HellermannTyton
TELECOMS

Utility Duct Systems

Better Technology through Innovation

MADE TO CONNECT

We are HellermannTyton Telecoms

Three Companies.
One System Approach.
One Future.

HellermannTyton Connectivity (UK) gabocom (Germany) and HellermannTyton OÜ (Estonia) share one clear ambition: to build future proof fibre infrastructures that grow with demand – and work reliably as a complete system.

United under the HellermannTyton Telecoms umbrella, all three organisations are aligned by the same uncompromising standards of quality, system integrity and customer service.

This collective commitment gives customers confidence that every solution is designed, manufactured and supported to deliver dependable performance year after year.

Expertise at your fingertips...

We have a knowledgeable team with over 30 years experience to work with you to configure the infrastructure you're looking for.

Tel: +44 (0) 1604 707420

Email: sales@htdata.co.uk

Scan for more information online.

HellermannTyton CONNECTIVITY

gabocom a HellermannTyton Company

HellermannTyton ESTONIA

Individual Strengths. One Integrated System.

HellermannTyton Connectivity (UK) brings deep market insight and close customer collaboration, with a strong focus on practical deployment needs and real-world network operation. Its expertise in fibre management, innovation-led development and responsive local support helps customers design and implement solutions that are efficient, reliable and aligned with evolving UK and international network requirements.

gabocom (Germany) contributes decades of engineering excellence and a strong system-driven mindset. Known for precision design, robust product development and long-term performance, gabocom specialises in creating technically advanced fibre management solutions that deliver proven system integrity across complex network environments.

HellermannTyton OÜ (Estonia) adds advanced manufacturing capability and industrial efficiency, enabling high-quality, scalable production with consistent performance. With a strong focus on manufacturing excellence, process reliability and supply continuity, the Estonian operation ensures that system solutions are delivered with dependable quality and long-term availability.

Together, these complementary strengths form a unified capability, combining local market understanding, engineering precision and manufacturing excellence.

HellermannTyton Telecoms delivers a unified approach to fibre infrastructure across the entire network.

Our solutions are designed to provide structured, reliable and scalable fibre management from network handover through to internal network pathways.

Built to support a wide range of deployment models, our portfolio enables efficient network roll out while maintaining flexibility for future expansion.

Combined with our own manufacturing capabilities and a broad system portfolio, we offer robust, future ready connectivity and a reliable one stop solution for modern fibre networks.

Engineering Reliable Utility Duct Solutions

At the heart of fibre network infrastructure lies the need for reliable, efficient, and future-ready cable management solutions.

HellermannTyton Telecoms delivers this by combining advanced manufacturing with decades of engineering to create high-performance utility duct systems.

HellermannTyton Telecoms excels in designing and producing durable ducting systems, supporting telecoms, power, and smart network infrastructure. Our solutions ensure long-term protection and accessibility for critical cabling.

Using advanced production, strict quality control, and innovation, HellermannTyton offers flexible standard and custom duct solutions. We support high-volume manufacturing with precision and durability.

This brochure provides an overview of HellermannTyton Telecoms capabilities, highlighting its manufacturing strengths, technical expertise, and commitment to supporting reliable utility infrastructure worldwide.

Flexibility in Manufacturing

In an industry where every project presents unique technical and logistical challenges, manufacturing flexibility is essential. The HellermannTyton Telecoms facilities are designed to be agile, adapting to deliver tailored duct solutions aligned precisely to customer specifications and installation requirements.

A strong emphasis on customisation allows for a wide range of configurable options. These include colour variations for clear utility identification and regulatory compliance, as well as supply formats such as coiled or straight lengths for ease of transportation and installation. Additional features, including factory-installed pulling ropes, further streamline installation processes, reducing on-site time and lowering labour costs.

Material selection is equally flexible. Virgin materials are used where maximum strength, durability, and compliance are critical, while high-quality recycled materials offer a more sustainable alternative without compromising product integrity.

Product Design and Performance

Engineering excellence underpins HellermannTyton's utility duct portfolio. These ducts feature an advanced three-layer construction, specifically designed to deliver strength, durability, and superior performance in demanding conditions.

Each layer serves a distinct function:

- A durable outer layer provides resistance to impact and environmental stress
- A strong structural core ensures stability under load
- An inner silicone liner creates an ultra-low friction surface
- Available with either a ribbed or smooth internal surface, the range can be tailored to meet specific requirements of different installation methods and applications.

This innovative design significantly improves installation efficiency by reducing resistance during cable pulling or blowing.

The benefits of the silicone liner are particularly valuable in modern telecoms installations. Reduced friction enables longer cable blowing distances, supports sub-duct and microduct installation, and improves performance in smaller diameter ducts where precision is critical.

Together, these design and manufacturing capabilities demonstrate HellermannTyton Telecoms ability to deliver high-performance, adaptable duct systems for future-ready infrastructure.

Operational Emissions and Product Life Cycles

HellermannTyton is executing a structured reduction plan targeting the emissions generated across our business operations and services. Our facilities maintain ISO 9001 and ISO 14001 accreditations to govern our environmental impact.

We actively implement waste-sorting protocols to divert materials from landfills wherever municipal infrastructure permits. We focus on low-waste product design, utilising recycled inputs where technically feasible; our TobyBox300 is an operational milestone in this initiative, built using verified recycled compounds.

Utility Duct Solutions for Telecoms and Power Networks

Our duct systems are engineered for both traditional trenching and trenchless techniques, including horizontal directional drilling (HDD) and thrust boring, enabling faster deployment with minimal disruption.

Engineered for Performance

Across all applications, our duct systems support:

- Horizontal Directional Drilling (100m+ crossings)
- High pull-strength materials
- Low-friction internal bore for efficient cable installation
- Compliance with UK and international standards

Delivering Measurable Benefits

- Eliminate road excavation and disruption
- Reduce project timelines and civil engineering costs
- Ensure full compliance with utility standards
- Provide long-term protection for telecoms and power infrastructure

Trusted in the Field

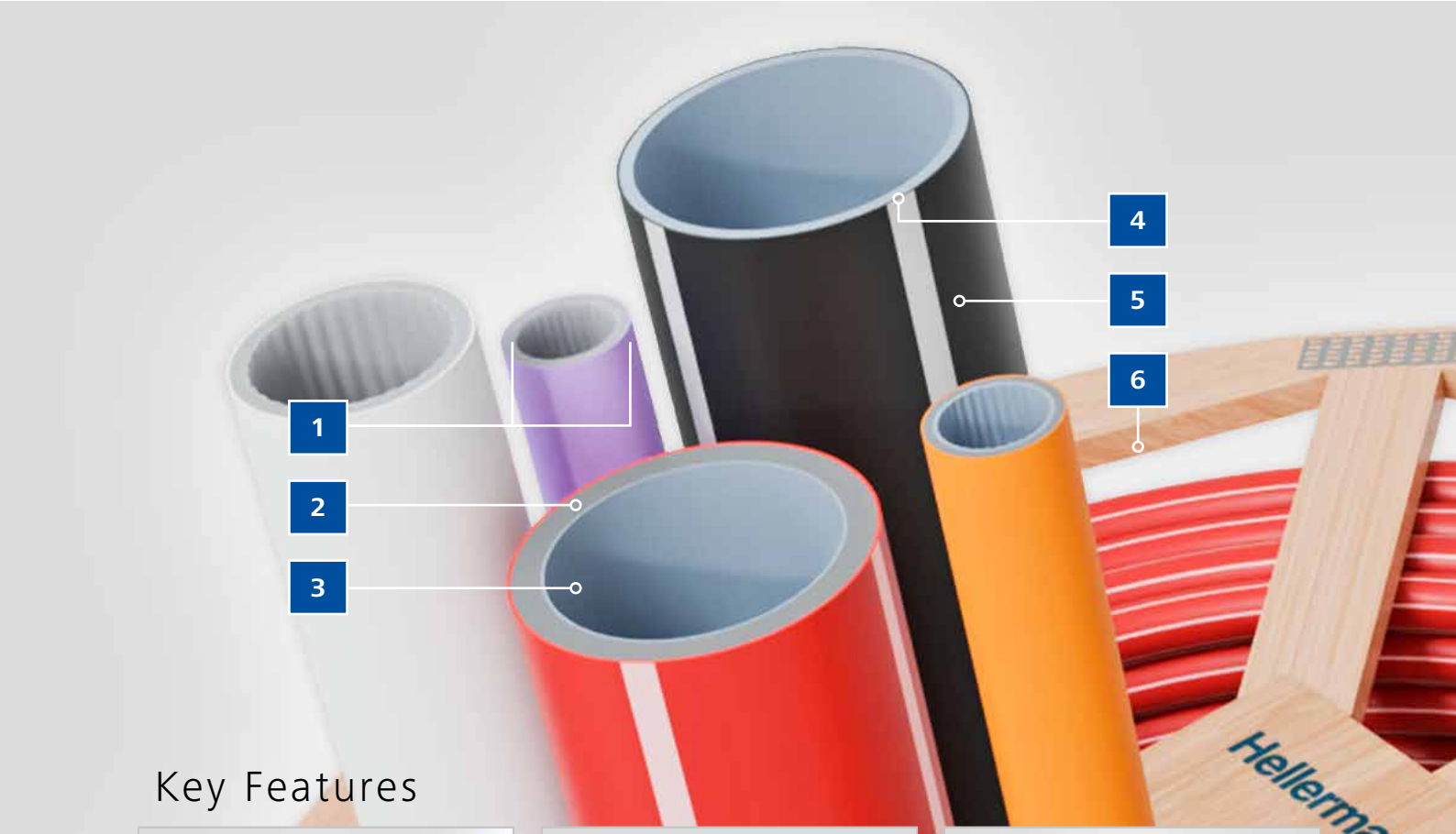
- Proven in real-world conditions, from fibre installations beneath live highways to large-scale renewable energy connections
- HellermannTyton duct systems help contractors deliver infrastructure projects more safely, quickly, and efficiently
- Trusted across demanding environments where reliability and performance are essential

Learn more about Utility Duct Solutions

Our connectivity solutions fit nearly any fibre network.
If you can't find the exact product, our wide range has the right option for you.

Scan for more applications online.

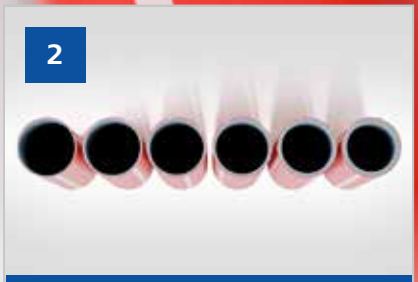
HellermannTyton
TELECOMS



Key Features

1 Size Range

Available in scalable sizes from 25mm to 110mm to accommodate any cable or microduct capacity requirement.



2 SN2, 4, 8, 16, 32 and 64

A versatile portfolio of utility ducts for diverse infrastructure needs across telecom, power and critical networks.

3 Silicone Liner

Silicone liner reduces friction making it easier for pulling in/blowing in cables.

4 Material Selection

Virgin materials ensure strength and durability, while quality recycled materials offer sustainable, reliable alternatives.

5 Customisation Options

Options include colour choice, solid or striped, inner surface either smooth or ribbed and client branding.

6 Supplied Formats

Configure for easy handling and transport. Reels, coils or straight lengths and structured installations for project flexibility.

SN Rating and SDR Comparison

While SN (Ring Stiffness) is the preferred specification for buried utility ducts, some projects and international standards may refer to SDR (Standard Dimension Ratio).

The table below provides an approximate comparison between the two systems based on the wall thickness of the HellermannTyton duct range. For outside diameters not covered by this table, wall thickness shall be calculated based on the SDR. If the pipe is made of non-virgin material and does not fulfil the SN classes stated in this table, the lower nominal stiffness as defined in this table shall be declared.

Nominal SN Class	Typical SDR Equivalent* (HDPE PE)	Typical Application
SN2	SDR 33	Light-duty installations
SN4	SDR 26	Standard utility networks
SN8	SDR 21	Highway and infrastructure projects
SN16	SDR 17	Deep burial and high-load applications
SN32	SDR 13.6	Heavy-duty installations
SN64	SDR 11	Extreme loading conditions

**The SDR values shown are indicative only for HDPE pipes.*

DN/OD (mm)	SN2	SN4	SN8	SN16	SN32	SN64
25	-	-	-	1.8	1.9	2.3
32	-	-	1.8	1.9	2.4	3.0
40	-	1.8	1.9	2.4	3.0	3.7
50	1.8	2.0	2.4	3.0	3.7	4.6
63	2.0	2.5	3.0	3.8	4.7	5.8
90	2.8	3.5	4.3	5.4	6.7	8.2
110	3.4	4.2	5.3	6.6	8.1	10.0

Table is in accordance with the standard EN 50626-2:2023.

SN and SDR are not directly equivalent measurements.

SN defines a duct's resistance to external loads, whereas SDR defines the ratio between outside diameter and wall thickness.

The SDR values shown are indicative and based on the relationship between wall thickness and diameter within this duct range.

Why use SN Rating?

For utility duct systems, the primary design challenge is resisting external loads from soil, traffic, and ground movement rather than containing internal pressure. SN classification directly measures a duct's ability to withstand these external forces, making it the preferred specification for cable protection and utility infrastructure networks.

By contrast, SDR (Standard Dimension Ratio) is most commonly used for pressure pipe systems carrying water, gas, or other fluids. SDR is calculated as: SDR = Outside Diameter ÷ Wall Thickness.

This primarily indicates a pipe's pressure capability rather than its structural performance when buried. While SDR can be an important consideration for trenchless installations, such as horizontal directional drilling, or in heavily pressurised environments where the duct is subjected to pulling forces and internal friction, it does not directly measure resistance to deformation under external ground loads.

For this reason, SN rating remains the most relevant and meaningful specification for utility infrastructure ducting applications.

SN ratings provide:

- A direct measure of buried performance
- Easier selection based on installation conditions
- Compliance with utility and infrastructure specifications
- Optimised material usage without over-engineering
- Greater confidence in long-term network protection

Utility Duct 25mm - 110mm

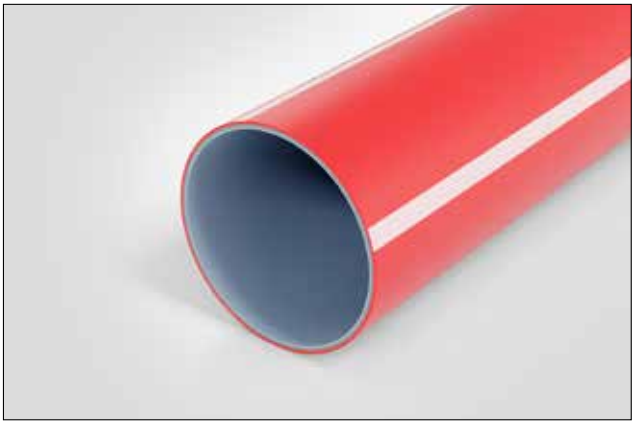
SN2 - SN64

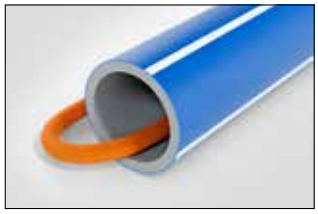
Our high-quality HDPE utility duct is available in a comprehensive range of colours to meet utility identification and project-specific requirements. Ducts can be manufactured in either a solid colour format or with four longitudinal identification stripes, providing clear and durable service identification for power, telecommunications, fibre optic and other underground utility networks.

For ease of cable installation, ducts can be supplied with an integral pulling rope (draw cord), helping to reduce installation time and improve on-site efficiency.

As standard, all ducts are supplied with continuous manufacturer's identification markings, including relevant product and traceability information. Where required, marking details can be tailored to meet individual customer specifications, incorporating bespoke text, logos, project references, asset owner information or other identification requirements.

Ducts up to 63mm OD are available in coils or on drums, offering long installation lengths with fewer joints. 110mm OD duct is supplied in straight lengths only and is available in 6m or 12m lengths.





Top: SN2 110mm Recycled Duct with liner.
Bottom Left: SN64 110mm Recycled Duct with ribbed internal surface.
Bottom Right: SN64 110mm Duct with pulling rope.

Key Features

- Available in a wide range of standard and bespoke colours
- Solid colour or four-stripe identification options
- Optional factory-fitted pulling rope (draw cord)
- Standard manufacturer's marking with customer-specific marking available
- Supplied in coils, on drums or in straight lengths depending on size
- Suitable for open-cut, ploughing and directional drilling installation methods

Typical Supply Lengths

Note: Lengths shown are typical capacities and may vary depending on duct specification and drum configuration.
Ducts up to 63mm OD can be supplied in coils or on drums. 110mm OD duct is available in 6m or 12m straight lengths only.

Coil	
Duct OD (mm)	**Maximum Length (m)**
25	500
32	300
40	250
50	100
63	100

Drum						
Duct OD (mm)	**Size (mm)**	**1200 × 1150**	**1600 × 1155**	**1830 × 1155**	**2250 × 1100**	**2400 × 1195**
25	**Length (m)**	1200	2200	2900	4700	5100
32		650	1300	1700	3000	3100
40		–	850	1100	1900	2000
50		–	400	660	1200	1200
63		–	–	300	500	800

Straight Lengths		
Duct OD (mm)	**Length (m)**	**Pallet Quantity**
90	12	42
	6	42
110	12	42
	6	42

Application Scenarios

Fibre Telecoms beneath a Major Road

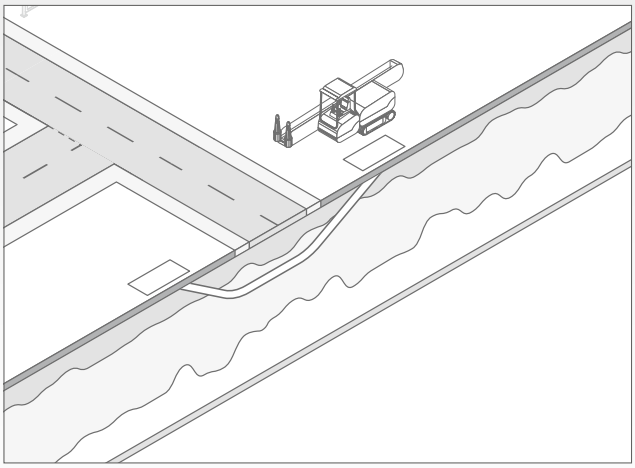
The Challenge:
Installing fibre optic infrastructure across a busy A-road can present significant logistical and operational challenges, particularly where maintaining uninterrupted traffic flow is essential. Traditional open-cut excavation methods are often not viable in these environments, requiring an alternative approach that minimises disruption while ensuring a secure and long-lasting installation.

The Solution:
In scenarios such as this, HellermannTyton ducting solutions could be utilised alongside trenchless installation techniques to deliver an effective outcome.

Horizontal directional drilling (HDD) may be employed to create a bore beneath the carriageway, allowing infrastructure to be installed without disturbing the road surface.

A smooth-bore telecom duct could then be installed within the bore to provide a continuous and protected pathway for fibre optic cables, supporting both performance and long-term reliability.

The Outcome:
- Zero disruption to traffic
- Reduced installation time and cost
- Secure, durable fibre infrastructure



Technical Specification

Material	PE100 high-density polyethylene
Diameter	110mm OD
SN	32
Installation Method	HDD (up to 80m bore)
Installation Depth	450mm
Minimum Bend Radius	10 × OD
Compliance	BS EN 12201 Openreach compatibility

Urban Fibre Rollout

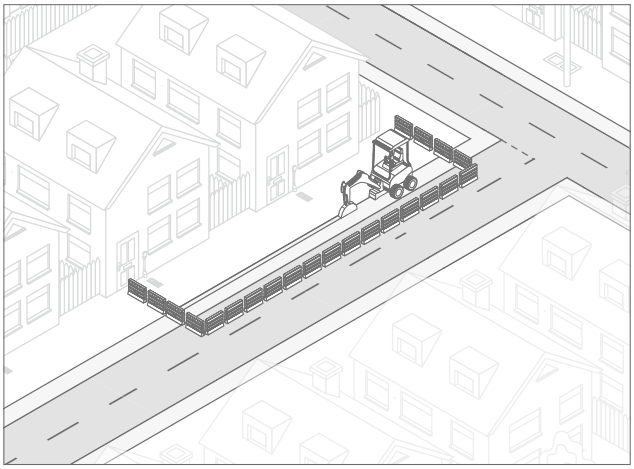
The Challenge:
Deploying fibre infrastructure within a densely populated urban environment can present a complex set of challenges. Limited space within pavements and verges, combined with existing underground utilities and continuous pedestrian and business activity, requires a solution that carefully balances efficient installation with minimal disruption.

The Solution:
Multi-duct configurations may be installed beneath pavements and roadside verges, allowing multiple fibre pathways within a single footprint.

Horizontal directional drilling (HDD) could also be employed for road and utility crossings, helping to reduce surface disruption while maintaining installation efficiency in highly constrained areas.

A combination of smooth bore and twin-wall HDPE ducts could offer both flexibility and robust protection, depending on the specific installation requirements.

The Outcome:
- Minimal disruption with narrow trenches and fast reinstatement
- Quick installation in urban areas
- Lower costs than traditional methods
- Scalable for future fibre growth



Technical Specification

Material	HDPE smooth bore / twin-wall
Diameter	54mm and 96mm
SN	32
Installation Method	Micro Trenching
Installation Depth	450mm
Minimum Bend Radius	10 × OD
Compliance	BS EN 12201 Openreach compatibility

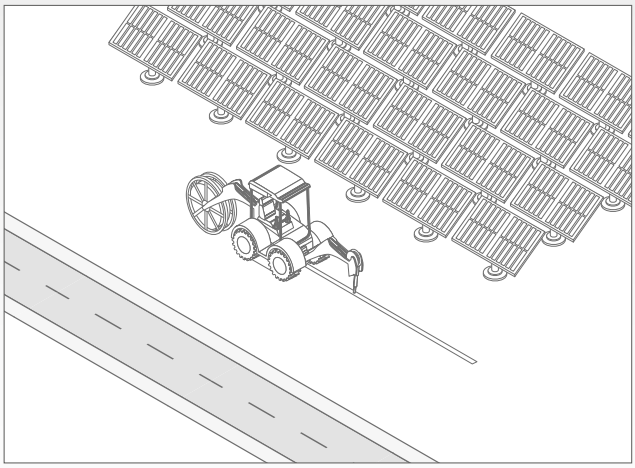
Solar Farm Grid Connection

The Challenge:
Connecting a solar installation to the grid across mixed and unpredictable terrain presents significant logistical and environmental considerations. Ground variations, including active agricultural land, undulating topography, and sensitive watercourse crossings, demand an installation strategy that minimises surface disruption while guaranteeing long-term cable protection.

The Solution:
HellermannTyton utility ducting combined with mole plough installation offers an effective solution for long-distance cable routes.

Twin-wall duct systems provide robust cable protection while enabling rapid installation with minimal ground disturbance. This makes them particularly well suited to solar farm grid connections across agricultural and rural landscapes.

The Outcome:
- Minimal environmental impact
- Consistent protection across varied terrain
- Faster installation over long distances



Technical Specification

Material	HDPE smooth bore
Diameter	63mm and 110mm
SN	16 / 32
Installation Method	Mole Plough
Installation Depth	Electricity 600mm / Fibre/Telcoms 250mm
Minimum Bend Radius	10 x OD
Compliance	BS 7671
Temperature Range	-20°C to +60°C

EV Charging Infrastructure

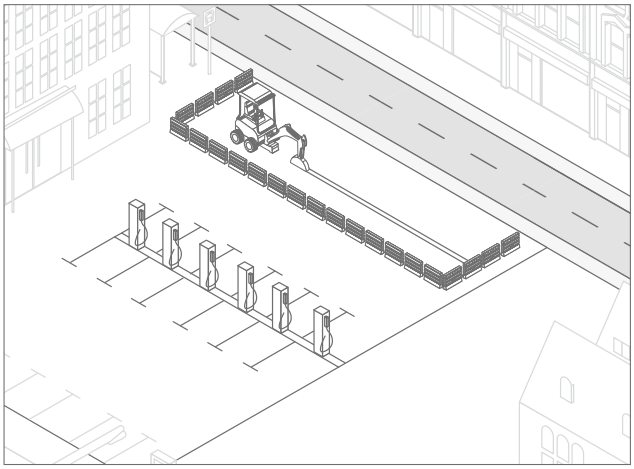
The Challenge:
Installing EV charging infrastructure within a live retail environment can present significant challenges, particularly where maintaining day-to-day operations and customer access is critical.

High footfall areas, vehicle movements and existing underground services all require careful planning to minimise disruption while still delivering a reliable and future-ready solution.

The Solution:
In situations like this, HellermannTyton ducting solutions could be utilised as part of a carefully managed installation approach.

A combination of horizontal directional drilling (HDD) and traditional trenching may be adopted to navigate beneath high-traffic zones and avoid sensitive areas, enabling infrastructure to be installed with minimal impact on site activity. Smooth bore HDPE ducts, in particular, could offer an effective pathway for cable routing while supporting ease of installation and long-term performance.

The Outcome:
- No disruption to site operations
- Reduced reinstatement work
- Future-ready infrastructure for EV expansion



Technical Specification

Material	HDPE smooth bore
Diameters	63mm and 110mm
SN	32 / 64
Installation Method	Micro Trenching
Installation Depth	Electricity 600mm / Fibre/Telcoms 250mm
Minimum Bend Radius	10 x OD
Compliance	BS 7671
Temperature Range	-20°C to +60°C

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