

Amphenol








C 16-1 / C 16-3



Circular
Circular Connectors

Amphenol-Tuchel Electronics



Shell size 1				
No. of contacts	8 + PE	14 + PE	17 + PE	
Termination	crimp	crimp	crimp	
Wire gauge mm ² / AWG	0,14 - 2,5 / 26 - 14	0,14 - 2,5 / 26 - 14	0,14 - 1,0 / 26 - 18	
Rated insulation voltage	400 V	100 V	100 V	
Current carrying cap.	12 A	11 x 6 A; 4 x 18 A	6 A	
Pollution degree	3	3	3	
Installation category	III	III	III	
Protection class	IP 65	IP 65	IP 65	
Shell size 2				
No. of contacts	5 + PE	12 + PE	14 + PE	19 + PE
Termination	screw	crimp	crimp	crimp
Wire gauge mm ² / AWG	4 / 10	0,14 - 2,5 / 26 - 14	0,14 - 2,5 / 26 - 14	0,14 - 1,0 / 26 - 18
Rated insulation voltage	400 V	3 x 500 V; 9 x 300 V	400 V	250 V
Current carrying cap.	21 A	3 x 21 A; 9 x 11 A	4 x 6 A; 11 x 12 A	6 A
Pollution degree	3	3	3	3
Installation category	III	III	III	III
Protection class	IP 65	IP 65	IP 65	IP 65

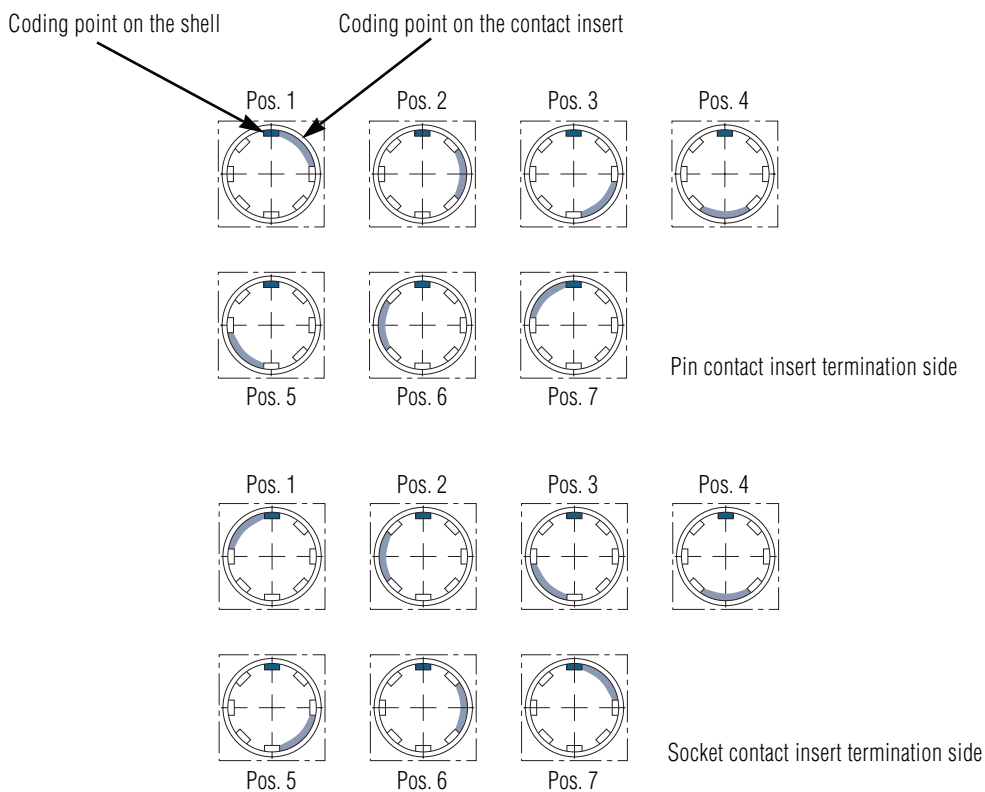
C 16-3

Coding system

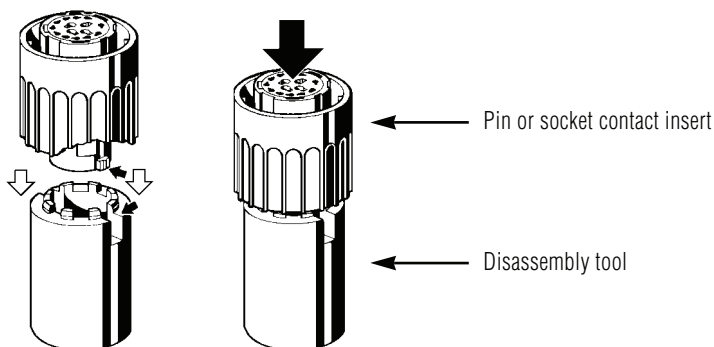
Polarization

Depending on the contact arrangements the polarization of this connector series can be varied. Please take care of the housing and contact insert characteristics.

Shell size 1			Shell size 2		
No of contacts	No of coding possibil.	Position	No of contacts	No of coding possibil.	Position
8 + PE	4	1, 3, 5, 7	5 + PE	6	1, 2, 3, 4, 6, 7
14 + PE	7	1, 2, 3, 4, 5, 6, 7	14 + PE	7	1, 2, 3, 4, 5, 6, 7
17 + PE	6	1, 2, 3, 4, 5, 7	12 + PE	7	1, 2, 3, 4, 5, 6, 7
			19 + PE	6	1, 3, 4, 5, 6, 7



Disassembly of contact inserts with disassembly tool (see page 26 und 29)



C 16-3

Characteristics

General Characteristics	Standard	Characteristics						
		Shell size 1			Shell size 2			
Number of contacts		8 + PE	14 + PE	17 + PE	5 + PE	12 + PE	14 + PE	19 + PE
Electrical Characteristics								
Rated insulation voltage	IEC 60664-1	400 V	100 V	100 V	400 V	3 x 500 V 9 x 300 V	400 V	250 V
Rated impulse withstand voltage	IEC 60664-1	6000 V	3000 V	3000 V	6000 V	3 x 6000 V 9 x 4000 V	3110 V	4000 V
Pollution degree	IEC 60664-1	3	3	3	3	3	3	3
Installation (overvoltage) category	IEC 60664-1	III	III	III	III	III	III	III
Material group	IEC 60664-1	II	II	II	II	II	II	II
Test voltage	IEC 60664-1	3110 V	1680 V	1680 V	2900 V	3 x 2900 V 9 x 1960 V	3110 V	1960 V
Current carrying capacity	IEC 60512-3, Test 5b	12 A	11 x 6 A 4 x 18 A	6 A	21 A	3 x 21 A 9 x 11 A	4 x 6 A 11 x 12 A	6 A
Insulation resistance	IEC 60512-2, Test 3a	$\geq 10^8 \Omega$						
Contact resistance	IEC 60512-2, Test 2a	$\leq 5 \text{ m}\Omega$						
Climatical Characteristics								
Climatic category	IEC 6068-1	40 / 125 / 56			40 / 100 / 56	40 / 125 / 56		
Operating temperature		-40°C ... +125°C (5+PE: +100°C) / -40°F ... +265°F (5+PE: +212°F)						
Mechanical Characteristics								
IP-degree of protection	IEC 60529	IP 65						
Insertion and withdrawal force	IEC 60512-7, Test 13b	$\leq 25 \text{ N}$	$\leq 30 \text{ N}$	$\leq 22 \text{ N}$	$\leq 15 \text{ N}$	$\leq 25 \text{ N}$	$\leq 30 \text{ N}$	$\leq 25 \text{ N}$
Mechanical operation	IEC 60512-5, Test 9a	≥ 500 mating cycles						
Materials								
Housing material		Polyamid 6.6						
Dielectric material		Polyamid 6.6						
Gasket material		Neoprene						
Contact plating		silver plated / gold plated						
Other Characteristics								
Termination technique		crimp			screw	crimp		
Wire range mm ² / AWG		0,14 - 1,5 / 26 - 16	0,14 - 2,5 / 26 - 14	0,14 - 1,0 / 26 - 18	4 / 10	0,14 - 2,5 / 26 - 14	0,14 - 2,5 / 26 - 14	0,14 - 1,0 / 26 - 18
Flammability		UL 94 V0						
Locking system		bayonet						



The stated technical values refer to the use as connector.
If these components are used as plug and socket device a reduced current carrying capacity has to be considered.

C 16-3

Shell size 2
Male cable connectors



I



H



K

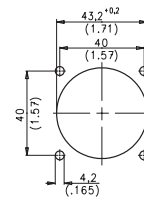
Description	Drawing	No. of cont.	Contacts ²⁾	Part No. Cable outlet ³⁾		
				PG 13,5	PG 16	PG 21
Male cable connector, long, style I with internal strain relief, 5 + PE screw termination, 12 + PE-, 14 + PE and 19 + PE-version without contacts ¹⁾		5 + PE	–	C016 20I005 103 2	C016 20I005 104 2	C016 20I005 105 2
		12 + PE	9 x .N 01 016 00... 4 x .N 01 025 00...	C016 10I012 003 2	C016 10I012 004 2	C016 10I012 005 2
		14 + PE	4 x .N 01 015 00... 11 x .N 01 016 00...	C016 10I014 003 2	C016 10I014 004 2	C016 10I014 005 2
		19 + PE	.N 01 015 000...	C016 10I019 003 2	C016 10I019 004 2	C016 10I019 005 2
Male cable connector, short, style H with clamping ring, 5 + PE screw termination, 12 + PE-, 14 + PE and 19 + PE-version without contacts ¹⁾		5 + PE	–	C016 20H005 103 2	C016 20H005 104 2	–
		12 + PE	9 x .N 01 016 00... 4 x .N 01 025 00...	C016 10H012 003 2	C016 10H012 004 2	–
		14 + PE	4 x .N 01 015 00... 11 x .N 010 1600...	C016 10H014 003 2	C016 10H014 004 2	C016 10H014 005 2
		19 + PE	.N 01 015 00...	C016 10H019 003 2	C016 10H019 004 2	–
Male cable connector, style K with clamping ring, 5 + PE screw termination, 12 + PE-, 14 + PE and 19 + PE-version without contacts ¹⁾		5 + PE	–	–	C016 20K005 104 2	–
		12 + PE	9 x .N 01 016 00... 4 x .N 01 025 00...	–	C016 10K012 004 2	–
		14 + PE	4 x .N 01 015 00... 11 x .N 01 016 00...	–	C016 10K014 004 2	–
		19 + PE	.N 01 015 00...	–	C016 10K019 004 2	–

C 16-3

Shell size 2
Female receptacle



G



Panel cutout

Identification	Drawing	No. of cont.	Contacts ²⁾	Part No.
Female receptacle, style G, 5 + PE screw termination, 12 + PE-, 14 + PE and 19 + PE-version without contacts ¹⁾		5 + PE	–	C016 20G005 100 2
		12 + PE	9 x .N 02 016 00... 4 x .N 02 025 00...	C016 10G012 000 2
		14 + PE	4 x .N 02 015 00... 11 x .N 02 016 00...	C016 10G014 000 2
		19 + PE	.N 02 015 00...	C016 10G019 000 2

¹⁾ Please order crimp contacts separately, see page 30/31.

²⁾ Part No system for crimp contacts, see page 32.

³⁾ Cable outlet in mm, see page 32.

Summary of Part No.

Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
C016 00U000 000 1	26	C016 10E014 003 2	28	C016 10H019 003 2	27	C016 20E005 103 2	28
C016 00U000 000 2	29	C016 10E014 004 2	28	C016 10H019 004 2	27	C016 20E005 104 2	28
C016 00U000 010 2	29	C016 10E014 005 2	28	C016 10H17 003 1	24	C016 20E005 105 2	28
C016 00U000 020 1	26	C016 10E017 002 1	25	C016 10I008 002 1	24	C016 20F005 104 2	28
C016 00V000 000 1	26	C016 10E017 003 1	25	C016 10I008 003 1	24	C016 20G005 100 2	27
C016 00V000 000 2	29	C016 10E019 003 2	28	C016 10I012 003 2	27	C016 20H005 103 2	27
C016 00V000 010 2	29	C016 10E019 004 2	28	C016 10I012 004 2	27	C016 20H005 104 2	27
C016 00V000 020 1	26	C016 10E019 005 2	28	C016 10I012 005 2	27	C016 20I005 103 2	27
C016 10C008 000 1	26	C016 10F008 002 1	25	C016 10I014 002 1	24	C016 20I005 104 2	27
C016 10C012 000 2	28	C016 10F008 003 1	25	C016 10I014 003 1	24	C016 20I005 105 2	27
C016 10C014 000 1	26	C016 10F012 004 2	28	C016 10I014 003 2	27	C016 20K005 104 2	27
C016 10C014 000 2	28	C016 10F014 002 1	25	C016 10I014 004 2	27	FH 0000-016	26
C016 10C017 000 1	26	C016 10F014 003 1	25	C016 10I014 005 2	27	FH 0002-016	29
C016 10C019 000 2	28	C016 10F014 004 2	28	C016 10I017 002 1	24	HN 01 015 0005 (1)	30
C016 10D008 002 1	25	C016 10F017 002 1	25	C016 10I017 003 1	24	HN 01 015 0005 (2)	30
C016 10D008 003 1	25	C016 10F017 003 1	25	C016 10I019 003 2	27	HN 01 015 0039 (1)	30
C016 10D012 003 2	28	C016 10F019 004 2	28	C016 10I019 004 2	27	HN 01 015 0039 (2)	30
C016 10D012 004 2	28	C016 10G008 000 1	25	C016 10I019 005 2	27	HN 01 016 0002 (1)	30
C016 10D014 002 1	25	C016 10G012 000 2	27	C016 10K008 002 1	24	HN 01 016 0002 (2)	30
C016 10D014 003 1	25	C016 10G014 000 1	25	C016 10K008 003 1	24	HN 01 016 0003 (1)	30
C016 10D014 003 2	28	C016 10G014 000 2	27	C016 10K012 004 2	27	HN 01 016 0003 (2)	30
C016 10D014 004 2	28	C016 10G017 000 1	25	C016 10K014 002 1	24	HN 01 016 0004 (1)	30
C016 10D017 002 1	25	C016 10G019 000 2	27	C016 10K014 003 1	24	HN 01 016 0004 (2)	30
C016 10D017 003 1	25	C016 10H008 002 1	24	C016 10K014 004 2	27	HN 01 016 0005 (1)	30
C016 10D019 003 2	28	C016 10H008 003 1	24	C016 10K017 002 1	24	HN 01 016 0005 (2)	30
C016 10D019 004 2	28	C016 10H012 003 2	27	C016 10K017 003 1	24	HN 01 016 0011 (1)	30
C016 10E008 002 1	25	C016 10H012 004 2	27	C016 10K019 004 2	27	HN 01 016 0011 (2)	30
C016 10E008 003 1	25	C016 10H014 002 1	24	C016 10N008 006 1	25	HN 01 025 0001 (1)	30
C016 10E012 003 2	28	C016 10H014 003 1	24	C016 10N014 006 1	25	HN 01 025 0001 (2)	30
C016 10E012 004 2	28	C016 10H014 003 2	27	C016 10N017 006 1	25	HN 01 025 0010 (1)	30
C016 10E012 005 2	28	C016 10H014 004 2	27	C016 20C005 100 2	28	HN 01 025 0010 (2)	30
C016 10E014 002 1	25	C016 10H014 005 2	27	C016 20D005 103 2	28	HN 02 015 0005 (1)	31
C016 10E014 003 1	25	C016 10H017 002 1	24	C016 20D005 104 2	28	HN 02 015 0005 (2)	31