

MIL-DTL-83513 /08 & /09

PIGTAIL CONNECTOR

PLASTIC SHELL

- Supplied pre-wired and fully potted.

CAGE CODE : OK0J2

IDENTIFICATION CODE

M83513/

08-

G

01

SERIES

M83513/ : QPL series.

TYPE

08- : Pin connector, plastic shell.
09- : Socket connector, plastic shell.

NUMBER OF CONTACTS

A : 9.
B : 15.
C : 21.
D : 25.
E : 31.
F : 37.
G : 51.

See pages 16&17 for contact arrangements.

WIRE TYPE

M22759/11-26 ■

PTFE Insulated.

01 : 46 cm (18") white.

02 : 92 cm (36") white.

03 : 46 cm (18")

10 colour repeat.

04 : 92 cm (36")

10 colour repeat.

13 : 183 cm (72") white.

14 : 183 cm (72")

10 colour repeat.

See page 20 for colour codes & page 19 for wire type.

M22759/33-26 ■

Irradiated ETFE insulated.

09 : 46 cm (18") white.

10 : 92 cm (36") white.

11 : 46 cm (18")

10 colour repeat.

12 : 92 cm (36")

10 colour repeat.

15 : 183 cm (72") white.

16 : 183 cm (72")

10 colour repeat.

SOLID UNINSULATED ■

05 : 13 mm (0.5") gold plated.

06 : 26 mm (1") gold plated.

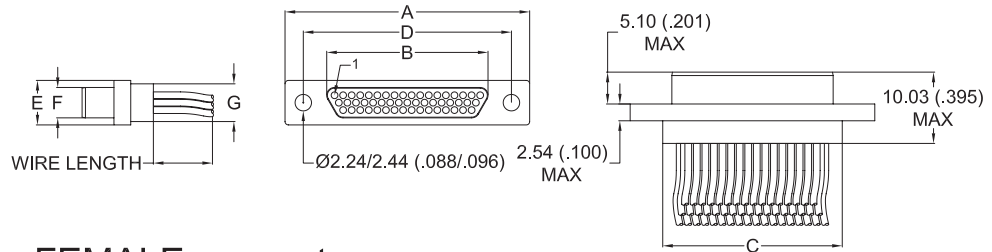
07 : 13 mm (0.5") tin plated.

08 : 26 mm (1") tin plated.

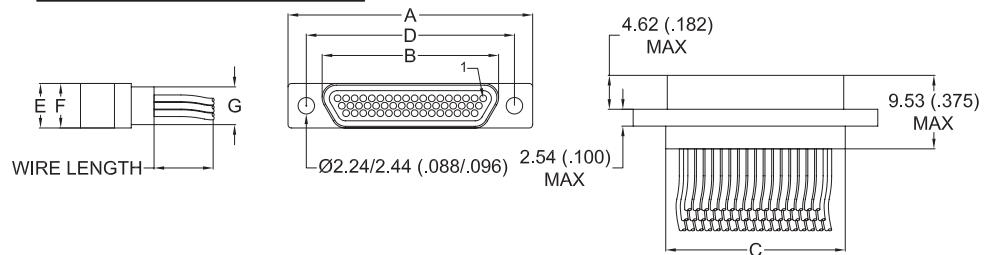
DIMENSIONS

Dimensions are in millimetres (inches).

MALE connector



FEMALE connector



	A ± 0.25 (±.010)	B max.		C -0.46/+0.25 (-.018/+.010)	D ± 0.13 (±.005)	E max.	F max.		G max.
		Male	Female				Male	Female	
9 P / 9 S	19.76 .778	7.41 .292	9.65 .380	10.11 .398	14.35 .565	5.53 .218	3.40 .134	5.53 .218	4.39 .173
15 P / 15 S	23.57 .928	11.22 .442	13.46 .530	13.92 .548	18.16 .715	5.53 .218	3.40 .134	5.53 .218	4.39 .173
21 P / 21 S	27.38 1.078	15.03 .592	17.27 .680	17.73 .698	21.97 .865	5.53 .218	3.40 .134	5.53 .218	4.39 .173
25 P / 25 S	29.92 1.178	17.57 .692	19.81 .780	20.27 .798	24.51 .965	5.53 .218	3.40 .134	5.53 .218	4.39 .173
31 P / 31 S	33.73 1.328	21.38 .842	23.62 .930	24.08 .948	28.32 1.115	5.53 .218	3.40 .134	5.53 .218	4.39 .173
37 P / 37 S	37.54 1.478	25.19 .992	27.43 1.080	27.89 1.098	32.13 1.265	5.53 .218	3.40 .134	5.53 .218	4.39 .173
51 P / 51 S	36.27 1.428	23.92 .942	26.16 1.030	26.62 1.048	30.86 1.215	6.60 .260	4.50 .177	6.60 .260	5.59 .220

SUMMARY OF CHARACTERISTICS

ELECTRICAL & MECHANICAL PERFORMANCE		MATERIAL & FINISH	
CURRENT RATING	3 A max.	MOULDED SHELL	Liquid Crystal Polymer (LCP)
CONTACT RESISTANCE	8 mΩ max.	PIN CONTACT	Copper and beryllium copper, gold over nickel plating
INSULATION RESISTANCE	5000 MΩ min. @ 500 V DC	SOCKET CONTACT	Copper alloy, gold over nickel plating
DIELECTRIC WITHSTANDING VOLTAGE	Sea level : 600 V AC Altitude 21 km (70,000 ft) : 150 V AC	ENCAPSULANT	Epoxy resin
CONTACT ENGAGING FORCE	170 g max. (6 oz)		
CONTACT SEPARATING FORCE	14 g min. (0.5 oz)		
CONTACT RETENTION	2.26 kg (5 pounds)		
DURABILITY	500 mating cycles min.		
VIBRATION	20g's – No discontinuity > 1 μs		
SHOCK	50g's – No discontinuity > 1 μs		

SEE PAGE 15 FOR MORE INFORMATION