SUPERSOL® PLUS
SUPERFLEX® PLUS

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

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

KOUVIDIS®
forever safe

SUPERSOL® PLUS

1st layer

The external wall provides the required mechanical strength

2nd layer

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

3rd layer

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

SUPERFLEX® PLUS

1st layer

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

2nd layer

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

3rd layer

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

Patent Protected: Anti-electromagnetic technology (1009975), Anti-static technology (1009810) Color Marking (1009158), Anti-Scratch technology (1010513).

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

Low acidity

Friction reduction, faster insertion of the cables.

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 PO blend, 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

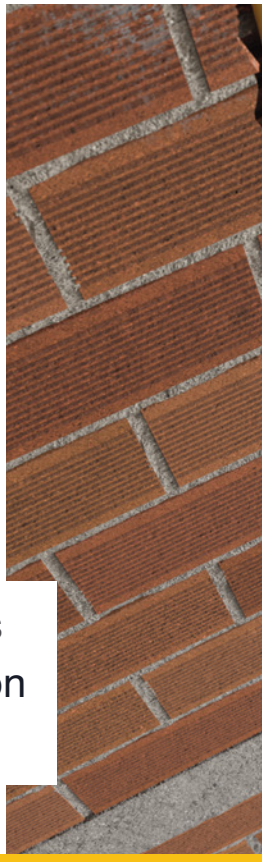
SUPERSOL® PLUS
SUPERFLEX® PLUS

DUROFLEX® PLUS

KOUVIDIS

SUPERSOL® PLUS
SUPERFLEX® PLUS

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



SUPERSOL® PLUS
the ideal solution
in underplaster

1

Faster installation

A special ULTRA slip material is added in the internal layer of SUPERSOL® PLUS and SUPERFLEX® 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 = Tele-communication 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^{0}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.


AWARDS '21
Packaging
Silver
AWARDS '21
Packaging
Bronze
SUPERFLEX® PLUS


KOUVIDIS
SUPERSOL® PLUS

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 meters

Understanding the needs in plasterboard concealed installations, we offer the **SUPERFLEX® PLUS** Ø16 and Ø20 conduit in 100-meters packages to better serve the needs of the electrical installer.

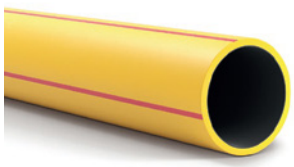
Reduced footprint

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.

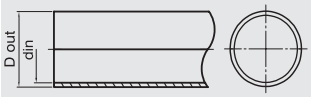
Light Type (320Nt)

SUPERSOL® PLUS ISR Rigid conduit

23431



RAL 9004 INNER | RAL 9004 OUTER



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

Reference Standards
NF P 98-332

Assembled with
SUPERSOL PLUS Coupler
SUPERSOL PLUS Clip
Metal Clamp KOUVIDIS

Patents protected
1009810, EP2698792, 1009975, 1010513

Properties		Class
Resistance to compression	320Nt/5cm	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
IP ingress protection	min IP65	6 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
Fire effects	None declared	0
Environmental impact	Halogen free	1

Additional properties

Raw material	Halogen free, heavy metals free (RoHS) and specially stabilized thermoplastic PO blend
Low friction (internal layer)	Special material (Ultra slip) speeds up the routing of cables
Anti - electromagnetic technology	Absorbs a part of the electromagnetic radiation emitted by cables
Color marking	Longitudinal stripes of indelible color indicate the power of the protected cables
Halogen free	No toxic gases in case of fire
Low acidity	No corrosive gases in case of fire
Low smoke	Better visibility of escape ways
Antistatic Technology	Protection against static electricity
Antiscratch Technology	Protection against scratching from cable routing
Marking	Engraved with laser printing

Application fields

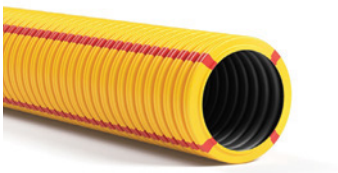
Exposed | **Concealed (underplaster)** | **Concealed (dry wall)** | **Concealed floor / ceiling** | Underfloor in screed | Concrete | Outdoor | Buried underground | Wood

Type	Part number red / green	D out	min din		kg	(m)
Ø16	1028016 / 1029016	16	13.4	57	2.18	7410
Ø20	1028020 / 1029020	20	17.5	57	3.02	5130
Ø25	1028025 / 1029025	25	22.1	30	4.40	3300
Ø32	1028032 / 1029032	32	28.4	30	2.85	1920

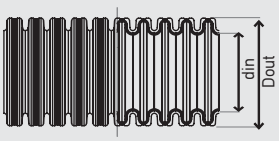
Light Type (320Nt)

SUPERFLEX® PLUS ISR Pliable corrugated conduit

23332



RAL 9004 INNER | RAL 9004 OUTER



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

Reference Standards
NF P 98-332

Assembled with
SUPERSOL PLUS Coupler
SUPERSOL PLUS Clip
Metal Clamp KOUVIDIS

Patents protected
1009810, EP2698792, 1009975, 1010513

Properties		Class
Resistance to compression	320 Nt/5cm	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
IP ingress protection	min IP65	6 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
Fire effects	None declared	0
Environmental impact	Halogen free	0

Additional properties

Raw material	Halogen free, heavy metals free (RoHS) and specially stabilized thermoplastic PO blend
Low friction (internal layer)	Special material (Ultra slip) speeds up the routing of cables
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Antistatic Technology	Protection against static electricity
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Marking	Engraved with laser printing

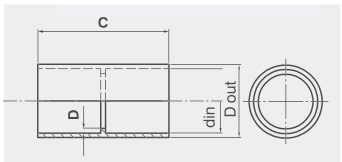
Application fields

Exposed | **Concealed (underplaster)** | **Concealed (dry wall)** | **Concealed floor / ceiling** | Underfloor in screed | Concrete | Outdoor | Buried underground | Wood

Type	Part number red / green	D out	min din		kg	(m)
Ø16	2053916 / 2054016	16	10.9	100	4.70	7000
Ø20	2053020 / 2054020	20	14.2	100	5.60	6000
Ø25	2053025 / 2054025	25	18.6	50	3.59	3500
Ø32	2053032 / 2054032	32	24.9	25	2.31	1500

Fittings

RAL 1023
yellow



SUPERSOL® PLUS ISR Connection coupler
for concealed type installations

Properties

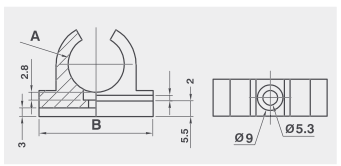
Raw material	Halogen free, heavy metals free (RoHS) and specially stabilized thermoplastic PO blend

Type	Part number	D out	din	C mm		
Ø16	4042016	17.7	16.0	52.3	40	1920
Ø20	4042020	23.5	20.0	51.5	30	1890
Ø25	4042025	28.5	25.0	51.5	30	1440
Ø32	4042032	37.0	32.0	65.0	20	560

Application Standards: EN 61386.01

Fittings

RAL 1023
yellow



SUPERSOL® PLUS ISR Clip
for concealed type installations

Properties

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

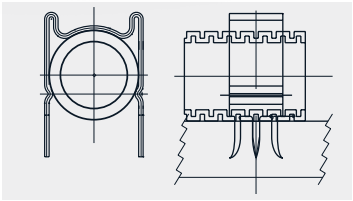
Type	Part number	A mm	B mm		
Ø16	4045016	15.8	35	4x50	3400
Ø20	4045020	19.8	40	4x50	2000
Ø25	4045025	24.8	46	4x30	1920
Ø32	4045032	31.8	53	30	1440

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

Patent Protected: 1010513

Fittings

KOUVIDIS Metal clip for drywall



CE

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

Cutting tool for plastic pipes
in one stop

Suggested for conduits **up to Ø25**

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

Cutting tool for plastic pipes
with automatic quick reverse

Suggested for conduits **up to Ø32**

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

Cutting tool for plastic pipes
with automatic quick reverse

Suggested for conduits up to **Ø63**

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

Replacement blades for pipe shears

Product: **Blade PEX 28 S**

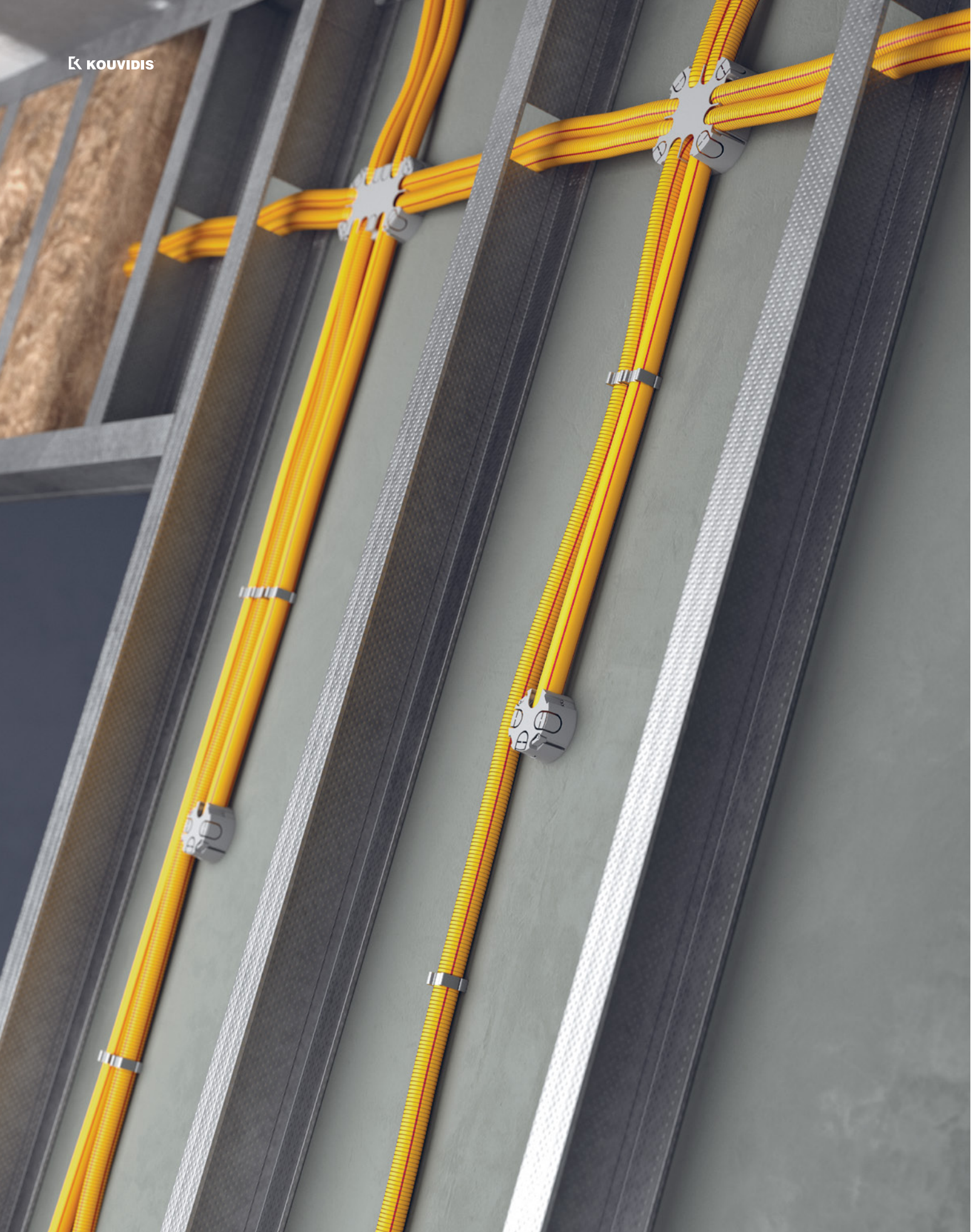
Part Number: 6000029

Product: **Blade P 35 A**

Part Number: 6000031

Product: **Blade P63 P**

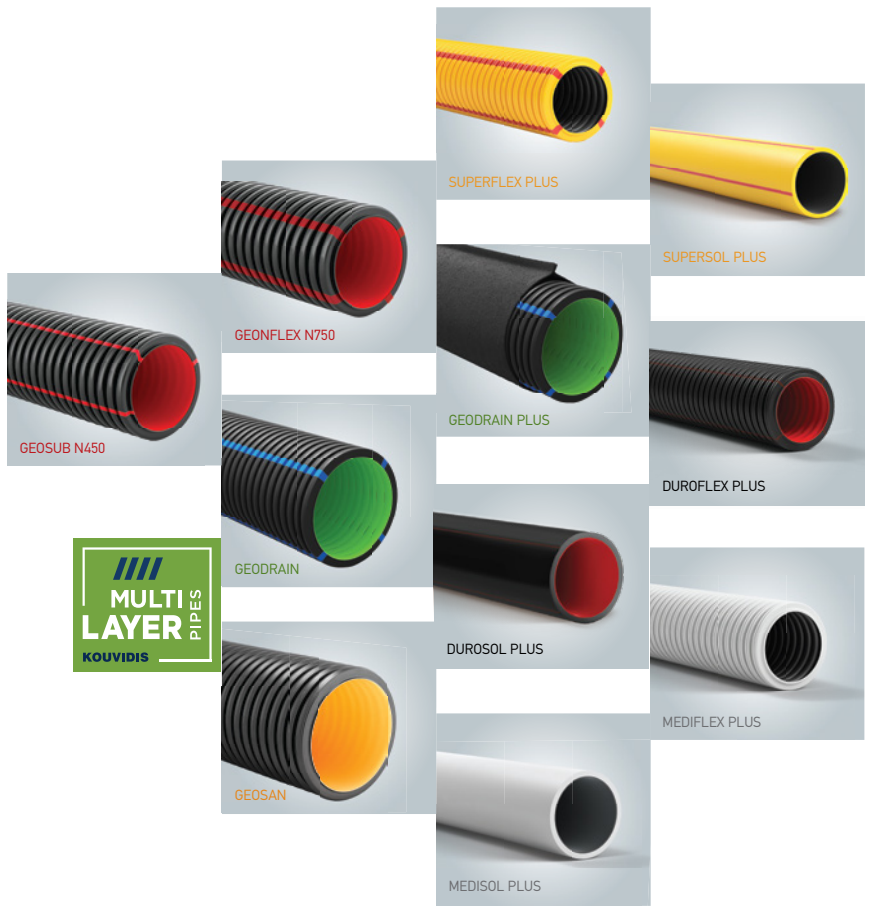
Part Number: 6000033



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.

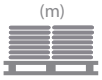


LEGEND

Nominal outer diameter (mm)

Nominal inner diameter (mm)

Dimensions (mm)



Coils of pliable conduits on pallet (m)

KOUVIDIS
LOW FRICTION

Friction reduction at he internal wall of the conduit

KOUVIDIS
ANTISTATIC

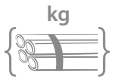
Antistatic technology which protects against static electricity
Patent Protected: 1009810

KOUVIDIS
ANTISCRATCH

Antiscratch protection ISR
Patent Protected:1010513

Packing (pieces/box)

Coil weight (Kg)



Package weight (kg)

Total meters in a specially designed pallet for rigid conduits

KOUVIDIS
LOW SMOKE

Low smoke emissions

Low acidity

Product Conformity to all requirements of relative European Directives.

Bigger Packing for fittings (pieces)

Packing (m/coil)

Package (m/package)
3 m length

KOUVIDIS
HALOGEN FREE

Halogen free product

KOUVIDIS
INDELIBLE LINES

Longitudinal stripes of indelible color (3rd layer)
red RAL 3020
green RAL 6037.

KOUVIDIS
EMR

Conduits with anti - electromagnetic technology

The product and its production process are inspected and approved by VDE German institute

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.

ver. 04.2024

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.

KOUVIDIS
SMART FACTORY

KOUVIDIS

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