

D-subminiature Backshells - Two-Piece D*H Series

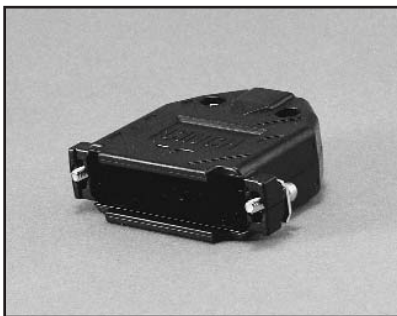


- Standard two-piece construction available in plastic, metallized plastic, or diecast zinc versions with 180° straight cable entry.
- Fits standard metal shell D-subminiature plugs and sockets as well as HTD Series 1.5 D-sub.
- Ethernet hoods are available in diecast 15 position versions only with both 90° and 180° cable entry.
- Included in all backshells:
 - Hardware: 4-40 screws, hex nuts, 4-40 screw mounting bracket.
 - Grommets: To accommodate most cable sizes. Grommets also function as strain reliefs.
- Backshells are individually bagged.
- Note that slide locks may not be used with these backshells.
- Optional thumbscrew for backshell must be ordered separately if required.

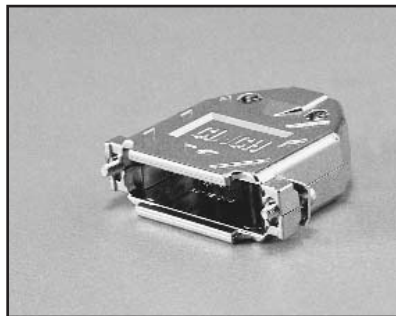
Materials

- 4-40 screws, hex nuts, mounting bracket: Steel with zinc plating and clear chromate coating.
- Standard Backshells:
 - Plastic Backshells: ABS (black), hardware - steel with zinc plating, grommets - polyphenylene, (black).
 - Metallized Plastic Backshells: ABS with nickel over copper plating, hardware - steel with zinc plating, grommets - PVC (black).
 - Diecast Backshells: Diecast zinc, grommets - PVC (black).
- Ethernet Backshells: Diecast zinc, grommets - PVC (black).

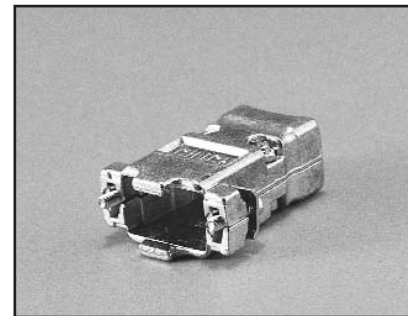
4



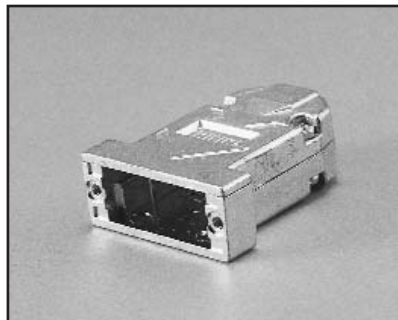
Plastic



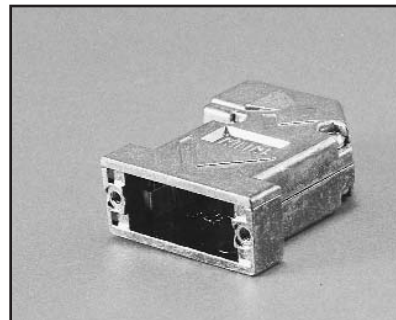
Metallized



Diecast



Ethernet Straight



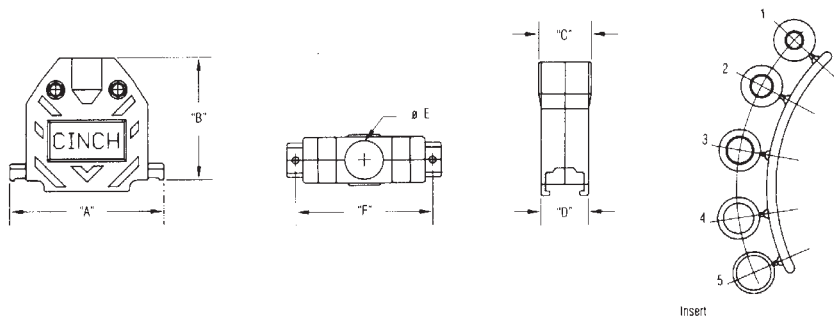
Ethernet Right-Angle

D-subminiature Backshells - Two-Piece D*H Series



Straight (180°) Standard Backshells

Plastic and Metallized Plastic Backshells



Dimensions

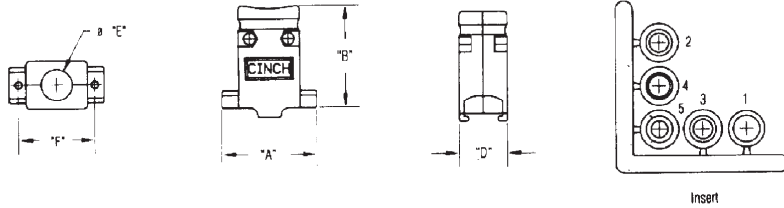
Shell Size	A		B		C		D		E		F	
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
E	1.225	31.12	1.547	39.29	0.640	16.26	0.645	16.38	0.400	10.16	0.984	24.99
A	1.540	39.12	1.516	38.51	0.640	16.26	0.645	16.38	0.400	10.16	1.312	33.32
B	2.090	53.09	1.655	42.04	0.710	18.03	0.645	16.38	0.522	13.26	1.857	47.17
C	2.730	69.34	1.830	46.48	0.906	23.01	0.645	16.38	0.725	18.42	2.500	63.50
D	2.645	67.18	1.855	41.12	0.940	23.88	0.750	19.05	0.725	18.42	2.406	61.11

D-subminiature Backshells - Two-Piece D*H Series

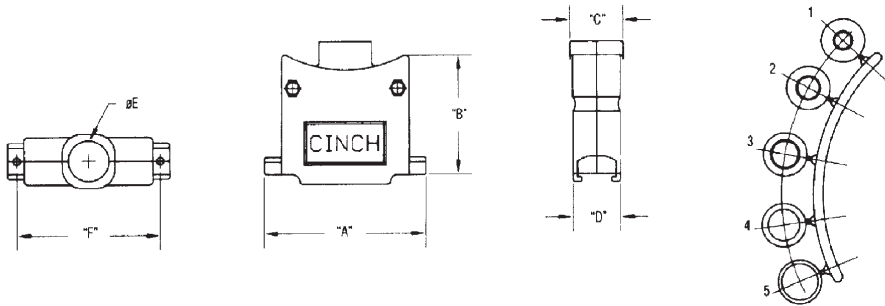


EMI/RFI Shielded Diecast Backshells

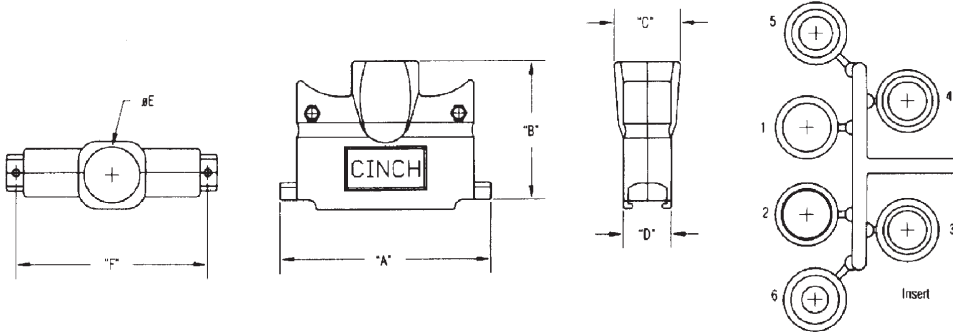
9 and 15 Position



25 Position



37 and 50 Position



Dimensions

Shell Size	A		B		C		D		E		F	
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
E	1.225	31.12	1.465	37.21	0.620	15.75	0.620	15.75	0.400	10.16	0.984	24.99
A	1.540	39.12	1.600	40.64	0.620	15.75	0.620	15.75	0.400	10.16	1.312	33.32
B	2.090	53.09	1.570	39.88	0.690	17.53	0.620	15.75	0.525	13.34	1.857	47.17
C	2.730	69.34	1.810	45.97	0.862	21.89	0.620	15.75	0.725	18.42	2.500	63.50
D	2.624	66.65	1.800	45.72	0.862	21.89	0.730	18.54	0.725	18.42	2.406	61.11

Ordering Information

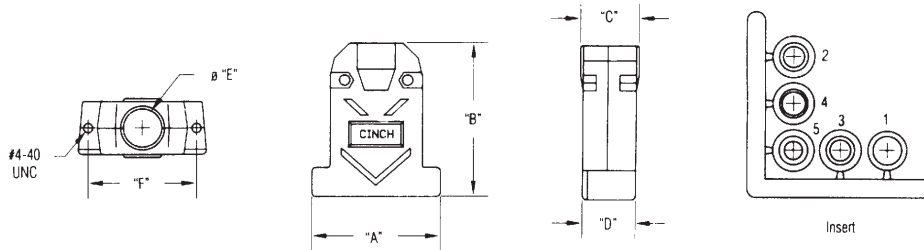
D*H Two-Piece Backshells

Shell Size	Fits		Cable Entry Style	Plastic	Cable Dia. (in)	Metallized Plastic	Cable Dia. (in)	Diecast Metal	Cable Dia. (in)
	Standard Density	HTD 1.5 Density							
E	9	15	Straight (180°)	DPH-E-001	.210-.320	DCH-E-001	.210-.350	DMH-E-001	.210-.320
A	15	26	Straight (180°)	DPH-A-001	.210-.320	DCH-A-001	.210-.350	DMH-A-001	.210-.320
B	25	44	Straight (180°)	DPH-B-001	.230-.450	DCH-B-001	.230-.450	DMH-B-001	.230-.450
C	37	62	Straight (180°)	DPH-C-001	.350-.650	DCH-C-001	.350-.640	DMH-C-001	.350-.650
D	50	N/A	Straight (180°)	DPH-D-001	.350-.650	DCH-D-001	.350-.640	DMH-D-001	.350-.640

D-subminiature Backshells - Two-Piece D*H Series

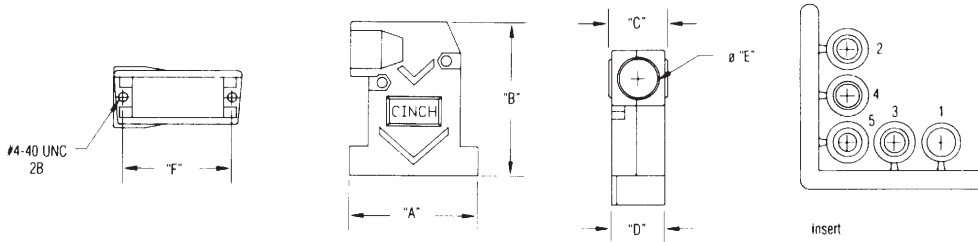


Straight (180°) Diecast Ethernet Backshells



Type 2

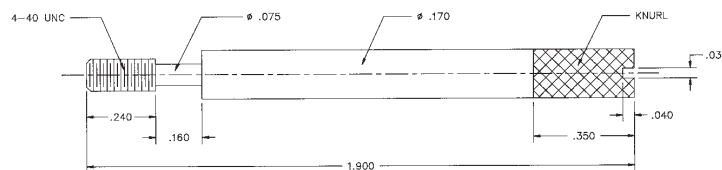
Right-Angle (90°) Diecast Ethernet Backshells



Ordering Information

D*H Ethernet Diecast Backshells

Fits Shell Size	Fits Standard Density	Cable Diameter (in)	Cable Entry Style		A		B		C		D		E		F	
					in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
A	15	.210-.320	Straight (180°)	DMH-A-001XL	1.550	39.37	1.880	47.75	0.710	18.03	0.64	16.26	0.522	13.26	1.312	33.32
A	15	.210-.320	Rt. Angle (90°)	DMH-A-901X	1.550	39.37	1.880	47.75	0.710	18.03	0.64	16.26	0.522	13.26	1.312	33.32



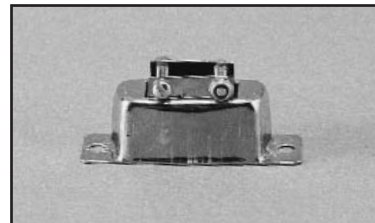
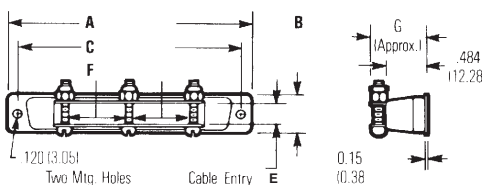
THUMBSCREWS (OPTIONAL) FOR D*H BACKSHELLS

Order #4-40-THMB-1 (two each required per backshell).

(Will not work with ethernet type backshells)

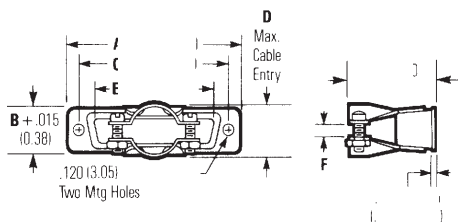
- **Shell Material:** Zinc-plated low carbon steel with yellow chromate finish.
- **Clamp:** Zinc-plated steel with yellow chromate finish.
- **Screw:** Zinc-plated steel with yellow chromate finish.
- **Stop Nut:** Zinc-plated brass with yellow chromate finish.

Straight Clamp



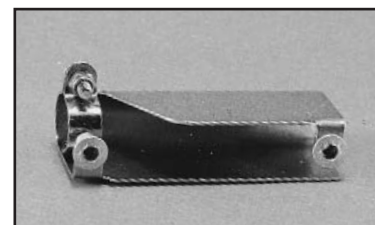
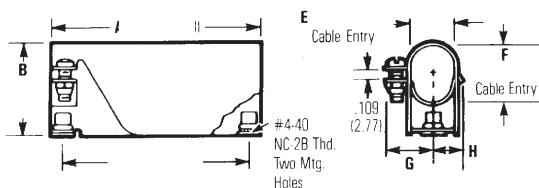
Shell Size	Positions	A		B		C		E		F		G	
		in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
A	15	1.531	38.89	.500	12.70	1.312	33.32	.296	7.52	.312	7.92	.640	16.26
B	25	2.078	52.78	.500	12.70	1.852	47.04	.296	7.52	.796	20.22	.640	16.26
C	37	2.718	69.04	.500	12.70	2.500	63.50	.296	7.52	.687	17.45	.640	16.26
D	50	2.625	66.68	.609	15.47	2.406	61.11	.390	9.91	.687	17.45	.703	17.86

Round Clamp



Shell Size	Positions	A		B		C		D		E		F		G	
		in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
A	15	1.531	38.89	.500	12.70	1.312	33.32	.406	10.31	.984	23.72	.125	3.18	1.031	26.19
B	25	2.078	52.78	.500	12.70	1.852	47.04	.593	15.06	1.515	38.48	.187	4.75	1.062	26.97

Right-Angle Clamp

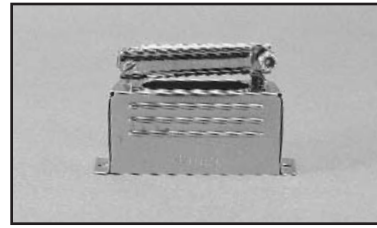
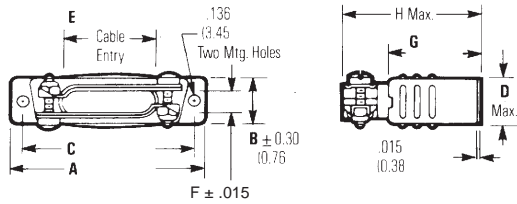


Shell Size	Positions	A		B		C		E		F		G		H	
		in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
E	9	1.203	30.56	0.718	18.24	.984	24.99	.437	11.10	.437	11.10	.468	11.89	.281	7.14
A	15	1.531	38.89	0.718	18.24	1.312	33.32	.437	11.10	.437	11.10	.468	11.89	.281	7.14
B	25	2.078	52.78	0.968	24.59	1.852	47.04	.437	11.10	.625	15.88	.468	11.89	.281	7.14
C	37	2.718	69.04	1.187	30.15	2.500	63.50	.437	11.10	.812	20.62	.468	11.89	.281	7.14
D	50	2.625	66.68	1.250	31.75	2.406	61.11	.562	14.27	.906	23.01	.531	13.49	.343	8.71

D-subminiature Junction Shells

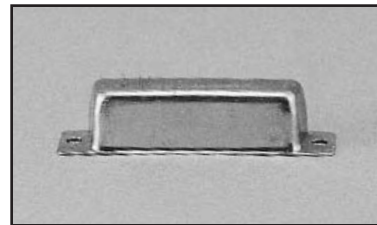
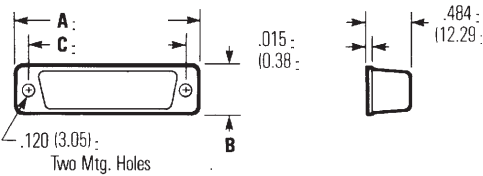


Deep Straight Clamp



Shell Size	Positions	A		B		C		D		E		F		G		H	
		in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
E	9	1.203	30.56	.484	12.29	0.984	24.99	.578	14.68	.375	9.53	.375	9.53	.750	19.05	1.219	30.96
A	15	1.531	38.89	.484	12.29	1.312	33.32	.578	14.68	.713	18.11	.312	7.92	.750	19.05	1.250	31.75
B	25	2.078	52.78	.484	12.29	1.852	47.04	.578	14.68	1.000	25.40	.312	7.92	1.000	25.40	1.531	38.89
C	37	2.718	69.04	.484	12.29	2.500	63.50	.578	14.68	1.375	34.93	.312	7.92	1.000	25.40	1.531	38.89
D	50	2.625	66.68	.593	15.06	2.406	61.11	.687	17.45	1.406	35.71	.406	10.31	1.125	28.58	1.656	42.06

Switching Shell



Shell Size	Positions	A		B		C	
		in	mm	in	mm	in	mm
A	15	1.531	38.89	.500	12.70	1.312	33.32
B	25	2.078	52.78	.500	12.70	1.852	47.04
C	37	2.718	69.04	.500	12.70	2.500	63.50
D	50	2.625	66.68	.609	15.47	2.406	61.11

Ordering Information

Junction Shells - Metal

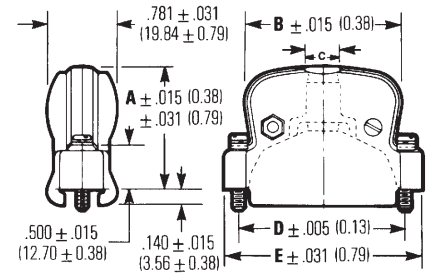
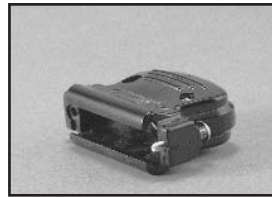
Shell Size	Fits					
	Standard Density	Straight Clamp	Round Clamp	Right-Angle Clamp	Deep Straight Clamp	Switching Shell
E	9	N/A	N/A	DE-19977-5	DE-24657	N/A
A	15	DA-19678-1	DA-20961	DA-19977-1	DA-24658	DA-19678-6
B	25	DB-19678-2	DB-20962	DB-19977-2	DB-24659	DB-19678-7
C	37	DC-19678-3	N/A	DC-19977-3	DC-24660	DC-19678-8
D	50	DD-19678-4	N/A	DD-19977-4	DD-24661	DD-19678-9

D-subminiature Plastic Hoods



Phenolic Hood

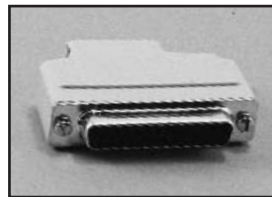
Shell Material: Phenolic (black).
#4-40 Screws: Steel with nickel plating.



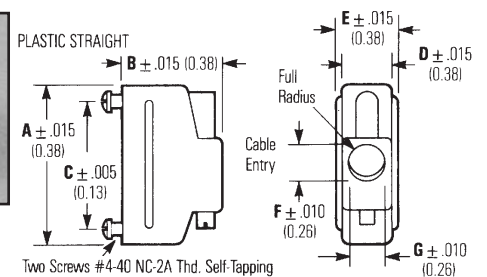
Shell Size	Positions	A		B		C		D		E	
		in	mm	in	mm	in	mm	in	mm	in	mm
A	15	1.297	32.94	1.219	30.96	.266	6.76	1.312	33.32	1.641	41.68
B	25	1.406	35.71	1.797	45.64	.328	8.33	1.852	47.04	2.203	55.96

All-Plastic Straight (180°) Hood

Shell Material: Nylon (gray).
#4-40 Screws: Steel with nickel plating.



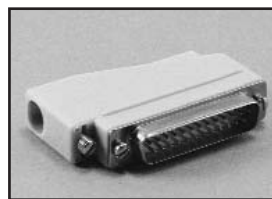
Connector Not Included



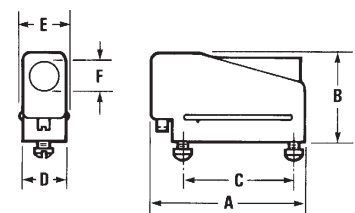
Shell Size	Positions	A		B		C		D		E		F		G	
		in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
E	9	1.218	30.94	1.000	25.40	.984	23.72	.500	12.70	.562	14.27	.281	7.14	.218	7.14
A	15	1.546	38.27	1.000	25.40	1.312	33.32	.500	12.70	.562	14.27	.360	9.14	.360	9.14
B	25	2.093	53.16	1.250	31.75	1.852	47.04	.500	12.70	.562	14.27	.493	12.52	.360	9.14

All-Plastic Right-Angle (90°) Hood

Shell Material: Nylon (gray).
#4-40 Screws: Steel with nickel plating.



Connector Not Included



Shell Size	Positions	A		B		C		D		E		F	
		in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
A	15	1.822	46.28	1.000	25.40	1.312	33.32	.500	12.70	.562	14.28	.360	9.14
B	25	2.368	60.15	1.250	31.75	1.852	47.04	.500	12.70	.562	14.28	.360	9.14

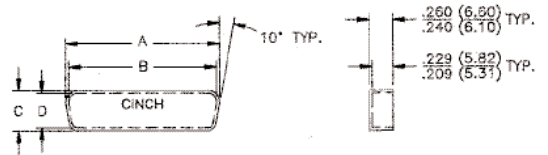
Ordering Information

Plastic Hoods

Shell Size	Standard Density	Phenolic Hood	Straight Hood	Right Angle
E	9	N/A	DE-51218-1	N/A
A	15	DA-51225-1	DA-51210-1	DA-51211-1
B	25	DB-51226-1A	DB-51212-1	DB-51213-1
C	37	N/A	N/A	N/A
D	50	N/A	N/A	N/A

Dust Caps

- For use with all Cinch D-subminiature connectors.
- Used to protect connector contacts when connector is not mated.
- Made of polyethylene (black).



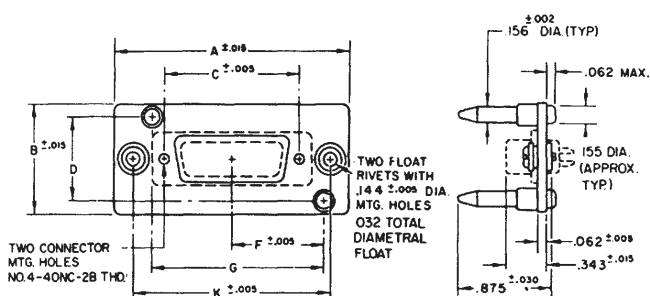
Ordering Information

Shell Size	Fits Standard Density	Fits Catalog No.	Description	A		B		C		D	
				in	mm	in	mm	in	mm	in	mm
E	9	DE-59-20	Socket	.694	17.63	.627	15.93	.362	9.19	.295	7.49
E	9	DE-60-20	Plug	.749	19.02	.682	17.32	.412	10.46	.345	8.76
A	15	DA-59-20	Socket	1.022	25.95	.955	24.25	.362	9.19	.295	7.49
A	15	DA-60-20	Plug	1.077	27.36	1.010	25.65	.412	10.46	.345	8.76
B	25	DB-59-20	Socket	1.562	39.67	1.495	37.97	.362	9.19	.295	7.49
B	25	DB-60-20	Plug	1.635	41.52	1.568	39.83	.430	10.92	.363	9.22
C	37	DC-59-20	Socket	2.210	56.13	2.143	54.43	.362	9.19	.295	7.49
C	37	DC-60-20	Plug	2.283	57.99	2.216	56.29	.430	10.92	.363	9.22
D	50	DD-59-20	Socket	2.116	53.75	2.049	52.04	.474	12.04	.407	10.34
D	50	DD-60-20	Plug	2.179	55.35	2.112	53.64	.536	13.61	.469	11.91

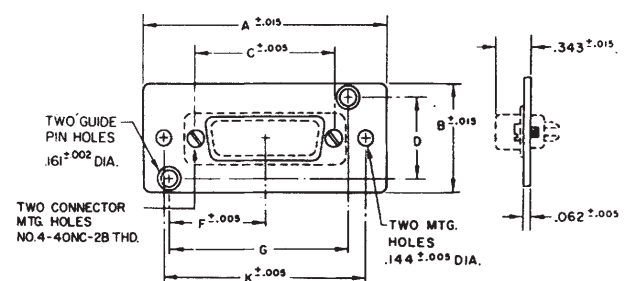
Guide Pin Plates

- Aligns connectors before actual mating. Generally used in blind mate applications.
- Male or female guide plates will accommodate Cinch male or female connectors.
- Plate: Cold-rolled steel with cadmium plating and yellow chromate finish.
- Guide pin (male): Stainless steel, passivated.
- Screws, rivets (male plate), washers (male plate): Steel with cadmium plating and yellow chromate finish.

Plug



Socket



Ordering Information

Shell Size	Fits Standard Density	Fits		A		B		C		D		F		G		K	
		Plug	Socket	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
E	9	N/A	N/A														
A	15	DA-22213	DA-22214	2.281	57.93	1.000	25.40	1.312	33.32	.750	19.05	.898	22.81	1.663	42.24	1.906	48.41
B	25	DB-22255	DB-22254	2.820	71.63	1.000	25.40	1.852	47.04	.750	19.05	1.168	29.67	2.203	55.96	2.446	62.13
C	37	DC-22070	DC-22071	3.468	88.09	1.000	25.40	2.500	63.50	.750	19.05	1.492	37.90	2.851	72.42	3.094	78.59
D	50	DD-21962	DD-21961	3.375	85.73	1.125	28.58	2.406	61.112	.874	21.88	1.437	36.50	2.749	69.82	3.000	76.20

Screwlocks

- Screwlocks are designed to retain the same size mated connectors together or to secure the connector to a rack/panel. Screwlocks may be used on plugs or sockets.
- Female screwlocks consist of one #4-40 screw with a #4-40 hole in the top, two flat washers to accommodate different panel thicknesses, one lockwasher, and one #4-40 nut. Military female screwlocks include three flat washers.
- Male screwlocks consist of one #4-40 slotted screw and a spring tension clip. Different sizes accommodate the various connector flange sizes and types of backshells or hoods (if applicable).
- Two screwlocks are required per connector.
- Military screwlocks meet all requirements of MIL-C-24308.

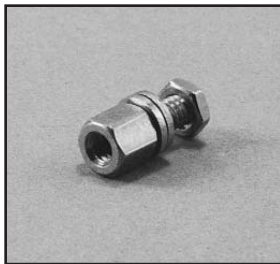
Materials

Commercial Screwlock Assemblies:

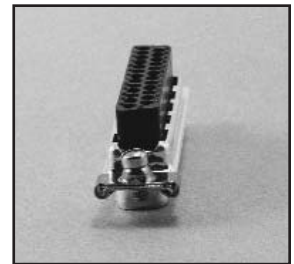
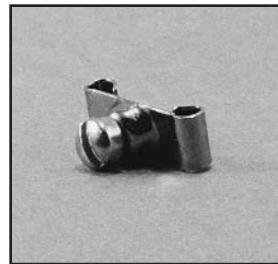
- Male Screwlock Assembly: Clip and screw are steel with zinc plating and yellow chromate finish.
- Female Screwlock Assembly: Washers (2), lockwashers, hex nuts, and nuts are steel with zinc plating and yellow chromate finish.

M24308 Military Screwlock Assemblies:

- Male Screwlock Assembly: Clip and screw are steel with cadmium plating and yellow chromate finish.
- Female Screwlock Assembly: Washers (3), lockwashers, hex nuts, and nuts are steel with cadmium plating and yellow chromate finish.



Female Screwlock

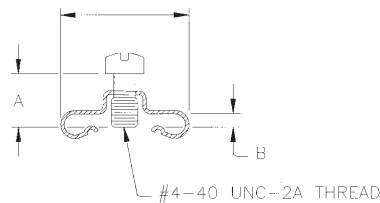


Male Screwlock

- Screwlock assemblies will not fit D*H or SDH Series backshells.

Male Screwlocks

.547 (13.89) SHELL SIZES E, A, B, C
.656 (16.66) SHELL SIZE D

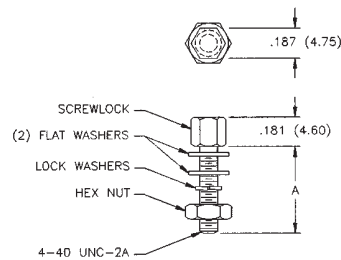


Ordering Information

Shell Size Positions	A		B		E	A	B	C	D
	in	mm	in	mm	9	15	25	37	50
Commercial:									
D20419-0	0.250	56.35	0.033	0.84	P/S	P/S	S	S	
D20419-16	0.250	56.35	0.048	1.22	S*	S*	P/S*	P/S*	
D20419-21	0.281	63.34	0.059	1.50		P*	P*		
D20420-0	0.250	56.35	0.033	0.84					S
D20420-12	0.281	63.34	0.048	1.22					P/S*
D20420-15	0.281	63.34	0.059	1.50					P*
Military MIL-C-24308:									
M24308/25-9F	Per MIL spec				P/S	P/S	P/S	P/S	
M24308/25-10F	Per MIL spec								P/S

NOTE: P = Plug, S = Socket
* Indicates use with junction shell

Female Screwlocks



Ordering Information

Shell Size Positions	A		E	A	B	C	D
	in	mm	9	15	25	37	50
Commercial:							
D20418-2	0.312	70.32	P/S	P/S	P/S	P/S	P/S
D20418-39	0.628	141.55	P/S	P/S	P/S	P/S	P/S
Military MIL-C-24308:							
M24308/26-1F	Per MIL spec		P/S	P/S	P/S	P/S	P/S
M24308/26-2F	Per MIL spec		P/S	P/S	P/S	P/S	P/S

NOTE: P = Plug, S = Socket