

Amphenol

Amphenol-Tuchel Electronics GmbH

Circular Connector eco|mate^m Series



easier & quicker

|mate by Amphenol

Serie C16-1

A successful connector program now available in a new design with new technology.

3 + PE Screw termination

6 + PE Solder termination

6 + PE Crimp termination

New design



Improved technology



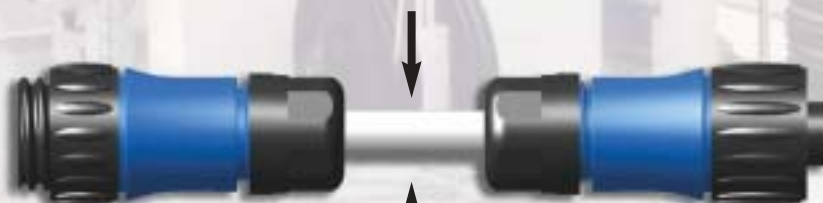
Male Cable Connector
with Clamping Ring



Male Cable Connector
right angled with
Clamping Ring

Easier and quicker assembly

- New screw connection with clamping ring
- Strain relief and seal in a single element
- Ergonomically shaped handle for a better grip and safer handling
- Possibility of fastening the protective cover to the housing
- **Less logistics.** One type of housing for all cable sizes (6 to 12,5 mm)



Ø 6- 12,5 mm

The new product design is fully compatible and interchangeable with the existing C16-1 product design.

eco|mate^m

Serie C16-1

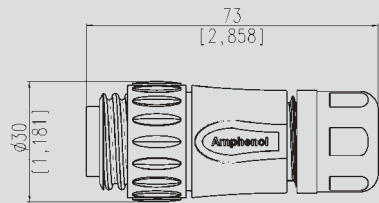


Male Cable Connector

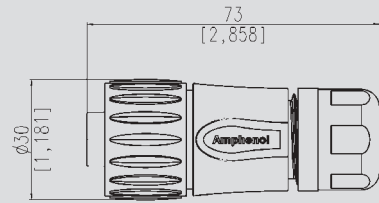


Female Cable Connector

Male Cable Connector



Female Cable Connector



Description	No. of Cont.	Part Number	
		Cable retention with clamping ring	Cable retention with additional Cable clamp
Screw Termination	3 + PE	C016 20H003 100 10	C016 20H003 110 10
Solder Termination	6 + PE	C016 30H006 100 10	C016 30H006 110 10
Crimp Termination	6 + PE	C016 10H006 000 10	C016 10H006 010 10

Screw Termination	3 + PE	C016 20D003 100 10	C016 20D003 110 10
Solder Termination	6 + PE	C016 30D006 100 10	C016 30D006 110 10
Crimp Termination	6 + PE	C016 10D006 000 10	C016 10D006 010 10

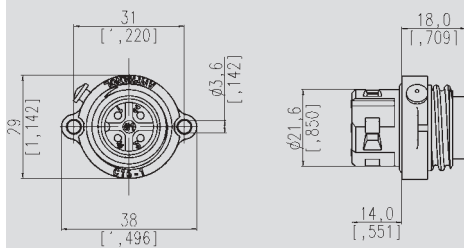


Male Receptacle

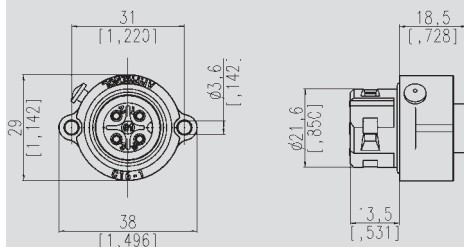


Female Receptacle

Male Receptacle



Female Receptacle



Description	No. of Cont.	Part Number
Screw Termination	3 + PE	C016 20C003 100 12
Solder Termination	6 + PE	C016 30C006 100 12
Crimp Termination	6 + PE	C016 10C006 000 12

Screw Termination	3 + PE	C016 20G003 100 12
Solder Termination	6 + PE	C016 30G006 100 12
Crimp Termination	6 + PE	C016 10G006 000 12

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Serie C16-1

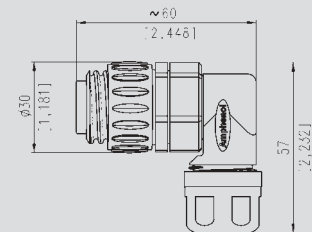


Male Cable Connector, right-angled

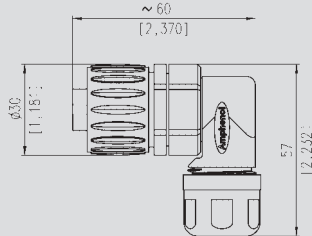


Female Cable Connector, right-angled

Male Cable Connector, right-angled



Female Cable Connector, right-angled



Description	No. of Cont.	Part Number
Screw Termination	3+ PE	C016 20K003 100 10
Solder Termination	6+ PE	C016 30K006 100 10
Crimp Termination	6+ PE	C016 10K006 000 10

Screw Termination	3+ PE	C016 20F003 100 10
Solder Termination	6+ PE	C016 30F006 100 10
Crimp Termination	6+ PE	C016 10F006 000 10

Typ Number System

C016

20

H

003

100

10

Series

Design

Cable Retention

Number of Contacts

Style of Connector

Termination

10 = Standard blue/black

12 = Standard black

15 = EMC

100 = Clamping Ring

110 = Internal Cable Clamp

003 = 3+ PE

006 = 6+ PE

H = Male Cable Connector

D = Female Cable Connector

K = Male Cable Connector, r/a

F = Female Cable Connector r/a

C = Male Receptacle

G = Female Receptacle

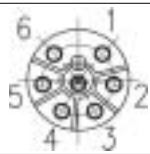
10 = Crimp

20 = Screw

30 = Solder

The example shown is representative of a 4 pole cable connector with screw terminals and without internal strain relief.

Serie C16-1

General Characteristics	Standard	Characteristics		
Number of contacts		3 + PE	6 + PE	
				
Electrical Characteristics		Screw	Solder	Crimp
Rated insulation voltage	IEC 60664-1 ¹⁾	400 V	250 V	200 V
Rated impulse withstand voltage	IEC 60664-1 ¹⁾	6000 V	4000 V	
Pollution degree	IEC 60664-1 ¹⁾	3	3	
Installation (overvoltage) category	IEC 60664-1 ¹⁾	III	III	
Material group	IEC 60664-1 ¹⁾	II	II	
Current carrying capacity	IEC 60512-5-2, Test 5b	16 A / + 55 °C	10 A / + 55 °C	13 A / + 55 °C
Insulation resistance	IEC 60512-3-1	≥ 10 ⁸ Ω	≥ 10 ⁸ Ω	
Contact resistance	IEC 60512-2-1	≤ 5 m Ω	≤ 5 m Ω	

Climatical Characteristics				
Climatic category	DIN EN 60068-1	40 / 100 / 56		40 / 125 / 56
Operating temperature		-40°C ... +100°C		

Mechanical Characteristics			
IP-degree of protection	DIN EN 60529	IP 65 / IP 67	
Insertion and withdrawal force	DIN EN 60512-13-2, Test 13b	≤ 15 N	≤ 30 N
Mechanical operation	DIN EN 60512-9-1, Test 9a	≥ 500 Steckzyklen	

Materials				
Housing material		Polyamid 6.6		
Dielectric material		Polyamid 6.6		
Gasket material		Neoprene		
Contact plating		silver plated / gold plated		

Other Characteristics				
Termination technique		screw	solder	crimp
Wire gauge mm ² / AWG		max. 2,5 mm ²	0,75 mm ²	0,14 - 1,5 mm ²
Flammability	UL 94	VO		
Locking system		round thread DIN 405		
Fire protection	DIN 5510 Part 2 DIN 53438 Part 1-3	S1		

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



The stated technical values refer to the use as connector without breaking capacity (COC). If these components are used connectors with breaking capacity (CBC) a reduced current carrying capacity has to be considered.

General information

We reserve the right to change the design due to improvement in quality, development or production requirements.

This catalogue must not be used in any form or manner without our prior approval in writing (Copyright Law, Fair Trading Law, Civil Code).

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