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# X-ray Systems

# PROSLIDE 32 B

# PROSLIDE 32 B System

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**Abb. Version mit Teleskopsäule**
***Fig. Version with telescopic column***

Verantwortlich für das Zusammensetzen von Produkten
zu diesem System nach Richtlinie 93/42/EWG, Artikel 12:
*Responsible for putting devices together to this*
*system acc. to Directive 93/42/EEC, Article 12:*

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# PROSLIDE 32 B

## Mobile X-ray unit (for analog / CR / DR)

### Technical Product Specifications

* For PROSLIDE 32 B with telescopic column, details are in bold print, otherwise identical.

| | |
|---|---|
| ***Electrical Specifications*** | |
| *Power supply* | 115 ÷ 230Vac ±10% |
| *Frequency* | 50/60 Hz ± 5 Hz |
| *Absorbed current* | 10 A |
| *Line compensation* | Automatic |
| *Line resistance* | <1 Ω @ 115/230Vac |
| *Standard outlet* | 16 A @ 230Vac |
| *Power supply cable* | 2.9 m, retractable |
| *Insulation class* | Class I with applied parts type B |
| *Use conditions* | Continuous working with intermittent load |
| *Classification according to the liquid penetration* | IPx0 |
| *Safety in presence of anaesthetic inflammable gases* | The equipment is neither type AP nor APG |
| | |
| ***Environmental conditions*** | |
| *Temperature normal use / warehouse and transport* | 10 °C to 40 °C / -25°C to 70°C |
| *Relative humidity normal use / warehouse and transport* | 30% to 75% non-condensing / 10% to 90% non-condensing |
| *Pressure normal use / warehouse and transport* | 700 hPa to 1060 hPa / 500 hPa to 1060 hPa |
| | |
| ***Total filtration of the equipment*** | |
| *Monobloc* | 1.4 mm Al @75kV |
| *Additional fixed filter* | 0 |
| *Collimator* | 2 mm Al @75kV |
| *Total filtration of monobloc group* | 3.4 mm AL @75kV |
| *Additional filtration of DAP meter* | 0.3 mm Al @75kV |
| *Total filtration* | 3.7 mm Al @75kV |
| | |
| ***Mechanical specifications*** | |
| *Width (in transport position)* | 576 mm |
| *Length (in transport position)* | 1168 mm / ***1200 mm** |
| *Height (in transport position)* | 1855 mm / ***1421 mm** |
| *Transport handle height* | 900 mm |
| *Focus-floor distance (Z-axis)* | 727 ÷ 2014 mm / ***660 ÷ 2014 mm** |
| *Max. height* | 2242 mm |
| *Arm extension (X-axis)*<br>*Front range*<br>*Lateral range* | 360 mm<br>710 ÷ 1070 mm<br>517÷ 877 mm / ***536 ÷ 896 mm** |
| *Rotation of the monobloc around the arm axis (α swivel)* | ± 180° |
| *Rotation of monobloc around the column axis (β swivel)* | ± 320° from transport position |
| *Rotation of the monobloc around its axis (γ swivel)* | 127° (90° forward, 37° backward) |
| *Movement* | Motorised, speed is proportional to the exerted pressure onto the transport handle. |

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|---|---|
| *Speed forward (transport position)* | 0 ÷ 1.4 m/s |
| *Speed forward in working position* | 0 ÷ 0.7 m/s |
| *Speed backwards* | 0 ÷0.7 m/s |
| *Max. superable inclination* | 12° (21%) |
| *Wheels diameter rear* | 300 mm, antistatic |
| *Wheels diameter front* | 125 mm, antistatic, damped |
| *Cassette holder capacity* | 4 cassettes format 35 x 43 cm (13.78 x 16.93 in.) |
| *Weight* | 397 kg, batteries included |
| | |
| ***Batteries*** | |
| *Battery type* | VRLA (Valve regulated lead acid batteries) |
| *Battery pack* | 12 batteries x 12V, 18Ah, Pb, 144Vdc |
| *Vacuum nominal voltage* | 144Vdc |
| *Load voltage (worst case)* | 100V @200A |
| *Low battery charge indicator* | yes |
| *Min. autonomic operation* | 200 exposures at 80kV/50mAs within 6 hours |
| | |
| ***Battery charger*** | |
| *Power supply* | 115Vac / 230Vac ±10% single-phase, 50/60 Hz |
| *Absorption by mains* | 10 A max |
| *Charge indicator* | yes |
| *Charge characteristics* | IUoU - compensated in temperature |
| *Charge time* | 5h |
| *Safeties* | Overtemperature, overvoltage, charge timeout |
| | |
| ***Operating specifications*** | |
| *External interfaces* | Interface for Bucky. Serial communication (RS232) for service. |
| *User interface* | Keyboard with graphic LCD display 160 x 101mm (effective area 123 x 68 mm), to display the operating parameters and possible unusual messages or conditions.<br>Service program for troubleshooting.<br>Management by microcontrollers (master-slave). |
| *Available languages* | English, German, French, Spanish, Italian, Portuguese. Further language available for non-European characters. |
| *X-ray hand switch* | Local hand switch with extensible cable.<br>Wireless remote control (optional) |
| *Safeties* | Filament current, Monobloc temperature, Overloading, Max kV or fault in HV, Check of the stored data, Microcontroller auto test, Battery overvoltage. |
| *Programmed Anatomic Mode (APR)* | Storage of 36 exams<br>(6 anatomical groups, each one of 6 examinations) |
| *Use coefficient (duty cycle) according to the applied power* | Waiting t = kV * mAs / 100 (s) |
| | |
| ***X-ray specifications*** | |
| *Max. power of the generator* | 32kW (320 mA @ 100 kV) |
| *Inverter frequency in high voltage* | 40 kHz |
| *Max ripple* | <2% @100kV |
| *Climbing time* | <1ms @100kV |
| *kV values* | 40 ÷ 125kV in steps of 1kV |
| *kV accuracy* | ±5% (IEC 60601-2-54) |
| *mA values* | 70 ÷ 320mA automatically associated to kV |
| *mA accuracy* | ±10% (IEC 60601-2-54) |

| | |
|---|---|
| *mAs values* | 0.1 ÷ 320mAs with increases of 12,5% |
| *mAs accuracy* | ±10% (IEC 60601-2-54) |
| *Exposure times* | 0.001 ÷ 3sec according to set mAs |
| *Exposure time accuracy* | ±10% (IEC 60601-2-54) |
| *Continuous thermal dissipation* | 60 W |
| ***Monobloc*** | |
| *Nominal power (100 kV - 320 mA) 0.1s* | 32 kW |
| *Max. voltage at the tube* | 125 kV |
| *Max. current at the tube* | 350 mA |
| *Ripple to the max. power* | < 2% |
| *kV increasing time to max. power* | < 1 ms |
| *Half-value layer @ 75kV* | 2 mm Al |
| *Min. inherent filtration @75kV* | 1.4 mm Al |
| *Weight* | 19.0 kg |
| *Thermal capacity* | 600 kJ |
| *Total thermal safety* | 900 kJ |
| *Thermal safety (n.c. thermal switch)* | 60 °C ±5° C |
| *Compensation lung volume* | 0.2 $dm^3$ |
| *Continuous thermal dissipation* | 60 W |
| *Leakage radiation* | < 1 mGy/h |
| ***X-ray tube*** | |
| *Rotation speed* | 3000 $min^{-1}$ |
| *Nominal High voltage* | 130 kVp |
| *Nominal focus dim. (IEC 60336)* | 0,6 mm small focus / 1,2 mm large focus |
| *Nominal anodic power (IEC 60613)* | 16 kW small focus / 32 kW large focus |
| *Anodic material* | RT (Focus track: Tungsten-Rhenium), TZM (Anode mass: molybdenum + titanium + zirconium) |
| *Anodic diameter* | 64 mm (2,52in.) |
| *Anodic angle* | 15° |
| *Thermal capacity of the anode* | 80 kJ (107kHU) |
| *Max continuous anode dissipation* | 300 W |
| *Min. inherent filtration (IEC 522)* | 0.7 mm Al eq. |
| *Tube material* | glass |
| ***Collimator*** | |
| *Collimation* | Manual with internal light source, multilayer, squared field |
| *Assembly plan from focus* | 80 mm (3.14") |
| *Coverage of the field at 100cm FFD (SID)* | min 0 x 0 cm, max 43 x 43 cm<br>Laser field to determine the focal distance at 1 m |
| *Lighting source* | Clusters of high-brightness LED power |
| *Lamp lighting time* | 30 s |
| *Light intensity (IEC 60601-2-54)* | > 160 lux |
| *Minimum contrast ratio (IEC 60601-2-54)* | 4:1 |
| *Focal distance measurement* | Retractable tape measure (max extension 3 m) |
| *Inherent filtration* | 2 mm equivalent Al/75kV |
| *Additional filtration* | 0 mm Al / 1 mm Al + 0,1 mm Cu / 1 mm Al + 0,2 mm Cu / 2 mm Al |
| *Rotation* | ± 120° |
| *Weight* | 5,5 Kg |
| ***Optional*** | |
| *DAP meter* | Device for the area-dose product measurement in X-ray diagnostics according to IEC 60580 standard |
| *Bluetooth DAP* | Automatic data transfer with Bluetooth DAP |
| *Collimator with laser* | Collimator with included double laser |
| *Remote exposure control* | Infrared X-ray control device |

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# PROSLIDE 32 B System

## *Mobile X-ray unit with DR system*

### Consisting of:

| | |
|---|---|
| ***PROSLIDE 32 B*** | Mobile X-ray unit,<br>specification see previous pages,<br>with PC holder |
| | **CE 0051** |
| | |
| ***RAPIXX DR system*** | DR detector with CONAXX 2 acquisition software |
| | RAPIXX models are limited to RAPIXX WIFI versions |
| | **CE 0297** |

*The PROSLIDE 32 B System is supplied with an EC Declaration of Conformity issued by the manufacturer for the mobile X-ray unit and an EC Declaration of Conformity issued by PROTEC for the RAPIXX DR system.*

*PROSLIDE 32 B as well as RAPIXX DR system have their own EC Certificate issued by the corresponding notified bodies.*

*For the PROSLIDE 32 B System PROTEC applies Article 12 of the Medical Device Directive and puts the two above mentioned devices bearing the CE marking together, in order to place them on the market as a medical system. Accordingly PROTEC provides a Declaration in accordance with Article 12 of Directive 93/42/EEC for PROSLIDE 32 B System, which may be used by our distributors for sales and installation activities.*

| | |
|---|---|
| ***Optional*** | |
| *19" All-in-one Touch-PC* | All-in-one Touch-PC, 1280 x 1024 pixel |
| | LCD with LED backlight, resistive Touch, Intel Celeron J1900 quad-core processor, 4 GB RAM, 256 GB SSD (optional 512 GB SSD), USB/COM/LAN Medical 4KV Isolation, WLAN, waterproof: IP65 Front Panel, 6 hours battery time, Windows 10 operating system |
| | **CE** |

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