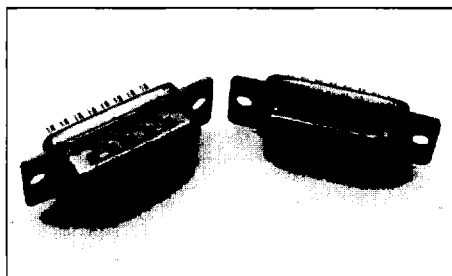


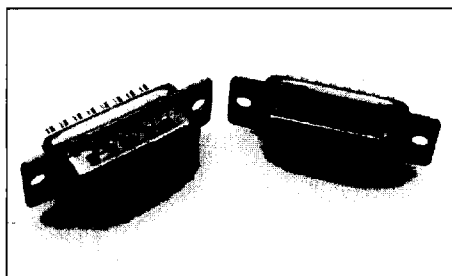
D* — Solder Cup Termination (Machined) with Tin Shells

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

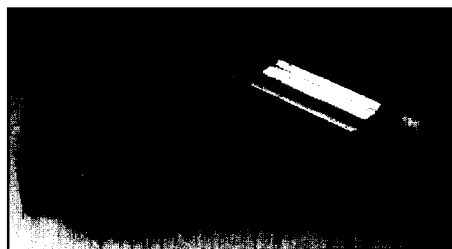
D*A — Crimp Connectors without Contacts

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

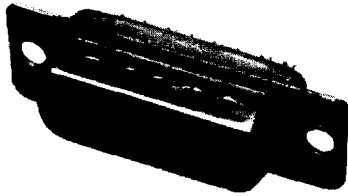
Temperature Rating	–55°C to 125°C
Current Rating	3 A (20 AWG) 2 A (22 AWG) 1,4 A (24 AWG) 1,2 A (26 AWG) 1 A (28 AWG) 0,8 A (30 AWG)
Contact Resistance	15 mΩ
Dielectric Withstanding Voltage	1000 VAC at Sea Level

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 (Machined) with Tin Shells

Plug



Part Numbers

Shell Size	Layout	Through Hole	Clinch Nut #4-40 UNC	Clinch Nut M3
DE	9	DE9PK87	DEE9PK87	DEX9PK87
DA	15	DA15PK87	DAE15PK87	DAX15PK87
DB	25	DB25PK87	DBE25PK87	DBX25PK87
DC	37	DC37PK87	DCE37PK87	DCX37PK87
DD	50	DD50PK87	DDE50PK87	DDX50PK87

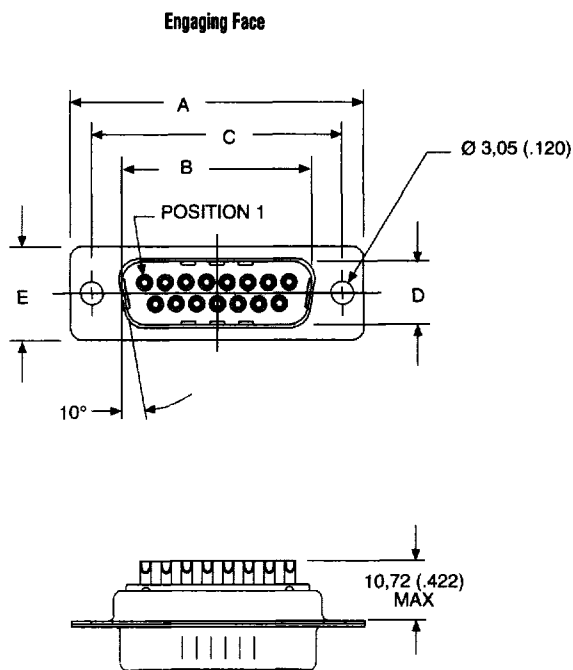
Note: For performance class 2, add A191. Example: DA15PA191K87.

Selection Guide

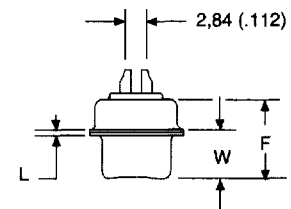
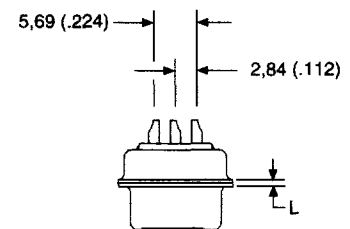
- For Product Features, Specifications, Materials and Finishes, see pages 30-31.

Reader's Resource

- For contact cavity arrangements, see page 224.
- For panel cutouts, see page 221.
- For hardware views (European), see page 227.



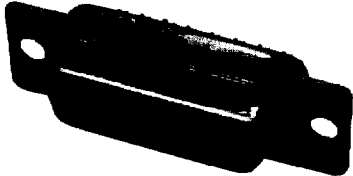
DD Configuration



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)	L ±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)	—	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)	—	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)	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)	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)	0,99 (.039)

Solder Cup Termination (Machined) with Tin Shells

Receptacle	Part Numbers				
	Shell Size	Layout	Through Hole	Clinch Nut #4-40 UNC	Clinch Nut M3
	DE	9	DE9SA197	DEE9SA197	DEX9SA197
	DA	15	DA15SA197	DAE15SA197	DAX15SA197
	DB	25	DB25SA197	DBE25SA197	DBX25SA197
	DC	37	DC37SA197	DCE37SA197	DCX37SA197
	DD	50	DD50SA197	DDE50SA197	DDX50SA197

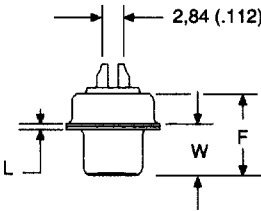
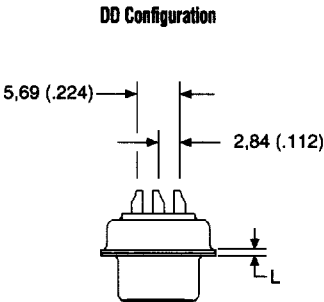
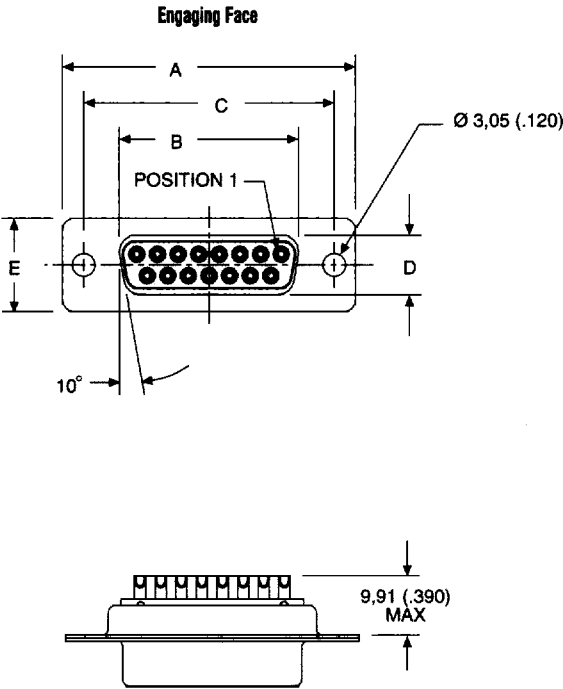
Selection Guide

- 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 (European), see page 227.

Note: For performance class 2, add A191. Example: DA15SA191A197.



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)	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)	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)	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)	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)	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)	0,76 (.030)

Solder Cup Termination (Stamped) with Tin Shells

Plug

Selection Guide

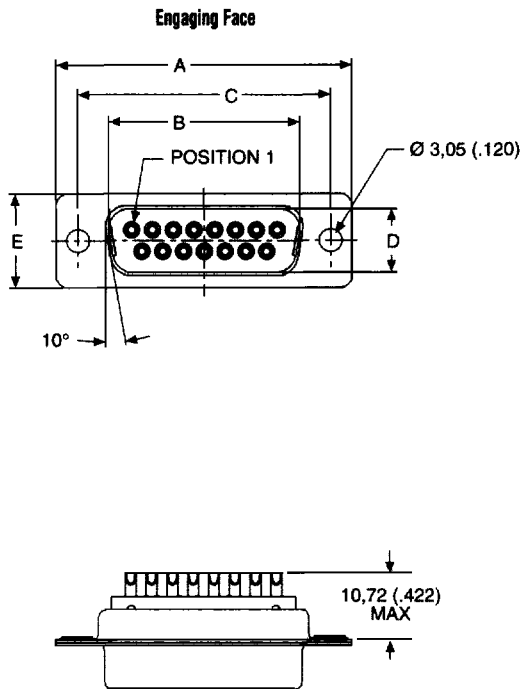
- * For Product Features, Specifications, Materials and Finishes, see pages 30-31.

Reader's Resource

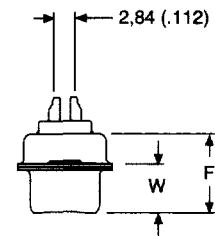
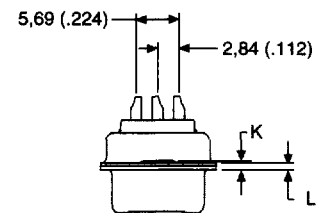
- * For contact cavity arrangements, see page 224.
- * For panel cutouts, see page 221.
- * For hardware views (Standard), see page 226.

Part Numbers

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



DD Configuration

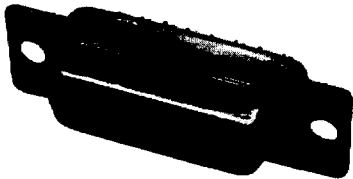


Dimensions

Shell Size	A ±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)	K ±0,317 (.0125)	K ±0,25 (.010)	L ±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)

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

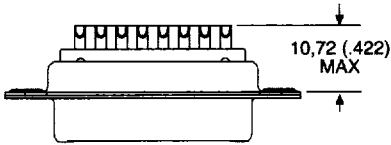
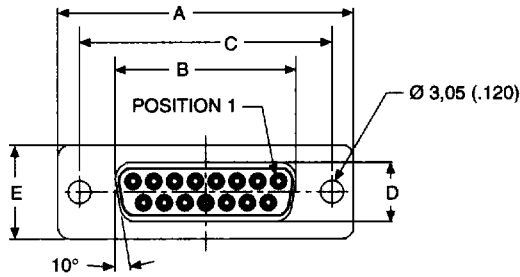
Selection Guide

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

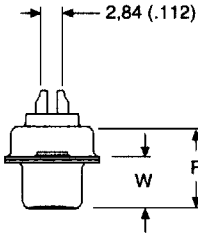
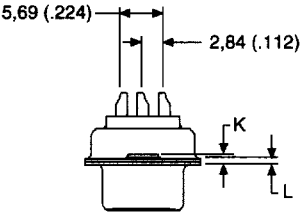
Reader's Resource

- For contact cavity arrangements, see page 224.
- For panel cutouts, see page 221.
- For hardware views (Standard), see page 226.

Engaging Face



DD Configuration

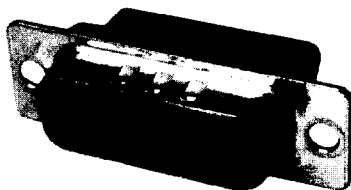


Dimensions

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)	K ±0,318 (.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)

Crimp Connectors without Contacts

Plug



Part Numbers

Shell Size	Layout	Through Hole
DE	9	DEA9PK87F0
DA	15	DAA15PK87F0
DB	25	DBA25PK87F0
DC	37	DCA37PK87F0

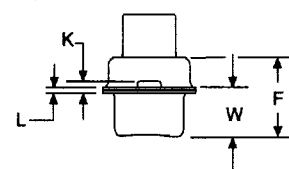
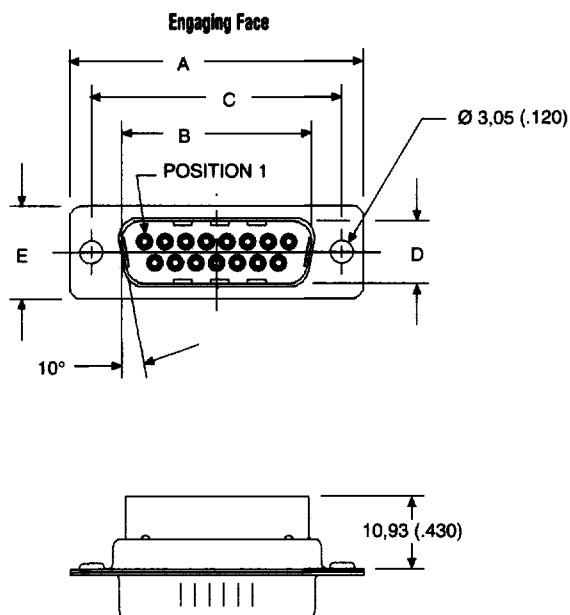
Note: For crimp (size 20) contacts and tooling, see pages 83 & 275.

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.

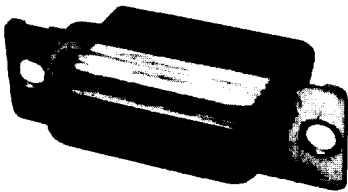


Dimensions

Shell Size	±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)

Crimp Connectors without Contacts

Receptacle



Part Numbers

Shell Size	Layout	Through Hole
DE	9	DEA9SA197F0
DA	15	DAA15SA197F0
DB	25	DBA25SA197F0
DC	37	DCA37SA197F0

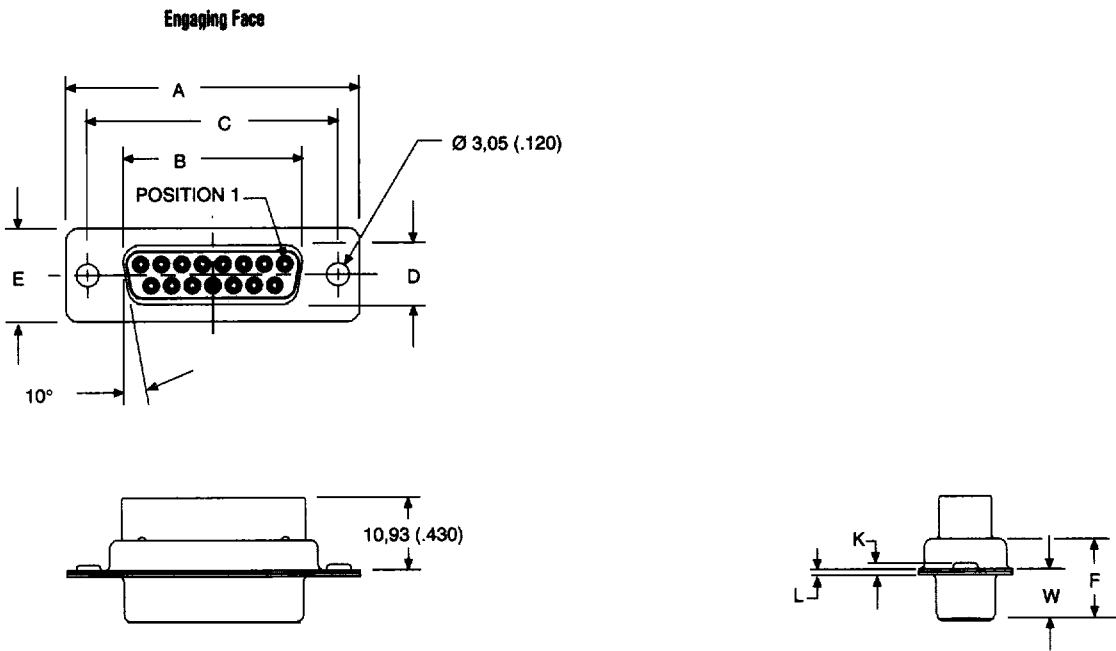
Note: For crimp (size 20) contacts and tooling, see pages 83 & 275.

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.

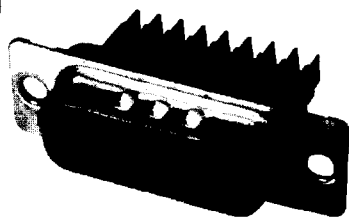


Dimensions

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)	K ±0,318 (.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)

Discrete Wire IDC

Plug



Part Numbers

Shell Size	Layout	Through Hole	Clinch Nut #4-40 UNC	Through Hole & Shield Can Kit	Clinch Nut #4-40 UNC & Shield Can Kit
DE	9	DEW9P*	DEWE9P*	DEW9P*G	DEWE9P*G
DA	15	DAW15P*	DAWE15P*	DAW15P*G	DAWE15P*G
DB	25	DBW25P*	DBWE25P*	DBW25P*G	DBWE25P*G
DC	37	DCW37P*	DCWE37P*	DCW37P*G	DCWE37P*G

Note: *Insert contact type. Example: DEW9P1.
For contacts with 0,76 µm gold add -A176. Example: DEW9P1-A176.
For shield can kit, see page 40.

Selection Guide

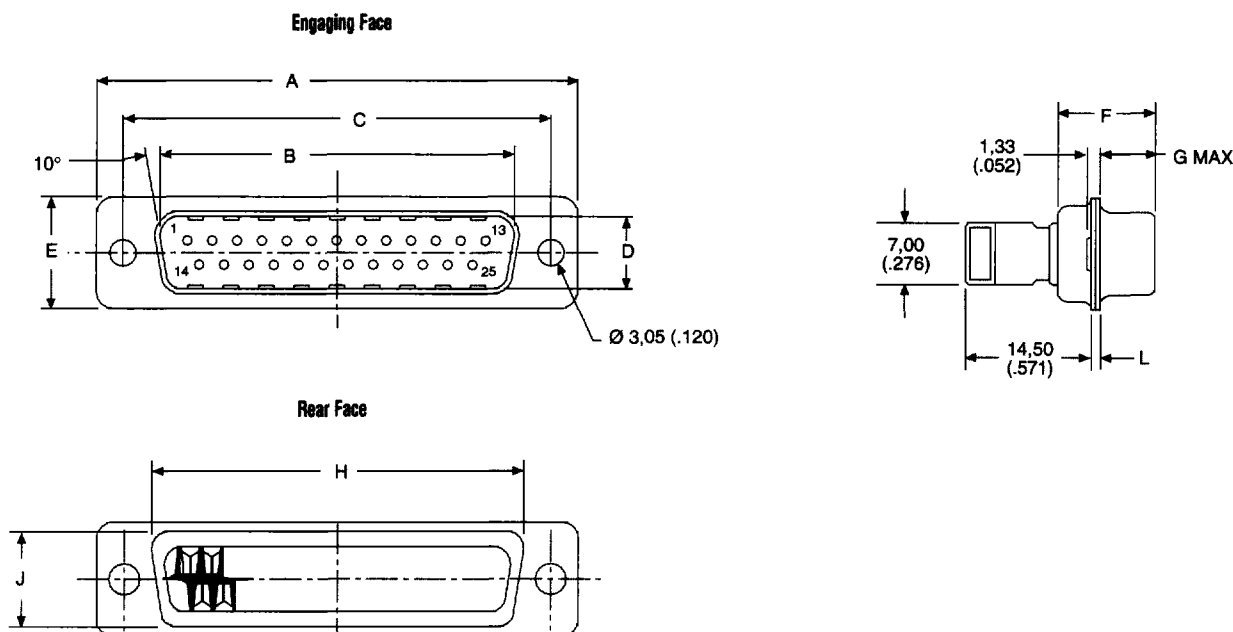
- For Product Features, Specifications, Materials and Finishes, see pages 30-31.

Reader's Resource

- For contact cavity arrangements, see page 224.
- For panel cutouts, see page 221.
- For hardware views (European), see page 227.

Contact Types*	Wire Accommodation
1	28 AWG/30 AWG
2	22 AWG/26 AWG
3	20 AWG/22 AWG

For more information, see pages 40-41.

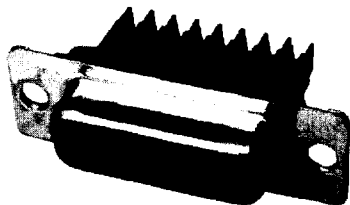


Dimensions

Shell Size	Layout	A ±0,38 (.015)	B ±0,12 (.005)	C ±0,12 (.005)	D ±0,13 (.005)	E ±0,38 (.015)	F ±0,25 (.010)	G max.	H ±0,25 (.010)	J ±0,25 (.010)	L ±0,25 (.010)
DEW	9	30,81 (1.213)	16,91 (.666)	24,99 (.984)	8,35 (.329)	12,55 (.494)	10,71 (.422)	6,05 (.238)	19,27 (.759)	10,71 (.422)	0,76 (.030)
DAW	15	39,14 (1.541)	25,54 (.994)	33,32 (1.312)	8,35 (.329)	12,55 (.494)	10,71 (.422)	6,05 (.238)	27,50 (1.083)	10,71 (.422)	0,76 (.030)
DBW	25	53,03 (2.048)	38,96 (1.534)	47,04 (1.852)	8,35 (.329)	12,55 (.494)	10,82 (.426)	5,99 (.236)	41,27 (1.625)	10,71 (.422)	0,99 (.039)
DCW	37	69,32 (2.729)	55,42 (2.182)	63,50 (2.500)	8,35 (.329)	12,55 (.494)	10,82 (.426)	5,99 (.236)	57,70 (2.272)	10,71 (.422)	0,99 (.039)

Discrete Wire IDC

Receptacle



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 (European), see page 227.

Part Numbers

Shell Size	Layout	Through Hole	Clinch Nut #4-40 UNC	Through Hole & Shield Can Kit	Clinch Nut #4-40 UNC & Shield Can Kit
DE	9	DEW9S*	DEWE9S*	DEW9S*G	DEWE9S*G
DA	15	DAW15S*	DAWE15S*	DAW15S*G	DAWE15S*G
DB	25	DBW25S*	DBWE25S*	DBW25S*G	DBWE25S*G
DC	37	DCW37S*	DCWE37S*	DCW37S*G	DCWE37S*G

Note: *Insert contact type. Example: DEW9S1.

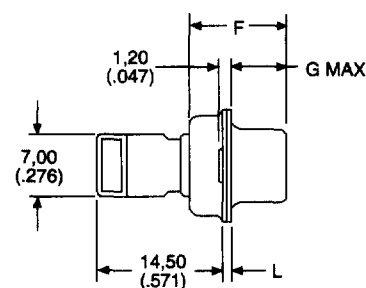
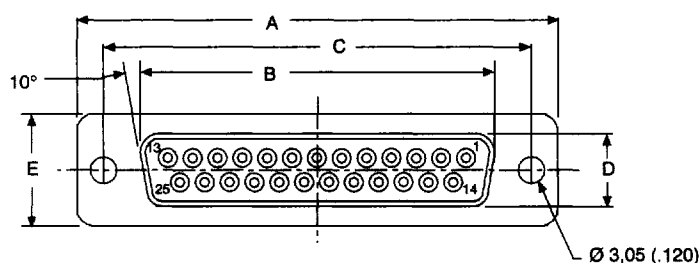
For contacts with 0.76 μ m gold add -A176. Example: DEW9S1-A176.

For shield can kit, see page 40.

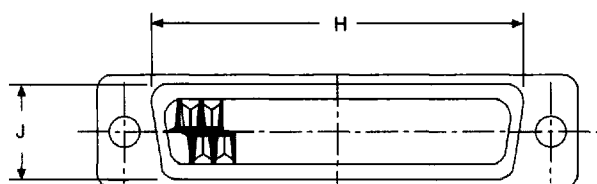
Contact Types*	Wire Accommodation
1	28 AWG/30 AWG
2	22 AWG/26 AWG
3	20 AWG/22 AWG

For more information, see pages 40-41.

Engaging Face



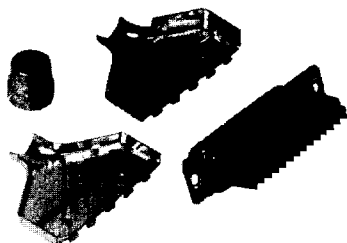
Rear Face



Dimensions

Shell Size	Layout	A ± 0.38 (.015)	B ± 0.12 (.005)	C ± 0.12 (.005)	D ± 0.13 (.005)	E ± 0.38 (.015)	F ± 0.25 (.010)	G max.	H ± 0.25 (.010)	J ± 0.25 (.010)	L ± 0.25 (.010)
DEW	9	30.81 (1.213)	16.33 (.643)	24.99 (.984)	7.90 (.311)	12.55 (.494)	10.89 (.429)	6.30 (.248)	19.27 (.759)	10.71 (.422)	0.76 (.030)
DAW	15	39.14 (1.541)	24.66 (.971)	33.32 (1.312)	7.90 (.311)	12.55 (.494)	10.89 (.429)	6.30 (.248)	27.50 (1.083)	10.71 (.422)	0.76 (.030)
DBW	25	53.03 (2.048)	38.38 (1.511)	47.04 (1.852)	7.90 (.311)	12.55 (.494)	10.89 (.429)	6.30 (.248)	41.27 (1.625)	10.71 (.422)	0.76 (.030)
DCW	37	69.32 (2.729)	55.84 (2.159)	63.50 (2.500)	7.90 (.311)	12.55 (.494)	10.89 (.429)	6.30 (.248)	57.70 (2.272)	10.71 (.422)	0.76 (.030)

Shield Can Kit



Materials and Finishes

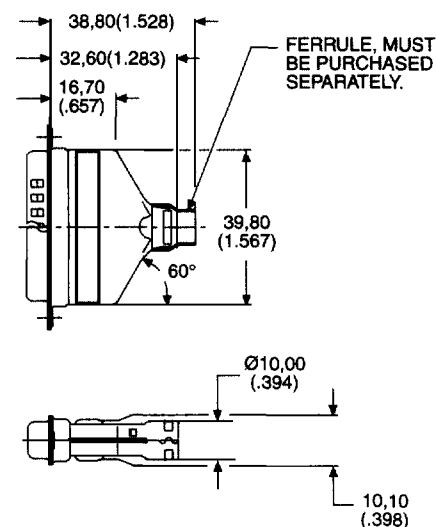
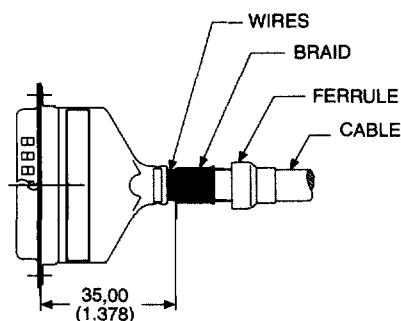
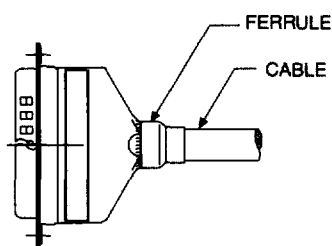
Shield Can and Ferrule

Material: Steel

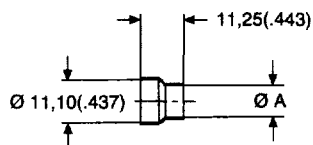
Finish: Tin

Ferrule

D*W	Ø Cable	Ferrule Ø A	Ferrule Part Number	Crimp Tool Part Number	Crimp Tool Position
DEW9G	4,8-5,5	6.25 (.246)	304-8810-000	D115433-1	B
	5,5-6,2	6.25 (.246)	304-8810-000	D115433-1	A
	6,2-7,2	8.2 (.323)	304-8811-000	D115433-2	B
	7,2-8,2	8.2 (.323)	304-8811-000	D115433-2	A
	8,2-9,5	11.5 (.452)	304-8812-000	D115433-3	B
	9,5-11,1	11.5 (.452)	304-8813-000	D115433-3	A
DBW25G	4,8-5,5	6.25 (.246)	304-8810-000	D115433-1	B
	5,5-6,2	6.25 (.246)	304-8810-000	D115433-1	A
	6,2-7,2	8.2 (.323)	304-8811-000	D115433-2	B
	7,2-8,2	8.2 (.323)	304-8811-000	D115433-2	A
	8,2-9,5	11.5 (.452)	304-8812-000	D115433-3	B
	9,5-11,1	11.5 (.452)	304-8813-000	D115433-3	A



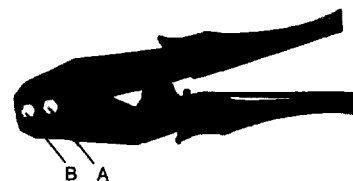
Ferrule



Wire Trim Dimensions



Crimp Tool Positions



Discrete Wire IDC Contacts

Contacts

Contact Types	1	2	3
Pin	330-8753-101	330-8753-102	330-8753-103
Socket	330-8754-101	330-8754-102	330-8754-103

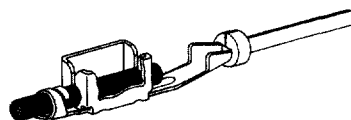
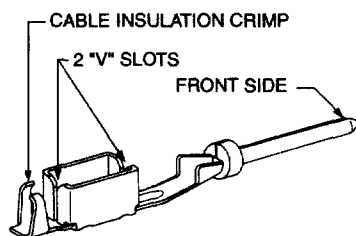
Solid Cable

Wire Size	28 AWG	30 AWG	22 AWG	24 AWG	26 AWG	20 AWG	22 AWG
Section mm ²	0.08	0.05	0.34	0.22	0.12	0.60	0.34
Internal dia. mm max	0.32	0.26	0.62	0.51	0.40	0.88	0.62
External dia. mm max	1.30	1.20	1.45	1.45	1.40	1.45	1.45

Stranded Cable

Wire Size	28 AWG	30 AWG	22 AWG	24 AWG	26 AWG	20 AWG	22 AWG
Section mm ²	0.09	0.05	0.34	0.22	0.12	0.60	0.34
Composition	7 x 0.13	7 x 0.10	7 x 0.25	7 x 0.20	7 x 0.15	19 x 0.20	7 x 0.25
Internal cable dia. mm max	0.40	0.30	0.75	0.60	0.45	0.97	0.75
External wire dia. mm max	1.30	1.20	1.45	1.45	1.40	1.45	1.45

Insulation Displacement Connection Concept



Tooling

Extraction Tool



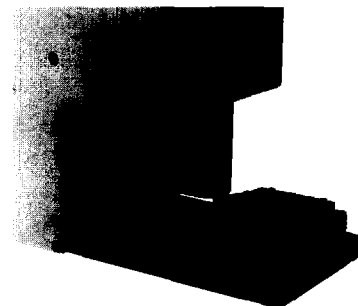
Part Number
DW115394

Hand Crimp Tool



Part Number
Standard Tool: DW115394-1
Automatic Tool: DW115394-2
Tool Support: DW115394-20

Row by Row Pneumatic Press



Part Number
DW115394-501