

# SUPERSOL<sup>®</sup> PLUS SUPERFLEX<sup>®</sup> PLUS

**3**layer conduits system  
with anti-electromagnetic technology

FOR CONCEALED  
TYPE INSTALLATIONS  
IN **DRY WALL**  
IN **UNDERPLASTER**  
IN **SUB-CEILING &**  
IN **SUB-FLOOR**



**K KOUVIDIS<sup>®</sup>**  
forever safe

## SUPERSOL® PLUS

**NEW  
PRODUCT**

### 1<sup>st</sup> layer

The external wall provides the required mechanical strength

### 2<sup>nd</sup> layer

The inner layer makes the insertion of the cables much easier during the installation or replacement.

### 3<sup>rd</sup> layer

The third independent layer of longitudinal lines, of indelible color, creates a long lasting color marking between electrical and communication networks.



## SUPERFLEX® PLUS

### 1<sup>st</sup> layer

The corrugated external wall provides the necessary flexibility and the required mechanical strength.

### 2<sup>nd</sup> layer

The internal layer follows the geometry of the outer layer, facilitating the smooth insertion of the cables during the installation or replacement.

### 3<sup>rd</sup> layer

The third independent layer of longitudinal lines, of indelible color, creates a long lasting color marking between electrical and communication networks.

conduits system

SUPERSOL® PLUS - SUPERFLEX® PLUS 320Nt

with **anti-electromagnetic** technology

for concealed type  
installations  
in dry wall, underplaster  
sub-ceiling and sub-floor



Anti - electromagnetic  
technology



Halogen  
Free



Low smoke  
emissions



Friction reduction,  
faster insertion of  
the cables.



Faster and easier  
cable insertion  
(SUPERFLEX PLUS)



Longitudinal stripes of  
indelible color indicate  
the power of the  
protected cables

at a glance...

The new conduits SUPERSOL® PLUS and SUPERFLEX® PLUS are the evolution of the very successful pipes SUPERSOL® and SUPERFLEX® which were firstly produced by KOUVIDIS in 1979.

SUPERSOL® PLUS and SUPERFLEX® PLUS conduits consist of three different layers providing the necessary strength and flexibility. They are produced in diameters (Dout) Ø16, Ø20, Ø25 and Ø32 and fully comply with the European Standards (EN 61386.21 & EN 61386.22). Combined with the new specially designed clips, made of polypropylene, and the new connection couplers, in yellow color, SUPERSOL® PLUS and SUPERFLEX PLUS® compose the definite conduits system for electrical concealed type installations, such as the dry wall, underplaster, sub-ceiling and sub-floor.

KOUVIDIS is the first Greek company to enter the field of production of plastic conduits using **anti - electromagnetic technology**.

The inner layer of SUPERSOL® PLUS and SUPERFLEX® PLUS incorporates an innovative technology, which absorbs part of the electromagnetic radiation emitted by the cables running within the conduit. (see page 8 - 9)

New  
plastic  
conduits  
system

for concealed type  
installations

SUPERSOL® PLUS  
SUPERFLEX® PLUS




DUROFLEX® PLUS





# SUPERSOL<sup>®</sup> PLUS SUPERFLEX<sup>®</sup> PLUS

- Cables insertion is a delight
- Conduits mounting is done with ease
- Clean and fast cutting with the use of professional pipe shears

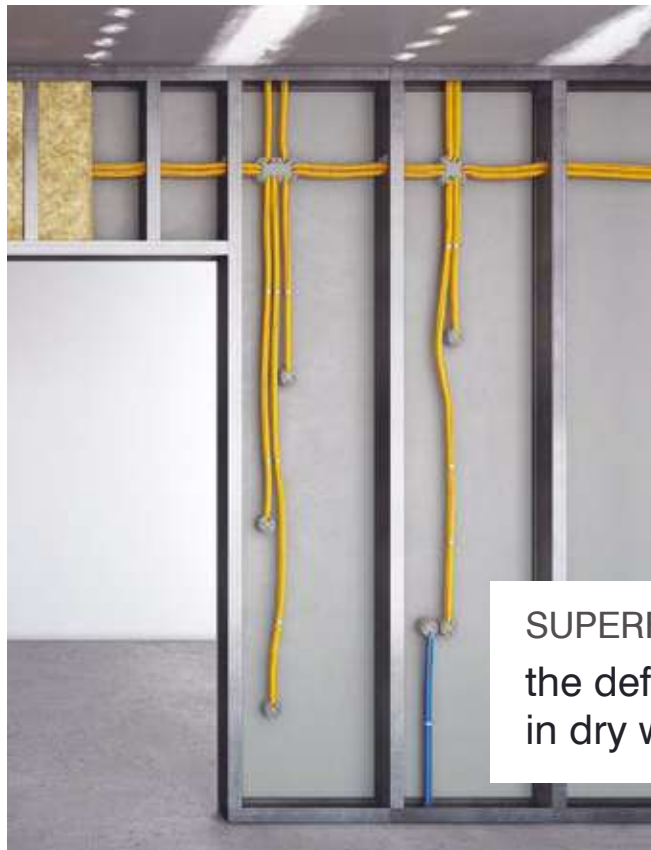


SUPERSOL<sup>®</sup> PLUS  
the ideal solution  
in underplaster

## 1

### **Faster installation**

A special ULTRA slip material is added in the internal layer of SUPERSOL<sup>®</sup> PLUS and SUPERFLEX<sup>®</sup> PLUS conduits **reducing significantly** the friction and thus the applied force that is required for cable routing.



SUPERFLEX® PLUS  
the definite solution  
in dry wall

## 2

### Less “exposure”

The new SUPERSOL® PLUS and SUPERFLEX® PLUS conduits incorporate a new anti-electromagnetic technology that shields off part of the electromagnetic radiation of the contained cables, preventing it from reaching the interior of the building. (see pages 8-9)

## 3

### Safer installation

The new SUPERSOL® PLUS and SUPERFLEX® PLUS conduits conform with the requirements of the 364/2016/EU Regulation for the fire protection in buildings. They are made from 100% halogen free and low smoke raw materials in order to protect people and their property in case of a fire.



## new anti - electromagnetic technology

Patent Protected: 1009975

All cabling, both in residences and business premises, that are used to transfer energy and provide supply to electric devices, create the so-called low-frequency magnetic fields, as well as electric fields, that remain even after the devices have been inactivated.

These fields depend on the voltage and intensity of the electric current and become weaker as the distance from their source increases. However, they are considerable at distances up to one metre.

In particular, the field created when we come into contact with a device or when we are standing next to a plasterboard wall with electrical cabling behind it can be very strong.

Thanks to the development of the **anti-electromagnetic technology**, part of the radiation originating from cabling is isolated within the interior layer of the new SUPERSOL® PLUS and SUPERFLEX® PLUS conduits, while the interference created between circuits (weak and strong currents) is minimised.



## How does it work?

During the production process phase, the **anti-electromagnetic technology** is incorporated into the raw material of SUPERSOL® PLUS and SUPERFLEX® PLUS conduits, preventing part of the electromagnetic radiation from entering the building.

We developed a ground-breaking polymer of a special composition, where metal elements of low particle size are added to the interior layer of the new plastic conduits, thus shielding part of the electromagnetic radiation generated by the electrical cables.

The interior of the conduit functions as a shield against these fields, while its exterior protects the internal cables, in accordance with the requirements of European Standard EN 61386-22.

Moreover, the metal content of the interior layer does not prevent the normal recyclability of the product, ensuring its very low environmental footprint.

## Application field

This technology is ideal for plasterboard partition walls or cavity walls, in spaces such as office buildings, hotel rooms and residences.



# main advantages of conduits system SUPERSOL® PLUS SUPERFLEX® PLUS



The inner layer incorporates an innovative anti-electromagnetic technology



**40%** (SUPERFLEX® PLUS) and **20%** (SUPERSOL® PLUS) lower friction due to special ultra slip material added in the internal layer



Longitudinal stripes of indelible color distinguish the cables that are in the conduits. Red = Power cables | Green = Telecommunication cables



Made from halogen free and heavy metals free (RoHS) raw materials



High mechanical resistance (EN 61386-21 & EN 61386-22) in high temperature up to 105°C



Low smoke emissions (EN 61034-2) and low toxicity of the gases produced by combustion (EN 60754-2)



Special thermoplastic material which makes the conduits cutting much easier



Ideal for concealed type installations in underplaster, dry walls, sub-ceiling, sub-floor and chipboard



New specially designed packaging that saves up to **50%** more storage space (SUPERFLEX® PLUS)



Testing certification in accordance with the above mentioned European Standards by the German laboratory VDE.



# new packaging for SUPERSOL® PLUS & SUPERFLEX® PLUS conduits



## Less volume

The packaging of the new **SUPERFLEX® PLUS** conduits is designed in a way that reduces its volume by 25% to 50% compared to conventional packaging, offering multiple benefits regarding storage.



## More metres

Understanding the needs in plasterboard concealed installations, we offer the **SUPERFLEX® PLUS** Ø20 conduit in 100-metre packages to better serve the needs of the electrical installer.



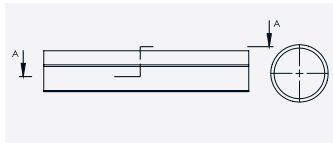
## Reduced footprint

Our new generation **SUPERSOL® PLUS** and **SUPERFLEX® PLUS** packaging includes the recyclable protective film we use in every conduit packaging, but in much smaller quantities, in an effort to continuously reduce our environmental footprint.

Light Type (320Nt)

RAL 1023  
yellow / outer layer

RAL 9004  
black / inner layer



Application Standards: EN 61386.21, EN 50642, EN 61034-2, EN 60754-2

Reference Standards: NF P 98-332

European Directives: 2014/35/EE (LVD), 2011/65/EE (RoHS)



Patent Protected: 1009810

SUPERSOL® PLUS IAS

23431

Properties

		Class
Resistance to compression	320 Nt	2
Resistance to impact	2J (at -25 °C)	3
Lower temperature range	-25 °C	4
Upper temperature range	+105 °C	3
Resistance to bending	Rigid	1
Electrical characteristics	With electrical insulated characteristics	2
Protection against ingress of solid objects	min IP65	6
Protection against ingress of water		5
Resistance against corrosion	Not applicable	0
Tensile strength	None declared	0
Resistance to flame propagating	Non flame propagating	1
Suspended load capacity	None declared	0

Additional properties

Raw material	Halogen free, heavy metals free (RoHS) and specially stabilized thermoplastic PP
Lower frictions (internal layer)	Special (slip) material for smoother insertion of the cables
Anti - electromagnetic technology	Absorbs part of the electromagnetic radiation emitted by the cables
Low smoke	Better visibility of escape exits
Color marking power of the protected cables	Longitudinal stripes of indelible color indicate the power of the protected cables
Halogen free	No toxic or corrosive gases in case of fire
Antistatic technology	Protection against static electricity

+ Three layer conduit. External wall provides the necessary mechanical strength and durability, whilst the inner layer ensures the smooth insertion of the cables. Marked by using embossed printing and packed with 100% recyclable polyethylene film including safety straps. Ideal for concealed type installations in plasterboard, cavity wall and sub-ceiling.

Type	Part Number power/telecommunication currents				kg	(m)
Ø16	1017016 / 1018016	16	13.4	57	3.30	7980
Ø20	1017020 / 1018020	20	17.5	57	3.93	5415
Ø25	1017025 / 1018025	25	22.1	30	3.00	3300
Ø32	1017032 / 1018032	32	28.4	30	4.20	1890

Light Type (320Nt)

RAL 1023  
yellow / outer layer

RAL 9004  
black / inner layer



Application Standards: EN 61386.22, EN 50642, EN 61034-2, EN 60754-2

Reference Standards: NF P 98-332

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Patent Protected: 1009810

SUPERFLEX® PLUS IAS






23332

Properties		Class
Resistance to compression	320 Nt	2
Resistance to impact	2J (at -15 °C)	3
Lower temperature range	-15 °C	3
Upper temperature range	+105 °C	3
Resistance to bending	Pliable	2
Electrical characteristics	With electrical insulated characteristics	2
Protection against ingress of solid objects	min IP65	6
Protection against ingress of water		5
Resistance against corrosion	Not applicable	0
Tensile strength	None declared	0
Resistance to flame propagating	Non flame propagating	1
Suspended load capacity	None declared	0

Additional properties

Raw material	Halogen free, heavy metals free (RoHS) and specially stabilized thermoplastic PP
Lower frictions (internal layer)	Special (slip) material for smoother insertion of the cables
Anti - electromagnetic technology	Absorbs part of the electromagnetic radiation emitted by the cables
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Halogen free	No toxic or corrosive gases in case of fire
Antistatic technology	Protection against static electricity

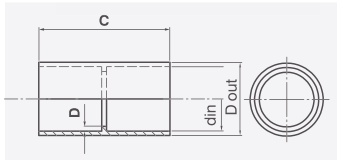
+ Three layer conduit. The external wall is corrugated whilst the inner layer follows the geometry of the outer wall minimizing thus the in-between space. Marked using embossed printing and packed with 100% recyclable polyethylene film including safety straps. Ideal for concealed type installations in plasterboard, cavity wall and sub-ceiling.

Type	Part Number power/telecommunication currents				kg 	(m) 
Ø16	2010016 / 2017016	16	10.9	50	2.34	5850
Ø20	2010020 / 2017020	20	14.2	100	5.60	5200
Ø25	2010025 / 2017025	25	18.8	50	3.59	2200
Ø32	2010032 / 2017032	32	24.9	25	2.31	1100

Fittings

**NEW  
PRODUCT**

RAL 1023  
yellow



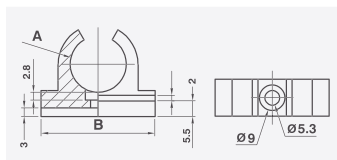
Application Standards: EN 61386.01

Reference Standards: EN 50642, EN 61034-2, EN 60754-2

Fittings

**NEW  
PRODUCT**

RAL 1023  
yellow








Patent Protected: 1009810

## SUPERSOL® PLUS Connection coupler for concealed type installations

### Properties





Raw material Halogen free, heavy metals free (RoHS) and specially stabilized thermoplastic PE

Type	Part number					
		Ø out	Ø in	mm		
Ø16	4029016	17.7	16.0	52.3	40	1920
Ø20	4029020	23.5	20.0	51.5	30	1890
Ø25	4029025	28.5	25.0	51.5	30	1440
Ø32	4029032	37.0	32.0	65.0	20	560

## SUPERSOL® PLUS Clip for concealed type installations

### Properties

Raw material Halogen free, heavy metals free (RoHS) and specially stabilized thermoplastic PP

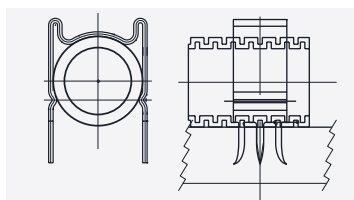
Type	Part number				
		mm	mm		
Ø16	4027016	15.8	35	4x50	3400
Ø20	4027020	19.8	40	4x50	2000
Ø25	4027025	24.8	46	4x30	1920
Ø32	4027032	31.8	53	30	1440

SUPERSOL® PLUS Clips are compatible with nail fastening tools and it is recommended to use nails of at least 30 mm.

Fittings

NEW  
PRODUCT

## KOUVIDIS Metal clip for drywall





Application Standards: EN 61386.25

### Properties

Raw material

Galvanized steel, type Sendzimir (by adding aluminum in the zinc mixture), which provides maximum antioxidant protection

Type	Part number		
Ø16	6000024	108	432
Ø20	6000025	96	384
Ø25	6000026	72	288
Ø32	6000027	48	1921

### Mounting instructions

KOUVIDIS metal clamp is suggested to be installed with the use of a hammer with head 25x25mm.



+ The **NEW specially designed metallic clamp of KOUVIDIS** provides **fast, easy and safe mounting** for the new 3layer conduits SUPERSOL® PLUS and SUPERFLEX® PLUS on drywalls and chipboards.

It is produced from galvanized steel, type Sendzimir (by adding aluminum in the zinc mixture), which provides maximum antioxidant protection, high mechanical strength and durability over time. Mounting the metal clamp is very easy, avoiding piercing; it is installed with the single use of a hammer (suggested hammer head 25x25mm).

Each side has three hooks out of which the two have a special bent and thus they do not traumatize the dry wall or the wooden wall while they are penetrated into the inner body. The middle hook is vertical, providing thus the necessary strength for the clip's safe installation. Hooks' length is designed to not surpass the width of the dry wall or wooden wall. Finally, the special notches at the side walls of KOUVIDIS metal clamp hold the conduit evenly and protect it from the hammer's blow pressure.

Accessories

**NEW  
PRODUCT**



Suggested for conduits up to Ø25

## Cutting tool for plastic pipes in one stop

Product: **REMS ROS PEX 28 S**

Part Number: 6000028

Version from stable magnesium, particularly light

For one-hand operation

Ergonomically designed handles with soft grip for fast cutting in one cut

Blade retraction by spring-loaded scissor levers for easy cutting

One-hand lock for safe transport and protection of the blade

Specially hardened and specially ground wedge-shaped blade with cutting angle 150°

Chipless cutting - no chips remain in the conduit

Accessories

**NEW  
PRODUCT**



Suggested for conduits up to Ø32

## Cutting tool for plastic pipes with automatic quick reverse

Product: **REMS ROS P 35 A**

Part Number: 6000030

Version from stable magnesium, particularly light

For one-hand operation

Easily replaceable specially hardened blade

Durable aluminum design

Automatic and fast rewind saves time and effort

Chipless cutting - no chips remain in the conduit

Accessories

**NEW  
PRODUCT**



Suggested for conduits up to Ø63

## Cutting tool for plastic pipes with automatic quick reverse

Product: **REMS ROS P 63 P**

Part Number: 6000032

Version from stable magnesium, particularly light

For one-hand operation

Specially hardened, wedge-shaped blade for heavy, medium and light type conduits

Effortless work due to ratchet feed

Fast rewind saves time and effort

Chipless cutting - no chips remain in the conduit

Accessories

**NEW  
PRODUCT**



Product: **Blade PEX 28 S**

Part Number: 6000029



Product: **Blade P 35 A**

Part Number: 6000031



Product: **Blade P63 P**

Part Number: 6000033



# multi - layer conduits

Multi-layer conduits are fully adapted to the new technology of plastics, ensure greater mechanical strength, facilitate installation due to their multiple benefits and guarantee an improved environmental footprint.

KOUVIDIS has been active in the multi-layer conduit market since 2012, having developed innovative products for various applications. In 2023, the company becomes the first plastic conduits manufacturer in the Balkans that imparts the multilayer technology to rigid conduits for electrical installations.

We use two different technologies for welding the individual layers for pliable conduits:



**DUROFLEX<sup>®</sup> PLUS IAS**



**SUPERFLEX<sup>®</sup> PLUS IAS**



**SUPERSOL<sup>®</sup> PLUS IAS**

<b>Production technology</b>	Double <b>Wall</b> (DW)	Double <b>Layer</b> (DL)	Double <b>Wall</b> (DW)
<b>Layer 1</b>	Corrugated external wall		Smooth external wall
<b>Layer 2</b>	Smooth internal wall	Corrugated internal layer following the geometry of the outer wall	Smooth internal wall
<b>Layer 3</b>	An independent layer of longitudinal lines		
<b>Application field</b>	Concrete	Dry wall	Underplaster, sub-ceiling
<b>Drawing</b>			

For more technical information please advise the Product Data Sheets at [www.kouvidis.com](http://www.kouvidis.com)

**LEGEND**

	<p>Nominal outer diameter (mm)</p>		<p>Packing (pieces/box)</p>		<p>Bigger Packing for fittings (pieces)</p>
	<p>Nominal inner diameter (mm)</p>		<p>Coil weight (Kg)</p>		<p>Packing (m/coil)</p>
	<p>Dimensions (mm)</p>		<p>Package weight (kg)</p>		<p>Package (m/package) 3 m length</p>
	<p>Coils of pliable conduits on pallet (m)</p>		<p>Total meters in a specially designed pallet for rigid conduits</p>		<p>Halogen free product</p>
	<p>Faster and easier cable insertion</p>		<p>Low smoke emissions</p>		<p>Conduits with anti - electromagnetic technology</p>
	<p>Friction reduction at the internal wall of the conduit</p>		<p>Longitudinal stripes of indelible color (3<sup>rd</sup> layer) red RAL 3020 green RAL 6037.</p>		
	<p>Product Conformity to all requirements of relative European Directives.</p>		<p>The product and its production process are inspected and approved by VDE German institute</p>		

## ATTENTION

Cable protection conduits are an essential part of the electrical infrastructure of a building.

Unfortunately, even today, there are many cases where cables are directly installed within cavity walls (drywall) even if most of the Member's national legislation, in Europe, impose the mandatory use of protective cable conduits in electrical installations. From our point of view, as manufacturers, we recommend avoiding installing cables directly within walls, an action that may endanger the safety of the building or the people living in it.

Our plastic conduits offer higher thermoplastic insulation, better mechanical resistance, fire protection, less risk during installation and finally the best way to protect cables. Additionally, they prove their true value years later, when building owners proceed to new modern applications. Therefore, a well-planned electrical conduit installation gives the builder the security to use new technologies any time with very little installation effort, something that is impossible to do when cables are directly installed in walls.



KOUVIDIS was founded in 1979 when Emmanuel Kouvidis, an electrician-installer, decided to quit his job and set up a business of his own in order to produce high quality conduits which would not break and which would ensure the safety of electricians installers.

His vision came true and KOUVIDIS evolved to one of the largest Greek plastic pipe manufacturers characterized by continuous development and innovation.

Keeping its people at the heart of all its actions and aiming to the sustainable development and the cycling economy, KOUVIDIS will continue to provide value added products and services and to constantly improve the installer's work.

learn more about our  
44+ years journey  
[www.kouvidis.com](http://www.kouvidis.com)



EMM. KOUVIDIS SA  
Manufacturer of plastic piping systems

VIO.PA Tylissos 715 00 Heraklion, Crete, Greece  
T: +30 2810 831500, F: +30 2810 831502  
E: [info@kouvidis.gr](mailto:info@kouvidis.gr)  
[www.kouvidis.gr](http://www.kouvidis.gr)

