



**aira<sup>®</sup>**

**PLASMA FILTERS  
for cooker hoods**



We have a unique range of products and several brands  
We distinguish ourselves thanks to the ability to shape according to  
our customers, products and markets.

## Unique products

From this idea comes a declination of the MARES logo that includes all the colors of its unique collection that draws its inspiration from the elements of nature: blue for ARIA products (plasma filters, universal long life filters, air purifiers...) , green for EARTH products (organic waste dryers), BLUE for WATER products (E-waterblock and Alpwater), Red for FIRE products but also the institutional color of our company. We are always the same and yet always new and different.

Since more than 40 years, this is the way we bridge the gap between customers, market and products



The plasma filtration system has been developed in Germany by the Plasma Research & Technology Institute of Liepzig since the early 2000s, and was initially studied for hospitals in order to reduce the risk of disease transmission and allergies, to then be introduced after a few years in the collective catering sector.

In fact, plasma filters eliminate not only odors but also germs, bacteria, viruses, allergens, cigarette smoke and reduce the risk of diseases and infections.

In professional kitchens, this technology has made it possible to solve the problem of cooking fumes that are much denser than in the domestic environment and has allowed for a reduction in maintenance costs.

Furthermore, it does not increase the noise of the hood in any way, unlike traditional carbon filters.

Our company, always looking for new products, has had the idea of considering the use of these filters for domestic kitchen hoods and in collaboration with the German manufacturer, a range was created which, in terms of size and capacity, could meet the needs of the final consumer.



## Plasma filters

### THE HISTORY



**Cooking is a great pleasure, but how can we effectively eliminate the smells and fumes produced while cooking?**

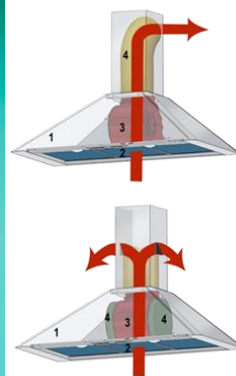
Let's clarify!

Extractor hoods need an extraction hole in the wall or ceiling to connect to, and a powerful motor in your hood to extract all the air from the room. This generates noisy and energy-consuming operation.

In addition, an extractor hood draws warm air out of the kitchen in the winter and cool air in the summer, increasing heating and air conditioning costs.

After all, even filter hoods with traditional carbon filters are not very effective in reducing odors, and these filters must be replaced very often, causing high maintenance costs.

Powerful motors try to compensate for modest efficiency by increasing noise and energy consumption.

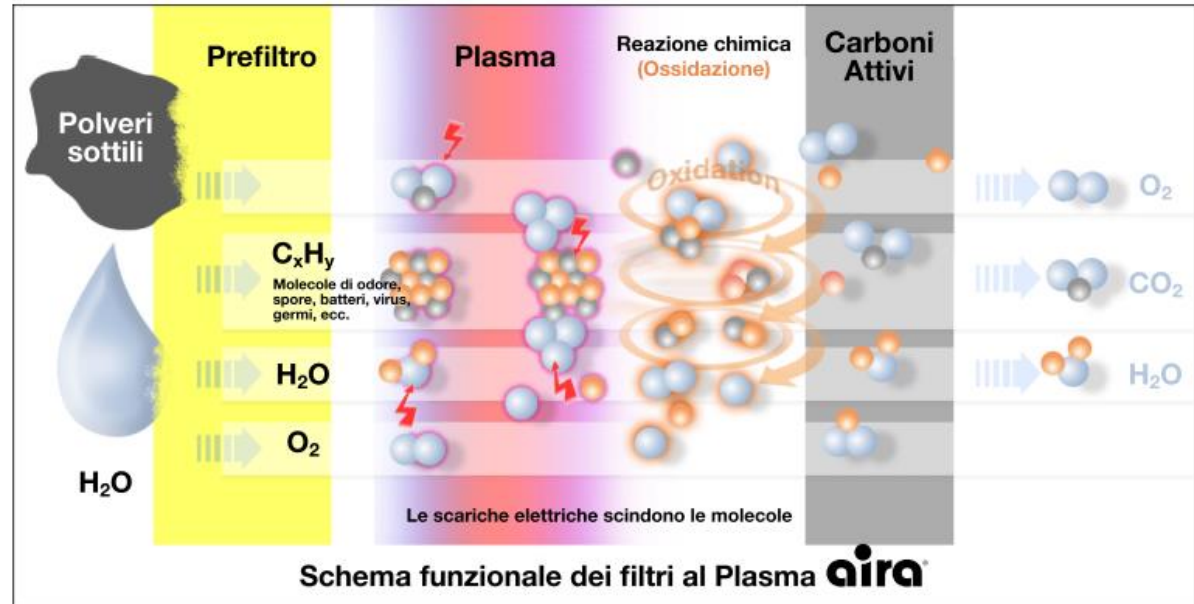


## Plasma filters

THE BEST SOLUTION FOR AIR PURIFICATION

Now all this is over with plasma technology!

The plasma air treatment is the most effective method of air purification with 99% odour reduction.



Plasma is an ionized gas made up of a mix of electrons and ions. It is an electrically conductive state of matter. Northern lights and lightning, for instance, are examples of natural plasma.

Plasma is a chemical-physical process which, activated by electrical discharges, allows the break-down of air molecules efficiently and safely.

Plasma generates ozone which is a molecule made up of three oxygen atoms, and is capable of oxidizing and destroying bacteria, viruses and other germs.

There is no mechanical filtering of odors, but a real transformation of the air molecules.

The treated air, at the exit of the hood, contains oxygen, a small residual humidity and CO<sub>2</sub> i.e. only pure air remains!

## Plasma filters

THE TECHNOLOGY



Our Plasma filters host an electronic CPU inside the power supply which generate a high voltage field with a very little current. This makes it safe for you and with very low energy consumption\*.

La combinazione dei nostri speciali elettrodi, la centralina nel trasformatore realizzata appositamente per questo prodotto ed il materiale filtrante a carbone attivo ad alte prestazioni, consentono la miglior filtrazione oggi disponibile sul mercato.



The electrodes have a very long service life and are practically indestructible when used correctly. They have been tested for 20,000 working hours without any failure!

Translated into the useful life of the product in a domestic hood, assuming one hour of daily use, this means over 54 years of useful life.

With 2 hours of daily use that means a lifespan of over 27 years.

The useful life of a hood is estimated at 10 years on average.

## Plasma filters

### THE TECHNOLOGY

\* Absorbed power: max 10 watts, max 3.65 kW per year - Standby consumption: max 0.5 watts



The filtering material, a very high density bark, already used in the military sector for the production of gas masks with high protection against chemical-bacteriological risks, is unique and reserved exclusively for our Plasma filters.

The ozone produced is retained inside the filter thanks to the high density of the high performance carbon filter.

The pores of the carbon filter remain free and clean and the filter works without the need for any maintenance for its entire life cycle.

## **Plasma filters**

**A UNIQUE AND EXCLUSIVE FILTER BARK!**

The Plasma filter is a highly interesting product, not just for interior architects and designers, but also for the people responsible for planning and building homes who need cost-effective and discrete solutions to avoid the external dispersal of the energy used to heat or cool our living spaces.

But that is not all...

### Design the kitchen with absolute freedom!

Thanks to the use of the Plasma filter, the hood DOES NOT need to be connected to the air outlet hole, unlike for the extraction versions, thus allowing complete freedom and creativity in positioning the hood and hob anywhere in the room, even centrally with the modern island layouts that are so popular today though frequently impossible to create.

The absence of unsightly aluminum ducting saves on construction costs for boxing in, with associated gains in terms of kitchen style and design!



## Plasma filters

SAVINGS AND FLEXIBILITY



## Plasma filters

### ENERGY SAVINGS

Cooker hoods equipped with a Plasma filter eliminate the need to expel warm air in winter / cool air in summer to outside the home.

Their effectiveness at removing odours also means users can avoid the counterproductive practice of opening windows in the attempt to remove odours rapidly.

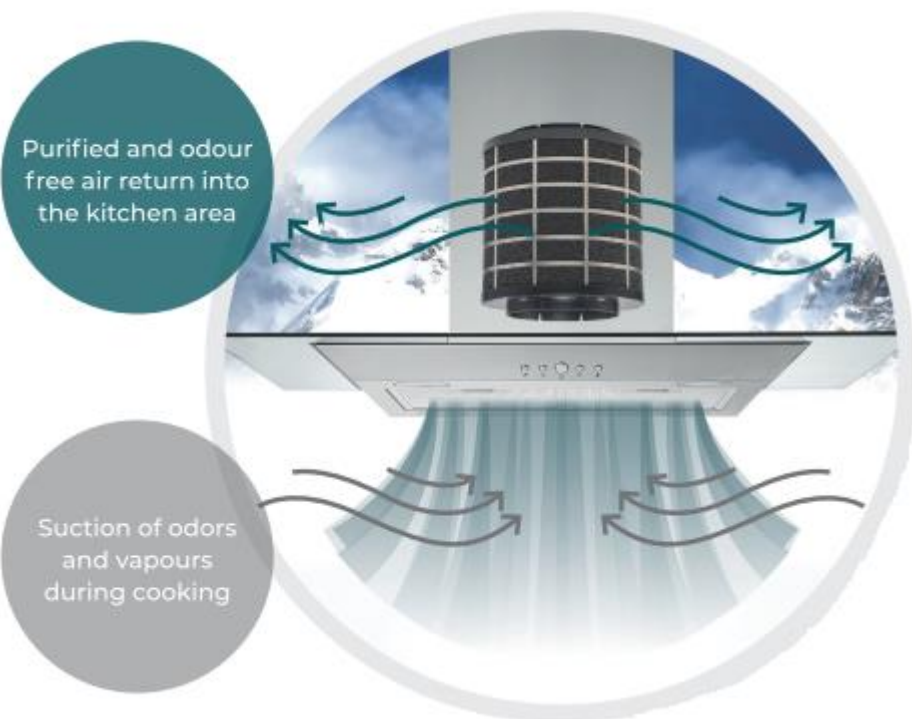
A study was conducted in the Netherlands to calculate the energy lost to the exterior of the home on average simply to remove persistent cooking odours from the kitchen.












Average monthly heating costs for a Dutch home, at current energy prices, is around € 500, calculating 8 hours/day of central heating use.

Switching on an extraction hood for one hour a day removes around 1/8th of the heat present in the home. Opening a window while cooking increases heat loss, resulting in average daily wasted energy costs of around € 2.50.

Considering at least 7 months of central heating use, wasted energy totals around € 500/600.

In homes that are also equipped with air conditioning, yearly energy losses can easily reach values in the order of € 800/900!



-  Eliminates up to 99% of cooking odours
-  Design your kitchen the way you want it!
-  Eliminates tobacco odours
-  Save on heating and air conditioning costs
-  Eliminates viruses, pollen, bacteria and other allergens
-  Maintenance-free
-  Simple and quick installation
-  No masonry work required
-  Compatible with almost every model of hood
-  5-YEARS warranty
-  Does not increase hood noise in any way

The aira plasma filter is your perfect ally, the 6th appliance you can't do without and which also works as a powerful air purifier.

## Plasma filters

ONE FILTER, COUNTLESS BENEFITS

*tutta un'altra*

**aira**<sup>®</sup>



There are hoods on the market already equipped with Plasma filters (which hood manufacturers buy and install directly during the production process), alternatively, existing hoods can be upgraded with Plasma filters (to replace conventional activated carbon filters) in the RETROFIT versions:

1. No specific electronic system required.
2. The built-in sensor detects the airflow (0.6 m<sup>3</sup>/sec min.) and switches the filter on only when the hood motor is running, switching it off automatically when the hood motor stops to minimize energy consumption.
3. The best performance is obtained with airflows of minimum of 2 m<sup>3</sup>/sec (equivalent to the lowest speed available on the control panel).
4. The hood should be switched on at least 10 minutes before you start cooking (considering a kitchen volume of around 200 m<sup>3</sup>) and switched off at last 10 minutes after cooking is ended. When using grills or fryers it is advisable to double the hood post-ventilation time.
5. The hood operates with a standard 220V AC mains supply.
6. The aluminum grease filters must be retained (ideally in the 10-12 layer version).

## Plasma filters

PLUG & PLAY

The simplest integration into any type of cooker hood!

Even for hood manufacturers, no specific electronics are needed to integrate the plasma filters into the selected cooker hood model.

This means a very simple development, to add the most advanced air purification system in your range of hoods, and shorter time to market!



## RONDO SERIES

For wall mounted hoods with chimney

Suitable for hoods up to 1000 m<sup>3</sup>/h  
Available with air outlet diameter of 120 and 150 mm



Look at the data sheet



## PLANO SERIES

For island and built-in hoods with or without chimney

Suitable for hoods up to 600 m<sup>3</sup>/h  
Available with air outlet diameter da 120 and 150 mm



Look at the data sheet



# Plasma filters

THE RANGE



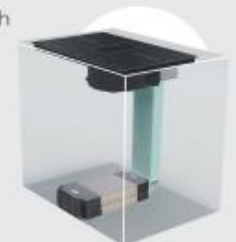
## QUADRO SERIES

For extractor tops or downdraft models and ceiling hoods

Suitable for hoods up to 1200 m<sup>3</sup>/h  
Available for either horizontal or vertical installation



Look at the data sheet



**AIR OUTLET Ø 120**

Model	RONDO 350/150R	RONDO 550/150R	RONDO 650/150R	RONDO 400/180R	RONDO 600/180R	RONDO 800/180R
Cod. Art.	8113	8115	8116	8418	8618	8818
Height mm	120	180	240	150	210	270
Length mm	Ø 150	Ø 150	Ø 150	Ø 180	Ø 180	Ø 180
Air inlet mm	Ø 120	Ø 120	Ø 120	Ø 120	Ø 120	Ø 120
Net weight Kg.	0,6	0,8	1	1,2	1,4	1,9
Gross weight Kg.	2	2,2	2,4	2,1	2,3	2,6
Packaging dimensions cm	22 x 25,5 x 31,5	22 x 25.5 x 31.5	22 x 25.5 x 31.5	22 x 25.5 x 31.5	22 x 25.5 x 31.5	22 x 25.5 x 38.4
Activation	Automatic activation at 1 m / sec. Air flow through integrated electronic sensor.					
Power	220 VAC via 150 cm cable and Europlug socket (class 2, 2 pin)					
Electrical operation	Primary: 210-250 V, 50 Hz Secondary: HS ca. 5 kV, 5 Hz					
Frame material	AlMg3 aluminium, PA6					
Absorbed power	Max 10 W					
Stand-by consumption	Max 0,5 W					
Use	Cooker hoods with exhaust hose ≥ 17 x 17cm	Cooker hoods with exhaust hose ≥ 17 x 17cm	Cooker hoods with exhaust hose ≥ 17 x 17cm	Cooker hoods with chimney ≥ 20 x 20 cm	Cooker hoods with chimney ≥ 20 x 20 cm	Cooker hoods with chimney ≥ 20 x 20 cm
Performance	Suitable for hoods with any motor (works best with net value motors up to 350 m3 / h).	Suitable for hoods with any motor (works best with net value motors below 550 m3/h).	Suitable for hoods with any motor (works best with net value motors up to 650 m3 / h).	Suitable for hoods with any motor (works best with net value motors up to 400 m3 / h).	Suitable for hoods with any motor (works best with net value motors up to 600 m3 / h).	Suitable for hoods with any motor (works best with net value motors up to 800 m3 / h).
Please Note	Adding the plasma filter to the hood does not in any way increase the noise of the hood itself.					
Accessories included.	Eccentric adapter/reducer (art. 7547), 3in1 socket adapter (art. 7001)					
Warranty	5 years					
Certificates	CE, VDE, IUTA, OLFASENSE					
Instruction manual	English, Italian, German, Dutch, French, Polish					

# Plasma filters

DATA SHEET  
RONDO SERIES



### AIR OUTLET Ø 150 mm

Model	RONDO 500/210R	RONDO 800/210R	RONDO 1000/210R
Cod. Art.	8521	8821	8121
Height mm	120	210	270
Length mm	Ø 210	Ø 210	Ø 210
Air inlet mm	Ø 150	Ø 150	Ø 150
Net weight Kg.	1,2	1,7	2
Gross weight Kg.	2,1	2,5	2,8
Packaging dimensions cm	22 x 25.5 x 31.5	22 x 25.5 x 31.5	22 x 25.5 x 38.5
Activation	Automatic activation at 1 m / sec. Air flow through integrated electronic sensor.		
Power	220 VAC via 150 cm cable and Europlug socket (class 2, 2 pin)		
Electrical operation	Primary: 210-250 V, 50 Hz Secondary: HS ca. 5 kV, 5 Hz		
Frame material	AlMg3 aluminium, PA6		
Absorbed power	Max 10 W		
Stand-by consumption	Max 0,5 W		
Use	Cooker hoods with chimney ≥ 25 x 25 cm	Cooker hoods with chimney ≥ 25 x 25 cm	Cooker hoods with chimney ≥ 25 x 25 cm
Performance	Suitable for hoods with any motor (works best with net value motors up to 500 m3/h).	Suitable for hoods with high-performance motors (up to a net value of 800 m3/h).	Suitable for hoods with high-performance motors (up to a net value of 1000 m3/h).
Please Note	Adding the plasma filter to the hood does not in any way increase the noise of the hood itself.		
Accessories included.	Eccentric adapter/reducer (art. 7547), 3in1 socket adapter (art. 7001)		
Warranty	5 years		
Certificates	CE, VDE, IUTA, OLFASENSE		
Instruction manual	English, Italian, German, Dutch, French, Polish		

## Plasma filters

DATA SHEET  
RONDO SERIES



Model	PLANO 400	PLANO 500	PLANO 600	PLANO 800
Art. Code	8941	8952	8961	8981
air performance	400 m <sup>3</sup>	500 m <sup>3</sup>	600 m <sup>3</sup>	800 m <sup>3</sup>
Height mm	74	74	74	100
Width mm	250	250	250	250
Length mm	210	250	350	450
cable length mt.	1	1	1	1
Net weight kg	2	2,5	2,9	3,3
Gross weight kg	2,5	3	3,4	3,8
Packaging dimensions cm	26 x 26 x 18,2	26 x 26 x 18,2	65 x 30 x 10	65 x 30 x 10
Activation	Automatic activation at 1 m/sec. Air flow by means of integrated electronic sensor			
Power	220 VAC via 150 cm cable and Europlug socket (class 2, 2 pin)			
Electrical operation	Primary: 210-250 V, 50 Hz Secondary: HS 5 kV, 5 Hz approx.			
Frame material	AlMg3 aluminium, PA6			
Absorbed power	Max 10 W			
Stand-by consumption	Max 0.5 W			
Use	Built-in cooker hoods and all cooker hoods without chimney. Easier integration thanks to the 150 mm inlet diameter.			
Performance	Suitable for hoods with any motor (works best with net value motors from 400 to 800 m <sup>3</sup> /h).			
Please Note	Adding the plasma filter to the hood does not in any way increase the noise of the hood itself.			
Certificates	CE, IUTA, Olfasense			

## Plasma filters

DATA SHEET  
PLANO INDUSTRY SERIES



Model	PLANO 400	PLANO 500	PLANO 600	PLANO 800
Art. Code air inlet Ø 150 mm	8940	8950	8960	8980
Art. Code air inlet Ø 120 mm	8948	8958	8968	8988
air performance	400 m <sup>3</sup>	500 m <sup>3</sup>	600 m <sup>3</sup>	800 m <sup>3</sup>
Height mm	87	87	87	110
Width mm	250	250	250	250
Length mm	210	250	350	450
cable lenght mt.	1	1	1	1
Net weight kg	2,2	2,7	3,1	3,8
Gross weight kg	2,7	3,2	3,6	4,3
Packaging dimensions cm	26 x 22 x 32	26 x 22 x 32	26 x 22 x 39	26 x 22 x 49
Activation	Automatic activation at 1 m/sec. Air flow by means of integrated electronic sensor			
Power	220 VAC via 150 cm cable and Europlug socket (class 2, 2 pin)			
Electrical operation	Primary: 210-250 V, 50 Hz Secondary: HS 5 kV, 5 Hz approx.			
Frame material	AlMg3 aluminium, PA6			
Absorbed power	Max 10 W			
Stand-by consumption	Max 0.5 W			
Use	Built-in cooker hoods and all cooker hoods without chimney. Easier integration thanks to the 150 mm inlet diameter.			
Performance	Suitable for hoods with any motor (works best with net value motors from 400 to 800 m <sup>3</sup> /h).			
Noise	Adding the plasma filter to the hood does not in any way increase the noise of the hood itself.			
Accessories	Eccentric adapter			
Certificates	CE, IUTA, Olfasense			
Instruction manual	English, Italian, German, French, Dutch			

## Plasma filters

DATA SHEET  
 PLANO RETROFIT SERIES



Model	QUADRO 400	QUADRO 600	QUADRO 800	QUADRO 1200
Art. Code	8740	8760	8780	8712
Height mm	92	92	92	92
Width mm	280	280	280	280
Length mm	400	450	540	640
Air inlet mm	222 x 90	222 x 90	222 x 90	222 x 90
Net weight kg	3	3,8	6	6,5
Gross weight kg	4	5	7,5	8
Packaging dimensions	31 x 66 x 11 cm	31 x 66 x 11 cm	31 x 66 x 11	31 x 66 x 11
Activation	Automatic activation at 1 m/sec. Air flow by means of integrated electronic sensor			
Power	220 VAC via 150 cm cable and Europlug socket (class 2, 2 pin)			
Electrical operation	Primary: 210-250 V, 50 Hz Secondary: HS 5 kV, 5 Hz approx.			
Frame material	AlMg3 aluminium, PA6			
Absorbed power	Max 10 W			
Stand-by consumption	Max 0.5 W			
Use	Filter for hobs with integrated "hob + hood" or "downdraft" hood			
Performance	Suitable for hoods with net value	Suitable for hoods with net value	Suitable for hoods with net value	Suitable for hoods with net value
	motors up to 400 m3/h	motors up to 600 m3/h	motors up to 800 m3/h	motors up to 1200 m3/h
Note	Adding the plasma filter to the hood does not in any way increase the noise of the hood itself.			
Accessories included.	--			
Matching accessories	Plinth Grille Mod. 7025 WxHxD 264x113x81 mm Plinth Grille Mod. 7026 WxHxD 264x100x81 mm			
Warranty	5 years			
Certificates	CE, IUTA, Olfasense			
Instruction manual	English, Italian, German, French, Dutch			

# Plasma filters

DATA SHEET  
 QUADRO SERIES  
 (Horizontal)



Model	QUADRO L 650	QUADRO L 750	QUADRO L 950
Art. Code	8765	8775	8795
Height mm	92	92	92
Width mm	280	280	280
Length mm	380	460	560
Air inlet mm	222 x 90	222 x 90	222 x 90
Net weight kg	5,3	5,7	6,5
Gross weight kg	6,5	7	8
Packaging dimensions	31 x 66 x 11 cm	31 x 66 x 11 cm	31 x 66 x 11
Activation	Automatic activation at 1 m/sec. Air flow by means of integrated electronic sensor		
Power	220 VAC via 150 cm cable and Europlug socket (class 2, 2 pin)		
Electrical operation	Primary: 210-250 V, 50 Hz Secondary: HS 5 kV, 5 Hz approx.		
Frame material	AlMg3 aluminium, PA6		
Absorbed power	Max 10 W		
Stand-by consumption	Max 0.5 W		
Use	Filter for hobs with integrated "hob + hood" or "downdraft" hood		
Performance	Suitable for hoods with net value motors up to 650 m3/h	Suitable for hoods with net value motors up to 750 m3/h	Suitable for hoods with net value motors up to 950 m3/h
Note	Adding the plasma filter to the hood does not in any way increase the noise of the hood itself.		
Accessories included.	--		
Matching accessories	Plinth Grille Mod. 7025 WxHxD 264x113x81 mm Plinth Grille Mod. 7026 WxHxD 264x100x81 mm  Brackets for vertical mounting		
Warranty	5 years		
Certificates	CE, IUTA, Olfasense		
Instruction manual	English, Italian, German, French, Dutch		



## Plasma filters

DATA SHEET  
 QUADRO L SERIES  
 (Vertical)

Accessories	Art. Nr.	MOQ	Picture	Suitable for...	EAN 13 CODES	
Eccentric adaptor 120 to 150mm	7547			for RONDO SERIES 150 und 180		
White adaptor 120 to 150mm	7549			for RONDO SERIES 150 und 180		
Eccentric adaptor 210	7550			for RONDO SERIES 210	642108795329	
Multi socket plug - 3 in 1	7001			—	642108795251	
Separable white cable				for RONDO SERIES		
Metal Ring	7020_180			Metal Ring for Rondo series 150 and 180		
Metal Ring	7020_210			Metal Ring for Rondo series 210		
Quadro adapter	7557 (previously art 7545)	24		Flat duct connector	0048544891319	
Quadro adapter	7571	24		Flat duct connector outside	0048544891326	
Quadro adapter	7558	24		Adapter Flat to Round	0048544891333	
Quadro adapter	7577	36		Bora type Adapter	0048544891371	
Quadro flexible tube	7559	20		Flexible Adapter 40 cm	0048544891340	
Quadro flexible tube	7560	24		Flexible Tube 3 M	0048544891364	
Adhesive tape	7561	20		25 Meter Tape	0048544891357	
Plinth Grid 113	7025			for QUADRO filters	642108795237	
Plinth Grid 100	7026			for QUADRO filters	642108795244	
Bracket	7017			for QUADRO L (vertical)		

# Plasma filters

DATA SHEET  
ACCESSORIES



# Plasma filters

## CERTIFICATIONS



### VDE CERTIFICATION

Our Plasma filters are certified in compliance with all recently approved European Standards:



DIN EN 60335-1 (VDE 0700-1):2012-10; EN 60335-1:2012  
 DIN EN 60335-1 Ber.1 (VDE 0700-1 Ber.1):2014-04; EN 60335-1:2012/AC:2014  
 EN 60335-1:2012/A11:2014  
 DIN EN 60335-1/A13 (VDE 0700-1/A13):2018-07; EN 60335-1:2012/A13:2017  
 DIN EN 60335-2-31 (VDE 0700-31):2015-06; EN 60335-2-31:2014  
 DIN EN 62233 (VDE 0700-366):2008-11; EN 62233:2008  
 DIN EN 62233 Ber.1 (VDE 0700-366 Ber.1):2009-04; EN 62233 Ber.1:200

Ozone Measurement according to Section 32 of DIN EN 60335-2-65 (VDE 0700-65):2013-02; EN 60335-2-65:2003+A1+A11:2012.

Continuous measurement over 24 h.  
 Emissions below the required limits.



### IUTA CERTIFICATION – ZERO OZONE EMISSIONS

Our Plasma filters have been tested by German laboratories certified to the highest standards, which found a value of ZERO Ozone emissions.



### OLFASENSE CERTIFICATION – ZERO ODOURS

The Olfasense institute has certified the odour removal effectiveness of our Plasma Filters.

The filters achieved the maximum score in the olfactory test: reduction of up to 96.5% was proven, even of the most intense and persistent odours (such as frying and roasting).



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