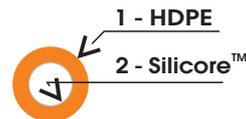


Microduct DuraMicro DB 12/8 mm

Microduct DuraMicro DB is intended for protection of optical microcables. Structural part (1) is made from high density polyethylene (HDPE). Inner surface (2) is made from permanent sliding material Sillicore™ with a very low coefficient of friction and standardly with fine ribs. Outer microduct's surface is smooth. Microduct is not designed for permanent inner pressure.



Wall thickness and material classify the microduct as a Direct Burial (DB). Installation methods and conditions are described in the Installation manual. The microduct can be supplied also as a part of bundles DuraFlat™ and DuraMulti.

The quality management system of Dura-Line CT is certified acc. to ČSN EN ISO 9001. Microduct does not contain dangerous chemicals in accordance to the Directive 2006/1907/EC (REACH). Microduct meets requirements of the Directive 2002/95/EC (RoHS) - content of lead, cadmium, mercury, Cr^{VI}, PBB, PBDE.

The details to parameters are in company standard CWS 103-02.

DESCRIPTION, APPLICATION

LEGISLATION

PARAMETERS

| Parameter | Value | Standard, conditions |
|--|--|--|
| Outer diameter (OD) | 12±0,1 mm | CWS 103-02 |
| Inner diameter (ID) | min. 7,9 mm | CWS 103-02 |
| Wall thickness (WT) | min. 1,9 mm | CWS 103-02 |
| Ovality | max. 5% | CWS 103-02, before coiling |
| Blown ball test (BB test) | pass | CWS 103-02, ball diameter 6,5 mm |
| Inner coefficient of friction | max. 0,1 | CWS 103-02 |
| Burst pressure | min. 60 bar | ČSN EN ISO 1167-1, 2 |
| Visual examination | free from defects | CWS 103-02 |
| Crush - residual deformation | max. 15% OD = max. 1,8 mm | ČSN EN 60794-1-2, E3, sample 200mm, active 100mm, force 1 680 N, 3 mm/min., action 60 s, recovery 20 s |
| Crush - pressure force | min. 1 000 N | ČSN EN 60794-1-2, E3, sample 200mm, active 100mm, ID deformation by 15%, speed 3 mm/min. |
| Impact | no damage after the test, dimens. in tolerances after recovery | ČSN EN 60794-1-2, method E4, striking surface radius 10 mm, impact energy 15 J, recovery time 1 h |
| Bending stiffness | min. 0,36 N.m ² | CWS 103-02 |
| Thermal expansion | *1,6.10 ⁻⁴ K ⁻¹ | ISO 11359-2, temperature range from -20°C to +70°C |
| Longitudinal reversion | max. 3% | ČSN EN ISO 2505, oven, 110°C, 60 min. |
| Standard Dimension Ratio (SDR = OD/WT) | *6 | - |
| Weight | *59 kg/km | - |
| Transport and storage temperatures | from -40°C to +70°C | - |
| Installation temperatures | from -10°C to +50°C | - |
| Operating temperatures | from -40°C to +70°C | - |
| Installation tensile force | max. 840 N | - |
| Recommended cable dimens. for blowing | from 2,4 to 5,6 mm | - |
| Minimum bending radius | 120 mm | - |
| Blowing pressure | max. 20 bar | max. 2 hours at max. +50°C |
| Outdoor exposure limit | max. 12 months | Central Europe conditions |

* informative value

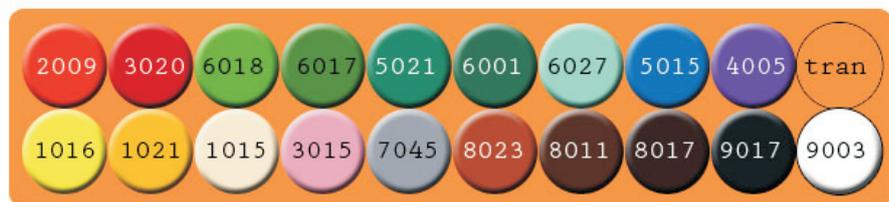
Microduct DuraMicro DB 12/8 mm

MODIFICATION

- **Standard** is a basic material version convenient for most applications.
- **UV stabilized** is more resistant to ultraviolet radiation. Storability is prolonged to 24 months at Central Europe outdoor conditions.
- **Antistatic** - lower electrical surface resistance.
- **Antirodent** is more resistant to rodents because of special repellent additives.
- **Preinstalled pulling cord** with tensile strength min. 300 N.

COLOR LIST

Microduct is supplied in natural translucent version or in wide scale of following RAL list. Longitudinal stripes with the same color are another possibility.



MARKING

Microduct is printed in whole length according to customer requirement. Printing color is contrasting to microduct color. Printing can be doubled in opposite sides as an option. Printing scheme is repeating after 1 metre.

Example of printing scheme:

DURA-LINE CT DuraMicro DB 12/8 mm SILICORE 03/2009 LOT No 12345678 0000 m >|<

PACKING AND STORAGE

Microduct is wound on disposable drum (MTB) and coil is wrapped by stretch film. Microduct's ends are protected by plastic caps protecting them from impurities penetrating into microduct. End of microduct is minimally 10 mm under the flange edge. MTB flanges are regularly made from chipboard and have to be protected from moisture.

Option - MTB flanges can be made from Oriented Strand Board (OSB) which is waterproof.

MTB core diameter is 415 mm.

All drum dimensions are informative values.

Drum width is measured near center in place of axis. The periphery width can be higher up to 10% because of pressure winded microducts.

| Drum | Flange diameter (mm) | Drum width (mm) | Shaft hole diameter (mm) | Winding maximum length (m) | Informative weight of full drum with chipboard flanges (kg) |
|-------|----------------------|-----------------|--------------------------|----------------------------|---|
| MTB2 | 600 | 640 | 65 | 500 | 40 |
| MTB3 | 900 | 640 | 65 | 2 000 | 136 |
| MTB7 | 1 000 | 550 | 82 | 2 000 | 140 |
| MTB8 | 1 030 | 640 | 65 | 2 600 | 177 |
| MTB9 | 1 000 | 510 | 82 | 2 000 | 140 |
| MTB12 | 1 030 | 640 | 82 | 2 600 | 177 |
| MTB13 | 1 190 | 510 | 82 | 3 000 | 213 |