



Afri Piping Systems (Pty) Ltd
SPECIFICATIONS DOCUMENT

MicroDucts & Bundled MicroDucts



The Afripipes MicroDuct Range of solutions caters to the FTTx Market. The larger 14/10mm Ducts are ideal for large fibre count cables, while the 8/5mm range is perfect for deployment of FTTh networks.





MicroDuct™

Technical Data

| Properties: | 5/3.5 | 7/3.5 | 8/5 | 10/8 | 12/10 | 14/10 | 16/13 | 18/15 |
|--|--|-------------|-----------|------------|------------|------------|------------|-----------------------------------|
| • Outer Diameter | | | 8mm±0.1mm | 10mm±0.1mm | 12mm±0.1mm | 14mm±0.1mm | 16mm±0.1mm | 18mm±0.1mm |
| • Inner Diameter | 3.5mm±0.1mm | 3.5mm±0.1mm | 5mm±0.1mm | 8mm±0.1mm | 10mm±0.1mm | 10mm±0.1mm | 13mm±0.1mm | 15mm±0.1mm |
| • Length on Drums | 2000m | 2000m | 2000m | 2000m | 2000m | 2000m | 1000m | 1000m |
| • Pressure Rating | 5mm±0.1mm | 8 Bar | 10 Bar | 10 Bar | 10 Bar | 8 Bar | 10 Bar | 10 Bar |
| • Material/Colour | V | | | | | | | d or as per customer requirements |
| • Ovality | <5% | <5% | <5% | <5% | <5% | <5% | <5% | <5% |
| • Kink Test (As per Industry Norm 20D) | Passes | Passes | Passes | Passes | Passes | Passes | Passes | Passes |
| • Chemical Resistance(ISO/TR10358) | Virgin HDPE (High Density Polythylene), Colour as per TIA/EIA 598 Standard | | | | | Passes | Passes | Passes |
| • Marking | Afripipes, Size, Micr | | | | | | | |
| • Coefficient of Friction(Bellcore Test GR356) | nal Surface | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 |
| • Inter | Longitudinal Ribs with Silicone Inner layer (or Smooth) | | | | | | | |
| • Environmental Stress Cracking(ASTM 1693) | oDuct, Batch Number, Time, Length | | | | | | | |

Bundled MicroDuct

| | 2-Way | 4-Way | 7-Way | 12-Way | 24-Way |
|--|--|----------------------|--------------------|-----------|-----------|
| • Number and Available Size of MicroDucts | Virgin HDPE (High Density Polythylene), Colour as per TIA/EIA 598 Standard | | | | 24x |
| | 5/7/8/10/12/14/16/18 | 5/7/8/10/12/14/16/18 | 5/7/8/10/12/14/16 | 5/7/8 | 5/7/8 |
| • Length on Drums | 1000m | 1000m | 1000m | 1000m | 1000m |
| • Shape | Rectangular | Square | Hexagonal or Round | Hexagonal | Hexagonal |
| • Material/Colour | V | | | | |
| • Impact Resistance (6.5J/-10°C) | | | | | |
| • Crush Resistance (1000N for 1 Minute) | Maximum of 80% of the inner Duct dimension Steel ball passes freely through each MicroDuct | | | | |
| • Bending 20D | Maximum of 80% of the inner Duct dimension Steel ball passes freely through each MicroDuct | | | | |
| • Chemical Resistance(ISO/TR10358) | Passes | Passes | Passes | Passes | Passes |
| • Marking | Bundled MicroDuct, Batch Number, Time, Length or as per customer requirements | | | | |
| • External Surface | Free from holes, Scratches | | | | |
| • Environmental Stress Cracking(ASTM 1693) | No Visible Cracks or Fracturing | | | | |

NB: Different configurations can be manufactured on request

Handling and Storage:

| | |
|--|----------------|
| • Storage Temperature | -20°C to +60°C |
| • Installation Temperature (Recommended) | +15°C to +40°C |
| • Ultra-Violet Resistance Period | 1 Year |
| • Installation | |

| | As per SABS 1200 LB | | | | | | | Properties: |
|---|---------------------|-------|-----|------|-------|-------|-------|-------------|
| | 5/3.5 | 7/3.5 | 8/5 | 10/8 | 12/10 | 14/10 | 16/13 | 18/15 |
| • Straight Connector 12 Bar Pressure Rating | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| • End Cap 12 Bar Pressure Rating | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| • Non Pressurized End Cap | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |