

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	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.

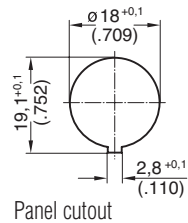
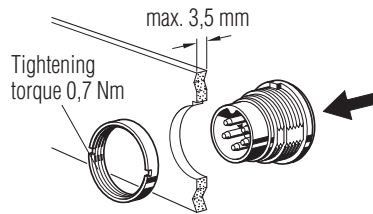
* 2 contact version: contact loading 1+3

** 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,
rear 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 nut, contact plating: silver or gold.		2	T 3202 100	–	–	–		
		3 ³⁾	T 3262 100	–	–	T 3262 150 ⁴⁾		
		4 ³⁾	T 3302 100	–	–	T 3302 150 ⁴⁾		
		5	T 3362 100	–	–	T 3362 150		
		5 S ³⁾	T 3358 100	–	–	T 3358 150 ⁴⁾		
		6 ³⁾	T 3402 100	–	–	T 3402 150 ⁴⁾		
		7	T 3477 100	–	–	T 3477 150 ⁴⁾		
		7 ³⁾	T 3486 100	–	–	T 3486 150 ⁴⁾		
		8 ³⁾	T 3506 100	–	–	T 3506 150 ⁴⁾		
		12	–	–	T 3637 100	–		
		14	–	–	T 3652 100	–		
		Male receptacle, termination: straight dip solder, pin length 10,5 mm from flange, panel mounting with ring nut, contact plating: silver or gold.		3 ³⁾	T 3262 400	–	–	–
				4 ³⁾	T 3302 400	–	–	–
				5	T 3362 400	–	–	–
5 S ³⁾	T 3358 400			–	–	–		
6 ³⁾	T 3402 400			–	–	–		
7	T 3477 400			–	–	–		
7 ³⁾	T 3486 400			–	–	–		
8 ³⁾	T 3506 400			–	–	–		
12	–			–	T 3637 404	–		
14	–			–	T 3652 404 ⁴⁾	–		
Male receptacle, termination: straight dip solder, pin length 14,5 mm from flange, panel mounting with ring nut, contact plating: silver or gold.		3 ³⁾	T 3262 420 ⁴⁾	–	–	–		
		4 ³⁾	T 3302 420 ⁴⁾	–	–	–		
		5	T 3362 420 ⁴⁾	–	–	–		
		5 S ³⁾	T 3358 420 ⁴⁾	–	–	–		
		6 ³⁾	T 3402 420	–	–	–		
		7	T 3477 420 ⁴⁾	–	–	–		
		7 ³⁾	T 3486 420	–	–	–		
		8 ³⁾	T 3506 420	–	–	–		
Male receptacle, termination: straight dip solder, pin length 19,5 mm from flange, panel mounting with ring nut, contact plating: silver or gold.		3 ³⁾	T 3262 430	–	–	–		
		4 ³⁾	T 3302 430 ⁴⁾	–	–	–		
		5	T 3362 430 ⁴⁾	–	–	–		
		5 S ³⁾	T 3358 430 ⁴⁾	–	–	–		
		6 ³⁾	T 3402 430	–	–	–		
		7	T 3477 430	–	–	–		
		7 ³⁾	T 3486 430 ⁴⁾	–	–	–		
		8 ³⁾	T 3506 430 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.