## **Technical Data Sheet**





### **DESCRIPTION, APPLICATION**

## Microduct DuraMicro DI 7/5,5 mm LSHF UV stabilized

Microduct DuraMicro DI LSHF is intended for protection of optical microcables. It is used mainly in places where reduced flammability is required. Stuctural part (1) is made from compound of polyethylene (PE) and flame retardants (FR). The microduct is self extinguishing and formation of smoke is reduced during combustion (LS=Low Smoke). The microduct is halogen free (HF). Inner surface (2) is made from permanent sliding material Silicore $^{\text{TM}}$  with a very low coefficient of friction. Outer and inner microduct's surfaces are smooth. UV version is more resistant to sunlight (2). 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 $^{\mathrm{IM}}$ , DuraPack and DuraMulti.

- DURA-LINE CT's quality system is certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001.
- The microduct does not contain chemicals in accordance to the Directive of the European Parliament and the Commission no. 2006/1907/EC (REACH)
- The microduct meets requirements of the Directive of the European Parliament and the Commission no. 2011/65/EU (RoHS), as amended on January 3, 2013 (RoHS II).

The details to parameters are in company standard CWS 103-2015.

### **LEGISLATION**

### **PARAMETERS**

Parameter	Value	Standard, conditions	
Outer diameter (OD)	7±0,1 mm	CWS 103-2015	
Inner diameter (ID)	min. 5,4 mm	CWS 103-2015	
Wall thickness (WT)	min. 0,7 mm	CWS 103-2015	
Ovality	max. 5%	CWS 103-2015, before coiling	
Blown ball test (BB test)	pass	CWS 103-2015, ball diameter 4,5 mm	
Inner coefficient of friction	max. 0,1	CWS 103-2015	
Burst pressure	min. 30 bar	ČSN EN ISO 1167-1, 2	
Visual examination	free from defects	CWS 103-2015	
Crush - residual deformation	max. 15% OD = max. 1,05 mm	CSN EN 60794-1-2. ed. 4, E3, sample 200 mm, force 620 N, 3 mm/min., action 60 s, recovery 20 s	
Flammability	V-0	UL 94, specimen thickness 0,8 mm	
Oxygen index	min. 30	ČSN ISO 4589-2, specimen I, method A	
Spread of fire	pass	ČSN EN 61386-1, part 13.1.3	
Smoke density - light transmittance	min. 60%	ČSN EN 61034-1 and 2	
Combustion gas corrosivity - pH	min. 4,3	IEC 60754-2	
Thermal expansion	*1,6.10 <sup>-4</sup> K <sup>-1</sup>	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)	*9,3	-	
Weight	*16 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. 145 N	-	
Recommended cable dimens. for blowing	from 1,7 to 3,9 mm	-	
Minimum bending radius	70 mm	-	
Blowing pressure	max. 16 bar	max. 2 hours at max. +50°C	
Outdoor exposure limit	max. 12 months	Central Europe conditions	



version 01-2019



### **MODIFICATION**

# **COLOR LIST**

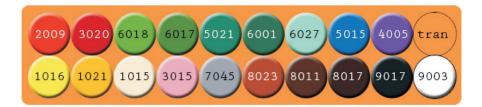
### **MARKING**

#### **PACKING AND STORAGE**

## Microduct DuraMicro DI 7/5,5 mm LSHF UV stabilized

- UV stabilized is more resistant to ultraviolet radiation. UV version is more resistant to sunlight (UV resistance up to 15 years) at Central Europe outdoor conditions.
- Antistatic lower electrical surface resistance.
- Preinstalled pulling cord with nominal tensile strength 600 N and elongation only 4%.

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



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 DI 7/5,5 mm LSHFUV SILICORE 09/2015 LOT No 12345678 0000 m ><

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.

The drums and lengths in the table are recommended. Other packing on request.

Drum	Flange diameter (mm)	Drum width (mm)	Shaft hole diameter (mm)	Winding maximum length (m)	Informative weight of full drum with chipboard flanges (kg)
MTB1	495	640	65	550	14
MTB2	600	640	65	1 800	39
МТВ3	900	640	65	6 000	114
MTB7	1 000	550	82	6 000	118
MTB9	1 000	510	82	6 000	118
MTB14	600	510	82	1 200	29
MTB17	900	500	65	4 400	87