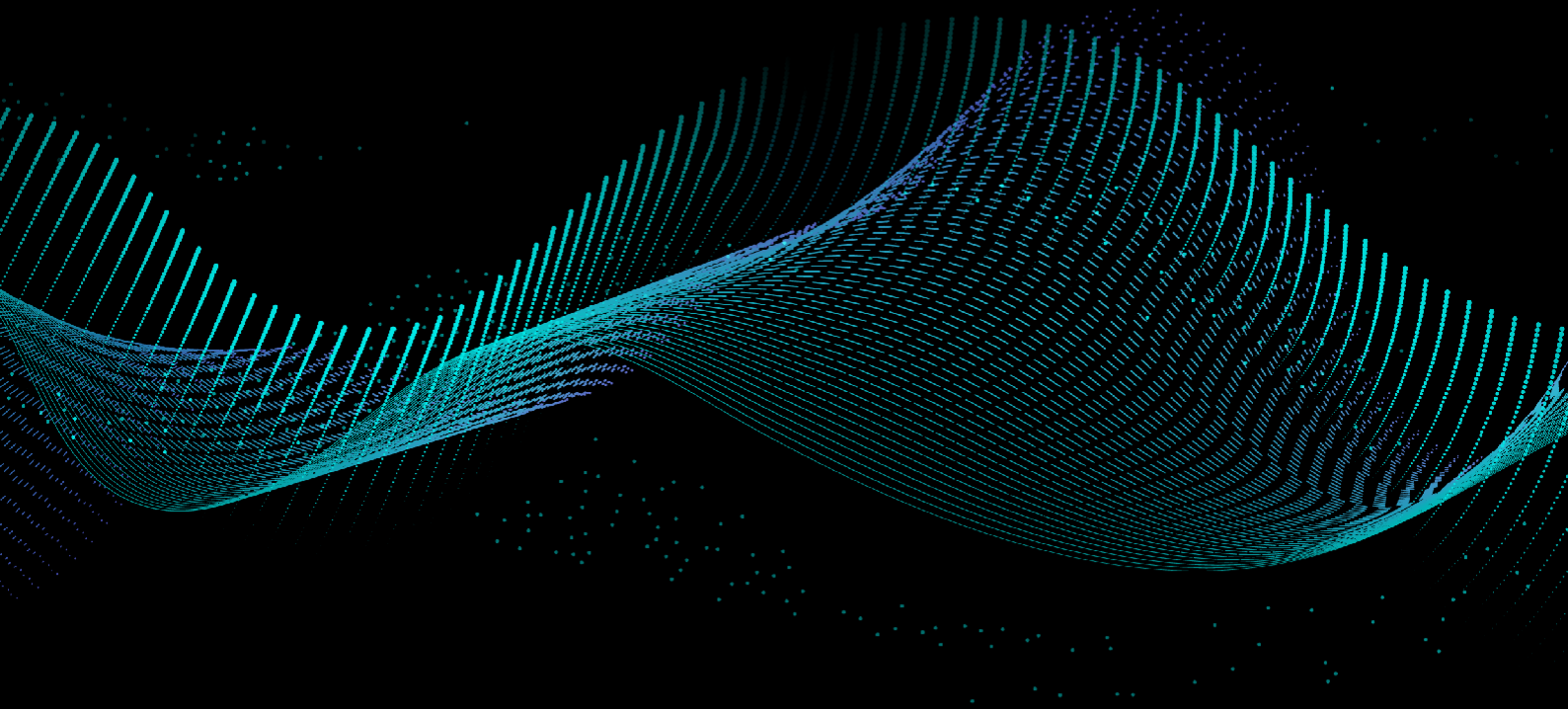
Specification

Microfocus connector gasblock 14/10 mm tube-tube 5-8 mm cable including locking clips



microfocus

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The scope of this specification is to describe the construction and the requirements of the components used in the access network where the external network microduct is cut and connected to the internal network microduct. It is essential that the connector offers a continuous uninterrupted internal through bore, to ensure good fiber cable installation. The connector must then offer simple application to guarantee a gas tight seal to the external network. The Microfocus connector gasblock 14/10 mm tube-tube consists of a body, cap, washer, retainer, release sleeve, seal, O-ring, grabring and locking clips.

Microduct specifications

Characteristic	Value
Outer diameter	14 mm (± 0.1 mm)
Inner diameter	10 mm (min. 9.9 mm)
Material	HDPE or LSZH

Cable specifications

Characteristic	Value
Maximum diameter	8 mm
Minimum diameter	5 mm

Connector gasblock

The Microfocus connector gasblock shall have the necessary sealing arrangement to operate safely at blowing pressures of 15 Bar and protect the inner cavity against ingress of any particles. The connector must be able to be assembled and disassembled without the use of tools.

Material

The Microfocus connector gasblock body is constructed in Polycarbonate, the guide tube retainer, release sleeve and cap in POM, the O-ring seal in Nitrile, and the gasblock seal in Silicone. The following performance tests will demonstrate satisfactory design performance and material selection will ensure good lifetime and stability of

performance characteristics.

Performance tests

The Microfocus connector end shall withstand the following mechanical and environmental tests at ambient temperature of 20°C.

1. Tensile Test:

The purpose of the test is to establish the minimum force necessary to destroy the integrity of the assembly. Connect two pieces of 14 mm microduct. Ensure the connection is fully inserted. Place the assembly in a tensometer and perform a destructive test at a rate of extension of 25 mm/minute. Record the maximum force before failure and note also the failure mode. Minimum acceptable force for 14 mm HDPE microduct is 200 Newton's and for the 14 mm LSZH microduct is 120 Newton's.

2. Leak Test:

The connectors shall operate at 15 Bar with a maximum permissible leak rate of 1 cc/min. Pressurise the assembled connectors to 15 Bar and place the assembly under water and record the rate of air bubble leak present. 1 bubble every 3 seconds represents a leak rate of 1cc/min.

Gas blocked state: the connector assembly shall seal against 0.5 Bar pressure within the external network tube. Connect the assembly to a 5-liter reservoir and pressurise to 0.5 Bar. Leave for 48 hours and check for any pressure decay. If no decay is present the assembly is deemed to have passed the test.

3. Burst Pressure Test:

The connectors shall seal at internal pressures up to 25 Bar without sustaining damage, or permanent deformation, and shall remain connected to the duct. Pressure shall be increased through to failure of the connector or duct. The pressure and mode of failure shall be recorded. Pressurise the assembled connectors at a steady increasing rate with a hydraulic water pressure and record the maximum pressure before
destruction. The increase in pressure to be applied at a rate, which will result in failure in approximately 1 minute.

4. Pressurisation:

The connectors shall seal at internal pressures up to 15 Bar for 4 hours without sustaining damage, or permanent deformation, and shall remain connected to the duct. Pressurise the assembled connectors up to 15 Bar, leave for 4 hours and check for any deformation. If connectors remain connected and pressurised the assembly is deemed to have passed the test.

5. Water Ingress Test:

The connectors shall seal, after 10 connections of the microtube, against the ingress of water in its free state (not gas blocked) under a head of water of 5m, no leaks shall occur over a period of 24 hours. Immerse the assembled connectors in a chamber of coloured water and pressurise the chamber to 0.5 Bar, (this is the equivalent to a 5m head of water). Place the open end of the assembled connection onto white detection paper. Leave over a period of 24 hours, and record whether any leaks occurred.

6. Design Lifetime:

The connector shall meet all performance requirements, over a minimum period of 20 years. It shall be designed and manufactured such that there is no residual stress, which could adversely affect performance over the lifetime of the product.

Ordering information

Characteristic	Value
Article number	TSD100642
Description	Microfocus connector gasblock 14/10 mm tube-tube 5-8 mm cable including locking clips
Standard Pack Quantity	100 pieces