

# CREATE A NEW WORLD IN NEUROSURGERY WITH US!

Each neurosurgical intervention means a new challenge. Every minute counts. Every step needs to fit. A smooth workflow is essential.

The Black Forest Medical Group is proud to **support you and your team** with innovative solutions that make neurosurgical interventions safer and more efficient.

From our history to the present and turning into the future, we were and always will be driven by the desire to satisfy your needs. Together, we are able to multiply our strengths, making a lasting difference for the health of people worldwide.

Matthias Schüle
Owner & Managing Director



Take a peek on our work and visit us on social media!



# **CONTENTS**

# RIGID & NON-INVASIVE HEADREST SYSTEMS

| DORO® QR3 Headrest System                 | 6  |
|---|----|
| DORO® QR3 Skull Clamp                     | 7  |
| DORO® Base Units                          | 8  |
| DORO° Swivel Adaptors & OR Table Adaptors | 9  |
| DORO® Base Unit Parkbench                 | 10 |
| DORO® Crossbar Adaptor                    | 11 |
| DORO® Navigation Adaptors                 | 12 |
| DORO® Skull Pins <b>NEW</b>               | 13 |
| DORO® Accessories                         | 15 |
| DORO® QR3 Headrest System Teflon®         | 16 |
| DORO® Horseshoe Headrests Aluminum        | 17 |
| DORO® Multi-Purpose Skull Clamp           | 18 |

# **IMAGING SOLUTIONS**

| DORO LUCENT Headrest System PRO NEW   |    |
|---------------------------------------|----|
| DORO LUCENT® Skull Clamp <b>NEW</b>   | 2  |
| DORO LUCENT® Headrest System          | 2  |
| DORO® Mix & Match                     | 2  |
| DORO LUCENT® Navigation Adaptors      | 2  |
| DORO® Quick-Clamp Radiolucent         | 2  |
| DORO LUCENT® Headrest Accessories     | 3  |
| DORO® Horseshoe Headrests Radiolucent | 3  |
| DORO® QR3 XTom Headrest System        | 3  |
| DORO LUCENT® iXI Headrest System      | 3  |
| DORO LUCENT® iMRI Headrest Systems    | 3  |
| DORO LUCENT® Product Trainings        | 4  |
| DORO LUCENT® iMRI & iXI Accessories   | 4  |
| DORO® Skull Clamp for Spinal Frames   | 4  |
| DODO® OD Table Adapters Padialysent   | /. |

# **RETRACTOR SYSTEMS**

| OORO LUNA® Retractor System  | 48 |
|------------------------------|----|
| OORO COBRA® Retractor System | 50 |
| OORO® Flexible Rotary Arms   | 5  |
| DORO° Halo Retractor System  | 52 |
| OORO® Retractor Accessories  | 54 |
| OORO° Sterilization Trays    | 55 |
| DORO° Micro Blades           | 55 |
| OORO° Blades                 | 50 |



# **DORO® QR3 HEADREST SYSTEM**

The DORO® QR3 Headrest System is developed for daily use in non-imaging neurosurgical applications. Features like built-in navigation adaptor interfaces and Mix & Match compatibility with DORO® Radiolucent products make it a time-saving and versatile device.





DORO® Storage Case Headrest System Item no. 1001.030 optionally available)

#### **VERSATILE**

With the DORO® QR3 Skull Clamp as a basis, you are free to enhance the set-up to what suits you best. Retractor arms, entire retractor systems or navigation adaptors can easily be attached.

#### INTUITIVE

Fast and easy mounting frees up resources for the rest of your surgery preparations.

#### **COMPATIBLE**

Can directly be attached to an OR table via the neuro interface or mounted to its side-rails utilizing DORO® Side Rail Adaptors (page 9). You can also Mix & Match it with radiolucent DORO® products (page 27).

# **DORO® QR3 SKULL CLAMP**

**EASY TO READ** 

Metric and

**PRECISE** 

**NAVIGATION** 

device adaptors

proximity to the

surgical field.

**DORO**®

**QR3 Headrest System** 

Item no. 1001.100

Navigation tracking

(page 12) can easily

be attached in close

imperial units.

**PRESSURE SCALE** 

#### **SPACIOUS**

Due to its unique shape there is always free space to place the intubation tube, even in prone position.

#### **REDUCED RISK OF LACERATIONS**

No play between archholder and skull clamp base when locked.

#### **DORO**® **QR3 Skull Clamp** Item no. 1001.001

(shown with DORO® Disposable Skull Pins)

#### **EASY, SAFE AND** STABLE INTERFACE

Attach DORO® **Retractor Systems** and other accessories to the form-fitting Quick-Rail® interface (infobox below)

#### **STABLE**

Minimum play between the skull clamp base and the extension arm ensures high stability and a reduced risk to lose navigation.

**QUICK-RAIL®** AN INNOVATIVE INTERFACE

The term QR3 refers to the 3rd generation of our innovative Quick-Rail® technology which is directly implemented in both extension arm and fixed arm of our aluminum skull clamps. Due to its unique shape it can easily be located, even when covered by multiple layers of sterile drape. The Quick-Rail® enables reliable attachment of accessories, such as the DORO LUNA® or DORO COBRA® Retractor Systems.



# **DORO® ALUMINUM BASE UNITS**

DORO® Base Units are individually designed for specific OR tables. Additionally, you can attach DORO® Base Units to nearly any common OR table with DORO® Side Rail OR Table Adaptors (page 9).

### **REFINED APPEARANCE**



**DORO**® Adjustable Base Unit Takara Belmont Item no. 3001-001

**CLEANING** 

and drainage.

Dedicated drain holes

allow for better flushing





**EXCELLENT DURABILITY** 

to operational stress.

# **DORO® SWIVEL ADAPTORS**

DORO® Swivel Adaptors are the connecting elements between DORO® Skull Clamps and DORO® Base Units. Versions offering pivoting features and additional starbursts are available.

Provides 360° rotation for optimum flexibility in patient positioning.

Increase your options in mounting navigational or similar devices by adding two additional starbursts with our Swivel Adaptor Navigation.





# **DORO® ALUMINUM OR TABLE ADAPTORS**



Width-adjustable, universal neuro interface, fitting OR tables with bars up to 125 mm.

**DORO**® Side Rail OR Table Adaptor AMSCO® Item no. 3011-10



Side Rail OR Table Adaptor Item no. 3011-00

(Width-adjustable, fitting OR tables with bars up to 70 mm)



(mounted on square receptacle of OR table)

# **DORO® BASE UNIT PARKBENCH**

The DORO® Base Unit Parkbench is the perfect solution for lateral patient positioning. Its design allows a safe and comfortable positioning of the patient's arm, resulting in a reduced risk of hematomas. The Base Unit Parkbench is adjustable in width and attaches to almost all standard siderails.



# **DORO® CROSSBAR ADAPTOR**

The DORO® Crossbar Adaptor is the perfect solution for all approaches requiring the patient to be in sitting position. It can be mounted to the side-rails of nearly any standard OR tables and provides a stable interface for the DORO® QR3 Headrest System.



# **DORO® NAVIGATION ADAPTORS**

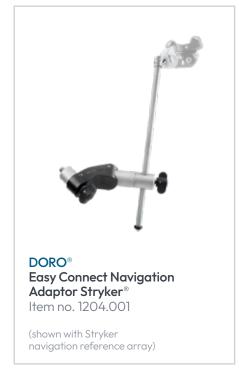
DORO® Easy Connect Navigation Adaptors connect directly to the integrated navigation starburst on the Quick-Rail® of DORO® Aluminum Skull Clamps. This provides a very stable and secure connection and allows positioning the navigation reference array close to the surgical target.



DORO® Easy Connect Navigation Adaptor Medtronic Item no. 1204.003

(shown with Medtronic navigation reference array)





# **DORO® DISPOSABLE SKULL PINS**





Item no. 3006-10

36 Pins



36 Pins



36 Pins



13 🔀

# A NEW ERA OF **IMAGING QUALITY**

Perfect balance of imaging quality and pin stability. The DORO LUCENT® Disposable Skull Pin is specifically designed for intra-operative imaging applications using CT, MRI, X-Ray and Fluoroscopy. Imaging artifacts are reduced to a minimum while the composition of a titanium tip and high-performance reinforced polymer ensures a precise, secure and rigid fixation of the patient's head.



**DORO LUCENT®** Sterile Disposable Skull Pins, Adult

Item no. 1106.003 (3 Pins)\* Item no. 1106.103 (9 Pins)

\*Not available in the USA & Canada

# **DORO® REUSABLE SKULL PINS**



# **DORO**®

Reusable Skull Pins Stainless Steel, Adult Item no. 3005-00

3 Pins



# DORO®

Reusable Skull Pins Stainless Steel, Pediatric Item no. 3004-00

3 Pins



#### **DORO**® Reusable Skull Pins

Titanium, Adult Item no. 3005-50

3 Pins



#### **DORO**®

Reusable Skull Pins Titanium, Pediatric Item no. 3004-50

3 Pins

# **DORO® ACCESSORIES**



# **DORO**®

**DORO**®

**Cervical Spine Support** Item no. 3012-00

Neck support for anterior spine surgery

Headrest Wall Storage Unit

Item no. 3013-00 81 cm x 94 cm | 32" w x 37" h



Lubricant HP 500 Item no. 1001.999

#### DORO®

DORO®

Lubricant HP 500 | 6-pack Item no. 1001.998



Autoclavable and precise in its application due to its needle-shaped tip.





# DORO® QR3 HEADREST SYSTEM TEFLON®

The DORO® QR3 Headrest System Teflon® is the sterilizable counterpart of our well-established DORO® Headrest System Aluminum. Its autoclavability is a major plus when you are treating highly infectious patients.

# DORO® QR3 Headrest System Teflon® Item no. 3003-100 (shown with DORO® Skull Pins) Included Items Item no. DORO® Skull Clamp Teflon® 3003-009 DORO® Swivel Adaptor Teflon® 3002-009 DORO® Adjustable Base Unit Teflon® 3001-009

#### **PRECISE NAVIGATION**

Navigation tracking device adaptors (page 12) can easily be attached closely to the surgical field.

#### **EASY, SAFE & STABLE CONNECTION**

Attach DORO LUNA®, DORO COBRA® or Quick-Clamp products to the form-fitting Quick-Rail® interface.

# AUTOCLAVABLE

The Teflon® coated surface of the DORO® QR3 Headrest System Teflon® makes it machine-washable and autoclavable. It conforms to World Health Organization (WHO) Infection Control Guidelines for cleaning and sterilization.



#### **DORO**®

Storage Case Headrest System

Item no. 1001.030

(Optionally available)

# DORO® HORSESHOE HEADREST ALUMINUM



# SKELETAL TRACTION OPTION

DORO® Horseshoe Headrests Aluminum are available with or without an Extension Bar.

# PROPER PATIENT POSITIONING

All DORO® Horseshoe Headrests are adjustable in width.

#### **ADULT VERSION**

| DORO® Swivel Horseshoe Headrest System, Adu<br>with Extension Bar<br>Item no. 3009-00 | lt       |
|---|----------|
| Included Items  | Item no. |
| DORO® Horseshoe Base  | 3009-01  |
| DORO® Horseshoe Pad, Adult, right   | 3009-10  |
| DORO® Horseshoe Pad, Adult, left  | 3009-11  |
| DORO® Extension Bar Horseshoe   | 3009-25  |

| DORO® Swivel Horseshoe Headrest System, Adult without Extension Bar Item no. 3009-02 |          |
|--|----------|
| Included Items   | Item no. |
| DORO® Horseshoe Base   | 3009-01  |
| DORO® Horseshoe Pad, Adult, right  | 3009-10  |
| DORO® Horseshoe Pad, Adult, left   | 3009-11  |

#### PEDIATRIC VERSION

| DORO® Swivel Horseshoe Headrest System, Pediatric with Extension Bar Item no. 3008-00 |          |
|---|----------|
| Included Items  | Item no. |
| DORO® Horseshoe Base  | 3009-01  |
| DORO® Horseshoe Pad, Pediatric, right   | 3008-10  |
| DORO® Horseshoe Pad, Pediatric, left  | 3008-11  |
| DORO® Extension Bar Horseshoe   | 3009-25  |

| DORO® Swivel Horseshoe Headrest System, Pedi<br>without Extension Bar<br>Item no. 3008-02 | atric    |
|---|----------|
| Included Items  | Item no. |
| DORO® Horseshoe Base  | 3009-01  |
| DORO® Horseshoe Pad, Pediatric, right   | 3008-10  |
| DORO® Horseshoe Pad, Pediatric, left  | 3008-11  |

16

DORO® QR3 Headrest

System Teflon®

Item no. 3003-100

# **DORO® MULTI-PURPOSE SKULL CLAMP**

The DORO® Multi-Purpose Skull Clamp is our most versatile head positioning device. It offers all the beneficial features of the DORO® QR3 Skull Clamp and can be set-up for invasive or non-invasive procedures in adult as well as in pediatric cases. Since a children's skull is still growing and therefore very vulnerable, neurosurgical solutions are needed which fit their needs. The DORO® Multi-Purpose Skull Clamp provides different kinds of shapes and sizes of gel pads and pin holders. An extension bar with a force application specifically designed for pediatric cases ensures a safe immobilization of the child's head while providing additional control over the pinning force up to 90N.







### **FLEXIBLE**

A large variety of DORO® Gel Pads and Pin Holders is available to support optimal patient positioning (pages 20-21).

# PRECISE NAVIGATION

Navigation tracking device adaptors (page 12) can easily be attached in close proximity to the surgical field.

#### **EXTENDABLE**

The Quick-Rail® technology enables you to attach accessories and retractor systems such as the DORO Luna® Retractor System (page 48) easily, quickly, and securely to the skull clamp.

#### MIX & MATCH

Combine the DORO® Multi-Purpose Skull Clamp with a radiolucent base unit and swivel adaptor (page 27).

#### ADULT AND PEDIATRIC SOLUTION

#### DORO® Universal Multi-Purpose Skull Clamp System

Item no. 3022-00

| Included Items                                 | Item no. |
|--|----------|
| DORO® Disposable Skull Pins, Adult (36pcs)     | 3006-00  |
| DORO® Disposable Skull Pins, Pediatric (36pcs) | 3006-10  |
| DORO® Pin Holder Pediatric                     | 3020-01  |
| DORO® Gel Pad (2pcs)                           | 3020-02  |
| DORO® Head Support (w/o Gel Pads)              | 3020-03  |
| DORO® Multi-Purpose Skull Clamp                | 3020-50  |
| DORO® Extension Bar 90N/20lbs                  | 3020-52  |
| DORO® Single Pin Holder                        | 3020-55  |
| DORO® Pin Holder Adult                         | 3020-56  |
| DORO® Gel Head Ring w/ Base 90 mm (3pcs)       | 3020-61  |
| DORO® Pin Holder Adjustable, Pediatric         | 3020-62  |
| DORO® Gel Head Ring w/ Base 140 mm             | 3020-63  |
| DORO® Adjustment Key                           | 3020-65  |
| DORO® Gel Ear Ring w/ Base 90 mm (2pcs)        | 3020-68  |
| DORO® Trio Gel Pad (adjustable)                | 3020-71  |
| DORO® Storage Case MPSC System                 | 3020-001 |
|  |          |

# **SUPPORTS PEDIATRIC PROCEDURES**

The DORO® Multi-Purpose Skull Clamp features specifically designed components like the 90 N/20 lbs Extension Bar or the head support.



DORO®

Extension Bar 90 N/20 lbs

Item no. 3020-52

#### DORO® Storage Case MPSC System Item no. 3020-001

(shown with Multi-Purpose Skull Clamp and Accessories)

# DOR DOR DOR DOR DOR DOR DOR DOR DOR DOR

#### PEDIATRIC SOLUTION

#### DORO®

Abbott Multi-Purpose Skull Clamp System Pediatric

Item no. 3021-00

| Included Items                                 | Item no. |
|--|----------|
| DORO® Disposable Skull Pins, Pediatric (36pcs) | 3006-10  |
| DORO® Pin Holder Pediatric                     | 3020-01  |
| DORO® Head Support (w/o Gel Pads)              | 3020-03  |
| DORO® Multi-Purpose Skull Clamp                | 3020-50  |
| DORO® Extension Bar 90N/20lbs                  | 3020-52  |
| DORO® Single Pin Holder                        | 3020-55  |
| DORO® Gel Head Ring w/ Base 90 mm (3pcs)       | 3020-61  |
| DORO® Pin Holder Adjustable, Pediatric         | 3020-62  |
| DORO® Gel Head Ring w/ Base 140 mm             | 3020-63  |
| DORO® Adjustment Key                           | 3020-65  |
| DORO® Gel Ear Ring w/ Base 90 mm (2pcs)        | 3020-68  |
| DORO® Trio Gel Pad (adjustable)                | 3020-71  |
| DORO® Storage Case MPSC System                 | 3020-001 |
|  |          |

#### PEDIATRIC SOLUTION

# DORO®

urpose Skull Clamp System

| Multi-Purpose Skull Clamp System               |          |  |
|--|----------|--|
| Item no. 3020-00                               |          |  |
| Included Items                                 | Item no. |  |
| DORO® Disposable Skull Pins, Pediatric (36pcs) | 3006-10  |  |
| DORO® Pin Holder Pediatric                     | 3020-01  |  |
| DORO® Head Support (w/o Gel Pads)              | 3020-03  |  |
| DORO® Multi-Purpose Skull Clamp                | 3020-50  |  |
| DORO® Single Pin Holder                        | 3020-55  |  |
| DORO® Gel Head Ring w/ Base 90 mm (3pcs)       | 3020-61  |  |
| DORO® Pin Holder Adjustable, Pediatric         | 3020-62  |  |
| DORO® Gel Head Ring w/ Base 140 mm             | 3020-63  |  |
| DORO® Adjustment Key                           | 3020-65  |  |
| DORO® Gel Ear Ring w/ Base 90 mm (2pcs)        | 3020-68  |  |
| DORO® Trio Gel Pad (adjustable)                | 3020-71  |  |
| DORO® Storage Case MPSC System                 | 3020-001 |  |

# **STORE IT SAFELY**

All DORO® Multi-Purpose Skull Clamp systems are shipped in a protective storage case.

# **DORO® MULTI-PURPOSE**

# INVASIVE SETUP

Set-up the DORO® Multi-Purpose Skull Clamp as a classic 3-pin skull clamp for adult patients or apply the dedicated 90 N /20 lbs extension bar, head support and dual pin holders on both sides when treating pediatric patients.







# **DORO® MULTI-PURPOSE**

# NON-INVASIVE SETUP

Choose from a variety of different gel pad shapes and sizes for optimal patient stabilization for non-invasive positioning. All of the pads can either be mounted to the lateral receptacles at the skull clamp or to the head support for maximized flexibility in patient positioning.



20 21 🔀



# DORO LUCENT® HEADREST SYSTEM PRO

# CT / X-RAY BASED ANGIO

| DORO LUCENT® Headrest System Pro<br>Item no. 1101.100 |          |
|---|----------|
| Included Items  | Item no. |
| DORO LUCENT® Skull Clamp                              | 1101.001 |
| DORO LUCENT® Base Unit                                | 1101.021 |
| DORO LUCENT® Transitional Member                      | 1101.026 |
| DORO LUCENT® Locking Transitional Member              | 1101.031 |
| DORO LUCENT® Storage Case Headrest System             | 1101.030 |
| DORO LUCENT® Disposable Skull Pins, Adult (9 Pins)    | 1106.103 |
| DORO® Swivel Adaptor Radiolucent                      | 3033-00  |

The DORO LUCENT® Headrest System Pro is the ideal choice for all neurosurgical procedures involving intraoperative CT, X-ray based Angiography or X-ray imaging.

- ✓ Excellent imaging results
- ✓ Perfect handling and control
- ✓ 4-pin pediatric option available



# **COMPACT VERSION**

If you need to keep a low profile, the DORO LUCENT® Base Unit Compact offers shortened side parts, minimizing the space between base unit and OR table.

**DORO** LUCENT® **Base Unit Compact** Item no. 1101.022

**DORO** LUCENT® Side Part, short Item no. 1101.038

(2 short side parts are required)



# **DORO LUCENT® SKULL CLAMP**

# CT / X-RAY BASED ANGIO

The DORO LUCENT® Skull Clamp introduces a unique release mechanism, empowering surgeons to fully self-operate the clamp. Having access to all controls without changing the hand position ensures precise adjustments and an uninterrupted workflow. Interchangeable pin holders allow the right pin configuration for every patient and head size. Dedicated pediatric pin holders, which ensure a safe immobilization of children's heads, are available.

#### **INTERCHANGABLE PINHOLDERS**

#### **PLAY-FREE OPEN/LOCK**

Enhanced precision for neuronavigation.

**PATENTED** 

Access to all controls.

including the release

mechanism, while

Secure positioning of adult and pediatric patients for surgery.



#### SUPPORTIVE TORQUE SCREW

Force scale indication in N and lbs plus start marking to ensure sufficient travel for every pinning procedure.

> **DORO** LUCENT® Skull Clamp Item no. 1101.001

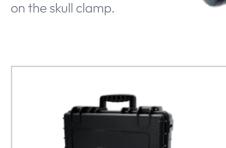
(shown with DORO LUCENT® Disposable Skull Pins)

#### **UNIQUE QUICK-RAIL®**

Intuitive mounting of retractor systems and other accessories.

#### **SMOOTH SLIDING MECHANISM**

Equal force distribution throughout the ratcheting process results in optimal precision and control.



**DORO** LUCENT® Skull Clamp Case Item no. 1101.900



# **PEDIATRIC SET**

A 4-pin holder set for head sizes down to 73 mm is additionally available.

**DORO LUCENT®** Skull Clamp Pediatric Set Item no. 1101.040

# **DORO LUCENT® HEADREST SYSTEM**

# CT / X-RAY BASED ANGIO

The DORO LUCENT® Headrest System is a cranial stabilization system for all procedures applying X-Ray & iCT Imaging. It features the completely metal free DORO® Skull Clamp Radiolucent with its beneficial Quick-Rail® interfaces for a quick and easy attachment of navigation tracking devices, retractor systems and other accessories.

| DORO LUCENT® Headrest System<br>Item no. 1101.020  |          |
|--|----------|
| Included Items                                     | Item no. |
| DORO LUCENT® Base Unit                             | 1101.021 |
| DORO LUCENT® Transitional Member                   | 1101.026 |
| DORO LUCENT® Locking Transitional Member           | 1101.031 |
| DORO LUCENT® Storage Case Headrest System          | 1101.030 |
| DORO LUCENT® Disposable Skull Pins, Adult (3 Pins) | 1106.003 |
| DORO® Swivel Adaptor Radiolucent                   | 3033-00  |
| DORO® Skull Clamp Radiolucent                      | 3034-00  |

#### **VERSATILE**

Quick-Rail® Technology enables you to attach accessories and retractor systems easily, quickly and securely to the skull clamp.

# **EASY TO READ** PRESSURE SCALE





**DORO** LUCENT® **Headrest System** Item no. 1101.020

# BXIM MATCH



#### FOR CRANIAL AND CERVICAL SPINE APPLICATIONS

Mix & Match DORO® Radiolucent Skull Clamps and Swivel Adaptors with DORO® Aluminum Base Units.



**DORO**® **Transitional Member Radiolucent** (to ALU Base Unit) Item no. 3032-00



# FOR CRANIAL APPLICATIONS

Mix & Match DORO® Radiolucent Skull Clamps with DORO® Aluminum Swivel Adaptors and Base Units.







#### FOR CERVICAL SPINE APPLICATIONS

Mix & Match DORO® Aluminum Skull Clamps with the DORO® Radiolucent Swivel Adaptor, Transitional Member and Base Unit.





# DORO LUCENT® NAVIGATION ADAPTORS

# MRI / CT / ANGIO

DORO® Navigation Adaptors Radiolucent offer a safe and stable interface for navigation reference arrays from Stryker®, Medtronic and Brainlab. They are directly mounted to the Quick-Rail® and allow a close positioning of the respective navigation reference array to the patients head while keeping the sterile field intact.





# **DORO® QUICK-CLAMP**

# FOR RADIOLUCENT QUICK RAIL

The DORO® Quick-Clamp with Starburst for Radiolucent Quick-Rail® serves as an intuitive interface\* for devices used for example in frameless stereotactic or endoscopic procedures.

Designed for use over the sterile barrier and form-fittingly connected to the proven



<sup>\*</sup>The interface is designed to bear a max. load of 16.8 Nm (which equals a weight of 3.4 kg attached to a horizontally mounted, 50 cm long arm). It is validated for use with the Brainlab VarioGuide™. It is the responsibility of the user to verify that third party devices can safely be secured to the DORO® Quick-Clamp with Starburst for Radiolucent Quick-Rail®. The product is shown mounted to a DORO® Skull Clamp Radiolucent.

28

# **DORO LUCENT® HEADREST ACCESSORIES**

CT / X-RAY BASED ANGIO



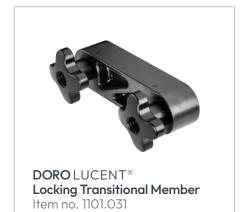




Item no. 3033-10









DORO LUCENT® Transitional Member Item no. 1101.026





# **DORO® HORSESHOE RADIOLUCENT**

# CT / X-RAY BASED ANGIO

#### **ADULT VERSION**

| DORO® Swivel Horseshoe Headrest Radiolucent<br>Adult, with Extension Bar<br>Item no. 3036-00 |          |
|--|----------|
| Included Items   | Item no. |
| DORO® Horseshoe Base Radiolucent with Extension Bar  | 3036-50  |
| DORO® Horseshoe Pad, Adult, right  | 3009-10  |
| DORO® Horseshoe Pad, Adult, left   | 3009-11  |

#### **PEDIATRIC VERSION**

| DORO® Swivel Horseshoe Headrest Radiolucent<br>Pediatric, with Extension Bar<br>Item no. 3035-00 |          |
|--|----------|
| Included Items   | Item no. |
| DORO® Horseshoe Base Radiolucent with Extension Bar  | 3036-50  |
| DORO® Horseshoe Pad, Pediatric, right  | 3008-10  |
| DORO® Horseshoe Pad, Pediatric, left   | 3008-11  |

DORO® Radiolucent Horseshoes are the best choice for procedures that do not require a rigid fixation. The products come with an extension bar for skeletal traction. The horseshoe features a Quick-Rail® interface for the quick connection of DORO COBRA® Retractor Arms.

**VERSATILE** 

Attach DORO COBRA® Retractor Arms utilizing the DORO COBRA® Quick-Clamp for Radiolucent Quick-Rail® (page 30).

# **DORO® HORSESHOE RS RADIOLUCENT**

#### CT / X-RAY BASED ANGIO

## **ADULT VERSION**

| DORO® Horseshoe RS Headrest Radiolucent,<br>Adult, with Extension Bar<br>Item no. 3036-70 |          |
|---|----------|
| Included Items  | Item no. |
| DORO® Horseshoe RS Base Radiolucent with Extension Bar                                    | 3036-71  |
| DORO® Horseshoe Pad, Adult, right   | 3009-10  |
| DORO® Horseshoe Pad, Adult, left  | 3009-11  |

# **PEDIATRIC VERSION**

| DORO® Horseshoe RS Headrest Radiolucent,<br>Pediatric, with Extension Bar<br>Item no. 3035-70 |          |
|---|----------|
| Included Items  | Item no. |
| DORO® Horseshoe RS Base Radiolucent with Extension Bar  | 3036-71  |
| DORO® Horseshoe Pad, Pediatric, right   | 3008-10  |
| DORO® Horseshoe Pad, Pediatric, left  | 3008-11  |



#### COMPACT

Connect the Horseshoe RS directly to the DORO LUCENT® Transitional Member and benefit from a low profile.

# DORO LUCENT® HORSESHOE ENT

# CT / X-RAY BASED ANGIO

The DORO LUCENT® Horseshoe Headrest ENT is designed to match the specific needs of patient positioning for ear, nose and throat procedures. You can directly mount it to the DORO LUCENT® Transitional Member which allows a low profile by having the open part of the horseshoe facing away from the OR table.



#### **ADULT VERSION**

| ${\bf DORO\ LUCENT}^{\circ}\ {\bf Horseshoe\ Headrest\ ENT,\ Adult}$ |          |
|--|----------|
| Item no. 1101.007  |          |
| Included Items   | Item no. |
| DORO LUCENT® Horseshoe Headrest ENT,<br>RDL w/o Gel Pads             | 1101.006 |
| DORO® Horseshoe Pad, Adult, right                                    | 3009-10  |
| DORO® Horseshoe Pad, Adult, left                                     | 3009-11  |
|  |          |

(shown mounted to the DORO LUCENT® Base Unit)

#### **PEDIATRIC VERSION**

| DORO LUCENT® Horseshoe Headrest ENT, Pediatric           |          |
|--|----------|
| Item no. 1101.008  |          |
| Included Items   | Item no. |
| DORO LUCENT® Horseshoe Headrest ENT,<br>RDL w/o Gel Pads | 1101.006 |
| DORO® Horseshoe Pad, Pediatric, right                    | 3008-10  |
| DORO® Horseshoe Pad, Pediatric, left                     | 3008-11  |



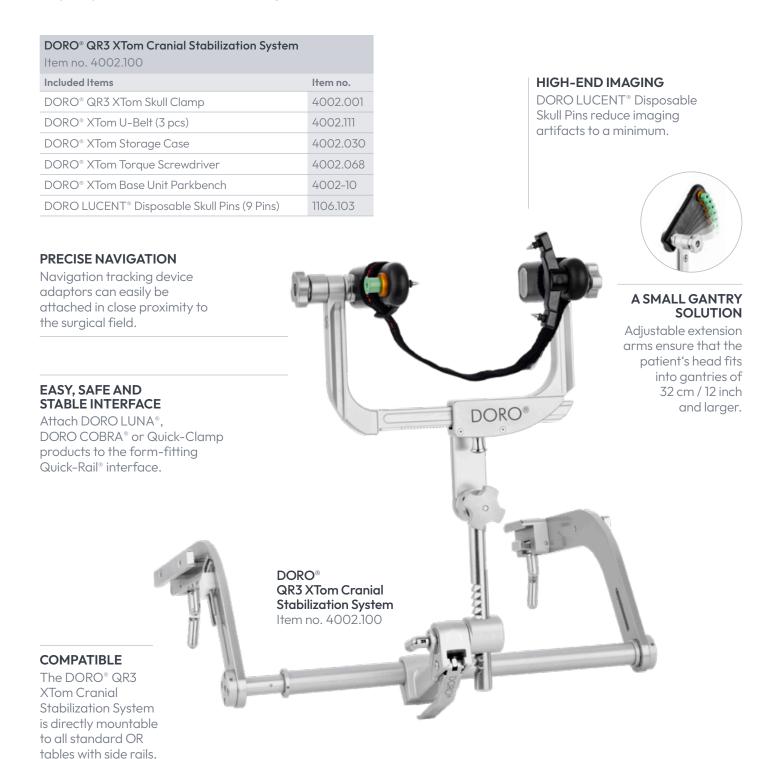




# **DORO® QR3 XTOM HEADREST SYSTEM**

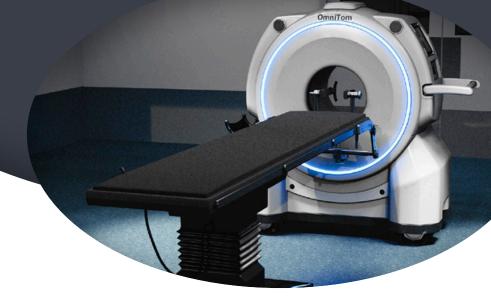
#### SMALL GANTRY CT

The DORO® QR3 XTom Cranial Stabilization System is designed to fit small gantry CTs. Adjustable Extension Arms ensure an optimal patient placement within CT scanner gantries of 32 cm / 12 inch and larger. The XTom System comes with a specifically designed torque screw driver to set pin pressure and with the DORO® XTom U-Belt, which works like a safety net and will prevent major injuries in case of head slippage, no matter the patient's head position.



# Which DORO® System works for your NeuroLogica scanner?

The DORO® QR3 XTom Cranial Stabilization System is designed to fit small gantry CTs like NeuroLogica's OmniTom or CereTom scanners. For CTs with larger gantries the DORO LUCENT® Headrest System is the Cranial Stabilization System of choice.









NEUROLOGICA SCANNER

BodyTom

OmniTom

CereTom



DORO® **SYSTEM**  DORO LUCENT® Headrest System Item no. 1101.020 (page 26)



DORO® QR3 XTom Cranial Stabilization System Item no. 4002.100

35

# DORO LUCENT® iXI HEADREST SYSTEM

# MRI / CT / ANGIO

The DORO LUCENT® iXI Headrest System enhances your diagnostic capabilities by supporting intra-operative MR, CT and X-Ray based Angio imaging. This allows you and your team to perform diagnostic procedures on bone and tissue during the same surgery, resulting in more precise treatment with reduced time consumption compared to separate imaging methods.



#### STATE-OF-THE-ART

The DORO LUCENT® iXI Headrest System is a dedicated multimodality imaging solution designed for use with MAQUET / GETINGE Magnus OR Tables and SIEMENS Nexaris Imaging Suites.

#### **FAMILIAR**

The classic skull clamp design lets you apply your known routines and workflows.

# **MULTI-MODALITY IMAGING**

Multimodality imaging is the current pinnacle of clinical, intra-operative imaging. All individual strengths of the three highend imaging modalities are combined into one versatile OR suite. This way, a surgeon is able to decide on the fly, which modality (or modalities) will benefit the patient the most, resulting in the best possible medical answer possible for each individual patient.



# Sola / Vida

OR TABLE

GETINGE (MAQUET) Magnus Tabletop 1180.12





#### PLEASE NOTE:

With the first installation of a DORO LUCENT® iMRI Headrest System, an expert training is mandatory (page 42). Please contact your local DORO® representative for details.



DORO LUCENT® Headplate Item no. 4003.005



Position the patient as required for surgery before starting the actual pinning procedure with the DORO LUCENT® Headplate. This makes further movements of the sedated patient unnecessary, resulting in reduced procedural risk, less stress for the patient and increased convenience for you and your team.

The DORO LUCENT® Headplate is included in every DORO LUCENT® iXI or iMRI system.

**37 №** 

# **DORO LUCENT® IMRI HEADREST SYSTEMS**

MRI

#### **SOLUTIONS FOR FIXED MRIs**

DORO LUCENT® iMRI Headrest Systems for rigidly installed MRIs are mounted to the OR table's transfer board by utilizing the DORO LUCENT® iMRI Parallelogram Adaptor, giving you the freedom you need to properly position patients for surgery. These systems are available for a variety of OR table and MRI scanner combinations. Please refer to the neighboring chart to find a product that fits your OR environment.



MRI SCANNER

PHILIPS
Ingenia MR-OR (1.5T & 3T)

GE 3.0T Signa HDxt / Signa Artist & Architect/ Optima MR450w/ Discovery MR750 & 750w SIEMENS MAGNETOM Aera / Skyra Sola / Vida SIEMENS MAGNETOM Aera / Skyra

**OR TABLE** with Transfer Table Top

MIZUHO

GETINGE (MAQUET)
Alphamaquet & Otesus / Magnus
Tabletops 1150.13, 1180.13

BAXTER (Trumpf/Hill-Rom)

# DORO LUCENT® iMRI Headrest System MIZUHO

Item no. 4003.350

| HeIII 110. 4003.330   |          |
|---|----------|
| Included Items  | Item no. |
| DORO® Skull Clamp<br>Radiolucent<br>for DORO LUCENT®<br>Parallelogram Adaptor | 4003.001 |
| DORO® Headplate   | 4003.005 |
| DORO® Adjusting Wrench<br>for DORO LUCENT®<br>Parallelogram Adaptor           | 4003.011 |
| DORO LUCENT® Storage<br>Case for Parallelogram<br>Adaptors                    | 4003.030 |
| DORO LUCENT® iMRI<br>Parallelogram Adaptor<br>MAQUET                          | 4003.311 |
| DORO LUCENT®  | 1106.003 |

A fitting iMRI Transfer Collision Indicator must be purchased from Phillips.



#### PLEASE NOTE:

Disposable Skull Pins, Adult (3 Pins)

> With the first installation of a DORO LUCENT® iMRI Headrest System, an expert training is mandatory (page 42). Please contact your local doro® representative for details.

# DORO LUCENT® iMRI Headrest System MAQUET

Item no. 4003.300

| HeIII 110. 4003.300   |          |
|---|----------|
| Included Items  | Item no. |
| DORO® Skull Clamp<br>Radiolucent<br>for DORO LUCENT®<br>Parallelogram Adaptor | 4003.001 |
| DORO® Headplate   | 4003.005 |
| DORO® Adjusting Wrench<br>for DORO LUCENT®<br>Parallelogram Adaptor           | 4003.011 |
| DORO LUCENT® Storage<br>Case for Parallelogram<br>Adaptors                    | 4003.030 |
| DORO LUCENT® iMRI<br>Parallelogram Adaptor<br>MAQUET                          | 4003.311 |
| DORO LUCENT® iMRI<br>Transfer Collision Indicator                             | 4003.XXX |
| DORO LUCENT®<br>Disposable Skull Pins,<br>Adult (3 Pins)                      | 1106.003 |
|   |          |



#### PLEASE NOTE:

In case you are planning to combine one of the SIEMENS MRI scanners mentioned above with the MAQUET Transfer Board 1180.71CO, please contact your DORO®-Partner.

# DORO LUCENT® iMRI Headrest System Baxter

| Item no. 4003.200   |          |
|---|----------|
| Included Items  | Item no. |
| DORO® Skull Clamp<br>Radiolucent<br>for DORO LUCENT®<br>Parallelogram Adaptor | 4003.001 |
| DORO® Headplate   | 4003.005 |
| DORO® Adjusting Wrench<br>for DORO LUCENT®<br>Parallelogram Adaptor           | 4003.011 |
| DORO LUCENT® Storage<br>Case for Parallelogram<br>Adaptors                    | 4003.030 |
| DORO LUCENT® iMRI<br>Parallelogram Adaptor<br>Baxter                          | 4003.211 |
| DORO LUCENT® iMRI<br>Pad Baxter   | 4003.212 |
| DORO LUCENT® iMRI<br>Transfer Collision Indicator                             | 4003.XXX |
| DORO LUCENT®<br>Disposable Skull Pins,<br>Adult (3 Pins)                      | 1106.003 |
| DORO® Torx Screwdriver<br>T45, nonmagnetic                                    | 3033-68  |

# MOVEMENT CAPABILITIES

DORO LUCENT® Parallelogram
Adaptors allow you to shift, tilt, angle
and rotate the skull clamp to find
a fitting position for your patient.









# DORO LUCENT® IMRI HEADREST SYSTEMS

#### **SOLUTION FOR MOVING MRIs**

The DORO LUCENT® iMRI Cranial Stabilization Set IMRIS is a lightweight and intuitive intraoperative solution designed for the IMRIS Invision™ Surgical Theatre, featuring a ceiling-mounted, movable MRI. It can quickly be connected to the IMRIS Linkage System using the DORO LUCENT® iMRI Interface Adaptor. The interface to the IMRIS coil can be continuously adjusted, allowing for precise positioning.



#### PLAY-FREE **OPEN/LOCK**

Enhanced precision for neuro-navigation

#### UNIQUE **QUICK-RAIL®**

Intuitive mounting of retractor systems or other accessories

# Minimized amount

in less artifact.

IMPROVED FLEXIBILITY

Slim and thoughtful design allows for easy and collision-free accessibility.

# **MRI SCANNER**

#### **SIEMENS**

MAGNETOM Espree / Aera / Verio / Skyra / Vida

**OR TABLE** with Transfer Table Top

Pins, Adult (3 Pins)

Baxter (Trumpf/Hill-Rom) ORT 100 / 200 / 300 / 400

#### **DORO LUCENT® Cranial Stabilization Set IMRIS** Item no. 4003.600 Included Items Item no. DORO® Skull Clamp Radiolucent 4003.001 for DORO LUCENT® Parallelogram Adaptor DORO® Headplate 4003.005 DORO® Adjusting Wrench 4003.011 for DORO LUCENT® Parallelogram Adaptor DORO LUCENT® 4003.031 Storage Case for IMRIS DORO LUCENT® iMRI 4003.611 Interface Adaptor IMRIS DORO LUCENT® IMRI 4003.631 Coil Connector IMRIS DORO LUCENT® Disposable Skull 1106.003



# **READY FOR AUTOMATIC IMAGE REGISTRATION**\*

Brainlab Automatic Image Registration (AIR) is the fundamental technology for high-precision surgical navigation from start to finish. It adds intraoperatively acquired MR images to surgical navigation while maintaining the preoperative surgical plan. This updated registration compensates for potential loss of navigation accuracy during surgery.

The Brainlab registration matrix with integrated MR markers has been designed exclusively for DORO LUCENT® iMRI & iXI Headrest Systems and therefore seamlessly integrates in the standard patient positioning workflow.

\*DORO LUCENT® iMRI Cranial Stabilization Set IMRIS: compatibility subject to the type of IMRIS MRI scanner used.

41

# DORO LUCENT® PRODUCT TRAININGS

Dedicated products like the DORO LUCENT® iMRI or iXI Headrest Systems come as a part of a larger iMRI or multimodality imaging installation. Before you start conducting live cases with these state-of-the-art products, we will train you in their use.

respective imaging modality.

We explain functions, simulate workflows and assist you in matching them to your distinct needs. These training sessions are held on site, in your facility, with you and your team, to offer the best possible education. DORO® application specialists will cover essential and advanced product knowledge and will match the training to your OR environment. The training will especially focus on overall system set-up & movement capabilities as well as patient

positioning and clinical workflow subject to the



DORO® iMRI & iXI Product Training Item no. 8001

# DORO LUCENT® IMRI & IXI ACCESSORIES



DORO LUCENT® Headplate Item no. 4003.005



DORO LUCENT® iMRI Pad Baxter Item no. 4003.212



DORO® Adjusting Wrench for DORO LUCENT® Parallelogram Adaptor Item no. 4003.011



DORO LUCENT® iMRI Transfer Collision Indicator Item no. 4003.XXX



DORO LUCENT® iXI Transfer Collision Indicator Item no. 4003.5XX



DORO®
Torx Screwdriver T45,
nonmagnetic
Item no. 3033-68

# DORO® SKULL CLAMP RADIOLUCENT FOR SPINAL FRAMES

#### CT / X-RAY BASED ANGIO

This modification of our metal-free DORO® Skull Clamp Radiolucent is designed for spinal surgeries and can be mounted to all established spinal OR tables and spinal frames. The slim design allows the skull clamp to be lowered between the rails of the open frame, simplifying patient positioning and imaging procedures.



DORO® Skull Clamp Radiolucent for Spinal Frames Item no. 4004.101

(shown with DORO LUCENT® Disposable Skull Pins, page 14)

#### MIX & MATCH

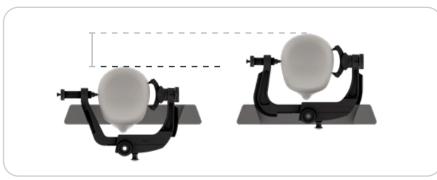
The DORO® Skull Clamp Radiolucent can be mounted to DORO® Aluminum Swivel Adaptor and Base Unit utilizing the Mix & Match Adaptor 3033–50 (page 27) or to fitting counterparts of spinal frame table manufacturers.



quickly, and securely

to the skull clamp.

DORO® Skull Clamp Radiolucent for Spinal Frames shown mounted to a MIZUHO OSI Insite® table (side view).



Comparison of the lowering capability of the DORO® Skull Clamp Radiolucent for Spinal Frames between the bars of an operating table for spinal surgery (front view) to the standard DORO® Skull Clamp Radiolucent.

43

# DORO® OR TABLE ADAPTORS RADIOLUCENT

# CT / X-RAY BASED ANGIO



DORO® Angiography Table Adaptor Siemens, Radiolucent for Artis Table Item no. 4003-00



DORO®
Table Adaptor Medifa®,
Radiolucent for Medifa®
OR Table 8000 & 8000 hybrid
Item no. 4004.001



DORO® Table Adaptor STERIS, Radiolucent for STERIS Carbon OR Tables CMAX XRAY Item no. 4004.002



DORO® Table Adaptor MAQUET, Radiolucent

Item no. 3031-50

(for Alphamaquet 1150 and Magnus 1180 and only in conjunction with MAQUET Adaptor, MAQUET item no. 6005.25A0)



DORO® Transitional Member Radiolucent, long (160 mm) Item no. 3032-10

(compatible with DORO® Table Adaptors Radiolucent, item no. 3031-50, 4003-00, 4004.001, 4004.002)



DORO® Transitional Member Radiolucent, short (120 mm) Item no. 3032-20

(compatible with DORO® Table Adaptors Radiolucent, item nos 3031-50, 4003-00, 4004.001, 4004.002)



# **DORO® RADIOLUCENT TABLE ADAPTORS**

# **SET-UP POSSIBILITIES**

Start with the OR table manufacturer at the bottom and work your way up to the DORO° solution that works best for you.



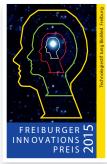


# **DORO LUNA® RETRACTOR SYSTEM**

The DORO LUNA® Retractor System is made to support you in every surgery. Its open design allows you to always keep the curves parallel to the floor, independently of patient and skull clamp positioning. Tilt, shift and angle the system into any position you need and you will still be able to use the curves as a comfortable

hand rest and retractor arm interface. The adaptability of the DORO LUNA® Retractor System can be further enhanced with additional accessories, making it the most versatile retractor system to date.

The DORO LUNA® Retractor System is the winner of the 2015 Freiburg Innovation Award.



# CONVENIENT Snap-on attachment of DORO COBRA® Flexible Rotary Arms on any desired position on the curve. DORO LUNA® Retractor System Standard Item no. 1203.100 (shown mounted to the DORO® QR3 Skull Clamp)

**SUPPORTIVE** 

Ergonomic design makes the DORO LUNA® Curve the optimal hand support. It can be positioned

of skull clamp position.

parallel to the floor, independently

#### **EASY**

No extra tools are needed to mount and use DORO LUNA® Retractor Systems.

#### **FAST**

DORO LUNA® attaches directly to the Quick-Rail®, even over multiple layers of sterile drape.

# DORO LUNA® Retractor System – Standard System

Item no. 1203.100

| Included Items  | Item no. |
|---|----------|
| DORO COBRA® Flexible Rotary Arm 280mm (2 pcs)           | 1201.006 |
| DORO® Retractor Sterilization Tray                      | 1201.091 |
| DORO LUNA® Quick-Clamp for Quick-Rail® (2 pcs)          | 1203.001 |
| DORO LUNA® Coupling (4 pcs)                             | 1203.002 |
| DORO LUNA® Rod (2 pcs)                                  | 1203.003 |
| DORO LUNA® Curve (2 pcs)                                | 1203.004 |
| DORO LUNA® Sterilization Tray                           | 1203.091 |
| DORO® Blade Set 102 mm, Black Coated,<br>5 pcs (2 sets) | 3116-101 |

| DORO LUNA® Retractor System – Compact<br>System         |          |
|---|----------|
| Item no. 1203.200                                       |          |
| Included Items  | Item no. |
| DORO COBRA® Flexible Rotary Arm 280mm (2 pcs)           | 1201.006 |
| DORO® Retractor Sterilization Tray                      | 1201.091 |
| DORO LUNA® Quick-Clamp for Quick-Rail®                  | 1203.001 |
| DORO LUNA® Coupling (2 pcs)                             | 1203.002 |
| DORO LUNA® Rod  | 1203.003 |
| DORO LUNA® Curve  | 1203.004 |
| DORO LUNA® Sterilization Tray                           | 1203.091 |
| DORO® Blade Set 102 mm, Black Coated,<br>5 pcs (2 sets) | 3116-101 |



# **GET THE BUNDLE**

DORO LUNA®

Standard Retractor System

◆ DORO® QR3 Skull Clamp

Item no. 1203.110

**DORO** LUNA®

Standard Retractor System

• DORO® QR3 Headrest System

Item no. 1203.120



# **GET THE BUNDLE**

**DORO** LUNA®

Compact Retractor System

ORO® QR3 Skull Clamp

Item no. 1203.210

**DORO** LUNA®

Compact Retractor System

• DORO® QR3 Headrest System

Item no. 1203.220

# A HIGHLY FLEXIBLE INTERFACE

Unfold the full potential of your DORO LUNA® & DORO COBRA® products by combining them in various set-ups: Mount half a DORO LUNA® Retractor System as a hand support while directly connecting DORO COBRA® Flexible Rotary Arms to the Quick-Rail® of the skull clamp, either in an imaging or in a non-imaging environment.



DORO COBRA® Retractor System mounted to the DORO® QR3 Skull Clamp



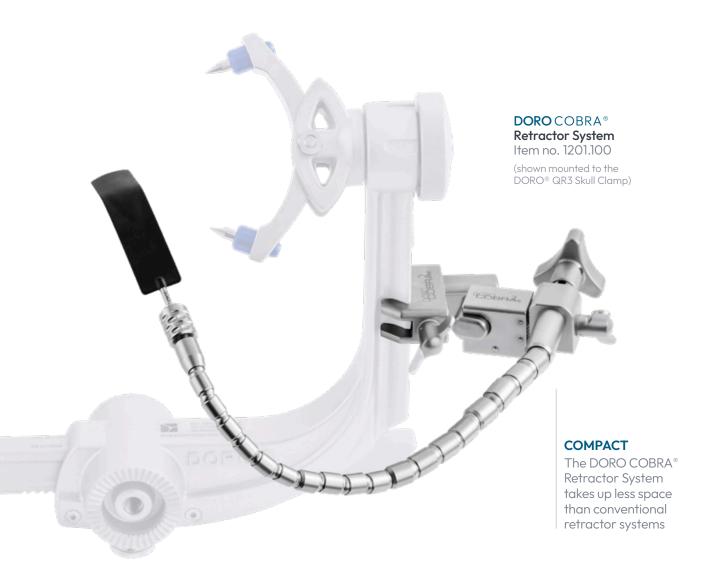
DORO LUNA® Retractor System mounted to the DORO® QR3 Skull Clamp



DORO LUNA® & DORO COBRA® combined set-up mounted to the DORO LUCENT® Skull Clamp

# DORO COBRA® RETRACTOR SYSTEM

The DORO COBRA® Retractor System is the retractor system of choice for minimal obstruction and access to the surgical site. DORO COBRA® Flexible Rotary Arms are directly mounted to the Quick-Rail® of either the DORO® QR3 Skull Clamp or the DORO® Skull Clamp Radiolucent. A combined set-up with DORO LUNA® components is possible and grants enhanced set-up and application possibilities.



| DORO COBRA® Retractor System for Aluminum Quick-Rail® Item no. 1201.100 |          |
|---|----------|
| Included Items  | Item no. |
| DORO COBRA® Quick-Clamp for Aluminum Quick-Rail® (2 pcs)                | 1201.021 |
| DORO COBRA® Flexible Rotary Arm 420 mm (2 pcs)                          | 1201.008 |
| DORO® Blade, Black Coated, 102 x 7 mm (2 pcs)                           | 3116-111 |
| DORO® Blade, Black Coated, 102 x 10 mm (2 pcs)                          | 3116-121 |
| DORO® Retractor Sterilization Tray                                      | 1201.091 |



# DORO COBRA® FLEXIBLE ROTARY ARMS

DORO COBRA® Flexible Rotary Arms are smooth and very precise in their movement. Just clip them on their form-fitting counterparts like the DORO LUNA® Curve or the DORO COBRA® Quick-Clamps, mount a DORO® Brain Spatula and continue your procedure. All DORO COBRA® Retractor Arms share the ability to be quickly adjusted, even without releasing the arm's tension.



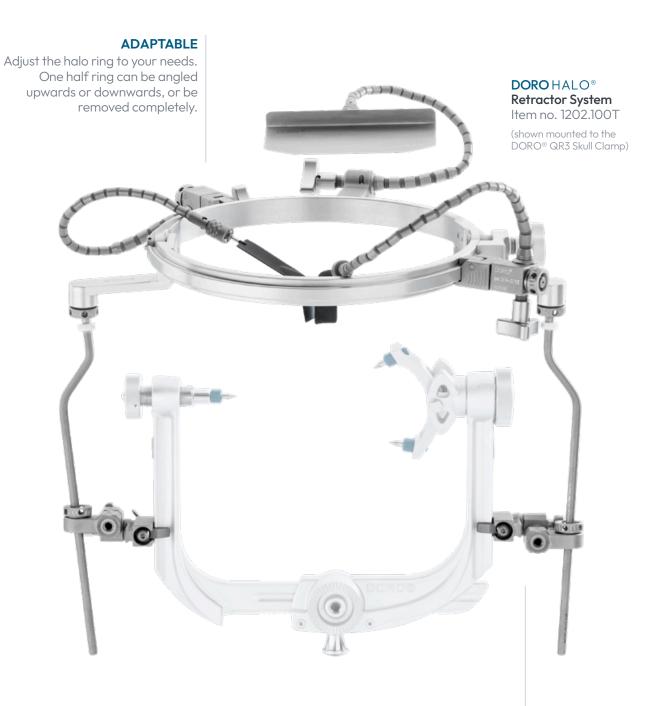
| DORO COBRA® Flexible Rotary Arms       |          |
|--|----------|
| Available Items                        | Item no. |
| DORO COBRA® Flexible Rotary Arm 200 mm | 1201.005 |
| DORO COBRA® Flexible Rotary Arm 280 mm | 1201.006 |
| DORO COBRA® Flexible Rotary Arm 350 mm | 1201.007 |
| DORO COBRA® Flexible Rotary Arm 420 mm | 1201.008 |

(shown with a DORO® Blade, 102 mm attached)

**№** 50

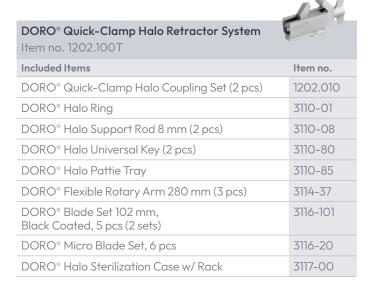
# **DORO® HALO RETRACTOR SYSTEM**

The DORO® Halo Retractor System features the classic halo ring design. You can easily attach it to the Quick-Rail® of DORO® QR3 Skull Clamps utilizing the DORO® Quick-Clamp or to older skull clamp versions by engaging the alternatively available C-Clamp. Rotary retractor arms, brain spatulas and accessories are available.



#### COMPATIBLE

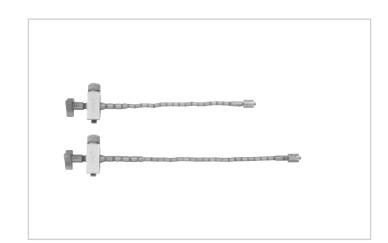
The DORO® Halo Retractor System fits almost all common skull clamps, either utilizing the form-fitting Quick-Rail® interface or the C-Clamp.



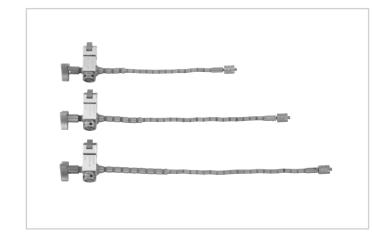
| DORO® Halo Retractor System w/ C-Clamp<br>Item no. 3100-00 | 5        |
|--|----------|
| Included Items   | Item no. |
| DORO® Halo Ring  | 3110-01  |
| DORO® Halo Support Rod 8 mm (2 pcs)                        | 3110-08  |
| DORO® Halo Support Bracket<br>w/ C-Clamp Adaptor (2 pcs)   | 3110-51  |
| DORO® Halo Universal Key (2 pcs)                           | 3110-80  |
| DORO® Halo Pattie Tray                                     | 3110-85  |
| DORO® Flexible Arm 230 mm (3 pcs)                          | 3114-34  |
| DORO® Blade Set 102mm,<br>Black Coated, 5 pcs (2 sets)     | 3116-101 |
| DORO® Micro Blade Set, 6 pcs                               | 3116-20  |
| DORO® Halo Sterilization Case w/ Rack                      | 3117-00  |

# **DORO® FLEXIBLE ARMS**

The DORO® Flexible Arms are specifically designed to be mounted to the DORO® Halo Ring. We offer different options in length, so you and your team are able to use the best setup for every situation.



| DORO® Flexible Arms       |          |
|---------------------------|----------|
| Available Items           | Item no. |
| DORO® Flexible Arm 230 mm | 3114-34  |
| DORO® Flexible Arm 300 mm | 3114-35  |



| DORO® Flexible Rotary Arms       |          |
|----------------------------------|----------|
| Available Items                  | Item no. |
| DORO® Flexible Rotary Arm 200 mm | 3114-36  |
| DORO® Flexible Rotary Arm 280 mm | 3114-37  |
| DORO® Flexible Rotary Arm 350 mm | 3114-38  |

53

# **DORO® RETRACTOR ACCESSORIES**



**DORO**® Quick-Clamp Item no. 1202.014



Quick-Clamp Coupling Universal Item no. 1202.015



**DORO**® Halo Support Rod Holder Item no. 1202.016



**DORO**® Quick-Clamp Halo Coupling Set Item no. 1202.010



**DORO**® Quick-Clamp with Interface Mizuho-Type Retractors Item no. 1201.045



**DORO**® Halo Support Bracket with C-Clamp Adaptor Item no. 3110-51



DORO® Halo Ring Item no. 3110-01







**DORO**® Halo Pattie Tray Item no. 3110-85

**DORO**® Halo Universal Key Item no. 3110-80



Clamp Body for Skin Hooks

**DORO**® Mini Vice Item no. 3114-54

**DORO**®

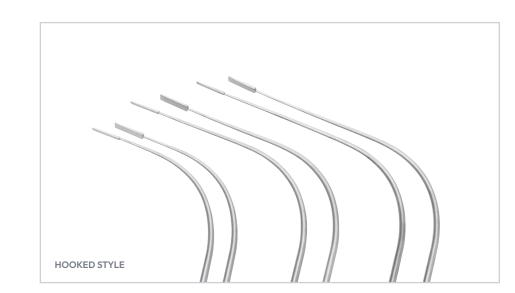
Item no. 3114-53

# **DORO® STERILIZATION TRAYS**

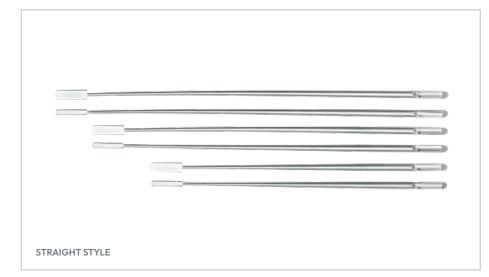
| DORO® Sterilization Trays                  |          |
|--|----------|
| Included Items                             | Item no. |
| DORO® Retractor Sterilization Tray (shown) | 1201.091 |
| DORO LUNA® Sterilization Tray (shown)      | 1203.091 |
| DORO® Halo Sterilization Tray              | 3117-00  |



# **DORO® MICRO BLADES**



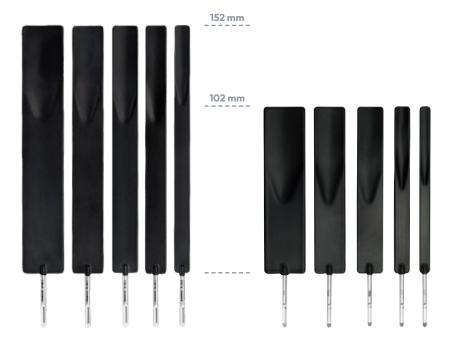
| DORO® Micro Blade Set,<br>Straight, 6 pcs.<br>Item no. 3116-20 |          |
|--|----------|
| Included Items   | Item no. |
| 124 x 2 mm   | 3116-21  |
| 124 x 4 mm   | 3116-22  |
| 150 x 2 mm   | 3116-23  |
| 150 x 4 mm   | 3116-24  |
| 165 x 2 mm   | 3116-25  |
| 165 x 4 mm   | 3116-26  |
|  |          |



| DORO® Micro Blade Set,<br>Hooked, 6 pcs.<br>Item no. 3116-40 |          |
|--|----------|
| Included Items   | Item no. |
| 124 x 2 mm   | 3116-41  |
| 124 x 4 mm   | 3116-42  |
| 150 x 2 mm   | 3116-43  |
| 150 x 4 mm   | 3116-44  |
| 164 x 2 mm   | 3116-45  |
| 164 x 4 mm   | 3116-46  |

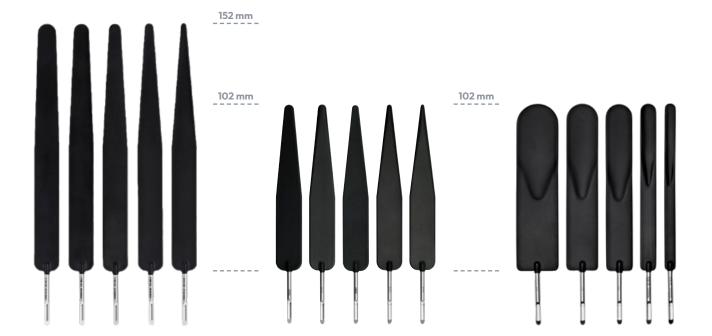
# **DORO® BLADES**







| DORO® Blade Set 102 mm<br>Black Coated, 5 pcs.<br>Item no. 3116-101 | ,        |
|---|----------|
| Included Items  | Item no. |
| 102 x 7 mm  | 3116-111 |
| 102 x 10 mm   | 3116-121 |
| 102 x 16 mm   | 3116-131 |
| 102 x 20 mm   | 3116-141 |
| 102 x 26 mm   | 3116-151 |
|   |          |
| not included in Set   | Item no. |
| 102 x 13 mm   | 3116-161 |
|   |          |



 DORO® Blade Set 152 mm,

 Conical, Black Coated, 5 pcs.

 Item no. 3116-60

 Included Items
 Item no.

 152 x 2 mm
 3116-61

 152 x 3 mm
 3116-62

 152 x 4 mm
 3116-63

 152 x 5 mm
 3116-64

 152 x 6 mm
 3116-65

 DORO® Blade Set 102 mm,

 Conical, Black Coated, 5 pcs.

 Item no. 3116-601

 Included Items
 Item no.

 102 x 2 mm
 3116-611

 102 x 3 mm
 3116-621

 102 x 4 mm
 3116-631

 102 x 5 mm
 3116-641

 102 x 6 mm
 3116-651

 DORO® Blade Set 102 mm,

 Rounded Tip, Black Coated, 5 pcs.

 Item no. 3116-70

 Included Items
 Item no.

 102 x 7 mm
 3116-71

 102 x 10 mm
 3116-72

 102 x 16 mm
 3116-73

 102 x 20 mm
 3116-74

 102 x 26 mm
 3116-75

# **WHY BLACK?**

The black matt finish of our blades prevents reflections from light focused on the surgical site during procedures.



# WANT TO USE YOUR OWN BLADES?

Do you want to use our state-of-the-art DORO COBRA® Flexible Rotary Arms in combination with brain spatulas you are already familiar with? The DORO® Adaptor for Flat Brain Spatulas is the right choice as it attaches to all DORO® Retractor Arms and holds all common flat brain and tubular spatulas. But try out our blades at least once... we are sure you will like them!

# ONE CATALOGUE, MANY OPTIONS









Version 15, March 2025. © pro med instruments GmbH - part of Black Forest Medical Group. DORO®, DORO LUNA®, DORO COBRA®, DORO LUCENT® and Quick-Rail® are registered trademarks (®) of pro med instruments GmbH, Freiburg, Germany. All rights reserved. No part of this document may be reproduced in any form without written permission from copyright holder. Specifications subject to change without notice. Teflon® is a registered trademark of DuPont de Nemours GmbH. VarioGuide™ is a trademark of Brainlab. Insite® is a registered trademark of Mizuho OSI. PMT® is a registered trademark of PMT® Corporation. The information has been compiled with utmost care. Errors can, however, not be excluded. Errors do not entitle to any legal claims. We reserve the right to modify the products at any time. Please note that the present catalogue also describes products which are not approved for sale in all countries.



**pro med instruments GmbH**, part of Black Forest Medical Group Bötzinger Straße 86, 79111 Freiburg, Germany Phone: +49 761 384 222 - 10 | info@blackforestmedical.com

■■ USA pro med instruments Inc., part of Black Forest Medical Group 4529 S.E. 16th Place, Suite 101, Cape Coral, FL 33904
Phone: +1 239 369 - 2310 | info.us@blackforestmedical.com

© pro med instruments, part of Black Forest Medical Group, 2025 All rights reserved. The information provided was compiled with utmost care. Errors can, however, not be excluded. Errors do not entitle to any legal claims. We reserve the right to modify the shown products at any time.



Take a peek on our work and visit us on social media!

### blackforestmedical.com



