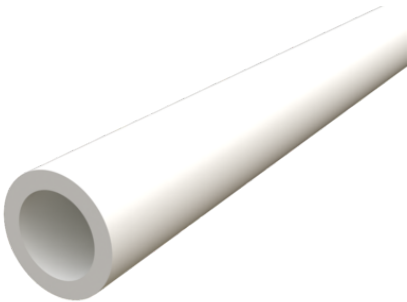


|              |                                  |
|--------------|----------------------------------|
| Product name | Microduct 20/16mm WHITE, 770m/dr |
| Product code | 88018020WH                       |
| GTIN         | 7332811339677                    |
| ETIM-Class   | EC001474                         |



PRODUCT SPECIFICATIONS

20/16mm single microducts are designed for long term protection of fiber optical cables and are especially suitable for installation of micro cables. Direct Bury type of microducts are thick wall products that attain their mechanical robustness and functional performance through their intrinsic thick walls and need no further protection in underground installations. The microduct are made of high-density virgin polyethylene (HDPE). Every microduct has a permanent, co-extruded silicone compound inner liner and longitudinal grooves giving a coefficient of friction of less than 0,1.

Measurements

|        |          |
|--------|----------|
| Length | 1,000 mm |
| Height | 20 mm    |
| Width  | 20 mm    |
| Weight | 115 g    |

Technical Specifications - Single Ducts

|                          |            |
|--------------------------|------------|
| Duct Type                | 20/16      |
| Duct Colour              | White      |
| Outer Diameter           | 20 mm      |
| Outer Diameter Tolerance | +/- 0.2 mm |
| Inner Diameter           | 16 mm      |
| Inner Diameter Tolerance | +/- 0.2 mm |

|                              |         |
|------------------------------|---------|
| Min Bending Radius           | 200 mm  |
| Max Install Tensile Force    | 2,000 N |
| Inner clearance test (of ID) | 85 %    |

## Mechanical Characteristics

|                                                 |                                                                          |
|-------------------------------------------------|--------------------------------------------------------------------------|
| Temperature ranges for installation             | -15°C - +40°C                                                            |
| Temperature ranges for Operation                | -45°C - +55°C                                                            |
| Temperature ranges for transport and storage    | -45°C - +55°C                                                            |
| Pressure Withstand (IEC 60794-1-22, Method F13) | Temp 20°C, duration 30 min; 2,5x installation pressure without any leaks |
| Pressure Withstand (IEC 60794-1-22, Method F13) | Temp 40°C, duration 24 h; 1,3x installation pressure without any leaks   |
| Pressure Withstand (EN 50411-6-1:2011 Annex B)  | Temp 20°C, duration 30 min; 18 bar without any leaks                     |
| Tensile performance (IEC 60794-1-21, Method E1) | Test length >1m, tensile load 1070N, load 10 min without any damage      |
| Kinking (IEC 60794-1-21, Method E10)            | Temp 23 +/- 3°C; 20x OD with no kinking, $d=C/\pi$                       |
| Crush (IEC 60794-1-21, Method E3A)              | Test length 250mm, load 2kN, Duration 1 min, recov 1h without any damage |
| Impact (IEC 60794-1-21, Method E4)              | Impact energy 15J, striking surface radius 300mm without any damage      |
| Bending (IEC 60794-1-21, Method E11B)           | Mandrel diam 40x OD, 3 cycles without any damage                         |
| Repeated bending (IEC 60794-1-21, Method E6)    | Bending diam 40x OD, 25 cycles without any damage                        |
| Coefficient of Friction (IEC 62470)             | Tension around a curve 1040mm with result of a CoF less than 0,1         |
| Outdoor exposure/UV-stabillity (Months)         | 12                                                                       |
| Torsion IEC-60794-1-21-E7                       | Tension around a curve of 1040mm with CoF <0.1                           |
| ESCR Test (ASTM D1693)                          | Condition B>500h with min 5 OK out of 10                                 |