

# SUTOWER - THE SYSTEM FOR ALL LABORATORY APPLICATIONS



 Berrytec®



# PUREST WATER IN PERFECTION

Our Sutower combines the **complete combi class** in **one compact system**.

Its dimensions have been chosen so that it can be easily installed in a **60 cm wide gap** in your laboratory. It even contains a **powerful feed pump up to 4,000 litres/h**, a storage tank with a capacity of 100 litres, all technical components from osmosis to EDI and our post-cleaning cartridge. Your floor remains completely free of pumps, cables and hoses. A real pleasure for you and your cleaning team!

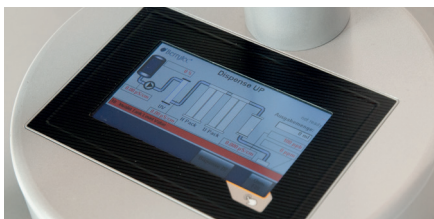
Its performance spectrum extends up to a daily consumption of 400 litres of water qualities I to III and up to 600 Ltr. in Type II. In addition, the Sutower class has a wide range of standard equipment, such as sterile tank overflow, CO2 tank ventilation filters, etc., which are already included in the basic price.

On the „upper deck“, within easy reach of a height of 1 metre, we have installed our solid aluminium Easy Dispenser Arm with control panel and display for convenient ultrapure water removal. You can conveniently fill containers from 100 ml to 20,000 ml. As an option, you can also attach an external extraction nozzle for your sink. With the integrated powerful feed pump you can operate your dishwasher, laboratory autoclaves and other consumers with water type II and III up to a daily requirement of up to 600 litres.

## WATER STANDARDS ACCORDING TO STANDARDS ASTM D1193-91

measure- ment	conductivity	MΩ at 25°C	salinity	TOC
Tap water	400-1500 µS/cm		ca. 300 ppm	bis 5000 µg/Ltr.
ASTM Typ I ISO D1193-6	0,055 µS/cm	> 18	0,05 ppm	<50 µg/Ltr.
ASTM Typ II	1 µS/cm	>1	0,12 ppm	<50 µg/Ltr.
ASTM Typ III	0,25 µS/cm	> 4	8 ppm	<200 µg/Ltr.
ASTM Typ IV	5,0 µS/cm	> 0,2	-	-

# OUR PASSION IS THE BEST RECIPE FOR QUALITY



## INNOVATIVE PRODUCTS

Berrytec water systems are equipped with functional technology to control your water quality.

We work with modern processing methods such as electrodeionization, osmosis with pulsation technology and proven polisher and subsequent cleaning cartridge.

Our systems are so flexible and diverse that you only buy what is necessary for your application.

The housings of our Berrytec series are built from magnesium-aluminum alloys, as well as our dispenser arm. This allows us to guarantee optimum service life and durability.

## CONCEPTIONAL

Not your laboratory needs to adapt to your water system, but we adapt your system to your standards.

In other words, we offer many solutions as individual components. As well as compact solutions as a cabinet system or as solutions in a fixed or mobile base cabinet.

With our dispenser-arm solutions you are flexible when you have to fill your vessels.

Different water qualities from one system are possible, that is efficient and saves costs.

Your requirements in the laboratory are changing: no problem, we can retrofit our Berrytec series on many models.

## ADVICE AND SERVICE

With the right choice of your water system we will not leave you in the dark. We analyze the best system for your application for free.










We take the following parameters into account:

- feed water quality
- Your laboratory application
- water demand
- Financial framework
- Variants








































Request the free test kit from us or one of our distributors. Fill in the questionnaire and send back the enclosed sample tube with your feed water.

Maintenance, such as changing subsequent cleaning cartridges, UV lamps and filters, is customer-friendly and can be done by the user. This saves costs.

Ask us, we help you to choose the right system.

-  **Pre-Softening**  
To increase the service life of your osmosis modules
-  **Membrane degassing**  
For the reduction of carbon dioxide in the water, for example to reduce the conductance of the produced permeate
-  **Reverse Osmosis**  
The cost-effective method of producing laboratory water. Up to 98% deposition
-  **Electrodeionization**  
Recleaning stage after osmosis to produce water of less than 1 µS / cm
-  **Ultrapure water**  
The royal class of water quality
-  **UV radiation**  
Against standstill contamination
-  **Ultrafiltration**  
Removal of pyrogens and DNA
-  **Ion exchanger**  
Removal of inorganic ions
-  **Adsorption**  
Activated carbon can be used to remove dissolved organic substances and chlorine

## MODEL OVERVIEW OF ALL SYSTEMS

Series	Production volume per hour	Adsorption and Deionization	Osmosis	EDI	Ultrapure water	UV	UF	Post-cleaning
Available options								
mini-RO	up to 24 ltr.							
mini-UP+	up to 20 ltr.							
RO	up to 60 ltr.							
EDI	up to 20 ltr.							
UP	up to 20 ltr.							
Kombi Klasse	from 5-20 ltr.							
Sutower	up to 36 ltr.							
Kompakt <sup>2</sup>	from 24 ltr. up to 500 ltr.							

<sup>2</sup> cabinet / cabinet model, also available as roll container

# ULTRAPURE WATER SYSTEMS TYPE I

What distinguishes ultrapure water systems from others?

First, one has to ask the question, what is the most important thing for the production of ultrapure water? Again, there are many components that must play together like a clockwork. In our opinion, however, there is one that stands out a little between the others, and we like to call them the „heart“ of the ultrapure water system, the filter cartridge. Ultimately, it ensures the optimum water quality through its quality, design and the combination of the right amount of resins, activated carbon and filters. That makes a good system! With our DUO-Pak cartridges we have found the balance in terms of these aspects in terms of the nature of the application spectrum and the service life.

In addition, the other components, such as UV lamp, ultrafiltration module, vacuum degassing, recirculation pump, valves, control, disinfection and removal, our same passion applies to quality and reliability.

Our philosophy is not yield at any price, but quality at a reasonable price. That's why we continue to work on our systems to optimize them.

Below is our selection guide, which ultrapure water system is right for you. We are happy to advise you, or one of our sales partners individually.

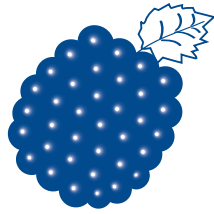
Models	Basic-model	Option	Option	Option	Basic-model	Option	Option	Basic-model	Option	Option
<b>Application</b>	mini-UP+	+UV	+UF	+ Dispenser	UP	+UV	+UF	Sutower	+UV	+UF
<b>Technology / Features</b>										
Daily amount 20 liters	20				20			20		
Daily amount 200 liters					200			200		
UV-Oxidation	Basis	+			Basis	+		Basis	+	
TOC <5ppb	Basis	+	+		Basis	+	+	Basis	+	
Cell culture	Basis		+		Basis		+	Basis		+
Electrophoresis	Basis		+		Basis		+	Basis		+
Preparation of monoclonal antibodies	Basis		+		Basis		+	Basis		+
Nuclease	Basis	+	+		Basis	+	+	Basis	+	+
Non-pyrogenic	Basis	+	+		Basis	+	+	Basis	+	+
Input monitoring	Incl.				Incl.			Incl.		
Volume dosage	Basis			+	Incl.			Incl.		
1 x remote dispenser	Basis			+	Incl.			Option		
Another remote dispenser					Option			Option		
Underbench installation	Ja			+	Incl.					
Interface	Nein				Option			Incl.		
Printer	Nein				Option			Option		
IQ/OQ	Nein				Option			Option		
Reverse osmosis	Nein				Option			Incl.		
EDI	Nein				Option			Option		
Feed tap water	Nein				Option			Ja		
Feed pretreated	Ja				Option			Nein		

Explanations:

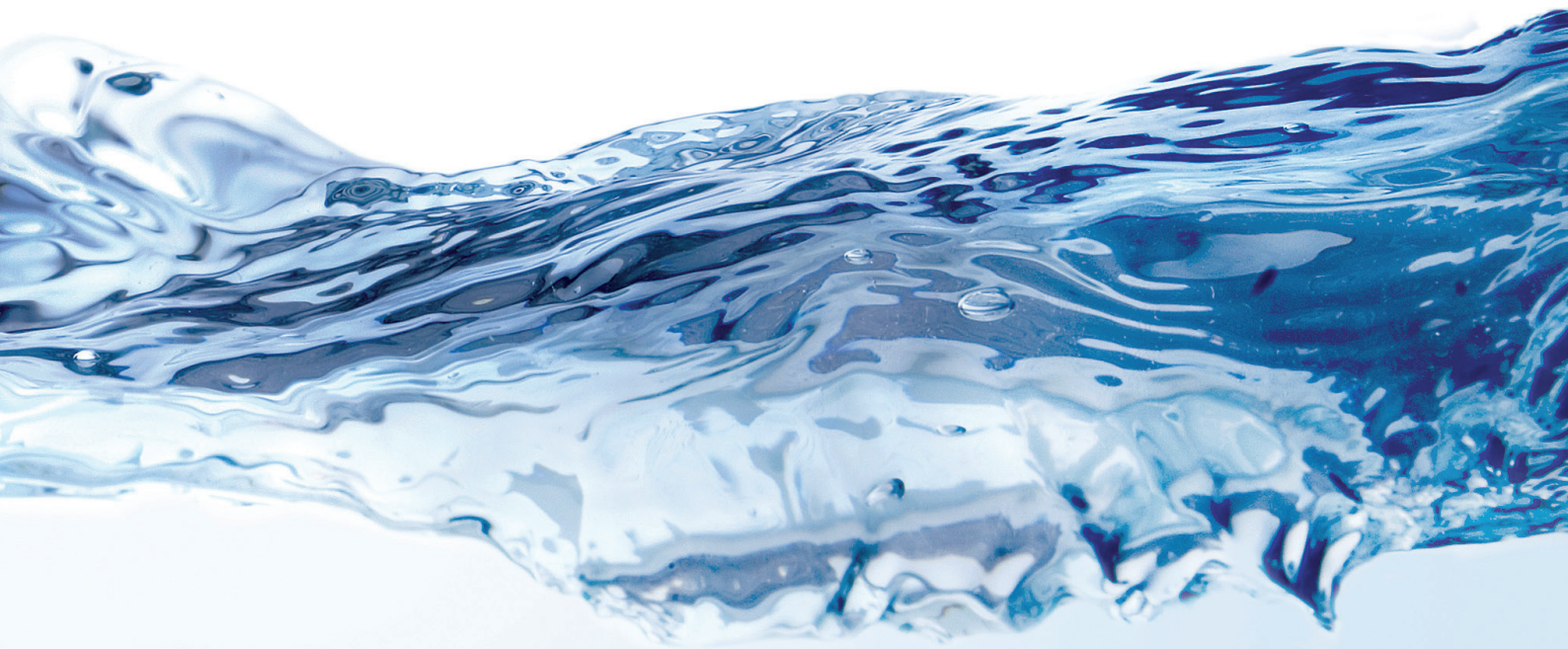
Incl. = possible with the system;  
 Basic = belongs to the corresponding model as standard equipment;  
 + = where marked, it is possible or for an extra charge  
 option = available at extra cost







Berrytec®



# THE NEW SUTOWER

We have designed our new Sutower as a smart solution for perfect integration into your laboratory. It combines the advantages of our existing plant concepts and leaves nothing to be desired in terms of performance and quality. You can adjust your water requirements in the class ASTM I and/or ASTM II, as well as III with a daily volume of up to 600 litres, depending on which configuration you choose. Our Sutower can be perfectly integrated into your laboratory with only a width of 565mm and you can choose the housing design partly in your desired RAL colour (for a small surcharge).

Our Sutower combines the advantages of our combi class in a compact system, but with an integrated PP tank of 100 liters volume. The dimensions have been chosen to fit comfortably into a gap of at least 570mm in your laboratory.

And we've managed to get the technology in the housing, right up to our high-performance feed pump with 66 litres per minute. With this you have the optimal supply for your laboratory, for example for 2 dishwashers and autoclaves, and ultrapure water extraction. All we need is a water connection, an outflow of at least DN30 and a current of 110-230V. The Sutower can be set to rolls or on a pedestal to place it in your laboratory line. Your floor remains free from further pumps, cartridges, cables and lines. A real pleasure for your cleaning team.

The performance spectrum of our sutower extends up to a daily volume of 600 litres, no matter whether you want to supply it in quality I, II or III. With the integrated feed pump, you can connect several devices directly via an external distribution system and maintain a supply pressure of up to 2bar at all times.

The Sutower is selectable in different equipment variants, depending on your needs. You can choose between osmosis in different production quantities up to 36Ltr./h and in addition optionally an electrodeionization unit for post-cleaning.

Depending on your tap water, we produce permeate qualities between 5-12 $\mu$ S/cm, which are then individually cleaned via our berrypureR purification cartridge to 0.08 $\mu$ S/cm. Alternatively, you can opt for an EDI unit for post-cleaning, which will save you the cost of consumable material in the post-cleaning stage.

No matter what you choose, with our Sutower you have made the right choice. In addition, you have the possibility to produce 0.055 $\mu$ S/cm ultrapure water with the Sutower.



But here too our motto is better is more:

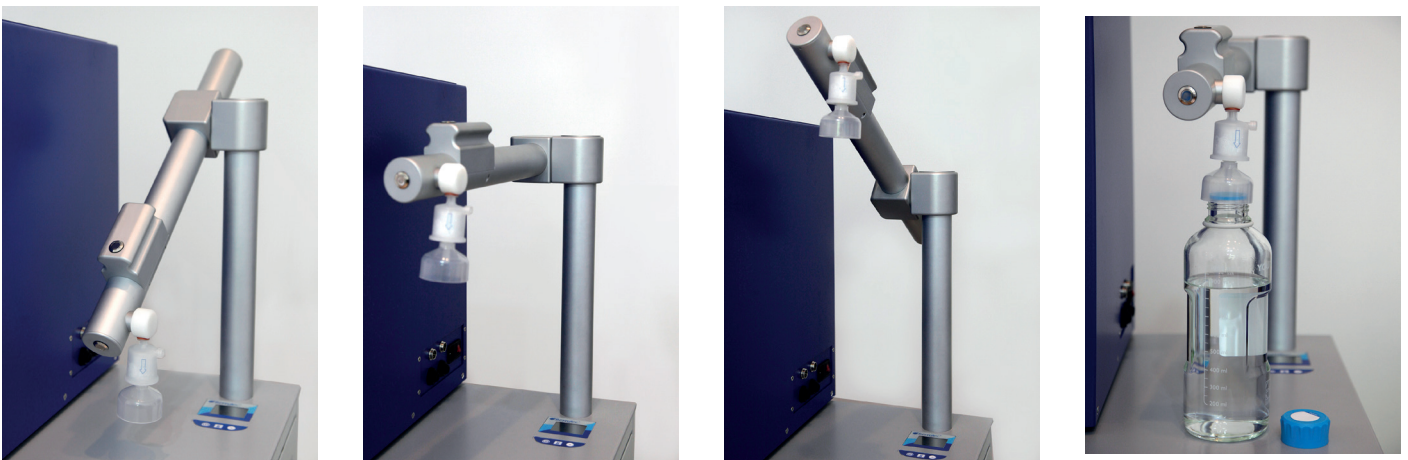
More performance 2.0 ltr./min. and 2 x DUO-PAK cleaning cartridges, which means significantly longer service life for you than with most of our competitors.

- For daily quantities of 20-500 ltr. ultrapure water
- More features and options available
- More convenience in operation
- Easy handling with our Easy dispenser arm
- UV lamp Dual for a low TOC value (see data sheet)
- Ultrafiltration module UF for lowest endotoxin, RNase and DNase values (see data sheet)
- TOC measurement module optionally available with new quartz spiral measurement technology, with values from 1.2-100ppb (calibratable)
- Premium touch screen control for easy operation to keep an eye on the essential data
- Documentation module for data recording gives you the important information about the status of your plant.
- Network module optionally available

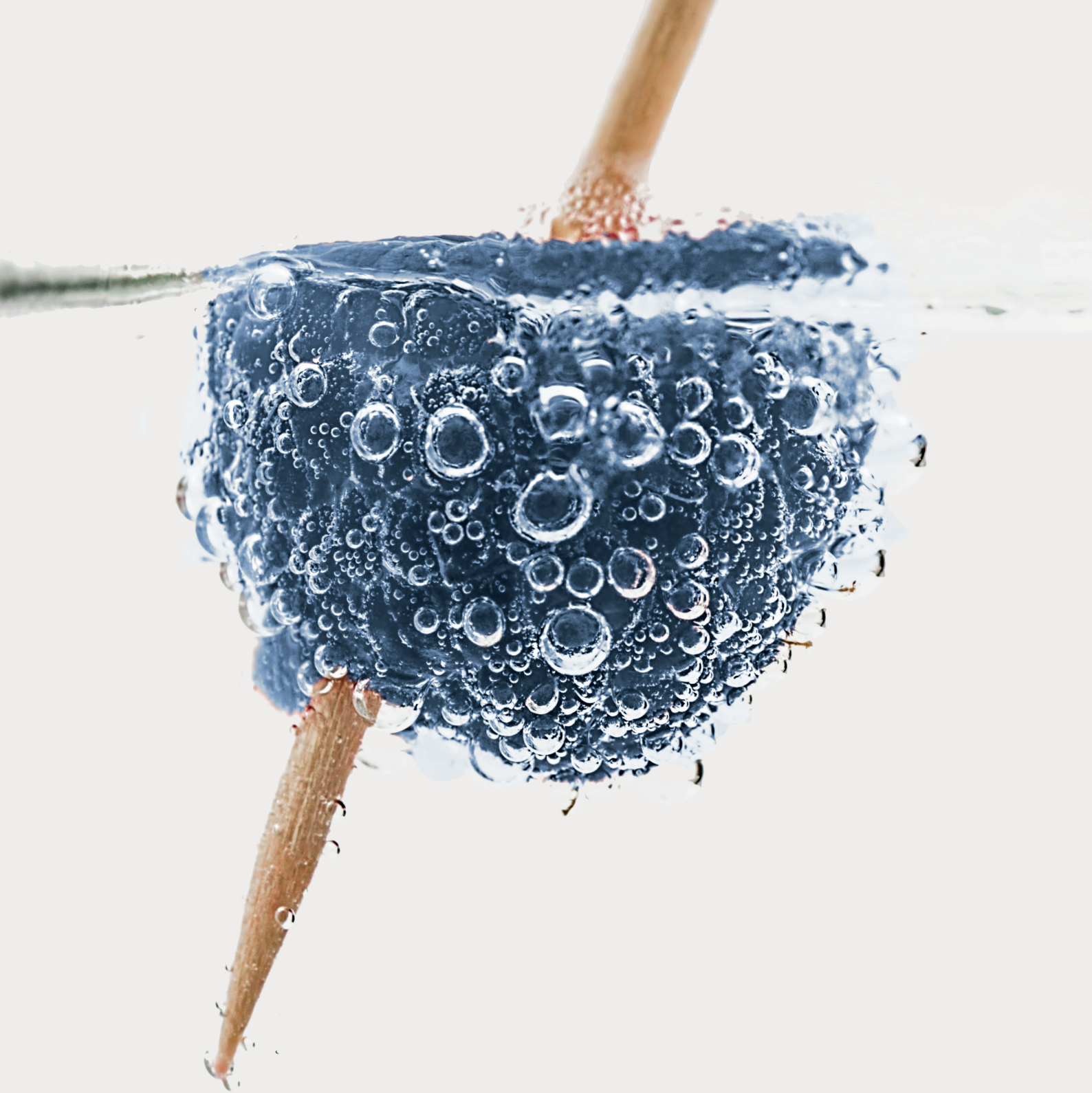
On our „Overdeck“ at a height of 900-1000mm (depending on the model) our solid Easy Dispenser Arm, made of aluminium, is fixed installed. Here you can extract ultrapure water from 0.01-99.9 litres volume-exactly and with our „drop function“ also quite comfortably drop by drop. We thus offer you absolute comfort when filling your bottle size. You simply place the Easy dispenser arm in the desired position and leave it there. It is not necessary to tighten it with a screw or pushbutton, no matter whether you want it in 60mm or 560mm for filling your bottles. In addition, up to 3 additional Dispenser Easy Arms can be installed and connected at different locations in your laboratory. So you always have ultrapure water available at different locations.

This gives you the greatest possible flexibility in your laboratory supply and saves you time and walking distances.

Of course, our Sutower is also equipped with our Easy Dispenser Arm. Smooth movement, with one hand you bring the swivelling end filter into the correct position, self-adjusting to the individual height of your bottle. Then you either trigger the removal process manually on the two buttons or set the desired volume on the control panel. Here, too, all parts are made of solid aluminium alloys with plain bearings, so you will still be able to enjoy your system in 20 years' time.



EASILY ADJUSTABLE EASY DISPENSER ARM; REMAINS FIXED AT ANY HEIGHT



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