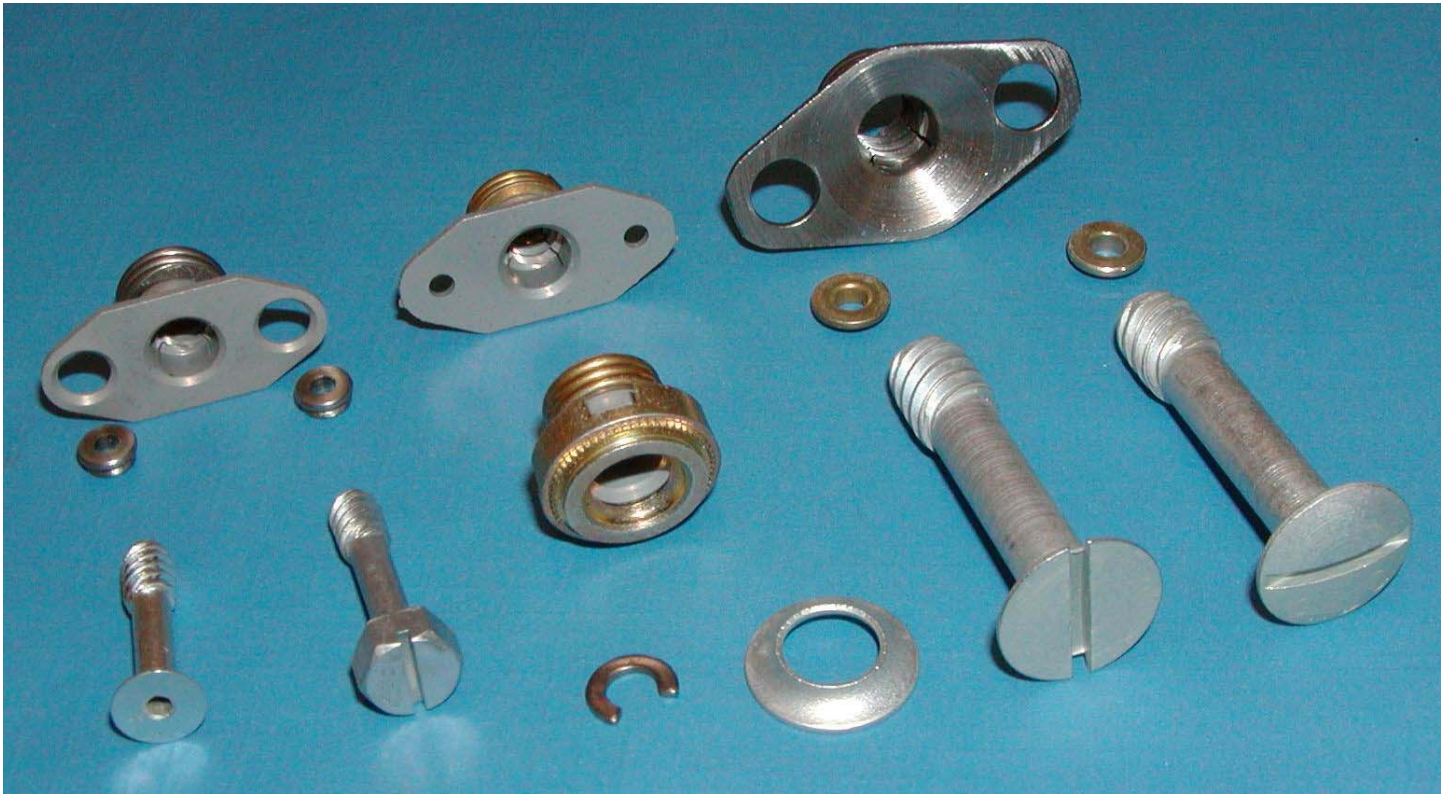


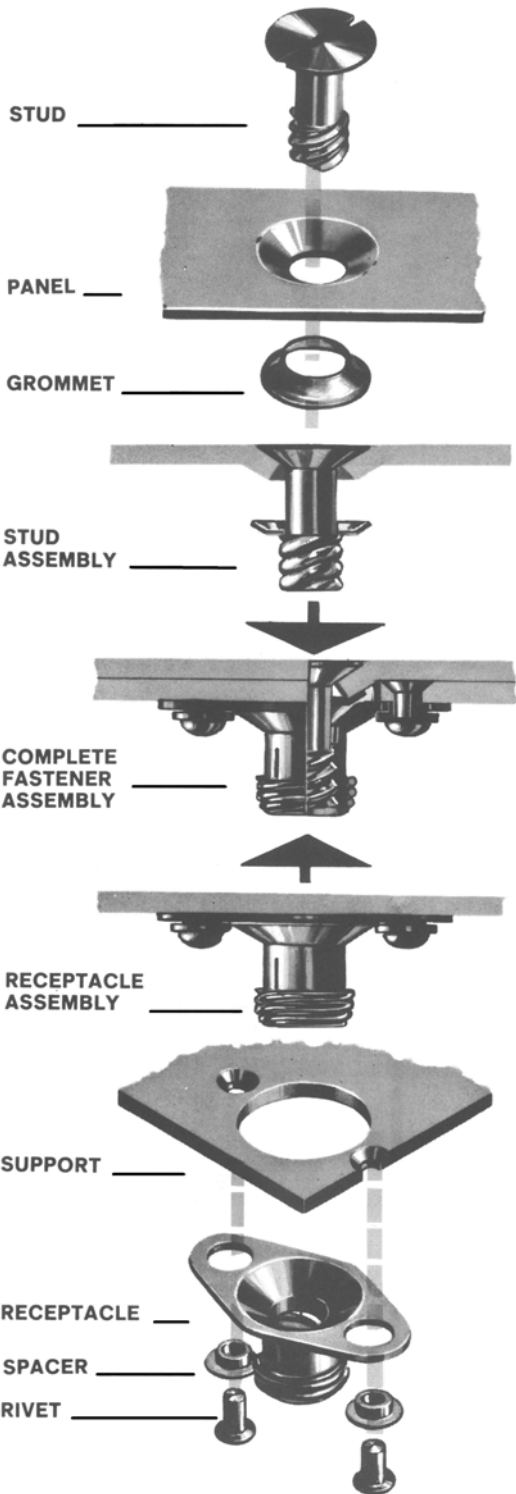
UN-5700 Line



The DFCI UN-5700 Line stud has a special four-lead thread that operates in less than one turn. The receptacle provides a friction lock by expanding against a surrounding coil spring as the stud is engaged.

Rated locking torque is maintained over thousands of use cycles. These features are combined with the advantages of standard threaded fasteners; panel take-up, no sheet separation under load, and high tensile and shear ratings.

UN-5700 Line



Studs

The fastener stud has a fast four lead thread, and is easily captivated in the panel with a grommet that is slipped over the threaded end and flattened down. Studs are made of steel, head treated and cadmium plated per QQ-P-416, Type 1, Class 3. Other materials are available on special order.





Retainers

The retaining rings are made of steel cadmium plated per QQ-P-416, Type II, Class 2.

Receptacles

Two types of receptacles are available—rigid and floating (the latter for use where misalignment may develop). The receptacle is slotted and spring encircled. As the stud is screwed into the receptacle, the spring is expanded, thus creating a constricting force on the stud. The receptacle is made of aluminum alloy, anodized, and the spring is made of music wire, cadmium plated per QQ-P-416, Type II, Class 2. Spacers for all floating receptacles are made of steel, cadmium plated per QQ-P-416, Type II, Class 2. Other materials are available on special order.

Components

Hex Head Type 578x-20	Oval Head, Straight Slot Type 571x-20	Flush Head, Straight Slot Type 576x-20 (Sizes 4, 5)	Flush Head, Hex Recess Type 576x-S20 (Size 3)
			

Studs are available with Hex, Oval-Slotted, and Flush-Slotted Heads. Available on special order: Oval Head Studs with Phillips Recess.




Size	Thread Major Diameter		Locking Torque (in.-lb.)	Rated Tensile and Shear (lb.)	Locking Torque Retention (cycles)
	(inch)	(mm)			
3	.188	4.78	4-8	600	5,000
4	.250	6.35	8-12	1,000	5,000
4	.313	7.95	15-25	1,500	5,000

Retaining Ring

Type 5723-A and 5725-166-C3Y (for size 3)



Retaining Rings are slipped around the Stud and squeezed closed with pliers.

Rigid Receptacle Types 5718 and 5718-A	Floating Receptacle Types 5718-F and 5718-FA	Press Fit Receptacle Type 5718-FP
		
Rigid receptacles are riveted solidly to their support. Type 5718-A is used for Size 3 and 4 studs. Type 5718 is used for size 5 studs only.	Floating receptacles have oversize rivet holes that permit movement around rivet spacers within the holes. Supplied with 2 spacers.	Press-in receptacles are installed by pressing into a round hole. Receptacles float to accept panel misalignment. Type 5718-FP is available for size 3 and 4 studs.

UN-5700 Line



Selection Procedure

1. Verify that the Mechanical Properties are suitable for the application.
2. Select a stud head style. **For example:** A size 3 Oval Head Stud would be **5713-20**
3. Select a stud retainer and part number. **Example:** The Retaining Ring would be **5725-166-C3Y**
4. Calculate the Total Material Thickness as described below.
5. Using the table on the stud page, find the Total Material Thickness range that applies to your calculated Total Material Thickness. The **G** needed for the Stud Part Number is stated to the right of the applicable Total Material Thickness range. **For example:** For the size 3 with a Total Material Thickness of .175" (4.45 mm), the **G** needed would be **-20**.
6. Combine the stud head style and **G** for a complete part number. **For example:** The complete part number for our example would be **5713-20-20-C2C**.
7. Select either a rigid or floating receptacle. **For example:** The size 3 rigid receptacle is **5718-A3-ACNC**.

Finding the Total Material Thickness (TMT)

The Total Material Thickness (TMT) is the sum of the panel thickness, support thickness, and any gap thickness that may be present. The panel thickness is the thickness of the material that contains the stud. Support thickness is the thickness of the material to which the receptacle is mounted. Gap thickness is the thickness of any gasket, spacing, or other material that prevents the panel and support from being in direct contact with each other. All stud retainers drop into the support area and do not add a gap.



UN-5700 Line

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UN-5700 Line



Size 3 Studs



Flush Head
Type 5763-S20



Oval Head
Type 5713-20



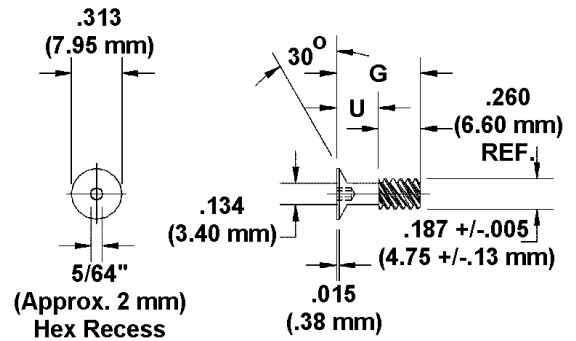
Hex Head
Type 5783-20

These size 3 hex, oval and flush head studs are supplied with 3/16" (4.78 mm) thread major diameter.

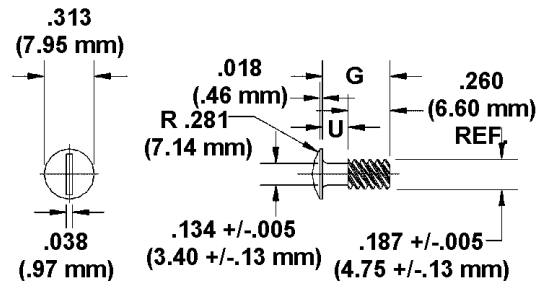
The locking torque is 4 to 8 inch pounds, 600 pound rated tensile and shear.

Stud Material: Steel, heat treated, cadmium plated per QQ-P-416, Type 1, Class 3.

Flush Head, Hex Recess Part Number: 5763-S20

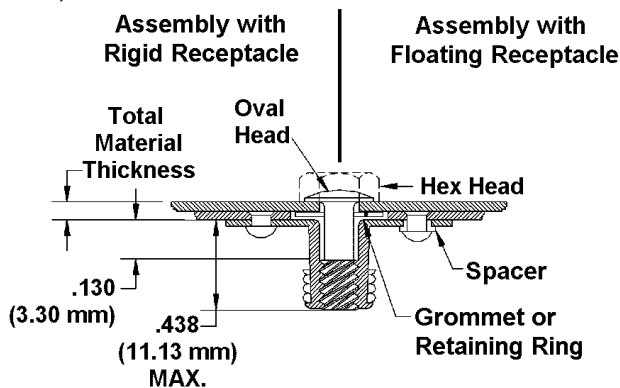


Oval Head, Straight Slot Part Number 5713-20

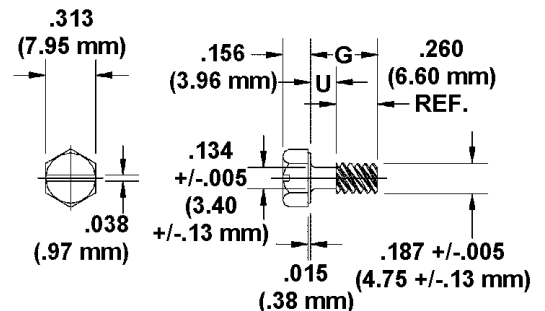


Typical Assembly

Add your panel and support thickness to give you the Total Material Thickness. Then select the stud from the table on the next page. (See page UN-4 for a complete description of Total Material Thickness.)



Hex Head Part Number 5783-20





UN-5700 Line

Size 3 Sizing Tables (inch)

Total Material Thickness	G	Stud Shank Dimensions		Stud Weight (Lb. Each)		
		G DIM	U DIM	Flush 5763-S20	Oval 5713-20	Hex 5783-20
.000" to .050"	-5	.420"	.160"	--	.00304	.0060
.051" to .100"	-10	.470"	.210"	--	.00324	.0062
.101" to .150"	-15	.520"	.260"	.00308	.00344	.0064
.151" to .200"	-20	.570"	.310"	.00328	.00364	.0066
.201" to .250"	-25	.620"	.360"	.00348	.00384	.0068
.251" to .300"	-30	.670"	.410"	.00368	.00404	.0070
.301" to .350"	-35	.720"	.460"	.00388	.00424	.0072
.351" to .400"	-40	.770"	.510"	.00408	.00444	.0074

Note: A thread lubricant suitable for the fastener's installed environment is recommended.
For part number 5763-S20-15, a minimum panel thickness of .125" is required.

(mm)

Total Material Thickness	G	Stud Shank Dimensions		Stud Weight (Lb. Each)		
		G DIM	U DIM	Flush 5763-S20	Oval 5713-20	Hex 5783-20
1.00 – 1.27	-5	10.67	1.06	--	.00304	.0060
1.30 – 2.54	-10	11.94	5.33	--	.00324	.0062
2.57 – 3.81	-15	13.21	6.60	.00308	.00344	.0064
3.84 – 5.08	-20	14.48	7.87	.00328	.00364	.0066
5.11 – 6.35	-25	15.75	9.14	.00348	.00384	.0068
6.38 – 7.62	-30	17.02	10.41	.00368	.00404	.0070
7.65 – 8.89	-35	18.29	10.92	.00388	.00424	.0072
8.92 – 10.16	-40	19.56	12.95	.00408	.00444	.0074

Note: A thread lubricant suitable for the fastener's installed environment is recommended.
For part number 5763-S20-15, a minimum panel thickness of 3.18 mm is required.

UN-5700 Line



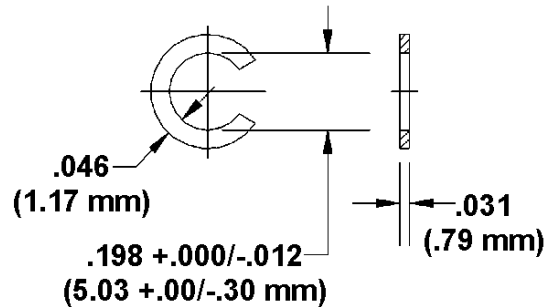
Size 3

Stud Retainers



Retaining Ring

Retaining Ring



Part Number 5725-166-C3Y

Material: Steel, cadmium plated with yellow chromate, per QQ-P-416, Type II, Class 2
Weight: .00025 lb.

Size 3

Receptacles



5718-A3
Rigid Receptacle



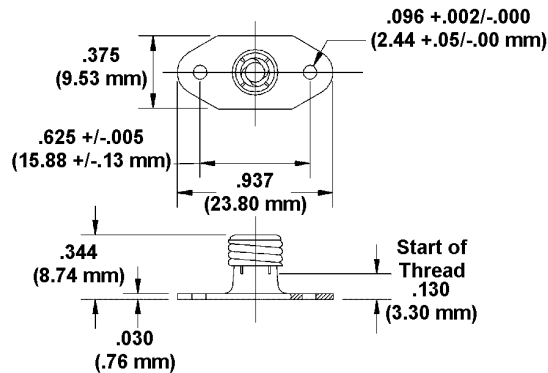
5718-FA3
Floating
Receptacle
w/Spacers



5718-FP3
Press Fit
Receptacle

Rigid Receptacle

For use with all size 3 studs

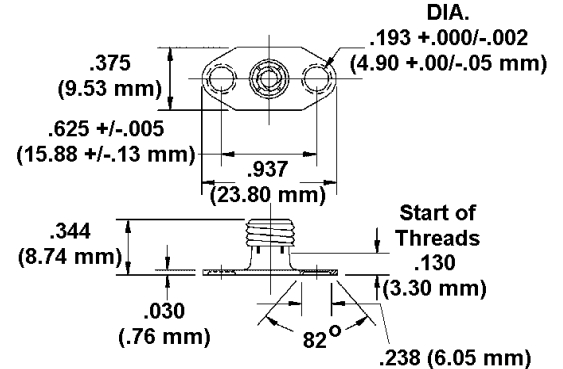


Part Number 5718-A3

Material: Aluminum alloy, anodized.
Spring: music wire cadmium plated per QQ-P-416, Type II, Class 2 yellow
Weight: .0026 lb.

Floating Receptacle

For use with all size 3 studs

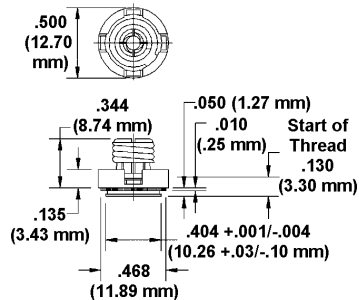


Part Number 5718-FA3

Material: Aluminum alloy, anodized.
Spring: music wire cadmium plated per QQ-P-416, Type II, Class 2, yellow
Weight: .0033 lb. (including 2 spacers)
Float: .025 (.64 mm) all directions

Press Fit Receptacle

Support Thickness:
.050" (1.27 mm) min.

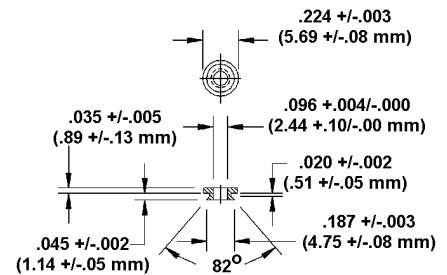


Part Number: 5718-FP3

Material: Ring: carbon spring steel, heat treated. Retainer: steel, heat treated. Spring: music wire. Ring, retainer and spring – cadmium plated QQ-P-416, Type II, Class 2, yellow chromate. Base: aluminum alloy, anodized
Weight: .00577 lb.
Float: .015 (.38 mm) all directions

Spacer

For use with 5718-FA3 receptacle
2 supplied with each 5718-FA3 receptacle



Part Number: 5718-F3-3-C3Y

Material: Steel, cadmium plated QQ-P-416, Type II, Class 2 yellow chromate
Weight: See Floating Receptacle above

UN-5700 Line



Size 4 Studs



Flush Head
Type 5764-20



Oval Head
Type 5714-20



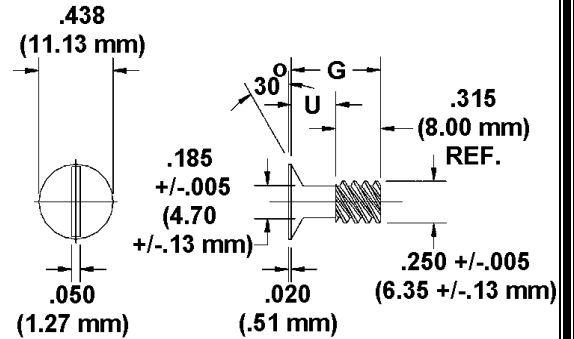
Hex Head
Type 5784-20

These size 4 hex and oval head studs are supplied with 1/4" (6.35 mm) thread major diameter.

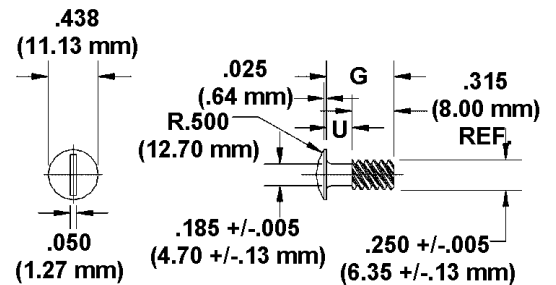
The locking torque is 8 to 12 inch pounds. 1,000 pound rated tensile and shear.

Stud Material: Steel, heat-treated, Cadmium plate per QQ-P-416 Type I, Class 3.

Flush Head, Straight Slot Part Number: 5764-20

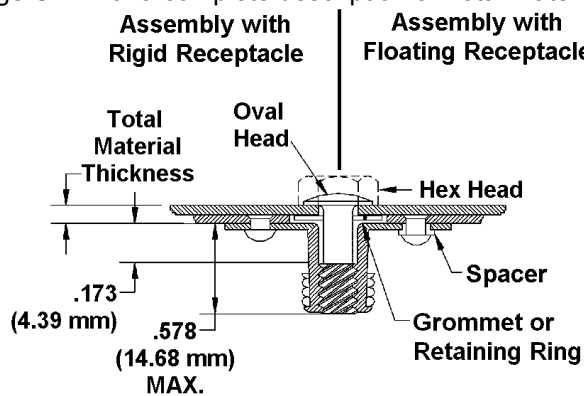


Oval Head, Straight Slot Part Number 5714-20

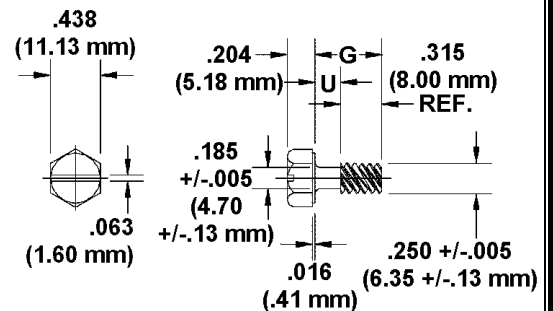


Typical Assembly

Add your panel and support thickness to give you the Total Material Thickness. Then select the stud from the table on the next page. (See page UN-4 for a complete description of Total Material Thickness.)



Hex Head Part Number 5784-20





UN-5700 Line

Size 4 Sizing Tables (inch)

Total Material Thickness	G	Stud Shank Dimensions		Stud Weight (Lb. Each)		
		G DIM	U DIM	Flush 5764-20	Oval 5714-20	Hex 5784-20
.000" to .100"	-10	.565"	.250"	--	.00675	.01392
.101" to .200"	-20	.665"	.350"	.00751	.00752	.01469
.201" to .300"	-30	.765"	.450"	.00828	.00829	.01546
.301" to .400"	-40	.865"	.550"	.00906	.00906	.01623
.401" to .500"	-50	.965"	.650"	.00983	.00983	.01700
.501" to .600"	-60	1.065"	.750"	.01060	.01060	.01777
.601" to .700"	-70	1.165"	.850"	.01137	.01137	.01854
.701" to .800"	-80	1.265"	.950"	.01214	.01214	.01931

Note: A thread lubricant suitable for the fastener's installed environment is recommended.
For part number 5764-20-20-C2C, a minimum panel thickness of .150" is required.

(mm)

Total Material Thickness	G	Stud Shank Dimensions		Stud Weight (Lb. Each)		
		G DIM	U DIM	Flush 5764-20	Oval 5714-20	Hex 5784-20
0.00 – 2.54	-10	14.35	6.35	--	.00675	.01392
2.57 – 5.08	-20	16.89	8.89	.00751	.00752	.01469
5.11 – 7.62	-30	19.43	11.43	.00828	.00829	.01546
7.65 – 10.16	-40	21.97	13.97	.00906	.00906	.01623
10.19 – 12.70	-50	24.51	16.51	.00983	.00983	.01700
12.73 – 15.24	-60	27.05	19.05	.01060	.01060	.01777
15.27 – 17.78	-70	29.59	21.59	.01137	.01137	.01854
17.81 – 20.32	-80	32.13	24.13	.01214	.01214	.01931

Note: A thread lubricant suitable for the fastener's installed environment is recommended.
For part number 5764-20-20-C2C, a minimum panel thickness of 3.81 mm is required.

UN-5700 Line



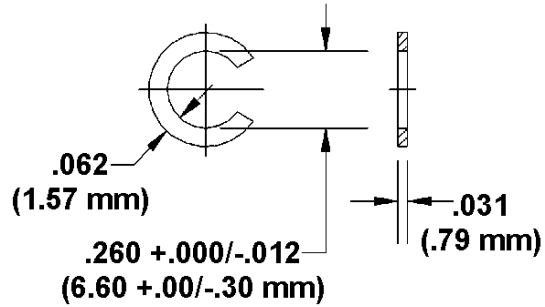
Size 4

Stud Retainers



Retaining Ring

Retaining Ring



Part Number 5723-A514-C3Y

Material: Steel, cadmium plated with yellow chromate, per QQ-P-416, Type II, Class 2
Weight: .00042 lb.

Size 4

Receptacles



5718-A4-ACNC
Rigid Receptacle



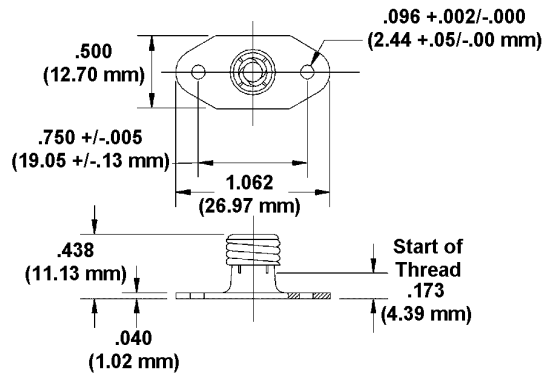
5718-FA4-ACNC
Floating Receptacle
w/Spacers



5718-FP4-ACNC
Press Fit Receptacle

Rigid Receptacle

For use with all size 4 studs



Part Number 5718-A4-ACNC

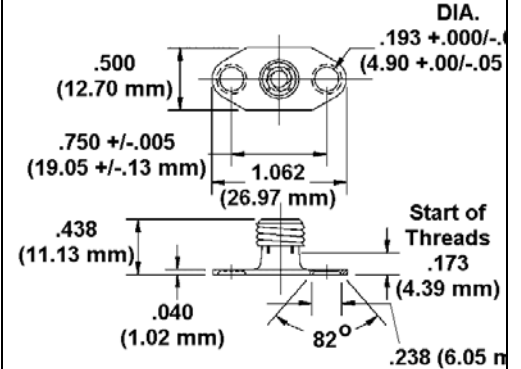
Material: Aluminum alloy, anodized.

Spring: music wire cadmium plated per QQ-P-416, Type II, Class 2 yellow

Weight: .00516 lb.

Floating Receptacle

For use with all size 4 studs



Part Number 5718-FA4-ACNC

Material: Aluminum alloy, anodized.

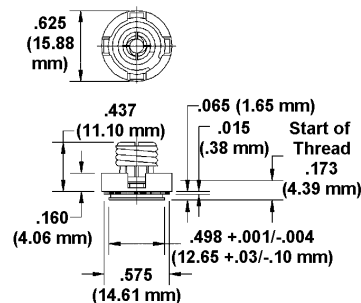
Spring: music wire cadmium plated per QQ-P-416, Type II, Class 2, yellow

Weight: .00593 lb. (including 2 spacers)

Float: .025 all directions

Press Fit

Support Thickness:
.065" (1.65 mm) min.



Part Number: 5718-FP4-ACNC

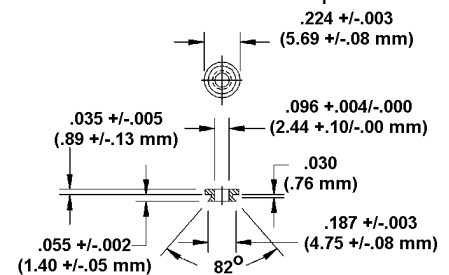
Material: Ring: carbon spring steel, heat treated. Retainer: steel, heat treated. Spring: music wire. Ring, retainer and spring – cadmium plated QQ-P-416, Type II, Class 2, yellow chromate. Base: aluminum alloy, anodized

Weight: .01156 lb.

Float: .015" (.38 mm) all directions

Spacer

For use with
5718-FA4-ACNC receptacle
2 supplied with each
5718-FA4-ACNC receptacle



Part Number: 5718-F4-3-C3Y

Material: Steel, cadmium plated QQ-P-416, Type II, Class 2 yellow chromate

Weight: See Floating Receptacle above

UN-5700 Line



Size 5 Studs



Flush Head
Type 5765-20



Oval Head
Type 5715-20



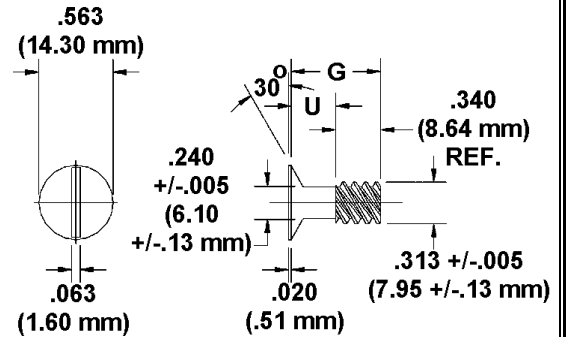
Hex Head
Type 5785-20

These size 5 hex, oval and flush head studs are supplied with 5/16" (7.95 mm) thread major diameter.

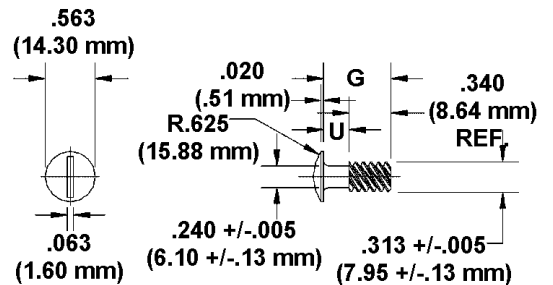
The locking torque is 15 to 32 inch-pounds. 1,500 pound rated tensile and shear.

Stud Material: steel, heat treated, cadmium plated per QQ-P-416, Type 1, Class 3.

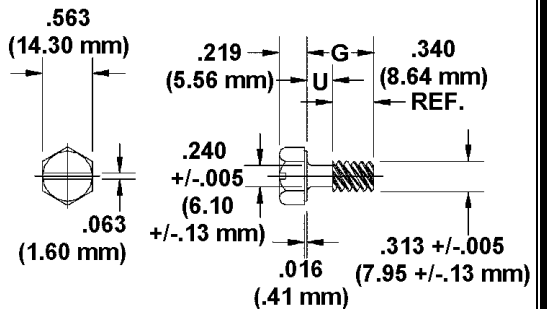
Flush Head, Straight Slot Part Number: 5765-20



Oval Head, Straight Slot Part Number 5715-20

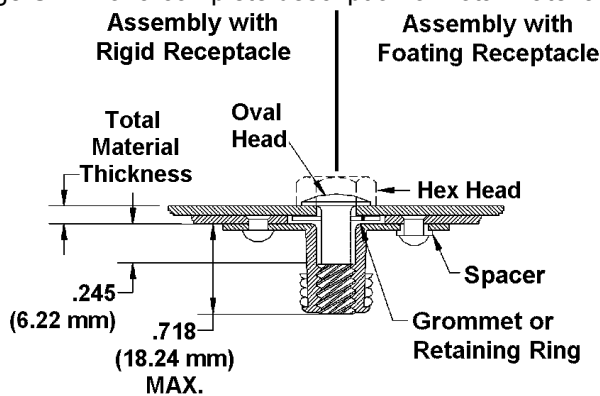


Hex Head Part Number 5785-20



Typical Assembly

Add your panel and support thickness to give you the Total Material Thickness. Then select the stud from the table on the next page. (See page UN-4 for a complete description of Total Material Thickness.)





UN-5700 Line

Size 5 Sizing Tables (inch)

Total Material Thickness	G	Stud Shank Dimensions		Stud Weight (Lb. Each)		
		G DIM	U DIM	Flush 5765-20	Oval 5715-20	Hex 5785-20
.000" to .100"	-10	.700"	.360"	.01311	.01335	.02555
.101" to .200"	-20	.800"	.460"	.01443	.01467	.02687
.201" to .300"	-30	.900"	.560"	.01575	.01599	.02819
.301" to .400"	-40	1.000"	.660"	.01707	.01731	.02951
.401" to .500"	-50	1.100"	.760"	.01839	.01863	.03083
.501" to .600"	-60	1.200"	.860"	.01971	.01995	.03215
.601" to .700"	-70	1.300"	.960"	.02103	.02127	.03479
.701" to .800"	-80	1.400"	1.060"	.02235	.02259	.03611

Note: A thread lubricant suitable for the fastener's installed environment is recommended.

(mm)

Total Material Thickness	G	Stud Shank Dimensions		Stud Weight (Lb. Each)		
		G DIM	U DIM	Flush 5765-20	Oval 5715-20	Hex 5785-20
0.00 – 2.54	-10	17.78	9.14	.01311	.01335	.02555
2.57 – 5.08	-20	20.32	11.68	.01443	.01467	.02687
5.11 – 7.62	-30	22.86	14.22	.01575	.01599	.02819
7.65 – 10.16	-40	25.40	16.76	.01707	.01731	.02951
10.19 – 12.70	-50	27.94	19.30	.01839	.01863	.03083
12.73 – 15.24	-60	30.48	21.84	.01971	.01995	.03215
15.27 – 17.78	-70	33.02	24.38	.02103	.02127	.03479
17.81 – 20.32	-80	35.56	26.92	.02235	.02259	.03611

Note: A thread lubricant suitable for the fastener's installed environment is recommended.

UN-5700 Line



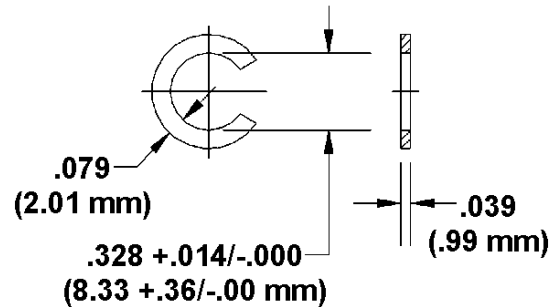
Size 5

Stud Retainers



Retaining Ring

Retaining Ring



Part Number 5723-A516-C3Y

Material: Steel, cadmium plated with yellow chromate, per QQ-P-416, Type II, Class 2
Weight: .00094 lb.

Size 5

Receptacles



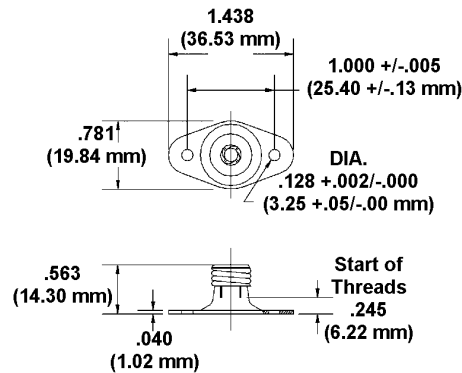
5718-5-ACNC
Rigid Receptacle



5718-F5-ACNC
Floating Receptacle
w/Spacers

Rigid Receptacle

For use with all size 5 studs

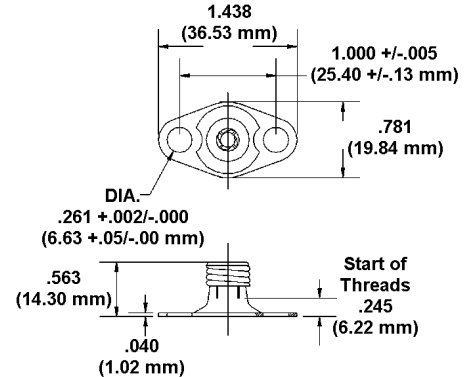


Part Number 5718-5-ACNC

Material: Aluminum alloy, anodized.
Spring: music wire cadmium plated per QQ-P-416, Type II, Class 2 yellow
Weight: .0092 lb.

Floating Receptacle

For use with all size 5 studs

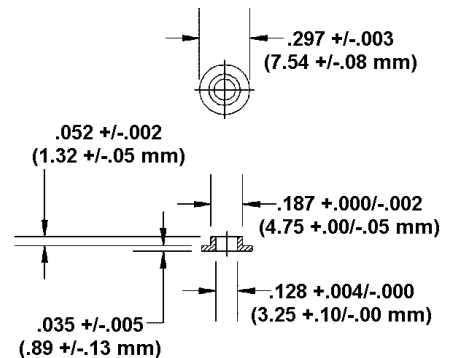


Part Number 5718-F5-ACNC

Material: Aluminum alloy, anodized.
Spring: music wire cadmium plated per QQ-P-416, Type II, Class 2, yellow
Weight: .01000 lb. (including 2 spacers)
Float: .037 all directions

Spacer

For use with 5718-F5-ACNC receptacle
2 supplied with each
5718-F5-ACNC receptacle



Part Number: 5718-F5-3-C3Y

Material: Steel, cadmium plated QQ-P-416, Type II, Class 2 yellow chromate
Weight: See Floating Receptacle above

UN-5700 Line

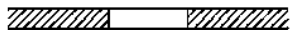


Stud Installation

Retaining Ring

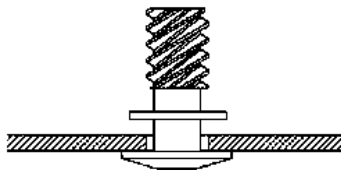
All Head Styles

1. Drill hole in panel

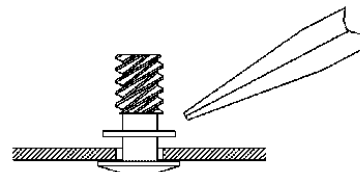


Stud Size	Hole Diameter	
	(inch)	(mm)
3	3/16"	4.78
4	1/4"	6.35
5	5/16"	7.95

2. Insert stud and slip retaining ring over shank of stud.



3. Squeeze ring with pliers.





UN-5700 Line

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UN-5700 Line

Receptacle Installation

Rigid and Floating

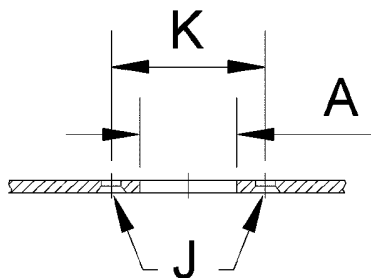
1. Drill holes and countersink rivet holes of support panel

(inch)

Stud Size	A ± 0.010	K ± 0.005	J
3	.344	.625	.096
4	.468	.750	.096
5	.703	1.000	.128

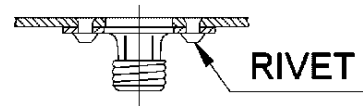
(mm)

Stud Size	A ± 0.25	K ± 0.13	J
3	8.74	15.88	2.44
4	11.89	19.05	2.44
5	17.86	25.40	3.25



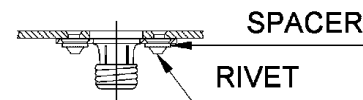
Rigid

2. Rivet receptacle



Floating

2. Insert spacers and rivet receptacle

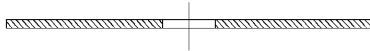


Receptacle Installation

Press Fit

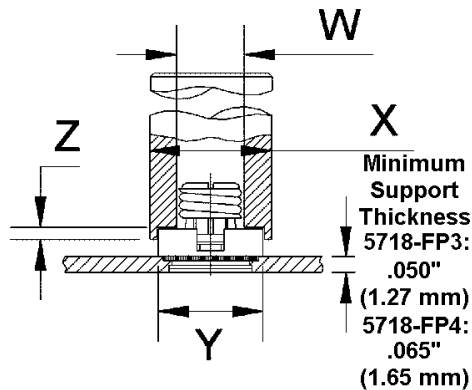
Type GH grommets may be used to retain studs when the support thickness exceeds .070" (1.78 mm) for 5718-FP3 and .094" (2.39 mm) for 5718-FP4 receptacles. For thinner supports, the retaining ring must be used. The retaining ring should be slipped around stud shaft and closed with pliers in undercut section of stud.

1. Drill hole



Size	Hole Diameter			
	(inch)		(mm)	
3	.406	+0.003 -0.001	10.31	+0.08 -0.03
4	.500	+0.003 -0.001	12.70	+0.08 -0.03

2. Make a press in tool using dimensions shown below



3. Press in.

Part Number	Tool Dimensions							
	W		X		Y	+0.005 (0.13 mm) -0.000 (0.00 mm)	Z	
	(inch)	(mm)	(inch)	(mm)			(inch)	(mm)
5718-FP3	.344 x .625 deep	9.58 x 15.88 deep	.625	15.88	.505	12.88	.125	3.18
5718-FP4	.453 x .625 deep	11.51 x 15.88 deep	.750	19.05	.630	16.00	.156	3.96

UN-5700 Line



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