

38999 SERIES I, II, III, IV COMMERCIAL CONNECTOR SERIES



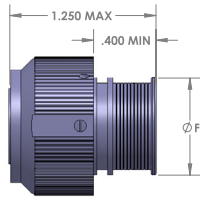
TopFlite specializes in the design and manufacture of D38999 Commercial Equivalent Connectors that are offered in a variety of materials, finishes, and contact styles including Printed Circuit Board, Solder, and Crimp termination. The TopFlite Advantage is that the customer can fully customize the connector design, including but not limited to overall length, custom insert arrangements, flange size or style, specialty materials, integrated backshells, fully sealed, and more. If an option(s) is not listed in the part number builder below, TopFlite can issue a specialty "Z-Code" to the end of the part number nomenclature to cover any custom alterations the customer may require for their application. Remember, TopFlite specializes in custom connector design and consulting, so if you can't find it, chances are we can make it!

PART NUMBER BUILDER												
EXAMPLE PART NUMBER	TFC-	32	H	16	TH	F	09-35	P	N	-020500	-W	-ZXXX
STANDARD PREFIX												
CONNECTOR TYPE	501 - D38999 SERIES 1 PLUG 502 - D38999 SERIES 1 RECEPTACLE 510 - D38999 SERIES 2 PLUG 511 - D38999 SERIES 2 RECEPTACLE 32 - D38999 SERIES 3 PLUG 33 - D38999 SERIES 3 RECEPTACLE 46 - D38999 SERIES 4 PLUG ⁵ 44 - D38999 SERIES 4 RECEPTACLE ⁵											
HERMETICALLY SEALED	H - INCLUDES GLASS/CERAMIC HERMETIC SEALING (OMIT FOR NONE)											
STYLE	06 - STANDARD PLUG (D38999/26 STYLE, NO RATCHET) 16 - ANTI-DECOUPLING PLUG (D38999/26 STYLE, W/ RATCHET) 07 - JAM NUT RECEPTACLE (D38999/24 STYLE) 22 - INLINE RECEPTACLE 20 - BOX MOUNT RECEPTACLE (D38999/20 STYLE)											
BACKEND STYLE	TH - THREADED BACK IT - INTEGRATED TERMINATION TAIL CS - CASTLE BACK FB - FLAT BACK (PC TAIL OR SOLDER CONTACTS ONLY)											
MATERIAL/ FINISH	F - ALUMINUM W/ ELECTROLESS NICKEL Z - ALUMINUM W/ BLACK ZINC NICKEL A - ALUMINUM W/ BLACK ANODIZE D - ALUMINUM W/ OLIVE DRAB CADMIUM T - ALUMINUM W/ NICKEL TEFLON/PTFE K - STAINLESS W/ PASSIVATION TREATMENT (SEE PAGE 4 FOR MATERIAL AND FINISH SPECIFICATIONS & ADDITIONAL FINISHES)											
SIZE & INSERT ARRANGEMENT	09-35 11-35 13-04 ETC. (SEE APPENDIX A FOR ALL OPTIONS. CONSULT FACTORY FOR CUSTOM ARRANGEMENTS)											
CONTACT STYLE	P - CRIMP PIN S - CRIMP SOCKET PCP - PC TAIL PIN PCS - PC TAIL SOCKET PS - SOLDER CUP PIN SS - SOLDER CUP SOCKET XP - NO PIN CONTACTS XS - NO SOCKET CONTACTS											
POLARIZATION	A B C ETC. (SEE MIL-DTL-38999 PROCUREMENT SPECIFICATION)											
PC TAIL CONTACT SIZE	FIRST 3 DIGITS ARE THE DIAMETER, EX. 020 = .020" DIAMETER TAIL SECOND 3 DIGITS ARE THE LENGTH FROM REAR OF CONNECTOR, EX. 400 = .400" THUS, FOR EXAMPLE, -018300 WOULD EQUATE TO .018" DIAMETER & .300" LENGTH (OMIT FOR NON-PC TAIL CONTACT VERSIONS)											
WIRE HOLES	W - WITH WIRE HOLES (OMIT FOR NONE)											
Z-CODE	Z112 Z090 Z030 ETC. (CONTACT SALES STAFF IF A Z-CODE IS REQUIRED FOR A CUSTOM CONFIGURATION/OPTION(S). OMIT FOR NONE)											

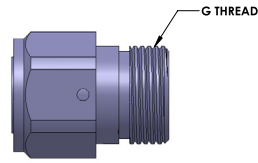
Notes

1. Consult Factory for any required options not seen listed above
2. Connectors with Solder Cup or PC Tail Contact Options are Backpotted
3. Hermetic Sealing only available with Non-Crimp, Pin Contact Connectors
4. See Appendix B for Performance Data
5. Consult factory for Series IV Connectors

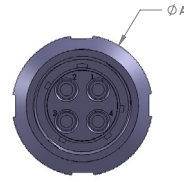
PLUG SERIES 501 - SHELL STYLE 06/16



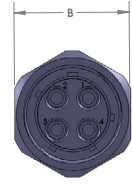
ITR REAR



THREADED REAR



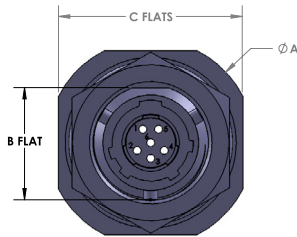
STANDARD COUPLING



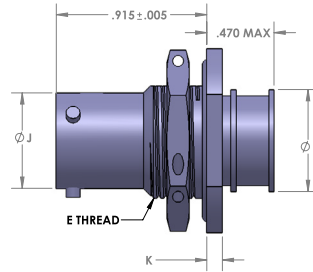
HEX COUPLING

DIMENSIONS (IN)				
SHELL SIZE	A MAX	B	F	G THREAD
9	0.859	0.845	0.625	.4375-28
11	0.984	0.960	0.750	.5625-24
13	1.156	1.130	0.875	.6875-24
15	1.281	1.260	1.000	.8125-20
17	1.406	1.380	1.125	.9375-20
19	1.516	1.500	1.250	1.0625-18
21	1.641	1.620	1.312	1.1875-18
23	1.766	1.745	1.437	1.3125-18
25	1.891	1.870	1.562	1.4375-18

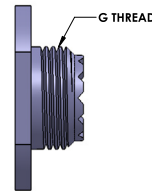
JAM NUT RECEPTACLE SERIES 502 - SHELL STYLE 24



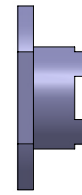
FRONT VIEW



ITR REAR



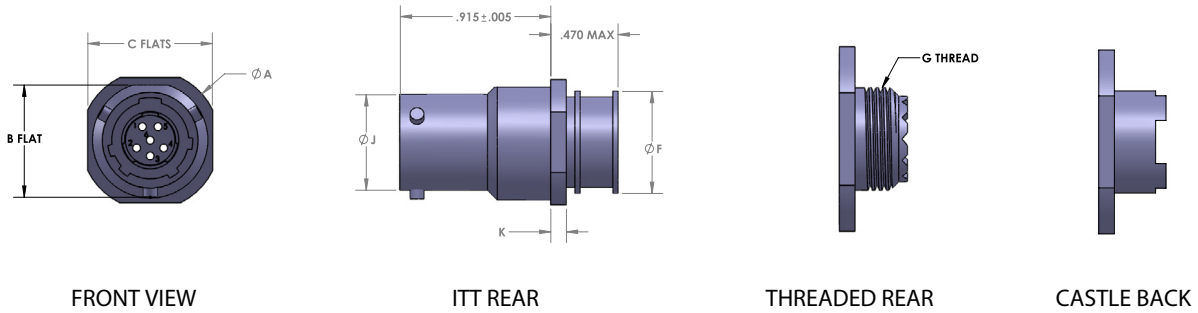
THREADED REAR



CASTLE BACK

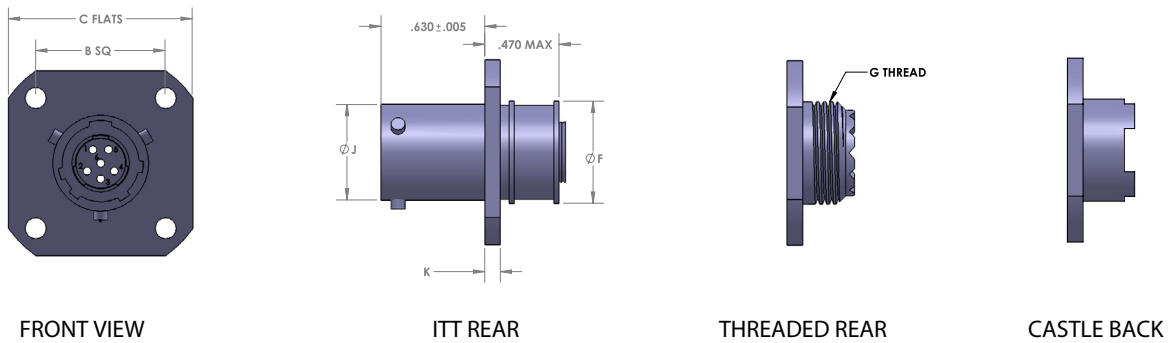
DIMENSIONS (IN)								
SHELL SIZE	A	B FLAT	C FLAT	E THREAD	G THREAD	F	J	K
9	1.188	0.651	1.063	.6875-24	.4375-28	0.625	0.572	0.110
11	1.375	0.751	1.252	.8125-20	.5625-24	0.750	0.700	0.110
13	1.500	0.938	1.374	1.000-20	.6875-24	0.875	0.850	0.110
15	1.625	1.062	1.500	1.125-18	.8125-20	1.000	0.975	0.110
17	1.750	1.187	1.626	1.250-18	.9375-20	1.125	1.100	0.110
19	1.938	1.312	1.811	1.375-18	1.0625-18	1.250	1.207	0.140
21	2.062	1.437	1.937	1.500-18	1.1875-18	1.312	1.332	0.140
23	2.188	1.562	2.063	1.625-18	1.3125-18	1.437	1.457	0.140
25	2.312	1.687	2.189	1.750-18	1.4375-18	1.562	1.582	0.140

INLINE CABLE RECEPTACLE SERIES 502 - SHELL STYLE 22



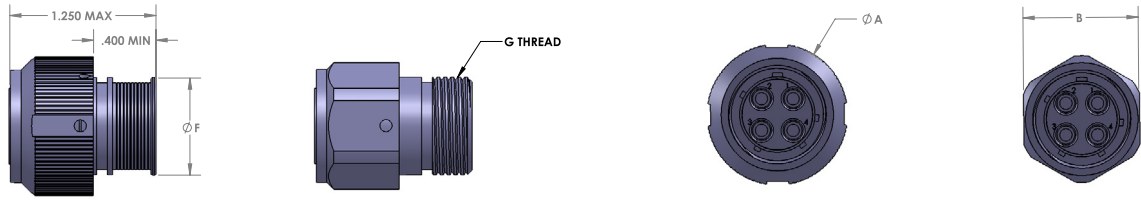
DIMENSIONS (IN)							
SHELL SIZE	A	B FLAT	C FLAT	G THREAD	F	J	K
9	1.188	0.651	0.750	.4375-28	0.625	0.572	0.110
11	1.375	0.751	0.875	.5625-24	0.750	0.700	0.110
13	1.500	0.938	1.062	.6875-24	0.875	0.850	0.110
15	1.625	1.062	1.187	.8125-20	1.000	0.975	0.110
17	1.750	1.187	1.312	.9375-20	1.125	1.100	0.110
19	1.938	1.312	1.437	1.0625-18	1.250	1.207	0.140
21	2.062	1.437	1.562	1.1875-18	1.312	1.332	0.140
23	2.188	1.562	1.687	1.3125-18	1.437	1.457	0.140
25	2.312	1.687	1.812	1.4375-18	1.562	1.582	0.140

BOX MOUNT RECEPTACLE SERIES 502 - SHELL STYLE 20



DIMENSIONS (IN)						
SHELL SIZE	B	C FLAT	G THREAD	F	J	K
9	0.719	0.938	.4375-28	0.625	0.572	0.085
11	0.812	1.031	.5625-24	0.750	0.700	0.085
13	0.896	1.125	.6875-24	0.875	0.850	0.085
15	0.969	1.219	.8125-20	1.000	0.975	0.085
17	1.062	1.312	.9375-20	1.125	1.100	0.085
19	1.156	1.438	1.0625-18	1.250	1.207	0.085
21	1.250	1.562	1.1875-18	1.312	1.332	0.115
23	1.375	1.688	1.3125-18	1.437	1.457	0.115
25	1.500	1.812	1.4375-18	1.562	1.582	0.115

PLUG SERIES 510 - SHELL STYLE 06/16



ITT REAR

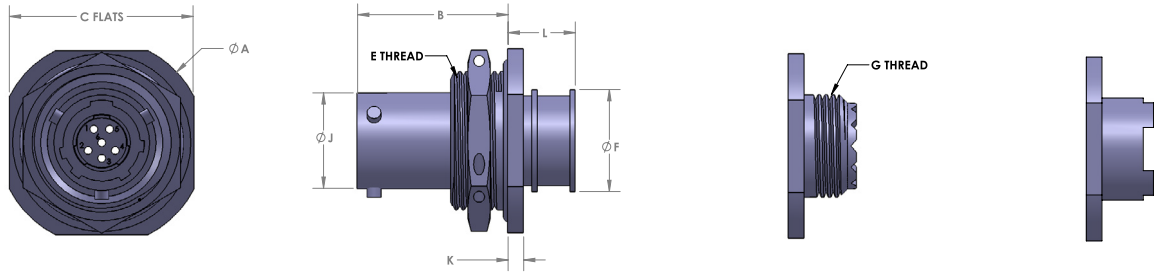
THREADED REAR

STANDARD COUPLING

HEX COUPLING

DIMENSIONS (IN)				
SHELL SIZE	A MAX	B	F	G THREAD
8	0.750	0.730	0.625	.4375-28
10	0.859	0.840	0.750	.5625-24
12	1.031	1.010	0.875	.6875-24
14	1.156	1.350	1.000	.8125-20
16	1.281	1.260	1.125	.9375-20
18	1.406	1.385	1.250	1.0625-18
20	1.531	1.510	1.312	1.1875-18
22	1.641	1.620	1.437	1.3125-18
24	1.766	1.745	1.562	1.4375-18

JAM NUT RECEPTACLE SERIES 511 - SHELL STYLE 24



FRONT VIEW

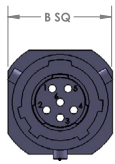
ITT REAR

THREADED REAR

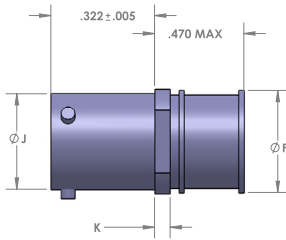
CASTLE BACK

DIMENSIONS (IN)									
SHELL SIZE	A	B	C FLAT	E THREAD	G THREAD	F	J	K	L MAX
8	1.375	0.438	1.250	.875-20	.4375-28	0.625	0.473	0.094	0.516
10	1.500	0.438	1.375	1.000-20	.5625-24	0.750	0.590	0.094	0.516
12	1.625	0.438	1.500	1.125-18	.6875-24	0.875	0.750	0.094	0.516
14	1.750	0.438	1.625	1.250-18	.8125-20	1.000	0.875	0.094	0.516
16	1.938	0.438	1.781	1.375-18	.9375-20	1.125	1.000	0.094	0.516
18	2.016	0.438	1.890	1.500-18	1.0625-18	1.250	1.125	0.094	0.516
20	2.141	0.464	2.016	1.625-18	1.1875-18	1.312	1.250	0.094	0.484
22	2.265	0.464	2.140	1.750-18	1.3125-18	1.437	1.375	0.094	0.484
24	2.390	0.464	2.265	1.875-16	1.4375-18	1.562	1.500	0.094	0.484

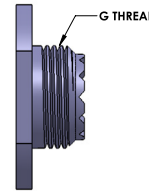
INLINE CABLE RECEPTACLE SERIES 511 - SHELL STYLE 22



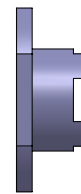
FRONT VIEW



ITT REAR



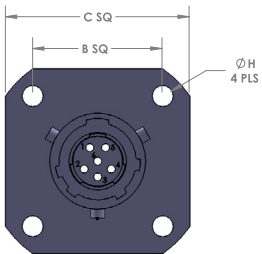
THREADED REAR



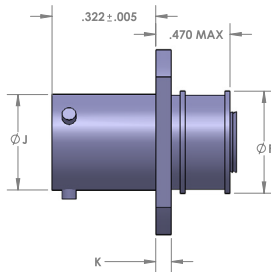
CASTLE BACK

DIMENSIONS (IN)					
SHELL SIZE	B	G THREAD	F	J	K
8	0.525	.4375-28	0.625	0.473	0.063
10	0.650	.5625-24	0.750	0.590	0.063
12	0.820	.6875-24	0.875	0.750	0.063
14	0.950	.8125-20	1.000	0.875	0.063
16	1.050	.9375-20	1.125	1.000	0.063
18	1.175	1.0625-18	1.250	1.125	0.063
20	1.300	1.1875-18	1.312	1.250	0.063
22	1.425	1.3125-18	1.437	1.375	0.063
24	1.550	1.4375-18	1.562	1.500	0.063

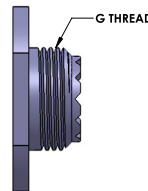
BOX MOUNT RECEPTACLE SERIES 511 - SHELL STYLE 20



FRONT VIEW



ITT REAR



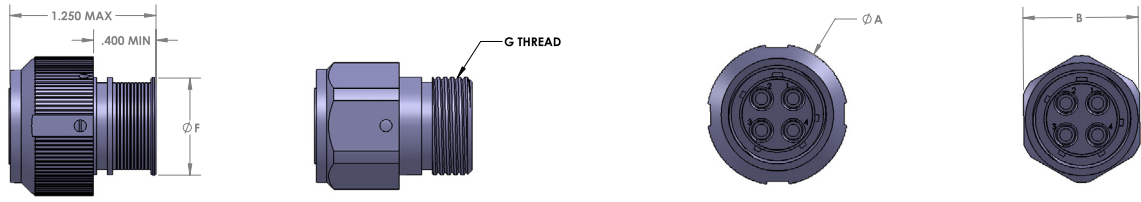
THREADED REAR



CASTLE BACK

DIMENSIONS (IN)							
SHELL SIZE	B	C	G THREAD	F	H	J	K
8	0.594	0.828	.4375-28	0.625	0.120	0.473	0.063
10	0.719	0.954	.5625-24	0.750	0.120	0.590	0.063
12	0.812	1.047	.6875-24	0.875	0.120	0.750	0.063
14	0.906	1.141	.8125-20	1.000	0.120	0.875	0.063
16	0.969	1.234	.9375-20	1.125	0.120	1.000	0.063
18	1.062	1.328	1.0625-18	1.250	0.120	1.125	0.063
20	1.156	1.453	1.1875-18	1.312	0.120	1.250	0.063
22	1.250	1.578	1.3125-18	1.437	0.120	1.375	0.063
24	1.375	1.703	1.4375-18	1.562	0.147	1.500	0.063

PLUG SERIES 32 - SHELL STYLE 06/16



ITT REAR

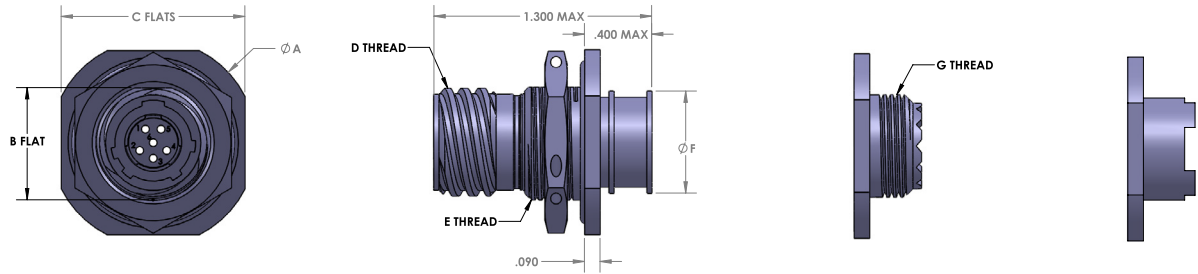
THREADED REAR

STANDARD COUPLING

HEX COUPLING

DIMENSIONS (IN)					
SHELL SIZE	A MAX	B	MATING THREAD	F	G THREAD
9	0.858	0.808	.6250-.1P-.3L	0.625	M12x1.0-6g 0.100R
11	0.984	0.922	.7500-.1P-.3L	0.750	M15x1.0-6g 0.100R
13	1.157	1.090	.8750-.1P-.3L	0.875	M18x1.0-6g 0.100R
15	1.270	1.210	1.0000-.1P-.3L	1.000	M22x1.0-6g 0.100R
17	1.400	1.350	1.1875-.1P-.3L	1.125	M25x1.0-6g 0.100R
19	1.510	1.450	1.2500-.1P-.3L	1.250	M28x1.0-6g 0.100R
21	1.640	1.580	1.3750-.1P-.3L	1.312	M31x1.0-6g 0.100R
23	1.760	1.700	1.5000-.1P-.3L	1.437	M34x1.0-6g 0.100R
25	1.880	1.820	1.6250-.1P-.3L	1.562	M37x1.0-6g 0.100R

JAM NUT RECEPTACLE SERIES 33 - SHELL STYLE 24



FRONT VIEW

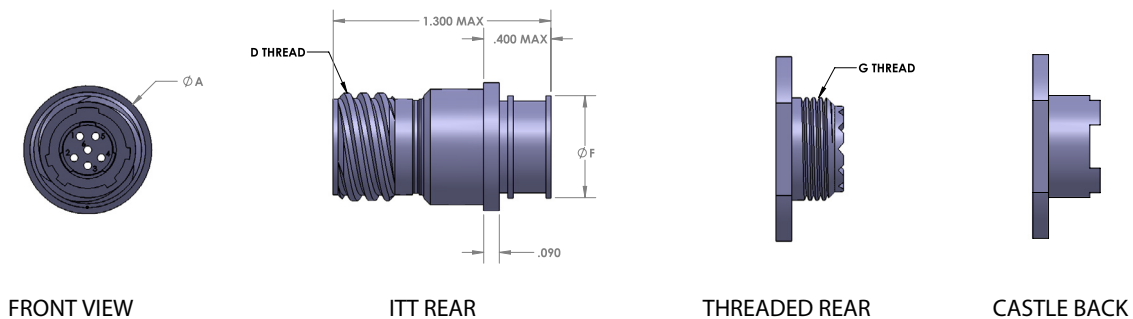
ITT REAR

THREADED REAR

CASTLE BACK

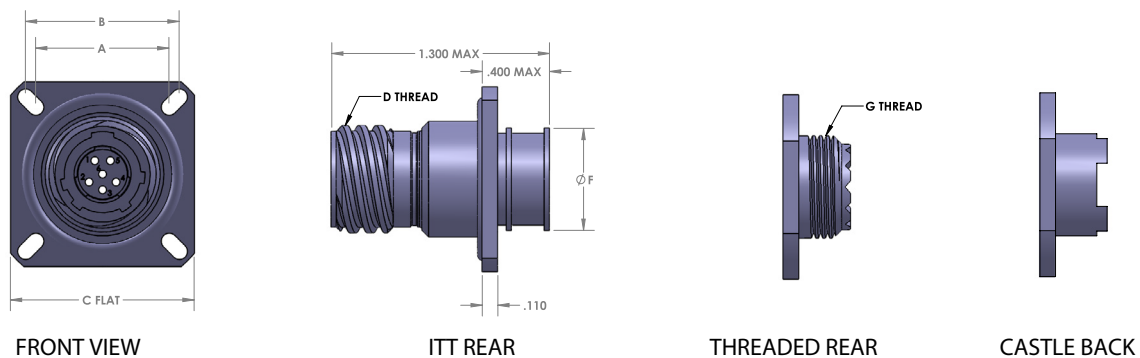
DIMENSIONS (IN)							
SHELL SIZE	A	B FLAT	C FLAT	D THREAD	E THREAD	F	G THREAD
9	1.189	0.651	1.063	.6250-.1P-.3L	M17x1-6g 0.100R	0.625	M12x1.0-6g 0.100R
11	1.374	0.751	1.252	.7500-.1P-.3L	M20x1-6g 0.100R	0.750	M15x1.0-6g 0.100R
13	1.500	0.938	1.374	.8750-.1P-.3L	M25x1-6g 0.100R	0.875	M18x1.0-6g 0.100R
15	1.626	1.062	1.500	1.0000-.1P-.3L	M28x1-6g 0.100R	1.000	M22x1.0-6g 0.100R
17	1.752	1.187	1.626	1.1875-.1P-.3L	M32x1-6g 0.100R	1.125	M25x1.0-6g 0.100R
19	1.937	1.312	1.811	1.2500-.1P-.3L	M35x1-6g 0.100R	1.250	M28x1.0-6g 0.100R
21	2.063	1.437	1.937	1.3750-.1P-.3L	M38x1-6g 0.100R	1.312	M31x1.0-6g 0.100R
23	2.189	1.562	2.063	1.5000-.1P-.3L	M41x1-6g 0.100R	1.437	M34x1.0-6g 0.100R
25	2.311	1.687	2.189	1.6250-.1P-.3L	M44x1-6g 0.100R	1.562	M37x1.0-6g 0.100R

INLINE CABLE RECEPTACLE SERIES 33 - SHELL STYLE 22



DIMENSIONS (IN)				
SHELL SIZE	A	D THREAD	F	G THREAD
9	0.719	.6250-.1P-.3L	0.625	M12x1.0-6g 0.100R
11	0.837	.7500-.1P-.3L	0.750	M15x1.0-6g 0.100R
13	1.034	.8750-.1P-.3L	0.875	M18x1.0-6g 0.100R
15	1.152	1.0000-.1P-.3L	1.000	M22x1.0-6g 0.100R
17	1.310	1.1875-.1P-.3L	1.125	M25x1.0-6g 0.100R
19	1.428	1.2500-.1P-.3L	1.250	M28x1.0-6g 0.100R
21	1.546	1.3750-.1P-.3L	1.312	M31x1.0-6g 0.100R
23	1.664	1.5000-.1P-.3L	1.437	M34x1.0-6g 0.100R
25	1.782	1.6250-.1P-.3L	1.562	M37x1.0-6g 0.100R

BOX MOUNT RECEPTACLE SERIES 33 - SHELL STYLE 20



DIMENSIONS (IN)						
SHELL SIZE	A	B	C FLAT	D THREAD	F	G THREAD
9	0.594	0.719	0.937	.6250-.1P-.3L	0.625	M12x1.0-6g 0.100R
11	0.719	0.812	1.031	.7500-.1P-.3L	0.750	M15x1.0-6g 0.100R
13	0.812	0.906	1.126	.8750-.1P-.3L	0.875	M18x1.0-6g 0.100R
15	0.906	0.969	1.220	1.0000-.1P-.3L	1.000	M22x1.0-6g 0.100R
17	0.969	1.062	1.311	1.1875-.1P-.3L	1.125	M25x1.0-6g 0.100R
19	1.062	1.156	1.437	1.2500-.1P-.3L	1.250	M28x1.0-6g 0.100R
21	1.156	1.250	1.563	1.3750-.1P-.3L	1.312	M31x1.0-6g 0.100R
23	1.250	1.375	1.689	1.5000-.1P-.3L	1.437	M34x1.0-6g 0.100R
25	1.375	1.500	1.811	1.6250-.1P-.3L	1.562	M37x1.0-6g 0.100R