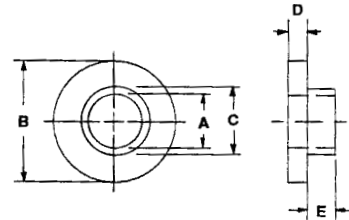


HIGH PERFORMANCE PLASTIC SHOULDER WASHERS (continued)

*Available in the following materials:

Material Code No.	Material Name	Material Code No.	Material Name
-11	Polypropylene	-38	G-10 Fiber Glass
-27	PVC	-40	PFA, (Teflon®)
-28	CPVC	-46	Polycarbonate
-18	Nylon 6/6, (natural)	-60	Nylon 6/6, 30% Short Glass-filled
-29	Teflon®	-62	Acetal
-37	PVDF		

*Available in other materials.
See materials list in index.
Other sizes available on request.



Part No. FN112 - (Size Code No.) - (Material Code No.)

Size Code No.	A Shank I.D.	B Flange O.D.	C Shank O.D.	D Flange Thk.	E Shank Thk.	Size Code No.	A Shank I.D.	B Flange O.D.	C Shank O.D.	D Flange Thk.	E Shank Thk.
-889	.187	.375	.245	.031	.140	-934	.194	.437	.248	.062	.027
-890	.187	.375	.265	.062	.031	-935	.194	.437	.248	.062	.050
-891	.187	.437	.281	.093	.093	-936	.194	.437	.279	.031	.027
-892	.187	.437	.372	.046	.078	-937	.194	.437	.279	.031	.050
-893	.187	.500	.250	.031	.047	-938	.194	.437	.279	.062	.027
-894	.187	.562	.312	.046	.078	-939	.194	.437	.279	.062	.050
-895	.187	1.500	.281	.062	.062	-940	.194	.437	.310	.031	.027
-896	.188	.375	.250	.047	.031	-941	.194	.437	.310	.031	.050
-897	.188	.406	.278	.058	.088	-942	.194	.437	.310	.062	.027
-898	.188	.437	.313	.062	.063	-943	.194	.437	.310	.062	.050
-899	.188	.500	.280	.062	.045	-944	.194	.441	.248	.062	.047
-900	.190	.488	.250	.125	.156	-945	.194	.468	.248	.031	.027
-901	.190	.500	.250	.062	.156	-946	.194	.468	.248	.031	.050
-902	.190	.500	.312	.125	.046	-947	.194	.468	.248	.062	.027
-903	.190	.625	.310	.031	.062	-948	.194	.468	.248	.062	.050
-904	.190	.625	.375	.062	.047	-949	.194	.468	.279	.031	.027
-905	.190	.750	.315	.094	.875	-950	.194	.468	.279	.031	.050
-906	.191	.406	.275	.062	.053	-951	.194	.468	.279	.062	.027
-907	.191	.531	.279	.062	.040	-952	.194	.468	.279	.062	.050
-908	.192	.630	.255	.067	.036	-953	.194	.468	.310	.031	.027
-909	.192	.281	.233	.020	.015	-954	.194	.468	.310	.031	.050
-910	.192	.375	.245	.047	.047	-955	.194	.468	.310	.062	.027
-911	.193	.290	.250	.016	.125	-956	.194	.468	.310	.062	.050
-912	.193	.440	.312	.043	.137	-957	.194	.468	.341	.031	.027
-913	.193	.500	.318	.031	.031	-958	.194	.468	.341	.031	.050
-914	.193	.500	.318	.031	.047	-959	.194	.468	.341	.062	.027
-915	.193	.500	.318	.031	.078	-960	.194	.468	.341	.062	.050
-916	.193	.500	.368	.062	.025	-961	.194	.500	.248	.031	.027
-917	.194	.500	.248	.027	.031	-962	.194	.500	.248	.031	.050
-918	.194	.375	.312	.125	.062	-963	.194	.500	.248	.062	.027
-919	.194	.343	.248	.031	.027	-964	.194	.500	.248	.062	.050
-920	.194	.343	.248	.031	.050	-965	.194	.500	.279	.031	.027
-921	.194	.343	.248	.062	.027	-966	.194	.500	.279	.031	.050
-922	.194	.343	.248	.062	.050	-967	.194	.500	.279	.062	.027
-923	.194	.375	.248	.031	.027	-968	.194	.500	.279	.062	.050
-924	.194	.375	.248	.031	.050	-969	.194	.500	.310	.031	.027
-925	.194	.375	.248	.062	.027	-970	.194	.500	.310	.031	.050
-926	.194	.375	.248	.062	.047	-971	.194	.500	.310	.062	.027
-927	.194	.375	.248	.062	.050	-972	.194	.500	.310	.062	.050
-928	.194	.375	.279	.031	.027	-973	.194	.500	.341	.031	.027
-929	.194	.375	.279	.031	.050	-974	.194	.500	.341	.031	.050
-930	.194	.375	.279	.062	.027	-975	.194	.500	.341	.062	.027
-931	.194	.375	.279	.062	.050	-976	.194	.500	.341	.062	.050
-932	.194	.437	.248	.031	.027						
-933	.194	.437	.248	.031	.050						

(continued next page)

Tolerances:
Flange O.D. +/- .005
Flange Thickness +/- .005

.187 I.D. to .194 I.D.

Shank O.D. - .005/+0.00
Shank Thickness +/- .005
Shank I.D. + .005/-0.00

HIGH PERFORMANCE PLASTIC SHOULDER WASHERS (continued)

Part No. FN112 - (Size Code No.) - (Material Code No.)

Size Code No.	A Shank I.D.	B Flange O.D.	C Shank O.D.	D Flange Thk.	E Shank Thk.	Size Code No.	A Shank I.D.	B Flange O.D.	C Shank O.D.	D Flange Thk.	E Shank Thk.
-977	.194	.500	.371	.031	.027	-1034	.194	.750	.248	.031	.050
-978	.194	.500	.371	.031	.050	-1035	.194	.750	.248	.062	.027
-979	.194	.500	.371	.062	.027	-1036	.194	.750	.248	.062	.050
-980	.194	.500	.371	.062	.050	-1037	.194	.750	.279	.031	.027
-981	.194	.562	.248	.031	.027	-1038	.194	.750	.279	.031	.050
-982	.194	.562	.248	.031	.050	-1039	.194	.750	.279	.062	.027
-983	.194	.562	.248	.062	.027	-1040	.194	.750	.279	.062	.050
-984	.194	.562	.248	.062	.050	-1041	.194	.750	.310	.031	.027
-985	.194	.562	.279	.031	.027	-1042	.194	.750	.310	.031	.050
-986	.194	.562	.279	.031	.050	-1043	.194	.750	.310	.062	.027
-987	.194	.562	.279	.062	.027	-1044	.194	.750	.310	.062	.050
-988	.194	.562	.279	.062	.050	-1045	.194	.750	.341	.031	.027
-989	.194	.562	.310	.031	.027	-1046	.194	.750	.341	.031	.050
-990	.194	.562	.310	.031	.050	-1047	.194	.750	.341	.062	.027
-991	.194	.562	.310	.062	.027	-1048	.194	.750	.341	.062	.050
-992	.194	.562	.310	.062	.050	-1049	.194	.750	.371	.031	.027
-993	.194	.562	.341	.031	.027	-1051	.194	.750	.371	.031	.050
-994	.194	.562	.341	.031	.050	-1052	.194	.750	.371	.062	.027
-995	.194	.562	.341	.062	.027	-1053	.194	.750	.371	.062	.050
-996	.194	.562	.341	.062	.050	-1054	.194	.750	.432	.031	.027
-997	.194	.562	.371	.031	.027	-1055	.194	.750	.432	.031	.050
-998	.194	.562	.371	.031	.050	-1056	.194	.750	.432	.062	.027
-999	.194	.562	.371	.062	.027	-1057	.194	.750	.432	.062	.050
-1000	.194	.562	.371	.062	.050	-1058	.194	.750	.495	.031	.027
-1001	.194	.562	.432	.031	.027	-1059	.194	.750	.495	.031	.050
-1002	.194	.562	.432	.031	.050	-1060	.194	.750	.495	.062	.027
-1003	.194	.562	.432	.062	.027	-1061	.194	.750	.495	.062	.050
-1004	.194	.562	.432	.062	.050	-1062	.195	.260	.399	.060	.030
-1005	.194	.625	.248	.031	.027	-1063	.195	.375	.240	.039	.023
-1006	.194	.625	.248	.031	.050	-1064	.195	.437	.310	.047	.053
-1007	.194	.625	.248	.062	.027	-1065	.195	.490	.310	.250	.187
-1008	.194	.625	.248	.062	.050	-1066	.195	.531	.248	.040	.030
-1009	.194	.625	.279	.031	.027	-1067	.195	.630	.437	.078	.078
-1010	.194	.625	.279	.031	.050	-1068	.195	.640	.380	.062	.062
-1011	.194	.625	.279	.062	.027	-1069	.196	.380	.254	.055	.120
-1012	.194	.625	.279	.062	.050	-1070	.196	.312	.250	.062	.031
-1013	.194	.625	.310	.031	.027	-1071	.196	.375	.246	.062	.032
-1014	.194	.625	.310	.031	.050	-1072	.196	.375	.308	.062	.031
-1015	.194	.625	.310	.062	.027	-1073	.196	.390	.287	.078	.187
-1016	.194	.625	.310	.062	.050	-1074	.196	.437	.255	.031	.031
-1017	.194	.625	.341	.031	.027	-1075	.196	.440	.303	.031	.140
-1018	.194	.625	.341	.031	.050	-1076	.196	.500	.274	.045	.095
-1019	.194	.625	.341	.062	.027	-1077	.196	.625	.312	.094	.062
-1020	.194	.625	.341	.062	.050	-1078	.196	.625	.375	.031	.031
-1021	.194	.625	.371	.031	.027	-1079	.197	.408	.240	.187	.062
-1022	.194	.625	.371	.031	.050	-1080	.198	.500	.240	.062	.063
-1023	.194	.625	.371	.062	.027	-1081	.198	.588	.253	.031	.031
-1024	.194	.625	.371	.062	.050	-1082	.198	.750	.247	.075	.039
-1025	.194	.625	.432	.031	.027	-1083	.199	.433	.312	.062	.125
-1026	.194	.625	.432	.031	.050	-1084	.199	.468	.305	.078	.055
-1027	.194	.625	.432	.062	.027	-1085	.200	.399	.260	.375	.062
-1028	.194	.625	.432	.062	.050	-1086	.200	.399	.260	.062	.375
-1029	.194	.625	.495	.031	.027	-1087	.200	.437	.245	.062	.016
-1030	.194	.625	.495	.031	.050	-1088	.200	.500	.240	.062	.032
-1031	.194	.625	.495	.062	.027	-1089	.200	.500	.240	.062	.063
-1032	.194	.625	.495	.062	.050						
-1033	.194	.750	.248	.031	.027						

(continued next page)

Tolerances:
Flange O.D. +/- .005
Flange Thickness +/- .005

.194 I.D. to .200 I.D.

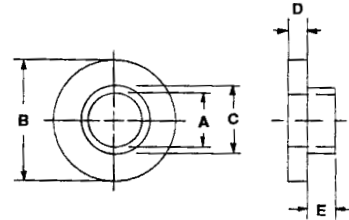
Shank O.D. - .005/+ .000
Shank Thickness +/- .005
Shank I.D. + .005/- .000

HIGH PERFORMANCE PLASTIC SHOULDER WASHERS (continued)

*Available in the following materials:

Material Code No.	Material Name	Material Code No.	Material Name
-11	Polypropylene	-38	G-10 Fiber Glass
-27	PVC	-40	PFA, (Teflon®)
-28	CPVC	-46	Polycarbonate
-18	Nylon 6/6, (natural)	-60	Nylon 6/6, 30% Short Glass-filled
-29	Teflon®	-62	Acetal
-37	PVDF		

*Available in other materials.
See materials list in index.
Other sizes available on request.



Part No. FN112 - (Size Code No.) - (Material Code No.)

Size Code No.	A Shank I.D.	B Flange O.D.	C Shank O.D.	D Flange Thk.	E Shank Thk.	Size Code No.	A Shank I.D.	B Flange O.D.	C Shank O.D.	D Flange Thk.	E Shank Thk.
-1090	.200	.500	.281	.062	.094	-1135	.219	.437	.310	.031	.050
-1091	.200	.500	.312	.062	.312	-1136	.219	.437	.310	.062	.027
-1092	.201	.375	.280	.062	.125	-1137	.219	.437	.310	.062	.050
-1093	.201	.437	.281	.047	.047	-1138	.219	.468	.279	.031	.027
-1094	.201	.635	.425	.140	1.109	-1139	.219	.468	.279	.031	.050
-1095	.201	.750	.358	.125	.031	-1140	.219	.468	.279	.062	.027
-1096	.201	1.000	.358	.125	.031	-1141	.219	.468	.279	.062	.050
-1097	.201	1.375	.358	.125	.031	-1142	.219	.468	.310	.031	.027
-1098	.201	1.375	.500	.105	.020	-1143	.219	.468	.310	.031	.050
-1099	.203	.500	.375	.055	.125	-1144	.219	.468	.310	.062	.027
-1100	.203	.390	.313	.078	.078	-1145	.219	.468	.310	.062	.050
-1101	.203	.438	.267	.031	.094	-1146	.219	.468	.341	.031	.027
-1102	.203	.438	.267	.062	.094	-1147	.219	.468	.341	.031	.050
-1103	.203	.437	.300	.062	.063	-1148	.219	.468	.341	.062	.027
-1104	.203	.437	.307	.062	.063	-1149	.219	.468	.341	.062	.050
-1105	.203	.468	.296	.062	.031	-1150	.219	.500	.279	.031	.027
-1106	.203	.500	.250	.093	.032	-1151	.219	.500	.279	.031	.050
-1107	.203	.750	.312	.062	.109	-1152	.219	.500	.279	.062	.027
-1108	.203	.750	.312	.093	.093	-1153	.219	.500	.279	.062	.050
-1109	.203	1.000	.298	.062	.062	-1154	.219	.500	.310	.031	.027
-1110	.205	.620	.312	.047	.047	-1155	.219	.500	.310	.031	.050
-1111	.206	.380	.277	.070	.042	-1156	.219	.500	.310	.062	.027
-1112	.206	.500	.281	.062	.078	-1157	.219	.500	.310	.062	.050
-1113	.206	.590	.324	.045	.016	-1158	.219	.500	.341	.031	.027
-1114	.208	.437	.281	.062	.016	-1159	.219	.500	.341	.031	.050
-1115	.208	.615	.315	.047	.047	-1160	.219	.500	.341	.062	.027
-1116	.210	.437	.281	.055	.025	-1161	.219	.500	.341	.062	.050
-1117	.210	.635	.380	.042	.090	-1162	.219	.500	.371	.031	.027
-1118	.212	.343	.272	.031	.025	-1163	.219	.500	.371	.031	.050
-1119	.215	.562	.365	.109	.062	-1164	.219	.500	.371	.062	.027
-1120	.218	.375	.281	.050	.030	-1165	.219	.500	.371	.062	.050
-1121	.218	.500	.310	.062	.063	-1166	.219	.562	.279	.031	.027
-1122	.218	.500	.310	.125	.062	-1167	.219	.562	.279	.031	.050
-1123	.218	.500	.373	.055	.070	-1168	.219	.562	.279	.062	.027
-1124	.218	.500	.375	.045	.090	-1169	.219	.562	.279	.062	.050
-1125	.218	.500	.375	.062	.063	-1170	.219	.562	.310	.031	.027
-1126	.219	.375	.279	.031	.027	-1171	.219	.562	.310	.031	.050
-1127	.219	.375	.279	.031	.050	-1172	.219	.562	.310	.062	.027
-1128	.219	.375	.279	.062	.027	-1173	.219	.562	.310	.062	.050
-1129	.219	.375	.279	.062	.050	-1174	.219	.562	.341	.031	.027
-1130	.219	.437	.279	.031	.027	-1175	.219	.562	.341	.031	.050
-1131	.219	.437	.279	.031	.050	-1176	.219	.562	.341	.062	.027
-1132	.219	.437	.279	.062	.027	-1177	.219	.562	.341	.062	.050
-1133	.219	.437	.279	.062	.050						
-1134	.219	.437	.310	.031	.027						

(continued next page)

Tolerances:
Flange O.D. +/- .005
Flange Thickness +/- .005

.200 I.D. to .219 I.D.

Shank O.D. - .005/+ .000
Shank Thickness +/- .005
Shank I.D. + .005/- .000

HIGH PERFORMANCE PLASTIC SHOULDER WASHERS (continued)

Part No. FN112 - (Size Code No.) - (Material Code No.)

Size Code No.	A Shank I.D.	B Flange O.D.	C Shank O.D.	D Flange Thk.	E Shank Thk.	Size Code No.	A Shank I.D.	B Flange O.D.	C Shank O.D.	D Flange Thk.	E Shank Thk.
-1178	.219	.562	.371	.031	.027	-1235	.220	.408	.240	.062	.187
-1179	.219	.562	.371	.031	.050	-1236	.225	.437	.282	.062	.375
-1180	.219	.562	.371	.062	.027	-1237	.230	.395	.299	.078	.109
-1181	.219	.562	.371	.062	.050	-1238	.230	.450	.310	.016	.047
-1182	.219	.562	.432	.031	.027	-1239	.230	.500	.307	.020	.011
-1183	.219	.562	.432	.031	.050	-1240	.233	.500	.340	.078	.055
-1184	.219	.562	.432	.062	.027	-1241	.234	.500	.343	.031	.031
-1185	.219	.562	.432	.062	.050	-1242	.234	.745	.282	.031	.187
-1186	.219	.625	.279	.031	.027	-1243	.247	.550	.380	.062	.468
-1187	.219	.625	.279	.031	.050	-1244	.248	.551	.380	.062	.250
-1188	.219	.625	.279	.062	.027	-1245	.250	.425	.310	.062	.062
-1189	.219	.625	.279	.062	.050	-1246	.250	.500	.375	.062	.437
-1190	.219	.625	.310	.031	.027	-1247	.250	.600	.370	.125	.125
-1191	.219	.625	.310	.031	.050	-1248	.250	.625	.375	.093	.047
-1192	.219	.625	.310	.062	.027	-1249	.250	.734	.488	.125	.062
-1193	.219	.625	.310	.062	.050	-1250	.250	.750	.375	.156	.468
-1194	.219	.625	.341	.031	.027	-1251	.251	1.050	.750	.187	.312
-1195	.219	.625	.341	.031	.050	-1252	.252	.625	.343	.062	.125
-1196	.219	.625	.341	.062	.027	-1253	.252	.625	.343	.125	.062
-1197	.219	.625	.341	.062	.050	-1254	.252	.375	.312	.125	.062
-1198	.219	.625	.371	.031	.027	-1255	.252	.500	.312	.031	.031
-1199	.219	.625	.371	.031	.050	-1256	.252	.500	.312	.040	.028
-1200	.219	.625	.371	.062	.027	-1257	.252	.500	.312	.062	.032
-1201	.219	.625	.371	.062	.050	-1258	.252	.500	.312	.062	.063
-1202	.219	.625	.432	.031	.027	-1259	.252	.500	.312	.031	.031
-1203	.219	.625	.432	.031	.050	-1260	.252	.500	.312	.062	.031
-1204	.219	.625	.432	.062	.027	-1261	.252	.500	.372	.062	.025
-1205	.219	.625	.432	.062	.050	-1262	.252	.500	.375	.031	.032
-1206	.219	.625	.495	.031	.027	-1263	.252	.625	.343	.125	.062
-1207	.219	.625	.495	.031	.050	-1264	.252	.625	.437	.062	.032
-1208	.219	.625	.495	.062	.027	-1265	.252	.750	.312	.062	.063
-1209	.219	.625	.495	.062	.050	-1266	.253	.750	.341	.050	.031
-1210	.219	.750	.279	.031	.027	-1267	.253	.437	.278	.040	.030
-1211	.219	.750	.279	.031	.050	-1268	.253	.437	.310	.031	.027
-1212	.219	.750	.279	.062	.027	-1269	.253	.437	.310	.031	.031
-1213	.219	.750	.279	.062	.050	-1270	.253	.437	.310	.031	.050
-1214	.219	.750	.310	.031	.027	-1271	.253	.437	.310	.062	.027
-1215	.219	.750	.310	.031	.050	-1272	.253	.437	.310	.062	.050
-1216	.219	.750	.310	.062	.027	-1273	.253	.437	.312	.062	.094
-1217	.219	.750	.310	.062	.050	-1274	.253	.468	.310	.031	.027
-1218	.219	.750	.341	.031	.027	-1275	.253	.468	.310	.031	.050
-1219	.219	.750	.341	.031	.050	-1276	.253	.468	.310	.062	.027
-1220	.219	.750	.341	.062	.027	-1277	.253	.468	.310	.062	.050
-1221	.219	.750	.341	.062	.050	-1278	.253	.468	.341	.031	.027
-1222	.219	.750	.371	.031	.027	-1279	.253	.468	.341	.031	.050
-1223	.219	.750	.371	.031	.050	-1280	.253	.468	.341	.062	.027
-1224	.219	.750	.371	.062	.027	-1281	.253	.468	.341	.062	.050
-1225	.219	.750	.371	.062	.050	-1282	.253	.500	.310	.031	.027
-1226	.219	.750	.432	.031	.027	-1283	.253	.500	.310	.031	.050
-1227	.219	.750	.432	.031	.050	-1284	.253	.500	.310	.062	.027
-1228	.219	.750	.432	.062	.027	-1285	.253	.500	.310	.062	.050
-1229	.219	.750	.432	.062	.050	-1286	.253	.500	.341	.031	.027
-1230	.219	.750	.495	.031	.027	-1287	.253	.500	.341	.031	.050
-1231	.219	.750	.495	.031	.050	-1288	.253	.500	.341	.062	.027
-1232	.219	.750	.495	.062	.027	-1289	.253	.500	.341	.062	.050
-1233	.219	.750	.495	.062	.050						
-1234	.220	.375	.260	.031	.093						

(continued next page)

Tolerances:
Flange O.D. +/- .005
Flange Thickness +/- .005

.219 I.D. to .253 I.D.

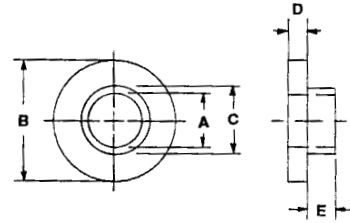
Shank O.D. - .005/+ .000
Shank Thickness +/- .005
Shank I.D. + .005/- .000

HIGH PERFORMANCE PLASTIC SHOULDER WASHERS (continued)

*Available in the following materials:

Material Code No.	Material Name	Material Code No.	Material Name
-11	Polypropylene	-38	G-10 Fiber Glass
-27	PVC	-40	PFA, (Teflon®)
-28	CPVC	-46	Polycarbonate
-18	Nylon 6/6, (natural)	-60	Nylon 6/6, 30% Short Glass-filled
-29	Teflon®	-62	Acetal
-37	PVDF		

*Available in other materials.
See materials list in index.
Other sizes available on request.



Part No. FN112 - (Size Code No.) - (Material Code No.)

Size Code No.	A Shank I.D.	B Flange O.D.	C Shank O.D.	D Flange Thk.	E Shank Thk.	Size Code No.	A Shank I.D.	B Flange O.D.	C Shank O.D.	D Flange Thk.	E Shank Thk.
-1290	.253	.500	.371	.031	.027	-1337	.253	.750	.310	.031	.050
-1291	.253	.500	.371	.031	.050	-1338	.253	.750	.310	.062	.027
-1292	.253	.500	.371	.062	.027	-1339	.253	.750	.310	.062	.050
-1293	.253	.500	.371	.062	.050	-1340	.253	.750	.341	.031	.027
-1294	.253	.562	.310	.031	.027	-1341	.253	.750	.341	.031	.050
-1295	.253	.562	.310	.031	.050	-1342	.253	.750	.341	.062	.027
-1296	.253	.562	.310	.062	.027	-1343	.253	.750	.341	.062	.050
-1297	.253	.562	.310	.062	.050	-1344	.253	.750	.371	.031	.027
-1298	.253	.562	.341	.031	.027	-1345	.253	.750	.371	.031	.047
-1299	.253	.562	.341	.031	.050	-1346	.253	.750	.371	.031	.050
-1300	.253	.562	.341	.062	.027	-1347	.253	.750	.371	.062	.027
-1301	.253	.562	.341	.062	.050	-1348	.253	.750	.371	.062	.050
-1302	.253	.562	.371	.031	.027	-1349	.253	.750	.432	.031	.207
-1303	.253	.562	.371	.031	.050	-1350	.253	.750	.432	.031	.050
-1304	.253	.562	.371	.062	.027	-1351	.253	.750	.432	.062	.027
-1305	.253	.562	.371	.062	.050	-1352	.253	.750	.432	.062	.050
-1306	.253	.562	.432	.031	.027	-1353	.253	.750	.495	.031	.027
-1307	.253	.562	.432	.031	.050	-1354	.253	.750	.495	.031	.050
-1308	.253	.562	.432	.062	.027	-1355	.253	.750	.495	.062	.027
-1309	.253	.562	.432	.062	.050	-1356	.253	.750	.495	.062	.050
-1310	.253	.562	.495	.031	.027	-1357	.254	.498	.375	.062	.687
-1311	.253	.562	.495	.031	.050	-1358	.254	.630	.375	.062	.187
-1312	.253	.562	.495	.062	.027	-1359	.255	.437	.275	.010	.040
-1313	.253	.562	.495	.062	.050	-1360	.255	.464	.312	.016	.078
-1314	.253	.615	.310	.031	.047	-1361	.255	.467	.312	.047	.125
-1315	.253	.625	.310	.031	.027	-1362	.255	.500	.341	.047	.069
-1316	.253	.625	.310	.031	.050	-1363	.255	.513	.312	.062	.375
-1317	.253	.625	.310	.062	.027	-1364	.255	.550	.375	.062	.422
-1318	.253	.625	.310	.062	.050	-1365	.255	.562	.375	.062	.437
-1319	.253	.625	.341	.031	.027	-1366	.255	.625	.322	.062	.187
-1320	.253	.625	.341	.031	.050	-1367	.255	.625	.375	.125	.812
-1321	.253	.625	.341	.062	.027	-1368	.256	.348	.290	.031	.062
-1322	.253	.625	.341	.062	.050	-1369	.256	.437	.355	.109	.060
-1323	.253	.625	.371	.031	.027	-1370	.257	.500	.375	.170	.125
-1324	.253	.625	.371	.031	.050	-1371	.257	.500	.343	.062	.094
-1325	.253	.625	.371	.062	.027	-1372	.257	.675	.480	.094	.062
-1326	.253	.625	.371	.062	.050	-1373	.257	.730	.375	.250	.343
-1327	.253	.625	.432	.031	.027	-1374	.258	.500	.375	.063	.031
-1328	.253	.625	.432	.031	.050	-1375	.258	.753	.409	.078	.047
-1329	.253	.625	.432	.062	.027	-1376	.258	.760	.410	.078	.047
-1330	.253	.625	.432	.062	.050	-1377	.260	.625	.300	.057	.032
-1331	.253	.625	.495	.031	.027	-1378	.260	.750	.365	.050	.031
-1332	.253	.625	.495	.031	.050	-1379	.260	.425	.377	.062	.171
-1333	.253	.625	.495	.062	.027	-1380	.260	.437	.310	.060	.052
-1334	.253	.625	.495	.062	.050	-1381	.260	.500	.312	.031	.031
-1335	.253	.740	.341	.031	.047						
-1336	.253	.750	.310	.031	.027						

(continued next page)

Tolerances:
Flange O.D. +/- .005
Flange Thickness +/- .005

.253 I.D. to .260 I.D.

Shank O.D. - .005/+ .000
Shank Thickness +/- .005
Shank I.D. + .005/- .000

HIGH PERFORMANCE PLASTIC SHOULDER WASHERS (continued)

Part No. FN112 - (Size Code No.) - (Material Code No.)

Size Code No.	A Shank I.D.	B Flange O.D.	C Shank O.D.	D Flange Thk.	E Shank Thk.	Size Code No.	A Shank I.D.	B Flange O.D.	C Shank O.D.	D Flange Thk.	E Shank Thk.
-1382	.260	.515	.312	.062	.140	-1439	.317	.625	.432	.062	.050
-1383	.260	.550	.305	.078	.047	-1440	.317	.625	.495	.031	.027
-1384	.260	.555	.300	.078	.047	-1441	.317	.625	.495	.031	.050
-1385	.260	.562	.300	.047	.047	-1442	.317	.625	.495	.062	.027
-1386	.260	.562	.375	.094	.062	-1443	.317	.625	.495	.062	.050
-1387	.260	.625	.375	.125	.812	-1444	.317	.750	.371	.031	.027
-1388	.260	.625	.400	.125	.750	-1445	.317	.750	.371	.031	.050
-1389	.260	.625	.437	.078	.078	-1446	.317	.750	.371	.062	.027
-1390	.260	.630	.327	.062	.125	-1447	.317	.750	.371	.062	.050
-1391	.260	.750	.375	.062	.031	-1448	.317	.750	.432	.031	.027
-1392	.260	.750	.385	.140	.687	-1449	.317	.750	.432	.031	.050
-1393	.265	.492	.318	.031	.078	-1450	.317	.750	.432	.062	.027
-1394	.266	.500	.365	.062	.032	-1451	.317	.750	.432	.062	.050
-1395	.266	.697	.359	.062	.125	-1452	.317	.750	.495	.031	.027
-1396	.266	.740	.371	.094	.125	-1453	.317	.750	.495	.031	.050
-1397	.266	.740	.375	.094	.343	-1454	.317	.750	.495	.062	.027
-1398	.266	.750	.380	.094	.078	-1455	.317	.750	.495	.062	.050
-1399	.266	.750	.380	.094	.218	-1456	.319	.500	.375	.063	.031
-1400	.266	.875	.484	.093	.062	-1457	.320	.625	.405	.139	.066
-1401	.270	.720	.485	.062	.156	-1458	.320	.500	.375	.062	.046
-1402	.270	2.111	.603	.125	.703	-1459	.320	.735	.368	.031	.062
-1403	.281	.625	.312	.062	.063	-1460	.323	.750	.375	.047	.047
-1404	.281	.750	.500	.062	.063	-1461	.325	.780	.525	.100	.048
-1405	.281	1.000	.562	.125	.020	-1462	.328	.687	.437	.125	.125
-1406	.289	.531	.352	.031	.031	-1463	.328	.693	.437	.062	.125
-1407	.290	.674	.500	.094	.187	-1464	.332	.872	.617	.125	.500
-1408	.295	.625	.375	.062	.031	-1465	.343	1.000	.562	.125	.020
-1409	.296	.531	.339	.037	.036	-1466	.345	.625	.470	.062	.040
-1410	.305	.750	.437	.125	.032	-1467	.349	.502	.399	.031	.125
-1411	.306	.825	.445	.094	.406	-1468	.370	.750	.500	.078	.312
-1412	.308	.428	.350	.125	.047	-1469	.375	.750	.500	.031	.125
-1413	.312	.500	.368	.031	.025	-1470	.375	.750	.500	.110	.125
-1414	.312	.750	.434	.171	.422	-1471	.375	.750	.500	.125	.125
-1415	.313	.500	.375	.031	.016	-1472	.375	.750	.500	.195	.125
-1416	.313	.500	.437	.062	.032	-1473	.375	1.000	.500	.031	.125
-1417	.313	.625	.500	.062	.032	-1474	.375	1.000	.500	.110	.125
-1418	.315	.500	.375	.031	.062	-1475	.375	1.000	.500	.125	.125
-1419	.316	.620	.370	.062	.500	-1476	.375	1.000	.500	.195	.125
-1420	.317	.500	.371	.031	.027	-1477	.375	.625	.490	.062	.031
-1421	.317	.500	.371	.031	.050	-1478	.375	.625	.500	.031	.047
-1422	.317	.500	.371	.062	.027	-1479	.375	.625	.500	.047	.047
-1423	.317	.500	.371	.062	.050	-1480	.375	.687	.500	.093	.063
-1424	.317	.562	.371	.031	.027	-1481	.375	.725	.437	.156	.156
-1425	.317	.562	.371	.031	.050	-1482	.375	.740	.500	.062	.187
-1426	.317	.562	.371	.062	.027	-1483	.375	.743	.443	.062	.187
-1427	.317	.562	.371	.062	.050	-1484	.375	.743	.500	.094	.109
-1428	.317	.562	.432	.031	.027	-1485	.375	.750	.500	.062	.032
-1429	.317	.562	.432	.031	.050	-1486	.375	.750	.500	.062	.125
-1430	.317	.562	.432	.062	.027	-1487	.375	.750	.500	.094	.031
-1431	.317	.562	.432	.062	.050	-1488	.375	.750	.500	.125	.031
-1432	.317	.625	.371	.031	.027	-1489	.375	.750	.500	.125	.062
-1433	.317	.625	.371	.031	.050	-1490	.375	.875	.500	.062	1.000
-1434	.317	.625	.371	.062	.027	-1491	.375	1.000	.500	.062	.031
-1435	.317	.625	.371	.062	.050	-1492	.375	1.000	.625	.062	.032
-1436	.317	.625	.432	.031	.027	-1493	.375	1.005	.500	.062	.312
-1437	.317	.625	.432	.031	.050						
-1438	.317	.625	.432	.062	.027						

(continued next page)

Tolerances:
Flange O.D. +/- .005
Flange Thickness +/- .005

.260 I.D. to .375 I.D.

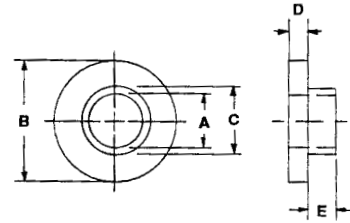
Shank O.D. - .005/+ .000
Shank Thickness +/- .005
Shank I.D. + .005/- .000

HIGH PERFORMANCE PLASTIC SHOULDER WASHERS (continued)

*Available in the following materials:

Material Code No.	Material Name	Material Code No.	Material Name
-11	Polypropylene	-38	G-10 Fiber Glass
-27	PVC	-40	PFA, (Teflon®)
-28	CPVC	-46	Polycarbonate
-18	Nylon 6/6, (natural)	-60	Nylon 6/6, 30% Short Glass-filled
-29	Teflon®	-62	Acetal
-37	PVDF		

*Available in other materials.
See materials list in index.
Other sizes available on request.



Part No. FN112 - (Size Code No.) - (Material Code No.)

Size Code No.	A Shank I.D.	B Flange O.D.	C Shank O.D.	D Flange Thk.	E Shank Thk.	Size Code No.	A Shank I.D.	B Flange O.D.	C Shank O.D.	D Flange Thk.	E Shank Thk.
-1494	.376	.743	.437	.062	.187	-1540	.385	.750	.556	.062	.027
-1495	.378	.625	.448	.031	.031	-1541	.385	.750	.556	.062	.050
-1496	.378	.625	.495	.062	.031	-1542	.385	.750	.616	.031	.027
-1497	.378	.750	.498	.031	.156	-1543	.385	.750	.616	.031	.050
-1498	.378	.750	.498	.062	.187	-1544	.385	.750	.616	.062	.027
-1499	.378	.750	.505	.078	.250	-1545	.385	.750	.616	.062	.050
-1500	.380	.565	.500	.375	.062	-1546	.385	.875	.432	.031	.027
-1501	.380	.750	.505	.060	.060	-1547	.385	.875	.432	.031	.050
-1502	.380	.625	.437	.031	.031	-1548	.385	.875	.432	.062	.027
-1503	.380	.625	.442	.032	.025	-1549	.385	.875	.432	.062	.050
-1504	.380	.625	.500	.062	.020	-1550	.385	.875	.495	.031	.027
-1505	.380	.625	.500	.062	.312	-1551	.385	.875	.495	.031	.050
-1506	.380	.812	.558	.093	.040	-1552	.385	.875	.495	.062	.027
-1507	.380	.980	.556	.125	.250	-1553	.385	.875	.495	.062	.050
-1508	.382	1.000	.500	.062	.562	-1554	.385	.875	.556	.031	.027
-1509	.383	.620	.434	.047	.031	-1555	.385	.875	.556	.031	.050
-1510	.383	.743	.502	.078	.312	-1556	.385	.875	.556	.062	.027
-1511	.384	.748	.504	.125	.359	-1557	.385	.875	.556	.062	.050
-1512	.385	.562	.433	.250	.062	-1558	.385	.875	.616	.031	.027
-1513	.385	.625	.498	.031	.062	-1559	.385	.875	.616	.031	.050
-1514	.385	.562	.432	.031	.027	-1560	.385	.875	.616	.062	.027
-1515	.385	.562	.432	.031	.050	-1561	.385	.875	.616	.062	.050
-1516	.385	.562	.432	.062	.027	-1562	.385	1.000	.432	.031	.027
-1517	.385	.562	.432	.062	.050	-1563	.385	1.000	.432	.031	.050
-1518	.385	.570	.470	.062	.375	-1564	.385	1.000	.432	.062	.027
-1519	.385	1.000	.618	.172	.250	-1565	.385	1.000	.432	.062	.050
-1520	.385	.625	.432	.031	.027	-1566	.385	1.000	.495	.031	.027
-1521	.385	.625	.432	.031	.050	-1567	.385	1.000	.495	.031	.050
-1522	.385	.625	.432	.062	.027	-1568	.385	1.000	.495	.062	.027
-1523	.385	.625	.432	.062	.050	-1569	.385	1.000	.495	.062	.050
-1524	.385	.625	.495	.031	.027	-1570	.385	1.000	.556	.031	.027
-1525	.385	.625	.495	.031	.050	-1571	.385	1.000	.556	.031	.050
-1526	.385	.625	.495	.062	.027	-1572	.385	1.000	.556	.062	.027
-1527	.385	.625	.495	.062	.050	-1573	.385	1.000	.556	.062	.050
-1528	.385	.625	.500	.062	.032	-1574	.385	1.000	.616	.031	.027
-1529	.385	.687	.562	.125	.030	-1575	.385	1.000	.616	.031	.050
-1530	.385	.750	.432	.031	.027	-1576	.385	1.000	.616	.062	.027
-1531	.385	.750	.432	.031	.050	-1577	.385	1.000	.616	.062	.050
-1532	.385	.750	.432	.062	.027	-1578	.386	.562	.443	.031	.050
-1533	.385	.750	.432	.062	.050	-1579	.386	.688	.484	.031	.046
-1534	.385	.750	.495	.031	.027	-1580	.390	.625	.500	.313	.062
-1535	.385	.750	.495	.031	.050	-1581	.390	.625	.500	.375	.062
-1536	.385	.750	.495	.062	.027	-1582	.390	.750	.577	.094	.109
-1537	.385	.750	.495	.062	.050	-1583	.406	.625	.500	.031	.031
-1538	.385	.750	.556	.031	.027						
-1539	.385	.750	.556	.031	.050						

(continued next page)

Tolerances:
Flange O.D. +/- .005
Flange Thickness +/- .005

.376 I.D. to .406 I.D.

Shank O.D. - .005/+ .000
Shank Thickness +/- .005
Shank I.D. + .005/- .000

HIGH PERFORMANCE PLASTIC SHOULDER WASHERS (continued)

Part No. FN112 - (Size Code No.) - (Material Code No.)

Size Code No.	A Shank I.D.	B Flange O.D.	C Shank O.D.	D Flange Thk.	E Shank Thk.	Size Code No.	A Shank I.D.	B Flange O.D.	C Shank O.D.	D Flange Thk.	E Shank Thk.
-1584	.406	.945	.470	.078	.531	-1642	.510	1.230	.980	.062	.094
-1585	.409	.625	.574	.050	.085	-1643	.515	.750	.556	.062	.027
-1586	.430	.750	.500	.187	.047	-1644	.515	.750	.556	.062	.050
-1587	.435	.735	.490	.187	.047	-1645	.515	.750	.556	.093	.027
-1588	.435	1.739	1.095	.203	.203	-1646	.515	.750	.556	.093	.050
-1589	.437	.625	.498	.031	.047	-1647	.515	.750	.616	.062	.027
-1590	.437	.750	.562	.062	.031	-1648	.515	.750	.616	.062	.050
-1591	.440	.875	.630	.125	.375	-1649	.515	.750	.616	.093	.027
-1592	.443	.625	.495	.031	.027	-1650	.515	.750	.616	.093	.050
-1593	.443	.625	.495	.031	.050	-1651	.515	.875	.556	.062	.027
-1594	.443	.625	.495	.062	.027	-1652	.515	.875	.556	.062	.050
-1595	.443	.625	.495	.062	.050	-1653	.515	.875	.556	.093	.027
-1596	.443	.750	.495	.031	.027	-1654	.515	.875	.556	.093	.050
-1597	.443	.750	.495	.031	.050	-1655	.515	.875	.616	.062	.027
-1598	.443	.750	.495	.062	.027	-1656	.515	.875	.616	.062	.050
-1599	.443	.750	.495	.062	.050	-1657	.515	.875	.616	.093	.027
-1600	.443	.750	.556	.031	.027	-1658	.515	.875	.616	.093	.050
-1601	.443	.750	.556	.031	.050	-1659	.515	1.000	.556	.062	.027
-1602	.443	.750	.556	.062	.027	-1660	.515	1.000	.556	.062	.050
-1603	.443	.750	.556	.062	.050	-1661	.515	1.000	.556	.093	.027
-1604	.443	.750	.616	.031	.027	-1662	.515	1.000	.556	.093	.050
-1605	.443	.750	.616	.031	.050	-1663	.515	1.000	.616	.062	.027
-1606	.443	.750	.616	.062	.027	-1664	.515	1.000	.616	.062	.050
-1607	.443	.750	.616	.062	.050	-1665	.515	1.000	.616	.093	.027
-1608	.443	.875	.495	.031	.027	-1666	.515	1.000	.616	.093	.050
-1609	.443	.875	.495	.031	.050	-1667	.515	1.000	.616	.094	.031
-1610	.443	.875	.495	.062	.027	-1668	.515	1.105	.752	.125	.281
-1611	.443	.875	.495	.062	.050	-1669	.515	1.125	.740	.062	.094
-1612	.443	.875	.556	.031	.027	-1670	.520	.734	.562	.062	.055
-1613	.443	.875	.556	.031	.050	-1671	.520	.825	.620	.062	.500
-1614	.443	.875	.556	.062	.027	-1672	.538	1.252	.600	.062	.406
-1615	.443	.875	.556	.062	.050	-1673	.550	.790	.625	.047	.422
-1616	.443	.875	.616	.031	.027	-1674	.562	.875	.687	.062	.094
-1617	.443	.875	.616	.031	.050	-1675	.569	.750	.616	.062	.050
-1618	.443	.875	.616	.062	.027	-1676	.569	.750	.616	.093	.050
-1619	.443	.875	.616	.062	.050	-1677	.569	.875	.616	.062	.050
-1620	.443	1.000	.495	.031	.027	-1678	.569	.875	.616	.093	.050
-1621	.443	1.000	.495	.031	.050	-1679	.569	1.000	.616	.062	.050
-1622	.443	1.000	.495	.062	.027	-1680	.569	1.000	.616	.093	.050
-1623	.443	1.000	.495	.062	.050	-1681	.569	1.125	.616	.062	.050
-1624	.443	1.000	.556	.031	.027	-1682	.569	1.125	.616	.093	.050
-1625	.443	1.000	.556	.031	.050	-1683	.569	1.250	.616	.062	.050
-1626	.443	1.000	.556	.062	.027	-1684	.569	1.250	.616	.093	.050
-1627	.443	1.000	.556	.062	.050	-1685	.612	1.064	.787	.062	.062
-1628	.443	1.000	.616	.031	.027	-1686	.617	.880	.750	.047	.203
-1629	.443	1.000	.616	.031	.050	-1687	.625	.875	.687	.062	.063
-1630	.443	1.000	.616	.062	.027	-1688	.627	1.245	.875	.125	.500
-1631	.443	1.000	.616	.062	.050	-1689	.671	1.000	.750	.062	.062
-1632	.445	.875	.530	.500	.100	-1690	.695	.995	.787	.125	.625
-1633	.471	1.251	.528	.062	.406	-1691	.695	.995	.792	.125	.187
-1634	.500	.745	.560	.031	.312	-1692	.750	1.250	.875	.062	.024
-1635	.500	1.125	.700	.094	.437	-1693	.765	1.500	.859	.060	.020
-1636	.505	.750	.562	.062	.025	-1694	.765	1.125	.875	.094	.031
-1637	.505	.875	.569	.032	.032	-1695	.806	2.060	1.050	.125	.500
-1638	.505	1.000	.750	.062	.032						
-1639	.508	.688	.543	.031	.047						
-1640	.508	.890	.560	.040	.030						
-1641	.508	1.000	.770	.078	.109						

Tolerances:
Flange O.D. +/- .005
Flange Thickness +/- .005

.406 I.D. to .806 I.D.

Shank O.D. - .005/+ .000
Shank Thickness +/- .005
Shank I.D. + .005/- .000