

MD100

MicroDuct® Tubing



MD100 Tubing

The MicroDuct Tubing (MD) is a technology breakthrough composed of a fluoropolymer resin and carbon nanotube blend used to transport air sample packets from the test area location back to the Air Data Router (ADR). This tubing provides a cost-effective solution for environments where carbon monoxide (CO), carbon dioxide (CO₂), total volatile organic compounds (TVOC), particle counts, and dewpoint may be monitored. The absence of interlaced low voltage conductors does not allow discrete dry bulb temperature readings to be taken at the test area location. Therefore, calculated points including relative humidity, humidity ratio, and enthalpy are not available. Also, the lack of data communication and low voltage conductors makes MD not suitable for use as an alternative to OSC Structured Cable between the Sensor Suite and ADRs.

Features



Plenum rated for new and existing construction.



Flexible, lightweight and rugged.



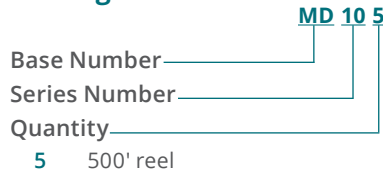
Easy to install. No special tools or installation techniques are required.



Dimensionally stable to support reliable connections via push-to-connect fittings.

Printed with running length markings required for installation.

Ordering Guide



Cable/Tubing Compatibility Chart

	RS200	AWP200	DPB200
OSC100	✓	✓ †	✓
MD100	X	✓ ††	✓ †
OT100	✓ †	✓ ††	✓ †*

* Requires Enlarger Fitting (OT-E11) to interface with probe

† Tubing does not support probes with discrete temperature sensors

‡ Probe does not feature discrete temperature sensor. Temperature and all calculated virtual points requiring temperature are not supported.

X Not Supported

Specifications

Mechanical

Tubing dimensions: 0.312" OD x 0.25" ID (0.79 OD x 0.64 ID cm)

Maximum pull tension: 50 lbf (222 N)

Minimum bend radius: 3.5" (8.89 cm)

Cross sectional area: 0.076 sq in (0.193 sq cm)

Printed running footage marking: 2' (0.61 m)

Weight (approx.): 500' (152.4 m) reel and carton: 15 lbs (6.8 kg)

Reel dimensions: 20' dia. x 8.73" W (50.8 dia x 22.2 W cm)

Operating temperature range (for indoor use only):
0°–120°F (-18°–49°C)

Regulatory Compliance

NFPA 90A, UL 94V-0, UL 1820 Flame and Smoke Classified



U. S. Patents

6,125,710; 7,216,556; 7,360,461; 7,389,704

Accessory Items for MD Tubing

	MD-C11 Straight Coupler Fittings Kit	MD-C12 Elbow Coupler Fittings Kit
		
Description	The MD-C11 Coupler Fittings are used to join two lengths of MD Tubing. The Coupler Fittings Kit consists of ten straight coupler fittings. Recommended order quantity is one for 2,500' (762 m) of MD100.	The MD-C12 Elbow Coupler Fittings are used to join two lengths of MD Tubing. The Elbow Coupler Fittings Kit consists of ten elbow coupler fittings. Recommended order quantity is one for 2,500' (762 m) of MD100.
Features	<ul style="list-style-type: none"> • Push-fit technology • Superior flow characteristics 	<ul style="list-style-type: none"> • Push-fit technology • Superior flow characteristics
Ordering Guide	Order Number <u>MD-C11</u>	Order Number <u>MD-C12</u>
Specifications	Kit Includes Ten Straight Coupler Fittings Dimensions: 0.312" (0.79 cm) OD tube	Kit Includes Ten Elbow Coupler Fittings Dimensions: 0.312" (0.79 cm) OD tube