

# COMPONENTS

FOR ALL BRUSH EQUIPMENT



# SYSTEM COMPONENTS FOR YOUR CLEANING DEVICE

# OUR SYSTEM CLEANING DEVICE

L

LR-180-GTR



C

SOLA-TECS C



W

SOLA-TECS W



Each system component has a label L, C, W. This indicates the cleaning device for which this component can be used.

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**SOLA-TECS C**

SPLASH GUARD, TO STAY DRY



The SOLA-TECS C splash guard, with high-quality professional finish, is an essential piece of equipment. It can be fitted from either side by simply “clicking” it onto the SOLA-TECS C.

This ensures improved rinsing and prevents dirty water – picked up by the wind, for example – from contaminating the already cleaned PV modules. The user is also protected from splashing water when cleaning at short range.

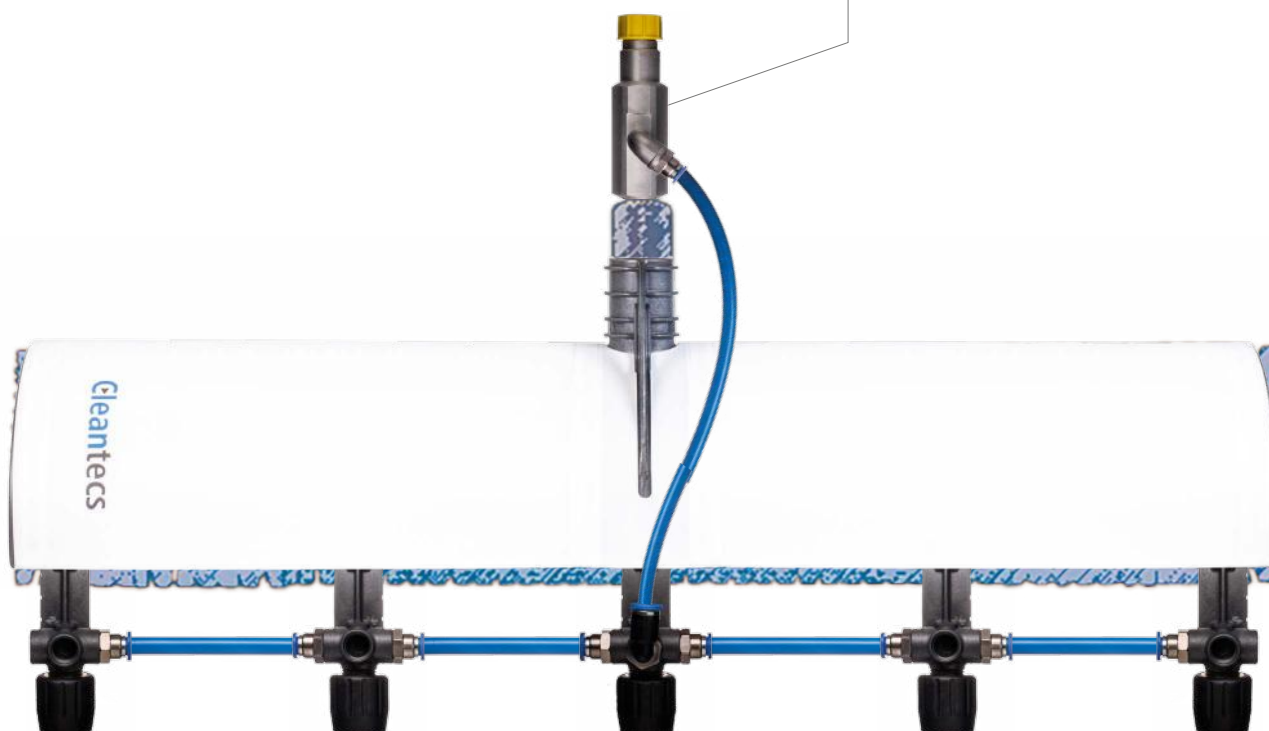


Splash guard	C600	C800	C1000
Width	620 mm	820 mm	1,020 mm
Item. no.	0200866	0200868	0200870



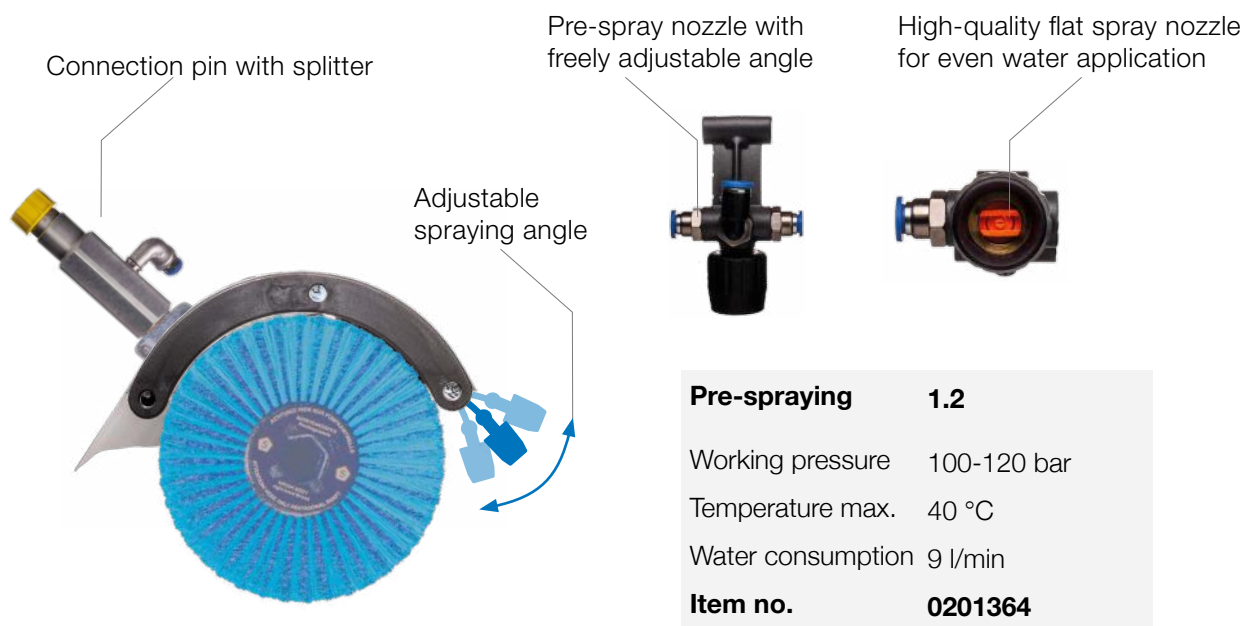
## PRE-SPRAYING FOR HEAVY SOILING

## ACCELERATED CLEANING PROCESS



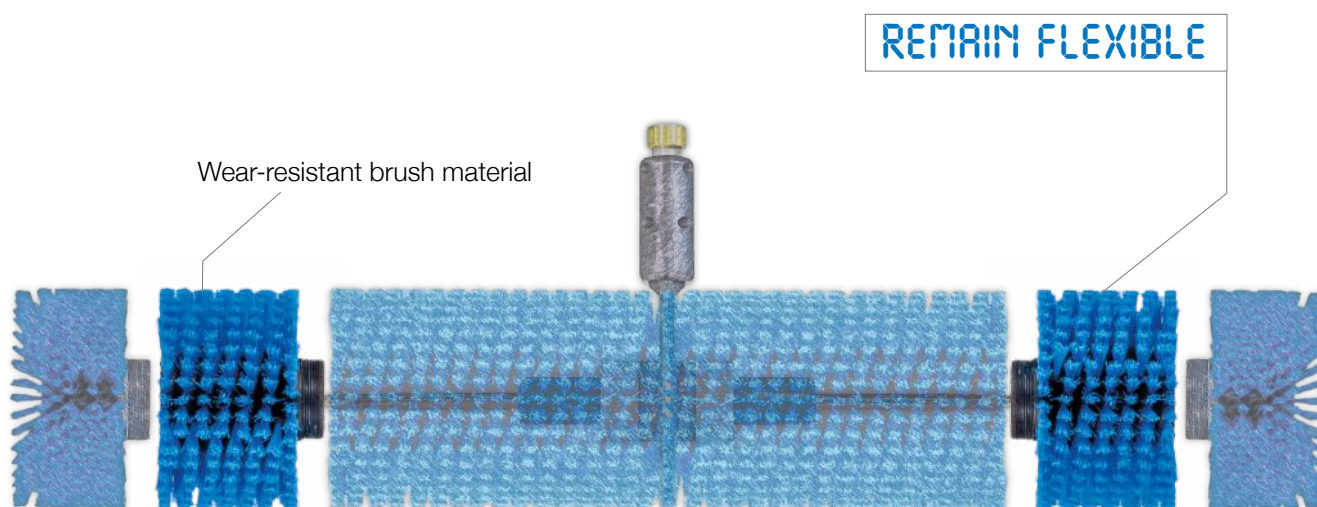
For our SOLA-TECS C splash guard, we offer an extension for pre-spraying the modules to be cleaned. This extension allows you to pre-treat the surfaces with water in case of heavy soiling. In doing so, you remove dirt quicker, thereby speeding up the cleaning process. This is also a clear advantage when cleaning vertically, as the water is distributed more evenly from top to bottom.

“It can be attached to all SOLA-TECS C splash guards of different sizes.”

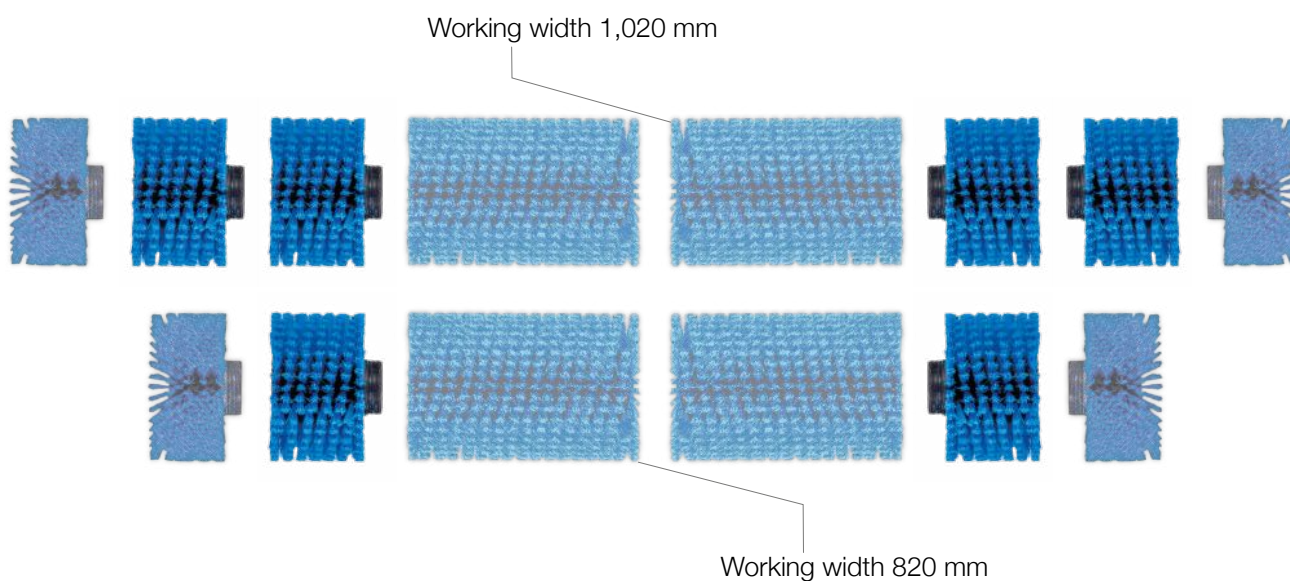




## BRUSH EXTENSION SET FOR ADJUSTING THE WORKING WIDTH



The brush roller consists of individual units that are 10 cm wide. These allow the SOLA-TECS C to be made bigger or smaller as required. The user can adjust the brush roller to widths of 620-1,020 mm, based on local conditions.



<b>Extension</b>	<b>2 x 100 mm</b>
Length	100 mm
Max. temperature	40 °C
Diameter	160 mm
<b>Item no.</b>	<b>0201354</b>

## CONNECTION PIN FOR WATER REDUCTION



In all SOLA-TECS C we use a 9 l/min nozzle as standard. This means a water flow of 9 litres per minute at a water pressure of 100 bar.

Water consumption can be cut from approx. 9 l/min to 5 l/min by adjusting the nozzle (connection PIN). This not only ensures the device is environmentally friendly, but also opens up new possibilities when it comes to the use of water filters such as osmosis or DI resin filters.

However, it should be noted that lower flushing power can extend the working time accordingly, because the higher the water output, the better the flushing effect. For cleaning with a reduced water flow, we offer a 5 l/min nozzle for the SOLA-TECS C600 and C800 and a 7 l/min nozzle for the SOLA-TECS C1000.

Connection PIN	0.9	1.1
Working pressure	100-120 bar	100-120 bar
Temperature max.	40 °C	40 °C
Water consumption	5 l/min	7 l/min
<b>Item no.</b>	<b>0201552</b>	<b>0201550</b>

## SWIVEL JOINT FOR HORIZONTAL CONTROL



PROVIDES MANOEUVRABILITY

The SOLA-TECS C is easy to control using a swivel joint. This is a flexible connection between the brush and the lance bow. When you turn the pole, the brush angle changes. The advantage is that the final module row is not cleaned laterally but at an angle of up to 12°.

When cleaning the edge of the roof, there is always a risk of the brush going over the edge. Given the length of the pole and the leverage forces which occur, it is then difficult to retrieve the brush again. This problem is prevented by the swivel joint. Use it to slant the brush slightly for cleaning the last module row.

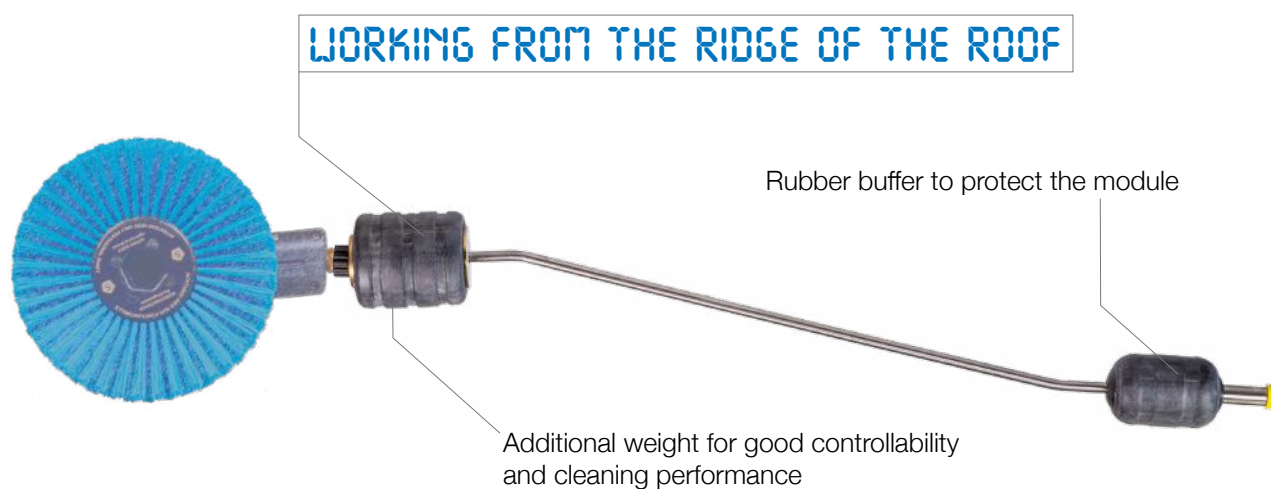
In addition, the swivel movements allow sideways movement from module to module without any great physical exertion. This allows maintenance walkways to be bridged seamlessly.

The swivel joint can be set to three swivel ranges of 0°, 30° and 60°. This corresponds to an angle of 0°, 7° and 12° on the brush.

**Swivel joint**

Max. operating pressure	140 bar
Max. temperature	40 °C
Connection	M 22 x 1.5 outer thread
Outlet	M 22 x 1.5 inner thread
<b>Item no.</b>	<b>0200815</b>

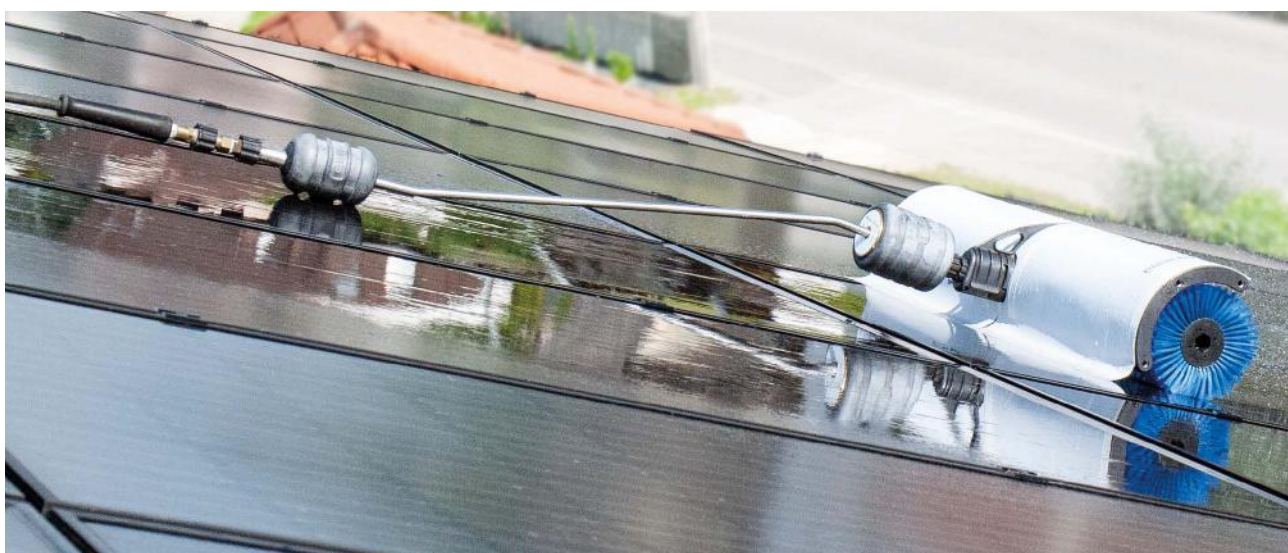
## PENDULUM TUBE – EXPANDING THE WORK RADIUS



A limited working area is an issue which comes up time and again. The SOLA-TECS C can be lowered from the ridge by adding a pendulum tube to the high-pressure hose.

This extends the operating range far beyond the reach of a lance and allows much more flexibility when using the SOLA-TECS C. This makes cleaning possible without changing location.

An additional weight ensures sufficient pressure on the rotary brush and prevents streaking.



<b>Pendulum tube for SOLA-TECS C</b>	
Weight	4,300 g
Length	1.1 m
<b>Item no.</b>	<b>0200285</b>

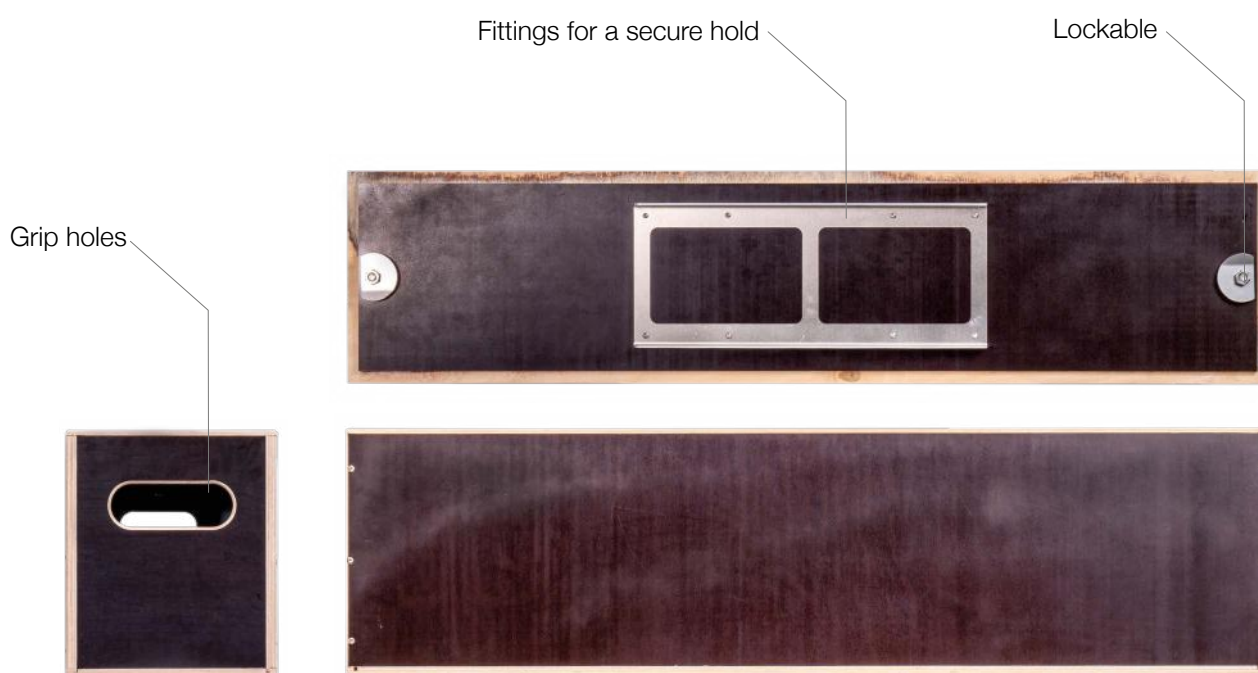


## TRANSPORT BOX FOR SAFE TRANSPORT

## SAFE TRANSPORT



A transport box for all SOLA-TECS C models! This practical transport box has been equipped with stable aluminium fittings on the interior to hold your SOLA-TECS C safely in place during transportation. The generous interior space combined with high stability are sure to meet even the toughest requirements. For maximum safety of the contents.

**Transport box**

Material	Wood
Length	1,150 mm
Width	270 mm
Height	310 mm
Weight	15,000 g
<b>Item no.</b>	<b>0201052</b>

# POLE SYSTEMS

# SOLA-LITE POLE SYSTEMS FOR YOUR PV AND SOLAR CLEANING

Our huge range of SOLA-LITE pole systems up to 15 metres ensures that you can safely reach every part of your PV system. We use only carbon fibre poles, as they are significantly lighter than other materials and reduce bending. Maximum stability for your safety.



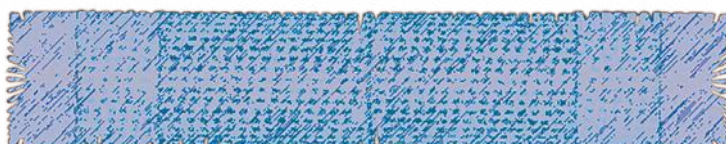


## TELESCOPIC LANCE SOLA-LITE VCTE



Telescopic tube made of CARBON

Flexy high-pressure hose included



Pin for correct locking

Isolator between the SOLA-TECS C and the lance

**SOLA-LITE****VCTE 12****VCTE 15**

Length

2.1 m

2.3 m

Range

12.0 m

15.0 m

Weight

2,800 g

3,500 g

Material

Full carbon

Full carbon

HP hose

incl.

incl.

Connection

M 22 x 1.5

M 22 x 1.5

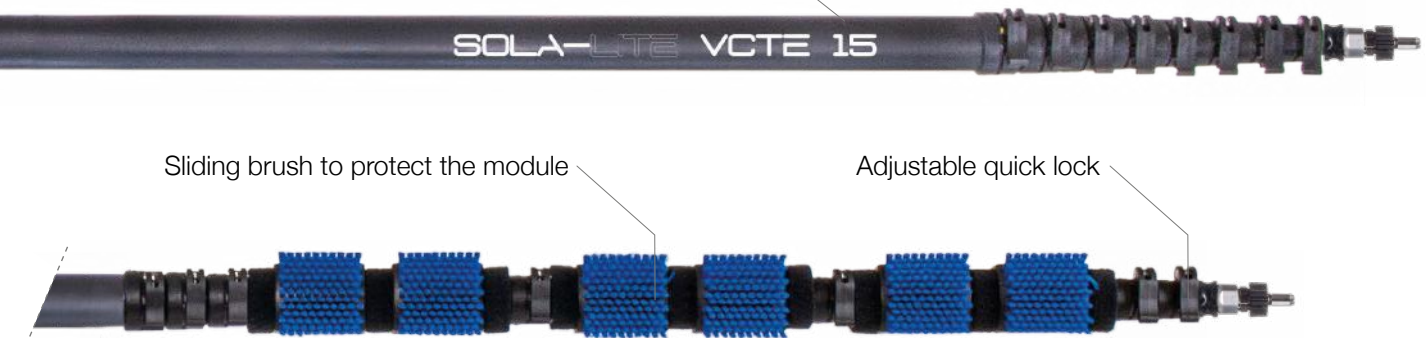
Sliding brush

incl.

incl.

**Item no.****0200799****0200802**

## COMPACT GIANT



With the SOLA-LITE VCTE telescopic lance you get a high-quality professional system made from 100 % carbon. We offer the system in two different lengths (12 m/15 m).

The advantage of these telescopic lances is that you can work at different heights with a single pole. Extend the pole by releasing the quick-release clip and pulling the internal pole out to its maximum length. The device ensures optimum working comfort thanks to an internal water supply.

You will receive an out-of-the-box rotating brush system with a matching lance bow and SOLA-TECS C. Our SOLA-LITE VCTE lances are equipped with a 25 m long internal high-pressure hose with a M 22 x 1.5 internal thread connection and a stand that prevents the high-pressure hose from kinking.



## MODULAR POLE SOLA-LITE VCMO 1.8

LIGHT AND STABLE



Fans of plug-in systems appreciate their advantages: great stability and low weight. The modular pole fully meets both these conditions.

The SOLA-TECS VCMO 1.8 is a single-module full carbon pole, 1.80 m in length. It is extremely light, stable and modular, weighing 520 grams. The poles can be easily combined to achieve the desired length.

The advantage of these modular poles is that they are very light and strong (rigid). The only weight to be carried is that of the required pole length. If you want to carry out all work to a professional standard using a pole system and prefer plug-in systems, this is the best choice.

To use the SOLA-TECS C with the modular pole, you will need a lance bow with an external water supply and an NW 6 high-pressure hose.

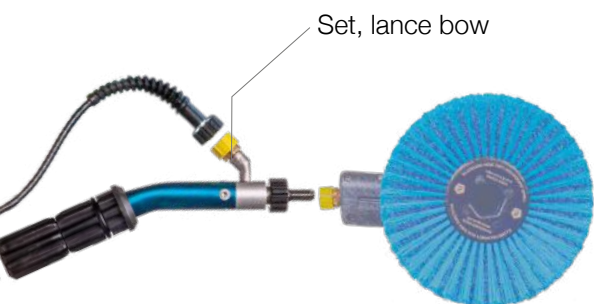






Modular CARBON pole

Hose bracket



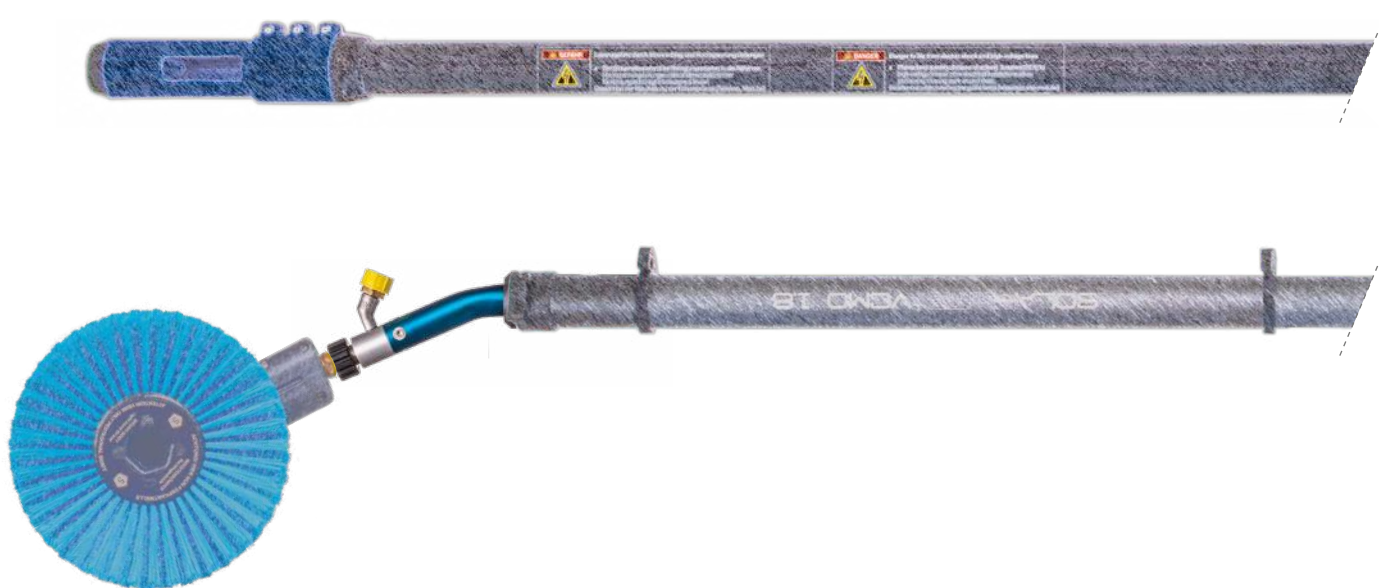
Set, lance bow

Set with pole bag  
Item no. 0500836



<b>SOLA-LITE</b>	<b>VCMO 1.8</b>	<b>VCMO 1.8 SET</b>
Quantity	1	8
Length	1.8 m	1.8 m
Range	from 1.8 m	13.0 m
Weight	520 g	520-4,500 g
Material	Full carbon	Full carbon
HP hose	no	incl.
Pole bag	no	incl.
Sliding brush	no	incl.
<b>Item no.</b>	<b>0200805</b>	<b>0200829</b>

## LANCE BOW FOR OUR LANCES



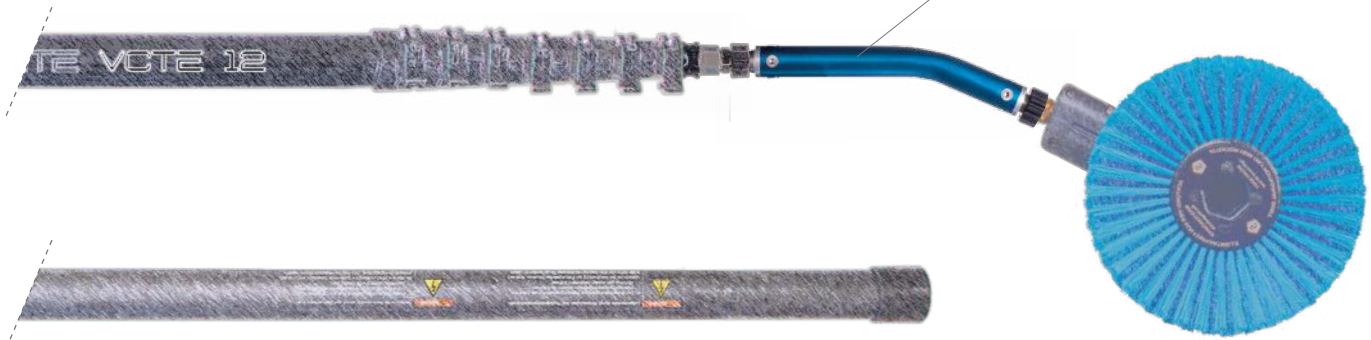
Our lance bows are made of robust yet lightweight aluminium. They are available in two versions: one with an internal water supply for our telescopic lances and one with an external water supply for our modular poles.

The lance bow enables the SOLA-TECS C to be mounted quickly and easily directly onto the lance bow. With a 180° turn of the brush, you can change the direction of rotation of the SOLA-TECS C in seconds without the need for tools.

The lance bow is ideal for cleaning PV systems. It ensures the optimum distance between the lance and the panels and thus prevents damage to the lance and the PV system. The resulting direct pressure on the brush also has a positive effect on the result.

Lance bow	VCTE	VCMO cranked
Weight	400 g	500 g
Angle	30 °	30 °
Material	Aluminium	Aluminium
<b>Item no.</b>	<b>0200274</b>	<b>0200277</b>

PROVIDES SPACING



Lance bow for telescopic lance  
VCTE

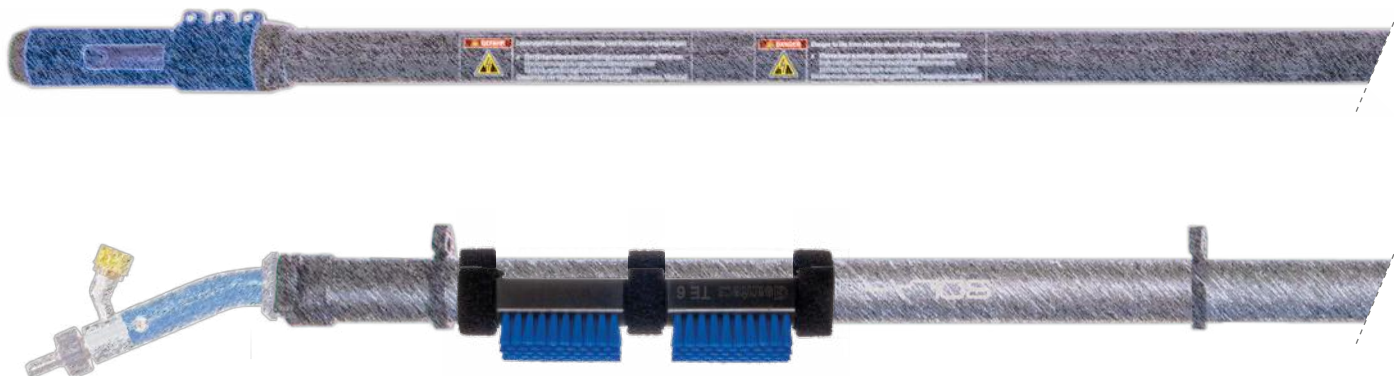
Anti-twist device to prevent  
the cleaner from coming off the  
lance.



Lance bow for modular lance  
VCMO cranked



## SLIDING BRUSHES

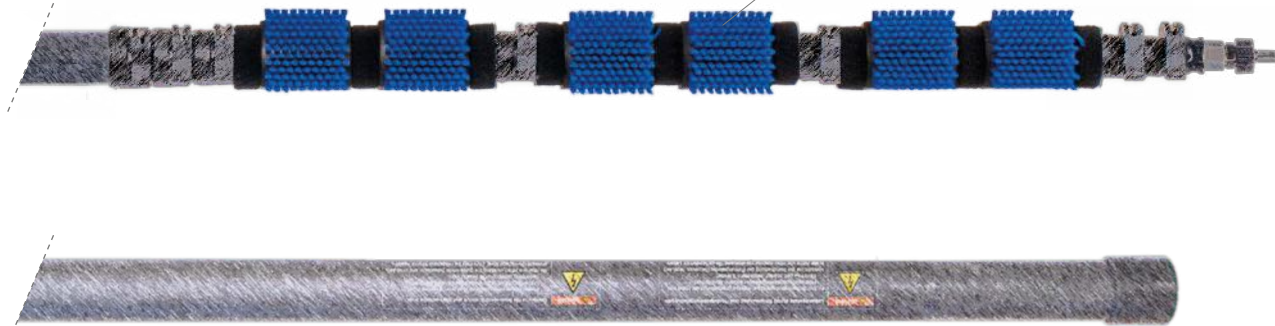


Sliding brushes for our pole systems. These sliding brushes are attached to the poles with Velcro straps so that the pole does not damage the modules if it bends. 3 pieces are included in delivery. Available in two different versions, for modular poles and telescopic lances.

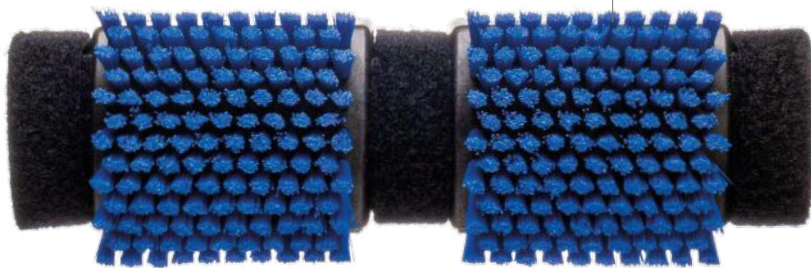
Sliding brush	VCTE	VCMO
Weight	500 g	500 g
Length	150 mm	150 mm
Width	45 mm	45 mm
Material	Aluminium	Aluminium
Scope of delivery	3 pieces	3 pieces
<b>Item no.</b>	<b>0200828</b>	<b>0200827</b>



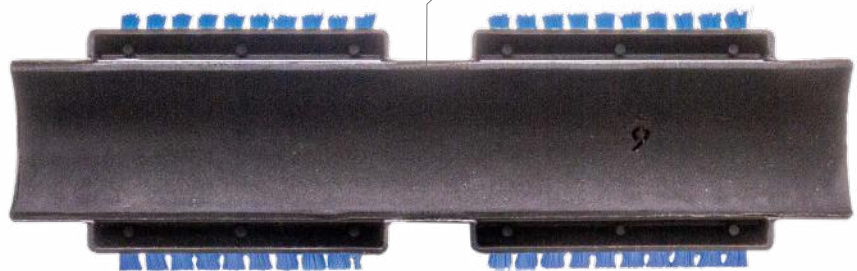
## MODULE PROTECTION



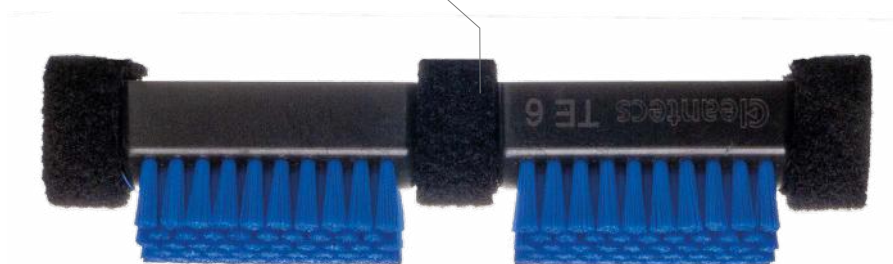
Wear-resistant brush material



Anti-slip coating  
for good grip



Velcro for quick attachment



## SOLA BRUSH



<b>SOLA Brush</b>	<b>400</b>	<b>580</b>
Operating pressure	50 bar	50 bar
Max. temperature	60 °C.	60 °C.
Width	400 mm	580 mm
Weight	1,500 g	2,000 g
Connection	M 22 x 1.5 outer thread	M 22 x 1.5 outer thread
<b>Item no.</b>	<b>0200813</b>	<b>0200814</b>



## THE UNIQUE ONE



The manual SOLA Brush has been specially developed for PV and solar panel cleaning.

The optimum hardness of the bristles and a specially developed high-pressure nozzle ensure optimum removal of dirt and moss around the frame area. The nozzles are internal and spray directly onto the soiled surface.

Thanks to the adjustable angle joint, the ergonomic mode of operation and the optimal support of the brush can be individually adjusted. It is the perfect complement to the SOLA-TECS C rotary brush and can be replaced in just a few seconds.

The SOLA BRUSH is available in 40 cm and 58 cm widths.

## ADAPTER FOR ACCESS TO OUR SOLA-TECS C SYSTEM



Do you already have a pole system from another supplier and would like to continue using it with our SOLA-TECS C system and its associated components? No problem! Whether UNGER or KÄRCHER – we offer you secure connection with an adapter from Cleantecs.

The adapters are delivered with an 25 m flexy high-pressure NW6 hose. So you can get started straight away.

Manufacturer	Unger	Kärcher	Unger	Cleantec	Unger
Lances model	CarbonTec	TL	HiFlo Advance	-	HiFlo nLite
Operating pressure	100-120 bar	100-120 bar	100-120 bar	100-120 bar	100-120 bar
Max. temperature	60 °C	60 °C	60 °C	60 °C	60 °C
Weight	420 g	230 g	340 g	360 g	350 g
HP hose	incl.	-	incl.	incl.	incl.
<b>Item no.</b>	<b>0200848</b>	<b>0200838</b>	<b>0200847</b>	<b>0200837</b>	<b>0200846</b>

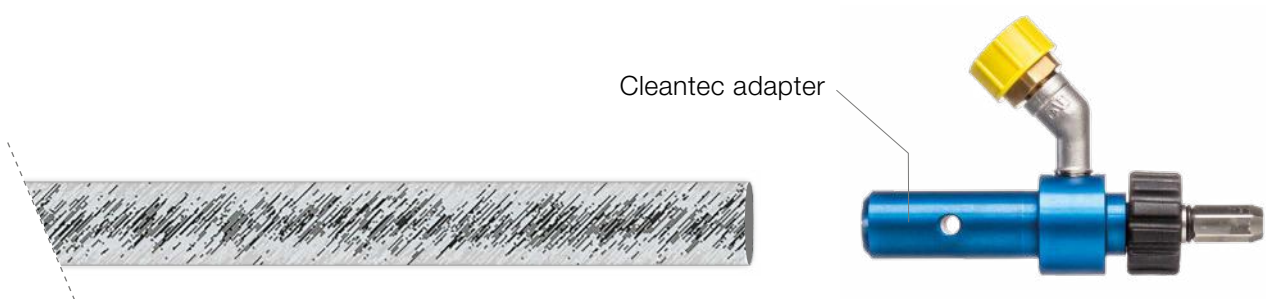
Kärcher TL adapter



Unger HiFlo Advance adapter



Cleantec adapter



Unger HiFlo nLite adapter





## SPLASH GUARD TO STAY DRY

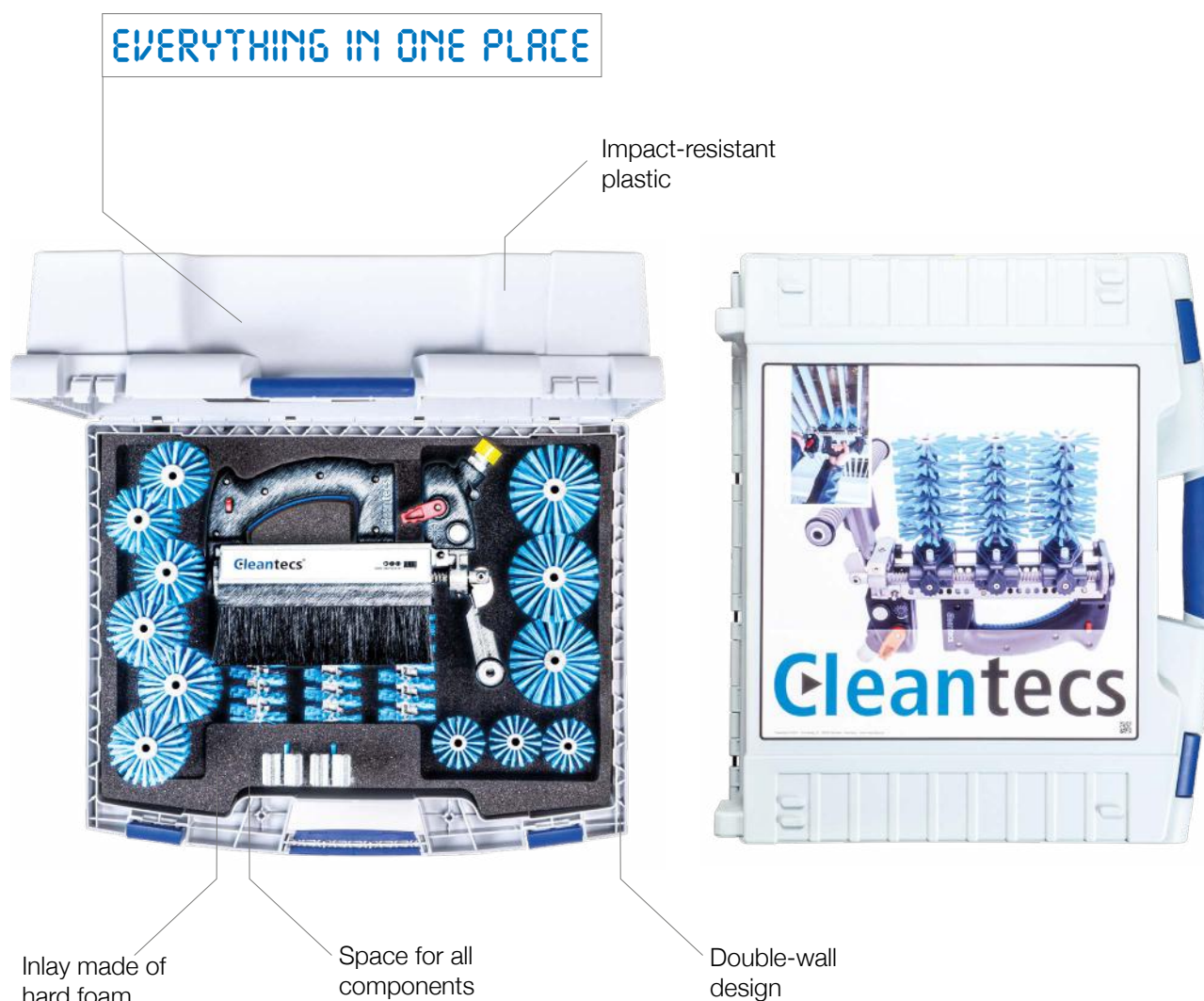


A splash guard is available to protect you from splashing water and keep you from getting wet when working with the LR-180-GTR lamella cleaner. Loosen the handle to attach the splash guard in just a few seconds.

It is as quick to remove again as it is to attach. This is particularly important in the case of a deep window reveal, where the splash guard could get in the way. This way you will always have flexibility!

Item	Splash guard
Weight	250 g
Item no.	0200918

## FOR SAFE TRANSPORT



For maximum safety of the contents.

The functional and extremely reliable transport case with precisely fitting inlay made of hard foam offers space for the lamella cleaner, all brush sizes and the splash guard.

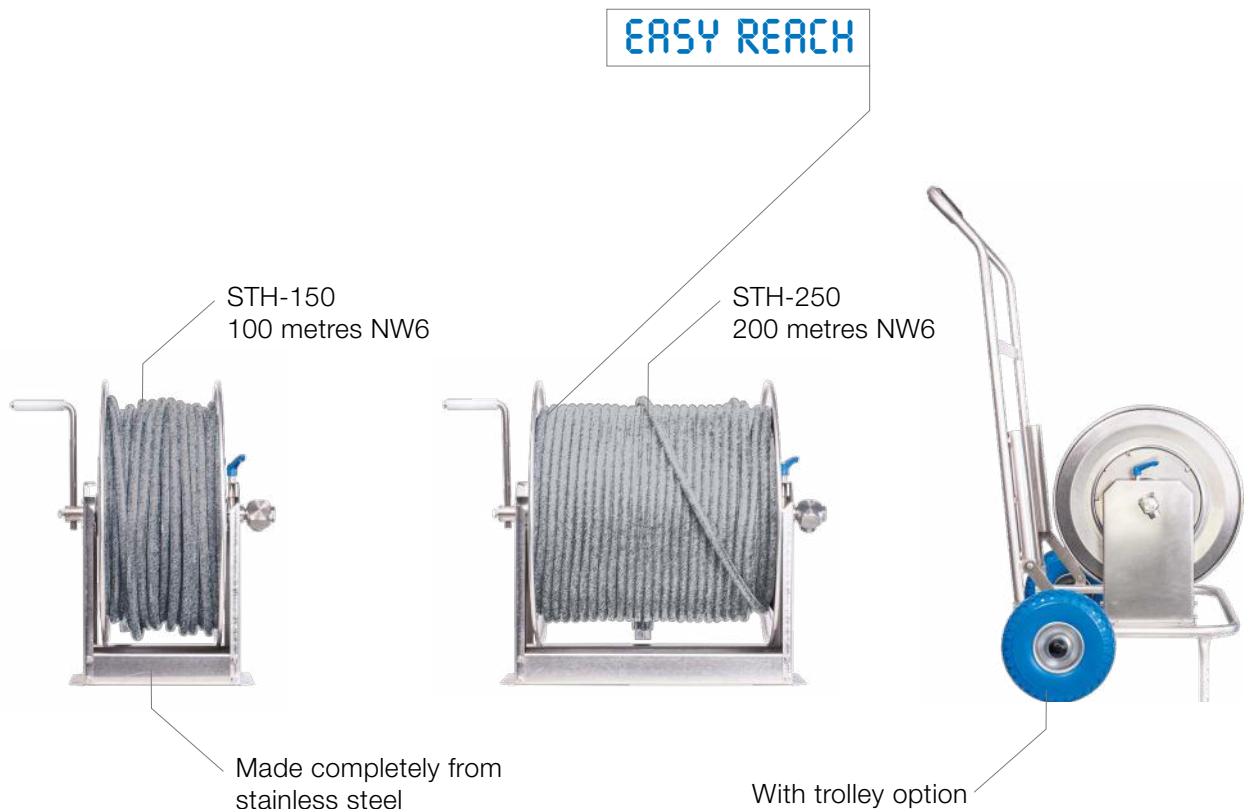
The contents of your case are optimally protected by the unique double-wall construction and all-round sandwich design, which gives the plastic case maximum stability.

Item	Transport case
Size	570 x 550 x 270 mm
Weight approx.	2,000 g
Item no.	0201603



# WATER SUPPLY

## ROBUST HOSE REEL



The robust, high-quality stainless steel hose reel for your high-pressure hoses is manoeuvrable with the trolley and easy to operate, just like a hand truck. We have fitted extra large wheels for use on rough terrain. The reel has an almost closed steel plate hub and is guided through maintenance-free plastic bearing bushes. An adjustable hand crank with a free-running polyamide handle is used to turn the reel. A mechanical brake integrated into the bearing enables finely adjusted braking of the reel up to the stop point.

Available in 2 sizes, with or without trolley.

Hose reel	STH-150	STH-250
Material	Stainless steel	Stainless steel
Max. pressure	300 bar	300 bar
Max. temperature	90 °C	90 °C
Max. load capacity	100 kg	100 kg
Max. hose length NW 6	100 m	200 m
Max. hose length NW 8	75 m	125 m
Max. hose length NW 10	50 m	100 m
L x W x H	460 x 450 x 460 mm	480 x 465 x 515 mm
Weight	5,000 g	11,000 g
L x W x H (+ trolley)	800 x 570 x 1,150 mm	650 x 700 x 1,175 mm
Weight (+ trolley)	19,000 g	20,000 g
Connection	M 22 x 1.5 outer thread	M 22 x 1.5 outer thread
<b>Item no.</b>	<b>0201540</b>	<b>0201541</b>
<b>(Item no. incl. trolley)</b>	<b>0201542</b>	<b>0201544</b>



With an additional high-pressure hose, you can vastly extend the range of operation of your SOLA-TECS. We deliver all listed high-pressure hoses with a hose connector so that you can extend your high-pressure hoses as desired. Suitable for professional use due to the robust and stable workmanship.

Our flexy® high-pressure hoses are highly flexible, very light and have excellent gliding properties to make your work much easier. For these reasons, we also use only flexy® high-pressure hoses for our SOLA-LITE lance systems.

High-pressure hose	Flexy NW 6	Flexy NW 6	Flexy NW 6	Flexy NW 6
<b>Length</b>	<b>25 m</b>	<b>25 m</b>	<b>100 m</b>	<b>200 m</b>
Lance	VCMO	VCTE	-	-
Max. pressure	300 bar	300 bar	300 bar	300 bar
Max. temperature	60 °C	60 °C	60 °C	60 °C
Nominal diameter	NW 6	NW 6	NW 6	NW 6
Connection	M 22 x 1.5 inner thread	M 22 x 1.5 inner thread	M 22 x 1.5 inner thread	M 22 x 1.5 inner thread
Outlet	M 22 x 1.5 outer thread	G1/4" outer thread	M 22 x 1.5 outer thread	M 22 x 1.5 outer thread
Hose connector	no	no	no	no
<b>Item no.</b>	<b>0500837</b>	<b>0500351</b>	<b>0501822</b>	<b>0501899</b>



High-pressure hose	NW 8	NW 8	NW 8	NW 8	NW 8	NW 8
<b>Length</b>	<b>25 m</b>	<b>35 m</b>	<b>50 m</b>	<b>75 m</b>	<b>100 m</b>	<b>125 m</b>
Max. pressure	210 bar	210 bar	210 bar	210 bar	210 bar	210 bar
Max. temperature	150 °C	150 °C	150 °C	150 °C	150 °C	150 °C
Nominal diameter	NW 8	NW 8	NW 8	NW 8	NW 8	NW 8
Connection	M 22 x 1.5 inner thread	M 22 x 1.5 inner thread	M 22 x 1.5 inner thread	M 22 x 1.5 inner thread	M 22 x 1.5 inner thread	M 22 x 1.5 inner thread
hose connector	incl.	incl.	incl.	incl.	incl.	incl.
<b>Item no.</b>	<b>0200896</b>	<b>0200897</b>	<b>0200898</b>	<b>0200899</b>	<b>0200900</b>	<b>0200901</b>

High-pressure hose	NW 10	NW 10	NW 10	NW 10
<b>Length</b>	<b>10 m</b>	<b>50 m</b>	<b>75 m</b>	<b>100 m</b>
Max. pressure	210 bar	210 bar	210 bar	210 bar
Max. temperature	150 °C	150 °C	150 °C	150 °C
Nominal diameter	NW 10	NW 10	NW 10	NW 10
Connection	M 22 x 1.5 inner thread	M 22 x 1.5 inner thread	M 22 x 1.5 inner thread	M 22 x 1.5 inner thread
hose connector	incl.	incl.	incl.	incl.
<b>Item no.</b>	<b>0200902</b>	<b>0200903</b>	<b>0200905</b>	<b>0200906</b>

**WATER FILTER**



## RESIDUE-FREE CLEANING WITH ULTRA-PURE WATER

There are many different names for the artificially created water known as “purified water”. Be it demineralised water, fully demineralised water, partially demineralised water, deionised water, or DI water.

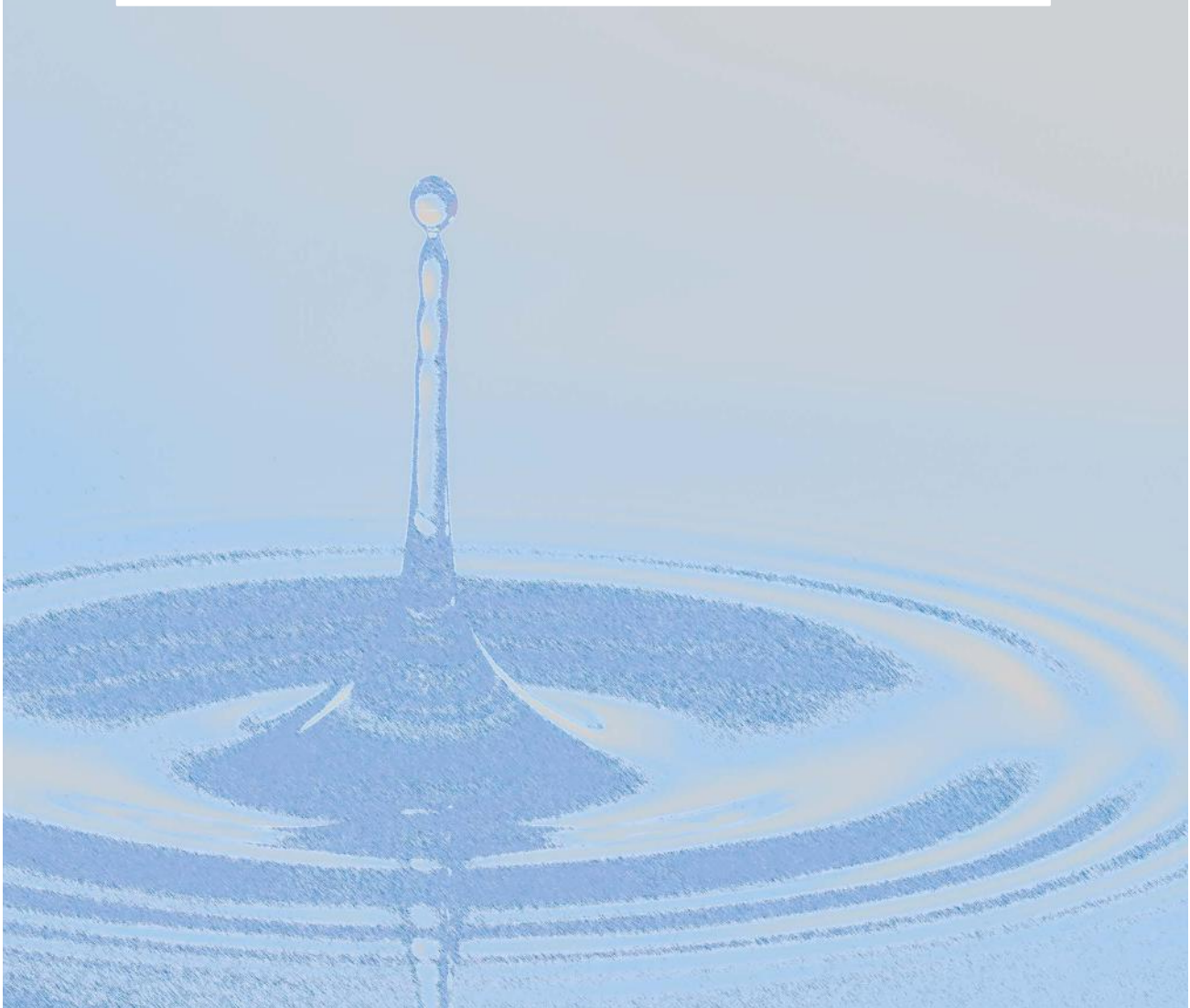
All of these terms refer to “purified water” – that is to say: water with the lowest number of dissolved substances (ions), which can adversely affect its quality. We offer two common processes for the production of “purified water”.

Fully demineralised water: In this process, ions are exchanged with the help of resin. During this exchange, almost all minerals are bound to the resin.

Partially demineralised water: In this process, the formation of limescale is reduced by lowering the degree of hardness.

In both processes, we attach additional filters to our products which filter additional particles from the water before and after.

This ensures a residue-free cleaning results on photovoltaic modules and glass surfaces.



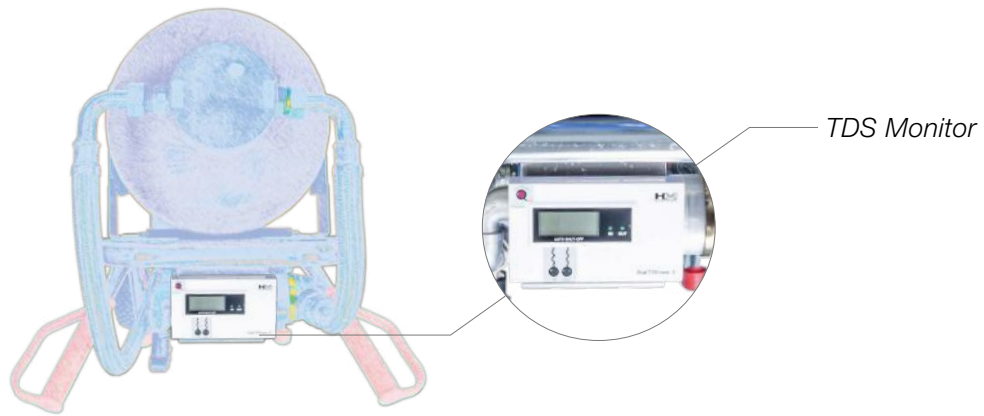


Residue-free cleaning requires “purified water”. Our resin filter instantly produces 100 % pure water, making it ideal for the residue-free cleaning of photovoltaic modules.

The scope of delivery includes a transport cart with large rubber rollers and two 1 µm fine filters. These catch large contaminants in the inflow and resin components in the outflow. This ensures that the photovoltaic modules are cleaned without leaving any residue.

<b>Water filter</b>	<b>DI resin filter 50 L</b>	<b>DI interchangeable bottle 50 L</b>
Operating pressure	10 bar	10 bar
Working capacity 10 °dH	8,000 litres	8,000 litres
Pure water quality	< 10 µS/cm	< 10 µS/cm
Height/diameter	120 cm/Ø 25 cm	113 cm/Ø 25 cm
Operating weight	80 kg	70 kg
Hose trolley	incl.	no
Connections	GEKA Plus	GEKA Plus
Operating position	vertical	vertical
<b>Item no.</b>	<b>0200272</b>	<b>0200273</b>





A TDS meter is installed to determine the water quality. This measures the water conductivity at the water inlet and outlet with precision. We have fitted a water meter to monitor the flow rate.

If your mixed-bed resin is worn out, you can replace it yourself. We offer a starter set with an auxiliary device, transport containers and reusable mixed-bed resin for this purpose. You can, of course, also have the mixed-bed resin replaced by a service provider on site.



## COMPLETE SYSTEM FOR GENTLE CLEANING BY PARTIAL DEMINERALISATION



The WF1200 Clean partial demineralisation filter is ideal for the professional cleaning of blinds in water with high water hardness, but with a non-critical level of mineral in the untreated water.

The filter system housing is made of metal and is therefore very robust. Changing the filter is extremely easy because the housing is locked by a bayonet catch. This allows you to change the filter cartridge on site in just a few minutes.

Water filter	WF12000 Clean
Demineralisation	Partial demineralisation
Working capacity 10 °dH	12,000 litres
Max. operating pressure	6 bar
Operating temperature	4-60 °C
Nominal flow rate	up to 700 l/h
Pressure loss at nominal Ø	0.45 bar
Dimensions (height/Ø)	550/288 mm
Weight (dry/wet)	18 kg/24 kg
Connections	GEKA Plus
Operating position	vertical
<b>Item no.</b>	<b>0501094</b>
<b>Item no. replacement cartridge</b>	<b>0501092</b>



The prefilter is made of polypropylene string and filters even the finest particles from the water including sand, dirt, suspended matter, lime flakes, rust and, if necessary, discolouration. Due to its pore size, the wound filter does not allow particles larger than 1  $\mu\text{m}$  to pass through.

The water flows through the filter cartridges from the outer surface to the core. The winding density of the cartridges increases towards the core, so that the pores become finer and finer. Thus, coarser dirt particles are caught on the surface of the filter cartridge, while smaller particles are caught inside the core.

Item	Prefilter	Filter cartridge
Filter	1 $\mu\text{m}$	1 $\mu\text{m}$
Flow rate	20 l/min	20 l/min
Max. operating pressure	6 bar	-
Connection	GEKA Plus	-
Operating position	vertical	vertical
<b>Item no.</b>	<b>0200830</b>	<b>0500298</b>

## MIXED-BED RESIN



We supply disposable and reusable mixed-bed resins for full demineralisation which consist of a high-quality resin mixture. Full demineralisation is the complete removal of ionic compounds dissolved in the water to obtain water with a high degree of purity. The mixed-bed resin almost completely removes the dissolved components in the water and achieves a water conductivity of approx. 0.1  $\mu\text{S}/\text{cm}$ .

## Disposable resin



Disposable resin cannot be regenerated. Once the disposable resin has been used up, it can be disposed of with the residual waste.

Disposable resin	50 L	250 L
Litre	50	250
Bag	2 pieces	10 pieces
Item no.	0201441	0201442



STARTER KIT FOR REUSABLE MIXED-BED RESIN



The starter kit contains new resin in bags, regeneration shipping barrels and a funnel, plus protective caps for filling your filter cartridge.

Mixed-bed resin	REUSABLE 50 L	REUSABLE 100 L	REUSABLE 200 L	REUSABLE 400 L
Litre	50	100	200	400
Empty barrel 60 litres	2 pieces	3 pieces	5 pieces	9 pieces
Funnel	1 piece	1 piece	1 piece	1 piece
Protective cap	1 piece	1 piece	1 piece	1 piece
Item no.	0200831	0200832	0200833	0200834

Regenerated mixed-bed resin



Regenerated mixed-bed resin has a slightly lower capacity than new resin. Since we only accept regenerated mixed-bed resin from PV cleaning systems, we ensure that no foreign matter gets into the resin. This ensures that you receive only regenerated material of the highest quality.

Regeneration service: We offer a regeneration service for reusable mixed-bed resin. If your mixed-bed resin in the 50 litre DI resin filter is exhausted, you can exchange it. To do this, pour the exhausted resin into the barrel supplied with the STARTER KIT and send it to Cleantecs. We exchange the mixed-bed resin in your barrel for regenerated resin and return the barrel to you.  
**Note: You may only use the regeneration service if you have purchased a STARTER KIT!**

Mixed-bed resin	Regeneration
Litre	50
Item no.	0501842

Funnel and protective cap



For customers who wish to use disposable resin, we also offer a practical funnel with protective cap. This means you can fill the filter cartridge easily and prevent resin from getting into the riser pipe.

Item	Funnel + Protective cap
Funnel	1 piece
Protective cap	5 pieces
Item no.	0201641

**REMOTE CONTROL**

## WATER STOP

### THE HIGH-PRESSURE BALL VALVE FOR PV CLEANING



As an alternative to a radio remote control that interrupts the power supply to your high-pressure pump, the water stop allows you to interrupt the water supply to stop the rotation of the brush. It consists of a high-pressure ball valve mounted on a suction cup with a metal slide.

The suction cup allows the ball valve to be attached directly to a PV panel. We have added a metal slide for use on the floor or roof, so the water stop on the metal slide can be pulled back without damaging it.

Item	Water stop
Max. operating pressure	210 bar
Inlet	M 22 x 1.5 outer thread
Outlet	M 22 x 1.5 outer thread
Item no.	0200915

## RADIO REMOTE CONTROL – FOR MORE SECURITY AT THE TOUCH OF A BUTTON



LUMINOUS FLUX 230V

Our radio remote controls FFS230 and FFS400 have a radio module from ELCA at their core.

ELCA has over 25 years of experience in the manufacture of safety radio remote controls. The entire concept of the radio remote control is adapted to meet the requirements of PV cleaning.

The rotating brush can be stopped at the touch of the button that interrupts the power supply to your high-pressure cleaner. The brush is restarted just as easily.

The radio remote control offers you a long range, protection class IP69, and an additional shock protection.

Maximum operational safety, reliability and shock resistance make a radio remote control indispensable. The complete set consists of: Transmitter (AT), receiver (AR) and charging adapter.

With an optionally available antenna, the range of the radio remote control can be increased many times over.



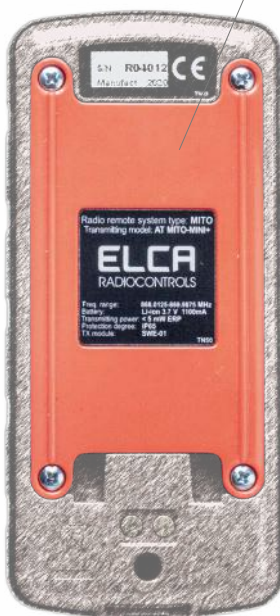


## THREE-PHASE AC CURRENT 400V



## THE NEW RADIO TRANSMITTER

### ROBUST AND SIMPLE



Replaceable  
li-on battery



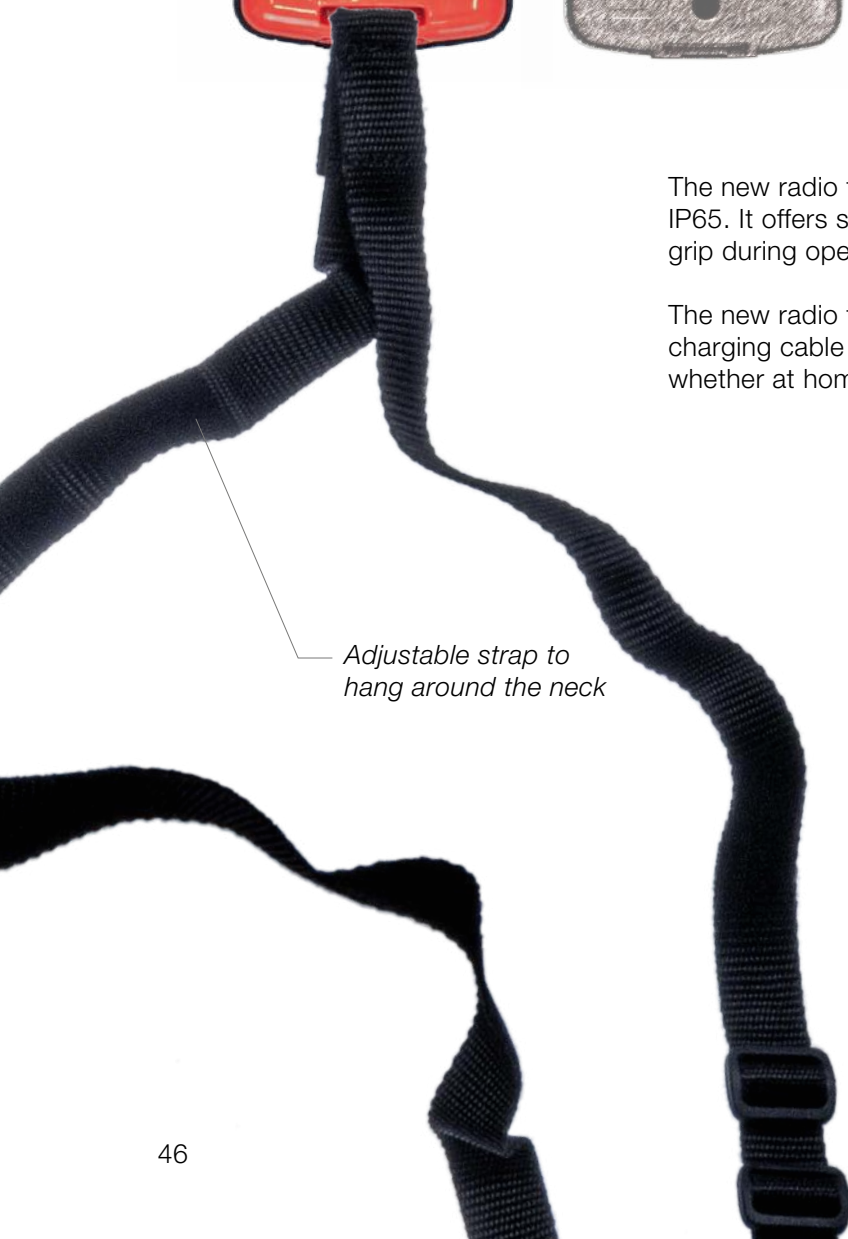
Good grip

Protection class IP65

Extra fall protection

The new radio transmitter is protected to protection class IP65. It offers shock protection, which also ensures a good grip during operation.

The new radio transmitter has a replaceable li-ion battery. The charging cable with USB connection ensures easy charging – whether at home or on the road.

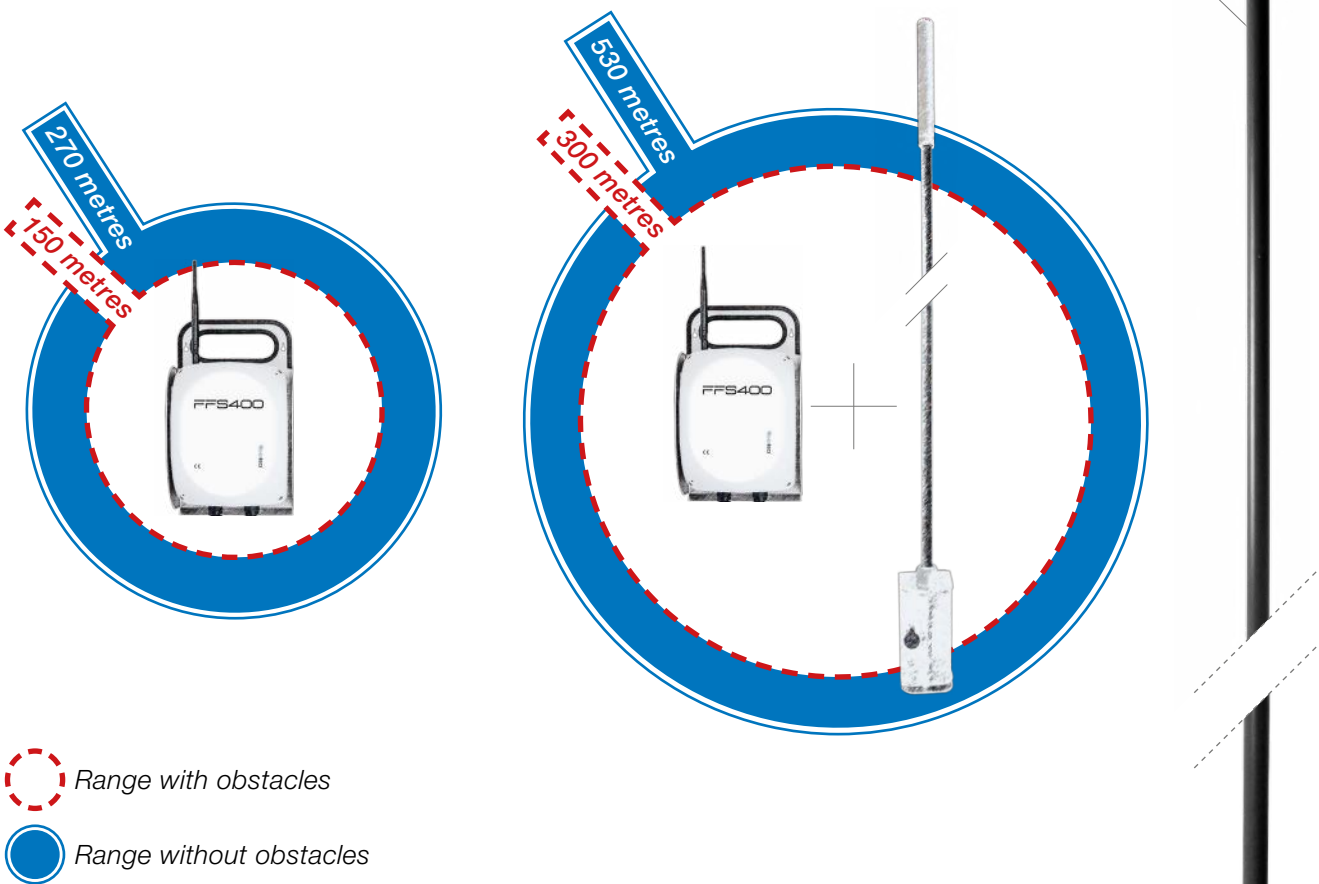


Adjustable strap to  
hang around the neck



USB connection

ANTENNA PLUS AP530



The range of the radio remote control can be increased many times over thanks to the aerial available as an option. Positioning the radio link where there are few obstacles is not always possible. Unfortunately, obstacles and unfavourable local conditions can affect the range of a radio remote control. The AP530 station antenna is a performance-enhancing accessory which allows you to increase the range of your radio remote control by a further 150 m.

It provides real added value in terms of reliability and safety.

Radio remote control	FFS230	FFS400	AP530
Voltage	230 volt	400 volt	-
Range with obstacles	approx. 150 m	approx. 150 m	approx. 300 m
Range without obstacles	approx. 270 m	approx. 270 m	approx. 530 m
Item no.	0200936	0200937	0201368

**HIGH-PRESSURE CLEANER**



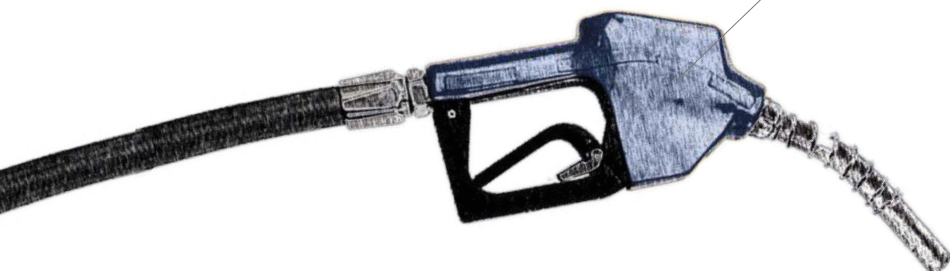
## THE HIGH-PRESSURE CLEANER FOR EVERY REQUIREMENT

We have put together a portfolio of high-pressure cleaners for the optimum operation of our products. We offer high-pressure cleaners for every requirement and every location, whether 230 V, 400 V – or even completely independent of the mains power supply with a petrol engine for maximum independence. All high-pressure cleaners are developed and manufactured in Germany.

## LUMINOUS FLUX 230V-POWERED

THREE-PHASE AC CURRENT  
400V-POWERED

## PETROL-POWERED



## HIGH-PRESSURE CLEANER WITH 230 V

## THE COMPACT



“Nothing is impossible”: This cold water high-pressure cleaner impresses with its versatility, long service life and practical mobility. The device will inspire professionals and do-it-yourselfers alike in professional and semi-professional use. The portable Kränzle high-pressure cleaner impresses with its handy, compact design and its robust suitability for everyday use.

High-pressure cleaner	Kränzle 12/130 TS
Operating pressure	30-130 bar
Max. overpressure	145 bar
Max. temperature	60 °C
Water output	11 l/min
Suction height	1.0 m
Electrical connection	230 V~, 13.5 A
Power consumption	2.9 kW
Power output	2.2 kW
Weight	26 kg
High-pressure hose	10 m, NW 8
Hose reel	no
Dimensions (L x W x H)	500 x 240 x 320 mm
<b>Item no.</b>	<b>0501098</b>



## HIGH-PRESSURE CLEANER WITH 400 V

### WORKHORSES



The Kränzle quadro series not only combines all the advantages of the Profi series and sets a new benchmark in terms of stability with its double-axle chassis and 4 wheels, but also offers maximum comfort for applications that require frequent changes of position. The series employs only oversized gearboxes and oil housings, which significantly extends the service life when the machine is used in rigorous continuous operation. The integrated hose reel with folding crank handle and up to 20 m high-pressure hose is provided as standard on many of the quadro-models, as is the robust ram protection and integrated water tank.

High-pressure cleaner	Kränzle quadro 799 TS T	Kränzle quadro 1000 TS
Operating pressure	30-180 bar	30-220 bar
Max. overpressure	200 bar	250 bar
Max. temperature	Cold water	Cold water
Water output	13 l/min	16 l/min
Water tank volume	10 l	16 l
Electrical connection	400 V, 8.5 A, 50 Hz	400 V, 12 A, 50 Hz
Power consumption	5.5 kW	7.5 kW
Power output	4.0 kW	5.5 kW
Weight	62 kg	82 kg
High-pressure hose	20 m, NW 6	10 m, NW 8
Hose reel	incl.	no
Dimensions (L x W x H)	780 x 395 x 870 mm	770 x 570 x 990 mm
<b>Item no.</b>	<b>0501511</b>	<b>0501354</b>



## HIGH-PERFORMANCE AND ROBUST



The high-pressure machines from OERTZEN embody an impressive synthesis of power and reliability. All components are rock solid and ensure fault-free continuous operation – with security for planning and in practice.



### High-pressure cleaner

### OERTZEN E240

Operating pressure	230 bar
Max. overpressure	250 bar
Max. temperature	Cold water
Water output	23 l/min
Water tank volume	no
Electrical connection	400 V/3~50 Hz
Power consumption	8.9 kW
Power output	-
Weight	96 kg
High-pressure hose	10 m, NW 8
Hose reel	no
Dimensions (L x W x H)	700 x 600 x 720 mm
<b>Item no.</b>	<b>0501551</b>



## HIGH-PRESSURE CLEANER FOR PETROL OPERATION

LARGE OPERATING RANGE



Kränzle high-pressure cleaners with petrol engines allow an almost unlimited range of operation. The dependable and easy-to-maintain machines are reliable in any situation. What's more, connection to the mains water supply is not absolutely necessary. Thanks to the suction hose, the machine can draw water from water basins, lakes or rivers. A filter protects against any impurities. As a result, exceptional cleaning power and impressive results are available anywhere.

High-pressure cleaner	Kränzle Profi-Jet B 10/200	Kränzle Profi-Jet B 20/200
Operating pressure	30-200 bar	30-200 bar
Max. overpressure	220 bar	220 bar
Max. temperature	Cold water	Cold water
Water output	10 l/min	20 l/min
Petrol engine	Honda GX200	Honda GX390
Weight	35 kg	64 kg
High-pressure hose	10 m, NW 8	10 m, NW 8
Hose reel	no	no
Speed control	no	incl.
Dimensions (L x W x H)	520 x 360 x 420 mm	785 x 570 x 1005 mm
<b>Item no.</b>	<b>0201556</b>	<b>0501557</b>



## MOBILE PERFORMANCE AND ROBUSTNESS



The Mobile series from OERTZEN has been created for commercial and industrial customers who want to carry out high-pressure cleaning with high continuous output without the need for a mains power supply.

Reliable industrial motors, stable reduction gears and well-engineered high-pressure pumps – as well as OERTZEN's decades of experience – are the solid foundations of this practical cleaning concept.



High-pressure cleaner	OERTZEN B240
Operating pressure	240 bar
Max. overpressure	260 bar
Max. temperature	Cold water
Water output	22 l/min
Petrol engine	Industry standard
Weight	96 kg
High-pressure hose	10 m, NW 8
Hose reel	no
Speed control	-
Dimensions (L x W x H)	720 x 640 x 610 mm
<b>Item no.</b>	<b>0501552</b>

## NOTES



# CLEANTECS IN USE WORLDWIDE





