

# Amphenol® FPT Series Miniature Cylindrical Filters

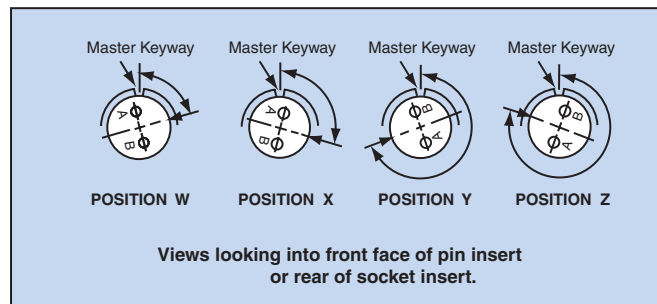
The Amphenol® FPT Series combines the unique design features of the miniature PT Series with an EMI filter.

- Intermateable with MIL-C-26482 Series connectors (see Catalog 12-070), and MIL-C-83723 Series I connectors (see Catalog MS-102)
- Quick positive coupling with visual confirmation of mating
- Higher reliability and greater durability with permanently encapsulated contacts
- Aluminum shells with several finish options

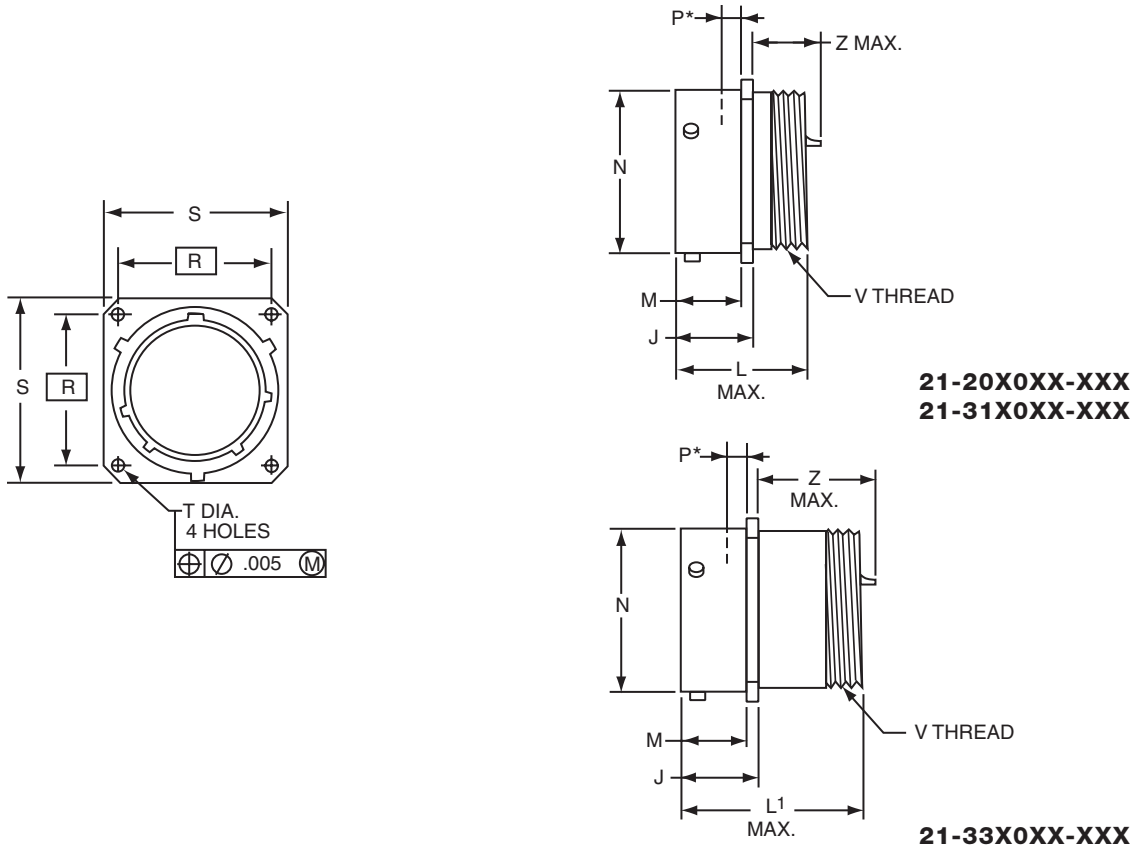


FPT Alternate Positions

Insert Arrangements	Degrees			
	W	X	Y	Z
10-5	45	151	180	270
10-6	90	–	–	–
10-98	90	180	240	270
12-3	–	–	180	–
12-8	90	112	203	292
12-10	60	155	270	295
12-98	61	135	189	340
14-12	434	90	–	–
14-18	15	90	180	270
14-19	30	165	315	–
16-8	54	152	180	331
16-26	60	–	275	338
18-32	85	138	222	265
20-41	45	126	225	–
22-41	39	–	–	–
22-55	30	142	226	314
24-61	90	180	270	324



## wall mounting receptacle



For ordering information, see how to order page 72.

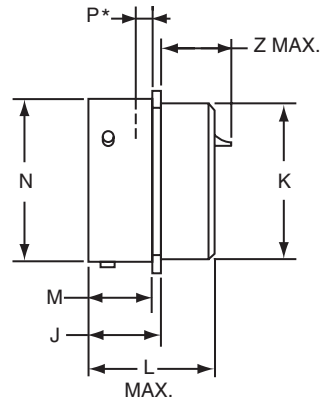
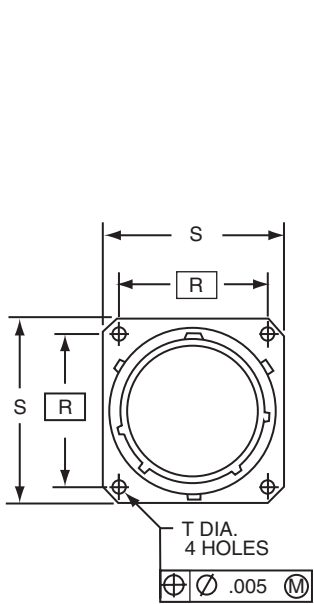
Plug movement required to clear FPT receptacles: .438 min.

\* Acceptable panel thickness for back panel mounting a standard receptacle.

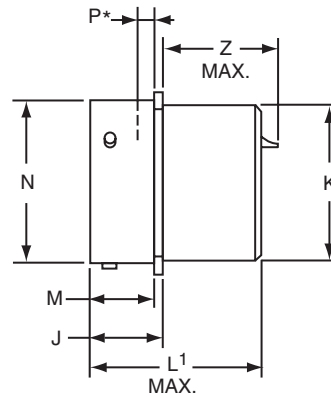
Shell Size	J +.021 -.010	M +.010 -.000	N Dia +.001 -.005	P* Max.	R (TP)	S +.011 -.010	T Dia. ±.005	V Thread UNE-F-2A (Plated)	SHORT SHELL VHF/UHF/MF Filters			LONG SHELL HF Filters		
									L Max.	Size 20 Contact Z Max.	Size 16 or 16 & 20 Contacts Z Max.	L <sup>1</sup> Max.	Size 20 Contact Z Max.	Size 16 or 16 & 20 Contacts Z Max.
8	.493	.431	.473	.087	.594	.812	.120	.4375-28	1.103	.850	.904	1.588	1.258	1.328
10	.493	.431	.590	.087	.719	.938	.120	.5625-24	1.103	.850	.904	1.588	1.258	1.328
12	.493	.431	.750	.087	.812	1.031	.120	.6875-24	1.103	.850	.904	1.588	1.258	1.328
14	.493	.431	.875	.087	.906	1.125	.120	.8125-20	1.103	.850	.904	1.588	1.258	1.328
16	.493	.431	1.000	.087	.969	1.219	.120	.9375-20	1.103	.850	.904	1.588	1.258	1.328
18	.493	.431	1.125	.087	1.062	1.312	.120	1.0625-18	1.103	.850	.904	1.588	1.258	1.328
20	.650	.556	1.250	.212	1.156	1.438	.120	1.1875-18	1.166	.755	.809	1.651	1.163	1.233
22	.650	.556	1.375	.212	1.250	1.562	.120	1.3125-18	1.166	.755	.809	1.651	1.163	1.233
24	.683	.589	1.500	.212	1.375	1.688	.147	1.4375-18	1.166	.722	.776	1.651	1.130	1.200

All dimensions for reference only.

## box mounting receptacle



**21-20X2XX-XXX**  
**21-31X2XX-XXX**



**21-33X2XX-XXX**

For ordering information, see how to order page 72.

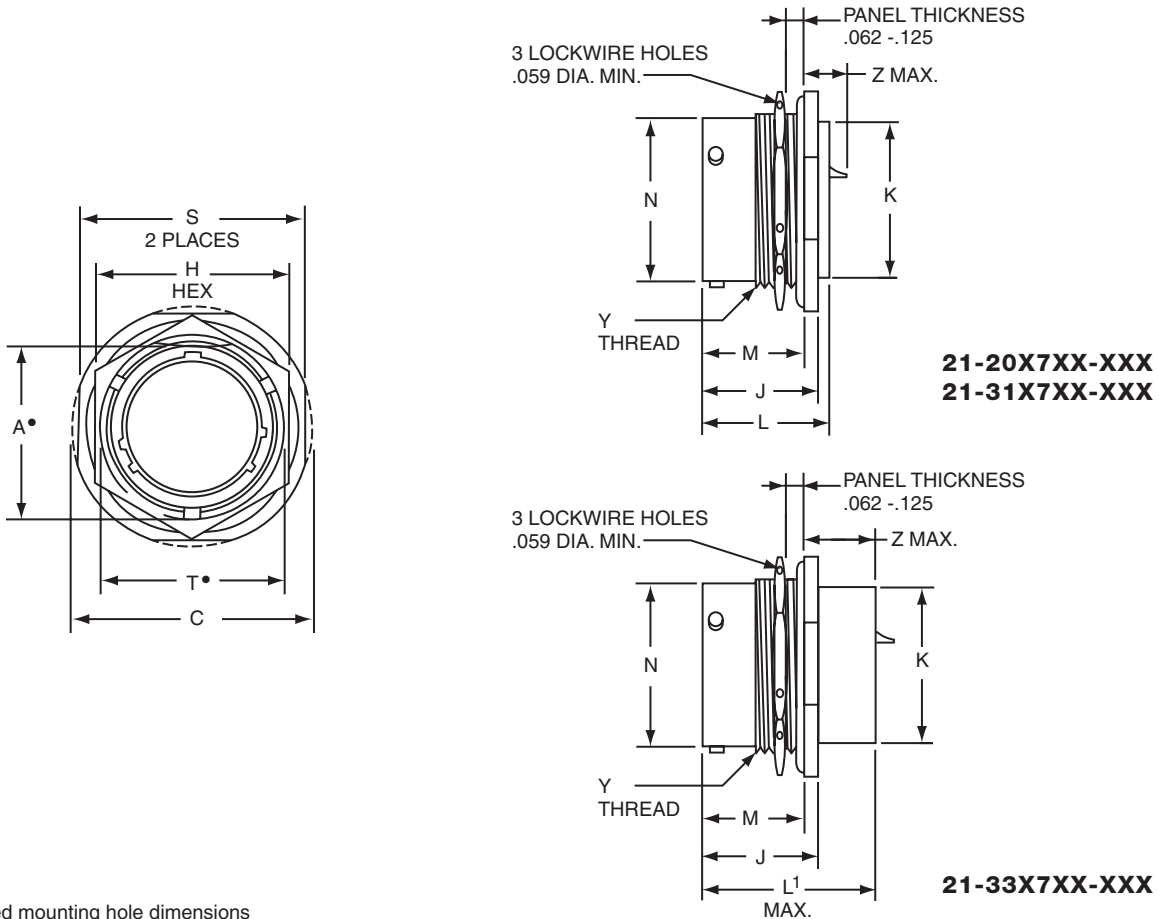
Plug movement required to clear FPT receptacles: .438 min.

\* Acceptable panel thickness for back panel mounting a standard receptacle.

Shell Size	J +.021 -.010	K Dia. +.011 -.000	M +.010 -.000	N Dia +.001 -.005	P* Max.	R (TP)	S +.011 -.010	T Dia. ±.005	SHORT SHELL VHF/UHF/MF Filters			LONG SHELL HF Filters		
									L Max.	Size 20 Contact Z Max.	Size 16 or 16 & 20 Contacts Z Max.	L <sup>1</sup> Max.	Size 20 Contact Z Max.	Size 16 or 16 & 20 Contacts Z Max.
8	.493	.438	.431	.473	.087	.594	.812	.120	1.103	.850	.904	1.588	1.258	1.328
10	.493	.562	.431	.590	.087	.719	.938	.120	1.103	.850	.904	1.588	1.258	1.328
12	.493	.688	.431	.750	.087	.812	1.031	.120	1.103	.850	.904	1.588	1.258	1.328
14	.493	.812	.431	.875	.087	.906	1.125	.120	1.103	.850	.904	1.588	1.258	1.328
16	.493	.938	.431	1.000	.087	.969	1.219	.120	1.103	.850	.904	1.588	1.258	1.328
18	.493	1.062	.431	1.125	.087	1.062	1.312	.120	1.103	.850	.904	1.588	1.258	1.328
20	.650	1.188	.556	1.250	.212	1.156	1.438	.120	1.166	.755	.809	1.651	1.163	1.233
22	.650	1.312	.556	1.375	.212	1.250	1.562	.120	1.166	.755	.809	1.651	1.163	1.233
24	.683	1.438	.589	1.500	.212	1.375	1.688	.147	1.166	.722	.776	1.651	1.130	1.200

All dimensions for reference only.

## jam nut receptacle

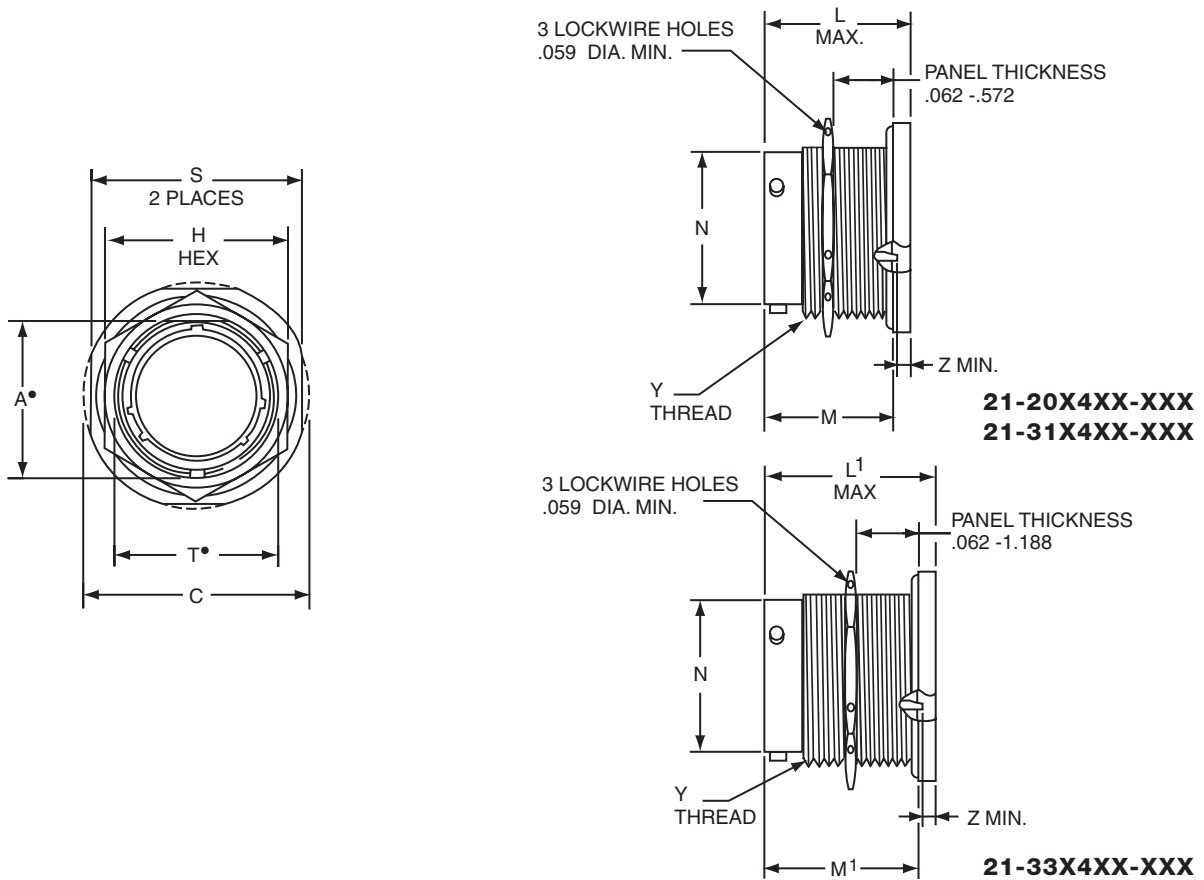


• “D” shaped mounting hole dimensions  
 For ordering information, see how to order page 72.  
 Plug movement required to clear FPT receptacles: .438 min.

Shell Size	A* Flat +.000 -.010	C Dia. +.011 -.010	H Hex +.017 -.016	J +.006 -.005	K Dia. +.011 -.000	M ±.005	N Dia +.001 -.005	S ±.010	T* Dia. +.010 -.000	Y Thread UNEF-2A (Plated)	SHORT SHELL VHF/UHF/MF Filters			LONG SHELL HF Filters		
											L Max.	Size 20 Contact Z Max.	Size 16 or 16 & 20 Contacts Z Max.	L <sup>1</sup> Max.	Size 20 Contact Z Max.	Size 16 or 16 & 20 Contacts Z Max.
8	.542	1.062	.750	.821	.438	.696	.473	.938	.572	.5625-24	1.103	.642	.698	1.588	1.050	1.120
10	.669	1.188	.875	.821	.562	.696	.590	1.062	.697	.6875-24	1.103	.642	.698	1.588	1.050	1.120
12	.830	1.375	1.062	.821	.688	.696	.750	1.250	.884	.8750-20	1.103	.642	.698	1.588	1.050	1.120
14	.955	1.500	1.188	.821	.812	.696	.875	1.375	1.009	1.0000-20	1.103	.642	.698	1.588	1.050	1.120
16	1.084	1.625	1.312	.821	.938	.696	1.000	1.500	1.134	1.1250-18	1.103	.642	.698	1.588	1.050	1.120
18	1.208	1.750	1.438	.821	1.062	.696	1.125	1.625	1.259	1.2500-18	1.103	.642	.698	1.588	1.050	1.120
20	1.333	1.938	1.562	1.040	1.188	.884	1.250	1.812	1.384	1.3750-18	1.166	.516	.570	1.651	.924	.994
22	1.459	2.062	1.688	1.040	1.312	.884	1.375	1.938	1.509	1.5000-18	1.166	.516	.570	1.651	.924	.994
24	1.575	2.188	1.812	1.073	1.438	.917	1.500	2.062	1.634	1.6250-18	1.166	.483	.537	1.651	.891	.961

All dimensions for reference only.

## jam nut receptacle (minimum penetration)



• "D" shaped mounting hole dimensions

For ordering information, see how to order page 72.

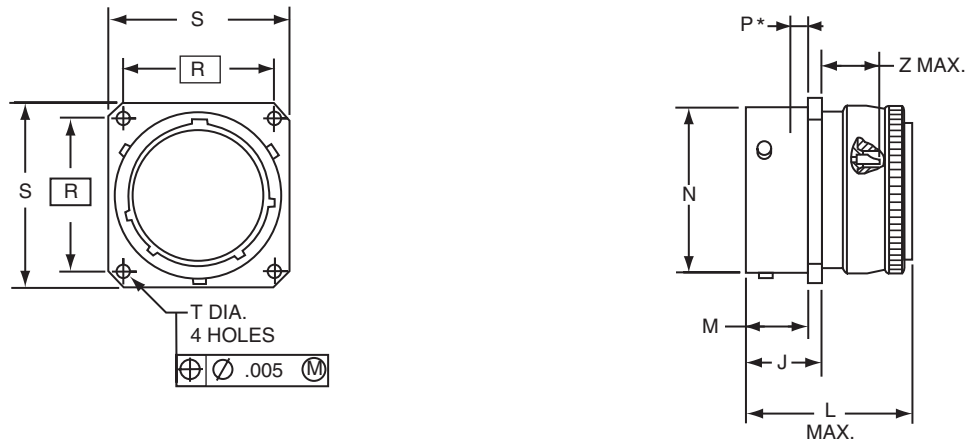
Plug movement required to clear FPT receptacles: .438 min.

Shell Size	A* Flat +.000 -.010	C Dia. +.011 -.010	H Hex +.017 -.016	M +.016 -.015	M <sup>1</sup> +.016 -.015	N Dia +.001 -.005	S +.011 -.010	T* Dia. +.010 -.000	Y Thread UNE2F-2A (Plated)	SHORT SHELL VHF/UHF/MF Filters			LONG SHELL HF Filters		
										L Max.	Size 20 Contact Z Max.	Size 16 or 16 & 20 Contacts Z Max.	L <sup>1</sup> Max.	Size 20 Contact Z Max.	Size 16 or 16 & 20 Contacts Z Max.
8	.542	1.062	.750	1.235	1.690	.473	.938	.572	.5625-24	1.366	.022	.029	1.821	.070	.000
10	.669	1.188	.875	1.235	1.690	.590	1.062	.697	.6875-24	1.366	.022	.029	1.821	.070	.000
12	.830	1.375	1.062	1.235	1.690	.750	1.250	.884	.8750-20	1.366	.022	.029	1.821	.070	.000
14	.955	1.500	1.188	1.235	1.690	.875	1.375	1.009	1.0000-20	1.366	.022	.029	1.821	.070	.000
16	1.084	1.625	1.312	1.235	1.690	1.000	1.500	1.134	1.1250-18	1.366	.022	.029	1.821	.070	.000
18	1.208	1.750	1.438	1.235	1.690	1.125	1.625	1.259	1.2500-18	1.366	.022	.029	1.821	.070	.000
20	1.333	1.938	1.562	1.266	1.721	1.250	1.812	1.384	1.3750-18	1.428	.062	.029	1.883	.070	.000
22	1.459	2.062	1.688	1.266	1.721	1.375	1.938	1.509	1.5000-18	1.428	.062	.029	1.883	.070	.000
24	1.575	2.188	1.812	1.266	1.721	1.500	2.062	1.634	1.6250-18	1.428	.062	.029	1.883	.070	.000

All dimensions for reference only.

# FPTE

## wall mounting receptacle



**21-22X0XX-XXX**

For ordering information, see how to order page 72.

Plug movement required to clear FPT receptacles: .438 min.

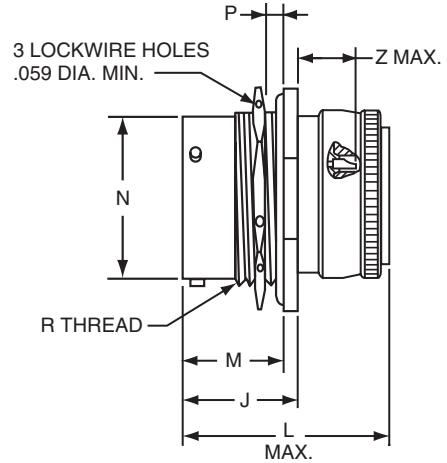
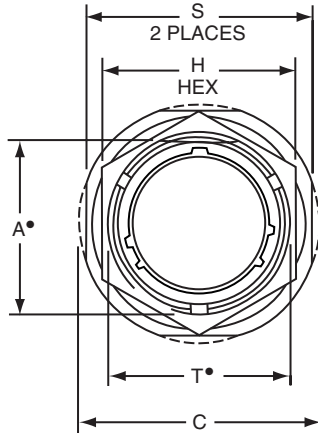
\* Acceptable panel thickness for back panel mounting a standard receptacle.

Shell Size	J +.021 -.010	M +.010 -.000	N Dia +.001 -.005	P* Max.	R (TP)	S +.011 -.010	T Dia. ±.005	SHORT SHELL VHF/UHF/MF Filters	
								L Max.	Size 20 Contact Z Max.
8	.493	.431	.473	.087	.594	.812	.120	1.409	.774
10	.493	.431	.590	.087	.719	.938	.120	1.409	.774
12	.493	.431	.750	.087	.812	1.031	.120	1.409	.774
14	.493	.431	.875	.087	.906	1.125	.120	1.409	.774
16	.493	.431	1.000	.087	.969	1.219	.120	1.409	.774
18	.493	.431	1.125	.087	1.062	1.312	.120	1.409	.774
20	.650	.556	1.250	.212	1.156	1.438	.120	1.553	.679
22	.650	.556	1.375	.212	1.250	1.562	.120	1.553	.679
24	.683	.589	1.500	.212	1.375	1.688	.147	1.553	.646

All dimensions for reference only.

# FPTE

## jam nut receptacle



21-22X7XX-XXX

• "D" shaped mounting hole dimensions

For ordering information, see how to order page 72.

Plug movement required to clear FPT receptacles: .438 min.

Shell Size	A* Flat +.000 -.010	C Dia. +.011 -.010	H Hex +.017 -.016	J +.006 -.005	M ±.005	N Dia. +.001 -.005	P Panel Thickness		R Thread UNEF-2A (Plated)	S ±.010	T* Dia. +.010 -.000	SHORT SHELL VHF/UHF Filters	
							Max.	Min.				L Max.	Size 20 Contact Z Max.
8	.542	1.062	.750	.821	.696	.473	.125	.062	.5625-24	.938	.572	1.546	.566
10	.669	1.188	.875	.821	.696	.590	.125	.062	.6875-24	1.062	.697	1.546	.566
12	.830	1.375	1.062	.821	.696	.750	.125	.062	.8750-20	1.250	.884	1.546	.566
14	.955	1.500	1.188	.821	.696	.875	.125	.062	1.0000-20	1.375	1.009	1.546	.566
16	1.084	1.625	1.312	.821	.696	1.000	.125	.062	1.1250-18	1.500	1.134	1.546	.566
18	1.208	1.750	1.438	.821	.696	1.125	.125	.062	1.2500-18	1.625	1.259	1.546	.566
20	1.333	1.938	1.562	1.040	.884	1.250	.250	.062	1.3750-18	1.812	1.384	1.672	.440
22	1.459	2.062	1.688	1.040	.884	1.375	.250	.062	1.5000-18	1.938	1.509	1.672	.440
24	1.575	2.188	1.812	1.073	.917	1.500	.250	.062	1.6250-18	2.062	1.634	1.672	.407

All dimensions for reference only.