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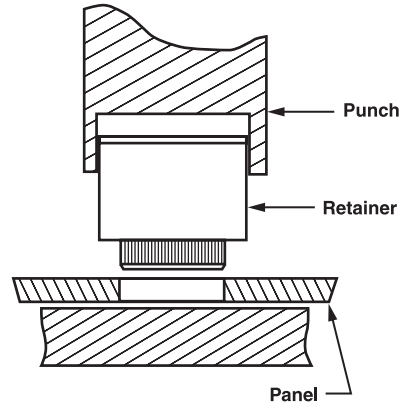
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METHOD OF INSTALLATION

Series 40000 Retainers Only

Drill hole to press in.

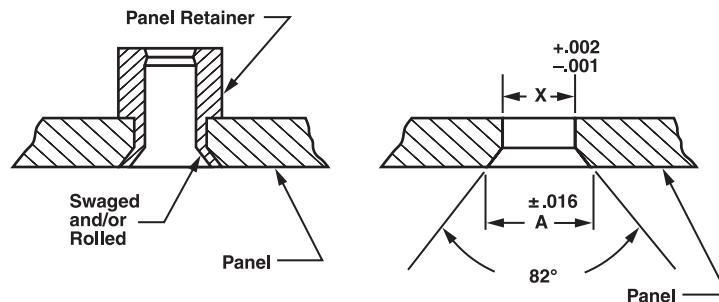
Recommended Diameters	
Shank Diameter	Recommended Panel Hole Diameter +.002 -.000
.198	.188
.228	.218
.280	.270
.366	.356
.414	.404
.479	.469



METHOD OF INSTALLATION

Series 50000, 55000, 60000, 65000, 70000 and 75000 Retainers Only

See page 45 for installation information.



Countersink formula: $A = X + .045$ minimum or $.078$ maximum

Retainer Shank Diameter	X Drill or Punch
.188	.191
.218	.221
.250	.257
.270	.272
.356	.359
.404	.407
.433	.437



TECH TIP

For shank diameters **.270** and below start with a **.045 min** when calculating the diameter (“A”) of the countersink.

SERIES 400000 RETAINER

For Captive Screws, see pages 113-156.

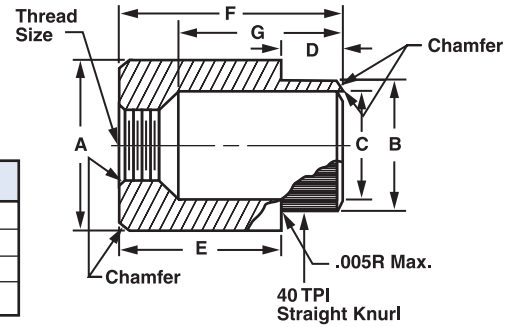
ORDER EXAMPLE:
400001 - S - 12

Basic Part Number: 400001
Material: S (See chart)
Finish: 12 (See page 277)

If any one dimension or tolerance change is required, add to end of part number. EXAMPLE: 400001-SS-12 (A=1/2)

For method of installation, see page 190.

Available Material (see page 275)	
A	Aluminum
B	Brass
S	Steel
SS	Stainless Steel



Basic Part Number	Thread	Panel Thickness	A ±.004	B ±.002	C +.004 -.001	D ±.005	E ±.005	F ±.010	G ±.005
400001	4-40	.048 - .072	1/4	.198	.150	.050	.200	1/4	.164
400002	4-40	.074 - .109	1/4	.198	.150	.080	.170	1/4	.164
400003	4-40	.119 - .156	1/4	.198	.150	.125	.125	1/4	.164
400004	6-32	.048 - .072	1/4	.198	.150	.050	.262	5/16	.210
400005	6-32	.074 - .109	1/4	.198	.150	.080	.232	5/16	.210
400006	6-32	.119 - .156	1/4	.198	.150	.125	.187	5/16	.210
400007	6-32	.188	1/4	.198	.150	.188	.125	5/16	.210
400008	8-32	.048 - .072	5/16	.228	.188	.050	.262	5/16	.208
400009	8-32	.074 - .109	5/16	.228	.188	.080	.232	5/16	.208
400010	8-32	.119 - .156	5/16	.228	.188	.125	.187	5/16	.208
400011	8-32	.188	5/16	.228	.188	.188	.124	5/16	.208
400012	10-24	.048 - .072	3/8	.280	.228	.050	.325	3/8	.236
400013	10-24	.074 - .109	3/8	.280	.228	.080	.295	3/8	.236
400014	10-24	.119 - .156	3/8	.280	.228	.125	.250	3/8	.236
400015	10-24	.188	3/8	.280	.228	.188	.187	3/8	.236
400016	10-24	.250	3/8	.280	.228	.250	.125	3/8	.236
400017	10-32	.048 - .072	3/8	.280	.228	.050	.325	3/8	.236
400018	10-32	.074 - .109	3/8	.280	.228	.080	.295	3/8	.236
400019	10-32	.119 - .156	3/8	.280	.228	.125	.250	3/8	.236
400021	10-32	.188	3/8	.280	.228	.188	.187	3/8	.236
400022	10-32	.250	3/8	.280	.228	.250	.125	3/8	.236
400023	1/4-20	.048 - .072	1/2	.366	.295	.050	.387	7/16	.292
400024	1/4-20	.074 - .109	1/2	.366	.295	.080	.357	7/16	.292
400025	1/4-20	.119 - .156	1/2	.366	.295	.125	.312	7/16	.292
400026	1/4-20	.188	1/2	.366	.295	.188	.249	7/16	.292
400027	1/4-20	.250	1/2	.366	.295	.250	.187	7/16	.292
400028	1/4-28	.048 - .072	1/2	.366	.295	.050	.387	7/16	.292
400029	1/4-28	.074 - .109	1/2	.366	.295	.080	.357	7/16	.292
400031	1/4-28	.119 - .156	1/2	.366	.295	.125	.312	7/16	.292
400032	1/4-28	.188	1/2	.366	.295	.188	.249	7/16	.292
400033	1/4-28	.250	1/2	.366	.295	.250	.187	7/16	.292
400034	5/16-18	.048 - .072	5/8	.414	.347	.050	.450	1/2	.358
400035	5/16-18	.074 - .109	5/8	.414	.347	.080	.420	1/2	.358
400036	5/16-18	.119 - .156	5/8	.414	.347	.125	.375	1/2	.358
400037	5/16-18	.188	5/8	.414	.347	.188	.312	1/2	.358
400038	5/16-18	.250	5/8	.414	.347	.250	.250	1/2	.358
400039	3/8-16	.074 - .109	3/4	.479	.406	.080	.482	9/16	.418
400041	3/8-16	.119 - .156	3/4	.479	.406	.125	.437	9/16	.418
400042	3/8-16	.188	3/4	.479	.406	.188	.374	9/16	.418
400043	3/8-16	.250	3/4	.479	.406	.250	.312	9/16	.418

SERIES 50000 RETAINER

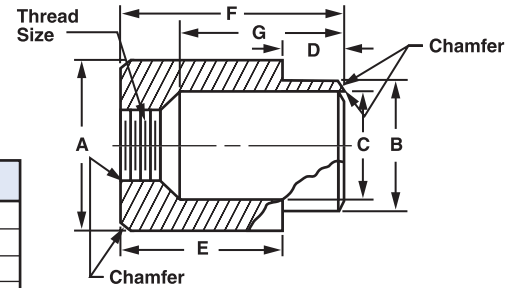
For Captive Screws, see pages 113-156.

ORDER EXAMPLE:
500001 - S - 1

Basic Part Number: 500001
 Material: S (See chart)
 Finish: 1 (See page 277)

For method of installation, see page 190.

Available Material (see page 275)	
A	Aluminum
B	Brass
S	Steel
SS	Stainless Steel



Basic Part Number	Thread	Panel Thickness	A ±.004	B +.000 -.003	C +.004 -.001	D ±.005	E ±.005	F ±.010	G +.005 -.010
500001	4-40	.052 - .067	9/32	.250	.210	.062	.312	3/8	.263
500002	4-40	.084 - .099	9/32	.250	.210	.093	.281	3/8	.263
500003	4-40	.109 - .140	9/32	.250	.210	.125	.250	3/8	.263
500004	6-32	.052 - .067	9/32	.250	.210	.062	.313	3/8	.265
500005	6-32	.084 - .099	9/32	.250	.210	.093	.282	3/8	.265
500006	6-32	.109 - .140	9/32	.250	.210	.125	.250	3/8	.265
500007	8-32	.052 - .067	17/32	.433	.386	.062	.500	9/16	.388
500008	8-32	.084 - .099	17/32	.433	.386	.093	.469	9/16	.388
500009	8-32	.109 - .140	17/32	.433	.386	.125	.437	9/16	.388
500010	8-32	.171 - .203	17/32	.433	.386	.187	.375	9/16	.388
500011	8-32	.234 - .265	17/32	.433	.386	.250	.312	9/16	.388
500012	10-24	.052 - .067	17/32	.433	.386	.062	.500	9/16	.395
500013	10-24	.084 - .099	17/32	.433	.386	.093	.469	9/16	.395
500014	10-24	.109 - .140	17/32	.433	.386	.125	.437	9/16	.395
500015	10-24	.171 - .203	17/32	.433	.386	.187	.375	9/16	.395
500016	10-24	.234 - .265	17/32	.433	.386	.250	.312	9/16	.395
500017	10-32	.052 - .067	17/32	.433	.386	.062	.500	9/16	.395
500018	10-32	.084 - .099	17/32	.433	.386	.093	.469	9/16	.395
500019	10-32	.109 - .140	17/32	.433	.386	.125	.437	9/16	.395
500020	10-32	.171 - .203	17/32	.433	.386	.187	.375	9/16	.395
500021	10-32	.234 - .265	17/32	.433	.386	.250	.312	9/16	.395
500022	12-24	.052 - .067	17/32	.433	.386	.062	.500	9/16	.396
500023	12-24	.084 - .099	17/32	.433	.386	.093	.469	9/16	.396
500024	12-24	.109 - .140	17/32	.433	.386	.125	.437	9/16	.396
500025	12-24	.171 - .203	17/32	.433	.386	.187	.375	9/16	.396
500026	12-24	.234 - .265	17/32	.433	.386	.250	.312	9/16	.396
500027	1/4-20	.052 - .067	17/32	.433	.386	.062	.500	9/16	.403
500028	1/4-20	.084 - .099	17/32	.433	.386	.093	.469	9/16	.403
500029	1/4-20	.109 - .140	17/32	.433	.386	.125	.437	9/16	.403
500030	1/4-20	.171 - .203	17/32	.433	.386	.187	.375	9/16	.403
500031	1/4-20	.234 - .265	17/32	.433	.386	.250	.312	9/16	.403
500032	1/4-28	.052 - .067	17/32	.433	.386	.062	.500	9/16	.403
500033	1/4-28	.084 - .099	17/32	.433	.386	.093	.469	9/16	.403
500034	1/4-28	.109 - .140	17/32	.433	.386	.125	.437	9/16	.403
500035	1/4-28	.171 - .203	17/32	.433	.386	.187	.375	9/16	.403
500036	1/4-28	.234 - .265	17/32	.433	.386	.250	.312	9/16	.403

SERIES 550000 RETAINER

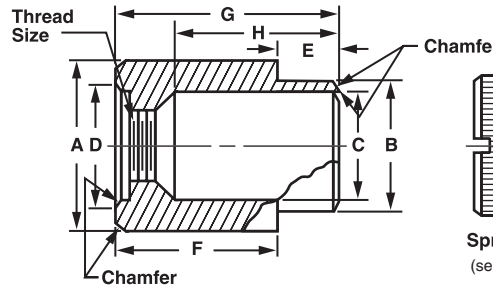
For method of installation, see page 190.

Available Material (see page 275)	
A	Aluminum
B	Brass
S	Steel
SS	Stainless Steel

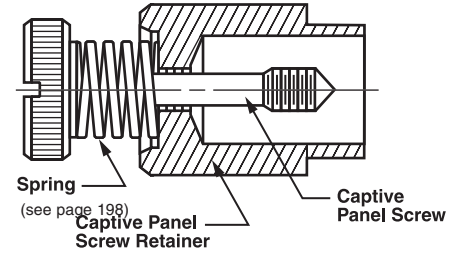
ORDER EXAMPLE:
550001 - S - 1

Basic Part Number: 550001
Material: S (See chart)
Finish: 1 (See page 277)

Captive Panel Screw and Spring must be ordered separately.



Choose appropriate screw from pages 113-114.



Basic Part Number	Thread	Panel Thickness	A ±.004	B +.000 -.003	C +.004 -.001	D +.005 -.000	E ±.005	F ±.005	G ±.010	H +.005 -.010
550001	4-40	.052/ .067	9/32	.250	.210	.192	.062	.375	7/16	.263
550002	4-40	.084/ .099	9/32	.250	.210	.192	.093	.344	7/16	.263
550003	4-40	.109/ .140	9/32	.250	.210	.192	.125	.312	7/16	.263
550004	6-32	.052/ .067	9/32	.250	.210	.192	.062	.375	7/16	.266
550005	6-32	.084/ .099	9/32	.250	.210	.192	.093	.344	7/16	.266
550006	6-32	.109/ .140	9/32	.250	.210	.192	.125	.312	7/16	.266
550007	8-32	.052/ .067	17/32	.433	.386	.312	.062	.563	5/8	.388
550008	8-32	.084/ .099	17/32	.433	.386	.312	.093	.532	5/8	.388
550009	8-32	.109/ .140	17/32	.433	.386	.312	.125	.500	5/8	.388
550010	8-32	.171/ .203	17/32	.433	.386	.312	.187	.438	5/8	.388
550011	8-32	.234/ .265	17/32	.433	.386	.312	.250	.375	5/8	.388
550012	10-24	.052/ .067	17/32	.433	.386	.312	.062	.563	5/8	.393
550013	10-24	.084/ .099	17/32	.433	.386	.312	.093	.532	5/8	.393
550014	10-24	.109/ .140	17/32	.433	.386	.312	.125	.500	5/8	.393
550015	10-24	.171/ .203	17/32	.433	.386	.312	.187	.438	5/8	.393
550016	10-24	.234/ .265	17/32	.433	.386	.312	.250	.375	5/8	.393
550017	10-32	.052/ .067	17/32	.433	.386	.312	.062	.563	5/8	.393
550018	10-32	.084/ .099	17/32	.433	.386	.312	.093	.532	5/8	.393
550019	10-32	.109/ .140	17/32	.433	.386	.312	.125	.500	5/8	.393
550020	10-32	.171/ .203	17/32	.433	.386	.312	.187	.438	5/8	.393
550021	10-32	.234/ .265	17/32	.433	.386	.312	.250	.375	5/8	.393
550022	12-24	.052/ .067	17/32	.433	.386	.312	.062	.563	5/8	.397
550023	12-24	.084/ .099	17/32	.433	.386	.312	.093	.532	5/8	.397
550024	12-24	.109/ .140	17/32	.433	.386	.312	.125	.500	5/8	.397
550025	12-24	.171/ .203	17/32	.433	.386	.312	.187	.438	5/8	.397
550028	12-24	.234/ .265	17/32	.433	.386	.312	.250	.375	5/8	.397
550029	1/4-20	.052/ .067	17/32	.433	.386	.312	.062	.563	5/8	.405
550030	1/4-20	.084/ .099	17/32	.433	.386	.312	.093	.532	5/8	.405
550031	1/4-20	.109/ .140	17/32	.433	.386	.312	.125	.500	5/8	.405
550032	1/4-20	.171/ .203	17/32	.433	.386	.312	.187	.438	5/8	.405
550033	1/4-20	.234/ .265	17/32	.433	.386	.312	.250	.375	5/8	.405
550034	1/4-28	.084/ .099	17/32	.433	.386	.312	.093	.532	5/8	.405
550035	1/4-28	.109/ .140	17/32	.433	.386	.312	.125	.500	5/8	.405
550036	1/4-28	.171/ .203	17/32	.433	.386	.312	.187	.438	5/8	.405
550037	1/4-28	.234/ .265	17/32	.433	.386	.312	.250	.375	5/8	.405

SERIES 60000 RETAINER

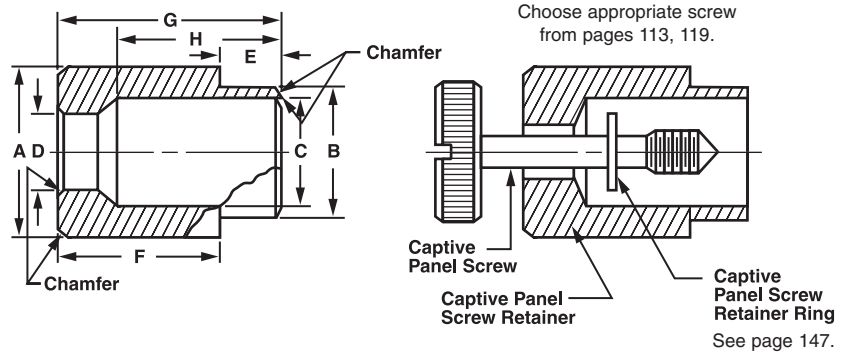
For method of installation, see page 190.

Available Material (see page 275)	
A	Aluminum
B	Brass
S	Steel
SS	Stainless Steel

ORDER EXAMPLE:
600001 - S - 1

Basic Part Number: 600001
 Material: S (See chart)
 Finish: 1 (See page 277)

Captive Panel Screw and Retainer Ring must be ordered separately.



Basic Part Number	Thread	Panel Thickness	A ±.004	B +.000 -.003	C +.004 -.001	D +.004 -.001	E ±.005	F ±.005	G ±.010	H +.005 -.010
600001	4-40	.052/ .067	9/32	.250	.210	.125	.062	.312	3/8	.299
600002	4-40	.084/ .099	9/32	.250	.210	.125	.093	.281	3/8	.299
600003	4-40	.109/ .140	9/32	.250	.210	.125	.125	.250	3/8	.299
600004	6-32	.052/ .067	9/32	.250	.210	.152	.062	.313	3/8	.304
600007	6-32	.084/ .099	9/32	.250	.210	.152	.093	.282	3/8	.304
600008	6-32	.109/ .140	9/32	.250	.210	.152	.125	.250	3/8	.304
600009	8-32	.052/ .067	17/32	.433	.386	.177	.062	.500	9/16	.447
600010	8-32	.084/ .099	17/32	.433	.386	.177	.093	.469	9/16	.447
600011	8-32	.109/ .140	17/32	.433	.386	.177	.125	.437	9/16	.447
600012	8-32	.171/ .203	17/32	.433	.386	.177	.187	.375	9/16	.447
600013	8-32	.234/ .265	17/32	.433	.386	.177	.250	.312	9/16	.447
600014	10-24	.052/ .067	17/32	.433	.386	.203	.062	.500	9/16	.464
600015	10-24	.084/ .099	17/32	.433	.386	.203	.093	.469	9/16	.464
600018	10-24	.109/ .140	17/32	.433	.386	.203	.125	.437	9/16	.464
600019	10-24	.171/ .203	17/32	.433	.386	.203	.187	.375	9/16	.464
600020	10-24	.234/ .265	17/32	.433	.386	.203	.250	.312	9/16	.464
600021	10-32	.052/ .067	17/32	.433	.386	.203	.062	.500	9/16	.464
600022	10-32	.084/ .099	17/32	.433	.386	.203	.093	.469	9/16	.464
600023	10-32	.109/ .140	17/32	.433	.386	.203	.125	.437	9/16	.464
600026	10-32	.171/ .203	17/32	.433	.386	.203	.187	.375	9/16	.464
600027	10-32	.234/ .265	17/32	.433	.386	.203	.250	.312	9/16	.464
600028	12-24	.052/ .067	17/32	.433	.386	.228	.062	.500	9/16	.459
600029	12-24	.084/ .099	17/32	.433	.386	.228	.093	.469	9/16	.459
600030	12-24	.109/ .140	17/32	.433	.386	.228	.125	.437	9/16	.459
600031	12-24	.171/ .203	17/32	.433	.386	.228	.187	.375	9/16	.459
600032	12-24	.234/ .265	17/32	.433	.386	.228	.250	.312	9/16	.459
600033	1/4-20	.052/ .067	17/32	.433	.386	.257	.062	.500	9/16	.475
600034	1/4-20	.084/ .099	17/32	.433	.386	.257	.093	.469	9/16	.475
600035	1/4-20	.109/ .140	17/32	.433	.386	.257	.125	.437	9/16	.475
600036	1/4-20	.171/ .203	17/32	.433	.386	.257	.187	.375	9/16	.475
600037	1/4-20	.234/ .265	17/32	.433	.386	.257	.250	.312	9/16	.475
600038	1/4-28	.052/ .067	17/32	.433	.386	.257	.062	.500	9/16	.475
600039	1/4-28	.084/ .099	17/32	.433	.386	.257	.093	.469	9/16	.475
600040	1/4-28	.109/ .140	17/32	.433	.386	.257	.125	.437	9/16	.475
600041	1/4-28	.171/ .203	17/32	.433	.386	.257	.187	.375	9/16	.475
600042	1/4-28	.234/ .265	17/32	.433	.386	.257	.250	.312	9/16	.475

SERIES 650000 RETAINER

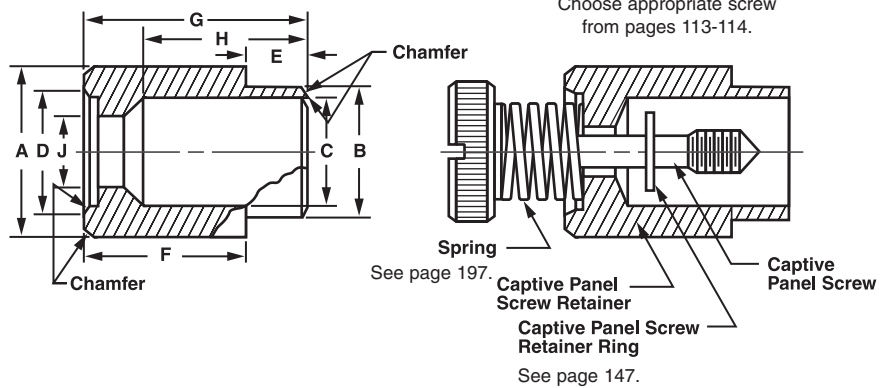
For method of installation, see page 190.

Available Material (see page 275)	
A	Aluminum
B	Brass
S	Steel
SS	Stainless Steel

ORDER EXAMPLE:
650001 - S - 1

Basic Part Number: 650001
Material: S (See chart)
Finish: 1 (See page 277)

Captive Panel Screw and Retainer Ring must be ordered separately.



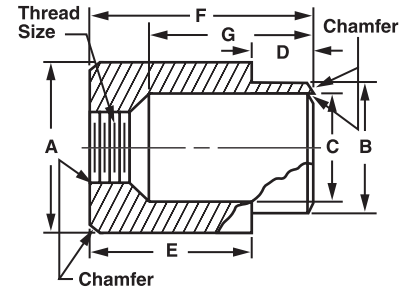
Basic Part Number	Thread	Panel Thickness	A	B	C	D	E	F	G	H	J
			±.004	+ .000 - .003	+ .004 - .001	+ .005 - .000	±.005	±.005	±.010	+ .005 - .010	+ .004 - .001
650001	4-40	.052/ .067	9/32	.250	.210	.192	.062	.375	7/16	.299	.125
650002	4-40	.084/ .099	9/32	.250	.210	.192	.093	.344	7/16	.299	.125
650003	4-40	.109/ .140	9/32	.250	.210	.192	.125	.312	7/16	.299	.125
650004	6-32	.052/ .067	9/32	.250	.210	.192	.062	.375	7/16	.305	.150
650005	6-32	.084/ .099	9/32	.250	.210	.192	.093	.344	7/16	.305	.150
650006	6-32	.109/ .140	9/32	.250	.210	.192	.125	.312	7/16	.305	.150
650007	8-32	.052/ .067	17/32	.433	.386	.312	.062	.563	5/8	.427	.175
650008	8-32	.084/ .099	17/32	.433	.386	.312	.093	.532	5/8	.427	.175
650009	8-32	.109/ .140	17/32	.433	.386	.312	.125	.500	5/8	.427	.175
650010	8-32	.171/ .203	17/32	.433	.386	.312	.187	.438	5/8	.427	.175
650011	8-32	.234/ .265	17/32	.433	.386	.312	.250	.375	5/8	.427	.175
650012	10-24	.052/ .067	17/32	.433	.386	.312	.062	.563	5/8	.432	.203
650013	10-24	.084/ .099	17/32	.433	.386	.312	.093	.532	5/8	.432	.203
650014	10-24	.109/ .140	17/32	.433	.386	.312	.125	.500	5/8	.432	.203
650015	10-24	.171/ .203	17/32	.433	.386	.312	.187	.438	5/8	.432	.203
650016	10-24	.234/ .265	17/32	.433	.386	.312	.250	.375	5/8	.432	.203
650017	10-32	.052/ .067	17/32	.433	.386	.312	.062	.563	5/8	.432	.203
650018	10-32	.084/ .099	17/32	.433	.386	.312	.093	.532	5/8	.432	.203
650019	10-32	.109/ .140	17/32	.433	.386	.312	.125	.500	5/8	.432	.203
650020	10-32	.171/ .203	17/32	.433	.386	.312	.187	.438	5/8	.432	.203
650021	10-32	.234/ .265	17/32	.433	.386	.312	.250	.375	5/8	.432	.203
650022	12-24	.052/ .067	17/32	.433	.386	.312	.062	.563	5/8	.438	.228
650023	12-24	.084/ .099	17/32	.433	.386	.312	.093	.532	5/8	.438	.228
650024	12-24	.109/ .140	17/32	.433	.386	.312	.125	.500	5/8	.438	.228
650025	12-24	.171/ .203	17/32	.433	.386	.312	.187	.438	5/8	.438	.228
650026	12-24	.234/ .265	17/32	.433	.386	.312	.250	.375	5/8	.438	.228
650027	1/4-20	.052/ .067	17/32	.433	.386	.312	.062	.563	5/8	.445	.257
650028	1/4-20	.084/ .099	17/32	.433	.386	.312	.093	.532	5/8	.445	.257
650029	1/4-20	.109/ .140	17/32	.433	.386	.312	.125	.500	5/8	.445	.257
650030	1/4-20	.171/ .203	17/32	.433	.386	.312	.187	.438	5/8	.445	.257
650031	1/4-20	.234/ .265	17/32	.433	.386	.312	.250	.375	5/8	.445	.257
650032	1/4-28	.052/ .067	17/32	.433	.386	.312	.062	.563	5/8	.445	.257
650033	1/4-28	.084/ .099	17/32	.433	.386	.312	.093	.532	5/8	.445	.257
650034	1/4-28	.109/ .140	17/32	.433	.386	.312	.125	.500	5/8	.445	.257
650035	1/4-28	.171/ .203	17/32	.433	.386	.312	.187	.438	5/8	.445	.257
650036	1/4-28	.234/ .265	17/32	.433	.386	.312	.250	.375	5/8	.445	.257

SERIES 70000 RETAINER - Small Profile

For Captive Screws, see pages 113-156.

Basic Part Number	Thread	Panel Thickness	A ±.004	B +.000 -.003	C +.004 -.001	D ±.005	E ±.005	F ±.010	G +.005 -.010
700001	4-40	.052/ .067	1/4	.188	.150	.062	.188	1/4	.161
700002	4-40	.084/ .099	1/4	.188	.150	.093	.157	1/4	.161
700003	4-40	.109/ .140	1/4	.188	.150	.125	.125	1/4	.161
700004	6-32	.052/ .067	1/4	.188	.150	.062	.250	5/16	.210
700005	6-32	.084/ .099	1/4	.188	.150	.093	.219	5/16	.210
700006	6-32	.109/ .140	1/4	.188	.150	.125	.188	5/16	.210
700007	8-32	.052/ .067	3/8	.218	.188	.062	.250	5/16	.210
700008	8-32	.084/ .099	3/8	.218	.188	.093	.219	5/16	.210
700009	8-32	.109/ .140	3/8	.218	.188	.125	.187	5/16	.210
700010	8-32	.171/ .203	3/8	.218	.188	.187	.125	5/16	.210
700011	10-24	.052/ .067	3/8	.270	.228	.062	.313	3/8	.236
700012	10-24	.084/ .099	3/8	.270	.228	.093	.282	3/8	.236
700013	10-24	.109/ .140	3/8	.270	.228	.125	.250	3/8	.236
700014	10-24	.171/ .203	3/8	.270	.228	.187	.188	3/8	.236
700015	10-24	.234/ .265	3/8	.270	.228	.250	.125	3/8	.236
700016	10-32	.052/ .067	3/8	.270	.228	.062	.313	3/8	.236
700017	10-32	.084/ .099	3/8	.270	.228	.093	.282	3/8	.236
700018	10-32	.109/ .140	3/8	.270	.228	.125	.250	3/8	.236
700019	10-32	.171/ .203	3/8	.270	.228	.187	.188	3/8	.236
700020	10-32	.234/ .265	3/8	.270	.228	.250	.125	3/8	.236
700021	12-24	.052/ .067	3/8	.270	.228	.062	.313	3/8	.239
700022	12-24	.084/ .099	3/8	.270	.228	.093	.282	3/8	.239
700023	12-24	.109/ .140	3/8	.270	.228	.125	.250	3/8	.239
700024	12-24	.171/ .203	3/8	.270	.228	.187	.188	3/8	.239
700025	12-24	.234/ .265	3/8	.270	.228	.250	.125	3/8	.239
700026	1/4-20	.052/ .067	1/2	.356	.295	.062	.375	7/16	.295
700027	1/4-20	.084/ .099	1/2	.356	.295	.093	.344	7/16	.295
700028	1/4-20	.109/ .140	1/2	.356	.295	.125	.312	7/16	.295
700029	1/4-20	.171/ .203	1/2	.356	.295	.187	.250	7/16	.295
700030	1/4-20	.234/ .265	1/2	.356	.295	.250	.187	7/16	.295
700031	1/4-28	.052/ .067	1/2	.356	.295	.062	.375	7/16	.295
700032	1/4-28	.084/ .099	1/2	.356	.295	.093	.344	7/16	.295
700033	1/4-28	.109/ .140	1/2	.356	.295	.125	.312	7/16	.295
700034	1/4-28	.171/ .203	1/2	.356	.295	.187	.250	7/16	.295
700035	1/4-28	.234/ .265	1/2	.356	.295	.250	.187	7/16	.295
700036	5/16-24	.052/ .067	1/2	.404	.343	.062	.375	7/16	.297
700037	5/16-24	.084/ .099	1/2	.404	.343	.093	.344	7/16	.297
700038	5/16-24	.109/ .140	1/2	.404	.343	.125	.312	7/16	.297
700039	5/16-24	.171/ .203	1/2	.404	.343	.187	.250	7/16	.297
700040	5/16-24	.234/ .265	1/2	.404	.343	.250	.187	7/16	.297

For method of installation, see page 190.



Available Material (see page 275)

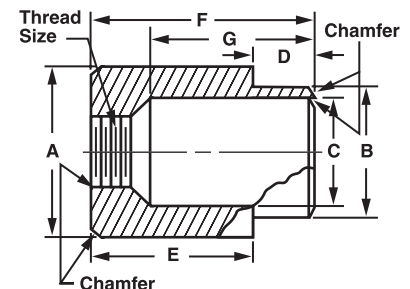
A	Aluminum
B	Brass
S	Steel
SS	Stainless Steel

ORDER EXAMPLE:
700001 - S - 1

Basic Part Number: 700001
 Material: S (Steel)
 Finish: 1 (See page 277)

SERIES 75000 RETAINER - Heavy Duty

Basic Part Number	Thread	Panel Thickness	A ±.004	B +.000 -.003	C +.004 -.001	D ±.005	E ±.005	F ±.005	G +.005 -.010
750001	6-32	.109/ .140	9/16	.406	.343	.165	.312	.477	.242
750002	6-32	.171/ .203	9/16	.406	.343	.230	.312	.542	.307
750003	6-32	.234/ .265	9/16	.406	.343	.290	.312	.602	.367
750004	8-32	.109/ .140	9/16	.406	.343	.165	.312	.477	.248
750005	8-32	.171/ .203	9/16	.406	.343	.230	.312	.542	.315
750006	8-32	.234/ .265	9/16	.406	.343	.290	.312	.602	.373
750007	10-32	.109/ .140	9/16	.406	.343	.165	.312	.477	.252
750008	10-32	.171/ .203	9/16	.406	.343	.230	.312	.542	.318
750009	10-32	.234/ .265	9/16	.406	.343	.290	.312	.602	.378
750010	12-24	.109/ .140	9/16	.406	.343	.165	.312	.477	.256
750011	12-24	.171/ .203	9/16	.406	.343	.230	.312	.542	.321
750012	12-24	.234/ .265	9/16	.406	.343	.290	.312	.602	.381
750013	1/4-20	.109/ .140	9/16	.406	.343	.165	.312	.477	.261
750014	1/4-20	.171/ .203	9/16	.406	.343	.230	.312	.542	.326
750015	1/4-20	.234/ .265	9/16	.406	.343	.290	.312	.602	.386

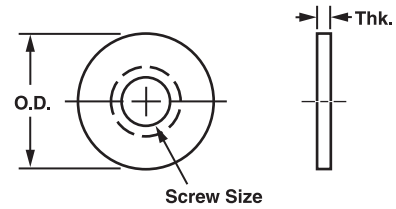


PANEL SCREW RETAINER WASHERS Special Internal Thread

ORDER EXAMPLE:
W114050 - SS - 12

Basic Part Number: W114050
 Material: SS (See chart)
 Finish: 12 (See page 277)

Available Material (see page 275)	
A	Aluminum
B	Brass
S	Steel
SS	Stainless Steel



Part Number	Screw Size	OD +.020 -.005	Thk +.005	Part Number	Screw Size	OD +.020 -.005	Thk +.005
W114050	2	.187	.020	W114066	8	.375	.030
W114080	2	.250	.020	W114086	8	.500	.030
W114052	4	.255	.030	W114058	10	.375	.030
W114082	4	.312	.030	W114068	10	.500	.030
W114054	6	.312	.030	W114051	1/4	.500	.045
W114056	8	.312	.030	W114061	1/4	.562	.045

Solid washers thread easily over any captive screw.

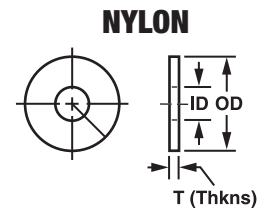
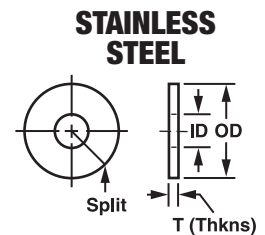
PANEL SCREW RETAINER WASHERS Used with 60000-65000 Retainers (see pages 194-195)

ORDER EXAMPLE:
800007 - SS

Basic Part Number: 800007
 Material: SS (See chart)

Available Material (see page 275)	
SS	Stainless Steel, type 303 ASTM-A-581-582
N	Nylon

Stainless Steel Part No.	Thread	Ref ID	OD ±.005	T ±.005	Nylon Part No.	Thread	Ref ID	OD ±.005	T ±.005
800007 SS	2-56	.075	.156	.010	800007 N	2-56	.075	.156	.010
800008 SS	4-40	.093	.171	.010	800000 N	4-40	.100	.171	.015
800009 SS	6-32	.112	.171	.010	800001 N	6-32	.125	.171	.020
800010 SS	8-32	.146	.312	.012	800002 N	8-32	.152	.312	.020
800011 SS	10-24	.166	.312	.012	800003 N	10-24	.167	.312	.020
800012 SS	10-32	.166	.312	.012	800004 N	10-32	.173	.312	.020
800013 SS	12-24	.190	.312	.012	800005 N	12-24	.193	.312	.020
800014 SS	1/4-20	.204	.312	.012	800006 N	1/4-20	.228	.312	.030
800015 SS	1/4-28	.214	.312	.012	800007aN	1/4-28	.228	.312	.030
800016 SS	5/16-24	.265	.375	.010	800007bN	5/16-24	.265	.375	.031
800016aSS	5/16-18	.265	.375	.010	800007cN	5/16-18	.265	.375	.031



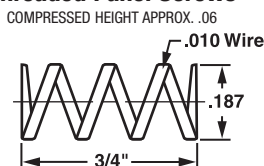
RETAINERS

Available Material (see page 275)
Stainless Steel Wire ASTM-A-313, Type 302, Cond. B

STAINLESS STEEL SPRINGS For Retainers 550000-650000

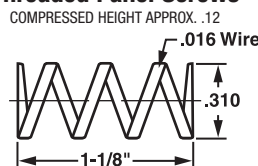
(see pages 193-195)

Used with 4-40 or 6-32 Threaded Panel Screws



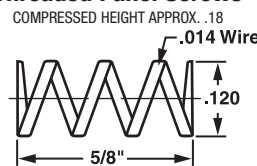
Part No.
EX-1

Used with 8-32 up to or 1/4-28 Threaded Panel Screws



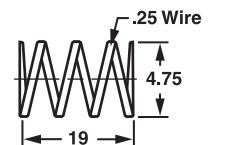
Part No.
EX-2

Used with 2-56 Threaded Panel Screws

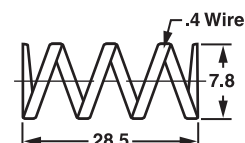


Part No.
EX-3

METRIC SPRINGS



Part No.
MEX-4



Part No.
MEX-5