

# A different perspective for better buildings

Protection  
Performance  
Peace of Mind

MICRO  
SHEF



**dura·line**

An Orbia Connectivity Solutions business.

Creating what  
connects us

# Best-in-class fire performance for in-building communications networks

As we move towards an omni-connected world, high bandwidth and low latency are non-negotiables. Next-generation applications like the Metaverse, the Internet of Things (IoT), and driverless vehicles will rely on optical fibre everywhere – indoors as well as outdoors. But installing fibre in buildings, confined spaces, and mass transit corridors comes with unique deployment challenges and fire-safety considerations.

Low Smoke Halogen Free (LSHF) MicroDuct products and associated accessories are a flexible, scalable solution for in-building communications networks. Conforming to demanding European standards, Dura-Line's LSHF range offers best-in-class fire performance when tested on gypsum plasterboard to EN 13501-1 for safety and security in in-building FTTH, LAN, data center, and transport applications.

## Where are LSHF products used?

MicroDucts LSHF are designed for use in settings where fire, smoke, and toxic fumes pose a risk to human life and critical electronic equipment, including but not limited to:



**Houses and apartment blocks**



**Enclosed public spaces**  
*(e.g., airports, stadia, malls)*



**Confined spaces**  
*(e.g., control rooms)*



**Spaces with poor ventilation** *(e.g., tunnels)*



**Office buildings**



**Hospitals**



**Data centres**



**Universities and schools**

# Key benefits



## **Best-in-class fire performance**

MicroDucts LSHF achieve a best-in-class B, s1, d0 rating against EN 13501-1, when mounted on gypsum plasterboard, where:

- B means the product has little or no contribution to fire,
- s1 means the product achieves the lowest smoke production rating, and
- d0 means no flaming droplets were observed during testing.



## **Halogen free**

LSHF product range has been tested according to EN 50642 for the content of halogens and it has been classified as halogen free



## **VDE marked**

MicroDucts LSHF are tested and certified by VDE according to DIN EN IEC 61386-22 (VDE 0605-22):2021-12; EN IEC 61386-22:2021+A11:2021.

A classification code is printed on the products for easy identification of product mechanical properties, resistance to flame propagation and content of halogen



## **Comprehensive installation options**

Approved for use in the widest range of in-building installation settings



## **Flexible, scalable cable management**

Simple maintenance and future capacity upgrades



## **Superior jetting performance**

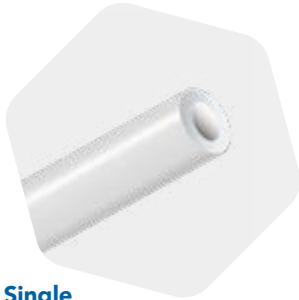
Available with SILICORE®, a permanently lubricated, co-extruded inner lining that provides a lower inner coefficient of friction (<0.1) for improved cable jetting performance



## **Independent verification**

From accredited European test laboratories

# Low Smoke Halogen Free Product Range



**Single  
MicroDucts**

## Colour

Natural (milky white)

## Material

Fire retardant

## Size range

5/3.5, 7/4, 7/5.5, 8/5.5, 10/6, 10/8,  
12/8, 12/9.6, 12/10, 14/10, 16/12,  
16/12.8

## Bundle options

Various size and bundle combinations  
available

## Inner lining

SILICORE®, a permanently lubricated,  
co-extruded inner lining that provides  
a lower inner coefficient of friction  
( $<0.1$ ) for improved cable jetting  
performance

**Designed for fill ratio** of minimum  
50% to maximum 75%

## Options

- Internal ribs
- Pre-installed pulling rope

## Standards for MicroDucts

- Tested for reaction to fire in accordance with **EN 13501-1** and classified as **B-s1, d0** when mounted on gypsum plasterboard
- Tested and classed as halogen free according to **EN 50642**
- Tested and certified by VDE according to **DIN EN IEC 61386-22 (VDE 0605-22):2021-12; EN IEC 61386-22:2021+A11:2021** with classification printed on products
- Production of MicroDucts LSHF is monitored by VDE



**Bundled  
MicroDucts**



## Accessories

### MicroDucts Fire Retardant Connectors, Reducers and End-stops



## Size range

5 to 16 mm

## Mounting method

Simple push-fit installation  
(no tools required)

## Standards

EN 1350-1, test pending  
as of May 2024



Orbia's Connectivity Solutions business, Dura-Line, is a leading manufacturer and distributor of high-density polyethylene (HDPE) conduit, accessories, and other connectivity solutions for the telecommunications, transportation, and electrical markets.

With more than 50 years of experience and a long-standing reputation for the safety, efficiency, and durability of its products, Orbia Dura-Line produces more than 500 million metres of infrastructure annually, forming the physical pathways for fiber and network technologies that connect people worldwide.

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