

Sensor Cables

Aptiv's Sensor Cables are designed to provide rugged and reliable transmission of sensor signals and power to/from control systems in even the most extreme environments. Using robust materials and shielding techniques, these cables maintain the integrity of accurate, interference free sensor data for critical applications in industrial automation, robotics, medical devices, automotive, aerospace, and environmental monitoring.



FEATURES & BENEFITS

- High Signal Integrity – Minimizes noise, crosstalk, and attenuation for accurate sensor readings.
- Durable Construction – Withstands flexing, torsion, abrasion, and vibration.
- Environmental Resistance – Protects against extreme temperatures, moisture, chemicals, oils, and UV exposure.
- EMI/RFI Shielding – Ensures interference-free performance in electrically noisy environments.
- Flexible & Compact Options – Available in highly flexible or space-saving designs for dynamic and tight-space applications.
- Customizable Designs – Tailored conductor counts, gauges, jackets, and shielding for specific sensor types and system requirements.
- Extended Service Life – Engineered for longevity, reducing downtime and replacement costs.
- M8/M12 Connectivity – Rugged, reliable interconnect options for industrial sensors and automation systems.

PRODUCT SPECIFICATIONS

Electrical Properties	
Voltage Rating	30V to 600V
Mechanical Properties	
Conductor Material	Tinned Copper, Bare Copper for optimal processing
Insulation Material	PVC, PE, PP, TPE, FEP, XLPE
Jacket Material	PVC, PUR, TPE, FEP
Shielding Type	Foil, Braid, Spiral, Combination
Outer Diameter	2 mm to 15 mm
Min. Bend Radius	5x to 15x cable O.D.
Flex Cycles	Up to 20 million cycles (for high-flex)
Environmental Properties	
Operating Temperature	-40°C to +150°C
Chemical Resistance	Resistant to oils, greases, coolants
UV Resistance	Yes (for outdoor rated cables)
Moisture Resistance	Excellent
Flame Retardancy	UL Vertical Tray, FT4 VW-1
RoHS and REACH Compliance	Compliant