



ITT

Interconnect Solutions
Cannon, VEAM, BIW

Ensuring over **20 years**
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between two worlds across
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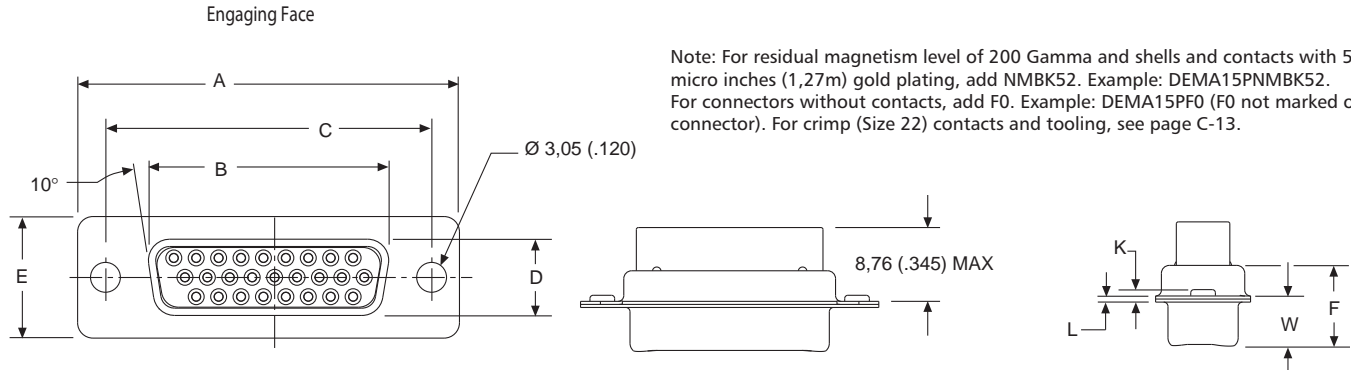
Engineered for life

D*MA Standard Density Crimp Contact Cable Connector

Plug

- For contact cavity arrangements, see pages C-44.
- For panel cutouts, see page C-49.

Shell Size	Layout	Through Hole	Dual Float Mount
DE	9	DEMA9P	DEMAY9P
DA	14	DAMA15P	DAMAY15P
DB	25	DBMA25P	DBMAY25P
DC	37	DCMA37P	DCMAY37P
DD	50	DDMA50P	DDMAY50P



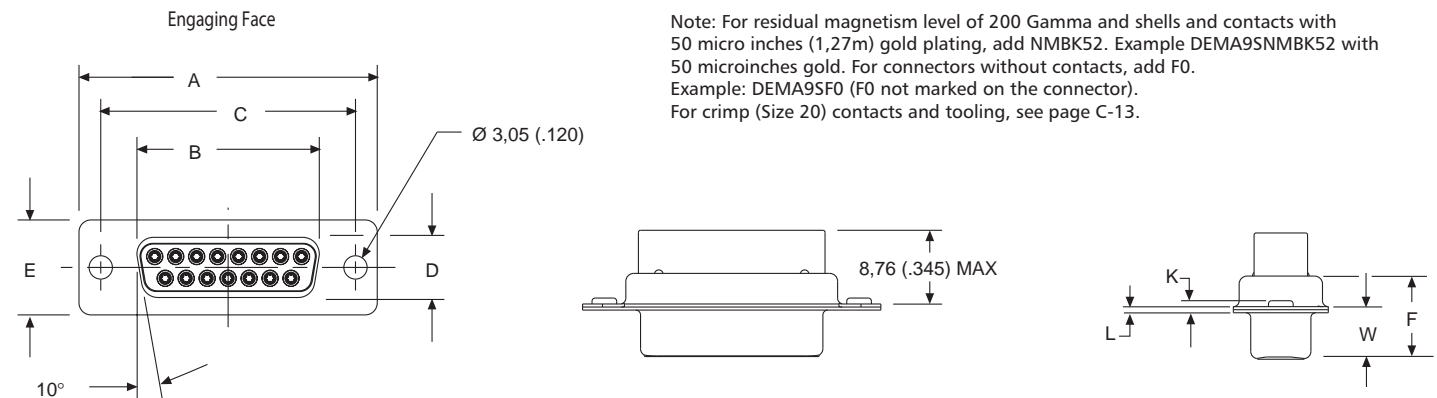
Dimensions

Shell size	A ± 0,38 (.015)	B ± 0,13 (.005)	C ± 0,13 (.005)	D ± 0,13 (.005)	E ± 0,38 (.015)	F ± 0,25 (.010)	W ± 0,368 (.0145)	K ± 0,317 (.0125)	L ± 0,25 (.010)
DE	30,81 (1.213)	16,92 (.666)	24,99 (8,36)	8,36 (.329)	12,55 (.494)	10,90 (.429)	6,94 (.273)	1,206 (.0475)	0,76 (.030)
DA	39,14 (1.541)	25,25 (.994)	33,32 (1.312)	8,36 (.329)	12,55 (.494)	10,90 (.429)	6,94 (.273)	1,206 (.0475)	0,76 (.030)
DB	53,04 (2.088)	38,96 (1.534)	47,04 (1.852)	8,36 (.329)	12,55 (.494)	10,90 (.429)	6,94 (.273)	1,206 (.0475)	0,76 (.030)
DC	69,32 (2.729)	55,42 (2.182)	63,50 (2.500)	8,36 (.329)	12,55 (.494)	10,90 (.429)	6,94 (.273)	1,206 (.0475)	0,76 (.030)
DD	66,93 (2.635)	52,81 (2.079)	61,11 (2.406)	11,07 (.436)	15,37 (.605)	10,90 (.429)	6,94 (.273)	1,206 (.0475)	0,76 (.030)

Receptacle

- For contact cavity arrangements, see pages C-44.
- For panel cutouts, see page C-49.

Shell Size	Layout	Through Hole	Dual Float Mount
DE	9	DEMA9S	DEMAY9S
DA	15	DAMA15S	DAMAY15S
DB	25	DBMA25S	DBMAY25S
DC	37	DCMA37S	DCMAY37S
DD	50	DDMA50S	DDMAY50S



Dimensions

Shell size	A ± 0,38 (.015)	B ± 0,13 (.005)	C ± 0,13 (.005)	D ± 0,13 (.005)	E ± 0,38 (.015)	F ± 0,25 (.010)	W ± 0,368 (.0145)	K ± 0,317 (.0125)	L ± 0,25 (.010)
DE	30,81 (1.213)	16,33 (.643)	24,99 (.984)	7,90 (.311)	12,55 (.494)	10,90 (.429)	6,94 (.273)	1,206 (.0475)	0,76 (.030)
DA	39,14 (1.541)	24,66 (.971)	33,32 (1.312)	7,90 (.311)	12,55 (.494)	10,90 (.429)	6,94 (.273)	1,206 (.0475)	0,76 (.030)
DB	53,04 (2.088)	38,38 (1.511)	47,04 (1.852)	7,90 (.311)	12,55 (.494)	10,90 (.429)	6,94 (.273)	1,206 (.0475)	0,76 (.030)
DC	69,32 (2.729)	54,84 (2.159)	63,50 (2.500)	7,90 (.311)	12,55 (.494)	10,90 (.429)	6,94 (.273)	1,206 (.0475)	0,76 (.030)
DD	66,93 (2.635)	52,42 (2.064)	61,11 (2.406)	10,74 (.423)	15,37 (.605)	10,90 (.429)	6,94 (.273)	1,206 (.0475)	0,76 (.030)

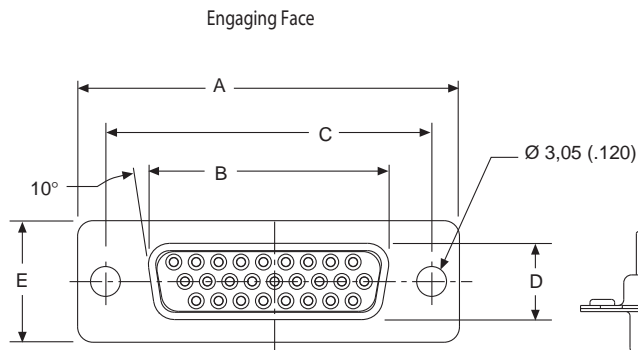
Cannon Crimp, Size 22 Military/High Reliability

D*MA High Density Crimp Contact Cable Connector

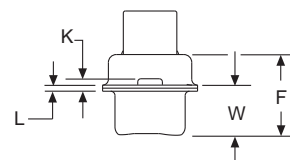
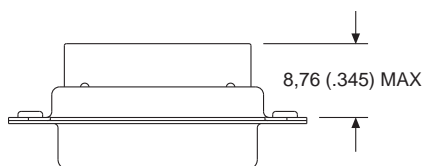
Plug

- For contact cavity arrangements, see pages C-44.
- For panel cutouts, see page C-49.

Shell Size	Layout	Through Hole	Dual Float Mount
DE	15	DEMA15P	DEMAY15P
DA	26	DAMA26P	DAMAY26P
DB	44	DBMA44P	DBMAY44P
DC	62	DCMA62P	DCMAY62P
DD	78	DDMA78P	DDMAY78P
DF	104	DFMA104PF216	DFMA4104PF216



Note: For Residual Magnetism Level of 200 gamma, add B. Example DEMA15PNMB
For shells with 50 microinches gold, add K52. Example: DEMA15PNMBK52.
For connectors without contacts, add F0. Example: DEMA15PF0 (F0 not marked on connector)
For crimp (Size 22) contacts and tooling, see page C-7.



Dimensions

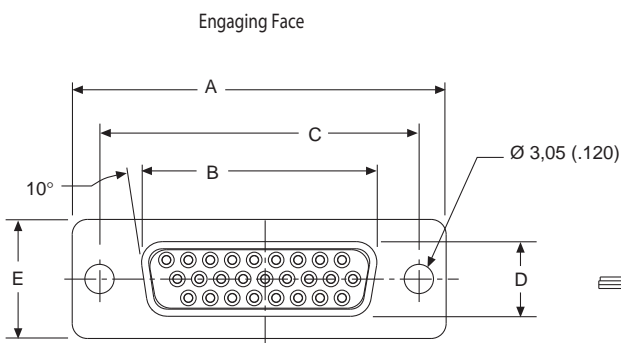
Shell size	A	B	C	D	E	F	W	W	K	K	L
	± 0,38 (.015)	± 0,13 (.005)	± 0,13 (.005)	± 0,13 (.005)	± 0,38 (.015)	± 0,25 (.010)	± 0,368 (.0145)	± 0,41 (.016)	± 0,317 (.0125)	± 0,25 (.010)	± 0,25 (.010)
DE	30,81 (1.213)	16,92 (.666)	24,99 (.984)	8,36 (.329)	12,55 (.494)	10,72 (.422)	6,693 (.2635)	-	1,206 (.0475)	-	0,76 (.030)
DA	39,14 (1.541)	25,25 (.994)	33,32 (1.312)	8,36 (.329)	12,55 (.494)	10,72 (.422)	6,693 (.2635)	-	1,206 (.0475)	-	0,76 (.030)
DB	53,04 (2.088)	38,96 (1.534)	47,04 (1.852)	8,36 (.329)	12,55 (.494)	10,82 (.426)	-	6,84 (.269)	-	1,52 (.060)	0,99 (.039)
DC	69,32 (2.729)	55,42 (2.182)	63,50 (2.500)	8,36 (.329)	12,55 (.494)	10,82 (.426)	-	6,84 (.269)	-	1,52 (.060)	0,99 (.039)
DD	66,93 (2.635)	52,81 (2.079)	61,11 (2.406)	11,07 (.436)	15,37 (.605)	10,82 (.426)	-	6,84 (.269)	-	1,52 (.060)	0,99 (.039)

DF (see Space Catalog)

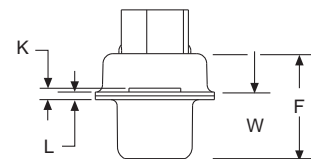
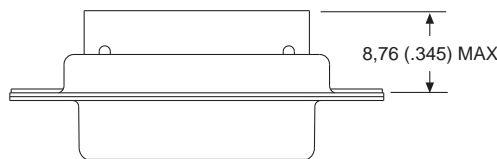
Receptacle

- For contact cavity arrangements, see pages C-44.
- For panel cutouts, see page C-49.

Shell Size	Layout	Through Hole	Dual Float Mount
DE	15	DEMA15S	DEMAY15S
DA	26	DAMA26S	DAMAY26S
DB	44	DBMA44S	DBMAY44S
DC	62	DCMA62S	DCMAY62S
DD	78	DDMA78S	DDMAY78S
DF	104	DFMA104SF216	DFMA4104SF216



Note: For residual magnetism level of 200 Gamma and shells and contacts with 50 micro inches (1,27m) gold plating, add NMBK52. Example DEMA15SNMBK52
contacts and shells with 50 microinches gold. For connectors without contacts, add F0. Example: DEMA15SF0 (F0 not marked on the connector). For crimp (Size 22) contacts and tooling, see page C-13.



Dimensions

Shell size	A	B	C	D	E	F	W	K	L
	± 0,38 (.015)	± 0,13 (.005)	± 0,13 (.005)	± 0,13 (.005)	± 0,38 (.015)	± 0,25 (.010)	± 0,368 (.0145)	± 0,317 (.0125)	± 0,25 (.010)
DE	30,81 (1.213)	16,33 (.643)	24,99 (8,36)	7,90 (.311)	12,55 (.494)	10,90 (.429)	6,94 (.273)	1,206 (.0475)	0,76 (.030)
DA	39,14 (1.541)	24,66 (.971)	33,32 (1.312)	7,90 (.311)	12,55 (.494)	10,90 (.429)	6,94 (.273)	1,206 (.0475)	0,76 (.030)
DB	53,04 (2.088)	38,38 (1.511)	47,04 (1.852)	7,90 (.311)	12,55 (.494)	10,90 (.429)	6,94 (.273)	1,206 (.0475)	0,76 (.030)
DC	69,32 (2.729)	54,84 (2.159)	63,50 (2.500)	7,90 (.311)	12,55 (.494)	10,90 (.429)	6,94 (.273)	1,206 (.0475)	0,76 (.030)
DD	66,93 (2.635)	52,42 (2.064)	61,11 (2.406)	10,74 (.423)	15,37 (.605)	10,90 (.429)	6,94 (.273)	1,206 (.0475)	0,76 (.030)



Dimensions shown in inches (mm)
Specifications and dimensions subject to change

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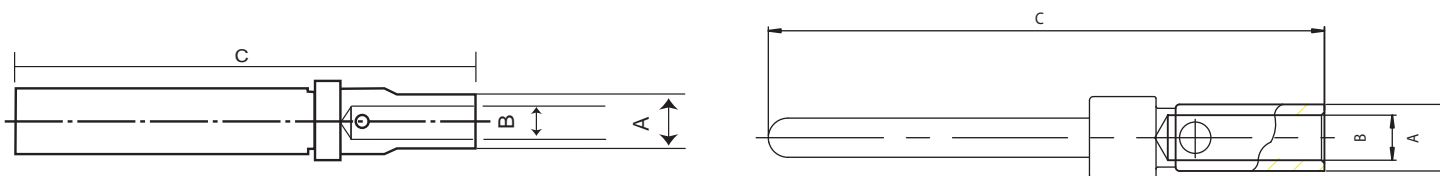
Cannon Crimp Contacts D*MA/D*A Combo Military/High Reliability

MATERIALS AND FINISHES

Contact Size	Wire Size Accom.	Standard Finish		Military Finish		NMB	
		Pin	Socket	Pin	Socket	Pin	Socket
20	20, 22, 24	330-5291-000	031-1007-073	980-0009-472	980-0009-471	330-5291-037	031-1007-052
20-18	1 #18 & 2 #22	330-5291-001	031-1007-001	330-5291-055	031-1007-054	330-5291-108	031-1007-091
20-26	26, 28, 30	330-5291-004	031-1007-004	330-5291-050	031-1007-048	330-5291-109	031-1007-053
22D	22, 24, 26, 28	980-0008-878	980-0008-874	980-0008-878	980-0008-874	030-2042-002	031-1147-002

MIL-C-39029 Cross-Reference

Contact Size	Wire Size Accom.	M39029	M24308	Cannon Part No.
20 Pin	20 / 22 / 24	/ 64-369	/ 11-1	980-0009-472
20 Socket	20 / 22 / 24	/ 63-368	/ 10-1	980-0009-471
22D Pin	24 / 26 / 28	/ 58-360	/ 13-1	980-0008-878
22D Socket	22 / 24 / 26 / 28	/ 57-354	/ 12-1	980-0008-874



AWG size		A ± 0,05	B ± 0,05	C max.
20 – 24	Pin	1,7 (0.067)	1,0 (0.039)	14,2 (0.559)
	Socket	1,7 (0.067)	1,0 (0.039)	13,7 (0.539)
26 – 30	Pin	1,7 (0.067)	0,6 (0.039)	14,2 (0.559)
	Socket	1,7 (0.067)	0,6 (0.039)	13,7 (0.539)

Insertion/Extraction Tools

CIET-20HD

Contact Size	AWG	Plastic Insertion/Extraction		Plastic Extraction	
		Pin	Socket	Pin	Socket
20	20, 22, 24	980-2000-426	CIET-20HD	323-7010-000	CET-20-11
2026	26, 28, 30	980-2000-426	CIET-20HD	323-7010-000	CET-20-11
2018	1 #18	None	None	274-5016-002	CET-20-15
	2 #22	None	None	274-5016-002	CET-20-15
22D	22, 24, 26, 28	274-7048-000	CIET-22D	None	None
High Power	12, 16	274-7003-000	CIET-12	None	None
High Volt	#20	274-7003-000	CIET-12	None	None

Hand Crimp Tools

Contact Size	Wire Size AWG	Crimp Tool		Locator	
		Part Number	Description	Part Number	Description
20	20, 22, 24	995-0001-584	M22520/2-01	995-0001-604	M22520/2-08
		995-0001-585	M22520/1-01	995-0001-244	TH25
2026	26, 28, 30	980-2000-426	M22520/2-01	995-0001-325	L3198-20HD
2018	1 #18, 2 #22	995-0001-584	M22520/2-01	980-0005-722	K250
22D	22, 24, 26, 28	995-0001-584	M22520/2-01	995-0001-739	M22520/2-06

Assembly instructions see page C-44.
For size 8 contacts, please refer to Combo D catalog or website.

Dimensions shown in inches (mm)
Specifications and dimensions subject to change

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C
D Sub
qns C

Cannon Straight PCB, Size 20 Military/High Reliability

Standard Density Straight PC Tail

Plug

- For contact cavity arrangements, see pages C-44.
- For P.C. hole pattern, see pages C-45.
- For panel cutouts, see page C-49.

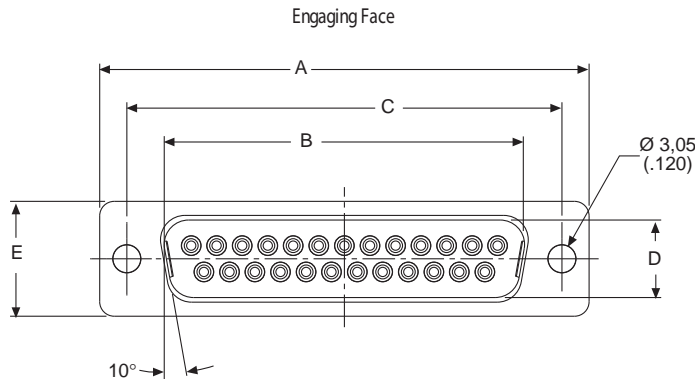
Shell Size	Layout	Through Hole	Dual Float Mount
DE	9	DEM9PM*	DEMY9PM*
DA	15	DAM15PM*	DAMY15PM*
DB	25	DBM25PM*	DBMY25PM*
DC	37	DCM37PM*	DCMY37PM*
DD	50	DDM50PM*	DDMY50PM*

PC Tail Modifiers	X	ØY
M	4.01 ± 0,69 (.158 ± .027)	0,76 ± 0,08 (.030 ± .003)
Q	7,62 ± 0,5 (.300 ± .020)	0,76 ± 0,08 (.030 ± .003)
0L3	4,82 ± 1,5 (.190 ± .020)	0,60 ± 0,08 (.023 ± .003)

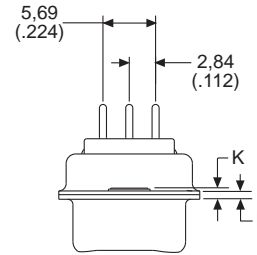
Note: For Residual Magnetism Level of 200 gamma, add NMBK52. Example DEMA15PMNMBK52 contacts and shells with 50 microinches gold. For alternate PC tail modifiers (see tabulation), replace 0L3 with M or Z. Example: DEM9PZNM

0L3 for HE501 connectors and ESA equivalents

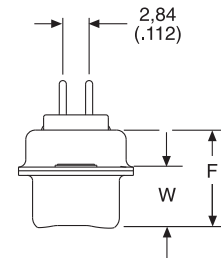
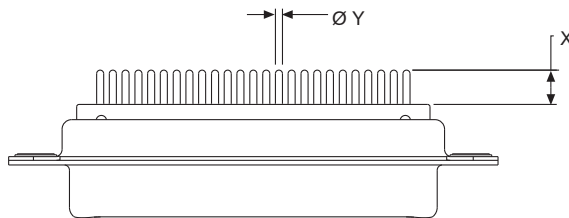
Size D



DD Configuration



Sizes E, A, B, C



Dimensions

Shell size	A	B	C	D	E	F	W	W	K	K	L
	± 0,38 (.015)	± 0,13 (.005)	± 0,13 (.005)	± 0,13 (.005)	± 0,38 (.015)	± 0,25 (.010)	± 0,368 (.0145)	± 0,41 (.016)	± 0,317 (.0125)	± 0,25 (.010)	± 0,25 (.010)
DE	30,81 (1.213)	16,92 (.666)	24,99 (8,36)	8,36 (.329)	12,55 (.494)	10,72 (.422)	6,693 (.2635)	-	1,206 (.0475)	-	0,76 (.030)
DA	39,14 (1.541)	25,25 (.994)	33,32 (1.312)	8,36 (.329)	12,55 (.494)	10,72 (.422)	6,693 (.2635)	-	1,206 (.0475)	-	0,76 (.030)
DB	53,04 (2.088)	38,96 (1.534)	47,04 (1.852)	8,36 (.329)	12,55 (.494)	10,82 (.426)	-	6,84 (.269)	-	1,52 (.060)	0,99 (.039)
DC	69,32 (2.729)	55,42 (2.182)	63,50 (2.500)	8,36 (.329)	12,55 (.494)	10,82 (.426)	-	6,84 (.269)	-	1,52 (.060)	0,99 (.039)
DD	66,93 (2.635)	52,81 (2.079)	61,11 (2.406)	11,07 (.436)	15,37 (.605)	10,82 (.426)	-	6,84 (.269)	-	1,52 (.060)	0,99 (.039)



Dimensions shown in inches (mm)
Specifications and dimensions subject to change

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Standard Density Straight PC Tail

Receptacle

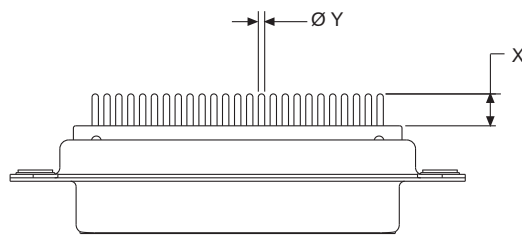
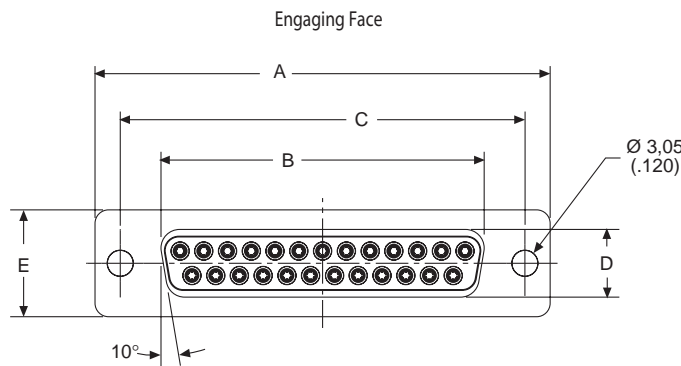
- For contact cavity arrangements, see pages C-44.
- For P.C. hole pattern, see pages C-45.
- For panel cutouts, see page C-49.

Shell Size	Layout	Through Hole	Dual Float Mount
DE	9	DEM9SM	DEMYSM
DA	15	DAM15SM	DAMY15SM
DB	25	DBM25SM	DBMY25SM
DC	37	DCM37SM	DCMY37SM
DD	50	DDM50SM	DDMY50SM

PC Tail Modifiers	X	Y
M	4,01 ± 0,69 (.158 ± .027)	0,76 ± 0,08 (.030 ± .003)
Q	7,62 ± 0,5 (.300 ± .020)	0,76 ± 0,08 (.030 ± .003)
OL3	4,82 ± 1,5 (.190 ± .020)	0,60 ± 0,08 (.023 ± .003)

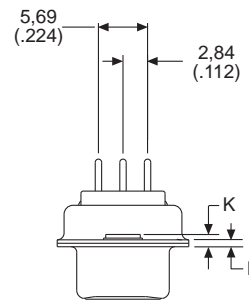
Note: For residual magnetism level of 200 Gamma and shells and contacts with 50 micro inches (1,27m) gold plating, add NMBK52. Example DEMA15SMNMBK52 and shells with 50 microinches gold. For alternate PC tail modifiers (see tabulation), replace with OL3 or Z. Example: DEM9SZNM

OL3 for HE501 connectors and ESA equivalents

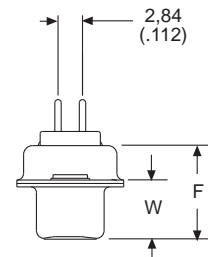


Size D

DD Configuration



Sizes E, A, B, C



Dimensions

Shell size	A ± 0,38 (.015)	B ± 0,13 (.005)	C ± 0,13 (.005)	D ± 0,13 (.005)	E ± 0,38 (.015)	F ± 0,25 (.010)	W ± 0,368 (.0145)	K ± 0,317 (.0125)	L ± 0,25 (.010)
DE	30,81 (1.213)	16,33 (.643)	24,99 (8,36)	7,90 (.311)	12,55 (.494)	10,90 (.429)	6,94 (.273)	1,206 (.0475)	0,76 (.030)
DA	39,14 (1.541)	24,66 (.971)	33,32 (1.312)	7,90 (.311)	12,55 (.494)	10,90 (.429)	6,94 (.273)	1,206 (.0475)	0,76 (.030)
DB	53,04 (2.088)	38,38 (1.511)	47,04 (1.852)	7,90 (.311)	12,55 (.494)	10,90 (.429)	6,94 (.273)	1,206 (.0475)	0,76 (.030)
DC	69,32 (2.729)	54,84 (2.159)	63,50 (2.500)	7,90 (.311)	12,55 (.494)	10,90 (.429)	6,94 (.273)	1,206 (.0475)	0,76 (.030)
DD	66,93 (2.635)	52,42 (2.064)	61,11 (2.406)	10,74 (.423)	15,37 (.605)	10,90 (.429)	6,94 (.273)	1,206 (.0475)	0,76 (.030)

Dimensions shown in inches (mm)
Specifications and dimensions subject to change

Cannon Straight PCB, High Density Plug Military/High Reliability D-Subminiature

High Density Straight PC Tail

Plug

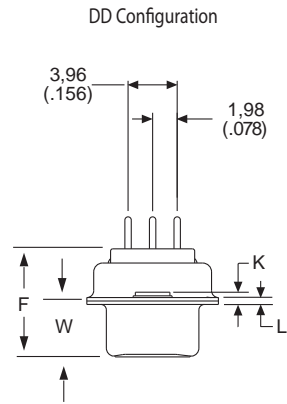
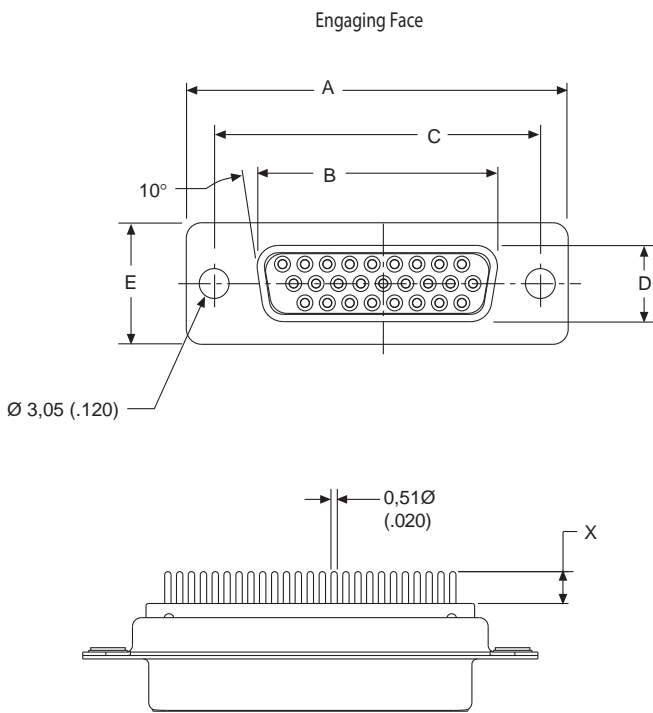
- For contact cavity arrangements, see pages C-44.
- For P.C. hole pattern, see pages C-47.
- For panel cutouts, see page C-49.

Shell Size	Layout	Through Hole	Dual Float Mount
DE	15	DEM15PM*	DEMY15PM*
DA	26	DAM26PM*	DAMY26PM*
DB	44	DBM44PM*	DBMY44PM*
DC	62	DCM62PM*	DCMY62PM*
DD	78	DDM78PM*	DDMY78PM*

PC Tail Modifiers	X
M	4,01 ± 0,69 (.158 ± .027)
Q	7,62 ± 0,5 (.300 ± .020)
OL3	4,82 ± 1,5 (.190 ± .020)

Note: For Residual Magnetism Level of 200 gamma, add NMBK52. Example DEMA15PMNMBK52 and shells with 50 microinches gold. For alternate PC tail modifiers (see tabulation), replace with OL3 or Z. Example: DEM15PZNM

OL3 for HE501 connectors and ESA equivalents



Note: D size connectors have 4 rows of contacts
F size connectors have 5 rows of contacts

Dimensions

Shell size	A	B	C	D	E	F	W	W	K	K	L
	± 0,38 (.015)	± 0,13 (.005)	± 0,13 (.005)	± 0,13 (.005)	± 0,38 (.015)	± 0,25 (.010)	± 0,368 (.0145)	± 0,41 (.016)	± 0,317 (.0125)	± 0,25 (.010)	± 0,25 (.010)
DE	30,81 (1.213)	16,92 (.666)	24,99 (8,36)	8,36 (.329)	12,55 (.494)	10,72 (.422)	6,693 (.2635)	-	1,206 (.0475)	-	0,76 (.030)
DA	39,14 (1.541)	25,25 (.994)	33,32 (1.312)	8,36 (.329)	12,55 (.494)	10,72 (.422)	6,693 (.2635)	-	1,206 (.0475)	-	0,76 (.030)
DB	53,04 (2.088)	38,96 (1.534)	47,04 (1.852)	8,36 (.329)	12,55 (.494)	10,82 (.426)	-	6,84 (.269)	-	1,52 (.060)	0,99 (.039)
DC	69,32 (2.729)	55,42 (2.182)	63,50 (2.500)	8,36 (.329)	12,55 (.494)	10,82 (.426)	-	6,84 (.269)	-	1,52 (.060)	0,99 (.039)
DD	66,93 (2.635)	52,81 (2.079)	61,11 (2.406)	11,07 (.436)	15,37 (.605)	10,82 (.426)	-	6,84 (.269)	-	1,52 (.060)	0,99 (.039)
DF	69,34 (2.73)	55,0 (2.16)	63,50 (2.50)	15,49 (0.61)	20,07 (0.79)	16,45 (.648)	6,94 (.273)	1,206 (.0475)	0,76 (.030)	-	-



Dimensions shown in inches (mm)
Specifications and dimensions subject to change

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