

# D83 SERIES

COMPACT D-SUB



**Amphenol** CANADA  
MILITARY & AEROSPACE

# Features

Standard and custom discrete contact arrangements  
AWG 23 to 12 (M39029 style)

Can accommodate RF contacts and fiber optics

Suitable for high-speed communications up to 10Gbps  
(e.g. 10GBASE-T@ 500MHz)

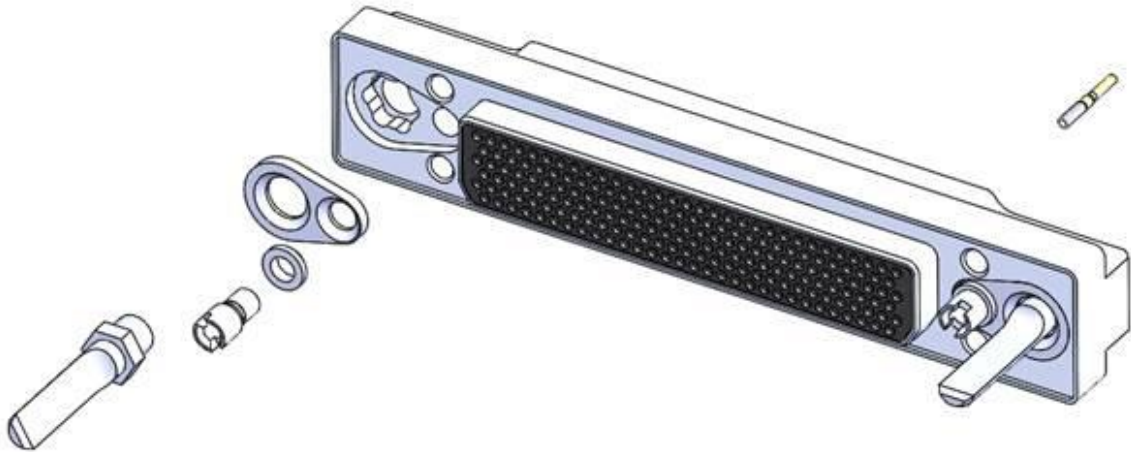
Interface and environmental performance exceeding  
standard format rectangular connectors

Performance highlights:

- Operating temperature range -55°C to +125°C
- DWV = 1000 V ac
- IR = 5,000 MΩ (sea level)
- Typical working voltage = 120 V ac
- Current rating = 3.5 A dc
- Corrosive environments: resistance to 500 hr salt-spray exposure for selected shell plating options:
  - 3 - Cadmium (Clear)
  - 5 - Zn Ni (black chromate 500 hrs)
  - 7 - OD Cadmium
  - 8 - Ni-PTFE / Durmalon
  - S - Stainless steel

# Example arrangements

**N183 (custom)**



**K043 (standard)**



# Catalog Standards

**D83- X XX XXX X X - X XX**

## MAIN STYLES:

### Receptacle/socket

#### Crimp termination

SDXXXT	Standard cable
SMXXXT	Rear panel mount
SFXXXT	Float mount

#### PCB tail termination (panel mount)

SMXXXB	Straight
SMXXXA	Right angle

#### PCB tail termination (standalone)

SDXXXB	Straight
SDXXXA	Right angle

### Plug/pin

#### Crimp termination

PDXXXT	Standard cable
PMXXXT	Rear panel mount
PFXXXT	Float mount

#### PCB tail termination (panel mount)

PMXXXB	Straight
PMXXXA	Right angle

#### PCB tail termination (standalone)

PDXXXB	Straight
PDXXXA	Right angle

## FULL OPTIONS:

### Shell Size & Contact Pattern

(See tables)

#### Gender

- P - pin = (plug)
- S - socket = (receptacle)
- receptacle variants:
- E - rcpt, with EMI spring
- D - rcpt, with EMI spring & integrated backshell
- B - rcpt, integrated backshell

#### Connector Style

- D = standard
- M = panel mount (rear)
- F = float mount

#### Shell Plating

- 0 - other (incl. plastic)
- 1 - Nickel
- 2 - Tin
- 3 - Cadmium (Clear)
- 4 - Gold
- 5 - Zn Ni (black chromate 500 hrs)
- K - Zn Ni (48 hrs)
- 6 - Yellow chromate
- 7 - OD Cadmium
- 8 - Ni-PTFE / Durmalon
- A - Anodized (black)
- L - Electro-deposited aluminum
- S - Stainless steel

#### Contact Termination

- A - rt angle PCB tail (.125)
- B - straight PCB tail (.125)
- V - rt angle PCB tail long (.250)
- W - straight PCB tail long (.250)
- H - wired/harnessed
- T - crimp
- R - right angle crimp
- U - compliant tail
- C - solder cup

#### Mounting

- 1-clinch nut
- 2-clinch nut w/ rt angle bracket
- 3-no hardware or through-hole
- 4-float mount
- P-hex jackpost
- 6-jackpost (round, slotted)
- 4-jackscrew
- 5-captive jackscrew (hex/Allen)
- 9-captive jackscrew, long (slotted) with e-clip
- H-screwlock (short)
- L-screwlock (long)
- 7-guide post
- 8-guide post socket

# Contact arrangements

Code (Shell/Contact arrangement)	23	16	12	Plug front view
<b>D83-A</b> XX005X-XXX	5			
BXX2P2		2		
BXX009	9			
CXX013	13			
DXX015	15			
DXX3P3		3		
DXX7P2	5	2		
EXX11P2	9	2		
EXX019	19			
EXX7P3	4	3		
FXX15P2	13	2		
FXX023	23			
FXX5P5		5		
GXX033	33			

Code (Shell/Contact arrangement)	23	16	12	Plug front view
<b>D83-H</b> XX10P4X-XXX	6		4	
HXX29P7	22	7		
HXX36P2	34		2	
HXX54P2	52	2		
HXX5P5			5	
HXX066	66			

# Contact arrangements

Code (Shell/Contact arrangement)	23	16	12	Plug front view
<b>D83-JXX17P4X-XXX</b>	13	4		
JXX25P2	23	2		
JXX033	33			
JXX7P7		7		
KXX27P4	23	4		
KXX35P2	33	2		
KXX043	43			
KXX9P9		9		
LXX6P6			6	
LXX078	78			
MXX102	102			
NXX183	183			
NXX195	195			

# Backshell Standards

DBS - X X X - X X XX - XXX



**Shell Size**  
(See tables)

**Body Length**

- 0 = .690 min
- A = .750
- B = .875
- C = 1.000
- D = 1.125
- E = 1.250

**Shell Plating**

- 0 - other (incl. plastic)
- 1,N - Nickel
- 2 - Tin
- 3,C - Cadmium (Clear)
- 4,G - Gold
- 5,B - Zn Ni (black chromate 500 hrs)
- K - Zn Ni (48 hrs)
- 6 - Yellow chromate
- 7,D - OD Cadmium
- 8,T - Ni-PTFE / Durmalon
- A - Anodized (black)
- L - Electro-deposited aluminum
- S - Stainless steel

**Exit Shape**

- E = elliptical exit
- F = elliptical w/ strain relief tab
- C = circular exit
- D = circular w/ strain relief tab

**Exit Angle**

- 00 - straight
- 90 - right angle exit

**Exit Width**

	<i>W = exit width</i>	<i>min shell size</i>
A	0.3	A
B	0.45	B
C	0.6	C
D	0.7	D
E	0.85	E
F	0.965	F
G	1.155	H
H	1.345	H
J	1.46	K
K	1.58	K
L	1.76	K only
N	1.645	M
P		
R		

