



Product description

The circular connector series C 16-3 has two housing sizes. The connectors are designed to meet the high requirements of industrial applications under harsh environmental conditions. The range includes versions with screw and crimp terminations. A selection of crimp contacts for hand crimp tools and crimp machines enables a reliable termination relating in qualitative, technical and economical advantages. A board selection of housing styles are available.

On choosing the housing style and shell size please take both the cable diameter and wire gauge into consideration. If necessary one should use the long housing versions.

Main features and advantages:

- Circular connectors for power and signal applications with following contact arrangements:
Shell size 1: 8 + PE, 14 + PE, 17 + PE, 12 + 3 + PE
Shell size 2: 5 + PE, 12 + PE, 14 + PE, 19 + PE
- For applications in machine tools, measurement and control, process technology and medical equipment
- Housing are made from high grade plastic material.
- Vibration safe connection by solid bayonet coupling with lock in position.
- Cable housing straight or right-angled with various cable outlets
- Protection degree IP 65 in mated position.
- Internal cable clamp or clamping ring provides a safe cable restrain.

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Order information

Colour coding

Upon request the coupling ring of the plugs and the housing of the receptacles can be delivered in the colour red, green, blue, yellow and grey.

Polarization

Depending on the contact arrangements the polarization of this connector series can be varied. The contact inserts can be mounted in alternate positions. The order number in the catalogue refers always to position 1. The position of the contact inserts can also be changed by the customer using a disassembly tool (see page 14 and 17) to remove the insert and remount it in the required position (see page 6)

Crimp version

Order numbers do not include crimp contacts. Please order separately (page 21 / 22)

Crimp tooling

Ask for our catalogue "Tools".

Testhouse

Approvals

Approval No.

VDE



3964

UL ¹⁾



E 63093

CSA



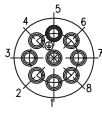
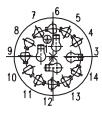


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In general approvals refer to representative versions of the connector series. Test report upon request.

¹⁾ Please refer to the „Conditions of Acceptability“.

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Technical data Shell size 1

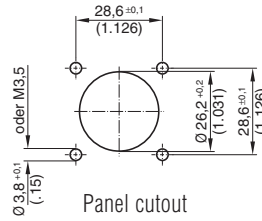
General Characteristics		Standard		Technical data			
				Shell size 1			
Number of contacts				8 + PE	14 + PE	17 + PE	12 + 3 + PE
							
Electrical Characteristics							
Rated voltage	DIN EN 60664-1 ¹⁾	400 V	100 V	100 V	3 x 320 V, 12 x 24 V		
	UL 1977, CSA 22.2	400 V	3 x 250 V, 11 x 250 V	250 V	3 x 250 V, 12 x 24 V		
Rated impulse withstand voltage	DIN EN 60664-1 ¹⁾	6000 V	3000 V	3000 V	3 x 4000 V, 12 x 800 V		
Pollution degree	DIN EN 60664-1 ¹⁾	3	3	3	3		
Installation (overvoltage) category	DIN EN 60664-1 ¹⁾	III	III	III	III		
Material group	DIN EN 60664-1 ¹⁾	II	II	II	II		
Current carrying capacity	DIN EN 60512-5-2, test 5b	12 A	3 x 16 A, 11 x 6 A	6 A	3 x 12 A, 12 x 6 A		
	UL 1977, CSA 22.2	10 A	3 x 12 A, 11 x 4 A	5 A	3 x 10 A, 12 x 5 A		
Insulation resistance	DIN EN 60512-3-1, test 3a	≥ 10 ⁸ Ω					
Contact resistance	DIN EN 60512-2-1, test 2a	≤ 5 mΩ					
Climatic Characteristics							
Climatic category	DIN EN 60068-1	40 / 125 / 56					
Operating temperature		-40°C ... +125°C					
Mechanical Characteristics							
Degree of protection	DIN EN 60529	IP 65					
Insertion and withdrawal force	DIN EN 60512-13-2, test 13b	≤ 25 N	≤ 30 N	≤ 22 N	≤ 25 N		
Mechanical operation	IEC 60512, test 9a	≥ 500 mating cycles					
Materials							
Housing material		Polyamide 6.6					
Dielectric material		Polyamide 6.6					
Gasket material		Neoprene					
Contact plating		silver plated / gold plated					
Other Characteristics							
Termination technique		crimp					
Wire gauge / AWG		0,14 - 2,5 mm ² / 26 - 14	0,09 - 2,5 mm ² / 28 - 14	0,09 - 1,0 mm ² / 28 - 18	0,09 - 2,5 mm ² / 28 - 14		
Flammability	UL 94	VO					
Locking system		bayonet					

¹⁾ DIN 60664-1 ≙ VDE 0110-1 ≙ DIN EN 60664-1



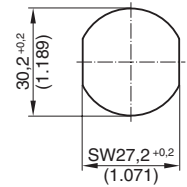
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Shell size 1 Female receptacles



G

Panel cutout



N

Panel cutout

Description	Drawing	No. of cont.	Contacts ²⁾	Part No.
Female receptacle for crimp contacts, style G, without contacts ¹⁾		8 + PE	.N 02 016 00...	C016 10G008 000 1
		14 + PE	11 x .N 02 015 00... 4 x .N 02 025 00...	C016 10G014 000 1
		12+3+PE	12 x .N 02 015 00... 4 x .N 02 016 00...	C016 10G015 000 1
		17 + PE	.N 02 015 00...	C016 10G017 000 1
Female receptacle for crimp contacts, style N, without contacts ¹⁾		8 + PE	.N 02 016 00...	C016 10N008 006 1
		14 + PE	11 x .N 02 015 00... 4 x .N 02 025 00...	C016 10N014 006 1
		12+3+PE	12 x .N 02 015 00... 4 x .N 02 016 00...	C016 10N015 006 1
		17 + PE	.N 02 015 00...	C016 10N017 006 1

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Shell size 1 Female cable connectors



E



D



F

Description	Drawing	No. of cont.	Contacts ²⁾	Part No. Cable outlet	
				Ø 10-12	Ø 12-14
Female cable connector for crimp contacts, long, style E with internal strain relief, without contacts ¹⁾		8 + PE	.N 02 016 00...	C016 10E008 002 1	C016 10E008 003 1
		14 + PE	11 x .N 02 015 00... 4 x .N 02 025 00...	C016 10E014 002 1	C016 10E014 003 1
		12+3+PE	12 x .N 02 015 00... 4 x .N 02 016 00...	C016 10E015 002 1	C016 10E015 003 1
		17 + PE	.N 02 015 00...	C016 10E017 002 1	C016 10E017 003 1
				Cable outlet	
				Ø 8-10	Ø 10-12
Female cable connector for crimp contacts, short, style D with clamping ring, without contacts ¹⁾		8 + PE	.N 02 016 00...	C016 10D008 002 1	C016 10D008 003 1
		14 + PE	11 x .N 02 015 00... 4 x .N 02 025 00...	C016 10D014 002 1	C016 10D014 003 1
		12+3+PE	12 x .N 02 015 00... 4 x .N 02 016 00...	C016 10D015 002 1	C016 10D015 003 1
		17 + PE	.N 02 015 00...	C016 10D017 002 1	C016 10D017 003 1
Female cable connector for crimp contacts, style F with clamping ring, without contacts ¹⁾		8 + PE	.N 02 016 00...	C016 10F008 002 1	C016 10F008 003 1
		14 + PE	11 x .N 02 015 00... 4 x .N 02 025 00...	C016 10F014 002 1	C016 10F014 003 1
		12+3+PE	12 x .N 02 015 00... 4 x .N 02 016 00...	C016 10F015 002 1	C016 10F015 003 1
		17 + PE	.N 02 015 0005	C016 10F017 002 1	C016 10F017 003 1

¹⁾ Please order crimp contacts separately, see page 21/22.

²⁾ Part No system for crimp contacts, see page 23.