

Afripipes

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	5mm±0.1mm	7mm±0.1mm	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	8 Bar	10 Bar	10 Bar	10 Bar	8 Bar	10 Bar	10 Bar	10 Bar
• Material/Colour	Virgin HDPE (High Density Polythylene), Colour as per TIA/EIA 598 Standard 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)	Passes	Passes	Passes	Passes	Passes	Passes	Passes	Passes
• Marking	Afripipes, Size, MicroDuct, Batch Number, Time, Length							
• Coefficient of Friction (Bellcore Test GR356)	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
• Internal Surface	Longitudinal Ribs with Silicone Inner layer (or Smooth)							
• Environmental Stress Cracking (ASTM 1693)	No Visible Cracks or Fracturing							

Bundled MicroDuct

Properties:	2-Way	4-Way	7-Way	12-Way	24-Way
• Number and Available Size of MicroDucts	2x	4x	7x	12x	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	Virgin HDPE (High Density Polythylene), Colour as per TIA/EIA 598 Standard or as per customer requirements				
• Impact Resistance (6.5J/-10°C)	No Visible Cracks or Fracturing				
• 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

Products:	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	✓	✓	✓	✓	✓	✓	✓	✓