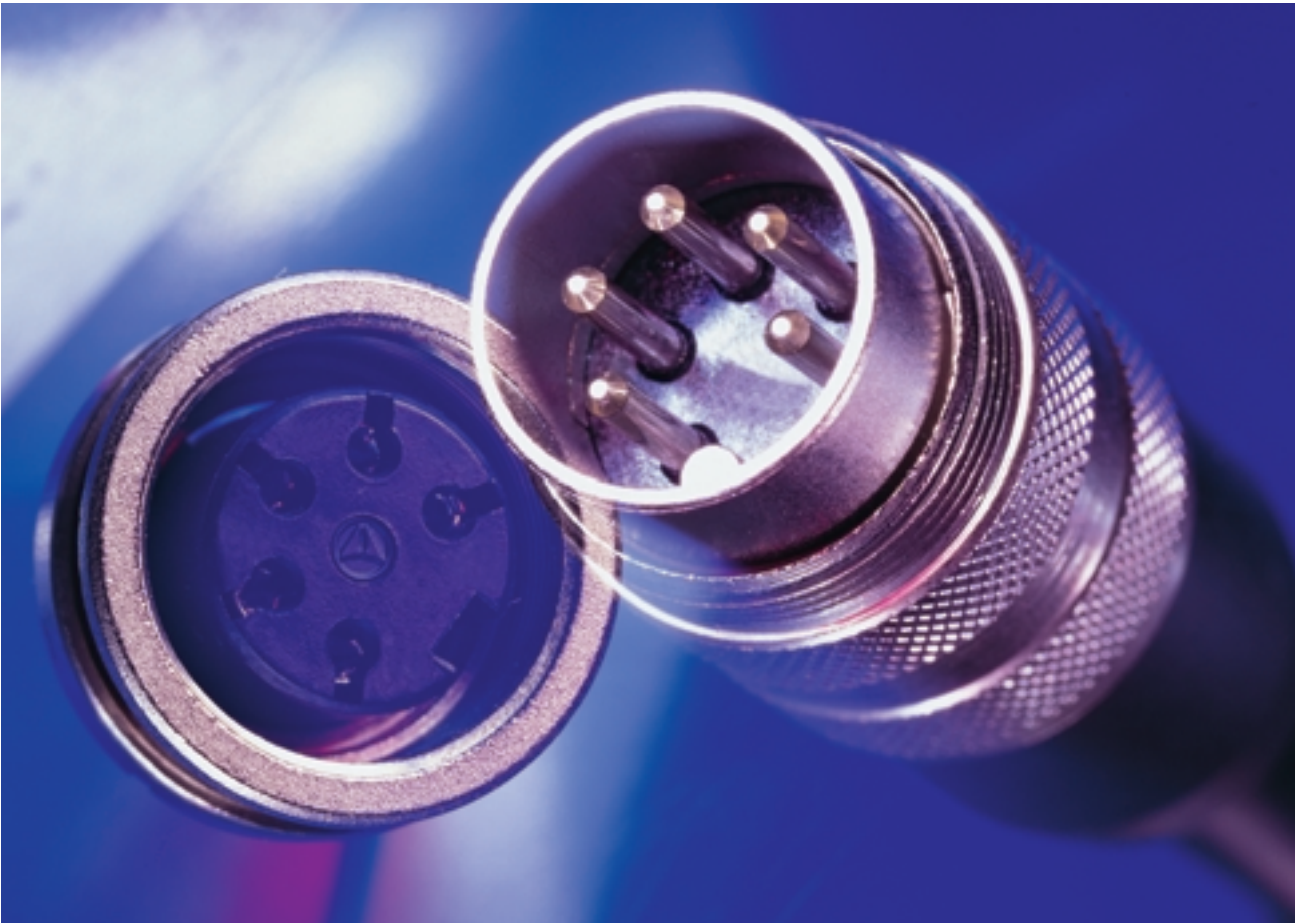


Amphenol

C 091 A/B/D



Circular Connectors

Amphenol-Tuchel Electronics GmbH

C 091 A



Main Features











- Metal threaded coupling acc. to IEC 130-9.
- Number of contacts are 2 to 8, 12 and 14.
- Internal metal strain relief with half shell construction and snap-in latching.
- Complete EMI shielding in fully mated and locked position.
- Male and female cable connectors: solder in 2 to 8, 12,14 positions; crimp in 3 to 8 positions; cable outlet PG 7 for diameter of 6 mm; cable outlet PG 9 for diameters of 6.5 mm and 8 mm; cable entry straight or right-angled; metal coupling nickel plated or plastic coated.
- Male and female receptacles for panel mount: front or rear mounting; solder in 2 to 8, 12, 14 positions; crimp in 3 to 8 positions; PCB mounting, straight and right-angled, using dip solder termination with multiple tail lengths.
- Coloured back-shells for coding, see page 47
- The connectors are registered under File # E 63 093 UL.



UNDERWRITERS LABORATORIES INC.

C 091 A

Characteristics

General Characteristics	Standard	Characteristics									
Number of contacts		2 + 3	4	5	5 Stereo	6	7	7	8	12	14
View on termination side of contact insert											
Contact arrangement acc. to DIN		41 524	–	–	41 524	41 322	–	45 329	45 326	–	–
Contact arrangement acc. to IEC		130-9	–	–	130-9	130-9	–	130-9	130-9	–	–
Electrical Characteristics											
Rated voltage	IEC 60664-1	300 V ≈			100 V ≈	300 V ≈			150 V ≈		
Rated impulse withstand voltage	IEC 60664-1	1500 V			1200 V	1500 V			1200 V		
Pollution degree	IEC 60664-1	1									
Installation category	IEC 60664-1	I									
Insulation group	IEC 60664-1	3									
Test voltage	IEC 60664-1	980 V ~			670 V ~	980 V ~			670 V ~		
Current rating	IEC 60512-3 Test 5 b	5 A / + 40 °C / + 104 °F								3 A / + 40 °C / + 104 °F	
Insulation resistance	IEC 60512-2 Test 3 a	> 10 ¹² Ω									
Contact resistance	IEC 60512-2 Test 2 a	< 5 m Ω									
Climatical Characteristics											
Climatic category	IEC 60068-1	40 / 85 / 56									
Temperature range	IEC 60068-1	- 40 °C ... + 85 °C / - 40 °F ... + 185 °F									
Mechanical Characteristics											
IP-degree	IEC 60529	IP 40									
Insertion and withdrawal forces	IEC 60512-7 Test 13 b	25 N 90.oz	30 N 110.oz	35 N 125.oz	50 N 180.oz	55 N 200.oz	60 N 220.oz	60 N 220.oz	50 N 180.oz		
Mechanical operation	IEC 60512-5 Test 9 a	Silver ≥ 500 mating cycles Gold ≥ 1000 mating cycles									
Materials											
Housing material		coupling ring brass, strain relief, die cast, nickel plated									
Dielectric material		thermoplastic									
Contact plating		silver plated / gold plated *									
Further Characteristics											
Termination technique		solder, crimp								solder	
Wire gauge		solder ≤ 0,5 mm ² (20-26 AWG), crimp 0,14 – 1,0 mm ² (26-18 AWG)								≤ 0,25 mm ² /24 AWG	
Flammability		UL 94 V0									
Locking system	IEC 103-9	metal screw coupling									

Characteristics

Do not connect or disconnect under load. Metal housing parts shall be securely incorporated to protected ground.

* Remark for gold plated contacts

To avoid brittle intermetallic connections gold-plated soldering terminals must be pre-tinned before soldering.

C 091 B



Main Features

- Bayonet locking.
- Number of contacts are 3 to 8, 12 and 14.
- Internal metal strain relief with half shell construction and snap-in latching. Plastic strain relief also available.
- Complete EMI shielding in fully mated and locked position.
- Male and female cable connectors: solder in 3 to 8, 12, 14 positions; crimp in 3 to 8 positions; cable outlet PG 7 for diameter of 6 mm; cable outlet PG 9 for diameters of 6.5 mm and 8 mm; cable entry straight or right-angled.
- Male and female receptacles for panel mount: front mounting; solder in 3 to 8, 12, 14 positions; crimp in 3 to 8 positions; PCB mounting in right-angled, vertical mounting upon request, using dip solder termination.
- Colored back-shells for coding, see page 47.
- The connectors are registered under File # E 63 093 UL.



UNDERWRITERS LABORATORIES INC.

C 091 B

Characteristics

General Characteristics	Standard	Characteristics									
Number of contacts		3	4	5	5 Stereo	6	7	7	8	12	14
View on termination side of contact insert											
Contact arrangement acc. to DIN		41 524	–	–	41 524	41 322	–	45 329	45 326	–	–
Contact arrangement acc. to IEC		130-9	–	–	130-9	130-9	–	130-9	130-9	–	–
Electrical Characteristics											
Rated voltage	IEC 60664-1	300 V =			100 V =	300 V =			150 V =		
Rated impulse withstand voltage	IEC 60664-1	1500 V			1200 V	1500 V			1200 V		
Pollution degree	IEC 60664-1	1									
Installation category	IEC 60664-1	I									
Insulation group	IEC 60664-1	3									
Test voltage	IEC 60664-1	980 V ~			670 V ~	980 V ~			670 V ~		
Current rating	IEC 60512-3 Test 5 b	5 A / + 40 °C / + 104 °F								3 A / + 40 °C / + 104 °F	
Insulation resistance	IEC 60512-2 Test 3 a	> 10 ¹² Ω									
Contact resistance	IEC 60512-2 Test 2 a	< 5 m Ω									
Climatical Characteristics											
Climatic category	IEC 60668-1	40 / 85 / 56									
Temperature range	IEC 60668-1	- 40 °C ... + 85 °C / - 40 °F ... + 185 °F									
Mechanical Characteristics											
IP-degree	IEC 60529	IP 40									
Insertion and withdrawal forces	IEC 60512-7 Test 13 b	25 N 90.oz	30 N 110.oz	35 N 125.oz	50 N 180.oz	55 N 200.oz	60 N 220.oz	60 N 220.oz	50 N 180.oz		
Mechanical operation	IEC 60512-5 Test 9 a	Silver ≥ 500 mating cycles Gold ≥ 1000 mating cycles									
Materials											
Housing material		die cast, nickel plated									
Dielectric material		thermoplastic									
Contact plating		silver plated / gold plated *									
Further Characteristics											
Termination technique		solder, crimp								solder	
Wire gauge		solder ≤ 0,5 mm ² (20-26 AWG), crimp 0,14 – 1,0 mm ² (26-18 AWG)								≤ 0,25 mm ² /24 AWG	
Flammability		UL 94 V0									
Locking system		bayonet									

Characteristics

Do not connect or disconnect under load. Metal housing parts shall be securely incorporated to protected ground.

* Remark for gold plated contacts

To avoid brittle intermetallic connections gold-plated soldering terminals must be pre-tinned before soldering.

C 091 D

Main Features

- Precision metal construction.
- Ingress Protection class IP 67.
- Threaded coupling acc. to IEC 130-9.
- Number of contacts are 3 to 8, 12 and 14.
- Internal metal strain relief.
- Complete EMI shielding in the fully mated and locked position (EMI security).
- Male and female cable connectors: solder in 3 to 8, 12, 14 positions; crimp in 3 to 8 positions; cable outlet in PG 7 for diameter of 6 mm; cable outlet in PG 9 for diameter of 8 mm ; straight cable entry; metal coupling nickel plated
- Male and female receptacles for panel mount: front or rear mounting, solder in 3 to 8, 12, 14 positions; crimp in 3 to 8 positions; PCB mounting, vertical, using dip solder termination with multiple tail lengths.
- The connectors are registered under File # E 63 093 UL.



UNDERWRITERS LABORATORIES INC.

C 091 D

Characteristics

General Characteristics	Standard	Characteristics									
Number of contacts		3	4	5	5 Stereo	6	7	7	8	12	14
View on termination side of contact insert											
Contact arrangement acc. to DIN		41 524	–	–	41 524	41 322	–	45 329	45 326	–	–
Contact arrangement acc. to IEC		130-9	–	–	130-9	130-9	–	130-9	130-9	–	–
Electrical Characteristics											
Rated voltage	IEC 60664-1	300 V ≈			100V ≈	300 V ≈			150 V ≈		
Rated impulse withstand voltage	IEC 60664-1	1500 V			1200 V	1500 V			1200 V		
Pollution degree	IEC 60664-1	1									
Installation category	IEC 60664-1	I									
Insulation group	IEC 60664-1	3									
Test voltage	IEC 60664-1	980 V ~			670 V ~	980 V ~			670 V ~		
Current rating	IEC 60512-3 Test 5 b	5 A / + 40 °C / + 104 °F									3 A / + 40 °C / + 104 °F
Insulation resistance	IEC 60512-2 Test 3 a	> 10 ¹² Ω									
Contact resistance	IEC 60512-2 Test 2 a	< 5 m Ω									
Climatical Characteristics											
Climatic category	IEC 60668-1	40 / 85 / 56									
Temperature range	IEC 60668-1	- 40 °C ... + 85 °C / - 40 °F ... + 185 °F									
Mechanical Characteristics											
IP-degree	IEC 60529	IP 67, cable diameter PG 7: .137 - .236, PG 9: .236 - .314									
Insertion and withdrawal forces	IEC 60512-7 Test 13 b	25 N 90.oz	30 N 110.oz	35 N 125.oz	50 N 180.oz	55 N 200.oz	60 N 220.oz	60 N 220.oz	50 N 180.oz		
Mechanical operation	IEC 60512-5 Test 9 a	Silver ≥ 500 mating cycles Gold ≥ 1000 mating cycles									
Materials											
Housing material		die cast, nickel plated									
Dielectric material		thermoplastic									
Sealing material		neoprene									
Contact plating		silver plated / gold plated *									
Further Characteristics											
Termination technique		solder, crimp									solder
Wire gauge		solder ≤ 0,5 mm ² (20-26 AWG), crimp 0,14 – 1,0 mm ² (26-18 AWG)									≤ 0,25 mm ² /24 AWG
Flammability		UL 94 V0									
Locking system	IEC 130-9	metal screw coupling									

Characteristics

Do not connect or disconnect under load. Metal housing parts shall be securely incorporated to protected ground.

* Remark for gold plated contacts

To avoid brittle intermetallic connections gold-plated soldering terminals must be pre-tinned before soldering.