

# QUADRAX CONTACTS

MIL-DTL-38999 SERIES III / EN3645 / EN4165

## FEATURES AND BENEFITS

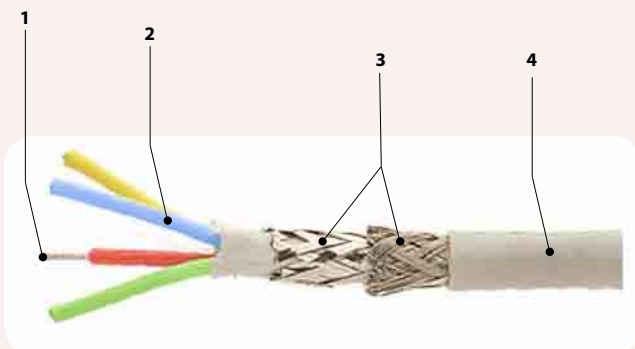
Amphenol® Quadrax Contacts - Offer several advantages for high data transfer rates, low power consumption and excellent EMI compatibility:

- 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

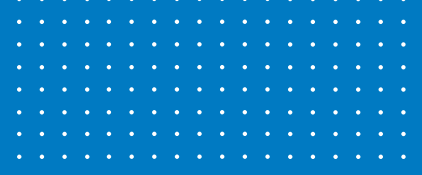
### CRIMP CONTACTS

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					
	Tensolite NF26Q100, NF26Q100-01, NF26-2Q100, PIC E51426, Wirenetics W-3714-379	600514	600516					
	S280W502-4/BMS13-72T03C04G024	600953	600954					
	Draka Fileca F-4704-6, Gore RCN 8672	600513	600515					
	Gore RCN8513, JSFY18-3							
	Tensolite NF24Q100, NF24Q100-01 for 2.5 Gbps applications	600951	600952					
	Gore 8647	600955	600956					
	USB2 (28433/02171LX-4)	600987	600958					
	Tensolite 24450/03089X-4(LD) Gore RCN8647	050998	050999					
	JSFY02-1, JSFY18	600959	600960					
	Gore RCN8487, JSFY18	600961	600962					
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



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

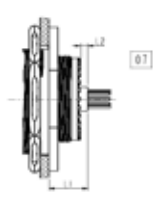
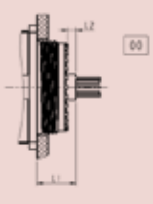
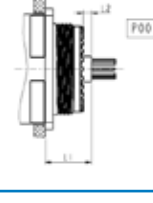
Picture	Process	Check	Tools
	<p>Strip the jacket</p> <p>Slide the piggy back grommet and crimping ferule</p>	<p>Do not damage the braid</p>	<p>Blade</p>
	<p>Open the braid over the crimping ferule</p>	<p>The braid shall cover equally the crimping ferule</p>	<p>Blade (To Trim Excess Braid)</p>
	<p>Strip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

# 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	
	<b>Sizes</b>	<b>9 to 11</b>	<b>13</b>	<b>15 to 17</b>	<b>19 to 25</b>	<b>9 to 11</b>	<b>13 to 25</b>
	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	
	<b>Sizes</b>	<b>9 to 25</b>				<b>9 to 19</b>	<b>21 to 25</b>
	Pin/Socket	L1	9,5 - 10,6		9,5 - 10,7	9,6 - 10,8	
		L2	1,2 - 2,5		1,2 - 2,5		
	<b>Sizes</b>	<b>9 to 19</b>		<b>21 to 25</b>	<b>9 to 19</b>	<b>21 to 25</b>	
	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		