be proven to have a significant influence on the manufacturing process or delivery of the delivery items and are not caused by the supplier.
5. After failing to adhere to an unbinding delivery period or delivery time the purchaser can demand in writing that the supplier deliver the products in a reasonable time period if the purchaser has fulfilled all of its due contractual obligations. The purchaser can, after a deadline was not adhered to, only demand compensation for losses as well as the delivery itself if the supplier or a legal representative or auxiliary person of the supplier can be imputed with wilful or intentional negligence. These liability limitations are not valid in the case of damages to body or health that can be attributed to the supplier.
6. If shipment is delayed at the request of the purchaser, beginning a month after notification of readiness for shipment, the purchaser will be charged for costs resulting from storage, at least 0.5% of the net invoice amount per month. After the determination and subsequent failure to adhere to a reasonable deadline the supplier has the right to obtain the delivery item in another manner (prior sale) and to deliver the item(s) to the buyer at a later point in time.

### VI. Partial deliveries

The supplier can fulfil an order with partial deliveries that are to be separately paid for according to the payment periods listed in IV./par. 5 If the payment of a partial delivery is delayed, the supplier can discontinue the remaining completion of the order. VII. Transfer of risk and receipt of delivery

1. All risk is transferred at the latest with the dispatch of the delivery to the purchaser, even when partial deliveries are made or the supplier has assumed other tasks or services, for example shipping costs or transport and assembly. At the request of the purchaser and at his expense, the deliverer can insure the shipment against breakage, transport, fire, and water damage.
2. If the shipment is delayed due to circumstances that the supplier cannot control, all risk is transferred to the purchaser as of the day of the readiness for shipment, however the supplier is required, at the purchaser's request and expense, to procure the insurance of the

purchaser's choice.

3. The purchaser only has the right to refuse to accept the delivery item if the delivery item shows significant defects.

### VIII. Conditional sales

1. The supplier retains ownership of all delivery parts delivered by him until the purchaser has fulfilled all obligations from current and other business transactions, especially any outstanding accounts.
2. Within the framework of regular business operations the purchaser may
  - a.) sell the supplier's delivery parts, unless he has not paid on time or suspended payment.
  - b.) has not joined or combined the supplier's delivery parts with other items. In this case the supplier will be granted co-ownership in accordance with §§ 947, 948 of the German Civil Code.
  - c.) process or modify the supplier's delivery parts. This processing or modification takes place without expense for the supplier. If as a result of the processing or modification an object of significantly higher value is produced, the supplier will obtain co-ownership, which corresponds to the amount of value his delivery contributes to the value of the new object.
3. The purchaser may neither mortgage the delivery item nor transfer his titles for the sake of settling debt. If a delivery item is mortgaged or seized or otherwise made available to a third party the supplier is to be immediately informed.
4. In the case of resale of the supplier's delivery parts or of the item that results from processing or combination of these parts, the purchaser is to immediately render the amount charged the subsequent purchaser to the supplier in compliance with § 354a of the German Commercial Code. This amount will correspond to the as yet unpaid invoice amount plus any interest accrued and the supplier's expenses for the delivery part. The purchaser may collect Stand 01.06.2006 on outstanding charges as long as he duly fulfils his obligations to the supplier. If the value of the reserved goods together with other securities granted to the supplier exceeds the outstanding money owed by the purchaser by more than 20 %, the supplier is required to grant approval if requested by the purchaser.
5. If the purchaser does not pay on time the supplier has the right to withdraw from the contract after a reasonable set time period. After withdrawing the purchaser is obligated to return any delivered goods.

### IX. Liability for defective delivery items

For defective delivery the supplier is liable to the following clauses to the exclusion of any other claims:

1. Defective parts are to be repaired or re-delivered according to the fair judgement of the supplier. If the supplier chooses to repair defective parts, these are to be sent to the supplier's offices. Repair of defective parts will not be carried out at the location where they are being used. If the repair is not successful or the parts are not re-delivered the purchaser has the right to reduce the purchase price by a reasonable amount or, if the defective item is not a construction service, to withdraw from the contract at his discretion. The discovery of a defect is to be immediately communicated to the supplier (within 5 working days after receipt for missing parts or broken parts). Replaced parts become the property of the supplier.
2. The purchaser's right to assert claims due to defects is prescribed to one year beginning with the legally defined beginning of the year as long as §§ 438 par.1 No.2 or 634a par.1 No.2 of the German Civil Code are not applicable and the defects are unintentional.
3. There is no liability for damages that result from the following: Unsuitable or improper use, incorrect assembly or operation by the purchaser or a third party, natural wear, staining, incorrect or negligent handling – especially excessive strain – unsuitable operating fluids or cleaning agents, replacement materials, chemical, electro-chemical or electric influences, provided the supplier bears no responsibility.
4. The purchaser is required according to fair judgement to grant the supplier a reasonable amount of time for the completion of all apparently necessary repairs and replacement deliveries.
5. The supplier is not liable for defects that involve the construction method determined by the purchaser or material delivered by the purchaser.
6. The liability for defects is not extended by repair or re-delivery. A new guarantee period in accordance with VIII. 2. Does not begin.
7. Other claims by the purchaser, in particular claims to damage compensation, which did not result from the delivery item are not valid.
8. There is no guarantee for changes made or operations performed by the purchaser or a third party in an improper manner or without previous authorization by the supplier. There is also no guarantee for natural wear and tear or improper use.
9. The supplier is not liable for consultation and suggestions not directly associated with a delivery and that are not defined as binding. This is also the case for operation or maintenance instructions that are not defined as binding.
10. The guarantee is not limited by the above clauses if conditions are involved in which the supplier or a legal representative or auxiliary person of the supplier can be imputed with wilful or intentional negligence, there is liability for the body, health or life of a person, or § 478 par.4 of the German Civil Code is violated.

### X. Supplier's right to withdraw from contract

If the purchaser is found to be in a poor financial situation (for example in judicial composition proceedings, execution measures) and if the supplier learns of this after the contract has been closed

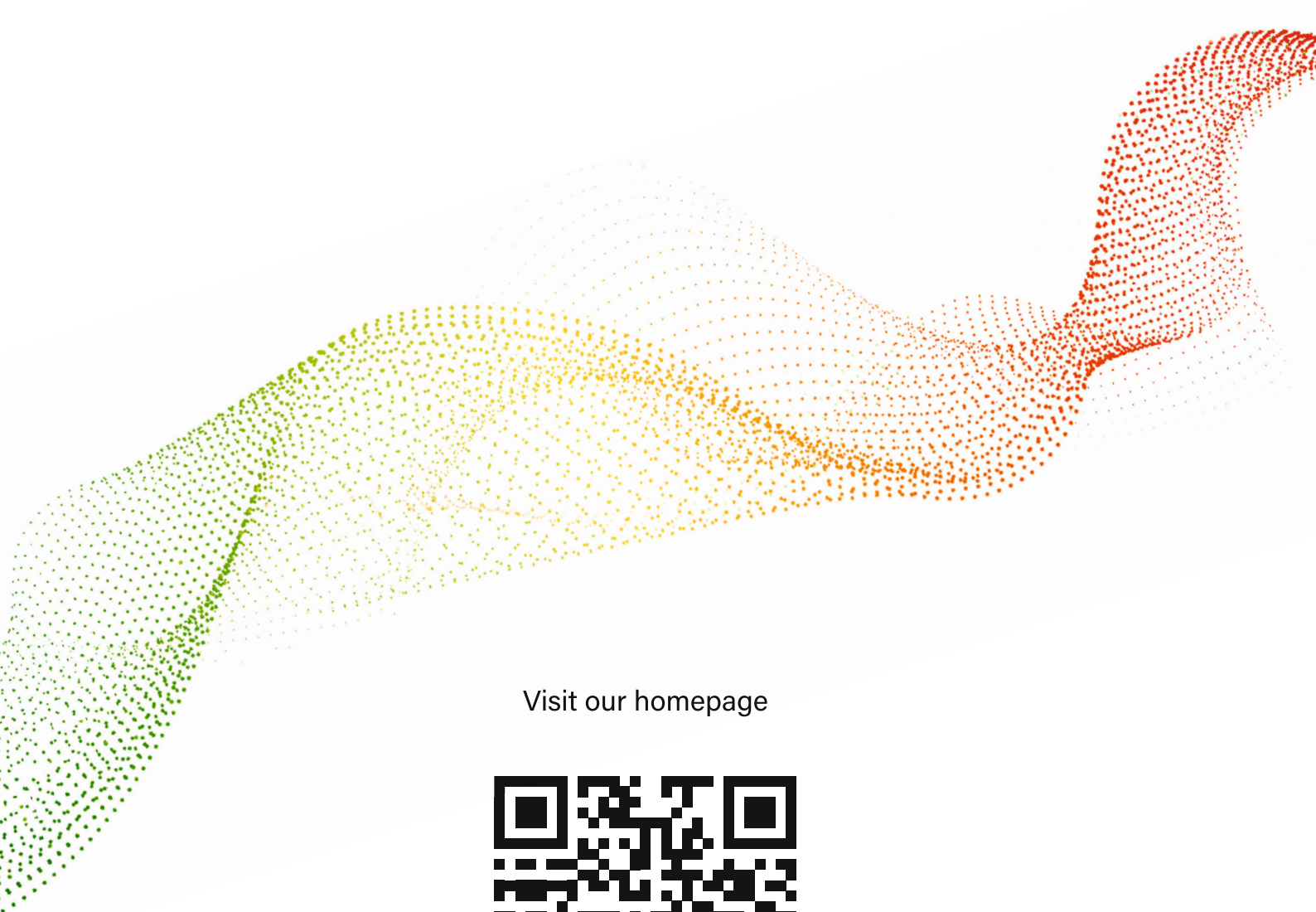
or after the closing of the contract a significant decline in the purchaser's financial situation becomes known and the supplier's claims from the supply contract are put at risk, the supplier has the right to withdraw from the contract without any obligation to redress while maintaining his claims from the partial delivery completed, should the purchaser not provide sufficient security within a reasonable period of time determined by the supplier. The delivery period is extended by the length of time of this right to withhold deliveries is being exercised.

### XI. Place of fulfilment and jurisdiction

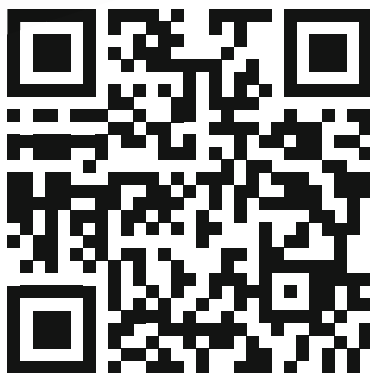
1. Place of fulfilment for the deliveries and services to be provided by the supplier and place of fulfilment for all financial transactions are the supplier's head offices.
2. For all disputes that result from contractual relationships the complaint is to be lodged at the court presiding over the location of the supplier's head offices, if the purchaser is a merchant, public entity or a public separate estate. The supplier also has the right to lodge a legal complaint at the purchaser's head offices.
3. For relations to non-merchants the preceding is also valid if after closing the contract the purchaser transfers his domicile or place of residence to a location outside the jurisdictional limits of the civil code or at the time of the legal enforcement his domicile or place of residence is not known.
4. If there are doubts as to the interpretation of the general export delivery conditions, the German language version has precedence.

### XII. Data storage

The purchaser accepts our data safety regulations.



Visit our homepage




Dr. Fritz Endoscopes GmbH

Almenweg 10  
88637 Buchheim  
Germany  
+49 (0) 7777 882300

dr.fritz@dr-fritz.de  
www.dr-fritz.com

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 dr.fritz\_endoscopes

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