



**Stamped contacts Crimp male contacts diameter 1,5 mm for wire gauge AWG 26 - 20 silver plated**

Part No. VN 01 015 0046 (1)

Series **Contacts**

Subseries **Contact Stamped contacts**

**Common Characteristics**

Contact diameter		1,5 mm
Insulation diameter		1,0 - 2,0 mm
anschlussquerschnitt_von		0,35
anschlussquerschnitt_bis		0,5
anschlussquerschnitt_awg_von		22
anschlussquerschnitt_awg_bis		20
Packaging / supplied as		Single contact
No. of pieces		100
Sex of Contact		Pin
Type of contact		Stamped/rolled crimp contact

**Electrical Characteristics**

Contact resistance	DIN EN 60512-2-1, Test 2a / IEC 60512-2-1, Test 2a	< 5 m
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# C 091 D



## Main Features

- Metal locking ring; screw locking according to DIN EN 60130-9 / IEC 60130-9
- Full metal construction
- Protection class IP 65 and IP 67
- Number of contacts: 3 – 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: 3 – 8, 12 and 14 contacts
  - Crimp connection: 3 – 8 contacts
  - 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
  - With 4-hole flange
  - With dip solder contacts of various contact lengths
  - Solder connection: 3 – 8, 12 and 14 contacts
  - Crimp connection: 3 – 8 contacts
- UL registered under file number E 63 093 UL













UNDERWRITERS LABORATORIES INC.

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

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## 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	45 322	–	45 329	45 326	–	–
Contact arrangement acc. to IEC		60130-9	60130-9	–	60130-9	60130-9	–	60130-9	60130-9	–	–
<b>Electrical Characteristics</b>											
Rated voltage	IEC 60664-1	300 V ≈			100V ≈	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 <sup>10</sup> Ω									
Contact resistance	IEC 60512-2-1 Test 2 a	< 5 m Ω									
<b>Climatic Characteristics</b>											
Climatic category	IEC 60668-1	40 / 100 / 56									
Temperature range	IEC 60668-1	- 40 °C ... + 100 °C / - 40 °F ... + 212 °F									
<b>Mechanical Characteristics</b>											
IP-degree	IEC 60529	IP 67 / IP 65									
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									
<b>Materials</b>											
Housing material		die cast, nickel plated									
Dielectric material		thermoplastic									
Sealing material		neoprene									
Contact plating		silver plated / gold plated *									
<b>Further Characteristics</b>											
Termination technique		solder, crimp								solder	
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								≤ 0,25 mm <sup>2</sup> /24 AWG	
Flammability		UL 94 V0									
Locking system	IEC 60130-9	metal screw coupling; tightening torque 0,5 - 0,7 Nm									
UL	UL 1977	Conditions of acceptability									

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

\* **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.

# C 091

## Crimp contacts

Stamped single contacts

Stamped contacts on reel for hand crimping tools

Stamped contacts on reel for crimp machines





packaging unit 100 pcs



200 pcs



2000 pcs  
(feeding left or right hand side)

Type of Contact	Contact Ø	Wire Gauge	max. Insul. Ø	Supplied as	Pcs.	Part Number	
						silver	gold
Pin contact 	1.5 mm	0.09-0.25 mm <sup>2</sup>	0.7-1.6	single contact	100	VN01 015 0052 (1)	VN01 015 0052 (2)
				contacts on reel	200	ZN01 015 0052 (1)	ZN01 015 0052 (2)
					2000	HN01 015 0052 (1)	HN01 015 0052 (2)
	left	2000	TN01 015 0052 (1)	TN01 015 0052 (2)			
	0.35-0.50 mm <sup>2</sup>	1.0-2.0	single contact	100	VN01 015 0046 (1)	VN01 015 0046 (2)	
			contacts on reel	200	ZN01 015 0046 (1)	ZN01 015 0046 (2)	
				2000	HN01 015 0046 (1)	HN01 015 0046 (2)	
		right	2000	TN01 015 0046 (1)	TN01 015 0046 (2)		
		0.75-1.0 mm <sup>2</sup>	1.6-2.1	single contact	100	VN01 015 0047 (1)	VN01 015 0047 (2)
contacts on reel				200	ZN01 015 0047 (1)	ZN01 015 0047 (2)	
	2000			HN01 015 0047 (1)	HN01 015 0047 (2)		
left	2000	TN01 015 0047 (1)	TN01 015 0047 (2)				
Socket contact 	1.5 mm	0.09-0.25 mm <sup>2</sup>	0.7-1.6	single contact	100	VN02 015 0052 (1)	VN02 015 0052 (2)
				contacts on reel	200	ZN02 015 0052 (1)	ZN02 015 0052 (2)
					2000	HN02 015 0052 (1)	HN02 015 0052 (2)
	left	2000	TN02 015 0052 (1)	TN02 015 0052 (2)			
	0.35-0.50 mm <sup>2</sup>	1.0-2.0	single contact	100	VN02 015 0046 (1)	VN02 015 0046 (2)	
			contacts on reel	200	ZN02 015 0046 (1)	ZN02 015 0046 (2)	
				2000	HN02 015 0046 (1)	HN02 015 0046 (2)	
		right	2000	TN02 015 0046 (1)	TN02 015 0046 (2)		
		0.75-1.0 mm <sup>2</sup>	1.6-2.1	single contact	100	VN02 015 0047 (1)	VN02 015 0047 (2)
contacts on reel				200	ZN02 015 0047 (1)	ZN02 015 0047 (2)	
	2000			HN02 015 0047 (1)	HN02 015 0047 (2)		
left	2000	TN02 015 0047 (1)	TN02 015 0047 (2)				

Connecting Range	Wire Gauge		Stripping length	Crimp height (average values)	Crimp retention force acc. DIN EN 60352-2
	mm <sup>2</sup>	AWG			
0.09-0.25	0.09	28	3.0 + 0.5	0.85-0.89	11
		26			15
	0.14	24		0.86-0.90	18
					28
0.25		0.91-0.97	32		
0.35-0.50	0.35	22	3.0 + 0.5	0.90-1.06	40
	0.50	20		0.95-1.11	60
0.75-1.00	0.75	18	3.5 + 1.0	1.33-1.50	85
					90
	1.00			1.36-1.53	108

These min. values are based on the copper wire tensile strength with  $\delta_B \approx 230 \text{ N/mm}^2$ .