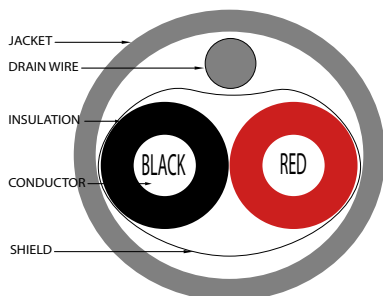


Control and Signal Cable

Q0165-1 Shielded 2-Conductor 20AWG Cable Specifications			
Conductors Gauge & Stranding	20AWG 10/30 Stranded Tinned Copper	Insulated Conductor Diameter	0.069 Inch Nominal
Voltage Rating	300V	Twisted Pair Diameter	0.138 Inch Nominal
Temperature Rating, Max.	80°C, 90°C & 105°C (176°F, 194°F & 221°F)	Overall Diameter	0.215 Inch Nominal
Temperature Rating, Min.	-20°C (-4°F)	Jacket Color	Chrome Gray
Capacitance, Mutual, Nom.	44 pF/ft	Jacket Thickness	0.038 Inch Nominal
Capacitance, Grounded, Nom.	81.4 pF/ft	Jacket Material	Polyvinylchloride (PVC)
Dielectric Withstanding, Min.	1500V RMS	Sunlight Resistant	Yes
D.C. Resistance, Max.	16.7 Ω / 1000ft.	Oil Resistance	No
Conductor Twist / Lay	Left hand / 2-1/2 Inch	Flame Retardant	FT-4
Shield	Aluminized Polyester Foil Shield (100% Coverage)	Approvals	UR AWM STYLE 2464 80C 300V NEC (UL) TYPE PLTC 105C 300V NEC (UL) TYPE ITC 105C 300V CSA FAS 105 FT4 CSA AWM FT4 90C 300V
Drain	22AWG 7-30 Stranded Tinned Copper Drain Wire		
Conductor Insulation Material	Polyvinylchloride (PVC)	Sample Print Legend	QUABBIN 0165R (UL) TYPE PLTC OR ITC 20 AWG 105C SUN RES OR AWM 2464 -- CSA LL66965 FAS 105 20 AWG 3 CONDUCTOR FT4 OR AWM I/II A/B 90C 300V FT4 -- RoHS -- (LOT DEDSIGNATOR)
Conductor Identification	Black, Red		
Conductor Insulation Wall Thickness	0.016 Inch Nominal		
Bare Conductor Diameter	0.037 Inch Nominal		

Q0165-1 Shielded 2-Conductor 20AWG Cable Specifications							
Part Number	Number of Conductors	AWG	Strand	Maximum O.D. (Inches ±10%)	Minimum Cut Length (ft)*	Approximate Weight (lb/ft)	Price per foot
Q0165-1	2	20	10	0.215 [5.46 mm]	30	0.0273	\$0.42



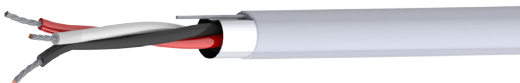
* See web store www.AutomationDirect.com for maximum cut lengths

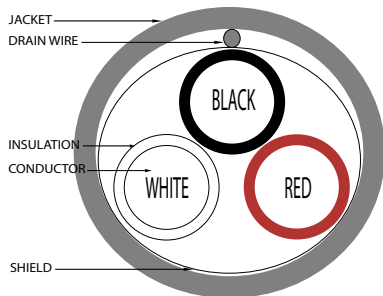


Please Note: Our prices on Control and Sensor Cable are closely tied to the market price for copper. This allows us to offer the best savings possible if conditions are favorable; however, it also means that our prices may increase if market conditions warrant.

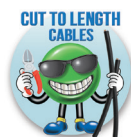
Control and Signal Cable

Q0220-1 Shielded 3-Conductor 20AWG Cable Specifications			
Conductors Gauge & Stranding	20AWG 10/30 Stranded Tinned Copper	Insulated Conductor Diameter	0.069 Inch Nominal
Voltage Rating	300V	Twisted Pair Diameter	0.148 Inch Nominal
Temperature Rating, Max.	80°C, 90°C & 105°C (176°F, 194°F & 221°F)	Overall Diameter	0.227 Inch Nominal
Temperature Rating, Min.	-20°C (-4°F)	Jacket Color	Chrome Gray
Capacitance, Mutual, Nom.	46 pF/ft	Jacket Thickness	0.038 Inch Nominal
Capacitance, Grounded, Nom.	83 pF/ft	Jacket Material	Polyvinylchloride (PVC)
Dielectric Withstanding, Min.	1500V RMS	Sunlight Resistant	Yes
D.C. Resistance, Max.	10.5 Ω / 1000ft.	Oil Resistance	No
Conductor Twist / Lay	Left hand / 2-1/2 Inch	Flame Retardant	FT-4
Shield	Aluminized Polyester Foil Shield (100% Coverage)	Approvals	UR AWM STYLE 2464 80C 300V NEC (UL) TYPE PLTC 105C 300V NEC (UL) TYPE ITC 105C 300V CSA FAS 105 FT4 CSA AWM FT4 90C 300V
Drain	22AWG 7-30 Stranded Tinned Copper Drain Wire		
Conductor Insulation Material	Polyvinylchloride (PVC)		
Conductor Identification	Black, Red, White	Sample Print Legend	QUABBIN 0220R (UL) TYPE PLTC OR ITC 20 AWG 105C SUN RES OR AWM 2464 -- CSA LL66965 FAS 105 20 AWG 2 CONDUCTOR FT4 OR AWM I/II A/B 90C 300V FT4 -- RoHS -- (LOT DESIGNATOR)
Conductor Insulation Wall Thickness	0.016 Inch Nominal		
Bare Conductor Diameter	0.037 Inch Nominal		

Q0220-1 Shielded 3-Conductor 20AWG Cable Specifications							
Part Number	Number of Conductors	AWG	Strand	Maximum O.D. (Inches ±10%)	Minimum Cut Length (ft)*	Approximate Weight (lb/ft)	Price per foot
							
Q0220-1	3	20	10	0.227 [5.77 mm]	30	0.0303	\$0.50




* See web store www.AutomationDirect.com for maximum cut lengths

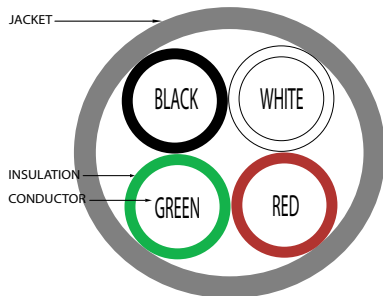


Please Note: Our prices on Control and Sensor Cable are closely tied to the market price for copper. This allows us to offer the best savings possible if conditions are favorable; however, it also means that our prices may increase if market conditions warrant.

Control and Signal Cable

Q6100-1 Unshielded 4-Conductor 20AWG Cable Specifications			
Conductors Gauge & Stranding	20AWG 7/28 Stranded Tinned Copper	Insulated Conductor Diameter	0.069 Inch Nominal
Voltage Rating	300V	Twisted Pair Diameter	0.138 Inch Nominal
Temperature Rating, Max.	60°C & 80°C (140°F & 176°F)	Overall Diameter	0.215 Inch Nominal
Temperature Rating, Min.	-20°C (-4°F)	Jacket Color	Chrome Gray
Capacitance, Mutual, Nom.	26 pF/ft	Jacket Thickness	0.032 Inch Nominal
Capacitance, Grounded, Nom.	N/A	Jacket Material	Polyvinylchloride (PVC)
Dielectric Withstanding, Min.	1500V RMS	Sunlight Resistant	No
D.C. Resistance, Max.	10.4 Ω / 1000ft.	Oil Resistance	No
Conductor Twist / Lay	Left hand / 2-1/2 Inch	Flame Retardant	FT-4
Shield	None	Approvals	(UL) NEC TYPE CM CSA AWM FT4 UL STYLE 2464
Drain	None		
Conductor Insulation Material	Polyvinylchloride (PVC)		
Conductor Identification	Black, White, Red, Green	Sample Print Legend	QUABBIN 6100R (UL) TYPE CM 20 AWG OR AWM 2464 -- CSA LL51726 AWM I/II A/B 80C 300V FT4 -- RoHS -- (LOT DESIGNATOR)
Conductor Insulation Wall Thickness	0.013 Inch Nominal		
Bare Conductor Diameter	0.037 Inch Nominal		

Q6100-1 Unshielded 4-Conductor 20AWG Cable Specifications							
Part Number	Number of Conductors	AWG	Strand	Maximum O.D. (Inches ±10%)	Minimum Cut Length (ft)*	Approximate Weight (lb/ft)	Price per foot
							
Q6100-1	4	20	7	0.227 [5.77 mm]	30	0.0303	\$0.55




* See web store www.AutomationDirect.com for maximum cut lengths

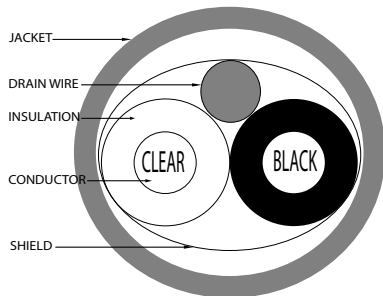


Please Note: Our prices on Control and Sensor Cable are closely tied to the market price for copper. This allows us to offer the best savings possible if conditions are favorable; however, it also means that our prices may increase if market conditions warrant.

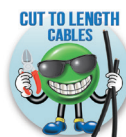
Control and Signal Cable

Q6140-1 Shielded 2-Conductor 20AWG Cable Specifications			
Conductors Gauge & Stranding	20AWG 7/28 Stranded Tinned Copper	Insulated Conductor Diameter	0.070 Inch Nominal
Voltage Rating	300V	Twisted Pair Diameter	0.143 Inch Nominal
Temperature Rating, Max.	60°C & 75°C (140°F & 167°F)	Overall Diameter	0.199 Inch Nominal
Temperature Rating, Min.	-20°C (-4°F)	Jacket Color	Chrome Gray
Capacitance, Mutual, Nom.	27 pF/ft	Jacket Thickness	0.028 Inch Nominal
Capacitance, Grounded, Nom.	51 pF/ft	Jacket Material	Polyvinylchloride (PVC)
Dielectric Withstanding, Min.	1500V RMS	Sunlight Resistant	No
D.C. Resistance, Max.	10.4 Ω / 1000ft.	Oil Resistance	No
Conductor Twist / Lay	Left hand / 2-1/2 Inch	Flame Retardant	None
Shield	Aluminized Polyester Foil Shield (100% Coverage)	Approvals	(UL) NEC TYPE CM CSA TYPE CMG UL STYLE 2092
Drain	20AWG Stranded Tinned Copper Drain Wire		
Conductor Insulation Material	Polyethylene (PE)		
Conductor Identification	Clear, Black	Sample Print Legend	QUABBIN 6140R (UL) TYPE CM 20 AWG 75C SHIELDED OR AWM 2092 -- CSA LL51726 TYPE CMG 60C -- RoHS -- (LOT DESIGNATOR)
Conductor Insulation Wall Thickness	0.016 Inch Nominal		
Bare Conductor Diameter	0.038 Inch Nominal		

Q6140-1 Shielded 2-Conductor 20AWG Cable Specifications							
Part Number	Number of Conductors	AWG	Strand	Maximum O.D. (Inches ±10%)	Minimum Cut Length (ft)*	Approximate Weight (lb/ft)	Price per foot
							
Q6140-1	2	20	7	0.199 [5.77 mm]	30	0.0303	\$0.44



* See web store www.AutomationDirect.com for maximum cut lengths



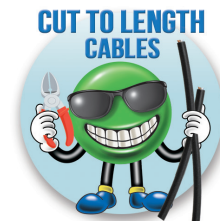
Please Note: Our prices on Control and Sensor Cable are closely tied to the market price for copper. This allows us to offer the best savings possible if conditions are favorable; however, it also means that our prices may increase if market conditions warrant.

Control and Signal Cable



The Control and Signal Cable from AutomationDirect is available in sizes from 22AWG to 16AWG with 2, 3 & 4-conductor with both unshielded and shielded conductors. Individual conductors are stranded tinned copper with color coded insulation for easy identification with the industry standard PVC Chrome Grey Jacket. Shielded versions include an overall aluminum mylar foil tape with a tinned copper drain wire for maximum effectiveness against external electrical noise interference. With a 300-volt rating these cables are ideal for low voltage control signals and audio application. The 4-conductor unshielded versions are designed to work directly with our SureStep® STP-DRV drives for when a longer cable is required. The cables carry both UL and CSA approvals and are proudly Made in the USA. Combining all that with our cut to length ordering, which eliminates unnecessary expense and waste by ordering only the length needed in 1 foot increments with a low 30 foot minimum, makes these cables a great value.

Cable Application Examples	
Part Number	Common Application
Q0165-1	Process system interconnect, power limited tray cable, instrumentation tray cable, class 3 circuits
Q0220-1	
Q3100-1	Instrumentation, audio, control cable, stepper motor control
Q4100-1	
Q4165-1	Instrumentation, sound, broadcast cable
Q4170-1	
Q4560-1	
Q6100-1	Instrumentation, audio, control cable, stepper motor control
Q6140-1	Instrumentation, sound, broadcast cable
Q7115-1	Instrumentation, audio, control cable
Q7121-1	
Q7125-1	Instrumentation, audio, control cable, stepper motor control
Q7315-1	Instrumentation, audio, control cable



Control & Signal Cable Cross-Reference							
ADC	Belden	Quabbin	Carol	Alpha	Lake	Description	Colors
Q0165-1	9320	0165	---	M39115	---	20AWG, 2-conductor, shielded, PVC, chrome gray	bk/rd
Q0220-1	9364	0220	C0453A	M39116	---	20AWG, 3-conductor, shielded, PVC, chrome gray	bk/rd/wh
Q3100-1	8620	3100	C2425A	---	---	16AWG, 4-conductor, unshielded, PVC, chrome gray	bk/rd/wh/gn
Q4100-1	8489	4100	C2404A	1858/4C	C184T(16)-2598	18AWG, 4-conductor, unshielded, PVC, chrome gray	bk/rd/wh/gn
Q4165-1	8760	4165	C2534A	2421C	C182CSTP(16)-4S	18AWG, 2-conductor, shielded, PVC, chrome gray	bk/cl
Q4170-1	8770	4170	C2535A	2423C	183CSP	18AWG, 3-conductor, shielded, PVC, chrome gray	bk/rd/cl
Q4560-1	9740	4560	C8116	1897C	B182CT16	18AWG, 2-conductor, unshielded, PVC, chrome gray	bk/rd
Q6100-1	9444	6100	C6353A	1317C	---	20AWG, 4-conductor, unshielded, PVC, chrome gray	bk/rd/wh/gn
Q6140-1	8762	6140	C2524A	2411C	202CSP	20AWG, 2-conductor, shielded, PVC, chrome gray	bk/cl
Q7115-1	8442	7115	C6348A	1172C	B222CT	22AWG, 2-conductor, unshielded, PVC, chrome gray	bk/rd
Q7121-1	9443	7121	C4062A	1173C	C223CT	22AWG, 3-conductor, unshielded, PVC, chrome gray	bk/rd/gn
Q7125-1	8444	7125	C4063A	1174C	---	22AWG, 4-conductor, unshielded, PVC, chrome gray	bk/rd/wh/gn
Q7315-1	8451	7315	C2516A	2461C	222CSTPP	22AWG, 2-conductor, shielded, PVC, chrome gray	bk/rd