

Emtelle UK Ltd. Haughhead Hawick TD9 8LF United Kingdom

info@emtelle.com emtelle.com

# Product Datasheet MHT 175

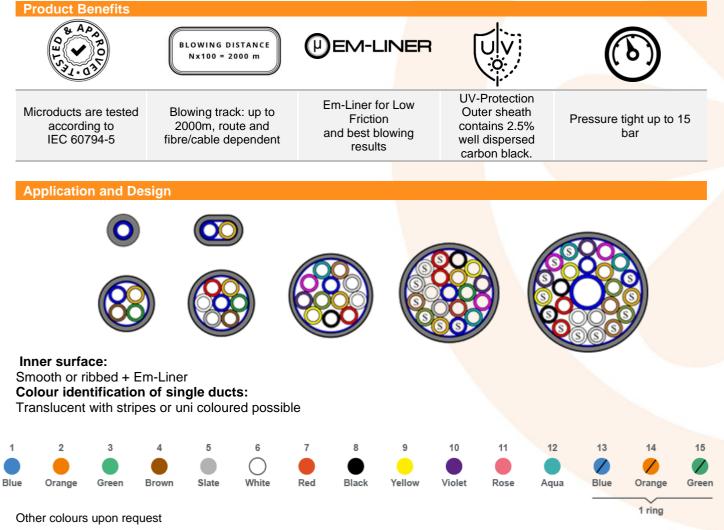
Generic Specification DI Microducts and Bundles 3mm, 5mm and 8mm



#### **Product Description**

Assemblies of PE tubes (3, or 5 or 8mm), each with low friction performance. Each assembly (tube bundle) is surrounded by an overlapped aluminium water barrier layer. Over this and bonded to it is a flexible sheath of black outdoor PE. These lightweight and flexible products are intended for direct installation into waiting duct, but not for direct burial or aerial use.

Any suitable sized Emtelle fibre unit: The 5mm and 8mm bundles will accommodate all FU counts: 2FU, 4FU, 8FU, 12FU and 24FU. The 3mm bundles will accommodate 2FU and 4FU.



This document is intended as a guide only. Whilst the information it contains is believed to be correct, Emtelle can take no responsibility for actions taken based on the information contained in this document. Emtelle reserves the right to make changes to this document without notice. All sales of product are subject to Emtelle's terms and conditions of sale only, which can be found on Emtelle's website. This document is protected by copyright (c) Emtelle Group [2020]. The products depicted are protected by intellectual property rights. Any unauthorized copying of this document or of our products is prohibited and Emtelle UK Limited will take action to prevent any infringement of its rights and to claim damages for the loss that it suffers. www.emtelle.com

emtelle.com

Product Datasheet MHT175

Page 1 of 3

# Issue F: 10/08/2021

| Generic Details: Single Microduct       |                   |            |              |  |
|---|-------------------|------------|--------------|--|
| Material                                | Polyethylene HDPE |            |              |  |
| Outer diameter                          | 3.0mm             | 5.0mm      | 8.0mm        |  |
| Inner diameter                          | 2.1mm             | 3.5mm      | 6.0mm        |  |
| Diameter of centre tube in 24-way       | 6mm               | 10mm       | 15mm         |  |
| Min. bending radius of<br>primary duct* | 30mm              | 50mm       | 80mm         |  |
| Max. pull tension, single duct          | 20N (2 kg)        | 70N (7 kg) | 140N (14 kg) |  |
| Max. Blowing pressure                   | 15 bar            |            |              |  |

\*This radius relates to the microduct capability only and does not indicate a good radius for blowing FU.

1. These microducts are compatible with designated 3mm, 5mm and 8mm push-fit connectors.

2. Max air pressure for blowing: 15bar.

3. Storage of unprotected primary microducts: Indoors and well shielded from daylight.

| Generic Details: Microduct Bundle |   |  |  |
|-----------------------------------|---|--|--|
| Material                          | Polyethylene, light stabilised (normally black) |  |  |
| Wall thickness                    | 1.7mm nominal including aluminium               |  |  |
| Sheath Removal                    | Using Ripcord(s) provided under sheath          |  |  |
| Number single ducts               | 1-24 (+central duct)                            |  |  |

| Product-Specific I | Details        |         |                                      |                      |
|--------------------|----------------|---------|--------------------------------------|----------------------|
| Туре               | Outer Diameter | Mass    | Max. Pull Tension*<br>(Installation) | Min. Bend Radius     |
| 3/2.1mm            |                |         |                                      |                      |
| 1-WAY DI           | 6.4 mm         | 33 g/m  | 250 N / 25 kg                        | 90 mm                |
| 2-WAY DI           | 6.4 x 9.4 mm   | 46 g/m  | 350 N / 35 kg                        | 90 mm                |
| 4-WAY DI           | 10.6 mm        | 68 g/m  | 500 N / 50 kg                        | 150 mm               |
| 7-WAY DI           | 12.4 mm        | 86 g/m  | 600 N / 60 kg                        | 170 mm               |
| 12-WAY DI          | 15.6 mm        | 122 g/m | <mark>900 N</mark> / 90 kg           | 220 mm               |
| 19-WAY DI          | 18.0 mm        | 160 g/m | 1200 N / 120 kg                      | 250 mm               |
| 24-WAY DI          | 21.4 mm        | 209 g/m | <mark>1500 N</mark> / 150 kg         | 300 mm               |
| 5/3.5mm            |                |         |                                      |                      |
| 1-WAY DI           | 8.4 mm         | 49 g/m  | <mark>400 N / 4</mark> 0 kg          | 120 mm               |
| 2-WAY DI           | 8.4 x 13.4 mm  | 77 g/m  | 600 N / 60 kg                        | 120 mm               |
| 4-WAY DI           | 15.5 mm        | 118 g/m | 700 N / 70 kg                        | 200 <mark>mm</mark>  |
| 7-WAY DI           | 18.4 mm        | 162 g/m | 1500 N / 150 kg                      | 240 mm               |
| 12-WAY DI          | 23.8 mm        | 240 g/m | 1600 N / 160 kg                      | 310 mm               |
| 19-WAY DI          | 27.8 mm        | 329 g/m | 2500 N / 250 kg                      | 360 mm               |
| 24-WAY DI          | 33.4 mm        | 437 g/m | 40 <mark>00 N / 400 kg</mark>        | 500 mm               |
| 8/6mm              |                |         |                                      |                      |
| 1-WAY DI           | 11.4 mm        | 78 g/m  | 600 <mark>N / 60 kg</mark>           | <mark>1</mark> 50 mm |
| 2-WAY DI           | 11.4 x 19.4 mm | 128 g/m | 1000 N / 100 kg                      | 150 mm               |
| 4-WAY DI           | 22.7 mm        | 204 g/m | 1500 N / 1 <mark>50 kg</mark>        | 300 mm               |
| 7-WAY DI           | 27.4 mm        | 292 g/m | 2000 N / 200 kg                      | 370 mm               |
| 12-WAY DI          | 36.0 mm        | 444 g/m | 3200 N / 320 kg                      | 550 mm               |
| 19-WAY DI          | 42.4 mm        | 623 g/m | 4500 N / 450 kg                      | 650 mm               |
|                    |                |         |                                      |                      |

This document is intended as a guide only. Whilst the information it contains is believed to be correct, Emtelle can take no responsibility for actions taken based on the information contained in this document. Emtelle reserves the right to make changes to this document without notice. All sales of product are subject to Emtelle's terms and conditions of sale only, which can be found on Emtelle's website. This document is protected by copyright (c) Emtelle Group [2020]. The products depicted are protected by intellectual property rights. Any unauthorized copying of this document or of our products is prohibited and Emtelle UK Limited will take action to prevent any infringement of its rights and to claim damages for the loss that it suffers. www.emtelle.com

emtelle.com

Product Datasheet MHT175

Page 2 of 3

### Notes:

Bend Radius:

\*These radius values relate only to the physical cable performance, not to recommended blowing radii. See installation manual for blowing advice.

Force:

\*After applying pulling tensions, allow time for pulled product to relax. See Installation manual.

| Operating Parameters                   |                          |
|--|--------------------------|
| Installation temperature               | -20°C+40° <mark>C</mark> |
| Transportation and storage temperature | -40°C+60°C               |
| Installation + Blowing ideal           | +5°C <mark>+20°C</mark>  |

| Testing |                          |                          |
|---------|--------------------------|--------------------------|
| Crush   | IEC 60794-1-2-Method E3  | Procedure to IEC 60794-5 |
| Impact  | IEC 60794-1-2-Method E4  | Procedure to IEC 60794-5 |
| Kink    | IEC 60794-1-2-Method E10 | Procedure to IEC 60794-5 |
| Bend    | IEC 60794-1-2-Method E11 | Procedure to IEC 60794-5 |

## **Additional Information**

- Emtelle FibreFlow Microducts are compatible with Emtelle 3mm, 5mm and 8mm connectors, end caps and gas stops
- Emtelle's Microducts and bundles often exceed IEC60794-5 requirements. If you require precise or higher test results, please contact us for more information
- Bundles on drums are covered with UV-protection foil to ensure 1 year UV-protection plus
- Optionally, the bundles can be supplied with a 0.63mm locating wire.
- Stripes on the sheath possible
- Customer specific print available

This document is intended as a guide only. Whilst the information it contains is believed to be correct, Emtelle can take no responsibility for actions taken based on the information contained in this document. Emtelle reserves the right to make changes to this document without notice. All sales of product are subject to Emtelle's terms and conditions of sale only, which can be found on Emtelle's website. This document is protected by copyright (c) Emtelle Group [2020]. The products depicted are protected by intellectual property rights. Any unauthorized copying of this document or of our products is prohibited and Emtelle UK Limited will take action to prevent any infringement of its rights and to claim damages for the loss that it suffers. www.emtelle.com

Product Datasheet MHT175

Page 3 of 3