

## C 091 A Characteristics

General Characteristics	Standard	Characteristics									
Number of contacts		2 <sup>1)</sup> + 3	4	5	5 Stereo	6	7	7	8	12	14
View on termination side of male contact insert											
Contact arrangement	DIN EN 61076-2-106	03-a ✓	04-a ✓	05-a ✓	05-b ✓	06-a ✓	07-a ✓	07-b ✓	08-a ✓	12-a ✓	14-a ✓
Contact arrangement	IEC 60130-9 <sup>2)</sup>	✓	✓		✓	✓		✓	✓		
Electrical Characteristics											
Rated voltage <sup>3)</sup>	IEC 60664-1	300 V ≈ (100 V ≈)	300 V ≈ (63 V ≈)	100 V ≈ (32 V ≈)	300 V ≈ (63 V ≈)	100 V ≈ (32 V ≈)	150 V ≈ (32 V ≈)	150 V ≈ (32 V ≈)	150 V ≈ (32 V ≈)	150 V ≈ (32 V ≈)	150 V ≈ (32 V ≈)
Rated voltage	UL 1977	250 V								60 V	
Rated impulse withstand voltage <sup>3)</sup>	IEC 60664-1	1500 V (840 V)		1200 V (500 V)	1500 V (840 V)		1200 V (500 V)				
Pollution degree <sup>3)</sup>	IEC 60664-1	1 (2)									
Installation category	IEC 60664-1	I									
Insulation group	IEC 60664-1	II, 400 ≤ CTI < 600									
Current rating	IEC 60512-5-2 UL 1977	5 A / + 40 °C / + 104 °F please refer also to current derating curves page 59								3 A / + 40 °C / + 104 °F	
Insulation resistance	IEC 60512-3-1	> 10 <sup>10</sup> Ω <sup>4)</sup>									
Contact resistance	IEC 60512-2-1	< 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	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	50 N 180.oz	50 N 180.oz
Mechanical operation	IEC 60512-9-1	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 <sup>5)</sup>									
Further Characteristics											
Termination technique		solder, crimp									
Wire gauge		solder: ≤ 0,5 mm <sup>2</sup> / 20 AWG crimp: 2 - 6 pol (excluding 5S): 0,09 - 1,00 mm <sup>2</sup> / 28 - 18 AWG crimp: 5S, 7, 7S and 8-pol.: 0,09 - 0,75 mm <sup>2</sup> / 28 - 20 AWG								solder: ≤ 0,25 mm <sup>2</sup> / 24 AWG crimp: 0,09-0,25 mm <sup>2</sup> / 28 - 24 AWG	
Flammability		UL 94 V0									
Locking system	IEC 60130-9 DIN EN 61076-2-106	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.

<sup>1)</sup> 2 contact version: contact loading 1+3

<sup>2)</sup> Edition 2000-05

<sup>3)</sup> values in brackets are according to DIN EN 61076-2-106

<sup>4)</sup> under operating conditions >10<sup>8</sup> Ω

<sup>5)</sup> 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; IEC 61076-2-106 ≙ DIN EN 61076-2-106