

Microduct DuraMicro DI 12/10 mm

DESCRIPTION, APPLICATION

Microduct DuraMicro DI 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 Silicore™ with a very low coefficient of friction and standardly is smooth. Outer microduct's surface is smooth. Microduct is not designed for permanent inner pressure.



Wall thickness and material classify the microduct as a Direct Install (DI) for installation to places with additional mechanical protection. Installation methods and conditions are described in the Installation manual. The microduct can be supplied also as a part of bundles DuraFlat™, DuraPack and DuraMulti.

LEGISLATION

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.

PARAMETERS

The details to parameters are in company standard CWS 103-2014.

Parameter	Value	Standard, conditions
Outer diameter (OD)	12 -0,1/+0,2 mm	CWS 103-2014
Inner diameter (ID)	min. 9,9 mm	CWS 103-2014
Wall thickness (WT)	1±0,1 mm	CWS 103-2014
Ovality	max. 5%	CWS 103-2014, before coiling
Blown ball test (BB test)	pass	CWS 103-2014, ball diameter 8,0 mm
Inner coefficient of friction	max. 0,1	CWS 103-2014
Burst pressure	min. 25 bar	ČSN EN ISO 1167-1, 2
Visual examination	free from defects	CWS 103-2014
Tensile performance	no damage after the test	ČSN EN 60794-1-2, method E1A, length min. 0,2 m, elongation 7%, speed of elongation 5 mm/min.
Kink	min. 240 mm	ČSN EN 60794-1-2, method E10
Crush	no damage after the test	ČSN EN 60794-1-2, method E3, sample length 250 mm, load 450 N, recovery time 1 h
Impact	no damage after the test	ČSN EN 60794-1-2, method E4, striking surface radius 10 mm, impact energy 1 J, recovery time 1 h
Bend	no damage after the test, reduction in diameters max. 15%	ČSN EN 60794-1-2, method E11A, diameter of mandrel 480 mm, 10 turns/helix, 3 cycles
Aging	after exposure dimensions in tolerances, burst pressure min. 25 bar	exposition in oven at 60°C for 3 months
Bending stiffness	min. 0,23 N.m ²	CWS 103-2014
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)	*12	-
Weight	*34 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. 465 N	-
Recommended cable dimens. for blowing	from 3,0 to 7,0 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

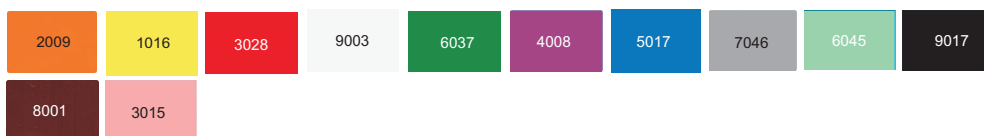
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MODIFICATION

- **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.
- **Preinstalled pulling cord** with tensile strength min. 300 N.

COLOR LIST

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



* Additional colours are available by request.

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:

DuraLine MicroDuct Silicore 12/10mm OR - Rala 1300236 - YYYY/MM Lot No XXXXXXXX - XXXXm >|<

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 400 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)
MTB3	900	624	85	2 000	83

MTB3

