
Naturally, MAVIG X-ray protective clothing also underwent the required prototype testing and certification in compliance with PPE 89/686/EEC (CE0123).
**Apron for Front Protection EXTENDED RA641**

**Perfect Protection Against Radiation**

Up-to-date user protection for multiple applications, which can also be carried out sitting down:
Specifically, this means that using a front protective apron as a functional one-piece unit in compliance with current practice naturally provides ideal radiation protection in any working position.

Radiation protection aprons are already standard equipment in different departments, e.g., urology, anaesthesia, etc. However, the currently used front protective aprons are designed for standing positions. But especially in the above mentioned departments, some interventions are performed with the operator in a seated position. This holds the risk that the gonads will be exposed to a considerably higher dose than when standing when a regular front protective apron is used. The main reason for this is the gap in the radiation protection that occurs due to the apron resting on the knees.

**Sophisticated Relief**

The innovative elastic belt, located on the inside of the front panel, rests most of the apron’s weight on the hips. This relieves the back and shoulders. In addition, soft shoulder pads are standard.

To reduce the weight of the apron, “without protection” can be optionally chosen in the back area.

**Protection Especially for Seated Activities**

For this purpose, a special gonad protector is attached on the inside of the apron. When sitting in front of a patient, facing forward, this protector hangs down protectively in front of the gonads, while the apron lies on the legs.

**Correct Length!**

*When working in a sitting position, the apron should be approximately 10 cm longer than recommended for your body size, so that the knees are covered.* *(see: “Lengths, recommended height”)*

At the same time, the new design prevents the apron from slipping down the legs and exposing them. The larger side pieces in the lower part keep the apron in position during any movement.

When you are standing, the RA641 also guarantees complete X-ray protection from neck to knees. Here, the side flaps of the lower part of the apron can simply be fastened together in the back, so that they do not interfere with any movements allowing unrestricted work.

In this working position, the gonad protection may be removed to save a few extra grams of weight.

**Replaceable Belt**

The hook & burr of the belt can be exchanged, if necessary, by means of zippers.

**Removable Gonad Protection**

The gonad protection attached with hook & burr can be simply removed for weight reduction when standing.

---

**Protective Material**

- NovaLite or
- Standard Lead

**Lead Equivalent Values**

Front (including gonad protection) optionally in:
- Pb 0.25 mm
- Pb 0.35 mm, or
- Pb 0.50 mm
Back, optionally:
- Pb 0.25 mm or without protection

**Outer Material / Colours**

ComforTex® HPMF Hybrid, available in the colours:
- Curacao
- Orchidee
- Regatta
- Indian Summer

**Type of closure**

Available with the closure systems:
- Straps & snap buckle
- Snap buckles

**Sizes*, recommended for:**

- XS Chest girth ≤ 84 cm
  Waist/hip girth ≤ 91 cm
- S Chest girth approx. 85 - 95 cm
  Waist/hip girth approx. 92 - 102 cm
- M Chest girth approx. 96 - 106 cm
  Waist/hip girth approx. 103 - 112 cm
- L Chest girth approx. 107 - 117 cm
  Waist/hip girth approx. 113 - 123 cm
- XL Chest girth approx. 118 - 128 cm
  Waist/hip girth approx. 124 - 134 cm
- XXL Chest girth approx. 129 - 139 cm
  Waist/hip girth approx. 135 - 145 cm
- 3XL Chest girth approx. 140 - 150 cm
  Waist/hip girth approx. 146 - 156 cm

* The size depends on the girth of the chest, waist, or hip, depending on which of the three measurements is the largest.

**Lengths, recommended height:**

<table>
<thead>
<tr>
<th>Length</th>
<th>Approximation</th>
</tr>
</thead>
<tbody>
<tr>
<td>90 cm</td>
<td>for approx. 150 - 160 cm</td>
</tr>
<tr>
<td>100 cm</td>
<td>for approx. 160 - 170 cm</td>
</tr>
<tr>
<td>110 cm</td>
<td>for approx. 170 - 180 cm</td>
</tr>
<tr>
<td>120 cm</td>
<td>for approx. 175 - 190 cm</td>
</tr>
<tr>
<td>130 cm</td>
<td>for approx. 185 - 195 cm</td>
</tr>
<tr>
<td>140 cm</td>
<td>for approx. 195 - 205 cm</td>
</tr>
</tbody>
</table>

**Optional / On Request**

- **Sleeves**
  - Breast Pocket
  - Embroidery:
    - on the breast pocket
    - on permanently sewn-on border
    - on detachable border
  - Thyroid Protection
  - Made-to-Measure Protection
    (possible on an individual basis)

- **Replacement Order for Belt** *(adapted via zipper)*
- **Replacement Order for Gonad Protection** *(adapted via hook & burr)*