



PVC Conduits



By Haykal **Plast**



Applications

- Electrical wiring protection
- Underground installations
- Exposed or concealed applications
- Industrial, commercial, and residential projects



Introduction

Welcome to **Voltapipe PVC Conduit Catalogue**, a comprehensive guide designed to support engineers, contractors, and project managers in selecting the right conduit solutions for electrical and construction needs.

PVC conduits have become the industry standard for safe, reliable, and cost-effective wiring protection. Their lightweight structure, durability, and resistance to moisture, chemicals, and corrosion make them the preferred choice across residential, commercial, and industrial applications.

In this catalogue, you will find:

- **Product specifications:** detailed dimensions, ratings, and compliance standards.
- **Application guidelines:** recommendations for installation in diverse environments.
- **Performance benefits:** insights into durability, flexibility, and long-term value.
- **Accessories and fittings:** a wide range to ensure seamless integration.

Our goal is to provide you with clear, organized information that simplifies decision-making and ensures your projects meet the highest standards of safety and efficiency.



Key Features and Benefits

Corrosion and Chemical Resistance: uPVC conduits are immune to corrosion caused by naturally corrosive soils, acids, alkalis, and salt solutions, ensuring longevity even in harsh environments.

Fire Resistance

They possess good flame-retardant properties; if exposed to flame, they self-extinguish when the source is removed, enhancing electrical safety.

Lightweight and Easy Installation

Compared to metal conduits, uPVC pipes are lighter (about one-fifth the weight of steel), making them easier to transport and install without specialized tools.

Smooth Interior

Their smooth inner surface reduces friction, facilitating easier wire pulling and preventing damage to electrical cables.

Flexibility

Though rigid, uPVC conduits have some structural flexibility, allowing them to withstand deformation without permanent damage, which is valuable during embedding in walls or concrete.

Durability

Resistant to UV exposure, impact, and mechanical stresses, uPVC conduits maintain performance indoors and outdoors for extended periods.



Application

- Electrical wiring protection in residential, commercial, and industrial buildings.
- Underground wiring and embedded pipelines inside walls/concrete.
- Telecommunication cable management.





- Urban power grids, transportation infrastructure, and automated installations.
- Suitable for indoor and outdoor environments due to corrosion, and
- UV resistance.

Summary

Choosing Voltapipe uPVC electrical conduit pipes provides an affordable, durable, and safe solution for routing electrical wiring. Their resistance to fire, corrosion, and physical stress, combined with ease of installation and compliance with international standards, makes them a preferred choice for modern electrical systems worldwide. Voltapipe uPVC conduits offer long-term reliability and reduced maintenance costs, ensuring safety and efficiency throughout the system's lifespan.

Standards and Compliance

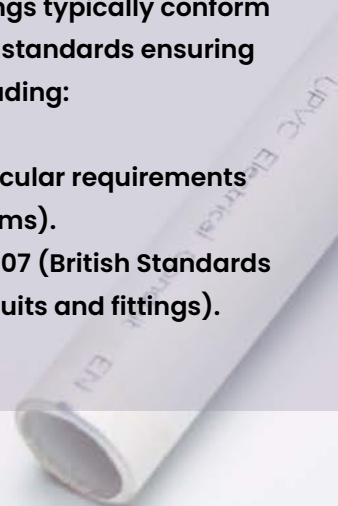
The EN 61386 Standard is the European benchmark for conduit systems used in electrical installations, ensuring they can safely protect and route cables up to 1,000v AC or 1,500V DC. For PVC (non-metallic) conduits, the standard is divided into several parts that define how the material must perform under mechanical, thermal, and fire stress.

Core Parts of the standard

- **EN 61386-1: General Requirements**
This is the base document covering universal testing methods for all conduit types, including marking, dimensions, and general constructions.
- **EN 61386-21: Rigid Conduit Systems**
Specifies requirements for rigid PVC pipes. These must pass a bending test (if declared bendable) where the conduit is bent to 90° and must still allow a gauge to pass through under its own weight.
- **EN 61386-22: Pliable Conduit Systems**
Covers flexible or corrugated PVC conduits that can be bent by hand. It includes specific “self-recovering” tests to ensure the conduit returns to its shape after compression.
- **EN 61386-24: Buried Underground**
Detailed requirements for conduits intended to be buried, focusing on the higher resistance to soil pressure and external moisture.

uPVC conduits and fittings typically conform to several international standards ensuring safety and quality, including:

- IEC 61386 series (particular requirements for rigid conduit systems).
- BS EN 61386 and BS 4607 (British Standards for non-metallic conduits and fittings).



Safety & Material Features

- **Flame retardancy:** Voltapipe PVC conduits meet specific fire hazard standards (V0 flame retardant), ensuring they do not contribute significantly to fire spread.
- **Dimensions:** Voltapipe PVC conduits are available in 20mm, 25mm, 32mm (other dimensions can be produced*).
- **Composition:** Voltapipe PVC conduits are made of polyvinyl chloride, a durable thermoplastic polymer.

* For more info contact us: +961 9 210 193 | +961 9 214 043.

Key performance classifications

Digit [12,16,17,18,19]	Property	Common PVC Ratings	Meaning
1 st	Compression	2 (Light) to 4 (Heavy)	Resistance to Crushing (e.g. 750N for medium)
2 nd	Impact	1 (very Light) to 5 (very Heavy)	Ability to withstand sudden shocks
3 rd	Min Temperature	1 (+5°C) to 5 (-45°C)	Lowest temperature for safe installation/use
4 th	Max Temperature	1 (+60°C) to 7 (+400°C)	Highest temperature the material can handle

Voltapipe

Electrical uPVC

Conduit fittings

We offer a comprehensive range of PVC conduit fittings to ensure secure and reliable connections. Designed to perfectly match our conduit pipes, these fittings provide a complete and integrated system for all your electrical installations.

Features

- Easy to install with PVC cement.
- Secure and watertight connections.
- Corrosion and chemical resistant.
- Durable and long-lasting.

Specifications

Material | High-grade PVC

Sizes | Compatible with conduit pipes from 20mm to 32mm

Color | White, grey and black

Standards | Complies with the (EN 61386) in Europe and (UL 651) in US

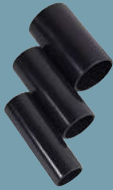


Bends



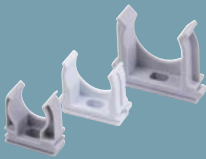
Item	Code	Pack Quantity
20 mm VT bend	VT B 20	50
25 mm VT bend	VT B 25	25

Couplers



Item	Code	Pack Quantity
20 mm Coupler	VT C 20	150
25 mm Coupler	VT C 25	104
32 mm Coupler	VT C 32	69

Clamps



Item	Code	Pack Quantity
20 mm Clamp	VT CL 20	150
25 mm Clamp	VT CL 25	104
32 mm Clamp	VT CL 32	69

Waterproof Junction box (ABS)



Item	Code	Pack Quantity
65 VT Round Junction Box	VT JB 65	25

Waterproof Junction box (ABS) 10*10cm



Item	Code	Pack Quantity
10*10 VT Junction Box	VT JB 10*10	30



Voltapipe

Electrical uPVC

Conduit Pipes

Our high-quality PVC conduit pipes are engineered to protect and route electrical wiring across a wide range of applications. Resistant to corrosion, chemicals, and impact, they deliver long-lasting performance and reliable safety.

Features

- Durable and lightweight.
- Easy to install and cut.
- non-conductive and flame retardant.
- Resistant to UV radiation.

Specifications

Material | High-grade PVC

Sizes | 20mm, 25mm, 32mm

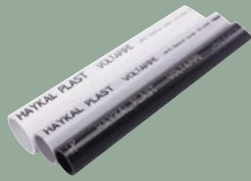
Length | 2.9m

Color | White, grey and black

Standards | Complies with the (EN 61386) in Europe and (UL 651) in US



Electrical Conduit



Item	Code	Pack Quantity
20 mm Heavy Duty	VP20*2.9m	30
25 mm Heavy Duty	VP25*2.9m	25
32 mm Heavy Duty	VP32*2.9m	15

Round Box (PVC)



Item	Code	Pack Quantity
Cover 65	VT RCB 65 20/25	400
20 mm I-Way	VT RBIW 20	36
25 mm I-Way	VT RBIW 25	33
20 mm Through 2-Way	VT RBTHRW 20	30
25 mm Through 2-Way	VT RBTHRW 25	25
20 mm Angle 2-Way	VT RBAW 20	30
25 mm Angle 2-Way	VT RBAW 25	25
20 mm Tee 3-Way	VT RBTEEW 20	25
25 mm Tee 3-Way	VT RBTEEW 25	20
20 mm 4-Way	VT RB4W 20	23
25 mm 4-Way	VT RB4W 25	18

Buch Adapter



Item	Code	Pack Quantity
20 mm Female	VT FBA 20	200
25 mm Female	VT FBA 25	100

Reducer



Item	Code	Pack Quantity
25*20 VT Reducer	VT RED 25*20	200





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