# **Equine**



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



We are changing veterinary endoscopy



# **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

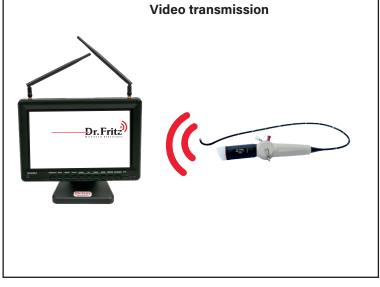
D: 3mm, WL:20 cm, strong version



# Flexibles LED Video Sinus Endoscope Wireless video transmission for monitors or PC (<20m)

- Integrated video transmitter
- 2 way defecting
- 1,8 mm working channel

- Towerless application
- Fully immersible
- Easy and quick reprocessing



# **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

- Wireless
- 5,8 GHz sender
- HD video quality
- 3 LEDS for perfect illumination
- Integrated flushing
- Luer connection
- 90° side view und 140° field of vision

The first dental endoscope with integrated irrigation



# **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

resolution: PAL,HD 1280x720pxs

- 140° field of vision
- with integrated flushing

rechargeable Li battery,

Luer connector (f)

# Set consisting of:

- Dentalscope HD
- Charger
- Short silicone tube with Luer connection on both sides (m/f)
- 7" receivers monitor, DVR
- 7" Empfänger-Monitor mit Rekorder
- Transportkoffer

Wireless transmission Ðr. Fritz<sup>®</sup>



# **LED-Dentalstick ECO**

Equine

wireless, digital transmission



# **Dentalstick ECO complete set**



# TD-93ECS

Dentalstick ECO SET

- Ø 14mm, WL:46cm, wireless Resolution: PAL 768x756px
- Length: 70cm
- 120° field of vision

# Set consisting of:

- Dentalstick ECO
- Charger
- 5" Monitor
- Case







# **Equine Training Laryngoscope**

**NextGen4 Dynamic and Overground Endoscopy** 



# Training Laryngoscope

- NextGen4 -





# **Equine Training Laryngoscope**

NextGen4 dynamic and overground endoscopy



- √ 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 laryngscope 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.

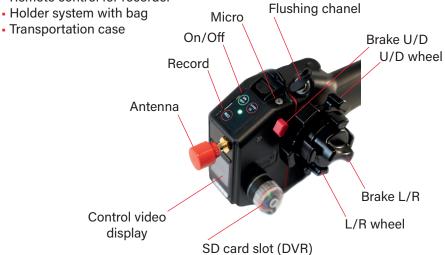
Our recording and video transmission includes automatic audio.

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









# Set ETL4-86SET



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. 11th Geneva Congress on Equine Medicine and Surgery. 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. Equine Vet. J. 41, 347-352

# 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 possibilitis of laryngoscopy in the field. 10th Geneva Congress, 11.-13.12.2007





# Video- Bronchoscope

Professional bronchoscopes - connection for insufflation, irrigation and suction



# Video Bronchoscope

- NextGen4 -

# **Tips & tricks** Device care for flexible endoscopes







# 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

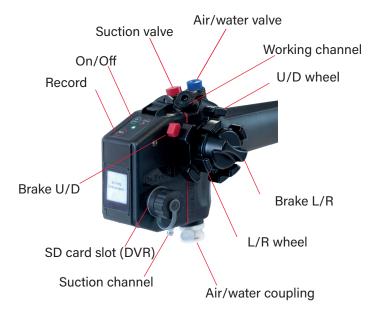
# **New Generation - NextGen4**

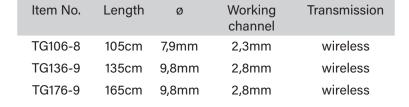
- Integrated control display
- Integrated SD card slot
- Fully soakable
- Truely mobile

Set	<b>TG176-9B</b>
-----	-----------------

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

Optional: wall mount











# **Set TG176-9B**



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

Equine

Multi receiver capable



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



**Receiver - monitor** 



### TXL2-580M

5" Receiver-monitor, recorder

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

### **TXM7-60R**

7" Receiver-monitor, recorder

• mSD card slot, automatic scan, battery

NEW: Time and labelling stamps for patient data

### TXM10-58R

10" Receiver-monitor,recorder

· mSD card slot, automatic scan, battery

## **TXM10-60R**

10" Receiver-monitor,recorder

mSD card slot, automatic scan, battery

NEW: Time and labelling stamps for patient data



# 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

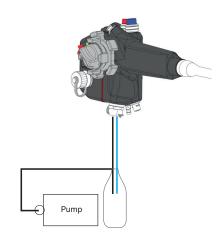
# Air/water pump

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)





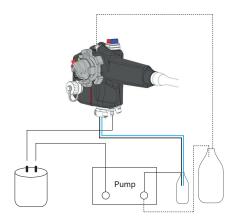
# **Suction-/irrigation pump**

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

Wall mount for inductive charging - always ready for use, perfectly stored and optimally drying.

# **TGX-25S**

- Wall mount
- Power supply
- Mounting material







# 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

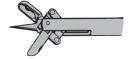
• OD: 2,2 mm, WL: 235 cm, Needle: 0,9x6 mm

# 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



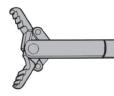
Biopsy forceps with spike

• 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



Grasping forceps

• OD: 2,3 mm WL: 360 cm



# B23-180E

Disposable biopsy forceps steril

• OD: 2,3 mm WL: 180 cm



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



• 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

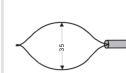




# SL23-2310

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

Symetric polypectomy snare complete with tube, without handle

• OD: 2,2mm, WL: 220cm wide: 35mm



Suction-coagulation electrode monopolar, luer-lock connctor

• 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 connctor

• OD: 2,2 mm, WL: 235 cm



# HS11-1200

Handle for polypectom, HF snares

Standard connections

79 2025

+49 (0)7777 / 882300 ■ dr.fritz@dr-fritz.de ■ www.dr-fritz.com



# 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



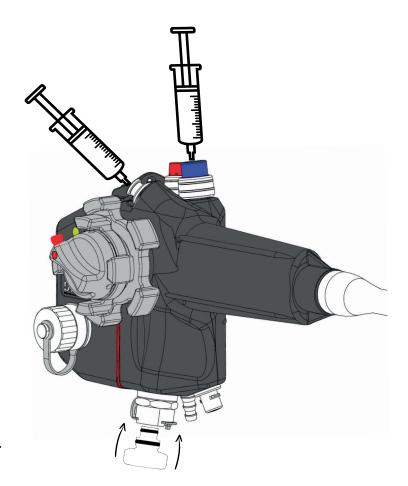
Disinfection without prior pre-cleaning is counterproductive, as it only fixes dirt particles on the surface instead of removing them.

# 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





Professional gastroscopes - connection for insufflation, irrigation and suction



# Video Gastroscope

- NextGen4 -





Professional gastroscope - connection for insufflation, irrigation and suction



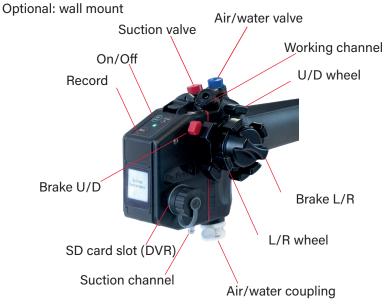
# **New Generation - NextGen4**

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

It	tem No.	Length	Ø	Working channel	Transmission
T	G326-12	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







# Set TG326-12G



Charger magnetic (TV27-NET)





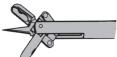
Cleaning adapters (TW132-24S)



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

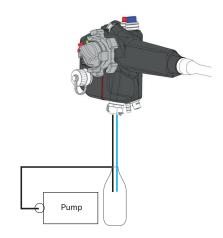
# Air/water pump

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)





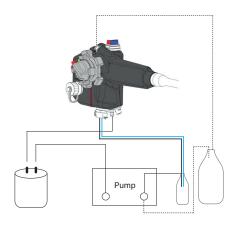
# **Suction-/irrigation pump**

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

Wall mount for inductive charging - always ready for use, perfectly stored and optimally drying.

# **TGX-25S**

- Wall mount
- Power supply
- Mounting material







# Cleaning accessories

**Video Bronchoscope** 

# For rigid & flexible endoscopes / instruments

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1 x 1 l, 7 enzymes, 0,5% specially for flexible endoscopes for daily manual cleaning



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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**

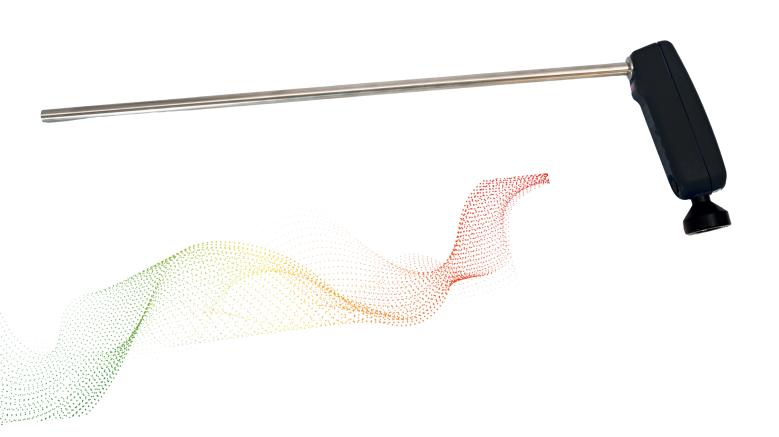
for flexible endoscopes, 50x44x16 cm, set with cover

### consisting of:

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



Endoscopes and instruments for laparoscopic/thoracoscopic surgery



# Video Laparoscope

in Large Animals





# / Thoracoscopy Laparoscopy

**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)









# Trocar cannulas with magnetic valve, safety trocars

Trocar cannulas are designed with different types of valves to reduce or to avoid CO2 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 socalled 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

231-161V Safety trocar only comp. to cannulas

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

fully dismantable, with cork screw handles

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)



Trocar cannulas with magnetic valve, safety trocars

235-111

**Trocar only** with sharp tip for trocars

ID: 16 mm, WL: 15 cm (without picture)

# **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)

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



Calitia Olly Wagnetic Valve hap Sealing Caps					
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				



**Palpation, Dissection and Puncture Instruments** 

# Thoracoscopy first puncture needle

Puncture needle for thoracoscopy, TR-03-201

ID:3 mm, WL:20 cm, incl. sharp trocar

L-47-210 Injection system and probe

5mm, WL: 47cm protected interchangable 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**

Knot tier, standard version L-19-544

D: 5mm, WL: 40cm

easy filling, suture size up to 1metric



Easy handling, easy to tighten, additional cutting





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



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

### **Tubular sheaths**

- 5 mm Ø
- Different working lenghts
- 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







Equine

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 Mixter 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



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 -







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:

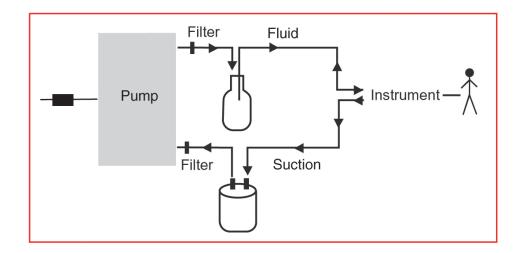
Suction & irrigation pump (H140-3) 1 li. suction bottle (H160-AB-43) 1 li. flushing bottle (H160-AB-7) Tubes & transformer Sterile filter (AR-10-922)

### H160-AB-43 Spare suction bottle

1 litre with lid

### H160-AB-7 Spare flushing bottle

1 litre with lid





CO<sub>3</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**



Spare Silicon tube, 3m, for CO<sub>2</sub> inflation, 741-009-1

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, high pressure tube, 1m

DIN connector, screw both sides

741-009V-PN CO, high pressure tube, 0,8m

compatible to PIN Index bottle (without picture)



Sterile product return shipment not accepted





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



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

·	Coagulation Soft/Forced	200 W + / +
Bipolar	Cutting Coagulation Auto Start/Stop	400 W 200 W + / +
Bipolar	Thermo-Stapling Thermo sealing	+ 300 W +

Cutting

Auto Stop

Weight 7 kg

Specifications:

Monopolar

max. power 420 W

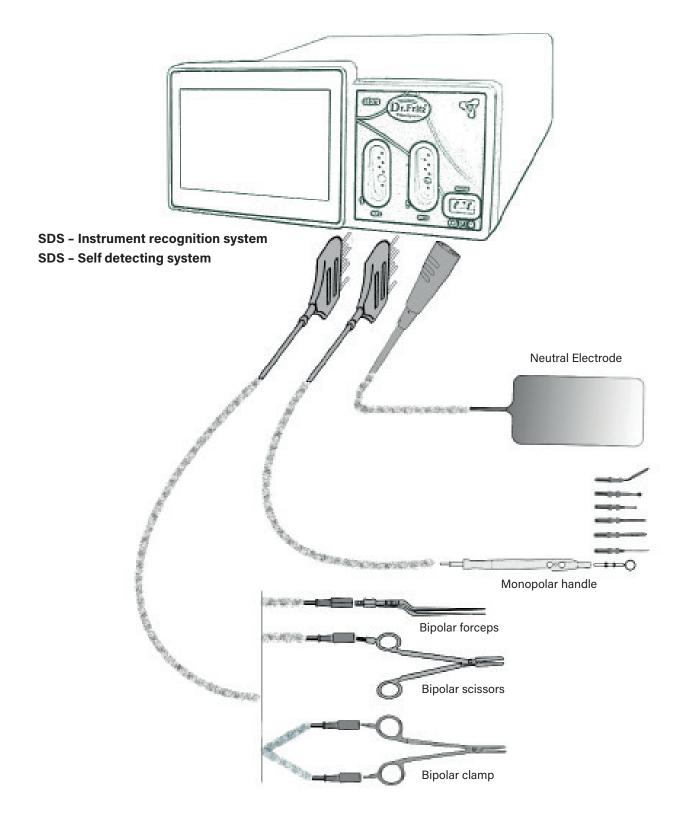


400 W



**High End with thermo sealing** 

# **Surview**







# **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
- 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
- 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-Laparoscope, 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 Safety trocar only comp. to cannulas
- 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,

- 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 -



Professional video vaginoscope, wireless, for diagonostic use and treatment



# Compact Video Vaginoscope

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



Control display



Battery replaceable



# **Compact Video Vaginoscope**

Equine

Professional video vaginoscope, wireless, for diagonostic use and treatment

# For practicioners 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, individuallypacked, 12pcs/pack (TQ52-66KL)





# **Individual parts TQ52 series**

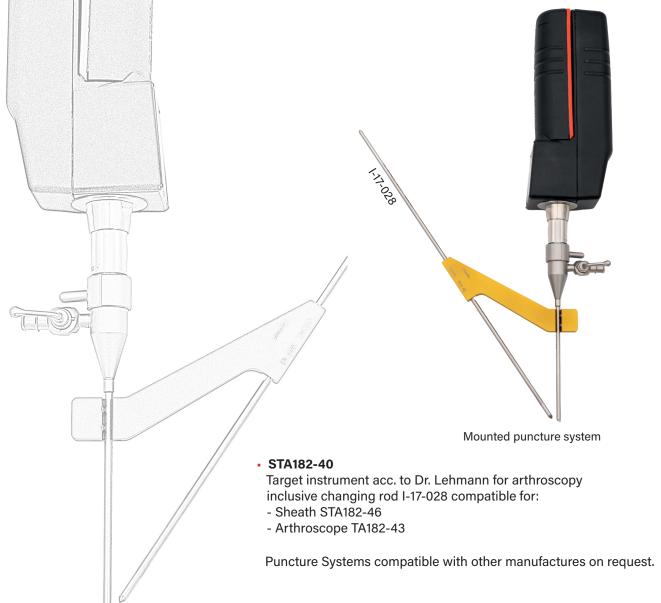




# Innovation in arthroscopy

Developed an 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.





**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







**Special hand instruments** 

I-18-518 Irrigation cannula with sharp trocar

stopcock, ID: 3 mm, WL: 7 cm



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:12cm





- 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





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

# Power line, the strong

- Heavy handles
- Extremely durable

Rongeur "Power line", oval cup, straight, I-18-973

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





- 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 sesamoide 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



#### I-18-661 Rongeur "standard line"

cup size: 4x8 mm, oval, straight,

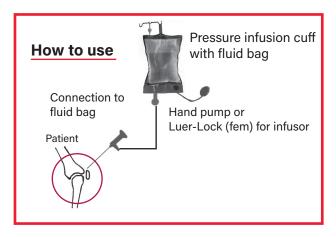
fenestrated, WL: 11 cm





# Manual fluid supply system

One of the cheapest options for liquid supply



### **Pressure Infusion Cuffs**



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

■ AR-08-100N Pressure infusion cuff

for 500-1000ml with manometer and hand pump reusable high quality manufacturing

# Roller pump for fluid supply

Large and small animal arthroscopy



- Quick and easy fluid flow
- Simple speed control
- No disposable accessories

ARR-20

Roller pump

Noise level: max. 50 dBa, very low Pump type: 3-roller peristaltic Flow parameters: up to 525ml/min.

Pneumatic foot switch Weight: 4,4kg

Size: 190 x 230 x 330mm

# **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

337 mm x 252 mm x 116 mm Dimensions:

Weight:

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

95% bis 100% Empty rate:

Norms: ISO 8536-4 and ISO 28620



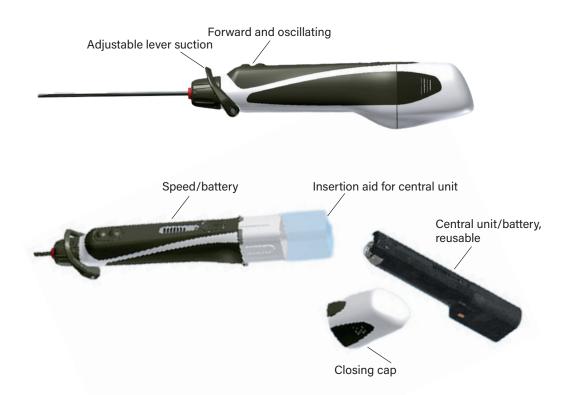


**Dr. Fri**t





### 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.





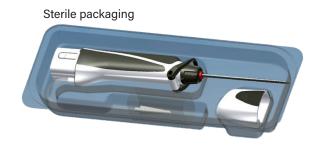




### Cordless single use shaver system for arthroscopy

# Disposable shaver

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



- 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





### **Accessories**







### Camera covers

DE-10-25

Camera covers, disposable, 1pcs. polyethylen, 13x250 cm minimum order 25 pieces



# 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



for chemical solution disinfection, consisting of basin (perforated) tray&cover for basin, size: 42x16x9,5 cm I-18-518 Irrigation cannula with sharp trocar

stopcock, ID: 2,7 mm, WL: 7 cm,

luer connection

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











**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-53022 Video cart

as above but height 110 cm (without pictures)



WV-54043

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,



# **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<sup>2</sup> bottles

> mounting set, comp.to video carts for 5-10 litre bottles, max OD: 14,5 c

WV-02851 Fixation system for CO<sup>2</sup> bottles

> mounting set, comp.to video carts for big bottles, max OD: 20,5 cm















Dr. Fritz



# **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 anethesia To handle during surgery To assist during recovery/standing after surgery



### **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, saftey 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





4 point carrying frame



On-load operation



Belt elongation

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

