

# Solido

## Solido medical pendants for operating rooms, intensive care units, and recovery

### FUNCTIONAL DESIGN

Merivaara Solido pendants are designed to provide medical teams with flexibility and ergonomics. The design of the pendants combines a modern and stylish look with ease of use and cleanability. Solido is specifically designed for rooms where the users appreciate its innovative solutions. In the design, special attention has been paid to the ergonomic use of various devices, which improves the use of space and workflow. This increases the overall work efficiency. The braking system ensures maximum stability and accuracy as well as ease of movement. The slim profile of the Solido pendant takes up less space to move around the patient, and thanks to round corners there is no need to be worried about sharp edges to cause injury. Overall, using Solido pendants improves the ergonomics of the whole team.



## SURGICAL PENDANTS AND ANESTHESIA PENDANTS FOR OPERATING ROOMS

SOLIDO pendants can be adapted to suit the needs of the surgeon or anaesthetist with all the required electrical and medical components. SOLIDO pendants are designed to provide the medical teams with maximum flexibility and reliability. The brake system ensures maximum stability and accuracy and ease of movement.

SOLIDO pendants are available in multiple configurations, which are always built to order. Please consult Merivaara sales for the optimal configuration for your needs.

## PENDANTS FOR INTENSIVE CARE UNITS (ICU) OR RECOVERY

Easy installation and long-lasting, top-quality components ensure minimum maintenance and maximum reliability.

Versatility – match any specification with this product range.

Low electricity consumption thanks to innovative LED stripes which are available for all direct, indirect and even night lighting. Lesser maintenance, greater performance!

Protecting epoxy powder coating guarantees an adequate hygienic surface. This could be boosted further with the dedicated Antibacterial paint to ensure 100% shield against infectious agents.

Thickness of the profile and the technology adopted guarantee substantial resistance to wear and tear.



## Benefits of the Solido family

### 1. ERGONOMIC SOLUTIONS

When designing the Solido pendants, special attention was paid to the ergonomics and ease-of-use:

- Slim profiles take less space and are easy to move around the patient
- Round corners are ergonomic and help to avoid injuries
- Visual illumination for various functions make using the pendant convenient
  - Brake indicators
  - Ambient lighting
  - Drawer lighting
  - Color coded led lights to tell which joint is released
- Clear symbols to control motorized up and down movements
- Adjustable shelf height

### 2. REDUCED RISK OF INFECTION

- Seamless design and round corners make the pendants easy to clean
- No visible fixing screws and smooth surfaces allow easy disinfection

### 3. LARGE SELECTION OF DIFFERENT SOLUTIONS

Solido pendants are available in several different configurations and are always manufactured according to the customer's specifications. At the customers' request, individual profiles can be painted according to the customer's color preference (RAL color chart). The Solido pendants are suitable for operating rooms, intensive care units or recovery.

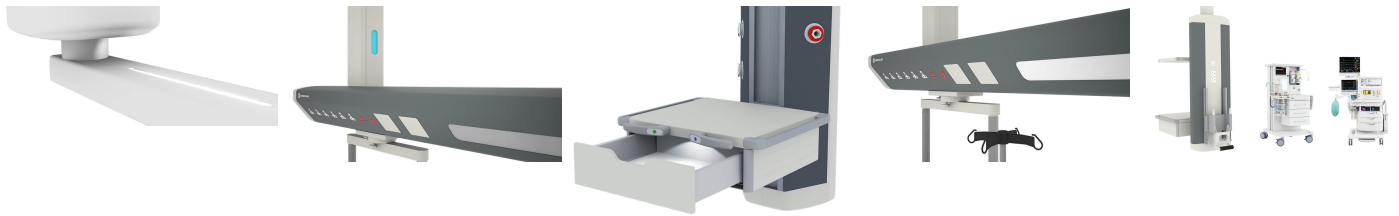
A wide range of accessories ensures that Solido pendant solutions are functional even for the demanding applications.

## 4. EASY TO MAINTAIN

Solido pendants are designed to be user-friendly and cost-effective from installation to maintenance. They are delivered pre-installed, which significantly reduces installation costs. The long-lasting and high-quality components ensure minimal maintenance and maximum reliability.

The cover of the Solido pendant is simple to remove, which makes access to the system easy for both installation and maintenance. Medical gases and electrical components are kept separate, which allows for safe maintenance.

By selecting the electromagnetic brakes, the need for maintenance is reduced due to the lack of friction material.



## Technical Specifications

		Operating rooms	ICU
Operational temperature range	5°C - 35°C	x	x
Relative humidity range	Between 30% and 75%	x	x
Atmospheric pressure:	From 700to 1060hPa	x	-
Supply voltage	100-230 VAC 50/60 Hz	x	x
Auxiliary voltage (usually)	24Vdc-24Vac	x	-
Low voltage	12-24 V-AC/DC	x	x
Power consumption - Lighting - Electrical socket	Max 150W Max 2000W for each socket	x	x
Brake system - Electropneumatic Brakes - Electromagnetic Brakes	24 Vcc, min 4Bar - max 6Bar 24 Vcc	x	-
Wire minimum section	Lights 1.5 mmq Electrical sockets 2.5	-	x

	sq.mm Ground 2.5/6 sq.mm		
Service head	Adjustable friction	x	-
Classification according to the degree of protection against penetration of liquids and external agents	Against penetration of liquids and external agents IP20.	x	x
Noise level	Less than 35 dB	x	-
Color	Frame is white (RAL 9010 matt), effect color in the columns and ABS covers is grey (RAL 9017 matt). Other RAL colors available on request.	x	x
Ceiling fixing	Clamped onto the ceiling with an adjustable bracket.	-	x
Wall fixing	Screwed onto the wall through a special bracket.	-	x
Testing	The products are fully tested and ready for immediate installing.	-	x
Aluminium	Structural profile not less than 3.5mm/cover profile not less than 1.8mm Alloy 6063 T6.	-	x
Testing in production for each single unit	For each unit, the following tests are performed: - grounding impedance protection in accordance with 8.6 of standard EN 60601-1 - standard measurement of leakage current and dielectric strength in accordance with 8.7, 8.8, 16.6 of EN 60601-1 - Tests on medical gas and vacuum distribution in accordance with 12.3, 12.4, 12.5, 12.6 of EN ISO 7396-1 - Testing facilities on evacuation of anaesthetic gases in accordance with 12.2, 12.3, 12.4 of EN ISO 7396-2 Tests carried out on end-of-line product	x	x

	form an integral part of this manual		
Testing in production for each single unit	For each unit the following tests are performed: - grounding impedance protection in accordance with 18f) of standard EN 60601-1 - standard measurement of leakage current in accordance with 19.3 and 19.4 of EN 60601-1 - measurement of dielectric strength, in accordance with 20.3 and 20.4 of standard EN 60601-1 - requirements as in 59.101.1, 59.102.1 and 59.103.1; 59.101.2); 59.102.2 b), 59.103.2); 59.101.2BC), 59.102.2 (c) and 59.103.2. b) - pressure tests in accordance with 59.101.2. d) and 59.102.2. d)	-	x
Electromagnetic interference	The operation of other devices placed near the medical device (as portable equipment or furniture) can cause electromagnetic interference or other interference, always check with qualified personnel	x	x
EC certificate 1548/MDD	The devices are made in compliance with Directive 93/42/EEC concerning medical devices Annex II with certification CE0051.	x	x
Regulation	MDR	x	x
Maintenance	Medical gases and electrical components are kept separated. For this reason no special caution during maintenance service is needed.	x	x
Cleaning	The epoxy-polyester paint or the anodic	x	x

	oxidation guarantees the durability of all external surfaces. Cleaning is recommended with a soft cloth soaked with a non-alcoholic and gentle detergent and disinfectant.		
GMDN code	35630	x	x
Product code	200030000, 200030001, 200030004		
Manufacturer	LM Medical, Italy		

## Contact us

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