Micro tube

BKT Micro Duct System

In order to keep up with the latest trends in telecom networks technology, BKT Elektronik has launched a micro duct system. This technology may be used for building operational optical fiber networks and municipal networks, in FTTH networks, as well as new generation networks.
The system includes: single micro ducts 4-15 mm in diameter, micro tube bundles for blowing into the existing cable infrastructure or micro tube bundles for direct burial in the ground. Additionally, we offer a wide range of accessories: tube couplings, tube plugs, protective jackets for the bundles and specialist tools. These will make branching and joining of system elements much quicker and easier.

The most important advantages of micro duct systems:

- Lower maintenance costs incurred by cities and districts, due to lower fees for the burial of tubes along the roads
- Possibility of increasing the number of tubes of existing telecom duct system
- Possibility of building municipal networks in FTTx standard and the various structures:
- - star, tree or ring with a random number of branches
- Work performed in stages, which results in spreading investment costs and continuous development of the system
- Better utilization of existing infrastructure in city centers, which makes it possible to avoid time-consuming and expensive earthworks
- Lower costs of rebores and culverts due to smaller gauges of micro tubes compared to traditional pipelines
- Better filling of existing infrastructure with micro tubes compared to only a single optical cable that is laid in the existing infrastructure
- Smaller number of fusion spliced connections at the network branches



BKTmikro DB Micro Tubes

Application
Micro tubes with reinforced wall for laying directly in the ground. Thanks to high tensile strength, DB micro tubes can be pulled mechanically into existing and partly used telecommunications duct system. Coextruded slip film. Friction less than 0.1. We can manufacture a micro tube with a duct rod.

Standards:
- PN EN 50086-2-4
- ISO TR 9080
- PN EN-921
- ISO 13480
- ISO 527 (pkt.3)
- PN EN 638
- IEC 40794-1-2

Structure:
- Micro tube made of PE80 primary high-density polyethylene
- Wall thickness 2.0 ÷ 2.25 mm

Mechanical parameters

Property	Value
Ovality	5%
Compression Strength at 5% Strain	1000 N
Minimum Bend Radius	10 x Dy
Hydraulic Pressure Resistance	12 MPa/20°C ≥ 1h 6.3 MPa/20°C ≥ 24h 4.6 MPa/80°C ≥ 165h 4.0 MPa/80°C ≥ 1000h
Friction	0.1
Corrosion Resistance	15 mm/24h
Maximum Tensile Strength	1150 N

Ordering information

Product description	Dy (mm)	Di (mm)	e	L1 (m)	Index
Micro tube BKTMikro DB 7 x 2,0*UF	7.0	3.0	2.00	3500	102M5403
Micro tube BKTMikro DB 8 x 2,1*UF	8.0	3.8	2.10	3000	102M5406
Micro tube BKTMikro DB 10 x 2,25*UD	10.0	5.5	2.25	2000	102M5408
Micro tube BKTMikro DB 12 x 2,0*UD	12.0	8.0	2.0	1700	102M5410
Micro tube BKTMikro DB 14 x 2,0*UD	14.0	10.0	2.0	1100	102M5411



