

QUADRAX CONTACTS

MIL-DTL-38999 SERIES III / EN3645 / EN4165

FEATURES AND BENEFITS

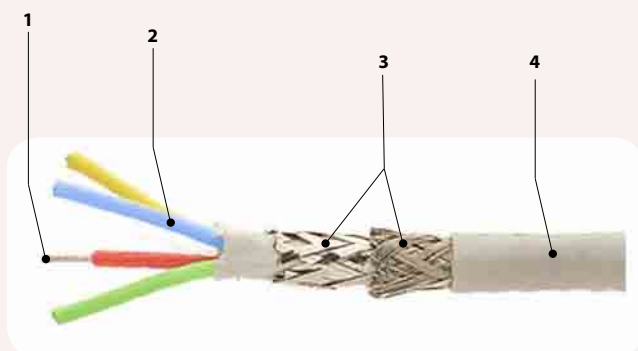
Amphenol® Quadrax Contacts -Offer several advantages for high data transfer rates, low power consumption and excellent EMI compatibility:

- Four strategically spaced inner contacts form two 100 or 150 Ohm matched impedance differential pairs
- Outer contact has rugged wall section for durability
- Available in size 8 crimp termination style
- Also available in size 8 with PC tails
- Requires modification of MIL-DTL-38999 connector to accommodate keyed contacts

MATERIALS AND FINISH

- Body: Copper alloy
- Finish: Gold over nickel on mating parts
- Insulators: High Performance Fluorocarbon or equivalent

TYPICAL QUADRAX CABLE



- 1 – 4 Center conductor
- 2 – 4 Insulation
- 3 – Braid
- 4 – Jacket

TYPICAL QUADRAX CABLE

- Bandwidth: Up to 1.25 GHz
- Data Rate: Exceeding 2.5 Gbps.
- Voltage Rating: 500 Vrms max. @ sea level
- Dielectric Withstanding Voltage:
 - 1000 VAC rms between all inner contacts @ sea level
 - 500 VAC rms between inner and outer contacts @ sea level



QUADRAX CONTACTS

TV SERIES, MIL-DTL-38999 SERIES III / EN3645 / EN4165

CRIMP CONTACTS

Contact Size	Cable	Contact Part Number			Inner conductor Gauge	Electrical Protocol	Crimping Tools		
		Pin	Socket	Impedance (Ohms)			Inner contact	Outer contact	
8	Draka Fileca F-4703-3, F4704-4, Filotex ET 2PC236, Filotex ET2PF870, PIC Wire E50424, ABS0972, Tensolite 23450/04090X-4(LD) Draka Fileca F-4704-5, ABS1503 KD 24	900496	900361	100	24	Ethernet, 1000 Base-T Gigabit Ethernet	M22520/2-01 with Positioner M22520/2-37 or with Daniels Positioner K709	M22520/5-01 with Die Set M22520/5-45 (Location A)	
	Tensolite NF24Q100, NF24Q100-01, 24443/9P025X-4(LD), S280W502-4, 24443/03130X-4(LD), 24443/C20714X-4(LD), 24450/0120X-4(LD), NF24-2Q100, TYCO CECRWC-18664, GORE GSC-01-81869-01, 24443/03166X-4(LD), Thermax T956-4T200, Pic Wire E51424, Thermax MX100Q-24, NF24Q100-01-200C (Space), BMS13-72T03C04G024	900330	900338						
	Tensolite NF22Q100, NF22Q100-01, Thermax 956-5, GORE RCN 7688	900410	900411						22
	Tensolite NF26Q100, NF26Q100-01, NF26-2Q100, PIC E51426, Wirenetics W-3714-379	600514	600516		26	Ethernet (100 Mbps), 1000 Base-T Gigabit Ethernet (1 Gbps)			
	S280W502-4/BMS13-72T03C04G024	600953	600954		24				
	Draka Fileca F-4704-6, Gore RCN 8672	600513	600515		26				
	Gore RCN8513, JSFY18-3				22				
	Tensolite NF24Q100, NF24Q100-01 for 2.5 Gbps applications	600951	600952		24	•Serial FPD Applications (2.5 Gbps) (Typical app run at 150 Ohms) • HDMI 1.3			
	Gore 8647	600955	600956		24				
	USB2 (28433/02171LX-4)	600987	600958		90	24			USB2.0 (480 Mbps)
	Tensolite 24450/03089X-4(LD) Gore RCN8647	050998	050999		110				IEEE 1394B Firewire
	JSFY02-1, JSFY18	600959	600960						IEEE 1394B Firewire
	Gore RCN8487, JSFY18	600961	600962						IEEE 1394B Firewire
	Tensolite 26473/02006X-4(LD)/Gore RCN8328 (not for new designs, use 21-033450/1 series)	900327	900337		150	26			

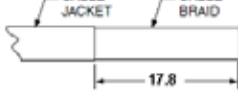
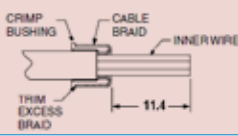
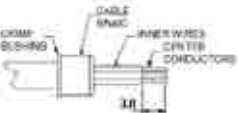
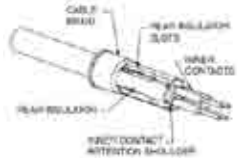
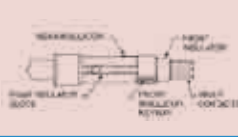
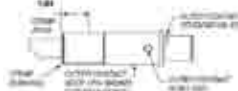
EN3155-074 AND -075 CRIMP CONTACTS

EN3155
COMPLIANT

Contact Size	Cable	Contact Part Number			Inner conductor Gauge	Electrical Protocol	Crimping Tools	
		Pin	Socket	Impedance (Ohms)			Inner contact	Outer contact
8	ABS1503KD24	600963	600964	100	24	Ethernet, 1000 Base-T Gigabit Ethernet	M22520/2-01 with Positioner M22520/2-37 or with Daniels Positioner K709	M22520/5-01 with Die Set M22520/5-45 (Location A)
	EN3375-011 KL24	600968	600966					

QUADRAX CONTACTS FOR SUBMINIATURE

TYPICAL CONTACTS INSTALLATION INSTRUCTIONS FOR QUADRAX CONTACTS

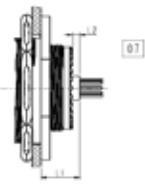
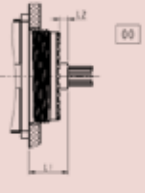
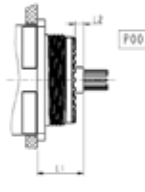
Picture	Process	Check	Tools
	Strip the jacket Slide the piggy back grommet and crimping ferule	Do not damage the braid	Blade
	Open the braid over the crimping ferule	The braid shall cover equally the crimping ferule	Blade (To Trim Excess Braid)
	Strip the inner conductors	Do not damage the inner conductors	Blade
	Crimp the inner contacts	The inner conductor shall be visible thru the inspection hole	M22520/2-01 with positionner M22520/2-37
	Install the rear insulator and respect the circular location for each individual contact	The contact location shall respect circular location	
	Slide the front insulator over the contact by the front	The keyway orientation shall meet the key way in outer contact	
	Crimp the outer contact		M22520/5-01 with M22520/5-45(A)

QUADRAX CONTACTS FOR SUBMINIATURE

MIL-DTL-38999 SERIES III / EN3645

PRINT CIRCUIT BOARD CONTACTS

Pin 900210, Socket 600520

Connectors with Quadrax Contacts		MIL-DTL-38999 series III / EN3645				MIL-DTL-38999 series III / EN3645 composite	
	Sizes	9 to 11	13	15 to 17	19 to 25	9 to 11	13 to 25
	Pin/Socket	L1	10,4 - 11,6	10,2 - 11,4		10,4 - 11,6	10,2 - 11,4
		L2	1,2 - 2,5	1,2 - 2,3	1,2 - 2,5	0,1 - 1,4	
	Sizes	9 to 25				9 to 19	21 to 25
	Pin/Socket	L1	9,5 - 10,6			9,5 - 10,7	9,6 - 10,8
		L2	1,2 - 2,5			1,2 - 2,5	
	Sizes	9 to 19		21 to 25		9 to 19	21 to 25
	Pin/Socket	L1	11,8 - 12,9		12,5 - 13,7	13 - 14,1	13,8 - 14,9
		L2	1,2 - 2,5			1,2 - 2,5	