

DS 5015

MIL-C-5015 Style Circular Connectors



MAIN CHARACTERISTICS

Characteristics

- Intermateable and intermountable with other MIL-C-5015 (Style) connectors.
- Several kinds of plating, all cadmium free (olive drab zinc alloy, black zinc alloy, electroless nickel upon request).
- Solder contacts, silver plated copper alloy, from AWG 16 to AWG 0.
- Polychloropren (rubber) inserts (A, E, F and R classes).
- Threaded coupling
- Coding by insert rotation (4 positions).
- Operating temperature from -55°C to +125°C.
- Insulation resistance 5 000 MW minimum (at 25°C).
- 500 mating cycles.
- Selection of connectors with First Mate / Last Break earth contact (DL Series).
- CE & VDE approved, UL approval pending.

Electrical Characteristics

- DS Standard Solder Contacts

Contact Size AWG	16	12	8	4	0
Contact Pin Diameter (mm)	1.6	2.4	3.6	5.7	9.1
Current Rating (A)	13	23	46	80	150
Wire Section (mm ²)	0,5 to 1,5	2 to 4	6 to 10	16 to 25	35 to 60
Dielectric Material Outer Diameter (mm)	1.6	2.8	5.2	8.3	11.8

- Insert Arrangement Service Rating

Service Rating	Inst.	A	D	E	B	C
Test Voltage AC (RMS)	1000	2000	2800	3500	4500	7000
Operating Voltage (AC)	250	700	1250	1750	2450	4200
Operating Voltage (DC)	200	500	900	1250	1750	3000

DESCRIPTION

The DS5015 Series is the new Amphenol MIL-C-5015 style connectors range for industrial and commercial applications.

Intended for general-purpose applications, these connectors are widely used in automotive, robotics, machine tool and welding industries, as well as in numerous other commercial and industrial applications, ranging from heavy equipment to ECG monitoring cables.

Shell components are made of high grade aluminium alloy to provide strength and environmental protection. This serie offers a wide variety of shell styles, contact patterns and accessories. The DS series is available in class A, B, E, F, and R, depending on the conditions and performance required.

The DS5015 SERIES also offers a range of connectors with First-Mate Last-Break earth contact.

DS 5015



Amphenol

Insert Arrangements

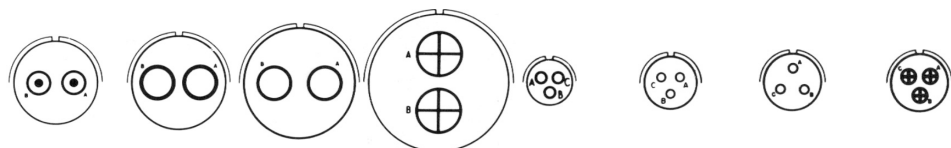
Front Face view of Inserts.

• Contact legend:

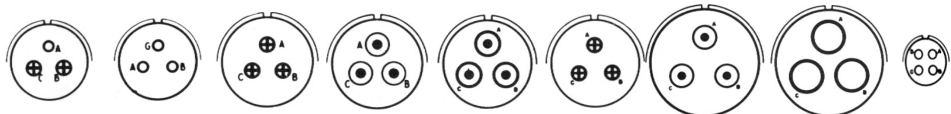
Symbol					
Contact Size AWG	16	12	8	4	0



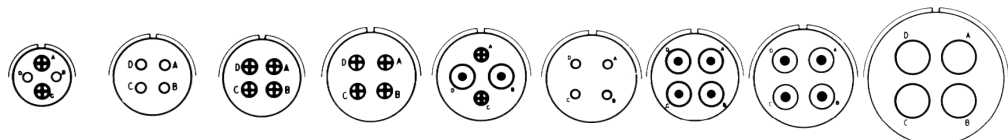
Insert Arrangement	16-12	22-7	10SL-4	12S-3	14S-9	16S-4	16-11	18-3	20-23
Service Rating	A	E	A	A	A	D	A	D	A
Number of Contacts	1	1	2	2	2	2	2	2	2
Contact Size AWG	4	0	16	16	16	16	12	12	8



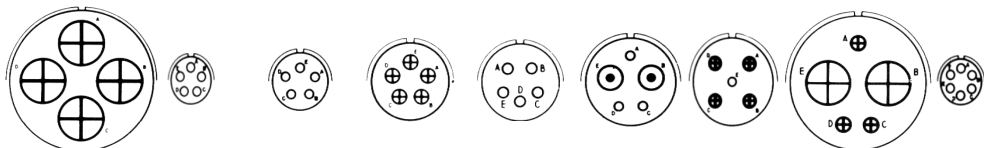
Insert Arrangement	22-8	24-9	28-7	32-5	10SL-3	14S-7	16S-5	16-10
Service Rating	E	A	D	D	A	A	A	A
Number of Contacts	2	2	2	2	3	3	3	3
Contact Size AWG	12	4	4	0	16	16	16	12



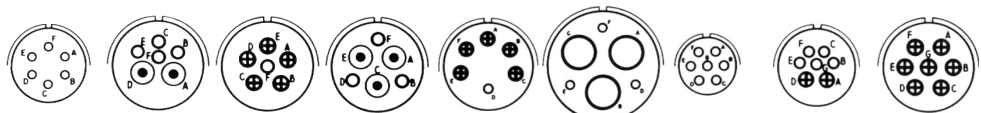
Insert Arrangement	18-5	18-22	20-3	20-19	22-2	22-9	28-3	28-6	14S-2
Service Rating	D	D	D	D	E	E	E	D	Inst.
Number of Contacts	3	3	3	3	3	3	3	3	4
Contact Size AWG	16/12	12	8	8	8	12	8	4	16



Insert Arrangement	16-9	18-4	18-10	20-4	22-4	22-10	22-22	24-22	32-17
Service Rating	A	D	A	D	A	E	A	D	D
Number of Contacts	2 2	4	4	4	2 2	4	4	4	4
Contact Size AWG	16 12	16	12	12	12 8	16	8	8	4



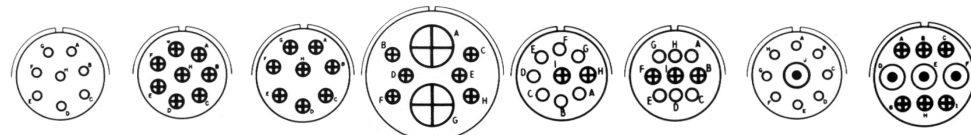
Insert Arrangement	36-5	14S-5	16S-8	18-11	18-20	22-12	22-13	32-1	14S-6
Service Rating	A	Inst.	A	A	A	D	A & D (E)	D & A (E)	Inst.
Number of Contacts	4	5	5	5	5	3 2	1 4	3 2	6
Contact Size AWG	0	16	16	12	16	16 8	16 12	12 0	16



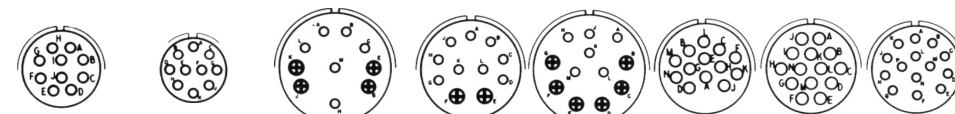
Insert Arrangement	18-12	20-8	20-17	20 22	22 15	28 22	16S-1	18-9	20-15
Service Rating	A	Inst.	A	A	A & E (D)	D	A	Inst.	A
Number of Contacts	6	4 2	1 5	3 3	1 5	3 3	7	5 2	7
Contact Size AWG	16	16 8	16 12	16 8	16 12	16 4	16	16 12	12



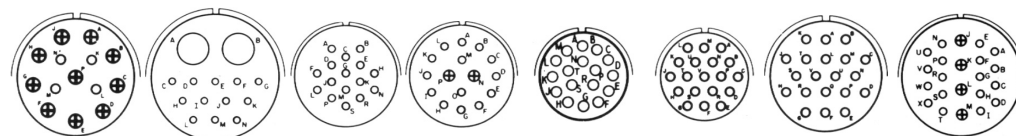
Insert Arrangement	24-2	24-10	28-10	18-8	20-7
Service Rating	D	A	A & D (G)	A	D & A (C,D,E,F)
Number of Contacts	7	7	3 2 2	7 1 8	
Contact Size AWG	12	8	12 8 4	16 12 16	



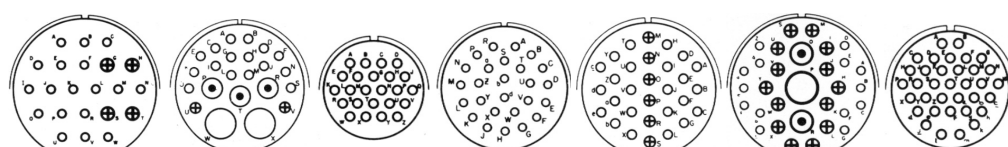
Insert Arrangement	22-18	22-23	24-6	32-15	20-16	20-18	22-27	24-11
Service Rating	D & A (C,D,E)	A & D (H)	A & D (A,G,H)	D	A	A	A & D (F)	A
Number of Contacts	8	8	8	6 2	7 2	6 3	8 1	6 3
Contact Size AWG	16	12	12	12 0	16 12	16 12	16 8	12 8



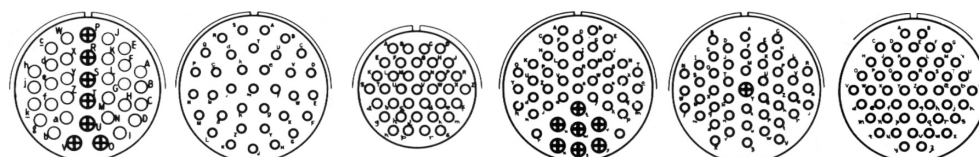
Insert Arrangement	18-1	18-19	28-19	24-20	28-9	20-11	20-27	22-19
Service Rating	Inst. & A (B,C,F,G)	A	A, D (A,B) & B (H,M)	D	D	Inst.	A	A
Number of Contacts	10	10	6 4	9 2	6 6	13	14	14
Contact Size AWG	16	16	16 12	16 12	16 12	16	16	16



Insert Arrangement	28-20	32-9	24-5	24-7	20-29	22-14	28-16	28-11
Service Rating	A	D	A	A	A	A	A	A
Number of Contacts	4 10	12 2	16	14 2	17	19	20	18 4
Contact Size AWG	16 12	16 4	16	16 12	16	16	16	16 12



Insert Arrangement	36-1	32-6	24-28	28-12	32-8	36-9	28-15
Service Rating	D	A	Inst.	A	A	A	A
Number of Contacts	18 4	16 3 2 2	24	26	24 6	14 2 14 1	35
Contact Size AWG	16 12	16 8 12 4	16	16	16 12	16 8 12 4	16



Insert Arrangement	32-7	36-15	28-21	36-7	36-8	36-10
Service Rating	Inst. & Bal (A)	D (M) & Bal (A)	A	A	A	A
Number of Contacts	28 7	35	37	40 7	46 1	48
Contact Size AWG	16 12	16	16	16 12	16 12	16

DL Serie: Contact Arrangements

First Mate / Last Break earth contact indicated with black color.



Insert Arrangement	10SL-3	18-10	22-22	24-10
Number of Contacts	2 + T	3 + T	3 + T	6 + T
Contact Size AWG	16	12	8	8

The DL connectors are available in the following arrangements:

- Box mounting receptacle, socket contacts (DL 3102A __-__-S)
- Straight Plug, pin contacts (DL 3106A __-__-P)
- 90° angle plug, pin contacts (DL 3108A __-__-P)

Connectors:

DS 5015 Series	DS 3100	A	18	3	S	—	—
Series Designation: DS: Amphenol DS 5015 Series (MIL-C-5015 Style) DL: Amphenol DL Series (First Mate / Last Break earth contact).							
Shell Style: 3100: Wall Mounting Receptacle 3101: Cable Connecting Receptacle 3102: Box Mounting Receptacle 3106: Straight Plug 3108: 90 Angle Plug							
Connector Class: A: General purpose applications. Solid back Shell. Polychloropren insert. E: Environmental resisting with grommet and strain relief backshell (Cable clamp integrated). Polychloropren insert. F: Environmental resisting with grommet, "O" ring seal and strain relief backshell (Integrated Cable clamp). Polychloropren insert. R: Environmental resisting , lightweight and shorter overall length (Integrated Cable clamp). Polychloropren insert.							
Shell Size: See inside pages 10SL, 12S, 14S, 16S, 16, 18, 20, 22, 24, 28, 32, 36							
Contact arrangements: See inside pages							
Contact Type: P: Pin contact (male) S: Socket contact (female)							
Coding: No suffix: Standard Position W, X, Y, Z : Consult Amphenol							
Finish: No suffix: Olive Drab Zinc Alloy BZ: Black Zinc Alloy NI: Electroless Nickel. Consult Amphenol							

Accessories:

Cable clamp (including bushing)	DS 3057 4A
Cable Clamp Designation: DS 3057: For DS 5015 series, A DL 3057: For DL Series	
Cable Clamp Size: According to shell size. See Inside pages. 4A (10SL, 12S), 6A (14S), 8A (16S,16), 10A (18), 12A (20,22), 16A (24,28), 20A (32), 24A (36).	

Protection cap	DS 25042 10SL
Cap Designation : DS 25042: For Plug DS 25043: For Receptacle	
Cap Size: Same as shell size. See Inside pages. 10SL, 12S, 14S, 16S, 16, 18, 20, 22, 24, 28, 32, 36.	

Do not hesitate to contact us for further information



Amphenol

Amphenol Socapex

Mil/Aero & Industrial Business Unit
 948, Promenade de l'Arve - BP 29
 F - 74311 Thyez Cedex

Tel.: +33 (0) 4 50 89 28 00 - Fax: +33 (0) 4 50 96 19 41
<http://www.amphenol.com>

Sales office

Tel.: +33 (0) 1 49 05 30 00 - Fax: +33 (0) 1 49 05 30 43