

# Amphenol

Amphenol-Tuchel Electronics GmbH

## Circular Connector eco|mate<sup>m</sup> 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



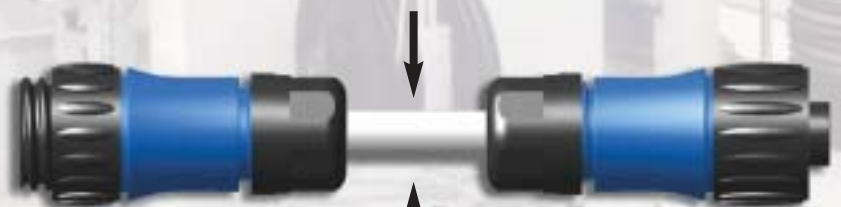
Male Cable Connector with Clamping Ring



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.

## Serie C16-1

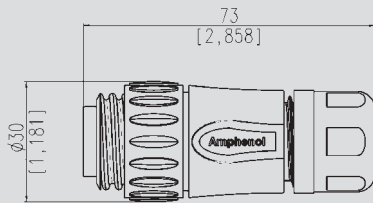


Male Cable Connector

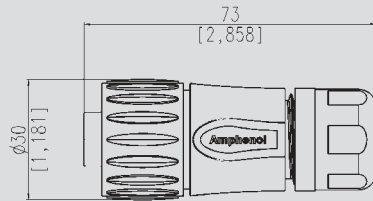


Female Cable Connector

### 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

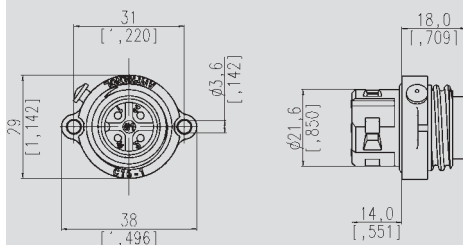


Male Receptacle

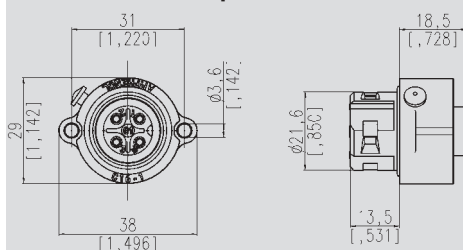


Female Receptacle

### 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

## Serie C16-1

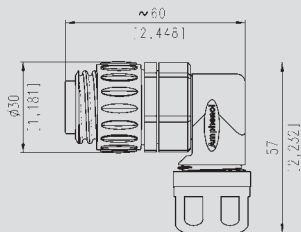


Male Cable Connector, right-angled

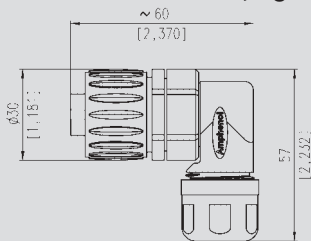


Female Cable Connector, right-angled

### Male Cable Connector, right-angled



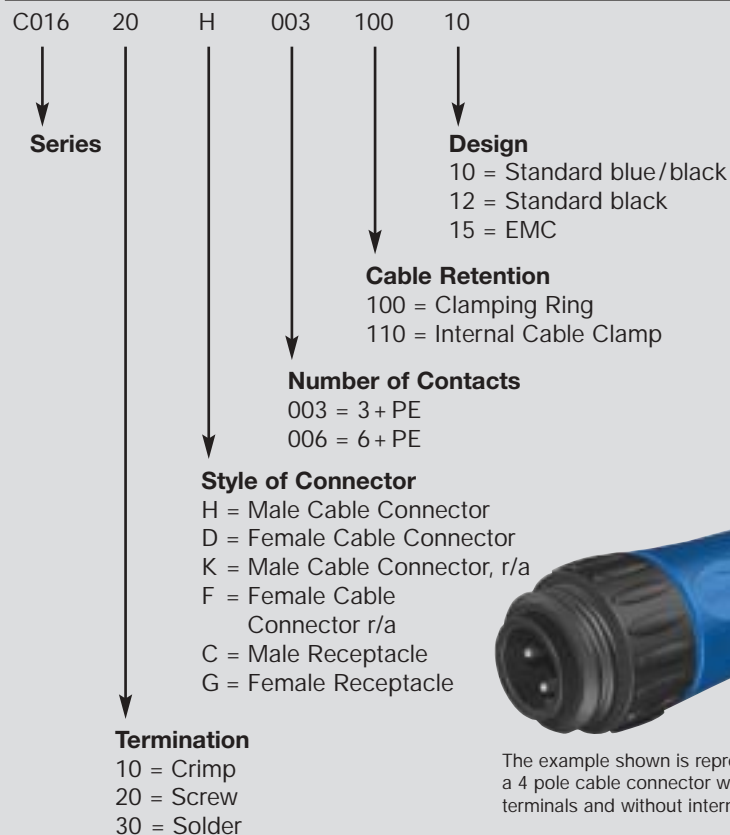
### Female Cable Connector, right-angled



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




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			
							
<b>Electrical Characteristics</b>		Screw		Solder	Crimp		
Rated insulation voltage	IEC 60664-1 <sup>1)</sup>	400 V		250 V	200 V		
Rated impulse withstand voltage	IEC 60664-1 <sup>1)</sup>	6000 V		4000 V			
Pollution degree	IEC 60664-1 <sup>1)</sup>	3		3			
Installation (overvoltage) category	IEC 60664-1 <sup>1)</sup>	III		III			
Material group	IEC 60664-1 <sup>1)</sup>	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 <sup>8</sup> Ω		≥ 10 <sup>8</sup> Ω			
Contact resistance	IEC 60512-2-1	≤ 5 m Ω		≤ 5 m Ω			
<b>Climatical Characteristics</b>							
Climatic category	DIN EN 60068-1	40 / 100 / 56		40 / 125 / 56			
Operating temperature		-40°C ... +100°C					
<b>Mechanical Characteristics</b>							
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					
<b>Materials</b>							
Housing material		Polyamid 6.6					
Dielectric material		Polyamid 6.6					
Gasket material		Neoprene					
Contact plating		silver plated / gold plated					
<b>Other Characteristics</b>							
Termination technique		screw	solder	crimp			
Wire gauge mm <sup>2</sup> / AWG		max. 2,5 mm <sup>2</sup>		0,75 mm <sup>2</sup>	0,14 - 1,5 mm <sup>2</sup>		
Flammability	UL 94	VO					
Locking system		round thread DIN 405					
Fire protection	DIN 5510 Part 2 DIN 53438 Part 1-3	S1					

<sup>1)</sup> 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).



## International

### Argentina

Amphenol Argentina  
Av. Callao 930  
2nd Floor Office B "Plaza"  
C1023 AAP Buenos Aires  
Phone +54 / 11 / 4815 6886  
Fax +54 / 11 / 4814 5779

### Australia

Amphenol Australia Ltd.  
2 Fiveways Blvd  
Keysborough  
Victoria 31 73  
Phone +61 / 3 / 8796 / 8888  
Fax +61 / 3 / 8796 / 8801

### Belgium

Amphenol-Tuchel Belgium  
Brusselbaan 524b  
B 1600 Sint-Pieters-Leeuw  
Phone +32 / 2377 / 25 49  
Fax +32 / 2377 / 5303

### Brasil

Amphenol do Brasil Ltda.  
Rua Diogo Moreira 132, 20th Floor  
CEP 05423-010 Sao Paulo SP  
Phone +55 / 11 / 3815.1003  
Fax +55 / 11 / 3815.1629

### China

Amphenol-Tuchel Electronics GmbH  
China Branch  
210-1 Taishan Road  
Changzhou 213022  
Phone +86 / 0519 / 5110301  
Fax +86 / 0519 / 5110299

### Germany

Amphenol-Tuchel Electronics GmbH  
August-Haeusser-Str. 10  
74980 Heilbronn  
Phone +49 / 71 31 / 929-0  
Fax +49 / 71 31 / 929-486

### Great Britain

Amphenol-Tuchel Great Britain  
39 Rowlands Castle Road  
Horndean  
Waterlooville, Hants P08 0DF  
Phone +44 / 23 92 / 57 17 91  
Fax +44 / 23 92 / 57 17 91

### Hong Kong

Amphenol East Asia Limited  
Units 2201-02, Railway Plaza  
39 Chatham Road South  
Tsimshatsui, Kowloon  
Phone +852 / 26 99 / 26 63  
Fax +852 / 26 88 / 09 74

### India

Amphetronix Limited  
Plot No.105 Bhosari Industrial Area  
Pune - 411 026  
Phone +91 / 20 / 27121418  
Fax +91 / 20 / 27120581

### Italy

Amphenol Italia S.p.A.  
Via Barbaiana n. 5  
I-20020 Lainate (MI)  
Phone +39 / 2 / 9325 41  
Fax +39 / 2 / 9325 4444

### Japan

Amphenol Japan, K.K.  
2-3-27, Kudan Minami  
Chiyoda-Ku  
Tokyo 102  
Phone +81 / 3 / 32 63 / 56 11  
Fax +81 / 3 / 52 76 / 70 59

### Korea

Amphenol DaeShin Limited  
#802 Joong-Dong 1131-5  
Wonmi-Ku  
Bucheon-City  
Kyunggi-Do  
Korea 420-020  
Phone +82 / 2 / 785 / 15 88  
Fax +82 / 2 / 589 / 15 14

### Mexico

Amphenol Mexico  
Prolongacion Reforma 61 - 6 B2  
Col. Paseo de las Lomas  
C.P. 01330 Mexico D.F.  
Phone +52 / 55 / 52 58.99 84  
Fax +52 / 55 / 50 81.68 90

### Sweden

Amphenol-Tuchel Scandinavia  
Skogsvägen 42  
SE 195 42 Märsta  
Phone +46 / 85 91 / 1 75 76  
Fax +46 / 85 91 / 1 75 76

### Singapur

Amphenol East Asia Limited  
Asia Pacific Sales Operation  
Singapore Branch  
300 Beach Road  
#25-07 The Concourse  
Singapore 199555  
Phone +27 / 11 / 305-95 74  
Fax +27 / 11 / 305-95 76

### South Africa

Amphenol International Ltd  
Chislehurst  
30 Impala Road  
Chislehurst  
Sandton, 2146  
Phone +27 / 11 / 7 83 95 17  
Fax +27 / 11 / 7 83 95 19

### Taiwan

Amphenol East Asia Ltd.  
Taiwan Branch (H.K.)  
116 Zhong Shan Road  
Lane 956 Taoyuan City  
Taiwan R.O.C. 330  
Phone +886 / 3 / 370 / 78 55  
Fax +886 / 3 / 360 72 59

### Turkey

Amphenol Turkiye  
Ayazaga Mah. Meydan Sk. No. 28  
Beybi Giz Plaza, Kat. 26  
34396 Maslak/Istanbul  
Phone +90 / 0212 / 3 35 25 01  
Fax +90 / 0212 / 3 35 25 00

### USA

Amphenol-Tuchel Electronics  
Representative Office  
6900 Haggerty Road  
Suite 200  
Canton, Michigan 48187  
Phone +1 / 734 / 451 6400  
Fax +1 / 734 / 451 71 97

Amphenol Corporation  
Corporate Headquarters  
358 Hall Avenue  
Wallingford, CT 06492  
Phone +1 / 203 / 2 65 / 8900  
Fax +1 / 203 / 2 65 / 86 28

Their responsible sales engineer:



# Amphenol

Amphenol-Tuchel Electronics GmbH

August-Haeusser-Str. 10 · D-74080 Heilbronn · Germany · Phone. +49 (0)7131/929-0 · Fax +49 (0)7131/929-486 · www.amphenol.de

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Circular DIN Connectors](#) category:*

*Click to view products by [Amphenol](#) manufacturer:*

Other Similar products are found below :

[CTV06RQF-25-8SA-LC](#) [CTV06RQF-25-8S-LC](#) [CTV06RQW-25-8SB-LC](#) [CTV06RW-25-20P](#) [CTV06RW-25-20PA](#) [CTV06RW-25-20PB](#)  
[CTV06RW-25-20PE-LC](#) [CTV06RW-25-20SB](#) [CTV06RW-25-20SE](#) [CTV07RW-17-8S\(506\)](#) [CTVP00RW-19-32S\(506\)](#) [CTVP00RW-9-35S\(506\)](#) [M83723/71R20416](#) [M83723/71R22196](#) [M83723/71W2039N](#) [M83723/71W24196](#) [M83723/71W2419N](#) [M83723/72A1404N-LC](#)  
[M83723/72R1203N](#) [M83723/72W20418](#) [M83723/72W22126](#) [M83723/72W22556](#) [M83723/72W2419N](#) [M83723/72W2461N](#)  
[M83723/73R2028N](#) [M83723/73R2039N](#) [M83723/73W1412N](#) [M83723/73W2039N](#) [M83723/74R1624N](#) [M83723/74R1808N](#)  
[M83723/74R2212N](#) [M83723/74W1203N](#) [M83723/74W1412N](#) [M83723/74W20416](#) [M83723/74W2041N](#) [M83723/75R10058](#)  
[M83723/75W2232N](#) [M83723/76R14157](#) [M83723/76R20256](#) [M83723/76W1808N](#) [M83723/76W2016N](#) [M83723/76W2461N](#)  
[M83723/77W2016N](#) [M83723/78R22327](#) [M83723/78W2212N](#) [M83723/78W22556](#) [M85049/50-5F](#) [D38999/20FF11AC](#) [D38999/20FJ20BB](#)  
[D38999/20FJ20SC](#)