

Surgical Instruments and Accessories for TwinStream™



7th Edition

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TwinStream™ Multi Mode Ventilator

TwinStream™

TwinStream™ Ventilator REF CTNS-110-000

Superimposed High Frequency Jet Ventilation (S-HFJV™) Mode

Ready for: supraglottic, subglottic and infraglottic procedures
weight based initial settings from 1-200 kg in steps of 1 kg

S-HFJV™ ventilation system for tubeless microlaryngeal, tracheoscopic and rigid bronchoscopy operations and all known procedures under HF jet ventilation. Suitable for neonates up to adipose adults.

Standard configuration:

- FIO2 Jet Gas Analysis
- LSM Mode
- Bias Flow adjustable for Pre and Postoxygenation
- Paw monitoring
- PP monitoring
- 1 Lumen Mode
- 2 Lumen Mode or 3 Lumen Mode
- LAR or BRO Mode

Including the following accessories:

- Complete Tubing Set / CTNS-220-0S0
- Adapter for 1 Lumen Catheter / CTFS-500-400
- Adapter for 2-4 Lumen Catheter / CTNI-610-400
- Power cord 3m / CTFI-833-000
- Tubing set for Central Gas Supply

Available Configuration OPTIONS:

- FIO2 Aw Module for direct sampling from Patient Airway / CTFP-155-000
- CO2 Module / CTFP-156-000
- 2 Lumen Catheter Mode / CTFP-157-200
- 3 Lumen Catheter Mode / CTFP-157-300
- 4 Lumen Catheter Mode / CTFP-157-400
- LAR Mode / CTFP-157-0L0
- BRO Mode / CTFP-157-0B0
- ICU Module / CTNS-102-000
- Emergency Start Software / CTFP-157-ESU
- Heating and Humidifier / WI 101200
- Trolley Smart / CTFS-710-GBD
- Twinstream Connectivity Module



TwinStream™ ICU

TwinStream™ Ventilator
REF CTNS-110-000

p-BLV™ ventilation system with Ventilation Mode ICU

Gasanalysis: FIO2 Jet

Bias Flow: adjustable between 0-55 lpm

Including the following accessories:

- Standard rail mounting for p-BLV™ Converter / CTNS-800-NP0
- Over Pressure Valve / CTNS-100-005
- T-Piece Adapter / B 1983
- Power cord 3m / CTFI-833-000
- Tubing set for Central Gas Supply
- Maintenance Kit

Optional for patients with 1-40 kg

- p-BLV™ Converter / CTNS-6I0-NP0

Optional for patients up to 200 kg:

- p-BLV™ Converter for Adults / CTNS-6I1-AC2
- Muffler for p-BLV™ Converter - 1 pc / CTNI-6I1-AC0
- Complete Tubing System / CTNS-220-0S2

Available Configuration OPTIONS:

- TwinStream Connectivity Module
- ESU- Software *Emergency Start UP* / CTFP-157-ESU
- BLV-Software / CTFP-159-001
- Heating and Humidifier / WI 101200
- Trolley Smart / CTFS-710-WBD



ENT, Laryngeal Surgery, Phonosurgery



Adult Kleinsasser Jet Laryngoscopes



Jet Laryngoscope for S-HFJV™ acc. to ALOY, Type KLEINSASSER

For use with TwinStream™ Ventilator
Integrated Easy Connect System• two Jet Lines for SHFJV®

- two Monitoring Lines for Airway Pressure and Gas Analysis (FiO₂Aw & etCO₂)
- two Mounting Points for Fiber Optic Light carrier/ Suction tube
- Inlet Port for Patient Gas Conditioning (Heater/Humidifier)
- Inlet Port for Patient Gas Conditioning
- Material: Surgical Stainless Steel
- Reprocessable: Yes

ACCESSORIES

REF CTF5-220-SU1, REF CTNS-220-0S0, REF CTNS-220-0S1
EasyConnect™ Tubing Set
for Jet Endoscopes and Jet Converter
Fig. ①+②, see ▶ **page 52 + 64** for details

REF CTNI-800-003
Heating Connector
for Jet Laryngoscopes
Fig. ③, see ▶ **page 57** for details

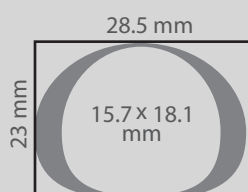
- Handle: **Type K01: 6-Edge Handle***
Type K41: 4-Edge Handle, SLIM-Series
*Type K01 is end of life



ADULT

SIZE A REF CTNS-310-K41
REF CNTS-310-K01

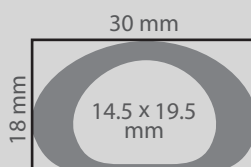
Total length: 190 mm
Ø inner proximal: 23 x 28.5 mm
inner distal: 15.7 x 18.1 mm



Size A

SIZE B REF CTNS-320-K41
REF CTNS-320-K01*

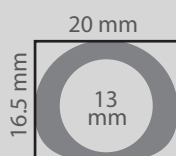
Total length: 190 mm
Ø inner proximal: 18 x 30 mm
Ø inner distal: 14.5 x 19.5 mm



Size B

SIZE C REF CTNS-330-K41
REF CTNS-330-K01*

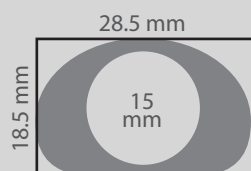
Total length: 190 mm
Ø inner proximal: 16.5 x 20 mm
Ø inner distal: 13 mm



Size C

SIZE 8590 B REF CTNS-3-8590-B

Total length: 170 mm
Ø inner proximal: 18.5 x 28.5 mm
Ø inner distal: 15 mm



8590 B

SIZE 8590 C REF CTNS-3-8590-C

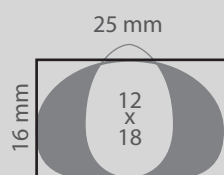
Total length: 170 mm
Ø inner proximal: 15.5 x 26 mm
Ø inner distal: 13.5 mm



8590 C

SIZE 8590 J-JL REF CTNS-3-8590-J
REF CTNS-3-8590-JL

Total length Size J : 180 mm
Total length Size JL : 220 mm
Ø inner proximal: 16 x 25 mm
Ø inner distal: 12 x 18 mm



8590 J-JL

Original KLEINSASSER by Carl Reiner

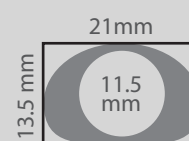


KLEINSASSER by Karl Storz



SIZE 8590 DN REF CTNS-330-K41

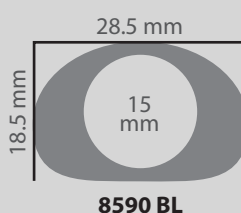
Total length: 180 mm
Ø inner proximal: 13.5 x 21 mm
Ø inner distal: 11.5 mm



8590 DN

Adult Jet Laryngoscopes

KLEINSASSER modified by Rudert

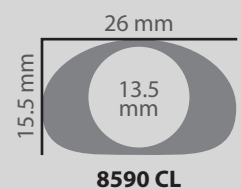


8590 BL

ADULT

SIZE 8590 BL REF CTNS-3-8590-BL

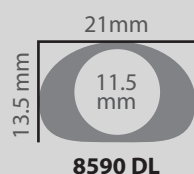
Total length: 170 mm
Ø inner proximal: 18.5 x 28.5 mm
Ø inner distal: 15 mm



8590 CL

SIZE 8590 CL REF CTNS-3-8590-CL

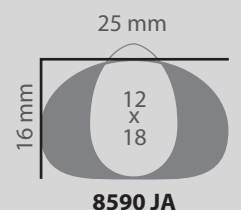
Total length: 170 mm
Ø inner proximal: 15.5 x 26 mm
Ø inner distal: 13.5 mm



8590 DL

SIZE 8590 DL REF CTNS-3-8590-DL

Total length: 180 mm
Ø inner proximal: 13.5 x 21 mm
Ø inner distal: 11.5 mm

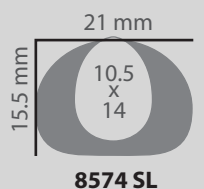


8590 JA

SIZE 8590 JA REF CTNS-3-8590-JA

Total length: 180 mm
Ø inner proximal: 16 x 25 mm
Ø inner distal: 12 x 18 mm

BENJAMIN Slimline



8574 SL

SIZE 8574 SL REF CTNS-3-8574-SL

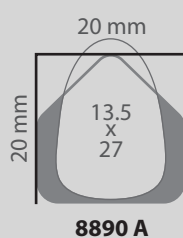
Total length: 170 mm
Ø inner proximal: 15.5 x 21 mm
Ø inner distal: 10.5 x 14 mm

DEDO

ADULT

SIZE 8890 A REF CTNS-3-8890-A

Total length: 180 mm
 Ø inner proximal: 20 x 20 mm
 Ø inner distal: 13.5 x 27 mm



Polygonal Jet-Laryngoscope by Carl Reiner

SIZE A REF CTNS-310-001 *

Total length: 180 mm
 Ø inner proximal: 19.5 x 33 mm
 Ø inner distal: 17.5 mm



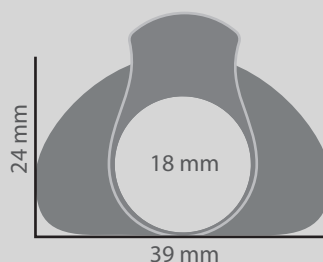
* End of Life product - limited availability to be expected

Adult Jet Laryngoscopes

LINDHOLM



8587 A - AA



SIZE 8587 A **REF CTNS-3-8587-A**

Total length: 150 mm
Ø inner proximal: 24 x 39 mm
Ø inner distal: 18 mm

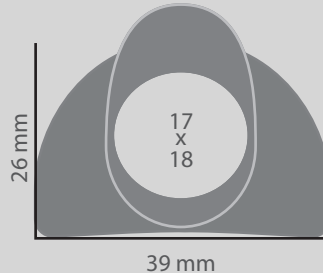
SIZE 8587 AA **REF CTNS-3-8587-AA**

Total length: 170 mm
Ø inner proximal: 24 x 39 mm
Ø inner distal: 18 mm

BOUCHAYER



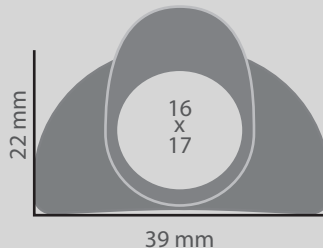
2091 L



SIZE 2091 L **REF CTNS-3-2091-L**

Total length: 180 mm
Ø inner proximal: 26 x 39 mm
Ø inner distal: 17 x 18 mm

2091 M



SIZE 2091 M **REF CTNS-3-2091-M**

Total length: 180 mm
Ø inner proximal: 22 x 39 mm
Ø inner distal: 16 x 17 mm

Jet Tracheoscopes

Jet Tracheoscope Adult according to FRIEDRICH

ADULT

SIZE A REF CTNS-310-T01
REF CTNS-310-T41

Total length: 230 mm
Ø inner proximal: 18.4 x 22.8 mm
Ø inner distal: 12 mm



SIZE B REF CTNS-320-T01
REF CTNS-320-T41

Total length: 220 mm
Ø inner proximal: 18.4 x 22.8 mm
Ø inner distal: 9 mm



PAEDIATRIC

Jet Tracheoscope Paediatric according to FRIEDRICH

SIZE KA REF CTNS-370-T01
REF CTNS-370-T41

Total length: 155 mm
Ø inner proximal: 17.6 x 19.6 mm
Ø inner distal: 6 mm



SIZE KE REF CTNS-380-T41

Total length: 141 mm
Ø inner proximal: 12.6 x 22.4 mm
Ø inner distal: 7.6 mm



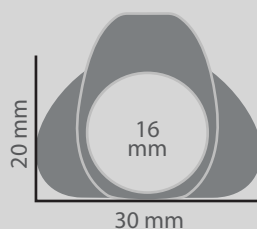
Scale=1:1

Paediatric / Neonatal Laryngoscopes

LINDHOLM



8587 KK



PAEDIATRIC / NEONATAL

SIZE 8587 KK REF CTNS-3-8587-KK

Total length: 110 mm
 Ø inner proximal: 20 x 30 mm
 Ø inner distal: 16 mm

BENJAMIN-LINDHOLM



8587 N



SIZE 8587 N REF CTNS-3-8587-N

Total length: 115 mm
 Ø inner proximal: 18 x 30 mm
 Ø inner distal: 20 x 16 mm



8587 P

SIZE 8587 P REF CTNS-3-8587-P

Total length: 95 mm
 Ø inner proximal: 16 x 26 mm
 Ø inner distal: 14 x 11 mm

Original PARSONS



Size D

SIZE 8576 D REF CTNS-3-8576-D

Total length: 90 mm
 Ø inner proximal: 12 x 14 mm
 Ø inner distal: 14 x 20 mm

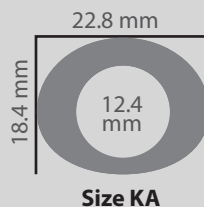
ACCESSORIES

- Karl Storz Chest Support System
REF ST 8575 K
 See ▶ **Page 65** for details
- Adapter for Jet Laryngoscopes
 to universal support arm
REF CTNS-860-050
 See ▶ **Page 63** for details
- Karl Storz Prismatic Light Deflector
REF ST 10101 FA
 See ▶ **Page 65** for details
- Pressure and Gas Monitoring Adapter
REF CTNS-6B2-030
 See ▶ **Page 35** for details

PAEDIATRIC / NEONATAL

SIZE KA REF CTNS-360-K41
REF CTNS-360-K01*

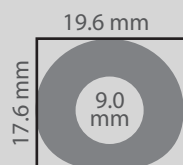
Total length: 140 mm
Ø inner proximal: 18.4 x 22.8 mm
Ø inner distal: 12.4 mm



Size KA

SIZE KC REF CTNS-370-K41
REF CTNS-370-K01*

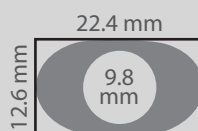
Total length: 130 mm
Ø inner proximal: 17.6 x 19.6 mm
Ø inner distal: 9 mm



Size KC

SIZE KE REF CTNS-380-K41
REF CTNS-380-K01*

Total length: 130 mm
Ø inner proximal: 12.6 x 22.4 mm
Ø inner distal: 9.8 mm



Size KE

SIZE 8590 KL REF CTNS-3-8590-L

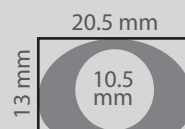
Total length: 150 mm
Ø inner proximal: 13 x 20.5 mm
Ø inner distal: 10.5 mm



8590 KL

SIZE 8590 K REF CTNS-3-8590-K

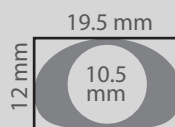
Total length: 150 mm
Ø inner proximal: 13 x 20.5 mm
Ø inner distal: 10.5 mm



8590 K

SIZE 8590 L REF CTNS-3-8590-L

Total length: 130 mm
Ø inner proximal: 12 x 19.5 mm
Ø inner distal: 10.5 mm



8590 L

Original KLEINSASSER by Carl Reiner



KLEINSASSER modified by Rudert



KLEINSASSER by Karl Storz



Adult spreadable Jet Laryngoscopes

Jet Laryngoscopes according to WEERDA

Jet Laryngoscope, distending, for S-HFJV™ acc. to ALOY, Type WEERDA

For use with TwinStream™ Ventilator

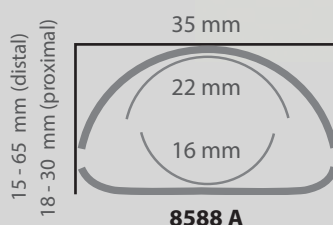
Integrated Easy ConnectSystem:

- 2 Jet Lines for S-HFJV™
- 2 Monitoring lines for Airway Pressure and Gas Analysis (FiO₂Aw & etCO₂)
- 2 Mounting Points for Fiber Optic Light carrier/ Suction tube
- Material: Surgical Stainless Steel
- Reprocessable: Yes

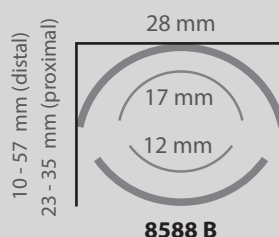


ADULT

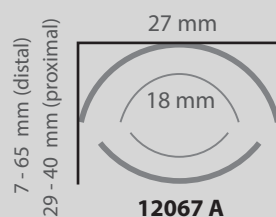
SIZE A REF CTNS-3-8588-A



Size A (extra long) REF CTNS-3-12067 A



SIZE B REF CTNS-3-8588-B



ACCESSORIES

- EasyConnect™ Tubing Set for Jet Endoscopes and Jet Converter
See ▶ **page 52 + 64** for details
REF CTNS-220-050, REF CTNS-220-051
REF CTFS-220-SU1
- Heating Connector for Jet Laryngoscopes with integrated inlet
See ▶ **page 57** for details
REF CTNI-800-003
- Karl Storz Chest Support System for Jet Laryngoscopes
See ▶ **page 65** for details
REF ST 8575 K
- Support Arm Adapter for Jet Laryngoscopes
See ▶ **page 55** for details
REF CTNS-860-050

Overview Special Scopes

Overview of available special type Laryngoscopes

Special Carl Reiner® Jet Laryngoscopes

ACCESSORIES

Carl Reiner Ref. No.	Type
CTNS-3-8574 SL	Jet Laryngoscope for SHFJV® acc. to ALOY, Type BENJAMIN, Size 8574 SL
CTNS-3-8661-CN	Jet Laryngoscope for SHFJV® acc. to ALOY, Type STEINER, Size 8661 CN
CTNS-3-8661-DN	Jet Laryngoscope for SHFJV® acc. to ALOY, Type STEINER, Size 8661 DN
CTNS-3-8590-B	Jet Laryngoscope for SHFJV® acc. to ALOY, Type KLEINSASSER-RUDERT, Size 8590 B
CTNS-3-8590-BL	Jet Laryngoscope for SHFJV® acc. to ALOY, Type KLEINSASSER-RUDERT, Size 8590 BL
CTNS-3-8590-C	Jet Laryngoscope for SHFJV® acc. to ALOY, Type KLEINSASSER-RUDERT, Size 8590 C
CTNS-3-8590-CL	Jet Laryngoscope for SHFJV® acc. to ALOY, Type KLEINSASSER-RUDERT, Size 8590 CL
CTNS-3-8590-D	Jet Laryngoscope for SHFJV® acc. to ALOY, Type KLEINSASSER-RUDERT, Size 8590 D
CTNS-3-8590-DL	Jet Laryngoscope for SHFJV® acc. to ALOY, Type KLEINSASSER-RUDERT, Size 8590 DL
CTNS-3-8590-DN	Jet Laryngoscope for SHFJV® acc. to ALOY, Type KLEINSASSER-RUDERT, Size 8590 DN
CTNS-3-8590-J	Jet Laryngoscope for SHFJV® acc. to ALOY, Type KLEINSASSER-RUDERT, Size 8590 J
CTNS-3-8590-K	Jet Laryngoscope for SHFJV® acc. to ALOY, Type KLEINSASSER-RUDERT, Size 8590 K
CTNS-3-8590-KL	Jet Laryngoscope for SHFJV® acc. to ALOY, Type KLEINSASSER-RUDERT, Size 8590 KL
CTNS-3-8590-L	Jet Laryngoscope for SHFJV® acc. to ALOY, Type KLEINSASSER-RUDERT, Size 8590 L
CTNS-3-8588-A	Jet Laryngoscope, distending, for SHFJV® acc. to ALOY, Type WEERDA, Size 8588 A
CTNS-3-8588-B	Jet Laryngoscope, distending, for SHFJV® acc. to ALOY, Type WEERDA, Size 8588 B
CTNS-3-8890-A	Jet Laryngoscope for SHFJV® acc. to ALOY, Type DEDO, Size 8890 A
CTNS-3-12067 A	Jet Laryngoscope, distending, for SHFJV® acc. to ALOY, Type WEERDA, Size 12067 A
CTNS-3-8587-A	Jet Laryngoscope for SHFJV® acc. to ALOY, Type LINDHOLM, Size 8587 A
CTNS-3-8587-AA	Jet Laryngoscope for SHFJV® acc. to ALOY, Type LINDHOLM, Size 8587 AA
CTNS-3-8587-KK	Jet Laryngoscope for SHFJV® acc. to ALOY, Type LINDHOLM, Size 8587 KK
CTNS-3-8587-N	Jet Laryngoscope for SHFJV® acc. to ALOY, Type BENJAMIN-LINDHOLM, Size 8587 N
CTNS-3-8587-P	Jet Laryngoscope for SHFJV® acc. to ALOY, Type BENJAMIN-LINDHOLM, Size 8587 P
CTNS-3-8590-JA	Jet Laryngoscope for SHFJV® acc. to ALOY, Type KLEINSASSER-RUDERT, Size 8590 JA
CTNS-3-8590-JL	Jet Laryngoscope for SHFJV® acc. to ALOY, Type KLEINSASSER, Size 8590 JL
CTNS-3-8576-D	Jet Laryngoscope for SHFJV® acc. to ALOY, Type PARSONS, Size 8576 D
CTNS-3-2091-L	Jet Laryngoscope for SHFJV® acc. to ALOY, Type BOUCHAYER, Size A
CTNS-3-2091-M	Jet Laryngoscope for SHFJV® acc. to ALOY, Type BOUCHAYER, Size C

Pneumology, Interventional Bronchoscopy



XS Series Jet Bronchoscopes

Hybrid Illumination

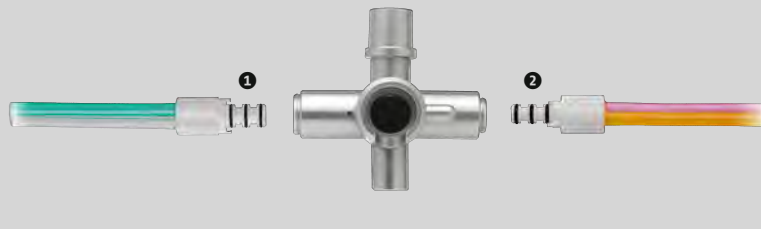


Jet Bronchoscope for S-HFJV™ according to ALOY

For use with TwinStream™ Ventilator

Fully integrated Easy Connect System
including:

- 2 Jet Lines for S-HFJV™
- 2 Monitoring Lines for Airway Pressure and Gas Analysis (FiO₂, Aw & etCO₂)
- Inlet Port for Patient Gas Conditioning (Heater/Humidifier)
- Material: Surgical Stainless Steel
- Reprocessable: Yes



ADULT

SIZE 6 **REF CTNS-408-3XS**
 Total Length 420 mm
 Usable length 373 mm
 Inner Diameter Ø: 7.4 mm
 Outer Diameter Ø: 8 mm



SIZE 6.5 **REF CTNS-409-3XS**
 Total Length 420 mm
 Usable length 373 mm
 Inner Diameter Ø: 8.4 mm
 Outer Diameter Ø: 9 mm



SIZE 7.5 **REF CTNS-410-3XS**
 Total Length 420 mm
 Usable length 374 mm
 Inner Diameter Ø: 9.4 mm
 Outer Diameter Ø: 10 mm



SIZE 8.5 **REF CTNS-411-3XS**
 Total Length 420 mm
 Usable length 375 mm
 Inner Diameter Ø: 10.4 mm
 Outer Diameter Ø: 11 mm



SIZE 9 **REF CTNS-412-3XS**
 Total Length 420 mm
 Usable length 376 mm
 Inner Diameter Ø: 11.4 mm
 Outer Diameter Ø: 12 mm



SIZE 9.5 **REF CTNS-413-3XS**
 Total Length 420 mm
 Usable length 377 mm
 Inner Diameter Ø: 12.4 mm
 Outer Diameter Ø: 13 mm



SIZE 10 **REF CTNS-414-3XS**
 Total Length 420 mm
 Usable length 378 mm
 Inner Diameter Ø: 13.4 mm
 Outer Diameter Ø: 14 mm



Scale=1:1

ACCESSORIES

REF CTFS-220-SU1, REF CTNS-220-0S0, REF CTNS-220-0S1
 EasyConnect™ Tubing Set for Jet
 Endoscopes and Jet Converter
Fig. ①+②, see ▶ page 52 + 64 for details

REF CTNS-860-051
 Adapter for Jet Converter or Jet
 Bronchoscopes
See ▶ page 55 for details

REF CTNS-6B5-ESL
 Adapter for Jet Bronchoscope acc. to
 KARL STORZ® Window/Cap
See ▶ page 54 for details

REF CTNS-861-00S
 Adapter for fixation of
 Jet Bronchoscopes
See ▶ page 55 for details

Starting from **Size 7,5** Carl Reiner Jet Bronchoscopes of Series 3XS
 are also available with a thicker wall (**Series 5XS**).

X7 Series Jet Bronchoscopes, shortened

Hybrid Illumination



Jet Bronchoscope for S-HFJV™ according to ALOY

For use with TwinStream™ Ventilator

Fully integrated Easy Connect System
including:

- 2 Jet Lines for S-HFJV™
- 2 Monitoring Lines for Airway Pressure and Gas Analysis (FiO₂Aw & etCO₂)
- Inlet Port for Patient Gas Conditioning (Heater/Humidifier)
- Material: Surgical Stainless Steel
- Reprocessable: Yes



ADULT

SIZE 6 **REF CTNS-408-3X7**
 Total Length 370 mm
 Usable length 323 mm
 Inner Diameter Ø: 7.4 mm
 Outer Diameter Ø: 8 mm



SIZE 6.5 **REF CTNS-409-3X7**
 Total Length 370 mm
 Usable length 323 mm
 Inner Diameter Ø: 8.4 mm
 Outer Diameter Ø: 9 mm



SIZE 7.5 **REF CTNS-410-3X7**
 Total Length 370 mm
 Usable length 324 mm
 Inner Diameter Ø: 9.4 mm
 Outer Diameter Ø: 10 mm



SIZE 8.5 **REF CTNS-411-3X7**
 Total Length 370 mm
 Usable length 325 mm
 Inner Diameter Ø: 10.4 mm
 Outer Diameter Ø: 11 mm



SIZE 9 **REF CTNS-412-3X7**
 Total Length 370 mm
 Usable length 326 mm
 Inner Diameter Ø: 11.4 mm
 Outer Diameter Ø: 12 mm



SIZE 9.5 **REF CTNS-413-3X7**
 Total Length 370 mm
 Usable length 327 mm
 Inner Diameter Ø: 12.4 mm
 Outer Diameter Ø: 13 mm



SIZE 10 **REF CTNS-414-3X7**
 Total Length 370 mm
 Usable length 328 mm
 Inner Diameter Ø: 13.4 mm
 Outer Diameter Ø: 14 mm



Scale=1:1

ACCESSORIES

REF CTFS-220-SU1, REF CTNS-220-0S0, REF CTNS-220-0S1
 EasyConnect™ Tubing Set for Jet
 Endoscopes and Jet Converter
Fig. ❶+❷, see ▶ page 52 + 64 for details

REF CTNS-860-051
 Adapter for Jet Converter or Jet
 Bronchoscopes
See ▶ page 55 for details

REF CTNS-6B5-ESL
 Adapter for Jet Bronchoscope acc. to
 KARL STORZ® Window/Cap
See ▶ page 54 for details

REF CTNS-861-00S
 Adapter for fixation of
 Jet Bronchoscopes
See ▶ page 55 for details

TBS Series Jet Tracheobronchoscopes

Hybrid Illumination



Jet Tracheo Bronchoscope for S-HFJV™ according to ALOY

For use with TwinStream™ Ventilator
Fully integrated Easy Connect System
including:

- 2 Jet Lines for S-HFJV™
- 2 Monitoring Lines for Airway Pressure and Gas Analysis (FIO₂Aw & etCO₂)
- Inlet Port for Patient Gas Conditioning (Heater/Humidifier)
- Material: Surgical Stainless Steel
- Reprocessable: Yes



STANDARD/ADULT

SIZE 7.5 **REF CTNS-410-TBS**
 Total Length 310 mm
 Usable length 264 mm
 Inner Diameter Ø: 9.4 mm
 Outer Diameter Ø: 10 mm



SIZE 8.5 **REF CTNS-411-TBS**
 Total Length 310 mm
 Usable length 265 mm
 Inner Diameter Ø: 10.4 mm
 Outer Diameter Ø: 11 mm



SIZE 9 **REF CTNS-412-TBS**
 Total Length 310 mm
 Usable length 266 mm
 Inner Diameter Ø: 11.4 mm
 Outer Diameter Ø: 12 mm



SIZE 9.5 **REF CTNS-413-TBS**
 Total Length 310 mm
 Usable length 267 mm
 Inner Diameter Ø: 12.4 mm
 Outer Diameter Ø: 13 mm



SIZE 10 **REF CTNS-414-TBS**
 Total Length 310 mm
 Usable length 268 mm
 Inner Diameter Ø: 13.4 mm
 Outer Diameter Ø: 14 mm



Scale=1:1

ACCESSORIES

REF CTFS-220-SU1, REF CTNS-220-0S0, REF CTNS-220-0S1
 EasyConnect™ Tubing Set for Jet
 Endoscopes and Jet Converter
Fig. 1+2, see ▶ page 52 + 64 for details

REF CTNS-860-051
 Adapter for Jet Converter or Jet
 Bronchoscopes
See ▶ page 55 for details

REF CTNS-6B5-ESL
 Adapter for Jet Bronchoscope acc. to
 KARL STORZ® Window/Cap
See ▶ page 54 for details

REF CTNS-861-00S
 Adapter for fixation of
 Jet Bronchoscopes
See ▶ page 55 for details

D0 Series

Jet Dilatation-Tracheoscope

Proximal Illumination



Jet Dilatation Tracheoscope for S-HFJV™ according to ALOY

For use with TwinStream™ Ventilator

Fully integrated Easy Connect System including:

- 2 Jet Lines for S-HFJV™
- 2 Monitoring Lines for Airway Pressure and Gas Analysis (FiO₂Aw & etCO₂)
- Inlet Port for Patient Gas Conditioning (Heater/Humidifier)
- Material: Surgical Stainless Steel
- Reprocessable: Yes



ADULT

SIZE 6 **REF CTNS-408-D05**
 Length 300 mm
 Usable length 250 mm
 Inner Diameter Ø: 7,4 mm, conical
 Outer Diameter Ø: 8 mm, conical



SIZE 9 **REF CTNS-412-D05**
 Length 300 mm
 Usable length 250 mm
 Inner Diameter Ø: 11,4 mm, conical
 Outer Diameter Ø: 12 mm, conical



Scale=1:1

ACCESSORIES

REF CTFS-220-SU1, REF CTNS-220-0S0, REF CTNS-220-0S1
 EasyConnect™ Tubing Set for Jet
 Endoscopes and Jet Converter
Fig. ❶+❷, see ▶ page 52 + 64 for details

REF CTNS-860-051
 Adapter for Jet Converter or Jet
 Bronchoscopes
See ▶ page 55 for details

REF CTNS-6B5-ESL
 Adapter for Jet Bronchoscope acc. to
 KARL STORZ® Window/Cap
See ▶ page 54 for details

REF CTNS-861-00S
 Adapter for fixation of
 Jet Bronchoscopes
See ▶ page 55 for details

SS Series Jet Bronchoscopes

for Children, Infants and Babys
Proximal Illumination



Jet Bronchoscope for S-HFJV™ according to ALOY

For use with TwinStream™ Ventilator

Fully integrated Easy Connect System
including:

- 2 Jet Lines for S-HFJV™
- 2 Monitoring Lines for Airway Pressure and Gas Analysis (FiO₂, Aw & etCO₂)
- Inlet Port for Patient Gas Conditioning (Heater/Humidifier)
- Material: Surgical Stainless Steel
- Reprocessable: Yes

ACCESSORIES

REF CTFS-220-SU1, REF CTNS-220-050, REF CTNS-220-051
EasyConnect™ Tubing Set for Jet
Endoscopes and Jet Converter
Fig. 1+2, see ▶ **page 52 + 64** for details

REF CTNS-860-051
Adapter for Jet Converter or Jet
Bronchoscopes
See ▶ **page 55** for details

REF CTNS-6B5-ESL
Adapter for Jet Bronchoscope acc. to
KARL STORZ® Window/Cap
See ▶ **page 54** for details

REF CTNS-861-00S
Adapter for fixation of
Jet Bronchoscopes
See ▶ **page 55** for details



PEDIATRIC

SIZE 4 **REF CTNS-4P7-3SS**
 Total Length 390 mm
 Usable length 340 mm
 Inner Diameter Ø: 6.4 mm
 Outer Diameter Ø: 7 mm



SIZE 6 **REF CTNS-4P8-3SS**
 Total Length 390 mm
 Usable length 340 mm
 Inner Diameter Ø: 7.4 mm
 Outer Diameter Ø: 8 mm



SIZE 6.5 **REF CTNS-4P9-3SS**
 Total Length 390 mm
 Usable length 340 mm
 Inner Diameter Ø: 8.4 mm
 Outer Diameter Ø: 9 mm



BABYS

SIZE 3 **REF CTNS-4B5-3SS**
 Total Length 260 mm
 Usable length 210 mm
 Inner Diameter Ø: 4.4 mm
 Outer Diameter Ø: 5 mm



SIZE 3.5 **REF CTNS-4B6-3SS**
 Total Length 260 mm
 Usable length 210 mm
 Inner Diameter Ø: 5.4 mm
 Outer Diameter Ø: 6 mm



SIZE 4 **REF CTNS-4B7-3SS**
 Total Length 260 mm
 Usable length 210 mm
 Inner Diameter Ø: 6.4 mm
 Outer Diameter Ø: 7 mm



INFANTS

SIZE 3 **REF CTNS-4I5-3SS**
 Total Length 290 mm
 Usable length 240 mm
 Inner Diameter Ø: 4.4 mm
 Outer Diameter Ø: 5 mm



SIZE 3.5 **REF CTNS-4I6-3SS**
 Total Length 290 mm
 Usable length 240 mm
 Inner Diameter Ø: 5.4 mm
 Outer Diameter Ø: 6 mm



SIZE 4 **REF CTNS-4I7-3SS**
 Total Length 290 mm
 Usable length 240 mm
 Inner Diameter Ø: 6.4 mm
 Outer Diameter Ø: 7 mm



SIZE 6 **REF CTNS-4I8-3SS**
 Total Length 290 mm
 Usable length 240 mm
 Inner Diameter Ø: 7.4 mm
 Outer Diameter Ø: 8 mm



SIZE 6.5 **REF CTNS-4I9-3SS**
 Total Length 290 mm
 Usable length 240 mm
 Inner Diameter Ø: 8.4 mm
 Outer Diameter Ø: 9 mm



Scale=1:1

ES Series Jet Bronchoscopes

for Infants and premature Babys
Proximal Illumination

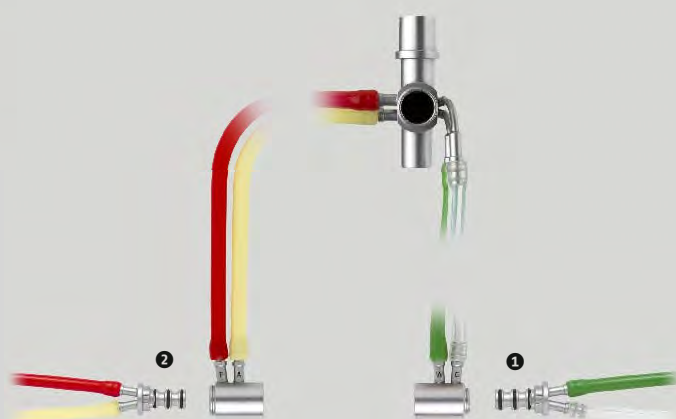


Jet Bronchoscope for S-HFJV™ according to ALOY

For use with TwinStream™ Ventilator

Fully integrated EasyConnect™ System
including:

- 2 Jet Lines for S-HFJV™
- 2 Monitoring Lines for Airway Pressure and Gas Analysis (FiO₂Aw & etCO₂)
- Inlet Port for Patient Gas Conditioning (Heater/Humidifier)
- Material: Surgical Stainless Steel, Silicone
- Free of: Latex, Phtalate & PVC
- Reprocessable: Yes



INFANTS AND PREMATURE BABYS

SIZE 2.5 REF CTNS-4N4-3ES

Total Length 185 mm
Usable length 135 mm
Inner Diameter Ø: 3.4 mm
Outer Diameter Ø: 4 mm



SIZE 3 REF CTNS-4N5-3ES

Total Length 185 mm
Usable length 135 mm
Inner Diameter Ø: 4.4 mm
Outer Diameter Ø: 5 mm



SIZE 3.5 REF CTNS-4N6-3ES

Total Length 185 mm
Usable length 135 mm
Inner Diameter Ø: 5.4 mm
Outer Diameter Ø: 6 mm



Scale=1:1

ACCESSORIES

REF CTFS-220-SU1, REF CTNS-220-0S0, REF CTNS-220-0S1
EasyConnect™ Tubing Set for
Jet Endoscopes and Jet Converter
Fig. 1+2, See ▶ page 52 + 64 for details

REF CTNS-860-051
Support Arm Adapter for Jet Converters
or Jet Bronchoscopes
See ▶ page 55 for details

REF CTNS-861-00S
Mounting option for Jet Bronchoscopes
or Jet Tracheo Bronchoscopes
See ▶ page 55 for details

Jet Couplings for Karl Storz® Bronchoscopes



**Jet Coupling for S-HFJV™
according to ALOY, Adult**

With EasyConnect™

Material: Surgical Stainless Steel

Reprocessable: Yes

REF CTNS-6B1-AS0



**Jet Coupling for S-HFJV™
according to ALOY, Pediatric**

With EasyConnect™

Material: Surgical Stainless Steel

Reprocessable: Yes

REF CTNS-6B1-PS0



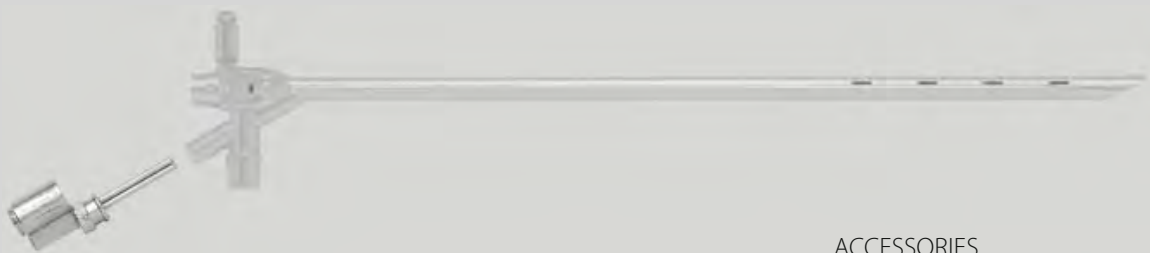
**Jet Coupling for S-HFJV™
according to ALOY, Neonatal**

With EasyConnect™

Material: Surgical Stainless Steel

Reprocessable: Yes

REF CTNS-6B1-NS0



ACCESSORIES

REF CTNS-220-1S0, REF CTNS-220-1S1
Jet Tubing System for Jet Endoscopes,
Jet Converter, with Easy Connect System
See ► **page 52** for details

Monitoring Adapter



EasyConnect™ Adapter for rigid standard Bronchoscopes and monitoring cannulas

For use with TwinStream™ Ventilator

Red Monitoring Tubing with male Luer Lock
• for Airway Pressure Monitoring

Yellow Monitoring Tubing with male Luer Lock
• for Gas Analysis (FiO₂ Aw & etCO₂)

Including Color-coded Silicone Tubings and Male Luer-Lock Connectors

Material: Surgical Stainless Steel
Silicone

Free of: Latex, Phtalate & PVC

Reprocessable: Yes

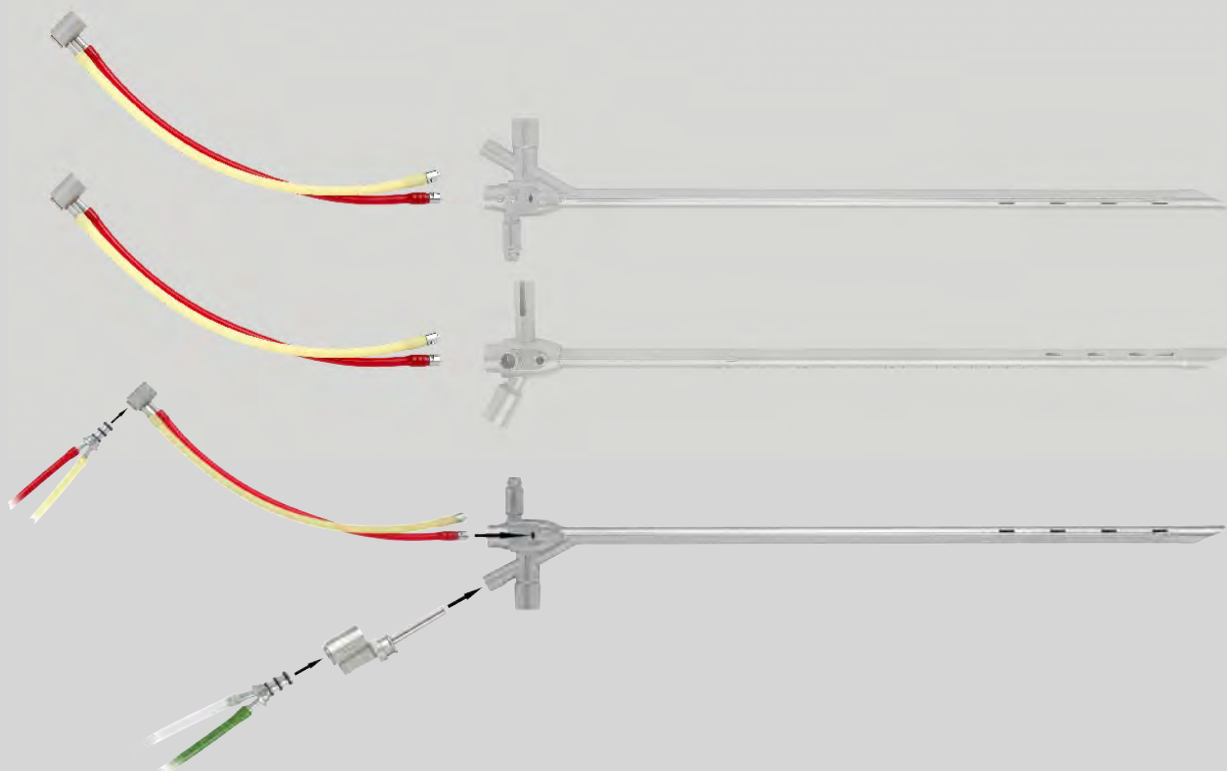
Length 30 cm

REF CTNS-6B2-030

ACCESSORIES

REF CTNS-220-200, REF CTNS-220-201
Monitoring Tubing Set for Jet Endoscopes,
Jet Converter, with Easy Connect System
See ▶ **page 52** for details

REF CTNS-6B4-A30
Monitoring Cannula with Luer-Lock for
Rigid Standard Bronchoscopes, Adult
See ▶ **page 36** for details



Monitoring Cannulas for Bronchoscopes

ADULT

Monitoring Cannula with Easy Connect for Rigid Standard Bronchoscopes

For use with TwinStream™ Ventilator and EasyConnect™ System

2 Monitoring Channels for

- Gas Analysis (FiO₂ Aw & etCO₂)
- Airway Pressure Monitoring

Material: Surgical Stainless Steel

Reprocessable: Yes

Length 30 cm
Ø inner 1.5 mm
Ø outer 2.0 mm
REF CTNS-6B2-A30

ACCESSORIES

REF CTNS-220-200, REF CTNS-220-201
Monitoring Tubing Set
for Jet Endoscopes, Jet Converter,
with Easy Connect System
See ▶ **page 52** for details



Monitoring Cannula with Luer-Lock for Rigid Standard Bronchoscopes

With 1 Lumen for

- Patient Gas Analysis

Material: Surgical Stainless Steel

Reprocessable: Yes

Length 30 cm
Ø inner 1.5 mm
Ø outer 2.0 mm
REF CTNS-6B4-A30

ACCESSORIES

REF CTNS-6B2-030
Pressure- and Gas Monitoring Adapter
for Rigid Standard Bronchoscopes
See ▶ **page 35** for details



PEDIATRIC

Monitoring Cannula with Easy Connect for Rigid Standard Bronchoscopes

For use with TwinStream™ Ventilator and EasyConnect™ System

- 1 Monitoring Channel for
- Airway Pressure Monitoring

Material: Surgical Stainless Steel

Reusable: Yes

Length 20 cm

Ø inner 1.5 mm

Ø outer 2.0 mm

REF CTNS-6B2-P20

Monitoring Cannula with Easy Connect for Rigid Standard Bronchoscopes

For use with TwinStream™ Ventilator with integrated Easy-Connect-System2

- Monitoring Channels for • Gas Analysis (FiO₂ Aw & etCO₂) • Airway Pressure Monitoring

Material: Surgical Stainless Steel

Reprocessable: Yes

Length 20 cm

Ø inner 1.5 mm

Ø outer 2.0 mm

REF CTNS-6B3-P20

Monitoring Cannula with Easy Connect for Rigid Standard Bronchoscopes

For use with TwinStream™ Ventilator and EasyConnect™ System

- 1 Monitoring Channel for
- Gas Analysis (FiO₂ Aw & etCO₂)

Material: Surgical Stainless Steel

Reprocessable: Yes

Length 20 cm

Ø inner 1.5 mm

Ø outer 2.0 mm

REF CTNS-6B4-P20

ACCESSORIES

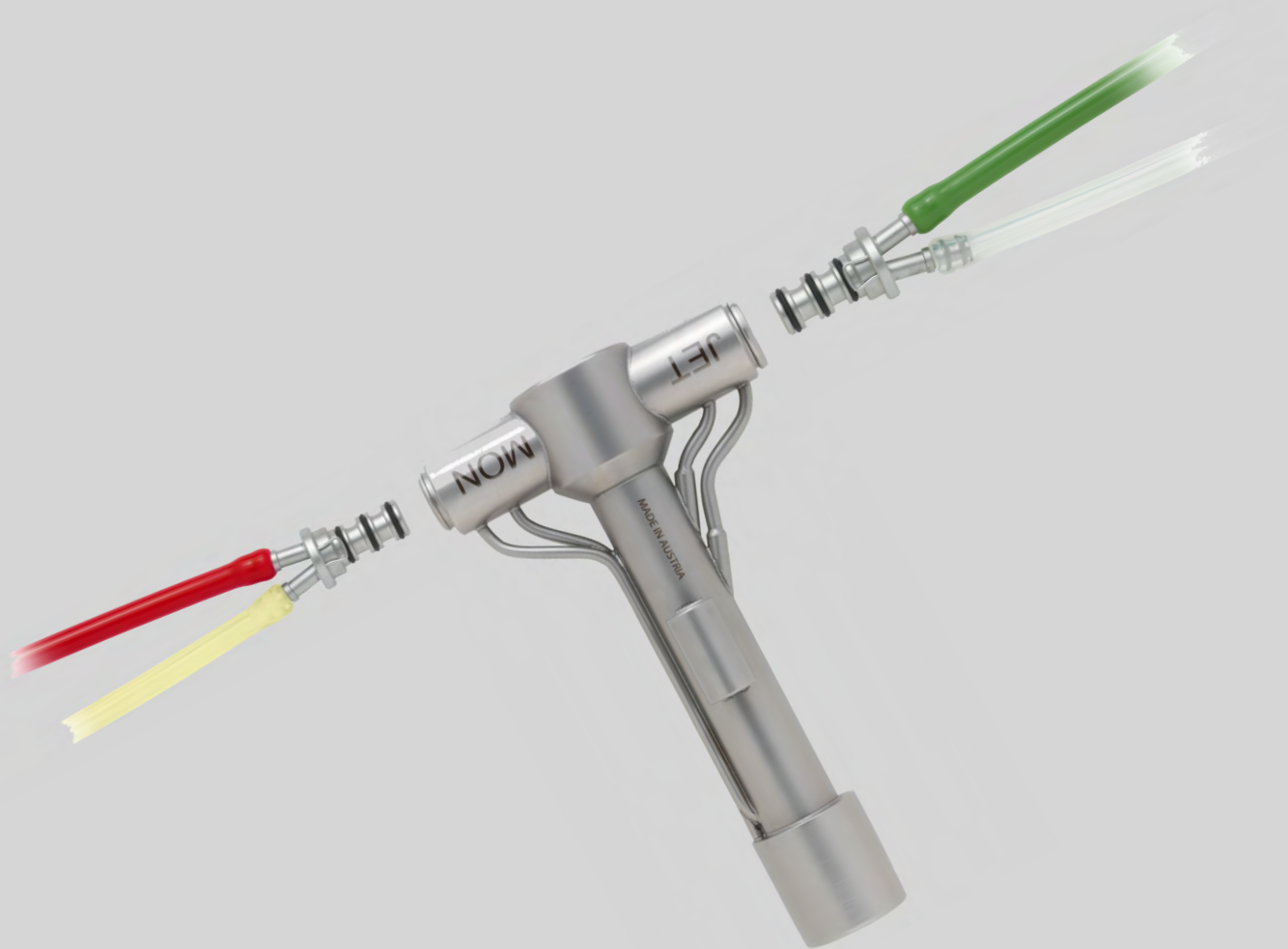
REF CTNS-220-200, REF CTNS-220-201

Monitoring Tubing Set for Jet Endoscopes, Jet Converter, with Easy Connect System

See ▶ **page 52** for details



Jet Converter for flexible Bronchoscopy and EBUS Applications



Jet Converter for flexible Bronchoscopy and EBUS Applications

Jet Converter for S-HFJV™ according to ALOY, VERES and SLAVEI

For use with TwinStream™ Ventilator
and EasyConnect™ System
for standard ET-Tubes or LMA

- 2 Jet Lines for S-HFJV™
- 2 Monitoring Lines for Airway Pressure
and Gas Analysis (FiO₂Aw & etCO₂)

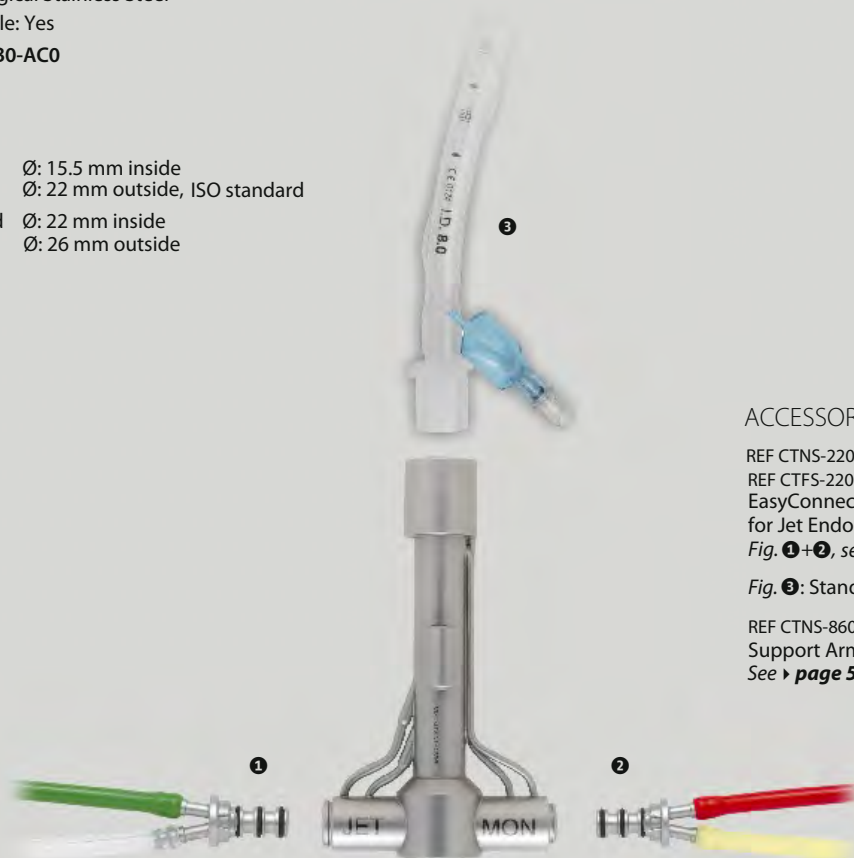
Material: Surgical Stainless Steel

Reprocessable: Yes

REF CTNS-6B0-AC0

SIZE

Distal end	Ø: 15.5 mm inside Ø: 22 mm outside, ISO standard
Proximal end	Ø: 22 mm inside Ø: 26 mm outside



ACCESSORIES

REF CTNS-220-0S0, REF CTNS-220-0S1,
REF CTFS-220-SU1
EasyConnect™ Tubing Set
for Jet Endoscopes and Jet Converter
Fig. 1+2, see ▶ page 52 and 64 for details

Fig. 3: Standard ET-Tube or LMA

REF CTNS-860-0S1
Support Arm Adapter for Jet Converter
See ▶ page 55 for details

Stent Application Tools



Jet Laryngoscope for S-HFJV™ according to ALOY for Application of Y-Stents

For use with TwinStream™ Ventilator
Integrated Easy Connect System • 2

Jet lines for S-HFJV™

- 2 Monitoring Lines for Airway Pressure and Gas Analysis (FiO₂Aw & etCO₂)
- 2 Mounting Points for Fiber Optic Light carrier/Suction tube
- Inlet port for Patient Gas Conditioning (Heater/Humidifier)

Material: Surgical Stainless Steel

Surfaces: Matt finish, Non-reflecting

Reprocessable: Yes

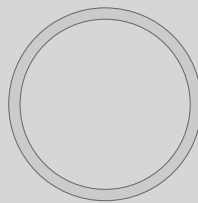
REF CTNI-860-501



ADULT

SIZE REF CTNI-860-501

Total length: 190 mm
 Ø inner proximal: 25.4 mm
 Ø outer proximal: 27.0 mm
 Ø inner distal: 20.2 mm
 Ø outer distal: 22.0 mm



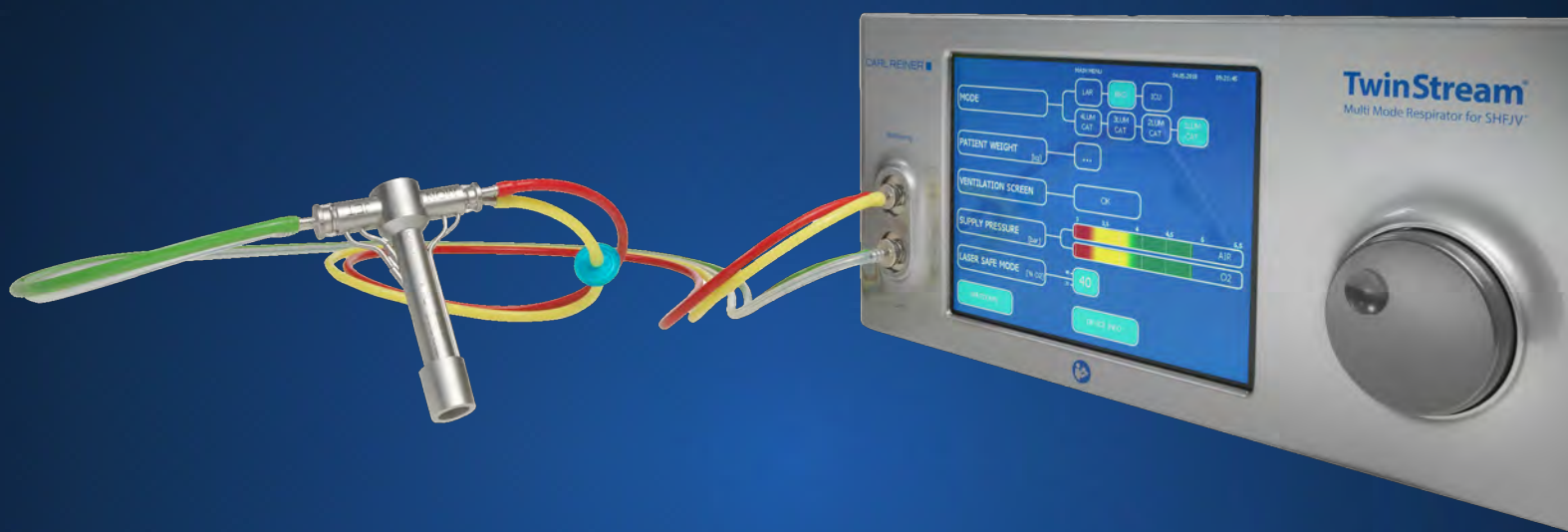
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ACCESSORIES

REF CTFS-220-SU1, REF CTNS-220-050, REF CTNS-220-051
 EasyConnect™ Tubing Set
 for Jet Endoscopes and Jet Converter,
 Fig. 1+2, see ▶ **page 52 + 64** for details

REF CTNS-860-050
 Support Arm Adapter for Jet Laryngoscope
 See ▶ **page 55** for details



Thoracic Surgery,
Single-Lung Ventilation
and Tracheal Resection

Jet Converter for Single-Lung Ventilation



**Jet Converter for S-HFJV™
according to ALOY, VERES
and SLAVEI**

For use with TwinStream™ Ventilator
and EasyConnect™ System for standard
ET-Tubes or LMA

- 2 Jet Lines for S-HFJV™
- 2 Monitoring Lines for Airway Pressure
and Gas Analysis (FiO₂Aw & etCO₂)

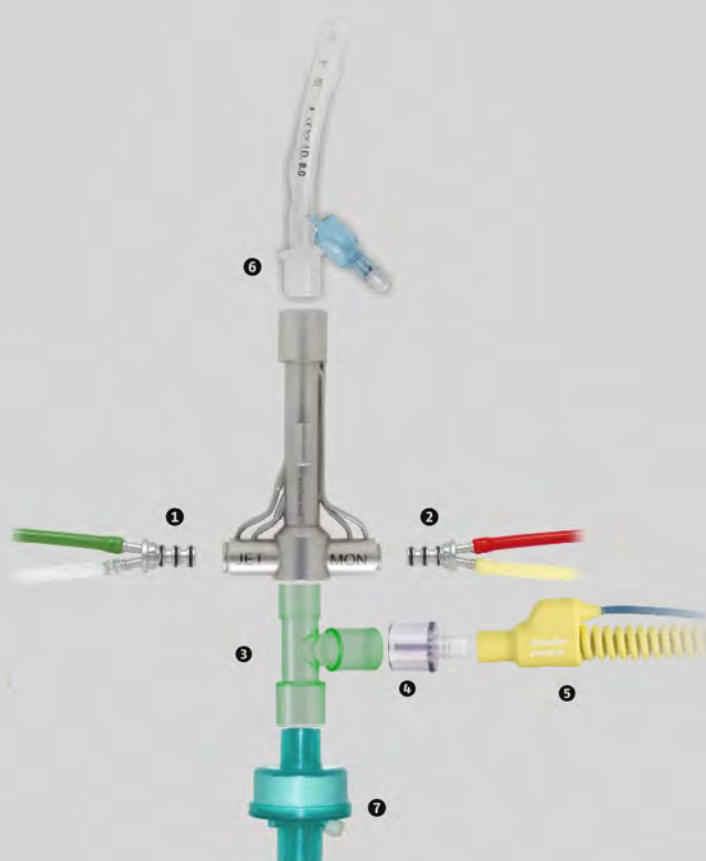
Material: Surgical Stainless Steel

Reprocessable: Yes

REF CTNS-6B0-ACO

SIZE

Distal end	Ø: 15.5 mm inside Ø: 22 mm outside, ISO standard
Proximal end	Ø: 22 mm inside Ø: 26 mm outside



REF CTNS-220-050, REF CTNS-220-051
EasyConnect™ Tubing Set
for Jet Endoscopes and Jet Converter,
Fig. ①+②, see ▶ **page 52 + 64** for details

REF CTNS-860-051
Support Arm Adapter for Jet Converter
See ▶ **page 55** for details



TwinStream™ ICU
for Long-Term Ventilation

ICU Long Term Ventilation Setup

ICU - SETUP

- Jet Ventilator TwinStream™ for p-BLV™
- p-BLV™ Converter for ICU
- ICU Tubing System with EasyConnect™
- Humidifier
- Humidifier Hoses
- Filter
- Muffler for p-BLV™ Converter



* Humidifier is a third party product
picture for setup reference only

ICU Setup Components

p-BLV™ Converter Setup

p-BLV™ Converter for ICU



REF CTNS-610-NP0
Recommended for
patients with a weight of
1 – 40 kg
2 Lines for p-BLV™
Reprocessable: Yes

REF CTNS-610-AC2
Recommended for
patients with a weight
above 40 kg
2 Lines for p-BLV™
Reprocessable: Yes

SIZE

Distal end Ø: 14 mm inside
 Ø: 22 mm outside, ISO standard
Proximal end Ø: 22 mm inside
 Ø: 26 mm outside



EasyConnect™ Tubing Set for p-BLV™ Module/ p-BLV™ Converter

Lengths 200 cm Monitoring tubing,
 50 cm Jet tubings,
Dimensions 3 × 7 mm
Material Silicone
Reprocessable: Yes
REF CTNS-220-0S2



Standard rail mounting 90° for p-BLV™ Converter

Fits for • CTNS-610-NP0
 • CNTS-610-AC2
 • CNTS-6B0-AC0

REF CTNS-800-NP0



Silencer for p-BLV™ Module

QTY: 1 pc
Material: Aluminum, anodized
Reprocessable: Yes

REF CTNI-611-AC0

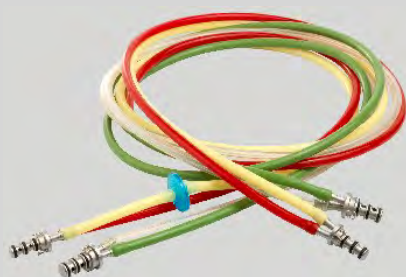
See ▶ **page 53** for details



Carl Reiner Accessories



Tubing Systems for Jet Endoscopes, Jet Converter



EasyConnect™ Tubing Set for Jet-Endoscopes and Jet-Converter

Tubing:	Silicone	REF	CTNS-220-0S0
Free of:	Latex, Phtalate, PVC	Length:	150 cm
		Dimensionen:	3 × 7 mm
EasyConnector:	Surgical Stainless Steel	REF	CTNS-220-0S1
O-Rings:	EPDM 70 medical grade	Length:	200 cm
		Dimension:	3 × 7 mm
Reprocessable:	Yes		



EasyConnect™ Monitoring Tubing Set for Jet-Endoscopes/Jet-Converter

Tubing:	Silicone
Free of:	Latex, Phtalate, PVC
EasyConnector:	Surgical Stainless Steel
O-Rings:	EPDM 70 medical grade
Reprocessable:	Yes

REF CTNS-220-200
Length: 150 cm
Dimension: 3 × 7 mm

REF CTNS-220-201
Length: 200 cm
Dimension: 3 × 7 mm



EasyConnect™ Jet Tubing Set for Jet-Endoscopes/Jet-Converter

Tubing:	Silicone
Free of:	Latex, Phtalate, PVC
EasyConnector:	Surgical Stainless Steel
O-Rings:	EPDM 70 medical grade
Reprocessable:	Yes

REF CTNS-220-1S0
Length: 150 cm
Dimension: 3 × 7 mm

REF CTNS-220-1S1
Length: 200 cm
Dimension: 3 × 7 mm

Tubing Systems for p-BLV™ Converter



EasyConnect™ Tubing Set for p-BLV™ Module / p-BLV™ Converter

Tubing:	Silicone	REF	CTNS-220-0S2
Free of:	Latex, Phtalate, PVC	Length:	Monitoring Tubings: 200 cm p-BLV Tubings: 50 cm
EasyConnector:	Surgical Stainless Steel	Dimension:	3 × 7 mm
O-Rings:	EPDM 70 medical grade		
Reprocessable:	Yes		



EasyConnect™ Jet Tubing Set for p-BLV™ Module/p-BLV™ Converter

Tubing:	Silicone
Free of:	Latex, Phtalate, PVC
EasyConnector:	Surgical Stainless Steel
O-Rings:	EPDM 70 medical grade
Reprocessable:	Yes

REF	CTNS-220-1S2
Length:	50 cm
Dimension:	3 × 7 mm



EasyConnect™ Monitoring Tubing Set for p-BLV™ Module/p-BLV™ Converter

Tubing:	Silicone
Free of:	Latex, Phtalate, PVC
EasyConnector:	Surgical Stainless Steel
O-Rings:	EPDM 70 medical grade
Reprocessable:	Yes

REF	CTNS-220-2S2
Length:	200 cm
Dimension:	3 × 7 mm

Carl Reiner® Accessories



**Adapter for Jet Bronchoscope
Type XS, X7, TBS series acc. KARL STORZ®**
for use with KARL STORZ® bronchoscopy
accessories.

Material: Surgical Stainless Steel

Reprocessable: Yes

REF CTNS-6B5-ESL



Bridge for Jet Bronchoscope Type XS series
To avoid that rigid Optics pokes out at tip of Bronchoscope.
For Adult Jet-Bronchoscopes with 42cm length (XS-Series)

Material: Surgical Stainless Steel

Reprocessable: Yes

Length: 104 mm

Bridge compatible
with KARL STORZ®
rigid Optics:

REF CTNS-6B5-ESD

Bridge compatible
with RICHARD WOLF®
rigid Optics:

REF CTNS-6B5-EWD



Support Arm Accessories

**Adapter for Jet Laryngoscopes to Universal Support Arm**

Material: Surgical Stainless Steel

Reprocessable: Yes

Length: 66.7 mm

REF CTNS-860-050

**Adapter for Jet- /p-BLV™ -Converter and Jet Bronchoscopes to Universal Support Arm**

Material: Surgical Stainless Steel

Reprocessable: Yes

Length: 94.7 mm

REF CTNS-860-051

**Adapter for fixation of Jet Bronchoscopes on Support Arm Adapter**

Material: Surgical Stainless Steel

Reprocessable: Yes

Length: 27 mm

REF CTNS-861-005

**Adapter for Jet- /p-BLV™ -Converter and Jet Bronchoscopes to Universal Support Arm**

Material: Surgical Stainless Steel

Reprocessable: Yes

Length: 95.5 mm

REF CTNS-710-112

**Adapter for fixation from EasyConnect™ Adapter for 2-4 lumen Jet Catheters on Support Arm Adapter**

Material: Surgical Stainless Steel

Reprocessable: Yes

Length: 25 mm

REF CTNI-610-410

Cleaning Adapters



Adapter for machine cleaning and disinfection of working channel for Jet Bronchoscopes

REF CTNS-812-BGW
for MIG use



Adapter for machine cleaning and disinfection of Jet Lines from Jet Endoscopes

REF CTFI-811-006
Jet EasyConnect™ Male to LuerLock Connector Female

REF CTFI-811-M06
Jet EasyConnect™ Male to LuerLock Connector Male



Adapter for machine cleaning and disinfection of Monitoring Lines from Jet Endoscopes

REF CTFI-811-007
Consisting of Jet Easy Connect Male with Tube and LL Connector Female

REF CTFI-811-M07
Consisting of Jet Easy Connect Male with Tube and LL Connector Male



Adapter for machine cleaning and disinfection of Jet Tubing Set

REF CTFS-810-002
Jet EasyConnect™ Female to LuerLock Connector Female

REF CTFS-810-M02
Jet EasyConnect™ Female to LuerLock Connector Male



Adapter for machine cleaning and disinfection of Monitoring Tubing Set

REF CTFS-810-003
Monitoring EasyConnect™ Female to LuerLock Connector Female

REF CTFS-810-M03
Monitoring EasyConnect™ Female to LuerLock Connector Male



Adapter (LF) for machine cleaning and disinfection of prism channel for Jet Bronchoscopes

REF CTNS-812-00S
Cleaning Nozzle to LuerLock Connector Female

REF CTNS-812-M0S
Cleaning Nozzle to LuerLock Connector Male

General Information:

Tubing:	Silicone
Free of:	Latex, Phtalate, PVC
Connectors:	Surgical Stainless Steel
O-Rings:	EPDM 70, medical grade
Reprocessable:	Yes
Length:	25 cm
Dimension:	3 × 7 mm

Heating and Humidification Accessories



Heating Connector for Jet Laryngoscopes with integrated inlet
For Original Carl Reiner® Jet Laryngoscopes
For the application of heated and humidified Biasflow

REF CTNI-800-003



Heating Connector for Jet Laryngoscopes with Mounting Points
For the application of heated and humidified Biasflow

REF CTNS-800-001



Universal Heating Connector for converted Jet Laryngoscopes
For the application of heated and humidified Biasflow

REF CTNS-800-002

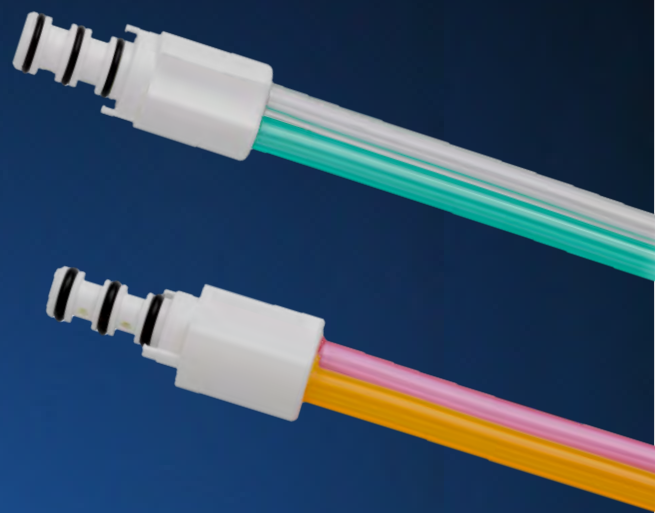


General Information:

Diameter: 10 mm

Material: Surgical Stainless Steel

Reprocessable: Yes



Third Party Products



Infraglottic Jet Catheters

Not Laser Resistant



Jet Catheters, 1 Lumen, not Laser Resistant

- For use with TwinStream™
- Pause Pressure Measurement
- Free of: Latex
- Free of: Phthalate
- Free of: PVC
- Color Coded Connector, green
- Imprinted Centimeter Scale
- Indicator for Vocal Cord Level

PEDIATRIC

1 Lumen	REF CTFS-513-000
Patient Gas Analysis	no
Diameter	2.7 mm (8CH)
Length	35 cm
Package contains	100 pieces

ADULT

1 Lumen	REF CTFS-514-000
Patient Gas Analysis	no
Diameter	4 mm (12CH)
Length	45 cm
Package contains	100 pieces

1 Lumen	REF CTFS-517-000
Patient Gas Analysis	no
Diameter	4 mm (12CH)
Length	70 cm
Package contains	100 pieces



ACCESSORIES

REF CTFS-500-400
Easy Connect Adapter
for 1-Lumen Jet Catheter and
Ravussin Technique, Fig. ①

REF CTNI-610-400
Easy Connect Adapter
for 2- to 4-Lumen Jet Catheters, Fig. ②



Jet Catheters, 3-4 Lumen, not Laser Resistant

- For use with TwinStream™
- With Airway Pressure Measurement
- Free of: Latex
- Free of: Phthalate
- Free of: PVC
- Imprinted Centimeter Scale

ADULT

3 Lumen	REF CTFS-534-000
Patient Gas Analysis	no
Diameter	5.8 mm
Length	45 cm
Package contains	5 pieces

4 Lumen	REF CTFS-544-010
Patient Gas Analysis	yes
Diameter	6.6 mm
Length	45 cm
Package contains	5 pieces

4 Lumen	REF CTFS-546-010
Patient Gas Analysis	yes
Diameter	6.6 mm
Length	65 cm
Package contains	5 pieces

*not available in all countries

Infraglottic Jet Catheters

Laser Resistant



**Jet Catheters,
1 Lumen, Laser Resistant**

- For use with TwinStream™
- With Pause Pressure Measurement
- Free of: Latex
- Free of: Phthalate
- Free of: PVC

ADULT

1 Lumen	REF CTFS-514-001
Patient Gas Analysis	no
Diameter	3.8 mm
Length	45 cm
Package contains	5 pieces

1 Lumen	REF CTFS-516-001
Patient Gas Analysis	no
Diameter	3.8 mm
Length	65 cm
Package contains	5 pieces



ACCESSORIES

REF CTFS-500-400
Easy Connect Adapter
for 1-Lumen Jet Catheter and
Ravussin Technique, *Fig. 1*

REF CTNI-610-400
Easy Connect Adapter
for 2- to 4-Lumen Jet Catheters, *Fig. 2*



**Jet Catheters,
2 Lumen, Laser Resistant**

- For use with TwinStream™
- With Pause Pressure Measurement
- Free of: Latex
- Free of: Phthalate
- Free of: PVC

ADULT

2 Lumen	REF CTFS-524-011
Patient Gas Analysis	yes
Diameter	3.8 mm
Length	40 cm
Package contains	5 pieces

2 Lumen	REF CTFS-526-011
Patient Gas Analysis	yes
Diameter	3.8 mm
Length	65 cm
Package contains	5 pieces

*not available in all countries

Transtacheal Jet Catheters

Jet Catheters according to RAVUSSIN, 1 Lumen, not Laser Resistant

- For use with TwinStream™
- With Pause Pressure Measurement
- Free of: Latex
- Free of: Phthalate
- Free of: PVC
- Not Laser-Resistant

ADULT

1 Lumen, 13G REF CTFS-511-000
Diameter 2.3 mm
Length 10 cm
Package contains 5 pieces

PEDIATRIC

1 Lumen, 14G REF CTFS-511-014
Diameter 2 mm
Length 10 cm
Package contains 5 pieces

NEONATE

1 Lumen, 16G REF CTFS-511-016
Diameter 1.7 mm
Length 10 cm
Package contains 5 pieces



ACCESSORIES

REF CTFS-500-400
Easy Connect Adapter
for 1-Lumen Jet Catheter and
Ravussin Technique, Fig. 3

*not available in all countries

Infraglottic Jet Catheters

NOT LASER RESISTANT

Lumen	Size	Outer Diameter	Length	Patient Gas Analysis	Pressure Measurement	Package Contains	REF	Adapter REF
1 Lumen	Pediatric	2.7 mm	35 cm	no	PP	10 pieces	CTFS-513-000	CTFS-500-400
1 Lumen	Adult	4 mm	45 cm	no	PP	10 pieces	CTFS-514-000	CTFS-500-400
1 Lumen	Pediatric	2.7 mm	45 cm	no	PP	10 pieces	CTFS-515-000	CTFS-500-400
1 Lumen	Adult	4 mm	70 cm	no	PP	10 pieces	CTFS-517-000	CTFS-500-400
3 Lumen	Adult	5.8 mm	45 cm	no	Paw	5 pieces	CTFS-534-000	CTNI-610-400
4 Lumen	Adult	6.6 mm	45 cm	yes	Paw	5 pieces	CTFS-544-010	CTNI-610-400
4 Lumen	Adult	6.6 mm	65 cm	yes	Paw	5 pieces	CTFS-546-010	CTNI-610-400

LASER RESISTANT

Lumen	Size	Outer Diameter	Length	Patient Gas Analysis	Pressure Measurement	Package Contains	REF	Adapter REF
1 Lumen	Adult	3.8 mm	45 cm	no	PP	5 pieces	CTFS-514-001	CTFS-500-400
1 Lumen	Adult	3.8 mm	65 cm	no	PP	5 pieces	CTFS-516-001	CTFS-500-400
2 Lumen	Adult	3.8 mm	40 cm	yes	PP	5 pieces	CTFS-524-011	CTNI-610-400
2 Lumen	Adult	3.8 mm	65 cm	yes	PP	5 pieces	CTFS-526-011	CTNI-610-400

ACCESSORIES



Easy Connect Adapter
for 1-Lumen Jet Catheter
and Ravussin Technique
REF CTFS-500-400



Easy Connect Adapter for
2- to 4-Lumen Jet Catheters
REF CTFS-610-400

Single Use Tubings

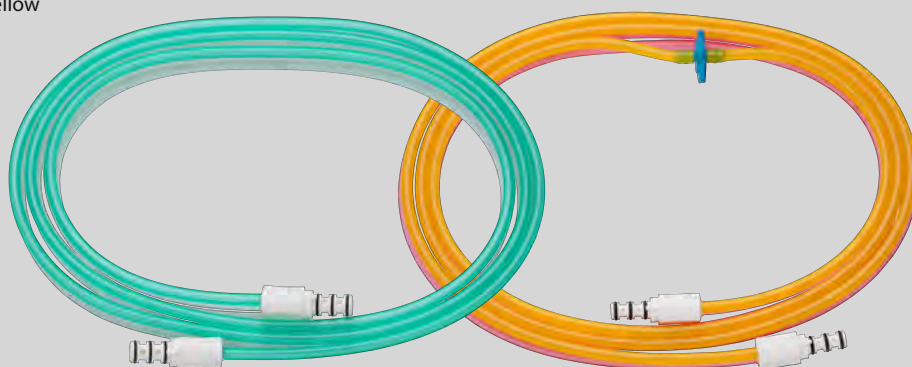
Single Use Easyconnect™ Tubing Set for Jet Endoscopes and Jet Converter

For use with the TwinStream™ Ventilator and EasyConnect™ system

- Disposable Jet-Tubing, green + transparent
- Disposable Monitoring Tubing, red + yellow
- incl. disposable bacteria filter
- Sterile
- Free of latex, phthalates
- Length: 200cm

Box contains 50 Sets

REF CTFS-220-SU1



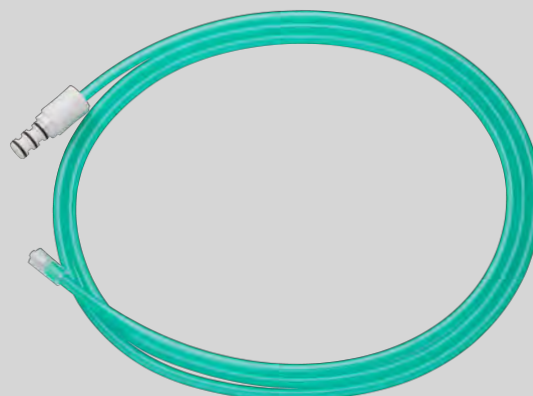
Single Use Tubing for 1 LUM Mode with Easyconnect™ System

For use with the TwinStream™ Ventilator and 1 Lumen Jet-Catheter

- Disposable Jet-Tubing, green
- With Easyconnect™- and Luer Lock Connector
- Disposable product
- Sterile
- Free of latex, phthalates
- Length: 200cm

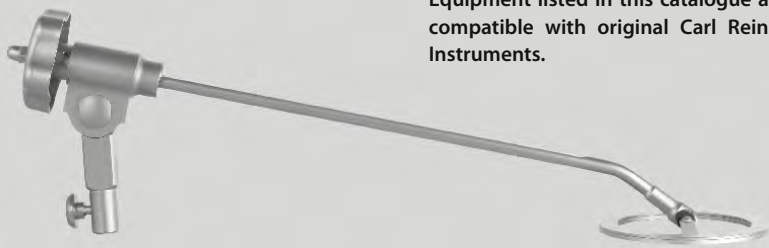
Box contains 20 pcs.

REF CTFS-220-1U1



*not available in all countries

Karl Storz® Accessories compatible with Carl Reiner® Products



**KARL STORZ® Chest Support System
for Laryngoscopes**
REF ST 8575 K

All KARL STORZ® GmbH & Co. KG, Germany
Equipment listed in this catalogue are fully
compatible with original Carl Reiner® Jet
Instruments.



**Adapter for KARL STORZ® Light
Cable**

For Carl Reiner® Fiber Optic
Light Carriers REF CTFS-4B0-0LS
and CTFS-4B0-GLS
REF CTFI-4B0-0L5



KARL STORZ® Prismatic Light Deflector
for rigid Bronchoscopes
REF ST 10101 FA



KARL STORZ® Cap with Rubber Sealing
for rigid Bronchoscopes
For XS, X7 and TBS Series
Adapter CTNS-6B5-ESL is required
REF ST 10315 N



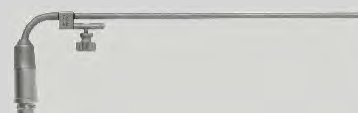
Cap with Window
for rigid Bronchoscopes
For XS, X7 and TBS Series
Adapter CTNS-6B5-ESL is required
REF ST 10315 M



KARL STORZ® Fluvog Cap
for rigid Bronchoscopes
direct fit for Carl Reiner®
Jet Bronchoscopes SS, ES and D0 Series
See ▶ **Pages 32-35** for details
in combination with adapter
REF CTNS-6B5-ESL
for XS, X7 and TBS Series
See ▶ **Pages 24-29** for details
REF ST 10315 P



**KARL STORZ® Light Clip
acc. to BENJAMIN HAVAS**
Fits all Carl Reiner® Jet Laryngoscopes
and Carl Reiner® Jet Tracheoscopes
See ▶ **Pages 6-11** for details.
REF ST 497 AC



KARL STORZ® Fiber Optic Light Carrier
Fits all Carl Reiner® Jet Laryngoscopes
and Carl Reiner® Jet Tracheoscopes
See ▶ **Pages 6-11** for details.
REF ST 8590 GF (Adult)
REF ST 8590 HF (Pediatric)

ACCESSORIES

KARL STORZ® 3 Lumen Laser Shaft
REF ST 10317 EL

KARL STORZ® Suction Tubes
REF ST 8590 M (Adult)
REF ST 8590 N (Pediatric)

Patient Gas Conditioning Module for Heating and Humidification



Heating- and Humidification System

AIRCon Gen2
REF WI 101200

Only available in combination with Humidification Accessories for long term Ventilation or Humidification Accessories for Operation Room.



T-Piece Adapter

Dimension:
M 22 mm × F 22 mm × F 22 mm
Material: Medical Grade Plastic
Box contains: 20pcs.

REF B 1983



Overpressure Valve 120 mBar for Bias-Flow Outlet

Dimension: AD: 22 mm, M
Material: Aluminum, eloxed

REF CTNS-100-005

Optional Accessories:

Water Bottle Holder for TwinStream™ Trolley
See ► **page 71** for details
REF CTNS-710-006

Supporting arm for breathing circuit
See ► **page 72** for details
REF CTFI-710-012

*not available in all countries

Humidification Accessories

Accessories for AIRcon® Humidifier for (ICU) long term Ventilation:



**Y-Adapter Cable for AIRcon
for Patient Tubing Set CTFI-800-650**
Color coded: Yellow - White/Green
REF CTFI-800-929



**Temperatur Sensor Cable
for AIRcon, 150 cm
for Patient Tubing Set CTFI-800-650**
Color code: Blue
REF CTFI-800-910



**Patient Y-hoses dual, heated,
with chamber, single use**
Set includes:
• Chamber
• Patient Hose
• Connecting Hose
• Y-Piece and L-Piece
REF CTFI-800-650
Box contains: 10 Sets

Accessories for AIRcon® Humidifier for Operation Room:



**Adapter Cable for AIRCon
for Patient Tubing Set CTFI-800-651**
Color coded: Yellow - Green
REF CTFI-800-942



**Temperatur Sensor Cable
for AIRcon, 180 cm
for Patient Tubing Set CTFI-800-651**
Color code: Blue
REF CTFI-800-909



**Patient OP-hoses, heated,
with chamber, single use**
Set includes:
• Chamber
• Patient Hose
• Connecting Hose
REF CTFI-800-651
Box contains: 10 Sets

*not available in all countries

TwinStream™ Trolley Type SMART

TwinStream™ Trolley Type SMART in grey color

- incl. 3 drawers and storage platform
- Coated in grey color
- Prepared to mount TwinStream on top platform
- Wide handle
- Deep gravity center for excellent stability
- Extra large, antistatic wheels
- Tiltable up to 10°
- Dimensions:
 - Height: 105 cm
 - Width: 58 cm
 - Depth: 70cm (incl. drawers & basket)
- Weight: 34 kg
- Loading capacity: up to 35 kg

REF CTFS-710-GBD



*not available in all countries

TwinStream™ Trolley Type SMART

TwinStream™ Trolley Type SMART in white color

- incl. 3 drawers and storage platform
- Coated in white color
- Prepared to mount TwinStream on top platform
- Wide handle
- Deep gravity center for excellent stability
- Extra large, antistatic wheels
- Tiltable up to 10°
- Dimensions:
 - Height: 105 cm
 - Width: 58 cm
 - Depth: 70cm (incl. drawers & basket)
- Weight: 34 kg
- Loading capacity: up to 35 kg

REF CTFS-710-WBD



*not available in all countries

Filter & Maintenance parts



**O-Ring Applicator GREEN,
for Jet Easy Connector Male**

REF CTFI-220-106



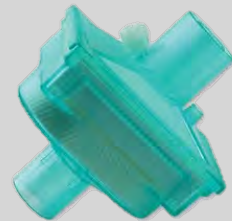
**O-Ring Applicator SILVER,
for Monitoring Easy Connector Male**

REF CTFI-220-206



Multitester for TwinStream™
Helps to perform annual
TwinStream™ Maintenance

REF CTNI-834-000



Bacterial filter for TwinStream ICU
Packaging Each piece sterile packed
Dimensions 22M/15F to 22F/15M

REF B J892001
Package contains 25 pcs



**O-Rings
for Monitoring Easy Connector Male**

Dimensions ID 0,233 × 0,067 mm
Material Neopren
medical grade

REF CTFI-220-204
Package contains 10 pcs



**O-Rings
for Jet Easy Connector Male**

Dimensions ID 0,313 × 0,051 mm
Material Neopren
medical grade

REF CTFI-220-104
Package contains 10 pcs



Bacterial Filter for Monitoring Tubing

Packaging Each piece sterile packed
Material Versapor® Acrylic Copolymer

REF CTFI-220-210
Package contains 100 pcs



UFO-Sensor for Patient Gas Analysis
(Ultra Fast Oxygen - Sensor)

REF CTFP-155-200
Package contains 1 pc
Disposal of used sensors:
In recycling-battery Box



O₂ - Sensor for TwinStream™
REF P IT M-12

Package contains 1 pc
Disposal of used sensors:
In recycling-battery Box



Original TwinStream™ Silicone Oil
Oxygen compatible up to 7 bar
For maintenance and care of
TwinStream™ O-rings on reprocessable hoses
REF CTNI-820-001

*not available in all countries

Hooks and Spare Parts



Strain Relief

For TwinStream™ Jet Respirator
Power Line version 2013 and newer

Included in all TwinStream™
new Configurations since 2013

REF CTNI-100-021



Strain Relief

For TwinStream™ Jet Respirator
Power Lines before 2012

Included in all TwinStream™
Configurations until 2012

REF CTNI-100-020



Elbow Adapter 90° O2 Nist
REF CTFI-210-N12



Microfilter with Moisture Separator for Inlet O₂

O ₂ DISS	REF CTFI-210-010
O ₂ NIST	REF CTFI-210-N10



Microfilter with Moisture Separator for Compressed Air Inlet

AIR DISS	REF CTFI-210-011
AIR NIST	REF CTFI-210-N11



Elbow Adapter 90° AIR Nist
REF CTFI-210-N13



Water Bottle Holder

For all TwinStream™ Trolleys

REF CTNS-710-006



Catheter basket, small for ISO-Bracket

For Depositing Power
Supplies, Glove Boxes, etc.

REF CTFI-710-007

*not available in all countries

Accessories for product presentation



**Universal Support Arm for Jet Endoscopes
or Jet Converter**
REF GE CA305-07-01



**Plastinated Piglung
Inflatable, healthy**

- Plastination through vacuum-impregnated silicone
- Durable & flexible

Including Windpipe
Connector (screwable)

REF NA LS03764



Acrylic Box for Demonstration of Piglungs

- Acrylic Box for optimal Live-Demonstration of an inflated Piglung
- Easy accessible via a Slider-Door on the Backside
- Easy hooking of pig lungs through the hole in the lid

Dimensions H x B x T : 465 x 410 x 255 mm
Wall: 6 mm thickness

REF CTFI-871-000



**Support arm, Type 'Easy' with 3 hinges &
flexible part for breathing circuits**
REF CTFI-710-012



**TwinStream Aluminum
Suitcase for Jet Instruments**

Aluminum suitcase with pre-molded
foam for transporting and presentation
of Original Carl Reiner® Jet instruments

Dimensions: 80 x 46 x 20 cm

REF CTFI-720-003



IMT® Smart Testlungs™

- Version: Adult
- 600ml Volumina
- with adjustable Compliance

REF B 300.162.00

*not available in all countries

CGS Tubing Sets

CGS Tubing Set with CGS Coupling System



REF CTNS-210-000

- System: DIN to DISS for TwinStream
- Color: All black
- Length: 5,5m
- Without backlash/check valve

REF CTNS-210-001

- System: DIN to DISS for TwinStream
- Color: ISO 32
- Length: 1,5m
- Without backlash/check valve

REF CTNS-210-002

- System: 1/8 thread to DISS for TwinStream
- Color: ISO 32
- Length: 5,5m
- Without backlash/check valve
- Fit most 1/8 probes

REF CTNS-210-003

- System: DIN to DISS for TwinStream
- Color: ISO 32
- Length: 5,5m
- Without backlash/check valve

REF CTNS-210-004

- System: DIN to DISS for TwinStream
- Color: ISO 32
- Length: 3,0m
- Without backlash/check valve

REF CTNS-210-005

- System: DIN to DISS for TwinStream
- Color: All black
- Length: 3,0m
- Without backlash/check valve

REF CTNS-210-006

- System: DIN to DISS for TwinStream
- Color: All black
- Length: 1,5m
- Without backlash/check valve

REF CTNS-210-010

- System: 1/8 thread to DISS for TwinStream
- Color: All black
- Length: 5,5m
- Without backlash/check valve
- Fit most 1/8 probes

REF CTNS-211-000

- System: AFNOR to DISS for TwinStream
- Color: ISO 32
- Length: 5,5m
- Without backlash/check valve

REF CTNS-211-001

- System: AFNOR to DISS for TwinStream
- Color: ISO 32
- Length: 1,5m
- Without backlash/check valve

REF CTNS-211-002

- System: AFNOR to DISS for TwinStream
- Color: All black
- Length: 1,5m
- Without backlash/check valve

REF CTNS-211-013

- System: AGA (small) to DISS for TwinStream
- Color: ISO 32
- Length: 5,5m
- Without backlash/check valve

REF CTNS-211-F00

- System: AFNOR to AFNOR
- Color: ISO 32
- Length: 5,5m
- Without backlash/check valve
- Requires Adapter DISS-AFNOR

REF CTNS-212-000

- System: KERN to DISS for TwinStream
- Color: All black
- Length: 5,5m
- Without backlash/check valve

REF CTNS-213-000

- System: British Standard to DISS for TwinStream
- Color: ISO 32
- Length: 5,5m
- Without backlash/check valve

REF CTNS-215-I00

- System: UNIFOR to DISS for TwinStream
- Color: ISO 32
- Length: 5,5m
- Without backlash/check valve

REF CTNS-216-CH0

- System: CARBAMED to DISS for TwinStream
- Color: ISO 32
- Length: 5,5m
- Without backlash/check valve

REF CTNS-217-N00

- System: MEDEC to DISS for TwinStream
- Color: ISO 32
- Length: 5,5m
- Without backlash/check valve

REF CTNS-217-N01

- System: PARKODEX to DISS for TwinStream
- Color: ISO 32
- Length: 5,5m
- Without backlash/check valve

*not available in all countries

Quality - Reliability - Continuity

Carl Reiner® Customer Care and Service Department fulfill highest standards

All devices and Instruments delivered by Carl Reiner® GmbH are manufactured with great care, profound knowledge and utmost quality consciousness in mind.

Our foremost goal is to offer absolute reliability and complete patient safety during the entire life-cycle of our products.

The reliability of our products is continuously supervised by our Quality Department and each shipped Device and Instrument is additionally approved by Carl Reiner's® Customer Care Service.

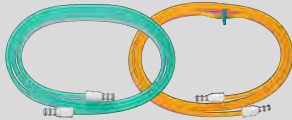
Our global network of dealers ensures that qualified help is always available in the immediate vicinity of our customers.

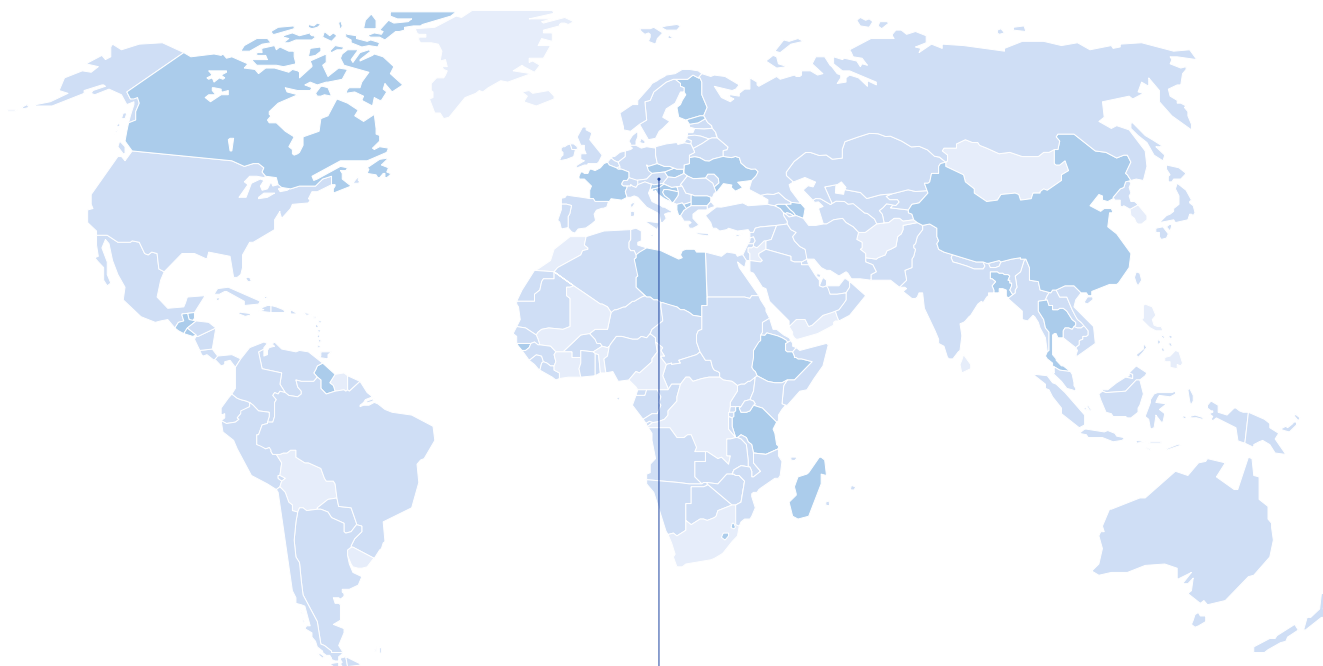
Carl Reiner® Customer Care offers the following services:

- Installation
- Application training
- Service training
- Maintenance
- Repair
- Hotline

Order Information

Overview of all Single Use Products and their packaging units

Item	Carl Reiner Ref. No.	Description	Minimum Order Quantity - 1 Box Pieces per Box
Single Use Tubings			
	CTFS-220-SU1	Single Use Easyconnect™ Tubing Set for Jet Endoscopes and Jet Converter, length 200cm	5 pcs.
	CTFS-220-1U1	Single Use Jet Tubing Set for 1 LUM Mode with EasyConnect™ System, length 200cm	5 pcs.
Jet Catheter			
	CTFS-511-000	Jet Catheter "Ravussin" 1 Lumen, 13G, for adult	5 pcs.
	CTFS-511-014	Jet Catheter "Ravussin" 1 Lumen, 14G, for pediatric	5 pcs.
	CTFS-511-016	Jet Catheter "Ravussin" 1 Lumen, 16G, for neonates	5 pcs.
	CTFS-513-000	Jet Catheter, 1 Lumen, length 35cm, not laser resistant, Ø outer: 2.7 mm	10 pcs.
	CTFS-514-000	Jet Catheter, 1 Lumen, length 45cm, not laser resistant, Ø outer: 4.0 mm	10 pcs.
	CTFS-514-001	Jet Catheter, 1 Lumen, length 45cm, laser resistant, Ø outer: 3.8 mm	5 pcs.
	CTFS-515-000	Jet Catheter, 1 Lumen, length 45cm, not laser resistant, Ø outer: 2.7 mm	10 pcs.
	CTFS-516-001	Jet Catheter, 1 Lumen, length 65cm, laser resistant, Ø outer: 3.8 mm	5 pcs.
	CTFS-517-000	Jet Catheter, 1 Lumen, length 70cm, not laser resistant, Ø outer: 4.0 mm	10 pcs.
	CTFS-524-011	Jet Catheter, 2 Lumen, length 40cm, laser resistant, Ø outer: 3.8 mm	5 pcs.
	CTFS-526-011	Jet Catheter, 2 Lumen, length 65cm, laser resistant, Ø outer: 3.8 mm	5 pcs.
	CTFS-534-000	Jet Catheter, 3 Lumen, length 45cm, not laser resistant, Ø outer: 5.8 mm	5 pcs.
	CTFS-544-010	Jet Catheter, 4 Lumen, length 45cm, not laser resistant, Ø outer: 6.6 mm	5 pcs.
	CTFS-546-010	Jet Catheter, 4 Lumen, length 65cm, not laser resistant, Ø outer: 6.6 mm	5 pcs.
Filter			
	CTFI-220-210	Bacterial Filter for TwinStream™ for Monitoring Tubing, sterile	100 pcs.
	B J892001	Bacterial filter for TwinStream™ ICU	25 pcs.
Humidification Accessories			
	CTFI-800-650	AIRcon Double limb system for TwinStream™ ICU, heated (i+e)	10 pcs.
	CTFI-800-651	AIRcon Single limb system for TwinStream™ , heated (i)	10 pcs.
	B 1983	T-Piece Adapter for overpressure valve for TwinStream™	20 pcs.



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Manufacture of Surgical Instruments

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