# Microduct

### 7/4mm LSZH Virgin Media

VM SKU 10014887/10014888



Technical Specification



### Description

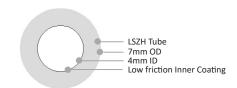
Low Fire Hazard tube providing an indoor pathway for blown fibre cables. Produced with materials designed for low smoke emission and containing no halogens (LSZH - Low Smoke Zero Halogen Materials)

Suitable for indoor use only. The tube can be used as a one way fibre route but should be handled with care and used in areas where mechanical properties are less demanding.

Not suitable for installation by pulling, must be laid directly or blown in.

With permanent low friction solid inner lining for optimised blowing

Can be supplied as single loose tubes or as sheathed assemblies of various configurations.



Schematic drawing, not to scale

### **Dimensions & Material**

Radius Product Code	O.D/I.D Nominal (mm)	O.D Min-Max (mm)	Wall Min- Max (mm)	Weight (g/m)	Min Bend Radius (mm)	Max Tensile Pulling by hand only (N)	Max Pressure (bar)
TY1364 - 200m TY1365 - 500m	7/4	6.9-7.1	1.40-1.55	38.2	140	130	12

Material	Low Toxic Gas Emission, Low Smoke Generation, ZERO % Halogen Content (chlorine, bromine, fluorine) according to IEC 60754-1		
Inner Wall	Smooth wall as standard		
Low friction	Permanent co-extruded low friction internal coating with coefficient of friction typically less than or equal to 0.09		
Colour	White solid as standard		
Elongation at break	160% min and 128% min after 7 days at 100°C		
Temperature Index	280°C minimum (ISO 4589-3)		
Operating Temperatures	Transport, Installation and Service -20°C to +60°C Operation (Blowing) -5°C to +35°C		
Ovality	3% production; 5% on drum		

## Microduct

## 7/4mm LSZH Virgin Media

VM SKU 10014887/10014888

#### Tests

Fire Test	Test Standard		
Flammability	DIN EN 60332-1-2:2004 + A11:2016, DIN EN 50339:2011 + A1:2016, Pass		
Smoke Emission	To DIN EN 61034-2:2005 +A1:2013		
Acid Content	DIN EN 60754-2:2014		
Fire Behaviour (CPR)	B2 ca s1a d2 a1 class; Tested to EN 50399, EN 60332-1, EN 61034-2 & EN 60754-2. Evaluated to EN 13501 (Note the ducting was tested without fibre)		
Classification Code	DIN EN 61386-22: 2-1-2-1-2-2-0-0-0-1-0		

Type Test	Test Standard	Requirement
Tensile Performance	IEC 60794-1-21-E1	130N, 10 min, v=100mm/min
Pressure	IEC 60794-1-22 - F13	2.5xPressure=30bar, 0.5h, 20 °C
Crush	IEC 60794-1-2-E3	300N, 60 s, 1h recovery time There shall be no splitting nor permanent damage. Any permanent residual deformation shall not exceed 15%.
Impact	IEC 60794-1-21-E4	1J (rec. 1h)
Bend & Repeated bend	IEC 60794-1-21-E11 & E6	D= $40 \times OD = 280$ mm, 25 cycles D= $40 \times OD = 280$ mm, 3 turn Bend radius $\leq 140$ mm
Kink	IEC 60794-1-21-E10	D= 20 x OD = 140mm
Friction Properties & Lubrication	Radius Inhouse	1.5m of tube is secured with 450° wrap around a 300mm mandrel with one end of the tube hanging downwards. The other end pointing horizontally towards the tensile testing machine.  A N°5 ripcord is installed through the tube and connected to a 200g weight. The twine shall be pulled at 1000mm/min and travel a minimum of 100mm. The average force of 2 pulls shall be recorded to give a coefficient of friction less than 0.09.

#### Marking

The following print (Inkjet) is applied at 1-meter intervals:

- PROPERTY OF VIRGIN MEDIA
- 7/4mm LSZH
- Line Number
- Batch Number
- Meter Count

### Packing

Microduct will be shipped on wooden drums or plastic drums. Duct end will be capped off.

Drum size: ø350x224mm, maximum 54 drum/pallet for 200m Length Drum size: ø500x276mm, maximum 20 drum/pallet for 500m Length

### **Delivery Lengths**

200m or 500m drum length.