

## 10015720 - Fibre In Duct LC/APC – LC/APC VENTURI CONNECTOR

### Product Overview

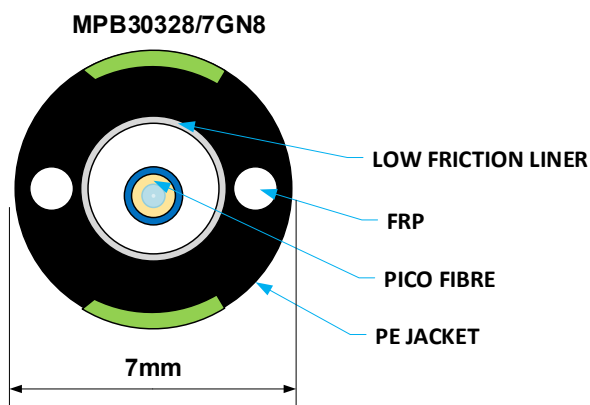
PIA approved fibre in duct assembly with an LC/APC Venturi connector on one end and un-terminated the other. The 7/3.7mm microduct features 0.8mm FRP for strain relief and controlled tensile breaking force. The inner fibre construction includes aramid yarn for increased retention.

### Application

Customer drop cable suitable for deployment in both UG and aerial scenarios.

### Features

- PIA Approved
- FTTP Fibre Pre-Loaded Microduct
- Increased tensile strength inner fibre
- Black with Green Stripes UV MDPE
- Aerial, dielectric, self-supporting design
- Low friction inner surface
- Excellent UV resistance
- Controlled tensile breaking force for maximum security, less than 2000N



## Technical Specification

| Parameter                  | Performance        | Specification                                    |
|----------------------------|--------------------|--------------------------------------------------|
| Connector                  | LC APC             | IEC Interface Standard – Green                   |
| Ferrule                    | Zirconia Ferrule   | LC Singlemode 1.25mm OD                          |
| Connector Boot             |                    | 3mm Green                                        |
| <b>Optical Performance</b> |                    |                                                  |
| Insertion Loss (Max)       | ≤0.25dB            | IEC 61300-3-4 (1310nm & 1550nm) Meth. B          |
| Insertion Loss (Mean)      | <0.12dB            | IEC 61300-3-4 (1310nm & 1550nm) Meth. B          |
| Repeatability/Durability   | ±0.2dB/500 Matings | IEC 61300-3-6                                    |
| Return Loss (Back)         | APC>60dB           | IEC 61300-3-6 method 1 or equivalent             |
| End Face Geometry          | Radius, Apex       | IEC 61755-2-1                                    |
| Visual                     | Standard           | X200 Magnification                               |
| <b>Materials</b>           |                    |                                                  |
| Connector                  | Stainless Steel    | SUS316                                           |
| Optical Fibre              | ITU-T G.657.A2     |                                                  |
| Dust Cap                   | Plastic Cap        | Clear                                            |
| <b>Mechanical</b>          |                    |                                                  |
| Fibre Retention            | ≥ 15N              | Approved Epoxy: Epotec 353ND or Resin Tech RT153 |

|                                                                |                                   |
|----------------------------------------------------------------|-----------------------------------|
| Insertion Loss (Random Mating Performance) shall be as follows |                                   |
| Maximum > 97%                                                  | ≤ 0.25 dB                         |
| Mean                                                           | ≤ 0.12 dB                         |
| Return Loss (RL)                                               | ≥ 55 dB (unmated) ≥ 60 dB (mated) |
| Polished Angle                                                 | 8 degrees                         |
| Scratches < 1µm in core zone                                   | < 4                               |
| Reference – Attenuation Random Mated IEC 61300-3-34            |                                   |

| Cable Construction           |            |                 |             |
|------------------------------|------------|-----------------|-------------|
| Items                        |            | Specification   | Remark      |
| Optical Fiber                | Fiber Type | i) SMF G.657A2  | ITU-T G.657 |
|                              |            | ii) SMF G.657B3 |             |
|                              | Color      | Natural         |             |
| Strength Member              | Material   | Aramid yarn     |             |
|                              | Diameter   | 1.1 ± 0.2mm     |             |
| Jacket                       | Thickness  | Nom. 0.25mm     |             |
|                              | Material   | LSZH PO         |             |
|                              | Color      | <b>White</b>    |             |
| Approx. buffer weight (Net.) |            | 1.2 kg/km       |             |

| Cable Characteristics |                      |                           |                    |
|-----------------------|----------------------|---------------------------|--------------------|
| Parameter             |                      | Specification             | Remark             |
| Mechanical            | Maximum Tensile load | 40N                       | IEC 60794-1-21 E1  |
|                       | Crush resistance     | 150N / 5cm                | IEC 60794-1-21 E3  |
|                       | Impact resistance    | 0.74 N.m                  | IEC 60794-1-21 E4  |
|                       | Minimum Bend radius  | 20 x O.D                  | IEC 60794-1-21 E11 |
|                       | Temperature Range    | -20℃ ~ +70℃               | IEC 60794-1-22-F1  |
| Environmental         | Flame retardant      | CPR Class E <sub>ca</sub> | IEC 60332-1-2      |

| Duct Specification              |                                             |
|---------------------------------|---------------------------------------------|
| Product Color                   | Black with Green Stripes                    |
| Material                        | HDPE                                        |
| Strain Relief                   | 0.8mm FRP                                   |
| Temperature, Operation [°C]     | -20 to +60                                  |
| Temperature, Storage [°C]       | -30 to +70                                  |
| Temperature, Installation [°C]  | -15 to +50                                  |
| Diameter OD/ID (mm)             | 7/3.7                                       |
| Bend Radius (mm)                | 140                                         |
| Tensile Force, Installation (N) | 850                                         |
| Crush (N/100mm)                 | 1900                                        |
| Impact (J)                      | 1                                           |
| Conformance                     |                                             |
| Abrasion                        | IEC 60794-1-21-E2B(1)                       |
| Kink                            | IEC 60794-1-21-E10,                         |
| Impact                          | IEC 60794-1-21-E4                           |
| Crush                           | IEC 60794-1-21-E3                           |
| Bend                            | IEC 60794-1-21-E11A                         |
| Torsion                         | IEC 60794-1-21-E7                           |
| Inner Clearance                 | IEC 60794-1-21-E123, IEC 60794-5-10, Ann. D |

## Ordering Information

| Part Number              | Description                                                          |
|--------------------------|----------------------------------------------------------------------|
| ISCVM-D7B-1-ALV-PIG-025M | External 7/4mm Black with Green Stripes UV Stable MDPE Pre Installed |
| ISCVM-D7B-1-ALV-PIG-050M | External 7/4mm Black with Green Stripes UV Stable MDPE Pre Installed |
| ISCVM-D7B-1-ALV-PIG-075M | External 7/4mm Black with Green Stripes UV Stable MDPE Pre Installed |
| ISCVM-D7B-1-ALV-PIG-100M | External 7/4mm Black with Green Stripes UV Stable MDPE Pre Installed |
| ISCVM-D7B-1-ALV-PIG-125M | External 7/4mm Black with Green Stripes UV Stable MDPE Pre Installed |
| ISCVM-D7B-1-ALV-PIG-150M | External 7/4mm Black with Green Stripes UV Stable MDPE Pre Installed |
| ISCVM-D7B-1-ALV-PIG-175M | External 7/4mm Black with Green Stripes UV Stable MDPE Pre Installed |
| ISCVM-D7B-1-ALV-PIG-200M | External 7/4mm Black with Green Stripes UV Stable MDPE Pre Installed |
| ISCVM-D7B-1-ALV-PIG-225M | External 7/4mm Black with Green Stripes UV Stable MDPE Pre Installed |
| ISCVM-D7B-1-ALV-PIG-250M | External 7/4mm Black with Green Stripes UV Stable MDPE Pre Installed |
| ISCVM-D7B-1-ALV-PIG-275M | External 7/4mm Black with Green Stripes UV Stable MDPE Pre Installed |