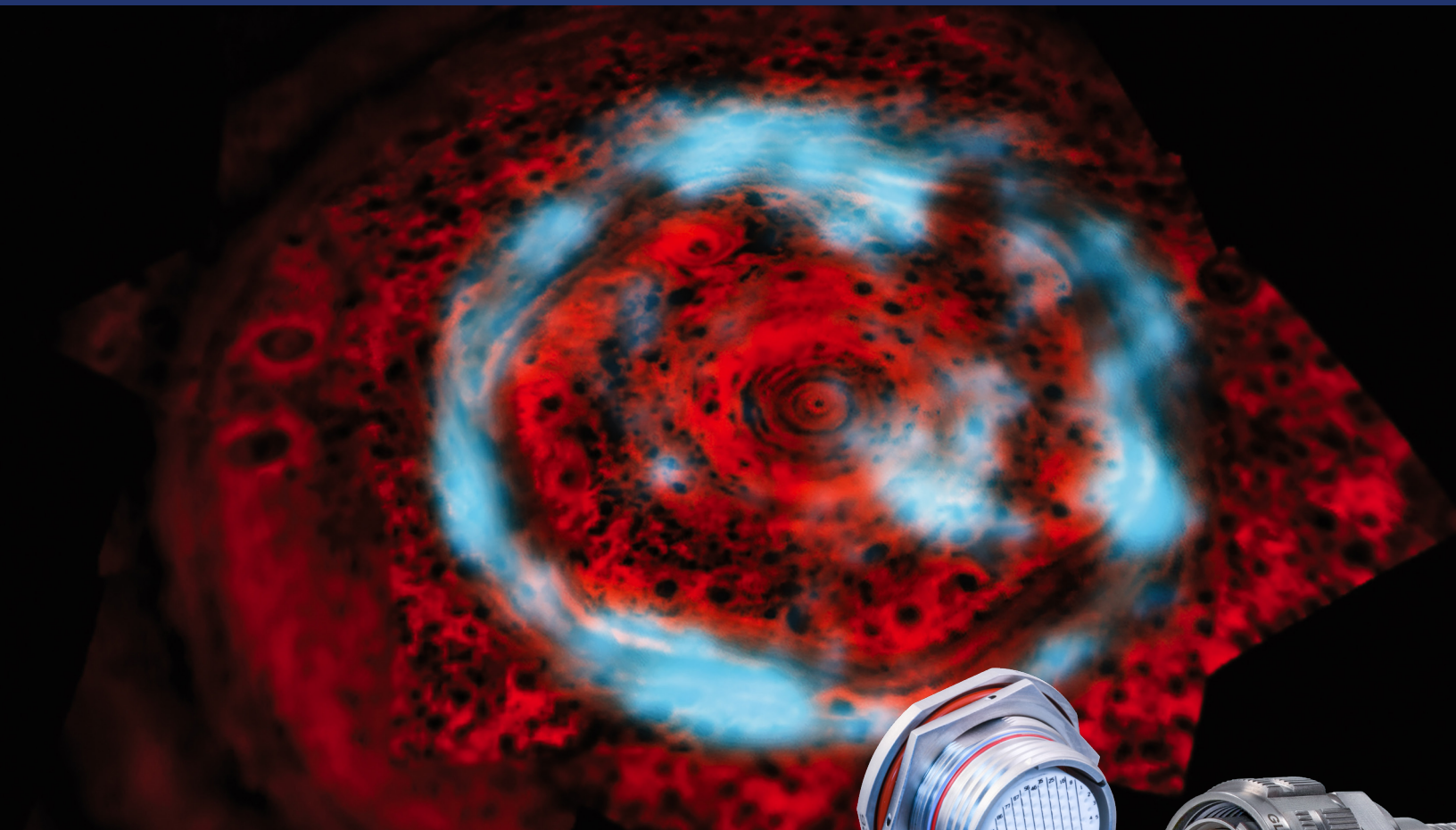


MISSION-CRITICAL
INTERCONNECT
SOLUTIONS



EXTREME TEMPERATURE

ThermaRex™

Cryogenic and High-Temperature Tolerant
Contacts, Connectors, Cables, and Conduit Systems

JANUARY 2025

EXTREME -
TEMPERATURE
INTERCONNECT
ECOSYSTEMS

ThermaRex™

CRYO • HIGH TEMP • ULTRA HIGH-TEMP

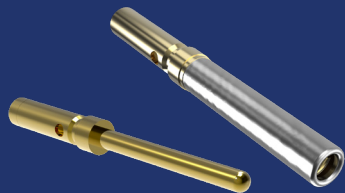
Cryogenic and high-temperature tolerant
connectors, cables, and conduit systems



ThermaRex UHT ultra high-temperature assembly: Series 806 connectors, high-temperature wire, high-temperature metal-core conduit.

Sensor devices in aerospace engine applications are increasingly exposed to higher temperature operating environments. Rugged sensors in FADEC equipment—an extreme high temperature environment—are also exposed to temperature extremes well beyond the capabilities of conventional interconnect devices. Glenair ThermaRex interconnect solutions are designed to survive and excel in high continuous operating temperature application environments up to 600°C.

HIGH-TEMPERATURE TOLERANT CROWN RING CONTACTS: ThermaRex™ HT SERIES



Glenair Signature Crown Ring contact series

provides reduced contact resistance,
superior conductivity, and higher
temperature-tolerance than
conventional AS39029 contacts.

- Superior conductivity performance compared to beryllium copper contacts, across full temperature range
- Up to 60% lower contact resistance than AS39029 contacts (normalized, less wire)
- Contact bodies made from high-temperature and stress-relaxation-resisting non-beryllium copper material
- Stainless steel Crown Ring
 - Provides socket forces without stress relaxation at high-temperatures
 - Moves socket spring function from socket body to ring, allowing use of high-conductivity copper
- Gold over nickel plating
 - Thicker plating than industry standards for reduced contact fretting and higher temperature endurance
 - Gold over nickel is “gold standard” for high-reliability aerospace contacts
- Crimp versions use standard industry tooling, including crimp die/locator and insertion/extraction tools (2AWG Crown Ring contacts require custom tooling)

High-temperature, Ultra high-temperature, and Cryogenic

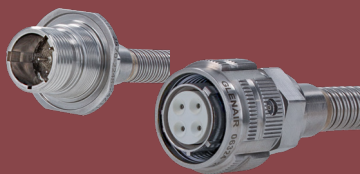
The ThermaRex product family includes connectors, cables, and wire protection conduit systems organized into three temperature ranges: ThermaRex HT (high-temperature), ThermaRex UHT (ultra high-temperature), and ThermaRex Cryo.

300°C ThermaRex HT Connector



- Service rating up to 300°C
- Vibration-resistant threaded coupling
- High-temperature ceramic insulators and silicone seals
- Durable stainless steel construction
- Available in Series 806, SuperNine®, or Series 79 rectangular
- Utilizes Glenair Crown Ring contacts

600°C ThermaRex UHT Connector

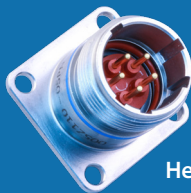


- 300°C to 600°C service range
- Vibration-resistant threaded coupling
- Specialized contacts, laser welds, and metal seals
- Utilizes ultra-high temperature flexible ceramic-insulated cable
- Ideal for nuclear and other extreme temperature applications

-195°C ThermaRex Cryo Environmental and Hermetic Connectors



Environmental



Hermetic

- Environmental-class service rating down to -195°C
- Vibe and shock at D38999 level, immersed in LN2
- Cryogenic temperature-resistant Duraelectric K grommet and interfacial seals
- Cold temperature-resistant thermoplastic dielectric insulator
- Hermetic-class service rating -195°C to +200°C
- Series 806 micro-miniature high-density packaging
- Corrosion-resistant stainless steel shell construction
- Glass-to-metal hermetic seal leak rate $<1 \times 10^{-7}$ cc He / sec @ 1 ATM

Complementary ThermaRex Ecosystem Technologies



High- and low-temperature hookup wire and shielded twisted pair



High-temperature polymer-core wire protection conduit



Flexible stainless steel metal-core jacketed conduit



Three classes of HT and UHT flexible braided shielding

EXTREME -
TEMPERATURE
INTERCONNECT
ECOSYSTEMS

ThermaRex™

CRYO • HIGH TEMP • ULTRA HIGH-TEMP

Three distinct temperature-tolerant interconnect ecosystems for cryogenic, high-temperature, and ultra high-temperature applications

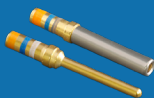
ThermaRex™ CRYO



Series 806 micro miniature circular.
Environmental service-class rating down to -200°C



Ultra-low-temperature
Micro-D hermetic
connector



Glenair 39029 type
crimp contacts



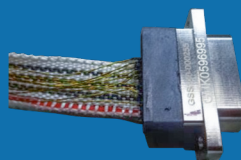
Low-temperature tolerant
MIL-STAR Nickel/Copper-
conductor wire



Hermetic-class
-195°C rating
<1X10⁻⁷ ccHe/sec
hermetic seal



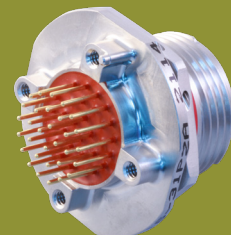
Thermal strap
for heat dissipation



Low thermal-transfer
cryo conductors
and harnesses

- Environmental-class service rating down to -195°C
- Hermetic -195°C
- High performance rigid dielectric insulators
- Duraelectric™ K grommets and seals

ThermaRex™ HT



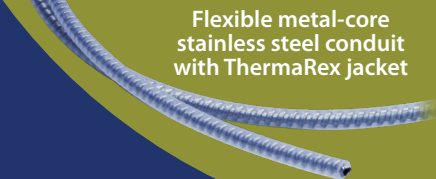
Series 806 Mil-Aero
high-temp micro-
miniature



ArmorLite™ CF microfilament
EMI braided shielding and
high-temperature PTFE glass tubular braid



High performance rigid dielectric
and ThermaRex polymer-core
convoluted tubing

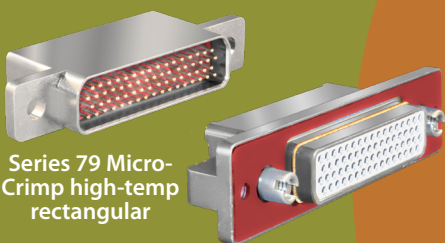


Flexible metal-core
stainless steel conduit
with ThermaRex jacket

- Environmental-class service rating up to +300°C
- Ceramic insulators
- Silicone O-rings and seals
- Stainless steel bodies

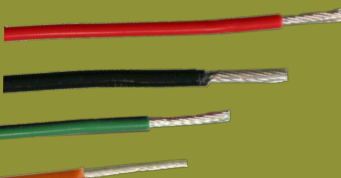


SuperNine®
"better-than-QPL" D38999
high-temperature



Series 79 Micro-Crimp high-temp
rectangular

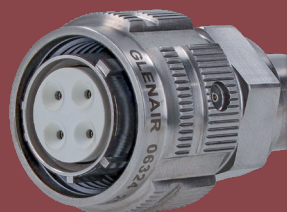
Glenair signature
Crown Ring
high-temperature
contacts



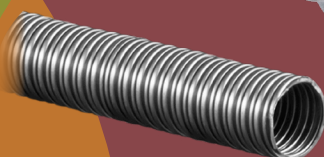
High-temperature tolerant
Nickel/Copper-conductor wire

ThermaRex™ UHT

Ultra-high temperature
SuperNine D38999-type plug and
receptacle connectors



Ultra high-
temperature Inconel
contacts



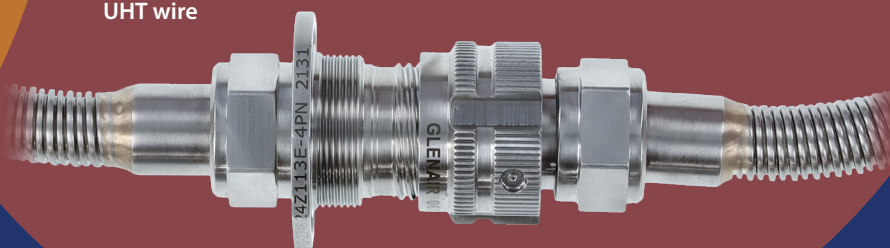
Ultra-high temperature
stainless steel flexible wire
protection conduit



Mica-tape flexible
ceramic-insulated
UHT wire



Nextel 312 ceramic tubular braid
1200°C continuous use rated



Turnkey ultra-high temperature
tolerant assemblies: contacts,
wire, connectors, backshells, and
wire protection conduit.

- Environmental-class service rating up to +600°C
- Ceramic insulator
- Flexible ceramic-insulated cable
- Non-metallic seals

HIGH-TEMPERATURE TOLERANT
ThermaRex HT Interconnect Ecosystem



SuperNine® Better-than-QPL D38999 Series III Packaging
233-273

THERMAREX™ HT

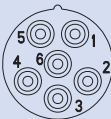
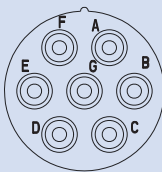
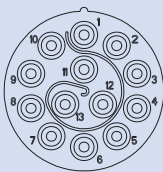
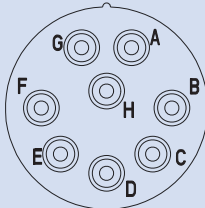
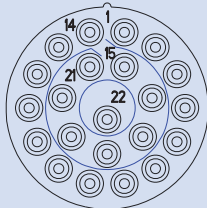
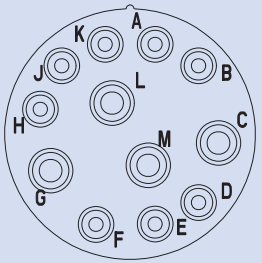
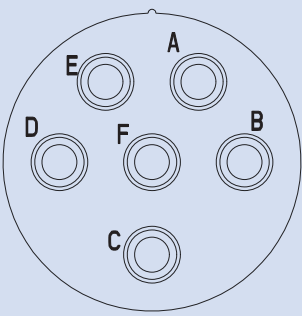
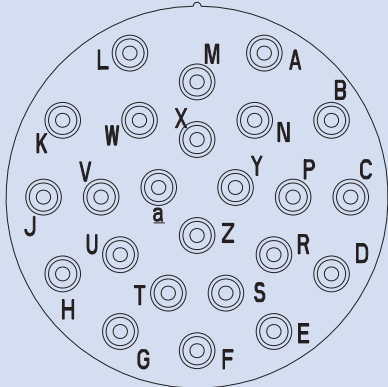


- Service rating up to 300°C
- Vibration-resistant threaded coupling
- High-temperature ceramic insulators and silicone seals
- Durable stainless steel construction

How To Order ThermaRex SuperNine connectors						
Sample Part Number	233-273	-20	Z1	17	-26	P N
Series / Basic Part No.	233-273 High-temperature ThermaRex SuperNine connector					
Connector Style	-20 = Receptacle, square flange-mount -24 = Receptacle, jam nut -26 = Plug					
Material/Finish	Z1 = Passivated CRES					
Shell Size	9, 11, 13, 17, 19, 21, 23, 25					
Insert Arrangement	Per M1560. See insert arrangement tables below					
Contact Style	P = Pin contacts S = Socket contacts A = Pin insert, less contacts B = Socket insert, less contacts					
Alternate Polarization*	A, B, C, D, E, N = Normal (IAW MIL-DTL-38999 Series III)					

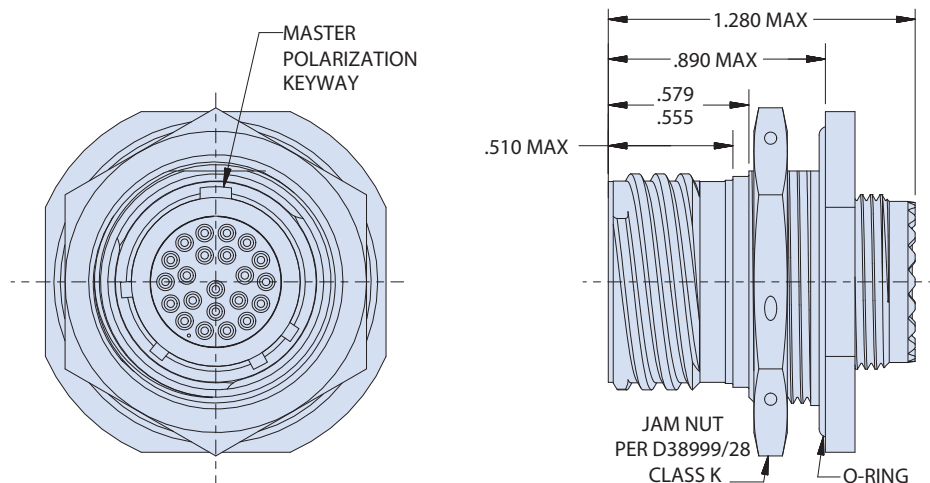
MATERIAL / FINISH NOTES

- Plug and receptacle shells, coupling nut - Passivated CRES
- Insulator - high-grade ceramic dielectric
- Grommet, interfacial, and peripheral seals - high-temp silicone
- Contacts - copper alloy, gold plated, CRES hood and crown ring on socket contacts

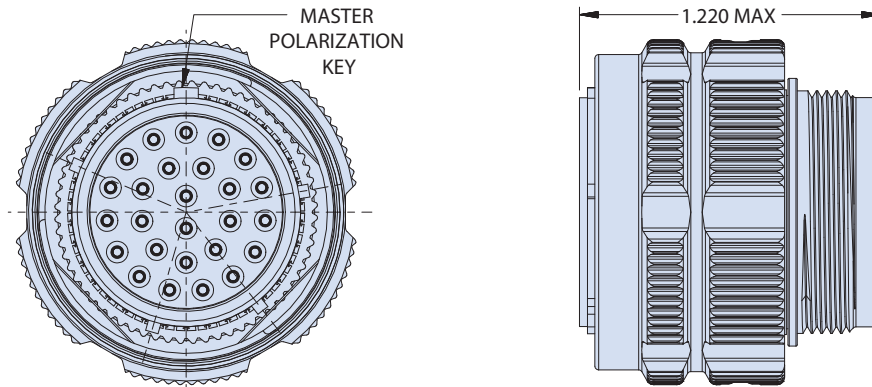
ThermaRex High-Temperature Crown Ring Contact Arrangements (pin mating face shown)				
Suggested high-availability contact arrangements show. Most MIL-STD-1560 arrangements are available, consult factory.				
				
9-35 Contact Size : 22D Qty.: 6 Service Rating: M	11-99 Contact Size : 20 Qty.: 7 Service Rating: I	11-35 Contact Size : 22D Qty.: 13 Service Rating: M	13-8 Contact Size : 20 Qty.: 8 Service Rating: I	13-35 Contact Size : 22D Qty.: 22 Service Rating: M
				
15-97 Contact Size : 20 / Quantity: 8 Contact Size : 16 / Quantity: 4 Service Rating: I	17-6 Contact Size : 12 Qty.: 6 Service Rating: I		21-24 Contact Size : 20 Qty.: 24 Service Rating: I	

SuperNine® Better-than-QPL D38999 Series III Packaging 233-273

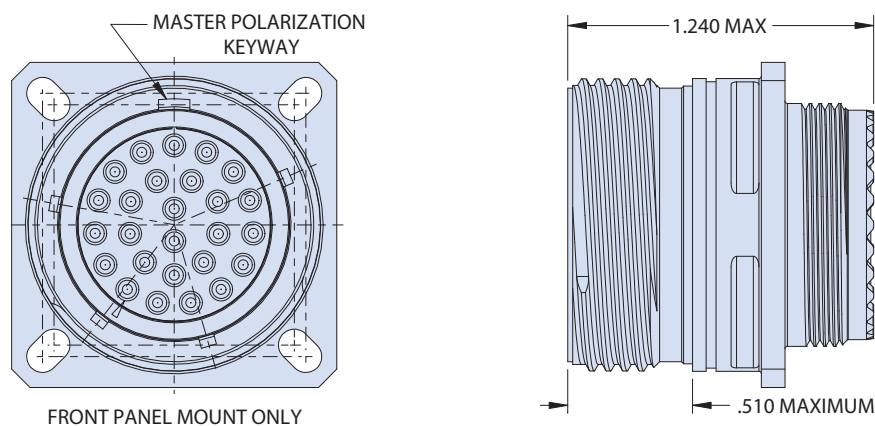
233-273-24 THERMAREX SUPERNINE RECEPTACLE, JAM NUT



233-273-26 THERMAREX SUPERNINE PLUG



233-273-20 THERMAREX SUPERNINE RECEPTACLE, SQUARE FLANGE-MOUNT



HIGH-TEMPERATURE TOLERANT ThermaRex HT Interconnect Ecosystem



Series 806 Micro Miniature Circular Packaging

ThermaRex™ HT

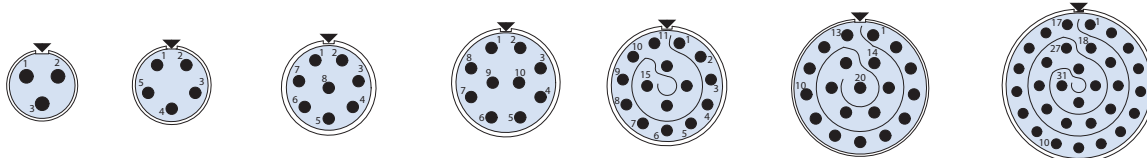


- Operating temperature -65°to +300°C
- Vibration-resistant threaded coupling
- High-temperature ceramic insulators and silicone seals
- Durable stainless steel construction

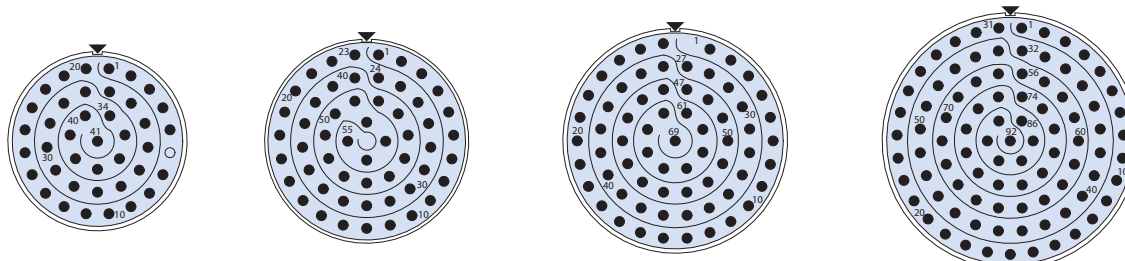
MATERIAL / FINISH NOTES

- Plug and receptacle shells, barrel, coupling nut, jam nut, hex nut - Passivated CRES
- Insulator - high-grade ceramic dielectric
- Grommet, interfacial seals - high-temp silicone
- Contacts - copper alloy, gold plated, CRES hood and crown ring on socket contacts

Series 806 Arrangements with #20 Contacts (1800 Vac, 7.5 A, pin mating face shown)

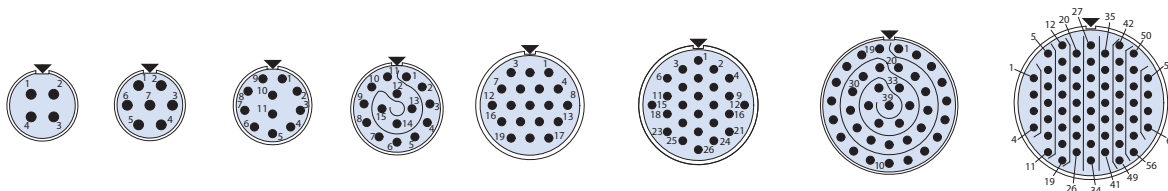


Arrangement No. **8-3** **9-5** **10-8** **11-10** **12-15** **14-20** **16-31**

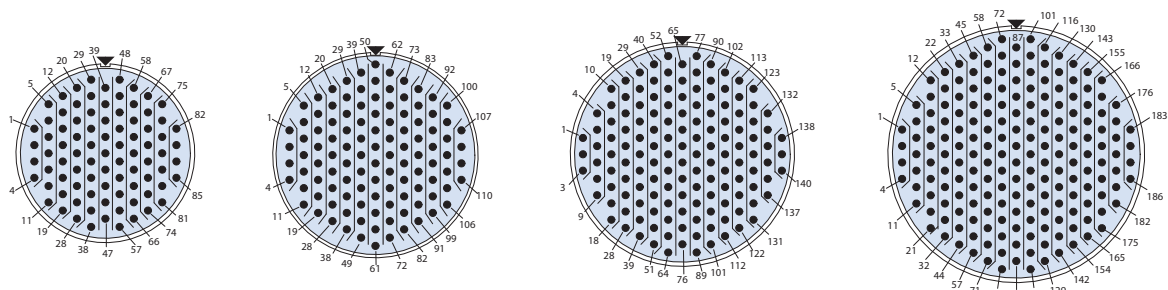


Arrangement No. **18-41** **20-55** **22-69** **24-92**

Series 806 Arrangements with #22HD Contacts (1300 Vac, 5 A, pin mating face shown)



Arrangement No. **8-4** **8-7** **9-11** **10-15** **11-19** **12-26** **14-39** **16-60**



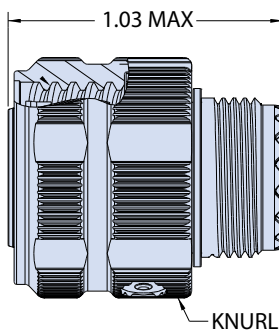
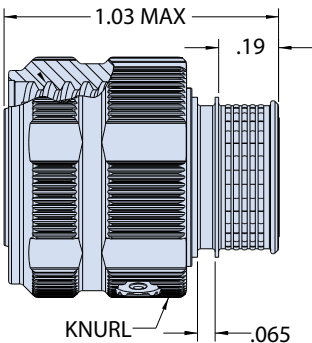
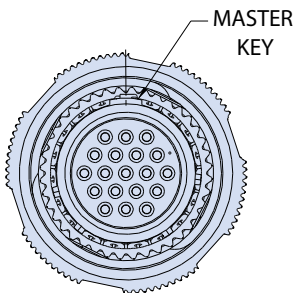
Arrangement No. **18-85** **20-110** **22-140** **24-186**

Series 806 Micro Miniature Circular Packaging
806-042 Plug • 806-041 Jam-Nut Receptacle

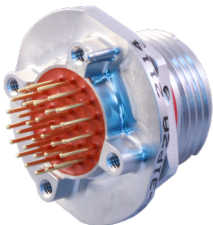
SERIES 806 MIL-AERO PLUG



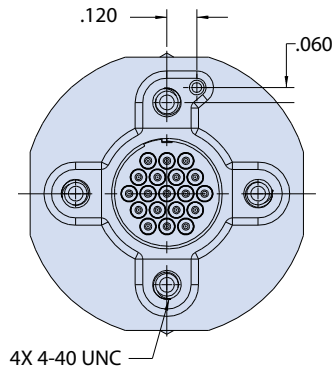
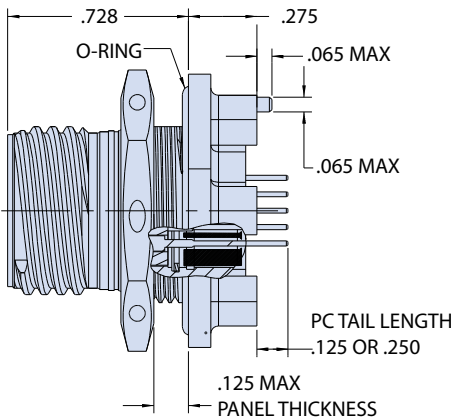
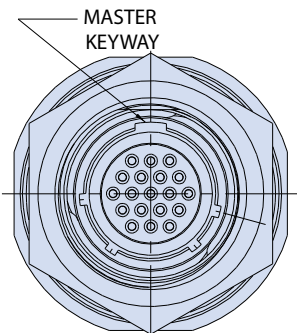
How To Order ThermaRex Series 806 Mil-Aero Plug						
Sample Part Number	806-042	Z1	11-19	S	M	A
Series / Basic Part No.	806-042 High-temperature ThermaRex Series 806 plug					
Material/Finish	Z1 = Passivated CRES					
Shell Size/Insert Arr.	Per 806-015, See tables					
Contact Style	P = Pin A = Pin connector, less contacts S = Socket B = Socket connector, less contacts					
Shell Style	M = Metric accessory thread B = Banding platform					
Polarization Keyway Code	A, B, C, D, E, F					



SERIES 806 MIL-AERO JAM NUT RECEPTACLE WITH PCB STANDOFF



How To Order ThermaRex Series 806 Mil-Aero Jam Nut Receptacle					
Sample Part Number	806-041	Z1	11-19	P	N
Series / Basic Part No.	806-041 High-temperature ThermaRex Series 806 jam nut receptacle with PCB standoff				
Material/Finish	Z1 = Passivated CRES				
Shell Size/Insert Arr.	Per 806-015, See tables				
Contact Style	P = Pin contacts only				
Polarization Keyway Code	A, B, C, D, E, F				



HIGH-TEMPERATURE TOLERANT ThermaRex HT Interconnect Ecosystem



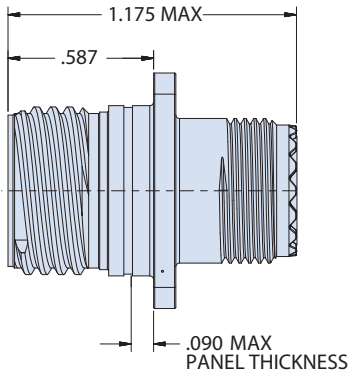
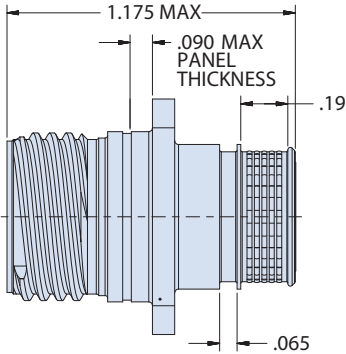
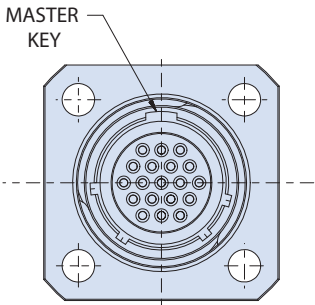
Series 806 Micro Miniature Circular Packaging 806-052 Square-Flange Receptacle

ThermaRex™ HT



SERIES 806 MIL-AERO SQUARE FLANGE RECEPTACLE

How To Order ThermaRex Series 806 Mil-Aero Square Flange Receptacle							
Sample Part Number	806-052	Z1	11-19	S	M	T	A
Series / Basic Part No.	806-052 High-temperature ThermaRex Series 806 square-flange receptacle						
Material/Finish	Z1 = Passivated CRES						
Shell Size/Insert Arr.	Per 806-015, See tables						
Contact Style	P = Pin A = Pin connector, less contacts S = Socket B = Socket connector, less contacts						
Shell Style	M = Metric accessory thread B = Banding platform						
Panel Mounting	T = Thru-hole						
Polarization Keyway Code	A, B, C, D, E, F						



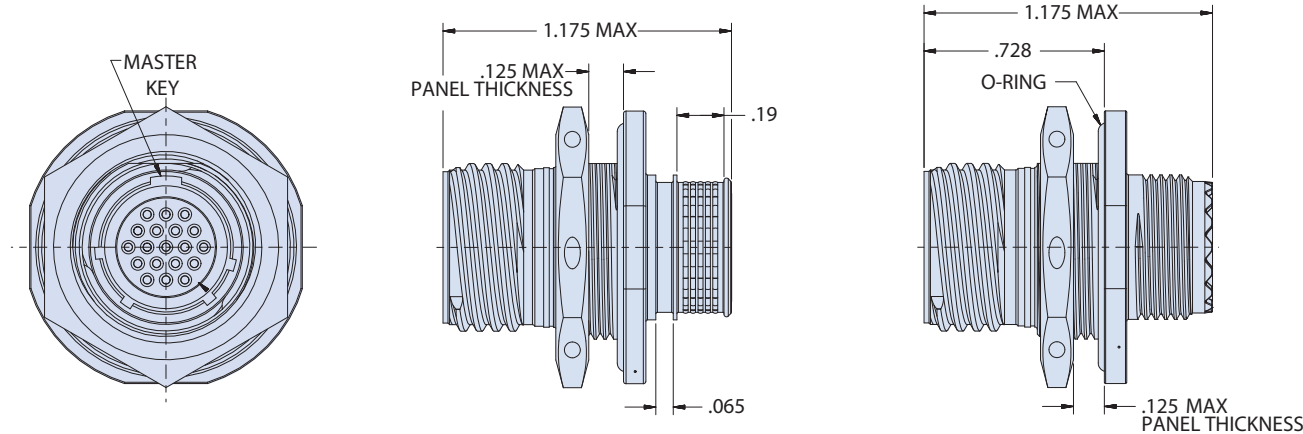
Series 806 Micro Miniature Circular Packaging
806-053 Jam-Nut Receptacle

SERIES 806 MIL-AERO JAM NUT RECEPTACLE



How To Order ThermaRex Series 806 Mil-Aero Jam Nut Receptacle						
Sample Part Number	806-053	Z1	11-19	S	M	A
Series / Basic Part No.	806-053 High-temperature ThermaRex Series 806 jam-nut receptacle					
Material/Finish	Z1 = Passivated CRES					
Shell Size/Insert Arr.	Per 806-015, See tables					
Contact Style	P = Pin A = Pin connector, less contacts S = Socket B = Socket connector, less contacts					
Shell Style	M = Metric accessory thread B = Banding platform					
Polarization Keyway Code	A, B, C, D, E, F					

ThermaRexTM HT

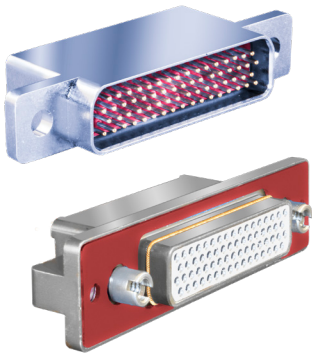


HIGH-TEMPERATURE TOLERANT ThermaRex HT Interconnect Ecosystem



Series 79 High-Performance Rectangular 797-756 Plug • 797-757 Receptacle

THERMAREX™ HT

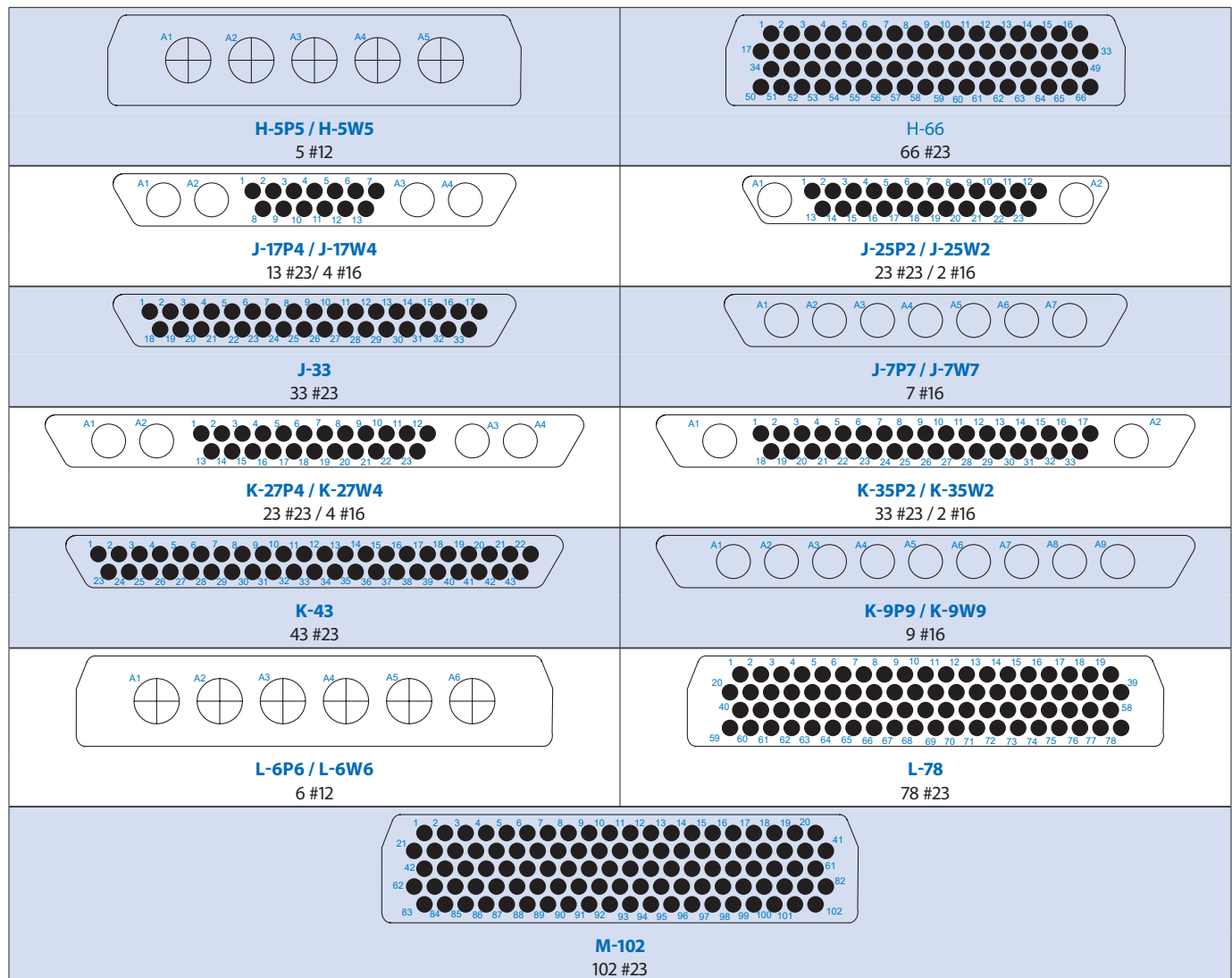


How To Order ThermaRex Series 79 connectors					
Sample Part Number	797	-756	S	H-29P7	E
Series / Basic Part No.	797 High-temperature ThermaRex Series 79 crimp-contact rectangular				
Connector Type	-756 = Plug -757 = Receptacle				
Contact Type	S = Socket (for -756 Plug connectors) P = Pin (for -757 Receptacle connectors)				
Insert Arrangement	Per 799-009. See insert arrangement tables below				
EMI Spring Option	E = With EMI spring N = No EMI spring (Only available on plug connectors)				

- Service rating up to 300°C
- Vibration-resistant threaded coupling
- High-temperature ceramic insulators and silicone seals
- Durable stainless steel construction
- No EMI groove and spring option for connector with insert arrangements G-33 or G-13P3.

ThermaRex High-Temperature Crown Ring Contact Arrangements (pin mating face shown)				
A-5 5 #23	B-2P2 / B-2W2 2 #16	B-9 9 #23	C-13 13 #23	D-15 15 #23
D-3P3 / D-3W3 3 #16	D-7P2 / D-7W2 5 #23 / 2 #16	E-11P2 / E-11W2 9 #23 / 2 #16	E-19 19 #23	
E-7P3 / 4 #23 3 #16	F-15P2 / F-15W2 13 #23 / 2 #16	F-23 23 #23		
F-5P5 / F-5W5 5 #16	G-33 33 #23			
H-10P4 / H-10W4 6 #23 / 4 #12	H-29P7 22 #23 / 7 #16			
H-36P2 / H-36W2 34 #23 / 2 #12	H-54P2 / H-54W2 52 #23 / 2 #16			

Series 79 High-Performance Rectangular 797-756 Plug • 797-757 Receptacle



MATERIAL / FINISH NOTES

- Housing, Float Mount Hardware, Guide Socket - Stainless Steel / Passivated
- Pin and Socket Contact - Copper Alloy / Gold Plated
- Socket Hood - Stainless Steel / Passivated
- Insulators - High Grade Ceramic / N/A
- Grommet and Interfacial Seal - High Temperature Silicone / N/A
- Retainer Clip Stainless Steel / N/A
- Emi Spring - Stainless Steel / Gold Plated

ELECTRICAL PERFORMANCE

- Contacts: Size 23 = 5 Amps Max. / Size 16 = 13 Amps Max. / Size 12 = 23 Amps Max.
- DWV - 500 Vac, with 5 Milliampers Max. leakage
- Insulation Resistance Resistance - 5,000 Megohms Max.
- Operating Temperature: -65°C to +300°C

BLIND MATE MISALIGNMENT ALLOWANCE

- Shell Sizes A, B, C, D, E, F, G, J, K:
±.040 (1.02) Allowable misalignment from centerline
- Shell Sizes H, L:
±.040 (1.02) Allowable misalignment from centerline
- Shell Size M:
±.050 (1.27) allowable misalignment from centerline

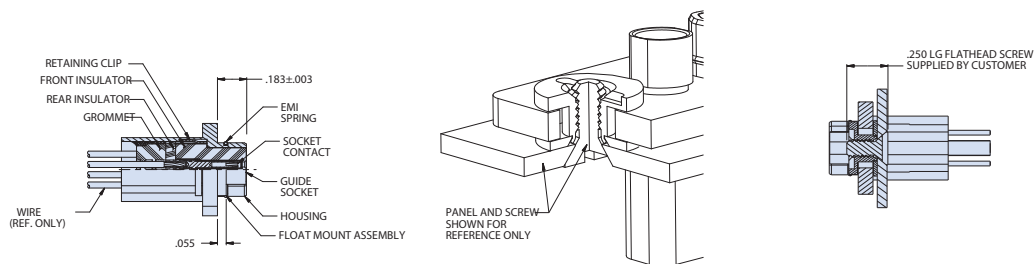
HIGH-TEMPERATURE TOLERANT ThermaRex HT Interconnect Ecosystem



Series 79 High-Performance Rectangular 797-756

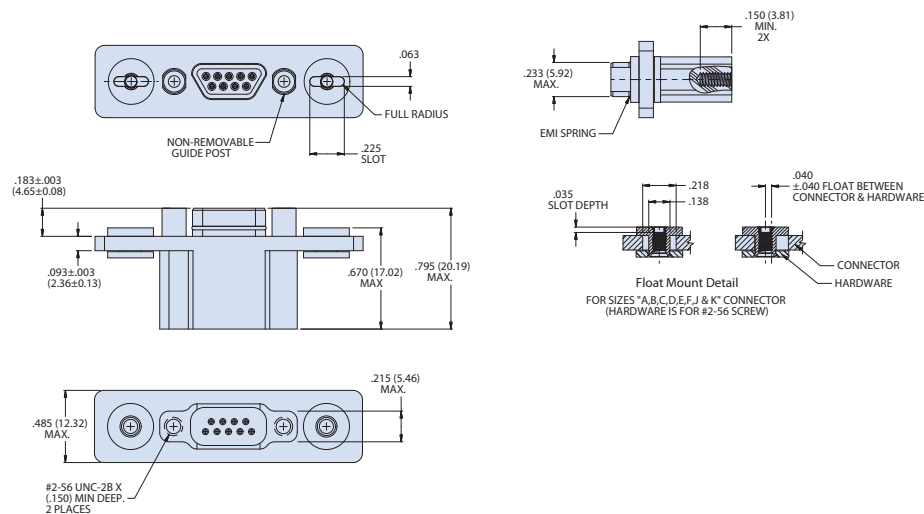
ThermaRex™ HT

CROSS-SECTIONAL VIEW AND HARDWARE

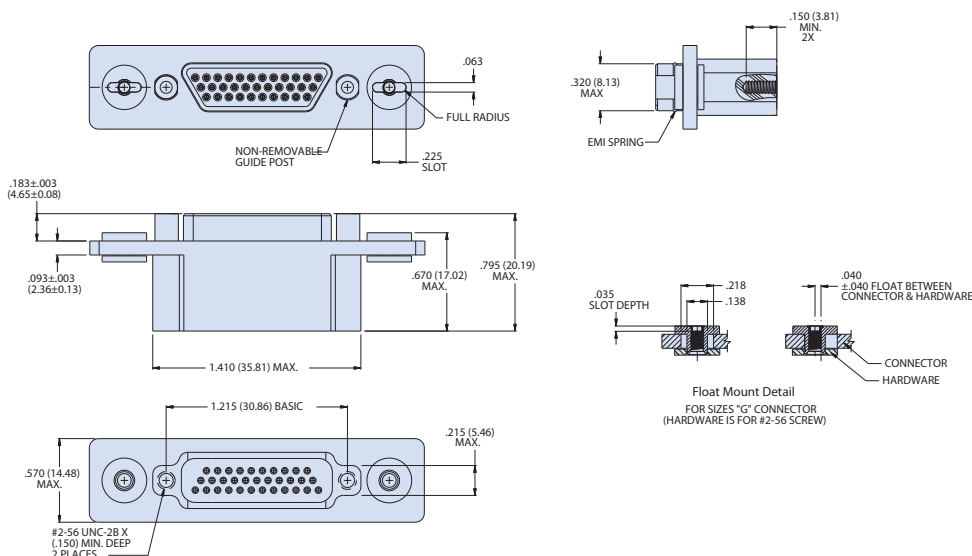


CONNECTOR SUPPLIED WITH NON-REMOVABLE GUIDE POST FOR BLIND MATE APPLICATION.
FLOAT MOUNT BUSHING HAS SHELL SIZES "M", "L" & "H" WITH #4-40 UNC-2B THREAD. ALL OTHER SIZES HAVE #2-56 UNC-2B THREAD.

SHELL SIZES A, B, C, D, E, F, J, K

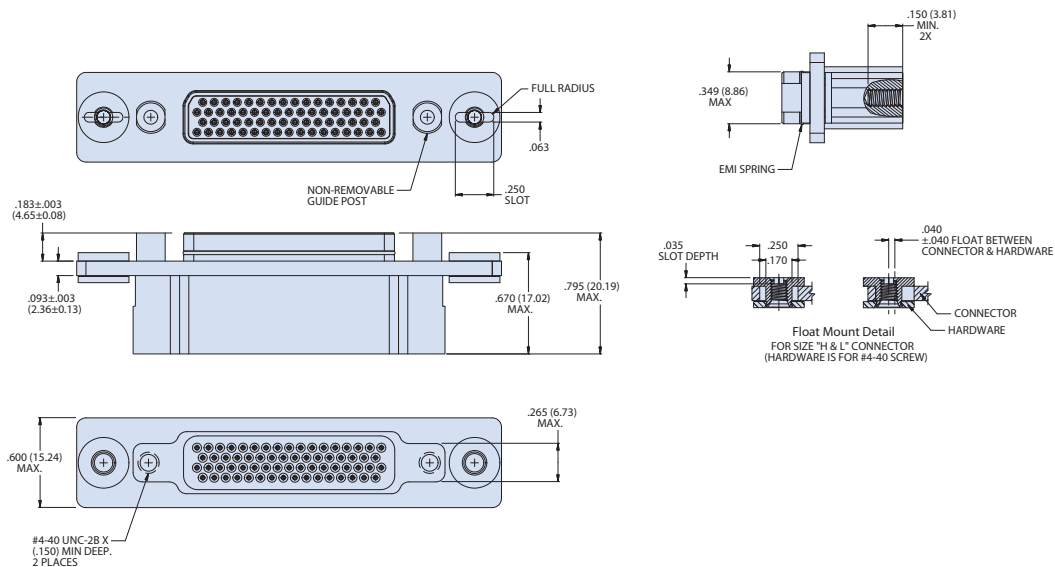


SHELL SIZE G

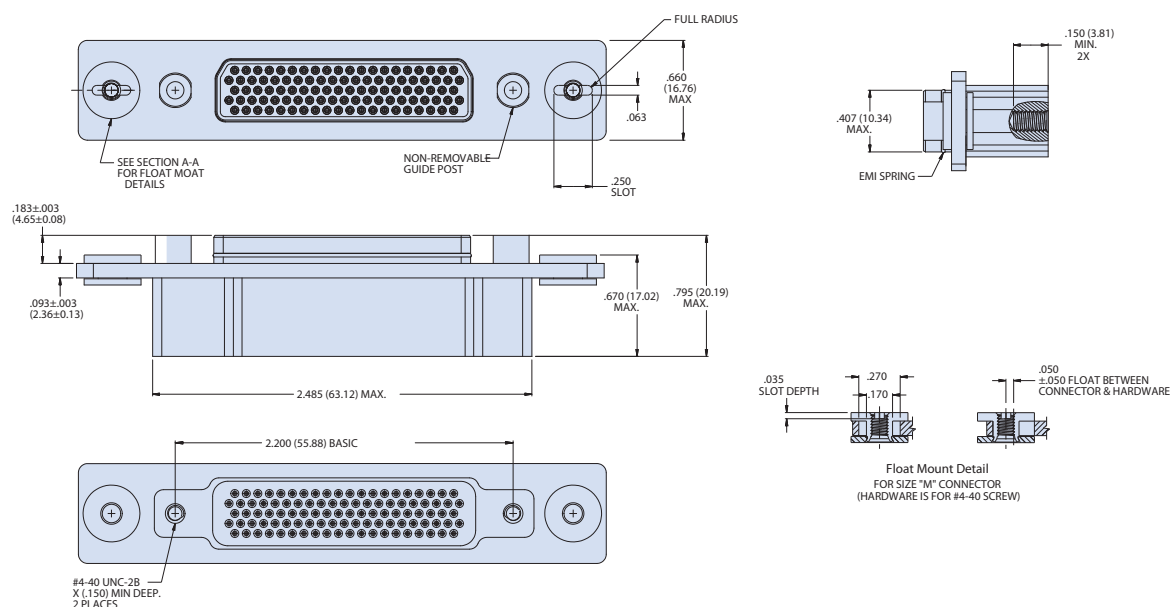


Series 79 High-Performance Rectangular 797-756

SHELL SIZES H AND L



SHELL SIZE M



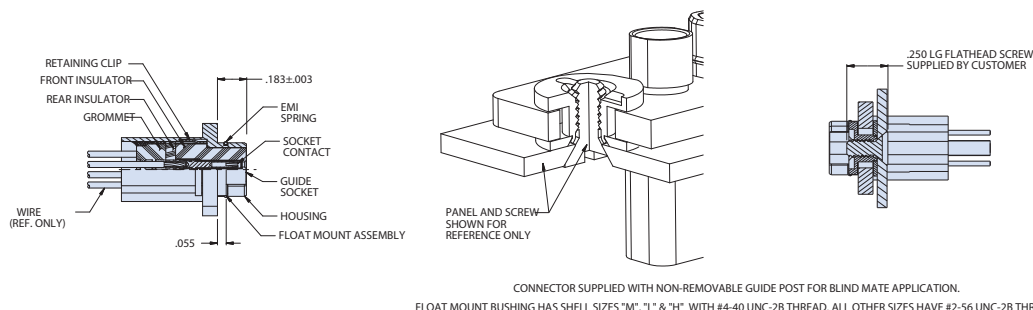
HIGH-TEMPERATURE TOLERANT ThermaRex HT Interconnect Ecosystem



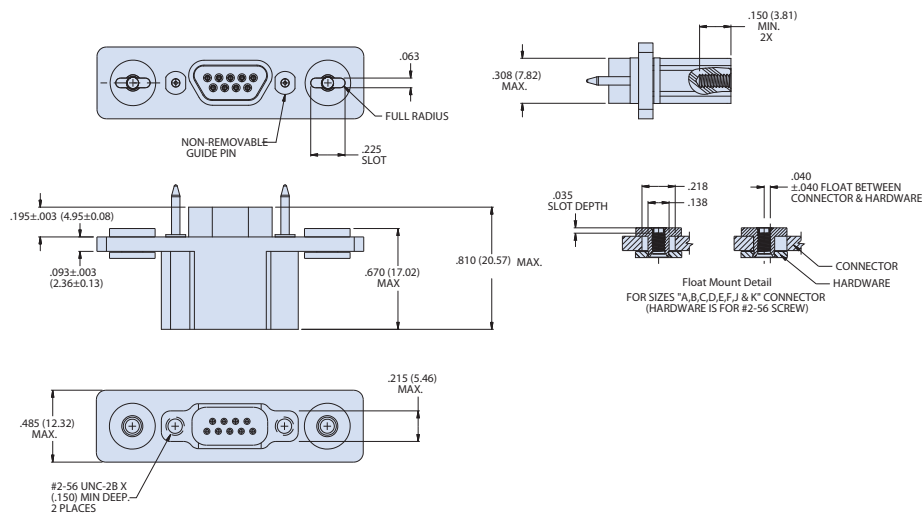
Series 79 High-Performance Rectangular 797-757

ThermaRex™ HT

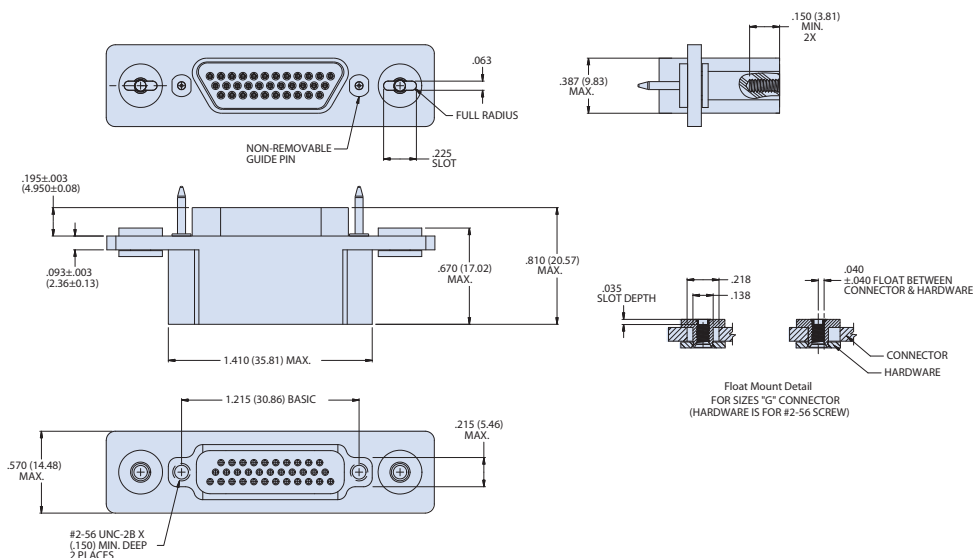
CROSS-SECTIONAL VIEW AND HARDWARE



SHELL SIZES A, B, C, D, E, F, J, K



SHELL SIZE G



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HIGH-TEMPERATURE TOLERANT ThermaRex HT Interconnect Ecosystem



ArmorLite CF Lightweight High-Temperature Braided Shielding 103-126

THERMAREX™ HT



P/N 103-126

How To Order ArmorLite CF		
Sample Part Number	103-126	-024
Series / Basic Part No.	103-026 ArmorLite CF lightweight braided shielding	
Dash No.	See Table I	

- Stainless steel over copper microfilament EMI shield
- High temperature -80°C to 300°C
- Tested to 400°C for 1000 hours with minimal change in resistance
- Corrosion / harsh environment resistant
- 1000 hour salt spray testing completed
- 70% reduced weight vs. standard braid
- Superb electrical resistance and shielding performance

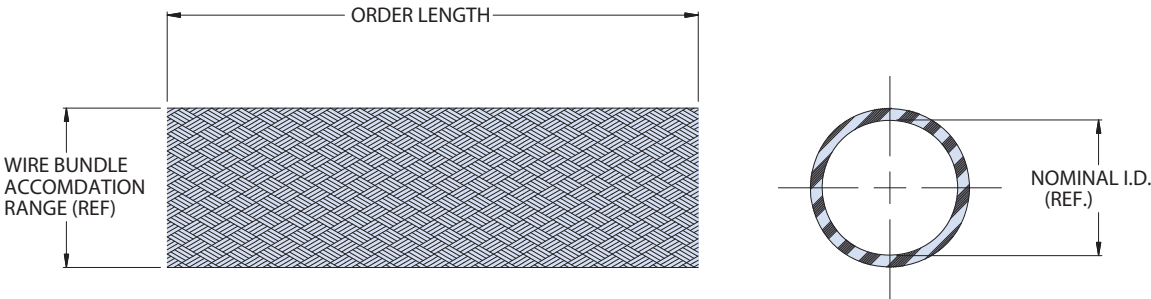


Table I - Dash No.								
Dash No.	Nominal I.D. (ref.)		Ref. Wire Bundle Range (nominal)		Weight (approx.)		Resistance (approx.)	
	In.	mm	In.	mm	grams/ft	grams/m	mΩ/ft.	mΩ/m
001	.031	.8	.016	.4	-	-	-	-
			.047	1.2				
002	.062	1.6	.040	1.0	-	-	-	-
			.075	1.9				
004	.125	3.2	.093	2.4	1.4	4.6	12.0	39.5
			.140	3.5				
008	.250	6.4	.125	3.2	2.8	9.2	7.8	25.5
			.312	7.9				
012	.375	9.5	.250	6.4	-	-	-	-
			.406	10.3				
016	.500	12.7	.375	9.5	5.5	18.0	5.3	17.4
			.560	14.2				
020	.625	15.9	.375	9.5	-	-	-	-
			.700	17.8				
024	.750	19.1	.500	12.7	7.6	25.0	3.6	11.8
			.800	20.3				
032	1.000	25.4	.780	19.8	-	-	-	-
			1.100	27.9				
040	1.250	31.8	.938	23.8	-	-	-	-
			1.312	33.3				
048	1.500	38.1	1.187	30.1	-	-	-	-
			1.590	40.4				
064	2.000	50.8	1.312	33.3	-	-	-	-
			2.090	53.1				

ArmorLite CF High-Temperature Braided Shielding 103-126



ArmorLite CF was laboratory-tested up to 400°C for 1000 hours, with minimal change in resistance. The complete Test Report document GT-20-766, *ArmorLite CF Braid (103-126-016) Thermal Shock and Endurance* is available on glenair.com

THERMAREX™ HT

ArmorLite CF Braid (103-126-016) Pull Test		
Test Requirement	Sample	Pull Test (lbf)
IAW 6059 Test Method 404. Samples will be installed onto tensile tester and put under tension at a rate of 25mm/min.	001	308
	002	246
	003	400
	Avg.	318.0

ArmorLite CF Braid (103-126-016) Thermal Shock Test -150°C to 300°C; 10 cycles, 30 minute durations				
Test Requirement	Sample	Pre-Test Resistance (mΩ/ft)	Post-Test Resistance (mΩ/ft)	Post-Test Pull (lbf)
IAW EN 6059 Test Method 308. Assemblies will undergo thermal cycling from -150°C to 300°C for 30 minute durations until 10 cycles have been completed at each temperature.	004	4.565	4.562	322
	005	4.523	4.512	313
	006	4.545	4.655	317
	Avg.	4.544	4.576	317.3

ArmorLite CF Braid (103-126-016) Thermal Endurance 300°C for 1000 hours				
Test Requirement	Sample	Pre-Test Resistance (mΩ/ft)	Post-Test Resistance (mΩ/ft)	Post-Test Pull (lbf)
IAW EN 6059 Test Method 302. Samples min. length of 600mm. Samples undergo thermal endurance for 1000 hours at 300°C. Temperature tolerances will be ±5°C of the maximum temperature as stated in EN 6059-302.	007	4.646	4.226	254
	008	4.543	4.544	274
	009	4.554	4.899	259
	Avg.	4.581	4.556	262.3

ArmorLite CF Braid (103-126-016) Thermal Endurance 400°C for 1000 hours				
Test Requirement	Sample	Pre-Test Resistance (mΩ/ft)	Post-Test Resistance (mΩ/ft)	Post-Test Pull (lbf)
IAW EN 6059 Test Method 302. Samples min. length of 600mm. Samples undergo thermal endurance for 1000 hours at 400°C. Temperature tolerances will be ±5°C of the maximum temperature as stated in EN 6059-302.	010	4.638	4.313	218
	011	4.606	4.653	175
	012	4.665	4.980	232
	Avg.	4.636	4.649	208.3

Resistance Testing IAW EN 3475 Test Method 301. Samples will be placed in chamber CE034 @ 20°C and will be attached to Micro-Ohmmeter with voltage probes spaced at a distance of 12" ±0.12". Samples will be tested at a current of 20 millivolts.

Complete Test Report GT-20-766, *ArmorLite CF Braid (103-126-016) Thermal Shock and Endurance* available on glenair.com

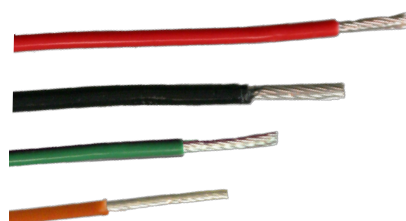
HIGH-TEMPERATURE TOLERANT ThermaRex HT Interconnect Ecosystem



Flexible Wire, Nickel/Copper conductor
961-047

ThermaRex™ HT

961-047, -65 TO 300°C, STRANDED COPPER WIRE



How To Order				
Sample Part Number	961-047	-N	-A	2
Series / Basic Part No.	961-047 = 300°C ThermaRex Wire			
Material	N = Nickel/Copper (-65°C to 300°C)			
Wire Size	See Table I			
Jacket Color	See Table II			

NOTES

- Bend Radius is 3X the O.D.
- Voltage rating is 1000 volts AC
- Insulation material is 300°C high temperature thermoplastic

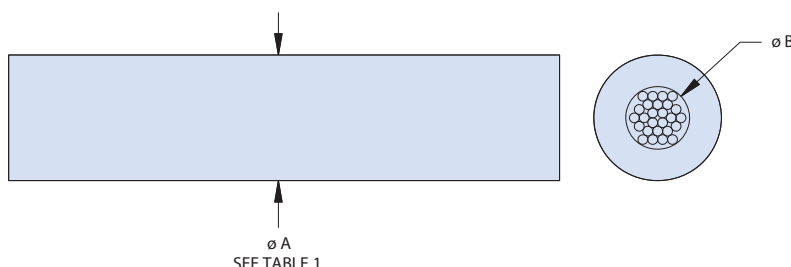


Table 1

Awg Code	Awg	Strand/Count/Awg	Cir Mil (Nom)	Weight Lbs/1000' (Nom)	Ø A	Ø B	Nickel Copper DC Res @ 20°C ohms/1000ft	Nickel Copper Ampacity (Amps) 40°C Ambient (See Note 2)	Jacket Wall Thickness (In)
A	24	19/36	475	3.45	0.044 (1.12)	0.024 (0.61)	38.4	TBD	0.010 (0.25)
B	22	19/34	754	4.58	0.050 (1.27)	0.030 (0.76)	24.1	TBD	0.010 (0.25)
C	20	19/32	1216	6.43	0.068 (1.73)	0.038 (0.97)	14.8	16	0.015 (0.38)
D	16	37/31	2931	13.1	0.090 (2.29)	0.060 (1.52)	6.33	40	0.015 (0.38)
E	14	7x7/30	4900	21.1	0.121 (3.07)	0.091 (2.31)	3.87	59	0.015 (0.38)
F	12	7x7/29	6257	25.9	0.132 (3.35)	0.102 (2.59)	3.03	78	0.015 (0.38)
G	10	7x19/31	10535	41.5	0.157 (3.99)	0.127 (3.23)	1.81	107	0.015 (0.38)
H	8	7x19/29	16983	63.9	0.191 (4.85)	0.161 (4.09)	1.12	142	0.015 (0.38)
J	6	7x19/27	27200	TBD	0.233 (5.92)	0.203 (5.16)	0.68	TBD	0.015 (0.38)

Table II: Jacket Color Option

Color Code	Color
0	Black
1	Brown
2	Red
3	Orange
4	Yellow
5	Kelly Green
6	Blue
7	Violet
8	Gray
9	White

Correction Factors

For ambient temperatures other than 40°C (104°F), multiply the allowable ampacities by the appropriate factor shown below.			
Ambient Temp. (°C)	Correction Factors	Ambient Temp. (°C)	Correction Factors
41-50	0.98	161-170	0.71
51-60	0.96	171-180	0.69
61-70	0.94	181-190	0.66
71-80	0.92	191-200	0.63
81-90	0.90	201-210	0.60
91-100	0.88	211-220	0.56
101-110	0.86	221-230	0.53
111-120	0.84	231-240	0.49
121-130	0.81	241-250	0.45
131-140	0.79	251-260	0.40
141-150	0.77	261-270	0.35
151-160	0.74	271-280	0.29

HIGH-TEMPERATURE TOLERANT ThermaRex HT Interconnect Ecosystem

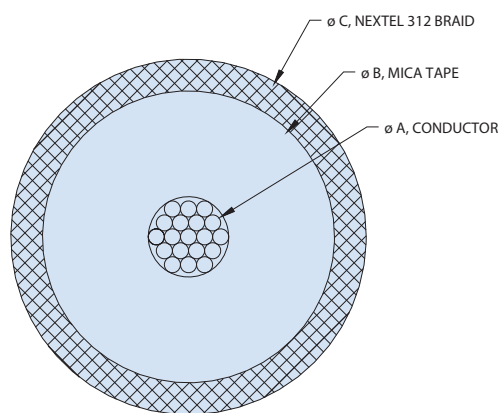
ThermaRex™
CRYO • HIGH TEMP • ULTRA HIGH-TEMP

Flexible Wire, Nickel/Copper, Mica Tape, Ceramic Braid
961-087

961-087, -65 TO 450°C, CERAMIC-INSULATED, STRANDED COPPER WIRE



How To Order			
Sample Part Number	961-087	-N	-20
Series / Basic Part No.	961-087 Mica Tape, Ceramic Braid		
Conductor Material	N = Nickel/Copper (-65 to 450 °C)		
Wire Size	See table		



NOTES

- Braid material shall be Nextel 312, 95% coverage.
- Voltage rating is 1000 Volts DC.

Table I					
AWG	Strand/Count/ AWG	Weight LBS/1000' (NOM)	ø A	ø B	ø C
24	19/36	TBD	0.024 (0.61)	0.104 (2.64)	0.134 (3.40)
22	19/34	TBD	0.030 (0.76)	0.110 (2.79)	0.140 (3.56)
20	19/32	TBD	0.038 (0.97)	0.118 (3.00)	0.148 (3.76)
16	37/31	TBD	0.060 (1.52)	0.140 (3.56)	0.170 (4.32)
14	7x7/30	TBD	0.091 (2.31)	0.171 (4.34)	0.201 (5.11)
12	7x7/29	TBD	0.102 (2.59)	0.182 (4.62)	0.212 (5.38)
10	7x19/31	TBD	0.127 (3.23)	0.207 (5.26)	0.237 (6.02)
8	7x19/29	TBD	0.161 (4.09)	0.241 (6.12)	0.271 (6.88)
6	7x19/27	TBD	0.203 (5.16)	0.283 (7.19)	0.313 (7.95)

HIGH-TEMPERATURE TOLERANT ThermaRex HT Interconnect Ecosystem



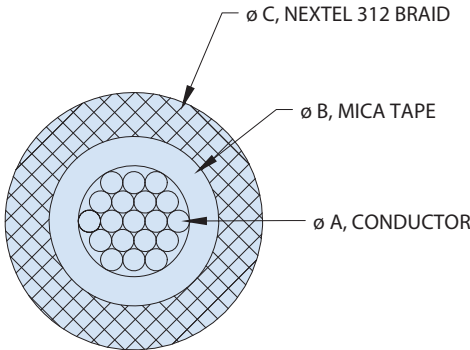
Flexible Wire, Lightweight, Reduced Diameter
961-112

ThermaRex™ HT



961-112, -65 TO 450°C, CERAMIC-INSULATED, STRANDED COPPER WIRE

How To Order			
Sample Part Number	961-112	-N	-20
Series / Basic Part No.	961-112 Lightweight, Reduced Diameter Wire		
Conductor Material	N = Nickel/Copper (-65 to 450 °C)		
Wire Size	See table		



NOTES

- Braid material shall be Nextel 312, 95% coverage.
- Voltage rating is 1000 Volts DC.

Table I					
AWG	Strand/Count/ AWG	Weight LBS/1000' (NOM)	ø A	ø B	ø C
24	19/36	TBD	0.024 (0.61)	0.044 (1.12)	0.074 (1.88)
22	19/34	TBD	0.030 (0.76)	0.050 (1.27)	0.080 (2.03)
20	19/32	TBD	0.038 (0.97)	0.058 (1.47)	0.088 (2.24)
16	37/31	TBD	0.060 (1.52)	0.080 (2.03)	0.110 (2.79)
14	7x7/30	TBD	0.091 (2.31)	0.111 (2.82)	0.141 (3.58)
12	7x7/29	TBD	0.102 (2.59)	0.122 (3.10)	0.152 (3.86)
10	7x19/31	TBD	0.127 (3.23)	0.147 (3.73)	0.177 (4.50)
8	7x19/29	TBD	0.161 (4.09)	0.181 (4.60)	0.211 (5.36)
6	7x19/27	TBD	0.203 (5.16)	0.223 (5.66)	0.253 (6.43)

Helical Polymer-Core Convoluted Tubing 120-100

120-100, HELICAL POLYMER-CORE CONVOLUTED TUBING



How To Order		-1	-1	-16	B	E	L
Sample Part Number	120-100						
Series / Basic Part No.	120-100 Helical Polymer-Core Convoluted Tubing						
Class	1 = Standard Wall, 2 = Thin Wall						
Convolution	1 = STD Convolution, 2 = Close Convolution						
Tubing Size	See Table I						
Color	B = Black, C = Clear, O = Orange, BL = Blue, Y = Yellow						
Material	E, F, P, T, K, R, See Table II						
Lanyard	L = Lanyard (Omit for none)						

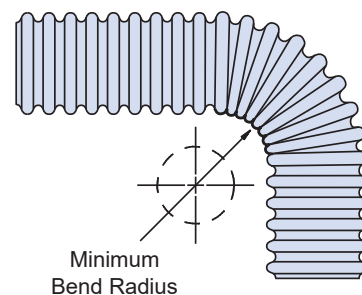
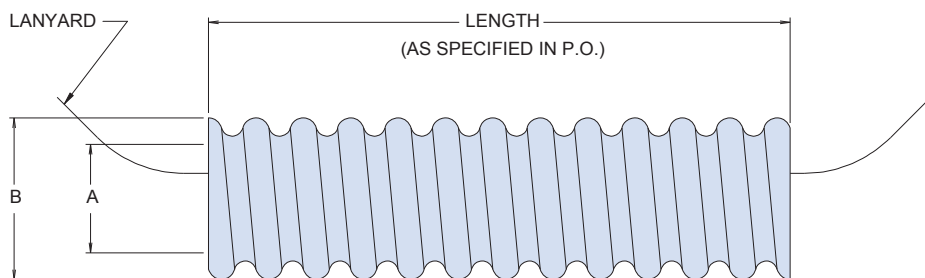


Table I: Tubing Size Order Number and Dimensions

Tubing Size	Fractional Size Ref	A Inside Dia Min	B Dia Max	Min Bend Radius
06	3/16	.181 (4.6)	.320 (8.1)	.50 (12.7)
09	9/32	.273 (6.9)	.414 (10.5)	.75 (19.1)
10	5/16	.306 (7.8)	.450 (11.4)	.75 (19.1)
12	3/8	.359 (9.1)	.510 (13.0)	.88 (22.4)
14	7/16	.427 (10.8)	.571 (14.5)	1.00 (25.4)
16	1/2	.480 (12.2)	.650 (16.5)	1.25 (31.8)
20	5/8	.603 (15.3)	.770 (19.6)	1.50 (38.1)
24	3/4	.725 (18.4)	.930 (23.6)	1.75 (44.5)
28	7/8	.860 (21.8)	1.073 (27.3)	1.88 (47.8)
32	1	.970 (24.6)	1.226 (31.1)	2.25 (57.2)
40	1 1/4	1.205 (30.6)	1.539 (39.1)	2.75 (69.9)
48	1 1/2	1.437 (36.5)	1.832 (46.5)	3.25 (82.6)
56	1 3/4	1.688 (42.9)	2.156 (54.8)	3.63 (92.2)
64	2	1.937 (49.2)	2.332 (59.2)	4.25 (108.0)

Table II

Sym	Tubing Material
E	ETFE, Tefzel IAW SAE-AS81914/5 & 6
F	FEP, Teflon IAW SAE-AS81914/3 & 4
P	PFA, Teflon IAW SAE-AS81914/9 & 10
T	PTFE IAW SAE-AS81914/1 & 2
K	Peek IAW SAE-AS81914/11
R	High Temperature ThermaRex, 300°C

PACKAGING

- Long-length orders of 120-100 conduit are subject to carrier weight and box size restrictions. For example, UPS air shipments are currently limited to 50 lbs. per box.
Unless otherwise specified, Glenair standard practice is to ship optimal lengths of product based on weight, size, and individual carrier specifications.
- Consult factory for thin-wall, close convolution combination and for PEEK™ and PTFE min/max dimensions.

HIGH-TEMPERATURE TOLERANT
ThermaRex HT Interconnect Ecosystem



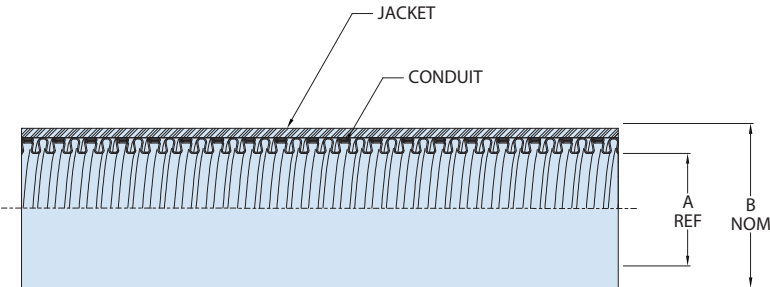
Flexible Metal-Core Conduit with ThermaRex Jacket
750-216

THERMAREX™ HT

750-216 HIGH-TEMPERATURE THERMAREX FLEXIBLE METAL-CORE CONDUIT



How To Order					
Sample Part Number	750-216	-047	C	R	B
Series / Basic Part No.	750-216 High-temperature ThermaRex flexible metal-core conduit				
Order No.	See Table I				
Core Option	C = Stainless steel				
Jacket Option	R = ThermaRex jacket				
Jacket Color	B = Black, P = Purple, W = White (Omit for Natural/Clear)				



NOTES

- Assembly Identified with Manufacturer's Name and P/N,
- Space Oremitting

MATERIAL/FINISH

- Conduit - Stainless Steel Metal Core/Passivated
- Jacket - Glenair 300°C ThermaRex (.018 Wall)/N.a.

Table I			
Order No.	A I.D. Ref	B O.D. Nom	Bend Radius
047	0.047	0.127	0.905
059	0.059	0.138	0.905
071	0.071	0.150	0.905
079	0.079	0.158	0.905
087	0.087	0.164	0.787
102	0.102	0.180	0.787
118	0.118	0.211	0.709
126	0.126	0.219	0.709
138	0.138	0.227	0.748
157	0.157	0.250	0.748

HIGH-TEMPERATURE TOLERANT ThermaRex HT Interconnect Ecosystem

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Bulk tubular non-metallic braid for wire harness protection 100-022

100-022 HIGH-TEMPERATURE PTFE-COATED FIBERGLASS BRAID, NATURAL COLOR



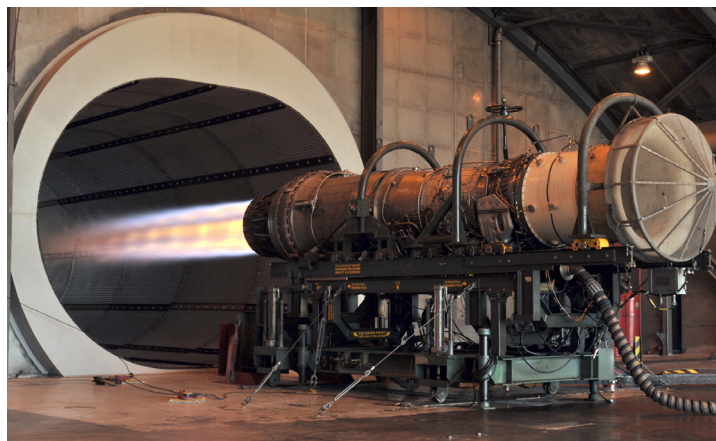
- Highly flexible PTFE-glass tubular braided sleeving with outstanding high- and low-temperature resistance (-200°C to +525°C)
- Ideally suited for rugged wire harness protection in proximity to engines and galleys
- Highly resistant to contaminants and toxic chemicals per ASTM D-570
- Smooth surface resistant to snagging and breakage

NOTES

- Material - braided fiberglass, PTFE coated, natural color IAW MIL-C-20079H
- Temperature range -200°C to +525°C
- Minimum order length - 100 ft. (30.5m)

How To Order		
Sample Part Number	100-022	-012
Basic No.	100-022 PTFE-glass tubular braid	
Braid Diameter No.	See Table I	

Table I: Size	
Dash No.	Nominal I.D.
-004	.125 (3.2)
-005	.156 (4.0)
-006	.188 (4.7)
-008	.250 (6.4)
-012	.375 (9.5)
-016	.500 (12.7)
-020	.625 (15.9)
-024	.750 (19.1)
-032	1.000 (25.4)
-040	1.250 (31.8)
-048	1.500 (38.1)



Glass-filled PTFE fire resistant braided shielding is ideally suited for cable protection adjacent high-heat engine applications

THERMAREX™ HT

ULTRA HIGH-TEMPERATURE TOLERANT ThermaRex UHT Interconnect Ecosystem



SuperNine® Better-than-QPL D38999 Series III Packaging 2570-2249 Plug

ThermaRex™ UHT

2570-2249 CONNECTOR, THERMAREX UHT, 600°C, PLUG



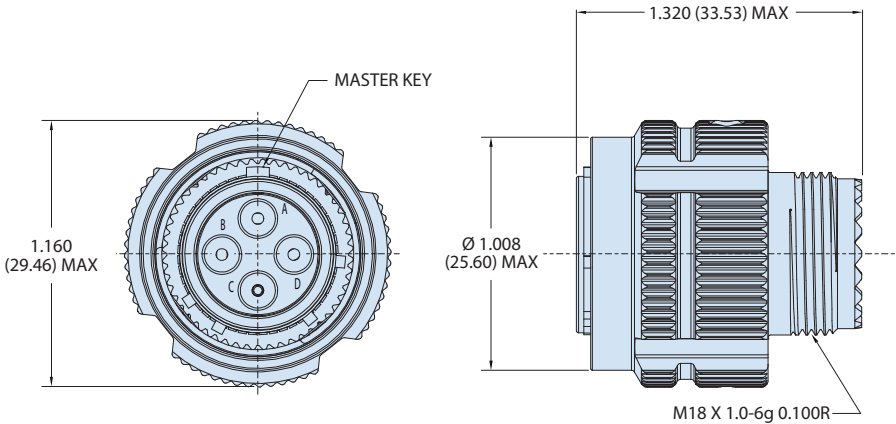
How To Order							
Sample Part Number	2570-2249	-26	Z1	13E	-4	S	N
Series / Basic Part No.	2570-2249 Connector, ThermaRex UHT, Plug						
Connector Style	26 = Plug						
Convolution	Z1 = Passivated stainless steel						
Shell Size	13E						
Insert Arrangement	4						
Contact Style	S = Socket Contact						
Alternate Polarization	A, B, C, D, E, N = Normal, U = Universal						

NOTES

- This connector is temperature rated from -65°C to +600°C.
- This connector is designed to mate with 2570-2248 with the same arrangement, polarization, and opposite contact gender.

MATERIAL/FINISH

- Barrel, Coupling Nut - Inconel / Nickel Plate
- Insulator - High Grade Ceramic / N.a.
- Socket Contact - Inconel / Nickel Plate



ULTRA HIGH-TEMPERATURE TOLERANT ThermaRex UHT Interconnect Ecosystem

ThermaRex™
CRYO • HIGH TEMP • ULTRA HIGH-TEMP

SuperNine® Better-than-QPL D38999 Series III Packaging 2570-2248

2570-2248 CONNECTOR, JAM NUT MOUNT, THERMAREX UHT, 600°C, RECEPTACLE



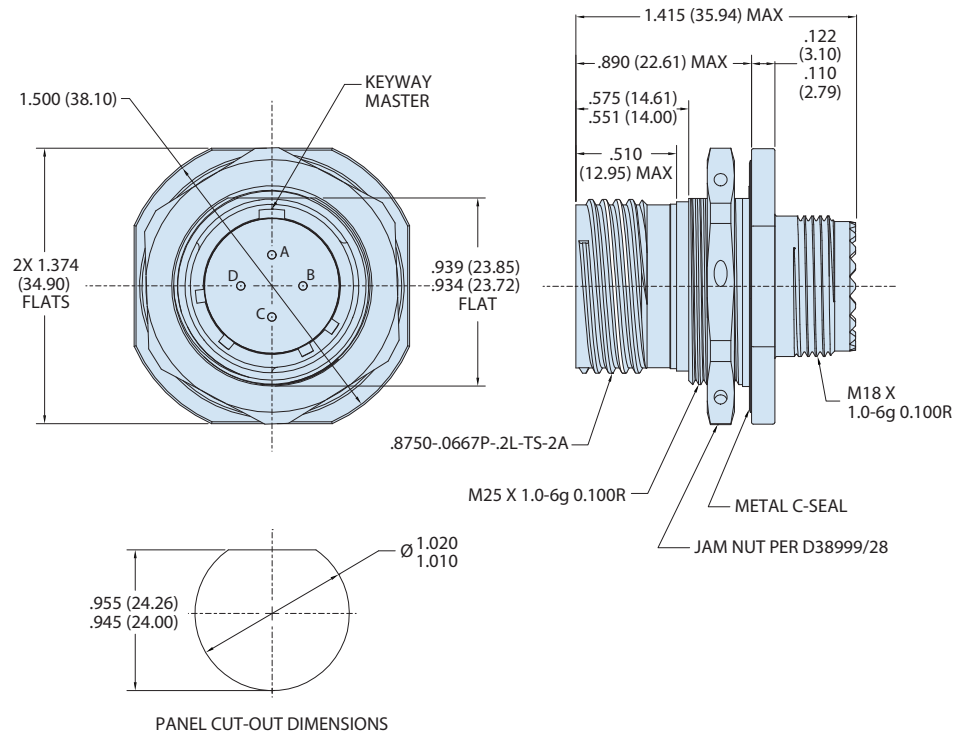
How To Order							
Sample Part Number	2570-2248	-24	Z1	13E	-4	P	N
Series / Basic Part No.	2570-2249 Connector, Jam Nut Mount, ThermaRex UHT, Receptacle						
Connector Style	24 = Receptacle, Jam Nut						
Material/Finish	Z1 = Passivated stainless steel						
Shell Size	13E						
Insert Arrangement	4						
Contact Style	P = Pin Contact						
Alternate Polarization	A, B, C, D, E, N = Normal, U = Universal						

NOTES

- This connector is temperature rated from -65°C to +600°C.
- This connector is designed to mate with 2570-2248 with the same arrangement, polarization, and opposite contact gender.

MATERIAL/FINISH

- Barrel, Coupling Nut - Inconel / Nickel Plate
- Insulator - High Grade Ceramic / N.a.
- Socket Contact - Inconel / Nickel Plate



ULTRA HIGH-TEMPERATURE TOLERANT ThermaRex UHT Interconnect Ecosystem



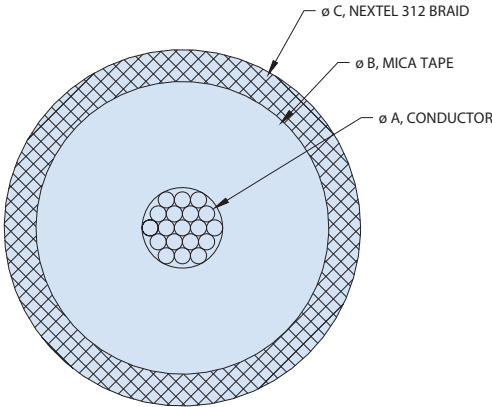
Flexible Wire, Ni200 Conductor, Mica Tape, Ceramic Braid
961-097

ThermaRex™ UHT

961-097, -65°C TO 600°C, CERAMIC-INSULATED, STRANDED NICKEL WIRE



How To Order		
Sample Part Number	961-097	-20
Series / Basic Part No.	961-097 UHT Cable, -65°C to 600°C, Ni201 Conductor, Mica Tape, Ceramic Braid	
Wire Size	See table	



NOTES

- Braid material shall be Nextel 312, 95% coverage.
- Voltage rating is 1000 Volts DC.

Table I					
AWG	Strand/Count/ AWG	Weight LBS/1000' (NOM)	ø A	ø B	ø C
24	19/36	TBD	0.025 (0.64)	0.105 (2.67)	0.135 (3.43)
22	19/34	TBD	0.032 (0.81)	0.112 (2.84)	0.142 (3.61)
20	7X6/32	TBD	0.041 (1.04)	0.121 (3.07)	0.151 (3.84)
16	7X15/36	TBD	0.065 (1.65)	0.145 (3.68)	0.175 (4.44)

ULTRA HIGH-TEMPERATURE TOLERANT ThermaRex UHT Interconnect Ecosystem

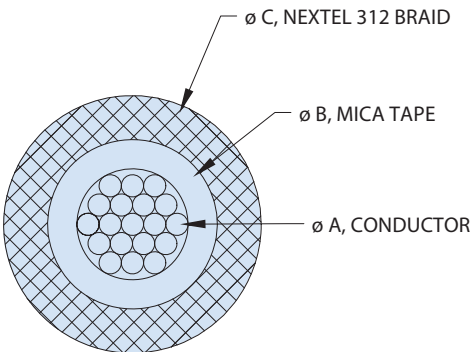
ThermaRex™
CRYO • HIGH TEMP • ULTRA HIGH-TEMP

Flexible Wire, Lightweight, Reduced Diameter
961-137

961-137, -65°C TO 600°C, CERAMIC-INSULATED, STRANDED NICKEL WIRE



How To Order		
Sample Part Number	961-137	-20
Series / Basic Part No.	961-137 UHT Cable, -65°C to 600°C, Ni201 Conductor, Mica Tape, Ceramic Braid	
Wire Size	See table	



NOTES

- Braid material shall be Nextel 312, 95% coverage.
- Voltage rating is 1000 Volts DC.

Table I					
AWG	Strand/Count/ AWG	Weight LBS/1000' (NOM)	ø A	ø B	ø C
24	19/36	TBD	0.025 (0.64)	0.041 (1.04)	0.071 (1.80)
22	19/34	TBD	0.032 (0.81)	0.048 (1.22)	0.078 (1.98)
20	7X6/36	TBD	0.041 (1.04)	0.057 (1.45)	0.087 (2.21)
18	7X9/36	TBD	0.050 (1.27)	0.066 (1.68)	0.096 (2.44)
16	7X15/36	TBD	0.065 (1.65)	0.081 (2.06)	0.111 (2.82)

ThermaRex™ UHT

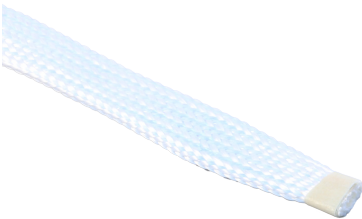
ULTRA HIGH-TEMPERATURE TOLERANT ThermaRex UHT Interconnect Ecosystem



Ceramic Tubular Braid 102-101

ThermaRex™ UHT

102-101 CERAMIC TUBULAR BRAID (NEXTEL™ 312)



- Nextel™ 312 ceramic tubular braid
- Continuous use temperature 1200°C
- Low elongation and shrinkage at operating temperature
- Low moisture absorption
- Good chemical resistance
- Good abrasion resistance
- Fire-resistant, will not melt

NOTES

- Material – continuous Nextel™ 312 yarn is a ceramic fiber

How To Order		
Sample Part Number	102-101	-016
Basic No.	Ceramic tubular braid (Nextel 312)	
Braid Diameter No.	See Table I	

Table I: Size	
Dash No.	Nominal I.D.
-004	.125 (3.2)
-008	.250 (6.4)
-012	.375 (9.5)
-016	.500 (12.7)
-024	.750 (19.1)
-032	1.000 (25.4)



Nextel™ 312 tubular braid is composed of 312 grade continuous fiber that offers strength and flexibility, even in constant high temperature environments. Its properties include low thermal conductivity and thermal shock resistance, making it ideal for applications that require a flame barrier or thermal shield. It outperforms other high temperature textiles like aramids and fiberglass.

ULTRA HIGH-TEMPERATURE TOLERANT ThermaRex UHT Interconnect Ecosystem

ThermaRex™
CRYO • HIGH TEMP • ULTRA HIGH-TEMP

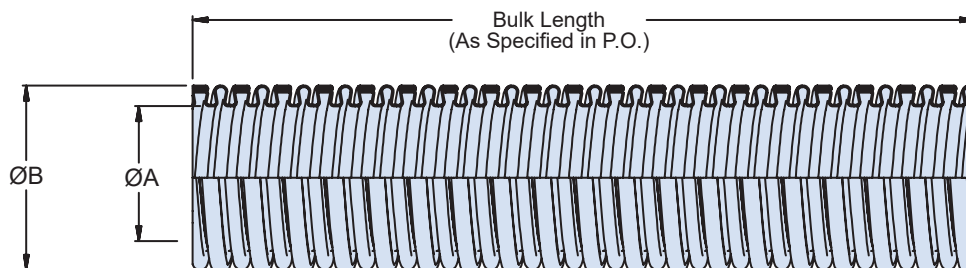
Ultra high-temperature stainless steel flexible metal-core EMI/RFI conduit 750-190



How To Order			
Sample Part Number	750-190	-047	C
Series / Basic Part No.	750-190 Ultra High-temperature ThermaRex Flexible Metal-Core Conduit		
Dash No.	See Table I		
Core Option	C = Stainless steel		

Std. Conduit Tolerances	
Length (Inches)	Tolerance (Inches)
Up To 18	± .50
19 - 36	± 1.0
37 - 72	± 1.5
73 - 144	± 2.0
145 - 300	± 3.0
301 - 600	± 4.0
601 - 1200	± 5.0
1201 - Up	± 6.0

Table I: Dash No. / Dimensions			
Dash No.	A I.D.	B O.D.	
	Min	Min	Max
06	.175 (4.45)	.260 (6.60)	.270 (6.86)
08	.245 (6.22)	.354 (9.00)	.374 (9.50)
09	.294 (7.47)	.390 (9.91)	.398 (10.1)
10	.308 (7.82)	.408 (10.4)	.425 (10.8)
12	.370 (9.40)	.478 (12.1)	.498 (12.6)
16	.495 (12.6)	.627 (15.9)	.647 (16.4)
20	.620 (15.7)	.750 (19.1)	.770 (19.6)
24	.745 (18.9)	.870 (22.1)	.890 (22.6)
32	.995 (25.3)	1.182 (30.0)	1.202 (30.5)
40	1.245 (31.6)	1.444 (36.7)	1.464 (37.2)
48	1.495 (38.0)	1.694 (43.0)	1.714 (43.5)
56	1.760 (44.7)	1.970 (50.0)	1.985 (50.4)
64	1.995 (50.7)	2.204 (56.0)	2.224 (56.5)
80	2.495 (63.4)	2.704 (68.7)	2.724 (69.2)
96	2.995 (76.1)	3.194 (81.1)	3.214 (81.6)



PACKAGING

Long-length orders of 750-190 conduit are subject to carrier weight and box size restrictions. For example, UPS air shipments are currently limited to 50 lbs. per box.

Unless otherwise specified, Glenair standard practice is to ship optimal lengths of product based on weight, size, and individual carrier specifications. Consult factory for additional information or to specify packaging requirements.

CRYOGENIC ThermaRex Cryo SuperNine® Connectors



High-performance D38999 type solution
233-295

ThermaRex™ Cryo



- Service rating from -195°C to 200°C
- Vibration-resistant threaded coupling

How To Order ThermaRex SuperNine connectors							
Sample Part Number	233-295	-20	Z1	17	-26	P	N
Series / Basic Part No.	233-295 Environmental, ThermaRex Cryo SuperNine connector						
Connector Style	-20 = Receptacle, square flange-mount -24 = Receptacle, jam nut -26 = Plug						
Material/Finish	ME = Aluminum alloy, electroless nickel Z1 = Stainless steel, passivate						
Shell Size	9, 11, 13, 17, 19, 21, 23, 25						
Insert Arrangement	Per Mil-STD-1560. See insert arrangement tables below						
Contact Style	P = Pin contacts S = Socket contacts A = Pin insert, less contacts B = Socket insert, less contacts						
Alternate Polarization*	A, B, C, D, E, N = Normal (IAW MIL-DTL-38999 Series III)						

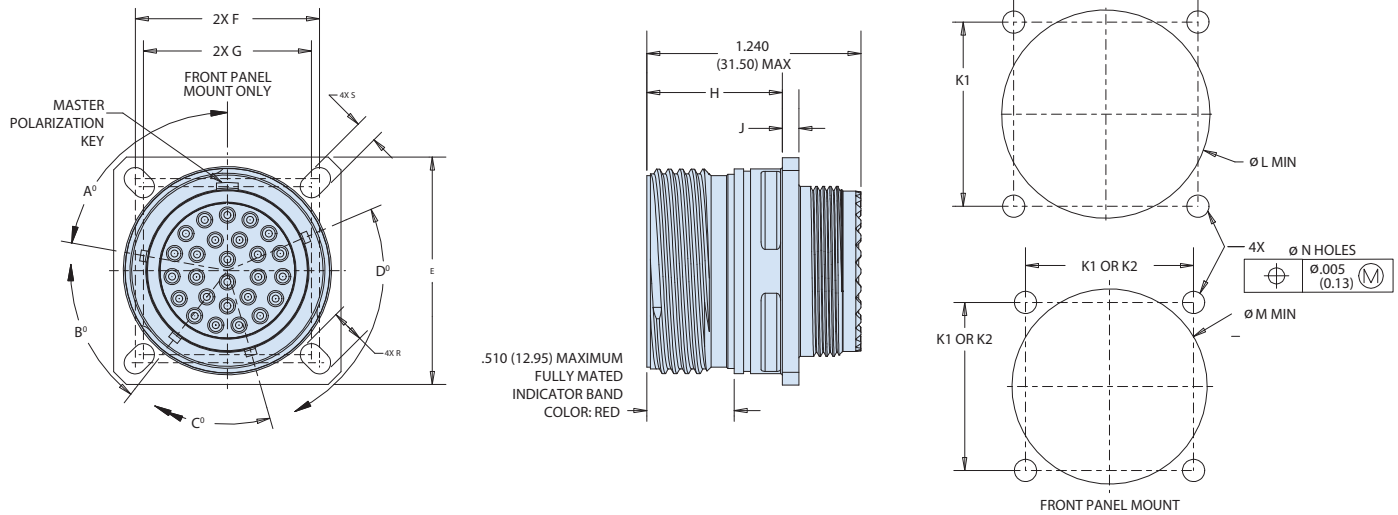
MATERIAL / FINISH NOTES

- Plug and receptacle shells, coupling nut - ME = Aluminum alloy, electroless nickel (48-hour salt spray); Z1 = Stainless steel, passivate
- Grommet, interfacial, and peripheral seals - Duralectric™ K
- Glenair's 233-295 Connector is designed to meet or exceed the mechanical, electrical and environmental requirements of Mil-Dtl-38999 and Mil-Std-1560 operating temperatures are -195°C to +200°C.
- Contacts - Pin: copper alloy, gold plated; Socket: copper alloy, gold plated, CRES hood
- 233-295 plug or receptacle will mate with other D38999 Series III receptacles or plugs having the same shell size, opposite insert arrangement and same mating shell polarization. However, performance at low temperature cannot be guaranteed.

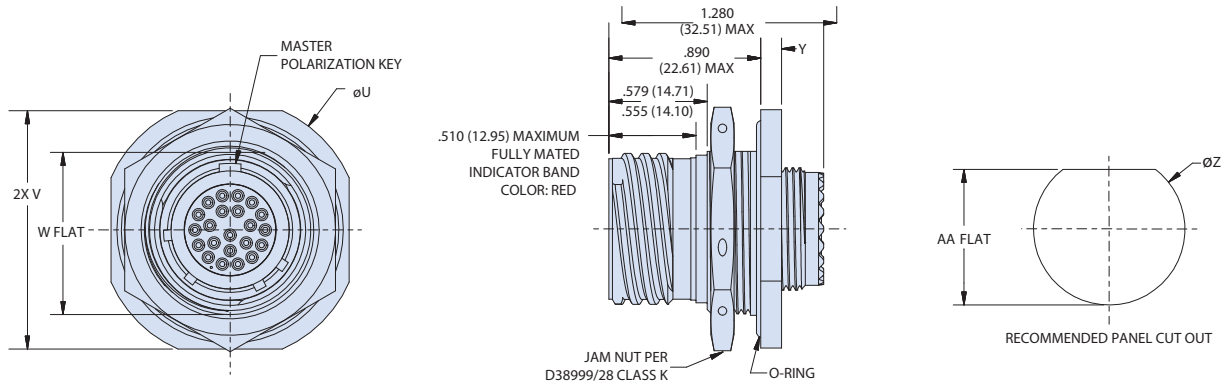
Suggested high-availability contact arrangements show. Most MIL-STD-1560 arrangements are available, consult factory.				
9-35 Contact Size : 22D Qty.: 6 Service Rating: M	11-99 Contact Size : 20 Qty.: 7 Service Rating: I	11-35 Contact Size : 22D Qty.: 13 Service Rating: M	13-8 Contact Size : 20 Qty.: 8 Service Rating: I	13-35 Contact Size : 22D Qty.: 22 Service Rating: M
15-97 Contact Size : 20 / Quantity: 8 Contact Size : 16 / Quantity: 4 Service Rating: I	17-6 Contact Size : 12 Qty.: 6 Service Rating: I	21-24 Contact Size : 20 Qty.: 24 Service Rating: I		

High-performance D38999 type solution 233-295

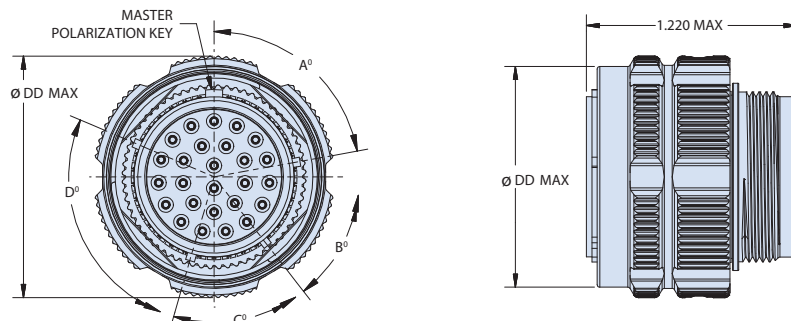
233-295-20 SQUARE FLANGE PANEL MOUNT RECEPTACLE



233-295-24 JAM NUT RECEPTACLE



233-295-26 PLUG



CRYOGENIC ThermaRex Cryo SuperNine[®] Connectors



Cryogenic Plug 806-060

ThermaRex™ CRYO



FEATURES AND BENEFITS

- Operating temperature -195°C to +200°C
- Special low-temperature 300G shock and aerospace vibration testing while submerged in liquid nitrogen
- Triple-start stub ACME mating thread
- High density #22HD and #20HD arrangements for reduced size and weight plus #16, #12 and #8 standard and hybrid contact layouts
- Aerospace-grade materials, construction
- Band platform or accessory threads

SPECIFICATIONS

- Dielectric withstanding voltage
#22HD contacts: 1300 VAC
#20HD contacts: 1800 VAC
#16 contacts: varies, contact factory
#12 contacts: varies, contact factory
#8 contacts: varies, contact factory
- Mating durability: 500 cycles
- Mechanical shock: EIA-364-27, 300g.
- Vibration (sine): MIL-DTL-38999M, 60g.
- Vibration (random) EIA-364-28 Condition VI, Letter J, 43.92 Grms, +200°C
- High Impact shock: MIL-S-901 Grade A
- Humidity: EIA-364-31 Method 4
- Salt spray (dynamic): EIA-364-26, 500 hours (96 hours for nickel-plated versions)
- Fluid immersion: EIA-364-10
- Altitude immersion: EIA-364-03 75,000 feet altitude
- Indirect Lightning Strike: EIA-364-75 Type B Level 2 10kA Peak

MATERIALS/FINISH

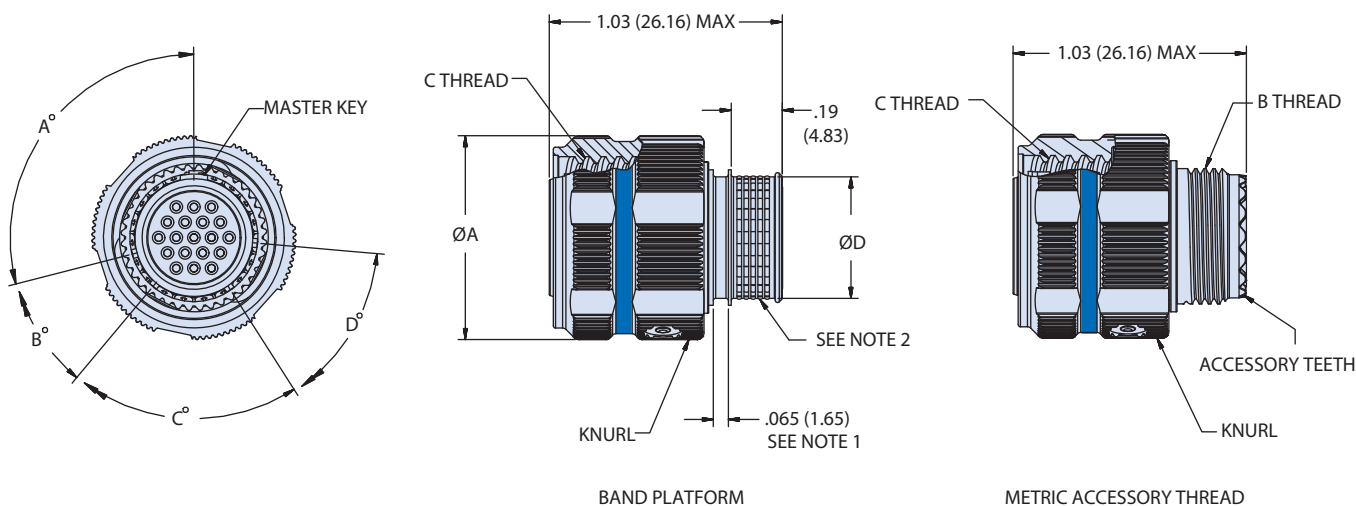
- Shell: passivated CRES or Aluminum Alloy
- Contacts: copper alloy, gold plate
- Insulator: high grade rigid dielectric
- Interfacial seal, grommet: Duralectric K low-temp silicone

Extreme low-temperature 806-060 ThermaRex Cryo plug connectors are rated to perform in temperatures as low as -195° C. Intended for use in sub-zero harsh applications such as space vehicles or aircraft zones subject to high altitude, while providing size and weight savings compared to conventional aerospace-grade circular connectors. Rugged ratchet mechanism and unique triple-start mating thread provide improved de-coupling resistance under vibration. Shell styles include integrated metric accessory thread or band platform.

How To Order ThermaRex Series 806 Mil-Aero Plug						
Sample Part Number	806-060	-Z1	11-19	S	M	A
Series / Basic Part No.	806-060 ThermaRex Cryogenic Plug					
Material/Finish	ME = Aluminum alloy / Electroless nickel Z1 = Stainless steel / passivated					
Shell Size/Insert Arr.	See Table I					
Contact Style	A = Pin connector less contacts P = Pin B = Socket connector Less contacts S = Socket					
Shell Style	M = Metric (Accessory Thread) B = Band (platform for attaching cable shield)					
Polarization	A, B, C, D, E, F					

Table I: Shell Size - Insert Arrangement																	
Contact Layout	Number of Contacts					Contact Layout	Number of Contacts					Contact Layout	Number of Contacts				
	22HD	20HD	16	12	8		22HD	20HD	16	12	8		22HD	20HD	16	12	8
7-3	3					22-69		69				18-3					3
8-4	4					24-92		92				20-4					4
8-7	7					8-1			1			22-5					5
9-11	11					10-2			2			24-8					8
10-15	15					11-4			4			10-8A	6		2		
11-19	19					12-5			5			11-13	11		2		
12-26	26					14-7			7			12-27	26		1		
14-39	39					16-12			12			14-21	17		4		
16-60	60					18-15			15			16-41	37		4		
18-85	85					20-22			22			18-59	55		4		
20-110	110					22-24			24			11-14	13			1	
22-140	140					24-35			35			12-14	12			2	
24-186	186					9-1				1		14-22	20			2	
8-3		3				12-2				2		16-32	28			4	
9-5		5				14-3				3		16-42	40			2	
10-8		8				16-4				4		18-62	60			2	
11-10		10				16-7				7		14-20A	19				1
12-15		15				18-8				8		16-22	20				2
14-20		20				20-11				11		18-21	18				3
16-31		31				22-13				13		20-28	24				4
18-41		41				24-19				19		22-44	40				4
20-55		55				10-1					1	24-97	93				4
						16-2					2						

Cryogenic Plug 806-060



ThermaRex™ CRYO

806-060 Dimensions				
SHELL SIZE	ØA MAX	B THREAD	C MATING THREAD	Ø D
7	.606 (15.39)	M8X 1-6g-.100R	.4375-.067P-.2L-TS-2B	.267 (6.78)
8	.676 (17.17)	M10 X 1-6g-.100R	.500-.067P-.2L-TS-2B	.327 (8.31)
9	.774 (19.66)	M12 X 1-6g-.100R	.562-.067P-.2L-TS-2B	.406 (10.31)
10	.832 (21.13)	M14 X 1-6g-.100R	.625-.067P-.2L-TS-2B	.484 (12.29)
11	.890 (22.61)	M15 X 1-6g-.100R	.688-.067P-.2L-TS-2B	.524 (13.31)
12	.950 (24.13)	M17 X 1-6g-.100R	.750-.067P-.2L-TS-2B	.603 (15.32)
14	1.110 (28.19)	M19 X 1-6g-.100R	.875-.067P-.2L-TS-2B	.681 (17.30)
16	1.170 (29.72)	M22 X 1-6g-.100R	1.000-.067P-.2L-TS-2B	.782 (19.86)
18	1.350 (34.29)	M25 X 1-6g-.100R	1.1250-.067P-.2L-TS-2B	.899 (22.83)
20	1.470 (37.34)	M28 X 1-6g-.100R	1.250-.067P-.2L-TS-2B	1.043 (26.49)
22	1.600 (40.64)	M31 X 1-6g-.100R	1.375-.067P-.2L-TS-2B	1.155 (29.34)
24	1.710 (43.43)	M34 X 1-6g-.100R	1.500-.067P-.2L-TS-2B	1.273 (32.33)

NOTES

- Boot groove for use with overmolded strain relief or 809-060 heat shrink boots
- Terminate shield with Glenair Band-Master ATS tool 601-108 and Glenair Nano band

CRYOGENIC ThermaRex Cryo SuperNine® Connectors



Jam Nut Receptacle 806-061

ThermaRex™ CRYO



FEATURES AND BENEFITS

- Operating temperature -195°C to +200°C
- Special low-temperature 300G shock and aerospace vibration testing while submerged in liquid nitrogen
- Triple-start stub ACME mating thread
- High density #22HD and #20HD arrangements for reduced size and weight plus #16, #12 and #8 standard and hybrid contact layouts
- Aerospace-grade materials, construction
- Band platform or accessory threads

SPECIFICATIONS

- Dielectric withstanding voltage
#22HD contacts: 1300 VAC
#20HD contacts: 1800 VAC
#16 contacts: varies, contact factory
#12 contacts: varies, contact factory
#8 contacts: varies, contact factory
- Mating durability: 500 cycles
- Mechanical shock: EIA-364-27, 300g.
- Vibration (sine): MIL-DTL-38999M, 60g.
- Vibration (random) EIA-364-28 Condition VI, Letter J, 43.92 Grms, +200°C
- High Impact shock: MIL-S-901 Grade A
- Humidity: EIA-364-31 Method 4
- Salt spray (dynamic): EIA-364-26, 500 hours (96 hours for nickel-plated versions)
- Fluid immersion: EIA-364-10
- Altitude immersion: EIA-364-03 75,000 feet altitude
- Indirect Lightning Strike: EIA-364-75 Type B Level 2 10kA Peak

MATERIALS/FINISH

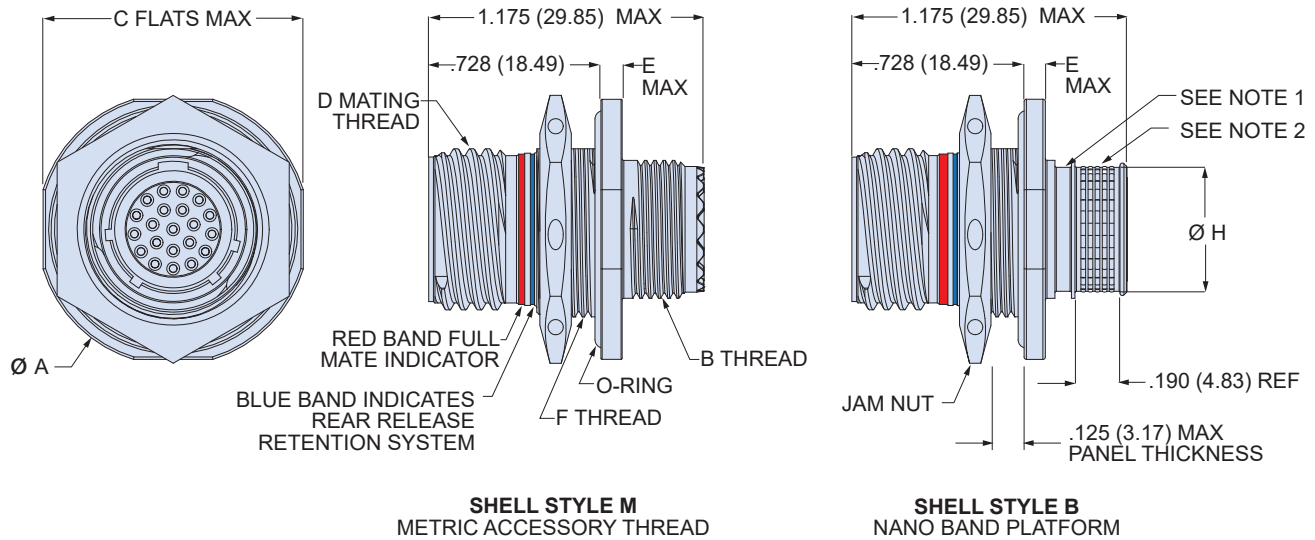
- Shell: passivated CRES or Aluminum Alloy
- Contacts: copper alloy, gold plate
- Insulator: high grade rigid dielectric
- Interfacial seal, grommet: Duralectric K low-temp silicone

Extreme low-temperature 806-061 ThermaRex receptacle connectors are rated to perform in temperatures as low as -195° C. Intended for use in sub-zero harsh applications such as space vehicles or aircraft zones subject to high altitude, while providing size and weight savings compared to conventional aerospace-grade circular connectors. Unique triple-start mating thread provides improved de-coupling resistance under vibration. Jam nut receptacle styles include integrated metric accessory thread or band platform.

How To Order ThermaRex Series 806 Mil-Aero Jam-nut Receptacle						
Sample Part Number	806-061	-Z1	11-19	S	M	A
Series / Basic Part No.	806-061 ThermaRex Cryogenic Jam Nut Receptacle					
Material/Finish	ME = Aluminum alloy / electroless nickel Z1 = Stainless steel / passivated					
Shell Size/Insert Arr.	See Table I					
Contact Style	A = Pin connector less contacts P = Pin B = Socket connector Less contacts S = Socket					
Shell Style	M = Metric (Accessory Thread) B = Band (platform for attaching cable shield)					
Polarization	A, B, C, D, E, F					

Table I: Shell Size - Insert Arrangement																	
Contact Layout	Number of Contacts					Contact Layout	Number of Contacts					Contact Layout	Number of Contacts				
	22HD	20HD	16	12	8		22HD	20HD	16	12	8		22HD	20HD	16	12	8
7-3	3					22-69		69				18-3					3
8-4	4					24-92		92				20-4					4
8-7	7					8-1			1			22-5					5
9-11	11					10-2			2			24-8					8
10-15	15					11-4			4			10-8A	6		2		
11-19	19					12-5			5			11-13	11		2		
12-26	26					14-7			7			12-27	26		1		
14-39	39					16-12			12			14-21	17		4		
16-60	60					18-15			15			16-41	37		4		
18-85	85					20-22			22			18-59	55		4		
20-110	110					22-24			24			11-14	13			1	
22-140	140					24-35			35			12-14	12			2	
24-186	186					9-1				1		14-22	20			2	
8-3		3				12-2				2		16-32	28			4	
9-5		5				14-3				3		16-42	40			2	
10-8		8				16-4				4		18-62	60			2	
11-10		10				16-7				7		14-20A	19				1
12-15		15				18-8				8		16-22	20				2
14-20		20				20-11				11		18-21	18				3
16-31		31				22-13				13		20-28	24				4
18-41		41				24-19				19		22-44	40				4
20-55		55				10-1					1	24-97	93				4
						16-2					2						

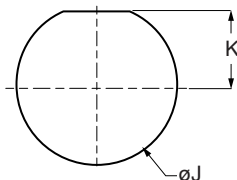
Jam Nut Receptacle 806-061



ThermaRex™ CRYO

Dimensions							
Shell Size	ØA Max	B Thread	C Max	D Mating Thread	E Max	F Thread	ØH
7	.848 (21.54)	M8 X 1-6g-.100R	.908 (23.06)	.4375-.067P-.2L-TS-2A	0.100 (2.54)	M13 X 1-6g-.100R	.265 (6.73)
8	.980 (24.89)	M10 X 1-6g-.100R	.920 (23.37)	.5000-.067P-.2L-TS-2A		M15 X 1-6g-.100R	.327 (8.31)
9	1.040 (26.42)	M12 X 1-6g-.100R	.980 (24.89)	.5625-.067P-.2L-TS-2A		M16 X 1-6g-.100R	.406 (10.31)
10	1.110 (28.19)	M14 X 1-6g-.100R	1.050 (26.67)	.6250-.067P-.2L-TS-2A		M18 X 1-6g-.100R	.484 (12.29)
11	1.160 (29.46)	M15 X 1-6g-.100R	1.110 (28.19)	.6875-.067P-.2L-TS-2A		M19 X 1-6g-.100R	.524 (13.31)
12	1.230 (31.24)	M17 X 1-6g-.100R	1.170 (29.72)	.7500-.067P-.2L-TS-2A		M21 X 1-6g-.100R	.603 (15.32)
14	1.360 (34.54)	M19 X 1-6g-.100R	1.320 (33.53)	.8750-.067P-.2L-TS-2A		M24 X 1-6g-.100R	.681 (17.30)
16	1.515 (38.48)	M22 X 1-6g-.100R	1.444 (36.68)	1.000-.067P-.2L-TS-2A		M27 X 1-6g-.100R	.782 (19.86)
18	1.610 (40.89)	M25 X 1-6g-.100R	1.570 (39.88)	1.1250-.067P-.2L-TS-2A		M30 X 1-6g-.100R	.899 (22.83)
20	1.850 (46.99)	M28 X 1-6g-.100R	1.760 (44.70)	1.250-.067P-.2L-TS-2A		M34 X 1-6g-.100R	1.043 (26.49)
22	2.010 (51.05)	M31 X 1-6g-.100R	1.913 (48.59)	1.3750-.067P-.2L-TS-2A	0.128 (3.25)	M37 X 1-6g-.100R	1.155 (29.34)
24	2.195 (55.75)	M34 X 1-6g-.100R	2.070 (52.58)	1.500-.067P-.2L-TS-2A		M41 X 1-6g-.100R	1.273 (32.33)

Jam-Nut Cutout



Recommended Mounting Hole		
SHELL SIZE	K +.005 (0.13) 0.000 (0.00)	J +.005 (0.13) 0.00 (0.00)
7	.224 (5.69)	.522 (13.26)
8	.256 (6.50)	.601 (15.27)
9	.287 (7.29)	.640 (16.26)
10	.318 (8.08)	.719 (18.26)
11	.350 (8.89)	.759 (19.28)
12	.381 (9.68)	.837 (21.26)
14	.443 (11.25)	.955 (24.26)
16	.505 (12.83)	1.073 (27.25)
18	.568 (14.43)	1.192 (30.28)
20	.630 (16.00)	1.349 (34.26)
22	.693 (17.60)	1.467 (37.26)
24	.755 (19.18)	1.624 (41.25)

NOTES:

- Boot groove for use with overmolded strain relief or 809-060 heat shrink boots
- Terminate shield with Glenair Band-Master ATS tool 601-108 and Glenair Nano band

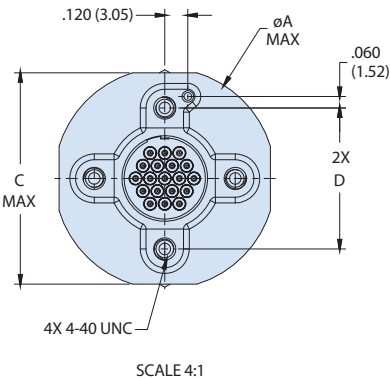
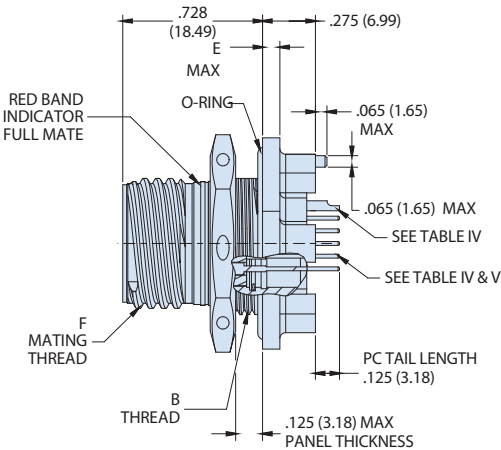
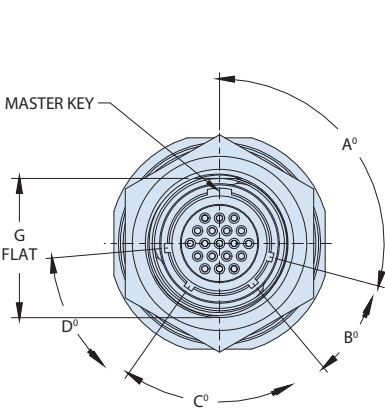
Jam Nut PCB Standoff Receptacle
806-085

ThermaRex™ Cryo



SERIES 806 MIL-AERO JAM NUT PCB STANDOFF RECEPTACLE

How To Order ThermaRex Series 806 Mil-Aero Square Flange Receptacle						
Sample Part Number	806-085	ME	11-19	S	1	A
Series / Basic Part No.	806-085 Cryogenic ThermaRex Series 806 jam nut PCB standoff receptacle					
Material/Finish	ME = Aluminum alloy, electroless nickel (96-hour salt spray) Z1 = Stainless steel, passivate					
Shell Size/Insert Arr.	Per 806-015, See tables					
Contact Type	P = Pin E = Solder cup, pin S = Socket F = Solder cup, SKT					
PC Tail Length	1 = .125±.025 Solder Cup = Omit					
Polarization Keyway Code	A, B, C, D, E, F					



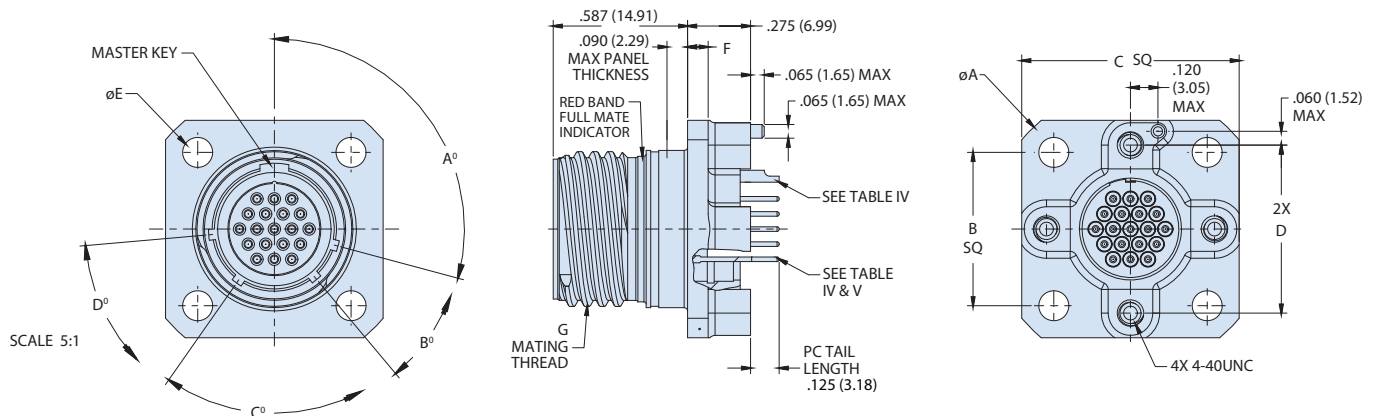
Square Flange PCB Standoff Receptacle
806-086

SERIES 806 MIL-AERO SQUARE FLANGE PCB STANDOFF RECEPTACLE



How To Order ThermaRex Series 806 Mil-Aero Square Flange Receptacle							
Sample Part Number	806-086	ME	11-19	S	1	T	A
Series / Basic Part No.	806-086 Cryogenic ThermaRex Series 806 square flange PCB standoff receptacle						
Material/Finish	ME = Aluminum alloy, electroless nickel (96-hour salt spray) Z1 = Stainless steel, passivate						
Shell Size/Insert Arr.	Per 806-015, See tables						
Contact Type	P = Pin E = Solder cup, pin S = Socket F = Solder cup, SKT						
PC Tail Length	1 = .125±.025 Solder Cup = Omit						
Panel Mounting Hole Style	T = Thru hole C = Clinch nuts for rear panel mounting, 4-40, M45938/6-4C						
Polarization Keyway Code	A, B, C, D, E, F						

ThermaRex™ CRYO



CRYOGENIC ThermaRex Cryo SuperNine[®] Connectors



Solder Cup/PC Tail Termination Hermetic Receptacle 806-088

ThermaRex™ Cryo



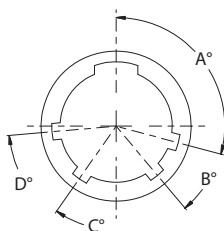
MATERIALS/FINISH

- Shell & jam-nut: 304L CRES/per p/n dev
- Contacts, hermetic: Nickel-iron alloy/gold plate
- Contacts, sockets: Copper alloy/gold plate
- Hoods, sockets: 305 CRES/passivate
- Insulator, hermetic: Vitreous glass
- Insulator, Socket: High performance rigid dielectric
- Seals & O-Rings: Duraelectric™ K

TEST CRITERIA

- Leak rate: $<1 \times 10^{-7}$ ccHe/sec @ 1 ATM. delta pressure
- DWV: 1300 VAC (#22 Contacts)
1800 VAC (#20, 16, 12, and 8 Contacts)
- I.R.: 5000 MEGOHMS MIN @ 500 VDC
- Current capacity: 3 A (#22), 5 A (#20), 10 A (#16), 17 AMPS (#12), 33 A (#8)

Polarization Key Code



POS	A°	B°	C°	D°
A	105°	140°	215°	265°
B	102°	170°	248°	305°
C	80°	150°	230°	295°
D	68°	140°	205°	275°
E	64°	155°	234°	304°
F	72°	120°	200°	298°

"ø T" ±.002 PC Tail

Cont. Size	Tail ø
22	.020
20	.030
16	.063
12	.094
8	.180

Series 806 cryogenic capable hermetic receptacles feature stainless steel shells and glass-to-metal seals. Rated for -195°C to +200°C temperature range. Series 806 connectors save size and weight compared to legacy aerospace-grade hermetic connectors. These parylene-compatible connectors are suitable for pressurized bulkhead applications subject to vibration, moisture, and temperature extremes.

How To Order ThermaRex Series 806 Mil-Aero Jam-nut Receptacle

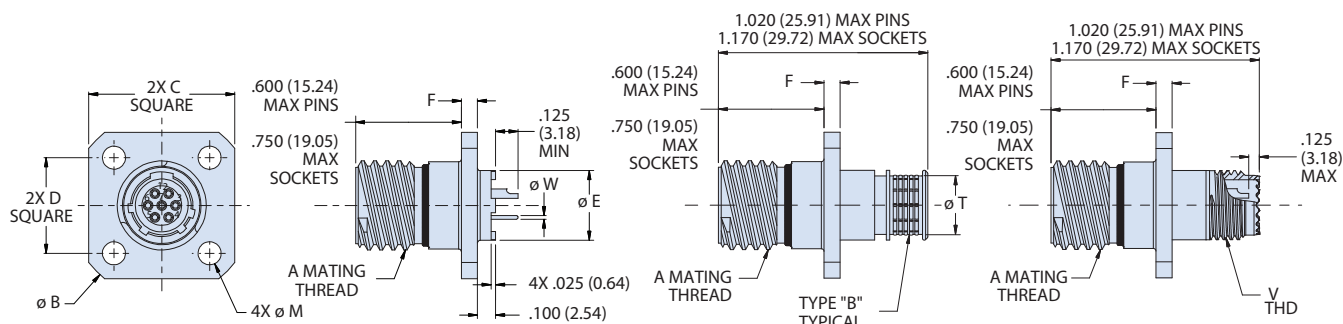
Sample Part Number	806-088	-B	07	Z1	8-7	C	A
Series / Basic Part No.	806-088 Solder Cup/PC Tail Termination Hermetic Receptacle						
Rear Configuration	B = Banding Porch T = Accessory Threads S = Standard Rear						
Mounting Type	02 = Box Mount 03 = Solder Mount 07 = Jam-Nut Mount 13 = Weld Mount						
Finish	Z1 = Passivated ZL = Nickel Plated						
Shell Size - Insert Arr.	See Table I						
Contact Style	C = PC Term., Pin (only available for standoff rear configuration style) D = PC Term., Skt (only available for standoff rear configuration style) P = Solder Cup, Pin S = Solder Cup, Socket						
Polarization	A, B, C, D						

Table I: Shell Size - Insert Arrangement

Contact Layout	Number of Contacts					Contact Layout	Number of Contacts					Contact Layout	Number of Contacts				
	22HD	20HD	16	12	8		22HD	20HD	16	12	8		22HD	20HD	16	12	8
7-3	3					22-69		69				18-3					3
8-4	4					24-92		92				20-4					4
8-7	7					8-1			1			22-5					5
9-11	11					10-2			2			24-8					8
10-15	15					11-4			4			10-8A	6		2		
11-19	19					12-5			5			11-13	11		2		
12-26	26					14-7			7			12-27	26		1		
14-39	39					16-12			12			14-21	17		4		
16-60	60					18-15			15			16-41	37		4		
18-85	85					20-22			22			18-59	55		4		
20-110	110					22-24			24			11-14	13			1	
22-140	140					24-35			35			12-14	12			2	
24-186	186					9-1				1		14-22	20			2	
8-3		3				12-2				2		16-32	28			4	
9-5		5				14-3				3		16-42	40			2	
10-8		8				16-4				4		18-62	60			2	
11-10		10				16-7				7		14-20A	19				1
12-15		15				18-8				8		16-22	20				2
14-20		20				20-11				11		18-21	18				3
16-31		31				22-13				13		20-28	24				4
18-41		41				24-19				19		22-44	40				4
20-55		55				10-1					1	24-97	93				4
						16-2					2						

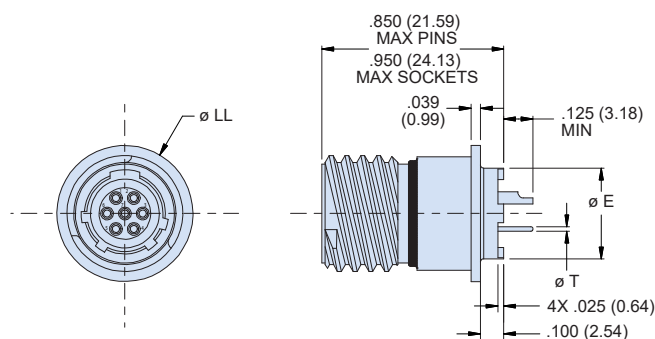
Solder Cup/PC Tail Termination Hermetic Receptacle 806-088

806-088-02 Box Mount Receptacle Dimensions



Shell Size	"A" Thread Mating	"Ø B" Max Flange	"C" Square Max Flange Flats	"D" Square BSC Mounting Holes	"Ø E" ±.010 Mounting Boss	"F" Max Flange	"Ø M" Thru MTG Holes	"Ø S" Thru
7	.4375-.067P-.2L-TS-2A	0.968 (24.59)	0.750 (19.05)	0.469 (11.91)	0.306 (7.77)	0.100 (2.54)	0.128 (3.25)	0.445 (11.30)
8	.5000-.067P-.2L-TS-2A	1.040 (26.42)	0.822 (20.88)	0.531 (13.49)	0.387 (9.83)			0.509 (12.93)
9	.5625-.067P-.2L-TS-2A	1.130 (28.70)	0.885 (22.48)	0.594 (15.09)	0.468 (11.89)			0.577 (14.66)
10	.6250-.067P-.2L-TS-2A	1.174 (29.82)	0.913 (23.19)	0.625 (15.88)	0.546 (13.87)			0.645 (16.38)
11	.6875-.067P-.2L-TS-2A	1.240 (31.50)	0.960 (24.38)	0.670 (17.02)	0.586 (14.88)			0.712 (18.08)
12	.7500-.067P-.2L-TS-2A	1.354 (34.39)	1.040 (26.42)	0.765 (19.43)	0.663 (16.84)			0.768 (19.51)
14	.8750-.067P-.2L-TS-2A	1.510 (38.35)	1.133 (28.78)	0.859 (21.82)	0.743 (18.87)			0.890 (22.61)
16	1.0000-.067P-.2L-TS-2A	1.620 (41.15)	1.227 (31.17)	0.938 (23.83)	0.842 (21.39)			1.015 (25.78)
18	1.1250-.067P-.2L-TS-2A	1.784 (45.31)	1.320 (33.53)	1.016 (25.81)	0.959 (24.36)			1.125 (28.58)
20	1.2500-.067P-.2L-TS-2A	1.910 (48.51)	1.444 (36.68)	1.109 (28.17)	1.105 (28.07)			1.275 (32.39)
22	1.3750-.067P-.2L-TS-2A	2.083 (52.91)	1.570 (39.88)	1.203 (30.56)	1.215 (30.86)	0.125 (3.18)	0.154 (3.91)	1.400 (35.56)
24	1.5000-.067P-.2L-TS-2A	2.200 (55.88)	1.696 (43.08)	1.312 (33.32)	1.335 (33.91)			1.525 (38.73)

806-088-03 Solder Mount Receptacle Dimensions

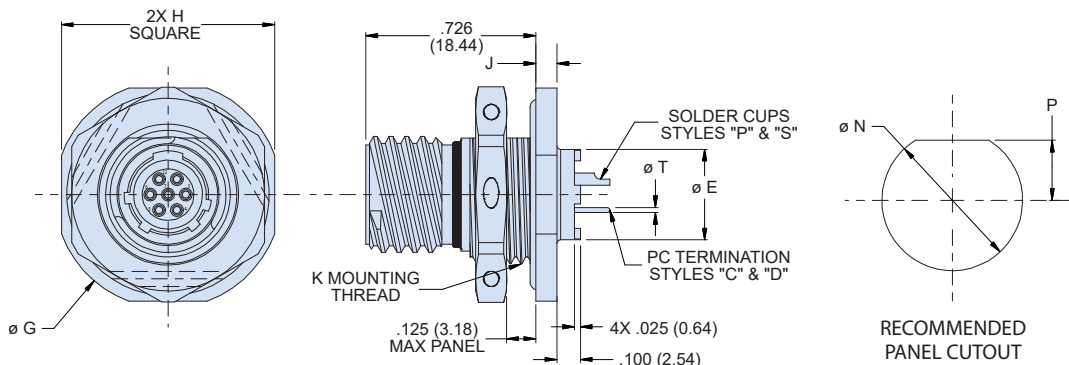


Shell Size	"A" Thread Mating	"Ø E" ±.010 Mounting Boss	"Ø LL" Flange
7	.4375-.067P-.2L-TS-2A	0.306 (7.77)	0.520 (13.21)
8	.5000-.067P-.2L-TS-2A	0.387 (9.83)	0.581 (14.76)
9	.5625-.067P-.2L-TS-2A	0.468 (11.89)	0.649 (16.48)
10	.6250-.067P-.2L-TS-2A	0.546 (13.87)	0.717 (18.21)
11	.6875-.067P-.2L-TS-2A	0.586 (14.88)	0.784 (19.91)
12	.7500-.067P-.2L-TS-2A	0.663 (16.84)	0.841 (21.36)
14	.8750-.067P-.2L-TS-2A	0.743 (18.87)	0.962 (24.43)
16	1.0000-.067P-.2L-TS-2A	0.842 (21.39)	1.087 (27.61)
18	1.1250-.067P-.2L-TS-2A	0.959 (24.36)	1.197 (30.40)
20	1.2500-.067P-.2L-TS-2A	1.105 (28.07)	1.347 (34.21)
22	1.3750-.067P-.2L-TS-2A	1.215 (30.86)	1.472 (37.39)
24	1.5000-.067P-.2L-TS-2A	1.335 (33.91)	1.597 (40.56)

Solder Cup/PC Tail Termination Hermetic Receptacle
806-088

ThermaRex™ CRYO

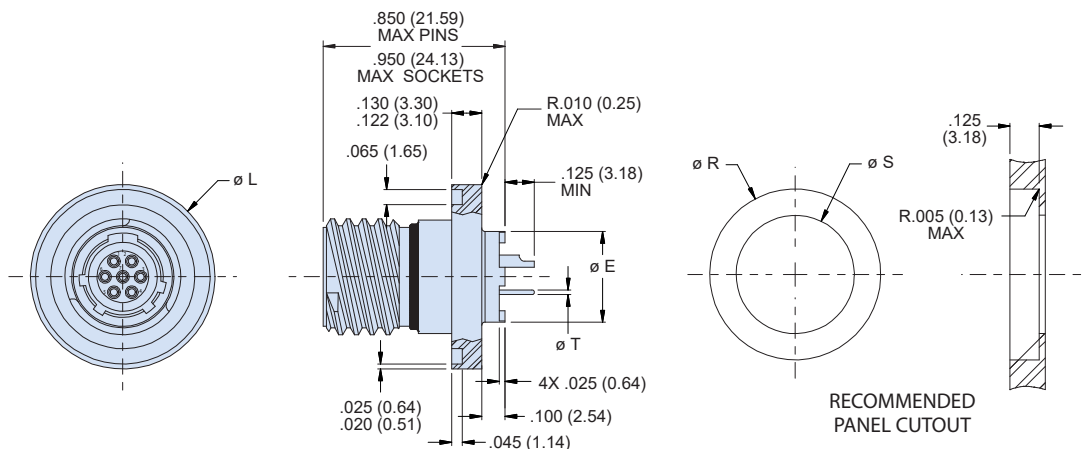
806-088-07 Jam-Nut Mount Receptacle Dimensions



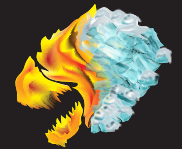
Shell Size	"A" Thread Mating	"Ø E" ±.010 Mounting Boss	"Ø G" Max Flange	"H" Square Max Flange Flats	"J" Max Flange	"K" Thread Mounting	"Ø N" +.005/- .000 Mounting Hole	"P" +.005/- .000 Mounting Flat
7	.4375-.067P-.2L-TS-2A	0.306 (7.77)	0.848 (21.54)	0.908 (23.06)	0.100 (2.54)	M13 X 1-6g-.100R	0.522 (13.26)	0.224 (5.69)
8	.5000-.067P-.2L-TS-2A	0.387 (9.83)	0.980 (24.89)	0.920 (23.37)		M15 X 1-6g .100R	0.601 (15.27)	0.256 (6.50)
9	.5625-.067P-.2L-TS-2A	0.468 (11.89)	1.040 (26.42)	0.980 (24.89)		M16 X 1-6g .100R	0.640 (16.26)	0.287 (7.29)
10	.6250-.067P-.2L-TS-2A	0.546 (13.87)	1.110 (28.19)	1.050 (26.67)		M18 X 1-6g .100R	0.719 (18.26)	0.318 (8.08)
11	.6875-.067P-.2L-TS-2A	0.586 (14.88)	1.160 (29.46)	1.110 (28.19)		M19 X 1-6g .100R	0.759 (19.28)	0.350 (8.89)
12	.7500-.067P-.2L-TS-2A	0.663 (16.84)	1.230 (31.24)	1.170 (29.72)		M21 X 1-6g .100R	0.837 (21.26)	0.381 (9.68)
14	.8750-.067P-.2L-TS-2A	0.743 (18.87)	1.360 (34.54)	1.320 (33.53)		M24 X 1-6g .100R	0.955 (24.26)	0.443 (11.25)
16	1.0000-.067P-.2L-TS-2A	0.842 (21.39)	1.515 (38.48)	1.444 (36.68)		M27 X 1-6g .100R	1.073 (27.25)	0.505 (12.83)
18	1.1250-.067P-.2L-TS-2A	0.959 (24.36)	1.610 (40.89)	1.570 (39.88)		M30 X 1-6g .100R	1.192 (30.28)	0.568 (14.43)
20	1.2500-.067P-.2L-TS-2A	1.105 (28.07)	1.850 (46.99)	1.760 (44.70)	0.128 (3.25)	M34 X 1-6g .100R	1.349 (34.26)	0.630 (16.00)
22	1.3750-.067P-.2L-TS-2A	1.215 (30.86)	2.010 (51.05)	1.913 (48.59)		M37 X 1-6g .100R	1.467 (37.26)	0.693 (17.60)
24	1.5000-.067P-.2L-TS-2A	1.335 (33.91)	2.195 (55.75)	2.070 (52.58)		M41 X 1-6g .100R	1.624 (41.25)	0.755 (19.18)

Solder Cup/PC Tail Termination Hermetic Receptacle
806-088

806-088-13 Weld Mount Receptacle Dimensions



Shell Size	"A" Thread Mating	" ϕE " $\pm .005$ Banding Porch	" ϕL " $\pm .002$ Flange	" ϕR " $\pm .002$ MTG Hole	" ϕS " Thru
7	.4375-.067P-.2L-TS-2A	0.265 (6.73)	0.725 (18.42)	0.730 (18.54)	0.445 (11.30)
8	.5000-.067P-.2L-TS-2A	0.327 (8.31)	0.788 (20.02)	0.793 (20.14)	0.509 (12.93)
9	.5625-.067P-.2L-TS-2A	0.406 (10.31)	0.912 (23.16)	0.917 (23.29)	0.577 (14.66)
10	.6250-.067P-.2L-TS-2A	0.484 (12.29)	0.975 (24.76)	0.980 (24.89)	0.645 (16.38)
11	.6875-.067P-.2L-TS-2A	0.524 (13.31)	1.038 (26.37)	1.043 (26.49)	0.712 (18.08)
12	.7500-.067P-.2L-TS-2A	0.603 (15.32)	1.100 (27.94)	1.105 (28.07)	0.768 (19.51)
14	.8750-.067P-.2L-TS-2A	0.681 (17.30)	1.225 (31.12)	1.230 (31.24)	0.890 (22.61)
16	1.0000-.067P-.2L-TS-2A	0.782 (19.86)	1.350 (34.29)	1.355 (34.42)	1.015 (25.78)
18	1.1250-.067P-.2L-TS-2A	0.899 (22.83)	1.475 (37.47)	1.480 (37.59)	1.125 (28.58)
20	1.2500-.067P-.2L-TS-2A	1.043 (26.49)	1.600 (40.64)	1.605 (40.77)	1.275 (32.39)
22	1.3750-.067P-.2L-TS-2A	1.155 (29.34)	1.725 (43.82)	1.730 (43.94)	1.400 (35.56)
24	1.5000-.067P-.2L-TS-2A	1.273 (32.33)	1.850 (46.99)	1.855 (47.12)	1.525 (38.73)



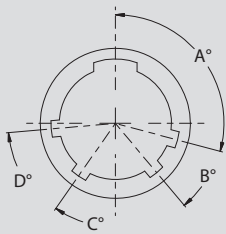
Series 806 cryogenic capable hermetic feedthroughs feature stainless steel shells and glass-to-metal seals. Rated for -195°C to +200°C temperature range. Micro miniature Series 806 connectors save size and weight compared to legacy aerospace-grade hermetic connectors. These high performance connectors are suitable for pressurized bulkhead applications subject to vibration, moisture, and temperature extremes.

Material/Finish

- Shell & jam-nut: SS304L CRES / per p/n dev
- Contacts, hermetic: Nickel-iron alloy / gold plate
- Contacts, sockets: Copper alloy / gold plate
- Hoods, sockets: 305 CRES / passivate
- Insulator, hermetic: Vitreous glass
- Insulator, socket: High grade dielectric
- Seals & O-rings: Duralectric™ K

Test Criteria

- Leak rate: $<1 \times 10^{-7}$ ccHe/sec @ 1 ATM. delta pressure
- DWV: 1300 VAC (#22 contacts)
1800 VAC (#20, #16, #12 contacts)
1000 VAC (#8 contacts)
- I.R. - 5000 MEGOHMS MIN @ 500 VDC

Polarization Key Code

POS	A°	B°	C°	D°
A	105°	140°	215°	265°
B	102°	170°	248°	305°
C	80°	150°	230°	295°
D	68°	140°	205°	275°
E	64°	155°	234°	304°
F	72°	120°	200°	298°

Panel Thickness

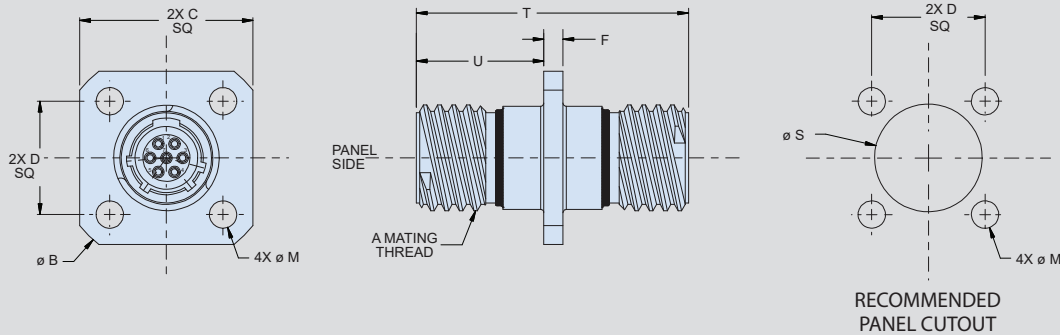
Code	"T" Max	"U" Max
-01	1.275 (32.39)	.750 (19.05)
-02	1.400 (35.56)	.875 (22.23)
-03	1.650 (41.91)	1.125 (28.58)

How To Order ThermaRex Series 806 Mil-Aero Feedthrough

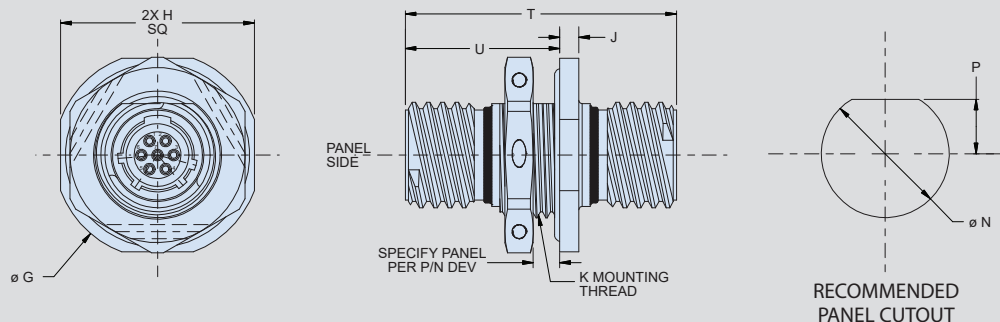
SAMPLE PART NUMBER		806-089	-07	Z1	8-7	P	A	-01
Series / Basic Part No.	806-089 Bulkhead Feedthrough							
Mounting Type	02 = Box Mount 07 = Jam-Nut Mount 13 = Weld Mount							
Finish	Z1 = Passivated ZL = Nickel Plated							
Shell Size - Insert Arr.	See Table I							
Contact Style	P = Pin On Panel Side, Socket Opposite S = Socket On Panel Side, Pin Opposite PP = Pin-Pin Feedthrough SS = Socket-Socket Feedthrough							
Polarization	A, B, C, D							
Panel Thickness	-01 = .125 -02 = .250 -03 = .500							

Table I: Shell Size - Insert Arrangement

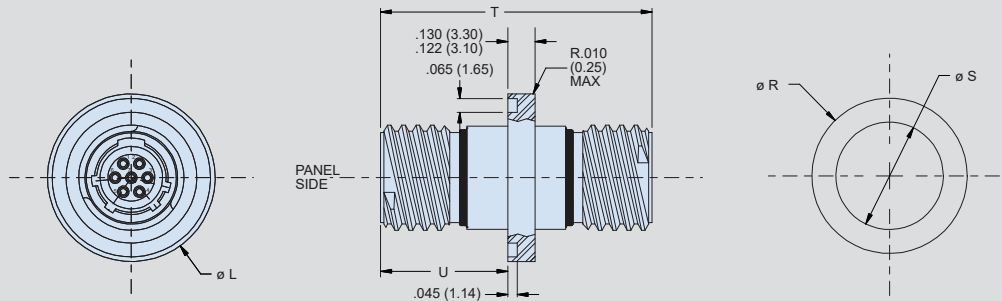
Contact Layout	Number of Contacts					Contact Layout	Number of Contacts					Contact Layout	Number of Contacts				
	22HD	20HD	16	12	8		22HD	20HD	16	12	8		22HD	20HD	16	12	8
7-3	3					22-69	69					18-3					3
8-4	4					24-92	92					20-4					4
8-7	7					8-1		1				22-5					5
9-11	11					10-2		2				24-8					8
10-15	15					11-4		4				10-8A	6		2		
11-19	19					12-5		5				11-13	11		2		
12-26	26					14-7		7				12-27	26		1		
14-39	39					16-12		12				14-21	17		4		
16-60	60					18-15		15				16-41	37		4		
18-85	85					20-22		22				18-59	55		4		
20-110	110					22-24		24				11-14	13			1	
22-140	140					24-35		35				12-14	12			2	
24-186	186					9-1			1			14-22	20			2	
8-3		3				12-2			2			16-32	28			4	
9-5		5				14-3			3			16-42	40			2	
10-8		8				16-4			4			18-62	60			2	
11-10		10				16-7			7			14-20A	19				1
12-15		15				18-8			8			16-22	20				2
14-20		20				20-11			11			18-21	18				3
16-31		31				22-13			13			20-28	24				4
18-41		41				24-19			19			22-44	40				4
20-55		55				10-1					1	24-97	93				4
						16-2					2						

806-089-02 Box Mount Dimensions

Shell Size	"A" Thread Mating	"Ø B" Max Flange	"C" Square Max Flange Flats	"D" Square BSC Mounting Holes	"Ø S" Thru	"F" Max Flange	"Ø M" Thru MTG Holes
7	.4375-.067P-.2L-TS-2A	0.968 (24.59)	0.750 (19.05)	0.469 (11.91)	0.445 (11.30)	0.100 (2.54)	0.128 (3.25)
8	.5000-.067P-.2L-TS-2A	1.040 (26.42)	0.822 (20.88)	0.531 (13.49)	0.509 (12.93)		
9	.5625-.067P-.2L-TS-2A	1.130 (28.70)	0.885 (22.48)	0.594 (15.09)	0.577 (14.66)		
10	.6250-.067P-.2L-TS-2A	1.174 (29.82)	0.913 (23.19)	0.625 (15.88)	0.645 (16.38)		
11	.6875-.067P-.2L-TS-2A	1.240 (31.50)	0.960 (24.38)	0.670 (17.02)	0.712 (18.08)		
12	.7500-.067P-.2L-TS-2A	1.354 (34.39)	1.040 (26.42)	0.765 (19.43)	0.768 (19.51)		
14	.8750-.067P-.2L-TS-2A	1.510 (38.35)	1.133 (28.78)	0.859 (21.82)	0.890 (22.61)		
16	1.0000-.067P-.2L-TS-2A	1.620 (41.15)	1.227 (31.17)	0.938 (23.83)	1.015 (25.78)	0.125 (3.18)	0.154 (3.91)
18	1.1250-.067P-.2L-TS-2A	1.784 (45.31)	1.320 (33.53)	1.016 (25.81)	1.125 (28.58)		
20	1.2500-.067P-.2L-TS-2A	1.910 (48.51)	1.444 (36.68)	1.109 (28.17)	1.275 (32.39)		
22	1.3750-.067P-.2L-TS-2A	2.083 (52.91)	1.570 (39.88)	1.203 (30.56)	1.400 (35.56)		
24	1.5000-.067P-.2L-TS-2A	2.200 (55.88)	1.696 (43.08)	1.312 (33.32)	1.525 (38.73)		

806-089-07 Jam-Nut Mount Dimensions

Shell Size	"A" Thread Mating	"ø G" MAX Flange	"H" Square Max Flange Flats	"J" Max Flange	"K" Thread Mounting	"ø N" +.005/- .000 Mounting Hole	"P" +.005/- .000 Mounting Flat
7	.4375-.067P-.2L-TS-2A	0.848 (21.54)	0.908 (23.06)	0.100 (2.54)	M13 X 1-6g-.100R	0.522 (13.26)	0.224 (5.69)
8	.5000-.067P-.2L-TS-2A	0.980 (24.89)	0.920 (23.37)		M15 X 1-6g .100R	0.601 (15.27)	0.256 (6.50)
9	.5625-.067P-.2L-TS-2A	1.040 (26.42)	0.980 (24.89)		M16 X 1-6g .100R	0.640 (16.26)	0.287 (7.29)
10	.6250-.067P-.2L-TS-2A	1.110 (28.19)	1.050 (26.67)		M18 X 1-6g .100R	0.719 (18.26)	0.318 (8.08)
11	.6875-.067P-.2L-TS-2A	1.160 (29.46)	1.110 (28.19)		M19 X 1-6g .100R	0.759 (19.28)	0.350 (8.89)
12	.7500-.067P-.2L-TS-2A	1.230 (31.24)	1.170 (29.72)		M21 X 1-6g .100R	0.837 (21.26)	0.381 (9.68)
14	.8750-.067P-.2L-TS-2A	1.360 (34.54)	1.320 (33.53)		M24 X 1-6g .100R	0.955 (24.26)	0.443 (11.25)
16	1.0000-.067P-.2L-TS-2A	1.515 (38.48)	1.444 (36.68)		M27 X 1-6g .100R	1.073 (27.25)	0.505 (12.83)
18	1.1250-.067P-.2L-TS-2A	1.610 (40.89)	1.570 (39.88)		M30 X 1-6g .100R	1.192 (30.28)	0.568 (14.43)
20	1.2500-.067P-.2L-TS-2A	1.850 (46.99)	1.760 (44.70)		M34 X 1-6g .100R	1.349 (34.26)	0.630 (16.00)
22	1.3750-.067P-.2L-TS-2A	2.010 (51.05)	1.913 (48.59)	0.128 (3.25)	M37 X 1-6g .100R	1.467 (37.26)	0.693 (17.60)
24	1.5000-.067P-.2L-TS-2A	2.195 (55.75)	2.070 (52.58)		M41 X 1-6g .100R	1.624 (41.25)	0.755 (19.18)

806-089-13 Weld Mount Dimensions

Shell Size	"A" Thread Mating	"Ø L" ±.002 Flange	"Ø R" ±.002 MTG Hole	"Ø S" Thru
7	.4375-.067P-.2L-TS-2A	0.725 (18.42)	0.730 (18.54)	0.445 (11.30)
8	.5000-.067P-.2L-TS-2A	0.788 (20.02)	0.793 (20.14)	0.509 (12.93)
9	.5625-.067P-.2L-TS-2A	0.912 (23.16)	0.917 (23.29)	0.577 (14.66)
10	.6250-.067P-.2L-TS-2A	0.975 (24.76)	0.980 (24.89)	0.645 (16.38)
11	.6875-.067P-.2L-TS-2A	1.038 (26.37)	1.043 (26.49)	0.712 (18.08)
12	.7500-.067P-.2L-TS-2A	1.100 (27.94)	1.105 (28.07)	0.768 (19.51)
14	.8750-.067P-.2L-TS-2A	1.225 (31.12)	1.230 (31.24)	0.890 (22.61)
16	1.0000-.067P-.2L-TS-2A	1.350 (34.29)	1.355 (34.42)	1.015 (25.78)
18	1.1250-.067P-.2L-TS-2A	1.475 (37.47)	1.480 (37.59)	1.125 (28.58)
20	1.2500-.067P-.2L-TS-2A	1.600 (40.64)	1.605 (40.77)	1.275 (32.39)
22	1.3750-.067P-.2L-TS-2A	1.725 (43.82)	1.730 (43.94)	1.400 (35.56)
24	1.5000-.067P-.2L-TS-2A	1.850 (46.99)	1.855 (47.12)	1.525 (38.73)

HIGH TEMPERATURE ThermaRex HT Series 806 Accessories



Swing-Arm Saddle Clamp 870V001

THERMAREX™ HT



Self-locking, adjustable arms. 870V001 Swing-Arm saddle clamp fits Glenair Series 806 Mil-Aero connectors. Use with unshielded wire bundles. Adjustable arms pivot to 0°, 45° or 90° positions. Arms have self-locking threads to withstand high vibration. Full radius saddles have self-locking clinch nuts. Available in two clamp sizes: standard clamp fits most wire bundles, large clamp has increased clearance for oversize wire bundles. Coupling nut has anti-decoupling mechanism for audible detented coupling and prevents backoff under high vibration. Tested for 1000 hours at 300°C and in random vibration at 300°C.

MATERIAL/FINISH

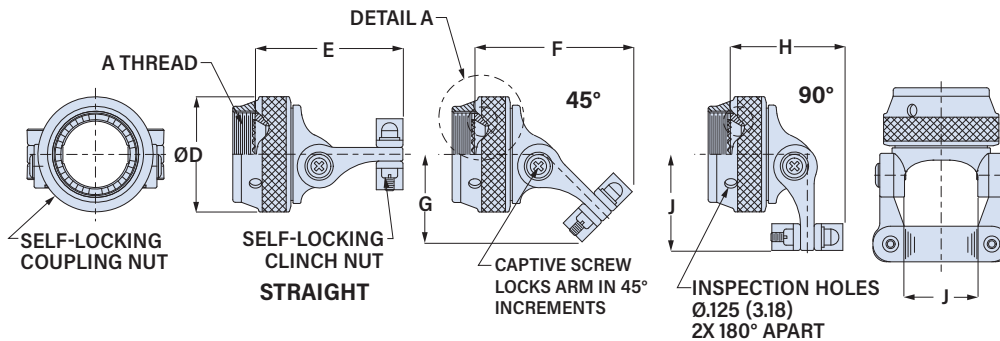
Stainless Steel (Code Z1)

- Coupling nut, body, arms, saddles: SST
- Screws, washers, inserts: stainless steel/passivated
- Anti-decoupling springs: stainless steel
- Clinch Nuts: stainless steel, silver plated

How To Order

Sample Part Number	870V001	Z1	08	A
Series / Basic Part No.	870V001 Swing-Arm saddle clamp			
Material/Finish	Z1 = Stainless steel passivated			
Shell Sizes	08, 09, 10, 11, 12, 14, 16, 18, 20, 22, 24			
Clamp Size	A = Standard clamp B = Wide mouth			

Dimensions



Shell Size	A Thread ISO Metric	øC Max	D Max	E Max	F Max	G Max	H Max	J Ref.
08	M10 x 1.0-6H	.812 (20.62)	1.55 (39.37)	1.45 (36.83)	.77 (19.56)	.98 (24.89)	.87 (22.10)	.393 (9.98)
09	M12 x 1.0-6H	.812 (20.62)	1.55 (39.37)	1.45 (36.83)	.77 (19.56)	.98 (24.89)	.87 (22.10)	.393 (9.98)
10	M14 x 1.0-6H	.938 (23.83)	1.61 (40.89)	1.56 (39.62)	.87 (22.10)	1.05 (26.67)	.96 (24.38)	.455 (11.56)
11	M15 x 1.0-6H	.938 (23.83)	1.61 (40.89)	1.56 (39.62)	.87 (22.10)	1.05 (26.67)	.96 (24.38)	.455 (11.56)
12	M17 x 1.0-6H	1.125 (28.58)	1.66 (42.16)	1.71 (43.43)	.97 (24.64)	1.22 (30.99)	1.03 (26.16)	.598 (15.19)
14	M19 x 1.0-6H	1.250 (31.75)	1.67 (42.42)	1.79 (45.47)	1.02 (25.91)	1.32 (33.53)	1.10 (27.94)	.710 (18.03)
16	M22 x 1.0-6H	1.250 (31.75)	1.67 (42.42)	1.79 (45.47)	1.02 (25.91)	1.32 (33.53)	1.10 (27.94)	.710 (18.03)
18	M25 x 1.0-6H	1.375 (34.92)	1.77 (44.96)	1.88 (47.75)	1.08 (27.43)	1.38 (35.05)	1.16 (29.46)	.839 (21.31)
20	M28 x 1.0-6H	1.500 (38.10)	1.77 (44.96)	1.96 (49.78)	1.13 (28.70)	1.49 (37.85)	1.22 (30.99)	.934 (23.72)
22	M31 x 1.0-6H	1.625 (41.28)	1.92 (48.77)	2.13 (54.10)	1.24 (31.50)	1.61 (40.89)	1.29 (32.77)	1.068 (27.13)
24	M34 x 1.0-6H	1.750 (44.45)	1.95 (49.53)	2.20 (55.88)	1.30 (33.02)	1.68 (42.67)	1.36 (34.54)	1.197 (30.40)

Swing-Arm Saddle Clamp
 870V001

Clamp Dimensions

The image contains two technical diagrams of clamps.
TYPE A STANDARD CLAMP: A cross-sectional view of a clamp with three segments. Dimension **U** is the height of the top segment. Dimension **T** is the width of the top segment. Dimension **S** is the total width of the clamp. The text **U CLOSED** is to the left.
TYPE B LARGE CLAMP: A cross-sectional view of a larger clamp with three segments. Dimension **X** is the height of the top segment. Dimension **W** is the width of the top segment. Dimension **V** is the total width of the clamp. A detail on the right shows a tolerance of **.062/.052 (1.6/1.3)**. The text **X CLOSED** is to the left.

Standard Clamp

Shell Size	S Max	T Min	U Ref.
08	.97 (24.64)	.22 (5.59)	.264 (6.71)
09	.97 (24.64)	.22 (5.59)	.264 (6.71)
10	1.03 (26.16)	.29 (7.37)	.310 (7.87)
11	1.03 (26.16)	.29 (7.37)	.310 (7.87)
12	1.21 (30.73)	.34 (8.64)	.422 (10.72)
14	1.32 (33.53)	.45 (11.43)	.538 (13.67)
16	1.32 (33.53)	.45 (11.43)	.538 (13.67)
18	1.45 (36.83)	.55 (13.97)	.590 (14.99)
20	1.54 (39.12)	.65 (16.51)	.660 (16.76)
22	1.67 (42.42)	.74 (18.80)	.744 (18.90)
24	1.79 (45.47)	.87 (22.10)	.826 (20.98)

Large Clamp

Shell Size	V Max	W Min	X Ref.
08	.98 (24.89)	.33 (8.38)	.356 (9.04)
09	.98 (24.89)	.33 (8.38)	.356 (9.04)
10	1.20 (30.48)	.45 (11.43)	.422 (10.72)
11	1.20 (30.48)	.45 (11.43)	.422 (10.72)
12	1.45 (36.83)	.62 (15.75)	.637 (16.18)
14	1.54 (39.12)	.68 (17.27)	.707 (17.96)
16	1.54 (39.12)	.68 (17.27)	.707 (17.96)
18	1.60 (40.64)	.80 (20.32)	.759 (19.28)
20	1.73 (43.94)	.90 (22.86)	.841 (21.36)
22	1.95 (49.53)	1.05 (26.67)	.996 (25.30)
24	2.08 (52.83)	1.18 (29.97)	1.060 (26.92)

HIGH TEMPERATURE ThermaRex HT Series 806 Accessories



Swing-Arm Saddle Clamp, EMI Banding Adapter 870V005

ThermaRex™ HT



Shielded, self-locking, adjustable arms. 870V005 aluminum or stainless steel Swing-Arm saddle clamp fits Glenair Series 806 Mil-Aero connectors. Adjustable arms pivot to 0°, 45° or 90° positions. Banding adapter has optional "T" slots for pigtailed individual shields. Terminate shield braid to adapter with optional Band-Master ATS® pre-coiled banding strap. Full radius saddles with self-locking clinch nuts. Available in two clamp sizes: standard clamp fits most wire bundles, large clamp has increased clearance for oversize wire bundles. Coupling nut has anti-decoupling mechanism for audible detented coupling and prevents backoff under high vibration. Tested for 1000 hours at 300°C and in random vibration at 300°C.

MATERIAL/FINISH

Stainless Steel (Code Z1)

- Coupling nut, body, arms, saddles, anti-decoupling springs, screws, washers, inserts: stainless steel, passivated
- Clinch nuts: stainless steel, silver plated
- Banding adapter:
Code Z1: stainless steel/ passivated
- Band (optional): stainless steel/ passivated

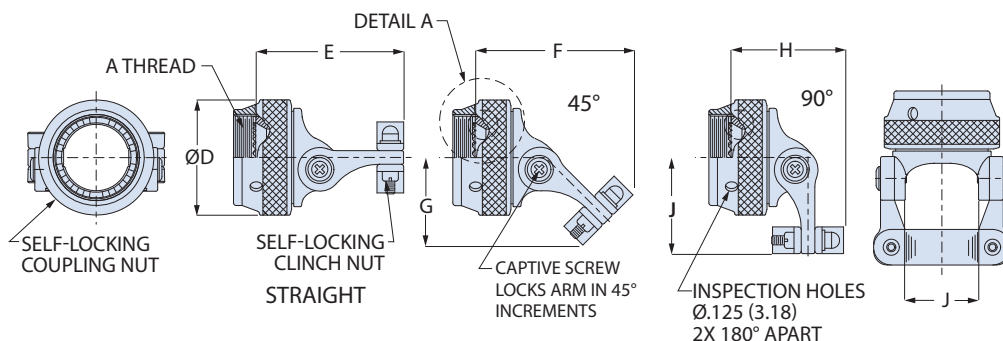
Banding Adapter Slots



Route pigtail shield braids into optional "T" slots in banding adapter.

How To Order						
Sample Part Number	870V005	Z1	08	A	S	K
Series / Basic Part No.	870V005 Swing-Arm Saddle Clamp, EMI Banding Adapter					
Material/Finish	Z1 = SST Interface Ring, Passivated					
Shell Sizes	08, 09, 10, 11, 12, 14, 16, 18, 20, 22, 24					
Clamp Size	A = Standard Clamp B = Wide Mouth					
Banding Adapter Slots	Omit if not required. See Banding Adapter. S = "T" Slots in Banding Adapter for Shield Pigtails					
Band	Omit if not required. K = Pre-Coiled Micro Band included With Clamp J = Pre-Coiled Micro Slim Band included With Clamp					

Dimensions



Shell Size	A Thread ISO Metric	øC Max	D Max	E Max	F Max	G Max	H Max	J Ref.
08	M10 x 1.0-6H	.812 (20.62)	1.55 (39.37)	1.45 (36.83)	.77 (19.56)	.98 (24.89)	.87 (22.10)	.393 (9.98)
09	M12 x 1.0-6H	.812 (20.62)	1.55 (39.37)	1.45 (36.83)	.77 (19.56)	.98 (24.89)	.87 (22.10)	.393 (9.98)
10	M14 x 1.0-6H	.938 (23.83)	1.61 (40.89)	1.56 (39.62)	.87 (22.10)	1.05 (26.67)	.96 (24.38)	.455 (11.56)
11	M15 x 1.0-6H	.938 (23.83)	1.61 (40.89)	1.56 (39.62)	.87 (22.10)	1.05 (26.67)	.96 (24.38)	.455 (11.56)
12	M17 x 1.0-6H	1.125 (28.58)	1.66 (42.16)	1.71 (43.43)	.97 (24.64)	1.22 (30.99)	1.03 (26.16)	.598 (15.19)
14	M19 x 1.0-6H	1.250 (31.75)	1.67 (42.42)	1.79 (45.47)	1.02 (25.91)	1.32 (33.53)	1.10 (27.94)	.710 (18.03)
16	M22 x 1.0-6H	1.250 (31.75)	1.67 (42.42)	1.79 (45.47)	1.02 (25.91)	1.32 (33.53)	1.10 (27.94)	.710 (18.03)
18	M25 x 1.0-6H	1.375 (34.92)	1.77 (44.96)	1.88 (47.75)	1.08 (27.43)	1.38 (35.05)	1.16 (29.46)	.839 (21.31)
20	M28 x 1.0-6H	1.500 (38.10)	1.77 (44.96)	1.96 (49.78)	1.13 (28.70)	1.49 (37.85)	1.22 (30.99)	.934 (23.72)
22	M31 x 1.0-6H	1.625 (41.28)	1.92 (48.77)	2.13 (54.10)	1.24 (31.50)	1.61 (40.89)	1.29 (32.77)	1.068 (27.13)
24	M34 x 1.0-6H	1.750 (44.45)	1.95 (49.53)	2.20 (55.88)	1.30 (33.02)	1.68 (42.67)	1.36 (34.54)	1.197 (30.40)

Swing-Arm Saddle Clamp, EMI Banding Adapter 870V005

Clamp Dimensions

The image contains two technical diagrams of clamps. The left diagram is labeled 'TYPE A STANDARD CLAMP' and shows a cross-section of a clamp with dimensions U (height of the closed clamp), T (thickness of the clamp body), and S (overall width). The right diagram is labeled 'TYPE B LARGE CLAMP' and shows a cross-section of a larger clamp with dimensions X (height of the closed clamp), W (thickness of the clamp body), and V (overall width). A detail view of the clamp body shows a thickness of .062/.052 (1.6/1.3).

Standard Clamp

Shell Size	S Max	T Min	U Ref.
08	.97 (24.64)	.22 (5.59)	.264 (6.71)
09	.97 (24.64)	.22 (5.59)	.264 (6.71)
10	1.03 (26.16)	.29 (7.37)	.310 (7.87)
11	1.03 (26.16)	.29 (7.37)	.310 (7.87)
12	1.21 (30.73)	.34 (8.64)	.422 (10.72)
14	1.32 (33.53)	.45 (11.43)	.538 (13.67)
16	1.32 (33.53)	.45 (11.43)	.538 (13.67)
18	1.45 (36.83)	.55 (13.97)	.590 (14.99)
20	1.54 (39.12)	.65 (16.51)	.660 (16.76)
22	1.67 (42.42)	.74 (18.80)	.744 (18.90)
24	1.79 (45.47)	.87 (22.10)	.826 (20.98)

Large Clamp

Shell Size	V Max	W Min	X Ref.
08	.98 (24.89)	.33 (8.38)	.356 (9.04)
09	.98 (24.89)	.33 (8.38)	.356 (9.04)
10	1.20 (30.48)	.45 (11.43)	.422 (10.72)
11	1.20 (30.48)	.45 (11.43)	.422 (10.72)
12	1.45 (36.83)	.62 (15.75)	.637 (16.18)
14	1.54 (39.12)	.68 (17.27)	.707 (17.96)
16	1.54 (39.12)	.68 (17.27)	.707 (17.96)
18	1.60 (40.64)	.80 (20.32)	.759 (19.28)
20	1.73 (43.94)	.90 (22.86)	.841 (21.36)
22	1.95 (49.53)	1.05 (26.67)	.996 (25.30)
24	2.08 (52.83)	1.18 (29.97)	1.060 (26.92)

Band information

Terminate cable braid to band adapter with optional pre-coiled banding strap. Glenair's Band-Master ATS® banding system provides quick, easy, cost-effective and highly reliable termination. Band is passivated stainless steel.



Band



Micro Band Tool
601-101



Micro Slim Band Tool
601-122

Shell Size	Pre-Coiled Micro Band Part No.	Pre-Coiled Micro Slim Band Part No.	Length	Max Diameter
9 – 13	601-061	601-601	8.125 (206.38)	.88 (22.35)
15 – 25	601-065	601-603	14.25 (361.95)	1.88 (47.75)

HIGH TEMPERATURE ThermaRex HT SuperNine® Accessories



Swing-Arm Saddle Clamp 870H001

THERMAREX™ HT



Self-locking, adjustable arms. 870H001 Swing-Arm saddle clamp fits MIL-DTL-38999 Series III and IV connectors. Use with unshielded wire bundles. Adjustable arms pivot to 0°, 45° or 90° positions. Arms have self-locking threads to withstand high vibration. Full radius saddles have self-locking clinch nuts. Available in two clamp sizes: standard clamp fits most wire bundles, large clamp has increased clearance for oversize wire bundles. Coupling nut has anti-decoupling mechanism for audible detented coupling and prevents backoff under high vibration.

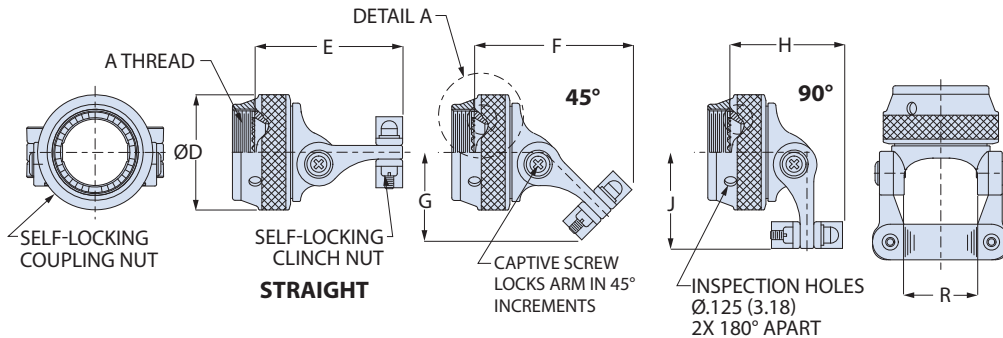
MATERIAL/FINISH

- **Stainless Steel (Z1)**
- Coupling nut, body, arms, saddles: SST
- Screws, washers, inserts: stainless steel/passivated
- Anti-decoupling springs: stainless steel
- Clinch Nuts: stainless steel, silver plated

How To Order

Sample Part Number	870H001										Z1	23	A
Series / Basic Part No.	870H001 Swing-Arm Saddle Clamp												
Material/Finish	Z1 = SST interface ring, passivated												
Shell Sizes	Shell Size	9	11	13	15	17	19	21	23	25			
		A	B	C	D	E	F	G	H	J			
	Size Code	09	11	13	15	17	19	21	23	25			
Clamp Size	A = Standard Clamp												
	B = Large Clamp												

Dimensions



Shell Size	A Thread	Ø B Min	D Max	E Max	F Max	G Max	H Max	J Max	R Ref.
9 (A)	M12X1.0-6H	.178 (4.52)	.812 (20.62)	1.55 (39.37)	1.45 (36.83)	.77 (19.56)	.98 (24.89)	.87 (22.10)	.393 (9.98)
11 (B)	M15X1.0-6H	.305 (7.75)	.938 (23.83)	1.61 (40.89)	1.56 (39.62)	.87 (22.10)	1.05 (26.67)	.96 (24.38)	.455 (11.56)
13 (C)	M18X1.0-6H	.404 (10.26)	1.125 (28.58)	1.66 (42.16)	1.71 (43.43)	.97 (24.64)	1.22 (30.99)	1.03 (26.16)	.598 (15.19)
15 (D)	M22X1.0-6H	.565 (14.35)	1.250 (31.75)	1.67 (42.42)	1.79 (45.47)	1.02 (25.91)	1.32 (33.53)	1.10 (27.94)	.710 (18.03)
17 (E)	M25X1.0-6H	.658 (16.71)	1.375 (34.92)	1.77 (44.96)	1.88 (47.75)	1.08 (27.43)	1.38 (35.05)	1.16 (29.46)	.839 (21.31)
19 (F)	M28X1.0-6H	.777 (19.74)	1.500 (38.10)	1.77 (44.96)	1.96 (49.78)	1.13 (28.70)	1.49 (37.85)	1.22 (30.99)	.934 (23.72)
21 (G)	M31X1.0-6H	.877 (22.28)	1.625 (41.28)	1.92 (48.77)	2.13 (54.10)	1.24 (31.50)	1.61 (40.89)	1.29 (32.77)	1.068 (27.13)
23 (H)	M34X1.0-6H	.999 (25.37)	1.750 (44.45)	1.95 (49.53)	2.20 (55.88)	1.30 (33.02)	1.68 (42.67)	1.36 (34.54)	1.197 (30.40)
25 (J)	M37X1.0-6H	1.127 (28.63)	1.875 (47.63)	2.10 (53.34)	2.31 (58.67)	1.39 (35.31)	1.75 (44.45)	1.55 (39.37)	1.323 (33.60)

Swing-Arm Saddle Clamp
 870H001

THERMAREX™ HT

Clamp Dimensions			
TYPE A STANDARD CLAMP TYPE B LARGE CLAMP			
Standard Clamp			
Shell Size	L Max	M Min	N Ref.
9 (A)	.98 (24.89)	.22 (5.59)	.265 (6.73)
11 (B)	1.05 (26.67)	.27 (6.86)	.310 (7.87)
13 (C)	1.20 (30.48)	.35 (8.89)	.422 (10.72)
15 (D)	1.30 (33.02)	.47 (11.94)	.538 (13.67)
17 (E)	1.44 (36.58)	.55 (13.97)	.590 (14.99)
19 (F)	1.56 (39.62)	.62 (15.75)	.660 (16.76)
21 (G)	1.69 (42.93)	.70 (17.78)	.744 (18.90)
23 (H)	1.77 (44.96)	.78 (19.81)	.826 (20.98)
25 (J)	1.89 (48.01)	.85 (21.59)	.896 (22.76)
Large Clamp			
Shell Size	P Max	R Min	S Ref.
9 (A)	.98 (24.89)	.33 (8.38)	.356 (9.04)
11 (B)	1.20 (30.48)	.45 (11.43)	.422 (10.72)
13 (C)	1.45 (36.83)	.62 (15.75)	.637 (16.18)
15 (D)	1.54 (39.12)	.68 (17.27)	.707 (17.96)
17 (E)	1.60 (40.64)	.80 (20.32)	.759 (19.28)
19 (F)	1.73 (43.94)	.90 (22.86)	.841 (21.36)
21 (G)	1.95 (49.53)	1.05 (26.67)	.996 (25.30)
23 (H)	2.08 (52.83)	1.18 (29.97)	1.060 (26.92)
25 (J)	2.32 (58.93)	1.30 (33.02)	1.124 (28.55)

HIGH TEMPERATURE ThermaRex HT SuperNine® Accessories



Swing-Arm Saddle Clamp, EMI Banding Adapter 870H005

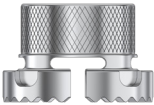
ThermaRex™ HT



MATERIAL/FINISH

- Stainless Steel (Z1)
- Coupling nut, body, arms, saddles, anti-decoupling springs, screws, washers, inserts: stainless steel, passivated
- Clinch nuts: stainless steel, silver plated
- Banding adapter:
 - Code Z1: stainless steel/ passivated
- Band (optional): stainless steel/ passivated

Banding Adapter Slots



Route pigtail shield braids into optional "T" slots in banding adapter.

Shielded, self-locking, adjustable arms. 870H005 stainless steel Swing-Arm saddle clamp fits MIL-DTL-38999 Series III and IV connectors. Adjustable arms pivot to 0°, 45° or 90° positions. Banding adapter has optional "T" slots for pigtailed individual shields. Terminate shield braid to adapter with optional Band-Master ATS® pre-coiled banding strap. Full radius saddles with self-locking clinch nuts. Available in two clamp sizes: standard clamp fits most wire bundles, large clamp has increased clearance for oversize wire bundles. Coupling nut has anti-decoupling mechanism for audible detented coupling and prevents backoff under high vibration.

How To Order															
Sample Part Number	870H005										Z1	23	A	S	K
Series / Basic Part No.	870H005 Swing-Arm Saddle Clamp, EMI Banding Adapter														
Material/Finish	Z1 = SST interface ring, passivated														
Shell Sizes	Shell Size	9	11	13	15	17	19	21	23	25					
		A	B	C	D	E	F	G	H	J					
	Size Code	09	11	13	15	17	19	21	23	25					
Clamp Size	A = Standard Clamp B = Large Clamp														
Banding Adapter Slots	Omit if not required. See banding adapter. S = "T" Slots in Banding Adapter for Shield Pigtails														
Band	Omit if not required. K = Pre-Coiled Micro Band included With Clamp J = Pre-Coiled Micro Slim Band included With Clamp														

Swing-Arm Saddle Clamp, EMI Banding Adapter 870H005

Clamp Dimensions			
Standard Clamp			
Shell Size	S Max	T Min	U Ref.
9 (A)	.97 (24.64)	.22 (5.59)	.264 (6.71)
11 (B)	1.03 (26.16)	.29 (7.37)	.310 (7.87)
13 (C)	1.21 (30.73)	.34 (8.64)	.422 (10.72)
15 (D)	1.32 (33.53)	.45 (11.43)	.538 (13.67)
17 (E)	1.45 (36.83)	.55 (13.97)	.590 (14.99)
19 (F)	1.54 (39.12)	.65 (16.51)	.660 (16.76)
21 (G)	1.67 (42.42)	.74 (18.80)	.744 (18.90)
23 (H)	1.79 (45.47)	.87 (22.10)	.826 (20.98)
25 (J)	1.92 (48.77)	.99 (25.15)	.896 (22.76)
Large Clamp			
Shell Size	V Max	W Min	X Ref.
9 (A)	.98 (24.89)	.33 (8.38)	.356 (9.04)
11 (B)	1.20 (30.48)	.45 (11.43)	.422 (10.72)
13 (C)	1.45 (36.83)	.62 (15.75)	.637 (16.18)
15 (D)	1.54 (39.12)	.68 (17.27)	.707 (17.96)
17 (E)	1.60 (40.64)	.80 (20.32)	.759 (19.28)
19 (F)	1.73 (43.94)	.90 (22.86)	.841 (21.36)
21 (G)	1.95 (49.53)	1.05 (26.67)	.996 (25.30)
23 (H)	2.08 (52.83)	1.18 (29.97)	1.060 (26.92)
25 (J)	2.32 (58.93)	1.30 (33.02)	1.124 (28.55)

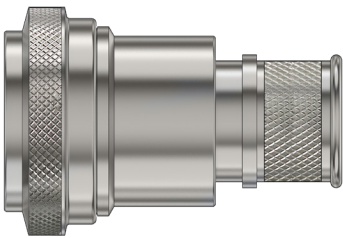
Band information				
Terminate cable braid to band adapter with optional pre-coiled banding strap. Glenair's Band-Master ATS® banding system provides quick, easy, cost-effective and highly reliable termination. Band is passivated stainless steel.				
Band Micro Band Tool Micro Slim Band Tool 601-101 601-122				
Shell Size	Pre-Coiled Micro Band Part No.	Pre-Coiled Micro Slim Band Part No.	Length	Max Diameter
9 – 13	601-061	601-601	8.125 (206.38)	.88 (22.35)
15 – 25	601-065	601-603	14.25 (361.95)	1.88 (47.75)

HIGH TEMPERATURE
ThermaRex HT Series 806 Backshell



Banding Backshell, Shrink Boot, Self-Locking
440VS191-1181

THERMAREX™ HT



Self-Locking. Band-Master ATS® shield termination. 440V*191 banding backshell fits Glenair's Series 806 connectors. Anti-decoupling mechanism provides audible detented coupling and prevents backoff under high vibration. Terminate cable braid shield to backshell with optional band strap. Stainless steel, silicone O-ring, stainless steel detent spring, stainless steel band. Tested for 1000 hours at 300°C and in random vibration at 300°C.

Profile Selection Guide

S Straight

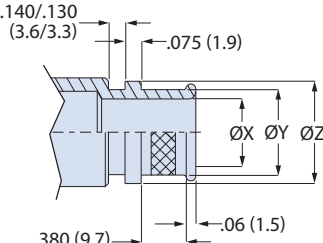
H 45°

J 90°

M 45°

N 90°

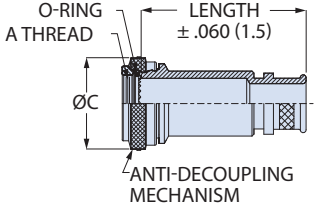
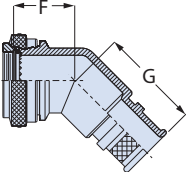
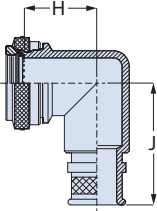
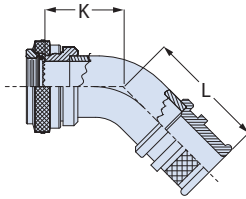
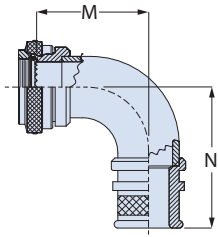
How To Order							
Sample Part Number	440VS191	Z1	20	12-	4	K	-1181
Series / Basic Part No.	440VS191 440VH191 440VJ191 440VM191 440VN191						
Material/Finish	Z1 = SST/ Passivated						
Shell Size	08, 09, 10, 11, 12, 14, 16, 18, 20, 22, 24						
Entry Size	See Entry Size table						
Length	3 1.5 inches Applies to Profile S only. 4 2.0 inches If Entry Size is greater than "Maximum 5 2.5 inches Entry Size" (see next page), then 2 inch 6 3.0 inches minimum applies.						
Band	Omit if not required K = Pre-Coiled Band						
Mod	-1181 = ThermaRex Elastomers						

ENTRY SIZE										
	Entry Size	Shell Sizes*	ØX ± .015 (0.4)	ØY ± .015 (0.4)	ØZ ± .015 (0.4)	Entry Size	Shell Sizes*	ØX ± .015(0.4)	ØY ± .015(0.4)	ØZ ± .015(0.4)
	02	08-24	.125 (3.18)	.250 (6.35)	.312 (7.92)	13	18-24	.812 (20.62)	.938 (23.83)	1.000 (25.40)
	03	08-24	.188 (4.78)	.312 (7.92)	.374 (9.50)	14	20-24	.875 (22.23)	1.000 (25.40)	1.062 (26.97)
	04	08-24	.250 (6.35)	.375 (9.52)	.438 (11.13)	15	20-24	.938 (23.83)	1.062 (26.97)	1.124 (28.55)
	05	09-24	.312 (7.92)	.438 (11.13)	.500 (12.70)	16	22-24	1.000 (25.40)	1.125 (28.58)	1.187 (30.15)
	06	10-24	.375 (9.52)	.500 (12.70)	.562 (14.27)	17	22-24	1.062 (26.97)	1.188 (30.18)	1.250 (31.75)
	07	11-24	.438 (11.13)	.562 (14.27)	.624 (15.85)	18	24	1.125 (28.58)	1.250 (31.75)	1.312 (33.32)
	08	12-24	.500 (12.70)	.625 (15.88)	.687 (17.45)	20	-	1.250 (31.75)	1.375 (34.92)	1.437 (36.50)
	09	14-24	.562 (14.27)	.688 (17.48)	.750 (19.05)	22	-	1.375 (34.92)	1.500 (38.10)	1.562 (39.67)
	10	16-26	.625 (15.88)	.750 (19.05)	.812 (20.62)	24	-	1.500 (38.10)	1.625 (41.28)	1.687 (42.85)
	11	16-24	.688 (17.48)	.812 (20.62)	.874 (22.20)	26	-	1.625 (41.28)	1.750 (44.45)	1.812 (46.02)
	12	18-24	.750 (19.05)	.875 (22.23)	.937 (23.80)	28	-	1.750 (44.45)	1.875 (47.63)	1.937 (49.20)

HIGH TEMPERATURE ThermaRex HT Series 806 Backshell

ThermaRexTM
CRYO • HIGH TEMP • ULTRA HIGH-TEMP

Banding Backshell, Shrink Boot, Self-Locking
440VS191-1181

Dimensions										
Profile S Straight		Profile H Cut/Weld 45°		Profile J Cut/Weld 90°		Profile M Full Radius 45°		Profile N Full Radius 90°		
										
Shell Size	A Thread ISO Metric	øC Max.	F Max.	G Max.	H Max.	J Max.	K Max.	L Max.	M Max.	N Max.
08	M10 x 1.0-6H	.692 (17.58)	.64 (16.26)	.92 (23.37)	.76 (19.30)	1.13 (28.70)	.79 (20.07)	1.19 (30.23)	.94 (23.88)	1.35 (34.29)
09	M12 x 1.0-6H	.786 (19.96)	.65 (16.51)	.96 (24.38)	.79 (20.07)	1.18 (29.97)	.79 (20.07)	1.19 (30.23)	.94 (23.88)	1.35 (34.29)
10	M14 x 1.0-6H	.883 (22.43)	.68 (17.27)	.99 (25.15)	.84 (21.34)	1.23 (31.24)	.79 (20.07)	1.26 (32.00)	.97 (24.64)	1.45 (36.83)
11	M15 x 1.0-6H	.911 (23.14)	.69 (17.53)	1.02 (25.91)	.85 (21.59)	1.24 (31.50)	.79 (20.07)	1.26 (32.00)	.97 (24.64)	1.45 (36.83)
12	M17 x 1.0-6H	1.002 (25.45)	.72 (18.29)	1.05 (26.67)	.90 (22.86)	1.29 (32.77)	.83 (21.08)	1.34 (34.04)	1.04 (26.42)	1.55 (39.37)
14	M19 x 1.0-6H	1.066 (27.08)	.73 (18.54)	1.08 (27.43)	.93 (23.62)	1.32 (33.53)	.83 (21.08)	1.34 (34.04)	1.04 (26.42)	1.55 (39.37)
16	M22 x 1.0-6H	1.196 (30.38)	.77 (19.56)	1.15 (29.21)	1.00 (25.40)	1.40 (35.56)	.84 (21.34)	1.41 (35.81)	1.08 (27.43)	1.65 (41.91)
18	M25 x 1.0-6H	1.311 (33.30)	.80 (20.32)	1.21 (30.73)	1.05 (26.67)	1.49 (37.85)	.89 (22.61)	1.49 (37.85)	1.14 (28.96)	1.74 (44.20)
20	M28 x 1.0-6H	1.430 (36.32)	.84 (21.34)	1.27 (32.26)	1.11 (28.19)	1.58 (40.13)	.92 (23.37)	1.56 (39.62)	1.21 (30.73)	1.84 (46.74)
22	M31 x 1.0-6H	1.548 (39.32)	.87 (22.10)	1.32 (33.53)	1.17 (29.72)	1.66 (42.16)	.95 (24.13)	1.62 (41.15)	1.28 (32.51)	1.94 (49.28)
24	M34 x 1.0-6H	1.696 (43.08)	.92 (23.37)	1.39 (35.31)	1.25 (31.75)	1.77 (44.96)	.97 (24.64)	1.68 (42.67)	1.33 (33.78)	2.04 (51.82)

CRYOGENIC ThermaRex Cryo Series 806 Accessories



Saddle Clamp, Self-Locking 620VS080

ThermaRex™ Cryo

Self-locking. Full radius saddles. Open frame saddle clamp fits Series 806 MilAero connectors. Anti-decoupling mechanism provides audible detented coupling and prevents backoff under high vibration. Die cast saddle bars have self-locking stainless steel clinch nuts. Full radius saddles are intended to be fully closed (bottomed onto frame). Aluminum. Qualified in vibration and 300G mechanical shock at -196°C.

MATERIAL/FINISH

- Body, saddles, coupling nut: aluminum / finish per PN
- Clinch nuts: SST/ silver
- Screws, washers: stainless steel/passivated
- Anti-decoupling spring: thermoplastic

How To Order			
Sample Part Number	620VS080	ME	08
Series / Basic Part No.	620VS080 Saddle Clamp, Self-Locking		
Material/Finish	ME = Alum/Electroless Nickel		
Shell Sizes	08, 09, 10, 11, 12, 14, 16, 18, 20, 22, 24		

Dimensions

Shell Size	A Thread ISO Metric	øB Max.	C Max.	D Max.	E ± .031 (0.79)	F Min.	H Max.	J Max.	ØG Max.	K Max.	L ± .031 (0.79)	M Min.	N Max.	P Max.
08	M10 x 1.0-6H	.64 (16.26)	.780 (19.81)	.83 (21.08)	.269 (6.83)	.27 (6.86)	1.040 (26.42)	.870 (22.10)	.79 (20.07)	.89 (22.61)	.265 (6.73)	.27 (6.86)	.96 (24.38)	1.43 (36.32)
09	M12 x 1.0-6H	.74 (18.80)	.840 (21.34)	.91 (23.11)	.346 (8.79)	.35 (8.89)	1.060 (26.92)	.910 (23.11)	.79 (20.07)	.89 (22.61)	.265 (6.73)	.27 (6.86)	.96 (24.38)	1.43 (36.32)
10	M14 x 1.0-6H	.80 (20.32)	.900 (22.86)	.97 (24.64)	.410 (10.41)	.42 (10.67)	1.080 (27.43)	.950 (24.13)	.91 (23.11)	1.00 (25.40)	.310 (7.87)	.31 (7.87)	1.05 (26.67)	1.50 (38.10)
11	M15 x 1.0-6H	.84 (21.34)	.960 (24.38)	1.08 (27.43)	.430 (10.92)	.44 (11.18)	1.100 (27.94)	.970 (24.64)	.91 (23.11)	1.00 (25.40)	.310 (7.87)	.31 (7.87)	1.05 (26.67)	1.50 (38.10)
12	M17 x 1.0-6H	.92 (23.37)	1.060 (26.92)	1.14 (28.96)	.488 (12.40)	.49 (12.45)	1.150 (29.21)	1.030 (26.16)	1.02 (25.91)	1.27 (32.26)	.390 (9.91)	.39 (9.91)	1.11 (28.19)	1.55 (39.37)
14	M19 x 1.0-6H	1.02 (25.91)	1.100 (27.94)	1.20 (30.48)	.530 (13.46)	.54 (13.72)	1.180 (29.97)	1.060 (26.92)	1.02 (25.91)	1.27 (32.26)	.390 (9.91)	.39 (9.91)	1.11 (28.19)	1.55 (39.37)
16	M22 x 1.0-6H	1.16 (29.46)	1.100 (27.94)	1.29 (32.77)	.620 (15.75)	.63 (16.00)	1.300 (33.02)	1.160 (29.46)	1.18 (29.97)	1.38 (35.05)	.506 (12.85)	.51 (12.95)	1.18 (29.97)	1.65 (41.91)
18	M25 x 1.0-6H	1.26 (32.00)	1.230 (31.24)	1.41 (35.81)	.700 (17.78)	.71 (18.03)	1.380 (35.05)	1.340 (34.04)	1.31 (33.27)	1.48 (37.59)	.591 (15.01)	.59 (14.99)	1.23 (31.24)	1.77 (44.96)
20	M28 x 1.0-6H	1.40 (35.56)	1.410 (35.81)	1.59 (40.39)	.778 (19.76)	.78 (19.81)	1.460 (37.08)	1.410 (35.81)	1.42 (36.07)	1.58 (40.13)	.661 (16.79)	.66 (16.76)	1.29 (32.77)	1.81 (45.97)
22	M31 x 1.0-6H	1.52 (38.61)	1.510 (38.35)	1.66 (42.16)	.850 (21.59)	.86 (21.84)	1.580 (40.13)	1.530 (38.86)	1.54 (39.12)	1.68 (42.67)	.744 (18.90)	.74 (18.80)	1.37 (34.80)	1.86 (47.24)
24	M34 x 1.0-6H	1.64 (41.66)	1.660 (42.16)	1.77 (44.96)	.961 (24.41)	.97 (24.64)	1.620 (41.15)	1.660 (42.16)	1.65 (41.91)	1.80 (45.72)	.826 (20.98)	.83 (21.08)	1.42 (36.07)	1.90 (48.26)