Linear Heat Series Sensor Cables

In close cooperation with leading cable manufacturers, AP Sensing offers a wide range of sensor cables. Besides the "Safety" and "Steel" models described here there are many specialty cables available for specific applications.

Sensor Cable Safety S2000A

A fast-responding sensor cable with a tight buffered fiber. Compact dimensions, high flexibility and good bending behavior. High tensile strengths due to the Aramid yarns. These cables have a halogen-free and flame-retardant cable sheath.

Sensor Cable Steel S2002A

Fast-responding armored sensor cable with stainless steel loose tubes and outer sheath. High tensile strength, high crush resistance. Longitudinally and laterally water tight. Excellent rodent protection. These cables have a halogen-free and flame-retardant cable sheath.

Sensor Cable Safety

1) Acrylate coated fibers
2) GRP strength member
3) Aramid yarn
4) FRNC outer sheath

Sensor Cable Steel

1) Acrylate coated fibers
2) Gel free stainless steel tube, 316L
3) Stainless steel wires, 316L
4) FRNC outer sheath
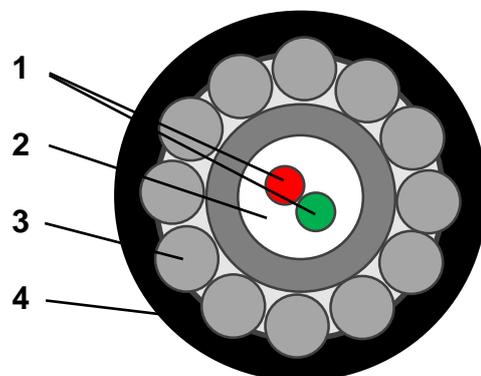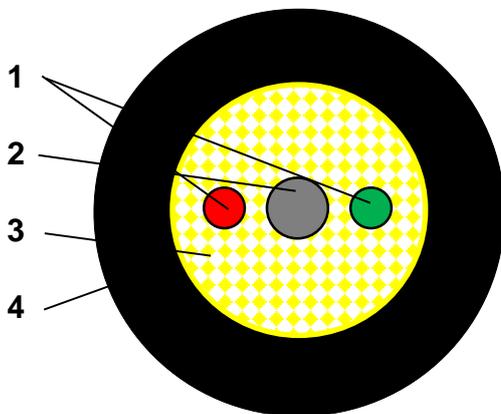
	Sensor Cable Safety	**Sensor Cable Steel**
	(S2000A)	**(S2002A)**
Construction:	FRNC outer sheath	FRNC outer sheath
	Aramid fibers	Stainless steel wires
	Tight-buffered fibers	Gel-free stainless steel loose tube fibers with primary coating
Color of outer sheath:	Black (standard)	Black (standard)
	Red (S2000A-RED)	Red (S2002A-RED)
Fiber:	MM 50/125 µm	MM 50/125 µm
	(MM 62.5/125 µm)	(MM 62.5/125 µm)
Cable Ø:	4.0 mm	3.8 mm
Weight:	17 kg/km	29 kg/km
Min. bending radius:	20xD mm (with tensile)	20xD mm (with tensile)
	15xD mm (without tensile)	15xD mm (without tensile)
Max. crush resistance:	100 N/cm	960 N/cm [1]
Max. tensile strength:	1000 N (short term)	1500 N (short term)
	800 N (long term)	1100 N (long term)
Operating temperature:	-40°C to +85°C	-40°C to +85°C
Installation temperature:	-5°C to +50°C	-5°C to +50°C
Short-term temperature:	-50°C to +150°C	-50°C to +150°C

Cables are delivered in the requested length.

Both cables comply with standards:
IEC 60331-25[2]; IEC 60332-1/-2/-3-24; IEC 60754-1/-2; IEC 60793;
IEC 60794-1-2; IEC 61034-2; EN 187000; VdS approved.
UL 521 and CAN/ULC S530 listed.
FM 3210 approved.

[1] 600N/cm in operation / max. 960N/cm during installation.
[2] Functional integrity of the sensor cable tested for 2 hours at 750 °C, furthermore in tunnel fire testing it has been demonstrated that the functional integrity of the cable was maintained for several minutes with temperatures exceeding 1000 °C.

Pre-assembled connectors
(S2000A-001: safety / S2002A-001: steel)

To reduce deployment cost and time, pre-assembled pigtails are optionally available. These enable a quicker and easier installation, with no need to organize a fusion splicer and splice box to connect the sensor cable to the DTS. Pigtails are supplied with E2000 8°angled connectors. For safe transportation they are covered with a flexible protective tube when shipped. The pulling sock increases the diameter of the assembly. Therefore the inner diameter of the duct or conduit should be at least 5 cm.

Pigtail with optical connector
(S2008A: 5 m / S2006A: 30 m)

E2000 8°angled connectors are available in 2 lengths for splicing to the sensor fiber (either to connect to the DTS, or for termination).

E2000 APC Adapter (S2011A)

Used to connect two E2000 APC connectors.
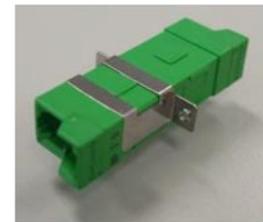
Sensor tube cutting tool (S2010A)

Recommended to cut the stainless steel tube, to properly remove the cable sheath and splicing the pigtail to the sensor fiber.

Specialty cables

In addition to these standard cables, special cables are available for extremely high and low temperature ranges and corrosive atmospheres. Special color requirements can also be met.