



MICRO CONNECTOR BACKSHELLS

TopFlite makes micro adapter/backshell versions for almost every backshell series in the catalog by using either the “M” or “J” series designators. This section also provides additional backshell options that are specifically reserved for use only with TopFlite’s M&M Connector™ series as well as industry competitor micro connectors.

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SERIES TFM46 MICRO TERMINATION BAND ADAPTERS



The TFM46 Series offers a termination band backshell for the TopFlite Micro Miniature M&M Connector™ Series. These backshells feature a thread-on design, with oring sealing and are offered in straight and angled configurations, in either direct or rotatable coupling styles. This configuration eliminates the need for cable clamps, allowing users to create a more streamline assembly while cutting down on weight and additional manual assembly processes. Material and back-end modifications can be accommodated with the use of a “Z-Code”; the customer need only contact their TopFlite sales representative for more information.

PART NUMBER BREAKDOWN									
EXAMPLE PART NUMBER	TFM46	1	F	2	08	02	-6	M	-ZXXX
STANDARD PREFIX									
ANGLE	1 - STRAIGHT 4 - 45 DEGREE 9 - 90 DEGREE								
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)								
COUPLING TYPE	1 - DIRECT COUPLING 2 - SELF-LOCKING COUPLING								
SIZE CODE	01, 02, 03,, 12, 13								
CABLE ENTRY	02, 03, 04, ETC. (SEE TABLE)								
LENGTH	1/8 INCREMENTS, FOR EXAMPLE: 3 = 0.375", 7 = .875", ETC. (MINIMUM LENGTH .750") (STRAIGHT ONLY)								
BAND OPTION	(SEE PAGE 7 FOR TERMINATION BAND OPTIONS. 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)								

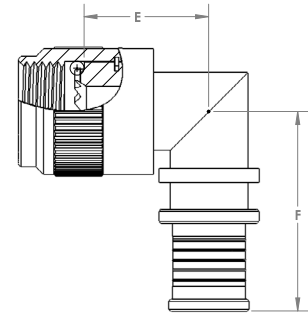
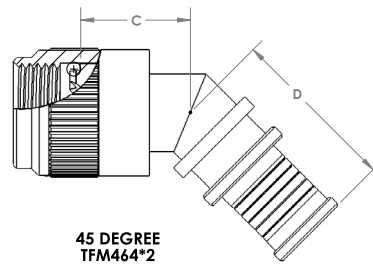
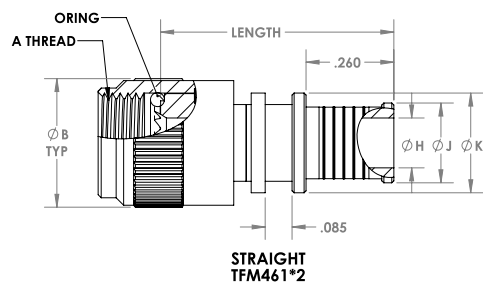
THREAD SIZE TABLE	
SHELL CODE	THREAD SIZE
01	.2500-32
02	.3125-32
03	.3750-32
04	.4375-28
05	.5000-28
06	.5625-24
07	.6250-24
08	.6875-24
09	.7500-20
10	.9375-20
11	1.1875-18

CABLE ENTRY TABLE	
CABLE ENTRY CODE	CABLE ENTRY DIA. (IN.)
01	.125
02	.188
03	.250
04	.312
05	.375
06	.438
07	.500
08	.562
09	.625
10	.688
11	.750
12	.812
13	.875

ADAPTER LENGTH TABLE	
LENGTH CODE	LENGTH (INCHES)
01	.750
02	.875
03	1.000
04	1.125
05	1.250
06	1.375
07	1.500
08	1.625
09	1.750
10	1.875
11	2.000
12	2.125
13	2.250
14	2.375
15	2.500

Specify Length in increments of .125 inches
(3.18 mm.)

BAND ADAPTER VIEWS



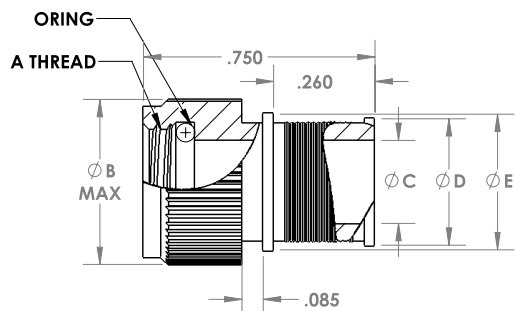
DIMENSIONS

SHELL SIZE	A THREADS	B MAX.		C MAX.		D MAX.		E MAX.		F MAX.	
		IN.	MM.	IN.	MM.	IN.	MM.	IN.	MM.	IN.	MM.
01	.2500-32	.470	11.94	.530	13.46	.660	16.76	.630	16.00	.780	19.81
02	.3125-32	.530	13.46	.550	13.97	.670	17.02	.660	16.76	.790	20.27
03	.3750-32	.570	14.48	.560	14.22	.680	17.27	.680	17.27	.810	20.57
04	.4375-28	.637	16.18	.570	14.48	.690	17.53	.700	17.78	.830	21.08
05	.5000-28	.700	17.78	.580	14.73	.700	17.78	.740	18.80	.860	21.84
06	.5625-24	.758	19.25	.590	14.99	.710	18.03	.770	19.56	.890	22.61
07	.6250-24	.819	20.80	.610	15.49	.730	18.54	.800	20.32	.920	23.37
08	.6875-24	.896	22.76	.640	16.26	.750	19.05	.840	21.34	.970	24.64
09	.7500-20	.930	23.62	.660	16.76	.770	19.56	.880	22.35	1.020	25.91
10	.9375-20	1.137	28.88	.690	17.53	.800	20.32	.950	24.13	1.090	27.69
11	1.1875-18	1.387	35.23	.720	18.29	.830	21.08	1.010	25.65	1.160	29.46

CABLE ENTRY

CABLE ENTRY CODE	Ø H		Ø J		Ø K	
	IN. ± .015	MM. ± 0.38	IN. ± .015	MM. ± 0.38	IN. ± .015	MM. ± 0.38
01	.125	3.18	.164	4.17	.266	6.76
02	.188	4.78	.227	5.77	.329	8.36
03	.250	6.35	.289	7.34	.391	9.93
04	.312	7.92	.351	8.92	.453	11.51
05	.375	9.53	.414	10.52	.516	13.11
06	.438	11.13	.477	12.12	.579	14.71
07	.500	12.70	.539	13.69	.641	16.28
08	.562	14.27	.601	15.27	.703	17.86
09	.625	15.88	.664	16.87	.766	19.46
10	.688	17.48	.727	18.47	.829	21.06
11	.750	19.05	.789	20.04	.891	22.63
12	.812	20.62	.851	21.62	.953	24.21
13	.875	22.23	.914	23.22	1.016	25.81

BAND ADAPTER VIEWS



STRAIGHT
DIRECT COUPLING
TFM461*1

DIRECT COUPLING DIMENSIONS

SHELL SIZE	A THREADS	B MAX.	
		IN.	MM.
01	.2500-32 UNEF-2B	.350	8.89
02	.3125-32 UNEF-2B	.415	10.54
03	.375-32 UN-2B	.465	11.81
04	.4375-28 UNEF-2B	.530	13.46
05	.5000-28 UNEF-2B	.595	15.11
06	.5625-24 UNEF-2B	.650	16.51
07	.6250-24 UNEF-2B	.715	18.16
08	.6875-24 UNEF-2B	.785	19.94
09	.750-20 UNEF-2B	.830	21.08
10	.9375-20 UNEF-2B	1.020	25.91
11	1.1875-18 UNEF-2B	1.280	32.51

DIRECT COUPLING THREAD TABLE

SHELL SIZE	A THREADS
01	.2500-32 UNEF-2B
02	.3125-32 UNEF-2B
03	.375-32 UNEF-2B
04	.4375-28 UNEF-2B
05	.5000-28 UNEF-2B
06	.5625-24 UNEF-2B
07	.6250-24 UNEF-2B
08	.6875-24 UNEF-2B
09	.750-20 UNEF-2B
10	.9375-20 UNEF-2B
11	1.1875-18 UNEF-2B

DIRECT COUPLING CABLE ENTRY

CABLE ENTRY CODE	Ø H		Ø J		Ø K	
	IN. ± .015	MM. ± 0.38	IN. ± .015	MM. ± 0.38	IN. ± .015	MM. ± 0.38
01	.094	2.39	.133	3.38	.235	5.97
02	.125	3.18	.164	4.17	.266	6.76
03	.172	4.37	.211	5.36	.313	7.95
04	.234	5.94	.273	6.93	.375	9.53
05	.272	6.91	.311	7.90	.413	10.49
06	.312	7.92	.351	8.92	.453	11.51
07	.375	9.53	.414	10.52	.516	13.11
08	.438	11.13	.477	12.12	.579	14.71
09	.500	12.70	.539	13.69	.641	16.28
10	.562	14.27	.601	15.27	.703	17.88
11	.625	15.88	.664	16.87	.766	19.46
12	.688	17.48	.727	18.47	.829	21.06
13	.750	19.05	.789	20.04	.891	22.63
14	.812	20.62	.851	21.62	.953	24.21

SERIES TFMSR MICRO STRAIN RELIEFS

DIRECT OR ROTATABLE COUPLING STRAIN RELIEF CLAMP



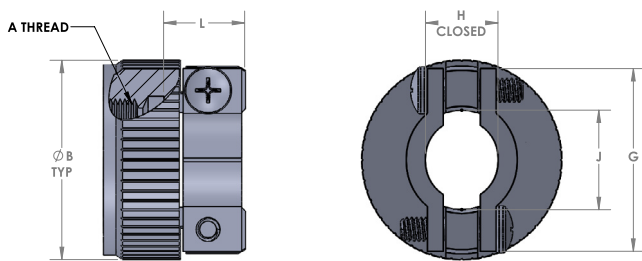
TopFlite offers a compact series of strain relief clamps for its Micro Miniature M&M Connector™ Series. These clamps can be utilized with cables or open wire bundles, and come in a variety of styles, such as direct or rotatable coupling and straight, 45, or 90 degree configurations.

PART NUMBER BREAKDOWN					
EXAMPLE PART NUMBER	TFMSR	11	F	05	-ZXXX
STANDARD PREFIX					
CLAMP STYLE	11 - Direct Coupling Style 12 - Rotatable Coupling Style				
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 CODE	01, 02, 03.....12, 13 (SEE TABLE I)				
Z-CODE	Z112 Z090 Z030 ETC. (CONTACT SALES STAFF IF A Z-CODE IS REQUIRED FOR A CUSTOM CONFIRGURATION/OPTION(S). OMIT FOR NONE)				

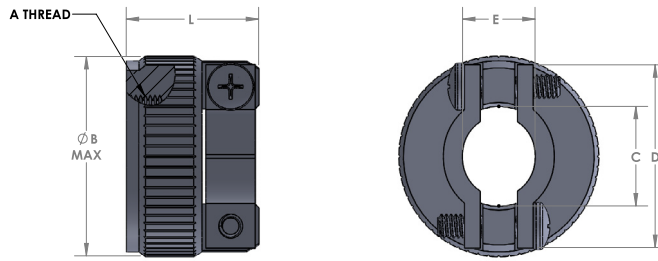
TABLE I		
SHELL SIZE	A THREAD SIZE CLASS-2B	Cable Entry Diameter (E Closed Dia)
01	.2500-32 UNEF	.11
02	.3125-32 UNEF	.17
03	.3750-32 UNEF	.17
04	.4375-28 UNEF	.23
05	.5000-28 UNEF	.30
06	.5625-24 UNEF	.30
07	.6250-24 UNEF	.36
08	.6875-24 UNEF	.42
09	.7500-20 UNEF	.42
10	.9375-20 UNEF	.48
11	.9375-20 UNEF	.61
12	1.0625-18 UNEF	.73
13	1.1875-18 UNEF	.86

Notes

1. Coupling Nut, Clamp, and Saddles: Aluminum Alloy 6061-T6 or 300 Series SST
2. Hardware: 300 Series Stainless Steel
3. For angled clamp dimensions consult factory



STRAIGHT ROTATABLE COUPLING
TFMSR12



STRAIGHT DIRECT COUPLING
TFMSR11

TFMSR12 DIMENSIONS

SIZE CODE	A THREADS	B TYP		G DIM		H CLOSED		J DIM		L MAX.	
		IN.	MM.	IN.	MM.	IN.	MM.	IN.	MM.	IN.	MM.
01	.2500-32 UNEF	.470	11.94	.496	12.60	.11	2.79	.119	3.02	.688	17.48
02	.3125-32 UNEF	.530	13.46	.582	14.78	.17	4.32	.182	4.62	.688	17.48
03	.375-32 UNEF	.570	14.48	.582	14.78	.17	4.32	.182	4.62	.688	17.48
04	.4375-28 UNEF	.637	16.18	.656	16.66	.23	5.08	.244	6.20	.688	17.48
05	.5000-28 UNEF	.700	17.78	.726	18.44	.30	7.62	.307	7.80	.688	17.48
06	.5625-24 UNEF	.758	19.25	.726	18.44	.30	7.62	.307	7.80	.750	19.05
07	.6250-24 UNEF	.819	20.80	.885	22.48	.36	9.14	.369	9.37	.750	19.05
08	.6875-24 UNEF	.896	22.76	.952	24.18	.42	10.67	.432	10.97	.750	19.05
09	.750-20 UNEF	.930	23.62	.952	24.18	.42	10.67	.432	10.97	.750	19.05
10	.9375-20 UNEF	1.137	28.88	1.018	25.86	.48	12.19	.494	12.55	.750	19.05
11	.9375-20 UNEF	1.137	28.88	1.148	29.16	.61	15.49	.619	15.72	.750	19.05
12	1.0625-18 UNEF	1.230	31.24	1.273	32.33	.73	18.54	.744	18.90	.750	19.05
13	1.1875-18 UNEF	1.387		1.400	35.56	.86	21.84	.869	22.07	.750	19.05

TFMSR11 DIMENSIONS

SIZE CODE	A THREADS	B MAX.		C DIA.		D DIA.		E DIA. CLOSED		L MAX	
		IN.	MM.	IN.	MM.	IN.	MM.	IN.	MM.	IN.	MM.
01	.2500-32 UNEF	.350	8.89	.119	3.02	.496	12.60	.11	2.79	.625	15.88
02	.3125-32 UNEF	.415	10.54	.182	4.62	.582	14.78	.17	4.32	.625	15.88
03	.375-32 UNEF	.465	11.81	.182	4.62	.582	14.78	.17	4.32	.625	15.88
04	.4375-28 UNEF	.530	13.46	.244	6.20	.656	16.66	.23	5.08	.688	17.48
05	.5000-28 UNEF	.595	15.11	.307	7.80	.726	18.44	.30	7.62	.688	17.48
06	.5625-24 UNEF	.650	16.51	.307	7.80	.726	18.44	.30	7.62	.750	19.05
07	.6250-24 UNEF	.715	18.16	.369	9.37	.885	22.48	.36	9.14	.875	22.23
08	.6875-24 UNEF	.785	19.94	.432	10.97	.952	24.18	.42	10.67	.875	22.23
09	.750-20 UNEF	.830	21.08	.432	10.97	.952	24.18	.42	10.67	.875	22.23
10	.9375-20 UNEF	1.020	25.91	.494	12.55	1.018	25.86	.48	12.19	1.000	25.40
11	.9375-20 UNEF	1.020	25.91	.619	15.72	1.148	29.16	.61	15.49	1.000	25.40
12	1.0625-18 UNEF	1.155	29.34	.744	18.90	1.273	32.33	.73	18.54	1.000	25.40
13	1.1875-18 UNEF	1.280	32.51	.869	22.07	1.400	35.56	.86	21.84	1.125	28.58

SERIES TFM10 MICRO CONNECTORS ENVIRONMENTAL EMI BACKSHELL



The 10 Series Micro Connector backshell is an excellent option for internal shield termination while ensuring a watertight seal is achieved at the backshell to cable jacket interface. This configuration eliminates the need for termination bands or the overmolding process, allowing users to assembly with standard shop floor tooling. Material and back-end modifications can be accommodated with the use of a "Z-Code"; the customer need only contact their TopFlite sales representative for more information.

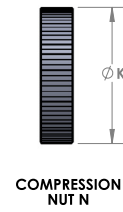
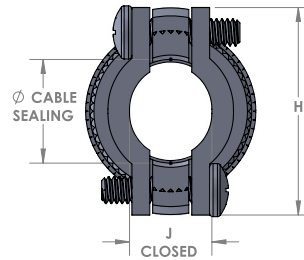
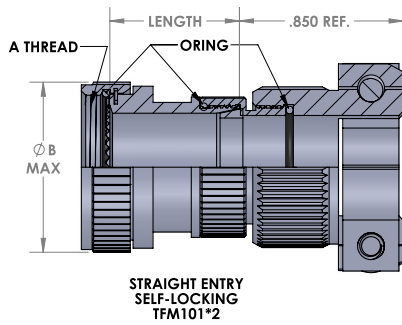
PART NUMBER BREAKDOWN									
EXAMPLE PART NUMBER	TFM10	1	F	2	08	02	-6	N	-ZXXX
STANDARD PREFIX									
ANGLE	1 - STRAIGHT 4 - 45 DEGREE, LOW-PROFILE 9 - 90 DEGREE, LOW-PROFILE								
MATERIAL/ FINISH	F - ALUMINUM W/ ELECTROLESS NICKEL Z - ALUMINUM W/ BLACK ZINC NICKEL A - ALUMINUM W/ BLACK ANODIZE 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)								
COUPLING TYPE	1 - DIRECT COUPLING 2 - SELF-LOCKING COUPLING								
SIZE CODE	01, 02, 03,, 12, 13								
CABLE ENTRY	02, 03, 04, ETC. (SEE TABLE)								
LENGTH	1/8 INCREMENTS, FOR EXAMPLE: 3 = 0.375", 7 = .875", ETC. (MINIMUM LENGTH .750") (STRAIGHT ONLY)								
BAND OPTION	N - COMPRESSION NUT (OMIT FOR CABLE CLAMP)								
Z-CODE	Z112 Z090 Z030 ETC. (CONTACT SALES STAFF IF A Z-CODE IS REQUIRED FOR A CUSTOM CONFIGURATION/OPTION(S). OMIT FOR NONE)								

THREAD SIZE TABLE	
SHELL CODE	THREAD SIZE
01	.2500-32
02	.3125-32
03	.3750-32
04	.4375-28
05	.5000-28
06	.5625-24
07	.6250-24
08	.6875-24
09	.7500-20
10	.9375-20
11	1.1875-18

CABLE ENTRY TABLE		
CABLE ENTRY CODE	CABLE ENTRY DIA.	
	MAX.	MIN.
01	.109	.031
02	.172	.078
03	.234	.140
04	.297	.203
05	.359	.265
06	.422	.328
07	.484	.390
08	.547	.453
09	.609	.515
10	.672	.578
11	.734	.640

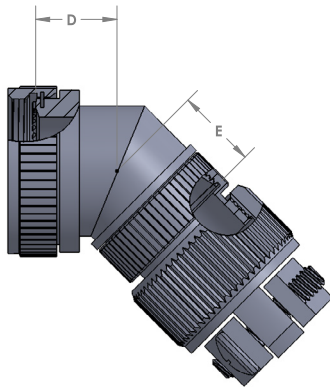
ADAPTER LENGTH TABLE	
LENGTH CODE	LENGTH (INCHES)
01	.625
02	.750
03	.875
04	1.000
05	1.125
06	1.250
07	1.375
08	1.500
09	1.625
10	1.750
11	1.875
12	2.000
13	2.125
14	2.250
15	2.375
16	2.500

Specify length in increments of .125 inches
(3.18 mm.)

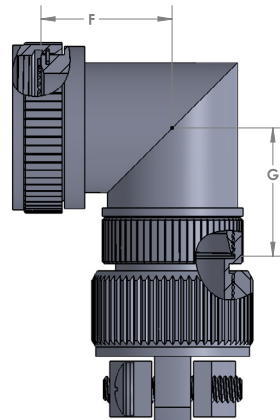


STRAIGHT ENTRY
SELF-LOCKING
TFM101*2

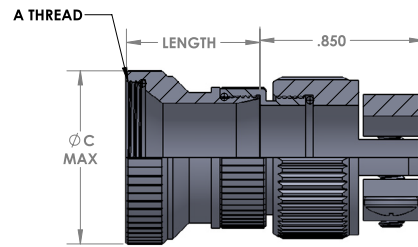
STRAIN RELIEF



45° ENTRY
LOW PROFILE
TFM104*2



90° ENTRY
LOW PROFILE
TFM109*2



STRAIGHT ENTRY
DIRECT COUPLING
TFM101*1

DIMENSIONS

SIZE CODE	A THREADS	B TYP		G DIM		H CLOSED	
		IN.	MM.	IN.	MM.	IN.	MM.
01	.2500-32	.470	11.94	.350	8.89	.750	19.05
02	.3125-32	.530	13.46	.415	10.54	.750	19.05
03	.3750-32	.570	14.48	.570	14.48	.750	19.05
04	.4375-28	.637	16.18	.530	13.46	.750	19.05
05	.5000-28	.700	17.78	.595	15.11	.750	19.05
06	.5625-24	.758	19.25	.650	16.51	.750	19.05
07	.6250-24	.819	20.80	.715	18.16	.750	19.05
08	.6875-24	.896	22.76	.785	19.94	.880	22.35
09	.7500-20	.930	23.62	.930	23.62	.880	22.35
10	.9375-20	1.137	28.88	1.137	28.88	1.000	25.40
11	1.1875-18	1.387	35.23	1.387	35.23	1.130	28.70

*Choose standard length for best availability

DIMENSIONS																
CABLE ENTRY CODE	CABLE SEALING DIA.		D MAX.		E MAX.		F MAX.		G MAX.		H		Ø J closed		Ø K	
	IN.	MM.	IN.	MM.	IN.	MM.	IN.	MM.	IN.	MM.	IN. ± .010	MM. ± 0.25	IN. ± .030	MM. ± 0.76	IN. ± .010	MM. ± 0.25
01	.109	.031	.603	15.32	.681	17.30	.724	18.39	.802	20.37	.496	12.60	.110	2.79	.398	10.11
02	.172	.078	.603	15.32	.681	17.30	.724	18.39	.802	20.37	.582	14.78	.170	4.32	.460	11.68
03	.234	.140	.603	15.32	.681	17.30	.724	18.39	.802	20.37	.656	16.66	.230	5.84	.523	13.28
04	.297	.203	.629	15.98	.707	17.96	.786	19.96	.864	21.95	.726	18.44	.300	7.62	.585	14.86
05	.359	.265	.629	15.98	.707	17.96	.786	19.96	.864	21.95	.885	22.48	.360	9.14	.647	16.43
06	.422	.328	.655	16.64	.733	18.62	.848	21.54	.926	23.52	.952	24.18	.420	10.67	.710	18.03
07	.484	.390	.655	16.64	.733	18.62	.848	21.54	.926	23.52	1.018	25.86	.480	12.19	.773	19.63
08	.547	.453	.707	17.96	.785	19.94	.911	23.14	.989	25.12	1.084	27.53	.550	13.97	.835	21.21
09	.609	.515	.707	17.96	.785	19.94	.911	23.14	.989	25.12	1.148	29.16	.610	15.49	.897	22.78