SUPERFLEX®
PLUS 320Nt

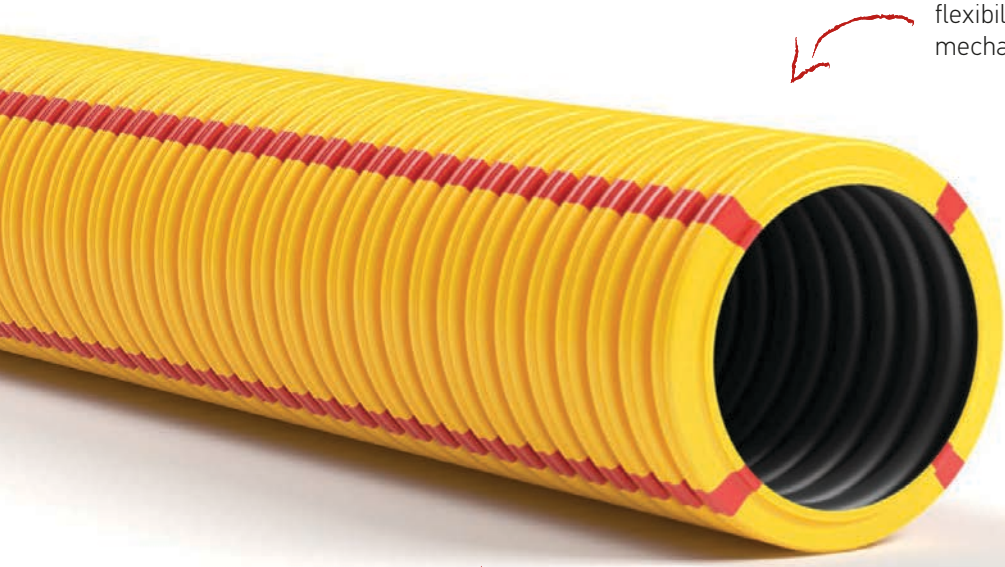
3 layer conduit

FOR CONCEALED
TYPE INSTALLATIONS
IN PLASTERBOARD

KOUVIDIS®

Layer 1

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



Layer 3

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

Layer 2

The internal layer follows the geometry of the outer layer, facilitating the smooth insertion of the cables.

Patent Protected by European Patent Office (EP2698792) and Hellenic Industrial Property Organization (Patent Pending)

SUPERFLEX® PLUS 320Nt

New generation of 3layer conduits

for concealed type installations in plasterboard

with ANTI-ELECTROMAGNETIC technology

Faster and easier cable insertion

Halogen Free

Anti - electromagnetic technology

at a glance...

Following the method of co-extrusion of 3 layers along with the use of special stabilized and halogen free raw materials, SUPERFLEX® PLUS conduits achieve high mechanical strength and flexibility, for concealed type installations in plasterboard, cavity wall and sub-ceiling.

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

Their inner layer incorporates an innovative technology, which absorbs a part of the electromagnetic radiation emitted by the cables running within the conduit.

SUPERFLEX® PLUS 320Nt
new anti-electromagnetic technology

All cabling, both in residences and business premises, that is used to transfer energy and provide supply to electric devices, creates 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 **anti-electromagnetic technology**, part of the radiation originating from cabling is isolated within the interior layer of the new 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 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.

less volume | more metres | reduced footprint

new packaging for 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

Knowing what are the practical needs when it comes to 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 of 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.

KOUVIDIS

SUPERFLEX® PLUS

the ideal solution
in plasterboard

Faster installation

A special slip material is added in the internal layer of SUPERFLEX® PLUS conduits, **reducing by 40%** the friction (test conducted according to IEC/TR 62470) and thus the applied force that is required for cable routing.

Less “exposure”

The new 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.

Safer installation

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


KOUVIDIS
SUPERFLEX® PLUS
DUROFLEX® PLUS

KOUVIDIS

main advantages of SUPERFLEX® PLUS conduits

The inner layer incorporates an innovative anti-electromagnetic technology

40% lower friction due to special slip material added in the internal layer (test conducted according to IEC/TR 62470)

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

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

High mechanical resistance in high temperature of (105^{0}C)

Not attractive to rodents (European Patent EP2698792)

Ease of use due to its ability to regain its initial shape after bending

Ideal for concealed type installations in plasterboard

New specially designed packaging that saves **25% - 50%** more storage space

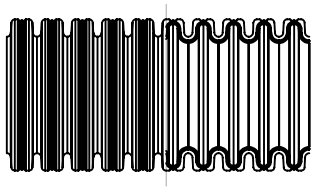
Lower costs due to its reduced storage space and lower installation time

Light Type (320Nt)

RAL 1023
yellow / outer layer

RAL 9004
black / inner layer

RAL 3020
Indelible red / Longitudinal lines



Application Standards: EN 61386.22

Reference Standards: EN 50642

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

SUPERFLEX® PLUS conduits are also available with green **color** marking with the part numbers: 27401XX0

where XX the diameter of the conduit
Ø16, Ø20, Ø25, Ø32

Patent Protected: EP2698792

SUPERFLEX® PLUS IAR

22332

Properties		Class
Resistance to compression	320Nt/5cm	2
Resistance to impact	1J (at-15°C)	2
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 Protection against ingress of water	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

Additional properties

Raw material	Halogen free, heavy metals free (RoHS) and specially stabilized thermoplastic PP
Anti – electromagnetic technology	Absorbs a part of the electromagnetic radiation emitted by the cables
Lower frictions	Special slip material added in the internal layer
Color marking	Longitudinal stripes of indelible color indicate the power of the protected cables
Halogen free	No toxic or corrosive gases in case of fire
Rodent repellent	Not attractive to rodents

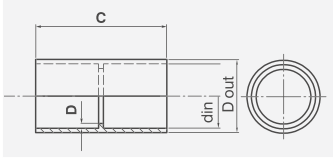
+ Three layer conduit consists of a corrugated external wall, an internal layer that follows the geometry of the outer wall and a third independent layer of longitudinal lines. Marked using embossed printing and packed with 100% recyclable polyethylene film including safety straps.

Ideal for concealed type installations in plasterboard, cavity wall and sub-ceiling. A special slip material is added on its internal layer, facilitating the smooth insertion of the cables.

Type	Part number	D out	din		kg	(m)
Ø16	27400160	16	10.9	50	2.34	5850
Ø20	27400200	20	14.2	100	5.60	5600
Ø25	27400250	25	18.8	50	3.59	2600
Ø32	27400320	32	24.9	25	2.31	1100

Fittings

RAL 3020
Red



Application Standards: EN 61386.01

Reference Standards: EN 50642

Coupler for SUPERFLEX® PLUS and DUROFLEX® PLUS conduits

Properties

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

Type	Part number	D out	din	C mm		
Ø16	4213016	17.7	16.0	52.3	40	1920
Ø20	4213020	23.5	20.0	51.5	30	1890
Ø25	4213025	28.5	25.0	51.5	30	1440
Ø32	4213032	37.0	32.0	65.0	20	560

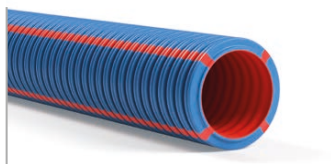
General properties for Fittings

Temperature range	-25°C to +60°C
Electrical characteristics	With electrical insulated characteristics
Resistance to flame propagating	Non flame propagating
Halogen free	No toxic or corrosive gases in case of fire

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 2011, having developed innovative products for various applications.

We use two different technologies for welding the individual layers:

	 **DUROFLEX® PLUS** IAR	 **SUPERFLEX® PLUS** IAR
Production technology	Double Structured Wall (DW)	Double Layer (DL)
Layer 1	Corrugated external wall	
Layer 2	Smooth internal wall	Corrugated internal layer following the geometry of the outer wall
Layer 3	An independent layer of longitudinal lines	
Application field	Concrete	Plasterboard, cavity wall, Sub-ceiling
Drawing		

For more technical information please advice the Product Data Sheets at www.kouvidis.gr

LEGEND

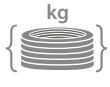
Nominal outer diameter

Nominal inner diameter (min)

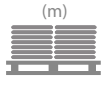
Packing (m/coil)

Faster and easier cable insertion

Packing (pieces/box)



Coil weight (Kg)



Coils of pliable conduits on pallet (m)

Conduits with anti - electromagnetic technology

Dimensions (mm)

Bigger Packing for fittings (pieces)

Halogen free product

ver. 09. 2020

40 YEARS

KOUVIDIS was founded 40 years ago 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 manufactures 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
40 years journey

www.kouvidis.gr

KOUVIDIS

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