



**UNIQUE HEATED
PRODUCTS**

**Get your quote today!
586-783-5725**

INSTRUMENT GRADE HEATED SAMPLE LINES

Unique's innovative **Instrument Grade Heated Sample Lines** (SII and above) are designed to be used wherever extracting and heating a gas, air, or emissions sample is desired. **UHPI** offers a wide array of external sleeveings, temperature ranges, and options to fit your specific applications. When used properly, **UHPI** lines meet or exceed USEPA/CFR standards. **UHPI's** use of superior insulations and precisely applied heating elements creates the most temperature-stable heated line on the market.

Instrument Grade Heated Sample Lines (SII and above) are available in a wide variety of configurations. Select your temperature range, inner core material & diameter, length, voltage, and sensor type; as well as an assortment of accessories detailed in the "Options" section of this catalog.

Meet tomorrow's regulations today - CALL **UNIQUE**

FEATURES AND SPECIFICATIONS



POLYPROPYLENE for flexibility, UV protection, and corrosion & water resistance. It offers excellent crush & abrasion resistance, great corrosion resistance, and is vapor tight. It can be sealed for use in wet areas. The convoluted design makes it ideal in extremely cold conditions as well as higher temperatures.

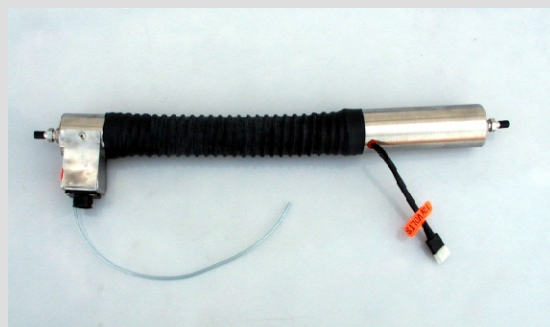
Material: Polypropylene
Color: Black
Diameter Range: 1" to 2" (typical)
Bend Radius at 1-1/2" diameter: 6"

FEATURES AND SPECIFICATIONS

PROPORTIONAL AIR FEED BACK (PAFB) has been exclusively developed by **Unique's** experienced engineering staff as a method of proportionally controlling the sample line's inner wall temperature. This feature prevents the inlet end from experiencing changes in temperature at the sample source and provides you with full control of the line's temperature profile.

Material: Polypropylene
Color: Black
Diameter Range: 1" to 2" (typical)
Bend Radius at 1-1/2" diameter: 6"
Core Size: 1/4"

Temperature Control must be supplied by
Unique Heated Products, Inc.



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INSTRUMENT GRADE HEATED SAMPLE LINES

More specifics on the recommended line configurations for your typical applications



FEATURES AND SPECIFICATIONS

ULTRA-FLEX - **Unique's** Ultra-Flex heated lines provide maximum flexibility with minimum diameter. Covered in a double layer of polyester mesh and incorporating a thin, yet highly efficient, double wound insulation provides no-gap coverage. The inner core is removable and replaceable should leaks or contamination occur. This line is NOT water resistant and is NOT recommended for moist conditions.

Material: Polyester

Color: Black

Diameter Range: 1" to 1.625" (typical)

Bend Radius at 1" diameter: 3"

Ambient Temperature Range: -94°F to +257°F

FEATURES AND SPECIFICATIONS

HEAVY DUTY - **Unique's** Heavy Duty sleeve is flexible, aluminum conduit, known as Greenfield™, for use in areas of extreme physical abuse. It has excellent crush resistance and will not melt when exposed to red-hot manifolds. This line is NOT water resistant and is NOT recommended for outdoor or moist conditions.

Material: Aluminum Conduit

Color: Silver (natural)

Diameter Range: 1" to 6" (typical)

Bend Radius at 1-1/2" diameter: 10"

Ambient Temperature Range: -50°F to +600°F



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MEXA 7000 - The MEXA 7000 option has been specifically designed for Unique's sample transfer lines with stainless steel end caps to directly mate with a Horiba MEXA 7000 Analyzer. This line is sleeved in Polypropylene for a tough durable exterior. The 7 pin connector is mounted on a stainless steel mini-electrical enclosure.

Material: Polypropylene

Color: Black

Diameter Range: 1" to 2" (typical)

Bend Radius at 1-1/2" diameter: 6"

Core Size: 1/4"

FEATURES AND SPECIFICATIONS

PPF - Unique's medium duty sleeve is flexible, polypropylene/rubber, for use in areas of heavy physical abuse. It is suitable for heavy indoor traffic and all outdoor environments.

Material: Polypropylene/Rubber

Color: Green/Black

Diameter Range: 1 1/4" to 4" (typical)

Bend Radius at 1-1/2" diameter: 10"

Core Size: 1/4"



Unique Heated Products, Inc. manufactures heated lines for a wide range of applications outside those listed, including non-automotive use. Please contact our office for a quotation to meet your custom configurations. Heated Sample Lines are just one of the components used to meet the Front End Sampling System requirements of the future.



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HEATED PRODUCTS ACCESSORIES

Unique Heated Products offers a variety of **Accessories** to prolong the life and enhance the use of many of your **UHPI Front End Sampling System** components. The **UHPI Heat Reflective Sleeve** provides low cost protection for your **UHPI Heated Sample Lines** when used in applications that expose portions of a Heated Sample Line to excessive temperatures. Designed as a highly heat reflective, slip-on tube, easily positioned along any portion of the Heated Sample Line, **UHPI's** Heat Reflective Sleeve protects your Heated Sample Line investment from exterior damage when in close proximity to extreme temperatures.

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FEATURES AND SPECIFICATIONS

- Easy to install, just slip-on and position to suit
- Made of highly reflective, aluminized fiberglass
- Low cost protection



Although **UHPI's Heat Reflective Sleeve** does not provide 100% protection against contact with molten metals or red-hot exhaust manifolds for extended periods of time, it does offer superior protection from premature deterioration. Configurations to fit virtually any size and shape are available to suit your application.

UP **UNIQUE HEATED
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**HEATED SAMPLE LINES
ORDERING GUIDE**

EXAMPLE: SII-B-4-120-S-E4-PPO-A-AK-RXX-000

FIELD NUMBER ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^
1 2 3 4 5 6 7 8 9 10 11

1. LINE SERIES

SI-DEW POINT CONTROL
FOR INSTRUMENTATION
SII-PREMIUM GRADE LINE
FOR INSTRUMENTATION (MOST COMMON)
SIII-MOST ACCURATE LINE FOR
LAB AND RESEARCH APPLICATIONS

2. TEMPERATURE RANGE

A-100° C (212° F)
B-200° C (392° F) (MOST COMMON)
C-300° C (572° F)
D-400° C (752° F)

3. SAMPLE TUBE DIAMETER

ENGLISH	METRIC
2-1/8 INCH	M2-2MM
3-3/16 INCH	M3-3MM
4-1/4 INCH	M4-4MM
6-3/8 INCH	M6-6MM
8-1/2 INCH	M8-8MM

4. LENGTH IN INCHES

TOTAL LENGTH OF HEATED AREA
EXCLUDING END FITTINGS

5. SAMPLE TUBE

T-.030 WALL TEFLON
S-.030 WALL 316 STAINLESS STEEL
SI-SILICONE
CO-COPPER
HY-HASTELOY
IC-INCONEL

6. END CONNECTIONS

E-TUBE STUBS (SIZE) (STANDARD)

FOR ALL OTHER OPTIONS PLEASE
CONTACT UHP SALES AND TECH
SUPPORT

7. EXTERIOR SLEEVE

PPO-POLYPROPYLENE HOSE, BLACK
PPF-MEDIUM DUTY SPIRO, GREEN
UF-ULTRAFLEX, POLYESTER
H-HEAVY DUTY METAL HOSE
ST-LIQUID SEALTIGHT CONDUIT
C1D1-CLASS 1 DIV 1
SIL-SILICONE

8. HEATER VOLTAGE

A-120 VAC
B-230 VAC
G-12 VDC
H-208 VAC
I-480 VAC
M-24 VDC

9. SENSOR TYPE

A-THERMOCOUPLE (J OR K)
B-THERMISTOR
C-RTD (PT100)
D-ADJUSTABLE T-STAT
E-SELF-LIMITING

10. POWER CABLE TYPE (LENGTH)

A-7 PIN CONNECTOR (13 AMP MAX)
B-7 PIN CONNECTOR (45 AMP MAX)
D-LOOSE WIRE W/STRIPPED ENDS
E-SO CORD W/NEMA 5-15 PLUG
F-FLEXIBLE CONDUIT
G-MIL SPEC CONNECTOR
H-CLASS 1 DIV 2
I-CLASS 1 DIV 1
J-3 PIN MOLEX CON. (11 AMP MAX)
K-SO CORD W/NEMA 6-30 PLUG
M-MALE TWIST LOCK W/TC
N-9 PIN CONNECTOR (13 AMP MAX)
R-CONNECTOR BOX W/7 PIN CON.

11. OPTIONS

FOR ALL OPTIONS PLEASE SEE
OPTION PAGE OR CONTACT
UHP SALES AND TECH SUPPORT



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