

Amphenol

Amphenol-Tuchel Electronics GmbH

C 091 A/B/D Series Circular Connectors



C 091 A



Main Features

- Metal locking ring; screw locking according to DIN EN 60130-9 / IEC 60130-9
- Number of contacts: 2 – 8, 12 and 14 contacts
- Internal strain relief
- Good shielding effectiveness when mated and locked
- Male and female cable connectors
 - Straight or right angled
 - Solder connection: 2 – 8, 12 and 14 contacts
 - Crimp connection: 2 – 8 contacts
 - With cable sleeve for max. cable diameter 6 mm, or
 - With cable glands for cable diameter 4 – 6 mm or 6 – 8 mm
- Male and female receptacles
 - Panel mount types for front or rear panel mounting
 - Pcb mount types, straight or right angled
 - With dip solder contacts of various contact lengths
 - Solder connection: 2 – 8, 12 and 14 contacts
 - Crimp connection: 2 – 8 contacts
- Coloured back shells optional
- UL registered under file number E 63 093 UL













UNDERWRITERS LABORATORIES INC.

¹⁾ In general approvals refer to representative versions of the connector series. Test report upon request.

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 male contact insert												
Contact arrangement acc. to DIN		41 524	–	–	41 524	45 322	–	45 329	45 326	–	–	
Contact arrangement acc. to IEC		60130-9	60120-9	–	60130-9	60130-9	–	60130-9	60130-9	–	–	
Electrical Characteristics												
Rated voltage	IEC 60664-1	300 V =			100 V =	300 V =			100 V =		150 V =	
Rated voltage	UL 1977	250 V									60 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	II, 400 ≤ CTI < 600										
Current rating	IEC 60512-5-2 Test 5 b UL 1977	5 A / + 40 °C / + 104 °F please refer also to current derating curves page 45									3 A / + 40 °C / + 104 °F	
Insulation resistance	IEC 60512-3-1 Test 3 a	> 10 ¹⁰ Ω										
Contact resistance	IEC 60512-2-1 Test 2 a	< 5 m Ω										
Climatic Characteristics												
Climatic category	IEC 60068-1	40 / 100 / 56										
Temperature range	IEC 60068-1	- 40 °C ... + 100 °C / - 40 °F ... + 212 °F										
Mechanical Characteristics												
IP-degree	IEC 60529	IP 40										
Insertion and withdrawal forces	IEC 60512-13-2 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 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 AWG crimp: 2 - 6 pol (excluding 5S): 0,09 - 1,00 mm ² / 28 - 18 AWG crimp: 5S, 7, 7S and 8-pol.: 0,09 - 0,75 mm ² / 28 - 20 AWG									≤ 0,25 mm ² /24 AWG	
Flammability		UL 94 V0										
Locking system	IEC 60130-9	metal screw coupling; tightening torque 0,7 Nm										

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

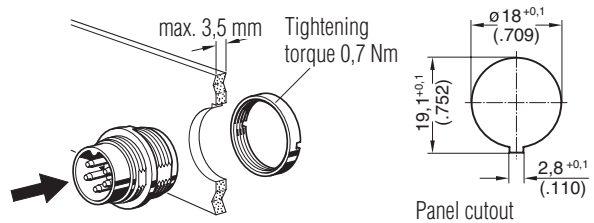
*** 2 contact version: contact loading 1+3**

**** Remark for gold plated contacts:** In order to avoid brittle inter-metallic connections, gold-plated terminals have to be tin-plated in the solder area.

IEC 60 664 ≙ DIN VDE 0110 ; IEC 60 512-x ≙ DIN EN 60 512-x; IEC 60 130-9 ≙ DIN EN 60 130-9

C 091 A

Male receptacle,
screw locking,
front mounting



Description	Drawing	No. of cont.	Part Number solder termination			Part No. Crimp termination ¹⁾ ring nut		
			Contact plating silver ring nut	hex nut	Contact plating gold ²⁾ ring nut			
Male receptacle, termination: solder or crimp, panel mounting with ring or hex nut, contact plating: silver or gold.		2	T 3202 000	T 3202 009	T 3202 018	–		
		3 ³⁾	T 3262 000	T 3262 009	T 3262 018	T 3262 550		
		4 ³⁾	T 3302 000	T 3302 009	T 3302 018	T 3302 550		
		5	T 3362 000	T 3362 009	T 3362 018	T 3362 550		
		5 S ³⁾	T 3362 010	T 3358 009	T 3358 018	T 3358 550 ⁴⁾		
		6 ³⁾	T 3402 000	T 3402 009	T 3402 018	T 3402 550		
		7	T 3477 000	T 3477 009	T 3477 018	T 3477 550		
		7 ³⁾	T 3486 000	T 3486 009	T 3486 018	T 3486 550 ⁴⁾		
		8 ³⁾	T 3506 000	T 3506 009	T 3506 018	T 3506 550 ⁴⁾		
		12	T 3637 001	T 3637 009	T 3637 000	–		
		14	T 3652 001	T 3652 009	T 3652 000	–		
		Male receptacle, termination: straight dip solder, pin length 10.5 mm from flange, panel mounting with ring nut, contact plating: silver or gold.		2	–	–	–	–
				3 ³⁾	T 3262 300	–	–	–
				4 ³⁾	T 3302 300 ⁴⁾	–	–	–
5	T 3362 300 ⁴⁾			–	–	–		
5 S ³⁾	T 3358 300 ⁴⁾			–	–	–		
6 ³⁾	T 3402 300 ⁴⁾			–	–	–		
7	T 3477 300 ⁴⁾			–	–	–		
7 ³⁾	T 3486 300 ⁴⁾			–	–	–		
8 ³⁾	T 3506 300			–	–	–		
12	–			–	T 3637 304 ⁴⁾	–		
14	–	–	T 3652 304 ⁴⁾	–				

¹⁾ Please order crimp contacts separately, see page 43

²⁾ see remark page 6

³⁾ Contact order for DIN EN 60 130-9

⁴⁾ Available upon request.