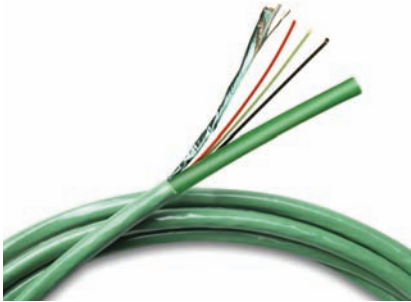




**OptiNet®**  
Optimizing Ventilation Performance



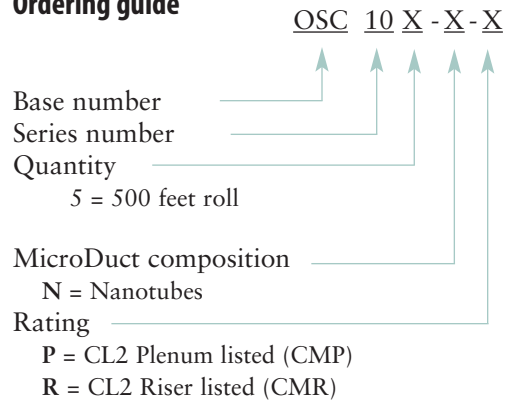
**FEATURES**

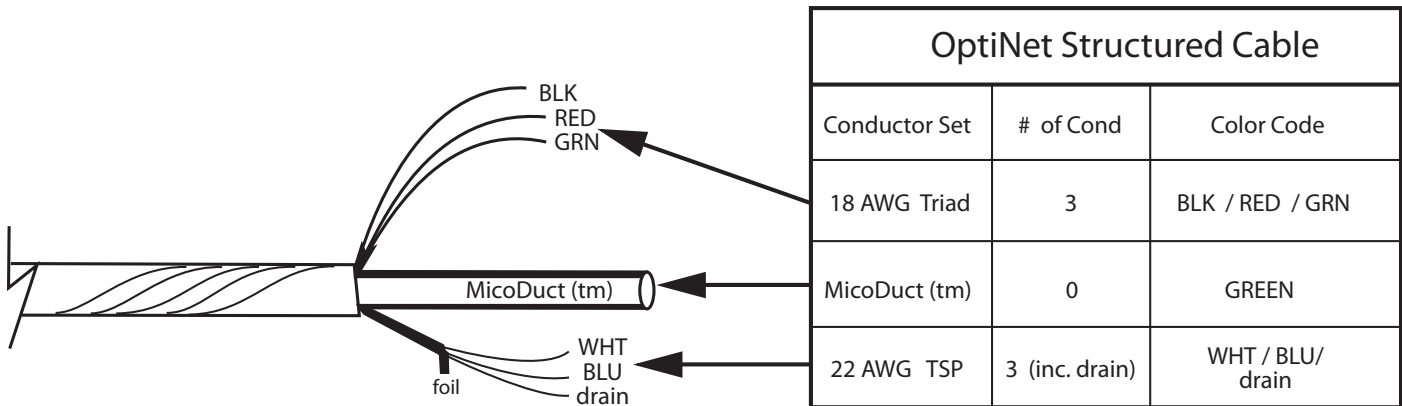
- Carbon nanotube and fluoropolymer blend provides superior particle transport and chemical purity of the air sample.
- A single OptiNet cable houses network communications, low voltage power and area-level discrete and virtual sensing.
- No special tools or installation techniques are required. Similar to typical voice, data, and telecommunications network cables.
- Two versions are available, Plenum and Riser rated for new and existing construction.

**OSC100 OptiNet Structured Cable**

The OptiNet Structured Cable is the communications backbone for the system. The cable is a composite of both traditional LAN based technologies, and a new cutting edge air sampling medium called MicroDuct®. This state-of-the-art structured cable provides low voltage power throughout the system, is a pathway for network data communications and transports air sample packets through its hollow inner core. This inner core, known as MicroDuct, is a technology breakthrough, a fluoropolymer resin and carbon nanotube blend. This patented design ensures that particle transport is unrestricted and air samples remain pure and uncorrupted.

**Ordering guide**





SPECIFICATIONS	PLENUM RATED CABLE (CMP)	RISER RATED CABLE (CMR)
<b>Outer jacket nominal thickness</b> <b>Maximum pull tension</b> <b>Minimum bend radius</b> <b>Cross sectional area</b> <b>Printed running footage marking</b> <b>Weight (approximate)</b> <b>Dimensions</b>	0.020" 100 lbs. (444 Newtons) 3.5" 0.237 sq. in 2 feet 500' reel: 50 lbs. (22.5 kg) 18" Diameter, 10" Width	0.020" 100 lbs. (444 Newtons) 2" 0.237 sq. in 2 feet 500' reel: 50 lbs. (22.5 kg) 18" Diameter, 10" Width
<b>Applicable standards</b>	CMP, NEC 800.51 (A) NFPA 262, UL-910	CMR, NEC 800.51 (B) ANSI 1666, UL-1666
<b>Conductors</b> Communications Low voltage power MicroDuct	22ga twisted shield pair with drain wire 18ga, 3 wire Fluoropolymer/carbon nanotubes	22ga twisted shield pair with drain wire 18ga, 3 wire Fluoropolymer/carbon nanotubes
<b>Mechanical characteristics</b> Operating temperature range Overall nominal diameter	-20°C to +75°C .500 in.	-20°C to +75°C .500 in.
<b>U.S. Patents</b> 6,125,710; 7,216,556; 7,360,46; 7,389,704		