

HDPE Micro Duct 18/14mm

1. General description

HDPE Silicon Duct is coated with inner silicon layer to improve the fiber cable blowing performance.

Its performance is evaluated under manufacturer's standard and may vary depending on installation condition and environment.

2. Raw materials

2-1 Micro duct is manufactured with 100% virgin HDPE.

2-2 Melt flow index ASTM D1238 $\leq 0.4 \text{ g/10min}$

190°C @ 2.16Kg Load

Density ASTM D792 $0.940 \sim 0.958 \text{ g/cm}^3$

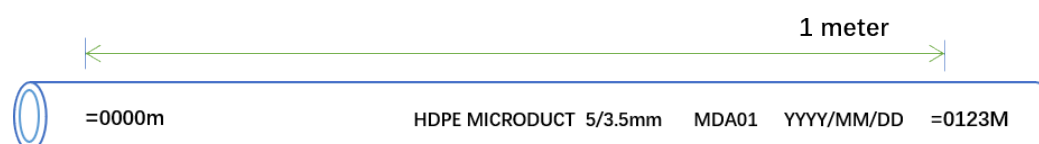
Environmental stress crack ISO 4599 Min. 96 hours
resist (F50)

3. Marking

The following information shall be printed at intervals of one (1) meter:

- Manufacturer's name
- Tube type or product spec.
- Coil number
- Production date
- Length marking (e.g. =0123m)

Example:



4. Color code

No.	1	2	3	4	5	6	7
Color	Natural	red	green	yellow	white	orange	blue

5. Dimension

Item	Outer dia. (mm)		Wall thickness (mm)		Min. I.D. (mm)	Pressure (bar)
	Nominal	Tolerance	Nominal	Tolerance		
18/14mm	18.0	-0.1, +0.2	2.0	-0.15, +0.2	13.8	16

6. Mechanical performance

Mechanical properties	Test standard	Test conditions	Performance
Visual appearance	-	Visual inspection	Smooth inside & outer surface, free from blisters, shrink hole, flaking, scratches & roughness
Test method 1: Tensile strength at yield	IEC 60794-5-10 & 20	Sample length: 200mm Rate of extension: 100mm/min	≥1,810N
Crush	IEC 60794-5-10 & 20	Sample length: 250mm Load: 1,050N Duration of Max. load: 1 minute Recovery time: 1 hour	There is no damage under visual examination and the inner clearance test shall be passed.
Impact	IEC 60794-5-10 & 20	Striking surface radius: 10mm Impact: 1.5 J Recovery time: 1 hour	There is no splitting or permanent damage under visual examination and the inner clearance test shall be passed.
Bend radius	IEC 60794-5-10 & 20	Number of turns: 5 Mandrel diameter: 24x O.D. Number of cycles: 3	There is no splitting or permanent damage under visual examination and the inner clearance test shall be passed.
Friction		Sample length: 4 meters Mandrel diameter: 750mm The sample length is secured with 450 wrap around the mandrel with one end of the tube hanging downwards, the other end pointing horizontally towards the tensile machine.	A 5.0Kg weight shall be pulled at 100mm/min and travel 200mm. An average force of 5 pulls shall be recorded to give a coefficient for friction less than 0.1

7. Packing information

Product code	Drum Length (m)	Packing Size (Flange x width, cm)	N./G. Weight (kg)	Drums in 40HQ
MD1814	1,000	115 x 53	98 / 122	80

Completed packages of the HDPE micro duct on drum can be stored outdoor max. 12 months upon the date of production.

Storage temperature: -40° C ~ +70° C

Installation temperature: -30° C ~ +50° C

Operating temperature: -40° C ~ +70° C
