

D*NG - Straight Pressfit Termination

See pages 4-5.

The D*NG is based upon the specification CECC75-301-802. These connectors provide a low-cost alternative to traditional through hole solder contacts. Utilizing stamped “Eye of the Needle” compliant contact tails per IEC-352-5, the parts are quickly and easily mounted onto PCBs without soldering, crimping or specialized tooling. The socket contact engaging area utilizes a “spoon” shape with four points of interconnection. Hardware options provide flexibility and ensure that the final product fits the electrical requirements of any application.

Product Features

Quick and easy press-in installation without specialized tooling
 “Spoon” socket contact provides improved interface compared to “Tuning Fork”
 Closed-entry socket for secure blind mating
 Front-shell only design based on CECC 75-301-802
 “Eye of the Needle” compliant contact tails
 Press-in bolt for ground continuity
 #4-40 UNC and M3 hardware options

D*M Straight Solder Termination (Machined) — Standard PC Tails

See pages 6-7.

D*M straight PCB connectors, equivalent to MIL-C-24308 qualified versions (except for finishes) for printed circuit boards and backplanes in demanding applications. Additional contact lengths, hardware and finish options available; consult factory for details.

Product Features

7.5 A current capacity
 Machined contacts
 2 contact finishes
 Optional vertical standoffs, screw locks, and boardlocks (4 prongs)
 UL file number E8572
 Dimensionally compatible with Combo D®

ZD* - Straight Solder Termination (Stamped)

See pages 8-9.

ZD* straight connectors are available for applications where price is the primary driver. They are available with or without boardlocks and screw locks.

Product Features

Stamped contacts with 5 A current capacity
 Economical
 Optional vertical standoffs with optional harpoon style boardlocks or screw locks

D* - Straight Solder Termination (Machined) — European PC Tails

See pages 10-11.

D* straight connectors are available for high performance uses according to DIN 41652. Available with European length OL contacts.

Select contact finish from 2 performance classes.

Product Features

High performance commercial connectors
 Two contact finish performance classes
 Optional vertical standoffs, threaded inserts and pushfits/boardlocks
 OL2 contact length, other lengths available
 Tin plated contact PC tails (pin & socket)
 Machined contacts

D* - Wrap Post Termination

See pages 12-13.

D* straight connectors are available for high performance uses according to DIN 41652. Contacts available in two popular lengths.

Product Features

High performance commercial class connectors
 Two contact lengths for 2 or 3 wraps
 Machined contacts

Specifications

Current Rating	5 A / 25°C, 3.5 A / 70°C ambient
Temperature Rating	–55°C to 125°C
Contact Resistance	10 mΩ
Test Voltage	1200 Vrms at Sea Level
Ø Plated Through Hole	1,09 - 0,94 (.043 - .037)
PC Tail Press-in Force	100N/contact max.
PC Tail Push-out Force	30N/contact min.
PC Board Thickness	3,20 - 1,60 (.125 - .062)

Materials and Finishes

Description	Material	Finish
Shell	Steel	Tin
Insulator	Thermoplastic, UL 94V-0	None (color: black)
Contact	Copper Alloy	Gold over Nickel (Standard) or Gold over PdNi (-408)
Hardware	Steel/Copper Alloy	Tin/Zinc

Specifications

Temperature Rating	–55°C to 125°C
Current Rating	7.5 A
Contact Resistance	55 millivolt max at 7.5 A test current
Dielectric Withstanding Voltage	1000 VAC at Sea Level

Materials and Finishes

Description	Material	Finish
Shell	Steel	Tin
Insulator	Thermoplastic, UL 94V-0	None (color: dark green)
Contact	Copper Alloy	Gold over Nickel. Terminating end Tin (Socket only)
Hardware	Steel/Copper Alloy	Tin/Zinc

Specifications

Temperature Rating	–55°C to 105°C
Current Rating	5 A
Contact Resistance	15 mΩ
Dielectric Withstanding Voltage	1000 VAC at Sea Level

Materials and Finishes

Description	Material	Finish
Shell	Steel	Tin
Insulator	Thermoplastic, UL 94V-0	None (color: black)
Contacts	Copper Alloy	Gold over Nickel
Hardware	Steel/Copper Alloy	Tin/Zinc

Specifications

Temperature Rating	–55°C to 125°C
Current Rating	5 A
Contact Resistance	10 mΩ
Dielectric Withstanding Voltage	1250 VAC at Sea Level

Materials and Finishes

Description	Material	Finish
Shell	Steel	Tin
Insulator	Thermoplastic, UL 94V-0	None (color: dark green)
Contacts	Copper Alloy	Gold over Nickel in mating area, Tin on balance
Hardware	Steel/Copper Alloy	Tin/Zinc

Specifications

Temperature Rating	–55°C to 125°C
Current Rating	5 A
Contact Resistance	10 mΩ
Dielectric Withstanding Voltage	1250 VAC at Sea Level

Materials and Finishes

Description	Material	Finish
Shell	Steel	Tin
Insulator	Thermoplastic, UL 94V-0	None (color: dark green)
Contact	Socket: Copper Alloy	Gold over Nickel. Terminating end Tin (Socket)
Hardware	Steel/Copper Alloy	Tin/Zinc

Straight Solder Termination (Stamped)

Plug



Part Numbers

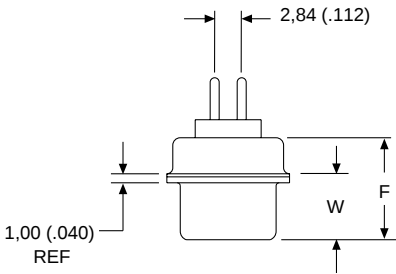
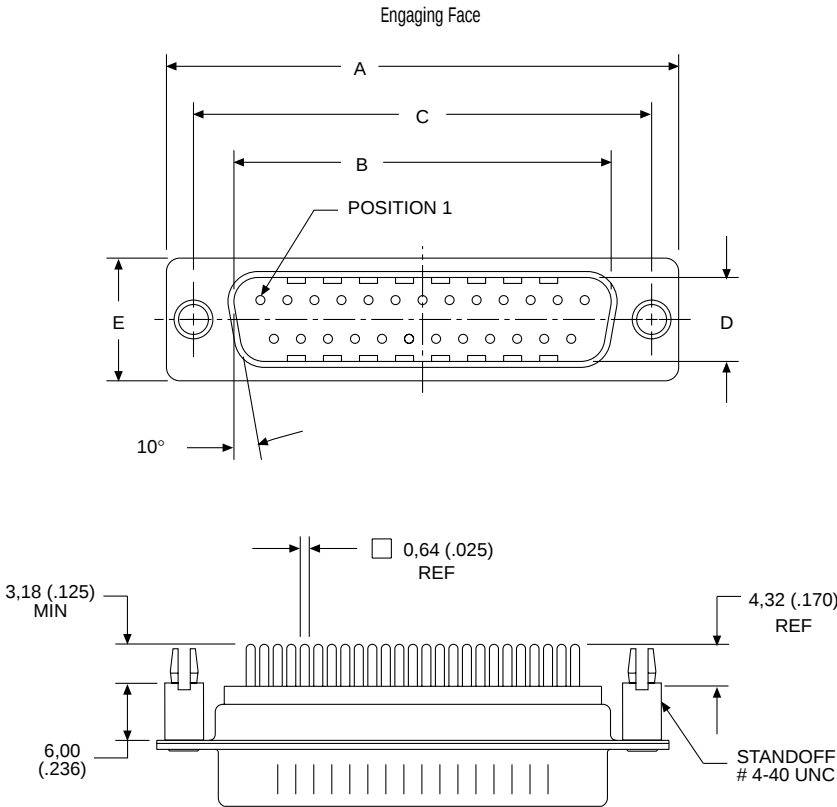
Shell Size	Layout	Through Hole	Standoff With Boardlock
DE	9	ZDE9P-OL2	ZDEE9P-OL2-146
DA	15	ZDA15P-OL2	ZDAE15P-OL2-146
DB	25	ZDB25P-OL2	ZDBE25P-OL2-146
DC	37	ZDC37P-OL2	ZDCE37P-OL2-146
DD	50	ZDD50P-OL2	ZDDE50P-OL2-146

Selection Guide

For Product Features, Specifications, Materials and Finishes, see pages 2-3.

Reader's Resource

For contact cavity arrangements, see page 224.
For P.C. hole patterns, see page 274.
For panel cutouts, see page 221.
For hardware views (Standard), see page 226.



Hardware removed for clarity

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)	W ±0,41 (.016)
DE	30,81 (1.213)	16,92 (.666)	24,99 (.984)	8,36 (.329)	12,55 (.494)	10,72 (.422)	6,693 (.2635)	—
DA	39,14 (1.541)	25,25 (.994)	33,32 (1.312)	8,36 (.329)	12,55 (.494)	10,72 (.422)	6,693 (.2635)	—
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)
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)
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)

Straight Solder Termination (Stamped)

Receptacle



Part Numbers

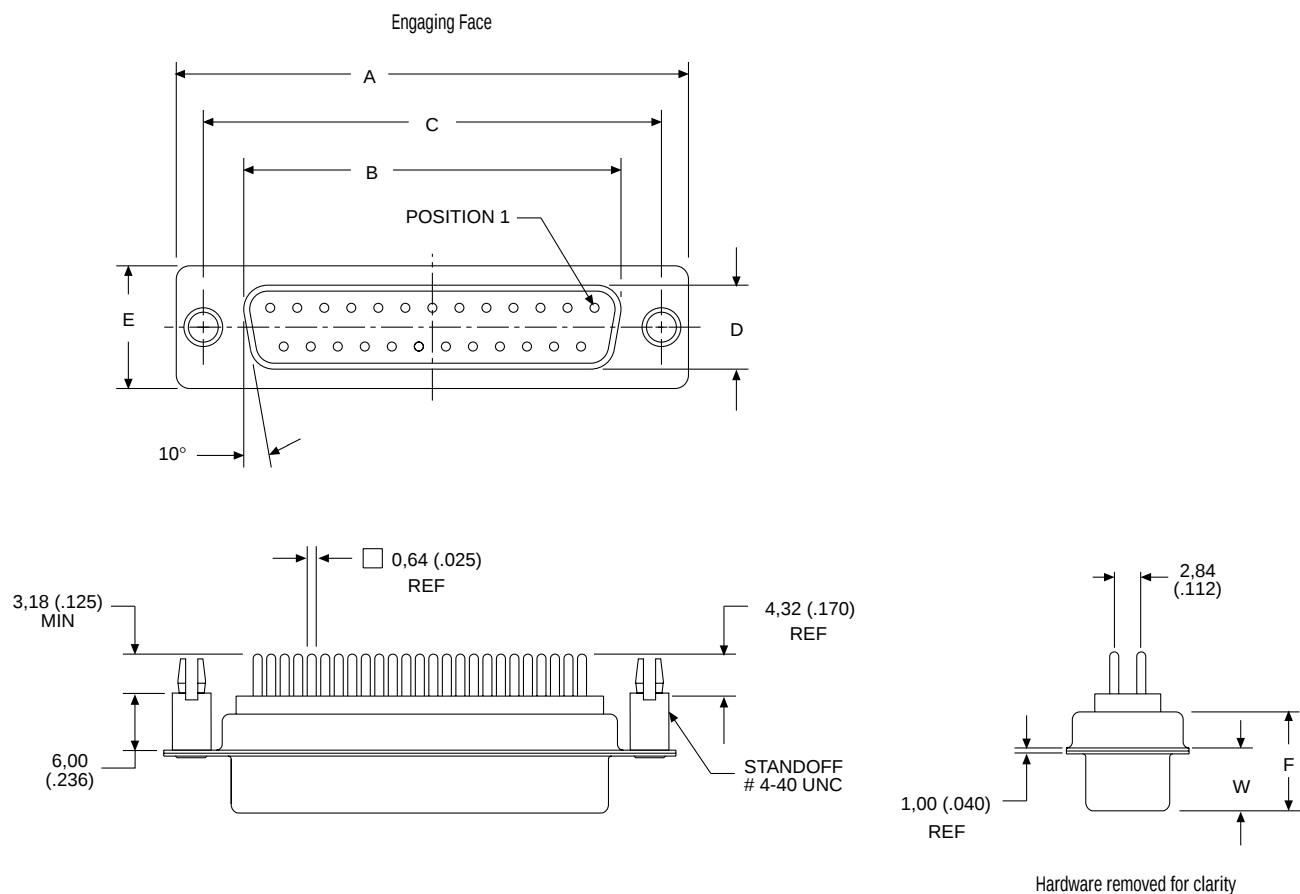
Shell Size	Layout	Through Hole	Standoff With Boardlock
DE	9	ZDE9S-0L2	ZDEE9S-0L2-146
DA	15	ZDA15S-0L2	ZDAE15S-0L2-146
DB	25	ZDB25S-0L2	ZDBE25S-0L2-146
DC	37	ZDC37S-0L2	ZDCE37S-0L2-146
DD	50	ZDD50S-0L2	ZDDE50S-0L2-146

Selection Guide

For Product Features, Specifications,
Materials and Finishes, see pages 2-3.

Reader's Resource

For contact cavity arrangements,
see page 224.
For P.C. hole patterns, see page 274.
For panel cutouts, see page 221.
For hardware views (Standard), see page 226.



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 ±0,38 (.015)
DE	30,81 (1.213)	16,33 (.643)	24,99 (.984)	7,90 (.311)	12,55 (.494)	10,90 (.429)	6,94 (.273)
DA	39,14 (1.541)	24,66 (.971)	33,32 (1.312)	7,90 (.311)	12,55 (.494)	10,90 (.429)	6,94 (.273)
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)
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)
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)

D* — Solder Cup Termination (Machined) with Tin Shells

See pages 32-33.

D* solder cup connectors are used for cable or panel mount wiring applications. Solder cup connectors provide maximum flexibility and performance for applications requiring discrete solder terminations and field repair without termination tooling.

Product Features

Machined solder cup termination, 5 A current capacity
 High performance commercial class connectors
 Two contact performance classes
 Optional clinch nuts with #4-40 UNC or M3 threads

ZD* — Solder Cup Termination (Stamped) with Tin Shells

See pages 34-35.

ZD* solder cup connectors are used for cable or panel mount wiring applications. Solder cup connectors provide maximum flexibility and performance for applications requiring discrete solder terminations.

Product Features

Stamped solder cup termination, 5 A current capacity
 Economical

D*A — Crimp Connectors without Contacts

See pages 36-37.

D*A crimp contact connectors are designed for reliable, fast cabling. Available in the industry standard D*A housing, the connectors provide a low-cost, quick cabling alternative compared to soldering.

Product Features

Crimp contacts available in reels of 5,000
 Application tooling:
 – Hand or automatic
 – Stripper crimper

D*W — Discrete Wire IDC

See pages 38-41.

The D*W connector provides insulation displacement connection technology for either solid or stranded wires. With D*W, speed of cabling is increased significantly over solder cup or crimp solutions. Contacts are easily removable and replaceable. Several specialized accessories (including shield cans, ferrules, and plastic boots) are available to provide a complete product solution.

Product Features

Quick harnessing capability with simple hand or semi-automatic tooling
 Accepts 30 AWG to 20 AWG wire; sizes can be mixed
 Shield cans insure reliable shielding continuity

Specifications

Temperature Rating	–55°C to 125°C
Current Rating	5 A
Contact Resistance	10 mΩ
Dielectric Withstanding Voltage	1250 VAC

Materials and Finishes

Description	Material	Finish
Shell/Hardware	Steel	Tin
Insulator	Thermoplastic, UL 94V-0	None
Contacts	Copper Alloy	Gold over Nickel

Specifications

Temperature Rating	–55°C to 105°C
Current Rating	5 A
Contact Resistance	15 mΩ
Dielectric Withstanding Voltage	1000 VAC at Sea Level

Materials and Finishes

Description	Material	Finish
Shell	Steel	Tin
Insulator	Thermoplastic, UL 94V-0	None
Contacts	Copper Alloy	Gold over Nickel

Specifications

Temperature Rating	–55°C to 105°C
Current Rating	5 A (20 AWG)
Contact Resistance	15 mΩ
Dielectric Withstanding Voltage	500 VAC at Sea Level

Materials and Finishes

Description	Material	Finish
Shell/Hardware	Steel	Tin
Insulator	Thermoplastic, UL 94V-0	None
Contacts	Copper Alloy	Gold over Nickel

Specifications

Temperature Rating	–55°C to 125°C
Current Rating	3 A (20 AWG) 2 A (22 AWG) 1,4 A (24 AWG) 1,2 A (26 AWG) 1 A (28 AWG) 0,8 A (30 AWG)
Contact Resistance	15 mΩ
Dielectric Withstanding Voltage	1000 VAC at Sea Level

Materials and Finishes

Description	Material	Finish
Shell/Hardware	Steel	Tin
Insulator	Thermoplastic, UL 94V-0	None
Contacts	Copper Alloy	Gold over Nickel in mating area, Tin on balance

Solder Cup Termination (Stamped) with Tin Shells

Plug

Selection Guide

For Product Features, Specifications,
Materials and Finishes, see pages 30-31.

Reader's Resource

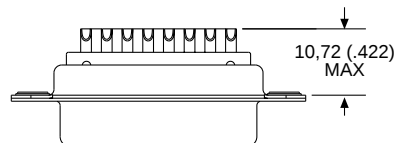
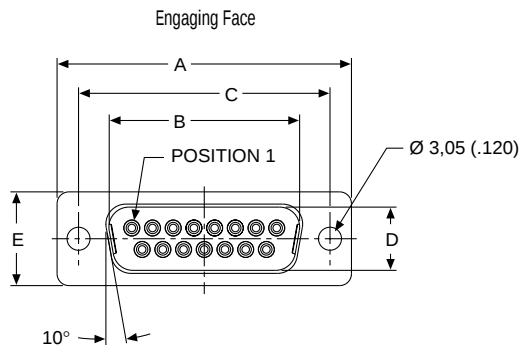
For contact cavity arrangements,
see page 224.

For panel cutouts, see page 221.

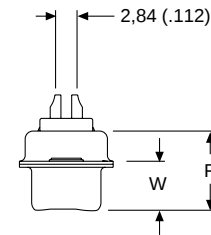
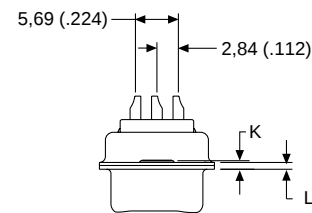
For hardware views (Standard), see page 226.

Part Numbers

Shell Size	Layout	Through Hole
DE	9	ZDE9P
DA	15	ZDA15P
DB	25	ZDB25P
DC	37	ZDC37P
DD	50	ZDD50P



DD Configuration

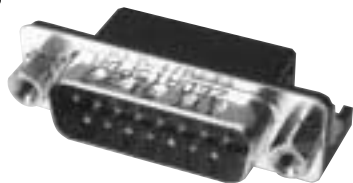


Dimensions

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)

90° Solder Termination (Stamped) — European Footprint 10,2 mm

Plug



Selection Guide
For Product Features, Specifications,
Materials and Finishes, see pages 14-15.

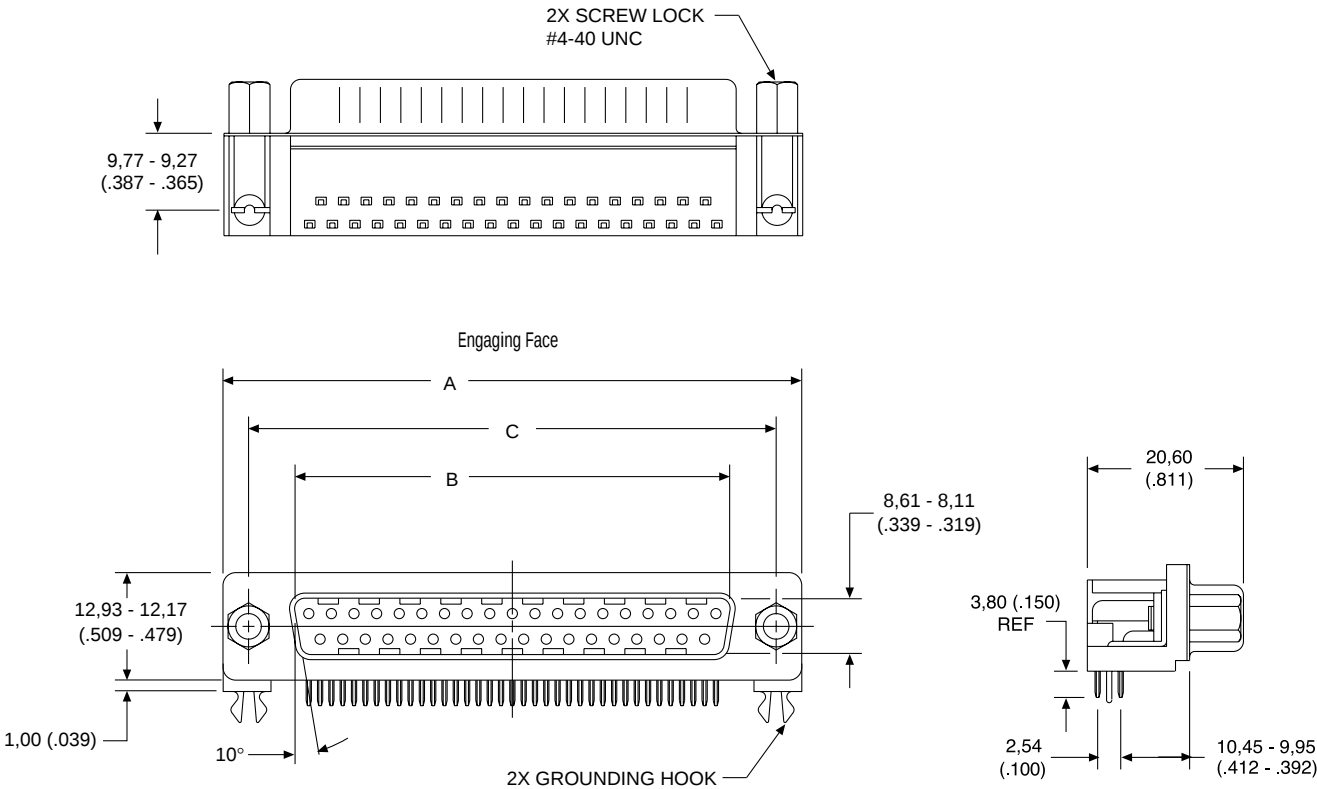
Part Numbers

Shell Size	Layout	Plastic Bracket, Integrated Grounding Strap, Boardlock, Threaded Insert #4-40 UNC	Plastic Bracket, Integrated Grounding Strap, Boardlock, Screw Lock #4-40 UNC
DE	9	ZDEL9P-1AKN-146	ZDE9P-1AKN-146
DA	15	ZDAL15P-1AKN-146	ZDA15P-1AKN-146
DB	25	ZDBL25P-1AKN-146	ZDB25P-1AKN-146
DC	37	ZDCL37P-1AKN-146	ZDC37P-1AKN-146

Note: For contacts with 30 microinches gold add -A191. Example: ZDEL9P-1AKN-A191-146

Reader's Resource

For contact cavity arrangements,
see page 224.
For P.C. hole patterns, see page 273.
For panel cutouts, see page 221.
For hardware views (European),
see page 227.



Dimensions

Shell Size	A ±0,38 (.015)	B ±0,25 (.010)	C ±0,13 (.005)
DE	30,89 (1.216)	16,92 (.666)	24,99 (.984)
DA	39,09 (1.539)	25,25 (.994)	33,32 (1.312)
DB	53,09 (2.090)	38,96 (1.534)	47,04 (1.852)
DC	69,40 (2.732)	55,42 (2.182)	63,50 (2.500)

Solder Cup Termination (Stamped) with Tin Shells

Receptacle



Part Numbers

Shell Size	Layout	Through Hole
DE	9	ZDE9S
DA	15	ZDA15S
DB	25	ZDB25S
DC	37	ZDC37S
DD	50	ZDD50S

Selection Guide

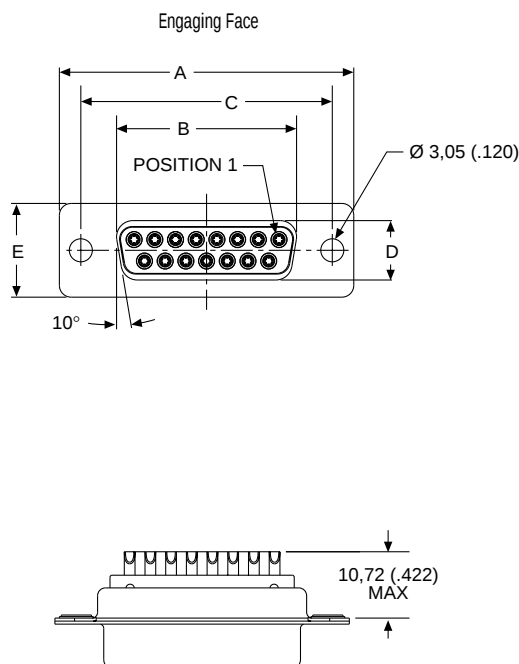
For Product Features, Specifications,
Materials and Finishes, see pages 30-31.

Reader's Resource

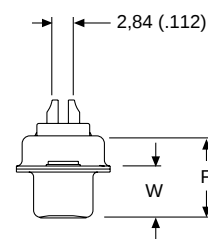
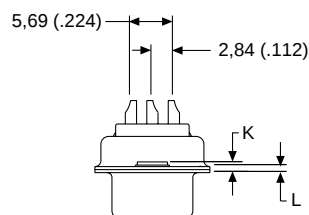
For contact cavity arrangements,
see page 224.

For panel cutouts, see page 221.

For hardware views (Standard), see page 226.



DD Configuration



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)	±0,38 (.015)	±0,318 (.0125)	±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)