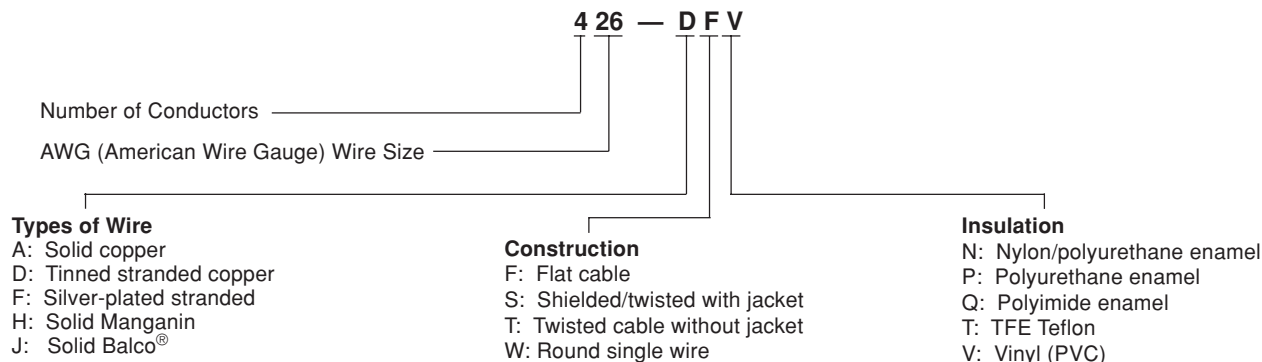


## General Information and Selection for Transducer Applications

### WIRE AND CABLE CODING SYSTEM



AWG	Diameter (nominal)		AWG	Diameter (nominal)	
	in	[mm]		in	[mm]
26	0.0253	0.643	36	0.0050	0.127
30	0.0100	0.254	37	0.0045	0.114
34	0.0063	0.160	42	0.0025	0.064

### SINGLE-CONDUCTOR TYPES: SOLID WIRE

Type	Packaging	Description
	Foot [Meter]*	
134-AWP 136-AWP	500 ft/150 m 500 ft/150 m	Solid copper wire, polyurethane enamel: General-purpose intragage hookup wire. Useful from $-100^{\circ}$ to $+300^{\circ}\text{F}$ ( $-75^{\circ}$ to $+150^{\circ}\text{C}$ ). Enamel coating easily removed by applying heat from soldering iron.
134-AWN	500 ft/150 m	Solid copper wire, nylon/polyurethane enamel: Identical in use and specifications to Type AWP above, but with superior abrasion resistance and slightly reduced insulation resistance at elevated temperatures. 134-AWN is available in four colors; specify: -R (red), -W (white), -B (black), -G (green).
130-AWQ 134-AWQ	500 ft/150 m 500 ft/150 m	Solid copper wire, polyimide enamel: Intragage hookup wire. Temperature range $-452^{\circ}$ to $+600^{\circ}\text{F}$ ( $-269^{\circ}$ to $+315^{\circ}\text{C}$ ) short term. Enamel is extremely tough and abrasion resistant, with excellent electrical properties; generally removed by mechanical scraping or sanding.
137-HWN	200 ft/60 m	Solid manganin wire, nylon/polyurethane enamel: Used for bridge balance and span set in transducer circuits. Nominal resistance: 14 ohms/ft (46 ohms/m). Temperature range: $+15^{\circ}$ to $+120^{\circ}\text{F}$ ( $-10^{\circ}$ to $+50^{\circ}\text{C}$ ).
142-JWN	500 ft/150 m	Solid Balco wire, nylon/polyurethane enamel: Used for bridge temperature compensation of zero shift or span. Nominal resistance: 19 ohms/ft (62 ohms/m). Temperature coefficient of resistance: $+0.25\%/^{\circ}\text{F}$ ( $+0.45\%/^{\circ}\text{C}$ ). Temperature range: $-15^{\circ}$ to $+300^{\circ}\text{F}$ ( $-10^{\circ}$ to $+150^{\circ}\text{C}$ ).



### General Information and Selection for Transducer Applications

FOUR-CONDUCTOR CABLE		
Type	Packaging	Description
	Foot [Meter]*	
426-DFV 426-DFV 430-DFV 430-DFV	100 ft/30 m 1000 ft/300 m 100 ft/30 m 1000 ft/300 m	Stranded tinned-copper wire, 4-conductor flat cable, vinyl insulation: For use from $-60^{\circ}$ to $+180^{\circ}\text{F}$ ( $-50^{\circ}$ to $+80^{\circ}\text{C}$ ). Conductors easily separated for stripping and wiring. Color-coded red/white/black/green.
426-DTV 426-DTV	100 ft/30 m 1000 ft/300 m	Stranded tinned-copper wire, 4-conductor twisted cable, vinyl insulation: For use from $-60^{\circ}$ to $+180^{\circ}\text{F}$ ( $-50^{\circ}$ to $+80^{\circ}\text{C}$ ). Color-coded red/white/black/green. Outside diameter 0.10 in (2.5 mm) nominal.
426-BSV 426-BSV	100 ft/30 m 1000 ft/300 m	Stranded copper wire, 4-conductor twisted cable, PVC insulated braided shield: For use from $-60^{\circ}$ to $+180^{\circ}\text{F}$ ( $-50^{\circ}$ to $+80^{\circ}\text{C}$ ). Outside diameter of jacket: 0.15 in (3.8 mm) nominal.
430-FST 430-FST	100 ft/30 m 1000 ft/300 m	Stranded silver-plated copper wire, 4-conductor twisted cable, Teflon insulation, braided shield, Teflon jacket: Small, flexible cable. For use from $-452^{\circ}$ to $+500^{\circ}\text{F}$ ( $-269^{\circ}$ to $+260^{\circ}\text{C}$ ). Color-coded red/white/black/green. Outside diameter of jacket: 0.12 in (3 mm) nominal.

\*Some types may not be continuous length.

**References:** Application Note: TT-601, Techniques for Bonding Leadwires to Surfaces Experiencing High Centrifugal Forces.  
Application Note: TT-604, Leadwire Attachment Techniques for Obtaining Maximum Fatigue Life of Strain Gages.  
Application Note: TT-608, Techniques for Attaching Leadwires to Unbonded Strain Gages.