


The logo consists of a solid red square with the word "VIOKAR" in white, bold, uppercase letters centered within it.

VIOKAR

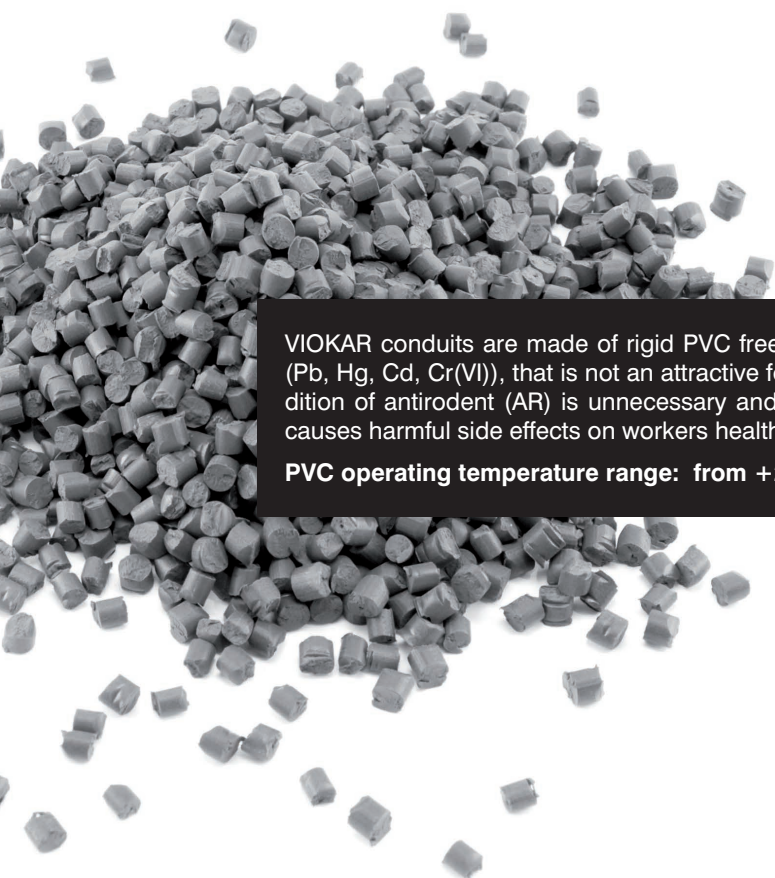
A photograph showing a white PVC pipe with a 90-degree elbow fitting. The pipe has a ribbed texture and is set against a dark background.

CONDUITS & ACCESSORIES

CATALOGUE 2020

A photograph of a green and brown corrugated pipe. The green part is smooth, and the brown part is ribbed. It is shown at an angle against a light background.

www.viokar.gr



VIOKAR conduits are made of rigid PVC free of certain hazardous substances (Pb, Hg, Cd, Cr(VI)), that is not an attractive food for rodents. Therefore, the addition of antirodent (AR) is unnecessary and it has also been observed that it causes harmful side effects on workers health during the production process.

PVC operating temperature range: from +25 °C to +70 °C

INDEX



ECONOMY

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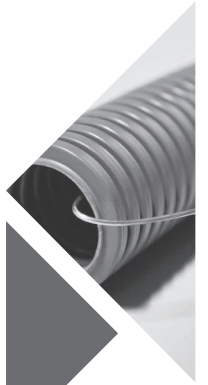
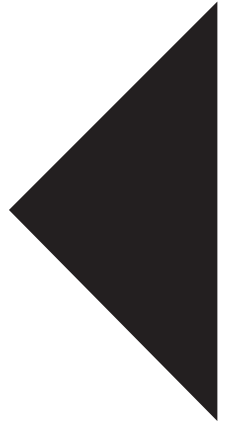
STANDARD

12



PREMIUM

16



BETON

20



GARDEN

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ULTRA FLEXIBLE

24

NEW CONDUITS SERIES

The new generation of Viokar conduits and accessories was designed and manufactured according to:

- the constantly increasing demands of technical projects
- the special features of each application
- the different needs of the installer

Each of the specialized product families is designed specifically for the intended application. That is, the technical characteristics of each family have been determined by the respective application.

In addition, each family of conduits is available in two different ways:

- in a **small packaging** for repairs and small installations, which includes a steel cable puller and also includes accessories, depending on the application.
- in a **professional packaging** for large-scale technical projects, where the installer can obtain exactly the measures needed.



0%

Hazardous materials (Pb, Hg, Cd, Cr(VI))
and anti-rodent (AR)

13%

reduction of energy consumption

22%

reduction of packaging materials

37%

increase of liquid and solid waste recycling

98%

recycled products and packaging

100%

FSC-certified advertising material

THINK
GREEN

NEW PACKAGING



INCLUDES

ECONOMY	Economy COUPLER	STEEL CABLE PULLER
STANDARD	COUPLER IP 40 & CLIP with plug & skrew	
PREMIUM	ADAPTOR IP67	
BETON	Security-Lock COUPLER	
GARDEN	Security-Lock COUPLER	
ULTRA-FLEX	ADAPTOR IP65	

25m

- Practical packaging that covers most small applications
- Includes accessories (coupler, adaptors or clips), for connecting or supporting conduits
- Includes a steel cable puller for easier cable pulling
- Easy transport

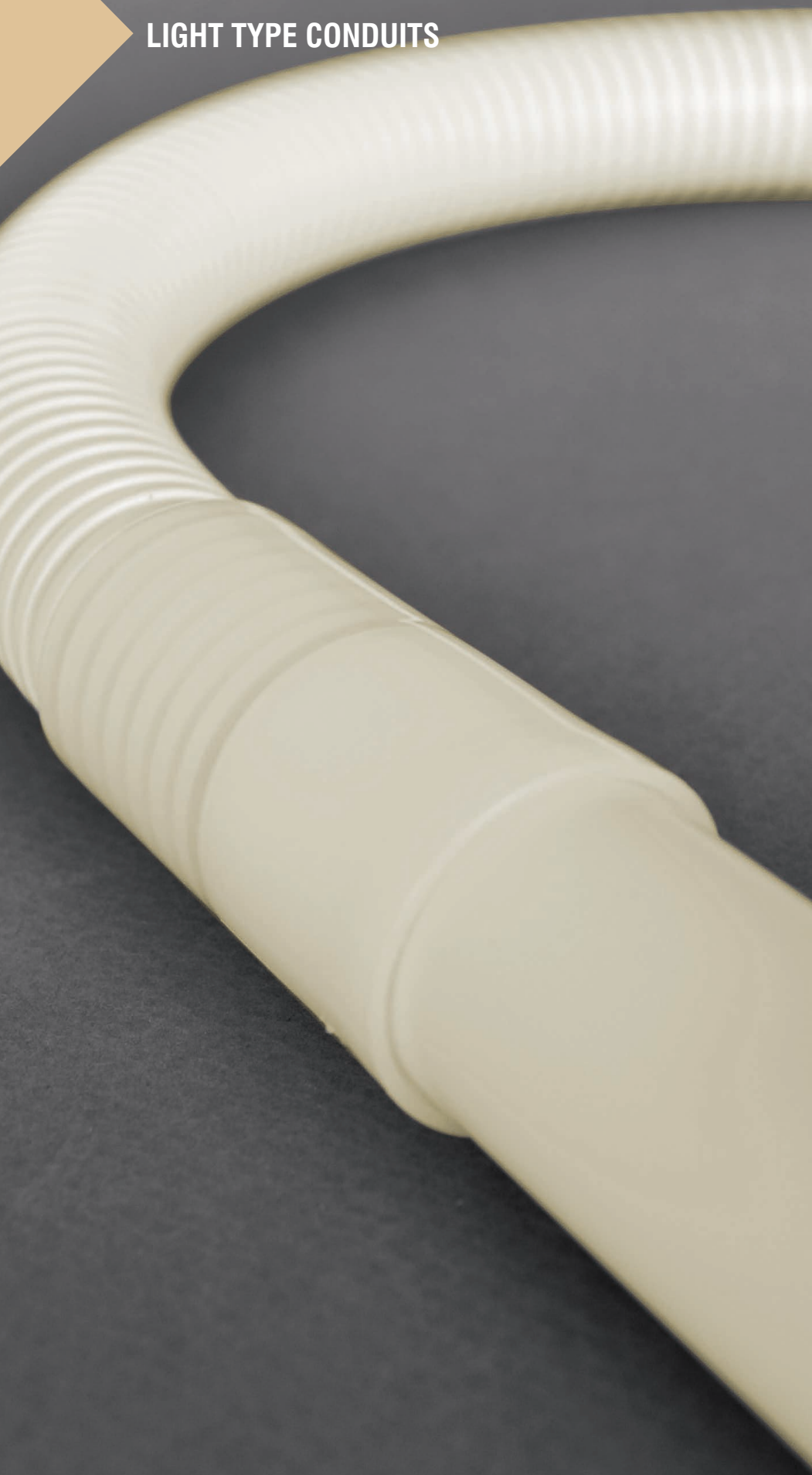


100m

- The package remains intact until the last meter, as the tube unfolds internally
- Keeps the conduit clean while protecting it from bumps
- Economical, as the installer only buys as many meters as needed
- Saves storage space
- Available per meter at an economical price

ECONOMY

LIGHT TYPE CONDUITS



APPLICATIONS

Ideal for low cost electrical installations with reduced mechanical stresses like under the plaster, behind plasterboards, or inside ceilings, etc



Economy



Fast
Installation



Increased
Capacity



The Economy coupler facilitates the connection between corrugated and rigid Conduits, while allowing a quick and secure installation.

ECONOMY

LIGHT TYPE CONDUITS

VIOSPIRAL **ECONOMY**



Light Type Corrugated Electrical Conduit

- Easily configurable for quick installation
- Increased capacity compared to relevant DIN dimensions

Type			25m	PROFESSIONAL 100m
Ø 16	16 +0/-0,3	11,2 ± 0,1	1105101016	1108101016
Ø 20	20 +0/-0,3	15,0 ± 0,1	1105101020	1108101020
Ø 25	25 +0/-0,4	18,9 ± 0,1	1105101025	1108101025
Ø 32	32 +0/-0,4	25,2 ± 0,1	1105101032	1108101032

VIOTUBO **ECONOMY**



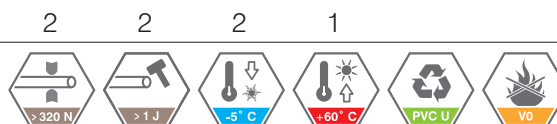
Light Type Rigid Electrical Conduit

- Increased capacity compared to relevant DIN dimensions

Type			Code	
Ø 16	16 +0/-0,3	14,0 ± 0,1	1106101016	30
Ø 20	20 +0/-0,3	17,5 ± 0,1	1106101020	30
Ø 25	25 +0/-0,4	22,5 ± 0,1	1106101025	30
Ø 32	32 +0/-0,4	29,6 ± 0,1	1106101032	15



CLASSIFICATION:



INTERNATIONAL STANDARDS: EN 61386.01, EN 61386.21, EN 61386.22, EN 60423

EUROPEAN DIRECTIVES: 2014/35/EU (LVD), 2011/65/EU (RoHS II), 2006/1907/EC (REACH)

ACCESSORIES

Conduit
Clip



Conduit Clip
with plug & screw



FIX-RING
single



FIX-RING
double



FIX-RING
τετραπλό



Coupler
Economy



Find the accessories
Codes > page 30

Recessed
VIOBOX IP20



Type	Dimensions	Code	∅	#	↑
Round Box ∅ 16-20	∅ 73 x 35	0181010073	20	8	100
Square Box ∅ 16-25	80 x 80 x 35	0181020080	25	8	70
Square Box ∅ 16-25	100 x 100 x 42	0181020100	20/25	8/4	35

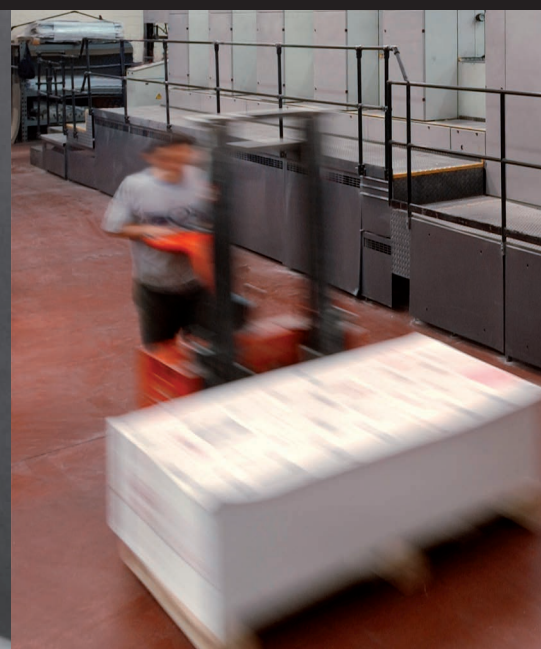
The single-frame recessed box offers excellent grip, while it can also be placed in series through its built-in links.

Code: 0181010073



STANDARD

MEDIUM TYPE CONDUITS



APPLICATIONS

Recommended for moderate mechanical loads, such as indoors or outdoors installations, being the obvious value for money choice

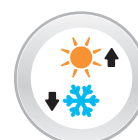
PVC operating temperature range:
from -25 °C to +70 °C



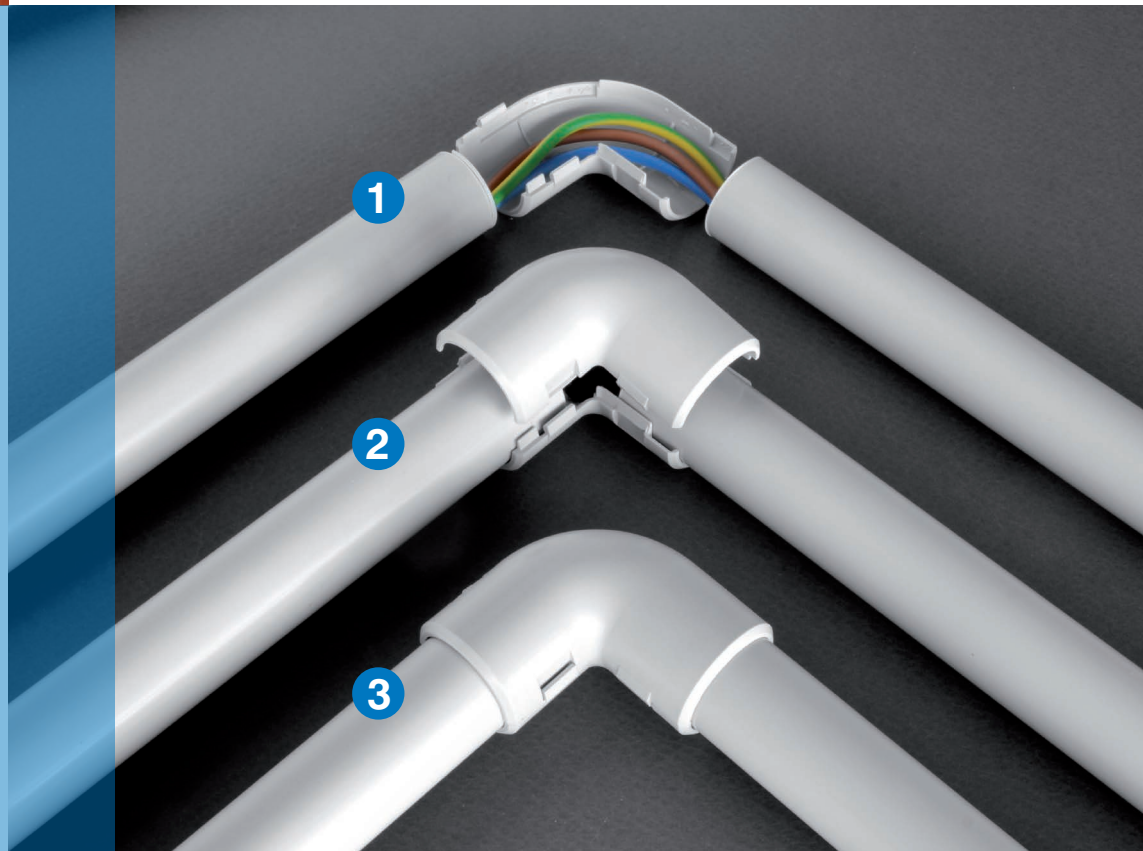
Fast Installation



UV Stabilised



From -5 °C
to +60 °C

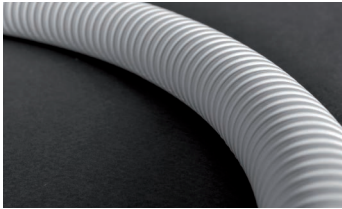


In addition to the classic conduits accessories, the inspectable bend and “T” can be integrated after the placement of the conduits, allowing the installation to be configurable and inspectable according to your needs.

STANDARD

MEDIUM TYPE CONDUITS

VIOSPIRAL **STANDARD**

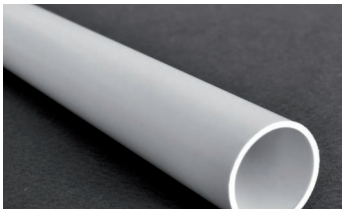


Medium Type Corrugated Electrical Conduit

- Remarkably bendable for quick and easy installation
- UV stabilised

Type			25m	PROFESSIONAL 100m
Ø 16	16 +0/-0,3	10,8 ± 0,1	1105200016	1108200016
Ø 20	20 +0/-0,3	14,5 ± 0,1	1105200020	1108200020
Ø 25	25 +0/-0,4	18,5 ± 0,1	1105200025	1108200025
Ø 32	32 +0/-0,4	24,7 ± 0,1	1105200032	1108200032

VIOTUBO **STANDARD**



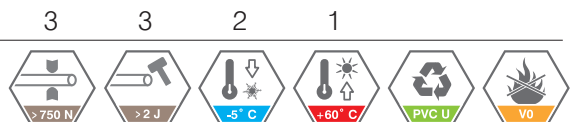
Medium Type Rigid Electrical Conduit

- Combined with its accessories can offer a solution to most types of installation
- UV stabilised

Type			Code	
Ø 16	16 +0/-0,3	13,2 ± 0,1	1106200016	30
Ø 20	20 +0/-0,3	16,7 ± 0,1	1106200020	30
Ø 25	25 +0/-0,4	21,7 ± 0,1	1106200025	30
Ø 32	32 +0/-0,4	28,6 ± 0,1	1106200032	15



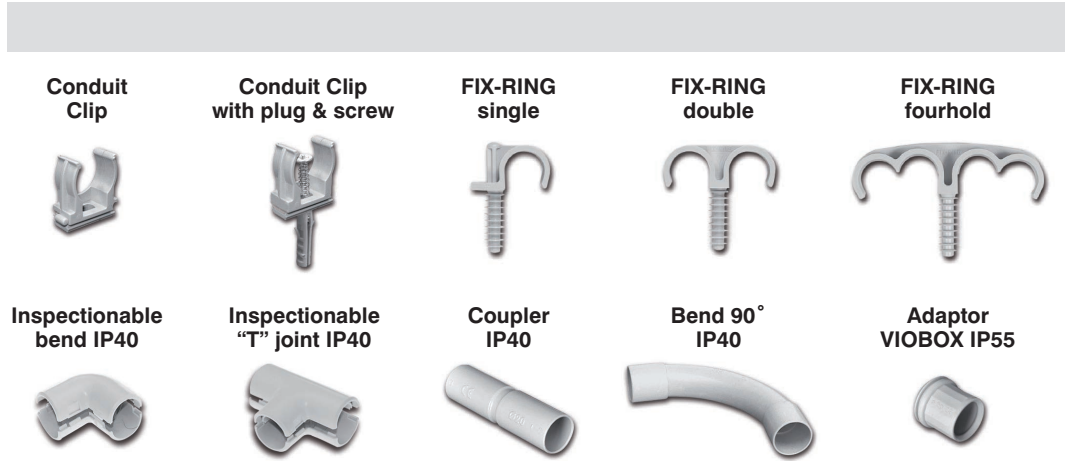
CLASSIFICATION:



INTERNATIONAL STANDARDS: EN 61386.01, EN 61386.21, EN 61386.22, EN 60423

EUROPEAN DIRECTIVES: 2014/35/EU (LVD), 2011/65/EU (RoHS II), 2006/1907/EC (REACH)

ACCESSORIES



Surface mounting box IP55



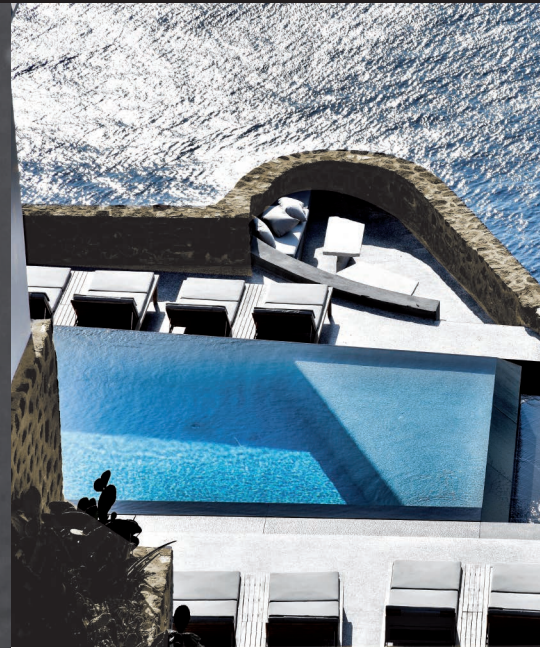
Type	Dimensions	Code			
Round Box Ø 16-20	Ø 70	0182210070	20	4	80
Square Box Ø 16-20	80 x 80	0182220080	20	6	48
Square Box Ø 25-32	108 x 108	0182220108	32	8	18

There are VIOBOX adaptors (IP 55) available for connecting the conduits to the surface mounting boxes, which offer speed and reliability to the installation.



PREMIUM

HEAVY TYPE CONDUITS



APPLICATIONS

Recommended for outdoor installations at harsh environmental conditions, where endurance is of the utmost importance.

PVC operating temperature range:
from -25°C to $+70^{\circ}\text{C}$



UV Stabilised



High mechanical
endurance...

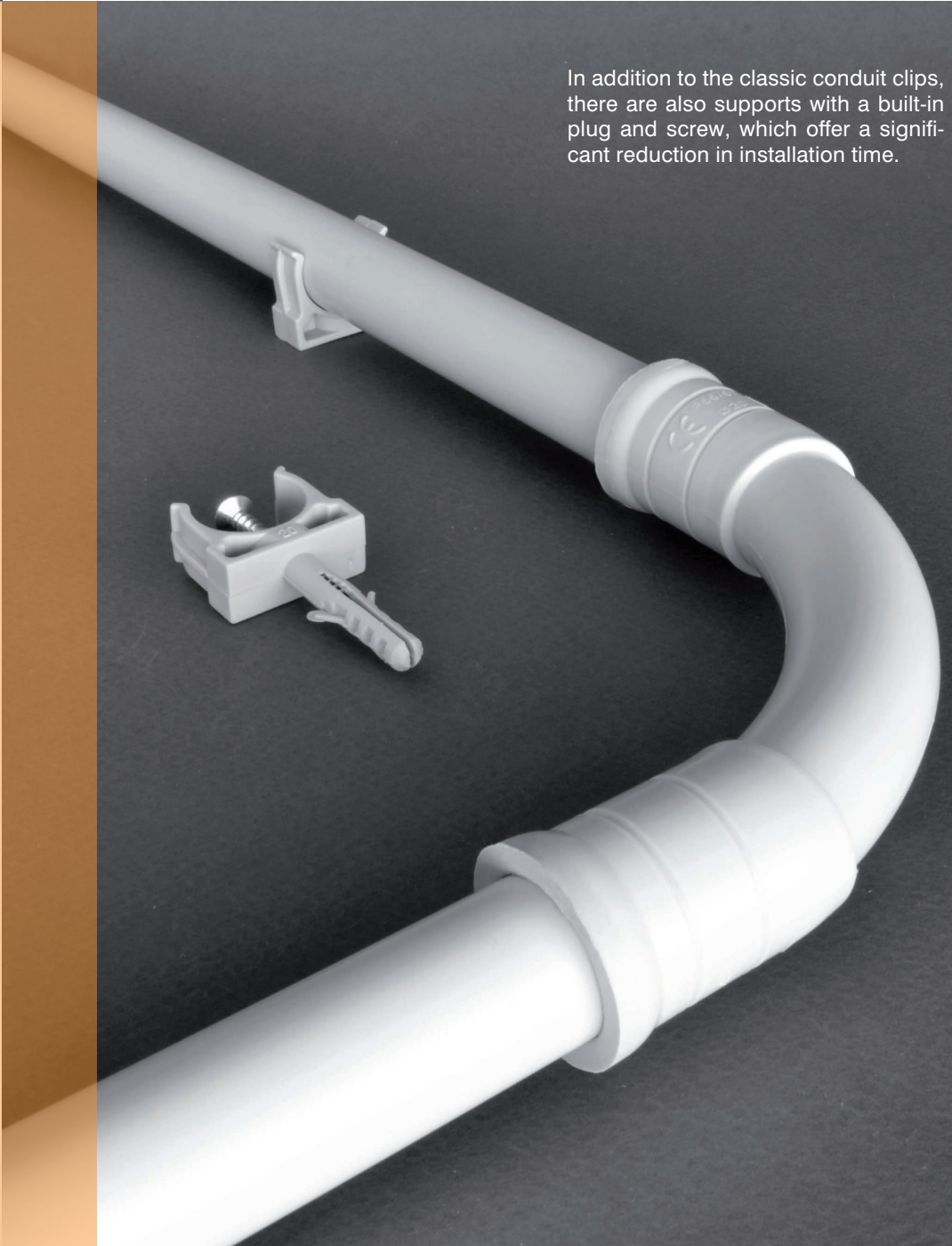


...even in very low
temperatures (-15°C)

CABLE PROTECTION



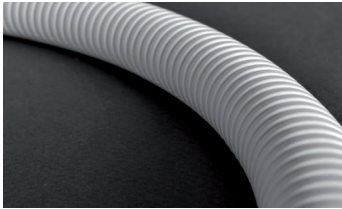
In addition to the classic conduit clips, there are also supports with a built-in plug and screw, which offer a significant reduction in installation time.



PREMIUM

HEAVY TYPE CONDUITS

VIOSPIRAL PREMIUM



Heavy Type Corrugated Electrical Conduit

- Recommended for heavy mechanical loads and exposed outdoor installations at below zero operating temperatures
- UV stabilised

Type			25m	PROFESSIONAL 100m
∅ 16	16 +0/-0,3	10,4 ± 0,1	1105300016	1108300016
∅ 20	20 +0/-0,3	14,1 ± 0,1	1105300020	1108300020
∅ 25	25 +0/-0,4	18,1 ± 0,1	1105300025	1108300025
∅ 32	32 +0/-0,4	24,2 ± 0,1	1105300032	1108300032

VIOTUBO PREMIUM



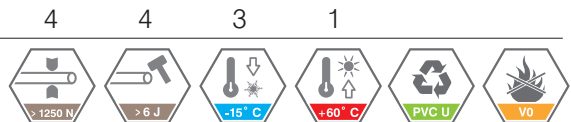
Heavy Type Rigid Electrical Conduit

- Recommended for heavy mechanical loads and exposed outdoor installations at below zero operating temperatures
- UV stabilised

Type			Code	
∅ 16	16 +0/-0,3	12,8 ± 0,1	1106300016	30
∅ 20	20 +0/-0,3	16,2 ± 0,1	1106300020	30
∅ 25	25 +0/-0,4	21,2 ± 0,1	1106300025	30
∅ 32	32 +0/-0,4	28,1 ± 0,1	1106300032	15



CLASSIFICATION:



INTERNATIONAL STANDARDS: EN 61386.01, EN 61386.21, EN 61386.22, EN 60423

EUROPEAN DIRECTIVES: 2014/35/EU (LVD), 2011/65/EU (RoHS II), 2006/1907/EC (REACH)



ACCESSORIES

Conduit Clip



Conduit Clip with plug & screw



FIX-RING single



FIX-RING double



FIX-RING fourhold



Coupler IP67



Flexible Bend IP66



Bend 90° IP67



Coupler IP66 VIOFLEX VIO TUBO



Adaptor IP67 VIO TUBO VIOBOX

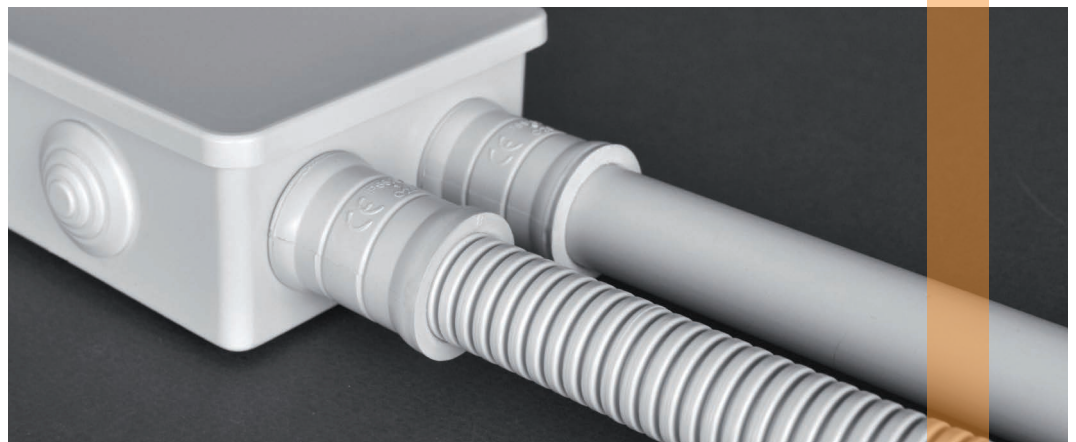


Surface mounting box IP55



Type	Dimensios	Code			
Round Box Ø 16-20	Ø 70	02 49 2751G	20	4	80
Square Box Ø 16-20	80 x 80	02 49 2753G	20	6	48
Square Box Ø 25	100 x 100	02 49 2755G	25	6	21
Square Box Ø 32	108 x 108	02 49 2773G	32	8	18

For connection of the conduits with the surface mounting boxes, we offer IP 67 waterproofing adaptors, which offer safety and reliability to the installation.



BETON

HEAVY EMBEDMENT CONDUITS



APPLICATIONS

Viospiral Beton is the ideal pliable plastic conduit for installations in concrete, reinforced concrete and underfloor installations, as it is able to withstand the elevated mechanical loads exerted by heavy embedment in concrete or cement, due to its unique formula and great mechanical strength, even in extreme temperatures.

PVC operating temperature range:
from -25°C to +70°C



Heavy Type
resistance impact



Unique
Formula



Security-Lock
Coupler



GARDEN



The **security lock** coupler guarantee the safe connection of the conduits during concrete casting.

APPLICATIONS

Viospiral Garden is recommended for use in small and large scale green projects as well as underground networks. It is the ideal pliable plastic conduit for private and public gardening projects (flower beds, islets, surroundings), as well as for agricultural crops and renewable energy projects. It is able to withstand the elevated mechanical loads exerted by soil sedimentation, due to its unique formula and great mechanical strength, even in extreme temperatures.

BETON & GARDEN

HEAVY EMBEDMENT CONDUITS

VIOSPIRAL **Beton**



Corrugated Electrical Conduit

- Specialised chemical composition for protection against concrete stabilisers
- Heavy type impact strength at -15 °C
- UV stabilised

Type			25m	PROFESSIONAL 100m
Ø 16	16 +0/-0,3	10,8 ± 0,1	1105402016	1108402016
Ø 20	20 +0/-0,3	14,4 ± 0,1	1105402020	1108402020
Ø 25	25 +0/-0,4	18,5 ± 0,1	1105402025	1108402025
Ø 32	32 +0/-0,4	24,7 ± 0,1	1105402032	1108402032

VIOSPIRAL **Garden**



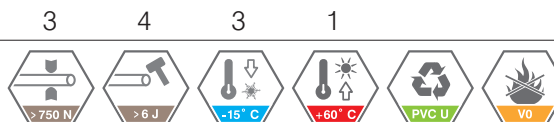
Corrugated Electrical Conduit

- Specialised chemical composition for protection against fertilizers, corrosive materials and environmental factors
- Heavy type impact strength at -15 °C
- UV stabilised

Type			25m	PROFESSIONAL 100m
Ø 16	16 +0/-0,3	10,8 ± 0,1	1105503016	1108503016
Ø 20	20 +0/-0,3	14,4 ± 0,1	1105503020	1108503020
Ø 25	25 +0/-0,4	18,5 ± 0,1	1105503025	1108503025
Ø 32	32 +0/-0,4	24,7 ± 0,1	1105503032	1108503032



CLASSIFICATION:



INTERNATIONAL STANDARDS: EN 61386.01, EN 61386.22, EN 60423

EUROPEAN DIRECTIVES: 2014/35/EU (LVD), 2011/65/EU (RoHS II), 2006/1907/EC (REACH)

ACCESSORIES

Conduit Clip



Conduit Clip with plug & screw



FIX-RING single



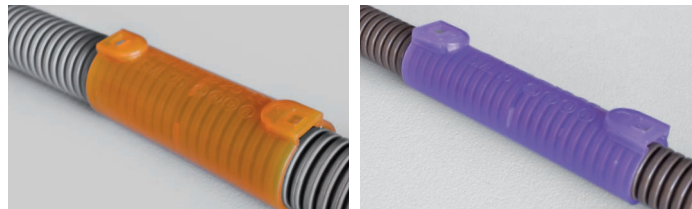
FIX-RING double



FIX-RING fourhold



Coupler Security-Lock IP65



Recessed box for spots



Type	Dimensions	Code			
Small Ø 16-20	Ø 78 x 107	0180910078	20	4	90
Big Ø 16-20	Ø 95 x 120	0180910095	20	4	48

The heavy type impact resistance at -15 °C makes the Beton conduit ideal to use in reinforced concrete applications.



ULTRA-FLEXIBLE

ULTRA FLEXIBLE CONDUITS



APPLICATIONS

Low temperature impact resistance, increased flexibility and additional UV stabiliser make VIOFLEX the natural choice in demanding mechanical applications where flexibility is a must have.



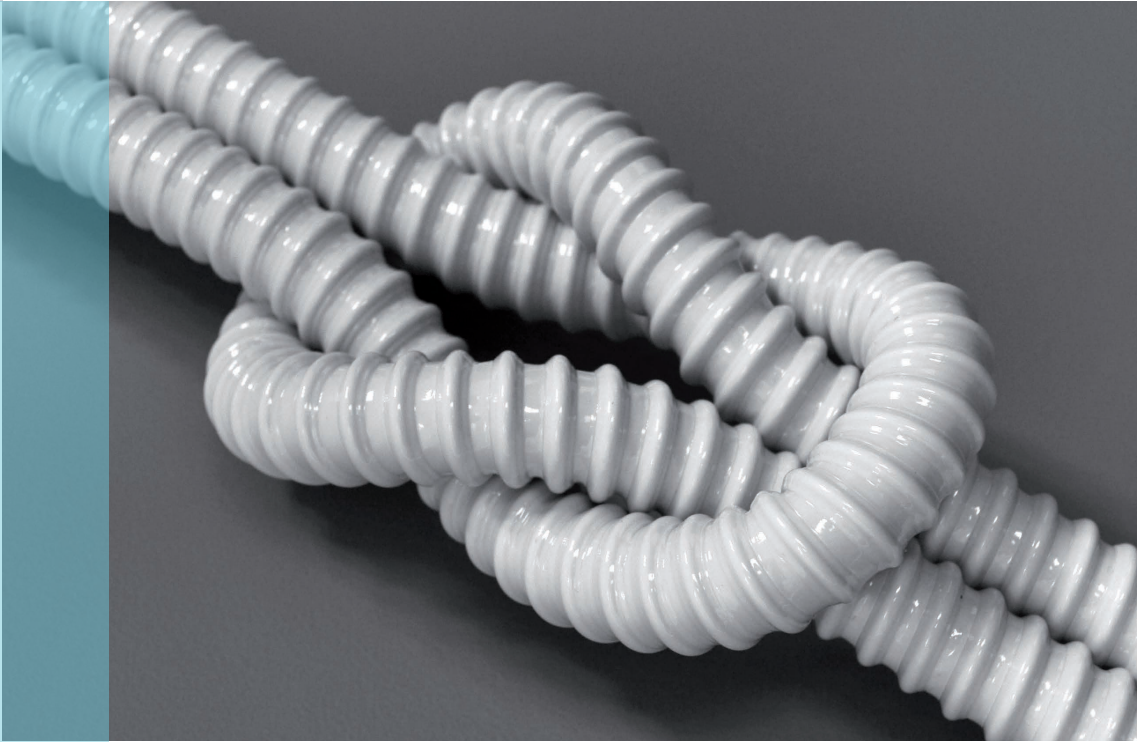
Increased Flexibility



Security-Lock



UV Stabilised



The increased flexibility of the conduit, combined with its smooth inner surface, makes it an ideal choice for installations that require overcoming obstacles and difficult passages.

ULTRA-FLEXIBLE




ULTRA FLEXIBLE CONDUITS

VIOFLEX



Flexible Electrical Conduit

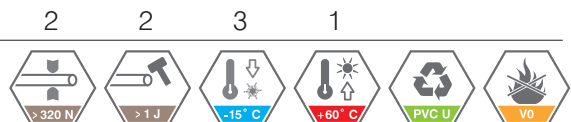
- With increased flexibility even at low temperatures for demanding installations
- UV stabilised

Type			 25m
No 10	15,0 ± 0,1	10 ± 0,1	1107100010
No 12	16,5 ± 0,1	12 ± 0,1	1107100012
No 14	18,8 ± 0,1	14 ± 0,1	1107100014
No 16*	21,5 ± 0,1	16 ± 0,1	1107100016
No 18	22,3 ± 0,1	18 ± 0,1	1107100018
No 20*	25,0 ± 0,1	20 ± 0,1	1107100020
No 22	26,6 ± 0,1	22 ± 0,1	1107100022
No 25*	30,8 ± 0,1	25 ± 0,1	1107100025
No 28	33,5 ± 0,1	28 ± 0,1	1107100028
No 30	35,6 ± 0,1	30 ± 0,1	1107100030
No 32*	37,5 ± 0,1	32 ± 0,1	1107100032
No 35	42,0 ± 0,1	35 ± 0,1	1107100035
No 40*	46,6 ± 0,1	40 ± 0,1	1107100040
No 50*	58,0 ± 0,1	50 ± 0,1	1107100050

* Can connect with IEC conduits using accessories



CLASSIFICATION:



INTERNATIONAL STANDARDS: EN 61386.01, EN 61386.23, EN 60423

EUROPEAN DIRECTIVES: 2014/35/EU (LVD), 2011/65/EU (RoHS II), 2006/1907/EC (REACH)

ACCESSORIES



Type	Couple IP66 VIOFLEX-VIOTUBO	Type	Adaptor IP65 VIOFLEX-VIOBOX
No 16 - Ø 16	3111500016	No 10 - M 16	3116500010
No 20 - Ø 20	3111500020	No 12 - M 16	3116500012
No 25 - Ø 25	3111500025	No 16 - M 20	3116500016
No 32 - Ø 32	3111500032	No 20 - M 25	3116500020
		No 25 - M 32	3116500025
		No 32 - M 40	3116500032
		No 40 - M 50	3116500040
		No 50 - M 63	3116500050

Surface mounting
box IP55




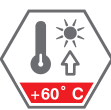










Type	Dimensions	Code			
Round Box M16 / M20	Ø 70	0182210070	20	4	80
Square Box M16 / M20	80 x 80	0182220080	20	6	48
Square Box M25	100 x 100	0182220100	25	6	21
Square Box M32	108 x 108	0182220108	32	8	18

VIOFLEX can be connected to junction boxes via IP65 adaptors that offer safety and reliability to the installation.



CLASSIFICATION CODE

Digits	Description	Class	0	1	2	3	4	5	6	7
		Symbols								
1	Resistance to compression			125 N	320 N	750 N	1250 N	4000 N		
2	Resistance to impact			0,5 J	A1 J	2 J	6 N	20,4 N		
3	Lowest temperature range			+5 °C	-5 °C	-15 °C	-25 °C	-45 °C		
4	Upper temperature range			+60 °C	+90 °C	+105 °C	+120 °C	+150 °C	+250 °C	+400 °C
5	Resistance to bending			Rigid	Pliable	Pliable/ self recovering	Flexible			
6	Electrical characteristics		None declared	With electrical continuity characterist.	With electrical insulating characterist.	With electrical continuity and insulating characterist.				
7	Protection against ingress of solid foreign objects		Not protected	Protected against solid foreign obj. of Ø > 50 mm	Protected against solid foreign obj. of Ø > 12 mm	Protected against solid foreign obj. of Ø > 2,5 mm	Protected against solid foreign obj. of Ø > 1 mm	Dust protected	Dust tight	
8	Protection against ingress of water		Not protected	Protected against vertically falling water drops	Protected against falling water drops when tilted up to 15°	Protected against falling water drops when tilted up to 60°	Protected against splashing water	Protected against water jets	Protected against powerful water jets	Prot. against the effects of temporary immersion in water
9	Resistance against corrosion			Low protection inside and outside	Medium protection inside and outside	Medium protection inside and high protect. outside	High protection inside and outside			
10	Tensile strength		None declared	Very light tensile strength	Light tensile strength	Medium tensile strength	Heavy tensile strength	Very heavy tensile strength		
11	Resistance to flame propagation			Non-flame propagating	Flame propagating					
12	Suspended load capacity		None declared	Very light suspended load capacity	Light suspended load capacity	Medium suspended load capacity	Heavy suspended load capacity	Very heavy suspended load capacity		

		1	2	3	4	5	6	7	8	9	10	11	12
ECONOMY	VIOSPIRAL	2	2	2	1	2	2	3	0	X	0	1	0
	VIOTUBO	2	2	2	1	1	2	3	0	X	0	1	0
STANDARD	VIOSPIRAL	3	3	2	1	2	2	3	0	X	0	1	0
	VIOTUBO	3	3	2	1	1	2	3	0	X	0	1	0
PREMIUM	VIOSPIRAL	4	4	3	1	2	2	3	0	X	0	1	0
	VIOTUBO	4	4	3	1	1	2	3	0	X	0	1	0
BETON		3	4	3	1	2	2	3	0	X	0	1	0
GARDEN		3	4	3	1	2	2	3	0	X	0	1	0
ULTRA-FLEX		2	2	3	1	4	2	3	0	X	0	1	0

Conduits for cable management and protection, according to EN 61386, must be designed and constructed in such a way that in normal use their performance is reliable and without risk to the user.

When assembled in a conduit system according to the manufacturer's instructions, they must provide reliable mechanical and whenever is required electrical protection to the insulated conductors and / or cables.

VIOKAR conduits are in accordance with the standard EN 61386 and are classified according to their mechanical, electrical and thermal properties. The conduits may be marked with the classification code and shall include at least the first four digits from a total of twelve that form this code.

TOTAL CO



CONNECTION GUIDE



ECONOMY

STANDARD

PREMIUM



Dimensions

VIOSPIRAL[®]

VIOTUBO[®]

VIOSPIRAL[®]

VIOTUBO[®]

VIOSPIRAL[®]

VIOTUBO[®]

Ø 16

1108101016

1106101016

1108200016

1106200016

1108300016

1106300016

Ø 20

1108101020

1106101020

1108200020

1106200020

1108300020

1106300020

Ø 25

1108101025

1106101025

1108200025

1106200025

1108300025

1106300025

Ø 32

1108101032

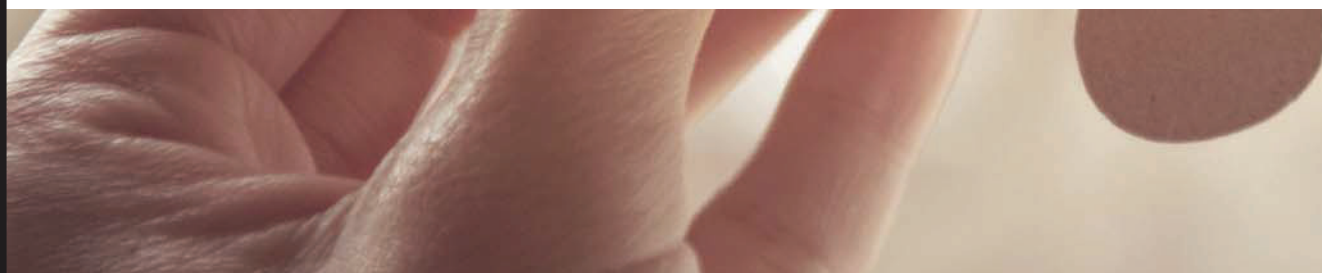
1106101032

1108200032

1106200032

1108300032

1106300032



NINECTION



BETON

GARDEN

ACCESSORIES



Beton

Garden

**Coupler
Economy**

**Coupler
IP40**

**Coupler
IP67**

**Coupler IP65
Security-Lock**

1108402016

1108503016

3111816016

3111816016

3111400016

3111615016

1108402020

1108503020

3111816020

3111816020

3111400020

3111616020

1108402025

1108503025

3111816025

3111816025

3111400025

3111617025

1108402032

1108503032

3111816032

3111816032

3111400032

3111618032

ADAPTORS & BOXES



Dimensions

Socket box

Recessed box for Spots

VIOBOX Recessed

IP 55 Surface Mounting Box

Adaptor IP67 VIOBOX

Adaptor IP55 VIOBOX

Ø 16

0185910065

0180910078

0181010073

0182220080

3116400016

0116300016

Ø 20

-

0180910095

0181020080

0182220080

3116400020

0116300020

Ø 25

-

-

0181020100

0182220100

3116400025

0116300025

Ø 32

-

-

-

0182220108

3116400032

0116300032

CONDUIT SUPPORT



Dimensions

Conduit Clip

Conduit Clip with plug & screw

FIX-RING Single

FIX-RING Double

FIX-RING Fourfold

Ø 16

3110000016

3110700016

6110110016

6110120016

-

Ø 20

3110000020

3110700020

6110110020

6110120020

6110140020

Ø 25

3110000025

3110700025

6110110025

6110120025

6110140025

Ø 32

3110000032

3110700032

-

-

-



Coupler IP66 VIOFLEX VIOBOX

Inspectionable Bend IP40

Inspectionable "T" Joint IP40

Bend 90° IP40

Bend 90° IP67

Flexible Bend IP66

Dimensions

3111500016

3113200016

3114200016

3112200016

3112400016

3115400016

Ø 16

3111500020

3113200020

3114200020

3112200020

3112400020

3115400020

Ø 20

3111500025

3113200025

3114200025

3112200025

3112400025

3115400025

Ø 25

3111500032

3113200032

3114200032

3112200032

3112400032

3115400032

Ø 32



DIN



~~IEC~~

VIOKAR is the first Greek company to stop the production of rigid and corrugated conduits with dimensions based on the outdated German dimensional standard DIN 49018. The same has been happening for years in the rest of Europe, even in Germany itself.

We now produce only products that are in accordance with the European dimensional standard EN 60423. This European standard specifies outside diameters for conduits used in electrical installations and the dimensional requirements for threads, in order to ensure the cooperation between conduits and components circulating in the European market, regardless of manufacturer and country of origin.

In addition, VIOKAR guarantees the absolute compatibility of its conduits and / or components with the corresponding ones of any manufacturer that complies with the European dimensional standard.



1964 | 2019



years

VIOKAR PLASTICS S.A.

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