

# M28840/1 STRAIGHT STRAIN RELIEF BACKSHELL

M28840/1	J	W
DESIGNATION	SHELL SIZE	MATERIAL & FINISH
QPL: M28840/1 Commercial: IN28840/1	A: 11 B: 13 C: 15 D: 17 E: 19 F: 23 G: 25 H: 29 J: 33	W: Aluminum, Cadmium Plate, O.D. over Electroless Nickel S: Aluminum -Zinc Nickel, Non-Reflective L: Aluminum-Tin-Zinc, Non-Reflective (Commercial only)

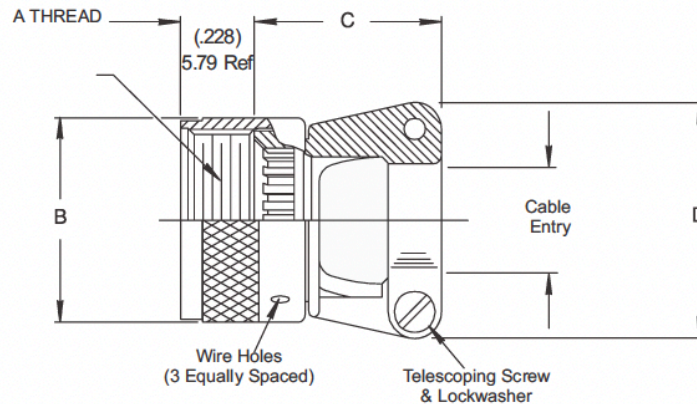


TABLE A

Military Shell Size	Shell Size	A Thread Class 2B	B Ø Max.	C Max.	D Max.	Screw Size Ref.	A Cable Entry	
							Min.	Max.
A	11	.750-20 UNEF	(1.028) 26.11	(1.091) 27.71	(.903) 2.94	.114-40	(.177) 4.50	(.286) 7.26
B	13	.875-20 UNEF	(1.141) 28.98	(1.091) 27.71	(.977) 24.82	.114-40	(.177) 4.50	(.286) 7.26
C	15	1.000-20 UNEF	(1.263) 32.08	(1.091) 27.71	(1.151) 29.24	.114-40	(.250) 6.35	(.416) 10.57
D	17	1.125-18 UNEF	(1.387) 35.23	(1.206) 30.63	(1.281) 32.54	.114-40	(.291) 7.39	(.476) 12.09
E	19	1.250-18 UNEF	(1.513) 38.43	(1.320) 33.53	(1.406) 35.71	.114-40	(.348) 8.84	(.626) 15.90
F	23	1.438-18 UNEF	(1.703) 43.26	(1.445) 36.70	(1.576) 40.03	.134-32	(.429) 10.90	(.831) 21.11
G	25	1.562-18 UNEF	(1.825) 46.36	(1.570) 39.88	(1.666) 42.32	.134-32	(.523) 13.28	(.956) 24.28
H	29	1.875-16 UN	(2.143) 54.43	(1.721) 43.71	(2.046) 51.97	.134-32	(.643) 16.33	(1.081) 27.46
J	33	2.062-16 UNS	(2.329) 59.16	(1.908) 48.46	(2.209) 56.11	.162-32	(.704) 17.88	(1.187) 30.15

\* Dimensions in (inches) mm

# M28840/2 90° STRAIN RELIEF BACKSHELL

M28840/2	J	W
DESIGNATION	SHELL SIZE	MATERIAL & FINISH
QPL: M28840/2 Commercial: IN28840/2	A: 11 B: 13 C: 15 D: 17 E: 19 F: 23 G: 25 H: 29 J: 33	W: Aluminum, Cadmium Plate, O.D. over Electroless Nickel S: Aluminum -Zinc Nickel, Non-Reflective L: Aluminum-Tin-Zinc, Non-Reflective (Commercial only)

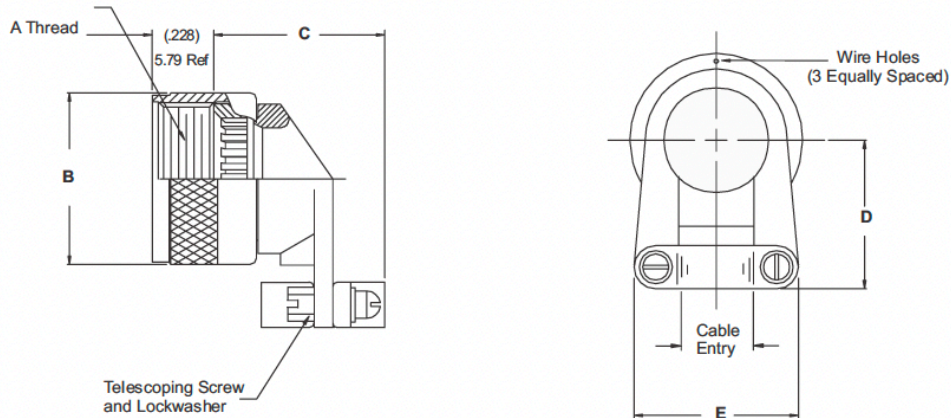


TABLE A

Military Shell Size	Shell Size	A Thread Class 2B	B Ø Max.	C Max.	D Max.	E Max.	Screw Size Ref.	Cable Entry	
								Min.	Max.
A	11	.750-20 UNEF	(1.028) 26.11	(1.071) 27.20	(.929) 23.60	(.903) 22.94	.114-40	(.177) 4.50	(.286) 7.26
B	13	.875-20 UNEF	(1.141) 28.98	(1.071) 27.20	(.929) 23.60	(.977) 24.82	.114-40	(.177) 4.50	(.286) 7.26
C	15	1.000-20 UNEF	(1.263) 32.08	(1.280) 32.51	(1.056) 26.82	(1.151) 29.24	.114-40	(.250) 6.35	(.416) 10.57
D	17	1.125-18 UNEF	(1.387) 35.23	(1.392) 35.36	(1.233) 31.32	(1.281) 32.54	.114-40	(.291) 7.39	(.476) 12.09
E	19	1.250-18 UNEF	(1.513) 38.43	(1.517) 38.53	(1.296) 32.92	(1.406) 35.71	.114-40	(.348) 8.84	(.626) 15.90
F	23	1.438-18 UNEF	(1.703) 43.26	(1.642) 41.71	(1.358) 34.49	(1.576) 40.03	.134-32	(.429) 10.90	(.831) 21.11
G	25	1.562-18 UNEF	(1.825) 46.36	(1.767) 44.88	(1.420) 36.07	(1.666) 42.32	.134-32	(.523) 13.28	(.956) 24.28
H	29	1.875-16 UN	(2.143) 54.43	(1.905) 48.39	(1.634) 41.50	(2.046) 51.97	.134-32	(.643) 16.33	(1.081) 27.46
J	33	2.062-16 UNS	(2.329) 59.16	(1.968) 49.99	(1.859) 47.22	(2.209) 56.11	.162-32	(.704) 17.88	(1.187) 30.15

\* Dimensions in (inches) mm

# M28840/3 45° STRAIN RELIEF BACKSHELLS

M28840/3	J	W
DESIGNATION	SHELL SIZE	MATERIAL & FINISH
QPL: M28840/3 Commercial: IN28840/3	A: 11 B: 13 C: 15 D: 17 E: 19 F: 23 G: 25 H: 29 J: 33	W: Aluminum, Cadmium Plate, O.D. over Electroless Nickel S: Aluminum -Zinc Nickel, Non-Reflective L: Aluminum-Tin-Zinc, Non-Reflective (Commercial only)

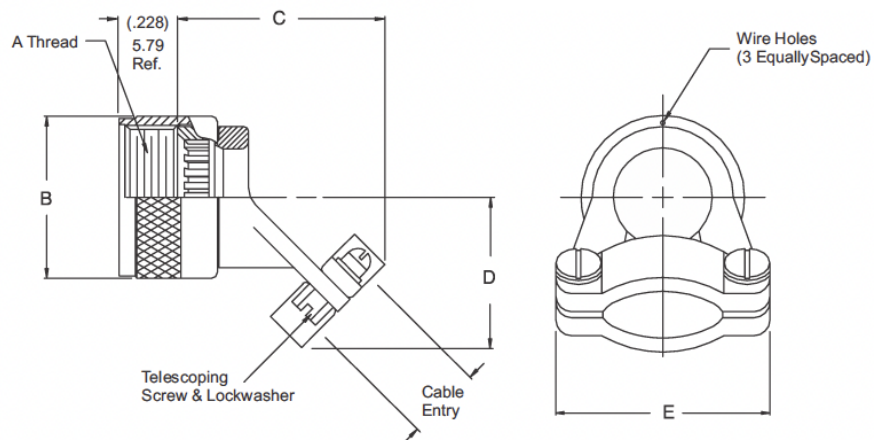


TABLE A

Military Shell Size	Shell Size	A Thread Class 2B	B Ø Max.	C Max.	D Max.	E Max.	Screw Size Ref.	Cable Entry	
								Min.	Max.
A	11	.750-20 UNEF	(1.028) 26.11	(1.091) 27.71	(.929) 23.60	(.903) 22.94	.114-40	(.177) 4.50	(.286) 7.26
B	13	.875-20 UNEF	(1.141) 28.98	(1.091) 27.71	(.929) 23.60	(.977) 24.82	.114-40	(.177) 4.50	(.286) 7.26
C	15	1.000-20 UNEF	(1.263) 32.08	(1.091) 27.71	(1.056) 26.82	(1.151) 29.24	.114-40	(.250) 6.35	(.416) 10.57
D	17	1.125-18 UNEF	(1.387) 35.23	(1.206) 30.63	(1.233) 31.32	(1.281) 32.54	.114-40	(.291) 7.39	(.476) 12.09
E	19	1.250-18 UNEF	(1.513) 38.43	(1.320) 33.53	(1.296) 32.92	(1.406) 35.71	.114-40	(.348) 8.84	(.626) 15.90
F	23	1.438-18 UNEF	(1.703) 43.26	(1.445) 36.70	(1.358) 34.49	(1.576) 40.03	.134-32	(.429) 10.90	(.831) 21.11
G	25	1.562-18 UNEF	(1.825) 46.36	(1.570) 39.88	(1.420) 36.07	(1.666) 42.32	.134-32	(.523) 13.28	(.956) 24.28
H	29	1.875-16 UN	(2.143) 54.43	(1.721) 43.71	(1.634) 41.50	(2.046) 51.97	.134-32	(.643) 16.33	(1.081) 27.46
J	33	2.062-16 UNS	(2.329) 59.16	(1.908) 48.46	(1.859) 47.22	(2.209) 56.11	.162-32	(.704) 17.88	(1.187) 30.15

\* Dimensions in (inches) mm

# M28840/5 BACKSHELL FOR METAL CORE CONDUIT

M28840/5	16	W	A
DESIGNATION	DASH #	MATERIAL & FINISH	BACKSHELL STYLE
QPL: M28840/5 Commercial: IN28840/5	See Table A	W: Aluminum, Cadmium Plate, O.D. over Electroless Nickel S: Aluminum -Zinc Nickel, Non-Reflective L: Aluminum-Tin-Zinc, Non-Reflective (Commercial only)	A: EMI, Non-Environmental B: EMI, Environmental

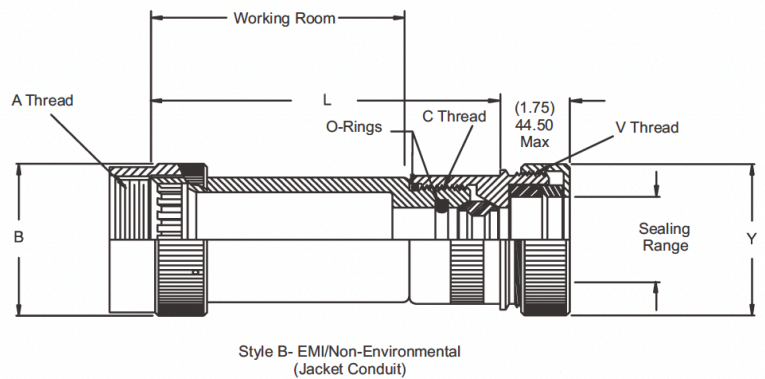
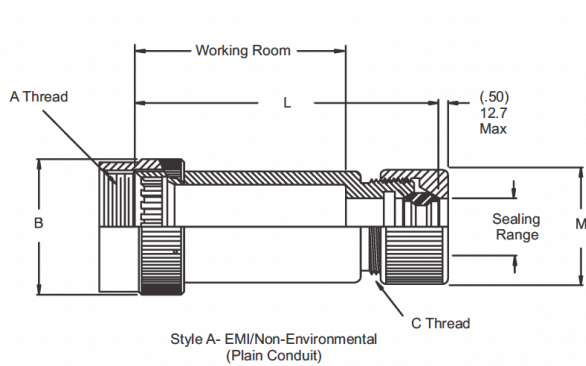


TABLE A									
DASH #	Military Shell Size	Shell Size	Conduit Size	L + .12 (3.05)	Working Room Ref.	V Thread Class 2	M Ø Max.	Y Ø Max.	
01	A	11	03	(1.75) 44.45	(1.00) 25.4	1.00-20 UNEF	(1.12) 28.45	1.19 (30.23)	
02	B	13				1.188-18 UNEF	(1.25) 31.8	(1.38) 35.1	
03	B	13				04	1.000-20 UNEF	(1.12) 28.5	(1.19) 30.23
04	C	15				03	1.188-30 UNEF	(1.25) 31.8	(1.38) 35.1
05	C	15	04	(3.00) 76.2	(1.50) 38.10	1.438-18 UNEF	(1.43) 36.3	(1.63) 41.4	
06	C	15	05			1.750-18 UNS	(1.62) 41.2	(1.94) 49.3	
07	C	15	06			1.438-18 UNEF	(1.43) 36.3	(1.63) 41.4	
08	D	17	05			1.750-18 UNS	(1.62) 41.2	(1.94) 49.3	
09	D	17	06	(2.25) 57.15	(2.00) 50.80	2.00-18 UNS	(1.81) 46.0	(2.19) 55.6	
10	D	17	08			1.438-18 UNEF	(1.43) 36.3	(1.63) 41.4	
11	E	19	05			1.750-18 UNEF	(1.62) 41.2	(1.94) 49.3	
12	E	19	06			2.00-18 UNS	(1.81) 46.2	(2.19) 55.6	
13	E	19	08	(2.75) 69.85	(1.50) 38.10	1.750-18 UNS	(1.62) 41.2	(1.94) 49.3	
14	F	23	06			2.00-18 UN	(1.81) 46.0	(2.19) 55.6	
15	F	23	08			2.00-16 UN	(2.18) 55.4	(2.44) 62.0	
16	F	23	10			1.750-18 UN	(1.62) 41.2	(1.94) 49.3	
17	G	25	06	(3.50) 88.90	(2.00) 50.80	2.00-18 UN	(1.81) 46.0	(2.19) 55.6	
18	G	25	08			2.250-16 UN	(2.18) 55.4	(2.44) 62.0	
19	G	25	10			2.500-16 UN	(2.56) 65.0	(2.69) 68.3	
20	G	25	12			2.250-16 UN	(2.18) 55.4	(2.44) 62.0	
21	H	29	10	(4.00) 101.6	(2.50) 63.50	2.500-16 UN	(2.56) 65.0	(2.69) 68.3	
22	H	29	12			2.250-16 UN	(2.18) 55.4	(2.44) 62.0	
23	J	33	12			2.500-16 UN	(2.56) 65.0	(2.66) 68.3	
24	J	33	16			3.00-16 UN	(3.06) 77.8	(3.18) 81.0	
25	A	11	04	(1.75) 44.45	(1.00) 25.4	1.188-18 UNEF	(1.75) 31.75	(1.38) 35.0	

\* Dimensions in (inches) mm

# M28840/5 BACKSHELL FOR METAL CORE CONDUIT

TABLE A							
DASH #	Military Shell Size	Shell Size	A Thread Class 2B	B Ø Max.	C Thread Class 2	Sealing Range	
						Max.	Min.
01	A	11	.750-20 UNEF	(1.028) 26.11	.875-20 UNEF	(.63) 16.0	(0.50) 12.7
02	B	13	.875-20 UNEF	(1.141) 28.98			
03	B	13			1.000-20 UNEF	(1.263) 32.08	.875-20 UNEF
04	C	15	1.000-20 UNEF	(.75) 19.1			(.63) 16.0
05	C	15	1.125-18 UNEF	(.88) 22.4			(.75) 19.1
06	C	15	1.250-18 UNEF	(1.00) 25.4			(.88) 22.4
07	C	15	1.250-18 UNEF	(1.387) 35.23			1.125-18 UNEF
08	D	17			1.250-18 UNEF	(1.00) 25.4	(.88) 22.4
09	D	17			1.625-18 UNEF	(1.38) 35.1	(1.19) 30.2
10	D	17	1.250-18 UNEF	(1.513) 38.43	1.125-18 UNEF	(.88) 22.4	(.75) 19.1
11	E	19			1.250-18 UNEF	(1.00) 25.4	(.88) 22.4
12	E	19			1.625-18 UNEF	(1.38) 35.1	(1.19) 30.2
13	E	19	1.438-18 UNEF	(1.703) 45.51	1.250-18 UNEF	(1.00) 25.4	(.88) 22.4
14	F	23			1.625-18 UNEF	(1.38) 35.1	(1.19) 30.2
15	F	23			1.875-18 UNS	(1.63) 41.4	(1.44) 36.6
16	F	23	1.562-18 UNEF	(1.825) 46.35	1.250-18 UNEF	(1.00) 25.4	(.88) 22.4
17	G	25			1.625-18 UNEF	(1.38) 35.1	(1.19) 30.2
18	G	25			1.875-18 UNS	(1.63) 41.4	(1.44) 36.6
19	G	25			2.125-16 UN	(1.88) 47.8	(1.63) 41.4
20	G	25	1.875-16 UN	(2.143) 54.43	1.875-18 UNS	(1.63) 41.4	(1.44) 36.6
21	H	29			2.125-16 UN	(1.88) 47.8	(1.63) 41.4
22	H	29	2.062-16 UNS	(2.329) 59.16	2.125-16 UN	(1.88) 47.8	(1.63) 41.4
23	J	33			2.750-16 UN	(2.38) 60.5	(2.13) 54.1
24	J	33			.875-20 UN	(.75) 19.05	(.63) 16.00
25	A	11	.750-20 UNEF	(1.028) 26.11	.875-20 UN	(.75) 19.05	(.63) 16.00

\* Dimensions in (inches) mm

# M28840/6 EMI/RFI ENVIRONMENTAL BACKSHELL

M28840/6	16	W	A
DESIGNATION	DASH #	MATERIAL & FINISH	BACKSHELL STYLE
QPL: M28840/6 Commercial: IN28840/6	See Table A	W: Aluminum, Cadmium Plate, O.D. over Electroless Nickel S: Aluminum -Zinc Nickel, Non-Reflective L: Aluminum-Tin-Zinc, Non-Reflective (Commercial only)	A: EMI, Non-Environmental B: EMI, Environmental

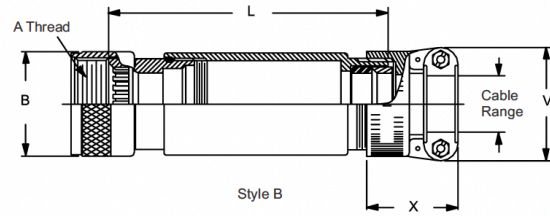
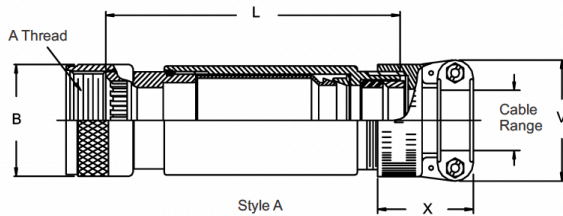


TABLE A

DASH #	Military Shell Size	Shell Size	A Thread Class 2B	B Ø Max.	C Ø Max.	D Ø Min.	Cable Entry	
							Max.	Min.
01	A	11	.750-20 UNEF	(1.028) 26.11	(1.156) 29.36	(.750) 19.05	(.312) 7.92	(.188) 4.77
02	B	13	.875-20 UNEF	(1.141) 28.98	(1.156) 29.36	(.750) 19.05	(.312) 7.92	(.188) 4.77
03	B	13	.875-20 UNEF	(1.141) 28.98	(1.156) 29.36	(.750) 19.05	(.438) 11.12	(.281) 7.14
04	C	15	1.000-20 UNEF	(1.263) 32.08	(1.281) 32.54	(.875) 22.23	(.312) 7.92	(.188) 4.77
05	C	15	1.000-20 UNEF	(1.263) 32.08	(1.281) 32.54	(.875) 22.23	(.438) 11.12	(.281) 7.14
06	C	15	1.000-20 UNEF	(1.263) 32.08	(1.281) 32.54	(.875) 22.23	(.562) 14.27	(.344) 8.74
07	C	15	1.000-20 UNEF	(1.263) 32.08	(1.406) 35.71	(1.000) 25.40	(.750) 19.05	(.438) 11.12
08	D	17	1.125-18 UNEF	(1.387) 35.23	(1.406) 35.71	(1.000) 25.40	(.625) 15.87	(.375) 9.52
09	D	17	1.125-18 UNEF	(1.387) 35.23	(1.406) 35.71	(1.000) 25.40	(.750) 19.05	(.438) 11.12
10	D	17	1.125-18 UNEF	(1.387) 35.23	(1.531) 38.89	(1.125) 28.58	(.938) 23.82	(.625) 15.87
11	E	19	1.250-18 UNEF	(1.513) 38.43	(1.531) 38.89	(1.125) 28.58	(.625) 15.87	(.375) 9.52
12	E	19	1.250-18 UNEF	(1.513) 38.43	(1.531) 38.89	(1.125) 28.58	(.938) 23.82	(.625) 15.87
13	E	19	1.438-18 UNEF	(1.703) 45.51	(1.656) 42.06	(1.250) 31.75	(.750) 19.05	(.438) 11.12
14	F	23	1.438-18 UNEF	(1.703) 45.51	(1.656) 42.06	(1.250) 31.75	(.938) 23.82	(.625) 15.87
15	F	23	1.438-18 UNEF	(1.703) 45.51	(1.781) 45.24	(1.375) 34.93	(1.188) 30.17	(.812) 20.62
16	F	23	1.562-18 UNEF	(1.825) 46.35	(1.781) 45.24	(1.375) 34.93	(.938) 23.82	(.625) 15.87
17	G	25	1.562-18 UNEF	(1.825) 46.35	(1.781) 45.24	(1.375) 34.93	(1.188) 30.17	(.812) 20.62
18	G	25	1.562-18 UNEF	(1.825) 46.35	(1.781) 45.24	(1.375) 34.93	(1.250) 31.75	(.875) 22.23
19	G	25	1.562-18 UNEF	(1.825) 46.35	(2.156) 54.76	(1.750) 44.45	(1.380) 35.05	(1.000) 25.4
20	G	25	1.875-16 UNS	(2.143) 54.43	(2.156) 54.76	(1.750) 44.45	(1.188) 30.17	(.812) 20.62
21	H	29	1.875-16 UNS	(2.143) 54.43	(2.156) 54.76	(1.750) 44.45	(1.380) 38.05	(1.000) 25.4
22	H	29	2.062-16 UNS	(2.329) 59.16	(2.281) 57.94	(1.875) 47.63	(1.380) 38.05	(1.000) 25.4
23	J	33	2.062-16 UNS	2.329) 59.16	(2.281) 57.94	(1.875) 47.63	(1.625) 41.28	(1.250) 31.75
24	J	33	.750-20 UNEF	(1.028) 26.11	(1.156) 29.36	(.750) 19.05	(.438) 11.12	(.281) 7.14
25	A	11	.750-20 UNEF	(1.028) 26.11	(1.281) 32.54	(.875) 22.22	(.562) 14.27	(.344) 8.74
26	B	13	.875-30 UNEF	(1.141) 28.98	(1.281) 32.54	(.875) 22.22	(.562) 14.27	(.344) 8.74
27	B	13	.875-30 UNEF	(1.141) 28.98	(1.406) 35.71	(1.000) 25.4	(.625) 15.87	(.375) 9.52
28	C	15	1.000-20 UNEF	(1.263) 32.08	(1.406) 35.71	(1.000) 25.4	(.625) 15.87	(.375) 9.52

\* Dimensions in (inches) mm

# M28840/6 EMI/RFI ENVIRONMENTAL BACKSHELL

TABLE A							
DASH #	Military Shell Size	Shell Size	L	Working Room Ref.	V Thread Class 2	X Ø Max.	Y Ref.
01	A	11	(3.62) 91.55	(2.00) 50.80	.625-24 UNEF	(1.281) 32.53	(.938) 23.82
02	B	13	(3.62) 91.55	(2.00) 50.80	.625-24 UNEF	(1.281) 32.53	(.938) 23.82
03	B	13	(3.62) 91.55	(2.00) 50.80	.750-20 UNEF	(1.281) 32.53	(1.125) 23.82
04	C	15	(3.62) 91.55	(2.00) 50.80	.625-24 UNEF	(1.281) 32.53	(.938) 23.82
05	C	15	(3.62) 91.55	(2.00) 50.80	.750-20 UNEF	(1.281) 32.53	(1.125) 28.57
06	C	15	(3.62) 91.55	(2.00) 50.80	.875-20 UNEF	(1.281) 32.53	(1.312) 33.32
07	C	15	(4.12) 104.65	(2.50) 63.50	1.188-18 UNEF	(1.312) 33.32	(1.593) 40.62
08	D	17	(4.12) 104.65	(2.50) 63.50	1.000-20 UNEF	(1.281) 32.54	(1.312) 33.32
09	D	17	(4.12) 104.65	(2.50) 63.50	1.188-19 UNEF	(1.312) 33.32	(1.593) 40.62
10	D	17	(4.12) 104.65	(2.50) 63.50	1.438-18 UNEF	(1.406) 35.71	(1.750) 44.45
11	E	19	(4.12) 104.65	(2.50) 63.50	1.000-20 UNEF	(1.281) 32.54	(1.312) 33.32
12	E	19	(4.12) 104.65	(2.50) 63.50	1.438-18 UNEF	(1.406) 35.71	(1.750) 44.45
13	E	19	(4.62) 117.35	(3.00) 76.20	1.188-18 UNEF	(1.312) 33.32	(1.593) 40.62
14	F	23	(4.62) 117.35	(3.00) 76.20	1.438-18 UNEF	(1.406) 35.71	(1.750) 44.45
15	F	23	(4.62) 117.35	(3.00) 76.20	1.750-18 UNS	(1.593) 40.46	(2.093) 53.16
16	F	23	(4.62) 117.35	(3.00) 76.20	1.438-18 UNEF	(1.406) 35.71	(1.750) 44.45
17	G	25	(5.12) 130.05	(3.50) 88.90	1.750-18 UNS	(1.593) 40.46	(2.093) 53.16
18	G	25	(5.12) 130.05	(3.50) 88.90	1.750-18 UNS	(1.593) 40.46	(2.093) 53.16
19	G	25	(5.12) 130.05	(3.50) 88.90	2.000-18 UNS	(1.625) 41.28	(2.343) 59.51
20	G	25	(5.12) 130.05	(3.50) 88.90	1.750-18 UNS	(1.593) 40.46	(2.093) 53.16
21	H	29	(5.12) 130.05	(3.50) 88.90	2.000-18 UNS	(1.625) 41.28	(2.343) 59.51
22	H	29	(5.12) 130.05	(3.50) 88.90	2.000-18 UNS	(1.625) 41.28	(2.343) 59.51
23	J	33	(5.12) 130.05	(3.50) 88.90	2.250-16 UNS	(1.900) 48.26	(2.750) 69.85
24	J	33	(3.62) 91.95	(2.00) 50.80	.750-20 UNEF	(1.281) 32.54	(1.125) 28.57
25	A	11	(3.62) 91.95	(2.00) 50.80	.875-20 UNEF	(1.281) 32.54	(1.312) 33.32
26	B	13	(3.62) 91.95	(2.00) 50.80	.875-20 UNEF	(1.281) 32.54	(1.312) 33.32
27	B	13	(4.12) 104.65	(2.50) 63.50	1.000-20 UNEF	(1.281) 32.54	(1.312) 33.32
28	C	15	(4.12) 104.65	(2.50) 63.50	1.000-20 UNEF	(1.281) 32.54	(1.312) 33.32

\* Dimensions in (inches) mm

# M28840/7 DUMMY STORAGE RECEPTACLE

M28840/7	B	4	F
DESIGNATION	SHELL SIZE	KEY POSITION	MATERIAL & FINISH
QPL: M28840/7 Commercial: IN28840/7	A: 11 B: 13 C: 15 D: 17 E: 19 F: 23 G: 25 H: 29 J: 33	1 2 3 4 5 6	No Designation: Aluminum, Cadmium Plate, O.D. over Electroless Nickel S: Aluminum-Zinc Nickel, Non-Reflective L: Aluminum-Tin-Zinc, Non-Reflective (Commercial only)

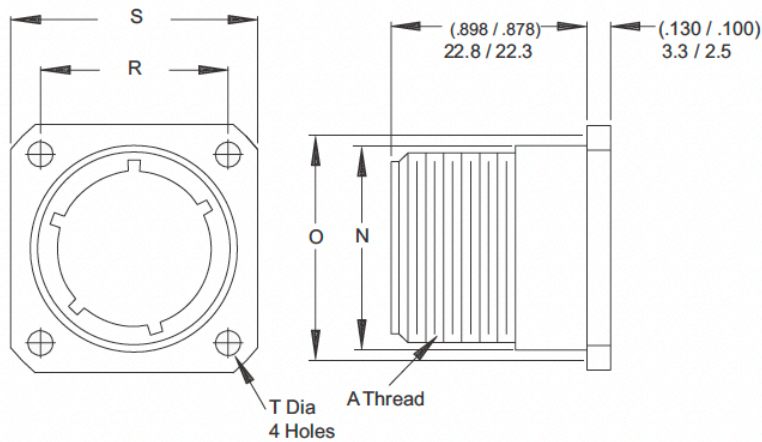


TABLE A

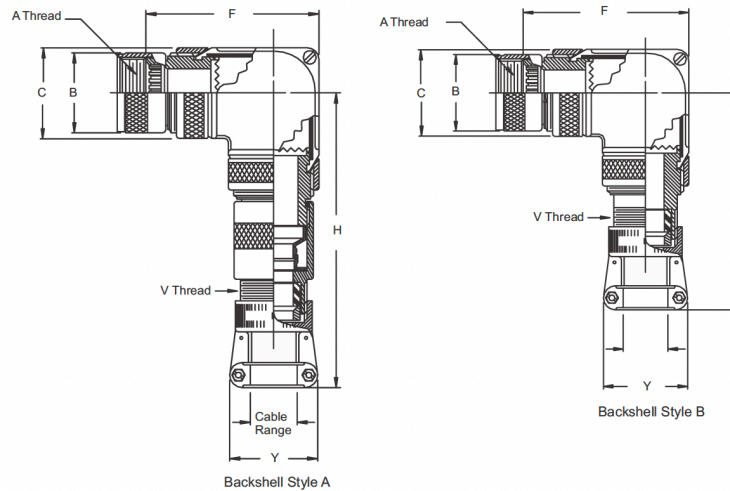
Military Shell Size	Shell Size	N Ø Max.	O Ref. Mating Hole	R True Position $\phi$ to $\phi$	S	T
A	11	(.750) 19.05	(.812) 20.62	(.750) 19.05	(1.043) 26.49 (1.003) 25.48	(.130) 3.30 (.115) 2.92
B	13	(.875) 22.22	(.937) 23.80	(.843) 21.41	(1.158) 29.41 (1.118) 28.40	
C	15	(1.062) 26.97	(1.124) 28.55	(.968) 24.59	(1.278) 32.46 (1.238) 31.45	
D	17	(1.125) 28.58	(1.187) 30.15	(1.015) 25.78	(1.403) 35.64 (1.363) 34.62	
E	19	(1.312) 33.32	(1.374) 34.90	(1.140) 28.96	(1.528) 38.81 (1.488) 37.80	
F	23	(1.500) 38.10	(1.562) 39.67	(1.281) 32.54	(1.738) 44.15 (1.698) 43.13	
G	25	(1.625) 41.28	(1.687) 42.85	(1.392) 35.36	(1.838) 46.69 (1.798) 45.67	(.157) 3.99 (.142) 3.61
H	29	(1.812) 46.02	(1.874) 47.60	(1.568) 39.83	(2.158) 54.81 (2.118) 53.80	
J	33	(2.000) 50.80	(2.062) 52.37	(1.734) 44.04	(2.348) 59.64 (2.308) 58.62	(.183) 4.65 (.168) 4.27

\* Dimensions in (inches) mm



# M28840/8 90° EMI/RFI ENVIRONMENTAL BACKSHELL

M28840/8	16	W	A
DESIGNATION	DASH #	MATERIAL & FINISH	BACKSHELL STYLE
QPL: M28840/8 Commercial: IN28840/8	See Table A	W: Aluminum, Cadmium Plate, O.D. over Electroless Nickel S: Aluminum -Zinc Nickel, Non-Reflective L: Aluminum-Tin-Zinc, Non-Reflective (Commercial only)	A: EMI Environmental B: Environmental



Backshell Shell Size	DASH #	Military Shell Size	Shell Size	A Thread Class 2B	B Ø Max.	C Ø Max.	D Ø Max.
A	01	A	11	.750-20 UNEF	(1.028) 26.11	(1.188) 30.17	(1.031) 26.19
A	02	B	13	.875-20 UNEF	(1.141) 28.98		
B	03	B	13	1.00-20 UNEF	(1.263) 32.08	(1.438) 36.52	(1.156) 29.36
A	04	C	15				
B	05	C	15				
C	06	C	15	1.125-18 UNEF	(1.387) 35.23	(1.688) 42.87	(1.281) 32.54
D	07	C	15				
A	08	D	17				
B	09	D	17	1.250-18 UNEF	(1.513) 38.43	(1.938) 49.22	(1.406) 35.71
C	10	D	17				
A	11	E	19				
B	12	E	19	1.438-18 UNEF	(1.703) 43.51	(2.188) 54.43	(1.531) 38.89
A	13	F	23				
B	14	F	23				
C	15	F	23	1.562-18 UNEF	(1.825) 46.35	(2.688) 68.26	(1.781) 45.24
A	16	G	25				
B	17	G	25				
C	18	G	25	1.875-16 UN	(2.143) 54.43	(1.188) 30.17	(1.031) 26.19
D	19	G	25				
A	20	H	29				
B	21	H	29	2.062-16 UNS	(2.329) 59.16	(1.438) 36.52	(1.156) 29.36
A	22	J	33				
A	23	J	33				
B	24	A	11	.750-20 UNEF	(1.028) 26.11	(1.688) 42.87	(1.281) 32.54
C	25	A	11				
C	26	B	13				
D	27	B	13	.875-20 UNEF	(1.141) 28.98	(1.688) 42.87	(1.281) 32.54
E	28	C	15	1.000-20 UNEF	(1.263) 32.08		

\* Dimensions in (inches) mm

# M28840/8 90° EMI/RFI ENVIRONMENTAL BACKSHELL

TABLE A							
Backshell Shell Size	DASH #	Military Shell Size	Shell Size	X Ref. Dimension	Y Ref. Dimension	H Max. Style A	N Max. Style B
A	01	A	11	(1.281) 32.54	(.938) 23.82	(5.332) 134.43	(2.962) 75.23
A	02	B	13		(.938) 23.82	(5.332) 134.43	(2.962) 75.23
B	03	B	13		(1.125) 28.57	(5.332) 34.43	(2.962) 75.23
A	04	C	15		(.938) 23.82	(5.457) 138.61	(3.087) 78.41
B	05	C	15		(1.125) 28.57	(5.457) 138.61	(3.087) 78.41
C	06	C	15		(1.312) 33.32	(5.457) 138.61	(3.087) 78.41
D	07	C	15		(1.593) 40.62	(5.682) 144.32	(3.312) 84.12
A	08	D	17		(1.312) 33.32	(5.682) 144.32	(3.312) 84.12
B	09	D	17	(1.312) 33.32	(1.593) 40.62	(5.713) 145.11	(3.343) 84.91
C	10	D	17	(1.406) 35.71	(1.750) 44.45	(5.807) 147.50	(3.437) 87.30
A	11	E	19	(1.281) 32.54	(1.312) 33.32	(5.682) 144.32	(3.312) 84.12
B	12	E	19	(1.406) 35.71	(1.750) 44.45	(5.832) 148.13	(3.462) 87.93
A	13	F	23	(1.312) 33.32	(1.593) 40.62	(5.738) 145.28	(3.36x=) 85.55
B	14	F	23	(1.406) 35.71	(1.750) 44.45	(5.832) 148.13	(3.462) 87.93
C	15	F	23	(1.593) 40.46	(2.093) 53.16	(6.019) 152.88	(3.649) 92.68
A	16	G	25	(1.406) 35.71	(1.750) 44.45	(5.832) 148.13	(3.462) 87.93
B	17	G	25	(1.593) 40.46	(2.093) 53.16	(6.019) 152.88	(3.649) 92.68
C	18	G	25	(1.593) 40.46	(2.093) 53.16	(6.144) 156.06	(3.774) 95.86
D	19	G	25	(1.625) 41.28	(2.343) 59.51	(6.176) 156.87	(3.806) 96.62
A	20	H	29	(1.593) 40.46	(2.093) 53.16	(6.144) 156.06	(3.774) 95.86
B	21	H	29	(1.625) 41.28	(2.343) 59.51	(6.176) 156.87	(3.806) 96.62
A	22	J	33	(1.625) 41.28	(2.343) 59.51	(6.426) 163.22	(4.056) 103.02
A	23	J	33	(1.900) 48.26	(2.750) 59.85	(6.701) 170.21	(4.33) 110.01
B	24	A	11	(1.281) 32.54	(1.125) 28.57	(5.332) 135.43	(2.962) 75.23
C	25	A	11		(5.457) 138.61	(3.087) 78.41	
C	26	B	13		(5.457) 138.61	(3.087) 78.41	
C	27	B	13		(5.682) 144.32	(3.312) 84.12	
B	28	C	15		(5.682) 144.32	(3.312) 84.12	

TABLE A								
Backshell Shell Size	DASH #	Military Shell Size	Shell Size	Cable Entry		E Max.	F Max.	V Thread Class 2
				Min.	Max.			
A	01	A	11	(.188) 4.77	(.312) 7.92	(1.156) 29.36	(2.614) 66.40	.625-24 UNEF
A	02	B	13	(.188) 4.77	(.312) 7.92			
B	03	B	13	(.281) 7.14	(.438) 11.12			
A	04	C	15	(.188) 4.77	(.312) 7.92	(1.281) 32.54	(2.864) 72.75	.625-24 UNEF
B	05	C	15	(.281) 7.14	(.438) 11.12			
C	06	C	15	(.344) 8.74	(.562) 14.27			
D	07	C	15	(.438) 11.12	(.750) 19.05	(1.406) 35.71	(3.114) 79.10	1.188-18 UNEF
A	08	D	17	(.375) 9.82	(.625) 15.87			
B	09	D	17	(.438) 11.12	(.750) 19.05			
C	10	D	17	(.625) 15.87	(.938) 23.82	(1.531) 38.89	(3.364) 85.45	1.438-18 UNEF
A	11	E	19	(.375) 9.52	(.625) 15.87	(1.406) 35.71		
B	12	E	19	(.625) 15.87	(.938) 23.82	(1.531) 38.89		
A	13	F	23	(.438) 11.12	(.750) 19.05	(1.406) 25.71	(3.614) 91.80	1.188-18 UNEF
B	14	F	23	(.625) 15.87	(.938) 23.82	(1.531) 38.89		
C	15	F	23	(.812) 20.62	(1.188) 30.17	(1.781) 45.24		
A	16	G	25	(.625) 15.87	(.938) 23.82	(1.531) 38.89	(1.781) 45.24	1.438-18 UNEF
B	17	G	25	(.812) 20.62	(1.188) 30.17			
C	18	G	25	(.875) 22.23	(1.250) 31.75	(1.781) 45.24		
D	19	G	25	(1.000) 25.40	(1.380) 35.05	(2.156) 54.76	(3.614) 91.80	2.000-16 UNS
A	20	H	29	(.812) 20.62	(1.188) 30.17	(1.781) 45.24		
B	21	H	29	(1.000) 25.40	(1.380) 35.05	(2.156) 54.76		
A	23	J	33	(1.380) 35.05	(1.000) 25.40	(2.281) 57.94	(4.114) 104.50	2.000-18 UNS
B	24	A	11	(1.625) 41.26	(1.250) 31.75			
C	25	A	11	(.438) 11.12	(.281) 7.14	(1.156) 29.36	(2.614) 66.40	.750-20 UNEF
C	26	B	13	(.562) 14.27	(.344) 8.74			
D	27	B	13	(.562) 14.27	(.344) 8.74			
E	28	C	15	(.625) 15.87	(.375) 9.52	(1.406) 35.71	(3.114) 79.10	1.000-20 UNEF

\* Dimensions in (inches) mm

# M28840/9 45° EMI/RFI ENVIRONMENTAL BACKSHELL

M28840/9	16	W	A
DESIGNATION	DASH #	MATERIAL & FINISH	BACKSHELL STYLE
QPL: M28840/9 Commercial: IN28840/9	See Table A	W: Aluminum, Cadmium Plate, O.D. over Electroless Nickel S: Aluminum -Zinc Nickel, Non-Reflective L: Aluminum-Tin-Zinc, Non-Reflective (Commercial only)	A: EMI Environmental B: Environmental

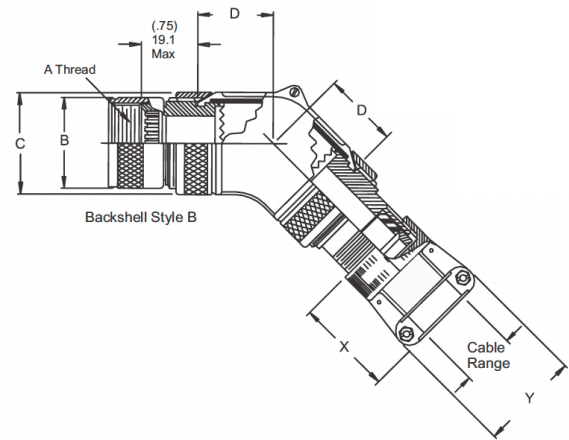
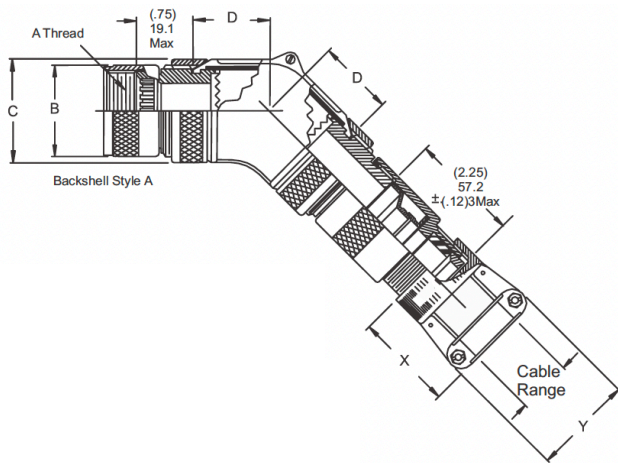


TABLE A

Backshell Shell Size	DASH #	Military Shell Size	A Thread Class 2B	B Ø Max.	C Ø Max.	D Max.
A	01	A	.750-20 UNEF	(1.028) 26.11	(1.188) 30.18	(1.031) 26.19
A	02	B	.875-20 UNEF	(1.141) 28.98		
B	03	B				
A	04	C	1.00-20 UNEF	(1.263) 32.08	(1.438) 36.53	(1.156) 29.36
B	05	C				
C	06	C				
D	07	C				
A	08	D	1.125-18 UNEF	(1.387) 35.23	(1.688) 42.88	(1.281) 32.54
B	09	D				
C	10	D				
A	11	E	1.250-18 UNEF	(1.513) 38.43	(1.938) 49.23	(1.406) 35.71
B	12	E				
A	13	F	1.438-18 UNEF	(1.703) 43.51		
B	14	F				
C	15	F				
A	16	G	1.562-18 UNEF	(1.825) 46.35	(2.188) 55.58	(1.531) 38.89
B	17	G				
C	18	G				
D	19	G				
A	20	H	1.875-16 UN	(2.143) 54.43	(2.688) 68.28	(1.781) 45.24
B	21	H				
A	22	J	2.062-16 UNEF	(2.329) 59.16		
B	23	J				
B	24	A	.750-20 UNEF	(1.028) 26.11	(1.188) 30.18	(1.031) 26.19
C	25	A			(1.438) 36.53	(1.156) 29.36
C	26	B	.875-20 UNEF	(1.141) 28.98	(1.688) 42.88	(1.156) 29.36
D	27	B				
E	28	C	1.000-20 UNEF	(1.263) 32.08	(1.688) 42.88	(1.281) 32.54

\* Dimensions in (inches) mm

# M28840/9 45° EMI/RFI ENVIRONMENTAL BACKSHELL

TABLE A							
Backshell Shell Size	DASH #	Military Shell Size	Cable Range		E Ø Max.	F Max. Style A	H Max. Style B
			Min	Max.			
A	01	A	(.188) 4.77	(.312) 7.92	(1.156) 29.36	(5.879) 149.33	(4.199) 106.65
A	02	B	(.188) 4.77	(.312) 7.92		(5.879) 149.33	(4.199) 106.65
B	03	B	(.281) 7.14	(.438) 11.12		(5.932) 150.67	(4.252) 108.00
A	04	C	(.188) 4.77	(.312) 7.92	(1.281) 32.54	(6.092) 154.74	(4.412) 112.06
B	05	C	(.281) 7.14	(.438) 11.12		(6.146) 156.11	(4.466) 113.44
C	06	C	(.344) 8.74	(.562) 14.27		(6.202) 157.53	(4.522) 114.86
D	07	C	(.438) 11.12	(.750) 19.05	(1.406) 35.71	(6.533) 165.94	(4.853) 123.27
A	08	D	(.375) 9.52	(.625) 15.87		(6.413) 162.89	(4.733) 120.22
B	09	D	(.438) 11.12	(.750) 19.05		(6.533) 165.94	(4.853) 123.27
C	10	D	(.625) 15.87	(.938) 23.82	(1.531) 38.89	(6.636) 168.55	(4.956) 125.88
A	11	E	(.375) 9.52	(.625) 15.87	(1.406) 35.71	(6.413) 162.89	(4.733) 120.22
B	12	E	(.625) 15.87	(.938) 23.82	(1.531) 38.89	(6.846) 173.89	(5.166) 131.22
A	13	F	(.438) 11.12	(.750) 19.05	(1.406) 25.71	(6.747) 171.37	(5.067) 128.70
B	14	F	(.625) 15.87	(.938) 23.82	(1.531) 38.89	(6.846) 173.89	(5.166) 131.22
C	15	F	(.812) 20.62	(1.188) 30.17	(1.781) 45.24	(7.103) 180.42	(5.423) 138.23
A	16	G	(.625) 15.87	(.938) 23.82	(1.531) 38.89	(6.846) 173.89	(5.156) 130.96
B	17	G	(.812) 20.62	(1.188) 30.17	(1.781) 45.24	(7.103) 180.42	(5.423) 138.23
C	18	G	(.875) 22.23	(1.250) 31.75		(7.316) 185.83	(5.636) 143.15
D	19	G	(1.000) 25.40	(1.380) 35.05		(2.156) 54.76	(7.425) 188.60
A	20	H	(.812) 20.62	(1.188) 30.17	(1.781) 45.24	(7.316) 185.83	(5.636) 143.15
B	21	H	(1.000) 25.40	(1.380) 35.05	(2.156) 54.76	(7.425) 188.60	(5.745) 145.92
A	22	J	(1.380) 35.05	(1.000) 25.40	(2.281) 57.94	(7.852) 199.44	(6.127) 156.77
B	23	J	(1.625) 41.28	(1.250) 31.75		(6.454) 163.93	(6.454) 163.93
B	24	A	(.438) 11.12	(.281) 7.14		(1.156) 29.36	(5.932) 150.67
C	25	A	(.562) 14.27	(.344) 8.74	(1.281) 32.54	(6.202) 157.53	(4.522) 114.86
C	26	B	(.562) 14.27	(.344) 8.74	(1.281) 32.54	(6.202) 157.53	(4.522) 114.86
D	27	B	(.625) 15.87	(.375) 9.52	(1.406) 35.71	(6.413) 162.89	(4.733) 120.22
E	28	C	(.625) 15.87	(.375) 9.50		(6.413) 162.89	(4.733) 120.22

TABLE A						
Backshell Shell Size	DASH #	Military Shell Size	V Thread Class	X Ref. Dimension	Y Ref. Dimension	
A	01	A	.625-24 UNEF	(1.281) 32.5	(938) 23.82	
A	02	B	.625-24 UNEF		(938) 23.82	
B	03	B	.750-20 UNEF		(1.125) 28.57	
A	04	C	.625-24 UNEF		(938) 23.82	
B	05	C	.750-20 UNEF		(1.125) 28.57	
C	06	C	.875-20 UNEF		(1.312) 33.32	
D	07	C	1.188-18 UNEF	(1.312) 33.32	(1.593) 40.62	
A	08	D	1.000-20 UNEF	(1.281) 32.54	(1.312) 33.32	
B	09	D	1.188-18 UNEF	(1.312) 33.32	(1.593) 40.62	
C	10	D	1.438-18 UNEF	(1.406) 35.71	(1.750) 44.45	
A	11	E	1.000-20 UNEF	(1.281) 32.54	(1.312) 33.32	
B	12	E	1.438-18 UNEF	(1.406) 35.71	(1.750) 44.45	
A	13	F	1.188-18 UNEF	(1.312) 33.32	(1.593) 40.62	
B	14	F	1.438-18 UNEF	(1.406) 35.71	(1.750) 44.45	
C	15	F	1.750-18 UNS	(1.593) 40.46	(2.093) 53.16	
A	16	G	1.438-18 UNEF	(1.406) 35.71	(1.750) 44.45	
B	17	G	1.750-18 UNS	(1.593) 40.46	(2.093) 53.16	
C	18	G	1.750-18 UNS	(1.593) 40.46	(2.093) 53.16	
D	19	G	2.000-16 UNS	(1.625) 41.28	(2.343) 59.51	
A	20	H	1.750-18 UNS	(1.593) 40.46	(2.093) 53.16	
B	21	H	2.000-18 UNS	(1.625) 41.28	(2.343) 59.51	
A	22	J	2.000-18 UNS	(1.625) 41.28	(2.343) 59.51	
B	23	J	2.250-16 UNS	(1.900) 48.26	(2.750) 69.85	
B	24	A	.750-20 UNEF	(1.281) 32.54	(1.125) 28.57	
C	25	A	.875-20 UNEF		(1.312) 33.32	
C	26	B	.875-20 UNEF			
D	27	B	1.000-20 UNEF			
E	28	C	1.000-20 UNEF			

\* Dimensions in (inches) mm

# M28840/10 WALL MOUNT RECEPTACLE CONNECTOR

M28840/10	A	G	1	P	1
DESIGNATION	MATERIAL & MATERIAL & FINISH	SHELL SIZE	INSERT	CONTACT	KEY POSITION
QPL: M28840/10 Commercial: IN28840/10	A: Aluminum, Cadmium Plate, O.D. over Electroless Nickel S: Aluminum-Zinc Nickel, Non-Reflective L: Aluminum-Tin-Zinc, Non-Reflective (Commercial only)	A: 11 B: 13 C: 15 D: 17 E: 19 F: 23 G: 25 H: 29 J: 33	1	F: Pin, Size 20 G: Socket, Size 20 P: Pin, Size, 22 S: Socket, Size, 22 D: Pin, Size, 28 E: Socket, Size, 28	1 2 3 4 5 6

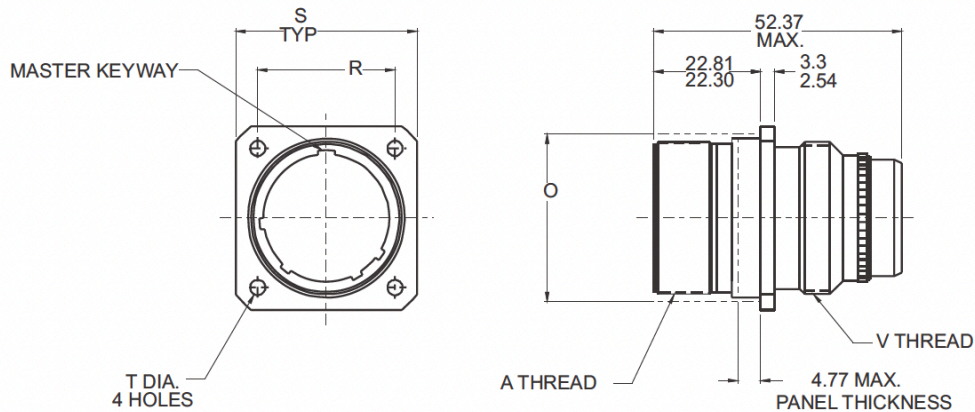


TABLE A

Military Shell Size	Shell Size	A Thread Class 2A	V Thread Class 2A	O Ref. Mating Hole	R True Position $\phi$ to $\phi$	S	T $\phi$
A	11	.750-.1P-.2L-D.S.	.750-20 UNEF	(.812) 20.62	(.750) 19.05	(1.043) 26.49 (1.003) 25.48	(.130) 3.30 (.115) 2.92
B	13	.875-.1P-.2L-D.S.	.875-20 UNEF	(.937) 23.80	(.843) 21.41	(1.158) 29.41 (1.118) 28.40	
C	15	1.062-.1P-.2L-D.S.	1.000-20 UNEF	(1.124) 28.55	(.968) 24.59	(1.278) 32.46 (1.238) 31.45	
D	17	1.125-.1P-.2L-D.S.	1.125-18 UNEF	(1.187) 30.15	(1.01) 25.78	(1.403) 35.64 (1.363) 34.62	
E	19	1.312-.1P-.2L-D.S.	1.250-18 UNEF	(1.374) 34.90	(1.140) 28.96	(1.528) 38.81 (1.488) 37.80	
F	23	1.500-.1P-.2L-D.S.	1.437-18 UNEF	(1.562) 39.67	(1.281) 32.54	(1.738) 44.15 (1.698) 43.13	
G	25	1.625-.1P-.2L-D.S.	1.562-18 UNEF	(1.687) 42.85	(1.392) 35.36	(1.838) 46.69 (1.798) 45.67	(.157) 3.99 (.142) 3.61
H	29	1.812-.1P-.2L-D.S.	1.875-16 UN	(1.874) 47.60	(1.568) 39.83	(2.158) 54.81 (2.118) 53.80	
J	33	2.000-.1P-.2L-D.S.	2.062-16 UNS	(2.062) 52.37	(1.734) 44.04	(2.348) 59.64 (2.308) 58.62	(.183) 4.65 (.168) 4.27

\* Dimensions in (inches) mm

# M28840/11 IN-LINE RECEPTACLE CONNECTOR

M28840/11	A	G	1	P	1
DESIGNATION	MATERIAL & FINISH	SHELL SIZE	INSERT	CONTACT	KEY POSITION
QPL: M28840/11 Commercial: IN28840/11	A: Aluminum, Cadmium Plate, O.D. over Electroless Nickel S: Aluminum-Zinc Nickel, Non-Reflective L: Aluminum-Tin-Zinc, Non-Reflective (Commercial only)	A: 11 B: 13 C: 15 D: 17 E: 19 F: 23 G: 25 H: 29 J: 33	1	F: Pin, Size 20 G: Socket, Size 20 P: Pin, Size, 22 S: Socket, Size, 22 D: Pin, Size, 28 E: Socket, Size, 28	1 2 3 4 5 6

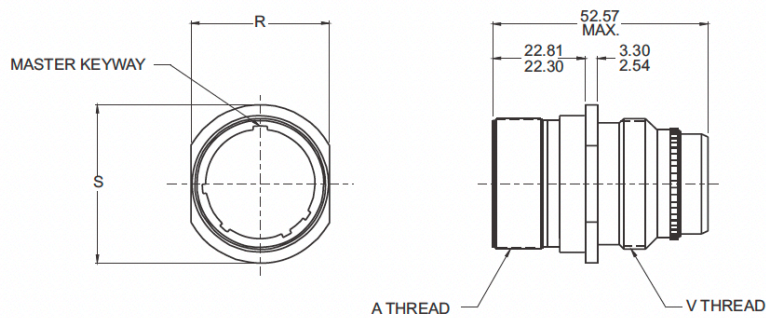


TABLE A

Military Shell Size	Shell Size	A Thread Class 2A	V Thread Class 2A	R	S Ø
A	11	.750-.1P-.2L-D.S.	.750-20 UNEF	(.768) 19.51 (.758) 19.25	(.963) 24.46 (.943) 23.95
B	13	.875-.1P-.2L-D.S.	.875-20 UNEF	(.893) 22.68 (.883) 22.43	(1.088) 27.63 (1.063) 27.13
C	15	1.062-.1P-.2L-D.S.	1.000-20 UNEF	(1.080) 27.43 (1.070) 27.18	(1.275) 32.38 (1.255) 31.88
D	17	1.125-.1P-.2L-D.S.	1.125-18 UNEF	(1.143) 29.03 (1.133) 28.78	(1.338) 33.98 (1.318) 33.48
E	19	1.312-.1P-.2L-D.S.	1.250-18 UNEF	(1.330) 33.78 (1.320) 33.53	(1.525) 38.74 1.505) 38.23
F	23	1.500-.1P-.2L-D.S.	1.437-18 UNEF	(1.518) 38.56 (1.508) 38.30	(1.713) 43.51 (1.693) 43.00
G	25	1.625-.1P-.2L-D.S.	1.562-18 UNEF	(1.643) 41.73 (1.633) 41.48	(1.838) 46.09 (1.818) 46.18
H	29	1.812-.1P-.2L-D.S.	1.875-16 UN	(1.893) 48.08 (1.883) 47.83	(2.088) 53.04 (2.068) 52.53
J	33	2.000-.1P-.2L-D.S.	2.062-16 UNS	(2.080) 52.83 (2.070) 52.58	(2.275) 57.78 (2.255) 57.28

\* Dimensions in (inches) mm

# M28840/12 BOX MOUNT RECEPTACLE CONNECTOR

M28840/12	A	2	G	1	P	1
DESIGNATION	MATERIAL & FINISH	LENGTH	SHELL SIZE	INSERT	CONTACT	KEY POSITION
QPL: M28840/12 Commercial: IN28840/12	A: Aluminum, Cadmium Plate, O.D. over Electroless Nickel S: Aluminum-Zinc Nickel, Non-Reflective L: Aluminum-Tin-Zinc, Non-Reflective (Commercial only)	Omit: Standard - (Figure 1)  2: Long - (Figure 2)	A: 11 B: 13 C: 15 D: 17 E: 19 F: 23 G: 25 H: 29 J: 33	1	F: Pin, Size 20 G: Socket, Size 20 P: Pin, Size, 22 S: Socket, Size, 22 D: Pin, Size, 28 E: Socket, Size, 28	1 2 3 4 5 6

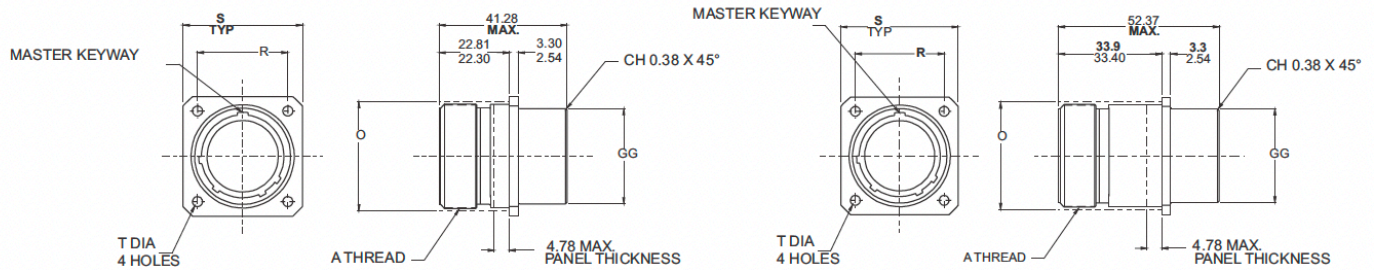


FIGURE 1  
Standard, 41.28 max length

FIGURE 2  
Long, 52.37 max length

TABLE A

Military Shell Size	Shell Size	N Ø Max.	Ø Ref. Mating Hole	R True Position $\phi$ to $\phi$	S	T	GG Ø Max.
A	11	(.750) 19.05	(.812) 20.62	(.750) 19.05	(1.043) 26.49 (1.003) 25.48	(.130) 3.30 (.115) 2.92	(.758) 19.25
B	13	(.875) 22.22	(.937) 23.80	(.843) 21.41	(1.158) 29.41 (1.118) 28.40		(.880) 22.35
C	15	(1.062) 26.97	(1.124) 28.55	(.968) 24.59	(1.278) 32.46 (1.238) 31.45		(1.005) 25.53
D	17	(1.125) 28.58	(1.187) 30.15	(1.015) 25.78	(1.403) 35.64 (1.363) 34.62		(1.130) 28.70
E	19	(1.312) 33.32	(1.374) 34.90	(1.140) 28.96	(1.528) 38.81 (1.488) 37.80		(1.255) 31.88
F	23	(1.500) 38.10	(1.562) 39.67	(1.281) 32.54	(1.738) 44.15 (1.698) 43.13		(1.443) 36.65
G	25	(1.625) 41.28	(1.687) 42.85	(1.392) 35.36	(1.838) 46.69 (1.798) 45.67	(.157) 3.99 (.142) 3.61	(1.567) 39.80
H	29	(1.812) 46.02	(1.874) 47.60	(1.568) 39.83	(2.158) 54.81 (2.118) 53.80		(1.880) 47.75
J	33	(2.000) 50.80	(2.062) 52.37	(1.734) 44.04	(2.343) 59.64 (2.308) 58.62		(2.067) 52.50

\* Dimensions in (inches) mm

# M28840/13 PROTECTIVE RECEPTACLE COVER

M28840/13	G	A	W
DESIGNATION	SHELL SIZE	CHAIN ATTACHMENT STYLE	MATERIAL & FINISH
QPL: M28840/13 Commercial: IN28840/13	A: 11 B: 13 C: 15 D: 17 E: 19 F: 23 G: 25 H: 29 J: 33	A: Link Chain WITH Fastener B: Link Chain WITH Ring for Jam-Nut Mounting Receptacle C: Link Chain WITH Ring for Cable-Connecting Receptacle	W: Aluminum, Cadmium Plate, O.D. over Electroless Nickel S: Aluminum -Zinc Nickel, Non-Reflective L: Aluminum-Tin-Zinc, Non-Reflective (Commercial only)

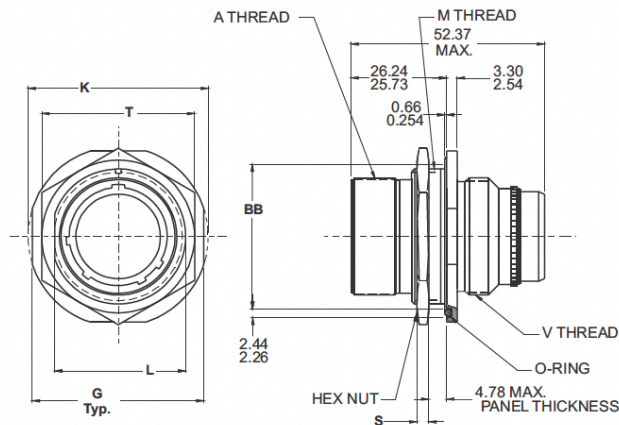


TABLE A

Military Shell Size	Shell Size	E Thread Class 2A	F Ø Max.	H + (0.010) ± (0.25)	J Ø + (0.05) ± (0.13)	G + (0.05) ± (0.13)
A	11	.750-.1P-.2L-D.S.	(1.028) 26.21	(.890) 22.61	(.130) 3.30	(.765) 19.43
B	13	.875-.1P-.2L-D.S.	(1.141) 23.98	(1.015) 25.78		(.890) 22.61
C	15	1.062-.1P-.2L-D.S.	(1.263) 32.08	(1.203) 30.56		(1.015) 25.78
D	17	1.125-.1P-.2L-D.S.	(1.387) 35.23	(1.265) 32.13		(1.140) 28.96
E	19	1.312-.1P-.2L-D.S.	(1.513) 38.43	(1.453) 36.91		(1.265) 32.13
F	23	1.500-.1P-.2L-D.S.	(1.703) 43.51	(1.640) 41.66	(.156) 3.96	(1.453) 36.91
G	25	1.625-.1P-.2L-D.S.	(1.825) 46.35	(1.765) 44.83		(1.577) 40.06
H	29	1.812-.1P-.2L-D.S.	(2.143) 54.43	(1.953) 49.61		(1.890) 48.01
J	33	2.000-.1P-.2L-D.S.	(2.329) 59.16	(2.140) 54.36	(.193) 4.90	(2.077) 52.76

\* Dimensions in (inches) mm



# M28840/14 JAM NUT RECEPTACLE CONNECTOR

M28840/14	A	G	1	P	1
DESIGNATION	MATERIAL & FINISH	SHELL SIZE	INSERT	CONTACT	KEY POSITION
QPL: M28840/14 Commercial: IN28840/14	A: Aluminum, Cadmium Plate, O.D. over Electroless Nickel S: Aluminum-Zinc Nickel, Non-Reflective L: Aluminum-Tin-Zinc, Non-Reflective (Commercial only)	A: 11 B: 13 C: 15 D: 17 E: 19 F: 23 G: 25 H: 29 J: 33	1	F: Pin, Size 20 G: Socket, Size 20 P: Pin, Size, 22 S: Socket, Size, 22 D: Pin, Size, 28 E: Socket, Size, 28	1 2 3 4 5 6

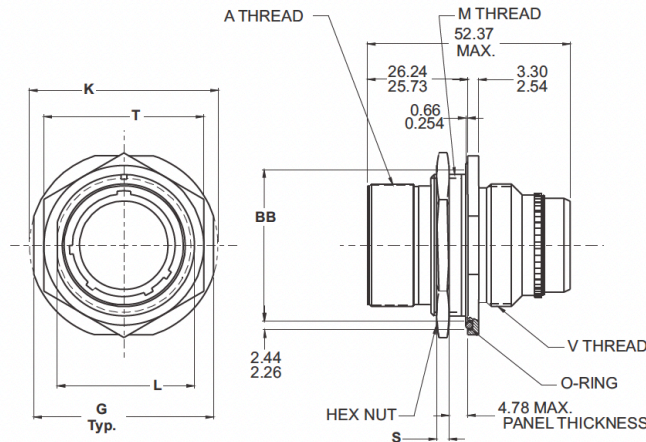


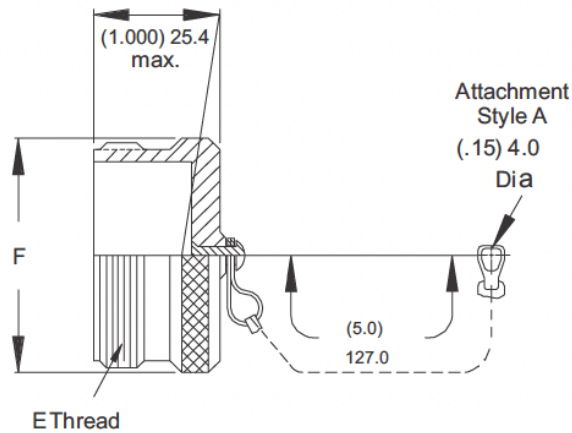
TABLE A

Military Shell Size	Shell Size	BB	G	K	L Across Flat	M Thread Class 2A	N Max.	P	R Max.	S Hex Nut Thickness	T ±.017(0.43)
A	11	(.979) 24.87	(1.274) 32.36	(1.368) 34.75	(.841) 21.36	7/8-20 UNEF	(0.750) 19.05	(.890) 22.61	(0.875)	(0.125) 3.17	(1.062) 26.97
A	11	(.969) 24.61	(1.254) 31.85	(1.348) 34.24	(.832) 21.13		19.05	(.880) 22.35	22.22		(1.188) 30.18
B	13	(1.104) 28.04	(1.399) 35.53	(1.508) 38.30	(.966) 24.54	1-20 UNEF	(0.875) 22.22	(1.015) 24.78	(1.000)		(1.375) 34.93
B	13	(1.094) 27.79	(1.379) 35.03	(1.488) 37.80	(.957) 24.31	1 3/16-18 UNEF	22.22	(1.005) 25.53	25.40		(1.438) 36.53
C	15	(1.292) 32.82	(1.587) 40.31	(1.681) 42.70	(1.156) 29.29		(1.062) 26.97	(1.203) 30.56	(1.188)		(1.625) 41.28
C	15	(1.282) 32.56	(1.567) 39.80	(1.661) 42.19	(1.144) 29.06	1 1/4-18 UNEF	26.97	(1.193) 30.30	30.18		(1.812) 46.02
D	17	(1.354) 34.39	(1.649) 41.88	(1.743) 44.27	(1.216) 30.89		(1.125) 28.58	(1.265) 32.13	(1.250)		(2.000) 50.80
D	17	(1.344) 34.14	(1.629) 41.38	(1.723) 43.76	(1.207) 30.66	1 7/16-18 UNEF	(1.25) 28.58	(1.255) 31.88	31.75		(2.188) 55.58
E	19	(1.542) 39.17	(1.837) 46.66	(1.931) 49.05	(1.403) 35.64		(1.312) 33.32	(1.453) 36.91	(1.438)		(2.375) 69.85
E	19	(1.532) 38.91	(1.817) 46.15	(1.911) 48.54	(1.394) 35.41	1 5/8-18 UNEF	33.32	(1.443) 36.65	36.52		
F	23	(1.729) 43.92	(2.024) 51.41	(2.118) 53.80	(1.591) 40.41		(1.500) 8.10	(1.640) 41.66	(1.625)		
F	23	(1.718) 43.66	(2.004) 50.90	(2.098) 53.29	(1.582) 40.18	1 3/4-18 UNS	8.10	(1.630) 41.40	41.28		
G	25	(1.854) 47.09	(2.149) 54.58	(2.243) 56.97	(1.716) 43.59		(1.625) 41.28	(1.765) 44.83	(1.750)		
G	25	(1.844) 46.84	(2.129) 54.08	(2.223) 56.46	(1.707) 43.36	1 15/16-16 UN	41.28	(1.755) 44.58	44.45		
H	29	(2.042) 51.87	(2.337) 59.36	(2.435) 61.85	(1.903) 46.34		(1.812)	(1.953) 49.61	(1.938)		
H	29	(2.032) 51.61	(2.317) 58.85	(2.415) 61.34	(1.894) 48.11	2 1/8-16 UN	46.02	(1.943) 49.35	49.22		
J	33	(2.229) 56.62	(2.524) 64.11	(2.618) 66.50	(2.091) 53.11		(2.000)	(2.140) 54.36	(2.125)		
J	33	(2.219) 56.36	(2.504) 63.60	(2.598) 65.99	(2.082) 52.88	50.80	(2.130) 54.10	53.98			

\* Dimensions in (inches) mm

# M28840/15 PROTECTIVE PLUG COVER

M28840/15	G	A	W
DESIGNATION	SHELL SIZE	CHAIN ATTACHMENT STYLE	MATERIAL & FINISH
QPL: M28840/15 Commercial: IN28840/15	A: 11 B: 13 C: 15 D: 17 E: 19 F: 23 G: 25 H: 29 J: 33	A: Link Chain WITH Fastener B: Link Chain WITH Ring for Jam-Nut Mounting Receptacle	W: Aluminum, Cadmium Plate, O.D. over Electroless Nickel S: Aluminum -Zinc Nickel, Non-Reflective L: Aluminum-Tin-Zinc, Non-Reflective (Commercial only)



Military Shell Size	Shell Size	E Thread Class 2B	F Ø Max.
A	11	.750-1P-.2L-DS	(1.028) 26.21
B	13	.875-1P-.2L-DS	(1.141) 28.98
C	15	1.062-1P-.2L-DS	(1.263) 32.08
D	17	1.125-1P-.2L-DS	(1.387) 35.23
E	19	1.312-1P-.2L-DS	(1.108) 28.14
F	23	1.500-1P-.2L-DS	(1.293) 32.84
G	25	1.625-1P-.2L-DS	(1.454) 36.93
H	29	1.812-1P-.2L-DS	(1.620) 41.15
J	33	2.000-1P-.2L-DS	(1.812) 46.02

\* Dimensions in (inches) mm

# M28840/16 PLUG CONNECTOR

M28840/16	A	G	1	P	1
DESIGNATION	MATERIAL & FINISH	SHELL SIZE	INSERT	CONTACT	KEY POSITION
QPL: M28840/16 Commercial: IN28840/16	A: Aluminum, Cadmium Plate, O.D. over Electroless Nickel S: Aluminum-Zinc Nickel, Non-Reflective L: Aluminum-Tin-Zinc, Non-Reflective (Commercial only)	A: 11 B: 13 C: 15 D: 17 E: 19 F: 23 G: 25 H: 29 J: 33	1	F: Pin, Size 20 G: Socket, Size 20 P: Pin, Size, 22 S: Socket, Size, 22 D: Pin, Size, 28 E: Socket, Size, 28	1 2 3 4 5 6

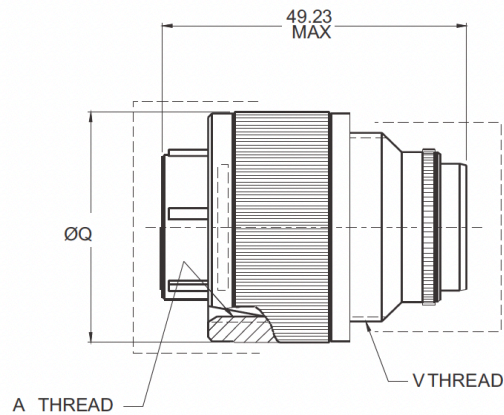


TABLE A

Military Shell Size	Shell Size	A Thread Class 2A	V Thread Class 2A	Q Ø Max. ±
A	11	.750-1P-.2L-DS	3/4-20 UNEF	(1.028) 26.11
B	13	.875-1P-.2L-DS	7/8-20 UNEF	(1.141) 28.98
C	15	1.062-1P-.2L-DS	1-20 UNEF	(1.263) 32.08
D	17	1.125-1P-.2L-DS	1 1/8-18 UNEF	(1.387) 35.23
E	19	1.312-1P-.2L-DS	1 1/4-18 UNEF	(1.513) 38.43
F	23	1.500-1P-.2L-DS	1 7/16-18 UNEF	(1.703) 43.26
G	25	1.625-1P-.2L-DS	1 9/16-18 UNEF	(1.825) 46.36
H	29	1.812-1P-.2L-DS	1 7/8-16 UN	(2.143) 54.43
J	33	2.000-1P-.2L-DS	2 1/16-16 UNS	(2.329) 59.16

\* Dimensions in (inches) mm

# M28840/17 PLUG CONNECTOR WITH STRAIGHT STRAIN RELIEF BACKSHELL

M28840/17	C	G	1	P	1
DESIGNATION	MATERIAL & FINISH	SHELL SIZE	INSERT	CONTACT	KEY POSITION
QPL: M28840/17 Commercial: IN28840/17	C: Class DJ: Aluminum Cadmium Plate U: Class ZJ Aluminum -Zinc Nickel, Non-Reflective M: Class TJ; Aluminum Tin Zinc, Non- Reflective (Commercial only)	A: 11 B: 13 C: 15 D: 17 E: 19 F: 23 G: 25 H: 29 J: 33	1	F: Pin, Size 20 G: Socket, Size 20 P: Pin, Size, 22 S: Socket, Size, 22 D: Pin, Size, 28 E: Socket, Size, 28	1 2 3 4 5 6

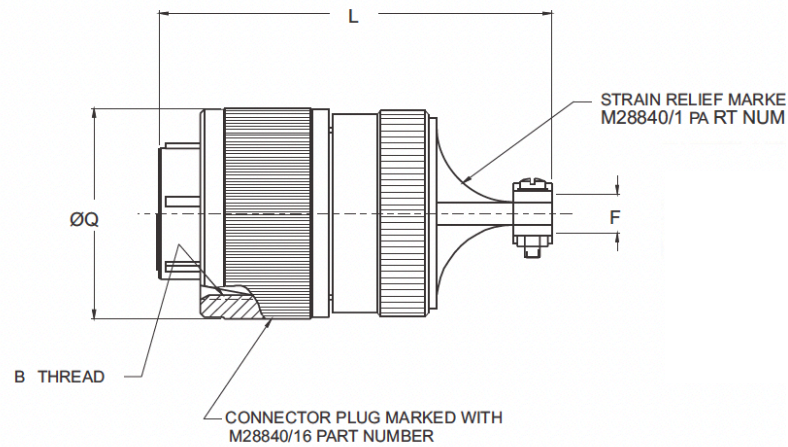


TABLE A

Military Shell Size	Shell Size	B Thread Class 2B	F Cable Entry		L Max.	Q Max.	Max O.D. Over Rear Clamps
			Max.	Min.			
A	11	.750-1P-.2L-DS	7.26 (0.286)	4.50 (.177)	61.92 (2.438)	26.11 (1.028)	21.13 (.832)
B	13	.875-1P-.2L-DS	7.26 (0.286)			28.98 (1.141)	
C	15	1.062-1P-.2L-DS	10.57 (.416)	6.35 (.250)	68.27 (2.688)	32.10 (1.263)	25.12 (.989)
D	17	1.125-1P-.2L-DS	12.10 (0.476)	7.39 (.291)	71.42 (2.812)	32.23 (1.387)	27.78 (1.094)
E	19	1.312-1P-.2L-DS	15.900 (.626)	8.84(.348)	74.63 (2.938)	38.43 (1.513)	33.50 (1.319)
F	23	1.500-1P-.2L-DS	21.10 (.831)	10.90 (.429)	77.78 (3.062)	43.25 (1.703)	39.55 (1.557)
G	25	1.625-1P-.2L-DS	24.28 (.956)	13.28 (.523)	80.98 (3.188)	46.36 (1.825)	41.99 (1.653)
H	29	1.812-1P-.2L-DS	27.45 (1.081)	16.33 (.643)	85.73 (3.375)	54.43 (2.143)	46.20 (1.819)
J	33	2.000-1P-.2L-DS	30.15 (1.187)	17.88 (.704)		59.16 (2.329)	51.31(2.020)

\* Dimensions in (inches) mm

# M28840/18 PLUG CONNECTOR WITH 90° STRAIN RELIEF BACKSHELL

M28840/18	C	G	1	P	1
DESIGNATION	MATERIAL & FINISH	SHELL SIZE	INSERT	CONTACT	KEY POSITION
QPL: M28840/18 Commercial: IN28840/18	C: Class DJ: Aluminum Cadmium Plate U: Class ZJ Aluminum -Zinc Nickel, Non-Reflective M: Class TJ; Aluminum Tin Zinc, Non- Reflective (Commercial only)	A: 11 B: 13 C: 15 D: 17 E: 19 F: 23 G: 25 H: 29 J: 33	1	F: Pin, Size 20 G: Socket, Size 20 P: Pin, Size, 22 S: Socket, Size, 22 D: Pin, Size, 28 E: Socket, Size, 28	1 2 3 4 5 6

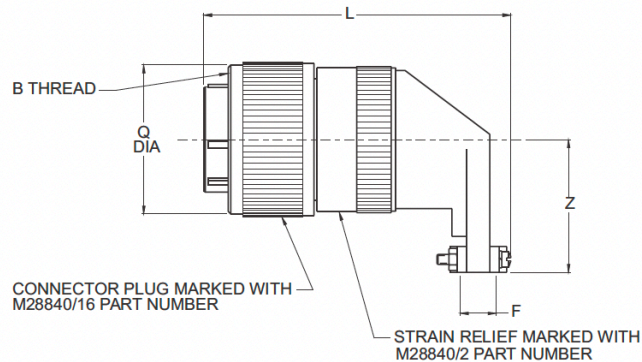


TABLE A

Military Shell Size	Shell Size	B Thread Class 2B	F Cable Entry		L Max.	Q Max.	Z Max.	Max O.D. Over Rear Clamps
			Max.	Min.				
A	11	.750-1P-.2L-DS	(.286) 7.26	(.177) 4.49	(2.562) 65.07	(1.028) 26.11	(.929) 23.60	(.832) 21.11
B	13	.875-1P-.2L-DS	(.286) 7.26		(2.562) 65.07	(1.141) 28.98	(.929) 23.60	
C	15	1.062-1P-.2L-DS	(.416) 10.56	(.250) 6.35	(2.750) 69.85	(1.263) 32.08	(1.056) 26.32	(.989) 25.12
D	17	1.125-1P-.2L-DS	(.476) 12.09	(.291) 7.39	(2.875) 73.02	(1.387) 35.23	(1.233) 37.32	(1.094) 27.79
E	19	1.312-1P-.2L-DS	(.626) 15.90	(.348) 8.83	(3.000) 76.2	(1.513) 38.43	(1.296) 32.92	(1.319) 33.50
F	23	1.500-1P-.2L-DS	(.831) 21.10	(.429) 10.89	(3.125) 79.37	(1.703) 43.25	(1.358) 34.49	(1.557) 39.55
G	25	1.625-1P-.2L-DS	(.956) 24.28	(.523) 13.28	(3.250) 82.55	(1.825) 46.25	(1.420) 36.07	(1.653) 41.99
H	29	1.812-1P-.2L-DS	(1.081) 27.45	(.643) 16.33	(3.375) 85.72	(2.143) 54.43	(1.634) 41.50	(1.819) 46.20
J	33	2.000-1P-.2L-DS	(1.187) 30.14	(.704) 17.88	(3.438) 87.32	(2.329) 59.15	(1.859) 47.22	(2.020) 51.31

\* Dimensions in (inches) mm

# M28840/19 PLUG CONNECTOR WITH 45° STRAIN RELIEF BACKSHELL

M28840/19	C	G	1	P	1
DESIGNATION	MATERIAL & FINISH	SHELL SIZE	INSERT	CONTACT	KEY POSITION
QPL: M28840/19 Commercial: IN28840/19	C: Class DJ: Aluminum Cadmium Plate U: Class ZJ Aluminum -Zinc Nickel, Non-Reflective M: Class TJ; Aluminum Tin Zinc, Non- Reflective (Commercial only)	A: 11 B: 13 C: 15 D: 17 E: 19 F: 23 G: 25 H: 29 J: 33	1	F: Pin, Size 20 G: Socket, Size 20 P: Pin, Size, 22 S: Socket, Size, 22 D: Pin, Size, 28 E: Socket, Size, 28	1 2 3 4 5 6

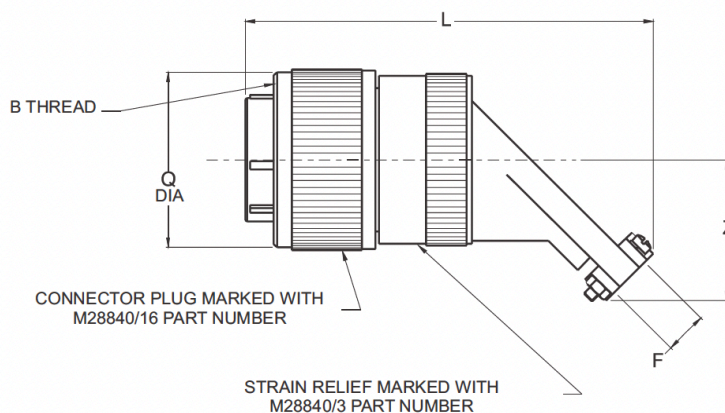


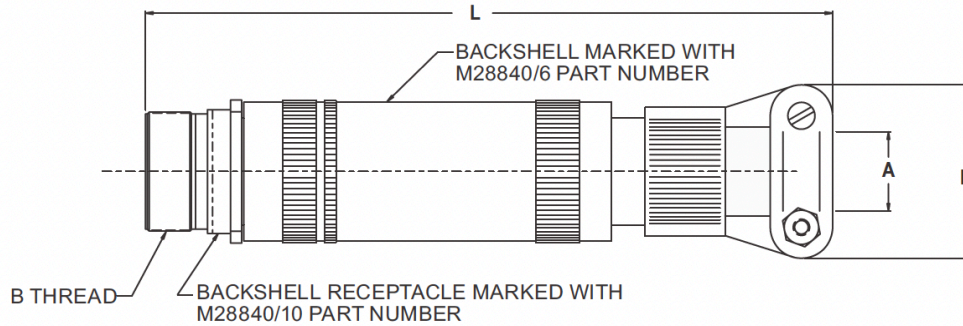
TABLE A

Military Shell Size	Shell Size	B Thread Class 2B	F Cable Entry		L Max.	Q Max.	Z Max.	Max O.D. Over Rear Clamps
			Max.	Min.				
A	11	.750-1P-.2L-DS	(.286) 7.26	(.177) 4.49	(3.125) 79.73	(1.028) 26.11	(.928) 23.57	(.832) 21.13
B	13	.875-1P-.2L-DS	(.286) 7.26		(3.125) 75.37	(1.141) 28.98	(.928) 23.57	
C	15	1.062-1P-.2L-DS	(.416) 10.56	(.250) 6.35	(3.250) 82.55	(1.263) 32.08	(.991) 25.17	(.989) 25.12
D	17	1.125-1P-.2L-DS	(.476) 12.09	(.291) 7.39	(3.312) 84.12	(1.387) 35.22	(1.110) 28.19	(1.094) 27.78
E	19	1.312-1P-.2L-DS	(.626) 15.90	(.348) 8.83	(3.375) 85.725	(1.513) 38.43	(1.172) 29.76	(1.319) 33.50
F	23	1.500-1P-.2L-DS	(.831) 21.10	(.429) 10.89	(3.438) 87.32	(1.703) 43.25	(1.235) 31.39	(1.557) 39.54
G	25	1.625-1P-.2L-DS	(.956) 24.28	(.523) 13.28	(3.500) 88.9	(1.825) 46.35	(1.297) 32.94	(1.653) 41.98
H	29	1.812-1P-.2L-DS	(1.081) 27.45	(.643) 16.33	(3.750) 95.25	(2.143) 54.43	(1.543) 39.19	(1.819) 46.20
J	33	2.000-1P-.2L-DS	(1.187) 30.14	(.704) 17.88	(3.875) 98.425	(2.329) 59.15	(1.668) 42.36	(2.020) 51.30

\* Dimensions in (inches) mm

# M28840/20 RECEPTACLE CONNECTOR WITH STRAIGHT EMI/RFI BACKSHELL

M28840/20	C	G	1	A	A	P	1
DESIGNATION	MATERIAL & FINISH	SHELL SIZE	INSERT	BACKSHELL SIZE	BACKSHELL STYLE	CONTACT	KEY POSITION
QPL: M28840/20 Commercial: IN28840/20	C: Class DJ: Aluminum Cadmium Plate U: Class ZJ Aluminum -Zinc Nickel, Non-Reflective M: Class TJ; Aluminum Tin Zinc, Non- Reflective (Commercial only)	A: 11 B: 13 C: 15 D: 17 E: 19 F: 23 G: 25 H: 29 J: 33	1	A B C D	A: EMI Environmental B: Environmental	F: Pin, Size 20 G: Socket, Size 20 P: Pin, Size, 22 S: Socket, Size, 22 D: Pin, Size, 28 E: Socket, Size, 28	1 2 3 4 5 6

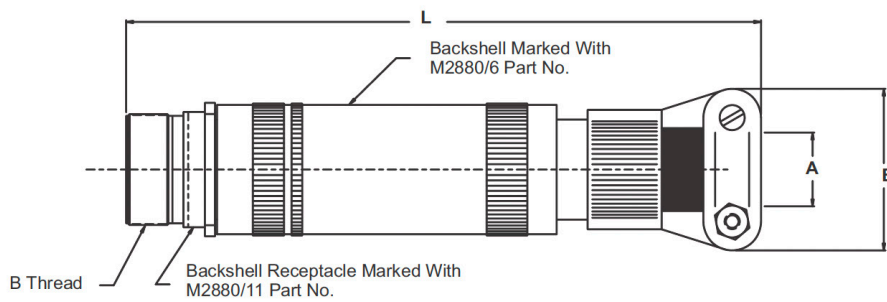


Military Shell Size	Shell Size	Backshell Shell Size	A Cable Entry		B Thread Class 2B	E Max.	L Max.
			Max.	Min.			
A	11	A	(.312) 7.92	(.188) 4.77	.750-1P-.2L-DS	(.938) 23.82	(6.625) 168.27
A	11	B	(.438) 11.12	(.281) 7.13		(1.125) 31.75	(6.625) 168.27
A	11	C	(.562) 14.27	(.344) 8.73		(1.312) 33.32	(6.625) 168.27
B	13	A	(.312) 7.92	(.188) 4.77	.875-1P-.2L-DS	(.938) 23.82	(6.625) 168.27
B	13	B	(.438) 11.12	(.281) 7.13		(1.125) 31.75	(6.625) 168.27
B	13	C	(.562) 14.27	(.344) 8.79		(1.312) 33.32	(6.625) 168.27
B	13	D	(.652) 16.546	(.375) 9.52	1.062-1P-.2L-DS	(1.312) 33.32	(7.125) 184.15
C	15	A	(.438) 11.12	(.281) 7.13		(1.593) 40.46	(6.625) 168.27
C	15	B	(.562) 14.27	(.344) 8.73		(1.312) 33.32	(6.625) 168.27
C	15	C	(.625) 15.87	(.375) 9.52	1.125-1P-.2L-DS	(1.312) 33.32	(7.125) 180.97
C	15	D	(.750) 19.05	(.438) 11.12		(1.593) 40.46	(7.188) 182.57
C	15	E	(.312) 7.92	(.188) 4.77		(.938) 23.82	(6.625) 168.27
D	17	A	(.625) 16.56	(.375) 9.52	1.312-1P-.2L-DS	(1.312) 33.32	(7.125) 180.97
D	17	B	(.750) 19.05	(.438) 11.12		(1.593) 40.46	(7.188) 182.57
D	17	C	(.938) 23.82	(.625) 15.87		(1.750) 44.45	(7.188) 182.57
E	19	A	(.625) 15.82	(.375) 9.52	1.500-1P-.2L-DS	(1.312) 33.32	(7.125) 180.97
E	19	B	(.938) 23.82	(.625) 15.87		(1.750) 44.45	(7.250) 184.15
F	23	A	(.750) 19.05	(.438) 11.12		(1.593) 40.46	(7.688) 195.27
F	23	B	(.938) 23.82	(.625) 15.87	1.625-1P-.2L-DS	(1.750) 44.45	(7.812) 198.42
F	23	C	(1.188) 30.17	(.812) 20.62		(2.093) 53.28	(7.938) 201.62
G	25	A	(.938) 23.82	(.625) 15.87		(1.750) 44.45	(7.750) 196.85
G	25	B	(1.188) 30.17	(.812) 20.62	1.812-1P-.2L-DS	(2.093) 53.28	(8.438) 214.32
G	25	C	(1.250) 31.75	(.875) 22.22		(2.093) 53.28	(8.438) 214.32
G	25	D	(1.380) 35.05	(1.000) 25.4		(2.343) 59.51	(8.500) 215.9
H	29	A	(1.188) 30.17	(.812) 20.62	2.000-1P-.2L-DS	(2.093) 53.28	(8.438) 214.32
H	29	B	(1.380) 35.05	(1.000) 25.4		(2.343) 59.51	(8.500) 215.9
J	33	A	(1.380) 35.05	(1.000) 25.4		(2.343) 59.51	(8.500) 215.9
J	33	B	(1.625) 41.27	(1.250) 31.75	(2.750) 69.85	(8.750) 222.25	

\* Dimensions in (inches) mm

# M28840/21 RECEPTACLE CONNECTOR WITH STRAIGHT EMI/RFI BACKSHELL

M28840/21	C	G	1	A	A	P	1
DESIGNATION	MATERIAL & FINISH	SHELL SIZE	INSERT	BACK-SHELL SIZE	BACKSHELL STYLE	CONTACT	KEY POSITION
QPL: M28840/21 Commercial: IN28840/21	C: Class DJ: Aluminum Cadmium Plate U: Class ZJ Aluminum -Zinc Nickel, Non-Reflective M: Class TJ; Aluminum Tin Zinc, Non- Reflective (Commercial only)	A: 11 B: 13 C: 15 D: 17 E: 19 F: 23 G: 25 H: 29 J: 33	1	A B C D	A: EMI Environmental B: Environmental	F: Pin, Size 20 G: Socket, Size 20 P: Pin, Size, 22 S: Socket, Size, 22 D: Pin, Size, 28 E: Socket, Size, 28	1 2 3 4 5 6



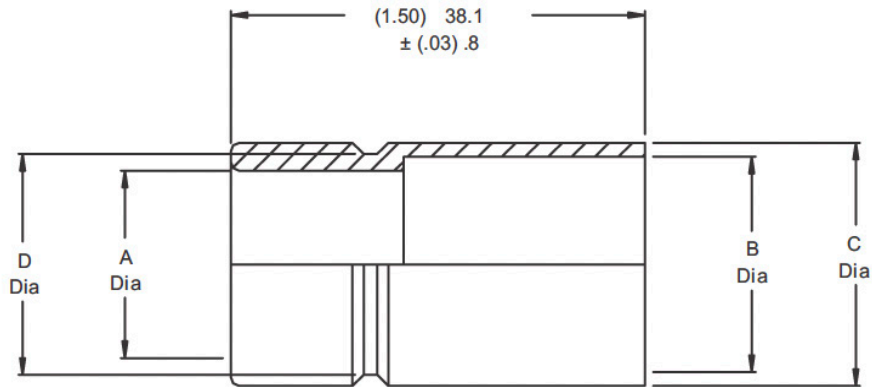
Military Shell Size	Shell Size	Backshell Shell Size	A Cable Entry		B Thread Class 2B	E Max.	L Max.
			Max.	Min.			
A	11	A	(.312) 7.92	(.188) 4.77	.750-1P-.2L-DS	(.938) 23.82	(6.625) 168.27
A	11	B	(.438) 11.12	(.281) 7.13		(1.125) 31.75	(6.625) 168.27
A	11	C	(.562) 14.27	(.344) 8.73		(1.312) 33.32	(6.625) 168.27
B	13	A	(.312) 7.92	(.188) 4.77	.875-1P-.2L-DS	(.938) 23.82	(6.625) 168.27
B	13	B	(.438) 11.12	(.281) 7.13		(1.125) 31.75	(6.625) 168.27
B	13	C	(.562) 14.27	(.344) 8.79		(1.312) 33.32	(6.625) 168.27
B	13	D	(.652) 16.546	(.375) 9.52		(1.312) 33.32	(7.125) 184.15
C	15	A	(.438) 11.12	(.281) 7.13	1.062-1P-.2L-DS	(1.125) 31.75	(6.625) 168.27
C	15	B	(.562) 14.27	(.344) 8.73		(1.312) 33.32	(6.625) 168.27
C	15	C	(.625) 15.87	(.375) 9.52		(1.312) 33.32	(7.125) 180.97
C	15	D	(.750) 19.05	(.438) 11.12		(1.593) 40.46	(7.188) 182.57
C	15	E	(.312) 7.92	(.188) 4.77		(.938) 23.82	(6.625) 168.27
D	17	A	(.625) 16.56	(.375) 9.52	1.125-1P-.2L-DS	(1.312) 33.32	(7.125) 180.97
D	17	B	(.750) 19.05	(.438) 11.12		(1.593) 40.46	(7.188) 182.57
D	17	C	(.938) 23.82	(.625) 15.87		(1.750) 44.45	(7.188) 182.57
E	19	A	(.625) 15.82	(.375) 9.52	1.312-1P-.2L-DS	(1.312) 33.32	(7.125) 180.97
E	19	B	(.938) 23.82	(.625) 15.87		(1.750) 44.45	(7.250) 184.15
F	23	A	(.750) 19.05	(.438) 11.12	1.500-1P-.2L-DS	(1.593) 40.46	(7.688) 195.27
F	23	B	(.938) 23.82	(.625) 15.87		(1.750) 44.45	(7.812) 198.42
F	23	C	(1.188) 30.17	(.812) 20.62		(2.093) 53.28	(7.938) 201.62
G	25	A	(.938) 23.82	(.625) 15.87	1.625-1P-.2L-DS	(1.750) 44.45	(7.750) 196.85
G	25	B	(1.188) 30.17	(.812) 20.62		(2.093) 53.28	(8.438) 214.32
G	25	C	(1.250) 31.75	(.875) 22.22		(2.093) 53.28	(8.438) 214.32
G	25	D	(1.380) 35.05	(1.000) 25.4		(2.343) 59.51	(8.500) 215.9
H	29	A	(1.188) 30.17	(.812) 20.62	1.812-1P-.2L-DS	(2.093) 53.28	(8.438) 214.32
H	29	B	(1.380) 35.05	(1.000) 25.4		(2.343) 59.51	(8.500) 215.9
J	33	A	(1.380) 35.05	(1.000) 25.4	2.000-1P-.2L-DS	(2.343) 59.51	(8.500) 215.9
J	33	B	(1.625) 41.27	(1.250) 31.75		(2.750) 69.85	(8.750) 222.25

\* Dimensions in (inches) mm



# M28840/22 METAL CONDUIT BUSHING

M28840/22	S	03
DESIGNATION	MATERIAL	DASH #
QPL: M28840/22 Commercial: IN28840/22	S: Corrosion Resistant Steel	03 04 05 06 08 10 12 16

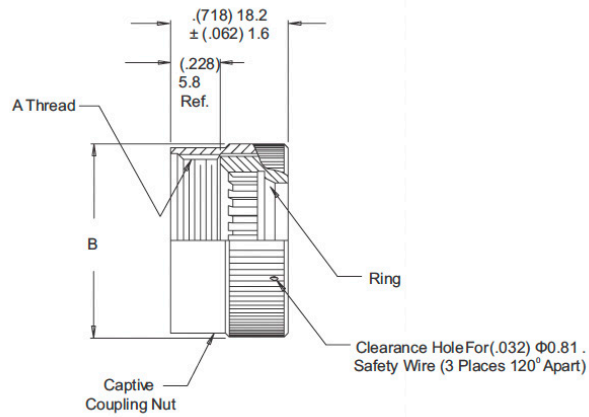


DASH #	MIL-DTL-28840/04 Size Ref.	A + 0.5 (.02)	B + 0.12 (.05) +	C + 0.12 (.05)	D 0.12 (.05)
03	03	(.375) 9.53	(.540) 13.71	(.625) 15.87	(.525) 13.34
04	04	(.500) 12.70	(.665) 16.89	(.750) 19.05	(.650) 16.51
05	05	(.625) 15.87	(.780) 19.81	(.875) 22.23	(.775) 19.69
06	06	(.750) 19.05	(.940) 23.88	(1.000) 25.40	(.900) 22.86
08	08	(1.000) 25.40	(1.225) 31.12	(1.375) 34.93	(1.275) 32.39
10	10	(1.250) 31.75	(1.470) 37.34	(1.625) 41.28	(1.525) 38.74
12	12	(1.500) 38.10	(1.740) 44.20	(1.875) 47.65	(1.775) 45.09
16	16	(2.000) 50.80	(2.215) 56.26	(2.375) 60.33	(2.275) 57.79

\* Dimensions in (inches) mm

# M28840/23 E NUT

M28840/23	J	W
DESIGNATION	SHELL SIZE	MATERIAL & FINISH
QPL: M28840/23 Commercial: IN28840/23	A: 11 B: 13 C: 15 D: 17 E: 19 F: 23 G: 25 H: 29 J: 33	W: Aluminum, Cadmium Plate, O.D. over Electroless Nickel S: Aluminum -Zinc Nickel, Non-Reflective L: Aluminum-Tin-Zinc, Non-Reflective (Commercial only)

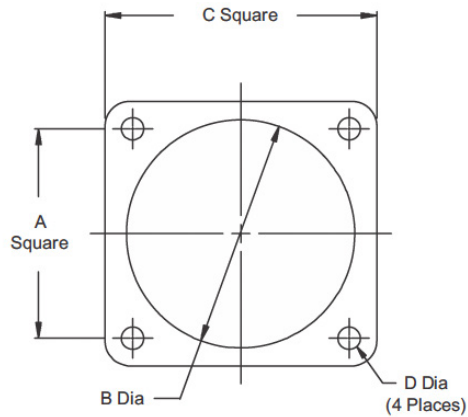


Military Shell Size	Shell Size	A Thread Class 2B	B Ø Max.
A	11	.750-20 UNEF	(1.028) 26.11
B	13	.875-20 UNEF	(1.14) 26.11
C	15	1.000-20 UNEF	(2.263) 32.08
D	17	1.125-18 UNEF	(1.387) 35.23
E	19	1.250-18 UNEF	(1.513) 38.43
F	23	1.438-18 UNEF	(1.703) 43.51
G	25	1.562-18 UNEF	(1.825) 46.35
H	29	1.876-16 UN	(2.143) 54.43
J	33	2.062-16 UNS	(2.329) 59.16

\* Dimensions in (inches) mm

# M28840/24 MOUNTING GASKET

M28840/24	G	A
DESIGNATION	SHELL SIZE	MATERIAL & FINISH
QPL: M28840/24 Commercial: IN28840/24	A: 11 B: 13 C: 15 D: 17 E: 19 F: 23 G: 25 H: 29 J: 33	A - Fluorinated Silicone B - EMI



Military Shell Size	Shell Size	A	B Ø	C	D Ø
A	11	(.760) 19.30	(.766) 19.46	(1.039) 26.39	(1.130) 3.30 (.110) 2.79
		(.740) 18.80	(.750) 19.05	(1.023) 25.98	
B	13	(.853) 21.67	(.891) 22.63	(1.154) 29.31	
		(.833) 21.16	(.875) 22.22	(1.138) 28.90	
C	15	(.978) 24.84	(1.078) 27.38	(1.274) 32.36	
		(.958) 24.33	(1.062) 26.97	(1.258) 31.95	
D	17	(1.025) 26.04	(1.141) 28.98	(1.399) 26.39	
		(1.005) 25.53	(1.125) 28.58	(1.383) 35.13	
E	19	(1.150) 29.21	(1.338) 33.98	(1.524) 38.71	
		(1.130) 28.70	(1.312) 33.32	(1.508) 38.30	
F	23	(1.291) 32.79	(1.516) 38.51	(1.734) 44.04	
		(1.271) 32.28	(1.500) 38.10	(1.718) 43.64	
G	25	(1.402) 35.61	(1.641) 41.68	(1.834) 46.58	(1.157) 3.99 (.137) 3.48
		(1.382) 35.10	(1.625) 41.28	(1.818) 46.18	
H	29	(1.578) 40.08	(1.891) 48.03	(2.154) 54.71	
		(1.558) 39.57	(1.875) 47.62	(2.138) 54.30	
J	33	(1.744) 44.30	(2.078) 52.78	(2.344) 59.54	
		(1.724) 43.79	(2.062) 52.37	(2.328) 59.13	

\* Dimensions in (inches) mm

# M28840/25 90°EMI CONDUIT ADAPTER

M28840/25	16	W	A
DESIGNATION	DASH #	MATERIAL & FINISH	BACKSHELL STYLE
QPL: M28840/25 Commercial: IN28840/25	See Table A	W: Aluminum, Cadmium Plate, O.D. over Electroless Nickel L: Aluminum -Tin-Zinc, Non-Reflective S: Aluminum -Zinc Nickel, Non-Reflective	A: EMI, Non-Environmental B: EMI, Environmental

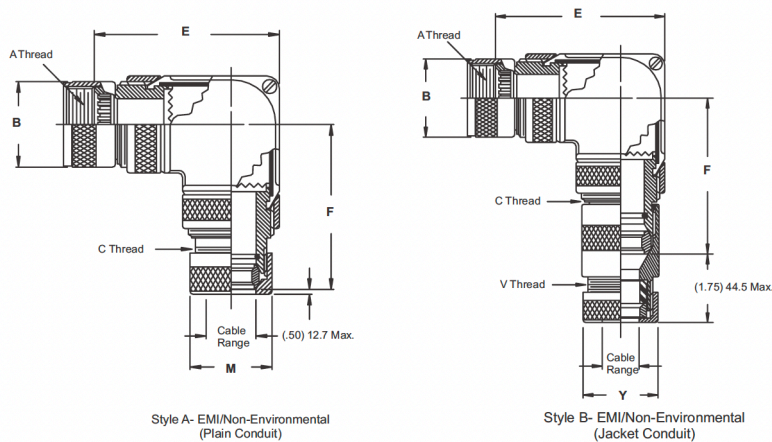


TABLE A

DASH #	Military Shell Size	A Thread Class 2B	B Ø Max.	C Thread Class 1	D Ø Max.	Sealing Range	
						Max.	Min.
01	A	.750-20 UNEF	(1.028) 26.11	.875-20 UNEF	(1.031) 26.19	(.63) 16.0	(.50) 12.7
02	B	.875-20 UNEF	(1.141) 28.98	.875-20 UNEF		(.63) 6.0	(.50) 12.7
03	B			1.000-20 UNEF		(.75) 19.1	(.63) 16.0
04	C	1.000-20 UNEF	(1.263) 32.08	.875-20 UNEF	(1.281) 32.58	(.63) 16.0	(.50) 12.7
05	C			1.000-20 UNEF		(.75) 19.1	(.63) 16.0
06	C			1.125-18 UNEF		(.88) 22.4	(.75) 19.1
07	C			1.250-18 UNEF		(1.00) 25.4	(.88) 22.4
08	D	1.125-18 UNEF	(1.387) 35.23	1.125-18 UNEF	(1.531) 38.89	(.88) 22.4	(.75) 19.1
09	D			1.250-18 UNEF		(1.00) 25.4	(.88) 22.4
10	D			1.625-18 UNEF		(1.38) 35.1	(1.19) 30.2
11	E			1.125-18 UNEF		(.88) 22.4	(.75) 19.1
12	E	1.250-18 UNEF	(1.513) 38.43	1.250-18 UNEF	(1.781) 45.24	(1.00) 25.4	(.88) 22.4
13	E			1.625-18 UNEF		(1.38) 35.1	(1.19) 30.2
14	F			1.250-18 UNEF		(1.00) 25.4	(.88) 22.4
15	F	1.438-18 UNEF	(1.703) 45.51	1.625-18 UNEF	(1.781) 45.24	(1.38) 35.1	(1.18) 30.2
16	F			1.875-18 UNS		(1.63) 41.4	(1.44) 36.6
17	G	1.562-18 UNEF	(1.825) 46.35	1.250-18 UNEF	(2.031) 51.59	(1.00) 25.4	(.88) 22.4
18	G			1.625-18 UNEF		(1.38) 35.1	(1.19) 30.2
19	G			1.875-18 UNS		(1.63) 41.4	(1.44) 36.5
20	G			2.125-16 UN		(1.88) 47.8	(1.63) 41.4
21	H	1.875-16 UN	(2.143) 54.43	1.875-18 UNS	(2.031) 51.59	(1.63) 41.4	(1.44) 36.6
22	H			2.125-16 UN		(1.33) 47.8	(1.63) 41.4
23	J			2.125-16 UN		(1.88) 47.8	(1.63) 41.4
24	J	2.062-16 UNS	(2.329) 59.16	2.750-16 UN	(2.531) 64.29	(2.38) 60.5	(2.13) 54.1
25	A			.750-20 UNEF		(1.028) 26.11	.875-20 UNEF

\* Dimensions in (inches) mm

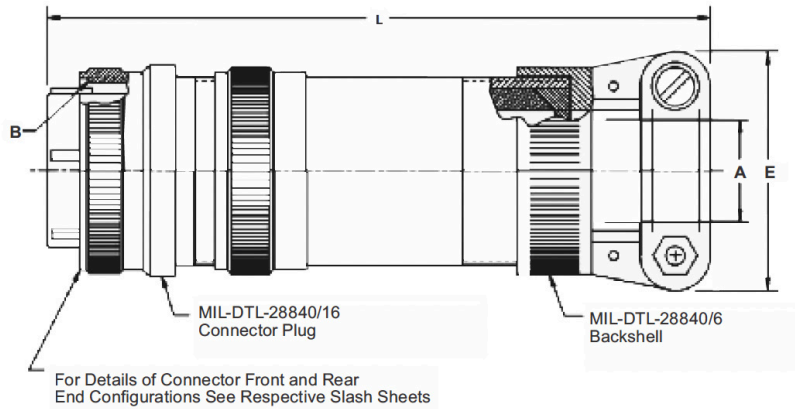
# M28840/25 90° EMI CONDUIT ADAPTER

TABLE A							
DASH #	Military Shell Size	Conduit Size M28840/4	E Max.	F Max.	V Thread Class 2	M Ø Max.	Y Ø Max.
01	A	03	(2.36) 59.9	(3.50) 92.8	1.000-20 UNEF	(1.12) 28.5	(1.19) 30.23
02	B	03			1.000-20 UNEF	(1.12) 28.5	(1.19) 30.23
03	B	04			1.188-18 UNEF	(1.25) 31.8	(1.38) 35.1
04	C	03	(2.56) 65.0	(3.69) 9.79	1.000-20 UNEF	(1.12) 28.5	(1.39) 35.3
05	C	04			1.118-18 UNEF	(1.25) 31.8	(1.38) 35.1
06	C	05			1.438-18 UNEF	(1.43) 36.3	(1.63) 41.4
07	C	06			1.750-18 UNS	(1.62) 41.2	(1.94) 49.3
08	D	05	(2.67) 67.8	(3.81) 101.0	1.438-18 UNEF	(1.43) 36.3	(1.63) 41.4
09	D	06			1.750-18 UNS	(1.62) 42.2	(1.94) 49.3
10	D	08			2.00-18 UNS	(1.81) 46.0	(2.19) 55.6
11	E	05			1.438-18 UNEF	(1.43) 36.3	(1.63) 41.4
12	E	06			1.750-18 UNS	(1.62) 41.2	(1.94) 49.3
13	E	08			2.00-18 UNS	(1.81) 46.0	(2.19) 55.6
14	F	06	(3.05) 77.5	(4.19) 111.1	1.750-18 UNS	(1.62) 41.2	(1.94) 49.3
15	F	08			2.00-18 UNS	(1.81) 46.0	(2.19) 55.6
16	F	10			2.250-18 UN	(2.18) 55.4	(2.44) 62.0
17	G	06			1.750-18 UNS	(1.62) 41.2	(1.94) 49.3
18	G	08			2.00-18 UN	(1.81) 46.0	(2.19) 55.6
19	G	10			2.250-18 UN	(2.18) 55.4	(2.44) 62.0
20	G	12	(3.33) 84.6	(4.50) 119.4	2.500-16 UN	(2.56) 65.0	(2.69) 68.5
21	H	10			2.250-16 UN	(2.18) 55.4	(2.18) 55.4
22	H	12			1.500-16 UN	(2.56) 65.0	(2.44) 62.0
23	J	12	(3.70) 94.0	(4.43) 128.1	2.500-16 UN	(2.56) 65.0	(2.69) 68.3
24	J	16			3.00-16 UN	(3.06) 77.8	(3.19) 81.0

\* Dimensions in (inches) mm

# M28840/26 PLUG CONNECTOR WITH STRAIGHT EMI/RFI BACKSHELL

M28840/26	C	G	1	A	A	P	1
DESIGNATION	MATERIAL & FINISH	SHELL SIZE	INSERT	BACKSHELL SIZE	BACKSHELL STYLE	CONTACT	KEY POSITION
QPL: M28840/26 Commercial: IN28840/26	C: Class DJ: Aluminum Cadmium Plate U: Class ZJ Aluminum -Zinc Nickel, Non-Reflective M: Class TJ; Aluminum Tin Zinc, Non- Reflective (Commercial only)	A: 11 B: 13 C: 15 D: 17 E: 19 F: 23 G: 25 H: 29 J: 33	1	A B C D	A: EMI Environmental B: Environmental	F: Pin, Size 20 G: Socket, Size 20 P: Pin, Size, 22 S: Socket, Size, 22 D: Pin, Size, 28 E: Socket, Size, 28	1 2 3 4 5 6



Military Shell Size	Shell Size	Backshell Shell Size	A Cable Entry		B Thread Class 2B	E Max.	L Max.
			Max.	Min.			
A	11	A	(.312) 7.92	(.188) 4.77	.750-1P-.2L-DS	(.938) 23.82	(6.500) 165.1
A	11	B	(.438) 11.12	(.281) 7.13		(1.175) 28.57	(6.500) 165.1
A	11	C	(.562) 14.27	(.344) 8.73		(1.312) 33.32	(6.500) 165.1
B	13	A	(.312) 7.92	(.188) 4.77	.875-1P-.2L-DS	(.938) 23.82	(6.500) 165.1
B	13	B	(.438) 11.12	(.281) 7.13		(1.125) 28.57	(6.500) 165.1
B	13	C	(.562) 14.27	(.344) 8.73		(1.312) 33.32	(6.500) 165.1
B	13	D	(.652) 16.56	(.375) 9.52	1.062-1P-.2L-DS	(1.312) 33.32	(7.000) 177.8
C	15	A	(.438) 11.12	(.281) 7.13		(1.125) 28.57	(6.500) 165.1
C	15	B	(.562) 14.27	(.347) 8.73		(1.312) 33.32	(6.500) 165.1
C	15	C	(.625) 15.87	(.375) 9.52		(1.312) 33.32	(6.500) 165.1
C	15	D	(.750) 19.05	(.438) 11.12	1.125-1P-.2L-DS	(1.593) 40.46	(6.500) 165.1
C	15	E	(.312) 7.92	(.188) 4.77		(0.938) 23.82	(7.000) 177.8
D	17	A	(.625) 15.87	(.375) 9.52		(1.312) 33.32	(7.000) 177.8
D	17	B	(.750) 19.05	(.438) 11.12	1.312-1P-.2L-DS	(1.595) 40.46	(7.000) 177.8
D	17	C	(.938) 23.82	(.625) 15.87		(1.750) 44.45	(7.000) 177.8
E	19	A	(.625) 15.87	(.375) 9.52	1.500-1P-.2L-DS	(1.312) 33.32	(7.500) 190.5
E	19	B	(.938) 23.82	(.625) 15.87		(1.730) 44.15	(7.625) 193.67
F	23	A	(.750) 19.05	(.438) 11.12	1.625-1P-.2L-DS	(1.593) 40.46	(7.812) 193.42
F	23	B	(.938) 23.82	(.625) 15.87		(1.750) 44.45	(7.625) 193.67
F	23	C	(1.188) 30.17	(.812) 20.62		(2.093) 53.16	(7.625) 193.67
G	25	A	(.938) 23.82	(.625) 15.87	1.812-1P-.2L-DS	(1.750) 44.45	(7.625) 193.67
G	25	B	(1.188) 30.17	(.812) 20.62		(2.093) 53.16	(7.625) 193.67
G	25	C	(1.250) 31.75	(.875) 22.22		(2.093) 53.16	(8.312) 211.12
G	25	D	(1.380) 35.05	(1.00) 25.4	2.000-1P-.2L-DS	(2.343) 59.51	(8.312) 211.12
H	29	A	(1.188) 30.17	(.812) 20.62		(2.093) 53.16	(8.312) 211.12
H	29	B	(1.380) 35.05	(1.00) 25.4	2.000-1P-.2L-DS	(2.343) 59.51	(8.312) 211.12
J	33	A	(1.380) 35.05	(1.00) 25.4		(2.343) 59.51	(8.312) 211.12
J	33	B	(1.625) 41.27	(1.256) 31.75	(2.750) 69.85	(8.625) 219.8	

\* Dimensions in (inches) mm

# M28840/27 45° EMI CONDUIT ADAPTER

M28840/27	16	W	A
DESIGNATION	DASH #	MATERIAL & FINISH	BACKSHELL STYLE
QPL: M28840/27 Commercial: IN28840/27	See Table A	W: Aluminum, Cadmium Plate, O.D. over Electroless Nickel S: Aluminum -Zinc Nickel, Non-Reflective L: Aluminum-Tin-Zinc, Non-Reflective (Commercial only)	A: EMI, Non-Environmental B: EMI, Environmental

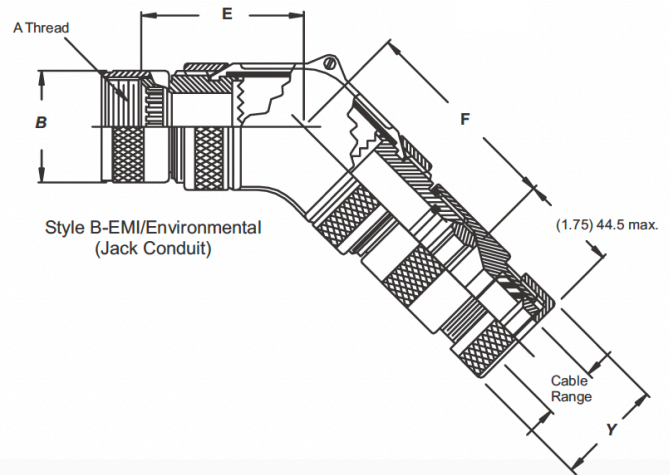
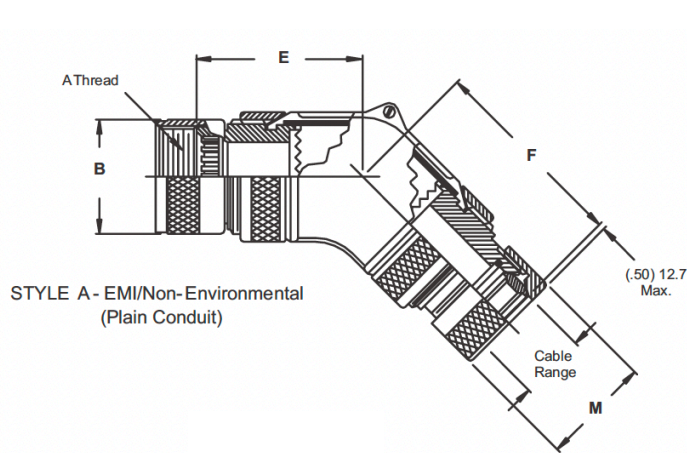


TABLE A

DASH #	Military Shell Size	Shell Size	A Thread Class 2B	B Ø Max.	C Thread Class 2	D Ø Max.	Sealing Range		Conduit Size M28840/4	E Max.
							Max..	Min..		
01	A	11	.750-20 UNEF	(1.028) 26.11	.875-20 UNEF	"(1.031) 26.19"	(.63) 16.0	(.50) 12.7	03	(2.36) 59.9
02	B	13	.875-20 UNEF	(1.141) 28.98	.875-20 UNEF		(.63) 16.0	(.50) 12.7	03	
03	B	13	1.000-20 UNEF	(1.263) 32.08	1.000-20 UNEF	"(1.281) 32.50"	(.75) 19.1	(.63) 16.0	04	(2.56) 65.0
04	C	15			.875-20 UNEF		(.63) 16.0	(.50) 12.7	03	
05	C	15	1.125-18 UNEF	(1.387) 38.23	1.000-20 UNEF	"(1.531) 38.80"	(.75) 19.1	(.63) 16.0	04	(2.67) 67.8
06	C	15			1.125-18 UNEF		(.88) 22.4	(.75) 19.1	05	
07	C	15	1.250-18 UNEF	(1.513) 38.43	1.250-18 UNEF	"(1.781) 45.24"	(1.00) 25.4	(.88) 22.4	06	(3.05) 77.5
08	D	17			1.125-18 UNEF		(.88) 22.4	(.75) 19.1	05	
09	D	17	1.438-18 UNEF	(1.703) 45.51	1.250-18 UNEF	"(2.031) 51.59"	(1.00) 25.4	(.88) 22.4	06	(3.33) 84.6
10	D	17			1.625-18 UNEF		(1.38) 35.1	(1.19) 22	08	
11	E	19	1.562-18 UNEF	(1.825) 46.35	1.125-18 UNEF	"(2.531) 64.29"	(.88) 22.4	(.75) 19.1	05	(3.70) 94.0
12	E	19			1.250-18 UNEF		(1.00) 25.4	(.88) 22.4	06	
13	E	19	1.875-18 UNS	(2.143) 54.43	1.625-18 UNEF	"(2.531) 64.29"	(1.38) 35.1	(1.19) 30.2	08	(4.00) 101.6
14	F	23			1.250-18 UNEF		(1.000) 25.4	(.88) 22.4	06	
15	F	23	1.875-18 UNS	(2.329) 50.16	1.625-18 UNEF	"(2.531) 64.29"	(1.38) 35.1	(1.19) 30.2	08	(4.00) 101.6
16	F	23			1.875-18 UNS		(1.43) 41.4	(1.44) 36.6	10	
17	G	25	2.125-16 UN	(2.143) 54.43	1.250-18 UNEF	"(2.531) 64.29"	(1.00) 25.4	(.88) 22.4	06	(4.00) 101.6
18	G	25			1.625-18 UNEF		(1.38) 41.4	(1.19) 30.2	08	
19	G	25	2.125-16 UN	(2.143) 54.43	1.875-18 UNS	"(2.531) 64.29"	(1.43) 41.4	(1.44) 36.6	10	(4.00) 101.6
20	G	25			2.125-16 UN		(1.88) 47.8	(1.63) 41.4	12	
21	H	29	2.750-16 UN	(2.329) 50.16	1.875-18 UNS	"(2.531) 64.29"	(1.63) 41.4	(1.44) 36.6	10	(4.00) 101.6
22	H	29			2.125-16 UN		(1.88) 47.8	(1.63) 41.4	12	
23	J	33	.750-20 UNEF	(1.028) 26.11	2.125-16 UN	"(1.031) 26.19"	(1.88) 47.8	(1.63) 41.4	12	(4.00) 101.6
24	J	33			2.750-16 UN		(2.38) 60.5	(2.13) 54.1	16	
25	A	11	.750-20 UNEF	(1.028) 26.11	.875-20 UNEF	"(1.031) 26.19"	(.75) 19.1	(.63) 16.0	04	(2.36) 59.9

\* Dimensions in (inches) mm

# M28840/27 45°EMI CONDUIT ADAPTER

TABLE A						
DASH #	Military Shell Size	Shell Size	F Max.	V Thread Class 2	M Ø Max.	Y Ø Max.
01	A	11	(3.50) 88.9	1.000-20 UNEF	(1.12) 28.5	(1.19) 30.23
02	B	13		1.000-20 UNEF	(1.12) 28.5	(1.19) 30.23
03	B	13		1.188-18 UNEF	(1.25) 31.8	(1.38) 35.1
04	C	15	(3.69) 93.7	1.000-20 UNEF	(1.12) 28.5	(1.19) 30.23
05	C	15		1.188-18 UNEF	(1.25) 31.8	(1.38) 35.1
06	C	15		1.438-18 UNEF	(1.43) 36.3	(1.63) 41.4
07	C	15	(3.81) 96.7	1.750-18 UNS	(1.62) 41.2	(1.94) 49.3
08	D	17		1.438-18 UNEF	(1.43) 36.3	(1.63) 41.4
09	D	17		1.750-18 UNS	(1.62) 41.2	(1.94) 49.3
10	D	17		2.00-18 UNS	(1.81) 46.0	(2.19) 55.6
11	E	19		1.438-18 UNEF	(1.43) 36.3	(1.63) 41.4
12	E	19		1.750-18 UNS	(1.62) 41.2	(1.94) 49.3
13	E	19	(4.19) 106.4	2.00-18 UNS	(1.81) 46.0	(2.19) 55.6
14	F	23		1.750-18 UNS	(1.62) 41.2	(1.94) 49.3
15	F	23		2.00-18 UN	(1.81) 46.0	(2.19) 55.6
16	F	23		2.250-16 UN	(2.18) 55.4	(2.44) 62.0
17	G	25		1.750-18 UNS	(1.62) 41.2	(1.94) 49.3
18	G	25		2.00-18 UN	(1.81) 46.0	(2.19) 55.6
19	G	25	(4.50) 114.3	2.250-16 UN	(2.18) 55.4	(2.44) 62.0
20	G	25		2.500-16 UN	(2.56) 65.0	(2.69) 68.3
21	H	29		2.250-16 UN	(2.18) 55.4	(2.44) 62.0
22	H	29	(4.83) 22.6	2.500-16 UN	(2.56) 65.0	(2.69) 68.3
23	J	33		2.500-16 UN	(2.56) 65.0	(2.69) 68.3
24	J	33		3.00-16 UN	(3.06) 77.8	(3.19) 81.0
25	A	11	(3.50) 88.9	1.188-18 UNEF	(1.25) 31.8	(1.38) 35.1

\* Dimensions in (inches) mm



# M28840/28 90° ADAPTER ASSEMBLY PLUG

M28840/28	C	G	1	B	A	P	1
DESIGNATION	MATERIAL & FINISH	SHELL SIZE	INSERT	BACKSHELL SIZE	BACKSHELL STYLE	CONTACT	KEY POSITION
QPL: M28840/28 Commercial: IN28840/28	C: Class DJ: Aluminum Cadmium Plate U: Class ZJ Aluminum -Zinc Nickel, Non-Reflective M: Class TJ; Aluminum Tin Zinc, Non- Reflective (Commercial only)	A: 11 B: 13 C: 15 D: 17 E: 19 F: 23 G: 25 H: 29 J: 33	1	A B C D	A: EMI Environmental B: Environmental	F: Pin, Size 20 G: Socket, Size 20 P: Pin, Size, 22 S: Socket, Size, 22 D: Pin, Size, 28 E: Socket, Size, 28	1 2 3 4 5 6

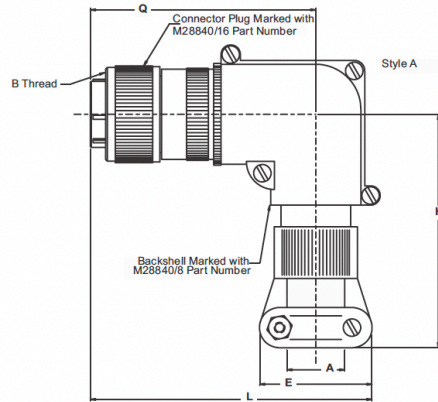


TABLE A

Military Shell Size	Shell Size	Backshell Shell Size	A Cable Entry		B Thread Class 2B	E Max.	H Max.	L Max.	Q Max.
			Max.	Min.					
A	11	A	(.312) 7.92	(.188) 4.77	.750-1P-.2L-DS	(.938) 23.82	(5.332) 135.43	(3.812) 96.82	(3.250) 82.55
A	11	B	(.438) 11.12	(.281) 7.13		(1.125) 28.57	(5.332) 135.43	(3.812) 96.82	(3.250) 82.55
A	11	C	(.562) 14.27	(.344) 8.73		(1.312) 33.32	(5.457) 138.60	(4.000) 101.6	(3.375) 85.72
B	13	A	(.438) 11.25	(.281) 7.13	.875-1P-.2L-DS	(1.125) 28.57	(5.332) 135.43	(3.812) 96.82	(3.250) 82.55
B	13	B	(.562) 14.27	(.344) 8.73		(1.312) 33.32	(5.457) 138.60	(4.000) 101.6	(3.375) 82.72
B	13	C	(.625) 16.56	(.375) 9.52		(1.312) 33.32	(5.682) 144.32	(4.250) 107.95	(3.500) 88.9
C	15	A	(.438) 11.25	(.281) 7.13	1.062-1P-.2L-DS	(1.125) 28.57	(5.457) 138.60	(4.000) 101.6	(3.375) 85.72
C	15	B	(.562) 14.27	(.344) 8.73		(1.312) 33.32	(5.457) 138.60	(4.000) 101.6	(3.375) 85.72
C	15	C	(.625) 16.56	(.375) 9.52		(1.312) 33.32	(5.682) 144.32	(4.250) 107.95	(3.500) 98.9
D	17	A	(.750) 19.05	(.438) 11.12	1.125-1P-.2L-DS	(1.593) 40.46	(5.713) 145.11	(4.150) 104.77	(3.500) 88.9
D	17	B	(.625) 16.56	(.375) 9.52		(1.312) 33.32	(5.682) 144.32	(4.250) 107.95	(3.500) 88.9
D	17	C	(.750) 19.05	(.438) 11.12		(1.593) 40.46	(5.713) 145.11	(4.250) 107.95	(3.500) 88.9
E	19	A	(.625) 16.56	(.375) 9.52	1.312-1P-.2L-DS	(1.312) 33.32	(5.682) 144.32	(4.250) 107.95	(3.500) 88.9
E	19	B	(.938) 23.82	(.625) 15.87		(1.750) 44.45	(5.832) 148.13	(4.375) 111.12	(3.625) 92.07
F	23	A	(.750) 19.05	(.438) 11.12		(1.593) 40.46	(5.713) 145.74	(4.500) 114.3	(3.625) 92.07
F	23	B	(.938) 23.82	(.625) 15.87	1.500-1P-.2L-DS	(1.750) 44.45	(5.832) 148.13	(4.500) 114.3	(3.625) 92.07
F	23	C	(1.188) 30.17	(.812) 20.62		(2.093) 53.16	(6.019) 152.88	(4.688) 119.07	(3.625) 92.07
G	25	A	(.938) 23.82	(.625) 15.87		(1.750) 44.45	(5.832) 148.13	(4.500) 114.3	(3.625) 92.07
G	25	B	(1.188) 30.17	(.812) 20.62	1.625-1P-.2L-DS	(2.093) 53.16	(6.019) 152.88	(4.688) 119.07	(3.625) 92.07
G	25	C	(1.250) 31.75	(.875) 22.22		(2.093) 53.16	(6.144) 156.05	(4.688) 119.07	(3.750) 95.25
G	25	D	(1.380) 35.05	(1.000) 25.4		(2.343) 59.51	(6.176) 156.87	(4.938) 125.42	(3.750) 95.25
H	29	A	(1.188) 30.17	(.812) 20.62	1.812-1P-.2L-DS	(2.093) 53.16	(6.144) 156.05	(4.812) 122.22	(3.750) 95.25
H	29	B	(1.380) 35.05	(1.000) 25.4		(2.343) 59.51	(6.176) 156.87	(4.938) 125.42	(3.750) 95.25
J	33	A	(1.380) 35.05	(1.000) 25.4		(2.343) 59.51	(6.426) 163.22	(5.188) 131.77	(4.000) 101.6
J	33	B	(1.625) 41.27	(1.250) 31.75	2.000-1P-.2L-DS	(2.750) 69.85	(6.701) 170.20	(5.375) 136.52	(4.000) 101.6

\* Dimensions in (inches) mm

# M28840/29 PLUG CONNECTOR WITH 45° EMI/RFI BACKSHELL

M28840/29	C	G	1	b	A	P	1
DESIGNATION	MATERIAL & FINISH	SHELL SIZE	INSERT	BACKSHELL SIZE	BACKSHELL STYLE	CONTACT	KEY POSITION
QPL: M28840/29 Commercial: IN28840/29	C: Class DJ: Aluminum Cadmium Plate U: Class ZJ Aluminum -Zinc Nickel, Non-Reflective M: Class TJ; Aluminum Tin Zinc, Non- Reflective (Commercial only)	A: 11 B: 13 C: 15 D: 17 E: 19 F: 23 G: 25 H: 29 J: 33	1	A B C D	A: EMI Environmental B: Environmental	F: Pin, Size 20 G: Socket, Size 20 P: Pin, Size, 22 S: Socket, Size, 22 D: Pin, Size, 28 E: Socket, Size, 28	1 2 3 4 5 6

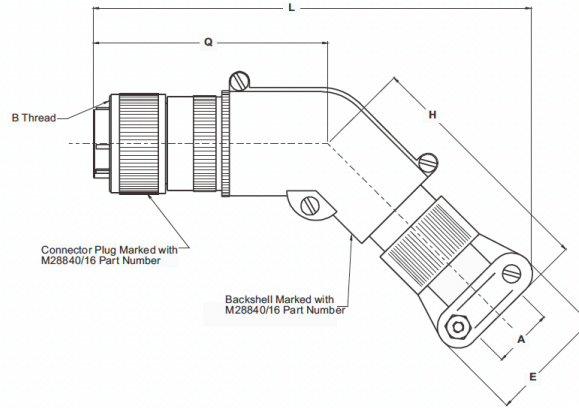


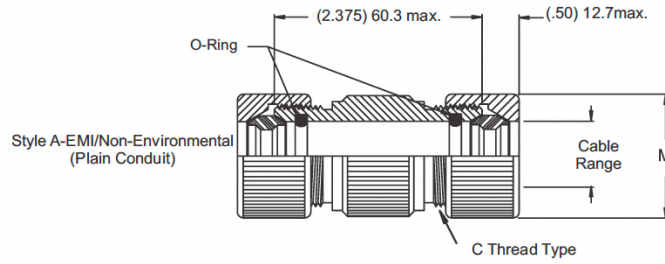
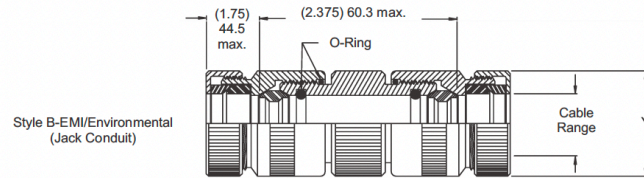
TABLE A

Military Shell Size	Shell Size	Backshell Shell Size	A Cable Entry		B Thread Class 2B	E Max.	H Max.	L Max.	Q Max.
			Max.	Min.					
A	11	A	(.312) 7.92	(.188) 4.77	.750-1P-.2L-DS	(.938) 23.82	(5.332) 135.43	(3.812) 96.82	(3.250) 82.55
A	11	B	(.438) 11.12	(.281) 7.13		(1.125) 28.57	(5.332) 135.43	(3.812) 96.82	(3.250) 82.55
A	11	C	(.562) 14.27	(.344) 8.73		(1.312) 33.32	(5.457) 138.60	(4.000) 101.6	(3.375) 85.72
B	13	A	(.438) 11.25	(.281) 7.13	.875-1P-.2L-DS	(1.125) 28.57	(5.332) 135.43	(3.812) 96.82	(3.250) 82.55
B	13	B	(.562) 14.27	(.344) 8.73		(1.312) 33.32	(5.457) 138.60	(4.000) 101.6	(3.375) 82.72
B	13	C	(.625) 16.56	(.375) 9.52		(1.312) 33.32	(5.682) 144.32	(4.250) 107.95	(3.500) 88.9
C	15	A	(.438) 11.25	(.281) 7.13	1.062-1P-.2L-DS	(1.125) 28.57	(5.457) 138.60	(4.000) 101.6	(3.375) 85.72
C	15	B	(.562) 14.27	(.344) 8.73		(1.312) 33.32	(5.457) 138.60	(4.000) 101.6	(3.375) 85.72
C	15	C	(.625) 16.56	(.375) 9.52		(1.312) 33.32	(5.682) 144.32	(4.250) 107.95	(3.500) 98.9
D	17	A	(.750) 19.05	(.438) 11.12	1.125-1P-.2L-DS	(1.593) 40.46	(5.713) 145.11	(4.150) 104.77	(3.500) 88.9
D	17	B	(.625) 16.56	(.375) 9.52		(1.312) 33.32	(5.682) 144.32	(4.250) 107.95	(3.500) 88.9
D	17	C	(.750) 19.05	(.438) 11.12		(1.593) 40.46	(5.713) 145.11	(4.250) 107.95	(3.500) 88.9
E	19	A	(.625) 16.56	(.375) 9.52	1.312-1P-.2L-DS	(1.312) 33.32	(5.682) 144.32	(4.250) 107.95	(3.500) 88.9
E	19	B	(.938) 23.82	(.625) 15.87		(1.750) 44.45	(5.832) 148.13	(4.375) 111.12	(3.625) 92.07
F	23	A	(.750) 19.05	(.438) 11.12		(1.593) 40.46	(5.713) 145.74	(4.500) 114.3	(3.625) 92.07
F	23	B	(.938) 23.82	(.625) 15.87	1.500-1P-.2L-DS	(1.750) 44.45	(5.832) 148.13	(4.500) 114.3	(3.625) 92.07
F	23	C	(1.188) 30.17	(.812) 20.62		(2.093) 53.16	(6.019) 152.88	(4.688) 119.07	(3.625) 92.07
G	25	A	(.938) 23.82	(.625) 15.87		(1.750) 44.45	(5.832) 148.13	(4.500) 114.3	(3.625) 92.07
G	25	B	(1.188) 30.17	(.812) 20.62	1.625-1P-.2L-DS	(2.093) 53.16	(6.019) 152.88	(4.688) 119.07	(3.625) 92.07
G	25	C	(1.250) 31.75	(.875) 22.22		(2.093) 53.16	(6.144) 156.05	(4.688) 119.07	(3.750) 95.25
G	25	D	(1.380) 35.05	(1.000) 25.4		(2.343) 59.51	(6.176) 156.87	(4.938) 125.42	(3.750) 95.25
H	29	A	(1.188) 30.17	(.812) 20.62	1.812-1P-.2L-DS	(2.093) 53.16	(6.144) 156.05	(4.812) 122.22	(3.750) 95.25
H	29	B	(1.380) 35.05	(1.000) 25.4		(2.343) 59.51	(6.176) 156.87	(4.938) 125.42	(3.750) 95.25
J	33	A	(1.380) 35.05	(1.000) 25.4		(2.343) 59.51	(6.426) 163.22	(5.188) 131.77	(4.000) 101.6
J	33	B	(1.625) 41.27	(1.250) 31.75	2.000-1P-.2L-DS	(2.750) 69.85	(6.701) 170.20	(5.375) 136.52	(4.000) 101.6

\* Dimensions in (inches) mm

# M28840/30 METAL CONDUIT COUPLER STYLES A & B

M28840/30	16	W	A
DESIGNATION	DASH #	MATERIAL & FINISH	BACKSHELL STYLE
QPL: M28840/30 Commercial: IN28840/30	See Table A	W: Aluminum, Cadmium Plate, O.D. over Electroless Nickel	A: EMI, Non-Environmental B: Environmental



ABLE A							
DASH #	Conduit Size	Sealing Range		C Thread	M Ø Max.	V Thread Class 2	Y Ø Max.
		Min.	Max.				
03	03	(.50) 12.7	(.63) 16.0	.875-20 UNEF	(1.12) 28.5	.100-20UNEF	(1.19) 30.23
04	04	(.63) 16.0	(.75) 19.1	1.000-20 UNEF	(1.25) 31.8	1.188-18 UNEF	(1.38) 35.1
05	05	(.75) 18.1	(.88) 22.4	1.125-18 UNEF	(1.43) 36.3	1.438-18 UNEF	(1.63) 41.4
06	06	(.88) 22.4	(1.00) 25.4	1.250-18 UNEF	(1.62) 41.2	1.750-18 UNS	(1.94) 49.3
08	08	(1.19) 30.2	(1.38) 35.1	1.625-18 UNEF	(1.81) 46.0	2.00-18 UNS	(2.19) 55.6
10	10	(1.44) 36.6	(1.63) 41.4	1.875-18 UNS	(2.18) 55.4	2.250-16 UN	(2.44) 62.0
12	12	(1.63) 41.4	(1.88) 47.8	2.125-16 UN	(2.56) 65.0	2.50-16 UN	(2.69) 68.3
16	16	(2.13) 54.1	(2.38) 60.5	2.750-16 UN	(3.06) 77.8	3.00-16 UN	(3.19) 81.0

\* Dimensions in (inches) mm