



**Emtelle UK Ltd.**  
 Haughhead  
 Hawick TD9 8LF  
 United Kingdom

info@emtelle.com  
 emtelle.com

**Product Datasheet MHT 2802**  
**Generic Specification DB – with foil Microducts and Bundles**



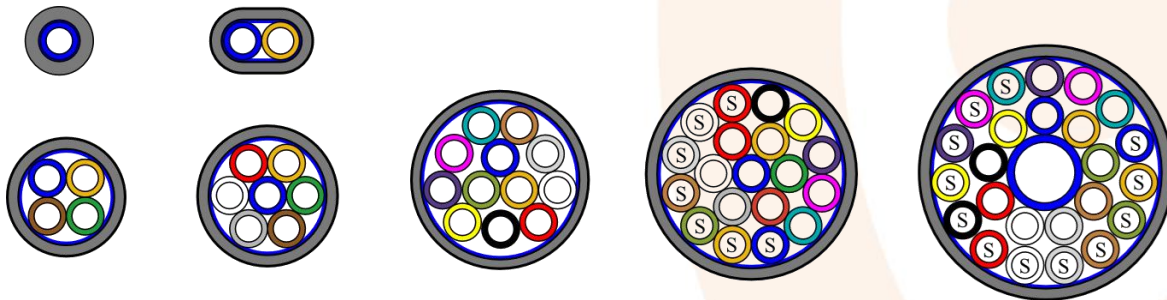
**Product Description**

Assemblies of PE microducts (m/d) each with low friction performance. Each assembly (bundle) is surrounded by an overlapped aluminium water barrier layer. Over this and bonded to it is a flexible sheath of black outdoor PE. Finally there is a tough outer HDPE sheath. These products are intended for direct burial in suitably prepared ground, and then field assembled during which optical fibres (see below) are installed.

**Product Benefits**

|  |   |  |                                   |                             |
|--|---|--|-----------------------------------|-----------------------------|
|  |   |  |                                   |                             |
| Microducts are tested according to IEC 60794-5 | Blowing track: 2000 m Performance confirmed | Em-Liner for Low Friction and best blowing results | UV-Protection up to 2 years in EU | Pressure tight up to 15 bar |

**Application and Design**



**Inner surface:**  
 Smooth or ribbed + Em-Liner

**Colour identification of single ducts:**  
 Translucent with stripes or uni coloured possible

- 1 Blue
- 2 Orange
- 3 Green
- 4 Brown
- 5 Slate
- 6 White
- 7 Red
- 8 Black
- 9 Yellow
- 10 Violet
- 11 Rose
- 12 Aqua
- 13 Blue
- 14 Orange
- 15 Green

Other colours upon request

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**Generic Details: Microduct Bundle**

|                     |   |
|---------------------|---|
| Material            | Polyethylene, Light stabilized (normally black) |
| Wall thickness      | 1.7mm nominal including aluminium               |
| Sheath removal      | Using Sheath removal tools                      |
| Number single ducts | 1-24  |

**Product-Specific Details**

| Type                       | Outer Diameter | Mass    | Max. Pull Tension (Installation) | Min. Bend Radius | Generic Specification |
|----------------------------|----------------|---------|----------------------------------|------------------|-----------------------|
| <b>3/2.1mm</b>             |                |         |                                  |                  |                       |
| 1-WAY DB                   | 10.2 mm        | 80 g/m  | 0.5 kN / 50 kg                   | 90 mm            | MHT113                |
| 2-WAY DB                   | 10.2 x 13.2 mm | 104 g/m | 0.7 kN / 70 kg                   | 90 mm            | MHT113                |
| 4-WAY DB                   | 14.4 mm        | 139 g/m | 1 kN / 100 kg                    | 150 mm           | MHT113                |
| 7-WAY DB                   | 16.2 mm        | 166 g/m | 1.1 kN / 110 kg                  | 170 mm           | MHT113                |
| 12-WAY DB                  | 19.4 mm        | 220 g/m | 1.5 kN / 150 kg                  | 220 mm           | MHT113                |
| 19-WAY DB                  | 21.8 mm        | 272 g/m | 2 kN / 200 kg                    | 250 mm           | MHT113                |
| 24-WAY DB<br>+ 1-WAY 6/4.5 | 25.2 mm        | 340 g/m | 2.3 kN / 230 kg                  | 300 mm           | MHT113                |
| <b>5/3.5mm</b>             |                |         |                                  |                  |                       |
| 1-WAY DB                   | 12.2 mm        | 71 g/m  | 0.5 kN / 50 kg                   | 100 mm           | MHT113                |
| 2-WAY DB                   | 12.2 x 17.2mm  | 154 g/m | 1.2 kN / 120 kg                  | 120 mm           | MHT113                |
| 4-WAY DB                   | 19.3 mm        | 216 g/m | 1.6 kN / 160 kg                  | 200 mm           | MHT113                |
| 7-WAY DB                   | 22.2 mm        | 278 g/m | 2 kN / 200 kg                    | 240 mm           | MHT113                |
| 12-WAY DB                  | 28.2 mm        | 411 g/m | 2.8 kN / 280 kg                  | 310 mm           | MHT113                |
| 19-WAY DB                  | 32.2 mm        | 526 g/m | 4 kN / 400 kg                    | 360 mm           | MHT113                |
| 24-WAY DB<br>+ 1-WAY 10/8  | 37.8 mm        | 671 g/m | 5 kN / 500 kg                    | 500 mm           | MHT113                |
| <b>8/6mm</b>               |                |         |                                  |                  |                       |
| 1-WAY DB                   | 15.2 mm        | 162 g/m | 1 kN / 100 kg                    | 150 mm           | MHT113                |
| 2-WAY DB                   | 15.2 x 23.2 mm | 232 g/m | 1.5 kN / 150 kg                  | 150 mm           | MHT113                |
| 4-WAY DB                   | 27.1 mm        | 368 g/m | 2.5 kN / 250 kg                  | 300 mm           | MHT113                |
| 7-WAY DB                   | 31.8 mm        | 487 g/m | 3.5 kN / 350 kg                  | 370 mm           | MHT113                |
| 12-WAY DB                  | 40.4 mm        | 698 g/m | 4.8 kN / 480 kg                  | 550 mm           | MHT113                |
| 19-WAY DB                  | 47.8 mm        | 987 g/m | 7 kN / 700 kg                    | 650 mm           | MHT113                |
| <b>10/8mm</b>              |                |         |                                  |                  |                       |
| 1-WAY DB                   | 17.2 mm        | 185 g/m | 1.3 kN / 130 kg                  | 180 mm           | MHT167                |
| 2-WAY DB                   | 17.2 x 27.2 mm | 285 g/m | 2 kN / 200 kg                    | 180 mm           | MHT167                |
| 4-WAY DB                   | 31.9 mm        | 450 g/m | 3 kN / 300 kg                    | 370 mm           | MHT167                |
| 7-WAY DB                   | 37.8 mm        | 606 g/m | 4 kN / 400 kg                    | 430 mm           | MHT167                |
| 12-WAY DB                  | 49.5 mm        | 946 g/m | 6 kN / 600 kg                    | 660 mm           | MHT167                |
| <b>12/10mm</b>             |                |         |                                  |                  |                       |
| 1-WAY DB                   | 19.1 mm        | 205 g/m | 1.5 kN / 150 kg                  | 200 mm           | MHT167                |
| 2-WAY DB                   | 19.1 x 31.1 mm | 331 g/m | 2.4 kN / 240 kg                  | 200 mm           | MHT167                |
| 4-WAY D                    | 36.8 mm        | 542 g/m | 4 kN / 400 kg                    | 500 mm           | MHT167                |
| 7-WAY DB                   | 43.8 mm        | 726 g/m | 5.5 kN / 550 kg                  | 600 mm           | MHT167                |

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**12/9.4mm**

|          |                |         |                 |        |        |
|----------|----------------|---------|-----------------|--------|--------|
| 1-WAY DB | 19.1 mm        | 214 g/m | 1.5 kN / 150 kg | 200 mm | MHT167 |
| 2-WAY DB | 19.1 x 31.1 mm | 349 g/m | 2.4 kN / 240 kg | 200 mm | MHT167 |
| 4-WAY DB | 36.8 mm        | 577 g/m | 4 kN / 400 kg   | 500 mm | MHT167 |
| 7-WAY DB | 43.8 mm        | 787 g/m | 5.5 kN / 550 kg | 600 mm | MHT167 |

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:

\*\*These products are normally buried, not pulled, but pulling is acceptable. After applying pulling tensions, allow time for the pulled product to relax. See installation manual.

**Operating Parameters**

|  |               |
|--|---------------|
| Installation temperature               | -20°C...+40°C |
| Transportation and storage temperature | -40°C...+60°C |
| Installation + Blowing ideal           | +5°C...+20°C  |

**Testing**

|         |                          |                          |
|---------|--------------------------|--------------------------|
| Tensile | IEC 60794-1-2-Method E1  | Procedure to IEC 60794-5 |
| 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 |

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